U.S. Department of
Transportation
**Federal Railroad
Administration**

Private Highway-Rail Grade Crossing Safety Research and Inquiry, Volume II—Appendices

Office of Research
and Development
Washington, DC 20590

DOT/FRA/ORD-10/02

Final Report
February 2010

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Volume II - Appendices

Appendix A.1

Public Meeting, Fort Snelling, MN

U.S. Department of Transportation
Federal Railroad Administration

Safety at Private Highway-Rail Grade Crossings

Public Meeting Agenda

Bishop Henry Whipple Federal Building
1 Federal Drive,
Fort Snelling, MN 55111

Wednesday, August 30, 2006
9:30 AM – 5:00 PM

Call to Order

Safety Briefing

Introductions

Grady C. Cothen, Deputy Associate Administrator, Office of Safety, Federal Railroad Administration

Susan Aylesworth, Director of Railroad Administration, Minnesota Department of Transportation

Miriam Kloeppel, Highway-Rail Grade Crossing and Trespasser Safety Division, Office of Safety, Federal Railroad Administration

Meeting Format & Rules of Conduct

Kathryn Shelton, Attorney, Office of Chief Counsel, Federal Railroad Administration

Public Meeting

Closing Remarks

Adjournment

Last Name	First Name	Organization		Industry	
Browder	William	Association of American Railroads	AAR	Railroad	
Vander Clute	Bob	Association of American Railroads	AAR	Railroad	
Perkovich	Tom	Brotherhood of Locomotive Engineers and Trianmen	BLET	Railroad	Labor Group
DePaepe	Tim	Brotherhood of Railroad Signalmen	BRS	Railroad	Labor Group
Abbot	Spencer	Burlington Northern Sante Fe Railroad	BNSF	Railroad	Class I
Cocchiarella	Alfonse	Burlington Northern Sante Fe Railroad	BNSF	Railroad	Class I
Leibfried	Lynn	Burlington Northern Sante Fe Railroad	BNSF	Railroad	Class I
Rasmussen	Craig	Burlington Northern Sante Fe Railroad	BNSF	Railroad	Class I
Warren	George	Burlington Northern Sante Fe Railroad	BNSF	Railroad	Class I
Harris	Randy	Canadian National Railroad	CN	Railroad	Class I
Lee	Terry	Canadian National Railroad	CN	Railroad	Class I
Bicha	Paul	Canadian Pacific Railway	CP	Railroad	Class I
Keinzler	Jim	Canadian Pacific Railway	CP	Railroad	Class I
Kreiger	Jim	Canadian Pacific Railway	CP	Railroad	Class I
McCorkle	Rod	Canadian Pacific Railway	CP	Railroad	Class I
Abbate	Patricia	Citizens for Rail Safety		Non-Profit Public Interest Group	
Whitemore	Shane	CSX Railroad	CSX	Railroad	Class I
Baer	Peggy	Iowa Department of Transportation	Iowa DOT	Government	State
Pepper	Allen	Kansas City Southern Railway Company	KCSR	Railroad	Class I
Aylesworth	Susan	Minnesota Department of Transportation	MNDOT	Government	State
Kahnke	Dan	Minnesota Department of Transportation	MNDOT	Government	State
Spencer	Tim	Minnesota Department of Transportation	MNDOT	Government	State
Crakes	Stacy	TKDA		Engineering Firm	
Hillman	Mike	TKDA		Engineering Firm	
Opal	Bob	Union Pacific Railroad	UPRR	Railroad	Class I
Peterson	David	Union Pacific Railroad	UPRR	Railroad	Class I
Adams	Chris	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Comstock	Paul	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Cothen	Grady	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Gillespie	Howard	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Howe	Bennie	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Kloeppel	Miriam	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Long	Michael	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Ries	Ron	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Shelton	Kathy	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Wagner	Tammy	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Carroll	Anya	US Department of Transportation / Volpe National Transportation Systems Center	USDOT/Volpe	Government	Federal
Garcia	Perla	US Department of Transportation / Volpe National Transportation Systems Center	USDOT/Volpe	Government	Federal
Peck	Steven	US Department of Transportation / Volpe National Transportation Systems Center	USDOT/Volpe	Government	Federal
Tuthill	Stacey	Weber Shandwick		Public Relations Firm	
Adams	Ron	Wisconsin Department of Transportation	WisDOT	Government	State
Morrison	Mark	Wisconsin Department of Transportation	WisDOT	Government	State

Appendix A.2

Public Meeting, Raleigh, NC

Safety at Private Highway-Rail Grade Crossings Public Meeting Agenda

McMimmon Conference & Training Center
North Carolina State University, 1101 Gorman Street
Raleigh, NC 27606

Wednesday, September 27, 2006
9:30 AM – 5:00 PM

Call to Order

Safety Briefing

Introductions

Grady C. Cothen, Deputy Associate Administrator, Office of Safety, Federal Railroad Administration

Welcome

Pat Simmons, Director, Rail Division, North Carolina Department of Transportation

Overview

Miriam Kloeppel, Highway-Rail Grade Crossing and Trespasser Safety Division, Office of Safety, Federal Railroad Administration.

Meeting Format & Rules of Conduct

Ronald Ries, Staff Director, Highway-Rail Grade Crossing and Trespasser Safety Division, Office of Safety, Federal Railroad Administration

Prepared Statements

Paul C. Worley, Assistant Director for Engineering and Safety, Rail Division, North Carolina Department of Transportation – North Carolina Experience

Bob Pressley, Gannett-Fleming - Private Crossing Safety Initiative Study for NCDOT, funded by FRA.

Public Meeting Theme - <u>Engineering Design</u>

Open Discussion - Public and Private Crossing Definition Matrix

Open Discussion - Standard Suite of Traffic Control Devices and Intersection Design Standards

Other Comments

Closing Remarks

Adjournment

Last Name	First Name	Organization	Industry		
Browder	William	Association of American Railroads	AAR	Railroad	
Bryant	John	Bass, Bryant, & Fanney, PLLC	BB & F	Legal Counsel	
Stayton	Cliff	CSX Railroad	CSX	Railroad	Class I
Whitemore	Shane	CSX Railroad	CSX	Railroad	Class I
Pressley	Bob	Gannett Fleming Incorporated		Engineering Firm	
Barringer	W L	Norfolk Southern Corporation	NS	Railroad	Class I
Schwartz	Stuart	Norfolk Southern Corporation	NS	Railroad	Class I
Stanback	Haskel	Norfolk Southern Corporation	NS	Railroad	Class I
Cruz	Ric	North Carolina Department of Transporation	NCDOT	Government	State
Field	Jason	North Carolina Department of Transporation	NCDOT	Government	State
Petteway	Arthur	North Carolina Department of Transporation	NCDOT	Government	State
Simmons	Patrick	North Carolina Department of Transporation	NCDOT	Government	State
Worley	Paul	North Carolina Department of Transporation	NCDOT	Government	State
Young	George	North Carolina Department of Transporation	NCDOT	Government	State
Christian	Kat	North Carolina Railroad Company	NCRR	Railroad	Shortline
Gilbert	Danny	Rail Safety Consultants	RSC	Consulting Company	
Medlin	Tina	RE/MAX International Incorporated	RE/MAX	Real Estate Broker/Sales	Real Estate
Bray	R Dale	Union Pacific Railroad	UPRR	Railroad	Class I
Lamm	G A	United Transportation Union	UTU	Union	Labor Group
Westbrook	Richard	United Transportation Union	UTU	Union	Labor Group
Cothen	Grady	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Kloeppel	Miriam	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Spurlock	Leslie	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Thomas	Donald	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Ries	Ron	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Carroll	Anya	US Department of Transportation / Volpe National Transportation Systems Center	USDOT/Volpe	Government	Federal
Garcia	Perla	US Department of Transportation / Volpe National Transportation Systems Center	USDOT/Volpe	Government	Federal
Gustave	Mirna	US Department of Transportation / Volpe National Transportation Systems Center	USDOT/Volpe	Government	Federal
Perry	John	West Virginia Public Service Commision / Operation Lifesaver	WVA PUC	Government	State
Lipscomb	Roger	Trackspec Railroad Corporation		Contractor	
Shank	Gary			Private Citizen	
Taylor	Susan			Private Citizen	

Appendix A.3

Public Meeting, San Francisco, CA

United States Department of Transportation
Federal Railroad Administration

Safety at Private Highway-Rail Grade Crossings
Public Meeting Agenda

Philip Burton Federal Building and Courthouse
450 Golden Gate Avenue
San Francisco, CA 94102
Thursday, October 26, 2006
9:30 AM – 5:00 PM

Call to Order

Safety Briefing

Introductions

Grady C. Cothen, Deputy Associate Administrator, Office of Safety, Federal Railroad Administration

Welcome

Clifford C. Eby, Deputy Administrator, Federal Railroad Administration

Vahak Petrossian, Manager, Rail Transit & Crossings Branch, California Public Utilities Commission

Meeting Format & Rules of Conduct

Mark Tessler, Assistant Chief Counsel for Safety, Office of Chief Counsel, Federal Railroad Administration

Overview

Miriam Kloeppel, Highway-Rail Grade Crossing and Trespasser Safety Division, Office of Safety, Federal Railroad Administration

Prepared Statements

Daren Gilbert, Supervisor, Rail Crossings Engineering Section, California Public Utilities Commission

Steve Cates, Chief, Office of Rail Equipment and Track Construction, California Department of Transportation

Public Meeting Theme - <u>Responsibility</u>

Open Discussion – Case Studies
Miriam Kloeppel, Highway-Rail Grade Crossing and Trespasser Safety Division, Office of Safety, Federal Railroad Administration

Open Discussion – Hypothetical Scenarios
Anya Carroll, Principal Investigator, Rail and Transit Systems Division, Volpe National Transportation Systems Center

Other Comments

Closing Remarks

Adjournment

Last Name	First Name	Organization		Industry	
Burcat	Peter	Law Offices of Peter S. Burcat		Legal Counsel	
Randolph	Adrian	Randolph Cregger & Chalfant, LLP / BN	BN	Legal Counsel	
Cates	Steven	California Department of Transporation	Caltrans	Government	State
Gates	Steve	California Department of Transporation	Caltrans	Government	State
Jue	Mathew	City of Campbell, CA	City of Campbell, CA	Government	City
Berdge	Patrick	California Public Utilities Commission	CPUC	Government	State
Boles	Kevin	California Public Utilities Commission	CPUC	Government	State
Elsmore	George	California Public Utilities Commission	CPUC	Government	State
Gilbert	Daren	California Public Utilities Commission	CPUC	Government	State
Jinbachian	Varoujan	California Public Utilities Commission	CPUC	Government	State
Juul	Erik	California Public Utilities Commission	CPUC	Government	State
Petrossian	Vahak	California Public Utilities Commission	CPUC	Government	State
Schumacher	Kevin	California Public Utilities Commission	CPUC	Government	State
Watson	Julie	California Public Utilities Commission	CPUC	Government	State
Cothen	Grady	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Dickinson	LeeAnne	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Eby	Cliff	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Hagood	Charlie	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Kloeppel	Miriam	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Ries	Ron	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Tessler	Mark	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Tessler	Mark	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Schwartz	Stuart	Norfolk Southern Corp	NS	Railroad	Class I
Mathieu	Ron	Southern California Regional Rail Authority / Metrolink	SCRRA / Metrolink	Metro	
Cheung	Freddy	Union Pacific Railroad	UPRR	Railroad	Class I
Peterson	David	Union Pacific Railroad	UPRR	Railroad	Class I
Smith	Jim	Union Pacific Railroad	UPRR	Railroad	Class I
Harris	Carol	Union Pacific Railroad / Association of American Railroads	UPRR / AAR	Railroad	Class I
Carroll	Anya	US Department of Transportation / Volpe National Transportation Systems Center	USDOT/Volpe	Government	Federal
Gustave	Mirna	US Department of Transportation / Volpe National Transportation Systems Center	USDOT/Volpe	Government	Federal
Peck	Steven	US Department of Transportation / Volpe National Transportation Systems Center	USDOT/Volpe	Government	Federal
Boston	Bob	Washington Utilities & Transportation Commission	WUTC	Government	State

Appendix A.4

Public Meeting, New Orleans, LA

Safety at Private Highway-Rail Grade Crossings
Public Meeting Agenda

Chateau Sonesta Hotel New Orleans
800 Iberville Street
New Orleans, LA 70112
Wednesday, December 6, 2006
9:30 AM – 5:00 PM

Call to Order

Safety Briefing

Introductions

Grady C. Cothen, Deputy Associate Administrator, Office of Safety, Federal Railroad Administration

Welcome

Richard Savoie, P.E., Deputy Chief Engineer, Louisiana Department of Transportation and Development

Meeting Format & Rules of Conduct

Mark Tessler, Assistant Chief Counsel for Safety, Office of Chief Counsel, Federal Railroad Administration

Overview

Miriam Kloeppel, Highway-Rail Grade Crossing and Trespasser Safety Division, Office of Safety, Federal Railroad Administration

Prepared Statements

Betsy Tramonte, Executive Director, Louisiana Operation Lifesaver

Public Meeting Theme – <u>Data Elements</u>

Open Discussion – Data Elements and Utilization
Miriam Kloeppel, Highway-Rail Grade Crossing and Trespasser Safety Division, Office of Safety, Federal Railroad Administration

Open Discussion – Data Collection
Anya Carroll, Principal Investigator, Rail and Transit Systems Division, Volpe National Transportation Systems Center

Other Comments

Closing Remarks

Adjournment

Last Name	First Name	Organization		Industry	
Burleson	David	Acadiana Railway Company		Railroad	Short-line
Browder	William	Association of American Railroads	AAR	Railroad	
Saunders	Ben	American Trial Lawyers' Association	ATLA	Legal Counsel	
Talley	Patrick	Frilot Partridge Kohnke & Clements, LC / Burlington Northern Sante Fe		Legal Counsel	Class I
Hellmers	Carl	Frilot Partridge Kohnke & Clements, LC / Burlington Northern Sante Fe		Legal Counsel	Class I
DePaepe	Tim	Brotherhood of Railroad Signalmen	BRS	Railroad	Labor Group
Meyer	Mary Beth	Christovich & Kearney LLP		Legal Counsel	
Rau	Wayne	City of Gretna		Government	City
Guerra	Vaness	City of Laredo / MPO		Government	City
Selman	Samuel Keith	City of Laredo TX		Government	City
Crader	David	Canadian National Railway	CN	Railroad	Class I
Dinning	John	Canadian National Railway	CN	Railroad	Class I
Harris	Randy	Canadian National Railway	CN	Railroad	Class I
Healey	Tom	Canadian National Railway	CN	Railroad	Class I
Kvedaras	Jim	Canadian National Railway	CN	Railroad	Class I
Whitemore	Shane	CSX Corporation	CSX	Railroad	Class I
Serna	Seve	US Department of Transportation / Federal Highway Administration	USDOT/FHWA	Government	Federal
Strinfellow	Mary	US Department of Transportation / Federal Highway Administration	USDOT/FHWA	Government	Federal
Cook	Carolyn	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Cothen	Grady	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Drake	Tom	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Kloeppel	Miriam	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Ries	Ron	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Tessler	Mark	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Pepper	Allen	Kansas City Southern	KCS	Railroad	Class I
Laiche	Bryant	Operation Life Saver - Louisiana	OLI		
Tramonte	Betsy	Operation Life Saver - Louisiana	OLI		
Brunty	Kim	Louisiana Depatment of Transportation and Development	LADOTD	Government	State
Ferguson	Gretchen	Louisiana Depatment of Transportation and Development	LADOTD	Government	State
Savoie	Richard	Louisiana Depatment of Transportation and Development	LADOTD	Government	State
Schiro	Karla	Louisiana Depatment of Transportation and Development	LADOTD	Government	State
Shrewsberry	Bill	Louisiana Depatment of Transportation and Development	LADOTD	Government	State
Suarez	Mark	Louisiana Depatment of Transportation and Development	LADOTD	Government	State
Van Mol	John	Leventon Farms / Private Citizen		Private	
Swales	Edward Butch	Mississippi Department of Transportation	MS DOT	Government	State
Barringer	William	Norfolk Southern Corporation	NS	Railroad	Class I
Stanback	Haskel	Norfolk Southern Corporation	NS	Railroad	Class I
Campbell	Rick	Railroad Controls Limited	RCL	Consulting	
Bertel	Richard	Rio Grande Pacific Corp	RGPC	Railroad	Short-line
Meyer	Gabriel	Union Pacific Railroad	UPRR	Railroad	Class I
Rathgeber	Paul	Union Pacific Railroad	UPRR	Railroad	Class I
Rouse	Ken	Union Pacific Railroad	UPRR	Railroad	Class I
Carroll	Anya	US Department of Transportation / Volpe National Transportation Systems Center	USDOT/Volpe	Government	Federal
Garcia	Perla	US Department of Transportation / Volpe National Transportation Systems Center	USDOT/Volpe	Government	Federal
Gustave	Mirna	US Department of Transportation / Volpe National Transportation Systems Center	USDOT/Volpe	Government	Federal
Peck	Steven	US Department of Transportation / Volpe National Transportation Systems Center	USDOT/Volpe	Government	Federal

Appendix A.5

Public Meeting, Syracuse, NY

Safety at Private Highway-Rail Grade Crossings Public Meeting Agenda

Renaissance Syracuse Hotel
701 East Genesee Street
Syracuse, NY 13210
Thursday, July 26, 2007
9:30 AM – 5:00 PM

Call to Order

Safety Briefing

Introductions & Welcome

Grady C. Cothen, Deputy Associate Administrator, Office of Safety, Federal Railroad Administration

Clarence W. "Ike" Scott, Director, Intermodal Projects Bureau, Freight & Economic Development Division, New York State Department of Transportation

Meeting Format & Rules of Conduct

Mark Tessler, Assistant Chief Counsel for Safety, Office of Chief Counsel, Federal Railroad Administration

Prepared Statements

Clarence W. "Ike" Scott, Director, Intermodal Projects Bureau, Freight & Economic Development Division, New York State Department of Transportation

William D. Burt, Chairman, Regulatory Review Committee, Railroads of New York, Incorporated

Public Meeting

Findings
Miriam Kloeppel, Highway-Rail Grade Crossing and Trespasser Safety Division, Office of Safety, Federal Railroad Administration

Policy Considerations and Topical Discussion
Grady C. Cothen, Deputy Associate Administrator, Office of Safety, Federal Railroad Administration

Closing Remarks

Adjournment

Last Name	First Name	Organization		Industry	
Bailey	Lawrence	Hodgson Russ LLP		Legal	
Barber	William	New York State Department of Transportation	NYSDOT	Government	State
Barringer	William	Norfolk Southern Corporation	NS	Railroad	Class I
Bennett	Michael	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Bergeron	Roger	Pan Am Railways	Pan Am	Railroad	Short-line
Boyer	Melanie	New York Susquehanna & Western Railway	NYSW	Railroad	Short-line
Browder	William	Association of American Railroads	AAR	Railroad	
Burt	William	Railroad Corporations of New York Incorporated	RONY	Railroad	
Carroll	Anya	US Department of Transportation / Volpe National Transportation Systems Center	USDOT/Volpe	Government	Federal
Cothen	Grady	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Cummings	John	Indiana Rail Road Company	INRD	Railroad	Short-line
Curley	Stephen	Connecticut Department of Transportation	CTDOT	Government	State
Danbar	Alex	WSTM-TV NBC3 / CW6	NBC-3	Broadcast Television	Local Affliliate
Dickinson	Randall	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
DiLorenzo	Frank	MTA Metro North Rail Road	Metro-North	Railroad	Commuter - Transit
Ford	Carl	New York State Department of Transportation	NYSDOT	Government	State
Fraley	Charles	Sheet Metal Workers International Association	SMWIA		Labor Group
Frangella	Lou	CSX Corporation	CSX	Railroad	Class I
Goulet	Glenn	US Department of Transportation / Volpe National Transportation Systems Center	USDOT/Volpe	Government	Federal
Grizkewitsch	Michail	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Gustave	Mirna	US Department of Transportation / Volpe National Transportation Systems Center	USDOT/Volpe	Government	Federal
Harris	Carol	Union Pacific Railroad	UPRR	Railroad	Class I
Harris	Randy	Canadian National Railway	CN	Railroad	Class I
Hendricks	Evelyn	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Kloeppel	Miriam	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Latino	Tiffany	News Radio 570 WSYR Syracuse	WSYR	Broadcast Radio	
Louis	James	Brotherhood of Locomotive Engineers and Trainmen	BLET	Railroad	Labor Group
Lund	Gregory	Brotherhood of Locomotive Engineers and Trainmen	BLET	Railroad	Labor Group
McKeon	Mark	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
McVey	Caitlyn	TWEAN News Channel of Syracuse LLC / News 10 Now		Broadcast Television	
Peck	Steven	US Department of Transportation / Volpe National Transportation Systems Center	USDOT/Volpe	Government	Federal
Petrella	Dan	New York State Department of Transportation	NYSDOT	Government	State
Plukas	Richard	Fitzsommons, Nunn, Fitzsimmons & Plukas, LLP		Legal	
Poichuk	Phillip	Transport Canada		Government	Federal / International
Ries	Ron	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Rohauer	Robert	CSX Corporation	CSX	Railroad	Class I
Saltz	Brian	MTA Long Island Railroad	LIRR	Railroad	Commuter - Transit
Schwartz	Stuart	Norfolk Southern Corporation	NS	Railroad	Class I
Scott	Clarence	New York State Department of Transportation	NYSDOT	Government	State
Siwula	Tom	C & S Companies	C&S	Engineering/architecture/Consturcution	Consultants
Stem	James	United Transporation Union	UTU	Railroad	Labor Group
Thomas	Julie	Connecticut Department of Transportation	CTDOT	Government	State
Vitale	Meghan	Syracuse Metropolitan Transportation Council	SMTC	Metropolitan Planning Organization	
Wagner	Tammy	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal
Werksma	Jared	WSTM-TV NBC3 / CW6	NBC-3	Broadcast Television	Local Affliliate
Whitemore	Shane	CSX Corporation	CSX	Railroad	Class I
Winsted	Robert	US Department of Transportation / Federal Railroad Administration	USDOT/FRA	Government	Federal

Appendix A.6

Transportation Research Board Panel Discussion, Washington, DC

SAFETY AT PRIVATE HIGHWAY RAIL GRADE CROSSINGS

COMMITTEE HEARING

WASHINGTON, D.C.

JANUARY 23, 2007

ATKINSON-BAKER, INC.
COURT REPORTERS
500 BRAND BOULEVARD, THIRD FLOOR
GLENDALE, CALIFORNIA 91203
(800) 288-3376

REPORTED BY: CARLA L. ANDREWS, CSR NO: 78506

FILE NO.: A00A5A9

SAFETY AT PRIVATE HIGHWAY RAIL GRADE CROSSINGS

Committee meeting, taken at the Marriott Hotel Washington, D.C., commencing at 3:50 p.m., Tuesday January 23, 2007, before CARLA L. ANDREWS, CSR No. 78506.

A P P E A R A N C E S

FOR THE PANEL:

MIRIAM KLOEPPEL

GUAN XU

PAUL WORLEY
RICHARD CAMPBELL
WILLIAM BROWDER
AIDAN NELSON

P-R-O-C-E-E-D-I-N-G-S

THE MODERATOR: The session today No. 071 is a panel session on the safety of private highway rail grade crossings. My name is Anya Carroll, and I am the chair of the Highway Rail Grade Crossings Committee, HB 60. And I am happy to be here today to moderate this session with our distinguished panel, which I will introduce in a moment.

The TRB Committee is happy to support the FRA in its safety inquiry on private crossings. And as such, an occurrence today is that we have a stenographer with us, which will be transcribing the comments so that we can capture everybody's ideas and thoughts and questions on the private crossing issue.

So because of that occurrence, I would like to make sure that before you speak, you actually introduce yourself -- your first and last name. If you could spell your last name the first time that you speak, that would be helpful to the stenographer. Also, if you speak a bit more slowly, she is more than likely to capture your thoughts more accurately.

So thank you all for attending.

Our distinguished panel today from the Federal Railroad Administration is Miriam Kloeppel. And she is with the Office of Safety. We have Guan Xu

from the Federal Highway Administration; Bill Browder from the Association of American Railroads; Rick Campbell from Railroad Controls, Limited; Paul Worley from North Carolina, DOT; and Aidan Nelson from the Rail Safety and Standards Board in the United Kingdom. I would like to welcome our panel of distinguished guests.

With that, I just have a few more opening remarks. As far as the temperament of the panel session this afternoon, each panel member will give a five- to ten-minute position statement, which will take

us to about 45, 50 minutes of the session. And then it will be an open discussion amongst all of us here in attendance and the panel members.

And we are open to any comments, questions, concerns that you have about the safety of private highway rail grade crossings. Two other things that I would like to mention is our committee meeting, the Highway Rail Grade Crossing Committee meeting, will be tomorrow at 8 a.m. till noon. And it is in Lincoln II, which is on the exhibition level across from the poster sessions. And I would also like to invite you to Syracuse, New York on February 15, at the Doubletree Hotel where we will be holding our fifth and last public meeting on safety of private crossings highway

rail grade crossings.

So with that, I will have the panel members give a short introduction of themselves and we will continue. So we will start with Miriam Kloeppel.

MS. KLOEPPEL: Good afternoon, ladies and gentlemen. Thank you for coming. Private crossing safety has for some time been a matter of concern to the U.S. Department of Transportation and to other federal agencies. In 1993 the FRA hosted an open meeting to initiate industry-wide discussions.

And in a 1994 rail highway safety action plan, the U.S. DOT proposed to develop national minimum standards for private crossings. In a 1997 study on safety at passive grade crossings, the NTSB highlighted

the need for some system to improve private crossing safety and recommended that U.S. DOT, in conjunction with the states, determine governmental oversight responsibility for safety at private grade crossings.

In 1999 the NTSB weighed in again in its report on private grade crossings incidents in Portage, Indiana. In this case, the NTSB recommended that the DOT eliminate any differences between public and private crossings with regard to funding or requirements for safety improvements.

In 2004 the U.S. DOT published an updated

action plan in which the FRA committed to leading an effort to define responsibility for safety of private crossings. Today's meeting is a vital part of that effort.

The FRA, for any of you who are not familiar with us, has eight regional offices geographically distributed across the country. As you can see from this chart, regardless of the region, private crossings constitute a significant percentage of all grade crossings. The total combination wide is about 94,000.

Although accidents at public crossings have declined considerably over the past 20 years, declining by one third over the past decade alone, the number of accidents at private crossings has remained comparatively stable, declining only 10 percent over the past decade. In most years, the number of

fatalities occurring in accidents at private crossings exceeded the number of on-duty deaths among railroad employees in all rail operations.

Now, the FRA has not entered into this initiative with any preconceived notions of what direction we are going to take ultimately. In order to best guard the information and the input from members of the public and from members of interested parties,

we have conducted a series of public meetings. As you can see, they have been scattered across the country. And we have had good attendance, although occasionally some bashful participants. And as I have mentioned, we will have our last one on February 15. You know, I left off the seven, so it may be hard because it's going to be February 15, 200. That's a little bit in the past. Sorry about that. But, yes, it will be next month.

Among the issues that we have discussed in the public meetings are these here, particularly the need for standardization, both in science and in design, various rights and responsibilities, according to the different parties involved, private crossing owners and railroads, and what the data might mean. There are obviously other subject areas. These were just a principal topic area. And we have quite a few comments on them. But I don't want to dive into what all those were because I need to make room for everybody else, including you all, to have time to

discuss things.

I will be happy to answer questions. Information from the FRA will be published in our report based on the discussions that were held. And we do have a docket in place. As you can see, it's on the

U.S. DOT docket web page. And it is Docket Nos. 23281. So if you are curious about the specifics of what went on in the public meetings or if you have comments of your own to contribute, I would like to encourage you to do so.

Thank you.

MS. XU: Good afternoon. My name is Guan Xu. I am the program manager for Railroad Highway Safety Program and Office of Safety Federal Highway Administration. When I told my team leader that I was put on a panel at the TRB to talk about issues regarding safety at private crossings, he asked me what are you talking about? We haven't done anything for private crossings. Our program is limited to public crossing only. And that's beyond our programmatic authority. So I said, I just got an idea of what I want to say. I think I will talk, you know, briefly about our program. It may be helpful for people to understand why we have not done anything yet. And, you know, also to help people to understand the issues and challenges that we are facing when it comes to private crossings.

The Federal Highway Rail Grade Crossing

Safety Program, as most of you already know, is often referred to as the Section 130 because we got our

regulatory and statutory authority from Section -- from Title 23 U.S. Code, Section 130, and also from the 23 CFR, Part 646. That part gives us problematic authority over the railroad highway grade crossings. And the program is one of the federal aid funding programs. So it is funded through transportation bills. The current transportation bill, SAFETEA-LU, authorized $220 million per year was authorized from fiscal year '06 to fiscal year '09 and set aside funds under the Highway Safety Improvement Program.

And Section 130 can be used on installation and updating the protective devices, such as flashing lights, gates, and signs. And it is also attributable to possible public policies. And I will emphasize that one of the important factors for the Section 130 funds is the number of public at-grade crossings in each state. So each state gets their portions based on, you know, 50 percent of Section 130 funds based on the number of public crossings.

You can see that the current Section 130 program is a federal-aid funding program. And current regulations on federal-aid programs limits FHWA's problematic authority to only public grade crossings. And I think this is one of the reasons why we have not been successful to take on issues at private

crossings. For example, in 1999, FHWA proposed a section to the MUTCD that contained a definition, standard, and guidance for traffic control devices at private crossings. But FHWA eventually had to withdraw their proposal because the railroad industry objected to the proposal, challenging FHWA's lack of statutory authority and the economic impact on the industry. And a number of states also opposed the inclusion of private crossing standards due to state laws associated with their lack of jurisdiction of public roads.

So the issue that needs to be addressed includes the allocation of responsibilities, associated costs, and appreciated traffic control devices and, also, what's the appropriate traffic control on these crossings.

As Miriam had talked about, FRA has initiated a safety inquiry to investigate safety concerns at private crossings. And FHWA will continue working with FRA and will take appropriate actions accordingly depending on the outcomes from the FRA's private crossing initiative. And that's all I have to say. Thank you.

MR. WORLEY: Good afternoon, I am Paul Worley. I am director of Engineering & Safety with the North Carolina Department of Transportation. I was

asked to come to be on this panel to talk to you this afternoon about private railroad crossings. And I want to talk to you some about our experience and some of the things we have done in North Carolina. I don't have any slides here, per se.

But you may have heard about our project, the Sealed Corridor. Following the Sealed Corridor Project, we realized that we needed to do something at private crossings because when we had done diagnostics on our corridor between Raleigh and Charlotte, we discovered there were many, many private crossings in various states of maintenance and ownership.

Using the Sealed Corridor approach, we used off-the-shelf technologies different ways. We also emphasized used corridor diagnostic teams and closures and alternative access whenever possible. So we took that same approach when we looked at the private crossing safety initiatives. We even signalized crossings with high volumes and some public use as well.

North Carolina is one of the few states to pursue private crossing safety projects and inventory. We have done this through a $1.9 million grant from the FRA through the Next Generation High-Speed Railway Program by virtue of North Carolina having a federally

designated high-speed railway corridor -- the Southeast high-speed railway corridor.

And the approach that we have taken with

private crossings, first of all, was to do a comprehensive diagnostic of all 47 crossings that remain between Raleigh and Charlotte. And the approach there was -- you always hear about data; garbage in and garbage out. We want to make sure we have the most appropriate inventory data that we could provide and use them to make decisions. So we were able to fund that particular study, do that comprehensive diagnostic. And we found that, you know, we had a lot of inaccuracies in inventory. We had already very sparse coverage on private crossings. We also had the sheer number of private crossings out there to deal with as well.

So it certainly opened the eyes of our diagnostic teams and our department as we looked at crossing safety in corridors because in North Carolina we believe that our best approach has been to use the corridor diagnostic approach and creating all the crossings into a particular area, both public and private.

There are many changes that are involved with private crossings. And it is our point of view. We

are not representing any one policy. But this is a unit of government that took on this project and has completed a good part of it.

As far as the challenges go, generally there are no public funds for private crossings that are out there because, as Guan said, you cannot use Section 130

money. You can use Section 130 money for crossings that are lightly travelled public roads because you can't use it for heavily travelled private crossings. So there is a real dichotomy there and issues that have to be within the policy.

There are varied types of private crossings. Various folks have their own definitions. What we looked at were private-use residential, farm, industrial, plant to plant within an industry, railroad use, private crossings. We also had public use for residential development, such as private communities, business, industrial, recreational, and what's most important in North Carolina, golf cart crossings.

Now, by the time private crossing present themselves at the state level and make their way to my office, they are politically charged. And I know this comes as a shock to you, but often all we can do is listen. Sometimes it may be a farmer who has driven all the way to Raleigh and wants someone just to listen

to them because the railroads are going to close their private crossing. And that's what we have had to do in the past. We have tried to listen. We have tried to understand. We have tried to encourage private individuals to keep talking with the railroads and try to negotiate a win-win situation. We try to express why the railroads need less private crossings and better protected private crossings.

Private agreements and deeds may cover the

crossings -- private crossings -- and may involve multiple parties over multiple years. And it is very difficult to go back and find one agreement for each crossing on a particular corridor. So you have to do a lot of digging and a lot of research, and still you may not final all the data you are looking for. Resources in state DOT's to maintain an accurate inventory of private crossings are not there at the state DOT or even at the railroad level. We are really trying to work harder on our public rail crossing inventory. But inventory and data gathering remains fairly important. But at the same time, it is something that is unfortunately not well staffed and well funded.

We have also, in addition to looking at the federally designated high-speed corridor, we also looked at private crossing as part of the corridor

studies. We did a commuter line in the Charlotte area in the private crossings there as far as what could be closed, what should be improved, what should be consolidated down to public access crossings. And through doing this, we have learned that we have got to partner with the owning and operating railroads to find comprehensive and innovative approaches.

When we started and we hosted the FRA hearings back earlier late last year in North Carolina, we talked about some of the issues that faced the private crossings that faced FRA and faced the states. And we talked about like, for instance, is the current

assignment of responsibility, is that effective. You know, our thoughts on that was it is not consistent.

Each railroad determines what can be done to improve the safety and manage the risk at private crossing. They do their own things. We feel there is a significant need to collect, correct, and update inventory information into the national and state inventories.

And U.S. DOT through the railroads, through the states, through rail transit operators should collaborate to develop a consistent approach, such as was done with the Crossing Technical Workgroup to develop that document through the ITE.

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One of the issues was cost -- maintenance cost, improvement cost. Stakeholders, federal and state agencies, local governments, transit authorities, and railroads, and private crossing owners may eventually need to develop some kind of methodology to share costs. It can't all be put on the public side. It can't all be shouldered by the railroads. There is a need to develop a methodology to share costs associated, construction and maintenance, based on local conditions and needs.

Considerations are these transit corridors where there are passenger rail corridors that travel at higher speeds. Are there quiet zones? Are there critical inter-modal corridors for rail freight? All of these have a private and public sector interest as

part of a multi-modal transportation system. And capitalization of future maintenance costs should also be considered. That was one of the big issues we had. While we have federal grant funds to pay for the devices and capital, we did not have ongoing maintenance. So we worked with railroad to capitalize maintenance. So that's the approach we considered as well.

Also, disputes. We talk about the farmer coming to your office or property owner and his concern

about losing their private crossing. There is no way to handle these disputes. There is no dispute resolution process. There needs to be some kind of model legislation. One of the issues was should the state or Federal Government assume a higher level of responsibility. Our feelings were that, first, national guidelines should be considered for development by the stakeholders. You have got to get the stakeholders together to figure out what way to go with this.

We talked about warning device standards. Should there be national standards for warning devices at private crossings. And some of this is being done through the National Conference of Uniform Traffic Control Devices. And then, finally, how do you determine a crossing is public purpose and it is subject to public use. Again, we get back to the stakeholder. You need to look at commercial crossings

versus private crossings. So there are a number of issues out there as well before you even get to legislation.

That's basically my summary of the issues that we have. We feel that we had a pretty good level of success. But it is not to have funding to be able to go and negotiate with the property owners and buy

alternative access to close any troublesome private crossing or to be able to signal any crossing that may lead into a private trailer park with a lot of residents that need the crossing, too. So that's one of the luxuries we have had in North Carolina. We feel like we can make most of the money. And we think that we could have the beginning of a model that uses the Diagnostic Team process and designates crossings that could perhaps be put to use elsewhere in the public corridors. Thank you.

MR. CAMPBELL: Good afternoon. I am Rick Campbell with Railroad Controls, Limited. And I am here to speak to you, I guess, on behalf of Rick Campbell and a number of different groups that I work with, including the National Committee on Uniform Traffic Control Devices, where I chair the Railroad and Light Rail Transit Technical Committee. However, I want to clarify that a lot of the views that you are going to hear aren't my own. They are derived from numerous meetings and organizations that I work with.

The issue of private highway rail grade

crossings, as you have already begun to develop ideas -- and certainly a lot of folks in this room are familiar with -- is a complex issue. It involves the railroad, a private landowner, and then potentially

other governmental agencies, such as FRA and FHWA. And private highway rail grade crossings are unique because they have largely been considered to be private matters of interest between the railroad company and the private landowner. And one of the things is they have been researched and inventoried. And some railroads have made significant strides towards inventory of private highway rail grade crossings. And in many cases, there are no documents that serve to establish the relationship between the railroad and the landowner. And that would include, of course, right of way over the crossing, maintenance of the crossing, and other safety issues, such as site distance and traffic control devices, and who has the responsibility for those.

So from the very basic beginnings of the private highway rail grade crossings, there's a point that exists relative to those crossings and the supporting documentation. In some states as well, although they are not public crossings, the State Public Utility Commission or Commerce Commission has assumed some degree of regulatory authority over private highway rail grade crossings from an agreement perspective but ordinarily from a traffic control

device perspective, although this is inconsistent

throughout the United States. However, the lack of progress made in reducing crashes at private highway rail grade crossings has led FRA to undertake a series of information-finding proceedings to solicit comments from railroads, landowners, state departments of transportation, and other stakeholders that have an interest in private highway rail grade crossings to be able to formulate opinions and ideas and possibly even rule making on how to address the private highway rail grade crossing issue.

In order to bring some degree of standardization of private highway rail grade crossings, one of the first things that's going to have to be developed is an inventory that's comprehensive on the private highway rail grade crossing. And, traditionally, the inventory that has been established and maintained by the railroads and FRA has been limited to public highway rail grade crossings. So this is going to provide another large expansion of the inventory.

In addition, FHWA and FRA are going to have to work closely to be able to develop a relationship that will allow establishment, standardized traffic control devices, and definitions as to private highway rail grade crossings in order to have an effective

cooperative effort.

At the present time, the manual on uniform traffic control devices does not specifically define public roadways separately from private roadways. MUTCD deals only with traffic control devices on public roadways or roadways open to public traffic. And recently FHWA has gone through an amendment and regulatory process to more clearly define the term open to public travel. That was handled through 23 CFR 655 and has recently been enacted as a final rule.

One of the things, though, that MUTCD lacks is the definition of other than a public road, which we do have a definition of a public roadway, that being any road or street under the jurisdiction of and maintained by a public agency and open to public travel. So you see where the open to public travel comes into this. MUTCD is silent about any other type of roadway that's not public.

In order to try and bring some order to these different types of crossings because you have already heard some comments from Paul about classes of crossings -- and obviously there is a clear need for a definition of a private roadway. And if we take what exists in MUTCD today and expand on that, one could derive that the definition of a private roadway would

be any road or street under the jurisdiction of and maintained by a private entity and not open to public

travel.

Well, those are fairly easy to define as well because that could be a roadway that's closed by a locked gate, posted with no trespassing signs, or there is some other type of barrier or gated access that prohibits the general public from access into this particular roadway. But one of the problems begins to surface when we have crossings that serve businesses. For example, a private roadway that has a highway rail grade crossing, which allows access to a retail development or restaurants or other types of commercial facilities, those that are clearly owned by a private agency but from the public's perspective are open to public travel.

And for that, I have proposed a third category and actually presented this to the Edit Committee of the National Committee on Uniform Traffic Control Devices. And what I proposed is a category known as a semi-public public roadway. And that would be any road or street under the jurisdiction of and maintained by a public entity and open to public travel.

And this third category allows us then to

classify these crossings, which are clearly on private rights of way but, from the public's perspective, open to public travel. Now, this work, of course, will have to go on within FHWA and MUTCD. But one of the benefits of this particular category -- and not to

duplicate what Paul just talked about. But one of the points of having a semi-public category is that it would allow the discretionary use of public funding for traffic control devices or other types of improvements. And because this is such a broad category, I don't know that we are going to be able to find successfully a definition to cover all applications.

So with MUTCD traffic control devices at highway rail grade crossings, they are actually developed through a process using a group of folks known as a Diagnostic Team. And the definition of a Diagnostic Team exists in 23 CFR 646. And it is a group of parties of interest in a highway rail grade crossing matter. And if we take that Diagnostic Team concept and expand it to the semi-public crossing category, we now have a means where the Diagnostic Team, which would include representation from the public agency -- applicable public agency. We would have some means to make a determination as to

applicability of federal funds and how they might be applied.

For example, a semi-public crossing that serves a retail development would in probably all circumstances not be deemed to be one which would be subject to the use of federal funds because we looked at a developer or landowner responsible for those traffic control devices. However, a semi-public

crossing that serves -- and I will use Paul's example of a private trailer park where there are numerous residents and potentially school buses, which use this crossing -- may be determined to be in the public's best interest received some or all federal or public funding to be able to provide improvements to the crossing and traffic control devices. So it is the ability and the discretion of the Diagnostic Team to be able to on a case-by-case basis make an allocation of whether the use of federal funding is appropriate.

And then finally from FRA's perspective, there was some mention earlier about a short-line railroad that exists in south of New Orleans called the New Orleans Gulf Coast Railroad. And they are currently fighting a battle with unauthorized private highway rail grade crossings. And the establishment through local citizens of the private crossings at will

can literally back up a dump truck and dump asphalt over the tracks and establish a private crossing clearly trespassing upon private right of way owned by the railroad company. However, because there is no clear-cut regulatory authority over these private crossings, the state boards have been reluctant to enforce actions by the railroad to be able to establish their right of way and protect their right of way from these illegal private crossings.

So as the third leg to the stool, if you will, I would like to suggest that FRA, as part of

their fact-finding process, consider the rule making which would provide some degree of authority through FRA or a state department of transportation to regulate the establishment of private highway rail grade crossings to provide for the inventory and that that inventory would include data, including maintenance responsibility, surface traffic control devices, and other information, which would be applicable at each crossing.

And as a closing point, I would say that were the party responsible for maintenance of the devices fail to maintain the devices or the surface or track structure or various elements that the crossing would be subject to closure.

So I will close with those comments. Like I say, in closing I want to make the comment that I think that in the past we have been somewhat misdirected by the fact that we have looked at ownership of the roadway as establishing public or private and that the real issue is not ownership or maintenance of the roadway itself but the expectation of free access by the public.

Thank you.

MR. BROWDER: Good afternoon. I am Bill Browder from the Association of American Railroads. And I want to apologize upfront to those of you that have had to listen to my presentation at least one or more times before because a lot of what I will talk

about is material that AAR and myself have presented in the past. First, let me tell you a little bit about the Association of American Railroads. It is an old established organization created back in 1888 after the war for the primary purpose of standards and practices.

And the first standard that we established and still use today is standard time. We were the inventors of standard time just like Al Gore says he's the inventor of the Internet. But we put it all together back in 1888 because everybody had a one- or

two-minute's difference in the time that they kept in every locality around that country in those days. And so we created the time zones.

Now, we don't take any credit for Daylight Savings Time. Mark on your calendar March 11 because we will be going back to that before we ever see the sun again in Washington, D.C. or we get away from the snow. But that's your U.S. Congress at work.

More about the AAR. The AAR still is a standards practices organization today maintaining a number of different standards. We also operate for the Federal Railroad Administration the Testing Center in Colorado. And it was premier Testing Center in the world. And folks from all around the world come and use the facilities there for a number of different venues that exist. We also have another profit-making subsidiary in North Carolina outside of Paul's hometown

of Raleigh there that is responsible for the interchange documents that we are involved in.

AAR is an association of the members in North America of the Class One railroads and some other folks. And we basically represent them. And the only costs that we have, unlike the Federal Railroads Administration command and control authority through the code of federal regulation, is interchange. We

don't have any more control over any of our members other than interchange. You know, the rails out there again after the war are 56 and half inches apart. And if you want to run them on those rails, you have got to have your equipment 56 and half inches apart. And it goes downhill from there as far as standards are concerned, but we have managed to do that since 1888. And it has developed a long and lasting relationship by private companies who are in business to make money for their stockholders, for their shareholders.

And so as such, AAR has many concerns about any issue that the government may be interested in addressing. I think there isn't a person in this room or organization that isn't interested in the common objective of safety at highway rail grade crossings.

To AAR -- and the views that I will express, especially since they are being transcribed, will be my own and not the AAR's espoused position because we have quite a few members who have different views concerning these particular issues. And I am sure if you talked

to them individually and they have come to these public sessions, they will be more than happy to provide comments upon the issues from their individual perspectives. I will give you a few things, though, that do apply.

First of all, at any highway rail grade crossing, railroads derive absolutely no benefit from those crossings being there. And that's stated in 23 CFR distinctly in the highway section of the CFR. And that's a very important thing to us. Another important thing to the railroads is that we are not the experts on treatments at highway rail grade crossings. The Highway Authority is the expert. Now, we are involved in private railroad crossing by default in the issue of treatments at grade crossings. But, again, we have a lot of concerns about those issues, especially as I mentioned in that it affects our stockholders. And these are expensive with the 93,000 private crossings and add to it the 150-sum public crossings that are out there today. Railroads in the United States spend over half a billion dollars a year on highway rail grade crossings, $500 million plus in maintenance, upkeep, liability, and activities that go on at grade crossings.

We don't have any large force of individuals out there to design and promote. We have got to do it within our own engineering departments or contract people to do that. The maintenance that we have to do

to CFR Part 234 requires us to make an on-site inspection of every active warning device crossing.

And there are over 65,000 of those out there in the United States. And you can imagine the cost of sending an individual to those crossings. Only about a thousand of the 93,000 private crossings have active warning devices. So they are few and far between. And most of them happen to be there because of the railroad insisting with everyone from state DOT's to private industries that they be installed for safety sake at crossings. I don't think that anything that comes out of hearings and studies will show that there is a one-size-fits-all solution with the number of stakeholders that we have that are involved in this issue.

You can already tell from those that are involved that we have to deal with 50 different state DOT's even though we get 120 through the 130 program to administer the programs that we have. Now, we have very established relationships, but different things work in different places. If you look at the Docket 23281 in case you missed it the first time around in the hearing, you will see a little short-line railroad down in Louisiana. I mean, that's a deposition in the making for you lawyers out there of what happens at private rail crossings. And that includes such things as folks in the good parishes down there going out and

dumping a load of asphalt across their right of way and identifying that as a private highway rail grade crossing. So it is a fertile field as far as issued by the way that railroad took it to court. They have been to federal court twice and had been thrown out. And they spent about $700,000 fighting these innumerable illegal crossings that they say exists down there.

But there are some common things that we can talk about in terms of safety because safety is first, always has been and always will be. And when I say safety, first, there is safety of our employees. We don't get anything out of those crossings, but we get our employees hurt, we get them killed, we get derailments. We get all kinds of issues that occur. UPS and FedEx, two of our best customers, don't care that we have a crossing accident at a private crossing some place on the right of way that delays the delivery of their traffic. And their customers are calling into the FedEx people wanting to know where their materials are. And so are our other industry customers, whether they are J.C. Penney and your sneakers that you are getting or they are a plant or a Chevrolet someplace that needs a widget to complete an auto on an assembly line.

So those are factors that we are interested

in. And, again, it is an important thing to our operations, our equipment, our employees, and safety overall. There are a number of things that have been done. I commend Rick's suggestion in terms of semi-public access -- semi-public crossing for those that have public access. I don't think there is any one-size-fits-all solution, as I said. And I think, quite frankly, I have got to commend the FRA for taking the initiative to at least get the process going on the issue.

So with that, I will finish and pass it along to the other side of the pond. And we are happy to have Aidan here to talk about where all the action is.

MR. NELSON: Thank you. I stood in this room about five years ago when we first talked about managing risk at private crossings. So I thought, well, however the presentation runs, I will just give some thoughts. And the thoughts start right back in the middle of the 19th century because private crossings were the price that railways had to pay to get their line of routes approved.

And for every crossing that was created, it was public. There were very distinct obligations placed on the railway. If it was private, there were pretty generic and often discreet obligations placed on

the railway. But for every crossing that was private back in 1850, it was an agreed, main, authorized user.

So the first issue is trying to keep tabs of

the succession from the original authorized user or users if more than one property was accessed a private crossing. It's a considerable challenge to the railway. And in Britain, it has become a far greater challenge in recent years with the planning rules being altered to permit development and agricultural properties to encourage employment in rural areas. And that's actually moved this quite a long way from a single farmer and his family and those associated with his business.

We have a situation, which the authorized user is supposedly responsible for ensuring that his visitors understand the rules of engagement for the private-level crossing. In practice, most farmers will say they do it but don't do anything. And indeed, with a move from farmers having their own hired hands to agricultural contracting, we have moved even further from the idea that the authorized user knows who's coming to work on his land.

We have recently had an accident in which there were a gang of immigrants from Britain, some illegal, none of which had an adequate command of

English to understand the instructions for the use of the crossing.

So in certain parts of the country, we are now producing information leaflets about the safe use of private crossings in a multitude of languages from Polish to Iraqi and Arabic. So we have got that.

We have a second language in parts of Britain -- Welsh. And that gives us a complication because you have in Wales signs in both English and Welsh. But the longer you make the signs, the less people pay attention to them, particularly if Welsh comes first, which hardly anyone uses it, other than officially. That's one of the obligations on the railway is to sign the crossing with the arrangements of its use. And that takes the form of a sign to indicate that it is private, a statement that the penalty for abusing the crossing which, in most cases, is a function of it being five-bar gate on either side of the railway because the railway has an obligation to fence itself. And that was a continuous fence. So at each private crossing you have a five-bar gate on either side.

It is not the safest form of railroad crossing because if you are going to use it properly, you first get off your vehicle, you open the near-side

gate. You walk across the grade crossing to open the far-side gate. You remember to look again, and you come back to get to your vehicle. You mount your vehicle, take it across your third crossing of the railway, you get off. You remember to look again, you walk back over, you close the gate. You come back over for the fifth time and close the other gate.

And if you are the mailman and you are only going to the farm to deliver the mail, what do you do?

You leave the gates open for your return. And you think, well, it is Friday, the refuse man comes. So you leave the gates open again. And what you go from is a passive user work crossing with a distinct barrier to indicate the presence of the railway to a passive open crossing.

We all know what happens on passive open crossings. You actually increase the risk. Now, we have been, some would say, a little stupid in Britain where we have high use of property crossings. We have put in miniature warning lights to indicate whether the line is clear or there is a train coming. And that just converts it to an active open crossing. And the idea of returning the barrier and closing the gate is even further from the user's mind.

So we have got a dilemma. What are we going

with regards to the dilemma? Well, first, we are trying to close the things. We have been reasonably successful. But most of the farmers and most of our crossings are in rural areas. Our private crossings are worked out. If the railway wants to close the train crossing and it wants to close a lot of them, it might be paying some reasonable sums of money. But in some cases, the railway has paid reasonable sums of money to close it. In others, it has become extorsion. And they have become ransom trips. And I think whatever you do in the way of legislation, you have got to take the ransom element out of it. And you

have got to promote rational armistices.

I have been particularly impressed by what the Irish are doing. And they have just taken a very radical look and sought to reduce the number of private crossings so that you are buying the land from farmers who have land on both sides of the railway and selling the land to other farmers. So they have consolidated the holding on one side of the railway and removed the need for the crossings.

They have also recognized that you can separate an agricultural crossing for far less money than railway engineers would have you believe. They want you to build something appropriate for the

separation of the public highway.

So if all you have got is to get cattle from one side to the other, you want something cattle sized. You don't want to take the biggest truck you can imagine underneath the railway. If you would go over the railway and all you have got to do is to round up the cattle and bring them back across, they can go up around a steep of gradients and you can build suitable bridges. So they have actually gone quite a long way into the British standard of having a solution.

The dilemma we have is when something becomes public. You can blame the Canadians because of this because their first prime minister was born in Scotland. And it was some years ago that the local authority put a sign at the end of the farmer's lane

pointing out the birthplace -- a tourist sign pointing out the birthplace of the first Canadian prime minister. That was seen as an invitation to public use.

Common sense did prevail, and I think the sign was taken down because the consequence of going to something that is declared public is that you have to upgrade the crossing to a public space crossing, which in Britain is usually, at the very least, an active open crossing. All the costs would fall to the

railway. So what the railway has become is pretty expert at challenging all of these indications of a public invitation to cross or where there is an established public invitation. But it is clearly a private right of way to reinforcing the private right-of-way dimension.

Sometimes the industry is forced into putting staff out on Saturdays and the holiday season because they give access to the camp sites. So everyone who uses the crossing on the Saturday when they are coming into camp for the week gets a leaflet advising them of the arrangements.

But that's done in partnership between the railway and the landowners. The biggest issue for me in relation to private crossings is that we know quite a lot about the risk profile. We know that on average the vehicles that use the crossings are bigger than most of our rural public crossings, plus farm machinery

on average is pretty heavy. Therefore, the potential for a passenger train derailment is increased when compared to the ordinary car.

We know that regular users of grade crossings on work-related journeys are the ones who are most likely to have an accident. And that's a pretty central characteristic of the access of the private

level crossings.

So if we are going to be effective there, we have got to target the employers who are not usually the authorized users at the crossings. That's something that falls to the railway and something that's done to varying degrees of effectiveness.

We have got one other dimension, which I think is particularly important. We have a nonstatutory planning guidance that says the planning authority must consult with -- sorry, should consult with the railway on any development likely to have a material impact on the use of the level crossing.

We believe that should be a mandatory statutory obligation to consult the railway because if we actually got that consultation going first, we might actually get some sense in the planning approvals, which would force the hand of the beneficiary for the planning approval to work with the railway to create an alternative access.

So I think that the possible quick win for us is toughening the planning regime to create a statutory

obligation to consult and, in light of that, to use
that as leverage to promote alternative access for
developments of the road. Thank you.
THE MODERATOR: I would like to thank the

panel one last time. And we will open up for questions
after that. Thank you very much. Since the term rules
of engagement were used by Aidan in his last speech, I
would just like to express again the need for -- if you
intend to make a comment or ask a question of the
panel -- and it could be separate entities on the panel
or the whole panel -- please step up to the mic, state
your name, spell your last name for the stenographer,
and ask your question and don't speak too quickly.
So with that, is there anybody in the
audience that would like to make a statement?

AUDIENCE ATTENDEE: Hi, I am Rich Brown with
TransCo Industries. That's B-r-o-w-n. And my question
is for Rick Campbell. Rick, the 94,000 population of
private crossings, what percentage of those crossings
are semi-public as you defined semi-public?
MR. CAMPBELL: Rich, we have had some
discussion about that. And because private crossings
are not currently inventoried, there is no real way to
know. However, there has been a group -- well, Tom is
going to come up and tell us about it. Maybe I should
say not inventoried to the point that we have the types
of data that we have at public crossings in terms of

usage of ADT and surface and warning devices. We just don't have the degree of information. It is hard to

say.

However, some folks, I guess, that would be considered experts or extremely knowledgable in the field can talk. And we feel that the number is not tremendously large. It's maybe in the neighborhood of 10 percent or potentially less than all of the private highway rail grade crossings. Sorry, Tom, if I said that wrong.

AUDIENCE ATTENDEE: Tom Woll, W-o-l-l, Federal Air Administration. Most people know me. Yeah, I have got to correct that. Private crossings are in the inventory, okay. So that's a misstatement. You are correct that we don't have ADT's in some of the other information. Sometimes the railroads will provide the train counts on that. But somebody has got to go out there and count those automobiles or whatever is going to cross that. And the question is, Who is going to do it? Obviously, the states are not going to do it.

There is a category for whether or not there is public access in the inventory. We changed that in November of 1999. However, I don't think that it has been updated by all of the various states and railroads. In fact, unfortunately, it was mentioned earlier in one of the other sessions. There are 20

states. And some of them -- I won't say that they are present here -- have not updated their inventory in the last six years and haven't initiated any updates. So if we could get that -- they probably have the data. We would just like for them to send it to us. So that's where the big problem is. And that's why the inventory, in some cases, is not up to date.

AUDIENCE ATTENDEE: My name is Gary Drouin, D-r-o-u-i-n, and I am with Transport Canada. I guess my first comment goes to Aidan. And my question is, was that sign in both Canadian official languages, French and English, because maybe that's what caused the confusion and not necessarily for the private or public voracity. I am just joking.

My real question goes to Rick. In the semi-public crossing if -- well, say, there's a trucking company and there's trucks of course going in -- delivery trucks going in and maybe a few customers like FedEx and so on and so forth. Would you consider that as a private crossing or semi-private crossing?

MR. CAMPBELL: As part of the proposed usage, we would consider that to be a private crossing because it is a private business, which has control over its employees. And then although you do have access by

drivers, such as FedEx or UPS or other types of delivery, all types of delivery, those are generally drivers that possess a commercial driver's license and have had additional training, which includes additional safety training in highway rail grade crossings. And clearly, that would be -- if that crossing was exclusively used to service that private business, if you will, that you would look to the private business to make any funding to support active or improved traffic control devices, which even to this day they could freely do. And, in fact, many private industrial facilities, especially if there are hazardous materials and things, actually do have active traffic control devices at those private crossings.

AUDIENCE ATTENDEE: Okay. Thank you.

MR. BROWDER: I want to go back to Mr. Drouin's inquiry about private grade crossings. And as I stated in the New Orleans public hearing for the 93 or 94,000 that are out there, the resource for most of those in the FRA inventory are the railroads. They are the people that are doing all of the work and submitting the data -- limited amount of data that Tom Woll requires. Again, we are a private company. We don't derive any benefit. We don't see an incredible safety benefit to providing this information for public

purposes.

As a matter of fact, some of our members choose to have fairly extensive information on their

private inventories. But, again, that's a matter of choice as far as the stockholders of that company are concerned. And unless we could identify any kind of significant safety value to us to collecting and examining that, right now it is a burden on our daily operations to collect and provide this information to the FRA. Thank you.

AUDIENCE ATTENDEE: Maurice Rached, R-a-c-h-e-d. This question is for Miriam Kloeppel. Miriam, how do we deal with situations where the crossing is owned by an authority that believes that the crossing is private and does not -- and is not subject to FRA regulations?

MS. KLOEPPEL: Are you talking something like a park or something that is apparently a private road but it has public use like access to a municipal dump?

AUDIENCE ATTENDEE: That's a good example.

MS. KLOEPPEL: Those are among the things that have to be considered. But at the moment, if it is in our inventory as private crossing, that's all we know about it.

AUDIENCE ATTENDEE: Okay. So you are not

taking any action in that regard at the present?

MS. KLOEPPEL: Well, I guess ultimately we may. But, as I said, this whole effort is to determine what kind of action we should take for any private crossing. This is just one possible category of many.

AUDIENCE ATTENDEE: Because I agree with Rick

and the other panelists when they indicated that the motorist doesn't know if it's a roadway open to the public like the motorist on a public roadway and crossing unless it is specifically assigned and gated and identified. Okay. Thank you.

MS. KLOEPPEL: Thank you.

THE MODERATOR: Aidan brought a different perspective to us on how Britain deals with private crossings. I was wondering if I could ask Mr. Poichuk to describe the Canadian practice of private crossings and classification for us. Mr. Poichuk.

AUDIENCE ATTENDEE: Phil Poichuk, P-o-i-c-h-u-k, Transport Canada. Currently, our standards are departing from the traditional definition. In Canada, traditionally we had private crossings in two categories -- basically statutory and nonstatutory. They are also referred to as by right or by grace. By right being where the railway in the late 1800's severed land and therefore had a right

to -- had the obligation to provide the crossing and, in fact, maintain it. By grace was where subsequently a landowner who hadn't had his land severed originally would need a crossing for other purposes. And then they would be -- they would enter an agreement with the railway and usually pay the cost. And, in fact, that was the by grace one.

It basically dealt more with rights and money, i.e., the maintenance of it, than it did with

the safety responsibility. Our new grade crossing standards, which I believe Anya and I believe Steve actually asked me to speak about tomorrow, gets away from traditional definitions relative to ownership. And, in fact, in our grade crossing manual RTD 10, as it is called, we don't use the word public or private. We get away from that distinction. And we now require safety amenities based on whether or not it is restricted or unrestricted for public use.

THE MODERATOR: Thank you, Phil.

Does the panel have any comments on the Canadian description and classification?

MS. KLOEPPEL: I think I think they are very interesting. But it is an interesting different way of looking at categorization of the crossing.

AUDIENCE ATTENDEE: Jim Burnett, former

chairman of the NTSB. What kind of records have been kept of the meetings so far and held in the FRA public meeting series? Are there transcripts of those meetings?

MS. KLOEPPEL: Yes, sir, there are transcripts. And I have been put them up on our -- in our docket as best as I can.

AUDIENCE ATTENDEE: Is the docket available on the Internet?

MS. KLOEPPEL: Yes, it's actually on our docket server.

THE MODERATOR: If you don't have one of

these brochures yet, on the back is the docket number. And if you go to the DMS system, if you type in the last five digits, it will take you right to the docket. And it will start with the oldest submission. And there is a little button that you can hit that says reverse order so you see the newest submission first.

MR. BROWDER: There are 21 items on the docket as of yesterday on 23281 that most of them concern. There are two of the transcripts that are already up there that she is talking about.

MR. BURNETT: Thank you.

MR. BROWDER: Don't put the year in when you search.

THE MODERATOR: Okay. I have a question. I have attended all four of the last public hearings. And I have heard the panel's opinions this afternoon on the safety of private crossings. And in order to find a solution, we need to try and push the envelope to determine what options do we have to move forward.

And I would like to ask the panel their opinions on if there were regulations or some guidance or standards that were developed for design characteristics, should that effort come from the states that administer and possibly have legislation over private crossings or should it come from a DOT-wide task force that includes not only the FRA, the FHWA, but stakeholders like the mortar carriers, the Transit Administration, or should it be left to the

locals to determine through their Diagnostic Teams the appropriate approaches?

MR. WORLEY: What I will say is the first thing you need is money. There needs to be some more pilot projects, I think, around the country to get some experience with different approaches for private crossings, be it public or private partnerships for closures, for how to go about equipping with warning devices or other treatments. So that would be the first positive step -- to get some experience. I think

ultimately you have got to look at a diagnostic team process that's headed up by the authority that has the experience in the states we are involved in. And that would be the state DOT's right now. And that's my opinion. And it is quite biased because, you know, you look at it and see you have a good idea of how to resolve things based on experience and what has to be accomplished. So I would say that would be the start because I would hate to see us get into something where you constantly try to write a lot of policy and write a lot of specifications without a lot of real world experience out there to draw from.

And, also, by having private crossings and real world experience, you certainly build the support toward doing something. So I think we are clearly moving towards doing something. It is just difficult. I think it also depends on money, which there is not a lot.

MR. CAMPBELL: I think I might add to that, too. I will just say that I agree with Paul because the state agency is the one that really has the clear picture of crossing safety issues within their jurisdictions. And that's exactly why that's included as a part of my proposal that the Diagnostic Team ultimately has say-so in terms of the crossing and what

might be done there.

Also, of course, as many as you know, there are some pretty interesting issues in Section 409 that provides some protection for the Diagnostic Team in terms of isolating their decisions. And there is certainly a large degree of logic that maintains that protection that exists. However, there are some things that the Diagnostic Team could have some latitude in where, for example, it might be possible to take a number of private crossings. In other words, a private driveway that starts at a single-family home and to consolidate those crossings. In other words, take those five or six driveways and build a connecting roadway and then a single crossing to serve that. And then in that case convert those multiple private crossings into a single semi-public crossing. And that may very well be, in that case, a good use of public funding. And it may also be as part of that process that some part of those costs are allocated or assessed to the landowners.

And, again, that would be within the

Diagnostic Team's jurisdiction to decide if public funds are to be used and, if so, what percentage and if the landowner should share in the burden of improvement costs as well. So, again, that's why I support that

the local Diagnostic Team really can deal with all of the individual issues and address them on site and then ultimately handle the deal through the DOT if there is one.

MS. XU: Well, I agree with what Paul and Rick just said. Basically, you know, states should have something they demand from, you know, the state level. But I would like to say that at the point that federal funding is involved, then we do need some federal-level guidelines in the general terms. There's all kind of federal guidelines. You know, they are all in general. And the state has a lot -- the states have a lot of power to define details. And so, you know, we would like to have some kind of guidelines in terms of how to initiate the process.

MS. KLOEPPEL: I just wanted to agree effectively with what Guan Xu gave. What I have heard in various meetings suggests that if there is a federal involvement, it should be something to do with establishing a process. Now, I won't say that it is the specific direction the FRA will go, but it is consistent with what we have been hearing from a number of meetings that participants in the meetings have a sense that there is no process and there is even no way

to begin attacking the problem. So one reasonable

federal way to be involved is to help with the development of that process and leave in the hands of the people who know best what they are doing the factual decision-making about individual funds, state, and local Diagnostic Teams.

MR. BROWDER: I hope you don't mind me saying this, but it really scares me because I think it shows a lack of understanding and naivete concerning the issues, especially after we have been to the public hearings about the seriousness of the issue itself. I would grant, the last thing the railroads want is probably regulation. But it's one more step down the line. It's something that opens up regulation to more entities out there, such as states, municipalities, and people like that. The current system for public crossings is a mess. We shot ourselves on the railroad -- shot ourselves in the foot when we agreed to the 130 plan.

Finally, I mentioned the amount of money it costs us in maintenance. That continues to go up every year. We are scared to death that that might continue within the private sector. And when I hear you talking about opening up some kind of a process to state and local governments to interface with private companies that don't have large staffs to entertain regulation, I

have concern.

Now, having said that, let me say I think there are some constructive steps that can be done. And I don't disagree about what Miriam and Guan said about things that can proactively address Paul's comments about pilot projects. I can tell you one thing that I think the railroads agree on and may be interested in having whatever the Federal Government entity is that's responsible for. It is to allow us to get agreements on all private crossings. We can't even do that now.

And one thing that would help with the administration of private crossings would be that, although we are not the experts on highway traffic control devices, certainly if there was an agreement that was required of the individual stakeholders, namely, the railroad and the highway user, that that would be, like a couple thousand lawyers tied to the bottom of the ocean, a good start. Thank you.

THE MODERATOR: Thank you, Bill.

MR. NELSON: I think the important thing for me is that we don't make problems that don't exist. And we have problems with private crossings. But very many private crossings are well run. The landowners exercise their responsibilities and they work the

railway. And I think that while you have got something that works, just leave it.

When you haven't got things that work, it is usually because, as a matter of public policy, developments have been allowed on one side of the railway without taking account of the impact on the railway.

If it is public policy for the development, it is allowed. And once you create that sort of development, you should avoid the issue of agreements. And it should be a new form of agreement to recognize the new circumstances. And the greater burden is on those who benefit from the development.

AUDIENCE ATTENDEE: My name is Ray Lewis, L-e-w-i-s. I am with the Division of Highways in West Virginia. We are one of about six or seven states, I think, that has more private crossings than public crossings. And that's not a distinction we would have sought. You said something there that really struck a cord with me as far as managing the crossings.

First of all, in my opinion, out of out 1900 private crossings, probably 1750 of them will never cause of us any trouble except at random because they tend to be farm field crossings. They tend to be individual residential crossings. They go to one or

two dwellings. There is not any room for expansion, say, between the railroad and the river. And you just have to make sure that the responsibility to carry out the farm doesn't do something too close to the tracks or the railroad and at least keep the roads passable

for whatever usage. And that may have been a crossing for agricultural use or you may need to add an asphalt surface for the residents going in and out several times a day.

The second thing is that access across the tracks. When we have a highway system we can't control, we can't keep people from coming onto out highway system. Anybody has a right to come on our highway system, but we can set the condition under which they do so. And we require driveway permits. And we have a fairly extensive manual for driveway permits. If that driveway is a new driveway crossing the tracks or it's a change in use of the land to cross the tracks as an existing driveway, then our rules and regulations require the landowner to get a new permit to reflect what's actually going to happen there. And if there is a railroad involved, we do ask for an agreement. Even if the crossing is in there by deed, we feel like we have the right to ask for an agreement.

One of the big problems with private crossings is the records are very difficult to locate. The problem really started to get out of hand on July 4, 1828, when Charles Carroll was the cornerstone of -- but there are different records on different crossings and everything is kept different ways by different railroads. Some are kept by evaluation statements. And you can find a list of all the

agreements on the sheets on evaluation sheets. Some of them are kept in separate files in different offices. So it makes it a real interesting search to find out exactly how a crossing got there. I think from what I have seen, one of the bigger problems with private crossings is a sudden change in use of the land.

I had an experience one time when somebody from the Brotherhood of Locomotives Union called and said they were real upset about a private crossing. And I knew where the crossing was. I said, Well, what is the problem? I said, You know, one farmer goes in and out of there. He says, No, no, our guy is on a lumber truck. And I go, What lumber truck? Well, one was carrying lumber up there to that property that had been subsidized and was getting 120 houses built on it. So that translates to about a thousand vehicles a day crossing the tracks at that point. So possibly

that will start some discussion. Thank you.

AUDIENCE ATTENDEE: I am John Henikchen, and my comments are for the panel. I would like to hear what you have in response to what I have to ask less Bill of course. Should regulations and standards or guidance be developed, how will those regulations and guidance standards be interfaced with the existing agreements -- private agreements that we have between the railroad and the landowner? In other words, will your regulations supercede that private agreement?

MS. KLOEPPEL: I hate to disappoint you, but

I have to say that I think that's one of those things that is yet to be determined. If we were to develop regulations, that is one of the factors that we would have to consider. But we would certainly have to be sensitive to that as an issue.

MS. XU: I don't have any comment. I think before I say anything, I will have to ask our lawyers.

AUDIENCE ATTENDEE: If we are going to leave it up to the lawyers, then I guess we don't have to worry about this issue. So that will be another 10 years and I will be retired.

MR. NELSON: Last Friday before I -- sorry, Thursday before I came over here, I signed the RSVP response to a consultation from our regulator about

what should be in their standards, their principal documents for level crossings in the ground. The view of RSVP is that there should be a statutory defined user interface for public highway crossings, public pedestrian crossings, and private level crossings. And beyond that user interface, everything else should be dealt with within the standards of the railroad concerned.

MR. WORLEY: One other thing to consider is if you have got some of those agreements out there and some of the crossings are based in deeds. And if someone has a right to that crossing in the deed, you get into a situation where you can't take their property. You can't take it. So you then have to

negotiate. So it comes back down to -- I get back into having that pilot program and getting the experience. You learn what are the different scenarios when you can negotiate to try to close and try to eliminate the crossings. It is kind of like the old politician back in North Carolina that once told me. He said, You have got to have something in the sack. You have got to talk to these folks. You have got to have something in the sack. You have got to try to negotiate with them. And I think that's what you are going to have to do.

THE MODERATOR: I would like to get back to

Ray Lewis. Ray Lewis represents a state representative. And as shown in the latest FRA compilation of state laws, there are only 32 -- 22 states that currently have statutes dealing with private crossings. Now, what we heard from Rick and from Paul, with Bill's agreement, is that it should be at a local level. How can the Federal Government now step in to help you that have statutes and those that don't actually be able to manage the safety of private crossings?

AUDIENCE ATTENDEE: (Ray Lewis) Well, I think that the point that Paul made is very pertinent in that if you start intruding into this relationship between property owner or the licensee on the crossing -- it is usually the same person but not always -- I think you get yourself possibly in the position where you could have takings. I don't want to

have 1900 takings. You know, I don't want to retire and been responsible for having to go out and have 1900 railroad transactions or more if the railroad happened to run down the property line and you have got two people with underlying interests in something like that.

It goes back to my comments that most of those crossings are never going to cause us any

trouble. I think that the ones that are going to cause us the most potential to cause trouble are the ones that were in the deed but the family has, granted the property has been subsidized, a trailer park has been put in or something. And I think that at that point, there may need to be some mechanism in state law or maybe federal regulations -- I am not sure of the appropriate form -- that would permit that deed to be rolled over into an agreement into a standard private crossing agreement.

When something like this happens, usually there is money being made. And the developer very frequently has the opportunity, as he did with the one with the 120 houses and lumber trucks, to get out from under his obligation to provide good and safe access to his tenants or the people to whom he sells the property or whatever.

Unfortunately, at least in West Virginia we have all of this new case law on change in use. And what we do is come out of circuit courts. And it

hasn't been reported, but I think that might be the most fruitful area to look at to try to identify those crossings that are going to pop up and cause you problems.

THE MODERATOR: Thank you.

MR. CAMPBELL: I might add that I agree with what Ray says wholeheartedly. And also to follow-up with John, by and large, I think the majority of the private crossings are not going to be an issue. And we don't need to go into this potential rule-making process and change what goes on at those locations. The ones that are in issue are the ones that do have this free and unrestricted public access and may require some additional treatment. So I think right there we narrow this down to a smaller group of crossings. Potentially I would see that the existing private crossings be retained. However, one thing that we might look at as a benefit to some regulation would be that if the usage for the ADDT on the crossing changes by some percentage or fixed amount that it would prompt a review into the use of the crossing because that's one of our big concerns is if a private landowner sells some or all of the large tract of property, all of a sudden it would become a multifamily access way or potentially a sporting-type facility or other facility where the public all of a sudden gets this expectation of free access.

So the rule-making process, as I see it,

really would have minimum impact on a large number of crossings. But the ones where there are changes or

where we do find public access are the ones that need to be addressed. And that's where it would be beneficial.

MR. WORLEY: As Ray was talking, one thing I wrote down was plans and outreach. And I propose a book called the Land Use Planner's Guide to Railroads because I think one thing you have got to try to do if the Feds can do something from a level or the states, as we look at land-use planning and smart growth as we talk about that, is to get information out to land-use planners on county levels and municipal levels what is the railroad about. You know, it is not a dying artery. It is growing. It has got more traffic, but you have got to consider the railroad and the facts about railroads when you are looking at land-use planning.

We went through the steps for working groups on public crossings. Maybe there needs to be some kind of, you know, information in that Land Use Planner's Guide to Railroads, Copyright 2007, Part One, that states all of that information where they can refer to and know that when they approve a subdivision rezoning perhaps they need to require them to get alternative access to private crossings. I think that's the way you continually try to work through these things

because the problems aren't created overnight. And they won't be resolved. And we will all be crazy and muttering before they are ever resolved. But that book is on sale very soon.

THE MODERATOR: Anyway, our time is near closing. I would like the panel members to -- if anybody has one last comment on the topic. Otherwise, I would like to give them all one last round of applause.

Once again, I thank you all for attending. And if you are interested in this topic and any of the other TRB Committee topics, we will be discussing them all tomorrow at the eight o'clock in the morning till noon in Lincoln II. And I also extend an invitation to you if you still have an interest in safety at private crossings to join us in Syracuse, New York in February -- it should be lovely weather -- at the Doubletree Hotel in Syracuse, New York. Thank you very much. The session is closed.

(At 5:34 p.m., the session was concluded.)

Appendix A.7

Docket Submissions

authorized users in the field to request, be granted, or release on-track authority. To facilitate the implementation of this technology, UP is requesting that FRA suspend compliance with certain rules in accordance with the provisions contained in 49 CFR 211.51.

The Remote Authority is a web-based application that will permit authorized users to request, be granted, or release Foul Time, Track Permit, Track & Time or Track Warrant authority to occupy a main track or other controlled track. The central office component consists of one or more Remote Authority servers that will receive requests from authorized users for on-track authority or requests to release on-track authority. If the user is authorized to request or release on-track authority, and the request meets established criteria, the request is forwarded to the Union Pacific's Computer Aided Dispatching system for further processing. Requests that do not meet established criteria are rejected at this point in the process, and the user is provided the opportunity to change or cancel the request.

Requests for on-track authority are received by the dispatching system and must meet established criteria to be eligible for issuance by the dispatching system without dispatcher intervention. If the established criteria are not satisfied, the request is placed in the appropriate authority request queue, and the train dispatcher is notified.

In this regard, the UP requests relief to permit the dispatching system to grant or release on-track authority in response to a valid request from an authorized user without intervention on the part of the train dispatcher or control operator who controls train movements on that track. The UP hereby seeks relief from 49 CFR 214.321(a)(1), which requires a track occupancy authority for working limits to be issued to the roadway worker in charge by the train dispatcher or control operator who controls train movements on that track.

Access to the Remote Authority application within the UP network requires the user to present valid credentials consisting of standard user identification and secret password. For off-network access, a Virtual Private Network (VPN) connection must be established by the employee before presenting valid credentials. Within the Remote Authority application, individual users are further restricted in the functions they may perform.

Interested parties are invited to participate in this proceeding by submitting written views, data, or comments. Although FRA does not anticipate scheduling a public hearing in connection with this proceeding, if any interested party desires an opportunity for oral comment, they should notify FRA in writing before the end of the comment period and specify the basis for their request.

All communications concerning this proceeding should identify the appropriate docket number (FRA–2006–24840) and may be submitted by any of the following methods:

- Web site: *http://dms.dot.gov*. Follow the instructions for submitting comments on the DOT electronic docket site.
- Fax: 202–493–2251.
- Mail: Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL–401, Washington, DC 20590–001.
- Hand Delivery: Docket Management Facility, Room PL–401 on the Plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal Holidays.

Communications received within 45 days of the date of this notice will be considered by FRA before final action is taken. Comments received after that date will be considered as far as practicable. All written communications concerning these proceedings are available for examination during regular business hours (9 a.m.–5 p.m.) at the above facility. All documents in the public docket are also available for inspection and copying on the Internet at the docket facility's Web site at *http://dms.dot.gov*.

Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000, (Volume 65, Number 70; Pages 19477–78). The statement may also be found at *http://dms.dot.gov*.

Issued in Washington, DC, on July 20, 2006.

Grady C. Cothen, Jr.,

Deputy Associate Administrator for Safety Standards and Program Development.

[FR Doc. E6–11964 Filed 7–26–06; 8:45 am]

BILLING CODE 4910–06–P

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

[Docket No. FRA–2005–23281, Notice No. 1]

Safety of Private Highway-Rail Grade Crossings; Notice of Safety Inquiry

AGENCY: Federal Railroad Administration (FRA), Department of Transportation (DOT).

ACTION: Notice of safety inquiry.

SUMMARY: FRA announces its intent to conduct a series of open meetings throughout the United States, in cooperation with appropriate State agencies, to consider issues related to the safety of private highway-rail grade crossings. At each open meeting, FRA intends to solicit oral statements from private crossing owners, railroads and other interested parties on issues related to the safety of private highway-rail grade crossings, which will include, but not be limited to, current practices concerning responsibility for safety at private grade crossings, the adequacy of warning devices at private crossings, and the relative merits of a more uniform approach to improving safety at private crossings. FRA has also opened a public docket on these issues, so that interested parties may submit written comments for public review and consideration.

DATES: The initial public meeting will be held in Fort Snelling, Minnesota on August 30, 2006 at the Bishop Henry Whipple Federal Building. Persons wishing to participate are requested to provide their names, organizational affiliation and contact information to Michelle Silva, Docket Clerk, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6030) by July 31, 2006. Persons needing sign language interpretation or other reasonable accommodation for disability are also encouraged to contact Michelle Silva, FRA Docket Clerk, at (202) 493–6030 by July 31, 2006. Additional public meetings will be announced over the next three months.

FOR FURTHER INFORMATION CONTACT: Ron Ries, Office of Safety, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6299); Miriam Kloeppel, Office of Safety, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6299); or Kathryn Shelton, Office of Chief Counsel, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6038).

SUPPLEMENTARY INFORMATION: There are currently over 94,000 private highway-

rail grade crossings (private crossings) in the United States. Each year, about 400 accidents and between 30–40 fatalities occur at these crossings. In most years, the number of deaths occurring at private crossings exceeded the number of on-duty deaths among railroad employees in all rail operations. While accidents and injuries at public highway-rail grade crossings have declined by between one-third and one-half in the past decade, accidents at private crossings have declined by only 10 percent, and the number of injuries in private crossing accidents has actually increased by 1 percent. Figures 1 and 2 show the accident, fatality, and injury trends occurring at private and public grade crossings, respectively.

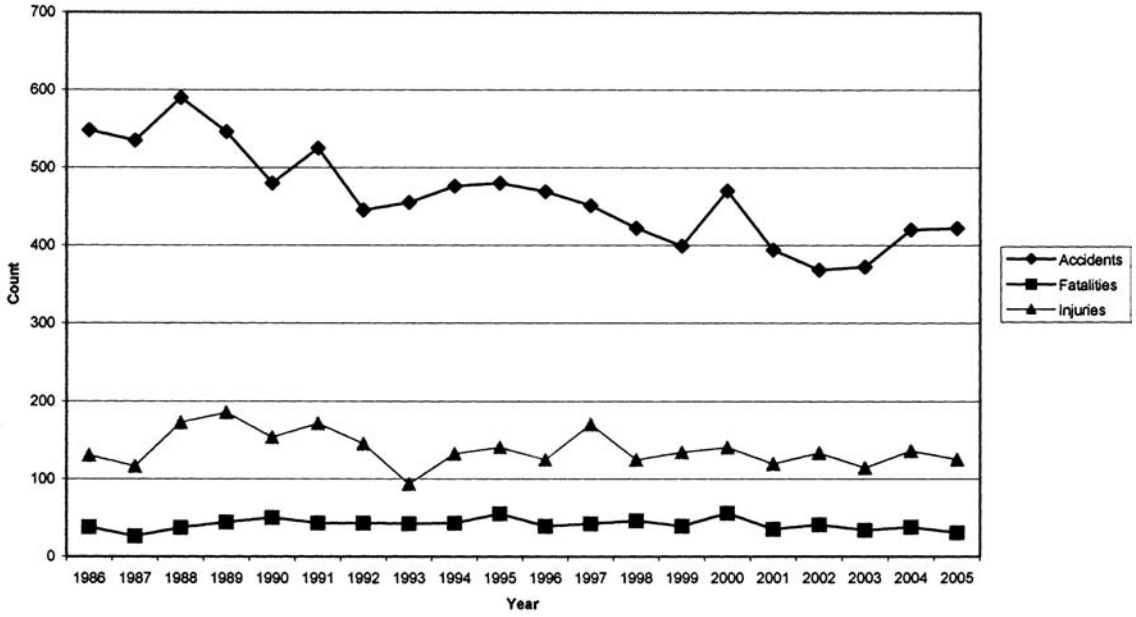


Figure 1. Accidents, fatalities, and injuries occurring at *private* highway-railroad grade crossings between 1986 and 2005.

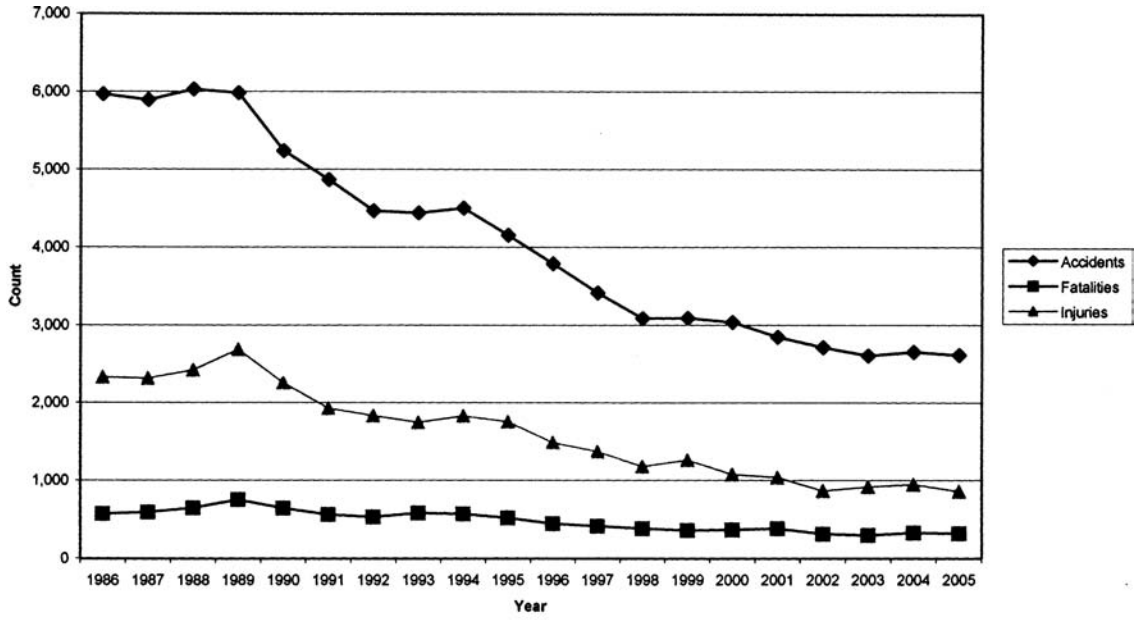


Figure 2. Accidents, fatalities, and injuries occurring at *public* highway-railroad grade crossings between 1986 and 2005.

Private highway-rail grade crossing safety has therefore been a matter of concern to the U.S. Department of Transportation and the National Transportation Safety Board (NTSB). FRA hosted an open meeting to initiate industry-wide discussions concerning private highway-rail grade crossing safety on July 15, 1993. In its 1994 Rail-Highway Crossing Safety Action Plan, the United States Department of Transportation proposed to ''develop and provide national, minimum safety standards for private crossings, and to eliminate the potential impediment to high speed rail operations posed by private crossings.'' In its 1997 study on Safety at Passive Grade Crossings, the National Transportation Safety Board (NTSB) highlighted the need for some system to improve safety at private highway-railroad grade crossings, recommending that the DOT, in conjunction with the States, should determine governmental oversight responsibility for safety at private highway-rail grade crossings. In 1999, the NTSB weighed in again on the issue of safety at private crossings in its report on a private grade crossing accident in Portage, Indiana. In this case, the NTSB recommended that the U.S. Department of Transportation ''eliminate any differences between private and public highway-rail grade crossings with regard to providing funding for, or requiring the implementation of, safety improvements.'' In 2004, the Department of Transportation published an updated Highway-Rail Crossing Safety and Trespass Prevention Action Plan (*http://www.fra.dot.gov/downloads/safety/action_plan_2004.pdf*) (*Secretary's Action Plan*). In this plan the FRA has committed to lead an effort to define responsibility for safety at private highway-rail grade crossings. This effort is intended to include a determination of minimum criteria for signage, and also to identify safety needs.

Private crossings present a safety challenge precisely because their non-public character can influence their design and maintenance. The 94,000 private crossings that remain on the national rail system serve the needs of a very large and disparate population of individuals, small businesses and large corporations that are holders of the right or privilege to traverse the railroad. Their circumstances differ in many ways:

1. *Degree of need for private crossings and their use.* The policy of the U.S. Department of Transportation seeks elimination of unnecessary and particularly hazardous highway-rail grade crossings, whether public or private. *Secretary's Action Plan* at 41. Some private crossings are essential for access to the holder's property and failure to provide access would render the property much less valuable. Other private crossings are situated along roads that could easily provide access via other public or private crossings. Some private crossings are heavily used, while others are used only seasonally (e.g., certain agricultural crossings used only for movement of agricultural equipment such as tractors and combines). Some crossings are used only for routine personal use or occasional use by business guests (e.g., personal residences). Other private crossings are used extensively for private business purposes, and motor vehicle operators are typically employees, contractors, and suppliers (e.g., access to industries, rock quarries, etc.) In still other cases, private crossings may be used very heavily by the public to enter commercial facilities.

2. *Engineering.* Some private crossings providing access to commercial properties have well-maintained surfaces and excellent signage comparable to that contemplated by the Manual for Uniform Traffic Control Devices. According to the National Highway-Rail Crossing Inventory, active warning devices are provided at 1,078 private crossings. More typically, many private crossings are marked only by crossbuck signs without advance warning signs, or not at all; and surface may be irregular. Sight distances at private crossings without active warning devices vary widely. Neither the Federal Government nor the States, with extremely few exceptions, provide financial assistance for engineering improvements at private crossings. In

these few instances, funding for private crossings may be provided for specific corridor projects, most commonly the high speed rail corridors.

3. *Legal status.* Private crossing rights vary from ownership of the fee simple (outright ownership of the underlying property), to documented easements, to prescriptive easements (where recognized), to documented licenses under contract, to verbal licenses subject to revocation without notice. The entities enjoying rights under these arrangements may be referred to as ''holders'' of the right to cross. Increasingly over the past 15 years, railroads have sought to establish maximum control over these intermodal intersections by requiring crossing holders to purchase insurance or provide other protection in the event a holder, railroad or a third party experiences a loss due to a collision. Contracts or other legal instruments may further define responsibilities (e.g., for maintenance of the crossing surface or providing notifications under stated conditions).

4. *Extent of regulation.* In general, private crossings are not subject to regulation at the State or Federal level. FRA's requirements for inspection, test and maintenance of active warning devices (49 CFR part 234) apply to the railroad where active warning has been installed; but there is no Federal mandate for providing such warning.[1] A handful of States require that railroads place crossbucks or special signage (in some cases a stop sign and a crossbuck on the same post) at private crossings. The subject of private crossings is otherwise largely unregulated. Accordingly, such recognized responsibilities as exist with respect to the safety of private crossings are generally the product of contracts and common law. (For a general description of responsibilities related to crossing safety, see Safety Advisory 2005–03; Highway-Rail Grade Crossing Safety (70 FR 22750; May 2, 2005)).

Request for Comments

While FRA solicits discussion and comments on all areas of safety at private highway-rail grade crossings, we particularly encourage comments on the following topics:

- At-grade highway-rail crossings present inherent risks to users, including the railroad and its employees, and to other persons in the vicinity should a train derail into an occupied area or release hazardous materials. When passenger trains are involved, the risks are heightened. From the standpoint of public policy, how do we determine whether creation or continuation of a private crossing is justified?
- Is the current assignment of responsibility for safety at private crossings effective? To what extent do risk management practices associated with insurance arrangements result in ''regulation'' of safety at private crossings?
- How should improvement and/or maintenance costs associated with private crossing be allocated?
- Is there a need for alternative dispute resolution mechanisms to handle disputes that may arise between private crossing owners and the railroads?
- Should the State or Federal government assume greater responsibility for safety at private crossings?
- Should there be Nationwide standards for warning devices at private crossings, or for intersection design of new private grade crossings?
- How do we determine when a private crossing has a 'public purpose' and is subject to public use?
- Should some crossings be categorized as 'commercial crossings', rather than as 'private crossings'?
- Are there innovative traffic control treatments that could improve safety at private crossings on major rail corridors, including those on which passenger service is provided?
- Should the Department of Transportation request enactment of legislation to address private crossings? If so, what should it include?

Issued in Washington, DC, on July 20, 2006.

Joseph H. Boardman,

Administrator.

[FR Doc. 06–6501 Filed 7–26–06; 8:45 am]

BILLING CODE 4910–06–P

[1] Other FRA regulations applicable to the railroad are intended to address safety at private crossings, as well as public crossings, particularly requirements for alerting lights (49 CFR 219.125) and reflectorization of rail rolling stock (49 CFR part 224) to make trains more conspicuous.

DEPARTMENT OF TRANSPORTATION

Maritime Administration

[Docket No. MARAD–2006–25457]

Information Collection Available for Public Comments and Recommendations

ACTION: Notice and request for comments.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, this notice announces the Maritime Administration's (MARAD's) intention to request extension of approval for three years of a currently approved information collection.

DATES: Comments should be submitted on or before September 25, 2006.

FOR FURTHER INFORMATION CONTACT: Michael Franklin, Maritime Administration, (MAR–610), 400 Seventh St., SW., Washington, DC 20590. Telephone: 202–366–2628, fax: 202–366–3954; or e-mail: *michael.franklin@dot.gov.* Copies of this collection can also be obtained from that office.

SUPPLEMENTARY INFORMATION:

Title of Collection: Automated Mutual-Assistance Vessel Rescue System (AMVER).

Type of Request: Extension of currently approved information collection.

OMB Control Number: 2133–0025.

Form Numbers: None.

Expiration Date of Approval: Three years from date of approval by the Office of Management and Budget.

Summary of Collection of Information. This collection of information is used to gather information regarding the location of U.S.-flag vessels and certain other U.S. citizen-owned vessels for the purpose of search and rescue in the saving of lives at sea and for the marshalling of ships for national defense and safety purposes.

Need and Use of the Information: This information collection is necessary for maintaining a current plot of U.S.-flag and U.S.-owned vessels.

Description of Respondents: Respondents are U.S.-flag and U.S. citizen-owned vessels.

Annual Responses: 29,280 responses.

Annual Burden: 2,342 hours.

Comments: Comments should refer to the docket number that appears at the top of this document. Written comments may be submitted to the Docket Clerk, U.S. DOT Dockets, Room PL–401, 400 Seventh Street, SW., Washington, DC 20590. Comments may also be submitted by electronic means via the Internet at *http://dmses.dot.gov/submit.* Specifically address whether this information collection is necessary for proper performance of the functions of the agency and will have practical utility, accuracy of the burden estimates, ways to minimize this burden, and ways to enhance the quality, utility, and clarity of the information to be collected. All comments received will be available for examination at the above address between 10 a.m. and 5 p.m. EDT (or EST), Monday through Friday, except

If the FRA and OnStar could work together they could set up a system for OnStar users and it could work something like this. When any vehicle that has OnStar approaches any rail crossing and there is a locomotive/train within 1000'(or more) of the crossing a pre-recorded audio message would announce that a locomotive/train is approaching and the driver should stop or proceed with caution at that peticular crossing. Each locomotive would need a transponder or better yet the transponder could be inside the signal box at that crossing. This may also be able to work with regular cell phones also. If there are no gates or lights at least they will hear a voice. If there are lights and gates than there is the addition of the third warning device, the message.

subject area (for other comments). Resource limitations preclude acknowledging or replying to submissions.

While the meeting is open to the public, admittance to the Department of State building is only by means of a pre-arranged clearance list. In order to be placed on the pre-clearance list, we must receive the following information from you no later than 5 p.m. on Monday, October 2, 2006:

I. State That You Are Requesting Pre-Clearance to a Meeting

II. Provide the Following Information

1. Name of meeting and its date and time (ACICIP, October 5, 2006, 10 a.m.).

2. Visitor's full name.

3. Company/Agency/Organization.

4. Title at Company/Agency/Organization.

5. Date of birth.

6. Citizenship.

7. Type of ID visitor will show upon entry (from list below).

8. ID number on the ID visitor will show upon entry.

Send the above information to Richard W. O'Brien by fax (202) 647–0158 or e-mail *o'brienrw@state.gov.*

All visitors for this meeting must use the 23rd Street entrance. One of the following valid ID's bearing the number provided with your pre-clearance request will be required for admittance:

- U.S. driver's license with photo.
- Passport.
- U.S. government agency ID.

Non-U.S. government attendees must be escorted by Department of State personnel at all times when in the building.

For further information, please contact Richard W. O'Brien, Executive Secretary of the Committee, at (202) 647–4736 or *o'brienrw@state.gov.*

General information about ACICIP and the mission of International Communications and Information Policy at the Department of State is available at our Web site: *http://www.state.gov/e/eb/adcom/c667.htm.*

Dated: September 18, 2006.

Richard W. O'Brien,

ACICIP Executive Secretary, Department of State.

[FR Doc. 06–8062 Filed 9–21–06; 8:45 am]

BILLING CODE 4710–07–P

DEPARTMENT OF STATE

[Public Notice 5557]

Bureau of International Security and Nonproliferation; Extension of Waiver of Missile Proliferation Sanctions Against Chinese Government Activities

AGENCY: Department of State.

ACTION: Notice.

SUMMARY: A determination has been made to extend the waiver of import sanctions against certain activities of the Chinese government that was announced on September 19, 2003, pursuant to the Arms Export Control Act, as amended.

DATES: *Effective Date:* September 13, 2006.

FOR FURTHER INFORMATION CONTACT: Pam Durham, Office of Missile Threat Reduction, Bureau of International Security and Nonproliferation, Department of State (202–647–4931).

SUPPLEMENTARY INFORMATION: A determination was made on March 13, 2006, pursuant to section 73(e) of the Arms Export Control Act (22 U.S.C. 2797b(e)) that it was essential to the national security of the United States to waive for a period of six months the import sanction described in section 73(a)(2)(C) of the Arms Export Control Act (22 U.S.C. 2797b(a)(2)(C)) against the activities of the Chinese government described in section 74(a)(8)(B) of the Arms Export Control Act (22 U.S.C. 2797c(a)(8)(B))—*i.e.*, activities of the Chinese government relating to the development or production of any missile equipment or technology and activities of the Chinese government affecting the development or production of electronics, space systems or equipment, and military aircraft (see **Federal Register** Vol. 68, No. 182, Friday, September 19, 2003). This action was effective on March 18, 2006.

On September 13, 2006, a determination was made pursuant to section 73(e) of the Arms Export Control Act (22 U.S.C. 2797b(e)) that it is essential to the national security of the United States to extend the waiver period for an additional six months, effective from the date of expiration of the previous waiver (September 18, 2006).

These measures shall be implemented by the responsible agencies as provided in Executive Order 12851 of June 11, 1993.

Dated: September 18, 2006.

Patricia A. McNerney,

Acting Assistant Secretary of State for International Security and Nonproliferation, Department of State.

[FR Doc. 06–8063 Filed 9–21–06; 8:45 am]

BILLING CODE 4710–27–P

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

[Docket No. FRA–2005–23281, Notice No. 2]

Safety of Private Highway-Rail Grade Crossings; Notice of Safety Inquiry

AGENCY: Federal Railroad Administration (FRA), Department of Transportation (DOT).

ACTION: Notice of safety inquiry.

SUMMARY: On July 27, 2006, FRA published a notice announcing its intent to conduct a series of open meetings throughout the United States, in cooperation with appropriate State agencies, to consider issues related to the safety of private highway-rail grade crossings. This notice indicated that the first of these meetings would be held August 30, 2006, in Fort Snelling, Minnesota. Notice No. 2 announces that FRA has scheduled subsequent meetings to be held September 27, 2006, in Raleigh, North Carolina; October 26, 2006, in San Francisco, California; and December 6, 2006, in New Orleans, Louisiana.

At each open meeting, FRA intends to solicit oral statements from private crossing owners, railroads and other interested parties on issues related to the safety of private highway-rail grade crossings, which will include, but will not be limited to, current practices concerning the responsibility for safety at private grade crossings, the adequacy of warning devices at private crossings, and the relative merits of a more uniform approach to improving safety at private crossings. FRA has also opened a public docket on these issues so that interested parties may submit written comments for public review and consideration.

DATES: The initial public meeting was held in Fort Snelling, Minnesota, on August 30, 2006, at the Bishop Henry Whipple Federal Building, One Federal Drive, Fort Snelling, Minnesota 55111, beginning at 9:30 a.m. The second public meeting will be held in Raleigh, North Carolina, on September 27, 2006, at North Carolina State University's McKimmon Conference and Training Center, 1101 Gorman Street, North

Carolina State University, Raleigh, North Carolina 27695, beginning at 9:30 a.m. The third public meeting will be held in San Francisco, California, on October 26, 2006, at the Philip Burton Federal Building and Courthouse, 450 Golden Gate Avenue, San Francisco, California 94102, beginning at 9:30 a.m. The fourth public meeting will be held in New Orleans, Louisiana, on December 6, 2006, at the Chateau Sonesta Hotel, 800 Iberville Street, New Orleans, Louisiana 70112, beginning at 9:30 a.m.

Persons wishing to participate are requested to provide their names, organizational affiliation, and contact information to Michelle Silva, Docket Clerk, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6030). Persons needing sign language interpretation or other reasonable accommodation for disability are also encouraged to contact Michelle Silva, FRA Docket Clerk, at (202) 493–6030. Additional public meetings will be announced over the next three months.

FOR FURTHER INFORMATION CONTACT: Ron Ries, Office of Safety, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6299); Miriam Kloeppel, Office of Safety, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6299); or Kathryn Shelton, Office of Chief Counsel, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6038).

SUPPLEMENTARY INFORMATION: For additional information, please see the initial notice, published July 27, 2006, in the **Federal Register** (citation: 71 FR 42713) and available at *http://a257.g.akamaitech.net/7/257/2422/01jan20061800/edocket.access.gpo.gov/2006/pdf/06-6501.pdf.*

Request for Comments

While FRA solicits discussion and comments on all areas of safety at private highway-rail grade crossings, we particularly encourage comments on the following topics:

- At-grade highway-rail crossings present inherent risks to users, including the railroad and its employees, and to other persons in the vicinity if a train were to derail into an occupied area or release hazardous materials. When passenger trains are involved, the risks are heightened. From the standpoint of public policy, how do we determine whether the creation or continuation of a private crossing is justified?
- Is the current assignment of responsibility for safety at private crossings effective? To what extent do risk-management practices associated with insurance arrangements result in ''regulation'' of safety at private crossings?
- How should improvement and/or maintenance costs associated with private crossing be allocated?
- Is there a need for alternative dispute resolution mechanisms to handle disputes that may arise between private crossing owners and the railroads?
- Should the State or Federal government assume greater responsibility for safety at private crossings?
- Should there be nationwide standards for warning devices at private crossings or for intersection design of new private grade crossings?
- How do we determine when a private crossing has a public purpose and is subject to public use?
- Should some crossings be categorized as commercial crossings rather than private crossings?
- Are there innovative traffic control treatments that could improve safety at private crossings on major rail corridors, including those on which passenger service is provided?
- Should the DOT request enactment of legislation to address private crossings? If so, what should it include?

Issued in Washington, DC, on September 15, 2006.

Michael J. Logue,

Deputy Associate Administrator for Safety.

[FR Doc. 06–7811 Filed 9–21–06; 8:45 am]

BILLING CODE 4910–06–P

DEPARTMENT OF TRANSPORTATION

Surface Transportation Board

[STB Ex Parte No. 558 (Sub–No. 9)]

Railroad Cost of Capital—2005

AGENCY: Surface Transportation Board. DOT.

ACTION: Notice of decision.

SUMMARY: On August 28, 2006, the Board served a decision to update its computation of the railroad industry's cost of capital for 2005. The composite after-tax cost-of-capital rate for 2005 is found to be 12.2%, based on a current cost of debt of 5.36%; a cost of common equity capital of 15.18%; and a capital structure mix comprised of 30.41% debt and 69.59% common equity. The cost-of-capital finding made in this proceeding will be used in a variety of Board proceedings.

DATES: Effective Date: This action is effective August 28, 2006.

FOR FURTHER INFORMATION CONTACT: Paul Aguiar, 202–565–1527. (Federal Information Relay Service (FIRS) for the hearing impaired: 1–800–877–8339).

SUPPLEMENTARY INFORMATION: The cost-of-capital finding in this decision may be used for a variety of regulatory purposes. Based upon Western Coal Traffic League reply comments, we will institute a separate advance notice of proposed rulemaking to explore the most suitable methodology to calculate the cost of capital. That proceeding will provide all interested parties an opportunity to comment on the discounted cash flow (DCF) model, the proper source for the inputs to that model, and whether the Board should adopt an alternative to that method, such as the Capital Asset Pricing Model (CAPM), for future cost-of-capital determinations. The Board's decision is posted on the Board's Web site, *http://www.stb.dot.gov.* In addition, copies of the decision may be purchased from ASAP Document Solutions by calling 202–306–4004 (assistance for the hearing impaired is available through FIRS at 1–800–877–8339), or by e-mail at *asapdc@verizon.net.*

Environmental and Energy Considerations

This action will not significantly affect either the quality of the human environment or the conservation of energy resources.

Regulatory Flexibility Analysis

Pursuant to 5 U.S.C. 605(b), we conclude that our action in this proceeding will not have a significant economic impact on a substantial number of small entities. The purpose and effect of this action are to update the annual railroad industry cost-of-capital finding by the Board. No new reporting or other regulatory requirements are imposed, directly or indirectly, on small entities.

Authority: 49 U.S.C. 10704(a).

Decided: September 15, 2006.

By the Board, Chairman Nottingham, Vice Chairman Mulvey, and Commissioner Buttrey.

Vernon A. Williams,

Secretary.

[FR Doc. 06–8097 Filed 9–21–06; 8:45 am]

BILLING CODE 4915–01–P

subject area (for other comments). Resource limitations preclude acknowledging or replying to submissions.

While the meeting is open to the public, admittance to the Department of State building is only by means of a pre-arranged clearance list. In order to be placed on the pre-clearance list, we must receive the following information from you no later than 5 p.m. on Monday, October 2, 2006:

I. State That You Are Requesting Pre-Clearance to a Meeting

II. Provide the Following Information

1. Name of meeting and its date and time (ACICIP, October 5, 2006, 10 a.m.).

2. Visitor's full name.

3. Company/Agency/Organization.

4. Title at Company/Agency/Organization.

5. Date of birth.

6. Citizenship.

7. Type of ID visitor will show upon entry (from list below).

8. ID number on the ID visitor will show upon entry.

Send the above information to Richard W. O'Brien by fax (202) 647–0158 or e-mail *o'brienrw@state.gov.*

All visitors for this meeting must use the 23rd Street entrance. One of the following valid ID's bearing the number provided with your pre-clearance request will be required for admittance:

- U.S. driver's license with photo.
- Passport.
- U.S. government agency ID.

Non-U.S. government attendees must be escorted by Department of State personnel at all times when in the building.

For further information, please contact Richard W. O'Brien, Executive Secretary of the Committee, at (202) 647–4736 or *o'brienrw@state.gov.*

General information about ACICIP and the mission of International Communications and Information Policy at the Department of State is available at our Web site: *http://www.state.gov/e/eb/adcom/c667.htm.*

Dated: September 18, 2006.

Richard W. O'Brien,

ACICIP Executive Secretary, Department of State.

[FR Doc. 06–8062 Filed 9–21–06; 8:45 am]

BILLING CODE 4710–07–P

DEPARTMENT OF STATE

[Public Notice 5557]

Bureau of International Security and Nonproliferation; Extension of Waiver of Missile Proliferation Sanctions Against Chinese Government Activities

AGENCY: Department of State.

ACTION: Notice.

SUMMARY: A determination has been made to extend the waiver of import sanctions against certain activities of the Chinese government that was announced on September 19, 2003, pursuant to the Arms Export Control Act, as amended.

DATES: *Effective Date:* September 13, 2006.

FOR FURTHER INFORMATION CONTACT: Pam Durham, Office of Missile Threat Reduction, Bureau of International Security and Nonproliferation, Department of State (202–647–4931).

SUPPLEMENTARY INFORMATION: A determination was made on March 13, 2006, pursuant to section 73(e) of the Arms Export Control Act (22 U.S.C. 2797b(e)) that it was essential to the national security of the United States to waive for a period of six months the import sanction described in section 73(a)(2)(C) of the Arms Export Control Act (22 U.S.C. 2797b(a)(2)(C)) against the activities of the Chinese government described in section 74(a)(8)(B) of the Arms Export Control Act (22 U.S.C. 2797c(a)(8)(B))—*i.e.*, activities of the Chinese government relating to the development or production of any missile equipment or technology and activities of the Chinese government affecting the development or production of electronics, space systems or equipment, and military aircraft (see **Federal Register** Vol. 68, No. 182, Friday, September 19, 2003). This action was effective on March 18, 2006.

On September 13, 2006, a determination was made pursuant to section 73(e) of the Arms Export Control Act (22 U.S.C. 2797b(e)) that it is essential to the national security of the United States to extend the waiver period for an additional six months, effective from the date of expiration of the previous waiver (September 18, 2006).

These measures shall be implemented by the responsible agencies as provided in Executive Order 12851 of June 11, 1993.

Dated: September 18, 2006.

Patricia A. McNerney,

Acting Assistant Secretary of State for International Security and Nonproliferation, Department of State.

[FR Doc. 06–8063 Filed 9–21–06; 8:45 am]

BILLING CODE 4710–27–P

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

[Docket No. FRA–2005–23281, Notice No. 2]

Safety of Private Highway-Rail Grade Crossings; Notice of Safety Inquiry

AGENCY: Federal Railroad Administration (FRA), Department of Transportation (DOT).

ACTION: Notice of safety inquiry.

SUMMARY: On July 27, 2006, FRA published a notice announcing its intent to conduct a series of open meetings throughout the United States, in cooperation with appropriate State agencies, to consider issues related to the safety of private highway-rail grade crossings. This notice indicated that the first of these meetings would be held August 30, 2006, in Fort Snelling, Minnesota. Notice No. 2 announces that FRA has scheduled subsequent meetings to be held September 27, 2006, in Raleigh, North Carolina; October 26, 2006, in San Francisco, California; and December 6, 2006, in New Orleans, Louisiana.

At each open meeting, FRA intends to solicit oral statements from private crossing owners, railroads and other interested parties on issues related to the safety of private highway-rail grade crossings, which will include, but will not be limited to, current practices concerning the responsibility for safety at private grade crossings, the adequacy of warning devices at private crossings, and the relative merits of a more uniform approach to improving safety at private crossings. FRA has also opened a public docket on these issues so that interested parties may submit written comments for public review and consideration.

DATES: The initial public meeting was held in Fort Snelling, Minnesota, on August 30, 2006, at the Bishop Henry Whipple Federal Building, One Federal Drive, Fort Snelling, Minnesota 55111, beginning at 9:30 a.m. The second public meeting will be held in Raleigh, North Carolina, on September 27, 2006, at North Carolina State University's McKimmon Conference and Training Center, 1101 Gorman Street, North

Carolina State University, Raleigh, North Carolina 27695, beginning at 9:30 a.m. The third public meeting will be held in San Francisco, California, on October 26, 2006, at the Philip Burton Federal Building and Courthouse, 450 Golden Gate Avenue, San Francisco, California 94102, beginning at 9:30 a.m. The fourth public meeting will be held in New Orleans, Louisiana, on December 6, 2006, at the Chateau Sonesta Hotel, 800 Iberville Street, New Orleans, Louisiana 70112, beginning at 9:30 a.m.

Persons wishing to participate are requested to provide their names, organizational affiliation, and contact information to Michelle Silva, Docket Clerk, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6030). Persons needing sign language interpretation or other reasonable accommodation for disability are also encouraged to contact Michelle Silva, FRA Docket Clerk, at (202) 493–6030. Additional public meetings will be announced over the next three months.

FOR FURTHER INFORMATION CONTACT: Ron Ries, Office of Safety, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6299); Miriam Kloeppel, Office of Safety, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6299); or Kathryn Shelton, Office of Chief Counsel, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6038).

SUPPLEMENTARY INFORMATION: For additional information, please see the initial notice, published July 27, 2006, in the **Federal Register** (citation: 71 FR 42713) and available at *http://a257.g.akamaitech.net/7/257/2422/01jan20061800/edocket.access.gpo.gov/2006/pdf/06-6501.pdf.*

Request for Comments

While FRA solicits discussion and comments on all areas of safety at private highway-rail grade crossings, we particularly encourage comments on the following topics:

- At-grade highway-rail crossings present inherent risks to users, including the railroad and its employees, and to other persons in the vicinity if a train were to derail into an occupied area or release hazardous materials. When passenger trains are involved, the risks are heightened. From the standpoint of public policy, how do we determine whether the creation or continuation of a private crossing is justified?
- Is the current assignment of responsibility for safety at private crossings effective? To what extent do risk-management practices associated with insurance arrangements result in ''regulation'' of safety at private crossings?
- How should improvement and/or maintenance costs associated with private crossing be allocated?
- Is there a need for alternative dispute resolution mechanisms to handle disputes that may arise between private crossing owners and the railroads?
- Should the State or Federal government assume greater responsibility for safety at private crossings?
- Should there be nationwide standards for warning devices at private crossings or for intersection design of new private grade crossings?
- How do we determine when a private crossing has a public purpose and is subject to public use?
- Should some crossings be categorized as commercial crossings rather than private crossings?
- Are there innovative traffic control treatments that could improve safety at private crossings on major rail corridors, including those on which passenger service is provided?
- Should the DOT request enactment of legislation to address private crossings? If so, what should it include?

Issued in Washington, DC, on September 15, 2006.

Michael J. Logue,

Deputy Associate Administrator for Safety.

[FR Doc. 06–7811 Filed 9–21–06; 8:45 am]

BILLING CODE 4910–06–P

DEPARTMENT OF TRANSPORTATION

Surface Transportation Board

[STB Ex Parte No. 558 (Sub–No. 9)]

Railroad Cost of Capital—2005

AGENCY: Surface Transportation Board. DOT.

ACTION: Notice of decision.

SUMMARY: On August 28, 2006, the Board served a decision to update its computation of the railroad industry's cost of capital for 2005. The composite after-tax cost-of-capital rate for 2005 is found to be 12.2%, based on a current cost of debt of 5.36%; a cost of common equity capital of 15.18%; and a capital structure mix comprised of 30.41% debt and 69.59% common equity. The cost-of-capital finding made in this proceeding will be used in a variety of Board proceedings.

DATES: Effective Date: This action is effective August 28, 2006.

FOR FURTHER INFORMATION CONTACT: Paul Aguiar, 202–565–1527. (Federal Information Relay Service (FIRS) for the hearing impaired: 1–800–877–8339).

SUPPLEMENTARY INFORMATION: The cost-of-capital finding in this decision may be used for a variety of regulatory purposes. Based upon Western Coal Traffic League reply comments, we will institute a separate advance notice of proposed rulemaking to explore the most suitable methodology to calculate the cost of capital. That proceeding will provide all interested parties an opportunity to comment on the discounted cash flow (DCF) model, the proper source for the inputs to that model, and whether the Board should adopt an alternative to that method, such as the Capital Asset Pricing Model (CAPM), for future cost-of-capital determinations. The Board's decision is posted on the Board's Web site, *http://www.stb.dot.gov.* In addition, copies of the decision may be purchased from ASAP Document Solutions by calling 202–306–4004 (assistance for the hearing impaired is available through FIRS at 1–800–877–8339), or by e-mail at *asapdc@verizon.net.*

Environmental and Energy Considerations

This action will not significantly affect either the quality of the human environment or the conservation of energy resources.

Regulatory Flexibility Analysis

Pursuant to 5 U.S.C. 605(b), we conclude that our action in this proceeding will not have a significant economic impact on a substantial number of small entities. The purpose and effect of this action are to update the annual railroad industry cost-of-capital finding by the Board. No new reporting or other regulatory requirements are imposed, directly or indirectly, on small entities.

Authority: 49 U.S.C. 10704(a).

Decided: September 15, 2006.

By the Board, Chairman Nottingham, Vice Chairman Mulvey, and Commissioner Buttrey.

Vernon A. Williams,

Secretary.

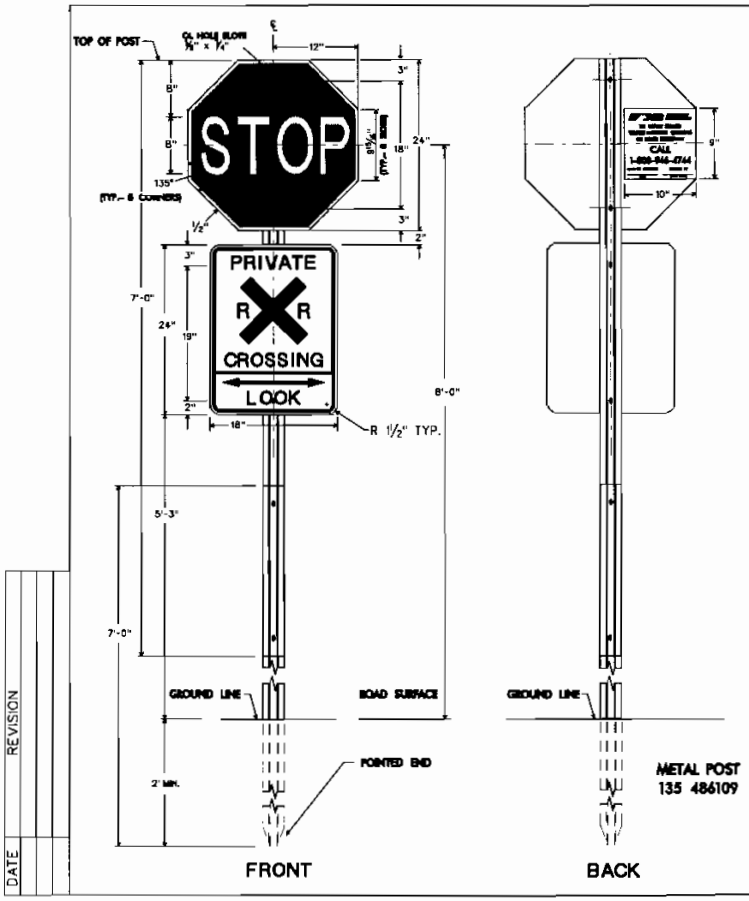
[FR Doc. 06–8097 Filed 9–21–06; 8:45 am]

BILLING CODE 4915–01–P

For the FRA to "increase" safety at private crossings --- first there would need to be a little safety. The crossings are BLIND--DEADLY---without even train whistles being blown. Hell there isn't even safety measures at public crossings because the FEDs are DIRTY.

I'm sure this is nothing about safety and all about giving railroads AMNESTY when they blindside and kill people. No need for meetings if the FRA says the crossings are dangerous the FRA is in violation of Federal law and should be prosecuted for 100s of negligient homicides for NOT doing their job to start with!!!

PLAN 6-22



NOTES:

ALL SIGNS ARE 24" OCTAGON AND 18"x 24" SIZED WITH RED AND WHITE BACKGROUND AND WHITE AND BLACK LETTERS AS SHOWN IN EXAMPLE.

PRIVATE CROSSING SIGN WITH 3/8 " BLACK BORDER AND 3/8 " MARGIN

ALL NUMBERS AND LETTERS TO BE IN ACCORDANCE WITH CURRENT MUTCD STANDARD ALPHABETS FOR HIGHWAY USE.

CENTER OF STOP SIGN IS TO BE 8'-0" ABOVE THE TOP OF PAVEMENT. THE DISTANCE FROM THE NEAR TRACK CENTERLINE IS TO BE 12'-0" MINIMUM AND 15'-0" MAXIMUM. DISTANCE FROM THE EDGE OF ROADWAY TO NEAR EDGE OF SIGN IS TO BE 12'-0", OR 6'-0" FROM THE EDGE OF SHOULDER, WHEN PRESENT, OR 2'-0" FROM THE FACE OF THE CURB, WHEN PRESENT. IF CURB IS NOT PRESENT, THE SIGN LOCATION CAN VARY FROM 6'-0" TO 12'-0" WHEN THERE ARE OBSTRUCTIONS ALONG THE SIDE OF THE ROAD. REFER TO NS PLAN 6-3A.

Sign blanks to be alodized 5052H38 bare back aluminum, 0.080" thickness, or as noted.
Remove all burs and sharp edges.
Posts and backs of signs to be left unfinished.
Reflective sheeting to be high intensity grade unpainted.

Use indelible, long lasting ink to enter ID# and road name on the back sticker.

See NS Plan 6-20 for mounting post details.

NORFOLK SOUTHERN

STOP AND PRIVATE CROSSING SIGN

DECEMBER 14, 2004
Atlanta, Georgia

DATE	REVISION

U.S. DEPARTMENT OF TRANSPORTATION

FEDERAL RAILROAD ADMINISTRATION

SAFETY AT PRIVATE HIGHWAY-RAIL GRADE CROSSINGS

PUBLIC MEETING

WEDNESDAY, AUGUST 30, 2006

9:30 AM

BISHOP HENRY WHIPPLE FEDERAL BUILDING

1 FEDERAL DRIVE,

FORT SNELLING, MINNESOTA 55111

ATKINSON-BAKER, INC.
COURT REPORTERS
(800) 288-3376
www.depo.com

TRANSCRIBED BY: DANA ANDERSON

FILE NO.: A007788

Partial Roster of Attendees

1st USDOT/FRA Public Meeting

Safety Inquiry on the Safety at Private Highway-Rail Grade Crossings

Fort Snelling, Minnesota

Name/Organization

Robert VanderClute*, AAR

William Browder, AAR

Tim Spencer, MNDOT

Ron Adams, Wisconsin DOT

Mark Morrison, Wisconsin DOT

Dan Kahnke, MNDOT

Shane Whitemore, CSX Railroad

Michael Long, USDOT/FRA

Rod McCorkle, Canadian Pacific Railroad

Paul Bicha, Canadian Pacific Railroad

Jim Keinzler, Canadian Pacific Railroad

Patricia Abbate*, Citizens for Rail Safety

Craig N. Rasmussen, BNSF

George Warren, BNSF

Randy Harris, Canadian National Railroad

Terry Lee, Canadian National Railroad

* Indicates provided an oral statement at the meeting.

Partial Roster of Attendees (Continued)

Name/Organization

Susan Aylesworth, MNDOT

Alfonse J. Cocchiarella, BNSF

Spencer Abbot, BNSF

Peggy Baer, Iowa DOT

David Peterson, Union Pacific Railroad

Bob Opal, Union Pacific Railroad

Tim DePaepe*, Brotherhood of Railroad Signalmen

Mike Hillman, TKDA

Stacy Crakes, TKDA

Paul Comstock, USDOT/FRA

Lynn Leibfried, BNSF

Tom Perkovich, BLET

Jim Kreiger, Canadian Pacific Railroad

Jim Kienzler, Canadian Pacific Railroad

Allen Pepper, Kansas City Southern Railroad

Tammy Wagner, USDOT/FRA

Chris Adams, USDOT/FRA

Bennie Howe, USDOT/FRA

Howard J. Gillespie, USDOT/FRA

Stacey Tuthill, WeberShandwick

* Indicates provided an oral statement at the meeting.

PROCEEDINGS taken on this 30th day of August, 2006, at the Bishop Henry Whipple Federal Building in Fort Snelling, Minnesota, commencing at the hour of 9:30 a.m.

PAUL COMSTOCK: Well, good morning everybody. And first of all, I want to apologize, I didn't know -- I wasn't told that we needed a PA system in the room. I'm Paul Comstock, chief inspector here, welcome to the Bishop Henry Whipple Federal Government Building. I'll give a short safety briefing just basically so we all know where to go. If something should occur where we have to evacuate the building, there will be an audible and visual warning and we would ask that you exit out the main hallway, take a left and go all the way down to the end, exit the building, there's a garage out there. Go ahead all the way to the far end

of the building. That's the Federal Railroad Administration meeting spot. So we can all join together there and sing Kumbaya or whatever.

The restrooms are right outside of

the entryway into the meeting room here and to your left, so -- in the main hallway. We have people here and FRA qualified for CPR and we have the defibrillator machine in the building so we won't need to worry about that as far as asking for volunteers. And the only other thing I ask is could you all set your pagers or cell phones or anything to quiet, vibrate or stun or whatever the case may be so that we have a nice, quiet meeting and can go on.

With that I'm going to introduce Mr. Grady Cothen, my fearless leader, and he'll take it from there. Thank you very much.

MR. GRADY COTHEN: Thanks, Paul. The betting was whether Paul could play that straight; he's FRA's official court jester and as you can see, I won.

So welcome to this session on

this -- safety of private highway-rail crossings. Thank you for being here. This is a little bit of an unusual facility for us, but it looks like it should work out okay. If you cannot hear during these

proceedings, waive your hand, stand up, move around, take a more comfort-proximate seat, whatever it takes so that you can participate in today's events. It'll be no problem at all with folks gathering around here closer if that's better for you.

My name is Grady Cothen. I'm the acting associate administrator for safety standards at FRA and as such I'm in charge of our regulatory program and am privileged to chair today. I think probably rather than me starting with a long speech I'll save it. Let's do some welcomes and introductions.

I believe that Lavoy Little and Mike Long are in the hall. Could you stand, please? Lavoy and Michael are our deputy regional administrators for FRA Region 4 headquartered in Chicago which includes the state of Minnesota. Thank you, gentlemen, for being here and providing logistical

support for the meeting. We appreciate it. You've met Mr. Comstock. I'm going to ask Ron Ries to introduce our far flung FRA multi highway-rail crossing team and can we do that -- it's a multi-regional team,

headquarters, field, Volpe. Could all you folks stand up and Ron will provide a little information about your roles. Ron Ries is our staff director for highway-rail crossing safety in Washington.

MR. RONALD RIES: Good morning. We have 18 people that work in the field when we are a full complement, work full-time in train crossing safety trespass prevention. Most regions have two crossing managers, a crossing manager and assistant, in each of our eight regions. And we've recently augmented Region 4 with another assistant, and Region 5 which is down in Texas, Louisiana where there is another position; we are in the process of filling those now. So we are fortunate to have a number of our great policy managers and assistants with us. Tammy Wagner with Region 4 is the crossing manager, we hear she was very instrumental in

working with Paul getting this facility set up. Sitting next to her is Chris Adams who is our region aid for the Pacific northwest area, our newest crossing manager.

Mr. Bennie Howe is the crossing manager for

Region 6 out of Kansas City.
Howard Gillespie assistant crossing manager for Region 6 as well. And let's see, who else? Our staff personnel, Miriam Kloeppel is an operation research analyst that works out of Washington, D.C. We have -- from Volpe we have Anya Carroll. We have Steve Peck in the back. And I knew I would do this, Perla Garcia also from Volpe. Volpe is providing the support for our safety initiative study and they will be making sure we get the proceedings done and helping us -- or put together all of the information we are hoping to gather from that.
Ms. Kathy Shelton is an attorney from Washington D.C. who has the pleasant task of working with the great safety crossing issues. She'll be giving us a little briefing here in just a second. We appreciate you being here. We know this is

sort of a new thing for us as far as looking at the private crossings. And as we are getting started we are looking for a lot of good information. We don't have any answers, we're not even really sure what the questions

are, and so you have a good opportunity to help provide us with that guidance. Have a great day and we are looking forward to a good meeting.

MR. GRADY COTHEN: What I would like to do is introduce Susan Aylesworth, Susan is the director of railroad administration for the Minnesota Department of Transportation. Each of these events we are holding in partnership with a state DOT or PUC, one of our state partners in highway-rail crossing program. The Federal Railroad Administration does nothing without its public and private partners, without the contributions of lots of folks. And in many cases our role is purely support and we try to give it, but one of the ways is to stir the pot sometimes and get some discussion going. Susan, thank you for joining us in welcoming this group, and I'll turn it over to you.

MS. SUSAN AYLESWORTH: Thanks. I'm here to welcome you all and when I was asked to speak, I was told there would be ten people here, so the joke is on me. I have nothing prepared, but ten people are easy to talk to.

Sometimes with people it's easier to talk to. Welcome to Minnesota, we are glad you all came and we are honored to be chosen as the first of several public meeting locations on this topic. Just by way of information, Minnesota has about 2,000, 2,500 private railroad crossings and this interestingly, we do have a rule that talks about the appropriate crossing treatment at private crossings, it's just that we don't think we have jurisdiction to implement it. That is an interesting quirk that may be unique to Minnesota, but our rules do talk about what is appropriate at private crossings and pretty much mirrors what we would expect to see at a public railroad crossing. One other issue that we struggle with, and maybe some of will you speak to this later, is that we are unsure of what the definition of a private crossing is.

We oftentimes go out and if the public is using a location, we can't be sure whether that public use continues on both sides of the track and therefore should be counted as a public crossing or whether we

should defer and leave it as a private crossing. And sometimes the railroads don't know that either. So it will be very interesting to hear what comments people make and what issues they raise of course with Quiet Zone this is an issue too so we are looking forward to this discussion on this timely topic.

Thank you.

MR. GRADY COTHEN: Thanks, Susan. I just wanted to say a few words to sort of get us going, then I'll ask Kathy Shelton to give us the legal officer statement. The Federal Railroad Administration has been promising now for about a decade to undertake an initiative on private crossings to try to see what could be done to help all state and local partners, public and private move toward improved safety of highway-rail crossings. In a moment Miriam Kloeppel will

lay out some of the facts for us and they are not enormously encouraging. We made significant progress in safety of public highway-rail crossings over the years, and we've made moderate progress as well at

private crossings driven by railroad efforts to close unnecessary crossings driven by improvements in train conspicuity and other factors affecting people in motor vehicle operation in the United States.

Certainly Operation Lifesaver has done its part to try to promote awareness. We've done some things, all of us have in the areas of education and enforcement over the years, and we've had some moderate success. But we still -- we still see a persistent issue at crossings which is not predicted to abate significantly any absence of further initiatives from someplace, and so how do we proceed? I think we have the opportunity today to begin to get issues on the table to define what those issues are, what is a private crossing, is it a good, solid and favored place to start and I thought I knew until I tried to get a train horn rule

written, and they told me I didn't. If you will help me today, I'd appreciate it.

We do not -- we don't have a preset agenda here. Our purpose over the next few months is to go to various locations around

the country to hear from folks who have information and views on the subject, and then our objective is to put together a plan of action which would carry forward the initiative that's described in the Secretary's 2004 action plan for highway-rail crossing safety. And there it is described in very general terms. Where that will take us specifically, I don't know, whether we'll need legislation in order to drive it forward at this point, I don't know. But there is no better place to start then here and now. So we ask your participation and indulgence, your ideas, your thoughts, your criticisms, whatever you've got. We do have today several organizations that have signed up ahead of time. And as a matter of fact, I believe that as of this hour at least they are inclusive of all those who indicated interest on the sign-in sheets. We may have

others here as the morning goes on.

When we begin, the testimony will -- did I say testimony? Introductory statements, we'll hear from those who signed up ahead of time. If you haven't indicated

your interest in making some kind of opening statement, feel free to do so. Steve there at the back (indicating) can help you in that regard or any one of us here. When we get through with some general statements, whatever you want to lay on the table for us, we'll go to a discussion period. At that point what I would ask you, for the benefit of the court reporter and the benefit of us, is to come and occupy a seat at the table here, the front table, and utilize that spot there as long as you want to hold it. And then when you feel like you've got your -- stated your piece, perhaps open it back up to someone else who might want to rotate in for the discussion. And again, please don't feel compelled by protocol to sit in the back row. Once we get the presentation out of the way here, the PowerPoint out of the way, you may feel more comfortable to bring a chair around

and gather in.

Okay. Kathy Shelton for the legal officer's statement.

MS. KATHRYN SHELTON: Good morning. My name is Kathy Shelton, and I will be the

legal officer for today's meeting. The purpose of this public meeting is fact-finding. This is the first of a series of public meetings nationwide in which you will have the opportunity to provide information to FRA about issues related to the safety of private highway-rail grade crossings. This public meeting is not meant to be a form for debate. Instead we are here to listen to you and to provide an opportunity for you to state your views on the record for review and consideration. In order to provide each of you an equal opportunity to express your views and comments, the following procedure will be used. Each person will be permitted to make an oral statement. However, persons representing the same organization may speak as a group.

At the beginning of your oral

statement, please identify yourself, spell your name and identify whether you are appearing in an individual or representative capacity. It may also be helpful to provide a business card to our stenographer at that

time. At the end, FRA representatives may ask questions in order to obtain clarifications of points made during your statement. We will then move on to the next oral statement. If you refer to a document in your oral statement that has not yet been provided to FRA, please provide a copy of the document to an FRA representative so that it can be marked for identification and added to the public docket.

Today's meeting is being transcribed and will become a part of the public docket on this issue. The transcript of this public meeting will be available for viewing and downloading at the Department of Transportation's docket management system web site at HTTP://dms.dot.gov. And please note the www is not used in the web site address. The entire public docket on this issue is also available for inspection at the

Department of Transportation docket facility room which is located at 400 7th Street Southwest in Washington, D.C.

Thank you. And now for a moment I'll turn the floor over to Dana, our

stenographer.

(Off the record.)

MR. GRADY COTHEN: Okay. Thank you. The next order of business is an introductory presentation sort of to put us on somewhat equal -- common footing. Some would say we are on equal footing because some of you know a lot about this subject matter and some of us don't know as much. But at least to go over some items of common interest regarding private crossings. Our presenter is Miriam Kloeppel who is an operations research analyst on our grade crossing staff within the office of safety analysis and FRA. Miriam comes to the subject matter with a deep and abiding personal interest having been, I believe, a principal author of the NTSB's study on passive crossings in 1988 which generated a lot of this work. Particularly rewarding to have somebody on

staff who now has to fulfill all of the various mandates that she wrote. With that in mind, Miriam, if you would, please.

MS. MIRIAM KLOEPPEL: Good morning, ladies and gentlemen. Thank you for coming.

I thought I'd prime the conversational pump anyway by starting with a little background.

Private crossing safety has been a matter of concern to the United States Department of Transportation and to other federal agencies for some time. In 1993, the FRA held an open meeting to initiate industrywide discussions in its 1994 rail highway safety action plan. The USDOT proposed to develop national minimum standards for private crossings. In its 1997 study on safety at passive grade crossings, the National Transportation Safety Board, I'll just call it NTSB for short, highlighted the need for some system to improve private crossing safety and recommended that the USDOT in conjunction with states determine governmental oversight responsibility for safety at private crossings. In 1999, the NTSB weighed in again in its report on a

private grade crossing accident in Portage, Indiana. In this case the NTSB recommended that the DOT eliminate any differences between public and private crossings with regard to funding or

requirements for safety improvement.

In 2004, the USDOT published an updated action plan in which the FRA committed to leading an effort to define responsibility for safety at private crossings. Today's meeting is a vital part of this effort. As you can see, regardless of the geographic region, private crossings constitute a significant percentage of all at-grade crossings. What I did here was I took numbers that had state-by-state counts of crossings that I just aggregated them into FRA geographic regions and if you're not familiar with our regions, I'll be happy to go over them at another time, but I just wanted to illustrate that regardless of where you are in the country, there is a fairly high percentage of the crossings that happen to be private. Total count nationwide is about 94,000.

Although accidents at public crossings have declined considerably over the past several years, declining by one-third over the past decade alone, the number of accidents at private crossings have remained

comparably stable, declining only 10 percent over the past decade. In most years, the number of fatalities occurring at accidents at private crossings exceeded the number of on-duty deaths for all railroad employees in all rail operations. As an illustration note of what goes on, here are a few examples.

About 1:00 p.m. on May 30th, 2006, Amtrak train number 350 struck an empty gravel truck at a private highway-rail grade crossing near Jackson, Michigan. The train was traveling about 74 miles per hour with a cab car in the lead when the truck entered the crossing in front of the train, one train crew member and 15 train passengers received minor injuries in the accident. The truck driver sustained fatal injuries. The private road at the accident crossing is used by an excavating company and by two residences. And on average, fewer than 30 highway

vehicles and a dozen trains, eight of which are Amtrak, traverse the crossing daily. It's estimated that the crossing was created about 1948 and there is no record of any maintenance contract between the business

owner and Norfolk-Southern Railway, the track owner.

About 4:40 p.m. on July 3rd, 2006, a southbound Amtrak train struck a passenger vehicle at a private crossing near Castle Rock, Washington. According to the Amtrak engineer, the accident occurred when the motorist entered the crossing after a northbound Union Pacific train cleared it. Train crew and train passengers received no injuries, but all four motor vehicle occupants sustained fatal injuries. The road leading to this crossing is a county road, but county maintenance ends shortly before the crossing. And the private road that extends beyond the crossing dead-ends after serving 11 residences. About 60 trains daily traverse this crossing, and it is not known when the crossing was created and no maintenance contract has been located for

this crossing.

About 7 p.m. on June 21st, 2006, Metro train number 921 traveling south at a recorded speed of 79 miles per hour struck a truck trailer traversing a private grade

crossing near Lemont, Illinois. A piece of the trailer became wedged under the snow plow of the locomotive and the locomotive derailed at the crossing. The driver of the tractor-trailer was not injured. There were 170 passengers aboard the train, five passengers claimed minor injuries and were treated and released and no train crew members reported any injury. This crossing serves two commercial facilities to which there is no other access. Roughly 28 trains and fewer than 30 highway vehicles use this crossing daily. The crossing is maintained by Canadian National, but there is no formal agreement. As an additional note, about six months prior to this accident another accident occurred at this crossing. The truck driver in the accident in December of 2005 sustained fatal injuries.

The FRA maintains a national

inventory of all crossings, public, private, pedestrian, at-grade or grade-separated. The data are used by many state, federal or private organizations for research or for resource allocations determining which

crossings are most in need of improvements. It's updated by the states and by the railroads on a voluntary, not a mandatory basis.

As you can see, only about one-third of the records for private crossings have been updated within the past five years, and a significant portion of the records have never been updated. Analysis on this sort of data will of necessity be somewhat tentative. And in comparison -- I don't have the numbers, but the data for public crossings are typically updated much more often than this. I don't expect you to read this whole slide. This is just the shot of the form on which the data are collected for the national inventory. Almost all data on both of these pages are collected for public crossings, but for private crossings only the sections that I have shaded are

collected. As a result, even when the private crossing record is up to date, potentially useful data are not collected. This slide shows a small sample of the data collection differences. According to the

FRA's 2002 compilation of state laws and regulations affecting highway-rail grade crossings, the states' approaches to private crossings' safety are highly varied. Take these examples of the extent of control held over the creation or closure of private crossings. Here are some examples of the degree to which traffic-control devices are standardized at private crossings. In fact, only two states that I could find in our compilation listed any kind of control like this at all.

According to, again, the 2002 compilation of state laws and regulations affecting highway railroad grade crossings, more than half the states have no laws or regulations related to private crossings. The federal government in the guise of various DOT agencies does offer some regulations for guidance documents that may

touch on safety at private crossings. As you can see in this sample however, none of these really covers a significant portion of the nation's private crossings. For example, the signal system inspection regulation, 49 CFR

part 234, really addresses about one percent of the private crossings as most of private crossings are passive. Freight car reflectorization only addresses probably fewer than 25 percent of all grade crossing accidents. And the manual on uniform traffic-control devices applies to only public crossings. In fact, there is no federal regulation or guidance that promotes safety at private grade crossings by specifically or uniformly addressing the special issues presented at private crossings.

Some private crossings may be used only seasonally like certain farm crossings used only for agricultural equipment movements, or they may be used only for routine personal use like crossings that serve residences. Other private crossings such as this industrial access crossing are

used extensively for private business purposes by employees, contractors and suppliers. In still other cases they may be used very heavily by the public to enter commercial facilities. This slide also

illustrates that in some cases there is no alternative access provided to the private property owner. And I hope you can see, in fact, the crossing that is on Maguire Parkway which is on the lower middle of the page there. But that is a couple of businesses that that's their only access.

The rights assigned to the private crossing holders very greatly. A holder of the right or privilege to cross may hold outright ownership of the underlying property, or they may have a documented easement over the railroad property. Where it's recognized, the holder may have a prescriptive easement or squatters rights. There may be a documented license under contract, or there may be a verbal license which could be subject to revocation without notice. Railroads may require the crossing holders to purchase or to provide some other

protection in the event of a collision at the crossing. Contracts or other legal documents may further define responsibilities such as maintenance of the crossing surface or providing notifications under stated

conditions. The confirmation and use of signs, signals, pavement markings and any other traffic-control devices placed at public crossings generally conform to the guidance provided in the manual on uniform traffic-control devices. In most states, this is not true of private crossings. The arrangement of private crossing signs can be highly individual. I just have a series of slides here illustrating some of the configurations that we have found. Sign maintenance may be somewhat sketchy, or it may be almost nonexistent. The FRA solicits discussion and comments on all areas of safety at private crossings but particularly encourages discussion on the following topics: At-grade highway-rail crossings present an inherent risk to users including the railroad and its employees as well as to other persons in the vicinity should a train

derail into an occupied area or release hazardous materials. From the standpoint of public policy, how do we determine whether creation or continuation of a private crossing is justified. How do we determine

when a private crossing has a public purpose and is subject to public use? How should improvement or maintenance responsibilities be allocated? Is there a need for alternative dispute mechanisms to handle disputes between railroads and private crossing holders? Should some crossings be categorized as commercial crossings rather than private crossings? Should there be nationwide standards for warning devices at private crossings or for intersection design for newly created private crossings? Are there innovative traffic-control devices that could improve safety of private crossings on major rail corridors including those on which passenger service is provided? Is the current assignment of responsibility for safety at private crossings effective? Do risk management practices associated with insurance arrangements result in some kind of

regulation of safety at private crossings? Should the state and federal governments cooperatively work together to determine responsibility and to provide oversight? Should the USDOT request enactment of

legislation to address private crossings? If so, what should that legislation include?

As much as I like the sound of my own voice, I'm actually going to stop here, but I will leave this slide up here and, in fact, it's on the last slide of the presentations there in case any of you should choose to submit a written statement to the docket in addition to speaking here today.

Thank you.

MR. GRADY COTHEN: Thank you, Miriam, for that overview. Appreciate it.

I think we are ready to hear from our colleagues. I'd like to start if I may, with at least the first to sign up.

Peggy Baer is a valued colleague from the Iowa Department of Transportation; if you are ready.

MS. PEGGY BAER: I just signed up to come to the meeting. I didn't sign up to --

MR. GRADY COTHEN: Do we have others from state DOTs in the region?

Yes, sir?

MR. RONALD ADAMS: Ron Adams.

MR. GRADY COTHEN: Ron, good to see you

again, from Wisconsin. I should have greeted you earlier. There is one group we can always count on for a few good words to start off a discussion, and that's the Association of American Railroads. They are kind of camp followers; wherever we go, they show up. And we are appreciative that Bob VanderClute who is executive vice president at the AAR has seemed fit to travel and be with us, and so let's ask Bob to lead off then.

MR. ROBERT VANDERCLUTE: Thank you, Grady. On behalf of the association and its member railroads, I want to thank you for the opportunity to present the railroad industry's view on private highway-rail grade crossing safety. Grade crossing safety is certainly a very important issue, and I think we certainly covered the highlights very well. Most fatalities and injuries occurring at-grade crossings take place at public

crossings. However, as the FRA data shows, there are a significant number of incidents that occur at private crossings. As the FRA points out in the notice announcing this meeting, there is a number of different types

of private grade crossings. Consequently there is no easy answer to the question of how to reduce the occurrence of incidents at private crossings.

For example, some private grade crossings are equipped with active warning devices such as gates, lights and bells as we have seen. Some private crossings are heavily used by the general public such as crossings providing access to shopping centers or recreation areas. And some private crossings are for industrial use only but -- be made by -- might be used by business employees, contractors and suppliers. And some private crossings are used only for the access to a home or a farm. The frequency with which private crossings are used can also vary widely. Some farm crossings, for example, might be used only a couple of times annually while there are

commercial and industrial crossings which are used by many motor vehicles daily. Furthermore, as the FRA points out in the meeting notice, the legal status of private crossings vary considerably.

In many cases railroads have no authority to close or relocate private crossings or condition the use on the institution of appropriate safety measures. For example, a private crossing may exist as the result of a deed granted when the railroad right-of-way was created. Or a state might require a railroad to grant farmers "suitable and convenient crossings," that they may continue in existence regardless of the frequency of which they are used.

Another issue is the nature of private crossings might change without the analysis of safety implications. A crossing that might only have been used by a land owner when first created could turn into a busy residential, industrial or commercial crossing later. If the crossing were a public crossing, a diagnostic team might

evaluate the consequences of the change in use. In the case of a private crossing however, there is no mandate that such an examination take place. Typically the users of private crossings should bear the cost of

the safety improvements at the crossing for the benefit they receive from the crossing, however, it may be appropriate for public funding to be provided at private crossings that resemble public crossings.

Finally, in the meeting notice the FRA asks about the extent to which insurance arrangements affect safety at public and private crossings. In the railroad's experience, insurance requirements do not drive the safety measures undertaken at a private crossing. The AAR and its member railroads look forward to this hearing, the ideas by others on how private crossings can be improved. And once again, I thank you for the opportunity to provide our views to you.

MR. GRADY COTHEN: Thanks, Bob. We have another thankful camp follower with us in the person of Tim DePaepe who is the director of research with Brotherhood of Railroad

Signalmen. And we want to hear from Tim concerning his research.

MR. TIM DEPAEPE: Thank you, Grady. And it is true that Bob and I travel together. We testify at Congress together, we get to

sit together a lot. People think that we are at odds sometimes, but we are not. A lot of times we are on the same page, and I think this is one of them. Originally I wasn't going to speak today, but after reading the notice, the FRA specifically asked a series of questions or comments and I felt and the Brotherhood of Railroads and Signalmen felt that it would be appropriate to comment on them. Our first comment is that it's our position that the FRA should prohibit the creation of new private crossings and work toward eliminating as many existing private crossings as possible. The best way to reduce accidents and fatalities is through the elimination of unprotected private crossings. However, if the FRA determines that it wants to allow the creation of new private crossings, then the new crossings should have at a minimum a set of grade

crossing signal system flashing light signals.

You also asked about how the improvement in our maintenance costs with private crossings should be allocated. We

believe they should be split equally between the state government, federal government and the property owner, however, each case should be evaluated on its own merit. There may be some cases where the responsibility allocation should be adjusted. The state and federal government, for instance, should split the cost of the crossing warning system where school bus or other public transportation entity may utilize the crossing. You asked specifically should the state and federal government assume greater responsibility for safety of private crossings or the intersection design of new private crossings. My organization feels very strongly about that. Even at public crossings, design flaws have created terrible -- or resulted in terrible accidents.

Fox River Grove in Illinois is a

good example. I mean, that's a public crossing that had a poor design. And as the former maintainer on that railroad, I can speak specifically to that issue.

The private crossings, they have

nothing as your pictures showed, you know, in some of the cases where you put signage up, the vegetation covered it. There is nothing that says you have to cut vegetation at a private crossing. But we believe the state and federal government should assume greater responsibility, you know, clearly by -- if no other reason, by the amount of fatalities that are happening. Not only are you killing the general public; as you alluded to, the train crews, the engineers or conductors are the first ones that are usually -- sometimes the only ones that get killed at crossings. Then you have the hazmat release which creates even a bigger problem. There are way too many accidents and an unacceptable number of fatalities along with them. Again, we can't reiterate enough, we believe that no private crossing should be created in the future unless they are equipped with active

crossing warning devices. And we also believe there should be nationwide standards for warning devices at private crossings and for intersection design. As Miriam's slides show, we believe they should be patterned

after the standards contained in the Manual on Uniform Traffic Control Devices, Part 8 which is subtitled Traffic Controls for Highway-Rail Grade Crossings. By taking this action, the users of the private crossings will be conditioned to respond to the stimuli that they encounter at other highway-rail grade crossings. We believe that there should be consistency in the message for the warning so that if there are public or private they get the same message and they take -- they take the same behavior.

You asked about how do you determine when a private crossing has a public purpose and subject to public use. It's our position that a private crossing should be defined as one used by a sole land owner or lessee. Once any other individuals routinely use the crossing, it should no longer be considered a private crossing but

as a public crossing. You talked about commercial crossings rather than private crossings. As the organization that represents the men and women that maintain, install and repair public grade crossing

warning devices, we are very familiar with what you are terming commercial crossings. Oftentimes the only vehicular traffic on a private crossing will be trucks servicing a local industry; for example, cement trucks going in and out of a stone quarry next to railroad tracks. We believe it's imperative that any private crossing that serves an industry should be held to the same standards for the highway-rail grade crossing signal system requirements. Due to the types of trucks and materials that they carry, the severity of an accident at these crossings would be greater than an accident between a car and a train. Trucks carrying hazardous materials pose an even greater danger.

You also -- you asked about innovative traffic control treatments that can improve safety at private crossings on major rail corridors. There is a lot of

things out there that a lot of people are trying to do to improve protection of passenger crossings. In our opinion they are not quite there yet. They don't offer the level of protection that improving technology

does, you know, the simple flashers, the signal system flasher arrangement that's out there now. Some of the things that they are proposing that ITS America is doing, pilot projects, they are innovative, but again they are not practical at this time. We believe you should stick with proven technology and utilize that.

We finally ask: Should the DOT request enactment of legislation to address private crossings? We believe they should request enactment of legislation to address private crossings. There is not enough being done to reduce accidents and fatalities at private crossings. At a minimum, the legislation should include the site-line distances signage requirements and grade crossing signal flashing light signals. We are killing too many people, and we believe that the DOT should step up and start taking

care of it.

On behalf of my president, Dan Pickett, I appreciate the opportunity to speak here, and I would be willing to answer any questions that anyone may have.

MR. GRADY COTHEN: Thanks, Tim. We appreciate you addressing those issues. Competing for the greatest distance traveled to come to this meeting is Ms. Patty Abbate as director of Citizens for Rail Safety.

Patty, can we here from you now?

MS. PATRICIA ABBATE: Sure. Thank you. I want to thank you all for the opportunity this morning. It's my pleasure to be here, and I look forward to a great discussion after all the statements are out. I'm with Citizens for Rail Safety. We are a national nonprofit based in Massachusetts that deals with all kinds of safety issues.

For far too long rail grade crossing safety at private railroad crossings has been a neglected issue on a national scale. According to FRA records, there are more than 94,000 virtually unregulated private crossings in the U.S. today. Most of

these crossings have little more than a crossbuck or stop sign to alert an approaching motorist or pedestrian. In fact, fewer than 2 percent of private crossings are equipped with any kind of accurate warning

device. Despite the fact that the number of private grade crossings has been steadily declining since 1975, with 34 percent fewer crossings today than 30 years ago, the number of casualties is increasing at these sites.

The subject of railroad safety of these railroad crossings remains such a critical issue that we at Citizens for Rail Safety are currently working with professors and researchers at the University of Tennessee in a study that is exploring this very subject. Findings and recommendations from this study will be released in the fall of 2006. Along with the Federal Railroad Administration, we recognize that private railroad grade crossings present a unique set of challenges where safety is concerned. The lack of a uniform approach to safety for the nearly 100,000 private railroad crossings continues to be one of the main reasons why

we are still faced with a conundrum of how to ensure safety at these sites. Unfortunately accidents and deaths at private crossings continue to occur. Just three weeks ago today on August 16th one teenager died and

three of her friends were hospitalized when the car they were traveling in was hit by a train at a private crossing in Rome, New York. Police reports indicate that the tracks had no warning lights or gates. However, the site did have a stop sign almost nearly completely covered with foliage and a crossbuck was posted as well. According to police, the crossing was used as an access to a quarry near a river where people visit to park or walk the trails. In this incident, the private crossing was known to be used not just by property owners, but by others as well on a regular basis.

In a case like this, who is ultimately responsible for the tragic accident; the property owner, the railroad, the local government, the federal government, the driver of the car? The conundrum continues. And for the families of the

victims, there is no resolution. As we continue to study safety issues of private highway-rail grade crossings, we must keep in mind that the railroads, both freight and passenger, are increasingly becoming more

important to our national economy. The rise in rail traffic that economists predict over the next decade will further put safety issues to the test at these private crossings. At this time, it is critical that we find a solution to the growing safety concerns that loom before us here. We also recognize that all private crossings are not created equal. Some are used infrequently and others are used so extensively that the term "commercial crossing" should be used instead of private crossing. Private crossing rights vary from crossing to crossing with legal rights of ownership and usage blurred.

But despite the differences in traffic volume, despite the differences in legal rights, despite the differences in ownership, it is clearly time for responsibility to be assumed and for safety

to become a priority at our private highway-rail grade crossings. Active warning devices have contributed to the decrease in casualties at public highway-rail grade crossings, so it stands to reason that the

introduction of lights and gates will also increase safety at private crossings. As the railroads, government, private industry and citizens take a closer look at this situation, together we need to consider revisiting a recommendation made back in '99 to treat private crossings the same as public crossings with all the same safety regulations in place. We need to explore public private governmental partnerships to ensure that the most dangerous private highway-rail grade crossings are protected with active warning devices.

We need to actively eliminate the number of private crossings whenever possible. We need to create an atmosphere of cooperation and shared responsibility so that private crossings will get the attention to safety that public crossings have. It is not acceptable for dangerous private highway

grade crossings that are frequently used by the public to be identified with only a stop sign that is obscured by foliage. There must be action taken, responsibility assumed and safety regulations created and enforced so

that we can reduce the number of accidents, injuries and deaths that occur at these private highway-rail grade crossings.

Thank you.

MR. GRADY COTHEN: Thank you. I tried to prepare folks who called in and let us know they were coming with the signup list today and those who indicated an interest in speaking today in terms of an initial statement. And anyone is free, of course, to speak during the discussion period. Anyone is free, whether signed up or not, to make an initial statement. I don't find others signed up to make initial statements, but that may be because I'm misunderstanding what I have in front of me. Is there anyone else that would like to just lay out issues, views or concerns at the outset? I see a number of my friends and colleagues from the railroad industry that I know and I know that there

are others here that I have not met previously who are very knowledgeable on the subject matter. So they are certainly encouraged to speak. The ignorance of your government is beyond reproach unless you do.

Let me offer a few more things as openers, if you will, and then we'll take a courtesy break here and return for some discussion.

Part of this is: How do we organize this activity going forward, because I know your organization will be interested in it and as it proceeds to the next venue and moves toward some kind of conclusion. First of all, let me remind you of the recommendations of the National Transportation Safety Board's report. In Miriam's mind, it was a 1997 report, but that's because it took her nearly a year to get it cleared; something that we bureaucrats know a lot about. Here are some key recommendations. There were a number of recommendations, and I certainly won't read all of them that were addressed in a number of organizations.

Here are some key recommendations:

Modify the grade crossing inventory system to include information on the site distances available to a motorist and presence of curves on the roadway and on the tracks; direct the states to include these data as a

part of regularly scheduled updates of the database. That's what's known, Susan, as an unfunded mandate.

For the board, it's a recommendation for us, it's an unfunded mandate. I would say that we have going on now the conclusion of an Office of Inspector General investigation at FRA that also asked us to look at the issue of additional data elements that would help us better understand why some of these events are according both at private and public crossings. So I think it's a very topical issue. We've had this NTSB recommendation too long already and are about to get further recommendations from Inspector General going generally to that same complex of issues. There are related issues. FRA tries to maintain a GIS database that includes the location of public and private crossings. It's been a challenge for

our folks in the office of policy to do that over the years. Railroads, major freight railroads have their systems, by in large, GIS mapped to a very high degree of resolution. However, those databases are not

available to us by in large.

We also have a very old, old Rail Garrison database which has some information which is still relevant but other information that's no doubt badly out of date. Another recommendation from the board, install within two years of receiving federal funding stop signs at all passive grade crossings unless a traffic engineering analysis determines that installation of the stop sign would reduce the level of safety at a crossing. Crossings where conditions are such that the installation of stop signs would reduce the level of safety should be upgraded with active warning devices or should be eliminated. Since the board's recommendation, the Federal Highway Administration and FRA have made additional efforts to clarify the department's position on use of stop signs and at public crossings

where the Federal Highway Administration has direct interest, there is encouragement to look at the use of stop signs, but with the crossbuck being still the basic unit.

Subsequent to that; and by the way,

Ron can correct me, but my memory of this situation is that the last analysis we did is that placement of stop signs has the effect overall, lots of crossings, of probably reducing the risk of crossing on the order of 20 percent. And that's kind of a historical number and does not include locations where there's active enforcement. Obviously it's private highway-rail crossings. The issue of getting active enforcement is a much bigger one and indeed a lot of the resistances occur on the highway side to the use of stop signs and crossings in addition to the danger of rear-end collisions at those locations has been related to the concern over how much active enforcement there would be at those locations to the extent to which motorists heeding of stop signs might be diluted by the failure of enforcement. So here we have the board saying: Go do a traffic engineering

study, place a stop sign there unless it is unsafe to do so. And if it is, you really need to go to active warning devices or close the crossing which is a -- staking out a position that's different than the kind of

position generally applied at public highway-rail crossings, but the board was saying this for both public and private crossings in the passive crossing study. And then of course another recommendation would be the enforcement issue.

Something that we try to reinforce actively, a law enforcement liaison, enforcement of all signage at highway-rail crossings, but it's very difficult to get cooperation on obviously a private crossing setting for obvious reasons. Are you puzzled yet? We are.

Here is another one, and I think it will apropos some of Miriam's slides, evaluate periodically, at least every five years, all passive grade crossings to determine compliance. And this is the state's personal response, second and third year to the state. Evaluate periodically all

passive grade crossings to determine compliance with existing guidelines of the Federal Highway Administration and AASHTO regarding site distances, angle of intersections where the roadway meets the

track, curves on the roadway or tracks and nearby roadway intersections. Those crossings determined not to be in compliance with the guidelines initiate activity to bring these crossings into compliance wherever possible. Action item for one of our subsequent meetings would be to get some briefing on the AASHTO standards which are -- perhaps I'm the only one in the room that needs help on that. I certainly could use a refresher. Where passive crossings cannot be brought in compliance for reasons such as permanent obstructions at the stop line, target those crossings for installation of active warning devices, grade separation at closure. Aren't you glad I'm not reading all of the recommendations. Here is one to the departmental agencies, AAR and APTA, American Public Transportation Association: Participate and cooperate fully with the

development of intelligent transportation systems that will be able to alert drivers of an oncoming train at passive grade crossings. I would like to say that in the intervening years, we really narrowed in on solutions

with regard to innovative devices. The FRA has been involved in this region in this state and the demonstration of an innovative warning system which have been placed at previously passive designed crossings and activated through GPS train location. And that's a really simple description of the technology. It was conducted under very careful FRA scrutiny, including Mr. Abie [ph.] and Mr. Comstock back there. And it looked like it produced some interesting results. There is a major vendor now that's talking about commercialization of that product, and we expect to see a product safety plan from that vendor on that technology before long under the -- our processor based rule. The board's passive crossing study is available on their web site and I would encourage anybody who hasn't read it or hasn't read it lately to go back to it

as an extremely useful resource. Let's take a break and return in 15 minutes which I think would be about ten minutes before the hour, and then we'll resume with discussion. If you would like to participate, feel free

to occupy a place at the table. If you feel you will not be wanting to participate in the discussion, if you could free up a spot, that would be great.

Thank you.

(Recess.)

MR. GRADY COTHEN: We've got in this room people from the railroads who are out there wrestling with this issue every day, closing crossings, getting agreements, talking to engineering to get some brush cleared and on and on and on. And a lot of you folks know what we need to know. So we encourage any of you who can to come to the table. Ron Adams has come to the table from the State of Wisconsin. I'd like to have a really productive and realistic discussion. The more realistic the discussion is, the more realistic our response will be. So you were warned. Okay. We are back on.

Paul, do you want to, for the people who didn't find coffee earlier, do you want to tell them about the cafeteria facilities we have available and see if you can determine how many people want to use

them when we get to a breaking point here a couple of hours from now, or whenever it is that we are going to break.

MR. PAUL COMSTOCK: Well, actually 11:30 would be about the best time to go for lunch. If you go right back by the elevators in the opposite direction there is a cafeteria in there. They do have a smoking area and there is a patio outside if you want to get some fresh air, ice water, coffee, the whole thing. Sandwiches, salad bar, entrees.

MR. GRADY COTHEN: How many people are likely to use the cafeteria facilities here just so we can warn them.

(Off the record.)

MR. GRADY COTHEN: Anya Carroll has passed out for you the list of questions from the public notice. And what we thought we would do as a first run at it, and we'll perfect this act as we continue to the next

stop on the road hopefully, is to do a general survey of these questions and try to get your thoughts on the subject matter. I don't know how many of you remember Gil Carmichael, but if you were in and about

the railroad industry at the time, I'm sure you do. And Mr. Carmichael was our administrator during the first Bush administration and -- George Herbert Walker Bush administration, and Mr. Carmichael would always surprise us by saying that you wouldn't build a road across a runway, would you? And you know it was a startling obvious observation, but his next point was always that the railroads are highways of interstate commerce, and really it's not a good way to plan your transportation system to have a grade crossing every mile. And of course it's not. It's not a good thing for railroads or communities, it causes us to disburse our resources and have a difficult time addressing safety needs at each of those locations rather than being able to focus on a smaller number of locations, but here we are. This is where we find ourselves still

even after all the efforts of the railroads and all the abandonments and consolidations and so forth and so on, with probably in excess of 90,000 private highway-rail crossings. So the first question has to do

with how do we determine whether creation or continuation of a private crossing is justified. And obviously we don't want anybody's property to be landlocked, and if there is insufficient alternative access, I think most of us would recognize that that's a legitimate concern that we've got to take into consideration. But being landlocked and inconvenienced are two different things, and I know that's a good part of the discussions that goes on.

Who would like to be first out on this topic? Anya and Steve will take some notes for us.

MR. ROBERT OPAL: Bob Opal, Union Pacific railroad, law department. Let me just make one observation on this question. One of the problems is that in most areas of the country there is not a decision-making process for whether a private crossing is

justified. The -- typically the decision -- in the public crossing area, the decision of whether a public crossing is necessary and what it should look like is typically something that is done by a state regulatory

commission of some kind. But in most states, they don't do that with respect to private crossings. They don't decide whether a private crossing is necessary, or not necessary, what it should look like, whether it should still exist, whether is should be closed. So there really isn't a coordinated decision-making process for making the decision as to whether the creation or continuation of a private crossing is justified. To the extent there is a decision-making process, it tends to be state courts, real estate property law concepts like easements, prescriptions like you saw on your slide, but not a -- with a few exceptions, not an overall decision-making process as to whether the crossing should exist like you see in the public crossing area. Lack of process; typically because the agencies do not have jurisdiction.

MR. GRADY COTHEN: Nobody is required to answer any question asked, okay. And Bob knows that better than anybody. Would the Union Pacific have criteria that you would try to apply when someone steps forward with

a request for a new crossing?

MR. ROBERT OPAL: I would think Dave would have to answer that. Generally, we wouldn't be very receptive.

MR. GRADY COTHEN: I understand. We do have a docket -- to know that to make statements at public proceedings we do have a public docket and any thoughts that the railroads have as to the considerations that they look at in deciding whether or not to let somebody open a crossing. I'm sure in some cases, the prospective holder of this right to cross probably owns the underlying real estate and doesn't -- you know, perhaps not so much in the west, but certainly in the east it's not easy for the railroad to say no. But if you have considerations that you've applied that include public interest considerations beyond the safety of your operations, which certainly is an important

one, that might be of interest.

MR. TIM DEPAEPE: Tim DePaepe, brotherhood of Railroad Signalmen. There has got to be a process, Grady, because there are many locations, for example, by our

headquarters in Front Royal, Virginia, there is five private crossings before a public crossing, and it's within -- I don't even think it's a mile. And they have signage up at each crossing. I mean, there is no reason to have these five crossings there. I mean it would be nothing just to put one access, maybe put gates or flashers at it to protect it better, and then you've just eliminated five private crossings. But I'm not aware of any process out there that would get the different parties that have the different access together to come to a decision to eliminate them, but there should be a process in place where you can do things like that.

MR. GRADY COTHEN: Do you think -- Tim, certainly that's better to carry out at the state level, right?

MR. TIM DEPAEPE: If you can keep the feds out of it, you are much better off.

MR. GRADY COTHEN: Well, we have unanimity at the table then -- maybe not.

MS. SUSAN AYLESWORTH: Susan Aylesworth, Minnesota DOT. We have attempted to close public crossings in the state of Minnesota

and with limited success, certainly. And even though we have a very specific process to do it, generally speaking, the administrative law judge recommends that the crossing be created. Fortunately we have gotten them to agree to lights and gates at all of those crossings, but still we're creating crossings. We probably create as many crossings as we close so we're probably doing net zero right now. And the closures don't often come with the openings. In other words, we might negotiate a crossing that's closed in one location, we'll have one that's requesting an opening in another. And so I'm thinking that if it's that hard to close a public crossing then, how much harder would it be to close a private one. Some of it is a resource question, because to -- I'm involved in a hearing right now, we are going into our third day on the opening of a public

crossing and there is at least one additional day beyond the testimony. So that's four days, lots of witnesses, a lot of money going into requesting that this crossing be opened.

And while I can't predict the

outcome, as you can see it's a labor-intensive process, so I would suggest that a closure would involve as many days and as many witnesses. And who is going to bear the cost of that?

MR. RONALD ADAMS: Ron Adams, Wisconsin Department of Transportation. We are not the regulatory agency with jurisdiction to close crossings in Wisconsin, public or private in Wisconsin. Our only involvement with private crossings is our state law that says the railroads have to provide suitable and convenient farm crossings. That definition -- the wording "farm crossing" is misleading because statutorily -- by the courts, it's been interpreted to be anything other than a public crossing for any purpose, so it makes it difficult. A lot of the private crossings are out there for historic reasons, either they were given by the

landowner -- given to the landowner as part of the deal the railroad cut to initially have their line crossing his property. In some cases, it's -- they were created by inaction on the railroad's part of paying

attention to what's happening on their property, quite frankly. And the other difficulty if you want to change the character of the crossing in Wisconsin, we have -- the public has jurisdiction only when a crossing is going from a public access, public highway to a public road.

And so if public maintenance stops before the crossing, then it becomes a -- it is a private crossing. And in some cases those continuations of roads don't meet any public standards for the roadway, so the local road jurisdiction doesn't want them. They don't want the responsibility, not only for the crossing, but they don't want responsibility for maintaining the road in the future because it doesn't meet even minimal standards. Because in a lot of cases -- in some cases maybe, the construction of it was such that it was truly

a private entry into a small area at first that has changed the character over time. And I would argue that in some cases that character has changed without the railroads paying attention to it even if they had

permitted that crossing initially, they didn't keep up with what the changing character was going -- character rather was -- how it was changing over time, to see if it met their standards or the contract that they had in place if they had one in place.

So it's difficult now to go in and say this crossing that's been there for 100 years is now a concern of the public even though the character has changed greatly and you have to find parties that are willing to accept other responsibilities. It's not just the service of the crossing or just warning devices. And if you put warning devices at a -- what is now a private crossing, whose responsibility are they? Is the railroad just going to say: Okay, we will give you a fee from our system as we do an interconnected highway railway signal devices

where we've got traffic signals, and someone else maintains them. And then do FRA rules apply to that other private maintainer that might be out there. So it's not just a simple matter of saying this private crossing

is now a public crossing, there is a host of things that go with it.

MS. PEGGY BARE: In Iowa we don't have a regulatory body that regulates crossings and the state DOT is only responsible for our crossings on the state system which is a very small part of the total. So if the whole issue of opening and closing crossings really falls back to the local highway jurisdiction and the railroad, and that often results in a lot of discussion, but frankly 95 percent of the time or more the local highway authority doesn't have the political will to close a crossing even if they know it's the right thing to do.

If one citizen complains, that crossing will stay open. That's a tough thing to -- it's just impossible to deal with in our state.

MR. RONALD ADAMS: I think another thing

somebody mentioned, well, separate them. Well, grade separations are extremely expensive, there are few pots of money that can really be used for grade separation either at the state or the federal level.

It's extremely difficult to get one in, especially in an urban area, you pay tremendous difficulty in doing that. Even in rural areas it's difficult to find the topography that makes it cheap to do it. So you're looking at a large expenditure of funds to separate any -- quite frankly, we're going to focus on the ones that have the most highway traffic. And so even if we could spend money on other ones, there are other crossings out there that have a much higher payback for taking proactive actions on.

MR. JAMES KIENZLER: Jim Kienzler, I'm director of regulatory affairs for Canadian Pacific, and I'm located out of Calgary, Alberta. Recognizing that Canadian legislation is very different and the regulatory schemes are different, Transport Canada currently has two initiatives that are relevant to this, they are continuing to

draft grade crossing regulations that include some safety jurisdiction over private crossings. They use different terminology than you use in here, but they have separated them between restricted and unrestricted

private crossings. They are drafting grade crossing regulations as we speak that have a decidedly different approach toward what they term restricted and unrestricted private crossings. Those regulations and the underlying engineering standards are available through their web site, and I would recommend this group review those if they have it.

Secondly, they have contracted with some consulting firms, IBI Group and UMA Engineering, to do an extensive study of private crossing safety. Again, I would refer you to look at that. They just issued an interim report, it deals with many of the same issues and concerns. Again, different legislative powers, different regulatory schemes. For instance, there are laws in Canada that have an appeal and binding arbitration process for private landowners

and railways in dealing with crossing access and crossing locations. I think it's worth you looking at.

MR. GRADY COTHEN: We will do that. I've had some conversations with our

colleagues at Transport Canada in the past on the subject and need to refresh our status on that. Thank you.

MS. SUSAN AYLESWORTH: Grady, I'd like to just comment about the cost issue for a moment. When I arrived in Minnesota about four-and-a-half years ago using our pot of money from the Section 130 program, we were able to construct approximately 40 upgrades to grade crossings per year. Now, we are in 2006. And although our pot of money has increased somewhat, the percentage of that amount has left it almost the same as it was in the past. In other words, the federal government is not giving us the full amount that was allocated. We are getting, I think, 85 percent of that. We are only able to do about 28 crossings per year at the current costs which have gone up significantly. So as you can see, we are falling behind. There

are approximately 1,500 active warning devices in Minnesota leaving about 3,000 public grade crossings without active warning devices.

If we were to add the approximately

2,000 private crossings to that list, several generations would be upgrading crossings at the rate of 25 or fewer per year. So it's some of -- the prospective of what we are faced with is the economic reality our state does not allocate additional funds for grade crossing safety with the exception of a small pot of money, half a million a year that is generated from fines collected by the state patrol. So we are able to add that to our allocation, but it still leaves us with very few projects and very little that we can do. Certainly we don't have enough money to do any grade separations with this fund unless we were able to allocate the entire amount to a grade separation. So just as some perspective of what the state is really able to do. And in addition, from a resource perspective, I think it's fair to say that our state has reduced our staff sufficiently

that I don't think we could meaningfully inventory or keep track of private crossings in addition to the public ones.

We are struggling to keep up with the demand of the staffing that we have. So

I think that is another issue that needs to be recognized. I don't think our private crossings have been inventoried any more recently than the FRA database has received the information. I believe there was a comprehensive inventory done in the early '90s, that may be the extent of it on private crossings.

MR. WILLIAM BROWDER: Bill Browder from the AAR. To add to Tim DePaepe's statement, and you may hear this in North Carolina, but just to see that a -- it gets to your attention in terms of numbers of private crossings, that same railroad and North Carolina DOT worked both very diligently in the early '80s to close a series of private crossings of a tank farm at Friendship, North Carolina, Piedmont Triad Airport without any success at all.

And in October of 1987, even though

the railroad had imposed a ten mile-per-hour speed limit through that particular section past Chimney Creek Road, a train hit a tanker, and it incinerated a set of five engines and the five crewmen that were on

board. And shortly thereafter, there were some additional negotiations and a program such as Tim described was empowered through public demand for such a program. But the railroad and the state had been unsuccessful in initiating and they were even willing to pay for it at that time because it was such an issue for them.

Thank you.

MR. RONALD ADAMS: Following up on Susan and Ron Adams, about the numbers of crossings. In Wisconsin at the beginning of the year we had just over 4,100 public at-grade crossings. 723 had gates and lights. 1,100 had flashing lights or another active warning device out there. We had 2,383 private crossings. Something to do with it at some point in time if something is changed, a lot of ifs in there. Our legislative this year passed a law mandating

the installation of yield signs at all passively signed crossings that don't have stop signs at them, and the railroads are working diligently to get those installed, and several of them have them installed now,

by July 1st, 2007. Again, because of the -- at public crossings, didn't do anything with private crossings because we don't have jurisdiction there. But to try and raise awareness that the people are supposed to pay attention to those crossbucks out there which railroads report they don't always do. Any more than they pay attention to stop signs in rural areas. It's not a -- the grade crossings are not a unique intersection. We have about 120 crashes at highway-railway intersections a year, it's somewhere in the order of 8,000 to 10,000 crashes at highway-highway intersections. So as I like to tell people when talking to them about highway railroad intersections, drivers do dumb things at intersections and it doesn't matter if it's a highway-highway intersection or a highway-rail intersection.

MR. TIM DEPAEPE: I've got to speak on

that issue about yield and stop signs. No one has been able to show me any data that, A, they've reduced incidents at private crossings once they are installed. And my personal experience and my organization's

position is it adds very little. We just have not seen that there is this big impact and there are people within government that think it's the end-all to the problem, just install stop signs or yield signs. What we have seen by talking to our members is people still, if they stop at all, they usually stop once they are on the track so they can look both ways and see if anything is coming. I think they just -- as you said, especially in the rural areas, and these are private crossings, people either stop now or they don't. I don't think putting up a stop sign is going to make that big of a difference. I really don't think that's where you want to go to think you are going to stop a problem. Because unless Volpe is aware of some studies that I don't know about, I haven't seen any data that it's working or that it's improving even what's going on today.

Thank you very much.

MR. GRADY COTHEN: I don't know if we have any studies with passively signed private crossings as to the effectiveness of signs. I would think that we would be

looking hard for the data elements with regard to signage effectiveness at private crossings, you know, which is a little bit discouraging because you'd like to start with adequate data. And actually I think we've been pretty successful as a community in having enough, not the best, but everything we would like to have, but, you know, enough to do some analysis for the various activities that we've done related to our reflectorization and train horns and that sort of thing and in evaluating in a general kind of way effectiveness and counter measures.

But this really gets us down to a very difficult point. The states that have -- it appears that the states that have signage requirements for private crossings in general, the small handful specify stop signs. So there is a judgment exercise by

somebody that, you know, the stop sign is the signage of choice. As I indicated if you look macro at passive crossings in the nation as a whole, we do believe that stop signs help, but most of those would be on public

roadways where you would have some degree of enforcement, however small.

So that's a big issue for us. I mean, and how do we work through it other than just gathering up our opinions which are useful. And I think we have to do that, but you would like to drive these decisions based upon data. And certainly I think the highway community as a whole has pretty much come down to passively sign crossing. If we can't do any better, we'll at a minimum have a crossbuck and a yield sign, and if there are indications that a stop sign is needed, then the stop sign will go in. And because of the resource issues that Ron and Susan have been referring to, you don't go to automated warning devices until you get to a higher level of risk. Here we have the problem that, you know, do you apply MUTCD criteria or not. If you do, assuming a yield sign is

less effective, you may end up using a yield sign rather than a stop sign, including in places where stop signs are now at those crossings.

Is that a good thing? I don't

know. Maybe it is. And then if you want to go for some more substantial signage, how do you do the analysis to determine whether automated warning devices are required? You don't know what the average annual daily traffic is. I think Miriam's slide said we don't even know what the train count is at the crossing. The accident-prediction formula is built around public crossings. So we find ourselves in the year of our Lord, 2006, in a rather primitive stage of program development, and that's very discouraging. And, you know, what this set of meetings is all about really is: How do we get traction on this thing? How do we get traction?

Any more comments about private crossings? Can we do away with them? Do we have to have more?

MS. ANYA CARROLL: I'd like to respond

to Tim since he asked if Volpe had any ideas about studies or anything that have been going on. Based on our experience supporting FRA rule-making, Grady mentioned freight car reflectorization which was based on

25 percent of the accidents; passively signed crossings are more affected. It took us ten years worth of data collection to support that rule.

Another example I would bring to the table where it was very difficult to analyze the data in this forum is the Buckeye Shield which was implemented across Ohio, half of the passive crossings had them, half of them didn't, they collected data for ten years and could still not make it through the MUCTD process to be a legislated -- or guided sign by MUCTD. There is hope, though. DOT, I think it was 2001, put together a technical working group. That was made up of numerous agencies and affiliations, industries, the railroads looking at positive guidance for how you apply technology at-grade crossings. Of course it was more publicly oriented, this is a private crossing issue, but it may be

applicable.

They looked at the types of conditions at certain crossings and where a sign would be applicable and where a warning device would be applicable. And if we could collect

the data that talked to train frequency and vehicle frequency, we may be able to use that document as a baseline to start from.

MR. GRADY COTHEN: Good point. And one of our other colleagues mentioned the fact that we didn't brief on the technical working group report. We will endeavor to do that for the next time around. Where can it be found at this point? It was up on the web site.

MR. WILLIAM BROWDER: On Ron Ries' web site, we have a hyperlink right to it.

MS. SUSAN AYLESWORTH: On FRA's web site too.

MR. RONALD RIES: Both Federal Highway and Federal Railroad's web site.

MR. WILLIAM BROWDER: But yours is easy.

One more document that might be consistent with what you all are talking about is the Transportation Research Board

NHRP study Number 470 which is a data-driven study of identification of crossbucks by groups and reaches several conclusions, which I won't attempt to paraphrase, but you ought to include it in your efforts. And Tim is

probably the reason that the national committee is using traffic-control devices as recommended to the FHWA language in support of yield as a default supplemental sign at public passive crossings and where diagnostic studies show it's appropriate, a stop sign.

Did I get that right, Peterson?

MR: PETERSON: Yes.

MR. WILLIAM BROWDER: Thank you.

MR. GRADY COTHEN: If some of the Canadian work is to be believed, and I think it is, you know, there are crossings out there where you probably don't want to put a stop sign because you are going to bring a heavy truck to a stop at a location where with available sight distance they're going to have great difficulty making headway and clearing the crossing before the train arrives; location by location kind of concern. And those circumstances, a yield

sign may actually be better. But one of the really big questions it seems to me in this proceeding is what should the default sign be with the crossbuck. And again, as indicated, that the technical working group was

comfortable with the yield signs, certainly it's an important augmentation to the crossbuck, wherever the crossbuck stands alone simply as a matter of communicating clearly to the motorist what the expected behavior is. Taking Tim's point, can we say how effective that is, well, no, we can't. I don't think we have that data at this point. I know we are going to bounce around in this discussion and that's okay because Anya and Steve are keeping track of where we've been.

I think that there was indication earlier that insurance arrangements really have not influenced behavior of railroads or crossing holders. And these are questions, by the way, that we get asked by the office of management and budget and by people within the Office of the Secretary. Any further comment on that? I would say that certainly from the Federal Railroad Administration

standpoint I'm not aware of significant influences.

MS. SUSAN AYLESWORTH: I can just comment on my past experience in Vermont where I worked in a DOT rail office. We

tried to legalize a group of private crossings along a corridor that was going to carry commuter rail or passenger rail. What it really amounted to was negotiating agreements with these landowners who had had rights not necessarily in writing, but maybe verbal agreements to cross the railroad tracks more than 100 years ago. And then these properties became developed and became private homes and became very desirable private homes, so their value increased significantly. And in each and every case we were unable to achieve some sort of legal documents legalizing the crossing because the property owners refused to procure the insurance that the railroad requested in order to finalize the deal. We were unable to move the negotiation forward. We were deadlocked. And the railroad obviously was unwilling to actively close the crossings,

and so I think today it's still in limbo.

In that instance, the sticking point were the insurance requirements that were being requested of these private landowners. And it was not an insubstantial

amount of money even though it might be divided amongst six properties, but there were quite a few crossings in there.

MR. GRADY COTHEN: In this case the want of insurance keeps us from seeing whether or not, had there been insurance in place, whether or not the underwriter or agent would have taken some action to evaluate the safety of arrangements at the location.

MS. SUSAN AYLESWORTH: In addition, we had -- the State had upgraded all the crossings for the commuter rail line, so the cost of the installation was borne by the State and the required easements or whatever we needed, since these were private rail lines was obtained. The one piece we can't do was formally legalize the crossings for the benefit of both the railroad and the State by retro of agreement.

MR. GRADY COTHEN: New commuter rail and

light rail starts are certainly something that are prominent on all of our horizons. And there are private crossings along those railroads as Susan has indicated; an issue of increasing concern.

Metrolink had one of its most serious accidents early on with a heavy truck at a private crossing. Thereafter the crossing was closed, but it's notably thereafter. There was adequate alternative access in that case. This goes to the example that Susan was just raising in that how should improvement in our maintenance costs associated with the private crossings be allocated. Ron has referred to the fact that very often arrangements are entered into and the level of activity and presumptively use of the crossing is maybe light at the time the arrangements are entered into. Time passes, and the use of the property changes or property is enhanced in some way and now you have heavier or different use. Those kind of considerations were behind some primitive guideline statements that we did back in 1994 suggesting that since the

railroad is not able to control the use of the property, that the holder of the right to cross should be responsible for enhanced warning or other engineering improvements associated with enhanced views.

We've heard reference to industrial and commercial crossings here. An example was recently cited to me where an eastern railroad was adding a passive signing resulting in reevaluation of the status of a private crossing which potentially could be blocked as a result of the train's use of the crossing. So we have things happening on the rail side and on the side of the crossing holder and one may not be able to control what the other is doing. And when you get a situation like that, sometimes you can't resort to law, you have to resort to equity, but how do you turn that into some kind of regulatory policy. Perhaps Michelle can do that for us.

Comments on who should bear the burden and why? I think -- let me pause at something first of all to narrow the field. I think we've heard people say, you know: If

we've got public use, public access on a crossing, so the general public is going to benefit from safety enhancements to the crossing, suffer the detriment if they are not done, that that seems to kind of make a

case for public involvement.

Now, it doesn't increase the Section 130 allocation to these folks. It does not do that. But in the best of all possible worlds, wouldn't we want the public to be involved in participating at least in some way in evaluating conditions at the crossing and funding improvements?

Just to narrow the field; questions or discussion?

MR. RONALD ADAMS: Simple answer, no.

MR. GRADY COTHEN: And why not?

MR. RONALD ADAMS: For new crossings -- new private crossings, there is a private owner that's coming to the railroad that's crossed the property, whether the private owner may have the underlying fee title, may not. But he's going to enter into some agreement with the railroad for that action whether it's because the state has a

prescriptive law that says you shall allow it or because the railroad may have a business opportunity by allowing a private crossing. And they will weigh those benefits versus what happens at that crossing for new ones

anyway. I think the railroad is in the driver's seat as to what they can require by agreement with a private property owner; more difficult I think with the ones that are in there historically. If there is a change in character, though, I think the railroad has to take a serious look at whatever agreement they can find to say what the character of that crossing was intended to be originally and go after enforcement of their agreements or whatever the document was that created that crossing.

And I know it's 150 years ago, it's hard to find those things and hard to find the section foreman that said: Oh, it's all right if you do this. But I think they have got to make that effort; time consuming as it may be, because you can't go to the title company to find out. If you do, you've got to tell them to go back to the creation of

the railroads to find out what the original deeds said. And then you've got to know what the state law was about how they acquired that property, who actually has the right to cross the track, whose property really is it.

It's not as simple as looking at the deeds because they might say warranty deed on it because they may not be.

MR. GRADY COTHEN: You suggested a -- kind of tactical reason -- I mean, that the railroad is in a position to exact --

MR. RONALD ADAMS: Something.

MR. GRADY COTHEN: -- reasonable contributions to doing it right. From a public policy standpoint, is there a complimentary argument out of a local zoning law -- the, you know, there are differences in counties in Maryland.

MR. RONALD ADAMS: Yeah.

MR. GRADY COTHEN: I'm a Maryland resident. Between the extent of which a developer will be asked to contribute to the roads and sewers and so forth that serve the common good there with many suggesting that those public improvements should be financed

by those who will ultimately benefit and profit from sale of the properties. Is that in addition to the tactile reason that you suggested, is there a public policy reason of that sort that we should look to?

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MR. RONALD ADAMS: In Wisconsin there is pressure on the local units of government not to be able to charge those development fees to a developer. But in a lot of cases, the municipalities, before they will accept jurisdiction of a road, they want them to their standards, and sometimes it's cheaper for the developer not to bring them up to town road or city road standards and keep them as a private road so that the community -- the larger community doesn't pay for the snow removal or the blacktopping in 20 years or ten years when it falls apart because there are more trucks on -- even on local development road gets deliveries from heavier vehicles and automobiles. And if it's a condo association or something like that, they forget to build it into their annual fees, they get hit with a big bill at the end of -- when they have to do something

on the roads. The locals don't want them if they are not going to last and the developer may not want to pay for them to last. And so again, mandating a crossing become public is only the first part of the process, I think.

It's only a small part of the process as far as determining who is doing the rest of it and who is maintaining it. Wisconsin has a program to pay the railroads for crossing signal maintenance based on the number of units, and at this point we don't -- I don't know if you have any private crossings with active warning devices, but I don't believe that those warning device units count towards that payment. We are supposed to pay 50 percent of the cost of maintenance, but the appropriation hasn't increased in a number of years, so it's down to about 25 percent of warning device payments that the state pays for.

MR. ROBERT OPAL: I just want to comment on the suggestion that the railroads are in the driver's seat on the question of the creation of public -- of private crossings or change of use in public crossings. It's only

true that railroads are in the driver's seat if the railroad has the right either under it's -- whatever documents may exist or under state law to say no.

And at least in my experience, that

very often is not the case and I remember a case in my Northwestern days in Illinois commuter territory where a private crossing which had been a farm crossing had changed into a -- into a development for -- I think it was condos, and we tried to get that crossing closed, and we just could not do it. And I mean, I think the gentleman from Wisconsin mentioned a little bit ago about they have a law in Wisconsin about farm crossings, but it's been traditionally expanded to be other kinds of crossings -- if you don't have the right to say no, you are not going to be able to -- you are not in the driver's seat. If the other party can compel the creation of a crossing, compel its continuation under state law or simply change the use without the permission or any other intervention of the railroad, can't say no, he's in the driver seat. So I just think

that -- I mean, with respect to the question of looking for documents, sure we are going to look for documents to the extent any exists. I mean, in the case of -- it's not sometimes as easy as you think. For example,

in the case of the old Northwestern railroad which was built in the Chicago area in the 1850s and 1860s, records were all lost in the Chicago fire. It's not as simple as you may think.

MR. GRADY COTHEN: We've worked our court reporter so hard, I think it's probably time for lunch. We really should break now if we want to get into the cafeteria. Let's be back at 1:00, please.

(Whereupon, the deposition recessed for lunch.)

AFTERNOON SESSION

MR. GRADY COTHEN: We are feeling very lonely up here at the head table, Patty and I and the others. And so if anyone else would like to join us here, we would be delighted to have you. And we'll resume. Hope you all

had a good lunch. Anya Carroll is going to take us back to one of the issues that Susan raised as we started this activity this morning.

MS. ANYA CARROLL: Grady wants to take a

nap, so he asked me to stand up and lead the discussion on how do we define private crossings. A number of the speakers who made opening statements talked about commercial crossings, talked about industrial crossings. We heard from CN that they have restricted and unrestricted crossings. Does anybody have an opinion of how we start the process to define or redefine? Maybe that's the word; redefine private crossings.

MR. RONALD ADAMS: I'd say in Wisconsin our laws define a public crossing as one that has public roads on each side of it. If it's a private road on one side and a public road on the other side, it's a private crossing, and we have no jurisdiction.

MR. RONALD RIES: And that falls in line with the Federal Highway definition of a public roadway for use of the funds, have to be public on both sides of the crossing.

MR. GRADY COTHEN: Is that what you said; both sides?

MR. RONALD ADAMS: Yeah, to be a public crossing it has to have a public road on each side.

MS. ANYA CARROLL: Do the states follow FHWA guidance then in that you have to have public roadways on both sides of the crossing?

MR. RONALD ADAMS: We would not spend federal money without complying with FHWA rules, for the record.

MR. GRADY COTHEN: For the record.

MS. ANYA CARROLL: So it may be that FRA has to partner with FHWA if we want to even think about redefining what a public crossing is.

MR. RONALD ADAMS: The only money that I know about that can be spent on private crossings is through FRA from the High-Speed Grade Crossing 1103 program, and that's the only place we get federal dollars to spend on private crossings.

MR. RONALD RIES: That was done through statute.

MR. RONALD ADAMS: It was done through statute, correct.

MR. ROBERT OPAL: The issue I heard this morning was not really what is a public versus a private crossing, because I think

that's pretty well established. The real issue is: What are the different types of private crossings, because they differ significantly. And that's what I heard this morning. Maybe somebody else heard something else.

MR. GRADY COTHEN: And that's where she is going next. But we wanted to start out with --

MS. ANYA CARROLL: But I wanted to establish what the process is. I mean, it looks like we have to go to Federal Highway, it has to be a partnership among federal organizations to actually redefine what this is.

MR. WILLIAM BROWDER: Unless you redefine what a public crossing is.

MS. ANYA CARROLL: Okay. So that's another option.

MR. GRADY COTHEN: Is there any problem

with the Federal Highway Administration definition? Does it get us in trouble anywhere?

MS. SUSAN AYLESWORTH: Grady, I'll give an example. If the Department of Natural

Resources has an access road to some sort of recreational spot and it's not a local road authority, we don't assume that that is a public crossing even though the public will drive down that access road to get there. That's a crossing owned by a state agency. We don't think it complies with the definition of a local road authority. I could be wrong on that, but we would assume that that would be a private crossing. So that's some of the conundrum that we have that we would not spend federal monies on a crossing in that context where both sides of the road are owned by another state agency.

MR. WILLIAM BROWDER: And another common example that exists is where you have a public dump and the private road to the public dump is maintained by the landfill, county or local or even state agency, those crossings. And we've had several Amtrak

incidents in Florida at private crossings like that.

MS. PEGGY BAER: Ron, you may remember this one in Davenport where the Levy Association owns some property on the other

side of the track and there is a crossing, but the Levy Association is not considered a highway authority, so it's a private crossing.

MS. ANYA CARROLL: Getting back to Grady's generic question, is there a problem with the definition of public crossings? Do we need to look at the definition of public crossings in order to address the other issues that we've been talking about this morning, commercial crossings, industrial crossings, natural resource crossings, farm crossings? I don't know how many -- maybe we want to talk about type before we go there. I don't know. Should we redefine public?

MR. WILLIAM BROWDER: I think that's a question you should put out there to investigators.

MS. ANYA CARROLL: In terms of public crossings, apparently a public crossing is

one that has public roads on either side of it, correct?

MR. RONALD ADAMS: Not necessarily. It could be a bike path, it could be a pedestrian crossing that's public. It may

not be a motor vehicle crossing.

MS. PATRICIA ABBATE: But if the access is a public road --

MR. RONALD ADAMS: Or a publicly owned path.

MS. PATRICIA ABBATE: Publicly owned. But yet there are many crossings -- private crossings where the public passes, and lots of public. So maybe you do have to redefine what that means if the public is at risk at these areas; even if it's privately owned or corporately owned or commercially owned. Because these people have to be protected some way and you have to start somewhere, and safety is the number one issue. But who is responsible for that and there are shades of gray there. Maybe this is a good question to investigate.

MS. ANYA CARROLL: Any comments?

MR. GRADY COTHEN: For the purpose of

this proceeding, is there any objection to considering a private crossing to be all crossings other than those nominated as public by the Federal Highway Administration, that is the scope of things we are going to

look at?

MR. RONALD ADAMS: Current Federal Highway definition?

MR. GRADY COTHEN: (Nods.)

MR. RONALD ADAMS: Okay. I would go with that.

MR. GRADY COTHEN: So we would be looking at these other circumstances that you've identified as areas of need in the sense that there is not a federal funding authority, there's no clear delineation of responsibility, questions regarding applicability of MUTCD and so forth.

MR. RONALD ADAMS: I also don't think it would be as simple as changing the FHWA definition of what a public crossing is to make the ones that are termed private, public. I think it's -- you are going to get bogged down in state and local jurisdictions and precedents and all that kind of stuff.

MR. GRADY COTHEN: Sure.

MS. ANYA CARROLL: Well, let's pick up where Grady left off. What are categories of -- other than public crossings? I mean, we heard a lot of discussion earlier this

morning.

MR. ROBERT OPAL: Farm crossings, industrial, other commercial, residential, parens, similar to driveways, close parens, residential, parens, similar to private driveways, residential multiunit in-plant, I guess that's a form of industrial in-plant. There's two types of industrial, industrial in-plant, industrial --

MR. RONALD RIES: Provides access.

MR. ROBERT OPAL: Yeah, industrial access versus industrial in-plant. That's my two cents worth.

MS. ANYA CARROLL: Anything else that you want to add to the list?

MS. SUSAN AYLESWORTH: I would add recreational to the extent that our interpretation is correct.

MR. ROBERT OPAL: Right. Do we want to talk about non-vehicular since that was

mentioned; pedestrian, bike trails, might be recreational with a subset.

MR. DAVID PETERSON: Institutional, say like universities. And an additional one would be government or public facilities.

MS. MIRIAM KLOEPPEL: That would cover the municipal dump sort of situation?

MR. DAVID PETERSON: It would cover military bases too.

MR. ROBERT OPAL: Another one is internal railroad facility crossings.

MR. TIM DEPAEPE: I don't know that you want to creep into that area. I mean, if you are going to regulate it all or -- I mean, like Proviso Hump Yard, there's tracks all over once you get in the facility off the public road. You'd almost have to carve out a niche for the railroads because there is no way you would want to put, you know, grade crossing equipment at all of those within the facility itself.

MR. GRADY COTHEN: Yeah, I think we are trying to account for categories here so that we don't do things that are inappropriate, you know, make appropriate distinctions.

MR. TIM DEPAEPE: Right.

MS. ANYA CARROLL: Anybody else? Any other types of crossings that you've seen on your railroad, in your state, in your local area?

Some of the regional FRA folks? Anything else?

MR. BENNIE HOWE: In our situation, we have a couple cases where there is also two categories of the military base. For -- Leavenworth, for example, has an access road plus inner -- like you have inner plant industrial. And we do some regulations in there; although we were told once we entered that gate we are not in Kansas anymore.

(Laughter.)

MR. DAVE PETERSON: There is one more important category that I believe is missing; would be farm crossings, field farm crossings.

MS. ANYA CARROLL: That was the first one signed, Dave, the column. We couldn't get the engineers in fast enough to remove the column before we had the meeting. Are there different kinds of farm crossings? We

started to talk about government facilities, military facilities, access versus inter-plant in railroad yards. Are there distinctions amongst the farm categories that you want to bring out? I know temporally

some farm crossings are used in the summer and not in the winter -- or I'm sure it varies per region. Are there access versus inter-field, inter-plant on farm crossings you are concerned about?

MS. PEGGY BAER: In Iowa we have farm-to-farm or road-to-farm crossings, but under our state law there is also agricultural-use private crossings. And the one I'm thinking of is -- I got a call on the Burlington Northern line where it's a hog farm and they haul the hog waste across the track to the sewage dump.

MR. WILLIAM BROWDER: One more that I don't see really defined are temporary private crossings. And this probably was a big thing I can think that CSX had a big issue with this -- and may still have it with respect to logging and people cutting timber and even having agreements for temporary

private crossings on the railroad.

MS. SUSAN AYLESWORTH: Add to that temporary private. We get a lot of requests for contractors crossings. They may be longer term, one to two years, but

construction crossings or contractor crossings for a duration of a particular project.

MS. ANYA CARROLL: I think we are on a roll now, everybody seems to be engaged. What do you think if we take these numerous ones and try and generalize, commercial industrial -- it may help in the long run to have discussions about these things in that general framework because there may be certain characteristics of commercial crossings versus industrial versus farm.

MR. GRADY COTHEN: I don't know whether this takes you beyond where you want to go at this point --

MS. ANYA CARROLL: Okay.

MR. GRADY COTHEN: -- Anya, but the category of crossing may not correspond precisely to who the users are, the population of users. And I think, you know,

obviously residential -- for instance, residential seems to be obviously simple, but perhaps it's not because in addition to the person who maintains the residence, and let's take the simple case of an extended driveway,

that person also will have business guests on the property from time to time. You know, unless they are handier than I am, the plumber is going to come out, the electrician is going to come out, maybe a yard service will come out if they're really prosperous and so forth, so you have various members of the public entering as business guests on the property. And the extent of that may influence how you want to treat it.

MR. WILLIAM BROWDER: May not just be invited guests, it may be U.S. Postal Service or FedEx and DHL and those people providing services; not even solicitors.

MR. GRADY COTHEN: Right. Correct.

MR. ROBERT OPAL: Well, the functional differences between some of these have to do with the number and types of people that may be using these types of vehicles that use the crossings, the periods of the year in which

they are being used and things of that nature. The residential private driveways probably are going to be primarily the owner plus his contractors and guests. The multiunits probably going to have a lot more

general public just because of the nature of the structure. The industrial crossing is going to have general public plus big machines. The farm crossing has big machines not used as much, but they may be so large that you can't, for example, use conditional -- any kind of things we consider to be crossing signage because the combine will take it out; I mean, just a few observations I have.

MR. GRADY COTHEN: We are working at three levels at least here, the category of crossing, the type of user and the nature of the traffic, motor vehicles, industrial equipment, boats. Some of our favorite crossings in the FRA have been accesses to marinas, particularly in the northeast corridor where after 20 years of work we still got, I think, 12 left in the north end.

MS. ANYA CARROLL: Any other attribute

that anybody can think of that would help us look at the functional category of crossings?

MR. BENNIE HOWE: I think that volume has to be involved in there somewhere because there is a big split on residential between

private -- going to one home and going into a trailer park or something. I think we have both of those in our region. And I think there has to be a distinction made there.

MS. ANYA CARROLL: For railroad, highway and other volume, traffic volume.

MR. BENNIE HOWE: I was thinking of traffic, but I suppose they both could make a big difference. I mean, we have some places -- different subject, but a private crossing goes into a Wal-Mart. And the Marina is, Peggy, all along this bank of the Mississippi River just, you know, up over the levy, just little sand crossings going over to the river, fishing or cabins or something like that; from here all the way to forever south.

MS. ANYA CARROLL: So how would we -- how would we put that in a functional sense as far as the roadway is concerned? What we

are talking about is it's -- right now it's a private crossing going into a Wal-Mart or it's a private crossing going into somebody's private cabin on a lake. How do we categorize what we are looking for? Is it

use?

MR. RONALD RIES: Seems like that sort of goes to the question about public purpose and public use, seeing if there is a general open invitation for the public to come in like a Wal-Mart or an open boat ramp where the general -- anyone would be open to use it, this one type. Another would, you know, is this my home? If it's not -- I don't expect everybody to come in and drive over my crossing. So that might be one way of looking at it.

MR. JIM KRIEGER: I just wanted to mention that comment, it might be restricted or unrestricted how to describe it.

MS. SUSAN AYLESWORTH: Have we captured use that is not necessarily permitted, people who are trespassing or people who are just accustomed, the crossing is there, the owner may be absentee and people have just decided

they can cross there as sort of a -- it is a trespasser because they are not invited, it's not a public crossing, but it's common-to-common usage because of its location and access to something that people

are interested in. So it could be a farm crossing that leads to a wooded area that the kids like to go hang in because nobody sees that they are there or something like that.

MS. ANYA CARROLL: How would we define that?

MR. BENNIE HOWE: How about lovers' lane?

MS. ANYA CARROLL: I don't think lovers' lane is going to be one of the categories.

MR. GRADY COTHEN: We called them woods. This is -- the lawyers, right, Bob, would say this is really access to an attractive nuisance is what this is.

MS. MIRIAM KLOEPPEL: Might interject at this point, these are very interesting elements that might help us categorize the private crossings, almost none of them are data that we have, and I'm curious to know whether people would find it useful to

conduct a massive inventory effort similar to what we did in the 1970s to collect this kind of information.

MS. SUSAN AYLESWORTH: We are in the process of doing an inventory of our public

at-grade crossings. We ambitiously thought we could inventory 1,500 crossings a year for a three-year cycle where every crossing would be inventoried every three years. Well, that was a little ambitious, we had one person doing it, so we probably inventoried two-thirds in the last three years. So really more like 1,000 a year. We have about 2,000 or so, 2,500 private crossings in the state. The difficulty with inventorying private crossings is they are not easily locatable. Some of them are on roads that no longer look like roads, some of them are in between cornfields. So we have limited information on the location working off of either the FRA database or our own database. So I'm not sure we could even capture all of them if we went out on an inventory effort. But then you come to the question of resources. I mean, certainly that is an

issue that is always present, we would have to take that person who we have, take them away from doing the public crossing inventory and assign them that private crossing inventory activity which I would presume

would take a lot longer to do.

MR. RONALD ADAMS: Some of that information that's been mentioned about site distances, we don't even have that on public crossings in the database. So not only would you have to find it and identify the private crossings and gather all of the data that's in the inventory, but you would have to go out and reinventory for specific items on the public crossings that we already know about. And we haven't really talked about pedestrian crossings, but in the inventory we frequently don't know if those are public or private at this point. And it gets confusing, it's difficult to ferret it out.

MR. LYN HARTLEY: BNSF Railroad, I don't want to discourage my friends at the FRA, but then the next question is: What database are you going to house this data in, are you going to create a modern easily maintainable

database to keep the data in? We certainly don't want to perpetuate what we have today. If any of the states as Susan has indicated have already done reinventory, they may or may not be sharing that because of

incompatibility of state databases and FRA databases.

MS. MIRIAM KLOEPPEL: I guess I'm hoping for people to come up with suggestions. Obviously the old way of doing things would be very cumbersome. If anyone has suggestions for ways to gather information using modern technology, I'd be very open to hearing them.

MR. TIM DEPAEPE: Track inspectors inspect the track on a weekly basis, there would be nothing -- they have high-rail vehicles that they have to use to inspect the track. And I'm not going to speak for the railroads here, but it would not be much of a burden to just tell the guy: Mark down the milepost. If they have some way to do it with GPS tracking, I know that some railroads are doing that now, but just when you go through your territory, just put down the

milepost of every private crossing, and then you'd capture them all. And then turn it in somehow, you know, to the FRA or whoever wants to maintain the database.

I mean, that's one way you could

get the information without -- it's not like you are having them make a special trip, as part of his inspection he can just note that. It would be in small enough bundles, you know, that they could get it done.

MR. ROBERT OPAL: It might get you locations, but it doesn't get you types because some of these types aren't evident just from the -- I mean, some of them are, some of them aren't. You just don't know from just the tracks.

MR. WILLIAM BROWDER: I'm not in a position to make a statement for the railroad industry or for the AAR, but to answer Lyn's question and Miriam's comments, I would suggest that the railroads and others make concrete recommendations to the FRA at the series of public hearings that they conducted in connection with the revision of the grade crossing inventory form. And to date I

haven't seen any results of those hearings, but I know they were on your web site and that the railroads made a number of specific recommendations to improve the inventory. And you might want to look at those

recommendations in consideration of this issue.

MS. MIRIAM KLOEPPEL: Be happy to.

MR. RONALD RIES: The inventory manual is in the process of being revised and updated and are working forward to getting the public -- making public the changes that came out of the inventory. And also, Lyn, we have a pilot project going -- undergoing now transferring inventory information using the web through an XML format, which doesn't mean anything to me, but from what I understand it will take almost any format and we'll be able to do it real-time on the web. So we are working on ways to facilitate exchanging information with states and railroads with the inventory.

MR. WILLIAM BROWDER: I think that much more addresses Lyn's question, that is the process rather than the physical properties

of the inventory.

MS. SUSAN AYLESWORTH: I would add another comment, that, to the best of my knowledge, the railroads are in the best position to know what a private crossing is

and what isn't. I mean, I would guess at this point they would have some record, which is why we don't go out and make that determination. I'm assuming that they have that information and are able to get it. There are certain circumstances where that's not possible, but I believe they have the best information available, certainly better than ours.

MR. LYN HARTLEY: I'm going to point out the obvious. The state DOTs by definition this morning know what public crossing is. So if you know what a public crossing is, therefore by default, the balance are private. I would say the states are in equal position to determine a public crossing as a railroad is to determine a private crossing.

MS. SUSAN AYLESWORTH: That is true if the private crossing has access to a public road. But commonly if it's between two farm

fields and there's a farm road leading to it, we wouldn't necessarily send our guy down the farm road to look for a private crossing. So in those instances, it's not as easy for us to discern whether there is even a crossing

in that location. And that's why I'm saying you might have better information about that than we do.

MR. LYN HARTLEY: Okay.

MR. WILLIAM BROWDER: I've got a question for Minnesota. Are you one of the 30 states that participates in the FRA inspection program?

MS. SUSAN AYLESWORTH: Tim, do you want to answer that?

MR. TIM DEPAEPE: We do not.

MS. SUSAN AYLESWORTH: Too expensive.

MR. WILLIAM BROWDER: Okay. Then I would challenge your contention of not being able to get down if you had an inspector with the state that had an inspection.

MS. PEGGY BAER: Well, we do have track inspectors, state track inspectors, two of them. And from my perspective, that would not be the highest priority I would want my

track inspectors working on, is identifying farm crossings. They have a bigger job than that. So I don't know that it's something that would be priority.

MR. DAVID PETERSON: I'd like to just

comment on Susan's statement that the railroads have a better understanding of private crossings. The one area where railroads have a classic gap on private crossings is when a private landowner goes through the land use commission of whatever regulatory body or community they are in and has a private road converted to public, frequently the railroads are not notified that that occurs. And most states there is not a mechanism in place to formally notify the railroad or in many cases the DOTs that the designation has changed until such time as an incident occurs at the crossing, and then that becomes made available to us when we do the reporting.

MS. SUSAN AYLESWORTH: I would agree with Dave Peterson, that we don't get informed for local planning activities when crossings are converted from private to

public for development purposes. Every once in a while we'll get a phone call, but very seldom, so our database would be in error in that instance also.

MR. RONALD ADAMS: Wisconsin, if they

haven't made any public road on the other side, it's still a private crossing no matter what they've done to develop the other side, it's away from the road. Even if they have gone to the locals and gotten some massive rezoning on the other side of the railroad, it's still a private crossing by definition, unless the road authorities have taken jurisdiction of that.

MR. ROBERT OPAL: I don't think that's what he's saying. I think he's saying the road on both sides has changed from private to public. We don't --

MR. DAVID PETERSON: That is exactly what I'm saying, Ron. The notification when a public road authority takes over ownership of the road in many jurisdictions does not include notification of the railroads or the state's regulatory body that keeps track of the crossing inventory. So we don't even

know to change the warning devices to make them conform with what should be at a public road. It may be that way, but we may not be formally notified.

MR. RONALD ADAMS: It may or may not be

a public crossing, because in Wisconsin the office of the commissioner hasn't ruled that it is. That's a question I don't know the answer to.

MS. ANYA CARROLL: What other -- maybe I can ask another question: What other organizations do you work with on a daily basis that might have this information? Does somebody like AASHTO? Does -- I mean, there is the regional federal highway folks. Who else can we lean on to be a partner in trying to at least identify the problem and the issues that we need to address? What other partners can we reach out to?

MR. WILLIAM BROWDER: Who are you reaching out to?

MS. ANYA CARROLL: You mean the data collection or the entire issue of private crossings?

MR. WILLIAM BROWDER: Either one. Take

your choice. I don't understand the question.

MS. ANYA CARROLL: What other private or public entities can FRA reach out to to try and collect data or try to bring into these

public meetings for their input that might be useful to move forward?

MR. WILLIAM BROWDER: You have FHWA.

MS. ANYA CARROLL: I don't think we do.

MR. WILLIAM BROWDER: I mean, you have it on your list.

MS. ANYA CARROLL: Yes.

MS. MIRIAM KLOEPPEL: Yes.

MR. WILLIAM BROWDER: The National Committee on Uniform Traffic Control Devices, railroad committee in particular, they are working on a number of areas to deal with private crossings and two of their representatives are on FRA's staff. AASHTO, AREMA, AFTA, TRB. I'm sure there are some others that have some better suggestions than me.

MR. ROBERT OPAL: Bill, any of those organizations likely to have data on public and private crossings?

MR. WILLIAM BROWDER: TRB is, I know that. It might be that BTS and a program that's out there that may have data, I'd have to look at it, it might be the FARS system under the -- it's NHTSA may have data on

public versus private crossings. I'm not sure anymore. They collect data, whether it includes delineation of public versus private, I'm not sure. And I'll tell you another that nobody -- you talked all around it, but you haven't confronted them, is NTSB.

MS: PEGGY BAER: Bill, what does FARS stand for?

MR. WILLIAM BROWDER: Fatal analysis reporting system. Every time a policeman makes out a report on a highway fatality, that's completed. It's about a 10- or 12-page report on that fatality and submitted to NHTSA.

MS. PEGGY BAER: Which stands for the...

MR. WILLIAM BROWDER: The National Highway Traffic Safety Administration. They're part of these guys. I don't know that they'll ever admit it.

MR. GRADY COTHEN: This is information

the FRA periodically compares the fatalities as reported through the FARS system with the fatalities reported under the RAIRS system, Railroad Accident Incident Reporting System. And the general finding is that our database

is more complete and more accurate as to location. And in most cases there is a discernable and assigned crossing number which has an identity in the database as public or private; whether that's correct or not may be something else, but it has an identity in the database. So we do pay attention to that resource, but we find that the filters that that has to go through and the lack of knowledge probably on the part of the collecting official regarding the railroad side issues makes it less reliable than the data that we collect through the railroads.

MS. ANYA CARROLL: How about users of some of these crossings, do they have a stake in safety of these crossings? We talked about commercial, industrial, do some of these plants or, you know, industries that need access to their plants, do they have a

-- do they know how many trucks they -- you know, frequent that crossing on a daily basis? What types of trucks? Oil trucks? I'm just trying to figure out what other organizations might have an interest in

attending these public meetings. This is the first one that we are holding on a series of currently four we have scheduled, and we would like to be all inclusive in bringing everybody to the table to talk to the issues so that we collect a world of information.

MR. ROBERT OPAL: Well, individual industries would certainly know what their truck traffic is in and out. But I think the real issue is whether there is some kind of a compilation that would show use of a particular category at a grade crossing. I'm not aware of anything like that.

MR. RONALD RIES: I'm not either.

MS. ANYA CARROLL: How about federal motor carriers, they are a new partner in DOT, right, relatively new?

MR. ROBERT OPAL: Well, a lot of trucking occurs with private trucks, though, so that only gives you part of the picture.

MR. WILLIAM BROWDER: The only segment of the industry, and I was going to mention this as one that does identify and develop data on it, is the school bus industry. And they do develop information on highway-rail

grade crossings that impact school buses. The NTSB has got data on highway-rail grade crossings within the highway segment rather than the railroad segment of their organization setup.

MS. MIRIAM KLOEPPEL: Not entirely.

MR. WILLIAM BROWDER: Well, they have a recommendation -- data and recommendation section. I know you worked in that. But it's very confusing to an outsider like me to reconcile data from the NTSB with the FRA, and a lot of people choose to ignore the NTSB data. But there may be categories collected that Anya may be interested in that we don't know about.

MS. ANYA CARROLL: We'll put them on the list.

MS. MIRIAM KLOEPPEL: We can talk with them. But typically what they have is isolated -- I mean, they would do case

studies. FRA will have a much fuller list of the accidents that occur. The NTSB will investigate a couple of accidents every couple of years. We will be happy to talk with them, though.

MR. GRADY COTHEN: They do publish data annually, but generally it's data obtained from the DOT. And then it's reorganized sometimes so that you get light rail and rail combined, for instance. FRA also publishes on the web currently rail transit as well as FRA data for convenience at the request of OIG.

MS. ANYA CARROLL: Would FTA be a partner here as well?

MS. MIRIAM KLOEPPEL: I think so.

MS. ANYA CARROLL: And we've heard lots of things from our railroad friends. What are some railroad organizations that might have information? We've got the AAR was represented today.

MR. ROBERT OPAL: Some of the ones that Bill gave you are railroad organizations.

MS. ANYA CARROLL: How about short lines?

MR. TIM DEPAEPE: ASLRRA, American Short Line and Regional Railroad Association.

MS. ANYA CARROLL: Aren't they supposed to provide the technology?

MR. TIM DEPAEPE: Well, they provide the

technology, but they wouldn't know where any of this -- where the crossings or things like that are.

MR. ROBERT OPAL: Probably the military has all this information somewhere in some database that probably we can access.

MS. ANYA CARROLL: Well, Grady mentioned the old rail garrison. You never know.

MR. WILLIAM BROWDER: I'm not qualified --

MS. ANYA CARROLL: Then we bring in DHS.

MR. WILLIAM BROWDER: Who keeps track of that data?

MR. GRADY COTHEN: The --

MR. WILLIAM BROWDER: You, me? Anybody else?

MR. GRADY COTHEN: The Strategic Rail network is defined between DOT and the Department of Defense, and the FRA Office of Policy can tell you at any given time which

segments are part of --

MR. WILLIAM BROWDER: But they don't keep any separate information on data that might be different in the FRA or more categories or different categories.

MR. GRADY COTHEN: I'm not aware of anything that's relevant to what we are doing here. There may be something, but I'm not aware of it. I think that -- granted that there are a lot of people that we want to reach out to, and these perspectives we want to understand. I mean, I think we've met the enemy, and he is us.

You know, the folks represented here, by in large, are the folks who have some knowledge and access to information that is going to be critical to solving the problem. And it doesn't mean we can't reach out, we certainly can.

We had representatives from the Twin Cities and western here, members for the Atlanta association today, that's when railroads are represented, their officers -- those FRA personnel participate in AREMA committees. And it -- certainly a lot of

different organizations that represent there that have an interest and some relevant perspectives to bring to bear. But I think when we start going looking for data, we are going to find there are a very limited number

of sources of the highly detailed data that we need.

I've got just some interim action items here. Go ahead, Susan.

MS. SUSAN AYLESWORTH: I just wanted to make a comment about FHWA for a moment. And I don't know if this is shared by the other states, but we met with our FHWA safety person recently, and honestly, FHWA has very limited interest in railroads and railroad grade crossings because it represents such a negligible portion of the total number of accidents in a state any given year. And because their resources are constrained, the time and attention they can devote to the Section 130 program is limited. So I just want to make a statement that even though we feel that highway-rail grade crossings are highways and highway related, the closest federal agency we work with is the FRA who

really doesn't have the type of jurisdiction over the type of warning devices at FHWA. So it is a little bit confusing for us to be working with an agency that doesn't have much time for us and then to work closely with an

agency that has time for us but doesn't really have the kind of jurisdictional authority over the very thing that we are working on.

And part of the problem our funding is so short is because we are a highway agency, now more commonly referred to as a transportation agency, general philosophy is that the highways get most of the attention, hence most of the money.

So even within our own organization, if we were to request additional funds for the purpose of going out and serving private crossings, I think given the current financial situation in Minnesota, it would not be a successful appeal. I think we would end up with no additional money for that, because there is so many competing highway priorities that are going on within our agency.

So just to sort of give you an overview of what we are dealing with. You know, frankly, we have been told: You only killed eight people last year. And, you know, the State of Minnesota killed -- the

highway department killed 600; eight versus 600 gets us out of the room. We are told to leave. We're not even part of the core safety program because we kill so few people. So just -- you need to carry that prospective on. Even if we were to add the deaths at private crossings, if we had that information, I don't think we'd get 12 people killed or 14 people killed. And we injure about -- we have about 70, 80 accidents a year, some of which are injury accidents. So really by comparison it's a big ho-hum for our state right now. It's not a high priority. It has been in the past, but -- and it isn't right now. And I think we need to keep that in mind as we pursue this, that there may be few, if any, resources that we could put together to do anything.

MR. GRADY COTHEN: And we understand that perspective and seen it mirrored at the

national level and we understand why that perspective is brought to bear. At the same time we do work cooperatively with the Federal Highway Administration, National Highway Traffic Safety Administration, the

FDA and others at DOT on these issues, and we help one another out a lot. And we appreciate you all taking the limited time to help us out here today.

You know, it's probably -- you want to define one of the worst kinds of public policy problems, this would certainly fall in the ballpark. It would be a candidate for that set because we have, you know, nobody responsible. But we all feel a sense of responsibility, and we all try to contribute something. We have limited resources, granted we have limited resources, transportation system that's craving resources, whether it's private railroad or the highway department. And we have a certain amount of risks that we are tolerating here unwillingly, we're at 35, 40 fatalities and many serious injuries annually, but distributed, you know, over

90,000-plus locations with many disparate characteristics.

So, you know, when you want to talk about a problem at -- that can't -- it just isn't going to get solved, this is it, it's

not going to get solved. And at the same time we know from our experience that this is not the first problem to be so characterized. In the Federal Railroad Administration over the years, we work through them one by one and made some headway. Nothing has been solved ultimately and to the complete extent. We've been able to make headway together on a lot of these problems.

I think there's some things that we need to do, and I'm not at all going to cut off the discussion, but I wanted to sum up before I lost the thought some things that we need to do. We'll continue outreach, we had a very long list of people to whom we've made initial outreach prior to this meeting. We have some other additional letters going out and, you know, we'll make sure that we hit all the bases in terms of the organizations involved. But if there is something that you

all in the room can do for us because you served, for instance, on an AREMA committee and happen to know the information that we really ought to have here or on a national committee or whatever it may be to help set

us up with the relevant people, some of you have already started to do that, and we'll reach out to those additional contacts and try to make available on our web page for this activity which is under the FRA safety web page under highway rail crossings. There is a click there for private crossings. We will attempt to add information there for people to view and to think about as you consider -- continue to give us some input. Part of that will be a coordination with the National Committee on Uniform Traffic Control Devices. We'll have Ron on the wall, and have Brian give us what we will need there as well as contact the committee chair.

And then perhaps in our next session, for those of you who may follow this, we will try to get some further briefing on any AASHTO or AREMA standards that may be relevant as well as the status of

any MUTCD activity.

FRA clearly needs to complete its rollout of a new interface for updating of the inventory. And anything any of us, Ron, the FRA need to do to see that that has

priority, let us know, I'd appreciate it. Put people in a much better frame of mind to talk about incremental improvements and the data that we have there as well as incremental enhancements of the specific fields that we might want to capture. And I think that going forward that's one of the areas that would be a very productive activity for these meetings. Really what that involves is getting an update so that we can make some headway on risk ranking private crossings.

We can establish all the identification and responsibility that we want to, but short of doing -- one major railroad just reported at a break that they have done, in terms of signing, all of their private crossings in a major effort, thousands of crossings, including all passively signed private crossings. Short of

that kind of effort, which is certainly to be commended, identifying the additional areas where investments appropriate at either enclosing or improving from an engineering standpoint the crossing really requires them

to know where to spend the money. And the railroad officers who have to deal with these problems every day, may have some sense of how to do that in terms of crew reports of problems at those locations and direct information that you get from communities becoming aware of increased activity at the locations and so forth and so on.

But from our standpoint, we are more in the dark on this than we are with respect to most of the risk analysis issues that FRA tackles from time to time. I would hope we could have another roundtable going forward on trying to get some resolution of standard recommendations for engineering. We can start with the technical working group report which we'll put out on this web page as well as a general link and see where that might take us along with the discussion about developments in the MUTCD committee. And

then I'd really like to see the group discuss triggers which I'll refer to as warrants for engineering improvements at private highway-rail crossings. This is probably an area that could present a significant

challenge in terms of waking up everybody that has an interest in this issue. I think most of the railroads are awake, alive and well on this because you deal with it every day. But those that hold the rights to cross spend most of their time, I think, worrying about something else.

In the MUTCD, then we have an indication that it's really indicated that on a double track main line that automated warning is really an appropriate thing to do. That does not mean we that have automated warning devices at every crossing on double track main lines, but it's clearly something that is warranted, and it should in most cases be done if there is any level of activity. And if there's not, the railroad probably wouldn't have turned that second main into a signing or pulled it out, cannibalize the materials.

Why not apply the same criterion to a private crossing that has public access at the industrial use or whatever other criteria might apply and ask those who would benefit from access to carry that burden. That would

require us to identify some warrants and some risk levels that were appropriate risk levels, and then to analyze the problems and determine whether or not on a cost-benefit basis the investment could be supported and the Federal Railroad Administration has looked at investment in public highway-rail crossings the addition of flashing lights and gates at locations where currently we only have passive signage. We've found very high multiples of benefit to cost such that it costs us to remain if not the most vigorous advocate, certainly one of the most biggest advocates within the Department of Transportation for continued investment in engineering improvements at highway-rail crossings. Even without knowing the specifics of individual crossings, we can easily conduct that kind of proforma analysis against various scenarios that might, in

fact, fit out there where you have heavy trucks, for instance, moving on a regular basis in and out of quarries, steel mills and other facilities. And we could certainly endeavor to add a twist to that with regard

to the rail side, the damage and casualties that does occur which isn't accounted for in the methodologies that we've used before.

But I would just ask the group to think about the possibility of warrants that might occur within a structure of federal or state oversight given the fact that there is certainly a national interest in doing something on this front. I don't think we can continue to build commuter rail service out without thinking more seriously about this issue. If there is an area where you have many public dollars spent and ideally you have private crossings closed and alternative access provided, but that's not the reality in many cases and certainly Amtrak on an inner-city basis continues to suffer from. And one of the challenges that it presented at many highway-rail crossings and some analysis that we've done indicates

that about a third of their lawsuits from a safety point of view in terms of train accidents result from events at highway-rail crossings, many of which are at private crossings. So from a point of view provision

of inner-city rail service, it's a matter of some interest. Commuter service, inner-city rail service and finally freight rail service including services that involves handling hazardous materials and importantly politically the lives of railroad crew members that may be subjected to death or serious injury in a collision with a heavy motor vehicle. The NTSB asked us to set up periodic safety reviews of highway-rail crossings. Railroads that have been aggressively trying to close private crossings may have some ideas of program models that make some sense there.

And then finally we have talked in the notice about resolution of disputes regarding who is going to be responsible for doing what out there. And the extent of which a private crossing should be retained or must be retained because of the need to

maintain the value of the property to which it provides access. It's been our experience in listening to the stories out of the states that have wrestled with this that the administrative processes in many states which

mirror language that you can find in the Federal Administrative Procedure Act are extraordinarily cumbersome in relation to the subject matter. And we don't have any particular interest in replicating that at the federal level, we are encouraging proliferation of that. But if you -- if one establishes sufficiently objective criteria for decision-making, one typically is not required to engage in that kind of fact-finding. Only when you entrust to the hearing officer significant amounts of discretion do you end up with that kind of procedure. You won't find that, I don't think, in a law book, but that's the way things happen. So I think it's highly desirable for this community together with the community of those who hold the rights plus the railroad, to come up with a set of sufficiently objective criteria to get these

issues resolved without extensive on-the-record proceedings in as many cases as possible. But that mechanism is an alternative mechanism, and however it is, I'm not sure. Obviously alternative dispute

resolutions greatly can be advocated and used more and more at the federal and state level with public matters as it is in private arbitration. But if you don't have a baseline method for resolving disputes, then the alternative methods sort of don't have anyplace to start from.

Other topics, issues that we need to be working on today before we do some more work?

MS. ANYA CARROLL: Grady, I just wanted to mention our next meeting is September 27th in Raleigh, North Carolina, and there will be an announcement coming out shortly. But North Carolina DOT was the lucky state to have been part of the high speed rail corridor development, and they have done a lot of work with the corridor. And they have data on their private crossings being upgraded to either signs or signals that we

may want them to present at that meeting in September.

MR. GRADY COTHEN: For general background on the issue, you'll want to look for the sealed corridor study in the Office

of Railroad Development's page, research and development page, I believe they are in. For general background, that would be useful reading. We also expect to go out to California in October.

MS. ANYA CARROLL: We hope the last week of October.

MR. GRADY COTHEN: Okay. Last week of October. Then to New Orleans.

MR. RONALD RIES: December 6th.

MS. ANYA CARROLL: December 6th in New Orleans.

MR. GRADY COTHEN: We will be putting out notices on all of this. And then we are looking at possibly going to New York state. I guess we ought to tell them people from New York state we're coming, call DOT; but looking at another possibility in the northeast in December as well to close out this round of public meetings.

MR. WILLIAM BROWDER: The last day of October, Halloween and the first of November is the 2006 Eastern Region Highway-Rail Grade Crossing Conference hosted by West Virginia DOT. I think that might conflict with what

you all are doing.

MS. ANYA CARROLL: Thank you, Bill.

MR. DAVID PETERSON: Grady, did you say what the date was for the San Diego meeting?

MS. ANYA CARROLL: It's San Francisco. And it's during the last week in October, but we have not found a facility yet.

MR. GRADY COTHEN: So we thank the State of Minnesota and look forward to visiting with our colleagues in North Carolina and California.

Anything else that you want to add to the cause? If not, I want to thank everybody offering statements, suggestions, comments, information today. We ask you to continue to follow the proceeding either being with us or through the public docket where we will post all of the information as well as the web site. And I'd like to have any written comments at all if you want to

make it part of the public docket at least be entered into it and reviewed. Thanks very much to all and the folks here for the use of the facility and the hospitality.

And with that, we hope you all

travel safely and we are adjourned.

(Whereupon, at 2:18 p.m., the foregoing meeting was terminated.)

***REPORTER'S NOTE: The original transcript is being delivered to Anya Carroll.

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STATE OF MINNESOTA)

COUNTY OF HENNEPIN)

I hereby certify that I reported the foregoing proceedings on the 30th day of August, 2006.

That the testimony was transcribed under my direction and is a true record of the testimony;

That the cost of the original has been charged to the party who noticed the meeting, and that all parties who ordered copies have been charged at the same rate for such copies;

That I am not a relative or employee or attorney or counsel of any of the parties, or a relative or employee of such attorney or counsel;

That I am not financially interested in the action and have no contract with the parties, attorneys, or persons with an interest in the action that affects or has a substantial tendency to affect my impartiality;

WITNESS MY HAND AND SEAL this 12th day of September, 2006.

_____

(Seal) Dana S. Anderson

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SAFETY at PRIVATE HIGHWAY-RAIL GRADE CROSSINGS

PUBLIC MEETING AGENDA

McKimmon Conference & Training Center
North Carolina State University, 1101 Gorman Street
Raleigh, NC 27606

Wednesday, September 27, 2006
9:30 a.m. - 5:00 p.m.

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PANEL MEMBERS

GRADY C. COTHEN, JR, Deputy Associate Administrator, Office of Safety, Federal Railroad Administration. U.S. Department of Transportation Federal Railroad Administration.

PAUL WORLEY, CPM, Assistant Director for Engineering & Safety, NC Department of Transportation, Rail Division, Engineering & Safety Branch.

MIRIAM KLOEPPEL, Operations Research Analyst, U.S. Department of Transportation, Federal Railroad Administration.

RONALD RIES, Staff Director, Crossing Safety & Trespass Prevention Program, U.S. Department of Transportation, Federal Railroad Administration.

ANYA A. CARROLL, Principal Investigator, Rail and Transit Systems Division, Volpe National Transportation Systems Center.

PAT SIMMONS, Director, Rail Division, North Carolina Department of Transportation.

WILLIAM M. BROWDER, Director of Operations, Association of

American Railroads.

Also Present:

JASON FIELD, NCDOT Rail Division

GEORGE YOUNG, NCDOT

Also Present (Continued):

ROBERT N. PRESSLEY, JR., P.E.

ARTHUR PETTEWAY

RIC CRUZ, NCDOT

JOHN BRYANT

DALE BRAY

GARY SHANK

DONALD THOMAS

LESLIE SPURLOCK

ROGER LIPSCOMB

JOHN PERRY

DANNY GILBERT

RICHARD WESTBROOK, UTU

GLENN LAMM, UTU

TINA MEDLIN, Remax

BILL BARRINGER

HASKEL STANBACK, NS

STUART SCHWARTZ, NS

SHANE WHITEMORE, CSX

CLIFF STAYTON, CSX

SUSAN TAYLOR

P R O C E E D I N G S

(On the record at 9:33 a.m.)

MR. COTHEN: Can we begin together here.

Good morning. Happy to have you here. My name is Grady Cothen, and I'm out of uniform. I left my jacket at home. But if it helps everybody else to take theirs off, then that's good, because what we want today is a good exchange among colleagues and friends and those who come in and get to know this group about safety at private highway-rail grade crossings. If that's not the topic you expected, you probably want to be in a core credit course in another room.

We are very happy to be in Raleigh today as guests of North Carolina DOT and to hold this public safety inquiry with everyone in attendance.

The first thing we always try to do,

other than remembering our jackets, is to have a safety briefing. Ron Ries is staff director for highway-rail grade crossings safety, and he will kick it off.

MR. RIES: Good morning. In the

likely event that there is an emergency, if there is something that's within the building, a fire, the alarms will go off. We have several options for exiting the building. If you go through the door on the left, the back of the room, that takes you directly into the lobby, and then you may take a left, and that will take you out to the front parking lot, continue all the way to the street and we will gather there.

If that entrance is blocked, we can also go out the other door in the back to the right, go to the hallway and take another right. That takes us to the back parking lot, and there's a line of pine trees in the back, so that will be a good place for us to gather as well.

If for some reason we need to have an emergency response, the house telephone, which you might not be able to see, but

behind the flip chart there at the back goes directly to the front desk. They will then call 911 and provide the proper instructions, so they will have somebody here as quickly as possible.

Is there anyone here that's CPR certified? We have four people. That will be very popular in case something happens. Hopefully if something happens, you would be willing to help with that.

The restroom facilities, gentlemen, if you go out the door to the back to the hallway, just a quick little left, it's there. The ladies room is to the right down the same corridor, almost to the door.

I look forward to having a very productive meeting.

MR. COTHEN: Thank you, Ron. We will do inductions of FR18 members here in a minute. I'd like to ask for greetings first. The Federal Railroad Administration have a particularly close relationship across a broad number of issues with the North Carolina Department of Transportation, in particular, the rail division. This is a

group of individuals who in the provision of passenger rail service, promotion of freight rail service, and particularly close to our heart, the promotion of rail safety, do an exceptional job in providing a leadership

role nationally in terms of the public's interest in safe and efficient rail service.

So I'd like to ask Pat Simmons, who is director of the rail division, North Carolina DOT to bring greetings.

MR. SIMMONS: Greetings. Thank you Grady. And thank you for bringing your team here and for bringing the Federal Railroad Administration, and we genuinely do have a positive and strong working relationship, a partnership, as we -- in a moment I'm going to introduce some of my folks, but those of you in the room who are familiar with the program and our department, I know we work in the areas of track safety equipment that operates over our state's railroads crossing. Safety is an area where we spend a lot of time and energy, developing new partnerships and then developing new passenger rail service.

In Washington, as here in Raleigh, in North Carolina, public partnerships are again in vogue, and today's topic of dealing with private crossings will, I hope, get us to that topic a little bit as well.

One of the challenges that we have in administering our program is we do not as a state have direct authority over private crossings. So that's an area where I'm not seeking more responsibility or more authority, but we need tools to improve safety.

We've had good partnerships also in North Carolina with our communities in developing crossing safety programs with our family of some two dozen or so freight railroads in the state, our labor and employees on the railroad and, of course, with Federal Railroad Administration.

Along the way some of our folks have helped invent some new terms of art in railroad crossing safety, including sealed corridor and PCSI terms. If you don't know what they mean, you will learn more about them later today.

And one of the things that we value a great deal is that we have been able to partner with all of these folks to improve safety through elimination of crossings that were redundant or in addition to what we

normally needed. That's always presented some challenges.

I'm pleased with North Carolina DOT. We have a team of folks that are dedicated, some of them are actually trained to do what they do. I'm not. I'm a marine biologist. We have a media specialist. We have a home economist, and we have a historian that help lead our vision. But their skill in looking at problems, critically examining them, finding solutions, being able to and willing to compromise and partner with whomever we can has been very helpful. With our engineering and safety branches led by Paul Worley, second to none among the other folks we have here. Let me ask you all, everyone is looking at Paul, so the rest of you, Jason Fields with the pink tie, we appreciate that. George Young, who heads our FRA certified safety program. Arthur

Petteway, who both guides us from an engineering standpoint and procurement of contract assistance standpoint. And Ric Cruz, who has a range of technical expertise that he contributes to our crossing safety

program.

Thank you all for what you do, and thank you FRA for blessing us and coming here today, welcome.

MR. COTHEN: Thanks very much, Pat.

Ron, you want to introduce the FRA crossing team here?

MR. RIES: We have several of our grade crossing managers here from Region 2, Don Thomas, who handles sort of the north central states along the eastern coast. And from Atlanta, from Region 3, we have Leslie Spurlock. And also from the Washington headquarters division is Miriam Kloeppel. You will hear from her later. And also from Volpe, Anya Carroll, one of the leading research experts in crossing safety. We are happy to have Volpe here supporting this effort and also providing staff is; Myrna Gustave and Perla Garcia in the back.

MR. COTHEN: All right, thank you.

I'm going to have Ron do the crystal duty.

Normally, when we go out on these events, we take counsel with us, purely for the edification of counsel I might add, and

counsel was not able to travel on this one. And so Ron will provide the obligatory legal officers' statement, and push comes to shove, I will revert to my membership in the DC bar to handling issues.

Go Ron.

MR. RIES: My only qualification for doing this is I'm married to an attorney.

Good morning. The purpose of this public meeting is fact finding. This is the second in a series of public meetings nationwide, which you and other members of the public will have the opportunity to provide information to FRA about issues related to the safety of private highway-rail grade crossings.

This public meeting is not meant to be a forum for debate. Instead, we are here to listen to you and provide an opportunity for you to state your views on the record for

review and consideration.

In order to provide each of you an equal opportunity to express your views and comments, the following procedure will be used.

Each person will be permitted to make an oral statement. However, persons representing the same organization may speak as a group.

At the beginning of your oral statement, we'd ask to make sure you come to a microphone so we can get a good transcription of what is being said. Come to the microphone. Please identify yourself, spell your name and indicate whether you are appearing as an individual or in a representative capacity.

At the end, FRA representatives may ask questions in order to obtain clarification of points made during your statement. We will then move onto the next oral statement.

If you refer to a document in your oral statement that has not yet been provided to FRA, please provide a copy of a

document to an FRA representative so it can be marked for identification and added to the public docket.

Today's meeting is being transcribed and will become a part of the public docket

on this issue.

The transcript of each public meeting will be available for viewing and downloading at the Department of Transportation's docket management system web site at HTTP//DMS.dot.gov, and please note that www is not used in the web address.

The entire public docket is also available for inspection at the Department of Transportation's docket facility room, which is located in Room PL, Plaza 401 at 400 7th Street S.W. in Washington, D.C. Thank you.

MR. COTHEN: Okay. I think you have in your packet the initial federal register notice on this activity that gives you the information about the docket as well. We can refer to it in the future.

Last week, we had a railroad safety

advisory committee meeting in Washington, D.C. As a part of that Miriam Kloeppel, who you will hear from in just a moment, made a presentation about this activity. The deputy administration and the administration

was sitting next to me at the front table, and I turned to him and I said, Cliff, I said, you know, we've got 95,000 private crossings out there. We've got significant amount of risk. It's widely disbursed. We don't have any standard signage. There's no assignment of responsibility. There's no -- we don't have a program, but other than that, everything is under control. And I think that that perhaps is a bit of an overstatement, but only slightly in the category of hyperbole. Actually, America's railroads have a big challenge in dealing with private crossing issues to the benefit of the users of those crossings and the safety of their own operations and personnel. And they do a good job trying to manage those issues on a day-to-day basis.

The real issues before us today is whether or not maybe a little help is in

order in terms of some regularity in public policy across the nation.

We thought the best way to find out about that was to go out and hear from people as much as we could around the

country. So we have been trying to beat the bushes and get folks in with diverse viewpoints about the subject matter. And, you know, I recognize there are a number of people in the audience and been reminded from the sign up list of the identity and background of others. So I think we're still in the process of beating the bushes, but we do have a core of folks here who know a lot about the subject. So we expect to have a good day.

We do appreciate everyone attending. We do want to make this as helpful and as informal as we can. As Ron indicated in the legal officer's statement, we are taking a transcript, which we'll place in the electronic docket so that everybody can access it.

So if you can be helpful to us, as we go forward, and as you speak, if you just

identify yourself and your organization each time you speak, then the court reporter will be able to provide the best quality transcript.

Before we go any farther, I will

recognize Miriam Kloeppel, who is operations research analyst in our highway rail grade crossing safety staff officer and safety analysis to set the stage.

MS. KLOEPPEL: Good morning. I will turn this on.

Thank you all for coming. I'm just going to provide a little overview, as Grady suggested, about the current status of what we understand to be the current status of safety at private crossings nationwide.

Private crossing safety has been for some time a matter of concern to the US Department of Transportation and to other federal agencies. In 1993, the FRA hosted an open meeting to initiate industry wide discussions.

In its 1994 Rail Highway Safety Action Plan, the United States Department of Transportation proposed to develop national

minimum standards for private crossings.

In its 1997 study on safety of passive grade crossings, the NTSB highlighted the need for some system to improve private crossing safety and recommended that the US

DOT, in conjunction with the states, determine governmental oversight responsibility for safety at private grade crossings.

In 1999, the NTSB weighed in again in its report on a private grade crossing accident in Portage, Indiana. In this case, the NTSB recommended that the DOT eliminate any differences between public and private crossings with regard to funding or requirements for safety improvements.

In 2004, the US DOT published an updated action plan in which the FRA committed to leading an effort to define responsibility for safety in private crossings. Today's meeting is a vital part of that effort.

What I did was I took the crossing count by state, which is easily retrieved from our safety data web site, and I grouped

it into our geographic regions. And as you can see, regardless of geographic region, private crossings constitute a significant percentage of all at-grade crossings. The total count nationwide for private crossings

is about 94,000.

Although accidents at public crossings have declined considerably over the past 20 years, declining by one-third over the past decade alone, the number of accidents at private crossings has remained comparatively stable, declining only ten percent over the past decade. In most years, the number of fatalities occurring in accidents at private crossings exceeded the number on-duty deaths among railroad employees in all railroad operations. The following are a few examples.

About one p.m. on May 30, 2006, Amtrak train No. 350 struck an empty gravel truck at a private highway-rail grade crossing near Jackson, Michigan. The train was traveling about 74 miles per hour when the truck entered the crossing in front of the train. One train crew member and 15

passengers received minor injuries in the accident. The truck driver sustained fatal injuries.

The private road accident crossing is used by an excavating company and by two

residences. On average, fewer than 30 highway vehicles and a dozen trains, eight of which are Amtrak, traverse the crossing daily. It's estimated the crossing was created about 1948. There is no record of any maintenance contract between the business owner and Norfolk Southern Railways.

About 4:40 p.m. on July 3, 2006, southbound Amtrak train 8507-03 struck a passenger vehicle at a private crossing near Castle Rock, Washington. According to the Amtrak engineer, the accident occurred when a motorist entered the crossing after a northbound train cleared it. Train crew and train passengers sustained no injuries, but all four motor vehicle occupants sustained fatal injuries. The road leading to this crossing is a county road, but county maintenance ends shortly before the

crossing, and a private road that extends beyond the crossing dead ends after serving 11 residences. About 60 trains daily traverse this crossing. It's not known when this crossing was created, and no

maintenance contract had been located for this crossing.

About 7 p.m. on June 21, 2006, a metro train traveling south at a recorded speed of 79 miles per hour struck a truck trailer traversing a private grade crossing near Lemont, Illinois. A piece of the trailer became wedged under the snow pile of the locomotive, and the locomotive derailed the crossing. The driver of the tractor trailer was not injured. There were 170 passengers aboard the train. Five passengers claimed minor injuries and were treated and released. No train crew members reported any injury. This crossing serves two commercial facilities to which there is no other access. Roughly 28 trains and fewer than 30 highway vehicles use this crossing daily. The crossing is maintained by the Canadian National Railway, but there is no

formal agreement.

As a side note, about six months prior to this accident in December of 2005, another accident occurred at this same crossing. The truck driver in the December

accident sustained fatal injuries.

As many of you know, the FRA maintains a national inventory of all crossings public, private or pedestrian at grade or grade separated. The data are used by many state, federal or private organizations for research or for resource allocation. It's updated by the states and by the railroads on a voluntary basis.

As you can see, only about one-third of the efforts for private crossings have been updated within the past five years and a significant portion of records have never been updated. Analysis on data of this quality must necessarily be somewhat tentative.

I don't expect you to read this. I just put this up for illustration.

This is a shot of the form on which crossing data are collected for the national

inventory. Almost all the data elements are required for public crossings. For private crossings, however, only the sections I have shaded are collected.

As a result, even when a private

crossing record is up to date, potentially useful data are not collected. This slide just illustrates a small sample of the differences.

According to the FRA's 2002 compilation of state laws and regulations affecting highway-rail grade crossings, the state's approaches to private crossings are highly varied. Take, for example, the extent of control held over the creation or closure of private crossings.

Here are some examples of the degree to which traffic control devices are standardized at private crossings.

At the time we were putting this together, these were the only states that said they had any control at all, according to the compilation. I will clarify that.

And, again, according to that compilation, more than half the states have

no laws or regulations at all relating to private crossings.

The American Association of State Highway and Transportation Officials or AASHTO, has a standard committee on rail

transportation which most people just refer to as SCORT. SCORT provides an arena whereby members, states and the railroads can exchange technical information, review existing regulations and proposed changed or new legislation or regulations. Currently, SCORT has a document or resolution on railroad safety improvement and enforcement calling for research and development and improved and lower cost technologies for warning systems. The resolution also believes that any future comprehensive national transportation program must continue to provide funds for consolidating, separating or otherwise protecting railroad highway grade process.

Neither the committee's policy statements nor its resolutions make any overt distinction between public and private crossings. But it should be remembered that

the majority of the members represent states, and it's unlikely that AASHTO will exercise jurisdiction beyond the jurisdictions of its members.

The federal government, in the guise

and various US DOT agencies, does offer some regulations or guidance documents that may touch on safety of private crossings. As you can see in this example, however, none of these really covers a significant portion of the nation's private crossings. We range from about one percent of the private crossings for signal systems to 25 percent of all crossing accidents being addressed by the freight carrier organization, and the manual on uniform traffic control devices applies to public crossings.

In fact, there is no federal regulation or guidance that promotes safety of private grade crossings by specifically or uniformly addressing the special issues presented at private crossings.

Some private crossings may be used only seasonally, like certain farm crossings used only for agriculture equipment, or they

may be used only for routine personal use, like crossings that serve residences.

Other private crossings, such as this industrial access crossing, are used extensively for private business purposes by

employees, contractors and suppliers. In still other cases, they may be used very heavily by the public to enter commercial facilities.

The rights assigned to the private crossing holders vary greatly. A holder of the right of privileged cross may hold outright ownership of the underlying property or have documented easement over the railroad property. Where it is recognized, the holder may have a prescriptive easement or squatter's rights essentially. There may be a documented license under contract, or maybe only a verbal license, subject to revocation without notice.

Railroads may require the crossing holders to purchase insurance or provide some other protection in the event of a collision at the crossing. Contracts or

other legal documents may further define responsibilities, such as maintenance of crossing surface or providing notifications under stated conditions.

This is just a slide, showing the

address for the docket submissions, as Ron Ries mentioned, and it would certainly be minimal to bring that back up if people want. But I wanted to go along here.

The FRA solicits discussion and comments on all areas of safety and private crossings, but particularly encourages discussion on the following topics: At grade highway rail crossings present an inherent risk to users, including the railroad and its employees, as well as to other persons in the vicinity should a train derail into an occupied area or release hazardous material. From the standpoint of public policy, how do we determine whether creation or continuation of a private crossing is justified?

How do we determine when a private crossing has a public purpose and is subject to public use?

How should improvement or maintenance responsibilities be allocated?

Is there a need for alternative dispute mechanisms to handle disputes between private crossing owners and

railroads?

Should some crossings be categorized as commercial crossings rather than as private crossings?

Should there be nationwide standards for warning devices at private crossings or for intersection designed for newly created private crossing?

Are there innovative traffic control devices that could improve safety of private crossings at major railroad corridors, including those where passenger services are provided?

Is the current assignment of responsibility for safety at private crossings effective?

Do risk management practices associated with insurance arrangements result in "regulation" of safety at private crossings?

Should state and federal governments cooperatively work to determine responsibility and provide oversight?

Should the US DOT request enactment of legislation to address private crossings?

If so, what should it conclude?

There is some standardization of treatment at public crossings across the nation. For example, the confirmation and use of signs, signals, pavement markings and any other traffic control devices placed at public crossings generally conform to the guidance provided in a manual on uniform traffic control devices.

In addition, in 2002, the United States Department of Transportation published a guidance document created through the efforts of a technical working group made up of representatives from both the public and private sectors, and although it does specifically say that it is for public crossings, in most states, there is no such standardization in private crossings.

The arrangement of private crossing

signs can be highly individual, and sign maintenance may be sketchy or nonexistent. I will just emphasize there is a crossbuck there.

To gather information on the current

state-of-the-art, as well as ideas about possible solutions to the existing problems, the FRA is holding a series of public meetings. The first of these was held August 30 in Fort Snelling, Minnesota. Obviously, this is the second, and there will be two additional meetings on October 26 in San Francisco, and on December 6 in New Orleans.

This is not a complete list of organizations represented at the meeting in Fort Snelling, but rather those organizations who provided either formal statements or substantial input during the meeting.

Numerous topics were discussed in Fort Snelling, but to my mind, they fell into a few different categories. In the first, it seemed that attendees agreed that there is no existing process that would provide

consistent structures to create or to reevaluate the relative need for new private crossings or to upgrade or close existing private crossings.

Attendees also seemed to indicate that

different parties often used different definitions to decide whether a crossing was public or private.

In addition, much discussion centered on the fact that private crossings are created for a wide variety of reasons, including residential, industrial, commercial, institutional or temporary, and these crossings may be used to varying degrees by members of the general public, may be traversed by users ranging from pedestrians to construction vehicles or hazardous materials and tank trucks.

I think this concludes the comments I had. I just thought I'd open up discussion at this point, or Grady, we can pass it on to Paul. Thank you.

MR. COTHEN: Thank you, Miriam. From the point of view of the FRA team, this is where we begin learning something. We

brought you an introduction, and I'd like to recognize Paul Worley, assistant director for engineering and safety of the rail division North Carolina DOT. Paul is a long time FRA colleague. He is a member of our

railroad safety advisory committee and a leader in his field.

So Paul, take as much time as you need or want.

MR. WORLEY: Thank you, Grady.

Again, Paul Worley, assistant director for engineering and safety with NCDOT's rail division, and today I'm going to give some general technical comments on behalf of our department. And I do want to put a disclaimer that they do not present policy position for the Department of Transportation or our board of transportation on private railroad crossings.

I invited Ron Ries back in June to come to North Carolina to have one of the national private crossing meetings here because of the issues we have here in our state. We thought they could be very

interesting and add a lot to the subject of this being discussed nationwide.

Following the implementation of -- a great part of the implementation of Sealed Corridor, the NCDOT has taken the same

off-the-shelf or clear-minded solutions approach to private crossings on the Raleigh and Charlotte border. We emphasized closure and alternate access of possible signalization of high volume crossings, signage and even consider new mandates and laws.

North Carolina is one of a few states to pursue private crossing safety improvements. On the Raleigh/Charlotte corridor, we've received around $1.9 million from FRA in special mixed generation high speed rail funds for a steady and a pilot program for closure and safety improvements.

In addition, as part of the comprehensive corridor studies, we have not been able to ignore the special needs and challenges of private crossings when evaluating public crossings. The use of such private crossings, accuracy of

inventory information, as well as the sheer number on some corridors certainly has served to open the eyes of corridor diagnostic teams and require attention and innovative approaches for closures and

improvements.

There are many challenges for private crossings, as Miriam mentioned, and some that we see and deal with every day.

First of all, as a private issue, there are generally no public funds for capital improvements on the state or federal level or maintenance beyond special grant funds, which we have been fortunate to receive.

There are varied types. I will name just a few, and you may even have more. Private use residential, farm, industrial, plant to plant, railroad, private crossings, and then there are the public use crossings residential development, business, industrial, recreational and even golf cart crossings, and those are important.

By the time private crossing issues present themselves at the state level, they

are sometimes politically charged, and often all we can do is listen and refer to railroad officials to keep people talking and collaborating.

Private agreements and deeds may cover

the crossings and involve multiple parties over many years.

And then finally resources to maintain an accurate inventory of private crossings in a comprehensive manner is not there either at the federal state level.

Bob Pressley, project engineer with the consulting firm of Gannett Fleming, will make a presentation on some of the crossing studies and safety initiatives they have been involved with our department over the last few years. Their studies have included the federal designated southeast high-speed rail corridor, which is also the NS main line, a potential rail transit commuter line, and an intercity passenger freight corridor. NCDOT has learned that we must partner with the owning/operating railroads to find comprehensive and innovative approaches to address this issue.

But first, a few weeks ago we gathered our crossing brain trust together, these guys over here, and tried to respond to some of the nine issues that were noted in the notice of inquiries.

The first one was the crossing assignment responsibility for safety of private crossings effective. And to what extent do risk management practices associated with insurance arrangements resulted in regulations and safety of private crossings?

Well, our first thought was there's not a consistent nationwide approach of private crossings. Instead, each railroad determines what can and will be done to improve safety and manage the risk at those crossings. There is a significant need to correct and update uniform data into the national state crossing inventories, and to ensure appropriate safety management practice. USDOT, railroads through AREMA and AAR, the states through AASHTO, and rail transport operators through APTA should collaborate to develop a consistent

approach, such as was done with the Crossing Technical Work Group document was developed through ITE.

The second questions was: How should improvement or maintenance costs associated

with private crossings be allocated?

Well, stakeholders, federal and state agencies, local government, transit authorities, railroads and private crossing owners may eventually need to develop a methodology to share costs associated with grade crossing safety treatment, construction and maintenance based on local conditions and needs and users. Such conditions include transit and passenger rail corridors, higher speed and conventional, quiet zones as well as critical intermodal corridors. All of which have a public and private sector interest as part of a multi-modal transportation system. Capitalization and future maintenance costs should be considered as part of the project implementation, where appropriate, so that we can ensure some perpetual maintenance and not with examples that we saw earlier.

Question three: Is there a need for alternative dispute resolution mechanisms to handle railroad disputes that may arise between private crossing owners and the railroads?

At this time, disputes are handled through the courts in the local area which presents a challenge to the ruling party, since they can be biased towards the landowner, and litigation is always costly for both parties. Imagine the amount that you put in litigation, what that could be done if you put it actually into engineering and building safety warnings. There is merit in the development of an unbiased committee to determine the outcome of these disputes. Because railroads engage in interstate commerce, dispute resolution should be considered for handling at the federal level, perhaps by the FRA through their regions, using crossing safety managers in support of the effort.

I put that in for Tom.

Should the state or federal government assume greater responsibility for safety in

private crossings?

Well, first, nationwide federal guidelines should be considered for development of our stakeholders through AASHTO, AREMA, APTA and the National

Concerns or Uniform Traffic Control Devices guidelines, rather than regulation would allow all parties to work through the process incrementally and learn accordingly. How many times do we adopt rules and regulations and learn to find out it really doesn't work practically.

So if we can work through the process of guidelines and best practices, that may be a good approach.

Should there be nationwide standards for warning devices or private crossings or for intersection design of new private crossings?

Again, nationwide federal standards should be considered for development by stakeholders again through AASHTO, AREMA, APTA, and the Conference for the Uniform Traffic Control Devices. Innovative and cost effective approaches should be

encouraged, researched and tested for the common good.

Question six: How do we determine when a private crossing has a public purpose and is subject for public use?

Again, a technical working group with identified stakeholders should be considered to develop guidelines or criteria that distinguishes between a true private crossing versus one that has a public purpose. This technical work group can also contribute guidance for warning device selection and application for private crossings.

Seven: Should some crossings be categorized as commercial crossings rather than private crossings?

The categories utilized in the national crossing inventory should be reviewed to differentiate between potential traffic volumes and/or service to single versus multiple users at recreational, commercial, industrial crossings and residential. The addition of an institutional category should also be

considered that involves government facilities, universities and military. Internal plant-to-plant crossings at railroad-use only crossings should be noted.

Question eight: Are there innovative

traffic control treatments that could improve safety at private crossings on major rail corridors, including those on which passenger service is provided?

The first approach to any treatment should include closure and/or alternative access. Gates and signals have a proven track record of reducing potential collisions and are not easily replaced at this time by less costly technologies without compromising reliability. North Carolina's private crossing safety initiative should be evaluated for its effectiveness, and further funding for this and similar project initiatives should be included in the next federal authorization. To date, innovative treatments have not provided either reduced cost or adequate safety improvements to justify their use for any but experimental institution in

controlled test environment.

And last, number nine: Should the Department of Transportation request enactment of legislation to address private crossings? If so, what should it include?

There are many issues to resolve prior to making this determination. Examples include how are all of the users of the crossings going to be determined? How can all the agreements be gathered and inputted into a national database? How are private crossings where agreements cannot be found be handled? And how will all of the dirt/ gravel highways be addressed regarding the approaches to private crossings? How are safety improvements to be funded? And how are national security concerns for the railroad infrastructure and commodities be addressed?

Those are just some of our thoughts in a group brainstorming one afternoon. I'm sure that there are many other approaches, many other ideas that people may have, but it is an important issue to us, and we continue to try to move forward on public

crossings, work where we can on private crossings with our railroad partners, but it is an issue that we feel cannot continue or cannot be ignored. We have to move to some kind of approach toward that.

And to give you some examples of approaches that we've taken, Bob Pressley is here and will be making a presentation on what we've done on three of these corridors we've mentioned, and some of the solutions that you will see, again, clear-minded approaches for a very complex process and issue. Thank you.

MR. PRESSLEY: As Paul said, my name is Bob Pressley. I'm the senior project manager with Gannett Fleming. We are located in Charlotte. Our firm has had the privilege of working for the rail division for several years now, and during the course of that time, we have been involved in three particular studies that either included significant numbers of private crossings or else they included a significant private crossing.

So I want to show you some of our

findings and some of the proposed solutions to some of those problems that we've identified.

We have conducted three particular studies; one is the private crossing safety

initiative, PCSI, as it is being called, which involve the Norfolk Southern main line, the North Carolina railroad corridor from Charlotte to Raleigh. There are 46 private crossings along that stretch of railroad, 140 track miles. Norfolk Southern runs about 50 freight trains a day on the main line portion of that track, and it also includes six passenger trains on a daily basis.

We conducted a traffic separation study on the Norfolk Southern O line, which runs from Charlotte to Mooresville. It's 30 miles. It has 109 grade crossings, 42 of which are private on this 30 miles of railroad.

The saving grace there is that NS only operates one freight train a day on the portion of the track, and then on the northern portion they operate a freight

train on Tuesdays and Thursdays. So all of those grade crossings are not severely impacted by high train volume.

The third section of railroad that we looked at is Norfolk Southern S line, which

runs from Salisbury to Asheville, 143 track miles. There are only four private crossings on this particular railroad, and Norfolk Southern operates approximately 14 freight movements a day. Our findings of all -- out of these three studies, we found 92 private crossings, 39 of them providing residential access, as you see here, 18 of those provided access to farms. We had 29 providing industrial access, and six provided what we classified as commercial access. This is the Billy Graham radio station over in western North Carolina.

We could not find any written agreements recorded in the public land records for any of these 92 private crossings. Norfolk Southern was able to find 25 agreements in their archives in Atlanta for a portion of these 92 private crossings.

Warning devices; 39 of them had none; 39 of them had crossbucks.

We found five that had gates and locks and nine had gates and flashers.

We found that the industrial crossings

posed particular and special hazards. Public Service Company of North Carolina, here in Wake County, operates a propane storage and distribution facility. They get about a hundred tractor trailer loads of propane in during the winter. Those propane tankers cross both the Norfolk Southern and the CSX.

Over in western North Carolina, on the S line, Ingles Markets, which is a large grocery store chain operating in six states, has a tremendous warehouse facility located on the S line served by private crossing.

Down in Mecklenburg County, North Carolina, equipment company is served by a private crossing. You know about equipment companies, they have low board trucks and trailers, and they supply heavy equipment.

Over in Guilford County, Rankin Fryar is a quarry and demolition landfill that is

served by a private crossing. We found that several of the residential crossings serve more than one residence.

In Orange County, Byrdsville Road served 67 residential units, and I've got a

picture I will show you that in a few minutes.

Terrell's Trailer Park is another one with 12 units. Down in Rowan County on the NS main line, Ethel Lane serves 18 residential units. It's a badly humped crossing. Stroup Farm Road in Mecklenburg County is a private crossing with the potential to serve 300 acres of farm land that is proposed for redevelopment as residential. And also in Mecklenburg County, we found another badly humped crossing that served seven residential units.

We found that providing solutions to some of these private crossings can be very expensive. The public service crossing that I mentioned here, we currently have it in the design stage for elimination, but that is going to cost about $850,000 to do it.

We proposed relocating the Ingles market crossing over western North Carolina, and as you can see, over a million dollars if it is built the way we currently have it conceived.

The Stroup Farm Road, and I will show you a graphic on this one in a moment, the recommended solution there is to build a grade separation, and with the frontage road and everything that goes with it, we are probably looking at about a $10 million expenditure.

Richard C. Roberts is a private crossing serving a mobile home over in Guilford County, and we've proposed to simply buy that one out and close the crossing. According to the tax records, that property is probably worth about $65,000.

Terrell's Trailer Park, again, we recommended gates and flashers to that one, somewhere around $150,000, and then in Mecklenburg County, we had recommended that a public crossing be upgraded and that a frontage road be developed north and south

of that public crossing so that we can close five private crossings. But as you can see, that would be about a million dollar expenditure.

So all of these solutions are very

expensive.

This is the public service company that's just down the road here. Hillsborough Street is on the bottom of the graphic. NC-54 is on the north. We're proposing to build alternative access that will take them out to NC-54. Their existing grade crossing, as you can see, crosses both the NS and the CSX. We would build a new driveway for them that would provide them access to NC-54 and close the private grade crossing.

This is Ingles Market. It's over in Asheville. As you can see, the tractor trailer is on the crossing. That is very typical. They have about 3,000 movements a day over that crossing, 2,000 of which are tractor trailers. They are proposing to expand that warehousing operation and add about a thousand trips a day once all that

is implemented.

They exit out onto US 70. There's no traffic signal there, so these trucks have to wait until the traffic clears on US 70 before they can entered that flow of

traffic. Bill Barringer can tell you about all the times the gates are broken by these trucks when a train approaches the crossing.

This is an aerial view of the Ingles' warehouse. What we're proposing to do here is to relocate that crossing to the west and tie it into an existing intersection with a traffic signal so that we can get new gates and flashers, new crossing material.

This one, again, is probably in excess of a million dollars, if built as we show here. Their expansion plans are to the right of the screen. But they would add about a third more to what they have there today.

This is the Stroup Farm crossing in Mecklenburg County. It does have gates and flashers. It is a private crossing.

This is a Duke Power crossing that is just up the road from the Stroup Farm

crossing, and you can see in this graphic, there are four private crossings just bang, bang, bang, bang. We have proposed to build a grade separation to the far right of the screen where the pump station road is. We

would build a new bridge over the railroad, and then the frontage road on the south side of the track or east side of the track would serve all of that property, two large farms and the deep power track. All of that is being planned for a residential development at this time. So if that grade separation can be built then those four private crossings can be eliminated.

This is Byrdsville Road over in Orange County, serving right now 67 residential units. You have a mixture of mobile homes and single-family residences in there. There are several vacant lots currently. So that development has potential to serve over a hundred homes. The gates and flashers were used salvaged equipment, which NCDOT and Norfolk Southern were able to install several years ago that was probably from the FRA grant as well?

MR. WORLEY: Yes, that's correct.

MR. PRESSLEY: This one does have gates and flashers. Current traffic logged is 311 a day on this particular crossing.

This is Ethel Lane and Jukebox Road

down in Rowan County. Ethel Lane which is the upper one of the two crossings shown here is badly humped. It has had a series of accidents over the years. There are 18 homes located in this area currently with several tracts of undeveloped land that could be developed residential in the future.

We have proposed here a frontage road that would be built on the east side of the railroad that would take all of this traffic out to an existing public roadway, and then they can cross the railroad where there are gates and flashers currently located.

This project is in the right-of-way stage at this point. The NCDOT Highway Division is attempting to negotiate a donation of all the right-of-way, and if that is accomplished, then the rail division will provide the funding to actually build

the road, and it will become a state maintained road, which would be of significant benefit to all of these properties.

This gives you a little closer view.

What we have tried to do is lay this road out in such a way that the property owners can see the advantage of possibly subdividing their property in the future for additional lots. So hopefully that will help sell the project to those that may be reluctant to participate.

This is Long Beverage also here in Mecklenburg County, another industrial crossing. There is a building, a beverage distribution warehouse. Again, this is one of those the state and Norfolk Southern were able to work out a deal where salvaged equipment was used to provide the gates and flashers at this particular crossing.

This is Bailey Road in north Mecklenburg County. It's an existing public crossing, but there are private crossings both north and south of this particular crossing. We propose to improve the public

crossing, then build a frontage road that would allow those five private crossings to be closed. Again, this is about a million dollars worth of investment.

This is the Roberts property. As you

can see, there's a nice gate there, but when we were there, it was obvious that that gate had not been used in several years. But there is a single mobile home occupying this property off the bottom of the slide there. Again, we recommended this property simply be purchased, and Duke University, the Duke forest surrounds all of this property. So it would be a logical purchase, and then the state could sell that property to the university and recoup their investment or whoever should wind up purchasing that particular piece of property.

Our conclusions, if there are agreements, they are between the railroad and the private owner. There is uncertainty about state and federal jurisdiction in all of this. We found that a lot of these crossings can be dangerous. There are industrial hazards certainly imposed by many

of them. A lot of them have poor sight distance, and if any protection, it's not very much or any warning devices. And we expect that a lot of these will experience increased traffic as time goes by.

The solution to many of these is expensive, as we've demonstrated. We're looking at grade separations and property acquisition frontage roads and things of that nature. A cost benefit analysis is difficult on a lot of them. The FRA grade deck model is not set up for private crossings. Then, of course, there are legal implications involved in all of this.

Finally, we think there probably is additional study needed, some type of a cost benefit model probably should be developed to deal with this issue.

With that, I will turn it back over to Grady and to answer any questions if those are coming now or later.

MR. COTHEN: Any questions for Bob? Feel free. Thank you very much, sir. Appreciate the presentation.

I think at this point, if you don't

mind, we will take a break of about ten minutes come back about quarter to. Can I ask anyone who would like to make a presentation from the podium or from the floor mic, just to step up and let us know

so that we can put you in order of sign up and hear from some folks who would like to make opening statements, and then after that we will proceed to the topical discussion.

Thanks very much. Let's take about ten.

(Off the record at 10:35 a.m.)

(On the record at 10:53 a.m.)

MR. COTHEN: Okay, let's presume, if we may.

What we thought we would do in the order that we had set up was an opportunity for anyone who wanted to at this point to address from their perspective private crossing safety issues in general, including all the topics that were presented in the initial notice for this activity that Miriam called attention to in her presentation.

And that gives us a chance, potentially, to get a regional perspective on these issues that may differ from the

perspective that we might glean elsewhere.

And so we would invite as many as are able to speak as formally or informally as you wish about those issues in this segment.

And then what we found in doing the

initial meeting in Fort Snelling is we covered a wide swap of issues and got a good initial introduction to the topic, but it didn't really give us the framework to begin to dig down into some of the issue areas more deeply.

So what we hope to do in this meeting and the two forthcoming meetings was to when we got into the discussion phase beyond the initial remarks from anybody who wanted to address a broad range of issues, we thought we would try to get a bit of a topical emphasis into the discussion.

So for this meeting, our hope was to talk as much as we could about the engineering issues. We thought it was a particularly good forum to do that, given that North Carolina DOT has been a leader in innovation with respect to engineering and highway rail crossings.

At our next meeting, which is in San Francisco, is that right?

MS. CARROLL: Yes.

MR. COTHEN: We would talk about responsibility as much as we possibly could

in terms of whose got an investment in this issue and who needs to have an investment in this issue. And that would include the notion of oversight from the federal and state level as well.

So private sector responsibility, when I say private sector, that really has to do with the railroads, whether they are public and privately operated, and if they are crossing holders, whether or not in many cases they are actually publication agencies. But other than transportation agencies in other cases, they are private landowners and folks who just over time have acquired the right to use that crossing.

So, and then finally, we will get New Orleans, we thought we would talk a little bit about data and, you know, one of the things that Bob said in his presentation is that doing a cost benefit on some of these

projects is a bit of a puzzle. One of the things that potentially FRA might do is do something like offer a better tool for private crossing prioritization, and that might be enhancement of grade or some other

form of assistance, but we need to also talk about the availability of data, and that would include inventory and also the actual data that we collect.

Before I forget to raise it, one of the things that we would welcome as a part of the filings in this document would be any suggestions that you have to make about how we can enrich the data elements on our what we call forum 618057, which is the accident/ incident report for highway railroad crossing, both with respect to private and public crossings.

So what can we do to have better information about the crossings themselves, that's the inventory piece of the problem, and then the accident/incident information that we are gathering, to what extent can we improve the data there? And then what tools can we provide that support better risk

assessment, better prioritization and improve the approaches to the cost analysis for publicly funded projects?

And then we'll probably do one more stop on this road show, and we haven't

scheduled this yet because of budgetary concerns will lead into the new fiscal year, but it will more likely be in New York State, and we hope to have our administrator present for that meeting, and there we would hope to have a bit of summations across the regional and issue bases that we've touched in the prior meetings.

So we're not limited to any topic area here today, but we would hope, first of all, to get some regional focus on things as they are presented in this area, generally south of the Atlantic states and one more crack at the deep south, New Orleans and those coming over from the south, and then this afternoon, or as soon as we can get to it, as we do get to it, a discussion of engineering issues at private crossings to include the whole nine yards, surface, sight distances, signage, automated warnings,

innovative treatments and that sort of thing.

I notice that we do have signed up from the West Virginia Public Service Commission in attendance today Mr. John

Perry, John is in the back. Is there any way to entice you, John, to make some initial remarks about the public service commission's interest in the subject and any observations that you might have out of your experience.

MR. PERRY: Yes.

MR. COTHEN: You are welcome to come to the podium or floor mic, whatever makes you more comfortable.

MR. PERRY: I'm John Perry, and I represent West Virginia Public Service Commission, where our railroad service station we are under the Division of Transportation.

I work with the enforcement section. I'm signal train control inspector. I'm also state coordinator for operations and lifesaver, so both jobs have an interest in crossing safety, and in particular, the

private crossings, because of the great number of crossings that we have even in our small state, we have a large number of crossings, and a large number of incidents that occur within our state have been at

private crossings, whether they be of the commercial grade or a residential area.

So basically we're here to listen, see what you folks have to say, see what basically is going on with any rule making that might be down the road somewhere that we might be, you know, we would certainly have an interest in that. Thank you.

MR. COTHEN: Thank you, John. Greetings back to Mr. Baldwin, if you will.

Are there others from state or local level organizations, public agencies with interests or responsibility for this area that we could encourage to help us set the stage for the general discussion?

Okay. I would just open the floor generally for opening statements from anybody who wants to talk. I see we have representatives here from labor, from the railroads, at least one identified private

citizen and others. We would be delighted to hear from you as to why you are here and what you are interested in, and what you can tell us about the subject that will help us build a set of recommendations for public

policy.

Yes, ma'am, come to the podium.

MS. MEDLIN: Tina Medlin, T-I-N-A, M-E-D-L-I-N, and I basically came today to educate myself, because I am currently affected by improvements in the railroad.

I'm also probably in a unique position in that I did witness a train/car collision in front of my property. Well, right down from my property about 18 years ago, and it was not a pretty sight.

I have property that borders a railroad that I've had for 20 some-odd years, little house in a little historic community in Harnett County called Calibian Springs.

And there's a train that goes from Raleigh to Fayetteville in the morning, it's great, it goes through about 7:30. If you hear the whistle, you know you have hit the

snooze button one time too many, and then it comes back in the afternoon.

Unfortunately, for me, when I purchased the property, it was my first home, and I didn't know a lot about real

estate, and I relied on my closing attorney to adequately represent me.

And so I purchased this property, and my access is a prescriptive easement contained within the railroad right-of-way. The house had been there since the turn of the century, that's the 1900s, not 2000, but several years after I purchased it, I tried to sell it, and then I found that I had no recorded legal access. But the attorney said my prescriptive easement was good enough to allow me to continue to have access, even though it was unrecorded.

In the last two years, the hundred acres to the north of me was purchased by a developer and an industrial park is going in. Access to that particular property had been along a dirt road, a private crossing, as I have learned today, and so that is -- I suppose, that's going to be the access to

the industrial park that's going in. The community is very concerned about it, because of, you know, extra traffic along the railroad lines. But I'm also a real estate agent, and you can't stop progress.

But I am concerned about safety issues in particular, because my house, the front corner of my house is 37 feet from the edge of the railroad right-of-way. The new sighting that is going in from the industrial park will be starting directly in front of my home. So I'm in a bit of a pickle.

And the reason I came today was I heard on WRAL that, you know, there was going to be a meeting, and I thought well, I'll come and at least educate myself about what are the laws. Maybe I can learn something that can help get me out of this pickle.

I'm a little concerned because the industrial park that is going in next to me has got a sighting, so there will actually be a crossing across the railroad track and the sighting, and it's going to be a reload

center, where they are taking railroad cars and off loading and then loading them onto other trains, loading them onto other 18 wheelers, and there will also be some storage facilities there too.

There have been some discussions with the developer about purchasing my property, and he was more than happy to purchase it at tax value. But I don't know anybody who would sell their house for tax value, and if you would, you need to see me, because that would be a listing I could sell very quickly.

So in this little historic community, we have some concerns. And I can't speak for everyone else out there, but I really wanted to understand more about, you know, what the rules and regulations were for the crossings, how that could possibly, you know, impact me, in between, you know, one that's a public right-of-way crossing and then of course the private. And I'm kind of in between the two and how that would affect me and what the laws and the regulations are, and you can talk to six different

attorneys and get six different opinions as to what my particular situation is. I'm just kind of waiting to see what's going to happen. In the meantime, my access has been cut off to my house, and my water lines have

been dug up, and, of course, I can sue if I can come up with, you know, enough money to hire an attorney to sue a wealthy developer that told me he gets what he wants.

So that's why I'm here. I wasn't here because I was in the wrong room. I really just wanted to come in and see if I could educate myself a little bit better about, you know, what's going on, what the plans are, understanding the differences between, you know, private crossing and industrial crossing and a commercial crossing and was hoping I might hear a little bit about sightings and how those are okayed, approved and, you know, by what entity and things like that. And so that's why I'm here.

MR. COTHEN: Thank you very much. And your appearance is very useful for us, you know, in terms of our understanding of this use. Just based upon what I think I heard,

it sounds like you've got a developer of an industrial park that's going to benefit significantly from access over the crossing, and a railroad that's going to benefit from increased business. And you are stuck in

between. If you want an opinion, by the way, I will give it to you free of charge at the break, and it will be worth what you pay for it, particularly since I'm not admitted in North Carolina. But it is a very difficult, complex of issues viewed from a national perspective. So I can only imagine what difficulty you may face under those complicated circumstances.

Generally, I think it's fair to say, and we've got a lot of railroaders in the room, correct me if I'm wrong on the railroad right-of-way, generally railroaders have significant latitude to build out their facilities to meet their service needs. There's a general supervision of that by the transportation board, which succeeded the interstate commerce commission's responsibility for this to be normally, unless a line being extended will not get

into the issue of augmenting existing facilities, such as building a sighting, industrial sighting. Normally, they will view that as an activity that is within the purview of the railroad. Obviously, when a

second main or new sighting goes in, whether it's industrial sighting or whether it's a passing sighting, when the road is used to expedite movement of its trains, there's an impact on the private crossing, the safety of persons using private crossings as well as other impacts in the community.

The other side of that is if the railroads didn't adequately invest in facilities to meet service needs, we would face more trucks on the highway where congestion is announced by the secretary of transportation as the central issue that we face in terms of meeting the needs of the economy, in terms of meeting our needs of citizens in terms of mobility.

We are all squeezed by these issues, no one certainly more than yourself. So thank you very much for taking that opportunity to bring that example to light.

Are there others who would be willing to step up to the plate and offer some perspectives, issues, questions that we should keep into consideration as we consider these issues going forward?

We will get Danny Gilbert go and Leslie, come on up and when Danny is through, then you go next, okay?

MR. GILBERT: Danny Gilbert, Rail Safety Consultants, spent 36 years with the railroad. And as most of you know, whenever you have a new meeting, you don't have a new meeting, you have a rehashing of an old meeting. And I guess my question would be in 1993, this same type of meeting was held, and what I believe some good, hard data was in a draft preliminary guideline for private crossings.

Railroads, I believe, have done a great job as far as trying to close private crossings, consolidate the private crossings, developing signage to help facilitate safety issues. But it's getting to the point where it's more difficult to consolidate closed crossings and work on

some of these private crossings. And the document although may not be the best document in the world, it has a lot of good guidance that we could start with. It talks about the holder responsibility. It talks

about warning devices. It talks about closures.

One of the biggest issues is who is the user? Does the user have a legal right to use that crossing? And in this document, it says: If you can't find anybody with responsibility that would accept the responsibility of the crossing, it should be closed.

So I guess my question is why would we not take and build on this document instead of start from scratch? I believe there's some good language in here that can help the railroads, help the states as far as closure, as far as responsibility for a crossing that you don't have any idea who uses it.

So this is a document that I've had for a number of years, and I've talked to a lot of people, and no one has seen this

document in years.

So my suggestion is start with what you've got, and then let's build on it from there.

MR. COTHEN: Thank you, Danny. Our

corporate memory here, some of us at FRA participated in the development of that document, and then administrator Gil Carmichael wanted to do something for private crossing safety, and he said you all get on it, and so we did and we circulated the document. We held a session in St. Louis to review the guidelines, and we can certainly arrange to have a copy of the draft guidelines placed in the docket of this proceeding.

The reaction of the railroads in general at that point was go away. At one point, we were told you don't have any right to issue guidelines. And at the same time, at the same time, the discussion that we had in St. Louis was excellent. The railroad officers and attorneys who were working on the private crossing issues at that time quite aggressively, and have since, by the

way, came to the meeting and talked about what they were trying to do, some of the issues that they face and some of the things that they managed to accomplish.

And so I thought it was a very

productive dialogue, notwithstanding the official pronounced position of the railroads as a community nationally that FRA didn't really need to be in the game.

And so, you know, we tucked our tails between our legs and we went away for a while, promising to return to the issue when we had the opportunity in terms of adequate resources.

Since that time, we've talked about a number of highway rail crossings, just so you know, of late hoping it would be put to bed as much as we possibly could, the train line issue. Although it may never die. And, of course, many people, including Ms. Spurlock, who will have a chance on the floor next, are spending a lot of time in communities as well as others in the room working on quiet zones under that regulation.

So now it's the season again, a little more than a decade later, to return to the topic, and rather than assuming we had the delivered wisdom at that time when we had only draft guidelines in our hands, we

thought we would start from scratch and see if rather than threatening people with draft guidelines, which is how we started the last one, we could kind of build it from the ground up and understand where we are today, how the situation may have changed and get a perspective more widely of communities, states, railroads, their employees and others who might have an interest in this matter.

So that's kind of the issues and approaches and topics. They are certainly not forgotten. And we may use it before it's over, use it as a basis for drafting, but I don't know about that. We will see when we get to the end of this road.

The end of the road, by the way, we hope to have, you know, a report on these activities, the Volpe Center will help us assemble and hopefully that will be a useful

and very public document, which we will have available on our web site that everybody can use as a reference going forward, regardless of what path we choose to take collectively.

Thanks, Danny. I'm glad somebody

remembers that we took a shot at it once before.

Leslie Spurlock is with us from FRA Region 3, headquartered in Atlanta, and she's willing to help us fill the silence, Leslie.

MS. SPURLOCK: So now that I've been introduced, do I say my name again?

One thing that I've thought of while you have been talking about the private crossings is you get a number 94,000, 95,000, even as we speak, there's probably ten more that have been put in. And I get a lot of complaints in my office about blocked crossings. Then when I call and follow up with the railroads, come to find out that was a corn field or a hundred acres of forest that someone has sold and cleared and there's one, two, three trailer homes on it now. Usually, you know, a lot of them are

family related. Well, suddenly you've created a surprise problem for the railroads. Not only is that an illegal private crossing, but they now have to take into consideration if somebody is there,

where they were stopping to pick up supplies or trees or something before, now they've got complaints about them, and it's just something if you could take into consideration in the future, that if any land is sold, what are you going to do that these new folks know about crossings? Can it be prohibited? Because part of me really feels for the railroads, that these small plots of land are popping up, and they've suddenly got a new crossing, that the feeling is with the homeowner, the landowner, and the big bad railroad, and that's not really the situation.

So please consider a way that maybe new crossings can be controlled and not just pop up overnight that nobody knew about them.

MR. COTHEN: Okay. Private rail crossings intersection between a roadway and

highway of interstate commerce, to use the term that's being used, and Leslie is calling to attention the plan. Thank you very much.

Yes, sir, Jason field.

MR. FIELD: My name is Jason Field. I'm with NCDOT's rail division. I'd like to expand a little bit on what she said, that is, an issue that we have a great deal of problem with in the State of North Carolina, where you have private crossings that a developer purchases, and two or three years down the road you end up having an 800 homes, banks, all kinds of other development that is based on a private crossing, and we're running into an issue with that in this state in trying to figure out how to address that.

So, you know, some kind of guideline in regards to private crossings and being shifted to public usage and things certainly should be something considered in anything that comes out.

MR. COTHEN: Jason, is there -- do you have any kind of charter document at NCDOT

in terms of what approach to take to adoption of private crossings, putting them in the public system?

MR. FIELD: Well, we have standard procedures we follow for any roadway. If

it's built to DOT standards, the private owners can pursue with the state to have it brought onto the state system, or the municipal system if it's in that area. But the problem we run into in a lot of cases, the rail division is not part of those discussions early on, and you end up having a problem before you are able to do anything about it.

And then in addition to that, due to political pressures, a lot of times we are in a place where the developers are not held accountable for bringing in the significant development that's adding to the traffic issues, as well as railroad handling issues and grade crossing safety, and then everybody looks to us to go fix this problem. And it's a tremendous problem, and, you know, in a lot of cases we find the private crossings are not built to any kind

of standard.

I had one location where when they were putting traffic loops down, the foot pedestals that they put down for the traffic loops were punched through the pavement. We

ended up ripping everything up, which got within the water lines, which were an inch below that pavement for the bank and a few other facilities, and end up having to fix that, and there's no general guideline from the private crossing standpoint where things had to be built a certain way. So they do what gets them by, and then when it becomes a public usage crossing, you have substandard infrastructure in place that everybody looks to the state to fix, you know, which in turn the cost benefit in some of these cases that was very good becomes less so.

You know, there are processes to bring these roads onto the system as far as the developer who is creating the problem, basically in developing these properties and hanging the price tag of fixing the infrastructure on the state once they leave.

MR. COTHEN: Thank you very much.

MR. WORLEY: I have a comment. One of the tasks that I see that perhaps could be done between, you know, one of the things that we talked about years ago is with the

grade crossings, is that local and county engineers, municipal and county engineering don't have a very good understanding of grade crossings. So we went through this process of the technical work group, the ITE document, which is pretty helpful for folks. Perhaps one of the things we are able to look at is land use planners in counties and towns coming up with some kind of document or some kind of guide of working with American Planning Association or even the University of North Carolina's planning department type, those type of folks to come up with a document that gives information about the railroad, about crossings, compiles some laws, regulations, concerns and so on and make that a document that's available to local land use planners, because I know there is a flat effort towards smart growth and being better

regulating and controlling development, and that may be a good tool that can be used by those local planners with information that would be very good for them. That's just a thought there.

I don't think they are really aware of what they are dealing with with the railroads. I know in talking about with some of the city planners in Greensboro, they were trying to do a lot of in-field development. And once they do that, they realize they have a crossing nearby and people go back to the city want to know why it's up.

One of the things they talk about is perhaps they go ahead and assess a fee or look at some of this new development and have that considered in some of costs of redeveloping these areas, what crosses or devices, so there are a number of factors that planners are more agreeable to assist with these days and consider when they are looking at planning.

MR. COTHEN: Thanks, Paul. It sounds like you have an action item in this

activity for sure among others.

Maybe we can jump start that by making some outreach at the national level at the American Planning Association or any other groups that might be good contacts.

Others that we can call on to speak generally about issues that have come to their attention?

Now, I've got to just be stern with you at this point, okay? I've got to be stern with you. We had railroads at the first meeting, normally we have a table, you know, it will be in rectangular sort of set up, and everybody comes to the table and we have the advisory committee, we have a series of working groups, where we have labor, management, suppliers, states and past organizations and others participating in standards development, and everybody comes to the table and everybody has a say.

Now, this is the second of our outreach sessions, and when we were in Fort Snelling, we had some very knowledgeable railroaders present. Labor, for example, talked. We had one introductory paper from

the Association of American Railroads, which was, I understand, a good deal shorter than the original draft. And then we had some folks from the rail industry who would answer questions very adeptly, factual

questions, but from a policy standpoint, we really had a dearth of substantive input from the major railroads.

So Cliff Ebie, who is our deputy administrator at the railroad safety advisory committee meeting, made a point to say you got to be at the table. You need to be at the table. And, of course, we are not in a rectangular setup here, so what that means you need to be on the podium or the floor mic at this stage.

We have some very knowledgeable railroad people here from labor and management, and they work with these issues all the time. And we we'd love to hear from you. If we don't, we're going to do whatever the heck we want to do.

MR. CRUZ: I'd like to talk about inventory issues.

MR. COTHEN: Good. He is going to

bail us out.

MR. CRUZ: My name is Ric Cruz. I worked with inventory as project engineer data manager, C-R-U-Z.

One of the issues that we'll have to

deal with as far as acquiring the data that's necessary to do all of our studies and modeling is actually collecting the data.

Private crossings in North Carolina, particularly there's probably about 4 or 5,000 we are talking about doing, right now the general statutes do not allow us to go on those properties. And as far as the general statutes, do not allow us to spend money going in and inventorying those particular crosses. We do have access through the general statutes to go on there for a particular reason, if we have to go on there and find information.

However, the biggest problem we have is that current data that we have in our database system is very, very old. Some of it dated back to 1974. Some of it is even nonexistent. Most of the data as far as the

railroads are concerned, as far as railroad traffic and private crossings is nonexistent. We don't know how many train moves or movements we have there or capacities on those particular rail lines at

all.

If we are tasked to acquire that data, it's very arduous undertaking as far as getting that information. It's something we have to consider. It's going to take time. It's going to take money. And right now there is no good data on that. It's something we will have to think about.

MR. COTHEN: One of the things that intrigued me is a work-around, Ric. We're getting to the point where we think we can place most of these crossings on a GIS database. Some years back it was 85 percent we could successfully put it in place. I keep waiting for somebody to say we are at 98 percent, but nobody said that yet. But a great number of these crossings with the information in the inventory has seemed to be put on a GIS platform.

MR. CRUZ: A lot of the information

that we have, the railroad crossings from FOA, we have actually checked those, and found there's a lot of error built into them, and they are not very accurate.

We have done a lot of GPS, GIS work in

North Carolina public crossings, and in so doing, we have been able to get -- update our map systems to the point where they are fairly accurate. Every chance we get while we are out there on the rail line, we also try to do the private crossings, locate them specifically on the maps. So we happen to do that.

And what we can have readily, been getting to these crossings closest to the roads that are operating parallel to the railroad, then we try to get that information also.

But for the most part, the biggest problem we have with private crossings is they are not numbered, and it's hard to find which one we are dealing with when we are out there.

And then there's a lot of crossings out there that are not on our database at

all and trying to resolve those issues with the railroad, sometimes it's a problem that we have, and a lot of times the railroads aren't too sure about the information either when they go back and forth as far as who

owns that crossing, and most times some of these crossings they don't even know they are out there.

So as far as that's concerned, the GIS and GPS information that we have is really pretty good on the public crossings, and as far as our mapping is concerned, some areas that we have it's been done in the past, but they are not very accurate, they are a hundred meters off so.

MR. COTHEN: With information on your database on the rail traffic public crossings, being that they tend to be interspersed, do you have the ability to convey, from an eyeball standpoint, the amount of traffic to which on a particular line the private crossings are exposed?

MR. CRUZ: Rail traffic or?

MR. COTHEN: Rail traffic.

MR. CRUZ: That's something else we

could probably do that, and there's ways we can do that electronically with the data. But it all is dependent on the accuracy of the train movements and counts that we get from the roadways, and that is where unless

we have a line that's been studied, then we can rely on information from those.

A lot of the other lines all through the state, there's not real accurate data on train movements. We have been working with the class one railroads on that, and hopefully this fall we will be able to start sharing more of that type of data.

But as of right now, we don't have -- I don't have confidence in the data that we have to be able to assign numbers on those private crossings, just based on the data that we have on record.

MR. COTHEN: Any of this discussion with regard to these issues, I guess, you are off the hook. Thank you very much.

MR. CRUZ: Thank you.

MR. COTHEN: Okay, others? Again, it's wide open to anything related to safety at private highway rail crossings, or for

that matter the impacts we have on communities. When we try to affect safety and public highway rail crossings, we need to know both sides of it.

Okay. What I would suggest is -- I'm

sorry.

MR. BRYANT: Can I speak?

MR. COTHEN: Please.

MR. BRYANT: I notice you've got some representatives from the railroad coming. I was wondering if they were going to speak today? I too was sitting on the --

MR. COTHEN: Can you state your name for the record?

MR. BRYANT: My name is John Bryant. I'm not with the railroad company.

I was standing on the Pre-Core today at the YMCA, and I learned about this meeting on WRAL news, just like you did.

But I think one of the things as a member of the public that I'd like to see happen is there's not any national standard for, I don't think, construction and maintenance of grade crossings, either public or private. I'm a trial lawyer. I

have a client that's involved in a case that is a maintenance issue from a crossing. And according to the folks that we have talked to during the course of that case, there's not any way to determine how grade crossings

are supposed to be maintained for the safety of the vehicular public for the life of the crossing. The only things that have been handed down to this particular defendant, the only things that have been handed down over the years in the case that I'm involved with, because I think it's important that you all know what goes on, I will give you just a little bit of factual background of what happened there so that you can have some importance to place not only on the collision between the train and the vehicle, but also because of the safety in passing over the tracks.

In my case, the theory of the plaintiff is that the tracks became decayed over a number of years, because no maintenance was performed on them. And the railroad admitted that for 20 years, nothing was done to maintain or check over these

particular tracks.

My client was holding a screwdriver when they passed over this rail. It got stuck on the rail and deployed the air bag, which shoved a screwdriver into his

cheekbone through his sinus cavity up into the orbit of his eye.

So it's not always, even though the -- most of what you are going to see is going to be the collision between the train and the car, I know those are really catastrophic events. But I think that because of the fact that the railroad companies are not left with any guidance about how they got to maintain those particular crossings, it's only handed down to employee, to employee, to employee over the years.

Some of the evidence that we heard in the case was that they were supposed to maintain the crossing the way that it was put in, and try to keep it that way for the life of it, which is a good and noble thing to do, but I think if you have in the crossings, either private or public, if you

have the rail and the crossing timbers that are on either side of the rail, which are eight inches by eight inches when they are wooden, I have learned. I didn't know anything about railroad crossings a couple

of years ago. And they are supposed to be flushed with the rail to keep cars that might be lower-riding cars or low boards like you were talking about earlier, from getting hung up on those things, and if that is something that is a great geometric configuration, I don't think that the rails here in North Carolina are any different of the rails that exist in the state of Wyoming or any other place in the country.

That's why I think it begs for a national standard, so that if the rail companies have a lot of tracks to keep up with and have a lot they have to take care of the safety -- according to the North Carolina General Statutes, have to take care of the safety of the motoring public also, and they also have to take care -- making sure that the train stays on the tracks, so these are the two things that they are

confronted with, for us to have a national standard at track safety crossing, I think is what we ought to try to accomplish. Because not just for the trains and not just for the collision between the trains and the

cars, but also for the construction and maintenance of the rails themselves at the grade crossings.

MR. COTHEN: Thank you, sir. I appreciate that perspective.

So that the issue that's brought here is one of surface, and I will posit to be corrected that this public crossing in general, sharing of responsibilities that are normally outside the rails' public authority, maintaining the surface and the gates, the railroad maintains the surface? Somebody direct me.

MR. RIES: Generally, it's over the track structure. On some states, it might go out another foot or so, and it would be the railroad's responsibilities.

MR. COTHEN: And the ties and the ballasts sections?

MR. RIES: And the ties.

MR. COTHEN: And in the case of private crossings the standard is?

MR. RIES: If there's agreement, typically it would be the agreements are usually written to be the property owner's

responsibility to pay for the maintenance, and the railroad would do the work actually over the track surface.

MR. COTHEN: If there's agreement, and we learned today that there's seldom an agreement, I mean, fiscally speaking, this is consistent with what we heard in Minnesota as well.

There will be more agreements if the situation were clearer, I'm sure, because we know that railroads try to work aggressively to close crossings where possible and to make sure that they are maintained safely.

Maintaining crossing surface is obviously something that's a challenge, given the number of highway rail crossings that needs to be attended to.

So thank you for that perspective. We need to always remember, and this is the case where we want to talk about

engineering, but certainly includes all aspects of the crossing surface.

Other comments before we break for lunch of a general nature?

I'm glad we had our public appearance

staff put out the press release, and we are grateful that the outlets here hae taken the opportunity to notice the meeting and bring in a couple of folks.

MR. RIES: Just also to note, thanks to North Carolina DOT who put out their own press release about this as well.

MR. COTHEN: That's right, yes.

Thank you very much, Paul and Pat and company.

What we would like to do, I think at this point, is we will take a break, make sure that we have time to set up. We will go -- in order for you to be able to get your lunch conveniently, take any calls you need to take, we will come back at one o'clock.

Is there any information about cafeteria facilities? There's information at the back and cafeteria on site. We will be back at one o'clock and try to set up in

rectangular fashion and railroads will be at the table. Thank you.

(Luncheon recess)

(Off the record at 11:46 a.m.)

(Continued on next page)

A F T E R N O O N S E S S I O N

(On the record at 1:01 p.m.)

MR. COTHEN: Okay, let's resume, please. We set up optimistically, and we almost filled out the table. I appreciate those of you who were able to return for the afternoon session.

As we indicated this morning, what we'd like to do, without prejudice at all to taking on other topics if they arise, is to get some traction, if we can, on engineering issues related to highway rail crossing safety and private crossings in particular. And we know that we got the manual for uniform traffic control devices, AREMA and AASHTO standards and so forth as potential sources, among others, to apply principles used at public crossings, private crossings. But we also got some peculiar and special circumstances. We don't have many public

crossings where it's required to farm and only to combine and traverse only a few times a year in season, and that sort of thing.

And we also have the issue of

resources, which is not a trivial issue when you consider over 90,000, apparently, locations that need to be addressed.

So if we can, we will ask Anya Carroll from the Volpe Center to begin to generate some discussion here, give you a little more background on the topic and take us through questions and issues. Anya.

MS. CARROLL: Thanks, Grady.

Good afternoon, everybody. What I figured we would do, because you are such gracious visitors to this meeting, is take you through some of the highlights of the Minnesota meeting that we had, and maybe identify some other states that may have similar and other railroads that may have similar concerns that you have to try and stimulate the conversation.

The same list of questions which you have a copy of in the back of the federal

register notice were asked of the Minnesota delegation at their public meeting. And so we had some statements made by Minnesota DOT, which basically corroborated the fact that they have no regulations over private

crossings other than insured farm crossings.

They had issues over the cost of closing private crossings and local jurisdictions that do not want to maintain private crossings.

They expressed the lack of funding for grade separations, and whose responsible for maintaining any traffic control device that would be placed at a private crossing, if that were possible.

Iowa DOT was present with us in Minnesota, and they were looking for some political will to close crossings, to allow local and state jurisdictions to be able to move that to fruition.

Canadian Pacific Railroad was with us, and they mentioned some new guidance, new regulations that transport Canada will be bringing forward in the form of what they call RTD-10, I think. In their terms, they

do not use the terms public versus private crossings. They use the term restricted versus unrestricted crossings.

So that's information for you to think about.

Transport Canada also has a research

team, they are IBI Group in Canada to look at the same issue of private crossings. So they will be coming out with a report, I would say, within the next six months to a year on the Canadian experience with private crossings.

They did some initial literature survey in that research. They went out and surveyed users and railroads off the private crossings. So that should be an interesting document.

Minnesota DOT also mentioned at our previous meeting that they may not have state resources available, even if there was funding coming to the state, to deal with private crossings. And even to do an inventory of private crossings, felt that they wouldn't -- they might not necessarily have the staff if they received funding to do that.

Minnesota DOT does mandate yield signs through their state for private crossings, and that they feel that there should be some sort of criteria in the MUTCD applied to the issue of private crossings.

One discussion point that came up was having a bibliography of all the reports that may impact our considerations about private crossings. And Volpe has been tasked by the FRA to try and put that information together in the form of a spreadsheet with links to the documents that will be put in the FRA docket on this matter.

And Danny, as far as you are concerned, I think it's a good idea to put those old 1993 guidelines in as part of our bibliography. So we will move ahead and do that.

We did talk a little bit about insurance issues, and the fact that there's no legal documentation available to provide a basis for negotiation to close private crossings or even to formally acknowledge where those crossings are.

And then we got into a long discussion about the engineering design and the types of categories. And you should have a handout, that's an excerpt in your packet that talks to a lot of what you mentioned,

Paul, this morning about the different types of crossings. And we are going to be using that in a few minutes to talk about well, how do we treat each one of these and how do you determine how they fall in each category?

There was an example given about types of categories that the levy association in Iowa is not considered a highway authority, so even if they may have roadway access to their levies, it's not a public roadway.

That was one example that was given.

In Wisconsin, from the DOT, the railroads must negotiate with private owners for new crossings.

So before a new crossing can be established under responsive DOT rule, the railroads must negotiate with the private owner, I guess, and have some sort of contractual agreement before that would be

allowed.

Also in Wisconsin, the local jurisdictions are urging any new developments to keep them private and not make them public, so that the public doesn't

assume the responsibility.

Also, in Wisconsin, the state pays 25 percent of the maintenance fees for the public crossings.

We talked about what's a public crossing and what's a private crossing in Wisconsin. If you have a public roadway on both sides of the crossing, it's then a public crossing. If it's a private road, then it's considered private.

MR. BROWDER: I don't quite understand. If it's a private road, it's considered private?

MS. CARROLL: If it's public on both sides, it's considered public. If it's public on one side and private on the other, it's considered private.

The types of users that use the crossings were of concern, and also what the public purpose is for each one of these

crossings, whether it be commercial access to a Wal-Mart, or recreational access to a boat ramp. How do you determine this, and how do you categorize them and what their needs are for any type of traffic control

device for one to be placed there?

There's also the data collection issue that was a big topic. Minnesota mentioned that the Federal Highway Administration has limited interest in crossings in general but private crossings as well, limited resources from the states. We heard a lot of that.

And then we talked about well, who could we partner with to discuss these issues? And for this meeting, we sent out over 600 invitations to multiple organizations to include trucking organizations, agriculture organizations, metropolitan planning organizations, so we'll still continue that outreach.

Some of the people that were identified as far as partnering was the Federal Highway Administration, the National Committee on Uniform Traffic Control Devices, AASHTO, AREMA, APTA, TRV, the

Bureau of Transportation and Statistics, the National Highway Traffic Safety Administration, the bus industry, specifically school buses were mentioned, federal transit, the AAR, the Short Line

Association and possibly even considering looking to DOT as far as security issues as Paul mentioned in his speech earlier.

So that was sort of a high-level summary of what we discussed. The docket will soon have the full results of the text that was taken by the stenographer in Minnesota, so you are able to read word by word of what went on there.

So with that, I think we want to move to -- does anybody have any comments or questions regarding the statements I just made about our Minnesota meeting?

Is anybody interested in providing a starting point for crossing categorization or engineering design of a particular type of crossing, or issues we may have, trying to do that?

Bill Browder?

MR. BROWDER: Since the railroaders

have been silent.

MS. CARROLL: Please, Bill, use the mic and introduce yourself.

MR. BROWDER: Bill Browder from the AAR. Is it working?

One issue that arose a little bit this morning from John Bryant that categorized standards and practices was the one concerning vertical alignment that was addressed in the accidents that shouldn't happen.

Back in March of '96, as a result of Fox River Grove, which in some ways is identified as hump crossings, that short-term objective was to provide some kind of indication which the MUTC did with a sign. But the long-term objection was to put together a group, which I was a member, Bruce George; Fred Small; AASHTO; AREMA; which was AREA at the time, and the Short Line Association, and as a data collection, we did a survey, which should be on your files, of crossing conditions that could be identified as vertical alignment issues, and in particular, identifying them at that

point from public crossings.

What happened with that report was that they recommended to those members that a technical committee be appointed to adopt recommendations from the stakeholders.

Although that committee was appointed, I don't think anything ever got done. I don't think they ever met. And it certainly hasn't gone anywhere without -- with the agent or one of the basic problems I know was the frustration of trying to address it without any -- with the stonewalling, basically, of the highway side in terms of wheel -- distance between wheels and height above ground of equipment, and Bruce George tried to promote an effort that avoided that, I guess, is the way I would characterize saying that issue. But if something is to be done in terms of ITS to address those issues, and I don't know if that's germane to private crossings or not, that's a great place to start in that endeavor.

Also, in terms of standards, and I'm repeating myself in saying that the

21 railroads are not the experts on the highway
22 side. And in terms of private crossings,
23 there is certainly, as has been identified
24 in my mind, a continuing lack of highway
25 side authority or interest in providing the

authority. And the only thing that the railroads have been able to do from that perspective, quite frankly, has to be, it has to endeavor where private crossings do exist to obtain agreements. And as you can see, our track record is not good. And it isn't from a lack of trying to obtain agreements.

CSX several years ago had a very assertive policy, not aggressive, to obtain agreements on private crossings that they did not have agreements on. And after about a year, they were completely frustrated, in many cases by local judicial authority that threw their cases out of court when they attempted to obtain some kind of action that would require a good faith negotiation, and even to the point of arbitration as far as some sort of written agreement. Some landowners that already crossed, just

absolutely refused to have anything to do with any kind of agreement. And I really appreciate, Grady, you saying this morning that the railroads were doing a god job. We don't hear that very often. I'm sure you

don't hear it very often either from other constituents, that the railroads are using the money and laden, heavy-handed people that are out there and are not good, solid, business citizens of communities and stakeholders.

In my 38 years in the railroads, I think railroads that I have been associated with have always tried to be good business citizens of communities where they are involved. Certainly, as Gil Carmichael had said, there are way too many crossings and the work group has been the private crossings out there that proliferate the countryside and the lines, and certainly each of these crossings has a certain exposure to safety, not only to the individuals that use the crossing, but to the train crews that traverse it.

And so I'm pleased to hear that we're

at least at the table in terms of trying to develop areas where there are commonalities.

Now, the bad news is that I'm not sure that we in the railroad industry have total commonality out there as far as where we

want to be. And, again, that stems from the fact that we're dealing with 49 different states as well as hundreds of local authorities and literally thousands of individual landowners and individuals who represent everything from stadiums to parking lots to strip malls to shopping malls.

And I think there are some good, basic things that have come out of what we've been talking about from an engineering standpoint that are basic areas that could be addressed.

There is in the AASHTO green book and AREMA, a standard for highway railway crossings, highways, either through the rail end of the crossing and to a certain number of feet outside the rail at a point, and it depends on the angle of the crossing and the rail, so I'm not going to give you feet, but

you can look it up and make it part of the record. The problem is that nobody else is out there doing anything that addresses any kind of potential standards or practices that can be agreed to on the highway side.

Again, we have certain things that we have even committed to.

If you go back to that report, basically the railroads committed, and this is really nothing new, I always heard it when I was a civil engineer, well, you come through and you timber and services crossing and raise it up every time. You see that crossing over there? You timber and service it, and it's way up in the air and it didn't get up that way with timber and servicing. In most cases, I can tell you from hands-on experience putting in crossings that you actually have an issue in terms of settlement in the highway end of the grade crossing. And yes, we do put some elevation when we go through and timber and surface it. But by six months afterwards, if we've done it right, it settled back to where it originally was, and if we haven't done it

right, it may even be below it and we have another problem.

So often these things are things that I think that brother Worley was right on target and right on the money that AASHTO

can be an active individual to support these kinds of engineering efforts.

I know that I can halfway speak for AREMA, although they are not here.

I think that, again, there's some other experience out there in the private crossing area. I point back to the efforts that have been made in the public crossing areas and suggesting that HWA certainly has some very knowledgeable people that can contribute. And as Paul said, Paul Worley said earlier, and I was glad to hear him talk about this, since he was there with me in the technical working group, I think his idea of convening some sort of technical working group like the one that we had may be an excellent idea, at least in getting stakeholders in some kind of a conference situation.

We've got very few stakeholders here

when you get right down to it. We've got North Carolina DOT, and I love them dearly, and I have been trying to wean myself from North Carolina how long now, Paul? Since I had you over there at the state fair?

MR. WORLEY: It's been a long time.

MR. BROWDER: For years, and I'm still not out of the woods. And nothing against North Carolina or West Virginia, I love them dearly too, but I think we need to get the rest of the group together to look at the engineering, or have I said enough Grady? I will shut up.

And I want the record to show that I'm from the railroads, and I want to contribute my part to avoid any further criticism from the chairs. Thank you.

MR. COTHEN: It wasn't intended as criticism. It was intended as encouragement. We thank you for taking the bait, I mean, stepping up and adding to the discussion.

Thank you very much for that.

MS. CARROLL: Anybody else?

MR. WORLEY: I got one thing to add

before you get into a lot of engineering inventory classifications. That's one thing that we can look at, but I would ask that we do consider the need to cut back based on the data and to look at different kinds of

treatments, because you can in a vacuum or based on a certain level of experience recommend certain kinds of signage or certain kinds of signals or certain kinds of signs, but really you need some real world tests out there to rely on DOT and to get the data. We do a lot without gathering data, and for something that's as big as private crossings, something that's out there before we start lifting and signing standard, make sure we have some really good data. We need to have it in there. Don't study forever. Some places study forever, but --

MS. CARROLL: Thank you Paul. I actually had a couple of questions for you. I know you are involved in AASHTO in the SCORT committee, and one of my things was my bedtime reading as of recent has been page by page, line by line, word by word MUTCD

and AASHTO green book. Some of the things I found were interesting, as I was not looking for necessarily highway-rail grade crossings, but other roadways that could be classified as private roads, which may

intersect the railroads. I found a couple of interesting citations in AASHTO, a whole section on driveways. There is guidance in AASHTO on how you sign and control access to driveways. And my question to you, Paul, and the other piece that I found was on recreational roads. And I was wondering, Paul, if you had any idea of how these came about, and whether they would be applicable to look at as some sort of way to bring AASHTO on board with private grade crossings?

MR. WORLEY: Well, I think we are on board with the SCORTs. First of all, I think AASHTO is on board, first of all, through the standard committee on rail, and a lot of the other safety issues we have got going on, but I would ask as far as accurate green booth goes, I would think the intent there would be to address where it said

driveway or access roads, private intersections of public highway, the railroad is not a public railroad.

So you still have, you know, you do have that traffic control device at the

public highway, and the public purpose thereof is to protect the user of the public highway for someone not having the stop sign and pull right out.

So I can imagine that's probably where those signs of standards came from years ago. But that does give you the ability to look at well, being that there's public purpose in railroad crossings to railroads in interstate commerce, that's something to look at. But I think that's the reason the agreement was made.

MS. CARROLL: But it does look at a private intersection of a public roadway, because there is guidance for private roads over public access.

MR. WORLEY: Right, exactly.

MS. CARROLL: So my thought was that since the door might be a little ajar, we could look at those as a baseline to work

from, you know, off a driveway or recreational, because the studies must have been done if AASHTO was quoted in the green book to say these are the kinds of things you need to look at when you have access.

MR. WORLEY: The former access group would be signed, that's much different. I don't say the concept is bad. I'd say that's not a real good comparison when you start talking about access to a public road with a highway rail crossing. And Bill has the battle we went through with the signs, stop signs and highway signs when you start trying to use a highway standard or bring those guys into it that way.

MS. CARROLL: We don't have anybody here representing the National Committee on Uniform Traffic Control Devices, do we?

MR. WORLEY: We're on the committee.

MR. BROWDER: Well, Paul and I are on the committee. Dave Peterson at the Fort Snelling meeting brought that up, and I told the staff up here that I had called Rick Campbell, who probably is the best and most representative individual for the national

committee to discuss their approach and perspective on the work that they are doing in this area, and Brian Gilrad of Ron's staff is also involved.

I suspect -- Ric committed to me that

he would come to a meeting, and I imagine, since he is not here, that he would come to the New Orleans meeting, that would be closer for him out of Fort Worth.

Does that help any?

MS. CARROLL: Yeah, it helps a little bit.

I was interested in a piece within the MUTCD, the 2003 edition, that talks to low volume roadways. And, again, I'm trying to stretch a point, like I tried to do with the driveways and the recreational roads. I mean, if we had accurate ADTs on private crossings and they fell below 408ATD, would they then fall under a MUTCD guidance for low volume roads whether they were public or private?

MR. WORLEY: I don't think you could do it.

MS. CARROLL: There is guidelines out

there.

MR. WORLEY: Right. These are low volume roads where you put up gates and locks.

MR. BROWDER: From AAR's perspective,

and speaking from my seat on the national committee, I would suggest that there's so many other parameters that were considered in the establishments of low volume roads, other than what we're looking at here, that if that's something that you all choose to do, I would just start from scratch and work and develop what you would like to see as your own standards and practices, rather than pointing at what the MUTCD has done which represents a real compromise of many, many, many other different facets and the establishments of that criteria. Just an idea.

MS. CARROLL: Okay, thank you, Bill. Well, I just had those two burning questions I had to ask, since I had some representation here.

MR. FIELD: My name is Jason Field again, I'm with NCDOT's rail division. And

I think one of the issues we really need to focus on is any treatment for any of the these crossings needs to be based on engineering judgment at the specific crossing. The idea of looking at a blanket

policy with a set criteria for ADT, I think is faulty. You have got issues of curvature of the railroads, the road sight distance. In North Carolina, we physically evaluate every single crossing prior to determining what kind of treatment we are going to apply there, whether it be gates, medians, barriers, elongated arms, in some cases side panels.

One thing that's been an issue for me is the broadband use of application of stop signs. While stop signs seem like a good idea at first glance, one of the issues that may or may not be considered before those are applied, as opposed to a yield sign, is the idea that the designed vehicle is required by law now to stop at a crossing, and depending on the train speed, I think there's a serious issue if that designed vehicle, if it's an 18-wheeler loaded has to

put it in gear and try to clear the tracks to get out of the dynamic envelope of the train and is not able to.

We recently had an incident with our Piedmont at a private crossing which charred

our train, it ripped the whole fiber glass shell off the front of it and basically put our train down. No serious injuries, fortunately, but the idea of a blanket usage of passive protection, I think, needs to weigh on the yield side of things versus the stop sign side of things, and if some sign is applied, it needs to be based on sound engineering evaluation on that specific location.

MS. CARROLL: I think all of the guidance that I read when it talks to rail crossings, it says, and based on engineering design team considerations. So I don't think that's going to go away.

MR. FIELD: Another issue regarding Bill's comments on the hump crossing approach and highway's approach to the hump crossings, we attempted to few years ago to develop a program to address hump crossings

and public grade crossings. I developed a nice little formula for kind of developing an index number, so that we could approach that, and we approached the Feds, as far as funding or in terms to trying to fund

something like that, and we weren't able to get support for that. So we ended up putting it on the back shelf.

One of the issues you are going to find on private crossings, generally private crossings are going to follow the existing geometry that was there. Whereas, public crosses, when roads are being built, you want the money to raise the approaches for the grade. And railroads are trying to get out of the water for private crossings. You are basically going to follow that ballast line.

The scariest crossings I closed was on CS section of double A line in Charlottesburg. Where literally you went up the ballast line of asphalt, crossed and went down the other side and the crossing was nine feet wide, if it was lucky. It was not a good situation. And so the idea of

having some kind of standard developed for widths and things is something else that ought to be considered.

MS. CARROLL: Thank you, Jason.

I think we want to move, unless

anybody has any comments on -- yes, Arthur.

MR. PETTEWAY: If I could add something. I like the idea when we talked about, when we first talked about gathering data important, but also when we are talking about engineering standards and specifications, we have to at some point make a determination of whether or not a crossing can be closed.

So let's not leave closing a crossing out of the mix. That should be a part of the evaluation and part of the engineering that you do have to cross.

So just wanted to make that point also.

MS. CARROLL: Thank you. That's very well taken.

MS. KLOEPPEL: I have been listening to various comments, and I certainly believe firmly in the value of engineering evaluation before putting any particular

traffic control devices in place. But I understand -- I was involved in the technical work that was -- that put together that guidance before. One of the motivations behind that was an acceptance

that you are not necessarily going to get a full engineering study. And so we were trying to provide some baseline information for people who might not be as technically competent as people in the state level are. And I was wondering what people felt about the value of a similar effort on private crossings. We did this for public crossings. Would it be valuable to have a group establish some baseline parameters?

MR. PETTEWAY: Yes.

MS. KLOEPPEL: Do you have, I guess I'm trying to draw the words out here, some opinions, or does your experience tell you what some of the considerations are that would make a private crossing different from a public crossing, and can we use that to fuel the conversation here?

MR. FIELD: Absolutely.

MS. KLOEPPEL: And this goes to

anybody, I'd like to hear what sorts of organizations would be important to have if we were going to discuss this more in depth.

MR. FIELD: Jason Fields, NCDOT. I think as far as the things that we receive

in North Carolina, there's a lot of cases where we have single vehicle width crossings with very bad sight distance, plus it goes across.

So obviously any group that deals with bus traffic, and that kind of thing, they do the best that they can, in addition to somebody with industrial trucking facilities. We've got a lot of cases, especially around our metropolitan areas, where you have got private crossings in industry that sometimes are internal to plan operations in addition to truck access points. And, of course, in most cases where you see that you have got a parallel road next to the tracks, that makes gating crossing very difficult and things of that nature.

I think it's important to have somebody from the highway side of things.

As a lot of cases, we're looking more towards doing some signage in some of our public crossings in rural with low ADTs that are public crossings, in addition to the rail division, obviously, or whatever state

agency looks after that kind of thing. And, of course, the railroads, they have got a stake in this as well.

I imagine one issue the railroad is going to be wanting to look at as far as a policy is what kind of protection for doing that kind of treatment, and there's the question of where the money comes from.

MR. WORLEY: Also, you talked earlier about the American Planning Association. Those types of planners are real important when you start talking about private crossings and development.

One thing about private crossings, you get more into the railroad and maintenance away, because you don't have the signals that you have in public crossings. So you really need to get some folks in there that are involved more in track maintenance and drainage maintenance. It's just a very

different animal with private crossings, plus you don't have the road bed in some cases, you don't have good drainage, you don't have the good approaches that you have in public crosses where you have a road

that's already municipal or state or county maintained, those approaches you have got railroad maintaining what's their only operating right-of-way and then paths of private driveways or concrete leading up to it.

Another thing within AASHTO, you've got the motor carrier group to think about as well, because you may have some private crossings that are in the important facilities or industrial type things, and motor carrier folks have a lot of good input on those kinds of things as well. So.

MS. KLOEPPEL: Thank you. Sorry, Anya.

MS. CARROLL: That's okay. Just on the motor carrier piece, I know there's something currently going on, maybe Ron can give us a little bit more information on FFMCSA and some proposed rule making that

they have got going on with crossings.

MR. RIES: In response to, I believe it's 1994 legislation, federal highway at that time, which was responsible for commercial motor vehicles, was directed to

issues statute of being a federal offense for a motor vehicle to go over a crossing unless it was known that the vehicle can go completely clear of the tracks so that they had proper storage of space. They actually issued a rule a couple of years ago, three years, it ended up getting pulled until they are in the process now of starting that rule, making public meeting in DC last week, and the only member of the public that showed up was our friend, Mr. Browder. There were about 15 feds and Bill.

MR. BROWDER: And they made me speak too, didn't they?

MR. RIES: Yes, they did. So that issue of storage space is still very real, and I think Bob's picture in the presentation showed a very real problem. So there will certainly be more coming from the FMCSA in that area.

MS. CARROLL: My thought was there that maybe FMCSA could be another partner in the technical working group, as well as AASHTO.

MR. RIES: And Federal Motor Carrier

Safety Administration work with FRA in operation lifesaver, developed a trucker safety advisory card that gives them crossing safety information, and we're putting up a quarter of a billion of them and we have all but 10,000 have been called for. So there's certainly an interest in that agency in terms of safety. But they are attempting to reach out.

MS. CARROLL: Anybody else have any thoughts on other partners that could be part of this technical working group to deal with this issue that may bring to the table?

I don't know who at ITE we would contact for the old list. I think there are about 250 members of that technical working group, from what I remember, in total. I know James Cheeks has since departed from ITE, and he was part of that keeper of the historical record. I guess that's an action

item for us to look into.

MR. RIES: And from a technical working group, when we finished the work, it was one of their hopes that they could reconvene in five years and review and try

to update that document. So that might be an opportunity to expand the charter to look at private crossings with those folks.

MS. CARROLL: Who would be in charge of that?

MR. RIES: Federal railroads are the ones that sponsored. I don't remember if HWA contributed to the funding of the contract with ITE.

MR. BROWDER: You mean, October of 2002?

MR. RIES: Pardon?

MR. BROWDER: The October 2002 group?

MR. RIES: The technical working group yes, the 2002 group. So it's pretty much a federal highway.

MR. BROWDER: I sure got the impression that they were in it.

MR. WORLEY: It's on their web site.

MR. RIES: It was a joint effort so.

MR. BROWDER: What happened, if I remember correctly, Paul, is that it started with a meeting at the Texas national conference, and it was a meeting of anybody who wanted to come.

So you got a whole litany of staples who came. And then I remember the second meeting was out in San Diego. I remember you, Andrew, standing outside worried about the transit coming to Raleigh. And we had a different set of stakeholders.

So we had the original stakeholders. So that's where you get the 250.

MS. CARROLL: Well, then we had Myrtle Beach.

MR. BROWDER: Myrtle Beach, and, of course, that was a South Carolina hosted southern region conference, and so you had the folks that were there for that conference that came too.

So, you know, I'll bet that Shelly Rau, who took James Cheeks' place over there, was responsible, would have an idea of some of the things, at least some of the litany of material that went on in terms of

the people. If not, I've got Cheeks' address, and they still use him as a consultant for their grade crossing committee. We will see him in January.

MS. CARROLL: Thank you, Bill.

Moving on to our engineering design, we wanted to look at things like, well, we talked a little bit about the home crossing or the vertical clearance, horizontal clearance. A lot of these types of criteria, even though they are applicable to public roads, are found in some of these guidance documents for crossings. But what we'd like to do is go through and discuss engineering designs.

We could start with categories of crossings that you want to try and identify, which may have different characteristics from each other, or we can start with just a list of what you would look for, or how you would determine the types of traffic control devices, sight distances for private crossings versus public.

So you have the list of what was developed in Minnesota in your packet there

as far as categories of other types of crossings. Does anybody have any additions to this that we could add? Are there groups that we could consider similar, for example, the term farm is used a lot, but is the true

term agricultural crossings? Because you may have farms or orchards or other things where you are still going to have heavy machinery.

So I just wanted to get your opinion on this list, add, subtract, contents and then we can move on to engineering design.

MR. CRUZ: Ric Cruz, NCDOT. You said other than commercial, but you don't mention commercial at all.

MS. CARROLL: Okay. This is highlights, summaries of notes that we took from our Minnesota meeting. This is just a category that we mentioned similar to, you know, government, like military stuff. It was just a category. We didn't eliminate anything. We didn't really define these categories. We just did some brainstorming.

MR. CRUZ: One of the standard fields that we do collect is commercial versus

industrial and residential, recreational, institutional. And I'm not sure what is meant by other commercial.

And as far as the government public facilities, it talks about military access

and planning. I'm not sure access I understand, but planning is just railroad crossing at the base.

MS. CARROLL: Yes, and that would be the same for the railroads, internal railroads facilities. It would be crossings within their --

MR. CRUZ: If you went military, you have public access roads within the military base itself, versus you have military purpose roads, where you have tanks and other heavy equipment. And do you want to further identify those or not?

MR. FIELD: Equipment versus nonequipment?

MR. CRUZ: Right. I mean, that's something there's knowledge about that.

MR. GILBERT: Even commercial might be a bullet point under industrial.

MS. CARROLL: No, I think it was more

who was it? Was it Iowa? Iowa mentioned the levy authority having an access road to their levies, and it wasn't commercial, it wasn't recreational. I think it might have been the levies that -- there were other

private roads out there that are held under the authority of certain institutions, but they are not necessarily public authorities.

So I think that's what that levy, the levy might be the answer to that one.

MR. WORLEY: You have got crossings at access. There are DOT crossings that are not both crossings, in other words, the irrigation area, those kind of things.

MR. FIELD: Basically other category.

MS. CARROLL: Or resource management. I don't know what the term would be. Resource management crossings or something of that nature.

MR. GILBERT: Why would you not have commercial and have something under it? I mean, you are talking about where does Wal-Mart fit in here? You know, Wal-Mart would be a commercial, it's not going to be an industry.

MS. CARROLL: I've added it to the list.

MR. FIELD: There ought to be something included that kind of shows the difference between a commercial property,

such as a Wal-Mart, which is a huge traffic generator, versus, you know, a TV repair shop that's much less inclined to generate as much traffic. It's a private crossing. There's few locations in North Carolina where there's actually a single allocated crossing going into a parking lot, a mall, for example, and you label that as commercial, as well as, you know, much less lower density of crossing area. That might be something you want to differentiate.

MS. CARROLL: So you think ADT would be a criteria within commercial that you want to address?

MR. FIELD: I think it might be worthwhile to have that added. Actually, if you have an inventory sheet using the current state inventory sheet, ADT is going to be one of those items anyway.

MR. WORLEY: Traffic too, I would

imagine, trucks versus cars.

MR. FIELD: Percentage of trucks is also currently on there.

MR. CRUZ: The problem with that is that's not included within a private

property.

MS. CARROLL: Inventory.

MR. WORLEY: You still have tank farms that have access of private crossing.

MR. FIELD: We need to incorporate a lot of the baseline data on current public inventory sheets over to the private inventory sheets, it sounds like, better characteristics employed, used in crossing.

MS. CARROLL: I guess when that topic was brought up at our meeting in Minnesota, Minnesota was quite determined to say they don't have state DOT staff available to keep up to date with their public grade crossings. And you could throw all the money you want at us, and we still won't have the staff to get to the private crossings. And is it their jurisdiction to be able to do that anyway? So we come back to a catch 22, how do we collect the data?

MR. GILBERT: You've got crossings in this commercial thing. I mean, I think in west end, you've got commercial and a huge residential area, real estate, accessed by a private crossing, which is truly multi,

multi, you know, faceted. I mean, it's landowners, it's everything.

MR. FIELD: All using a private crossing.

MR. GILBERT: All using one private crossing.

MR. CRUZ: One other thing, right now, the current -- the way the data is selected under private crossings, there's only, and this is what we're talking about, it says categories private and public properties. I would think all these here would fall under private properties is what you are trying to say. Right now, there's only three, and that's FRA and state and most states are the same thing.

So just collecting the data and distributing the data is going to be a measured change.

MS. CARROLL: Based on the comment you

just made Ric, is it, I mean, would it be a good approach to look at functional classifications of private crossings similar to what they do with roadways, where they look at level of service that the road

provides, type of vehicle that the roadway carries, and then from there once we build sort of a functional classification and types of users and frequency of user, you can then try to provide some baseline standards for traffic control devices or geometric design of those crossings or sight distance needs or requirements of those types of crossings?

MR. CRUZ: As a basis, you can start with just using the standard FRA required fields, extend those to the private crossings, and then everything that you have already done, Grady included at that point could be used, and you can alter it, fine tune it in all those areas you are talking about. But all that information already exists field wise. All the databases already are developed, and all the models represented have that information. So all

you are doing is extending that to private property. That would be the simplest way to do that if you gather that data.

MS. CARROLL: Who do you feel would be the most appropriate person to gather that

data?

MR. CRUZ: Well, the people who are most knowledgeable in doing it would be the states. The states are doing it even more so probably, than, I think, the railroads. You would have to have some ways of either augmenting their resources financially or personnel wise, either consultants or in-house. Those would be the people who understand better than anybody who deals with it, more quickly be able to give that data to the end users, bring that point so that we can actually use it in all the different type of modeling.

MS. CARROLL: Thank you, Ric.

Leslie, you have a comment?

MS. SPURLOCK: Is there a potential that you could go to like a college and get their senior students in engineering to do that kind of project?

MR. CRUZ: Part of the problem I've had, we've actually had consultants and used interns in our program. Also, it takes probably six months to a year to train these people to be able to actually collect this

data in uniform factually, so we are looking at the same thing, and extend that information back.

MR. WORLEY: And it's dangerous.

MR. CRUZ: That's true, it is dangerous.

MR. WORLEY: One of the things we talk about private crossings, remember sometimes we think about private crossings as those that we see from the road as a driveway. But when we did some of our initial PCSI surveys, and Bob can attest to this too, some of those private crossings you have to go through a man's field, go behind their tobacco barn, go around the pond, and you get in the middle of nowhere, and there's a crossing, and then it goes back to that field. Or you may have one that goes back behind the hump yard. There's a trail that goes down behind the hump yard and it goes

in or whatever. But you are getting into some private property, and that's a consideration when you start talking about sending state employees or any kind of employees on private property, you have got

a lot of hazards to get to the crossing, if it's not readily accessible. And there's a lot that are like that.

And then the other thing we talked about is protecting the crossing in geometrics.

One of the things we looked at with private crossing safety initiative is when you treated crossings, you just treat the crossing, you know, pretty much there, as is with signs and devices. Because when you start looking at the geometrics, and you start looking at the approaches, in some cases you are going to get off the railroad right away back on private property. And if you are doing something with federal funds or state funds, you are going to have to have some right-of-way if you are going to have public dedication to deal with private property. Those things can be overcome but

got to be considered.

MR. CRUZ: Adding to what Paul is saying, and Jason brought this up earlier when we were talking about it, actually, the best way to collect data on private property

is get a high-rail vehicle on the rail line itself, because then that's the only way you can be sure that you catch every single private property. Some private properties, by trying to go to them, you can't get to them.

MR. WORLEY: You still don't know where to go on the high rail. You don't necessarily know where it is.

MR. CRUZ: That's true. But using an aerial for anything like that might be useful.

MR. FIELD: To get a general idea and application too. You can tell generally a hunting trail from a boat ramp crossing or something like that.

MR. CRUZ: Going on high rails, you pick up another problem with the railroads need time to do that. In our experience, it's been very difficult to try to organize

the logistics on that.

So it's very hard to do.

MS. SPURLOCK: You had mentioned earlier about Transport Canada using the description restricted and unrestricted,

because maybe that's something we should look at too, because restricted would be somebody's really private property. He doesn't want you in their backyard when the train goes through a creek or something; don't go back there at all for your safety or anything else. And then there's the unrestricted, which is going into industrial yard. You want to go out and pick out some cement yourself. You want to go to K-Mart, Wal-Mart something like that. Because that's like if I want to go in and buy a tree from a nursery, it might be a private crossing, but it's not unrestricted to me.

So maybe that's another way you look at how you pass judgment on what kind of warnings should be aware, because the gentleman's farm crossing that nobody gets to but twice a year needs, I would think, a different kind of warning than somebody who

is going into a nursery to pick up plants in the spring or the fall.

MS. CARROLL: That begs a question for me is how do you determine how private or how public a private crossing is?

MR. WORLEY: That's what I said. You can't, because you get into situations where people have a driveway. It's a nice wide driveway. It says don't use this driveway unless you have business with us. Don't be turning around. I see that as restricted. That's when you get into the United States, the private property rights issues and farm bureau and all of that. That's one thing when you start talking about people at the table you are dealing with, you might as well ask the farm bureau to be here too, because the property rights mentality, it's a little bit different in Canada versus the United States.

MR. SHANK: Canada may be unrestricted, would be the equivalent of say municipally dedicated versus restricted any other too.

MS. CARROLL: I haven't read -- the law hasn't been passed, so it's not open for public viewing. So I can't give you a definition of what it means. But from Leslie's comment, how would you deem a

private crossing that has public use? Is it more than one user? Is it more than ten users?

MS. SPURLOCK: Make it so that the owner is not shooting at them.

MR. WORLEY: Maybe you just choose.

MS. SPURLOCK: Obviously, some owners if you are going in to buy parts, what do they call it, like an auto graveyard or something, because you are looking for a hub cap, they know the public is coming in, so they are unrestricted. Or like I said, a nursery or a Wal-Mart or whatever it might be. A concrete company may not want you there at all. They are restricted except for their trucks that have permission to go over. Maybe you need to find out what their policy is of the company's, and just assume that somebody who has got it on their farm property, that's going to be restricted.

Why even ask them? They don't want you in their backyard.

MR. FIELD: I think maybe the way to look at that is physically restricted. You know, if it's gated versus not gated,

because, you know, there are people crossing my property all the time walking, and, you know, but if I put a fence up, they would have to climb a fence. I think from a legal standpoint, it's gated.

I know in a lot of cases we assess private crosses in the public right-of-ways based on the fact there's a gate on this side of the tracks. If there's a gate on this side of the tracks, it's pretty clear the general public is not anticipated or expected to be able to go through there, unless they have permission from the property owner to go through their gate. And, you know, I think maybe it's something to look at, just whether it's gated or not as far as whether it's restrictive or not.

MR. GILBERT: You know, that restricted and unrestricted about three weeks ago -- this is Danny -- I contacted

Bill Bocheck and asked him what his definition of restricted and unrestricted crossing was, and whether it was private, public or whatever. I didn't get a good reply, because I don't think they know, and

I saved the e-mails. I mean, have you talked to him about what they mean by restricted and unrestricted, because they couldn't explain it?

MS. CARROLL: It was CP rail that brought it up at the Minnesota meeting. They mentioned these new regulations that are about to come into place, and they mentioned the fact that they weren't public and private anymore, it was restricted and unrestricted.

MR. GILBERT: I will send you the e-mails then.

MS. CARROLL: Thanks, Danny.

MS. SPURLOCK: For that matter, do we have to wait on Canada? Can we do our own?

MS. CARROLL: Yes, we can do our own.

MR. FIELD: We're not in Canada, so.

MS. SPURLOCK: There you go.

MS. CARROLL: It's good to look at

what other folks are doing as well and what the regulations are.

MS. SPURLOCK: But our definition of that could be different, and that's okay.

MS. CARROLL: Would you have a

definition of a public crossing be the same that it is now, and then subdivide a private crossing by restricted and unrestricted, and then would you provide guidance for unrestricted private crossings?

MR. FIELD: I would think the applications are not necessarily based on restricted or unrestricted, because if you go with the gated issue on that, that's going to really affect the ADT issue, which is based on the engineering judgment to apply the crossing. If it's farm crossing, twice a year you are not going to sit by gated swing gate, you know, or something like that. And perhaps a sign if you have got an unrestricted crossing, say to a boat ramp, we have some of those, then you are going to look at that differently just because it's a much more used crossing.

MS. CARROLL: So you are talking about

a physically locked gate?

MR. FIELD: The existence of a lockable gate.

MS. CARROLL: The existence of a lockable gate.

MR. FIELD: We can't get into the business trying to police these gates that are required to be locked; however, the railroad is in a position, based on the fact they are on the corridor, to perhaps prevent the private crossing as a continual unlocked gate that's supposed to be locked.

MS. CARROLL: Okay. Any other categories? I added commercial to this. Any other types of crossings we want to --

MR. RIES: I was just going to go back to your question about, you know, should we change the definition of public crossing? And, you know, my initial reaction is that it might not be good public crossing from federal funding perspective has a very statutory requirement. So I don't think changing what's a private crossing now and making it "public" would be very confusing to start allocating funds. That's not to

say, you know, the decision is made that that's a good use of public funds through the use of private crossings, you know, that's a subject that probably could be explored. But I think you need to keep the

basic definition of what a public and private crossing is, and then make subcategories within private crossings.

MS. CARROLL: Okay. My question would then be: How many people or frequency of vehicles distinguishes a public from a private crossing, Ron? Or is there any?

MR. RIES: The number of vehicles does not have anything to do with distinguishing whether it's public or private crossing. It's who holds the roadways, whether it's a public authority owns the roadway on both sides of the crossing.

So there are private crossings that have much higher traffic than a public crossing, the ones that go into the Wal-Mart or big industry. That's why I think you keep that separate.

Now, the question is when do you get into a private crossing that's open to the

public access? And, you know, there's talk, maybe it's when there's a gate. I don't know. If I'm a property owner, I have a crossing that goes into my residence, would I want to have a gate in front of it? And

considering also then the exposure that how the person if you have to be on both sides of your right-of-way, you are crossing the track six times either on foot or on --

MS. CARROLL: To go and shut the gates, it seems like is there an open invitation to the general public to use it might be a category.

So that might fit in with the cement trucks. You don't expect the general public to be invited into that, my private residence. I don't expect that, but I am going to have my invitees, I am going to be having some other people that service my house, that type of thing.

So that might be another way of looking at it. Do you expect John Q public to come in? So the TV repair shop, since you would be expecting people to come in, drop off their TVs, would be open to public

use. Certainly it's not comparable to what you have with the Wal-Mart. So it's probably somewhere you need to make decisions, or you have different categories open to public access type of things.

MR. WORLEY: Let's just start with closing them all.

MS. CARROLL: Arthur mentioned that. Let's just start with closing them all.

What I'd like to do now is move into the engineering design piece of the discussion and look for suggestions as to what would be our minimum kind of engineering design for private crossings, and we can work through, you know, sight distance, we can work through geometric design, we can work through sign, signals, gates, and things like that and see where you think we need to go in this area, because there's no uniformity right now, as you saw from some of the pictures, some people are using stop signs, some people are using yield signs, high-speed rail crossings have their own sign, and there are gates out there. There's all sorts of things.

So I'd like to start the discussion with if we had money, and if we had resources to use the money, and we've collected all the data that we need, where would we go? What would be a minimum

traffic control device? How would you control access on private crossings? What would be the minimum? Would it be, Jason, you mentioned a yield sign versus a stop sign. Is there a consensus that we can get to for this kind of thing?

MR. WORLEY: I like the southern sign.

MR. SCHWARTZ: Stuart Schwartz, S-T-U-A-R-T, S-C-H-W-A-R-T-Z. You might have a hard time getting consensus, in view of the fact that I think three upper class ones now have stop signs that are all private crossings, at least one state, that's California, requires them. There's not necessarily uniformity in terms of the signs themselves, although Norfolk Southern's sign is very similar to BSF and UP signs. So that you got at least one state, and perhaps there are more, I'm not aware of any, but it's conceivable that

there are other states as well as that also require stop signs.

So you may have some difficulty in establishing any kind of consensus that's an appropriate warning device, if you want to

call it that, the question whether or not it requires material crossings. Simply as a basic warning sign, you may have some difficulty with that.

MS. CARROLL: Do you have an understanding as to why those three class ones were stop signs based on some of the discussion earlier about heavy and long vehicles entering industrial sites that may need longer clearance types?

MR. SCHWARTZ: At the very least, if you require a vehicle to stop at a private crossing, you are giving him the opportunity to see whether a train is approaching. And I don't know precisely what phrase to use when you are stopped at a point when you could see in both directions and you can see whether or not a train is coming, that gives the driver an opportunity to avoid going across the crossing when the train is

approaching more so if there's a yield sign and the car was moving toward the crossing.

I can't speak for any other railroads that have those, and given the fact that California has established that as their

criteria, there may be some support. I understand the highway organizations, generally speaking, are not in favor of using stop signs in broad scale.

MR. BROWDER: I have a hard time starting this discussion with the issue of if we had the money. I think the root part of the analysis is what is the safety issue, and addressing it from the perspective of what needs to be done to do the maximum for safety at private crossings, and we can certainly, I'm not saying money isn't an issue for everybody, but that's where our focus would be.

Now, I have a follow-up comment, which you kind of got him started on, old Stu, and I would make the comment that from a safety perspective, there is no difference in terms of sight distance for the public versus private crossing at passive crossings. And

that it is very well spelled out by FHWA and reiterate it in that October 2002 report for sight distance. And I see no reason why anyone should vary from that perspective and if they are going to put out any kind of

standards or practices for private crossings.

MS. CARROLL: Thank you, Bill. I'm going to go up to the board for a minute.

I'm trying to think of how we can organize this based on public crossings.

The first thing that we do is we close them, correct? That's the first approach to take for safety sake?

MR. GILBERT: I'll second that.

MS. CARROLL: Thank you.

What would it take and what's the difference between closing a public crossing and closing a private crossing?

MR. FIELD: Requiring the right-of-way to reroute the driveways, because if you cannot take along the railroad's right-of-way, you are taking it across.

MR. WORLEY: You can negotiate for private driveway, and the cost is what you

get them as a settlement. They have 90 days to find another way.

MR. FIELDS: That's the difference between private and public though.

MS. KLOEPPEL: Don't you have some

issues about that, you close a public road you have to worry about providing access?

MR. FIELDS: There's a documented way to provide a right-of-way with public versus a private driveway, unless the state agency or municipal agency is going to maintain the roadway.

MR. WORLEY: We don't build roads for that purpose.

MS. CARROLL: What are some of the other issues that you found in your experiences that are public versus private to close crossings?

MR. WHITEMORE: Shane Whitemore with CSX. When you look at private road crossing closure versus public, it becomes public issue, and it turns to popularized issues that we talked about in Minnesota. It's not the state agent, I mean as Jason touched on, the state agency can come in and condemn and

make a public road for altering access. Those options aren't available between property rights issues between landowners. That's what we are, a landowner. The railroad right-of-way is owned, its title is

varied. It goes anywhere from fee simple to a straight license to operate through the property.

So when you look at property owners, it's just like Grady and I are neighbors, and I want to cross his property to get to Ron's place, right, Grady says go ahead, right. So at that point, you know, that's how I get through there. If he wants to close it, he says no, I'm not going to close it. You granted me the right to get to Ron's house.

So the state can come in and say we're closing it, right, we voted, you've elected us, so, you know, the city counsel has come in and we're closing Oak Street, we're going to put a cul-de-sac here, and this is where you go. The property rights issue, the owner says I'm not closing for anything. This is mine. I've got a right to cross

here.

So when you look at that, it becomes harder to close them. You have to give them money. You have to compensate in a different way. You don't have the force of

law to say we're going to take it, so you got to come in and try to negotiate the closure and negotiate getting rid of that right. Norfolk Southern and other railroads spent money to do that, and, I mean, we all go out and do it. I don't want to speak for Norfolk Southern. That's the fundamental difference I see between a public and private closure. I know it's not engineering. I will wait to San Francisco to start talking. We are talking about rights issues.

MS. CARROLL: That's okay. We will say CSX said.

MR. PETTEWAY: One of the things he did mention was legislation. From a state's perspective, we have laws that allow us to close crossings. On private crossings, we don't have that. So we don't have that power.

MS. CARROLL: You need some sort of legislative support to be able to do that. Any other thoughts on closures?

All right, so we have a private crossing. We can't close, but here it is.

It doesn't have any signs or signals on it. Is that -- should that be allowable?

MR. WORLEY: If they don't use it much, one option may be gates and locks.

MS. CARROLL: So you want to put that as a possible access control?

MR. WORLEY: It's what we consider, one side.

MS. KLOEPPEL: That's if it's not used much.

MR. WORLEY: It's farm, seasonal, property for storage.

MS. CARROLL: Anybody else? We have a private crossing. We can't close. What would you like to see up there?

MR. FIELD: You start with a sign package. If there's something that you don't have the ability to investigate across the board in some states, like you were saying earlier, I don't think stop sign was

the way to go, although I thought I made that point.

MS. CARROLL: Three class ones use stop signs. You mentioned that you would like to see yield signs?

MR. FIELD: In North Carolina, that's what we start with. The only way we put up a stop sign at a crossing is with an engineering violation site list. If it is determined by our division of traffic that it's not an appropriate use of the site issue, then we would go with a yield sign packet similar to what Norfolk Southern has been using, the low sign with the crossbucks and what not.

MR. COTHEN: Can I interject a thought or two on this? And I'm going to count on Mr. Ries, who was on the technical working group and others to bail me out when I overstep.

In that report on page 14, the group reported the Department of the Transportation's position, the Federal Highway Railroad Administration's position expressed in a memorandum that was widely

disseminated back in, oh, I don't know, this was actually March.

MR. BROWDER: March of '96.

MR. COTHEN: I think earlier. And what had happened was that we were getting

pressure from the transportation safety board on stop signs.

We also had on staff a fellow named Bruce George, who favored the use of stop signs at highway rail crossings. And we said -- we had conversation with Federal Highway Administration and tried to drive home the utility of a stop sign, and, of course, there are a variety of considerations that need to come into play. But one of the questions that Anya was trying to ask is: Is there a difference in terms of the considerations that might apply with respect to the selection of default signage?

The considerations that were -- federal highway, federal rail suggested be applied, this is in the public crossing context, was that local and state police and judicial officials commit to a program of

enforcement, no less vigorous than would apply on a highway intersection equipped with stop signs. That's a point that's got a double-edged sword. It might cut either way. Clearly, I have a program of

enforcement by public authorities of a stop sign at a highway rail crossing. However, it would establish a standard of care for the user, and to the extent the user is also made aware that it's private property, that may establish some degree of responsibility on the part of the user of the crossing.

The second was installation of a stop sign would not occasion a more dangerous situation. Taking into consideration both the likelihood and severity of highway rail collisions and other highway traffic risks than would exist with the yield sign.

And here, in my memory at least, what I was concerned was rear end collisions that can occur in a traffic stream. You place a stop sign, perhaps it's light rail traffic on the line, and people don't expect a train. And one out of three motorists decides to actually observe the stop sign,

and now we have proliferation of rear end collisions.

One can argue that that's applicable where you have commercial and industrial use, particularly in mixed population. One

can argue that that consideration is inapplicable for likely used highway rail crossings.

There were then a number of considerations or conditions that were called out as indicating the use of a stop sign as being appropriate, higher train speeds, highway traffic mix, includes buses, hazardous materials, carriers or other large equipment, quite a few trains, passenger trains and so forth, including other geometry issues at the crossing. That might challenge the motorist in terms of picking out the train on approach.

Weighing against the highway is, other than secondary in character, recommended maximum of 400ADT in rural areas and 1500 in urban areas.

So one can argue to the extent that private crossings, ADTs are lower, that

maybe a stop sign would be less objectionable.

The roadway's deepest ending grade to or through the crossing, sight distance in both directions is unrestricted in relation

to maximum closing speed and heavy vehicles use the crossing. Theirs may be more apropos of the reference of the difficulty of some heavy vehicles crossing but would argue against the stop sign.

Relatively contemporaneous with this document being published in the same general stream of discussion that was going on at FRA, we did generate closed private crossing guidelines. We noted that the states that had at that time acted to require specific signage for private crossings that opted for crossbuck and stop sign, and we suggested for discussion that that would be default signage.

Clearly, you know, there are circumstances where that doesn't work, shouldn't be applied. Clearly if you had the ability to do all the things you do on a public roadway it's probably not very smart

to start with mandatory yield and then option of stop sign. Don't get too many public traffic engineers out to these public crossings. It's one of our issues, so we're talking about a fairly complex calculus.

I just throw that in to further confuse anyone who isn't already.

MR. GILBERT: Typically, if you've got a private crossing, you've got a much lower automobile speed approach speed than you are at a public crossing, plus you are going to have, you know, probably surface treated or gravel treated approaches. So you are not going to be able to operate at 30 or 40 miles an hour going across there. So I don't think you are going to have some of those issues as you would have at a public crossing stop sign.

MS. CARROLL: Thanks, Grady. That was really informative, because I had forgotten all that stuff.

MR. FIELDS: Grady, I agree with you.

MR. RIES: It might be useful if the railroads that do have a standard signage package, that they require or like to have

posted at their private crossings, if we could get a template of what the standard package is, what they look like so we can just compare with what the different railroads use.

MS. CARROLL: Anybody that has a standard suite of engineering designs for private crossings, if we could ask you to entertain us with whatever your views of the criteria, that would be very, very helpful in the process.

MR. RIES: Also, I think Oregon has a standard crossing sign package that they require in addition to California.

MS. CARROLL: I think California's just became binding, didn't it? Didn't they just pass legislation that included public as well as private?

MR. RIES: I'm not sure.

MS. CARROLL: Are there any special signs that anybody uses out there from this regional group? You mentioned the look both ways sign. I mean, does anybody say, you know, this is a private crossing, you know, you are not supposed to be here? Are there

signs that limit or supposed to restrict public access? No public access? Do you use that standard sign at all on private crossings?

MR. BROWDER: There's no standard,

that's the point.

MS. CARROLL: Not for private crossings, but there are other standard signs. I'm saying did people use other standard signs?

MR. BROWDER: Yeah, but not that say private crossing.

MS. CARROLL: No, but might say no public access or restrictive use?

MR. BROWDER: I don't know. Where would that be?

MS. CARROLL: I don't know. I'm just asking the question.

MR. BROWDER: No, you are asking if there are signs. I'm saying there aren't. You can take the ones that are used in the MUTCD that may be applicable to private crossings, but there are no standards and practices for private crossing signs.

MS. CARROLL: That's correct. There

are no standards or practices, but does anybody use an MUTCD sign as part of their operating practice? A state or a railroad may use the look both ways sign or the yield sign.

MR. FIELD: We do have a location where we have a traffic signal, that's not prohibited. One of the legs is on a private road. We have got a sign there indicating stop at the stop mark on red, which is a standard MUTCD sign.

MR. RIES: I believe that the NSF private crossing sign indicates private crossing, no trespassing. So that would be useful.

Also a question that would be interesting to, you know, do the railroads also boast a emergency notification sign as part of their private crossing package? A 1-800 number to report problems might be something to consider in a suite of signage.

MR. SCHWARTZ: I can tell you that Norfolk Southern does.

MR. CRUZ: One issue with signs that we have seen at several class one railroads

is that the crossing number to identify that particular location has faded, and a lot of times with the 1-800 number, the EMTs or emergency services have a hard time finding it, because the numbers are not on those

signs. The signs are actually not that good.

MR. RIES: I think over the years, the quality of the signage has improved as far as keeping the numbers there.

MS. CARROLL: Skull and cross bones? Anybody use skull and cross bones?

MR. RIES: Always expect a train.

MS. CARROLL: Always expect a train.

MR. FIELD: I always like the one on my e-mail, watch out for the damn train.

MS. CARROLL: How about those of you that have active devices at private crossings? I mean, you can consider a lockable gate active, it's sort of the users do the activity.

MR. RIES: Active is train activated.

MS. CARROLL: Well, there's an active with these people. Train activated private crossing. Anybody have any of those?

MR. CRUZ: They have some hump crossings on the active side.

MS. CARROLL: Not on the passive?

MR. BROWDER: Well, all railroads that have industries with new private crossings,

where there is any kind of substantial amount of vehicular traffic are going to require active warning devices in the agreement before they have -- give anybody authority for a new crossing. Shopping centers, sporting arenas. So that's a question that I can answer clearly they are all out there. There are limited numbers. And, again, we're not the highway authority. We are interested though in protecting our liability and our own people by ensuring that there is a significant level of protection provided to ensure safe operation over the crossings.

A good example happened twice at the same crossing in Kissimmee, Florida, where a private vehicle operated by the Kissimmee Power Authority was hit by an Amtrak train at a crossing with active warning devices.

MR. COTHEN: I thought it was

gentlemanly of you to leave out the part where the state police escorted them on to the crossing.

MR. BROWDER: Florida State Police.

MR. COTHEN: Florida State Police.

MR. BROWDER: And videotaping it.

MS. CARROLL: So Bill, when the railroads negotiate with industry, is it just based on volume of vehicles or type of vehicle as well? I mean, if you are dealing with --

MR. BROWDER: It's probably all of the above. And quite frankly, I would say there are many different aspects to be included, and usually the railroads that I'm familiar with, some of them even will use highway authority consultants to give them a perspective on what would be safe as far as warning devices are concerned.

MS. CARROLL: So do you know of anybody that has like a standard checklist of items that they hadn't addressed as they go through this negotiating contract?

MR. BROWDER: Yeah, the railroads have a standard -- not a standard checklist, but

they have a checklist, proprietary checklist that they use.

MR. FIELD: In North Carolina, we apply the same standard to a public use private crossing that the railroad is

requiring signals to be engaged that we would of a private road.

MS. CARROLL: You use --

MR. FIELD: As far as pavement markings, warning signs, we require the same applications, but the issue we run into is we don't have the authority; the railroad does in that case. And what we'll do is we will work with the railroad as well as the developer and their consultants to determine what -- based on what plans they need to send to the railroad, the railroad engineer, the railroad still installs them just like they do on any crossing signal project.

MS. CARROLL: Any other topic or items to list under train activated warning devices at private crossings? How about ITS? Anybody ever use any ITS? I know in Minnesota they had the C3 product or whatever that they tried. I don't know if

they just demonstrated and that's it.

MR. BROWDER: There's nothing out there that doesn't require an FRA waiver, and quite frankly, the issue of failsafe operation that have concern for meeting the

FRA guidelines where appropriate, has always been a concern for the railroads.

MS. CARROLL: How about grade separation?

MR. BROWDER: How about what?

MS. CARROLL: Grade separation at private crossing? Anybody done that?

MR. BROWDER: I'm sure it's been done, but it's so expensive that it's rare, and in many cases about the only times that that is going to occur is with a little help from our friends at the state that are interested in attracting a major industrial partner. And an example I can think of is Virginia, Coors Beer. I'm sure there are others, but, you know, when you expect to spend anywhere from five to $25 million for an overpass or underpass, there's got to be a significant reason to do that at a private crossing.

MS. CARROLL: Coors didn't want to

spill their beer.

Do you have something to say?

MR. WHITEMORE: No, I was just going to reiterate the same thing that Bill said, is that we require a major food

distribution, you know, we had the example North Carolina DOT out in Asheville, we required Winn-Dixie to put an overpass in which they constructed at their expense a silica mining operation that required an overpass that still requires us to give them some property right easement to put the footers in across the railroad and stuff. We have to work those issues out. Very, very rare that somebody wants to spend the money.

MS. KLOEPPEL: I guess I'd like to interject, if I could. I hear loud and clear that there are a lot of considerations that you think are identical for public and private crossings, such as the needs for sight distance and the need for consistent work profiles. But are there engineering and design considerations that maybe could be different at private crossings as opposed

to public? We've talked a lot about the signs, but we haven't really talked a lot about road design and intersection design. Realistically speaking, we're probably not going to be able to rebuild every private

crossing to a public roadway standard. Are there nevertheless some kind of guidelines that we can work toward?

MR. FIELDS: Jason Fields, NC DOT again. There are a lot of varying degrees of designs and construction of private grade crossings. There are some, you know, I drive a Suburban, and we are out doing these things in these locations. It scares me to death to cross the tracks, because I can't see anything. I think there should be some guidance as far as supplying an appropriate roadway width for a designed vehicle. You know, if it's a residence, it obviously would be a 24-foot wide crossing. Whereas, if you have a distributor, where you have trucks on it, it would probably be 26 or 28 is the minimum for a two-lane crossing.

In addition, pavement depths vary greatly. You know, that's another issue.

Generally, across the tracks, you have asphalt, which is whatever the height of the rail is, but then as you taper out get off the edge of the ballast line, that pavement runs down to nothing. And it depends on who

the road master is, I think, as to what kind of ramification on the edge of the asphalt crossing. I think as a general guideline for a single-lane crossing, there should be nothing, in my opinion, less than 13-foot wide, just for a one-lane crossing, and that's with minimum, I think what any of them should be. You know, preferably you would want something 20 to 24-foot as far as the width of the crossing, just so you don't have people getting hung up on rails late at night, been at the bar or whatever else we all know that people generally do before they go and cross that crossing near their house.

And as far as pavement width, I think they should be controlled basically for ease of maintenance of railroad. Generally, there's a contractor that's putting that pavement in. The more that pavement

deteriorates, the more they have got to deal with it.

We heard this morning that there's issues with possible litigation from private crossings and things of that nature.

You know, as far as approach, I would suggest, you know, a typical standard we used for signals and gates would be 15-foot offset. I think that's a reasonable distance to determine the pavement for approaches. So you have got a nice transition you got made from asphalt the whole time, versus going through gravel as you go up the ballast line. It's not really a good idea to have your back tires on a gravel approach if somebody decides to gun it because they see the train coming around the corner.

MS. KLOEPPEL: Does anyone else have any other suggested considerations that would make a private crossing different from a public as far as engineering?

MR. PETTEWAY: I'd like to say something. I think for us, meaning DOT engineers, it's really hard for us to say

anything that's outside of state standards.

I think in all aspects, when you have a private road that's at some point in time is going to be a state road, most generally you are going to find them wanting to build to

whatever standard, it may be the state standard or municipal standard, where somebody can take over the maintenance.

So in a lot of cases, I think from our perspective, we are going to want to see it built to state standards, so at some point in time it can't be taken over.

Now, there have been times where the municipality will take over, and their standards would be what we would require. That may be a change there, but I really don't know from a state standpoint. I don't think we can look at anything that was less than what we would require.

MR. RIES: Do there need to be different design standards for the different types of crossings?

MR. FIELD: You would need two, I think, just for a single driveway. You are not going to necessarily have the same width

requirement you would for Long Beverage. So I would say we don't have more than two standards for that kind of thing.

MR. PETTEWAY: Right.

MR. WHITEMORE: Jason, that would be

assuming that you are driving a car over on it, but if you were having a tractor going across, you would have a different standard of a tractor going across the field from side to side versus an automobile.

MR. CRUZ: Or a tractor trailer --

MR. FIELD: Tractor trail there --

MR. WHITEMORE: The resident has a tractor trailer. The reason, I'm asking, you said there only should be two standards. I'm kind of saying let's kind of revisit that and say well, what's the use.

MR. FIELD: I think one issue you don't want to get bogged down with too many standards to pick from. If you are looking to have a relatively simple process for application across the board, you know, we're fortunate in North Carolina, we have got to look at stuff we do very often, maybe take the worst case scenario. Assume, okay,

the vehicle, maybe a tractor trailer for a single residence, what do you need for that? And, you know, use that as your narrower standard, if you will. If there's a larger standard, have a minimum requirement for a

two-lane road. If you have got a guard house going into a facility and a lane on both sides, obviously it's going to be eight feet wider to incorporate the fact that the guard house is on the other side. There's going to be exceptions to these rules anyway, as there always are. That's why we all have jobs.

MR. WHITEMORE: Me too.

MR. FIELD: Yeah, but perhaps maybe the two standards you should look at is single lane versus multilane and have a certain width generally off the cuff. If somebody says they are building a house on the other side, what do you all require? There's a general guideline well, if there's a tractor trailer and say somebody buys a house years down the road, and they own a truck, you know, if you run into that issue, maybe you use the worst case scenario of

that.

MR. CRUZ: The question I would have is the standard that you talk about now developing, is it for crossings that exist already, or for new crossings that they are

planning to put in? Because if you are trying to build the standard based on existing crossings, the vertical clearance alone, and to be able to change that from the private stand point or requiring somebody to do that will be cost prohibitive. Most private crossings, I would say the ones that we visited, have I'd say 90 percent of them have to have a vertical clearance issue, and how are you going to address that?

MR. COTHEN: FRA is progressive and proven in railroad safety. I mean, I think realistically we all have to be talking about perhaps a gold standard for new crossings, both in terms of showing the necessary, if they are suitably configured by engineering, and what's realistic in terms of remediating acute problems out there with other crossings where there's a

long history of use and subtle expectations.

MR. YOUNG: George Young, NCDOT. If we were able to establish standards for these railroad crossings, how in the world are we ever going to enforce them?

MR. COTHEN: Danny left because he can get out the draft of the guidelines. I can't believe we are this deep into this second meeting this just coming up. Tell the railroad to barricade the crossing. I mean, that's effectively what you would have to do if you had a federally led program.

MR. YOUNG: Who is going to be out there to determine whether or not any particular crossing, whether it's new or old crossing, meets the prescribed standard? Is it going to be the railroad's responsibility?

MR. COTHEN: State inspector.

MR. YOUNG: That's where I was afraid.

MR. COTHEN: That's an excellent question, and one that would have to be work out.

MR. BROWDER: That goes back to the program that I mentioned, that CSX has, and

the frustration that the railroad had in trying to implement some kind of programs where they did close crossings, which was completely negated in some locations by local judges issuing orders for them to

reopen the crossing. That's exactly what they tried to do.

MR. WHITEMORE: Just facts around Bill's statement, just so we understand the magnitude of the issue. We have 9,800 and change private crossings out there. We have 680 agreements, okay? So when you look at were they are there and the rates that the people have, you know, now we are researching our deeds. We are trying to figure out if we give them a deed of right to somewhere, as we look through each one of these, I can't imagine we would have two or 3,000 deed of rights for crossings, just assume 6 or 7,000 people, we have to litigate or pay off whoever, to get the road crossings closed or whatever, if we don't need them, it becomes a huge problem. And get them to sign an agreement if we do need them, you are crossing our property, we have

the expense and liability of that crossing being in place, what's your responsibility as a private owner as you come up with these guidelines, these standards for construction? Who is going to bear that

cost? And, you know, we keep coming to that well, barricade them. I say okay. This is a Shane Whitemore, not a railroad CSX perspective, if you say barricaid, that's what I wanted to do all along, going back to option one, just close it. It didn't have the right of clearance, didn't have the right to issue, I just wanted to close it anyway. We don't want it there.

MR. COTHEN: I just want to emphasize from the Federal Railroad Administration point of view, that kind of option has been discussed for legitimate safety reasons, and that is that, you know, these collisions derail trains and they harm employees and potentially a danger to the surrounding community. And even where the only person hurt is whoever is in the motor vehicle, and that's something that we want to avoid at all costs, which is why -- not all costs --

but every reasonable cost, which is why Miriam started with the statistics on the deaths at private crossings, but even when we don't get to that point, very often, you know, you traumatize railroad employees who

have been subjected to the event involuntarily, not something that they could have done anything about. And that's something that we usually don't have to raise from an FRA standpoint, because labor organizations will be the first to do so because their members are those at risk.

MS. SPURLOCK: Just two comments I wanted to make regarding municipality.

What I've seen in private crossings is the phenomenal costs involved, because some of these are around curves and things that would cost millions just to blow out the mountainside to give the municipality the approach. So that's something we would have to consider there, and also the single versus the multiple lanes. I've seen old probable dirt roads that were just paved over in communities in private crossings but they are only one car wide.

So if you set a new standard for private crossings being two lanes, what did you just do to the thousands of roads in all communities that are one-lane wide?

MR. FIELD: I think one issue in

speaking to that -- we are only looking at two issues here -- one is protection of the crossing, and the other one is the designs that the crossing is put in at. If you drive all over probably any state and as the design changes have changed over time, you don't see the state agency and city agency go back and widening everything from the ground up. If we apply the new standard to utilize, it would be, you know, something I think should be applied on project, as they occur, as they are able to be addressed, because, you know, we have got plenty of roads out here that are 18-foot wide, even though our current pavement standard is 26, and you get up in the mountains, there are some places you have got 14 if you are lucky.

And, you know, I think perhaps the biggest thing to look at is the protection

of the cross itself. I mean, that's kind of a standard. We've taken on projects here in North Carolina on treating the existing condition as it is, but as we are getting into this private crossing issue, I think

it's important, as you all raised, to look at the engineering construction of the private crossing. And if a developer is going in to develop a thousand home community, which we have all over this state, there should be a standard he is held to that the railroad can lean on and say well, you know, according to FRA, this is what's required. This is not just ours, although we currently use that practice. But I think the biggest thing is look at the protection of the crossing and as a secondary have a standard to be utilizing private crossings can be addressed when feasible, when there's money available or when things change there that can be applied to that; not going out there and force everybody to change it today because of this new policy that's out.

MS. CARROLL: I have one other

thought. Back in 2003, we had a research needs workshop that FRA sponsored and we brought together universities, railroads, states, industry people, suppliers and we talked about what research needs there would

be for grade crossings. One of the topics that surfaced was limiting the access to railway lines, that was a topic of research. What I'm hearing is that the rail ways would love to have the ability to say you can't cross my tracks, because I'm under this criteria if I've got 50 trains a day and I, you know, such and such conditions, speeds of, you know, 90 miles an hour, let's not build a grade crossing here.

MR. YOUNG: Can't they do that anyway?

MS. CARROLL: I would divert to Grady on that one. But it was a research topic that came up that just came to mind based on the comment that CSX made.

MR. WHITEMORE: We didn't talk to him.

MR. STAYTON: That was Shane, that wasn't CSX.

MR. BROWDER: No, she's talking about other stuff.

MS. CARROLL: Grady, do you know of any way that a railroad can ask for limited access and to control access to their crossings?

MR. COTHEN: Well, some of these folks

who deal with this on a daily basis can answer more specifically. But, you know, I think what we're facing here is, you know, a variety of state laws. We had one in the Midwest where an agricultural crossing can be demanded, unless we provide it in one of the states in the Midwest.

In some cases, particularly in the east, railroads are operating over easements, and the fee holder can be determined. They may have some residual right to demand access to cross the railroad et cetera, et cetera. I think it's infinitely complicated from a property law standpoint. You know, if we were to regulate in the area, we would regulate on the basis of safety, and under the commerce clause in the interest of getting trains over the railroad safely, and that would be our focus, and the costs would fall where

they may. You know, I can't imagine FRA trying to determine how the costs would be distributed.

MR. WHITEMORE: Except my understanding talking with New York DOT,

that on their high-speed corridors they either have passed legislation or are in the process of working on legislation that says on a high-speed corridor, for safety reasons would take over denying or have a crossing removed, private crossing removed.

MR. RIES: I was thinking that's probably the only, from an FRA legislative regulatory perspective, would be our safety standards for high-speed trains, where crossings cannot be at 125 miles an hour or greater, there might be a hook there if you had a high-speed area and came and wanted to put in a crossing.

MR. WHITEMORE: I think that's what they've done, passenger high speed.

MS. CARROLL: Any other comments or questions, engineering design, anything in general?

MR. YOUNG: I guess I might just

question whether or not that's something you need to look at beyond classifying crossings for protection purposes. In other words, I thought we were here today to find out what kind of protection to provide existing

crossings and not to maybe establish a standard for construction.

MS. CARROLL: I think the charge was everything and anything that we can hear. So I think it's open to any inquiry, any safety discussion. With that, I'm going to turn it back over to Grady. I'm done with my piece.

MR. COTHEN: What I'd like to do is I'd like to ask parties if you would think about another one of these three dimensional things. We have got issues working here related to characteristics of, other than public crossings, which we will call private crossings for the heck of it, and these are crossings that our colleagues in the state DOT don't have full control over for one reason or another, and we refined some categories of private crossings that we began to etch out in Minnesota, and we will

feed that back and put that in the docket.

We talked about possible needs for closure or basic signage, more advanced signage, perhaps grade separation as warranted. We've heard that all of those

really are relevant issues already in the field. And we noted that there are a variety of documents, resources available from the public crossing side that may provide guidance maybe on all fours, as we say in legalese, with the private crossing side, or it may not require distinctions to be made.

There's one aspect of this that we mentioned only in passing, and one of the reasons that we have such close association and only one with North Carolina DOT is their leadership in the high speed passenger service business, the sealed corridor project. And what they've shown is necessity of moving out with innovative or elaborate treatments to deal with not only the exposure to persons using the roadway, but also the exposure of passengers on trains. That's kind of the extreme example.

And in the northeast corridor, by the way, Washington and New York, each and every highway rail crossing, public and private, has been removed because of safety considerations on the passenger train side,

and a great deal of effort was put in to removing each and every crossing in Boston with only, I believe, 12 remaining in the state, all of which have very elaborate treatments. Some of them having elaborate treatments.

So another dimension for consideration is the degree of activity on the rail side, the speeds involved which drives accident severity both on the highway and the rail side and the mix of activity, freight, passenger, hazardous material and so forth. And as we talk about what may be warranted, what may be standard in these circumstances, certainly we would want to take into account, as we consider the effective and proportional use of both public and private sources would be the degree and risk at the crossing related to the nature of the rail operation.

So that turns into a pretty elaborate and complicated set of public policy issues. And what you all need to do, don't do it while you are driving at home, keep your mind on driving, if you are taking public

transportation or perhaps sitting on the front porch with some ice tea this afternoon, if you have further thoughts about that subject or as a team, for instance, we can get the North Carolina DOT to get back together after the meeting and have another brainstorming session, we would love to have your thoughts, not only with regard to how you think things ought to come out, but as we've done today in several instances, what further inquiry you think we should make before we make any suggestion on behalf of the affected communities as to what direction we ought to go.

Okay. This is a big job, and I think we've had a good day in Raleigh. And is there anybody else who feels like they haven't had a chance to speak about their issues today before we move on, adjourn, that is?

Well, if not, the docket will remain open, and you are certainly invited to contribute.

We thank North Carolina DOT for their guidance and help to arrange the facility

and the day and helping us lead on. We thank everyone who has been in attendance and is in attendance for their participation in the meeting, and I'm going to go home and tell my bosses that the railroad showed up and talked, so everybody can relax.

With that, this public inquiry is adjourned.

(Whereupon the hearing was concluded at 3:17 p.m.)

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While traveling in Austria we were driving to the rail station via automobile. There was a cassette tape in the radio. All of a sudden the tape stopped playing and a voicer came over the radio warning about the recent rain that has caused mudslides. The voice stated that some highways and rail lines were closed due to this.
If this system works in Austria for emergency weather reports it could surely work in the good ol USA concerning approaching trains at private rail crossings. The railroads,communication and electronic experts can work out the details. This system would save lives warning motorist via radio, cell phones or navigation systems. Navagation systems would contact only the few who have the systems along with the radio but just about everyone has a cell phone on when they are driving.

Missouri
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October 6, 2006

Mr. Ron Ries
Office of Safety
Federal Railroad Administration
1120 Vermont Avenue NW
Washington DC 20590

Re: Private Crossing Discussion Comment Period on FRA Docket No. 2005-23281

Dear Mr. Ries:

I am unable to attend the various hearings held around the country that involve safety inquiries for the various issues at private railroad crossings. I would like to submit the following comments on private crossings to be included in the compilation of comments that you receive. This is an issue that deserves attention and I salute the FRA for beginning the discussion on this important issue.

In our state, we have about 7,000 total crossings of which about 3,000 are private crossings. Private crossings in our state vary tremendously and defy a single description. This is because the vehicle traffic over the crossing could be anything from an isolated farm crossing used every few years by a lone tractor to a heavily used commercial business park used by hundreds of cars, delivery vehicles and commercial vehicles every day.

Our state statutes give us limited jurisdiction and options of what to do with private crossings, and federal laws and regulations on the subject of what procedures states should adopt are extremely limited in this area. We do investigate every fatality at a private crossing in our state, but our powers to attempt to remedy the private crossing after the accident or to prevent further accidents are unclear, mostly untested, and are not satisfactory in terms of designing an overall policy for all private crossings. Our state crossing inventory system does have subcategories of private crossings, which are private-farm, private-industrial and private-recreational. However, there are many crossings that do not fit neatly into any of these categories, and many change from one to the other without notice. Our inventory system is also devoid of much information on these crossings, as most have no information on vehicular traffic counts, signage requirements are unknown or vary widely, and even the name of the road may be unknown or may change from time to time.

Other problems with private crossings include: There is often no formal agreement between the landowner and the railroad establishing the crossing and no record of one, which leads to fights over when and if the crossing can be closed, the lack of consistent upkeep on crossing surfaces and whose responsibility it is to do so, and the variation on names used by our section, the landowner and the railroad on exactly what to "call" the crossing.

I would submit that as a place to start, private crossings have a definite "flow-chart" on how they are created, operated and maintained so there is at least a standard to follow, which I realize will not incorporate all of the existing private crossings, but at least would give a scenario to follow for best practices.

Then more importantly, there needs to be at least proposed a plan to further explore grouping of private crossings into further explanatory subcategories, and in addition that those subcategories would have specific requirements or procedures the landowner and railroad must follow in their dealings with these crossings. For instance, a category of "commercial crossing" would mean that although there is no public road over the crossing, the public is generally allowed to access the crossing and is in legal terms an invitee. This would encompass businesses, factories, amusement parks and the like that regularly build across railroad crossings and invite the public in for their own profit or as a way to do business. These types of crossings should have specific requirements put upon them such as those presently in effect for quiet zones that if there are accidents at the crossing, steps must be taken to make the crossing safer. Another category could be "restricted private crossings" in which the landowner has taken steps such as a locked gate at least certain times of the day or night to restrict access to the crossing, which in turn could provide incentives to the landowner and the railroad to restrict access to the crossing, which now there is no incentive for any party to do this. In return for the restriction and an ongoing commitment from the landowner that traffic over the crossing would be closely regulated, perhaps there could be some form of liability relief or relief from improvements being ordered. The private farm crossing category designation should also be explored and should also mean that the crossing really <u>is</u> a private farm crossing, not one that used to be a private farm crossing a few years ago and is now a business or home access. There should also be discussion of a notification requirement on the landowner and the railroad as to when the status changes, that they be required to notify their state railroad agency of record and the FRA, and that there be penalties assessed if this is not followed correctly. Lastly, serious consideration should be given to a uniform signage system for all railroads at all private crossings and a uniform rule on when or if the train whistle may be blown at a private crossing, as many railroads today will not blow the whistle if a crossing is private for any reason, (even if our agency requests it) although some will do so in certain circumstances.

Strictly speaking, there are now very little guidelines as to how private crossings are first made, how they are categorized and how they are changed. Unless and until there are some basic guidelines as to these issues, there will always be unsafe crossings that are regarded by the public as open to the public (and therefore impliedly approved by state and federal authorities) but in reality are private crossings much beyond the regulation of those entities.

Thank you for the opportunity to comment and I look forward to hearing more about this issue in the coming months as your studies and public hearings go forward.

Sincerely,

Rodney P. Massman
Administrator of Railroads
Missouri Department of Transportation

C: Lisa Lemaster-ga

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Michelle Silva
To the FRA Private Highway-Rail Grade Crossings Task Force

We are an operating railroad museum with part of our interpretive charter to display historic railroad crossing devices. The implications of the proposed task is to explore the establishment of forms of uniform standard warning devices. These could preclude the use of historic crossing warning devices in one of the last environments they can still be installed and displayed for historic purposes, i.e. the private railroad crossing. They cannot be used for public highway railroad crossings any longer. Yet the historic crossing devices still need to function in the environment they were created for to be historically interpretive. Many of the other issues of private crossings are of concern to us also but this comment focuses on the single issue of restricting the use of historic crossing warning equipment and devices for private railroad crossings.
Thank you
Steve Rusconi
Signal Department
Pacific Locomotive Association
Niles Canyon Railway

BEFORE THE UNITED STATES DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
WASHINGTON, D.C. 20590

Safety of Private Highway-Rail Grade Crossings; Notice of Safety Inquiry	Docket No. FRA 2005-23281

COMMENTS OF THE CALIFORNIA PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

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October 26, 2006

INTRODUCTION

The California Public Utilities Commission (CPUC or Commission) exercises rail safety oversight over railroads in California under the California Public Utilities Code and under the State Participation Plan with the Federal Railroad Administration (FRA), 49 Code of Federal Regulations (CFR), Parts 212.1 et seq. The CPUC also has exclusive jurisdiction over rail crossings within the state. Specifically in regards to private crossings, CPUC has the authority to determine the necessity for any private crossing and the place, manner, and conditions under which the crossing shall be constructed and maintained, and to fix and assess the cost and expenses.[1]

The Commission's General Order (G.O.) 75-D (administrative rules governing the standardization and use of warning devices at highway-rail crossings) has an entire regulation directed at warning devices at private highway-rail crossings. It requires a minimum of a STOP and "PRIVATE CROSSING" signs posted on each approach to a private highway-rail crossing.[2] It also requires a written agreement between the railroad and the party requesting the crossing.

The text of G.O. 75-D pertaining to private crossings reads:

7. PRIVATE AT-GRADE CROSSINGS

7.1 Pursuant to Public Utilities Code Section 7537, the Commission has the authority to determine the necessity for any private at-grade crossing and the place, manner, and conditions under which the at-grade crossing shall be constructed and maintained, and to fix and assess the cost and expense thereof. The Commission exercises such

[1] California Pubic Utilities Code §7537: The owner of any lands along or through which any railroad is constructed or maintained, may have such farm or private crossings over the railroad and railroad right of way as are reasonably necessary or convenient for ingress to or egress from such lands, or in order to connect such lands with other adjacent lands of the owner. The owner or operator of the railroad shall construct and at all times maintain such farm or private crossing in a good, safe, and passable condition. The commission shall have the authority to determine the necessity for any crossing and the place, manner, and conditions under which the crossing shall be constructed and maintained, and shall fix and assess the cost and expense thereof.

[2] General Order 75-D Section 7 pertains to private at-grade highway-rail crossings. The General Order is available on line at http://www.cpuc.ca.gov/PUBLISHED/GENERAL_ORDER/60157.htm.

jurisdiction when it is either petitioned by one of the parties or Commission staff.

The establishment of a private at-grade crossing, other than a private at-grade crossing of the railroad tracks by the owning railroad, must be authorized through a written agreement between the railroad and the party requiring the crossing.

Standard 1-X. "PRIVATE CROSSING" sign shall be installed at all private at-grade crossings. See Figure 6 for additional specifications.

7.2 At all approaches to private at-grade crossings there shall be installed either a STOP sign (defined as a Standard R1-1 in the CA MUTCD) or an automatic warning device described in Sections 6.2 through 6.6.

a) If a STOP sign is used, the Standard 1-X sign shall be mounted on the post below it.

b) If a Standard 8, 8-A, 9, 9-A, or 9-E device is used, the Standard 1-X sign shall be attached to the mast of the warning device below the flashing light signals.

7.3 The language contained in the lower portion of the "PRIVATE CROSSING" sign shown in Figure 6, commencing with and including the words "No Trespassing", shall be permitted at the option of the railroad.

The CPUC respectfully submits these comments regarding the FRA's Safety of Private Highway-Rail Grade Crossings; Notice of Safety Inquiry, on behalf of the CPUC and the people of the State of California. In this document the questions listed in the FRA's Notice of Safety Inquiry are shown in *italics*; they are followed by CPUC comments.

BACKGROUND

Private crossings carry most, if not all, safety concerns that public crossings have. Collisions can and do occur that cause delay, property damage, hazmat spills, injury and death. The parties involved in the establishment and use of private crossings must be cognizant of the potential incidents which could occur at such crossings, and, where appropriate, government should exert safety authority to assure such risks are eliminated or minimized.

The following are two recent examples of railroad-motorist collisions at private crossings that affected public safety. CPUC Staff addressed safety concerns for each crossing with the property owners, railroads and public authorities, which will result in crossing upgrades:

Example 1:
In April 2005, a fatal collision at a private crossing in a rural desert area resulted in two fatalities. A similar accident had occurred at the same crossing in 2000. Investigation revealed that the passive crossing is utilized by various parties accessing a propane company, a planned energy generation facility, an electric substation, a water facility, and open space for recreation. Trains run at 79 mph through this area, and although there is clear visibility along the track, drivers do not always take adequate precautions and often disregard the posted STOP signs on approach to the track. The crossing is in a narrow, paved road between a main highway and private properties on the other side of the tracks. CPUC staff informed the property owner that the private nature of the crossing was no longer valid and that CPUC staff would seek closure of the crossing unless the warning devices were upgraded to modern public crossing safety standards and, further, that the local roadway agency needed to take authority for the crossing and the maintenance costs associated with these improved safety warning devices. The property owners agreed and are financing the upgrades; the County has agreed to be responsible for the crossing and its maintenance costs.

Example 2:
A private unpaved road in Ventura County crosses Union Pacific Railroad Company (UPRR) tracks. The private crossing provides access to a Christmas tree farm as well as to three separate private residences. During the winter holiday season about 100 vehicles traverse the crossing daily. Daily train traffic includes eight UPRR freight trains traveling at 60 miles per hour (mph), ten Amtrak passenger trains, and four Metrolink commuter trains traveling at 70 mph. The crossing warning devices include STOP and “PRIVATE CROSSING” signs. There have been a total of five reported collisions at the crossing since September 4, 1986. The collisions resulted in twenty injuries and two fatalities. The most recent incident occurred August 5, 2005, involving a dump truck and an Amtrak passenger train. CPUC staff recommended upgrading the warning devices to flashing light signals and gates, advance warning signs, and providing illumination. The Ventura County Transportation Commission has acquired special federal funding and, together with the UPRR, will upgrade the warning devices at the crossing to gates and flashing light signals. Maintenance costs will be borne by the railroad as specified in the crossing agreement negotiated with the Ventura County Transportation Commission. Although the crossing will remain a private crossing, automatic warning devices will be installed.

COMMENTS

Question 1
At-grade highway-rail crossings present inherent risks to users, including the railroad and its employees, and to other persons in the vicinity if a train were to derail into an occupied area or release hazardous materials. When passenger trains are involved, the risks are heightened. From the standpoint of public policy, how do we determine whether the creation or continuation of a private crossing is justified?

CPUC Comments on Question 1

A private crossing is justified ONLY if it provides sole access to a parcel of land that has no other viable alternate access available that will not cross the railroad tracks. Private crossings have been thought of differently than public crossings because, in theory, only the private property owners and their invitees, guests, or employees use the crossing, and users should be aware of the existence of the crossing and associated hazard. This justified the opinion that there is no need for advance warning signage or automatic warning devices, as are typically used at public crossings. There is also the assumption that if a collision occurs at a private crossing, only the private property owner and the railroad may suffer the consequences of the crash, and therefore these two interested parties are solely responsible for the safety of the private crossing.

However, many private crossings are on farms which use temporary employees who may not be aware of the presence of the crossing and the associated hazards. Also, if trains carrying hazardous material or passengers are involved in a collision, then the surrounding community may be exposed to hazardous material or the passengers on-board the train may be injured or possibly killed. Therefore, train passengers and the general public, not only the property owner and the railroad, are exposed to the dangers of an accident at a private crossing. Also, unless the approaches to the private crossing are controlled (e.g., locked gates) or at least posted as private property, the public may use it (e.g., a lost driver). Therefore, individuals other than the invitee, guests, or employees of the property owner may use (with or without permission) the crossing.

Furthermore, if a private crossing is publicly used (such as ones that provide access to a business), the general public is exposed to the same level of hazard as with any public crossing. Anytime there is a probability that the public may be exposed to

harm by a private crossing, it becomes a public safety issue requiring diagnostic review and special consideration. In such cases, state government oversight of the crossing is needed.

Question 2
Is the current assignment of responsibility for safety at private crossings effective? To what extent do risk-management practices associated with insurance arrangements result in "regulation" of safety at private crossings?

CPUC Comments on Question 2

Currently, the railroads and private crossing owners share liability for the safety at private crossings. We do not have knowledge of insurance arrangements indemnifying property owners for damages resulting from accidents at private crossings. It is our understanding that railroads are self-insured with respect to personal injury liability. As such, risk management practices at private crossings are imposed primarily by state government regulations which pertain to private crossings and, secondarily, by the railroads' (and, to some extent, property owners) own interests in minimizing their exposure to financial liability.

Because there are few controls at most private crossings assuring usage by only authorized parties, the use of private crossings can change over time. We are not confident that such changes in use would be identified in a timely manner and addressed by the railroad or the land owner. Railroads may not be aware of the changes use, and land owners may not be aware of the need to reevaluate the crossing and its warning devices based on changes in use. We recommend some mechanism where the local government identifies increased or changed land use in land locked parcels to identify such changes in the dynamics of the crossing and its use. With such a process, the appropriate state agency, the railroads and land owners could make informed decisions regarding the appropriate crossing treatments.

Question 3
How should improvement and/or maintenance costs associated with private crossing be allocated?

CPUC Comments on Question 3

Generally, allocation of improvement and/or maintenance costs is agreed to by the landowner and the railroad as parties entering into the legal instrument establishing the private crossing. Private crossings can be created using the following legal instruments. In general, we support the specified cost allocation for each type:

a) Deeded crossings – crossings established at the time the property owner granted a right-of-way easement to the railroad for a rail line over the owner's property.

For these situations, railroads should be responsible for all improvement and maintenance costs.

b) Licensed crossings – crossings where the railroad granted a license to a property owner for a crossing of its tracks.

For these situations, property owner are generally responsible for all improvements and maintenance costs.

c) Newly created crossings, i.e., crossings where a railroad or other property owner has sold property to a purchaser at some time after the railroad had obtained the right-of-way for the rail line – Occasionally, the railroad sells property to a private party that is land-locked between railroad tracks (usually within a "wye"), and then allows the owner to build a private crossing over one of its tracks.

In these situations the responsibility should be explicitly determined by contract between the railroad and the property purchaser.

In California, where the landowner and railroad do not agree, the Commission may apportion such costs. See: Cal. Pub. Util. Code § 7537.[3]

Question 4
Is there a need for alternative dispute resolution mechanisms to handle disputes that may arise between private crossing owners and the railroads?

CPUC Comments on Question 4

As previously noted, California law grants the CPUC the power to fix and assess

[3] "…The commission shall have the authority to determine the necessity for any crossing and the place, manner, and conditions under which the crossing shall be constructed and maintained, and shall fix and assess the cost and expense thereof."

costs for the construction and maintenance of private crossings. The CPUC allows for administrative legal review by public hearing in crossing matters. Administrative Law Judges (ALJs) hear crossing cases and prepare proposed decisions for consideration by the Commission in general. The Commission reviews the facts of the case and the proposed decision and issues its own carefully-reasoned written decision. Moreover, the CPUC has its own Alternative Dispute Resolution mechanism for these and other proceedings in which ALJs specially trained in mediation procedures and outcomes are used to assist in resolving such matters.

Question 5
Should the State or Federal government assume greater responsibility for safety at private crossings?

CPUC Comments on Question 5

The issues involved with private crossings include property rights, contract law, and the safety responsibility for the traveling public, all of which have been traditionally within the states' jurisdiction. Many of the grants of rights-of-way in California were created in the Nineteenth Century at the time of initial railroad line construction. Both the rights-of-way and the crossing agreements may be found in Deeds of Trust, Quit Claim Deeds, and contractual arrangements between the railroads and California landowners subject to the laws of the State of California. Therefore, we strongly recommend keeping the responsibility for the safety of private crossings with the states. The FRA may issue guidelines, for the benefit of states that do not have laws on this subject, and provide recommended language for laws or regulations on this subject.

In short, the CPUC contends that public and private crossing safety regulation is too dependent on state law in real property and contracts law, and is too focused on regional issues and concerns, to permit federal pre-emption of the field. Recommended federal guidelines may be valuable, wholesale federal pre-emption is not.

Question 6
Should there be nationwide standards for warning devices at private crossings or for intersection design of new private grade crossings?

CPUC Comments on Question 6

In California, each individual public crossing design is reviewed by a diagnostic team, comprised of experts, to recommend appropriate design considering the unique nature of individual highway-rail crossings. Private crossing design is generally specified between the railroad and land owner in their crossing agreement. In cases where a private crossing is used by the public, or trains carrying hazardous material, or in instances where passenger trains use the crossing, the existing guidelines for "public" crossings should apply.

In other cases, we recommend the FRA invite a group of experts to develop guidelines for the design of private crossings, similar to the Highway/Rail Grade Crossing Technical Working Group that issued the *Guidance on Traffic Control Devices at Highway-Rail Grade Crossings.*

Question 7
How do we determine when a private crossing has a public purpose and is subject to public use?

CPUC Comments on Question 7

Where crossings allow unfettered access of passage, and routinely invite the general public to use the crossing, a public purpose has been established. In such cases, guidelines for crossing treatments should be the same as for a public crossing. Public uses of crossings which could be classified as private include: crossings at shopping centers and malls (which are generally private property), crossings to public facilities (such as land fills, recreational areas and other unrestricted public lands), private roads to residential developments (mobile home parks, residential subdivisions, private country clubs) and other business and commercial enterprises offering goods or services to the public (Christmas tree lots, nurseries). As stated above, the potential of hazard to the public at all private crossings should be assumed to be the same as a public crossing, particularly where the public is invited to the property.

Additionally, in many cases, the conditions and use at private crossings have changed markedly from those when the agreement was first executed. As mentioned

above, this changed use should be addressed through crossing upgrades, or potentially, closure. However, it is very difficult to set a threshold for determining when a crossing is "publicly" used. (For example, can two private residences share a private crossing—can 10 residences? Where do you draw the line?)

For example, a crossing may have been established 50 years ago when only a farmer and its employees used the crossing so that the document creating the private crossing may be appropriate for the limited use expected 50 years ago. But, if 50 years later a local or farmers' market is established on the property, or the property has been subdivided for residential or commercial use the changed usage at the crossing may pose a hazard to the general motoring public. The terms of agreement between the railroad and property owner have changed and so must be reevaluated. It is difficult to police the usage of each private crossing. Moreover, it is very difficult to set a threshold for determining when a crossing is "publicly" used. (For example, can two private residences share a private crossing—can 10 residences? Where do you draw the line?) Consequently, the private property owner must be given the incentive to upgrade the warning devices at the crossing when the usage changes. Financial liability, in case of a collision, is one incentive for private property owners to provide proper warning devices at a crossing, but generally, it is not a compelling one until after an incident. Any guidelines on private crossings considered for adoption should address changes in use over time, and provide for reevaluation.

The best time to determine an increase in motor vehicle, bicycle, or pedestrian traffic at a rail crossing is when a developer seeks approval of new commercial or residential construction. For the past three years, the Commission has been reviewing proposed developments within the state and has provided written comments to local governments concerning potential impacts on public safety under the California Environmental Quality Act (CEQA) of 1970. This procedure permits the Commission to monitor proposed increases in all traffic at private or public crossings. Under CEQA, the

lead agency for the proposed development is required to respond to public comments concerning the project.

Question 8
Should some crossings be categorized as commercial crossings rather than private crossings?

CPUC Comments on Question 8

California does not believe a distinction should be made between a "commercial" crossing and a "private" crossing. California treats the crossing as a "private" crossing but, nevertheless, may require greater protections to pedestrians or the motoring public through the addition of improved safety warning devices similar, or identical to, public crossings. Also, there are public used crossings that are not commercial in nature, e.g., apartment buildings and mobile home parks.

Question 9
Are there innovative traffic control treatments that could improve safety at private crossings on major rail corridors, including those on which passenger service is provided?

CPUC Comments on Question 9

Private crossings should be treated much like public ones. Private crossings are subjected to the same kind of diagnostic safety review and the same level of state safety oversight as public crossings. Existing industry and state safety standards and practices should be maintained. The same innovative traffic control treatments considered for public crossings can often be used at private crossings.

Question 10
Should the DOT request enactment of legislation to address private crossings? If so, what should it include?

CPUC Comments on Question 10

We believe that the FRA has taken the appropriate steps to solicit public comment on the matter to determine the scope of the relevant issues relating to private crossings. It would be premature to consider adoption of new legislation regarding private crossings until the comments of the interested parties are made and considered. Only then will an

assessment of regulatory gaps be able to be fully reviewed and potential solutions considered.

CONCLUSION

The California Public Utilities Commission applauds the initiative taken by the Federal Railroad Administration to reduce hazards associated with private at-grade highway-rail crossings. In our opinion, all private crossings should be provided with the same level of warning devices as public ones based on the use and geometry of the crossing. The dangers posed by a private and a public crossing on higher-speed passenger rail lines are basically similar since passengers as well as bicyclists, pedestrians, and motorists are placed at risk. Likewise, freight trains carrying hazardous material have similar potential for the dangerous release of those hazardous materials at both public and private crossings. California notes that all Class 1 railroads, and many short line railroads in the state, transport hazardous materials over their rail lines.

California contends that existing protections, particularly under state law, are sufficient to protect the traveling public so long as similar criteria for providing warning devices are used for both private and public crossings. For instance, private farm crossings used by temporary employees who may not be familiar with the crossings and the dangers associated with them should be considered for upgrades following diagnostic review and evaluation. Further, there are also many private crossings that provide public access to businesses or housing which also should be evaluated for warning protection improvements based on the same criteria as public crossings. The Commission recommends that the FRA assist in the formation of a Technical Working Group to

prepare general guidelines for identifying dangerous private crossings and recommend guidelines to be considered in upgrading or designing such crossings.

Respectfully submitted,

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October 26, 2006

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document entitled COMMENTS OF THE CALIFORNIA PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA in Docket No. FRA 2005-23281, upon the Federal Railroad Administration in this proceeding by electronically forwarding the document in WORD and filling out and submitting the Document Submission Form to the U.S.D.O.T.'s electronic docket site (DMS) at: http://dms.dot.gov .

Dated at San Francisco, California, this 26th day of October, 2006.

/s/ Joanne Lark

Joanne Lark

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Examination of Highway-Rail Grade Crossing Collisions Over 10 Years in Seven Midwestern States

THIS FEATURE COMPARES FOUR MAJOR CLASSES OF WARNING DEVICES FOR HIGHWAY-RAIL GRADE CROSSINGS. OVERALL, THE ANALYSIS SHOWS THAT THE HIGHEST COLLISION RATES USING ANY BASIS OCCURRED AT LOCATIONS WHERE THE WARNING DEVICE WAS A STOP SIGN. THE PUSH TO UPGRADE CROSSINGS FROM CROSSBUCKS ONLY TO STOP SIGNS MAY BE CREATING A FALSE SENSE OF IMPROVED SAFETY.

BY RICHARD A. RAUB

INTRODUCTION

Although the literature has addressed the potential safety of various classes of highway-rail crossing warning devices, few studies have compared the safety of crossings for different device classes.

This feature examines the differences among classes of warning devices using collision and inventory data from the Federal Railroad Administration (FRA). It examines four specific warning device classes: crossbucks only, STOP signs, flashing lights and gates. There are other types of warnings, including yield signs and none; however, the number of collisions at these crossings are too few to perform meaningful analyses.

This feature compares collisions and collision rates along with personal injuries and property damage among different classes of warning devices in seven midwestern states. Data cover a 10-year period (1994–2003). Raw data for collisions include number of collisions, injuries, fatalities and vehicle damage cost. Data are further disaggregated into type of collision (train into vehicle or vehicle into train).

Collision and injury rates use number of crossings, average daily (motor vehicle) travel (ADT) and average number of daily trains. An exposure measure is derived from daily trains × ADT (similar to one of the independent variables included in the hazard formula used to address the need for gates). Only collisions at public crossings as reported between vehicles and trains are used. Two assumptions are made:

- The warning device listed in the crossing inventory on the date of the collision is the correct one. However, if the crash report carried a higher level of warning (such as gates over flashing lights), that level is used. The device differed in less than 10 percent of cases. The collision report had the higher level of warning 75 percent of the time.
- The inventory has the best available data. ADT may not be updated for several years, crossings may be closed but not reported until another year and the number of daily trains can be highly variable over extended periods. Although discrepancies can exist, when the data are aggregated, especially over a region, these discrepancies should have a minimal overall effect on the analyses.

The discussion compares statistics by class of warning device as well as by state. It is limited to the states of Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri and Wisconsin. The reason for selecting the midwestern states derived from a study originally performed covering crossings in Wisconsin. Other states were used to discover if the findings in Wisconsin were, perhaps, an anomaly.

Two important findings appeared and are addressed in the discussion section:

- Gates generally have the lowest collision rates. With few exceptions, STOP signs have higher rates than the use of crossbucks only.
- There is substantial variation in collision rates among the states for a given class of device.

LITERATURE ON CROSSING WARNING DEVICES

Previous research analyzing collisions and collision rates by warning device is limited. Klein, Morgan and Weiner, using data from the Fatality Analysis Reporting System (FARS), compared the percentage of fatal collisions by class of warning device to the number of crossings with the device.[1]

They found that crossings with flashing lights were over-represented; that is, the percentage of fatal collisions at these crossings was higher than the percentage of these crossings in the inventory. Those with crossbucks were under-represented. Texas data showed that 58 percent of all collisions occurred at crossings with railroad gates or signals. The report did not address collision rates.

Sanders, McGee and Yoo found that the collision rates at passive crossings were similar regardless of whether they had STOP signs or crossbucks only.[2] Knoblauch, Hucke and Berg found that at crossings with flashing lights, drivers had not thought that the lights provided a creditable message.[3] Where only crossbucks were in place, drivers often missed seeing a train (especially at night).

Case studies by the National Transportation Safety Board (NTSB), covering 46 collisions at public crossings from December 1995 to August 1996, examined classes of warning devices.[4] They found that of the 46 collisions, 22 had occurred at crossings with STOP signs in place. In 59 percent of those incidents, drivers ignored the sign.

NTSB's specific interest in collisions at STOP-sign controlled crossings stemmed from the Federal Highway Administration's (FHWA) 1992 rulemaking supporting the use of STOP signs: "Stop or yield signs may be used at the discretion of the responsible State or local jurisdiction for crossings that have 2 or more trains per day..."[5]

The rulemaking was in response to requirements in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). Warrants are found in Section 8B.07 of the *Manual on Uniform Traffic Control Devices*.[6]

Most of the work on warning devices has been directed toward the installation of gates. Numerous hazard formulas are available to help determine when gates are needed. For flashing lights, Knoblauch, Hucke and Berg suggested only reasons why collisions occurred.[7] Few studies have examined the use of STOP signs. Observational studies by Bezkorovainy and Holsinger and, later, by Burnham showed that motorists frequently disregarded STOP signs at grade crossings.[8,9]

Russell and Burnham suggested that both FHWA and ISTEA promulgations on STOP signs were designed to reduce liability on the part of railroads, even though all previous evidence had suggested that such indiscriminate use would be detrimental and would not promote safety interests.[10]

Data and Methodology

Data for this analysis were derived from two sources. Collision data were taken from the FRA Office of Safety Web site, using the download "7.01 Accident Data on Demand."[11] The category "Highway-Rail Accidents" came from a Statistical Analysis System (SAS, PC version 8.0) table covering 1994–2003. SAS also was used for statistical analysis.

Although the crossing inventory also is available on the FRA Web site, it provides only the most recent configurations. Because annual rates were to be used, the inventory had to reflect the crossing warning devices in place when the collision occurred. Each time the railroad revises the inventory for a crossing, the FRA Office of Safety creates a new record. Because of the large number of records for each state, only those covering 1994–2003 for the seven midwestern states were requested.

Some data manipulation was performed. Most important, the codes for the crossing warning device contained in the FRA collision file were not the same codes used by the FRA inventory file (for example, 01 was "gates" in the collision file, but 8 in the inventory file). Codes in the collision table were changed to match those in the inventory. This change allowed the merging of inventory and collision files.

Approximately 9 percent of the warning devices did not fall into the four classifications used in this feature. Of those, approximately 50 percent had no warning device listed. Because traffic volumes, daily trains and the number of crashes were so small, their inclusion, in total, would have made no difference. Moreover, rates computed for these devices were highly variable and of limited value for analysis.

The warning device code was adjusted to represent the highest level of warning system (crossbucks were the lowest and gates were the highest) on either the collision report or the inventory. Of the more than 9,000 crashes examined, the device codes differed in less than 9 percent of cases. The highest level of warning system was on the inventory approximately 25 percent of the time; the remainder was on the collision record.

During an early review of this feature, a question was raised regarding the quality of both FRA collision and inventory data. Issues with the inventory data have been noted. However, in comparing Klein, Morgan and Weiner to the FRA data, the latter appear more complete.[12] Klein, Morgan and Weiner used FARS data for 1998–2002 in the seven states. They noted 365 fatal collisions at grade crossings, of which 341 involved a collision with a train. A total of 395 persons were killed in these latter collisions. On the other hand, FRA showed 427 fatal collisions killing 496 persons (25 percent higher than the FARS values).

Collision rates used in the analysis have three bases: millions of crossing vehicles (MCV), which is the sum of ADT at the crossings divided by 1 million, average daily trains and an exposure factor. The latter is derived from the product of ADT and crossing trains. It has been used in many of the hazard formulas, including New Hampshire, Coleman-Stewart and Peabody-Dimmick, and in part in the current U.S. Department of Transportation formula.[13]

COLLISIONS AND COLLISION RATES

National Data

For the entire United States over 10 years (1994–2003), there were 33,159 railroad-reported collisions between trains and vehicles at public grade crossings. Of these collisions, 8,793 resulted in one or more injuries and 3,410 resulted in one or more fatalities to vehicle occupants, railroad employees and railroad passengers (see Table 1). A total of 12,243 persons were injured and 4,070 were killed.

Over 10 years, the percentage of collisions with an injury or fatality averaged 37 percent (higher than 31 percent for all highway crashes). The fatal collision rate at highway-rail crossings was 10.3 per 100 collisions. All highway crashes had a fatal rate of 0.6 per 1,000 (2001 data).[14] At highway-rail crossings, both total and

fatal collisions decreased by 44 percent over the past 10 years. Injury collisions decreased 50 percent.

The Seven Midwestern States

Collisions and Collision Rates: The seven midwestern states had a total of 9,060 collisions for 1994–2003, or an average of 906 per year (see Table 2). This value was 27.6 percent of the national total. The proportion of injury and fatal collisions paralleled the national proportions. However, a 54-percent overall decrease for the past 10 years exceeded the national 44-percent decrease.

Table 2 also displays other values used in the subsequent analysis. For the seven states, total vehicular damage recorded was $37.7 million, or $4,160 per collision (and did not include costs resulting from injuries and deaths or any costs to the railroads, employees, or passengers). Over this period, these states reported an annual average of 61,100 public at-grade crossings. Illinois had the most with 13,300, followed closely by Indiana with 10,200.[15] The remaining five states averaged between 6,300 and 8,000 crossings. ADT at all crossings was 1,650 vehicles, with an average of eight daily crossing trains.

The analysis of collisions for the midwestern states examined differences among the states and the warning devices. The numerators for the rates included: collisions, casualty (injury plus fatal collisions) and vehicle damage. Denominators included: number of crossings, MCV, number of trains and an exposure factor. For descriptive ease, factors are expressed in thousands or millions.

Also examined were other factors that may play a role in differentiating collision rates. The most prominent was the type of collision—train into vehicle or vehicle into train. Vehicles struck trains 20 percent of the time in Missouri to 40 percent in Michigan. Other associated factors included: year of the collision, weather, visibility, age and sex of driver, number of roadway lanes and timetable train speed.

One aspect stands out clearly in the analysis: Collision rates for a given class of warning device and a given base were not consistent from state to state. One state may have had the highest rate per 1,000 crossings at gated crossings, but not the highest at passive crossings.

Likewise, the rates varied for class of device dependent upon the basis. That is, the rate for collisions at STOP-sign controlled crossings may have been the highest when the basis was MCV, but not when it was 10,000 trains. To expound a simple conclusion such as "crossings with gates have the lowest collision rates" cannot be done without also providing the

Table 1. All vehicle-train crashes and casualties nationally at highway-rail grade crossings.

Year	Crashes			Injuries	Fatalities
	Number	Injury	Fatal		
1994	4,503	1,237	476	1,645	571
1995	4,153	1,147	419	1,623	523
1996	3,788	1,038	379	1,386	448
1997	3,414	939	341	1,310	418
1998	3,086	849	324	1,145	384
1999	3,090	846	307	1,262	363
2000	3,032	756	319	1,079	369
2001	2,843	726	320	1,038	386
2002	2,707	630	260	865	315
2003	2,543	625	265	890	293
Total (1994–2003)	33,159	8,793	3,410	12,243	4,070
Percent change from 1994	-43.5	-49.5	-44.3	-45.9	-48.7
Percent injury or fatality		26.5	10.3		

Table 2. Crashes and crossing data for 1994–2003 (all warning devices) for seven midwestern states.

State	10-year total				Average annual values			
	Crashes	Severity		Vehicle damage (millions)	Crossings	MCV* (100)	Trains (millions)	Exposure factor (000)
		Injury or fatal	Fatal					
Illinois	2,004	858	293	$7.18	13,346	90.5	53.5	4.84
Indiana	1,941	691	196	$7.32	10,173	67.6	34.4	2.32
Iowa	979	339	68	$5.23	8,652	35.7	17.6	0.63
Michigan	1,181	517	110	$4.18	8,062	76.9	18.2	1.40
Minnesota	1,013	370	93	$5.49	7,586	30.0	15.0	0.45
Missouri	826	333	112	$3.48	6,261	23.1	22.0	0.51
Wisconsin	1,116	447	74	$4.79	7,037	53.1	14.6	0.73
Total	9,060	3,555	946	$37.68	61,117	376.9	175.4	66.12
Average per state	1,294.3	507.9	135.1	$4.16	8,731			
Average daily number per crossing						1,670	7.9	1.33

*Note: ADT described as million crossing vehicles (MCV).

basis for the conclusion along with the state in which that observation arose.

Collisions, Severity and Exposure Bases by Type of Warning Device: Only four classes of warning devices were used for this analysis: crossbucks, STOP signs, flashing lights and gates. Other classes, such as no device, traffic signal and flagman, were excluded. They accounted for approximately 7 percent of all crossings (and more than 50 percent of these had no warning device), but less than 3 percent of crashes. Attempting to distribute these crashes over a 10-year period and seven states would have yielded limited valid data for statistical analysis.

For the seven midwestern states, these four classes of public crossings had 8,856 collisions from 1994–2003. Injuries and fatalities occurred in 3,503 of the collisions. The cost of vehicle damage was approximately $37 million.

As shown in Table 3, 36 percent of the collisions occurred at crossings with only crossbucks as a warning device. Next highest were crossings with flashing lights, representing 28 percent of the collisions. Crossings with gates and STOP signs represented 23 percent and 13 percent, respectively.

Collisions with casualties had a similar percentage structure. However, a fatal collision was more likely to occur at gated crossings. The ratio between injury and fatal collisions was 1.5 to 1 at gated crossings versus approximately 3.3 to 1 for all other classes of device. Table 3 also shows the number of crossings with each of the four classes of warning device: daily MCV, the number of trains and the exposure factor.

Approximately 57 percent of crossings had only crossbucks. An additional 22 percent had flashing lights. These two devices accounted for almost 80 percent of all crossings in the seven states. Only 13 percent of all crossings had gates installed and, with few exceptions, they were two-quadrant. Eight percent had STOP signs.

When daily travel was considered, crossings with flashing lights carried 46 percent of the total MCV, or 41 million vehicles. Crossings with gates had the second highest volume; those with STOP signs were the lowest. ADT per crossing ranged from 445 at those with a STOP sign to 3,950 at those with gates. Crossings with flashing lights averaged 3,400 vehicles; those with only crossbucks averaged less than 600. Gated crossings carried almost seven times the vehicular volume as when passive warning devices were in place.

For number of daily trains, gated grade crossings accounted for 40 percent of the total; crossbucks were second with 32 percent. STOP signs accounted for 8 percent, the lowest.

Combining trains and vehicles into an exposure factor yields more extreme differences. The exposure factor can give a relative likelihood of a vehicle and train being at the crossing at the same time (and, thereby, of an opportunity for a collision). Gated crossings had an exposure factor of 2.1 times the value for crossbucks and 56 times that for STOP signs.

Table 3. Crashes and crossing data for 1994–2003 (by warning device) for seven midwestern states.

Device	Crashes		Injury and fatal		Fatal only		Damage
	Number	Percent	Number	Percent	Number	Percent	(millions)
Crossbucks	3,197	36.1	1,320	37.7	289	30.8	$14,895
STOP signs	1,146	12.9	470	13.4	116	12.4	$5,446
Flashing lights	2,445	27.6	959	27.4	234	25.0	$9,369
Gates	2,068	23.4	754	21.5	298	31.8	$7,520
Total	8,856		3,503		937		$37,230

Average annual values

Device	Crossings		Daily MCV*		Daily trains (000)		Exposure
	Number	Percent	Total	Percent	Total	Percent	factor (000)
Crossbucks	31,960	57.3	17,139	19.1	144.8	31.9	2.481
STOP signs	4,523	8.1	2,409	2.7	39.1	8.6	0.094
Flashing lights	11,983	21.5	41,294	45.9	89.1	19.6	3.678
Gates	7,327	13.1	29,062	32.3	181.3	39.9	5.268
Total	55,792		89,904		454.2		11.522

*Note: MCV = millions of crossing vehicles daily

Table 4. Average annual crash and casualty rates for 1994–2003 for seven midwestern states.

Device	Crash rates			
	Annual values			
	1,000 crossings	100 MCV (00)	1 million trains	Exposure
Crossbucks	10.0	1.87	2.21	128.84
STOP signs	25.3	4.76	2.93	1.215.56
Flashing lights	20.4	0.59	2.75	66.47
Gates	28.2	0.71	1.14	39.26
Average	15.9	0.99	1.95	231.33

Collision Rates for the Four Classes of Warning Device

This section describes collision and casualry (injury and fatal combined) annual rates for: 1,000 crossings, 100 MCV, 1 million trains and the exposure factor. The bases represent the values for all crossings with that class of device. Because of large differences in the number of vehicles and trains at the different classes of crossings, using rates presents more meaningful comparisons.

Table 4 displays the rates. Only rates for all collisions are given. In general, the overall rates were approximately 2.5 times the casualty rates. For example, the average collision rate per 1,000 crossings for the four warning classes combined was 15.9. The casualty rate was 6.3.

Rate Per 100 Million Annual Vehicles: One common method of measuring exposure is by the number of drivers using the facility. The number of entering vehicles, for example, commonly is used to compute crash rates at intersections. Because of the magnitude of the annualized MCV, the base is expressed in 100 MCV (annual) and shown in 100s.

The rate for crossings with STOP signs as the warning device was 4.76 per 100 MCV. Crossings with only crossbucks in place had a rate of 1.87, 39 percent of the rate for crossings with STOP signs. For crossings with active warnings, the rates were 0.59 for flashing lights and 0.71 for gates. The large volume of traffic at crossings with active warnings weights the average value at 0.65 per 100 MCV. The differences between the rates at crossings with STOP signs and other warning devices was statistically significant.

Rate Per 1 Million Annual Trains: Using a basis of 1 million annual trains changed the ordering. STOP signs remained the highest with a rate of 2.93 per million trains. Flashing lights had the next highest rate, followed closely by locations with crossbucks only. The differences between the rates for STOP signs and the latter two classes of warning devices were significant.

Where passive devices were in place, the rate at grade crossings with crossbucks was 75 percent of the rate where STOP signs were installed. Only the rate at gated crossings (1.14 per 1 million trains) was significantly lower.

Rate Based on Exposure Factor: Using a factor that accounts for vehicles and trains combined displayed the greatest differentials. Gated crossings had the lowest rate of 39.26 per exposure. Flashing lights had a rate some 1.5 times higher. The rate of 129 where only crossbucks were in place was more than three times the rate for gated crossings. STOP signs had a rate of 12,166, approximately 31 times where gates were in place.

COLLISIONS AT HIGHWAY-RAIL GRADE CROSSINGS WHERE STOP SIGNS WERE INSTALLED WERE MORE LIKELY TO OCCUR THAN WITH ANY OTHER FORM OF WARNING SYSTEM.

Differences by State and Warning Device: When rates are further disaggregated by state, a state that has the highest rate for one type of crossing warning device may not have the highest for another device among the states studied. Moreover, the ratio between the highest and lowest values will differ. For example, crossings with only crossbucks in Missouri had a rate of 2.68 collisions per 100 MCV. Wisconsin was the lowest with a rate of 1.40. The rate in Missouri was almost 200 percent higher than Wisconsin's.

Highway-rail crossings with STOP signs had the highest overall average collision rate of 4.76 per 100 MCV. The rate for Wisconsin, 10.42, was twice the average and 3.8 times that of Michigan. There was similar dispersion among the rates for crossings with flashing lights and gates. The highest rate for flashing lights of 0.80 per 100 MCV appeared in Indiana as opposed to the seven-state average of 0.59. At gates, the range lay between 1.22 in Iowa and 0.47 in Wisconsin.

COLLISION ELEMENTS AND THEIR RELATIONSHIP TO RATES

A number of factors were captured on the inventory for each crossing and were examined to determine if there was a relationship between that factor and collision rates. Because these factors often are ordinal, a non-parametric test is appropriate. Wilcoxon and the Kruskal-Wallis One Way Analysis of Variance are two tests of relationships among ranked values.[16]

Wilcoxon applies to two-sample cases and Kruskal-Wallace to k samples. For example, when comparing collision rates at crossings where the vehicle ran into a train and visa versa, all collision rates are ranked. The ranks are split into the two elements: vehicle into train and train into vehicle. The average of the ranks for each column should be similar (that is, rank values are distributed randomly among the two categories) if no statistical differences exist.

The factors listed below showed a statistically significant relationship with collision rates for one or more classes of warning systems:

- Manner of collision (train into vehicle or vehicle into train)
- Time of day (morning, afternoon, night)
- Weather (clear, rain, snow)
- Light conditions (day, dark)
- Timetable (maximum) train speed (using grouped speeds)
- Number of roadway lanes
- Crossing angle (angle of roadway to crossing)
- Age of driver (using age groupings)
- Sex of driver

Others variables that might be expected to relate to a collision showed none, including:

- Vehicle speed
- Actual train speed
- Location of collision (rural or urban, as indicated on the FRA file)
- Paved or unpaved crossings

Based on the tests, several observations can be drawn. First, for crossings with crossbucks, all factors except driver age appeared to have a significant relationship to collision rates based on MCV. However, determining which specific characteristic (for example, specific hour or set of hours) was different can not be done with the non-parametric tests used.

Collisions at crossings with flashing lights also had more than one-half of the

Table 5. Crossings changing from crossbucks only to STOP signs for seven midwestern states (crash and crossing data for 1,939 crossings).

Device	Total crossing years	Average years for device	Crashes	Casualties	Damage (000)	MCV	Daily trains
Crossbucks	9,158	4.72	192	102	1083.4	2.21	6.91
STOP signs	9,905	5.11	261	135	1432.8	2.17	8.22
Total	19,063	9.83	453	237	2516.2	4.37	15.13

Crash rates

Device	Crashes	Rates per 100 crossings	Annual rate	
			100 MCV	1 million trains
Crossbucks	192	2.10	23.82	7.61
STOP signs	261	2.64	33.00	8.69
Total	453	2.38	28.37	8.20

factors showing significant relationships. On the other hand, few relationships were found between the factors and collision rates for crossings with STOP signs or with gates. However, crossings with STOP signs and with gates shared one commonality: With both types of warning, approximately 75 percent of the collisions involved a train running into a vehicle, compared to less than 65 percent at the other two major classes.

Crossings Changed from Crossbucks to STOP Signs

One question raised during the review of this feature addressed what happened to crossings where a change was made from crossbucks to STOP signs. In all seven states, 1,939 crossings went from crossbucks to STOP signs, or visa versa, over the past 10 years. As shown in Table 5, crossbucks were in place for an average of 4.7 years at the crossings, and STOP signs for 5.1 years. The numbers do not add to 10 because some crossings did not exist or did not have passive controls for the entire period.

There were collisions at only 175 of the 1,939 crossings. The rates when STOP signs were in place were slightly higher for the crossings that had only crossbucks. None of the differences was statistically significant.

DISCUSSION AND CONCLUSIONS

STOP-sign laws call for a motorist to come to a stop and yield to crossing traffic before entering the intersection. In most cases, motorists do stop and yield. Collisions occur when motorists fail to stop or yield. The presumption behind their use at highway-rail crossings is that motorists will treat them the same as for roadway intersections.

Motorists should first completely stop and then proceed if a train is not present. Because motorists are stopping, there should be fewer collisions with trains than would occur at crossings where only crossbucks, which do not require the same action, are installed. This assumption was important because motorists often did not know how to treat the crossings with crossbucks.[17]

This feature originated with a request to examine the improvement in safety at crossings in Wisconsin, where STOP signs had replaced only crossbucks. Initial findings showed that crashes were over-represented at locations where STOP signs were installed. Initial findings led to examining highway-rail collisions in other midwestern states, which tended to share many geographic and population characteristics.

Using 10 years of collision data in seven midwestern states supported the initial findings. Not only in terms of percentages, but also in terms of rates, collisions at highway-rail grade crossings where STOP signs were installed were more likely to occur than with any other form of warning system.

As seen in this study, although crossbucks accounted for 58 percent of the crossings in the seven states, these locations had only 36 percent of all collisions. The other three classes were over-represented. For example, crossings with gates had 23 percent of the collisions but only 13 percent of the warning installations.

These statistics by themselves can be misleading. Gates usually are installed at crossings that have high traffic and train volumes. This is shown in Table 3, where the ADT for gated crossings was seven times greater than where only crossbucks were installed. Table 4 shows that collision rates at gated crossings were substantially lower.

What is surprising about the findings is the extremely high collision rates for crossings with STOP signs. Even for Michigan, which had the lowest STOP-sign crash rate, it was 21 percent higher than the rate for crossbucks only in that state. The Wisconsin rate of 10.4 crashes per 100 MCV was four times higher than the highest rate for crossbucks only. Although the rates per 1 million annual trains for STOP signs and flashing lights were the closest of any warning system, the rate for STOP signs was 7 percent higher.

Of the bases used for analysis, the more appropriate one appears to be based on exposure. This takes into account both the traffic volume at a crossing and the number of trains. In effect, it is a relative measure of exposure of drivers to a potential crash. The use of exposure shows that gated crossings have very low rates. On the other hand, the rates for STOP signs used for warnings far exceed any other type of warning device.

It also is important that even when STOP signs were installed at crossings that previously had only crossbucks, collision rates increased. This finding, although based on a small sample because of the very low likelihood of a collision at any passive crossing, further suggests that STOP signs may not provide the assumed level of enhanced safety.

Why the rates for highway-rail grade crossings with STOP signs should be so much higher than for any other form of warning device is not obvious. One possible explanation comes from some studies of STOP signs placed at roadways with low-volume intersecting traffic. Mounce

found that compliance decreased as cross-traffic volume decreased.[18] In their study of Texas intersections, Lumm and Stockton had a similar finding. They concluded that: "Stop signs do not reduce accident experience at low-volume intersections."[19]

One theory from the studies of drivers at low-volume intersections is that they come to regard STOP signs to have less meaning than the law intends. The low-volume highway-rail crossings would fall within this theory. Another theory is that drivers misjudge the speed of trains. They believe they have sufficient time to start and complete the crossing before the train arrives. That the collision at a STOP-sign controlled crossing is more likely to involve a train striking a vehicle than for crossbucks may support this hypothesis.

Another question raised in the preceding analysis is why the rates for the different classes of warning devices varied so substantially from state to state. A more extensive analysis of the data may show that certain crossing characteristics, such as angle of crossing, may have affected the rates. When these elements are controlled, the variations in rates from state to state may decrease.

Finally, no research appears to have been done comparing YIELD signs to STOP signs or to crossbucks at crossings. At least one study from the highway literature suggests that YIELD signs might be a better approach than STOP signs. The Lumm and Stockton work on low-volume intersecting roads found that significantly more motorists stopped or slowed below 5 miles per hour at intersections with YIELD signs than with STOP signs.[20]

They concluded that a STOP-sign controlled intersection was more likely to have a collision than one controlled by a YIELD sign or where no control was in place. All of these conclusions suggest that a comprehensive study of driver behavior at passive rail crossings with crossbucks, YIELD signs and STOP signs will provide information that can lead to improving safety at the grade crossings.

However, given the available data, even with their limitations, this feature raises a critical question. Should STOP signs be employed at highway-rail crossings as a type of warning device, or is some other passive warning device better? The limited literature on STOP signs already has questioned the efficacy of STOP-sign use. The analysis in this feature raises even more questions, which argues the need for better research on driver behavior before further STOP-sign installation takes place.

ACKNOWLEDGMENTS

Special acknowledgments go to Tom Woll and staff from the FRA Office of Safety; William Stenzel and Roy Lucke of Northwestern University for their reviews and comments; and Robert Gallamore, Director of the Transportation Center at Northwestern University, for assistance with funding. ■

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RICHARD A. RAUB

recently retired from the Northwestern University Center for Public Safety as senior research scientist. His primary research was devoted to traffic safety. He has authored or co-authored numerous articles in the field. In 2004, he was awarded the ITE paper of the year for his evaluation of the use of automated wayside horns at highway-rail crossings. In addition, he has been a member of the Illinois Chapter and now is affiliating with the Oregon Chapter. He is a member of several Transportation Research Board committees and is an active friend of Work Zone Safety as well as an original member of the Highway Safety Manual *Joint Subcommittee. He received a B.A. in economics from Tufts University and an M.S. in transportation science from Northwestern University.*

Richmond Regional 430150

Planning District Commission | Metropolitan Planning Organization

November 13, 2006

Docket Management Facility
US Department of Transportation
400 Seventh Street, S.W.
Nassit Building
Room PL – 401
Washington, D.C. 20590-0001

RE: Docket No. FRA- 2005–23281, Notice No. 1

To Whom It May Concern:

In response to notice published in the July 27, 2006 Federal Register (Vol. 71, No. 144) under Department of Transportation, Federal Railroad Administration, concerning its notice on "Safety of Private Highway–Rail Grade Crossings; Notice of Safety Inquiry", the Richmond Area Metropolitan Planning Organization for Richmond, Virginia files the attached comments on behalf of the Technical Advisory Committee member for New Kent County (see attached comments).

Should you have any questions, please contact me by e-mail (dlysy@richmondregional.org) or by calling me at 804-367-6001.

Sincerely,

Daniel N. Lysy
Director of Transportation

DNL/dj
Attachment

pc: Robert R. Setliff, MPO Chairman
Kevin Page, VDRPT
Members, MPO Technical Advisory Committee
Paul Fisher, RRPDC Executive Director

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SAFETY OF PRIVATE HIGHWAY – RAIL GRADE CROSSINGS;
NOTICE OF SAFETY INQUIRY

COMMENTS SUBMITTED BY
NEW KENT COUNTY, VIRGINIA
TECHNICAL ADVISORY COMMITTEE MEMBER
November 13, 2006

Docket Number FRA-2005-23281, Notice No. 1

1. Given the inherent risks to train-vehicle collisions, no new at-grade crossings of lines carrying or with the potential to carry passenger trains (commuter or city-to-city) should be permitted. All new crossings of lines carrying or with the potential to carry passenger trains should be grade separated. Funding should be made available to close all existing at-grade crossings on rails carrying or with the potential to carry passenger trains and either provide alternative access via existing grade separated crossings or construct new grade separated crossings. Priority should be given to those lines with the potential to serve as higher speed passenger rail corridors.

   There is a material difference between granting new access and continuing existing access across rail rights-of-way. The former grants a right that does not exist and presumably provides economic and other benefits accrue to the landowners establishing the crossing. The full cost of providing an appropriate grade-separated access should rightfully be borne by the landowners. However, in the case of continuing existing access, the situation is largely reversed and it is presumed that there may be substantial economic detriment to curtailing or removing a right that exists. Thus it is reasonable to expect that the costs for establishing an appropriate crossing should be borne to a greater extent by the railroad and the public sector. In some cases, existing at-grade crossings are of such low volume and will remain at such low volume that with appropriate gate control, they can remain as at-grade crossings. Should the landowner change the use of the adjacent land in a manner that increases the volume, then they should bear some responsibility for contributing to the cost of reconstructing the crossing as a grade-separated crossing.

2. There is no foolproof way in which to assign responsibility for safety, however what would improve the situation would be for FRA to establish clear standards for what constitutes a "safe crossing" under various scenarios (traffic volume and speed, train volume and speed, etc.) in a way that creates a legal shield prohibiting negligence claims against the crossing owner and railroad if the crossing is constructed and operated in that manner. Then the courts can handle the rest. This is very similar to the way in which AASHTO establishes road design safety standards.

3. The costs of maintenance of private crossings should be borne by the private entity owning and benefiting from the private crossing. Improvements to at-grade crossings should similarly be borne by the private entity owning and benefiting from the crossing. Replacement of private at-grade crossings with grade-separated crossings or alternative access that permits removal of the at-grade crossing should be shared between the railroad, landowner and public sector with the public sector contribution increasing proportionally related to the amount of passenger service existing or projected on the line.

4. Each State DOT should be empowered to mediate and enforce resolution of crossing disputes between private landowners and railroads over existing or newly proposed private crossings. The DOT should also be allowed to approve limited deviations from the safety standards discussed above based on sound engineering practice which is thoroughly documented as part of the plans.

5. As noted above, the FRA should establish clear specifications and guidelines for safety at private (and public) crossings under various scenarios (traffic volume and speed, train volume and speed, etc.) which are then administered by the State DOT. Only the public sector has the incentive to put safety first and foremost and thus it cannot be left to either the landowners or the railroads.

6. Yes, there should most certainly be national standards for all crossings and crossing types—public and private. AASHTO has road standards, MUTCD has signage/marking standards and the crossing standards should be modeled after these very successful national standards.

7. "Public Purpose" should have a very limited scope and incorporate only public roads, public recreational trails, or access to public property.

8. Having certain private crossings designated as "commercial crossings" is potentially a good idea in that it would provide clarity and perhaps differentiate crossings with different traffic characteristics from others. This would also permit the development of crossing standards that take into account the larger and slower vehicle types that may use a commercial crossing with higher frequency.

9. The only treatment that will be certain of improving safety of rail crossings is to grade separate the rail and the road because no other treatment is self-enforcing in this manner. Longer arms that close the entire roadway as opposed to only the approaching lanes supplemented with fencing parallel to the roadway approaches that makes a turn just beyond the crossing gates to parallel the rail for a distance may serve to prevent some of the more stupid attempts to out-run a train, but impatient folks seem to have unlimited reserves of resolve to avoid being delayed. It is better to spend money on grade separation than on half-measures that really only invite folks to be ever more creative in ignoring them.

10. If US DOT does not feel it has the authority to develop and enforce standards for all crossings, then legislation granting that authority should be sought.

http://csx-sucks.com/SiteDist.pdf The facts are the FEDs have murdered 1000s of people at crossings private and public by sitting train speeds too high and ignoreing sight lines. Where's the MURDER charges on the bought officials?

The second facts is these Mickey Mouse signs were meant for horses and buggies for cryin out loud. Geez, how phoney can you government clowns get with the goof ball studies?

I see ALL the railroads state/Federal handmaidens are at hand at these cover the railroads murdering ways so called hearings but 1000's of private crossing users where NEVER notified of the illegal hearings. By the way where is the meeting in MY county with all the crossing users notified?

Pages 391

Okay. This is a big job, and I think we've had a good day in Raleigh. And is there anybody else who feels like they haven't had a chance to speak about their issues today before we move on, adjourn, that is?
FRA-2005-23281-1 Federal Register Publication 07/27/2006 U.S. DOT/FRA - Notice of Safety Inquiry PDF (202038 bytes)
PDF (207035 bytes)
4 Pages FRA-2005-23281-2 Comment(s) 09/18/2006 Roger Samuels - Comments TXT (765 bytes)
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287 Pages FRA-2005-23281-7 Transcript(s) 10/17/2006 U.S. DOT/FRA - Transcript of September 27, 2006, Private Crossing Meeting in Raleigh, NC PDF (448131 bytes)
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391 Pages FRA-2005-23281-8 Comment(s) 10/19/2006 Roger Samuels - Comments TXT (812 bytes)
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3 Pages FRA-2005-23281-10 Comment(s) 10/24/2006 Steven J. Rusconi - Comments TXT (1041 bytes)
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1 Page FRA-2005-23281-11 Comment(s) 10/26/2006 California Public Utilities Commission - Comments DOC (79360 bytes)
PDF (134976 bytes)
14 Pages FRA-2005-23281-12 Report 11/16/2006 U.S. DOT/FAA - ITE Journal - Examination of Highway-Rail Grade Crossing Collisions Over 10 Years in Seven Midwestern States PDF (80105 bytes)
PDF (79951 bytes)

Observations of a former railroad engineering department employee now working in the private sector:

The private crossing issue is hardly new. For years, railroads have had to deal with adjoining landowners who want neither the fiscal responsibility or the liabilities that come with the use of a private crossing. This has been compounded by several generations of bad assumptions of “something for nothing” or just plain ignorance. Compounding this is the ignorance of city, county and state officials regarding regulations already on the books at State and Federal levels and suggested standards for road crossing design already presented by AASHTO, AREMA and others.

Most distressing to me as a technical professional is: (a) the blatant ignorance of city and county level officials in issues relating to public and private crossings in general and (b) the disturbing behavior of developers, real estate, title company and public sector consultants around railroad boundaries in general and private crossings in particular. The above mentioned individuals and entities have compounded the mess regarding private crossings multiple times over. Those same individuals do the public disservice with their woeful lack of training and knowledge regarding private at-grade crossings. Where problems and safety conflicts ought to be found and addressed during development or change in ownership, they are shamefully ignored.

(Q1) Is the current assignment of responsibility for safety at private crossings effective?
[A1] No, unfortunately, and it appears to be getting worse.

(Q2) To what extent do risk management practices associated with insurance arrangements result in “regulation” of safety at private crossings?
[A2] Adjacent landowners with an interest in a private crossing ought to share in the liabilities/risks in the use of a crossing. Changing the use of a private crossing and abuse of the right to use a private crossing is a chronic and growing problem. Those “risk management practices” in insurance arrangements can only help put the crossing user and the railroad on notice of what is expected of both parties.

(Q3) How should improvement and/or maintenance costs associated with private crossings be allocated? [A3] Binding contracts between the crossing user and the railroad should always take precedence. Where a railroad has “grandfathered-in” rights to a private crossing (example: crossing in place since time of construction of the rail line by agreement), the railroad ought to say so. Where title to adjoining land(s) to the crossing has changed and the landowner has failed to notify the railroad of that change in crossing user, the burden should fall on the private crossing user to keep use of the crossing or agree to a new contract. (let the new private crossing user take up the issue of failure to disclose with the former owner, real estate and title people who have caused the problem.)

(Q4) Is there a need for alternative dispute resolution mechanisms to handle disputes that may arise between private crossing owners and the railroads.
[A4] At some point, YES. However that mechanism should not be left to be administered at the city or county level because that is a major source of the problem. Even at the state level (DOT, Public Utilities Commission, Railroad Commission, etc.), there is a startling lack of competent/ qualified administrators with any railroad background.

Also, some future determination of use of those private crossings ought to be made where crossings to serve “landlocked” land parcels no longer applies, thus allowing removal of a dangerous crossing only left in place as a convenience or shortcut. This should also apply to developers subdividing adjacent lands demanding a public crossing and “a second private crossing for emergency access” required by local government planners that creates unwanted risk(s) at that second crossing and unwanted uses of that second crossing.

(Q5)Should the State or federal government assume greater responsibility for safety at private crossings?
[A5]No, unless the state can force the private user to comply and join in a binding contract – or face loss of the use of a private crossing for not shouldering some of the responsibility. [Consequences for ignoring what ought to be common sense]

(Q6) How do we determine when a private crossing has a “public purpose” and is subject to public use?
[A6] That mechanism is already in place in most states with their Public Utilities Commissions, Railroad Commissions, Commerce Commissions, et. al. with the application/ decision processes already in use. What needs to be stopped is the unexplainable thinking that exists in some county and local government agencies that they can tell a railroad what to do without dealing with state and/or federal regulations on the books (Iowa and Ohio as example), without consulting with the railroad (crossing by local decree). Model law, such as what is in effect for railroad side clearances, would be a help and might prod states with ambiguous and hopelessly lopsided crossing laws (like Iowa) to re-write their state regulations.

(Q7)Should some crossings be categorized as “commercial crossings” rather than “private crossings”?
[A7] Only if it is a subset of private crossings or railroad company use crossings. If those commercial users of that crossing, that benefits them, do not want to assume risk for use of the crossing, then the answer is an emphatic NO. The public and the railroad should not subsidize or underwrite these crossings.

(Q8)Are there innovative traffic control treatments that could improve safety at private crossings on major rail corridors, including those on which passenger service is provided?
[A8] The technology exists, but as with public crossings (Section 400 funding) , the issue is who will pay for it? Under most conditions, it shouldn’t be only the railroad. The railroad should not have to pay, with a few exceptions, for a private crossing’s protection that is of no benefit to the railroad and should be preferably removed.

(Q9)Should the Department of Transportation request enactment of legislation to address private crossings? If so, what should it include?
[A9]

(1) Modify the existing Federal DOT Form 6180.71 to show, with private crossings, followed later by public crossings and railroad company use private crossings, the user of record and where an agreement exists to own, operate or maintain that crossing identified by railroad contract or in the public record. Have the railroad enter what record it has (49CFR1201 etc.) followed by the state agency now maintaining those records. For all new and just-retired crossings, from implementation date forward, have this information filled in.

State agencies and the railroad need to identify undocumented crossings that can be closed/removed after public notice. Counties need to notify adjoining landowners of possible removal in order to identify possible owner/users of record. (something that should have happened years ago when FRA/DOT mandated crossing reductions)
(2) Require states to post change of ownership or use of a private crossing as part of the transfer process in any land sale, lease or transaction that directly affect that crossing. (Put the onus on the title companies, real estate people and buyer/seller to account for the private crossing and its use- or lose use of it.)
(3) Require state and local agencies to document their right to use any at-grade crossing, public or private. (Expect local government and agencies to report poor recordkeeping or lack of (missing) records as a given. Railroad records, post Staggers Act will also have “issues”)

Lewis S. "Mike" Eidson
President

255 Aragon Avenue
Coral Gables, FL 33134
305-476-7400
305-476-7444 Fax

December 6, 2006

Ron Ries
Office of Safety
Federal Railroad Administration
1120 Vermont Avenue, NW
Washington, DC 20590

Re: Safety of Private Highway-Rail Grade Crossings; Notice of Safety Inquiry
Docket No. FRA-2005-23281

Dear Mr. Ries:

The Association of Trial Lawyers of America (ATLA) hereby submits comments in response to the Federal Railroad Administration's (FRA) Notice of Safety Inquiry (Notice) soliciting comments on safety issues at private highway-rail grade crossings. *See* 71 Fed. Reg. 55543.

ATLA, with 55,000 members in the United States, Canada and abroad, is the world's largest trial bar. It was established in 1946 to safeguard victims' rights, strengthen the civil justice system, promote injury prevention, and foster the disclosure of information critical to public health and safety. ATLA believes that the federal government should not assume greater responsibility for safety at private crossings. The railroads are in the best possible position to assume the greatest responsibility for safety. Further, ATLA supports the use of alternative dispute mechanisms to handle rail safety disputes so long as the use of any such mechanism is non-binding and voluntarily agreed to by both parties.

I. The Federal Government Should Not Assume Additional Responsibility for Safety at Private Crossings

A. Railroads Should Assume the Greatest Responsibility for Safety

The FRA's rail safety audit indicated that there was an 11 percent increase in railroad grade crossing fatalities between 2003 and 2004.[1] The audit also clearly recognized that the possibility of collisions at grade crossings poses an increasing threat to the traveling public and presents many challenges for federal government oversight.[2]

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[1] *Audit of Oversight of Highway-Rail Grade Crossing Accident Reporting, Investigations, and Safety Regulations*, Federal Railroad Administration, Report No.: MH-2006-016, at 2 (issued Nov. 28, 2005) ("FRA Audit").

[2] *Id.* at 4.

In order to address this issue, the FRA Notice listed ten questions as topics for comments and consideration. One question asked whether the state or federal government should assume greater responsibility for safety at private crossings. ATLA believes this question misses the mark.

ATLA believes the railroads should assume full responsibility for rail (or public) safety at private crossings. Private highway rail grade crossings generally are governed by contracts between the railroad and the owner of the land upon which the private crossing is situated. Such contracts generally are negotiated for a time certain (likely one year) and either party has the right to terminate the agreement thereafter upon thirty days written notice. Therefore, the responsibilities of the parties are subject to the terms negotiated in the agreement. These contracts usually impose the duty to maintain safety upon the railroad company,[3] because it is in a unique position to be aware of hazards at crossings given that its operators pass through the crossings on a regular basis. Because the terms of these contracts vary depending upon the parties and the circumstances at each crossing, the FRA cannot and should not attempt to interject itself into existing and future contracts between the railroad and private individuals. No railroad should be relieved as a matter of law or regulation from any duty to keep a private crossing safe. Shifting the burden away from the entity with the most knowledge (i.e., the railroad) is bad public policy.

B. Federal Funds Cannot Be Used to Address Safety at Private Crossings

Traditional federal crossing safety improvement funds cannot be used for improvements at or for private crossings.[4] Congress only made limited high-speed rail funds available for crossing safety improvements (including private crossings) if the improvements would facilitate high-speed rail operations.[5] Lawmakers have barred additional program options of this type based on concerns over spending public funds for private infrastructure. Administrators of public funds generally are very concerned about expenditures that might be viewed as "improving" personal property. Therefore, the federal government cannot assume greater responsibility at private crossings, because it is prohibited from utilizing federal funds for this purpose.

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[3] However, in certain cases, there is unequal bargaining power between large, well-funded railroads and smaller individual property owners. These railroads often delegate the duty to maintain the crossing's safety to the property owner. Certain landowners might agree to whatever provisions are necessary in order to obtain lucrative private crossing contracts. Therefore, contracts in which railroads delegate this duty should be carefully scrutinized. *See infra* Part II(A).

[4] Federal Railroad Administration, Highway-Rail Crossing Program, http://www.fra.dot.gov/us/content/86. *See also* Georgia Department of Transportation, http://www.dot.state.ga.us/dot/operations/traffic-safety-design/SubUnit/rrfaq.shtml.

[5] The Intermodal Surface Transportation Efficiency Act of 1991, P.L. 102-240.

C. Recent Data Indicates Problems with Federal Government Oversight

The federal government cannot, and should not, be the sole body in charge of railroad safety. Federal regulations require railroads to report *all* highway-rail grade crossing incidents (public and private) regardless of the extent of damages and, as a result, public transportation authorities appear already to be overwhelmed by their responsibilities.[6] According to the FRA, railroads failed to report 21 percent of reportable public grade crossing collisions to the National Response Center (NRC).[7] The FRA's analysis showed that 115 collisions, which resulted in 116 fatalities, were reported to the FRA within 30 to 60 days after the collision, as required, but that was too late to allow federal authorities to promptly decide whether to conduct an investigation.[8]

Federal regulations also require the FRA to investigate all rail transportation incidents (public and private) that result in the death or injury of five or more persons or "when it appears that an investigation would substantially serve to promote railroad safety."[9] This is particularly troubling given that the FRA investigated only 9 of the 3,045 grade crossing collisions that occurred in 2004, and from 2000 to 2004, the FRA investigated only 13 percent of the most serious crossing collisions that the railroads reported.[10] Clearly, the flawed railroad safety system must be fixed to ensure that railroads are held accountable for critical safety issues, but the federal government lacks adequate resources to take on these additional responsibilities.

II. Alternative Dispute Mechanisms Are Suitable to Handle Rail Safety Disputes Subject to Certain Conditions, But the FRA Should Carefully Scrutinize Contracts Requiring Such Procedures

A. Alternative Dispute Mechanisms Should Only Be Used When They are Non-Binding and Voluntarily Agreed to By Both Parties

ATLA supports the use of alternative dispute resolution (ADR) where the process is non-binding and voluntarily agreed to by both parties. If the ADR provision in a contract meets these requirements, the process can provide a fair outcome to both parties and help to alleviate overcrowded dockets in the judicial system. Mandatory ADR, however, interferes with an individual's constitutional

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[6] 49 C.F.R. § 225.19(b).

[7] *Id.*

[8] *Id.* at 6-7.

[9] 49 C.F.R. § 225.31(a).

[10] FRA Audit at 7.

right to a jury trial[11] and limits the right of ordinary citizens to get redress or compensation for injuries.

ATLA's concerns regarding mandatory ADR generally do not apply where the parties are part of a collective bargaining agreement in which both sides have equal bargaining power. In a contract between a railroad and an individual owner of a land where a private crossing is situated, it is unclear whether the parties have equal bargaining power and whether any ADR language has been fully negotiated. An unequal distribution of bargaining power could result in arbitration clauses that include numerous unsatisfactory provisions which allow companies to select the arbitrators, set the arbitration in a location convenient for the company, exclude certain recoveries such as punitive damages against the railroad, shorten the statute of limitations, deny discovery, and eliminate the individual owner's right to appeal.[12] In situations where the FRA suspects an unequal bargaining power between the contracting parties, the agency must carefully scrutinize these contracts to determine if they include ADR mechanisms and, if so, whether they were voluntarily agreed to by both parties.

B. ADR's Contributions to the Legal System are Mixed

While ADR may have made contributions to our legal system, it is important to note that ADR has not been the solution to the nation's crowded court dockets that many had once hoped. Scholars have concluded that "while binding arbitration may well be preferable from the standpoint of certain segments of society – particularly large companies that draft the terms and court administrators and judges who can reduce their own workload – there is no reason to believe that society as a whole is better off with binding arbitration."[13]

The use of ADR has not significantly reduced the average time to dispose of civil lawsuits, or the average public or private expense to litigate cases.[14] As arbitrations increase in their complexity, they can become just as expensive as litigation.[15] As a result, arbitration costs can act as a barrier to the vindication of a

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[11] U.S. Const. amend. VII.

[12] Jean R. Sternlight, *Panacea or Corporate Tool?: Debunking the Supreme Court's Preference for Binding Arbitration*, 74 Wash. U. L. Q. 637, 638 (Fall 1996). Railroad companies are more likely than landowners to be involved in successive arbitration proceedings, because a locomotive may traverse numerous private crossings daily. Once a railroad company has selected an arbitrator who gives the company a favorable result, the company may select and pay the same arbitrator in future proceedings, resulting in a natural bias, as the arbitrator will be more likely to give the company favorable results in exchange for future business.

[13] *Id.* at 643.

[14] Deborah H. Hensler, Our Courts, Ourselves: How the Alternative Dispute Resolution Movement is Re-shaping our Legal System, 108 Penn St. L. Rev. 165, 195 (Summer 2003).

[15] 74 Wash. U. L. Q. at 694.

party's statutory rights.[16] Although ADR proponents argue that resolving a case through arbitration is cheaper than resolving a case through trial, the fact is that litigants dispose of most claims prior to trial.[17] Accordingly, the FRA should carefully consider not only the potential benefits but also the challenges associated with the process before the agency issues any regulations regarding ADR mechanisms.

ATLA appreciates this opportunity to submit comments in response to the Agency's Notice of Safety Inquiry regarding private highway-rail grade crossings. If you have any questions or comments, please contact Gerie Voss, ATLA's Regulatory Counsel at (202) 965-3500 ext. 748.

Sincerely,

Lewis S. "Mike" Eidson

[16] *Green Tree Finance Corp. v. Randolph*, 531 U.S. 79, 89-91 (2000). Where a party cannot afford the costs of arbitration, the arbitration provision cannot be exercised.

[17] 74 Wash. U. L. Q. at 694 (citing Richard L. Marcus et al., *Civil Procedure: A Modern Approach*, 102-04 (2d ed. 1995) (observing that most legal claims are not litigated, and that only 3% of litigated claims are actually tried)).

As a private crossing owner I would like to add the following:

Points/History:
The UCTC (Ulster County Transportation Council MPO)is presently working on a 30-year strategy for transportation growth.

CSX is looking to re-establish a double rail system to handle their proposed expansion from approximately 34 trains per day to 54 trains on a daily basis.

The Town of Saugerties Economic Development zone, a Federal highway, runs along Kings Highway, parallel to the railroad. This three mile stretch of road has eleven of the town's 14 at-grade crossings. Only two of those crossings are protected by lights and gates. In fact, over the years,there has been an accident and/or death at every crossing. The freqency is increasing as the traffic and population increases.

On April 7, 2005, I became more personally effected. My husband, Joe, was killed in a train/car collision at our own private at-grade crossing.

Conditions along the railroad have been deteriorating since CSX assumed ownership of the Conrail line. The number of trains have increased while the maintenance has decreased.

Foliage is no longer maintained or removed from the CSX right-of-way. RR methods of stone shuffling and replacement increase the grade at the access points each year; the steeper grade reduces the visibility.

There are no CSX stop signs or other safety devices at the crossings....although CSX DID take the initiative to post signs containing 800 numbers to call in case the tracks were blocked by something that might put the train in danger! Residents have taken matters into their own hands to reduce the danger...widening the exit/entrance approaches....posting their own stop signs, etc.

Train speeds have increased along with the increased need to move freight economically.

Suggestions:

Immediately impose speed limits in residential and industrial areas with at grade crossings. At present, CSX follows only suggested speed limits they they themselves have established (often times, without any input from the Town or County)

Install Standard stop signs and blinking caution lights. The lights would be activated by a signal from the locomotive when it was within 1/2 mile of the crossing.

Re-consider the location of the horns on the engines...approximately two years ago, the horns were moved from the front of the engines to the rear of the locomotive, behind the air conditioning units. This move has caused the warning signals to radiate out to the side of the train and can only be heard when the train actually passes the crossing. This has also triggered many requests for "quiet Zones" in our area.

Close the at-grade crossings,consolidating and redirecting the traffic to crossings with lights and gates via "collector" roads.

Return to former practices of educating the public (Stop-Look-Listen programs in schools and public meetings).

Thank you for the opportunity to imput suggestions and words of caution.

Sincerely,
Barbara L Budik
UCTC Member
Chairman, Saugerties EDC
Private Crossing Owner

BEFORE THE UNITED STATES DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
WASHINGTON, D.C. 20590

Safety of Private Highway-Rail Grade Crossings; Notice of Safety Inquiry	Docket No. FRA 2005-23281

COMMENTS OF RIO GRANDE PACIFIC CORPORATION AND NEW ORLEANS & GULF COAST RAILWAY COMPANY

November 29 2006

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I. SUMMARY OF COMMENTS BY RIO GRANDE PACIFIC AND NEW ORLEANS & GULF COAST RAILWAY

The only truly effective way to reduce the safety risks presented by private crossings is to eliminate as many private crossings as possible. A unifying federal approach is needed. Railroads must be recognized as interstate highways of commerce that must be allowed to operate without the interference and added risk of accidents and derailments caused by private crossings. Railroads must be able to control activities on the railroad right-of-way. Railroads must be given practical means of preventing new and expanded uses of existing private crossings and of eliminating existing private crossings wherever possible.

Rio Grande Pacific Corporation and New Orleans & Gulf Coast Railway Company urge the FRA to employ its regulatory authority or to support enactment of federal legislation giving the FRA authority to regulate private crossings as follows: (1) to give railroads the option to file suit in federal court to prevent landowners from installing unpermitted crossings on the railroad right of way and/or to remove crossings that pose safety hazards or interfere with railroad operations; (2) to establish uniform standards for design, construction and warnings to increase driver safety at private crossings and to ensure adequate drainage and reduce interference with track maintenance; (3) to establish alternative dispute resolution or administrative proceedings for the inexpensive, fair and speedy resolution of private crossing disputes; and (4) to establish a presumption that private crossings are hazardous and disfavored as a matter of federal law and that conflicting state laws are preempted.

The railroad's lack of access to federal court to challenge landowners' unpermitted use of the railroad right-of-way for crossings and the absence of uniform federal laws, procedures and standards for construction, permitting and closure of private crossings is a major obstacle to increasing safety by reducing the number of private crossings. The Railroads' only option at present is to seek recourse in hostile state courts applying divergent state property laws that tend to favor local landowners. Even when successful, state court litigation is very expensive and time consuming.

Federal transportation funds should be allocated for closing private crossings. States need money to build access roads to consolidate crossings. Funds should also be made available through grants or loans to enable landowners and/or railroads to acquire access rights and build private roads for alternate access to enable consolidation and elimination of crossings.

Lack of public funding is only part of the problem. So long as the law continues to favor the rights of landowners to insist on private crossings as a matter of convenience, there is no hope of progress even if reasonable levels of funding were made available to close crossings. Private railroad crossings should be presumed to be against public safety and disfavored as a matter of federal law, so as to shift the legal burden to landowners to prove necessity and entitlement in order to install or maintain private crossings. This step would give landowners incentive to seek public solutions for alternative access and/or to work cooperatively with neighbors and the railroad to find practical and affordable solutions.

Private crossings interfere with railroads' compliance with FRA track safety standards. The construction of crossings imposes additional and conflicting structural requirements and incorporates materials into the track structure that conflict with the FRA's requirements and standards for the roadbed and track structure. Crossings trap moisture, interfere with drainage and lead to premature deterioration of the underlying roadbed and track components. Crossings make regular maintenance of the roadbed and track much more difficult and costly. Regulatory standards or guidelines are needed to mitigate the inherent safety risks and harmful effects of crossings on railroad maintenance.

II. DISCUSSION OF RIO GRANDE'S AND NOGC'S EXPERIENCE WITH CONSOLIDATION AND CLOSURE OF PRIVATE CROSSINGS

Rio Grande Pacific Corporation is a short line and regional railroad holding company founded in 1986 that owns four Class III railroads with operations in six states, the Idaho Northern and Pacific Railroad, The Nebraska Central Railroad, Wichita Tillman and Jackson Railway Company, the Thunder Mountain Line and New Orleans & Gulf Coast Railway Company. Rio Grande's subsidiaries have encountered many of the same legal obstacles identified in the previous meetings in Minnesota, North Carolina and California and learned from hard experience how difficult it is to meet the FRA's challenge to reduce the number of private crossings. Dealing with private crossings is exceptionally expensive and complicated. Landowners are the only ones deriving an economic benefit from private crossings and rightfully should bear the expense of construction and maintenance. However, landowners are generally unwilling to accept responsibility for the expense of properly constructed crossings, even when they are required by law to do so. Regulations and property laws vary widely from state to state. The absence of clear legal authority permitting railroads to close private crossings or legal standards or procedures for permitting private crossings has frustrated the railroads' efforts in the face of strong resistance on the part of landowners and nearly total absence of political will on the part of elected local officials, judges and lawmakers to address private crossing safety.

It is bad enough that the lack of federal standards leaves the railroads without the tools to prevent people from building crossings wherever and however they want. Even worse, the very absence of federal regulation in the private crossing area has actually been used against the railroad by opponents who wish to stymie railroad efforts to limit crossings. The FRSA statutory scheme generally bars the railroad in all but exceptional situations from filing suit in federal court where the judges who preside are less captive to the prejudices of voters and presumably more attuned to protecting federal interests in interstate transportation and commerce. The current FRSA enforcement scheme presents an exceptionally complicated and irrational checkerboard of federal preemption barring application of some, but not all, state safety laws and regulations. Although state laws that are in addition to and conflict with federal safety laws and regulations, are generally preempted, as a practical matter, determining which state laws are in addition to and conflict with federal laws and regulations is far from clear and inevitably leads to costly and time consuming litigation.

The ill-fated efforts of Rio Grande's subsidiary, New Orleans & Gulf Coast Railway Company, present a case study of the insurmountable problems facing railroads who have accepted the FRA's challenge of closing private crossings in the interest of public safety.

Louisiana, along with the majority of other states, does not regulate private crossings or establish safety standards for construction of private crossings or provide procedures for adjudicating whether new private crossings should be permitted or for closing existing crossings. NOGC's efforts to limit and close crossings have been met with widespread resistance and outright hostility on the part of local officials and landowners alike. Landowners have gone to court and obtained restraining orders from sympathetic state court judges preventing NOGC from removing redundant, worn out and improperly built crossings –- even when the closure would have left the property with another crossing for necessary highway access.

NOGC and its predecessors fortunately have had very few serious accidents at either public or private at grade crossings, but NOGC is well aware that this record should not instill a false sense of safety. To the extent that crossings are considered at all, they are perceived to be the railroad's responsibility -- and sole problem. The commonly held, though false, local attitude is that private crossings do not present a public safety problem because: (a) there have not been any major accidents or fatalities at private crossings, and (b) NOGC's slow operating speed (10 mph) eliminates any safety risk.

NOGC is currently litigating with landowners over its right to prevent construction of new crossings or to deny permits for expanded use of field crossings. Unfortunately, after several years and great expense, NOGC's federal lawsuit was recently dismissed for lack of federal jurisdiction and is on appeal to the U.S. Fifth Circuit Court of Appeals. NOGC must start over in state court.

A. Background and Scope of NOGC's Private Crossing Problem

NOGC operates 32 miles of main line track serving over twenty switching and industrial customers in the New Orleans area via interchange with the Union Pacific Railroad in Westwego, Louisiana. NOGC is the only railroad operating east of Avondale on the West bank of the Mississippi River and is the only rail link for such customers as ConocoPhillips Alliance Refinery, Harvest States grain elevator, Chevron Oronite refinery, Packard Pipe, the Port of Plaquemines and the proposed Millennium Port at the mouth of the Mississippi River.

When NOGC bought the railroad in 1999, the 24 mile Algiers to Myrtle Grove line was burdened with 276 public and private at grade railroad crossings. With a per mile average of 11.5 crossings per mile, it is surely one of the highest ratios of crossings anywhere in the country. Some stretches have as many as 30 per mile. Only 57 are public crossings. Of the private crossings; 111 are industrial, commercial or multi-family crossings; 23 are agricultural, undeveloped property or pedestrian crossings; and 85 are for single family residential use. Nearly half of the private crossings are gravel "bootleg" crossings installed by landowners without the permission or supervision of the railroad.

The disproportionately large number of crossings on NOGC's line is the result of a combination of factors:

- Louisiana Highway 23 lies adjacent to and parallels the NOGC's tracks for most of its length. This is the only north south highway that runs through a long narrow strip of

Mississippi River delta. The tracks cut off access to the highway from a narrow strip of land on the river side of the tracks. Roads that once fronted the river were eliminated by levee officials or fell out of use once Highway 23 was built, leaving no alternative access roads on that side of the tracks.

- The recent unchecked residential and commercial growth and change in use of previously agriculture property on the river side of the tracks;

- The lack of any regulation of public crossings at either the state or federal level;

- The complete lack of planning by State and local governments and absence of sufficient public road crossings and/or access roads; and

- Laxity of enforcement of property rights and failure by predecessor railroads to respond to evolving changes in use of crossings by landowners and to prevent installation of new crossings as properties were subdivided.

This railroad was originally built in 1888 by the New Orleans, Fort Jackson and Grand Isle Railroad. The railroad was originally built across largely undeveloped swamp and agricultural lands. The State built the highway alongside the tracks 30 or more years later. Historic railroad maps indicate that 64 plantation crossings were provided along this 24 mile stretch at the time the railroad was built, an average of 2.6 per mile. No deeds or other records setting the terms by which these agricultural crossings were established have survived due to hurricanes and courthouse fires. The use of many of these original crossings changed over time and the number of crossings grew as the plantations were repeatedly subdivided over the years. In many instances, landowners failed to exercise legal rights to use the original crossings and railroads tacitly allowed the installation and use of new crossings rather than enforce their property rights.

NOGC operates its trains at 10 mph over its entire line even though its route consists of both Class 1 and Class 2 rated track, in part to minimize the risk of accidents. There is a widespread tendency among local motorist to disregard traffic signs and pull out in front or outrun trains with little concerted law enforcement effort to curb such behavior. The large number of at grade railroad crossings multiplies the points of contact between moving trains and automobiles, increasing the probability of crossing accidents and derailments. The risk of accidents is increased by the lack of minimum safety standards for engineering of approaches, drainage, surface, sight distances, lighting, signage and automated warnings at private crossings. NOGC cannot ensure the safety of its operations or increase efficiency by increasing train speed to meet the anticipated industrial growth in its service area if it cannot eliminate a significant number of these crossings. NOGC has been forced to redirect its resources to private crossing maintenance issues rather than investing in upgrading its roadbed infrastructure.

B. NOGC's Efforts to Address the Private Crossing Problem

NOGC bought the line in 1999 and immediately launched a multi-front effort to eliminate as many private crossings as possible. NOGC engaged GCR Associates, a highly regarded

professional planning firm to survey, inventory and map each crossing, identifying its location, construction and use and then to prepare a closure and consolidation plan. GCR identified clusters of crossings that could be consolidated by use of access roads leading to public crossings or upgraded protected private crossings. NOGC sought to educate and enlist the support and cooperation of State and Parish officials about this public safety and infrastructure issue, using the planning proposals as a starting point. At the same time, NOGC began posting and removing redundant and unused crossings and focused on preventing new crossings and expanded uses of existing crossings. NOGC initiated a permit application and review process and required written agreements imposing indemnity and insurance requirements and clearly assigning responsibility for construction and maintenance to those wanting private crossings.

NOGC has had a high level of cooperation from its refinery customers and larger retail establishments who have agreed to permits and funded construction of properly engineered crossings and installation of active and passive safety devices. NOGC has otherwise encountered strong resistance from residential and commercial users.

Despite NOGC's efforts, state and local officials have not been supportive. The Louisiana DODT and local parish officials generally have cited the lack of available funding for reducing the number of private crossings. Even if resources were not a problem, it became apparent that there is a complete lack of political will to address an issue that is so unpopular with constituents. In some instances, lack of support has turned to active resistance. Parish officials have continued to approve new subdivisions without requiring developers to confirm access rights and without adequate construction and engineering standards for private crossings, and have allowed public dedication of improperly constructed and unprotected subdivision crossings and have failed to correct obstructed sight lines. Local officials sought enactment of an amendment to the major public crossing closure legislation enacted by the Louisiana legislature in 2005, specifically to impede closure of railroad crossings along Highway 23. *See* La. Rev. Stat. § 48:390(F).

III. NOGC'S RESPONSE TO FRA SPECIFIC AREAS FOR COMMENT

I. At-Grade Highway-Rail Crossings Present Inherent Risks To Users, Including The Railroad And Its Employees, And To Other Persons In The Vicinity Should A Train Derail Into An Occupied Area Or Release Hazardous Materials. When Passenger Trains Are Involved, The Risks Are Heightened. From The Standpoint Of Public Policy, How Do We Determine Whether Creation Or Continuation Of A Private Crossing Is Justified?

A. Private Crossings cannot be justified in the interest of public safety

Every crossing increases the likelihood of accidents and derailments. NOGC's trains regularly transport tank cars carrying hazardous and toxic materials for NOGC's refinery customers and pass through densely populated residential and commercial areas in very close proximity to the Mississippi River and coastal waters, wetlands and marshes. Authoritative federal laws or regulations are needed to overcome the lack of political will and lack of local resources for eliminating and/or limiting private railroad crossings and to avoid the inherent prejudice of local courts and operation of state property laws that generally favor landowners.

One approach would be federal laws or regulations establishing that private railroad crossings are presumed to be against public safety and disfavored as a matter of law and to shift the legal burden to landowners to prove necessity and entitlement in order to install or maintain private crossings. This change in the law would provide necessary uniformity nationwide. This approach would give landowners the incentive to seek public solutions for alternative access and/or work cooperatively with neighbors to find practical and affordable solutions.

A unified federal solution is needed because state property laws are generally not attuned to specific safety issues at stake when the railroad attempts to limit access to the right of way for safety reasons. General tort laws are ill equipped to ensure public safety at private crossings. For example, the Louisiana statutory scheme for preventing landlocked properties from being removed from commerce by allowing the owner to cross over neighboring properties to reach the nearest public street is overwhelmingly oriented in favor of the individual landlocked owners and is clearly not designed to account for the public safety implications of permitting multiple railroad crossings side by side. The landlocked property laws were designed to resolve isolated cases in the agricultural era and are clearly not equipped to take the place of appropriate public planning and infrastructure in developing commercial and suburban areas. Many landowners have failed to exercised property rights against their vendors to use existing crossings for access, but have installed new crossings for convenience. Crossings were allowed to remain on sufferance rather facing costly and losing court battles.

Louisiana is among the majority of states that elect judges. It is extremely difficult for elected judges who must be responsive to the electorate to make decisions unfavorable to local landowners, even in the broader interest of public safety and welfare. Although lifetime appointments shield federal judges from the electoral pressures facing state court judges, federal courts are courts of limited jurisdiction and generally have not been deemed available to resolve property law disputes involving private railroad crossings, even when federal safety and economic regulations are implicated. It is anomalous that although the railroad industry is overwhelmingly governed by federal laws and regulations to ensure against enforcement of state laws that would impede their operation in interstate commerce, nevertheless, railroad lawsuits may be initiated in federal court only in exceptional circumstances.

Any procedure to evaluate the public utility of private crossings must give proper weight to the public welfare and account for the positive impact of railroad transportation as an environmentally responsible and safe alternative to transport by motor carrier. The economic impact of private crossings on railroad operations must also be addressed because private crossings increase liability exposure and redirect railroad time and resources away from essential track maintenance and inspection operations. Landowners must be responsible for installation and ongoing maintenance and upgrades for crossings engineered for site conditions and use. Landowners must maintain appropriate insurance and indemnify railroads against injuries and losses associated with crossing use.

B. Unregulated Private Crossings Create Conflicts with Other Safety Regulations

An overlooked consequence of private crossings that is highly relevant to the discussion of public policy is that the existence of unregulated private crossings directly and substantially conflicts with and impedes the Railroads' ability to maintain the track structure in accordance with the Track Safety Standards (49 CFR Part 213), which is one of its defined areas of responsibility. Crossings create additional safety issues and conflict with FRSA safety regulations that have not been previously addressed in these proceedings. First, large numbers of private crossings may counteract the effectiveness of the regulations requiring the sounding of locomotive horns at public crossings. *See* 49 C.F.R. § 222.1 *et seq*. Because of drivers' frequent inattention to trains and tendency to disregard of warning signs and signals, NOGC's engineers sound the locomotive horn at all crossings to warn of the approach of trains even though the regulations specifically do not require the sounding of horns at private crossings. 49 C.F.R. § 222.25. Where there are so many crossings in close proximity, train engineers are unable to blow the horn in the intended sequence and must blow a continuous blast. This situation allows motorists to become conditioned to the horn as background noise and increases the risk that motorists will fail to recognize the warning.

Installation of crossings also interferes with, adds to and conflicts with existing specific FRA track safety regulations relating to the construction and maintenance of the roadbed and track structure. 49 C.F.R. § 213, *et seq*. These provisions are intended to ensure that the roadbed and track provide the necessary structural support for railroad traffic and thereby reduce the risk of derailments. Insuring sufficient structural support has become more challenging as the permissible gross-weight-on-rail capacity of cars has increased over recent years. Crossings interfere with the roadbed and track structure in the following ways:

- Crossing materials impose additional and incompatible forces and materials on the standard road bed structure.

- Crossing materials trap moisture and interfere with proper drainage, thereby accelerating the deterioration of crossties and fouling of the ballast.

- Crossings interfere with visual inspection of the roadbed and track.

- The roadbed under crossings tends to settle at a different rate than for open track.

- Crossings render regular maintenance of the roadbed and track far more difficult and costly because crossing materials must be removed and replaced each time this work is performed. Mechanized tamping machines and ballast regulators are used to efficiently perform the track surfacing and alignment of the track. This work is needed to compensate for differential settlement, to correct discrepancies in cross-level, profile, and alignment and to refresh and replace fouled ballast. Differential settlement at crossings is exaggerated if crossings are skipped over. Removal and replacement of crossings so this work can proceed is very labor intensive and increasingly expensive.

- The need to remove crossings to perform required maintenance and the expense of replacing them acts to trigger confrontation between the landowners and railroad over who is responsible for the expense of installing and maintaining crossings.

These additional and cumulative crossing-related costs are substantial and impose an economic burden on short line railroads, in particular, which are generally small businesses which do not have unlimited resources. The inevitable result is that the railroads must divert and redirect significant funds away from, and to the detriment of, the maintenance and upgrading of the track and roadbed infrastructure as needed to increase efficiency and improve service to its shippers and future customers.

II. Is The Current Assignment Of Responsibility For Safety At Private Crossings Effective? To What Extent Do Risk Management Practices Associated With Insurance Arrangements Result In ''Regulation'' Of Safety At Private Crossings?

At present, there is no clear assignment of responsibility for safety at private crossings. There are no federal laws or regulations directly assigning responsibility for private crossings. There is no uniform law or policy assigning responsibility for safety at private crossings from state to state. The railroads' specific regulatory role with respect to safety at *public* crossings is quite limited, however, that role vis a vis public crossings may provide an appropriate starting point for allocating railroad responsibility for private crossings.[1] As a practical matter, railroads bear a disproportionate share of responsibility and potential liability for private crossing safety.

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[1] The FRA Safety Advisory 2005-03; Highway-Rail Grade Crossing Safety, issued May 2, 2005, 70 FR 22750-22754, summarized the responsibilities owed by railroads to the FRA, acting on behalf of the public, that relate to *public* highway-rail grade crossing safety, as follows:

1. Inspect, test, and maintain grade crossing warning systems in accordance with 49 CFR Part 234 . . . .*See* FRA Safety Advisory 2002-1 (67 FR 3258; 01/23/2002) and FRA Safety Advisory 2004-03 (69 FR 48904; 8/11/2004).
2. Report all activation failures in writing within 15 days (49 CFR 234.9).
3. Maintain track structure in accordance with the Track Safety Standards (49 CFR Part 213). This includes maintaining adequately drained (non-fouled) ballast that otherwise could permit the existence of low ballast resistance adversely affecting the operation of grade crossing signals (49 CFR Sec. 213.103) and removing vegetation on railroad property that could interfere with preview of grade crossing warning signs and signals, whether active or passive (49 CFR Sec. 213.37).
4. Operate trains in accordance with applicable speed limitations imposed by Federal regulation (49 CFR Parts 213, 234 & 236) and the railroad's operating rules, timetables, and special instructions (see 49 CFR Parts 217 & 240).
5. Provide and maintain locomotive event recorders on all locomotives operating greater than 30 miles per hour, preserving data following any reportable event (49 CFR 229.135).
6. Provide and maintain locomotive auxiliary alerting lights on any lead locomotive operating greater than 20 miles per hour (49 CFR 229.125(d)).

A. The Threat of Tort Liability Is an Ineffective Deterrent or Incentive for Landowners to Maintain the Safety of Private Crossings

Private crossing holders are not compelled by any federal law or regulation and few, if any state laws, to bear responsibility for safety at private crossings. Tort liability remains the primary means of assigning overall responsibility for safety. Railroads are generally not responsible for maintaining private crossings under Louisiana law, however, railroads may be held liable for the condition of private crossings if a crossing is known to be defective or if the railroad voluntarily assumed a duty to maintain the crossing. Private crossing holders would be legally liable for accidents attributable to the condition of private crossings and face the threat of tort liability under Louisiana law. The risk of liability, however, has not deterred the proliferation of private crossings or encouraged the consolidation or sharing of crossings. The absence of serious accidents at private crossings along the NOGC line and lack of public awareness may be partially responsible for this. Even though the FRA's statistics have shown that the overwhelming majority of crossing accidents are not due to any fault on the part of railroads, there is nothing to prevent tort plaintiffs from suing the railroad whenever an accident take place at private crossings, even when there is no evidence that the railroad was at fault.

B. Insurance Is Not a Practical Approach for Managing Risk at Public Crossings

Managing the risk of private crossings by using insurance arrangements is not a realistic option. There are no federal or state laws or regulations to compel private crossing holders to maintain even minimal liability insurance. NOGC's experience has shown that landowners are either unwilling or unable to carry appropriate levels of liability insurance due to the high cost and a lack of available coverage options, particularly for residential crossings. In connection with its recent discussions with landowners, NOGC asked an independent agent to investigate the availability of liability and property coverage for residential and commercial private crossings after landowners objected to the condition in NOGC's crossing agreement requiring crossing holders to obtain appropriate levels of liability coverage and name NOGC as an additional insured. All home and business owners in Southeast Louisiana are facing an insurance crisis in the wake of hurricane Katrina, with many insurers pulling out of this market altogether or substantially raising rates. The State sponsored insurer of last resort has requested huge rate increases making commercial and residential coverage prohibitively expensive in the near term. Even without this obstacle, the agent was unable to identify any carriers offering policies or endorsements extending such coverage in this marketplace. Whether driveway crossings would be considered part of the covered premises is subject to interpretation under the standard coverage terms in homeowners' policies. Coverage for liability assumed under contract is generally excluded under homeowners' coverage and not available via endorsement.

III. How Should Improvement And/Or Maintenance Costs Associated With Private Crossing Be Allocated?

Landowners, as the only ones deriving an economic benefit from the crossings, should rightly bear the expense of construction and maintenance. Railroads derive no economic benefit whatsoever from crossings, but practically speaking must bear the additional costs of crossings

unless they are reimbursed by the parties benefiting from the crossings. Railroads must also shoulder the substantial additional track maintenance costs where track is covered by crossings. Private crossing holders, however, are not compelled by any federal law or regulation and few, if any state laws, to bear responsibility for the cost of installation or upkeep of crossings built to industry standards or to pay for appropriate lighting and signage.

IV. Is There A Need For Alternative Dispute Resolution Mechanisms To Handle Disputes That May Arise Between Private Crossing Owners And The Railroads?

Railroads and landowners would benefit from alternative dispute mechanisms for handling disputes over private crossings such as arbitration or administrative hearings. Such a procedure must permit resolution of disputes in a fair, uniform, speedy and cost effective manner. Without fairness, speed and low cost, such a system would merely add a layer of needless administrative expense to the situation.

The standards for determining whether to permit or maintain a private crossing must begin with the uniformly applied presumption that private crossings are safety hazards and are disfavored as a matter of federal law and that conflicting state laws are preempted. The landowner seeking to install or maintain private crossings would bear the burden of proving actual need for the crossing, not inconvenience, and must demonstrate that a crossing can be safely constructed with appropriate visibility, signage and other safety measures and must accept responsibility for the cost of construction and ongoing maintenance. This alternative procedure and presumption would apply notwithstanding a claim of prior right or entitlement pursuant to deed, agreement or prescriptive easement. The required showing of need would require the landowner to pursue whatever legal recourse he may have against the persons who sold or subdivided the property without access and would entail showing that there were no physically feasible and safer alternative options without undue expense. The consideration of undue expense must weigh the present and future construction and maintenance costs to the railroad as well as the costs to the landowner of acquiring and constructing alternative access roads. This change in the law would give landowners incentive to seek public solutions for alternative access and/or work cooperatively with neighbors to find practical and affordable solutions.

To support this effort, funds should be allocated to the States for closure and consolidation of private crossings. These funds could be used directly by State DOTs or localities to build public access roads or made available by means of grants or loans to landowners to acquire property for access and to build private access roads. Railroads could also apply for funds for buy outs if necessary to achieve closures.

V. Should The State Or Federal Government Assume Greater Responsibility For Safety At Private Crossings?

The federal government should assume ultimate responsibility and authority for safety at private crossings. There is a virtual absence of state or federal regulation of private crossings. Railroads operate in interstate commerce. A uniform federal approach is necessary and preferable to forcing railroads to comply with a confusing variety of conflicting state regulations and procedures. A federal solution is needed to give the railroads the tools to eliminate and

permit private crossings, to establish standards and to allocate responsibility for liability at and construction and maintenance of private crossings.

VI. Should There Be Nationwide Standards For Warning Devices At Private Crossings, Or For Intersection Design Of New Private Grade Crossings?

Federal regulations are needed to adopt, implement and enforce nationwide safety standards for design and construction of crossings and appropriate warning devices at private crossings. The relative lack of existing state regulation establishes both the need and opportunity for establishing a uniform approach to private crossing safety.

VII. How Do We Determine When A Private Crossing Has A 'Public Purpose' And Is Subject To Public Use?

The determination of whether a crossing is "public" or "private" should consider the safety risks to the public associated with use of a particular crossing rather than the present federal classification of "public" based on whether the road or driveway is maintained by a public body charged with maintaining public streets or roads. As the testimony in prior hearings has indicated, under the present classification, the decision to dedicate a crossing road as a public street is often driven by the desire to avoid responsibility for maintenance and safety rather than an appropriate consideration of actual use of the crossing. The common public perception is that crossings should be considered "public" when they are heavily used by the public. It makes no sense from a safety standpoint to have a different standard for construction of heavily used private crossings than for public road crossings with comparable traffic.

VIII. Should Some Crossings Be Categorized As 'Commercial Crossings', Rather Than As 'Private Crossings'?

A more rational approach would be to categorize crossings by volume of traffic and public safety implications of particular uses of crossings rather than purely on ownership and/or maintenance responsibility. Refinery crossings which contemplate limited public access but are used by trucks transporting hazardous materials must be regulated not as commercial crossings, but so as to minimize the risk to public safety. The category of private crossing should apply where measures are taken to restrict access.

IX. Are There Innovative Traffic Control Treatments That Could Improve Safety At Private Crossings On Major Rail Corridors, Including Those On Which Passenger Service Is Provided?

The emphasis should be on strengthening the ability of states and railroads to eliminate private crossings. The use of access roads to permit the closure of private crossings and consolidation around a limited number of well constructed and protected crossings is such an innovative approach.

X. Should The Department Of Transportation Request Enactment Of Legislation To Address Private Crossings? If So, What Should It Include?

Rio Grande Pacific and NOGC strongly support federal legislation or regulation to address private crossings in the following areas:

1. To establish federal standards for design and construction of private crossings;

2. to allocate responsibility for construction, maintenance and liability for private crossings to the landowners who benefit from private crossings;

3. to establish a private right of action and federal jurisdiction to allow railroads to file suit in federal court to enjoin landowners from installing crossings that interfere with railroad operations, violate safety standards or regulations or present a safety hazard;

4. to establish a presumption that private crossings are safety hazards and are disfavored as a matter of federal law and that conflicting state laws are preempted. Landowners must bear the burden of proving actual need for any new or expanded crossing, not inconvenience and must accept responsibility for the cost of construction and maintenance of a crossing built to federal standards. This presumption would apply over and above a claim of right pursuant to deed, agreement or prescriptive easement.

5. to establish an alternative federal dispute resolution mechanism or administrative procedure for the uniform, fair, inexpensive and speedy resolution of private crossing and permitting disputes; and

6. to provide federal funds for closure of private crossings to States for construction of public access roads for consolidation and closure of crossings or made available by loans or grants to landowners or railroads to acquire access rights and build driveways to consolidate crossings.

BEFORE THE UNITED STATES DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
WASHINGTON, D.C. 20590

Safety of Private Highway-Rail Grade Crossings; Notice of Safety Inquiry	Docket No. FRA 2005-23281

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I. SUMMARY OF COMMENTS BY RIO GRANDE PACIFIC AND NEW ORLEANS & GULF COAST RAILWAY

The only truly effective way to reduce the safety risks presented by private crossings is to eliminate as many private crossings as possible. A unifying federal approach is needed. Railroads must be recognized as interstate highways of commerce that must be allowed to operate without the interference and added risk of accidents and derailments caused by private crossings. Railroads must be able to control activities on the railroad right-of-way. Railroads must be given practical means of preventing new and expanded uses of existing private crossings and of eliminating existing private crossings wherever possible.

Rio Grande Pacific Corporation and New Orleans & Gulf Coast Railway Company urge the FRA to employ its regulatory authority or to support enactment of federal legislation giving the FRA authority to regulate private crossings as follows: (1) to give railroads the option to file suit in federal court to prevent landowners from installing unpermitted crossings on the railroad right of way and/or to remove crossings that pose safety hazards or interfere with railroad operations; (2) to establish uniform standards for design, construction and warnings to increase driver safety at private crossings and to ensure adequate drainage and reduce interference with track maintenance; (3) to establish alternative dispute resolution or administrative proceedings for the inexpensive, fair and speedy resolution of private crossing disputes; and (4) to establish a presumption that private crossings are hazardous and disfavored as a matter of federal law and that conflicting state laws are preempted.

The railroad's lack of access to federal court to challenge landowners' unpermitted use of the railroad right-of-way for crossings and the absence of uniform federal laws, procedures and standards for construction, permitting and closure of private crossings is a major obstacle to increasing safety by reducing the number of private crossings. The Railroads' only option at present is to seek recourse in hostile state courts applying divergent state property laws that tend to favor local landowners. Even when successful, state court litigation is very expensive and time consuming.

Federal transportation funds should be allocated for closing private crossings. States need money to build access roads to consolidate crossings. Funds should also be made available through grants or loans to enable landowners and/or railroads to acquire access rights and build private roads for alternate access to enable consolidation and elimination of crossings.

Lack of public funding is only part of the problem. So long as the law continues to favor the rights of landowners to insist on private crossings as a matter of convenience, there is no hope of progress even if reasonable levels of funding were made available to close crossings. Private railroad crossings should be presumed to be against public safety and disfavored as a matter of federal law, so as to shift the legal burden to landowners to prove necessity and entitlement in order to install or maintain private crossings. This step would give landowners incentive to seek public solutions for alternative access and/or to work cooperatively with neighbors and the railroad to find practical and affordable solutions.

Private crossings interfere with railroads' compliance with FRA track safety standards. The construction of crossings imposes additional and conflicting structural requirements and incorporates materials into the track structure that conflict with the FRA's requirements and standards for the roadbed and track structure. Crossings trap moisture, interfere with drainage and lead to premature deterioration of the underlying roadbed and track components. Crossings make regular maintenance of the roadbed and track much more difficult and costly. Regulatory standards or guidelines are needed to mitigate the inherent safety risks and harmful effects of crossings on railroad maintenance.

II. DISCUSSION OF RIO GRANDE'S AND NOGC'S EXPERIENCE WITH CONSOLIDATION AND CLOSURE OF PRIVATE CROSSINGS

Rio Grande Pacific Corporation is a short line and regional railroad holding company founded in 1986 that owns four Class III railroads with operations in six states, the Idaho Northern and Pacific Railroad, The Nebraska Central Railroad, Wichita Tillman and Jackson Railway Company, the Thunder Mountain Line and New Orleans & Gulf Coast Railway Company. Rio Grande's subsidiaries have encountered many of the same legal obstacles identified in the previous meetings in Minnesota, North Carolina and California and learned from hard experience how difficult it is to meet the FRA's challenge to reduce the number of private crossings. Dealing with private crossings is exceptionally expensive and complicated. Landowners are the only ones deriving an economic benefit from private crossings and rightfully should bear the expense of construction and maintenance. However, landowners are generally unwilling to accept responsibility for the expense of properly constructed crossings, even when they are required by law to do so. Regulations and property laws vary widely from state to state. The absence of clear legal authority permitting railroads to close private crossings or legal standards or procedures for permitting private crossings has frustrated the railroads' efforts in the face of strong resistance on the part of landowners and nearly total absence of political will on the part of elected local officials, judges and lawmakers to address private crossing safety.

It is bad enough that the lack of federal standards leaves the railroads without the tools to prevent people from building crossings wherever and however they want. Even worse, the very absence of federal regulation in the private crossing area has actually been used against the railroad by opponents who wish to stymie railroad efforts to limit crossings. The FRSA statutory scheme generally bars the railroad in all but exceptional situations from filing suit in federal court where the judges who preside are less captive to the prejudices of voters and presumably more attuned to protecting federal interests in interstate transportation and commerce. The current FRSA enforcement scheme presents an exceptionally complicated and irrational checkerboard of federal preemption barring application of some, but not all, state safety laws and regulations. Although state laws that are in addition to and conflict with federal safety laws and regulations, are generally preempted, as a practical matter, determining which state laws are in addition to and conflict with federal laws and regulations is far from clear and inevitably leads to costly and time consuming litigation.

The ill-fated efforts of Rio Grande's subsidiary, New Orleans & Gulf Coast Railway Company, present a case study of the insurmountable problems facing railroads who have accepted the FRA's challenge of closing private crossings in the interest of public safety.

Louisiana, along with the majority of other states, does not regulate private crossings or establish safety standards for construction of private crossings or provide procedures for adjudicating whether new private crossings should be permitted or for closing existing crossings. NOGC's efforts to limit and close crossings have been met with widespread resistance and outright hostility on the part of local officials and landowners alike. Landowners have gone to court and obtained restraining orders from sympathetic state court judges preventing NOGC from removing redundant, worn out and improperly built crossings –- even when the closure would have left the property with another crossing for necessary highway access.

NOGC and its predecessors fortunately have had very few serious accidents at either public or private at grade crossings, but NOGC is well aware that this record should not instill a false sense of safety. To the extent that crossings are considered at all, they are perceived to be the railroad's responsibility -- and sole problem. The commonly held, though false, local attitude is that private crossings do not present a public safety problem because: (a) there have not been any major accidents or fatalities at private crossings, and (b) NOGC's slow operating speed (10 mph) eliminates any safety risk.

NOGC is currently litigating with landowners over its right to prevent construction of new crossings or to deny permits for expanded use of field crossings. Unfortunately, after several years and great expense, NOGC's federal lawsuit was recently dismissed for lack of federal jurisdiction and is on appeal to the U.S. Fifth Circuit Court of Appeals. NOGC must start over in state court.

A. Background and Scope of NOGC's Private Crossing Problem

NOGC operates 32 miles of main line track serving over twenty switching and industrial customers in the New Orleans area via interchange with the Union Pacific Railroad in Westwego, Louisiana. NOGC is the only railroad operating east of Avondale on the West bank of the Mississippi River and is the only rail link for such customers as ConocoPhillips Alliance Refinery, Harvest States grain elevator, Chevron Oronite refinery, Packard Pipe, the Port of Plaquemines and the proposed Millennium Port at the mouth of the Mississippi River.

When NOGC bought the railroad in 1999, the 24 mile Algiers to Myrtle Grove line was burdened with 276 public and private at grade railroad crossings. With a per mile average of 11.5 crossings per mile, it is surely one of the highest ratios of crossings anywhere in the country. Some stretches have as many as 30 per mile. Only 57 are public crossings. Of the private crossings; 111 are industrial, commercial or multi-family crossings; 23 are agricultural, undeveloped property or pedestrian crossings; and 85 are for single family residential use. Nearly half of the private crossings are gravel "bootleg" crossings installed by landowners without the permission or supervision of the railroad.

The disproportionately large number of crossings on NOGC's line is the result of a combination of factors:

- Louisiana Highway 23 lies adjacent to and parallels the NOGC's tracks for most of its length. This is the only north south highway that runs through a long narrow strip of

Mississippi River delta. The tracks cut off access to the highway from a narrow strip of land on the river side of the tracks. Roads that once fronted the river were eliminated by levee officials or fell out of use once Highway 23 was built, leaving no alternative access roads on that side of the tracks.

- The recent unchecked residential and commercial growth and change in use of previously agriculture property on the river side of the tracks;

- The lack of any regulation of public crossings at either the state or federal level;

- The complete lack of planning by State and local governments and absence of sufficient public road crossings and/or access roads; and

- Laxity of enforcement of property rights and failure by predecessor railroads to respond to evolving changes in use of crossings by landowners and to prevent installation of new crossings as properties were subdivided.

This railroad was originally built in 1888 by the New Orleans, Fort Jackson and Grand Isle Railroad. The railroad was originally built across largely undeveloped swamp and agricultural lands. The State built the highway alongside the tracks 30 or more years later. Historic railroad maps indicate that 64 plantation crossings were provided along this 24 mile stretch at the time the railroad was built, an average of 2.6 per mile. No deeds or other records setting the terms by which these agricultural crossings were established have survived due to hurricanes and courthouse fires. The use of many of these original crossings changed over time and the number of crossings grew as the plantations were repeatedly subdivided over the years. In many instances, landowners failed to exercise legal rights to use the original crossings and railroads tacitly allowed the installation and use of new crossings rather than enforce their property rights.

NOGC operates its trains at 10 mph over its entire line even though its route consists of both Class 1 and Class 2 rated track, in part to minimize the risk of accidents. There is a widespread tendency among local motorist to disregard traffic signs and pull out in front or outrun trains with little concerted law enforcement effort to curb such behavior. The large number of at grade railroad crossings multiplies the points of contact between moving trains and automobiles, increasing the probability of crossing accidents and derailments. The risk of accidents is increased by the lack of minimum safety standards for engineering of approaches, drainage, surface, sight distances, lighting, signage and automated warnings at private crossings. NOGC cannot ensure the safety of its operations or increase efficiency by increasing train speed to meet the anticipated industrial growth in its service area if it cannot eliminate a significant number of these crossings. NOGC has been forced to redirect its resources to private crossing maintenance issues rather than investing in upgrading its roadbed infrastructure.

B. NOGC's Efforts to Address the Private Crossing Problem

NOGC bought the line in 1999 and immediately launched a multi-front effort to eliminate as many private crossings as possible. NOGC engaged GCR Associates, a highly regarded

professional planning firm to survey, inventory and map each crossing, identifying its location, construction and use and then to prepare a closure and consolidation plan. GCR identified clusters of crossings that could be consolidated by use of access roads leading to public crossings or upgraded protected private crossings. NOGC sought to educate and enlist the support and cooperation of State and Parish officials about this public safety and infrastructure issue, using the planning proposals as a starting point. At the same time, NOGC began posting and removing redundant and unused crossings and focused on preventing new crossings and expanded uses of existing crossings. NOGC initiated a permit application and review process and required written agreements imposing indemnity and insurance requirements and clearly assigning responsibility for construction and maintenance to those wanting private crossings.

NOGC has had a high level of cooperation from its refinery customers and larger retail establishments who have agreed to permits and funded construction of properly engineered crossings and installation of active and passive safety devices. NOGC has otherwise encountered strong resistance from residential and commercial users.

Despite NOGC's efforts, state and local officials have not been supportive. The Louisiana DODT and local parish officials generally have cited the lack of available funding for reducing the number of private crossings. Even if resources were not a problem, it became apparent that there is a complete lack of political will to address an issue that is so unpopular with constituents. In some instances, lack of support has turned to active resistance. Parish officials have continued to approve new subdivisions without requiring developers to confirm access rights and without adequate construction and engineering standards for private crossings, and have allowed public dedication of improperly constructed and unprotected subdivision crossings and have failed to correct obstructed sight lines. Local officials sought enactment of an amendment to the major public crossing closure legislation enacted by the Louisiana legislature in 2005, specifically to impede closure of railroad crossings along Highway 23. *See* La. Rev. Stat. § 48:390(F).

III. NOGC'S RESPONSE TO FRA SPECIFIC AREAS FOR COMMENT

I. At-Grade Highway-Rail Crossings Present Inherent Risks To Users, Including The Railroad And Its Employees, And To Other Persons In The Vicinity Should A Train Derail Into An Occupied Area Or Release Hazardous Materials. When Passenger Trains Are Involved, The Risks Are Heightened. From The Standpoint Of Public Policy, How Do We Determine Whether Creation Or Continuation Of A Private Crossing Is Justified?

A. Private Crossings cannot be justified in the interest of public safety

Every crossing increases the likelihood of accidents and derailments. NOGC's trains regularly transport tank cars carrying hazardous and toxic materials for NOGC's refinery customers and pass through densely populated residential and commercial areas in very close proximity to the Mississippi River and coastal waters, wetlands and marshes. Authoritative federal laws or regulations are needed to overcome the lack of political will and lack of local resources for eliminating and/or limiting private railroad crossings and to avoid the inherent prejudice of local courts and operation of state property laws that generally favor landowners.

One approach would be federal laws or regulations establishing that private railroad crossings are presumed to be against public safety and disfavored as a matter of law and to shift the legal burden to landowners to prove necessity and entitlement in order to install or maintain private crossings. This change in the law would provide necessary uniformity nationwide. This approach would give landowners the incentive to seek public solutions for alternative access and/or work cooperatively with neighbors to find practical and affordable solutions.

A unified federal solution is needed because state property laws are generally not attuned to specific safety issues at stake when the railroad attempts to limit access to the right of way for safety reasons. General tort laws are ill equipped to ensure public safety at private crossings. For example, the Louisiana statutory scheme for preventing landlocked properties from being removed from commerce by allowing the owner to cross over neighboring properties to reach the nearest public street is overwhelmingly oriented in favor of the individual landlocked owners and is clearly not designed to account for the public safety implications of permitting multiple railroad crossings side by side. The landlocked property laws were designed to resolve isolated cases in the agricultural era and are clearly not equipped to take the place of appropriate public planning and infrastructure in developing commercial and suburban areas. Many landowners have failed to exercised property rights against their vendors to use existing crossings for access, but have installed new crossings for convenience. Crossings were allowed to remain on sufferance rather facing costly and losing court battles.

Louisiana is among the majority of states that elect judges. It is extremely difficult for elected judges who must be responsive to the electorate to make decisions unfavorable to local landowners, even in the broader interest of public safety and welfare. Although lifetime appointments shield federal judges from the electoral pressures facing state court judges, federal courts are courts of limited jurisdiction and generally have not been deemed available to resolve property law disputes involving private railroad crossings, even when federal safety and economic regulations are implicated. It is anomalous that although the railroad industry is overwhelmingly governed by federal laws and regulations to ensure against enforcement of state laws that would impede their operation in interstate commerce, nevertheless, railroad lawsuits may be initiated in federal court only in exceptional circumstances.

Any procedure to evaluate the public utility of private crossings must give proper weight to the public welfare and account for the positive impact of railroad transportation as an environmentally responsible and safe alternative to transport by motor carrier. The economic impact of private crossings on railroad operations must also be addressed because private crossings increase liability exposure and redirect railroad time and resources away from essential track maintenance and inspection operations. Landowners must be responsible for installation and ongoing maintenance and upgrades for crossings engineered for site conditions and use. Landowners must maintain appropriate insurance and indemnify railroads against injuries and losses associated with crossing use.

B. Unregulated Private Crossings Create Conflicts with Other Safety Regulations

An overlooked consequence of private crossings that is highly relevant to the discussion of public policy is that the existence of unregulated private crossings directly and substantially conflicts with and impedes the Railroads' ability to maintain the track structure in accordance with the Track Safety Standards (49 CFR Part 213), which is one of its defined areas of responsibility. Crossings create additional safety issues and conflict with FRSA safety regulations that have not been previously addressed in these proceedings. First, large numbers of private crossings may counteract the effectiveness of the regulations requiring the sounding of locomotive horns at public crossings. *See* 49 C.F.R. § 222.1 *et seq*. Because of drivers' frequent inattention to trains and tendency to disregard of warning signs and signals, NOGC's engineers sound the locomotive horn at all crossings to warn of the approach of trains even though the regulations specifically do not require the sounding of horns at private crossings. 49 C.F.R. § 222.25. Where there are so many crossings in close proximity, train engineers are unable to blow the horn in the intended sequence and must blow a continuous blast. This situation allows motorists to become conditioned to the horn as background noise and increases the risk that motorists will fail to recognize the warning.

Installation of crossings also interferes with, adds to and conflicts with existing specific FRA track safety regulations relating to the construction and maintenance of the roadbed and track structure. 49 C.F.R. § 213, *et seq*. These provisions are intended to ensure that the roadbed and track provide the necessary structural support for railroad traffic and thereby reduce the risk of derailments. Insuring sufficient structural support has become more challenging as the permissible gross-weight-on-rail capacity of cars has increased over recent years. Crossings interfere with the roadbed and track structure in the following ways:

- Crossing materials impose additional and incompatible forces and materials on the standard road bed structure.

- Crossing materials trap moisture and interfere with proper drainage, thereby accelerating the deterioration of crossties and fouling of the ballast.

- Crossings interfere with visual inspection of the roadbed and track.

- The roadbed under crossings tends to settle at a different rate than for open track.

- Crossings render regular maintenance of the roadbed and track far more difficult and costly because crossing materials must be removed and replaced each time this work is performed. Mechanized tamping machines and ballast regulators are used to efficiently perform the track surfacing and alignment of the track. This work is needed to compensate for differential settlement, to correct discrepancies in cross-level, profile, and alignment and to refresh and replace fouled ballast. Differential settlement at crossings is exaggerated if crossings are skipped over. Removal and replacement of crossings so this work can proceed is very labor intensive and increasingly expensive.

- The need to remove crossings to perform required maintenance and the expense of replacing them acts to trigger confrontation between the landowners and railroad over who is responsible for the expense of installing and maintaining crossings.

These additional and cumulative crossing-related costs are substantial and impose an economic burden on short line railroads, in particular, which are generally small businesses which do not have unlimited resources. The inevitable result is that the railroads must divert and redirect significant funds away from, and to the detriment of, the maintenance and upgrading of the track and roadbed infrastructure as needed to increase efficiency and improve service to its shippers and future customers.

II. Is The Current Assignment Of Responsibility For Safety At Private Crossings Effective? To What Extent Do Risk Management Practices Associated With Insurance Arrangements Result In ''Regulation'' Of Safety At Private Crossings?

At present, there is no clear assignment of responsibility for safety at private crossings. There are no federal laws or regulations directly assigning responsibility for private crossings. There is no uniform law or policy assigning responsibility for safety at private crossings from state to state. The railroads' specific regulatory role with respect to safety at *public* crossings is quite limited, however, that role vis a vis public crossings may provide an appropriate starting point for allocating railroad responsibility for private crossings.[1] As a practical matter, railroads bear a disproportionate share of responsibility and potential liability for private crossing safety.

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[1] The FRA Safety Advisory 2005-03; Highway-Rail Grade Crossing Safety, issued May 2, 2005, 70 FR 22750-22754, summarized the responsibilities owed by railroads to the FRA, acting on behalf of the public, that relate to *public* highway-rail grade crossing safety, as follows:

1. Inspect, test, and maintain grade crossing warning systems in accordance with 49 CFR Part 234 . . . .*See* FRA Safety Advisory 2002-1 (67 FR 3258; 01/23/2002) and FRA Safety Advisory 2004-03 (69 FR 48904; 8/11/2004).
2. Report all activation failures in writing within 15 days (49 CFR 234.9).
3. Maintain track structure in accordance with the Track Safety Standards (49 CFR Part 213). This includes maintaining adequately drained (non-fouled) ballast that otherwise could permit the existence of low ballast resistance adversely affecting the operation of grade crossing signals (49 CFR Sec. 213.103) and removing vegetation on railroad property that could interfere with preview of grade crossing warning signs and signals, whether active or passive (49 CFR Sec. 213.37).
4. Operate trains in accordance with applicable speed limitations imposed by Federal regulation (49 CFR Parts 213, 234 & 236) and the railroad's operating rules, timetables, and special instructions (see 49 CFR Parts 217 & 240).
5. Provide and maintain locomotive event recorders on all locomotives operating greater than 30 miles per hour, preserving data following any reportable event (49 CFR 229.135).
6. Provide and maintain locomotive auxiliary alerting lights on any lead locomotive operating greater than 20 miles per hour (49 CFR 229.125(d)).

A. The Threat of Tort Liability Is an Ineffective Deterrent or Incentive for Landowners to Maintain the Safety of Private Crossings

Private crossing holders are not compelled by any federal law or regulation and few, if any state laws, to bear responsibility for safety at private crossings. Tort liability remains the primary means of assigning overall responsibility for safety. Railroads are generally not responsible for maintaining private crossings under Louisiana law, however, railroads may be held liable for the condition of private crossings if a crossing is known to be defective or if the railroad voluntarily assumed a duty to maintain the crossing. Private crossing holders would be legally liable for accidents attributable to the condition of private crossings and face the threat of tort liability under Louisiana law. The risk of liability, however, has not deterred the proliferation of private crossings or encouraged the consolidation or sharing of crossings. The absence of serious accidents at private crossings along the NOGC line and lack of public awareness may be partially responsible for this. Even though the FRA's statistics have shown that the overwhelming majority of crossing accidents are not due to any fault on the part of railroads, there is nothing to prevent tort plaintiffs from suing the railroad whenever an accident take place at private crossings, even when there is no evidence that the railroad was at fault.

B. Insurance Is Not a Practical Approach for Managing Risk at Public Crossings

Managing the risk of private crossings by using insurance arrangements is not a realistic option. There are no federal or state laws or regulations to compel private crossing holders to maintain even minimal liability insurance. NOGC's experience has shown that landowners are either unwilling or unable to carry appropriate levels of liability insurance due to the high cost and a lack of available coverage options, particularly for residential crossings. In connection with its recent discussions with landowners, NOGC asked an independent agent to investigate the availability of liability and property coverage for residential and commercial private crossings after landowners objected to the condition in NOGC's crossing agreement requiring crossing holders to obtain appropriate levels of liability coverage and name NOGC as an additional insured. All home and business owners in Southeast Louisiana are facing an insurance crisis in the wake of hurricane Katrina, with many insurers pulling out of this market altogether or substantially raising rates. The State sponsored insurer of last resort has requested huge rate increases making commercial and residential coverage prohibitively expensive in the near term. Even without this obstacle, the agent was unable to identify any carriers offering policies or endorsements extending such coverage in this marketplace. Whether driveway crossings would be considered part of the covered premises is subject to interpretation under the standard coverage terms in homeowners' policies. Coverage for liability assumed under contract is generally excluded under homeowners' coverage and not available via endorsement.

III. How Should Improvement And/Or Maintenance Costs Associated With Private Crossing Be Allocated?

Landowners, as the only ones deriving an economic benefit from the crossings, should rightly bear the expense of construction and maintenance. Railroads derive no economic benefit whatsoever from crossings, but practically speaking must bear the additional costs of crossings

unless they are reimbursed by the parties benefiting from the crossings. Railroads must also shoulder the substantial additional track maintenance costs where track is covered by crossings. Private crossing holders, however, are not compelled by any federal law or regulation and few, if any state laws, to bear responsibility for the cost of installation or upkeep of crossings built to industry standards or to pay for appropriate lighting and signage.

IV. Is There A Need For Alternative Dispute Resolution Mechanisms To Handle Disputes That May Arise Between Private Crossing Owners And The Railroads?

Railroads and landowners would benefit from alternative dispute mechanisms for handling disputes over private crossings such as arbitration or administrative hearings. Such a procedure must permit resolution of disputes in a fair, uniform, speedy and cost effective manner. Without fairness, speed and low cost, such a system would merely add a layer of needless administrative expense to the situation.

The standards for determining whether to permit or maintain a private crossing must begin with the uniformly applied presumption that private crossings are safety hazards and are disfavored as a matter of federal law and that conflicting state laws are preempted. The landowner seeking to install or maintain private crossings would bear the burden of proving actual need for the crossing, not inconvenience, and must demonstrate that a crossing can be safely constructed with appropriate visibility, signage and other safety measures and must accept responsibility for the cost of construction and ongoing maintenance. This alternative procedure and presumption would apply notwithstanding a claim of prior right or entitlement pursuant to deed, agreement or prescriptive easement. The required showing of need would require the landowner to pursue whatever legal recourse he may have against the persons who sold or subdivided the property without access and would entail showing that there were no physically feasible and safer alternative options without undue expense. The consideration of undue expense must weigh the present and future construction and maintenance costs to the railroad as well as the costs to the landowner of acquiring and constructing alternative access roads. This change in the law would give landowners incentive to seek public solutions for alternative access and/or work cooperatively with neighbors to find practical and affordable solutions.

To support this effort, funds should be allocated to the States for closure and consolidation of private crossings. These funds could be used directly by State DOTs or localities to build public access roads or made available by means of grants or loans to landowners to acquire property for access and to build private access roads. Railroads could also apply for funds for buy outs if necessary to achieve closures.

V. Should The State Or Federal Government Assume Greater Responsibility For Safety At Private Crossings?

The federal government should assume ultimate responsibility and authority for safety at private crossings. There is a virtual absence of state or federal regulation of private crossings. Railroads operate in interstate commerce. A uniform federal approach is necessary and preferable to forcing railroads to comply with a confusing variety of conflicting state regulations and procedures. A federal solution is needed to give the railroads the tools to eliminate and

permit private crossings, to establish standards and to allocate responsibility for liability at and construction and maintenance of private crossings.

VI. Should There Be Nationwide Standards For Warning Devices At Private Crossings, Or For Intersection Design Of New Private Grade Crossings?

Federal regulations are needed to adopt, implement and enforce nationwide safety standards for design and construction of crossings and appropriate warning devices at private crossings. The relative lack of existing state regulation establishes both the need and opportunity for establishing a uniform approach to private crossing safety.

VII. How Do We Determine When A Private Crossing Has A 'Public Purpose' And Is Subject To Public Use?

The determination of whether a crossing is "public" or "private" should consider the safety risks to the public associated with use of a particular crossing rather than the present federal classification of "public" based on whether the road or driveway is maintained by a public body charged with maintaining public streets or roads. As the testimony in prior hearings has indicated, under the present classification, the decision to dedicate a crossing road as a public street is often driven by the desire to avoid responsibility for maintenance and safety rather than an appropriate consideration of actual use of the crossing. The common public perception is that crossings should be considered "public" when they are heavily used by the public. It makes no sense from a safety standpoint to have a different standard for construction of heavily used private crossings than for public road crossings with comparable traffic.

VIII. Should Some Crossings Be Categorized As 'Commercial Crossings', Rather Than As 'Private Crossings'?

A more rational approach would be to categorize crossings by volume of traffic and public safety implications of particular uses of crossings rather than purely on ownership and/or maintenance responsibility. Refinery crossings which contemplate limited public access but are used by trucks transporting hazardous materials must be regulated not as commercial crossings, but so as to minimize the risk to public safety. The category of private crossing should apply where measures are taken to restrict access.

IX. Are There Innovative Traffic Control Treatments That Could Improve Safety At Private Crossings On Major Rail Corridors, Including Those On Which Passenger Service Is Provided?

The emphasis should be on strengthening the ability of states and railroads to eliminate private crossings. The use of access roads to permit the closure of private crossings and consolidation around a limited number of well constructed and protected crossings is such an innovative approach.

X. Should The Department Of Transportation Request Enactment Of Legislation To Address Private Crossings? If So, What Should It Include?

Rio Grande Pacific and NOGC strongly support federal legislation or regulation to address private crossings in the following areas:

1. To establish federal standards for design and construction of private crossings;

2. to allocate responsibility for construction, maintenance and liability for private crossings to the landowners who benefit from private crossings;

3. to establish a private right of action and federal jurisdiction to allow railroads to file suit in federal court to enjoin landowners from installing crossings that interfere with railroad operations, violate safety standards or regulations or present a safety hazard;

4. to establish a presumption that private crossings are safety hazards and are disfavored as a matter of federal law and that conflicting state laws are preempted. Landowners must bear the burden of proving actual need for any new or expanded crossing, not inconvenience and must accept responsibility for the cost of construction and maintenance of a crossing built to federal standards. This presumption would apply over and above a claim of right pursuant to deed, agreement or prescriptive easement.

5. to establish an alternative federal dispute resolution mechanism or administrative procedure for the uniform, fair, inexpensive and speedy resolution of private crossing and permitting disputes; and

6. to provide federal funds for closure of private crossings to States for construction of public access roads for consolidation and closure of crossings or made available by loans or grants to landowners or railroads to acquire access rights and build driveways to consolidate crossings.

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August 30, 2006

Michelle Silva, Docket Clerk
Attn: Docket No. FRA-2005-23281, Notice No. 1
U.S. Department of Transportation Dockets
400 Seventh Street, S.W, Room PL-401
Washington, DC 20590-0001

Dear Madam:

BEFORE THE
DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
MINNEAPOLIS, MINNESOTA

Safety of Private highway-Rail Grade Crossings; Notice of Safety Inquiry; Public Hearing
Docket No. 2005-23281, Notice No. 1

WRITTEN COMMENTS
OF THE
BROTHERHOOD OF RAILROAD SIGNALMEN

The Brotherhood of Railroad Signalmen (hereinafter referred to as "BRS"), in response to a request by the Federal Railroad Administration (FRA), submit the following written comments for consideration on issues related to the safety of private highway-rail grade crossings, referenced as Docket No. FRA-2005-23281, Notice No. 1. We appreciate the opportunity to participate in FRA's effort.

The purpose of this public hearing is to examine: the current practices concerning responsibility for safety at private grade crossings; the adequacy of warning devices at private grade crossings, and the relative merits of a more uniform approach to improving safety at private crossings.

In the public notice the FRA asked for comments on the following bullet points:

- At-grade highway-rail crossings present inherent risks to users, including the railroad and its employees, and to other persons in the vicinity should a train derail into an occupied area or release hazardous materials. When passenger trains are involved, the risks are heightened. From the standpoint of public policy, how do we determine whether creation or continuation of a private crossing is justified?

It is the position of the BRS that the FRA should prohibit the creation of new private crossings and work toward eliminating as many existing private crossings as possible. The best way to reduce accidents and fatalities is through the elimination of unprotected private crossings. If FRA determines that it wants to allow the creation of new private crossings, then the new crossings should have, at a minimum, a set of grade crossing signal system flashing light signals.

- Is the current assignment of responsibility for safety at private crossings effective? To what extent do risk management practices associated with insurance arrangements result in "regulation" of safety at private crossings?

Clearly, the current assignment of responsibility for safety at private crossings is not as effective as it needs to be due to the increase of accidents over the past 20 years.

- How should improvement and/or maintenance costs associated with private crossings be allocated?

Improvement and maintenance costs should be split equally between the State government, Federal government and the property owner. However, each case should be evaluated on its own merit. There may be some cases where the responsibility allocation should be adjusted. The State & Federal government for instance should split the cost of a crossing warning system where school buses or other public transportation entity utilizes the crossing.

- Is there a need for alternative dispute resolution mechanisms to handle disputes that may arise between private crossing owners and the railroads?

The BRS does not believe that there is a need for alternative dispute resolution mechanisms as this time.

- Should the State or Federal government assume greater responsibility for safety at private crossings, or for intersection design of new private crossings?

Yes, the State and Federal governments should assume greater responsibility for safety at private crossings. As evidenced by the data contained in Docket No. FRA-2005-23281 there is a known safety problem at private crossings. There are far too many accidents and an unacceptable number of fatalities along with these accidents. As stated previously, the BRS believes that there should be no private crossings created in the future unless they are equipped with active crossing warning devices. If the DOT/FRA is going to allow for the creation of future private crossings, then the State and Federal governments should have regulatory oversight for intersection design of these new private crossings.

- Should there be Nationwide standards for warning devices at private crossings, or for intersection design of new private grade crossings?

The BRS contends that there should be Nationwide standards for warning devices at private crossings and for intersection design. The BRS believes that the standards should be patterned after, or similar to, the ones found in the Manual on Uniform Traffic Control Devices (MUTCD) Part 8, Traffic Controls for Highway-Rail Grade Crossings. By taking this action, users of private crossings will be conditioned to respond to the stimuli that they encounter at any other highway-rail grade crossing.

- How do we determine when a private crossing has a 'public purpose' and is subject to 'public use'?

A private crossing should be defined as one used by a sole landowner or lessee. Once any other individuals routinely use the crossing it shall no longer be considered a private crossing but as a public crossing.

- Should some crossings be categorized as 'commercial crossings' rather than as 'private crossings'?

Some "private crossings" are indeed "commercial crossings." Oftentimes the only vehicular traffic on a private crossing will be trucks servicing a local industry. For example cement trucks going in and out of stone quarry next to the railroad tracks. It is imperative that any "private crossing" that serves an industry should be held to the same standards for the highway-rail grade crossing signal system requirements. Due to the types of trucks and materials that they carry, the severity of an accident at these crossings would be greater than an accident between a car and a train. Trucks carrying hazardous materials pose an even greater danger.

- Are there innovative traffic control treatments that could improve safety at private crossings on major rail corridors, including those on which passenger service is provided?

The BRS has not seen any "innovative traffic control treatments" that could improve safety at private crossings, but basic grade crossing flashing light signals are proven technology

that would instantly decrease the hazards inherent with all crossings that lack an active warning system.

- Should the Department of Transportation request enactment of legislation to address private crossings? Is so, what should it include?

Yes, the DOT should request enactment of legislation to address private crossings. As stated previously, there is not enough being done to reduce accidents and fatalities at private crossings. At a minimum the legislation should include the sight line distances; signage requirements; and at a minimum, grade crossing signal system flashing light signals.

The Brotherhood of Railroad Signalmen appreciates this opportunity to participate in the discussion of issues related to the safety of private highway-rail grade crossings and I am ready to answer any questions that you may have at this time.

Respectfully submitted,

Tim DePaepe
BRS Director of Research

ACTION: Notice of Limitation on Claims for Judicial Review of Actions by FHWA and other Federal agencies.

SUMMARY: This notice announces actions taken by the FHWA and other Federal agencies that are final within the meaning of 23 U.S.C. 139(*l*)(1). These actions relate to a proposed highway project. U.S. Route 101 Willits Bypass Project between kilo post R69.4 and R78.9 (post mile R43.1 to 49.0) in Mendocino County, State of California. These actions grant approvals for the project.

DATES: By this notice, the FHWA is advising the public of final agency actions subject to 23 U.S.C. 139(*l*)(1). A claim seeking judicial review of the Federal agency actions on the highway project will be barred unless the claim is filed on or before July 5, 2007. If the Federal law that authorizes judicial review of a claim provides a time period of less than 180 days for filing such claim, then that shorter time period still applies.

FOR FURTHER INFORMATION CONTACT: Maiser Khaled, Director, Project Development & Environment, Federal Highway Administration, 650 Capitol Mall, Suite 4–100, Sacramento, CA 95814, weekdays between 7 a.m. and 4 p.m., telephone 916–498–5020, *maiser.khaled@fhwa.dot.gov.* For U.S. Fish and Wildlife Service, Ray Bosch, Wildlife Biologist, Endangered Species Program, Arcata Fish and Wildlife Office, telephone 707–822–7201, *ray_bosch@fws.gov.*

For National Oceanic and Atmospheric Administration—National Marine Fisheries Service, Thomas Daugherty, Fisheries Biologist, Ukiah Office, Telephone 707–468–4057, *Tom.Daugherty@noaa.gov.* For California Department of Transportation, Jeremy Ketchum, Senior Environmental Planner, 2389 Gateway Oaks Dr., Sacramento, CA 95833, weekdays between 8 a.m. and 5 p.m., (916) 274–0621, *jeremy_ketchum@dot.ca.gov.*

SUPPLEMENTARY INFORMATION: Notice is hereby given that the FHWA and other Federal agencies have taken final agency actions subject to 23 U.S.C. 139(*l*)(1) by issuing approvals for the following highway project in the State of California: U.S. Route 101 Willits Bypass Project between kilo post R69.4 and R78.9 (post mile R43.1 to 49.0) in Mendocino County. This project would reduce delays, improve safety, and provide at least a Level of Service C for interregional traffic on U.S. 101 in the vicinity of the City of Willits, Mendocino County, California. This would be accomplished by constructing a four-lane freeway around the city of Willits, in Mendocino County, from 0.8 mile south of the Haehl Overhead to 2.9 miles south of Reynolds Highway. The actions by the Federal agencies, and the laws under which such actions were taken, are described in the Final Environmental Impact Statement (FEIS) for the project, approved on November 25, 2006, in the Record of Decision (ROD) issued on December 18, 2006, and in other documents in the FHWA project files. The FEIS, ROD, and other project records are available by contacting the FHWA or the California Department of Transportation at the addresses provided above. The FHWA FEIS and ROD can be viewed and downloaded from the project Web site *http://www.dot.ca.gov/dist1/d1projects/willits/reports.htm* or viewed at public libraries in the project area.

This notice applies to all Federal agency decisions as of the issuance date of this notice and all laws under which such actions were taken, including but not limited to:

1. *General:* National Environmental Policy Act (NEPA) [42 U.S.C. 4321–4351]; Federal-Aid Highway Act [23 U.S.C. 109].
2. *Air:* Clean Air Act, 42 U.S.C. 7401–7671(q).
3. *Land:* Section 4(f) of the Department of Transportation Act of 1966 [49 U.S.C. 303].
4. *Wildlife:* Endangered Species Act [16 U.S.C. 1531–1544 and Section 1536], Marine Mammal Protection Act [16 U.S.C. 1361], Anadromous Fish Conservation Act [16 U.S.C. 757(a)–757(g)], Migratory Bird Treaty Act [16 U.S.C. 703–712], Magnuson-Stevens Fishery Conservation and Management Act of 1976, as amended [16 U.S.C. 1801 *et seq.*].
5. *Historic and Cultural Resources:* Section 106 of the National Historic Preservation Act of 1966, as amended [16 U.S.C. 470(f) *et seq.*]; Archeological Resources Protection Act of 1977 [16 U.S.C. 470(aa)–11]; Archeological and Historic Preservation Act [16 U.S.C. 469–469(c)].
6. *Social and Economic:* Civil Rights Act of 1964 [42 U.S.C. 2000(d)–2000(d)(1)]; Farmland Protection Policy Act (FPPA) [7 U.S.C. 4201–4209].
7. *Wetlands and Water Resources:* Clean Water Act, 33 U.S.C. 1251–1377 (Section 404, Section 401, Section 319); Coastal Barrier Resources Act, 16 U.S.C. 3501–3510; Coastal Zone Management Act, 16 U.S.C. 1451–1465; Land and Water Conservation Fund (LWCF), 16 U.S.C. 4601–4604; 42 U.S.C. 300(f)–300(j)(6); Emergency Wetlands Resources Act, 16 U.S.C. 3921, 3931; TEA–21 Wetlands Mitigation, 23 U.S.C. 103(b)(6)(m), 133(b)(11); Flood Disaster Protection Act, 42 U.S.C. 4001–4128.
8. *Hazardous Materials:* Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9601–9675; Superfund Amendments and Reauthorization Act of 1986 (SARA); Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6901–6992(k).
9. *Executive Orders:* E.O. 11990 Protection of Wetlands; E.O. 11988 Floodplain Management; E.O. 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations; E.O. 11593 Protection and Enhancement of Cultural Resources; E.O. 13175 Consultation and Coordination with Indian Tribal Governments; E.O. 11514 Protection and Enhancement of Environmental Quality; E.O. 13112 Invasive Species.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities apply to his program.)

Authority: 23 U.S.C. 139(*l*)(1).

Issued on: December 28, 2006.

Gene K. Fong,

Division Administrator, Federal Highway Administration.

[FR Doc. E6–22596 Filed 1–4–07; 8:45 am]

BILLING CODE 4910–RY–P

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

[Docket No. FRA–2005–23281, Notice No. 3]

Safety of Private Highway-Rail Grade Crossings; Notice of Safety Inquiry

AGENCY: Federal Railroad Administration (FRA), Department of Transportation (DOT).

ACTION: Notice of safety inquiry.

SUMMARY: On July 27, 2006, the FRA published a notice announcing its intent to conduct a series of open meetings throughout the United States, in cooperation with appropriate State agencies, to consider issues related to the safety of private highway-rail grade crossings. This notice indicated that the first of these meetings would be held August 30, 2006, in Fort Snelling, Minnesota. On September 22, 2006, the FRA published a second notice, which announced that FRA had scheduled subsequent meetings, to be held on September 27, 2006, in Raleigh, North

Carolina; October 26, 2006, in San Francisco, California; and December 6, 2006, in New Orleans, Louisiana. This Notice No. 3 announces that the FRA has scheduled an additional meeting, to be held on February 15, 2007, in Syracuse, New York.

At the meeting, FRA intends to solicit oral statements from private crossing owners, railroads and other interested parties on issues related to the safety of private highway-rail grade crossings, which will include, but not be limited to, current practices concerning responsibility for safety at private grade crossings, the adequacy of warning devices at private crossings, and the relative merits of a more uniform approach to improving safety at private crossings. FRA has also opened a public docket on these issues, so that interested parties may submit written comments for public review and consideration.

DATES: The public meeting will be held in Syracuse, New York on February 15, 2007, at the Doubletree Hotel, 6301 State Route 298, Syracuse, New York, 13057, beginning at 9:30 a.m.

Persons wishing to participate are requested to provide their names, organizational affiliation and contact information to Michelle Silva, Docket Clerk, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6030). Persons needing sign language interpretation or other reasonable accommodation for disability are also encouraged to contact Ms. Silva. Additional public meetings will be announced as they are scheduled.

FOR FURTHER INFORMATION CONTACT: Ron Ries, Office of Safety, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6299); Miriam Kloeppel, Office of Safety, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6299); or Kathryn Shelton, Office of Chief Counsel, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6038).

SUPPLEMENTARY INFORMATION: For additional information, please see the initial notice, published July 27 in the **Federal Register** (citation: 71 FR 42713) and available at *http://a257.g.akamaitech.net/7/257/2422/01jan20061800/edocket.access.gpo.gov/2006/pdf/06–6501.pdf*

Request for Comments

While FRA solicits discussion and comments on all areas of safety at private highway-rail grade crossings, we particularly encourage comments on the following topics:

❑ At-grade highway-rail crossings present inherent risks to users, including the railroad and its employees, and to other persons in the vicinity should a train derail into an occupied area or release hazardous materials. When passenger trains are involved, the risks are heightened. From the standpoint of public policy, how do we determine whether creation or continuation of a private crossing is justified?

❑ Is the current assignment of responsibility for safety at private crossings effective? To what extent do risk management practices associated with insurance arrangements result in ''regulation'' of safety at private crossings?

❑ How should improvement and/or maintenance costs associated with private crossing be allocated?

❑ Is there a need for alternative dispute resolution mechanisms to handle disputes that may arise between private crossing owners and the railroads?

❑ Should the State or Federal government assume greater responsibility for safety at private crossings?

❑ Should there be Nationwide standards for warning devices at private crossings, or for intersection design of new private grade crossings?

❑ How do we determine when a private crossing has a ''public purpose'' and is subject to public use?

❑ Should some crossings be categorized as ''commercial crossings'', rather than as ''private crossings''?

❑ Are there innovative traffic control treatments that could improve safety at private crossings on major rail corridors, including those on which passenger service is provided?

❑ Should the Department of Transportation request enactment of legislation to address private crossings? If so, what should it include?

Issued in Washington, DC, on December 29, 2006.

Jo Strang,

Associate Administrator for Safety.

[FR Doc. E6–22606 Filed 1–4–07; 8:45 am]

BILLING CODE 4910–06–P

DEPARTMENT OF TRANSPORTATION

Research and Innovative Technology Administration

[RITA–2006–26758]

Statement Regarding a Coordinated Framework for Regulation of a Hydrogen Economy

AGENCY: Research and Innovative Technology Administration, U.S. Department of Transportation.

ACTION: Notice of inquiry and request for public comment.

SUMMARY: The purpose of this **Federal Register** notice is to inform the public of current U.S. statutes and regulations that may be applicable to a hydrogen economy and to request comments on their interface . This notice describes and indexes several statutory and regulatory provisions of each major Federal agency and discusses possible applications of these provisions to aspects of a hydrogen economy, including construction and certification of transportation/ports infrastructure, the use of fuel cells to power automobiles and generate electricity for homes and businesses, and effects on public safety and health. The notice also describes the regulatory jurisdictions of each Federal agency in the context of a hydrogen economy. In addition, public comments are invited on a Web site that was created to depict the regulatory framework of a hydrogen economy. The Web site is located at *http://hydrogen.gov/regulations.html.* Comments will be used to improve the Web site.

DATES: Comments must be received on or before March 6, 2007.

Public Participation: The Ad Hoc Committee on a Regulatory Framework for a Hydrogen Economy (Ad Hoc Committee) of the Interagency Working Group on Hydrogen and Fuel Cells (IWG), which is part of the Executive Office of the President's National Science and Technology Council (NSTC), is seeking comments and advice from individuals, public interest groups, industry and academia on this statement regarding the framework for regulation of a hydrogen economy.

The Ad Hoc Committee members include the Office of Science and Technology Policy (OSTP), Department of State (DOS), U.S. Department of Transportation (DOT) (including the Federal Aviation Administration (FAA), Federal Highways Administration (FHWA), Federal Railroad Administration (FRA), National Highway Traffic Safety Administration (NHTSA), Federal Transit Administration (FTA), the Maritime Administration (MARAD), Federal Motor Carrier Administration (FMCSA), Pipeline and Hazardous Materials Safety Administration (PHMSA) and Research and Innovative Technology Administration (RITA)), Department of Agriculture (USDA), Department of Labor's (DOL's) Occupational Safety and Health Administration (OSHA), Environmental Protection Agency (EPA), National Aeronautics and Space Administration (NASA) and Federal

ACTION: Notice of Limitation on Claims for Judicial Review of Actions by FHWA and other Federal agencies.

SUMMARY: This notice announces actions taken by the FHWA and other Federal agencies that are final within the meaning of 23 U.S.C. 139(*l*)(1). These actions relate to a proposed highway project. U.S. Route 101 Willits Bypass Project between kilo post R69.4 and R78.9 (post mile R43.1 to 49.0) in Mendocino County, State of California. These actions grant approvals for the project.

DATES: By this notice, the FHWA is advising the public of final agency actions subject to 23 U.S.C. 139(*l*)(1). A claim seeking judicial review of the Federal agency actions on the highway project will be barred unless the claim is filed on or before July 5, 2007. If the Federal law that authorizes judicial review of a claim provides a time period of less than 180 days for filing such claim, then that shorter time period still applies.

FOR FURTHER INFORMATION CONTACT: Maiser Khaled, Director, Project Development & Environment, Federal Highway Administration, 650 Capitol Mall, Suite 4–100, Sacramento, CA 95814, weekdays between 7 a.m. and 4 p.m., telephone 916–498–5020, *maiser.khaled@fhwa.dot.gov.* For U.S. Fish and Wildlife Service, Ray Bosch, Wildlife Biologist, Endangered Species Program, Arcata Fish and Wildlife Office, telephone 707–822–7201, *ray_bosch@fws.gov.*

For National Oceanic and Atmospheric Administration—National Marine Fisheries Service, Thomas Daugherty, Fisheries Biologist, Ukiah Office, Telephone 707–468–4057, *Tom.Daugherty@noaa.gov.* For California Department of Transportation, Jeremy Ketchum, Senior Environmental Planner, 2389 Gateway Oaks Dr., Sacramento, CA 95833, weekdays between 8 a.m. and 5 p.m., (916) 274–0621, *jeremy_ketchum@dot.ca.gov.*

SUPPLEMENTARY INFORMATION: Notice is hereby given that the FHWA and other Federal agencies have taken final agency actions subject to 23 U.S.C. 139(*l*)(1) by issuing approvals for the following highway project in the State of California: U.S. Route 101 Willits Bypass Project between kilo post R69.4 and R78.9 (post mile R43.1 to 49.0) in Mendocino County. This project would reduce delays, improve safety, and provide at least a Level of Service C for interregional traffic on U.S. 101 in the vicinity of the City of Willits, Mendocino County, California. This would be accomplished by constructing a four-lane freeway around the city of Willits, in Mendocino County, from 0.8 mile south of the Haehl Overhead to 2.9 miles south of Reynolds Highway. The actions by the Federal agencies, and the laws under which such actions were taken, are described in the Final Environmental Impact Statement (FEIS) for the project, approved on November 25, 2006, in the Record of Decision (ROD) issued on December 18, 2006, and in other documents in the FHWA project files. The FEIS, ROD, and other project records are available by contacting the FHWA or the California Department of Transportation at the addresses provided above. The FHWA FEIS and ROD can be viewed and downloaded from the project Web site *http://www.dot.ca.gov/dist1/d1projects/willits/reports.htm* or viewed at public libraries in the project area.

This notice applies to all Federal agency decisions as of the issuance date of this notice and all laws under which such actions were taken, including but not limited to:

1. *General:* National Environmental Policy Act (NEPA) [42 U.S.C. 4321–4351]; Federal-Aid Highway Act [23 U.S.C. 109].
2. *Air:* Clean Air Act, 42 U.S.C. 7401–7671(q).
3. *Land:* Section 4(f) of the Department of Transportation Act of 1966 [49 U.S.C. 303].
4. *Wildlife:* Endangered Species Act [16 U.S.C. 1531–1544 and Section 1536], Marine Mammal Protection Act [16 U.S.C. 1361], Anadromous Fish Conservation Act [16 U.S.C. 757(a)–757(g)], Migratory Bird Treaty Act [16 U.S.C. 703–712], Magnuson-Stevens Fishery Conservation and Management Act of 1976, as amended [16 U.S.C. 1801 *et seq.*].
5. *Historic and Cultural Resources:* Section 106 of the National Historic Preservation Act of 1966, as amended [16 U.S.C. 470(f) *et seq.*]; Archeological Resources Protection Act of 1977 [16 U.S.C. 470(aa)–11]; Archeological and Historic Preservation Act [16 U.S.C. 469–469(c)].
6. *Social and Economic:* Civil Rights Act of 1964 [42 U.S.C. 2000(d)–2000(d)(1)]; Farmland Protection Policy Act (FPPA) [7 U.S.C. 4201–4209].
7. *Wetlands and Water Resources:* Clean Water Act, 33 U.S.C. 1251–1377 (Section 404, Section 401, Section 319); Coastal Barrier Resources Act, 16 U.S.C. 3501–3510; Coastal Zone Management Act, 16 U.S.C. 1451–1465; Land and Water Conservation Fund (LWCF), 16 U.S.C. 4601–4604; 42 U.S.C. 300(f)–300(j)(6); Emergency Wetlands Resources Act, 16 U.S.C. 3921, 3931; TEA–21 Wetlands Mitigation, 23 U.S.C. 103(b)(6)(m), 133(b)(11); Flood Disaster Protection Act, 42 U.S.C. 4001–4128.
8. *Hazardous Materials:* Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9601–9675; Superfund Amendments and Reauthorization Act of 1986 (SARA); Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6901–6992(k).
9. *Executive Orders:* E.O. 11990 Protection of Wetlands; E.O. 11988 Floodplain Management; E.O. 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations; E.O. 11593 Protection and Enhancement of Cultural Resources; E.O. 13175 Consultation and Coordination with Indian Tribal Governments; E.O. 11514 Protection and Enhancement of Environmental Quality; E.O. 13112 Invasive Species.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities apply to his program.)

Authority: 23 U.S.C. 139(*l*)(1).

Issued on: December 28, 2006.

Gene K. Fong,

Division Administrator, Federal Highway Administration.

[FR Doc. E6–22596 Filed 1–4–07; 8:45 am]

BILLING CODE 4910–RY–P

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

[Docket No. FRA–2005–23281, Notice No. 3]

Safety of Private Highway-Rail Grade Crossings; Notice of Safety Inquiry

AGENCY: Federal Railroad Administration (FRA), Department of Transportation (DOT).

ACTION: Notice of safety inquiry.

SUMMARY: On July 27, 2006, the FRA published a notice announcing its intent to conduct a series of open meetings throughout the United States, in cooperation with appropriate State agencies, to consider issues related to the safety of private highway-rail grade crossings. This notice indicated that the first of these meetings would be held August 30, 2006, in Fort Snelling, Minnesota. On September 22, 2006, the FRA published a second notice, which announced that FRA had scheduled subsequent meetings, to be held on September 27, 2006, in Raleigh, North

Carolina; October 26, 2006, in San Francisco, California; and December 6, 2006, in New Orleans, Louisiana. This Notice No. 3 announces that the FRA has scheduled an additional meeting, to be held on February 15, 2007, in Syracuse, New York.

At the meeting, FRA intends to solicit oral statements from private crossing owners, railroads and other interested parties on issues related to the safety of private highway-rail grade crossings, which will include, but not be limited to, current practices concerning responsibility for safety at private grade crossings, the adequacy of warning devices at private crossings, and the relative merits of a more uniform approach to improving safety at private crossings. FRA has also opened a public docket on these issues, so that interested parties may submit written comments for public review and consideration.

DATES: The public meeting will be held in Syracuse, New York on February 15, 2007, at the Doubletree Hotel, 6301 State Route 298, Syracuse, New York, 13057, beginning at 9:30 a.m.

Persons wishing to participate are requested to provide their names, organizational affiliation and contact information to Michelle Silva, Docket Clerk, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6030). Persons needing sign language interpretation or other reasonable accommodation for disability are also encouraged to contact Ms. Silva. Additional public meetings will be announced as they are scheduled.

FOR FURTHER INFORMATION CONTACT: Ron Ries, Office of Safety, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6299); Miriam Kloeppel, Office of Safety, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6299); or Kathryn Shelton, Office of Chief Counsel, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6038).

SUPPLEMENTARY INFORMATION: For additional information, please see the initial notice, published July 27 in the **Federal Register** (citation: 71 FR 42713) and available at *http://a257.g.akamaitech.net/7/257/2422/01jan20061800/edocket.access.gpo.gov/2006/pdf/06–6501.pdf*

Request for Comments

While FRA solicits discussion and comments on all areas of safety at private highway-rail grade crossings, we particularly encourage comments on the following topics:

❑ At-grade highway-rail crossings present inherent risks to users, including the railroad and its employees, and to other persons in the vicinity should a train derail into an occupied area or release hazardous materials. When passenger trains are involved, the risks are heightened. From the standpoint of public policy, how do we determine whether creation or continuation of a private crossing is justified?

❑ Is the current assignment of responsibility for safety at private crossings effective? To what extent do risk management practices associated with insurance arrangements result in ''regulation'' of safety at private crossings?

❑ How should improvement and/or maintenance costs associated with private crossing be allocated?

❑ Is there a need for alternative dispute resolution mechanisms to handle disputes that may arise between private crossing owners and the railroads?

❑ Should the State or Federal government assume greater responsibility for safety at private crossings?

❑ Should there be Nationwide standards for warning devices at private crossings, or for intersection design of new private grade crossings?

❑ How do we determine when a private crossing has a ''public purpose'' and is subject to public use?

❑ Should some crossings be categorized as ''commercial crossings'', rather than as ''private crossings''?

❑ Are there innovative traffic control treatments that could improve safety at private crossings on major rail corridors, including those on which passenger service is provided?

❑ Should the Department of Transportation request enactment of legislation to address private crossings? If so, what should it include?

Issued in Washington, DC, on December 29, 2006.

Jo Strang,

Associate Administrator for Safety.

[FR Doc. E6–22606 Filed 1–4–07; 8:45 am]

BILLING CODE 4910–06–P

DEPARTMENT OF TRANSPORTATION

Research and Innovative Technology Administration

[RITA–2006–26758]

Statement Regarding a Coordinated Framework for Regulation of a Hydrogen Economy

AGENCY: Research and Innovative Technology Administration, U.S. Department of Transportation.

ACTION: Notice of inquiry and request for public comment.

SUMMARY: The purpose of this **Federal Register** notice is to inform the public of current U.S. statutes and regulations that may be applicable to a hydrogen economy and to request comments on their interface . This notice describes and indexes several statutory and regulatory provisions of each major Federal agency and discusses possible applications of these provisions to aspects of a hydrogen economy, including construction and certification of transportation/ports infrastructure, the use of fuel cells to power automobiles and generate electricity for homes and businesses, and effects on public safety and health. The notice also describes the regulatory jurisdictions of each Federal agency in the context of a hydrogen economy. In addition, public comments are invited on a Web site that was created to depict the regulatory framework of a hydrogen economy. The Web site is located at *http://hydrogen.gov/regulations.html.* Comments will be used to improve the Web site.

DATES: Comments must be received on or before March 6, 2007.

Public Participation: The Ad Hoc Committee on a Regulatory Framework for a Hydrogen Economy (Ad Hoc Committee) of the Interagency Working Group on Hydrogen and Fuel Cells (IWG), which is part of the Executive Office of the President's National Science and Technology Council (NSTC), is seeking comments and advice from individuals, public interest groups, industry and academia on this statement regarding the framework for regulation of a hydrogen economy.

The Ad Hoc Committee members include the Office of Science and Technology Policy (OSTP), Department of State (DOS), U.S. Department of Transportation (DOT) (including the Federal Aviation Administration (FAA), Federal Highways Administration (FHWA), Federal Railroad Administration (FRA), National Highway Traffic Safety Administration (NHTSA), Federal Transit Administration (FTA), the Maritime Administration (MARAD), Federal Motor Carrier Administration (FMCSA), Pipeline and Hazardous Materials Safety Administration (PHMSA) and Research and Innovative Technology Administration (RITA)), Department of Agriculture (USDA), Department of Labor's (DOL's) Occupational Safety and Health Administration (OSHA), Environmental Protection Agency (EPA), National Aeronautics and Space Administration (NASA) and Federal

ACTION: Notice of Limitation on Claims for Judicial Review of Actions by FHWA and other Federal agencies.

SUMMARY: This notice announces actions taken by the FHWA and other Federal agencies that are final within the meaning of 23 U.S.C. 139(*l*)(1). These actions relate to a proposed highway project. U.S. Route 101 Willits Bypass Project between kilo post R69.4 and R78.9 (post mile R43.1 to 49.0) in Mendocino County, State of California. These actions grant approvals for the project.

DATES: By this notice, the FHWA is advising the public of final agency actions subject to 23 U.S.C. 139(*l*)(1). A claim seeking judicial review of the Federal agency actions on the highway project will be barred unless the claim is filed on or before July 5, 2007. If the Federal law that authorizes judicial review of a claim provides a time period of less than 180 days for filing such claim, then that shorter time period still applies.

FOR FURTHER INFORMATION CONTACT: Maiser Khaled, Director, Project Development & Environment, Federal Highway Administration, 650 Capitol Mall, Suite 4–100, Sacramento, CA 95814, weekdays between 7 a.m. and 4 p.m., telephone 916–498–5020, *maiser.khaled@fhwa.dot.gov.* For U.S. Fish and Wildlife Service, Ray Bosch, Wildlife Biologist, Endangered Species Program, Arcata Fish and Wildlife Office, telephone 707–822–7201, *ray_bosch@fws.gov.*

For National Oceanic and Atmospheric Administration—National Marine Fisheries Service, Thomas Daugherty, Fisheries Biologist, Ukiah Office, Telephone 707–468–4057, *Tom.Daugherty@noaa.gov.* For California Department of Transportation, Jeremy Ketchum, Senior Environmental Planner, 2389 Gateway Oaks Dr., Sacramento, CA 95833, weekdays between 8 a.m. and 5 p.m., (916) 274–0621, *jeremy_ketchum@dot.ca.gov.*

SUPPLEMENTARY INFORMATION: Notice is hereby given that the FHWA and other Federal agencies have taken final agency actions subject to 23 U.S.C. 139(*l*)(1) by issuing approvals for the following highway project in the State of California: U.S. Route 101 Willits Bypass Project between kilo post R69.4 and R78.9 (post mile R43.1 to 49.0) in Mendocino County. This project would reduce delays, improve safety, and provide at least a Level of Service C for interregional traffic on U.S. 101 in the vicinity of the City of Willits, Mendocino County, California. This would be accomplished by constructing a four-lane freeway around the city of Willits, in Mendocino County, from 0.8 mile south of the Haehl Overhead to 2.9 miles south of Reynolds Highway. The actions by the Federal agencies, and the laws under which such actions were taken, are described in the Final Environmental Impact Statement (FEIS) for the project, approved on November 25, 2006, in the Record of Decision (ROD) issued on December 18, 2006, and in other documents in the FHWA project files. The FEIS, ROD, and other project records are available by contacting the FHWA or the California Department of Transportation at the addresses provided above. The FHWA FEIS and ROD can be viewed and downloaded from the project Web site *http://www.dot.ca.gov/dist1/d1projects/willits/reports.htm* or viewed at public libraries in the project area.

This notice applies to all Federal agency decisions as of the issuance date of this notice and all laws under which such actions were taken, including but not limited to:

1. *General:* National Environmental Policy Act (NEPA) [42 U.S.C. 4321–4351]; Federal-Aid Highway Act [23 U.S.C. 109].
2. *Air:* Clean Air Act, 42 U.S.C. 7401–7671(q).
3. *Land:* Section 4(f) of the Department of Transportation Act of 1966 [49 U.S.C. 303].
4. *Wildlife:* Endangered Species Act [16 U.S.C. 1531–1544 and Section 1536], Marine Mammal Protection Act [16 U.S.C. 1361], Anadromous Fish Conservation Act [16 U.S.C. 757(a)–757(g)], Migratory Bird Treaty Act [16 U.S.C. 703–712], Magnuson-Stevens Fishery Conservation and Management Act of 1976, as amended [16 U.S.C. 1801 *et seq.*].
5. *Historic and Cultural Resources:* Section 106 of the National Historic Preservation Act of 1966, as amended [16 U.S.C. 470(f) *et seq.*]; Archeological Resources Protection Act of 1977 [16 U.S.C. 470(aa)–11]; Archeological and Historic Preservation Act [16 U.S.C. 469–469(c)].
6. *Social and Economic:* Civil Rights Act of 1964 [42 U.S.C. 2000(d)–2000(d)(1)]; Farmland Protection Policy Act (FPPA) [7 U.S.C. 4201–4209].
7. *Wetlands and Water Resources:* Clean Water Act, 33 U.S.C. 1251–1377 (Section 404, Section 401, Section 319); Coastal Barrier Resources Act, 16 U.S.C. 3501–3510; Coastal Zone Management Act, 16 U.S.C. 1451–1465; Land and Water Conservation Fund (LWCF), 16 U.S.C. 4601–4604; 42 U.S.C. 300(f)–300(j)(6); Emergency Wetlands Resources Act, 16 U.S.C. 3921, 3931; TEA–21 Wetlands Mitigation, 23 U.S.C. 103(b)(6)(m), 133(b)(11); Flood Disaster Protection Act, 42 U.S.C. 4001–4128.
8. *Hazardous Materials:* Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9601–9675; Superfund Amendments and Reauthorization Act of 1986 (SARA); Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6901–6992(k).
9. *Executive Orders:* E.O. 11990 Protection of Wetlands; E.O. 11988 Floodplain Management; E.O. 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations; E.O. 11593 Protection and Enhancement of Cultural Resources; E.O. 13175 Consultation and Coordination with Indian Tribal Governments; E.O. 11514 Protection and Enhancement of Environmental Quality; E.O. 13112 Invasive Species.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities apply to his program.)

Authority: 23 U.S.C. 139(*l*)(1).

Issued on: December 28, 2006.

Gene K. Fong,

Division Administrator, Federal Highway Administration.

[FR Doc. E6–22596 Filed 1–4–07; 8:45 am]

BILLING CODE 4910–RY–P

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

[Docket No. FRA–2005–23281, Notice No. 3]

Safety of Private Highway-Rail Grade Crossings; Notice of Safety Inquiry

AGENCY: Federal Railroad Administration (FRA), Department of Transportation (DOT).

ACTION: Notice of safety inquiry.

SUMMARY: On July 27, 2006, the FRA published a notice announcing its intent to conduct a series of open meetings throughout the United States, in cooperation with appropriate State agencies, to consider issues related to the safety of private highway-rail grade crossings. This notice indicated that the first of these meetings would be held August 30, 2006, in Fort Snelling, Minnesota. On September 22, 2006, the FRA published a second notice, which announced that FRA had scheduled subsequent meetings, to be held on September 27, 2006, in Raleigh, North

Carolina; October 26, 2006, in San Francisco, California; and December 6, 2006, in New Orleans, Louisiana. This Notice No. 3 announces that the FRA has scheduled an additional meeting, to be held on February 15, 2007, in Syracuse, New York.

At the meeting, FRA intends to solicit oral statements from private crossing owners, railroads and other interested parties on issues related to the safety of private highway-rail grade crossings, which will include, but not be limited to, current practices concerning responsibility for safety at private grade crossings, the adequacy of warning devices at private crossings, and the relative merits of a more uniform approach to improving safety at private crossings. FRA has also opened a public docket on these issues, so that interested parties may submit written comments for public review and consideration.

DATES: The public meeting will be held in Syracuse, New York on February 15, 2007, at the Doubletree Hotel, 6301 State Route 298, Syracuse, New York, 13057, beginning at 9:30 a.m.

Persons wishing to participate are requested to provide their names, organizational affiliation and contact information to Michelle Silva, Docket Clerk, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6030). Persons needing sign language interpretation or other reasonable accommodation for disability are also encouraged to contact Ms. Silva. Additional public meetings will be announced as they are scheduled.

FOR FURTHER INFORMATION CONTACT: Ron Ries, Office of Safety, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6299); Miriam Kloeppel, Office of Safety, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6299); or Kathryn Shelton, Office of Chief Counsel, FRA, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone 202–493–6038).

SUPPLEMENTARY INFORMATION: For additional information, please see the initial notice, published July 27 in the **Federal Register** (citation: 71 FR 42713) and available at *http://a257.g.akamaitech.net/7/257/2422/01jan20061800/edocket.access.gpo.gov/2006/pdf/06–6501.pdf*

Request for Comments

While FRA solicits discussion and comments on all areas of safety at private highway-rail grade crossings, we particularly encourage comments on the following topics:

❑ At-grade highway-rail crossings present inherent risks to users, including the railroad and its employees, and to other persons in the vicinity should a train derail into an occupied area or release hazardous materials. When passenger trains are involved, the risks are heightened. From the standpoint of public policy, how do we determine whether creation or continuation of a private crossing is justified?

❑ Is the current assignment of responsibility for safety at private crossings effective? To what extent do risk management practices associated with insurance arrangements result in ''regulation'' of safety at private crossings?

❑ How should improvement and/or maintenance costs associated with private crossing be allocated?

❑ Is there a need for alternative dispute resolution mechanisms to handle disputes that may arise between private crossing owners and the railroads?

❑ Should the State or Federal government assume greater responsibility for safety at private crossings?

❑ Should there be Nationwide standards for warning devices at private crossings, or for intersection design of new private grade crossings?

❑ How do we determine when a private crossing has a ''public purpose'' and is subject to public use?

❑ Should some crossings be categorized as ''commercial crossings'', rather than as ''private crossings''?

❑ Are there innovative traffic control treatments that could improve safety at private crossings on major rail corridors, including those on which passenger service is provided?

❑ Should the Department of Transportation request enactment of legislation to address private crossings? If so, what should it include?

Issued in Washington, DC, on December 29, 2006.

Jo Strang,

Associate Administrator for Safety.

[FR Doc. E6–22606 Filed 1–4–07; 8:45 am]

BILLING CODE 4910–06–P

DEPARTMENT OF TRANSPORTATION

Research and Innovative Technology Administration

[RITA–2006–26758]

Statement Regarding a Coordinated Framework for Regulation of a Hydrogen Economy

AGENCY: Research and Innovative Technology Administration, U.S. Department of Transportation.

ACTION: Notice of inquiry and request for public comment.

SUMMARY: The purpose of this **Federal Register** notice is to inform the public of current U.S. statutes and regulations that may be applicable to a hydrogen economy and to request comments on their interface . This notice describes and indexes several statutory and regulatory provisions of each major Federal agency and discusses possible applications of these provisions to aspects of a hydrogen economy, including construction and certification of transportation/ports infrastructure, the use of fuel cells to power automobiles and generate electricity for homes and businesses, and effects on public safety and health. The notice also describes the regulatory jurisdictions of each Federal agency in the context of a hydrogen economy. In addition, public comments are invited on a Web site that was created to depict the regulatory framework of a hydrogen economy. The Web site is located at *http://hydrogen.gov/regulations.html.* Comments will be used to improve the Web site.

DATES: Comments must be received on or before March 6, 2007.

Public Participation: The Ad Hoc Committee on a Regulatory Framework for a Hydrogen Economy (Ad Hoc Committee) of the Interagency Working Group on Hydrogen and Fuel Cells (IWG), which is part of the Executive Office of the President's National Science and Technology Council (NSTC), is seeking comments and advice from individuals, public interest groups, industry and academia on this statement regarding the framework for regulation of a hydrogen economy.

The Ad Hoc Committee members include the Office of Science and Technology Policy (OSTP), Department of State (DOS), U.S. Department of Transportation (DOT) (including the Federal Aviation Administration (FAA), Federal Highways Administration (FHWA), Federal Railroad Administration (FRA), National Highway Traffic Safety Administration (NHTSA), Federal Transit Administration (FTA), the Maritime Administration (MARAD), Federal Motor Carrier Administration (FMCSA), Pipeline and Hazardous Materials Safety Administration (PHMSA) and Research and Innovative Technology Administration (RITA)), Department of Agriculture (USDA), Department of Labor's (DOL's) Occupational Safety and Health Administration (OSHA), Environmental Protection Agency (EPA), National Aeronautics and Space Administration (NASA) and Federal

Federal Railroad Administration

Private Grade Crossing Open Public Meetings

Presented by
Robert Pressley, P.E.
Gannett Fleming

in conjunction with
NCDOT Rail Division Engineering & Safety Branch

September 27, 2006

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RAIL DIVISION
ENGINEERING AND SAFETY BRANCH

Studies Involving Private Crossings

- Private Crossing Safety Initiative
  - NCDOT Rail Division / North Carolina Railroad / Norfolk Southern (NS) – Raleigh to Charlotte, 140 track miles
- Traffic Separation Study
  - Charlotte Area Transit System / NCDOT Rail Division – NS 'O' Line – Charlotte to Mooresville, 30 track miles
- Western North Carolina Area Crossing Studies
  - NCDOT Rail Division – NS 'S' Line – Salisbury to Asheville – 143 track miles

General Findings

1. 92 private crossings evaluated in the three studies including:
   - 39 providing residential access

Crossing 721718H Cornelius

General Findings

1. 92 private crossings evaluated in the three studies including:
   - 18 providing farm access

Crossing 722977X
Guilford Co.

General Findings

1. 92 private crossings evaluated in the three studies including:
   - 29 providing industrial access

Crossing 729522H
Long View

General Findings

1. 92 private crossings evaluated in the three studies including:
   - 6 providing commercial access

Crossing 729425G
Blue Ridge
Broadcasting

General Findings

2. Written Agreements

- No written agreements between the operating railroad and the crossing owner found in public land records
- Written agreements between the operating railroad and the crossing owner were found for 25 of 92 crossings (**NS Archives)**

General Findings

3. Crossing warning devices included:
   - None -- 39

Crossing 904131T Guilford Co.

General Findings

3. Crossing warning devices included:
   - Crossbucks -- 39

Crossing 722974C Guilford Co.

General Findings

3. Crossing warning devices included:
   - Gated -- 5

Crossing 904230A Davidson Co.

General Findings

3. Crossing warning devices included:
   - Gates/Flashers -- 9

Crossing 726293N Durham Co.

General Findings

4. Industrial crossings pose special hazards
   - Public Service Company of NC – propane storage and distribution facility
   - Ingles Markets, Inc. – food service storage and distribution
   - N.C. Equipment Company – heavy equipment sales and services
   - Rankin Fryar – quarry and demolition landfill operations

General Findings

5. Some residential crossings serve multiple properties
   - Byrdsville Road – 67 residential units
   - Terrell's Trailer Park – 12 residential units
   - Ethel Lane – 18 residential units
   - Stroup Farm Road – potential to access 300 undeveloped acres
   - 8400 Old Concord Road – 7 residential units

Solutions Are Expensive

- Public Service Company of NC
  - Provide alt. access -- $850,000
- Ingles Markets
  - Relocate crossing -- $1,100,000
- Stroup Farm Road
  - Build grade separation -- $10,000,000
- Richard C. Roberts
  - Acquire property/close crossing -- $65,000

Solutions Are Expensive

- Terrell's Trailer Park
  - Install gates/flashers -- $150,000
- Huntersville Crossings
  - Upgrade 1 public crossing/consolidate 5 private -- $980,000

Examples of Recommended or Implemented Enhancements

Public Service Co. of NC

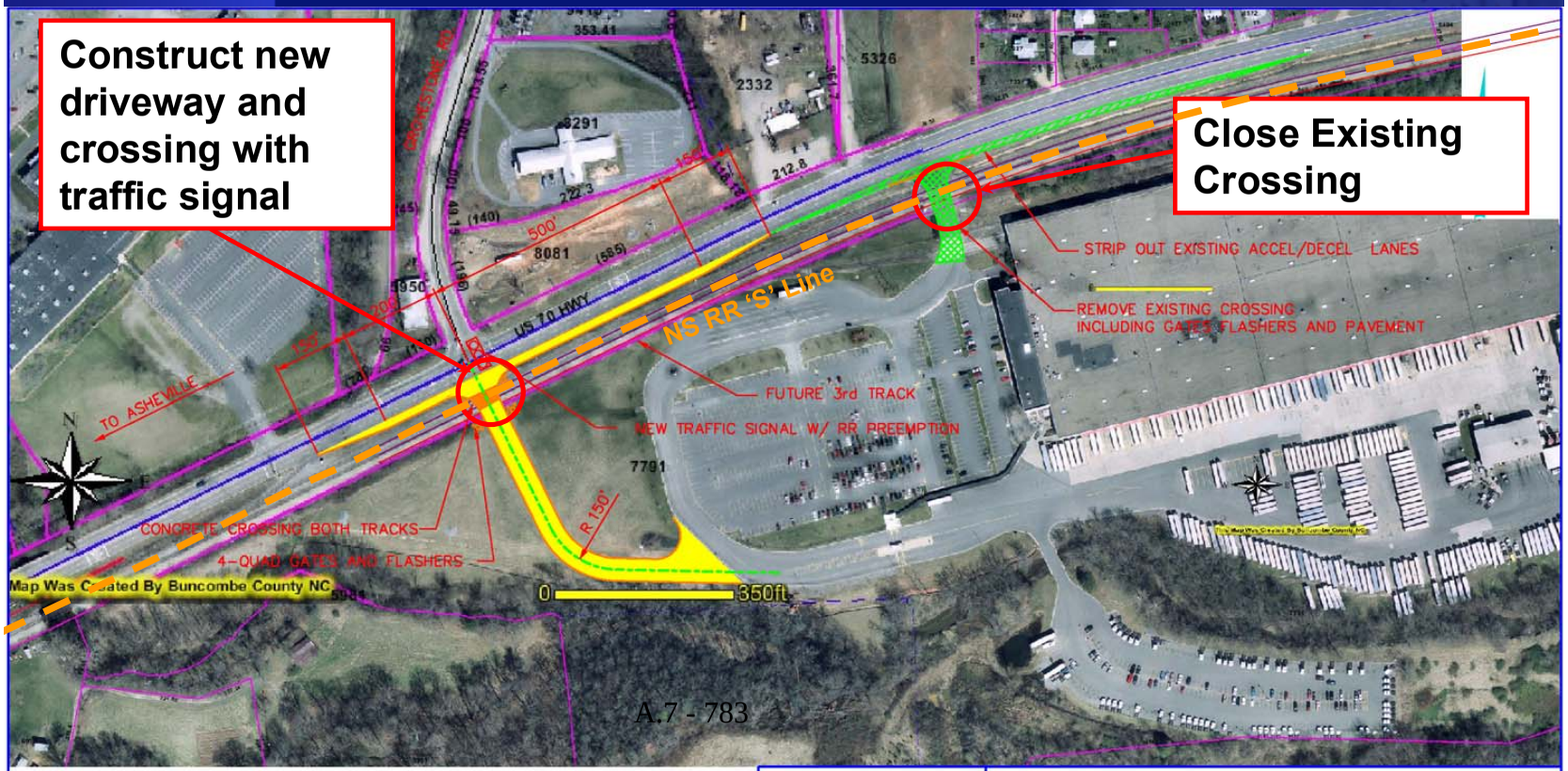
Examples of Recommended or Implemented Enhancements

Ingles Markets (near Asheville)

Existing Conditions

Examples of Recommended or Implemented Enhancements

Ingles Markets (near Asheville)



Examples of Recommended or Implemented Enhancements

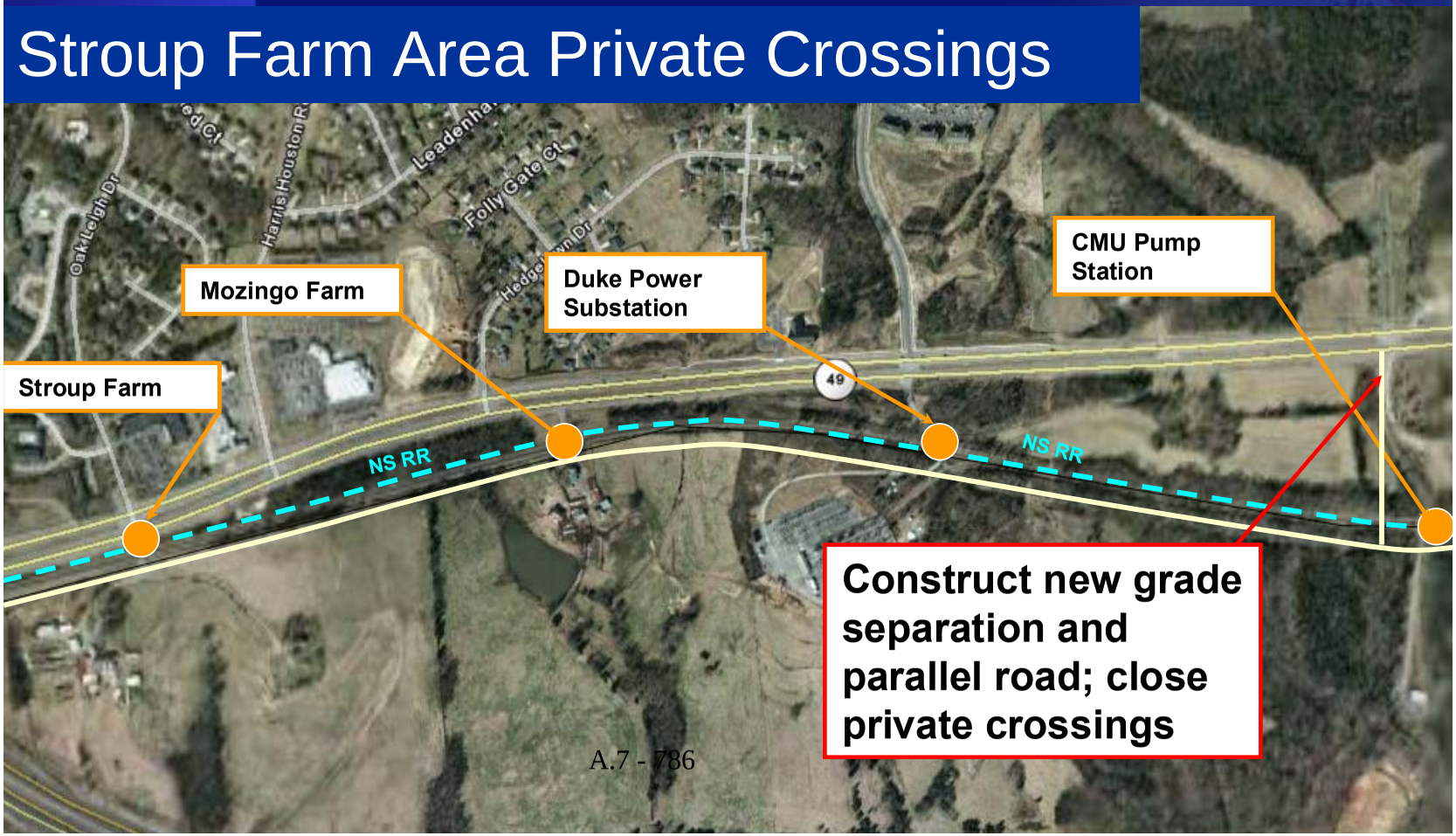
Stroup Farm

Examples of Recommended or Implemented Enhancements

Stroup Farm area – Duke Power Substation

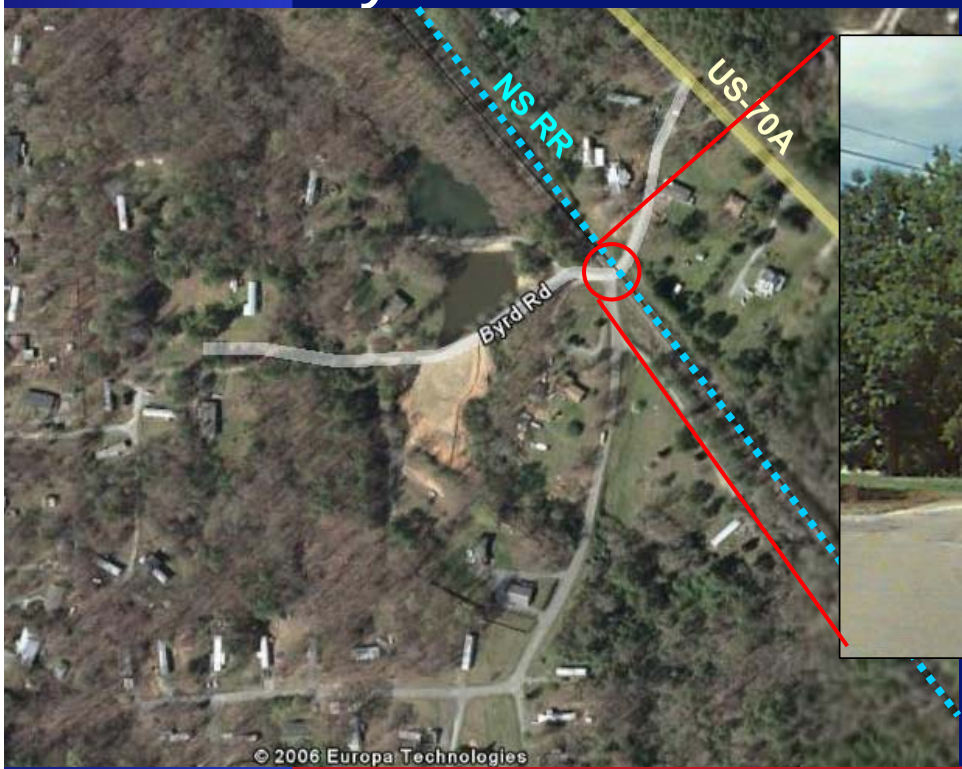
Examples of Recommended or Implemented Enhancements

Stroup Farm Area Private Crossings



Examples of Recommended or Implemented Enhancements

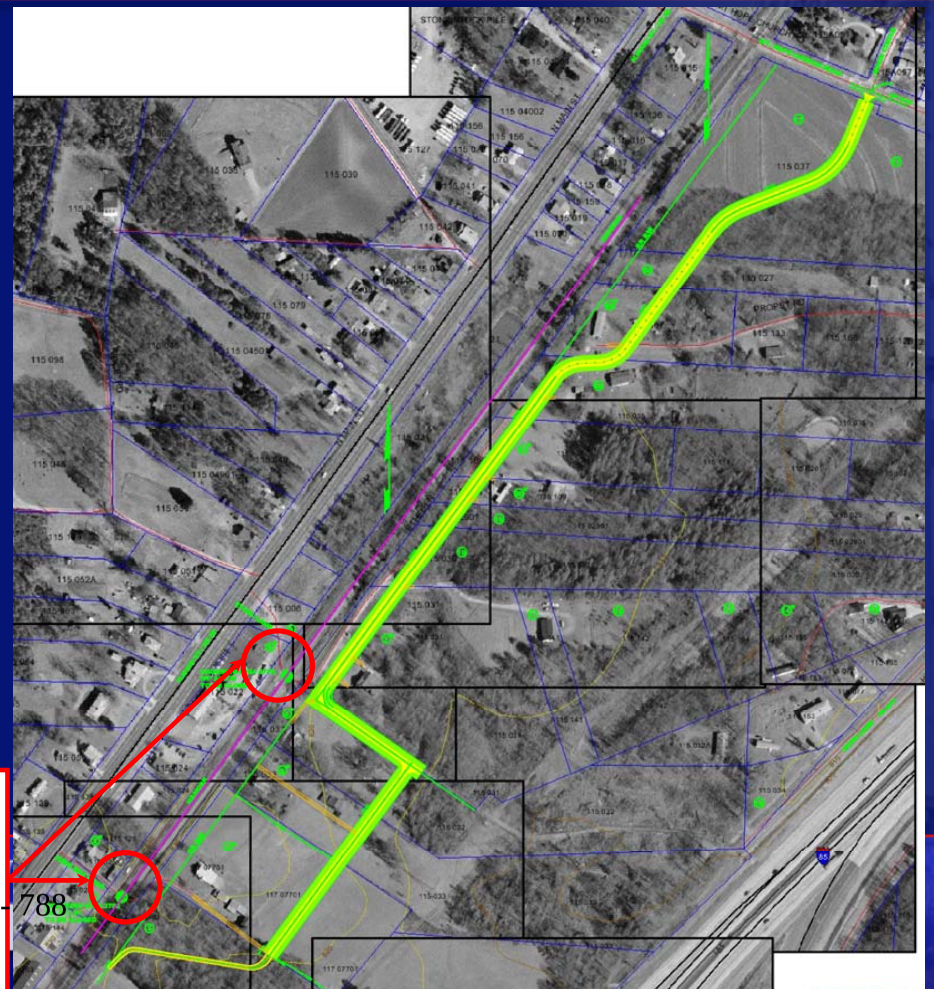
Byrdsville Road



Examples of Recommended or Implemented Enhancements

Ethel Lane

Juke Box Rd.



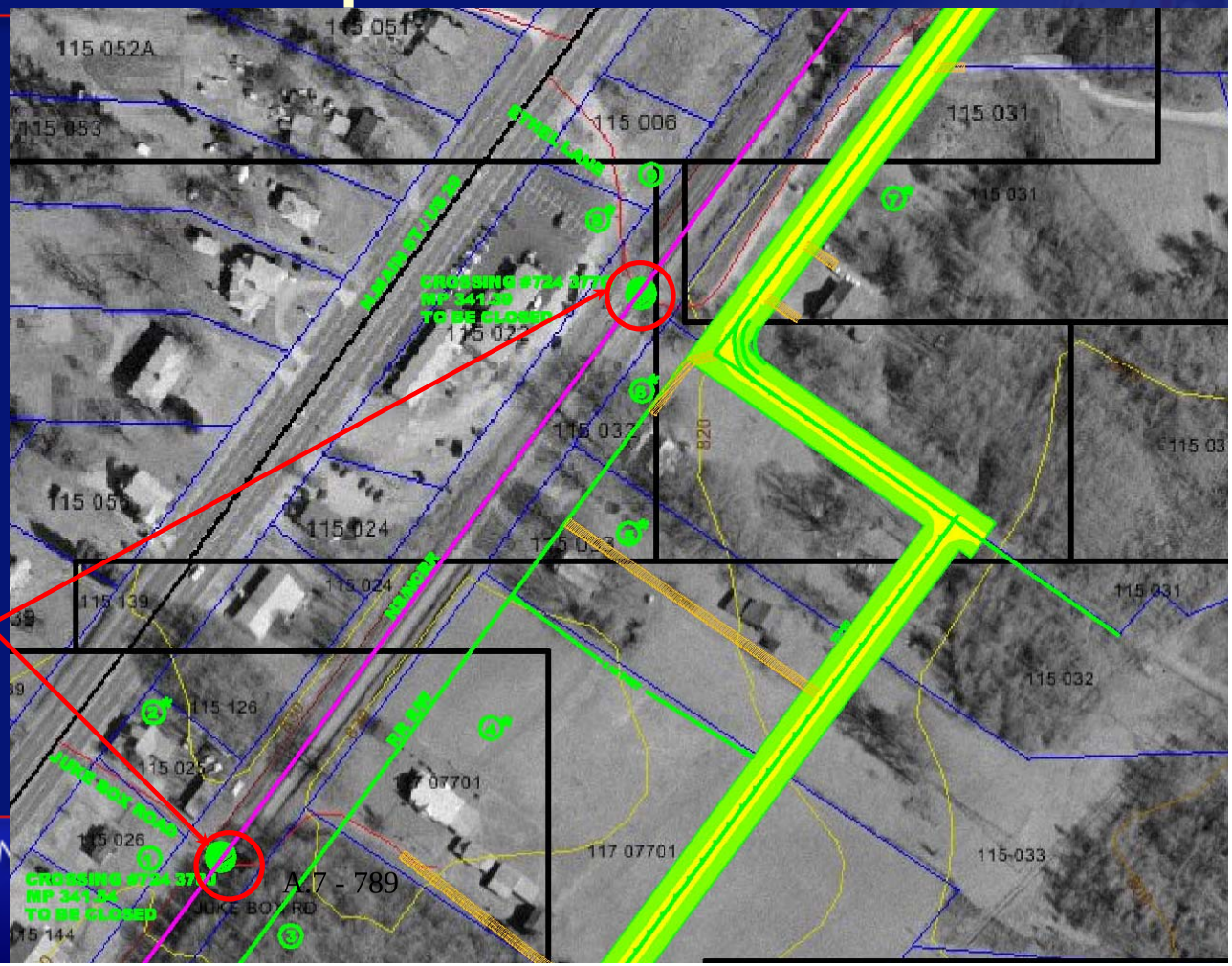
Close Existing Crossings and construct new road

Examples of Recommended or Implemented Enhancements

Ethel Lane

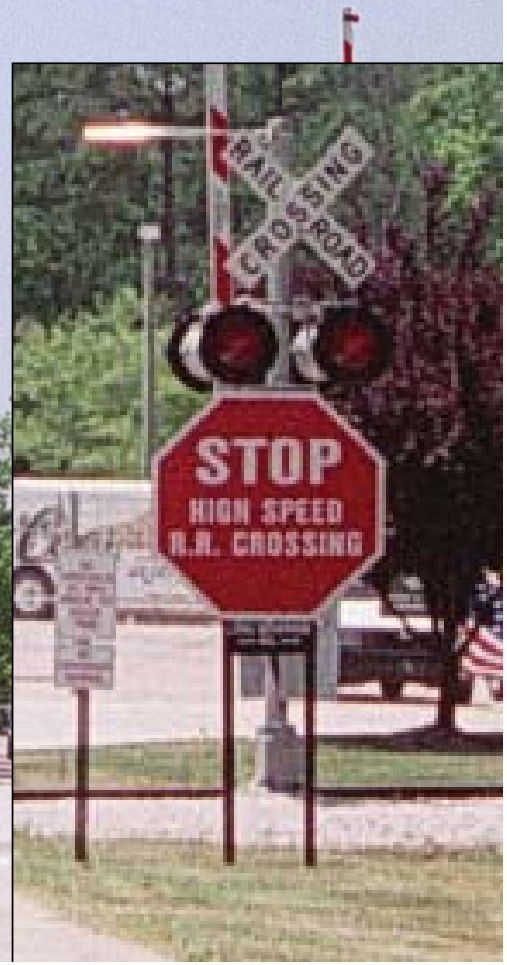
Juke Box Rd.

Close Existing Crossings and construct new road



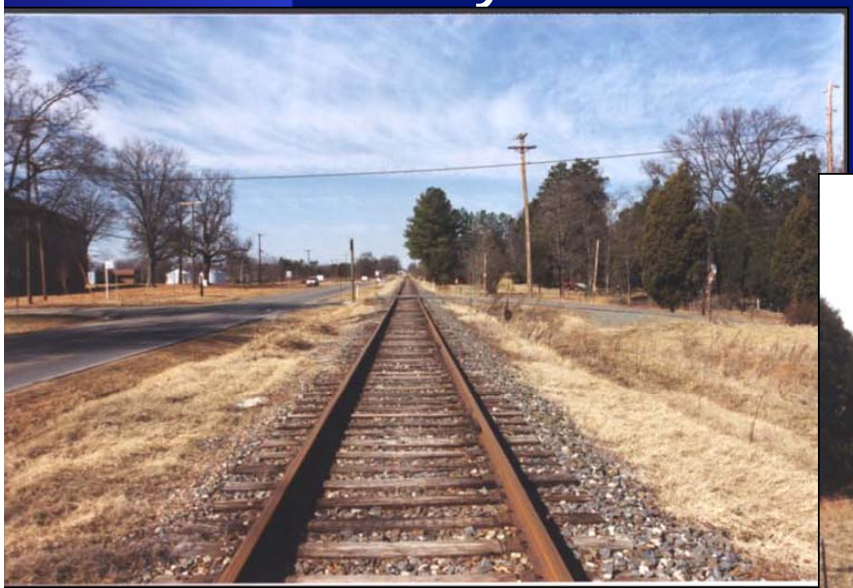
Examples of Recommended or Implemented Enhancements

Long Beverage



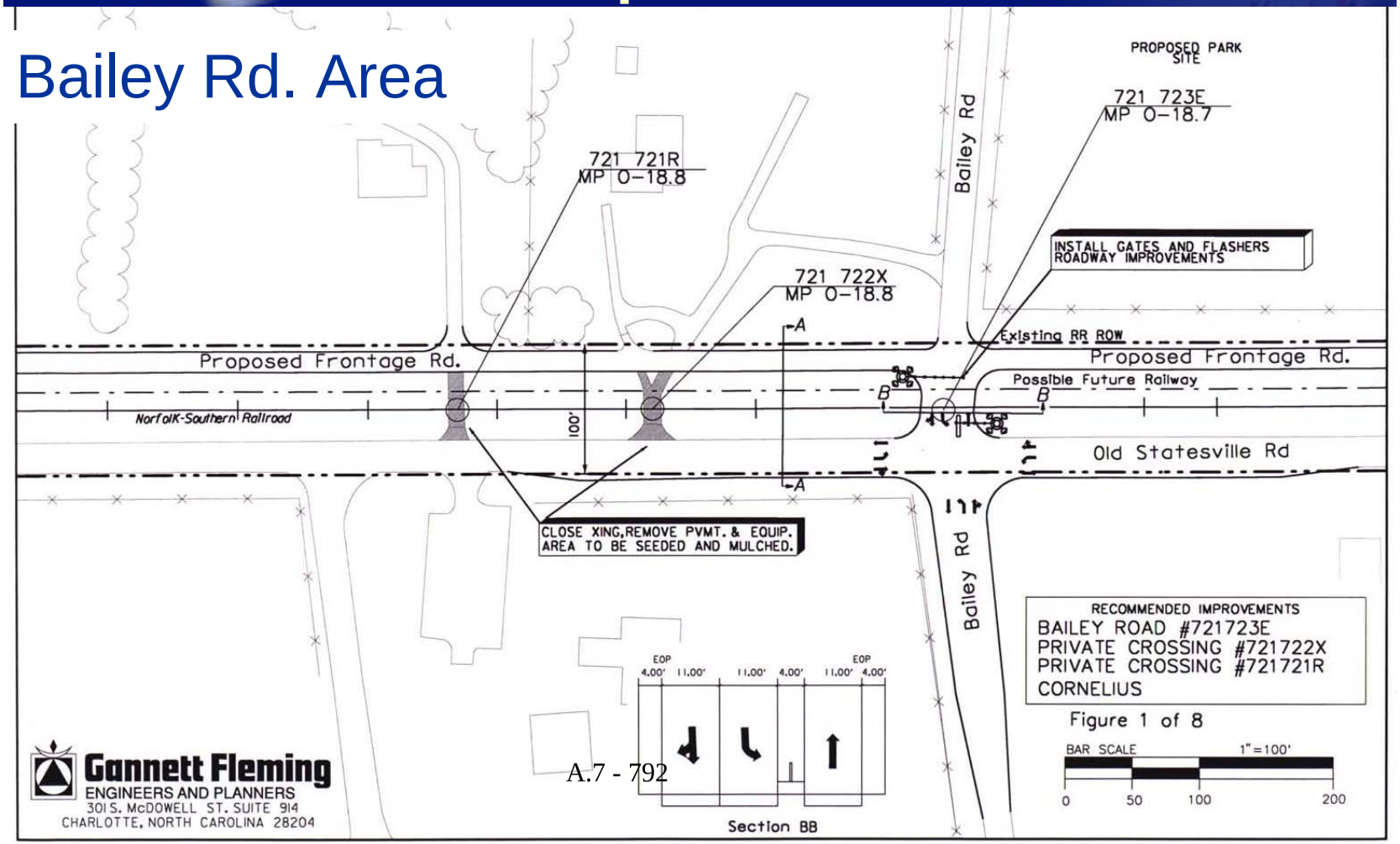
Examples of Recommended or Implemented Enhancements

Bailey Road area – Mecklenburg Co.



Examples of Recommended or Implemented Enhancements

Bailey Rd. Area

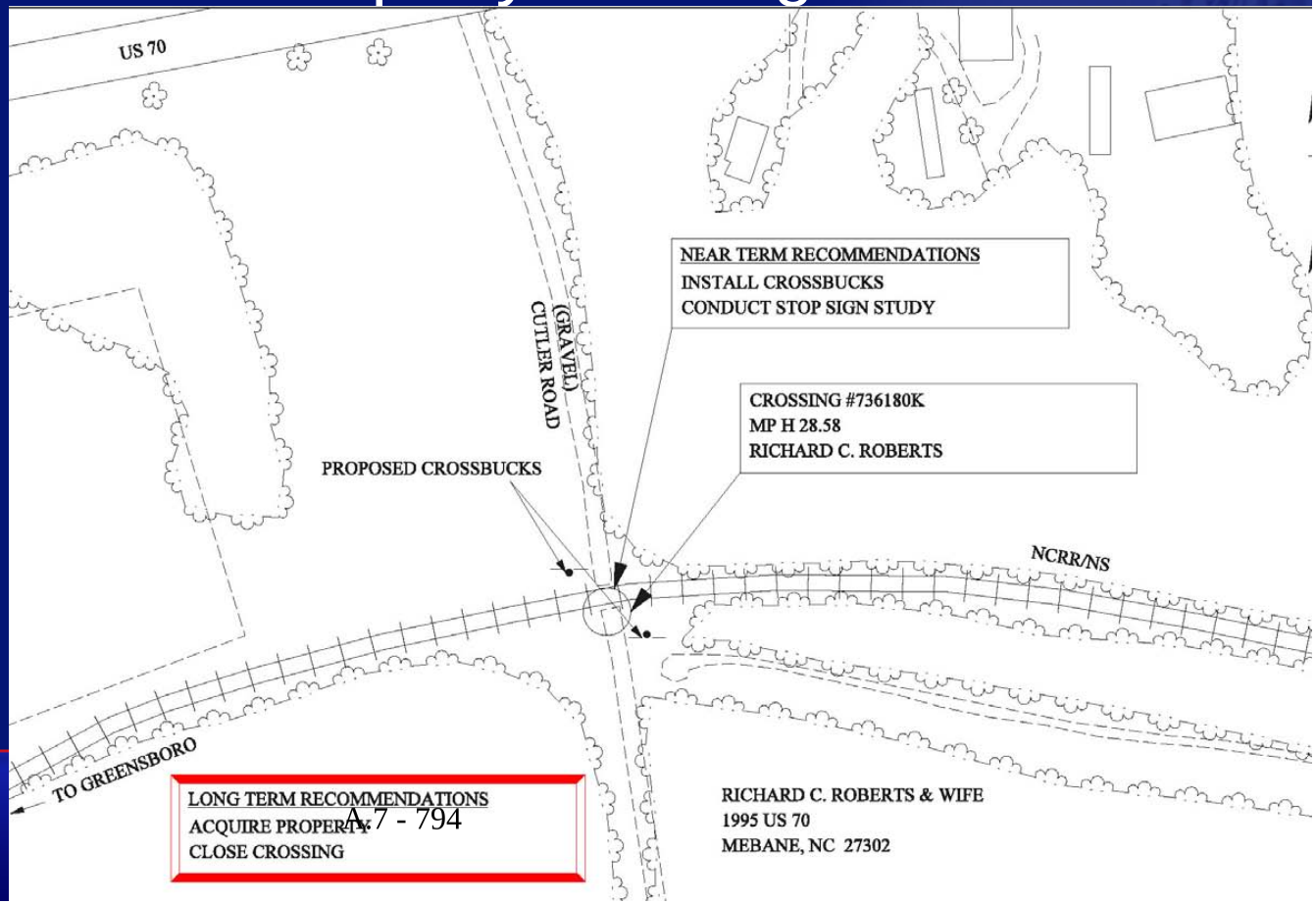


Examples of Recommended or Implemented Enhancements

Roberts Property – Alamance Co.

Examples of Recommended or Implemented Enhancements

Roberts Property – Orange Co.



Conclusions about Private Crossings

- Enhancements/closures difficult to resolve
  - Agreements are between RR & private owner
  - Uncertainty about state, federal jurisdiction
- Can be frequently dangerous
  - Industrial hazards
  - Poor sight distance, little or no protection
  - Increased traffic, esp. from development

Conclusions about Private Crossings (2)

- Enhancements often expensive
  - Often requires additional frontage roads to connect properties to public crossing
  - Can require grade separation or total property acquisition
  - Cost/benefit analysis difficult (FRA Gradec model not set up for private crossings)
  - Legal implications?
- Additional study needed
  - Legal framework, cost/benefit models

Questions?

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Gannett Fleming
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Paul Worley, C.P.M.
NCDOT Rail Division Engineering & Safety Branch
pworley@dot.state.nc.us
919.715.8740

Here's 35 crossings just in Missouri in 2006 crossing lights were STOLEN off public crossings the robbing railroads could move to the private railroad crossings if the FEDs are sooo concerned all of a sudden. The question is why the FRA railroad cronies are not in jail for allowing complete crossing workovers when gates are added when a 12 year old moron could just add gates to the existing lights for 20% of the cost. There's crossing lights/gates sitting all over the country on dead tracks not being moved and the FRA is worried about private crossings. Yeah right ---private crossings are the only place where the courts haven't been bought where the railroads can KILL FOR FREE at the blind pieces of crap crossings. This crap of court shaping for the railroads by the FEDS is illegal as hell or would be if the FEDs were not dirty co-conspirators in 1000s of railroad murders by NO law in violation of the FRA real job is.

19 0.092409 063104F BNSF MO BUCHANAN ST JOSEPH ILLINOIS&CHEER 0 0 0 0 0 06/06 GT 85 3 60 YES 2 6,500

80 0.067688 063104F BNSF MO BUCHANAN ST JOSEPH ILLINOIS&CHEER 0 0 0 0 0 FL 85 3 60 YES 2 6,500

208 0.042933 063121W BNSF MO BUCHANAN ST JOSEPH FOURTH ST. 0 0 0 0 0 06/06 GT 73 3 45 YES 2 1,170

15 0.107520 063121W BNSF MO BUCHANAN ST JOSEPH FOURTH ST. 0 0 0 1 0 FL 73 4 45 YES 2 1,170

415 0.031281 063112X BNSF MO BUCHANAN ST JOSEPH HICKORY ST 0 0 0 0 0 06/06 GT 79 2 60 YES 2 500

252 0.040044 063112X BNSF MO BUCHANAN ST JOSEPH HICKORY ST 0 0 0 0 0 FL 79 2 60 YES 2 500

417 0.031089 667700B BNSF MO WRIGHT MOUNTAIN GR HIGH ST. 0 0 0 0 0 06/06 GT 31 1 40 YES 2 2,355

255 0.039892 667700B BNSF MO WRIGHT MOUNTAIN GR HIGH ST. 0 0 0 0 0 FL 31 1 40 YES 2 2,355

443 0.030051 330053J KCS MO JASPER JOPLIN 9TH STREET 0 0 0 0 0 03/06 GT 24 2 50 YES 2 3,100

269 0.039057 330053J KCS MO JASPER JOPLIN 9TH STREET 0 0 0 0 0 FL 24 2 50 YES 2 3,100

510 0.027599 664598M BNSF MO PHELPS ROLLA 7TH STREET 0 0 0 0 0 06/06 GT 9 1 45 YES 2 8,300

306 0.036997 664598M BNSF MO PHELPS ROLLA 7TH STREET 0 0 0 0 0 FL 9 1 45 YES 2 8,300

514 0.027567 095216T BNSF MO BUCHANAN RUSHVILLE BLANK 0 0 0 0 0 06/06 GT 48 1 60 YES 2 1,016

308 0.036969 095216T BNSF MO BUCHANAN RUSHVILLE BLANK 0 0 0 0 0 FL 48 1 60 YES 2 1,016

538 0.026839 669024P BNSF MO BARTON GOLDEN CITY US 160 0 0 0 0 0 06/06 GT 27 1 50 YES 2 1,960

323 0.036332 669024P BNSF MO BARTON GOLDEN CITY US HIGHWAY 160 0 0 0 0 0 FL 27 1 50 YES 2 1,960

568 0.026010 663884P BNSF MO JEFFERSON FESTUS MILL AVE 0 1 0 0 0 06/06 GT 11 1 40 YES 2 5,600

3 0.183807 663884P BNSF MO JEFFERSON FESTUS MILL AVE 1 0 0 1 1 FL 11 1 40 YES 2 5,600

569 0.025998 667845M BNSF MO HOWELL POMONA 0 0 0 0 0 06/06 GT 30 1 45 YES 2 1,602

33 0.084976 667845M BNSF MO HOWELL POMONA 0 0 0 0 1 FL 30 1 45 YES 2 1,602

575 0.025880 293587Y KCS MO JACKSON BLUE SPRING WOODS Rd. 0 0 0 0 0 03/06 GT 5 1 40 YES 2 16,190

340 0.035474 293587Y KCS MO JACKSON BLUE SPRING WR OODS CHAPEL 0 0 0 0 0 FL 5 1 40 YES 2 16,190

669 0.023308 664599U BNSF MO PHELPS ROLLA 6TH STREET 0 0 0 0 0 06/06 GT 9 1 45 YES 2 5,500

393 0.033062 664599U BNSF MO PHELPS ROLLA 6TH STREET 0 0 0 0 0 FL 9 1 45 YES 2 5,500

716 0.022260 083705U BNSF MO HOLT FORTESCUE BLANK 0 0 0 0 0 06/06 GT 43 1 50 YES 2 690

419 0.032030 083705U BNSF MO HOLT FORTESCUE BLANK 0 0 0 0 0 FL 43 1 50 YES 2 690

795 0.020649 330143H KCS MO MCDONALD GOODMAN SPLITO AVE 0 0 0 0 0 03/06 GT 24 1 40 YES 2 1,243

465 0.030385 330143H KCS MO MCDONALD GOODMAN SPLITLOG AVE 0 0 0 0 0 FL 24 1 40 YES 2 1,243

858 0.019575 079383B BNSF MO RANDOLPH CLARK MADISON RD 0 0 0 0 0 06/06 GT 45 2 45 YES 2 564

136 0.053081 079383B BNSF MO RANDOLPH CLARK MADISON RD 0 0 0 0 0 NO 45 2 45 YES 2 564

862 0.019528 330031J KCS MO JASPER WACO MO YY 1 0 0 0 0 03/06 GT 24 1 50 YES 2 1,085

506 0.029195 330031J KCS MO JASPER WACO 0 0 0 0 0 FL 24 1 50 YES 2 1,085

907 0.018686 330039N KCS MO JASPER JOPLIN ELK ROAD 0 0 0 0 0 03/06 GT 20 1 50 YES 2 1,200

65 0.071830 330039N KCS MO JASPER JOPLIN ELK ROAD 0 0 0 0 1 FL 20 1 50 YES 2 1,200

968 0.017871 664600L BNSF MO PHELPS ROLLA ROLLA 0 0 0 0 0 06/06 GT 9 1 35 YES 2 2,880

578 0.027366 664600L BNSF MO PHELPS ROLLA ROLLA 0 0 0 0 0 FL 9 1 35 YES 2 2,880

1101 0.016073 293585K KCS MO JACKSON BLUE SPRING MAIN 0 0 0 0 0 03/06 GT 5 1 40 YES 2 5,075

668 0.025278 293585K KCS MO JACKSON BLUE SPRING MAIN 0 0 0 0 0 FL 5 1 40 YES 2 5,075

1120 0.015859 005352X BNSF MO RAY CAMDEN CO RD 10 0 0 0 0 0 06/06 GT 93 2 55 NO 1 111

856 0.021746 005352X BNSF MO RAY CAMDEN CO RD 10 0 0 0 0 0 HS 66 2 55 NO 1 111

1166 0.015556 005014A BNSF MO CLARK KAHOKA SANTA FE ST 0 0 0 0 0 06/06 GT 61 4 90 YES 2 76

177 0.046104 005014A BNSF MO CLARK KAHOKA SANTA FE ST 0 0 0 0 0 XB 61 4 90 YES 2 76

1193 0.015311 330046Y KCS MO JASPER JOPLIN 5TH ST 0 0 0 0 0 03/06 GT 24 1 50 YES 2 600

702 0.024359 330046Y KCS MO JASPER JOPLIN 5TH ST 0 0 0 0 0 FL 24 1 50 YES 2 600

1298 0.014262 329835B KCS MO CASS CLEVELAND MAIN ST 0 0 0 0 0 03/06 GT 24 1 55 YES 2 493

779 0.023058 329835B KCS MO CASS CLEVELAND MAIN ST 0 0 0 0 0 FL 24 1 55 YES 2 493

1349 0.013875 329863E KCS MO CASS DREXEL MAIN ST. 0 0 0 0 0 03/06 GT 24 2 55 YES 2 461

808 0.022566 329863E KCS MO CASS DREXEL MAIN ST. 0 0 0 0 0 HS 24 3 55 YES 2 461

1405 0.013236 329865T KCS MO BATES DREXEL ETHEL STREET 0 0 0 0 0 03/06 GT 24 1 55 YES 2 411

858 0.021743 329865T KCS MO BATES DREXEL ETHEL STREET 0 0 0 0 0 FL 24 1 55 YES 2 411

1493 0.012552 293588F KCS MO JACKSON BLUE SPRING VALLEY VIEW 0 0 0 0 0 03/06 GT 5 1 40 NO 2 2,779

921 0.020843 293588F KCS MO JACKSON BLUE SPRING VALLEY VIEW RO 0 0 0 0 0 FL 5 1 40 NO 2 2,779

1549 0.012198 063537L BNSF MO MARION HANNIBAL ROUTE "JJ" 0 0 0 0 0 06/06 GT 19 1 60 YES 2 447

957 0.020369 063537L BNSF MO MARION HANNIBAL ROUTE "JJ" 0 0 0 0 0 FL 19 1 60 YES 2 447

1655 0.011330 330157R KCS MO MCDONALD ANDERSON MILL STREET 0 0 0 0 1 03/06 GT 24 2 40 YES 2 380

22 0.092617 330157R KCS MO MCDONALD ANDERSON MILL STREET 0 0 1 0 0 XB 24 2 40 YES 2 380

1672 0.011235 664604N BNSF MO PHELPS ROLLA WALKER ST 0 0 0 0 0 06/06 GT 9 1 35 YES 2 930

1036 0.019055 664604N BNSF MO PHELPS ROLLA WALKER ST 0 0 0 0 0 FL 9 1 35 YES 2 930

1697 0.011003 673268F BNSF MO GREENE SPRINGFIELD HASELINE RD 0 0 0 0 0 06/06 GT 23 1 50 YES 2 280

1058 0.018732 673268F BNSF MO GREENE SPRINGFIELD HASELINE RD 0 0 0 0 0 FL 23 1 50 YES 2 280

1757 0.010505 079382U BNSF MO RANDOLPH CLARK VANDERPOPLARS 0 0 0 0 0 06/06 GT 45 2 45 NO 2 526

347 0.035252 079382U BNSF MO RANDOLPH CLARK VANDERPOPLARS 0 0 0 0 0 NO 45 2 45 NO 2 526

1883 0.009752 330120B KCS MO NEWTON NEOSHO BURR CROSSING 0 0 0 0 0 03/06 GT 24 1 40 YES 2 200

31 0.085927 330120B KCS MO NEWTON NEOSHO BURR CROSSING 0 0 0 0 2 FL 24 1 40 YES 2 200

1950 0.009312 063122D BNSF MO BUCHANAN ST JOSEPH FRANCIS ST 0 0 0 0 0 06/06 GT 61 3 45 YES 2 50

413 0.032255 063122D BNSF MO BUCHANAN ST JOSEPH FRANCIS ST 0 0 0 0 0 NO 61 3 45 YES 2 50

2143 0.008355 005345M BNSF MO RAY HENRIETTA CO RD 319 0 0 0 0 0 06/06 GT 93 2 79 NO 1 48

655 0.025606 005345M BNSF MO RAY HENRIETTA CO RD 319 0 0 0 0 0 OS 66 2 79 NO 1 48

2181 0.008228 330014T KCS MO JASPER ASBURY MAIN STREET 0 0 0 0 0 03/06 GT 24 2 50 YES 2 130

500 0.029363 330014T KCS MO JASPER ASBURY MAIN STREET 0 0 0 0 0 XB 24 2 50 YES 2 130

2226 0.007996 070172Y BNSF MO HOLT FOREST CITY BLANK 0 0 0 0 0 06/06 GT 57 2 60 YES 2 25

1496 0.014313 070172Y BNSF MO HOLT FOREST CITY BLANK 0 0 0 0 0 FL 57 2 60 YES 2 25

2251 0.007878 070142G BNSF MO ANDREW AMAZONIA BLANK 0 0 0 0 0 06/06 GT 57 1 60 NO 2 125

535 0.028390 070142G BNSF MO ANDREW AMAZONIA BLANK 0 0 0 0 0 NO 57 1 60 NO 2 125

2268 0.007747 095361S BNSF MO PLATTE FARLEY KISKER RD 0 0 0 0 0 06/06 GT 45 2 60 NO 1 169

554 0.028020 095361S BNSF MO PLATTE FARLEY KISKER RD 0 0 0 0 0 NO 45 2 60 NO 1 169

2276 0.007697 005263F BNSF MO CHARITON MARCELINE CO RD 223 0 0 0 0 0 06/06 GT 62 2 90 NO 1 56

557 0.027881 005263F BNSF MO CHARITON MARCELINE CO RD 223 0 0 0 0 0 XB 62 2 90 NO 1 56

2526 0.006588 070139Y BNSF MO ANDREW AMAZONIA BLANK 0 0 0 0 0 06/06 FL 57 1 60 NO 2 30

1085 0.018418 070139Y BNSF MO ANDREW AMAZONIA BLANK 0 0 0 0 0 NO 57 1 60 NO 2 30

2528 0.006581 669800M BNSF MO GREENE ASH GROVE 0 0 0 0 0 06/06 GT 21 1 40 YES 2 100

1040 0.019034 669800M BNSF MO GREENE ASH GROVE 0 0 0 0 0 SS 10 4 40 YES 2 100

2564 0.006497 095196J BNSF MO PLATTE IATAN COUNTY RD 0 0 0 0 0 06/06 FL 46 1 60 NO 2 40

1099 0.018201 095196J BNSF MO PLATTE IATAN COUNTY RD 0 0 0 0 0 NO 46 1 60 NO 2 40

2667 0.006185 005264M BNSF MO CHARITON MARCELINE CO RD 219 0 0 0 0 0 06/06 GT 62 2 90 NO 1 31

757 0.023403 005264M BNSF MO CHARITON MARCELINE CO RD 219 0 0 0 0 0 XB 62 2 90 NO 1 31

2713 0.005963 293572J KCS MO JACKSON OAK GROVE CLINTON 0 0 0 0 0 03/06 GT 5 1 40 YES 2 704

802 0.022711 293572J KCS MO JACKSON OAK GROVE CLINTON 0 0 0 0 0 XB 5 1 40 YES 2 704

2758 0.005675 861088B BNSF MO MACON COLLEGE MOU ST ROUTE T 0 0 0 0 0 06/06 GT 3 1 25 YES 2 670

1052 0.018819 861088B BNSF MO MACON COLLEGE MOU STATE ROUTE T 0 0 0 0 0 FL 10 1 20 YES 2 670

2798 0.005533 861093X BNSF MO RANDOLPH COLLEGE MOU STATE C 0 0 0 0 0 06/06 GT 3 1 25 YES 2 630

1082 0.018432 861093X BNSF MO RANDOLPH COLLEGE MOU STATE RT C 0 0 0 0 0 FL 10 1 20 YES 2 630

2813 0.005490 070171S BNSF MO HOLT FOREST CITY BLANK 0 0 0 0 0 06/06 GT 57 5 60 NO 2 10

2034 0.010266 070171S BNSF MO HOLT FOREST CITY BLANK 0 0 0 0 0 FL 57 5 60 NO 2 10

2835 0.005350 330184M KCS MO MCDONALD NOEL S KINGS HIGHWA 0 2 0 0 0 03/06 GT 24 1 40 YES 2 50

92 0.062987 330184M KCS MO MCDONALD NOEL 1 0 0 0 0 XB 24 1 40 YES 2 50

3010 0.004660 063528M BNSF MO MARION HANNIBAL ROAD 413 0 0 0 0 1 06/06 GT 19 1 60 YES 1 30

105 0.058865 063528M BNSF MO MARION HANNIBAL ROAD 413 0 0 0 1 0 XB 19 1 60 YES 1 30

3012 0.004646 070143N BNSF MO ANDREW AMAZONIA BLANK 0 0 0 0 0 06/06 GT 57 2 60 NO 2 30

1084 0.018418 070143N BNSF MO ANDREW AMAZONIA BLANK 0 0 0 0 0 NO 57 2 60 NO 2 30

3057 0.004514 442252W UP MO COLE CENTERTOWN OLD STAGE ROAD 0 0 0 0 1 04/06 GT 23 1 70 NO 1 85

108 0.057970 442252W UP MO COLE CENTERTOWN OLD STAGE ROAD 0 0 0 1 0 XB 23 1 70 NO 1 85

3153 0.004196 664376D BNSF MO FRANKLIN ST CLAIR PUBLIC 0 0 0 0 0 06/06 GT 9 1 40 YES 2 100

1214 0.016867 664376D BNSF MO FRANKLIN ST CLAIR PUBLIC 0 0 0 0 0 NO 9 1 40 YES 2 100

3451 0.003134 079378E BNSF MO PLATTE KANSAS CITY COUNTY RD 0 0 0 0 0 06/06 GT 45 2 45 NO 1 20

1654 0.013031 079378E BNSF MO PLATTE KANSAS CITY COUNTY RD 0 0 0 0 0 NO 45 2 45 NO 1 20

3526 0.002897 293263W KCS MO PIKE BOWLING GRE RD 53 0 0 0 0 0 03/06 GT 5 2 40 YES 1 100

1779 0.012139 293263W KCS MO PIKE BOWLING GRE RD 53 0 0 0 0 0 XB 5 2 40 YES 1 100

3532 0.002858 442243X UP MO MONITEAU CENTERTOWN CO.RD. 0 0 0 0 0 05/06 GT 23 1 70 NO 1 16

2941 0.005609 442243X UP MO MONITEAU CENTERTOWN CO.RD. 0 0 0 0 0 FL 23 1 70 NO 1 16

3648 0.002466 330029H KCS MO JASPER WACO RD 284 0 0 0 0 0 03/06 GT 24 1 50 YES 2 5

2006 0.010483 330029H KCS MO JASPER WACO RD 284 0 0 0 0 0 XB 24 1 50 YES 2 5

3935 0.001583 442251P UP MO COLE CENTERTOWN CO. RD 0 0 0 0 0 04/06 GT 23 1 70 NO 1 5

2596 0.006933 442251P UP MO COLE CENTERTOWN CO. RD 0 0 0 0 0 XB 23 1 70 NO 1 5

4132 0.000754 861087U BNSF MO RANDOLPH COLLEGE MOU COUN. RT # 0 0 0 0 0 06/06 GT 3 1 25 NO 1 30

2695 0.006535 861087U BNSF MO RANDOLPH COLLEGE MOU COUNTY RT # 0 0 0 0 0 XB 10 1 20 NO 1 30

4152 0.000503 861085F BNSF MO RANDOLPH COLLEGE MOU COUNTY RT 0 0 0 0 0 06/06 GT 3 1 25 NO 1 10

3210 0.004430 861085F BNSF MO RANDOLPH COLLEGE MOU COUNTY RT # 0 0 0 0 0 XB 10 1 20 NO 1 10

Hmmm, why do the railroad signal people give a damn who pays for the safety lights/gates when they should be in prison for KNOWINGLY letting the railroads overcharge for new (really refurbished stolen used junk) and steal existing equipment?

U.S. Department
Of Transportation

Memorandum

Research and Special Programs Administration

John A. Volpe
National Transportation Systems Center

Subject: **Safety at Private Crossings Public Meeting Fort Snelling, MN**

Date: October 12, 2006

From: Steven Peck

Reply to Attn of: RTV-3D

To: Miriam Kloeppel
Federal Railroad Administration

The first of a series of public meetings on the safety at private highway-rail grade crossings in the United States was held on August 30, 2006 in the Bishop Henry Whipple Federal Building in Fort Snelling, MN. Hosted by the Federal Railroad Administration (FRA), Office of Safety, the public meetings are being conducted regionally in an effort to start a national discussion on the challenging issue of improving safety at the nation's largely unregulated private highway-rail grade crossings.

Private crossings are owned by private property owners for their personal use, not the use of the public. There are over 94,000 private highway-rail grade crossings in the United States that provide access to a multitude of different types of properties including residential, agricultural, industrial, and commercial. Each type of private crossing can offer its own unique safety characteristics and concerns.

Representatives from Class I railroads, State Agencies (Departments of Transportation), Unions, Federal Agencies, Non-profit Organizations, and Industry attended the public meeting to begin discussion on the safety at private crossings in an effort to assist the FRA in addressing this long standing issue.

The meeting began with formal introductions and welcoming statements leading directly into a brief presentation provided by the FRA. The presentation was utilized as a foundation for the meeting by providing background and statistical information regarding private grade crossings in the United States. Topics mentioned included the national highway-rail grade crossing inventory, examples of unique state responsibilities, Federal responsibilities regarding private crossings, private crossing agreement legal makeup, and examples of private crossing safety treatments. The presentation ended with a list of topical areas provided to assist in the guidance of the discussion.

Four individuals provided formal statements:

Susan Aylesworth, Minnesota Department of Transportation (MNDOT)
Welcome to Minnesota, we are glad you all came and we are honored to be chosen as the first of several public meeting locations on this topic. Just by way of information, ***Minnesota has about 2,000 - 2,500 private railroad crossings*** and this interestingly, ***we do have a rule that talks about the appropriate crossing treatment at private crossings***, it's just that ***we don't think we have jurisdiction to implement it***. That is an interesting quirk that may be unique to Minnesota, but our rules do talk about what is appropriate at private crossings and pretty much mirrors what we would expect to see at a public railroad crossing. One other issue that we struggle with, and maybe some of will you speak to this later, is that ***we are unsure of what the definition of a private crossing is***.

We often times go out and if the public is using a location, we can't be sure whether that public use continues on both sides of the track and therefore should be counted as a public crossing or whether we should defer and leave it as a private crossing. And sometimes the railroads don't know that either. So it will be very interesting to hear what comments people make and ***what issues they raise of course with Quiet Zone this is an issue too so we are looking forward to this discussion on this timely topic***.

Bob Vander Clute, Executive Vice President, American Association or Railroads (AAR)
In many cases ***railroads have no authority to close or relocate private crossings or condition the use on the institution of appropriate safety measures***. For example, a private crossing may exist as the result of a deed granted when the railroad right-of-way was created. Or a state might require a railroad to grant farmers "suitable and convenient crossings," that they may continue in existence regardless of the frequency of which they are used.

Another issue is the nature of private crossings might change without the analysis of safety implications. A crossing that might only have been used by a land owner when first created could turn into a busy residential, industrial or commercial crossing later. If the crossing were a public crossing, a diagnostic team might evaluate the consequences of the ***change in use***. In the case of a private crossing however, there is no mandate that such an examination take place. Typically the ***users of private crossings should bear the cost of the safety improvements at the crossing for the benefit they receive from the crossing; however, it may be appropriate for public funding to be provided at private crossings that resemble public crossings.***

In the railroad's experience, insurance requirements do not drive the safety measures undertaken at a private crossing.

Tim DePaepe, Director of Research, Brotherhood of Railroad Signalmen (BRS)
Our first comment is that it's our position that the FRA should ***prohibit the creation of new private crossings*** and ***work toward eliminating as many existing private crossings as possible***. However, if the FRA determines that it wants to allow the creation of new private crossings, then the ***new (private) crossings should have at a minimum a set of grade crossing signal system flashing light signals***.

You also asked about how the improvement in our ***maintenance costs*** with private crossings should be allocated. We believe they should be ***split equally between the state government,***

federal government and the property owner; however, each case should be evaluated on its own merit. There may be some cases where the responsibility allocation should be adjusted. The ***state and federal government, for instance, should split the cost of the crossing warning system where school bus or other public transportation entity may utilize the crossing***.

But we believe the ***state and federal government should assume greater responsibility***, you know, clearly by -- if no other reason, by the amount of fatalities that are happening.

We believe that ***no private crossing should be created in the future*** unless they are equipped with active crossing warning devices. And we also believe there should be ***nationwide standards for warning devices at private crossings and for intersection design***. We believe they should be patterned after the standards contained in the ***Manual on Uniform Traffic Control Devices, Part 8*** which is subtitled Traffic Controls for Highway-Rail Grade Crossings. By taking this action, the users of the private crossings will be conditioned to respond to the stimuli that they encounter at other highway-rail grade crossings. We believe that ***there should be consistency in the message for the warning*** so that if there are public or private they get the same message and they take -- they take the same behavior.

It's our position that a ***private crossing*** should be defined as one used by a ***sole land owner or lessee***. Once any other individuals routinely use the crossing, it should no longer be considered a private crossing but as a public crossing.

We believe it's imperative that any ***private crossing that serves an industry should be held to the same standards for the highway-rail grade crossing signal system requirements***. Due to the types of trucks and materials that they carry, the severity of an accident at these crossings would be greater than an accident between a car and a train.

We believe you should ***stick with proven technology*** and utilize that.

We believe they (USDOT) ***should request enactment of legislation to address private crossings***. At a minimum, the legislation should include the ***site-line distances, signage requirements and grade crossing signal flashing light signals***.

Patty Abbate, Director, Citizens for Rail Safety (CRS)

The subject of railroad safety of these railroad (private) crossings remains such ***a critical issue that we at Citizens for Rail Safety are currently working with professors and researchers at the University of Tennessee in a study that is exploring this very subject***. Findings and recommendations from this study will be released in the fall of 2006. Along with the Federal Railroad Administration, we recognize that private railroad grade crossings present a unique set of challenges where safety is concerned. The lack of a uniform approach to safety for the nearly 100,000 private railroad crossings continues to be one of the main reasons why we are still faced with a conundrum of how to ensure safety at these sites. Unfortunately accidents and deaths at private crossings continue to occur.

The ***rise in rail traffic that economists predict over the next decade will further put safety issues to the test at these private crossings***. At this time, it is critical that we find a solution to the growing safety concerns that loom before us here. We also recognize that ***all private crossings are not created equal***. Some are used infrequently and others are used so extensively that the term ***"commercial crossing"*** should be used instead of private crossing. Private crossing ***rights vary from crossing to crossing with legal rights of ownership and usage blurred.***

As the railroads, government, private industry and citizens take a closer look at this situation, together we need to consider revisiting a recommendation made back in '99 ***to treat private crossings the same as public crossings with all the same safety regulations in place.*** We need to ***explore public private governmental partnerships*** to ensure that the most dangerous private highway-rail grade crossings are protected with active warning devices. We need to ***actively eliminate the number of private crossings whenever possible.***

The meeting was opened for discussion following the background information and formal introductions. Grady Cothen, Acting Associate Administrator for Safety Standards, FRA mediated the first half of the meeting, and Anya Carroll, Principal Investigator, Highway-Rail Grade Crossing Team, Volpe Center mediated the second half. During the open discussion many topics were mentioned and discussed both mediators guided the participants by utilizing the topical questions listed in the Federal Register Notice but allowing relevant, divergent discussion to materialize.

At-grade highway-rail crossings present inherent risks to users, including the railroad and its employees, and to other persons in the vicinity should a train derail into an occupied area or release hazardous materials. When passenger trains are involved, the risks are heightened. From the standpoint of public policy, how do we determine whether creation or continuation of a private crossing is justified?

Many attendees stated that the decision making process is lacking nationwide. Each state may have unique rules and regulations regarding private crossings and these rules and regulations are not always clearly known. Many participants felt that a nationwide process similar to established processes for public highway-rail grade crossings are needed.

In addition, local jurisdictions are urged to keep new developments private in order to alleviate the public from assuming responsibility. There may even be financial incentives for new developments to stay private.

- MNDOT:
  - No regulation capability over private crossings with the exception of insured, private farm crossings
  - Cost prohibitive to close private crossings
- Wisconsin Department of Transportation (WisDOT)
  - Railroads negotiate with private land owners regarding the agreement and installation of new private crossings
  -

- BRS:
  - Prohibit the creation of new private crossings
  - Eliminating as many existing private crossings as possible
  - New private crossings should have at a minimum a set of grade crossing signal system flashing light signals.

Is the current assignment of responsibility for safety at private crossings effective? To what extent do risk management practices associated with insurance arrangements result in ‘‘regulation’’ of safety at private crossings?

In many cases as a result of the age and specific arrangements with many of the private crossing agreements that have been made, no legal documentation is available to provide a basis for negotiations to modify or close the crossings. In some cases, there is no legal documentation available that formally acknowledges a private crossing. Insurance issues have not affected or restricted private crossing operation.

- AAR:
  - Insurance requirements do not drive the safety measures undertaken at a private crossing.

How should improvement and/or maintenance costs associated with private crossing be allocated?

Maintenance costs vary depending on the state and legal agreement between the railroads and private landowners. In some cases, the cost is split by the railroad and private owner while in other cases the railroad is responsible for the cost of maintenance. No organization appears to want to assume the financial responsibility associated with maintenance of new private crossings.

- WisDOT:
  - Railroads negotiate new private crossings details directly with private land owner.
  - Local jurisdictions do not want to assume the responsibility of maintenance over private crossings.
- BRS:
  - Split equally between the state government, federal government and the property owner (*However, each case evaluated on its own merit).
  - State and federal government should split the cost of the crossing warning system where school bus or other public transportation entity may utilize the crossing.
- AAR:
  - Typically, railroads are responsible to research the original deed and negotiate maintenance costs with the private land owners.

Is there a need for alternative dispute resolution mechanisms to handle disputes that may arise between private crossing owners and the railroads?

A few states will provide mediation support between railroads and private land owners but the majority of cases are dealt with directly between railroads and private land owners or in extreme cases, through a court of law.

- WisDOT:
  - Railroad must negotiate with private owner regarding new private crossings.
  - Railroad responsible to research original deed and negotiate with owner.

Should the State or Federal government assume greater responsibility for safety at private crossings?

Most states lack the resources for current requirements and desires related to public crossings let alone the additional resources that would be required to assume a greater responsibility with private crossings. Some states do provide greater guidance and regulation

Many participants feel that the Federal Highway Administration (FHWA) has limited interest regarding highway-rail crossings in general, especially private crossings. This may be a result of crossing safety being viewed as low priority at FHWA due to the fact that crossing fatalities are a small percent of the total number of highway incidents and there are resource limitations within FHWA.

- WisDOT:
  - State is responsible for 50% of the maintenance cost at public crossings, however they are currently paying roughly 25%
  - Lack of funding available for grade separation
- MNDOT:
  - Mandates that yield signs are installed at all private crossings.
  - Currently spending 25% of available Section 130 funds on public crossing improvements.
  - FRA does not have the jurisdiction to enforce regulation on many highway warning devices associated with crossing safety.

Should there be nationwide standards for warning devices at private crossings, or for intersection design of new private grade crossings?

The general consensus was that nationwide standards would be beneficial. The first step would be to have an applicable nationwide definition of a private crossing and possibly a means to differential the varying types of private crossings. Different states require a varying degree of requirements, however, all agree something needs to be done.

- MNDOT:
  - Mandates that yield signs are installed at all private crossings.

How do we determine when a private crossing has a 'public purpose' and is subject to public use?

Most participants were in agreement that a clear, nationwide definition of private crossing is needed in order to determine if it has a public purpose and subject to public use. In addition to a clear definition, the answer may still be difficult to ascertain. In some cases, the users of a crossing may vary making it difficult to determine if the public is using the crossing. In other cases, there may be unsolicited users such as delivery companies or trespassers.

There are instances where private crossings provide access to the public for commercial sites on private property. In addition, the public may have to utilize a private crossing for seasonal or recreational access to a boat ramp or marina.

- WisDOT:
  - If the roadway on both sides of a crossing is not public, then the crossing is defined as a private crossing regardless of who utilizes the crossing.

Should some private crossings be categorized as "commercial crossings" rather than as "private crossings"?

There were a multitude of private crossing uses discussed in great detail. This list expands beyond solely distinguishing commercial crossings. Some categories can be heavily used by the public such as commercial, seasonal, and recreational. Others such as industrial or military may provide access for heavy trucks and hazardous materials. Each type or category may have a unique set of safety concerns.

Categories mentioned:

#	**Category**	#	**Category**
1	Agricultural / Farm	7	Government / Public Facilities
2	Industrial	8	Military
3	Commercial	9	Railroad Internal Facility
4	Residential	10	Recreational
5	Non-Vehicular (e.g. Pedestrian / Bicycle)	11	Seasonal
6	Institutional (e.g. University)	12	Temporary (e.g. Logging, Construction)

Are there innovative traffic control treatments that could improve safety at private crossings on major rail corridors, including those on which passenger service is provided?

Most agreed that the implementation of any safety warning devices would be beneficial. There was some agreement with the implementation of proven warning devices currently in use as opposed to unproven, innovative technologies. The North Carolina Department of Transportation experience regarding private warning devices utilized during the work that was conducted on their state high-speed rail corridor was referenced as a possible point of investigation and data research.

Should the Department of Transportation request enactment of legislation to address private crossings? If so, what should it include?

This topic was not fully addressed or discussed in any detail.

#

CC: file
Grady Cothen
Ron Ries
Anya Carroll

U.S. Department
Of Transportation

Memorandum

Research and Special Programs Administration

John A. Volpe
National Transportation Systems Center

Subject: **Safety at Private Crossings Public Meeting Raleigh, NC**

Date: October 13, 2006

From: Steven Peck

Reply to Attn of: RTV-3D

To: Miriam Kloeppel
Federal Railroad Administration

The second of a series of public meetings on the safety at private highway-rail grade crossings in the United States was held on September 27, 2006 in the McKimmon Conference and Training Center, North Carolina State University, Raleigh, NC. Hosted by the Federal Railroad Administration (FRA), Office of Safety, the public meetings are being conducted regionally in an effort to start a national discussion on the challenging issue of improving safety at the nation's largely unregulated private highway-rail grade crossings. This meeting was conducted with the focus on engineering treatments to improve safety at private crossings.

Private crossings are owned by private property owners for their personal use, not the use of the public. There are over 94,000 private highway-rail grade crossings in the United States that provide access to a multitude of different types of properties including residential, agricultural, industrial, and commercial. Each type of private crossing can offer its own unique safety characteristics and concerns.

Representatives from Class I railroads, State Agencies (Departments of Transportation), Unions, Federal Agencies, Industry, and concerned citizens attended the public meeting to continue discussion on the safety at private crossings in an effort to assist the FRA in addressing this long standing issue.

The meeting began with formal introductions and prepared statements that lead directly into a brief presentation provided by the FRA set a basis for the discussion. The presentation was utilized as a foundation for the meeting by providing background and statistical information regarding private grade crossings in the United States, and briefly surmised key points from the first public meeting held in Minnesota on August 30, 2006.

Five individuals provided formal statements prior to open meeting discussion:

Pat Simmons, Director, Rail Division, North Carolina Department of Transportation (NCDOT)

In Washington, as here in Raleigh, in North Carolina, ***public partnerships*** are again in vogue, and today's topic of dealing with private crossings will, I hope, get us to that topic a little bit as well.

One of the challenges that we have in administering our program is ***we do not as a state have direct authority over private crossings***. So that's an area where I'm not seeking more responsibility or more authority, but ***we need tools to improve safety***.

And one of the things that we value a great deal is that we have been able to partner with all of these folks to ***improve safety through elimination of crossings that were redundant*** or in addition to what we normally needed. That's always presented some challenges.

Paul Worley, Assistant Director, Engineering and Safety, NCDOT

Following a great part of the implementation of Sealed Corridor, the NCDOT has taken the same off-the-shelf or clear-minded solutions approach to private crossings on the Raleigh and Charlotte border. We emphasized ***closure*** and ***alternate access*** of possible signalization of high volume crossings, ***signage*** and even consider ***new mandates and laws***.

There are many challenges for private crossings, as Miriam mentioned, and some that we see and deal with every day. First of all, ***as a private issue, there are generally no public funds for capital improvements on the state or federal level or maintenance beyond special grant funds***, which we have been fortunate to receive.

There are varied types. I will name just a few, and you may even have more. ***Private use residential, farm, industrial, plant to plant, railroad,*** private crossings, and then there are the ***public use crossings residential development, business, industrial, recreational and even golf cart crossings***, and those are important.

Private agreements and deeds may cover the crossings and ***involve multiple parties*** over many years. And then finally ***resources to maintain an accurate inventory of private crossings in a comprehensive manner are not there*** either at the federal or state level.

USDOT, railroads through AREMA and AAR, the states through AASHTO, and rail transport operators through APTA should collaborate to ***develop a consistent approach***, such as was done with the Crossing Technical Work Group document was developed through ITE.

Stakeholders, federal and state agencies, local government, transit authorities, railroads and private crossing owners may eventually ***need to develop a methodology to share costs associated with grade crossing safety treatment, construction and maintenance*** based on local conditions and needs and users.

Disputes are handled through the courts in the local area which presents a challenge to the ruling party, since they can be ***biased towards the landowner***, and litigation is always costly for both parties. There is merit in the ***development of an unbiased committee to determine the***

outcome of these disputes. Because railroads engage in interstate commerce, ***dispute resolution should be considered for handling at the federal level***, perhaps by the FRA through their regions, using crossing safety managers in support of the effort.

Nationwide federal guidelines should be considered for development of our stakeholders through AASHTO, AREMA, APTA and the National Committee on Uniform Traffic Control Devices guidelines, rather than regulation would allow all parties to work through the process incrementally and learn accordingly. So if we can work through the process of ***guidelines and best practices***, that may be a good approach. ***Innovative and cost effective approaches*** should be encouraged, researched and tested for the common good.

A technical working group with ***identified stakeholders should be considered to develop guidelines*** or criteria that distinguish between a true private crossing versus one that has a public purpose. This technical work group can also contribute ***guidance for warning device selection and application*** for private crossings.

The categories utilized in the national crossing inventory should be reviewed to differentiate between ***potential traffic volumes and/or service to single versus multiple users at recreational, commercial, industrial crossings and residential***.

To date, ***innovative treatments have not provided either reduced cost or adequate safety improvements*** to justify their use for any but experimental institution in controlled test environment.

There are ***many issues to resolve prior to making this determination on enactment of legislation*** to address private crossings. Examples include:

How are all of the users of the crossings going to be determined?
How can all the agreements be gathered and input into a national database?
How are private crossings, where agreements cannot be found, to be handled?
How will all of the dirt/gravel highways be addressed regarding the approaches to private crossings?
How are safety improvements to be funded?
How are national security concerns for the railroad infrastructure and commodities to be addressed?

<u>Bob Pressley, Senior Project Manager, Gannett Fleming</u>
Our findings of all of these three studies within 313 track miles, we found:

- **92 private crossings**
  39 provided residential access
  18 provided access to farms
  29 provided industrial access
  6 provided commercial access
    e. g., Billy Graham radio station

- **No written agreements** recorded in the public land records
  Norfolk Southern found 25 agreements in their archives

Warning device Applications
39 had none, 39 had crossbucks, 5 had gates and locks, 9 had gates and flashers.

Industrial crossings:
- Public Service Company of North Carolina operates a propane storage and distribution facility 100 tractor trailer loads of propane in during the winter.
- Ingles Markets, large grocery store chain operating in six states warehouse facility located on private crossing.
- North Carolina, equipment company
- Low board trucks and trailers
- Heavy equipment
- Rankin Fryar, quarry and demolition

Residential crossings:
- Serve more than one residence
- 67 residential units
- Terrell's Trailer Park
- 12 units
- Ethel Lane
- 18 residential units
- Stroup Farm
- Potential to serve 300 acres of farm land proposed for redevelopment as residential

Solutions can be very expensive.

Finally, we think there probably is additional study needed, some type of ***a cost benefit model*** probably should be developed to deal with this issue.

John Perry, West Virginia Public Service Commission
A ***large number of incidents*** that occur within our state have been at private crossings, whether they are commercial grade or a residential area.

Tina Medlin, Private Citizen
I basically came today to educate myself, because I am currently ***affected by improvements in the railroad***. I have property that borders a railroad that I've had for 20 some-odd 14 years. I purchased this property, and my access is a prescriptive easement contained within the railroad right-of-way.

The house had been there since the turn of the century, that's the 1900s, not 2000, but several years after I purchased it, I tried to sell it, and then I found that I had ***no recorded legal access***. But the attorney said my ***prescriptive easement was good enough to allow me to continue to have access***, even though it was unrecorded.

In the last two years, the hundred acres to the north of me was purchased by a developer and an ***industrial park is going in***. Access to that particular property had been along a dirt road, ***a private crossing***, that's going to be the ***access to the industrial park*** that's going in. I'm a little concerned because the industrial park that is going in next to me has got a siding, so there will actually be ***a crossing across the railroad track and the siding***, and it's going to be a reload center, where they are taking railroad cars and off loading and then loading them onto other trains, loading them onto other 18 wheelers, and there will also be some storage facilities there too.

The prepared statements and presentations led directly into the open discussion focused on engineering treatment for safety at private crossings and were moderated by Anya Carroll, Principal Investigator, Rail and Transit Systems Division, Volpe Center.

Would it be valuable for a group to establish a base line parameter?

The group believed that a baseline parameter would be valuable and is needed. Outreach would need to be made to as many stakeholders as possible and a list of organizations that should be involved was drafted. Mention was made of the 2002 Technical Working group that had planned to revisit the work in 2007 (five year anniversary). The 2002 Technical Working group had diverse audience participation because it held meetings at regional conferences.

Organizations to be involved:

Federal Highway Administration (FHWA)
FRA
Railroads
Planning Associations
Track Maintenance
Federal Motor Carrier Safety Administration (FMCSA)
ITE (2002 Technical Working Group)

American Association of Railroads (AAR)

- No one from highway side is helping the improvement
- AASHTO can be active at supporting the engineering aspects

Passive Crossing Categorization

In addition, the group discussed categorizing private crossings based on different characteristics. The list of categories created at the first meeting in Minnesota was used for reference. Mention of terminology be investigated in Canada was also discussed.

Private Crossing Categories from MN – Desired changes

Commercial vs. Recreational
Distinguish between Industrial vs. Low Density
ADT should be criteria for within Commercial

NCDOT

- Military - public access roads within the military base; versus you have military purpose roads, where you have tanks and other heavy equipment. [Equipment vs. Non-equipment]
- Should use ADT and types of traffic to differentiate within a private crossing category (e.g. Commercial Wall-mart vs. Commercial mom & pop television repair shop).
- Restricted vs. unrestricted could be determined by the presence of a gate.

SPURLOCK

- Should look into using the description restricted and unrestricted that Transport Canada is utilizing
  - Restricted would be somebody's really private property
  - Unrestricted - This would be going into industrial yard.
- Frequency of use could be another way to categorize.

Data Collection

What the best method and who should be responsible for passive crossing data collection was discussed.

NCDOT

- NC collects commercial versus industrial and residential, recreational, institutional.
- States are in the best position to collect data regarding private crossings.
- There are issues with training University students to collect data
- Safety concerns when entering private property

Distinguish Public from Private Crossings

A means to distinguish a private crossing from a public crossing was addressed.

FRA

- Changing from private to public could be confusing and cause funding issues.
- Best approach is to create sub-categories for private crossings
- Private crossings with public access and no gates could mean ok for public use
- Ownership of land not the number of vehicles that utilize a crossing determines whether it is public or private.

Engineering Design Suggestions

There were many views and suggestions regarding what would be considered optimal engineering implementations. Currently there is no uniformity on signage being implemented. There are also currently no proven Intelligent Transportation Systems technologies available to address the issue. Current safety treatments mentioned ranged from the State of California and three Class I railroads installing "STOP" signs at private crossings to some Class I railroads installing their own warning signs. All agreeing that crossing closure would be the best scenario although not usually an option.

NCDOT

- Closure is ideal however the right-of-way would need to be acquired to achieve closure
- Issues determine the use of STOP or YIELD sign
- Difficultly with geometrics – especially approaches on private property
  - Evaluate each location
  - Private crossings often have to follow their geometry
- Consider that you have to stay on Right-of-way if you are using public funds (with exceptions).
- Developers should be subject to certain standards at private crossings

CSX

- Property rights acquisition
  - Condemn order
  - Compensate / negotiate with owner
  - Relocate access point

Norfolk Southern:
Stop signs give opportunity to see if a train is coming vs. a yield sign when vehicle is moving.

Treatment Options by Crossing Type

Currently implemented engineering safety treatments that are utilized at public crossings were discussed by type, Passive and Active. The application of public crossing standards to private crossing was made.

Passive Crossing

- Lockable gates (e.g. seasonal, storage, etc.)
- Signage
  - STOP signs (e.g. CA and three Class I railroads)
  - YIELD signs
  - LOOK signs
  - Pavement markings – STOP bar
  - Unique Railroad company signs (e.g. BNSF sign)

Active Crossings

- Hump crossing signs
- Agreement with Railroad and Industry regarding large volume vehicles and types of vehicles
- Railroad check list for priority

Crossing Separation

Grade separation was discussed briefly. All agreed that there are usually financial restrictions to grade separation. One example between a major industrial location and the railroads was sited at a cost of $5-25 million to complete.

How can the Railroad ask for Limited Access?

CSX

NY State – a high-speed rail line has the authority to deny usage of private crossings.

#

CC: file
Grady Cothen
Ron Ries
Anya Carroll

U.S. Department
Of Transportation

Memorandum

Research and Special Programs Administration

John A. Volpe
National Transportation Systems Center

Subject: **Safety at Private Crossings Public Meeting San Francisco, CA**

Date: November 24, 2006

From: Steven Peck and Anya A. Carroll

Reply to Attn of: RTV-3D

To: Miriam Kloeppel
Federal Railroad Administration

The third of a series of public meetings on the safety at private highway-rail grade crossings in the United States was held on October 26, 2006 in the Philip Burton Federal Building and Courthouse, San Francisco, CA. Hosted by the US DOT's Federal Railroad Administration (FRA), Office of Safety, the public meetings are being conducted regionally in an effort to start a national discussion on the challenging issue of improving safety at the nation's largely unregulated private highway-rail grade crossings. This meeting was conducted with the focus on responsibilities for safety at private crossings.

Private crossings are owned by private property owners for their personal use, not the use of the public. There are over 94,000 private highway-rail grade crossings in the United States that provide access to a multitude of different types of properties including residential, agricultural, industrial, and commercial. Each type of private crossing can offer its own unique safety characteristics and concerns.

Representatives from Class I railroads, State Agencies (Departments of Transportation), Unions, Federal Agencies, Industry, and concerned citizens attended the public meeting to continue discussion on the safety at private crossings in an effort to assist the FRA in addressing this long standing issue.

The meeting began with formal introductions and welcoming speeches by the honorable Clifford C. Eby, Deputy Administrator, Federal Railroad Administration and Mr. Vahak Petrossian, Manager, Rail Transit and Crossing Branch, California Public Utilities Commission (CPUC). Following Deputy Administrator Eby and Mr. Petrossian, there were two prepared statements, one from the CPUC and the other from the California Department of Transportation (CalTrans) that lead directly into a brief presentation provided by the FRA used to set a basis for the discussion. The presentation was utilized as a foundation for the meeting and briefly summarized key points from the previous two public meetings held in Minnesota and North Carolina. The ensuing open discussion was structured to address the issue of responsibility through the use of case study examples and hypothetical situations.

Summary of the formal statements prior to the open meeting discussion:

Vahak Petrossian, Manager, Rail Transit & Crossings Branch, California Public Utilities Commission (CPUC)

Private crossing, it's a major issue, and unfortunately, ***the major problem is the private property owners who don't participate in these proceedings***. They are the ones that I think need to be heard, need to participate, and take responsibility for a lot of the private crossings on the railroad. Fifty years ago the crossing was established, there was nothing there, maybe one farmhouse and over the years we continue with it. We think that ***the folks who give authority to a new development, whether it's the city government, the local governments giving business licenses or something, they also have a responsibility to address railroad safety***.

Daren Gilbert, Supervisor, Rail Crossings Engineering Section, California Public Utilities Commission (CPUC)

The CPUC exercises rail safety oversight over railroads in California under the California Public Utilities Code and under the State Participation Program with the USDOT Federal Railroad Administration. The CPUC also has ***exclusive jurisdiction over highway rail crossings in the State***. Specifically, in regards to private crossings, the ***CPUC has the authority to determine the necessity for any private crossing and the place, manner, and conditions under which the crossing shall be constructed and maintained, and to fix and assess the costs and expenses of that crossing***.

The ***Commission's General Order 75 (D)*** contains administrative rules governing the standardization and use of warning devices at highway-rail crossings, and has an entire ***regulation directed at warning devices at private highway rail crossings***. It requires a ***minimum of a stop and private crossing sign posted on each approach to the private highway-rail crossing***. General Order 75 (D) also requires a written agreement be developed to authorize the crossing between the parties.

Unless the approaches to the private crossings are controlled, for example, by locked gates or at least posted as private property, the public, for example, may be using it, therefore, individuals other than the invitee, guests, and employees of the property owner may use with or without permission many private crossings. Furthermore, if a private crossing is publicly used, such as ones that provide access to a business, then the general public is exposed to the same level of hazard as with any other public crossing. ***Anytime there is a probability that the public may be exposed to harm by a private crossing, it becomes a public safety issue requiring diagnostic review and special consideration***. In such cases, ***state government oversight of the crossing is appropriate***.

Currently, the railroads and private crossing owners share the liability for the safety at private crossings, the property owners share an interest in minimizing their exposure to financial liability. Because there are few controls at most private crossings assuring usage by only authorized parties, the use of the private crossings can change over time. ***We are not confident that such changes in use would be identified in a timely manner and addressed by the railroad or the landowner***.

We recommend some mechanism where the State or local government identifies increased or changed land use in landlocked parcels through permitting or project approval to identify such changes in the dynamics in the highway-rail grade crossing and its use. The best time to determine an increase in motor vehicle, bicycle, or pedestrian usage at railroad crossings is when the developer seeks approval of new commercial or residential projects. For the past three years, the CPUC has been reviewing proposed developments, and concerning potential impact on public safety under the California Environmental Quality Act (CEQA).

Under CEQA, the lead agency for the proposed development is required to respond to public comments concerning the project. There are, however, ***many instances where we are not aware of private crossings, and therefore, cannot make specific recommendations***. As to costs, generally, allocation of improvement and/or maintenance costs is agreed to by the landowner and railroad as parties entering into the legal instrument establishing the private crossing. We believe this is appropriate. In California, where the landowner and railroad do not agree, the Commission may apportion such costs.

The CPUC allows for administrative legal review by public hearing in crossing matters. Administrative law judges hear crossing cases and prepare proposed decisions for consideration by the Commission. The ***CPUC has its own alternative dispute resolution mechanism***. The issues involved with private crossings include ***property rights, contract law, and the safety responsibility for the traveling public***, all of which have traditionally been within the State's responsibility.

Many of the grants of rights-of-way in California were created in the 19th century at the time of the initial railroad line construction. Both the rights-of-way and the crossing agreements may be found in deeds of trust, quit claim deeds, and other contractual arrangements between the railroads and landowners subject to the laws of the State of California. Therefore, ***we strongly recommend keeping the responsibility of the safety of private crossings with the States***. The FRA may issue guidelines, for the benefit of States that do not have laws on this subject and provide recommended language for laws and regulations. However, the CPUC contends that ***public and private crossing safety regulation is too dependent on State law and real property and contracts law, and is too focused on regional issues and concerns to permit Federal preemption of the topic.*** Recommended Federal guidelines may be valuable, wholesale federal preemption is not.

In California, private crossing design is generally specified between the railroad and the landowner in the crossing agreement. In cases ***where a private crossing is used by the public or trains carrying hazardous material or passenger trains, existing guidelines for public crossings should be used***.

In other cases, ***we recommend the FRA invite a group of experts to develop guidelines for the design of private crossings, similar to the highway-rail grade crossing technical working group that issued the guidance on traffic control devices at public highway rail grade crossings***.

Where crossings allow unfettered access of passage and routinely invite the general public to use the crossing, a public purpose has been established. In such cases, ***guidelines for crossing treatments should be the same as used for public crossing.***

Public uses of crossings, which could be classified as private, include crossings at shopping centers and malls, which are generally private property, crossings to public facilities, such as landfills, recreational areas and other unrestricted public lands, private roads to residences, such as mobile home parks, residential subdivisions and private country clubs, and other businesses and commercial enterprises offering goods or services to the public, such as Christmas tree lots or nurseries.

It is extremely difficult to police the usage of each private crossing. Consequently, the private property owner must be given the incentive to upgrade the warning devices at the crossing when the usage changes. Financial liability, in case of a collision, is one incentive for private property owners to provide proper warning devices at a crossing, but generally not a compelling one until after an incident occurred. ***Any guidelines on private crossings considered for adoption should address the changes in use over time and provide for re-evaluation***.

California ***does not believe a distinction should be made between a commercial and private crossing***. California treats the crossing as a private crossing, but this may require greater protections to pedestrians or the motoring public, through the addition of improved safety warning devices similar to or identical to public crossings.

We believe that FRA has taken appropriate steps to solicit public comment on the matter to determine the scope of the relevant issues relating to private crossings. It would be ***premature to consider adoption of new legislature regarding private crossings*** until the comments of the interested parties are made and considered. Only then will an assessment of regulatory gaps be able to be fully reviewed and potential solutions considered.

In our opinion, ***all private crossings should be provided with the same level of warning devices as public ones based on the use and geometry of the crossing***. The danger posed by a private and a public crossing on high speed passenger rails are basically similar, since passengers, as well as bicyclists, pedestrians and motorists are placed at risk. Likewise, freight trains carrying hazardous materials have similar potential for the dangerous release of those hazardous materials at both private and public crossings.

California contends that existing protections, particularly under State law, are sufficient to protect the traveling public provided appropriate criteria for providing warning devices are used for both public and private crossings. The Commission recommends that the ***FRA assist in the formation of a technical working group to prepare general guidelines for identifying dangerous private crossings and recommend guidelines to be considered in upgrading or designing such crossings***.

Steve Cates, Chief, Office of Rail Equipment and Track Construction, California Department of Transportation (CalTrans)

In California, we have accidents at private crossings, ***probably 40 or 50 of them a year.*** And they cause delays, death, and damage to private property, and that's something that I would like to see addressed.

CalTrans provides inner city rail service. We ***carry over four-and-a-half million passengers a year on three different routes***. Currently we own 88 rail cars and 17 locomotives. We have ***a rail highway grade crossing improvement program*** with many different funding sources. There is the Federal 1010, 1103 funds for crossing improvements and high speed rail corridors. We have the Federal section 130 funds that are provided through the U.S. Department of Transportation Federal Highway Administration (FHWA). Those are for improvements on public crossings. And we also have a program here in California, a Section 190 grade separation program. And by the way, our 130 and 190 programs are jointly administered with the CPUC. ***These programs provide over $35 million a year to improvement of safety at grade crossings. And we also contribute about $ 60,000 a year to Operation Lifesaver.***

Here are some statistics about California. We have about ***12,400 grade crossings; 4,500 of those or about 36 percent are private crossings***, the remainder (about 7,700) are public crossings. We have about 150 crashes at grade crossings every year in California. A hundred and thirty of those are public crossings, about ***20 of those a year are at private crossings***. And of those 20, two to three involve a passenger train.

The State doesn't have a specific financial aide program to improve private crossings, although we do have a PUC in California which fortunately has regulatory authority over the private crossings. We ***have used Federal 1010 and 1103 funding for high speed rail corridor to consolidate and close private crossings***.

The railroad and private crossing owner have shared the cost of most of these improvements and the costs were primarily to install, like concrete crossing panels. When CalTrans move forward and upgrade tracks, put in double tracks or triple tracks or whatever, we'll replace and upgrade the cross bucks and that sort of thing, at private crossings. But State funds have not been used to directly pay for these improvements. We structure our contracts and agreements so the funds don't go through the railroad and through the private crossing owner. ***Most private crossings don't have train-activated warning devices and have poor crossing surfaces and approaches to the crossing.***

I believe that the FRA or some Federal agency should ***take a leadership role in developing some standards or guidelines for crossing protection, consolidation, and clear, safe private crossings***. ***We need to take a look at low cost warning devices.*** The guidelines, I believe, should be similar to those that are put forth in the manual of uniform traffic control devices (MUCTD).

I think that the ***Federal Railroad Administration should take a more pro-active approach to provide funding for improvements at private crossings***. And they, in fact,

have done so through the Section 1010 and 1103 program where we're allowed to use funds to make improvements to private crossings, particularly in the area of closure and consolidation. I would look forward to an increase in funding through that program, ***with funds distributed on some type of formula basis*** to provide a stable funding mechanism so we could go in and close, consolidate, and improve crossings in these high speed rail corridors, particularly private crossings, and we would reduce the risks that are associated with those crossings. I think that this ***program should be restructured to include demonstration projects***. A reasonable working group or some other working group that would identify projects to ***test the feasibility of new technologies***.

(Question: Do you have some set guidelines or policies that you use in determining which private crossings would be subject for closure or grade separation? How do you make those decisions?) It's been pretty much opportunistic. The railroads are knowledgeable as to who might be more readily interested in improving those crossings. So I think they're kind of the experts on private crossings on their tracks, but all of the work we've done, other than when we're going through an upgrading or putting in new tracks, it's just been purely kind of opportunistic.

The prepared statements and presentations led directly into the open discussion focused on crossing responsibility. The format of the discussion was based around a series of case studies and hypothetical scenarios that were moderated by Anya Carroll, Principal Investigator, Rail and Transit Systems Division, Volpe Center.

Case Studies

What rights are assigned to the holder of a long-established prescriptive easement? Does the developer/railroad have responsibilities toward the affected crossing holder? If so, what? Do State governments (outside the court systems) bear a responsibility for crossings created via prescriptive easements?

The ***State of California does not permit crossings by prescriptive rights***. California is addressing crossing issues through the environmental document process. This process does provide a ***dispute resolution forum and procedure***. The ***State of Washington does witness prescriptive easements*** however the representative present was unaware of the legal issues surrounding them.

Who bears responsibility for safety at the crossing, the developer, homeowners, or railroad? If a city or county chooses to convert it to a public crossing, who is responsible for reporting this to the State and railroad? Who will know, and when, regarding land development?

There are publics hearings held for zoning changes however prior experience is that ***cities and towns do not consider the impact on the crossing***. California has been requesting additional funding and staff in an effort to get more involved in this process and meet with local planners to address rail safety. However, many stakeholders learn of crossing issues when there is an incident or a complaint. ***Caltrans:*** In California, it is illegal to widen crossings and not the roadway approaches resulting in bottlenecks. There is a strict timeline for response that the State must respond within and the environmental team

must evaluate and comment on impacts of crossings (new and upgrades). ***Union Pacific (UP) Railroad: California is the only state that is addressing this issue***. Caltrans and the CPUC are extremely helpful to the railroad companies regarding applications for new crossings.

If a private crossing is converted to a public crossing, who is notified?

Both California and Washington State have similar, formal processes that must be followed. In California, the CPUC can approve an application without a hearing. Washington State uses the process to diagnose and evaluate crossings for elimination. ***UP Railroad:*** In most states, the railroad is not notified. If they were notified, it would be a good opportunity to promote rail safety at crossings in the general proximity.

Is there a process for identifying the crossing holder? Can the crossing be closed by the railroad? Are there statutory or regulatory restrictions that govern this situation?

The only current processes used for identifying the crossing holder is research and posting notification of closure at a crossing. ***In California, there is a well defined regulatory process for posting a closure notice.***

<u>Hypothetical Scenarios</u>

What if the US DOT establishes a requirement that every private crossing have a standard formal agreement. Crossings for which an agreement cannot be found or created will be closed.

The state of California requires a written agreement for private crossings. This requirement would be expensive for the railroad companies. There is also a legal issue with existing deeds.

Standard formal agreements could be customized. Who would maintain agreements?

Any deed, or formal agreement should be filed in the county records office and a copy should be held by both parties in the agreement. ***Caltrans:*** There are issues (e.g. emergency service) with trying to close private crossings used by land locked property with no other access. Would land locked property be exempt? ***Leave control to the States, not the Federal Government.***

What if a new independent Federal agency (similar to the Surface Transportation Board) were created to oversee the resolution of private crossing disputes?

The ***State of California has a dispute resolution process in place***. Federal recommendations or guidelines would assist states that do not currently have a dispute resolution process however local interests will not want to deal with the Federal government. ***CPUC:*** CA has to threaten private owners with crossing closure to get private owners involvement. ***Control needs to be left with the states, not the Federal government.***

What if the US DOT provided guidance or standards on crossing design and warning device implementation at private crossings?

CPUC: The Federal government should use the ***same guidelines from public crossings for private crossings***. The minimum warning device requirement at a private crossing should be a stop sign and private crossing sign. This is the mandated minimum in California.

Stop signs and private crossing signs are standard at most private crossings across the United States (default). How do we feel about stop vs. yield signs as the default?

The National Committee on Uniform Traffic Control Devices (NCUTCD) is currently discussing this issue, the use of signage for private roadways with public use (e.g. shopping center). The MUTCD should be followed. ***CPUC:*** The MUTCD states the minimum requirements when federal funds are used on public roadways. ***Encourage public roadway authority to take over private crossings with public usage***.
Caltrans: At private crossings this should be a railroad requirement because it will be on the railroad right-of-way. ***AAR:*** The cost effectiveness of any implementation needs to be investigated (resource expenditure vs. safety improvement).

What if organizations such as American Association of State Highway and Transportation Officials (AASHTO), American Railway Engineering and Maintenance of Way Association (AREMA), and the NCUTCD were to include sections on private crossings in all existing guidance and standards documents?

The meeting ***participants agreed that the inclusion of additional guidance for private crossings safety in existing guidance and standards documents could be beneficial***. If a private crossing with public use is not identified and converted to a public crossing, it could potentially have increased safety risk if it were to be equipped with safety treatments based on private crossing guidance. ***METROLINK:*** More guidance the better, however increased funding is required. ***CPUC:*** Guidance should be based on ***usage of the crossing and the frequency and speed of trains*** that traverse the crossing. Specialty guidance could be used to establish ***minimum guidelines for low volume/specialty crossings.***

What if the railroads were to require all private crossing holders to obtain liability insurance?

The railroads do not always have the legal right to require private crossing holders to obtain liability insurance. This right depends on the contract or agreement between the railroads and the private holders. ***UP Railroad:*** It is not easy to get these types of liability policies.

What if a Federal Agency (FRA or other) established a process governing the creation, evaluation, and improvement of private crossings?

CPUC: ***This is the formula for preemption. Preemption is not the answe***r. The Federal Transit Authority (FTA) has the ***state safety oversight process***. If a state does not have a process, they must adopt the federal process. If a Federal agency (FRA or other) establishes a process, it is not going to improve safety at private crossings.

What if the ultimate responsibility for safety at private crossings resided with State Agencies?

California and Washington believe the ***responsibility currently resides with State Agencies and should remain that way***. The North Carolina Department of Transportation's use of funding incentives (Section 1010 & 1103 HSR) to close private crossings during their Sealed Corridor Program was referenced for others to investigate. ***UP Railroad:*** There needs to be additional guidance and incentives for closure and improvements. ***The Federal government's important role is in policy and consolidation and closure policy.***

What if the ultimate responsibility for safety at private crossings resided with the railroads?

The two railroad companies present UP Railroad and Norfolk Southern Corporation stated that railroads do not have the ability to control crossing usage and they have no regulatory authority at crossings.

What if a private crossing were categorized based on traffic levels and type of use?

General consensus was that ***basing categorization on traffic levels and type of use is not a good idea***. It would be extremely difficult to develop a threshold and remain committed. What would this threshold be and how would you calculate it? Categorization would need to be tied to some goal. ***UP Railroad:*** Categorization based on traffic level and type of use would hinder crossing consolidation. UP Railroad would caution the FRA regarding the use of traffic levels for categorization.

What data to collect to support analysis? How to collect it?

Caltrans: There are ***no resources to collect private crossing data***. California can not collect public crossing information and there are twice as many private crossings.

How do we simplify the problem? E.g. Survey form for locomotive engineers, satellite data, or use Geographic Information Systems (GIS) to collect information.

CPUC: Consider new funding similar to Section 130 Funding for private crossing improvements. There should be certain criteria to meet and address regarding private crossings. ***Caltrans:*** Global Positioning Systems (GPS) and aerial photography are limited. Interplant and industrial crossings would not get any info from GPS. Frequently those crossings are on private roads. ***Volpe Center:*** A recent study on the San Joaquin HSR Corridor looking at data gathering techniques will be released shortly by the FRA Office of Research & Development. That report provides information on data gathering techniques in California on the San Joaquin HSR corridor by Caltrans.

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CC: file
Grady Cothen
Ron Ries
Anya Carroll

U.S. Department
Of Transportation

Memorandum

Research and Special Programs Administration

John A. Volpe
National Transportation Systems Center

Subject: **Safety at Private Crossings Public Meeting New Orleans, LA**

Date: December 26, 2006

From: Steven Peck and Anya A. Carroll

Reply to Attn of: RTV-3D

To: Miriam Kloeppel
Federal Railroad Administration

The fourth of a series of public meetings on the safety at private highway-rail grade crossings in the United States was held on December 6, 2006 in the Chateau Sonesta New Orleans Hotel conference center, New Orleans, LA. Hosted by the US DOT's Federal Railroad Administration (FRA), Office of Safety, the public meetings are being conducted regionally in an effort to start a national discussion on the challenging issue of improving safety at the nation's largely unregulated private highway-rail grade crossings. This meeting was conducted with the focus on responsibilities for safety at private crossings.

Private crossings are owned by private property owners for their personal use, not the use of the public. There are over 94,000 private highway-rail grade crossings in the United States that provide access to a multitude of different types of properties including residential, agricultural, industrial, and commercial. Each type of private crossing can offer its own unique safety characteristics and concerns.

Representatives from Class I railroads, State Agencies (Departments of Transportation), Unions, Federal Agencies, Industry, and concerned citizens attended the public meeting to continue discussion on the safety at private crossings in an effort to assist the FRA in addressing this long standing issue.

The meeting began with formal introductions and welcoming speeches by Mr. Grady Cothen, Deputy Associate Administrator, Office of Safety, Federal Railroad Administration and Mr. Richard Savoie, P.E., Deputy Chief Engineer, Louisiana Department of Transportation and Development (LADOTD). Following Deputy Associate Administrator Cothen and Mr. Savoie, Ms. Miriam Kloeppel conducted a brief overview presentation on behalf of the FRA to provide a basis for the public meeting. Five prepared statements were then given by: the Louisiana Operation Lifesaver, the Rio Grande Pacific Corporation, Railroad Controls Limited, the Association of Trial Lawyers of America, and on behalf of himself, John Van Mol, Farmer. The statements lead directly into the open discussion. The ensuing open discussion was structured to address the issue of private crossing data elements through a description of currently available data, current uses for the data and hypothetical scenarios for additional desired data and usage.

Summary of the formal statements prior to the open meeting discussion:

Richard Savoie, Chief Engineer, Louisiana Department of Transportation and Development (DOTD) spoke first. In Louisiana, for public crossings we have a federal regulation that says: ***"Public roads means any road under the jurisdiction of and maintained by public authority and open to public travel is declared as public via public authority vote, resolution, or some other legal means, and the local road authority has maintained the road on both sides of the crossing over the past three years." Private crossings -- is a crossing where the property on both sides or at least one side of the railroad track is private property. Public authority responsibility: Advance warning signs and pavement markings shall be maintained in accordance with the MUTCD, the Manual of Uniform Traffic Control Devices, at public crossings. But there's no authority at private crossings.***

In Louisiana, as I mentioned, we have a total of 9,079 crossings. Of those, 3250 are public, 2787 are private, and since 1976, 866 were closed and 2,176 have been abandoned. ***Of those 2787 private crossings, 1690 are to private farms. We have a lot of farm industry in Louisiana. Three hundred forty-three (343) are at a private residence, 26 are to private recreation, 678 to private industry, and 50 pedestrian.*** We typically rank in the ***top five of railroad-crossing crashes and fatalities nationwide.*** But as of the first half of 2006, I'm pleased to announce that ***Louisiana is now tenth in the nation.*** It's not a good thing, but we're moving in the right direction. ***Grade-crossing collisions are usually caused by motorist error***… the state troopers came to our defense and they said ninety-eight to ninety-nine percent is driver error. This pie chart is cut up: ***Did not stop, 49%, Stopped on tracks, 26%, Drove around the gates, 12%, Stopped and didn't proceed 7%, and other, 6%.*** So you can see from this it really tells a bleak story of what the drivers do when it comes to crossings.

Grade-crossing warning devices upgrades work, it cut the accident fatality rate by 93%. ***Louisiana has a revised statute: 48:390.1 was modified to give Department of Transportation authority to close existing public crossings on non-state-maintained highways***. On the Department of Transportation closure criteria, greater than four crossings per mile in a rural area, less than 2,000 vehicles per day and less than two trains per day. When alternative routes are available, ***(we should avoid) skewed angle crossings that present hazards, curved tracks and complex crossings, those with multiple tracks and long switching periods causing blocked crossings.*** Those are the things we would like to attack.

When it comes to the 9,000 total crossings, the 1331 public crossings without warning devices, if we were to install signals at those locations, it would cost us between two hundred to four hundred million dollars. ***At $8 million a year, it would take us twenty-five to fifty years to address.*** We are working with mayors and public entities to close some of these crossings. **Ms. Betsey Tramonte, Executive Director, Louisiana Operation Lifesaver spoke next**. We were asked to come here today to discuss what private crossings mean to Operation Lifesaver. Our national mission statement says: ***"Operation Lifesaver is a nonprofit international continuing public education program, first established in 1972, to end collisions, deaths, and injuries at places where roadways cross train tracks and on railroad rights-of-way." There's no distinction between a public roadway and a private roadway.*** We have trained and certified speakers that provide free safety training for various professions and all age groups to increase

public safety around railroad tracks. In summary, looking at ***public crossings versus private crossings, Operations Lifesaver's goal is to stop crashes at places where roadways cross train tracks***. Our organization educates the public on safety at all highway-rail grade crossings independent of the highway's owner.

Mary Beth Meyer, Christovich & Kearney law firm spoke next. We have been counsel to the New Orleans and Gulf Coast Railway Company, in particular Rio Grande Railway Corporation in New Orleans. And we're here today because in many ways ***this railroad is sort of a poster child for the problems that railroads are facing with private crossing issues.***

What we have within New Orleans and Gulf Coast railroads is a small railroad company, ***short-line railroad, small business, who is trying to deal with closing private crossings*** and has had a very difficult time of it in -- on every front, basically.

When Rio Grande acquired this railroad in 1999, there were 276 at-grade crossings. How do we know there were that many? We created an inventory…. to define exactly what kind of crossings we had, and this map maps out each and every one of these. We have an ***inventory list that defines exactly what kind of use all of these crossings are put to: Private, industrial, commercial, and multifamily residential***. ***We have a very limited or no-access issue for a lot of the length of this line.*** *Entergy faced difficulties with implementing a permitting program: very, very high resistance from local landowners into entering agreements or agreeing to consolidate crossings.* ***We have worked out an agreement with the landowner-developer only to have the landowner turn around and go to the local government, in this case the parish, to have it declared a public crossing and then basically renege on all the agreements they had made about signage, controls, passive controls.***

The railroad serves a number of refinery customers in the parish and a large grain elevator near the terminus of a line and is an important contributor to the local economy and commerce in the area. ***We're not finding a very welcoming environment from the local authorities in trying to implement some of the proposals that we've made about crossing consolidations.***

So over the years we've had a problem of changing use and also a failure to properly police. We have very few crossing agreements in place. Most of those are with our commercial and industrial users, and we have had very good cooperation for the most part in the industrial and commercial, the Kmart, the -- you know, large users.

We are currently ***involved in litigation over this situation because of the strong resistance that we have gotten from local landowners.*** We've filed a federal lawsuit that was recently, after being maintained for several years and at great expense, near the trial to be dismissed for lack of jurisdiction by the federal court. ***There is the lack of federal standards and regulations addressing this in any way have really hampered the railroad's effort to deal with landowners.***

We also found it very difficult to establish jurisdiction based on other federal regulations created by the local laws which a lot of people have been relying on to get these crossings. And they say ***they're entitled to them out of necessity because they're enclosed properties.***

One of the safety issues that we have faced and identified in this situation **is *a real conflict with the track maintenance and regulations and standards* that are on the books.** ***What we have is a nightmare in trying to do any kind of programmed maintenance. These crossings create drainage problems, they cause premature deterioration of the crossties, and really have a very substantial negative impact on the maintenance and the stability of the underlying roadbed.*** We need some help in a regulatory sense, because there are no standards to point to. There is no voice out there saying ***private crossings are safety hazards and they're disfavored,*** and if you need a crossing, you, user, it is up to you to really show you have some sort of entitlement or right, some need, no alternative, and that you've exhausted all of your state property rights in order -- against your ancestors' entitled to get a passage across the tracks. We have found is ***the lack of regulation has not just been the neutral. It has really hurt us in trying to bring home the importance of limiting the number of crossings.***

And ***we obviously need some standards for how these are built and how they are protected, and we are looking for a uniform national approach*** we think is appropriate to drive home the importance of the safety aspects. We have handled this in a responsible way and have responded to the challenge to close crossings, but ***without the tools to do that, we are very severely limited.***

Richard Bertel, Chairman and CEO of Rio Grande Pacific Corporation, Fort Worth, the parent company of the New Orleans and Gulf Coast railroad spoke next. Rio Grande has four railroads. We operate in six states, and the NOGC is the smallest in terms of miles of the railroads that we operate. We are a very small business, operating in a heavily regulated environment that is very hostile, particularly in Louisiana. We have 276, or we had 276 (crossings) when we took over. We serve a Chevron refinery and a bulk terminal at Marrero. Some of the miles on our railroad exceed thirty crossings the mile. ***Over the last two years, we've spent about $600,000 in legal expense***, gone through discovery, gone to court ***without so much as getting a hearing,*** and we get turned back to the state courts, where the outcome is foregone as far as I can see. ***For a small railroad with this much traffic in hazardous material, we think that these scarce resources could have been applied more efficiently*** with the application of just a modicum of reason and common sense. ***We have had a high level of cooperation with the refineries, the large commercial entities, and the people that provide the jobs in the community (to close crossings).***

Some conclusions that I've tried to put together: ***It's imperative that we start to recognize that the railroads are in fact interstate highways of commerce.*** And that's confirmed by many years of ICC and SCC doctrine, which requires this. ***Railroads should have the right, if given the responsibility via safety mandate of the FRA, to control what goes on over, under, around, and through our railroad rights-of-way. No one should be able to build or alter the track structure without our consent and permission.***

But let me leave you with a hypothetical solution that may bear some discussion or it may not. ***So let's assume the following:*** There's 90,000 private crossings in the United States, $150,000 a crossing you could actively protect them, that's about $13 billion, we'll call it 15 billion, FRA allocates $15 billion to the state DOTs purposes of adding active warning protection to all private crossings, the DOTs will have to determine the need based upon federal guidelines, the

railroads will build and maintain the crossings, users of the private crossings would pay the state DOTs an interest rental based on the investment.

What's the cost benefit - If the DOTs can close crossings, they get to keep the money, and the interest rental that the stakeholders pay to use the crossings would go into a fund for the maintenance of these private crossings in the future administered by the states.
It would take five years to do all this, to protect all these crossings, $3 billion a year for five years one time, and you could take the money out of the RIF program.

- The federal government would get its desired objective of fewer crossing accidents
- The state DOTs would get massive new bureaucracies around the country
- The railroads would get crossing protection
- My insurance premiums hopefully would go down
- The person who actually uses the crossings would have to pay

Finally, ***we appreciate the FRA declaring a safety emergency in Louisiana to stop the insanity of the state and local inaction on the subject of private crossings.***

Rick Campbell, Railroad Controls, Limited spoke next. Private crossings are an issue that we deal with, and I'm going to qualify that "we." I work for a firm called Railroad Controls Limited. But part of my duties, we're very active in support of standards and recommended practices within the railroad industry. And I'm involved with both AREMA, which is the American Railway Engineering and Maintenance of Way Association, and highway-rail grade crossings, and I'm also involved with a group called the National Committee on Uniform Traffic Control Devices, or NCUTCD.

NCUTCD is made up of slightly over 200 professionals that are involved with all elements of traffic-control devices, traffic and transportation engineering. Within the NCUTCD there are various subcommittees or technical committees, as they're referred to, one of which is the Railroad and Light Rail Transit Technical Committee, of which I serve as chair, being elected by my peers.

Within our technical committee we have responsibility to comment to FHWA on parts 8 and 10 of the NCUTCD. One of the things that we wrestle with within our technical committee is private highway-rail grade crossings. Private highway-rail grade crossings are a unique issue within NCUTCD because NCUTCD is a document that is actually set up to deal with public travel and addresses issues relative to that public travel.
NCUTCD deals with roads that are open to travel. And "open to public travel" is a term that's not defined in the Code of Federal Regulations. There is an underlying effort on behalf of the national committee, who has convened a task force to deal with traffic-control devices on private property. Tom Hicks, Chair of that Task Force, says, "***Our goal has been to prevent stop signs***." And I'm sure everybody in here has driven through some type of private facility where you find a green stop sign or a stop sign that may be square or round because it was part of an architectural enhancement. The goal of the Task Force is to ***set-up guidelines for traffic-control devices on private property***.

The real issue has to deal with expectation of access: Does the public have the expectation of access to the crossing, to the intersection within a mall, to whatever the facility might be where there's some traffic-control-device requirement? And this issue of course extends beyond private crossings. It gets into that, the area that we find with malls and shopping centers and businesses or business parks where there's actually a large number, a significant number of vehicles, publicly operated vehicles that access that private property.

I would like to encourage FRA to give consideration maybe to the fact that there's a need for a third classification that we apply besides public and private. And I would like to suggest that FRA consider what we call semipublic. And semipublic would be an access way, and specifically narrowed to our hearing today, a highway-rail grade crossing that is owned by other than a public agency but to which the public expects free access. And examples of that could be of course shopping centers and various commercial establishments. It could be a large facility or crossing to access a single facility such as a fast-food restaurant or a convenience store. ***We generally find that these semipublic crossings could fall into categories such as industrial, commercial, recreational, or to access multifamily homes.***

So I would like to propose that we at least give consideration to the term ***"semipublic"*** as it might apply to highway-rail grade crossings and all types of traffic-control devices. ***We would still retain the category as private crossings, but we would generally define that as crossings that there is no public expectation of free access.*** And examples of those might be crossings that serve a single residence or a crossing that a landowner has for access from field to field or for access from a public roadway to a field or private access outside of a residence. Those are crossings that are generally assumed not to have just open access to the public, and in many cases they're fenced and locked; or in the case of a driveway to a residence, one that there's very limited access by the public, generally the landowners or residents of the residence and service providers, such as delivery trucks, commercial vehicle operators who could have training to be able to deal with access over these crossings and private facilities. Some thoughts that we've struggled with within the ***Railroad and Light Rail Technical Committee involve if we do have a private or a semiprivate-type crossing, do we have a need for a specific traffic-control devices to deal with access over that crossing?***

Many states -- of course ***California, through their Public Utilities Commission***, has taken a lead in development of a ***sign to be used at private crossings which clearly denotes the crossing is private.*** We also support the fact that ***if the public has access, we believe in standardization,*** which would then involve the use of traditional crossbuck and supporting advance warning signage.

I think that it would behoove FRA to be able to step in and try and assist with the problems that we've heard with private crossings and access to private facilities, but as I say, to take it to the step that we look at, ***Does the public have some expectation of free access? We need a methodology to be able to apply standardized traffic-control devices and at the same time to go through a diagnostic process as is already spelled out in part 8 of the NCUTCD***. And as part of that, the ***semipublic crossing would go through permitting-type process that we would like to see FRA have oversight over this***. And things that would be considered to be part of this permitting process would be to define the responsibility for access over the crossing: Who's

actually responsible for -- who is the jurisdiction responsible for the crossing? Ultimately that of course would carry over to responsibility for traffic-control devices at the crossing and of course for maintenance at the crossing. ***And as part of that agreement that if the responsible agency failed to fulfill its goal to install or maintain devices, surface access, vegetation, all the items that we could consider issues at crossings, that the crossing would automatically be closed, that there would be no recourse other than to have the crossing closed.*** And that alone would serve as an incentive to a commercial or an industrial-type facility to continue the maintenance and access-way improvements necessary to retain the crossing in an open and passable condition. ***I encourage you to move forward with regulation and to be able to have enough regulatory teeth to be able to give us some form of control where we can actually provide a level of enforcement to persons wishing to create a private or a semipublic crossing over a railroad***.

Ben Saunders, Former Chair Trial Lawyers Railroad Law Section, American Trial Lawyers, ATLA spoke next. We can talk about regulation, making the federal government bigger, having the politics that we have, having the courts do this and the courts do that. But what's the problem? The problem once again, you observed it, sir: ***The problem is that you have to have an inability for a human being who either works for a railroad or a human being who's driving a vehicle to interact.***

And where is the solution to this problem? It's been in Washington for years. National Transportation Safety Board for years has published and advocated what is called -- and once again I'm on the page with you -- ***positive train separation***. All of y'all ought to do yourselves a favor and drive down Airline Highway on your way home and go by what's called the Cold Storage Facility, where the Kansas City Southern and IC -- I can't remember which railroad -- has a few telephone poles built up with a ***roadway that goes under it*** so that when a train is coming from New Orleans going to Baton Rouge, ***the trucks going to the cold storage can't -- cannot -- interact with the train***.

So how do we design it out? ***By not having the train operate in a fashion that it can interact with an eighteen-wheeler or a lowboy hang up, a chemical truck, and, going down, a mom and a pop who are having an argument in the car and they stop on top of the track and get whacked.*** You go to Italy and you don't cross the track. A bar doesn't just come down like this. The bar comes across, and you don't have a choice. You do not have the option of driving across the track. That's a solution. You can't drive around. You'd have to drive through the barrier. That's No. 1.

No. 2, do something cheap, like the cold storage, when they're going through Nebraska through the corn fields and you want to have a situation where the truck is going to some processing plant and ***you don't want that eighteen-wheeler to have any ability to interact with the train.*** And then obviously, if you look again at Metairie Road, you have to build in some instances, overpasses, but the engineering and the ***technologies are there***.

John Van Mol, Private Citizen, spoke next. I'm a farmer. I have a cotton gin interest in a grain elevator. This is one of the farms that I farm, and ***it's owned by four different landowners.*** The Union Pacific Railroad is identified right here, running through the middle of it. July the 7th of 2005, ***in an attempt to live up to the rules and regulations that the Federal Rail***

Administration has set forth, they came through and posted all the private crossings along the breadth of this property that we're farming with the exception of this 427-860-D which at that time and for the last fifty years prior to that was always believed to be a public road. We offered to the railroad to exchange crossing for crossing. There was no negotiating with the railroad. The cotton gin ran out of cotton. I'm one of the principal people involved in the gin, so our cotton -- I'm a co-op, but I'm the last. And it cost me dearly, just kind of a haphazard way that the railroad has pursued this, in my mind. Now, this meeting is all about safety, and I am interested in safety. And I am trying to see things from the railroad's point of view, and ***I understand that I have a crossing that is not a continuous crossing.*** My men and machinery are not continuously crossing that railroad. ***We use these crossings seasonally but when using them we're using them a lot.*** We put a lot of emphasis on safety in our operation. And in talking to the railroad, they are very anxious to remove absolutely as many private crossings as they can. But I propose for my -- for the well-being of my farm, I think that it would be very easy if ***this crossing were reestablished for me to gate it to where it's denied access during off-period times.*** When we're not using it, we go for a month or two months or three months at a time. It's not abandoned. Basically it's used very infrequently. ***Cable that crossing or gate that crossing some kind of way.*** I'm willing to do that. ***I'm willing personally to be responsible for who comes and goes across the crossings.***

DATA ELEMENTS

Ms. Miriam Kloeppel, on behalf of the FRA presented background information regarding current data collection and usage by the FRA. Currently, most of the data available pertains to public crossings and is used in prioritizing safety treatments and funding allocation. In addition to this background information, Ms. Kloeppel described some of the data fields that have been suggested for collection from the NTSB and other sources. These data fields include sight distance, presence of curves on the roadway and track, angle of intersection, presence of nearby intersections, and latitudinal and longitudinal coordinates. This list was utilized to initiate conversation on data elements that members of the audience felt would be beneficial to collect.

> ***Railroad Controls Limited (RCL)*** requested the typical ***class of vehicle*** using crossings be identified and included. In addition, RCL would like the ***approach grade and sight distance identified***.
>
> The ***LADOT*** would like a new classification system, possibly the ***semi-public and private depictions*** described by ***RCL***, utilized. However they do not feel it is feasible to collect private crossing data.
>
> The ***Union Pacific Railroad (UPRR)*** feels it is difficult to collect data such as average annual daily traffic (***AADT***) for private crossings because of roadway conditions, e.g. traditional roadway counting devices could not be utilized on dirt roads

In addition to desired data, the FRA inquired as to methods for data collection, such as ***FRA Proxy*** options.

> The ***UPRR*** suggested the use of ***statistical sampling*** as opposed to complete data collection.

The ***Brotherhood of Railroad Signalmen (BRS)*** mentioned that Class I railroads are currently collecting ***latitudinal and longitudinal information*** for all crossings and using ***Geographic Information Systems (GIS) to map their railroads***. In addition, private crossings should be broken down into ***categories***.

The ***American Association of Railroads (AAR)*** stated that the basis for any regulation or action taken by the FRA needs to be ***increased safety***, this includes ***data collection***. Also, most of the existing private crossing information is collected and submitted by the railroads, the FRA needs to seek ***alternative ways of collecting data***. In addition, the FRA should improve the ***existing crossing inventory forms to make them more user-friendly and create electronic inventory submission***.

The ***LADOTD*** is concerned about the ***legal issues with submitting crossing information to the FRA crossing inventory***. Some information should remain private not public and there may be issues with the Department of Homeland Security. The focus should be on closing public crossings and consolidating private crossings.

The ***City of Laredo*** suggested using the ***revenue generated by the fuel tax to fund data collection*** and to require the railroad companies to supply the data.

Railroad Controls Limited reiterated their stance and usage of the ***terms semi-public and private in reference to private crossing definition and categorization***. Semi-public refers to a private roadway that is open to public travel. Private refers to a private roadway that is not open to public travel.

HYPOTHETICAL SCENARIOS

The open discussion continued with a series of hypothetical scenarios being proposed to the attendees by Ms. Anya A. Carroll, Principal Investigator, Volpe National Transportation Systems Center. These scenarios were utilized to initiate open dialog and discussion regarding data needs and collection methodologies.

What if the FRA in partnership with Federal Highway Administration (FHWA) developed a secure WEB site where States and railroads could login in to input data?

The ***AAR*** would like to know why this has not been done; highway-rail crossing issues are not FRA issues alone, they should be viewed as a ***One Department of Transportation system***. The AAR is committed to the current crossing inventory and feels that if the current inefficiencies are addressed that the process will improve.

The ***LADOT*** feels that this is a good idea however many of the railroad companies do not have the staff needed to collect and submit all of the data. The LADOT is also concerned about ***how secure the supplied data will be and how the FRA will protect the data***. There is concern about legal action taken as a result of information being made public; they feel this

information should be used for engineering uses only. ***This is the reason why the LADOT has not submitted information to the crossing inventory***.

The ***BRS*** feels that there is no motivation for States and railroads to collect and submit data. If data submission is not made mandatory, then it will remain a low priority.

The ***City of Laredo*** requested ***clarification on data security, public availability, and access to data***.

What if the State supplied information; Blocks 21-25 on the USDOT Crossing Inventory Forms was used in conjunction with a Geographical Information System (GIS) platform to locate and map private crossings?

The ***LADOTD*** stated that it currently ***does have some GIS information*** however it is focused on State systems. There is concern with trespassing in order for the state to collect data regarding private crossings and the security of data once submitted.

The ***Rio Grande and Pacific Railroad (RGPRR)*** stated that ***they currently have much of the data that the FRA is seeking*** however it would be a large and expensive administrative job to submit this data. The RGPRR inquired as to FRA interaction with the Surface Transportation Board (STB) regarding these issues.

The ***AAR*** informed everyone that some ***States hire contractors to collect crossing data***, one example is the State of Ohio. This is an option for States that have the funding but do not have the available staff.

What if States were required to collect the data?

The ***LADOTD*** does not feel this is good idea due to ***trespassing concerns with private property***.

What if Railroads were required to collect the data?

The ***UPRR*** and ***CSX Corporation (CSX)*** feel it would be a ***monumental burden*** on the railroads and too great a responsibility to require the data collection regarding private crossings of them. What benefit to railroad would this bring?

The ***AAR*** is not positive that the railroads are capable of ***collecting the data***.

What if the Federal Government created a team to collect the data?

CSX pointed out that there are currently huge discrepancies between the existing data that the Federal Government, State Governments, and railroads have.

The ***AAR*** mentioned that the railroads submit the data to the States and Federal Government and that the reason for the disconnect is the ***current inventory process***.

The ***UPRR*** feels that if the ***Federal Government was responsible for collecting the data that there would be uniformity because a single unity would be collecting data***.

What if track geometry cars were utilized to automate data collection?

The ***UPRR*** already has ***precision information from their equipment for all roads***.

The ***AAR*** stated that some railroads ***currently use automated data collection but the quantity and quality of data is limited***.

What if in the course of responding to a mandate on private crossing agreements, the railroad is required to assign a crossing ID number and update the USDOT crossing inventory?

The ***AAR***: suggested that ***FRA track inspectors be responsible for collecting data*** when they are in the field conducting inspections. In addition, low cost (less than $50,000) ***non-fail safe alternative warning devices need to be investigated and developed for low volume crossings***.

The ***BRS*** feels that the ***railroads posses the ability to collect the data*** and are the holders of the data. The FRA needs to impose a restriction or deadline to force the railroads to prioritize data collection. The FRA does not have the resources, staff and funding, to collect the data. Regarding ***low cost alternative warning devices, there are liability issues*** with non-fail safe systems.

The ***LADOTD*** suggested the use or requirement of ***permitting crossings with serious legal consequences for violations***. Louisiana needs Federal level jurisdiction because the local jurisdiction acts in favor of private landholders. ***LADOTD also feel that engineering alone is not the solution*** due to financial limitations and in many cases, there is more involved than just an engineering issue.

The ***FRA*** posed the following questions: Do we need a process? What is it? If issued, how to proceed? They followed this with a reference to the Minnesota Guidestar Low Cost Active Warning Demonstration in response to the AAR's suggestion.

The ***Association of Trial Lawyers of America (ATLA)*** reiterated their statement that the ***solution is in engineering - barrier gates and trestle bridges***.

#

CC: file
Grady Cothen
Ron Ries
Anya Carroll

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UNITED STATES DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
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HEARING OF
SAFETY AT PRIVATE HIGHWAY RAIL GRADE CROSSINGS
SAN FRANCISCO, CALIFORNIA
OCTOBER 26, 2006

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FILE NO: A007BEB

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UNITED STATES DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

Hearing of: Safety at Private Highway-Rail Grade Crossings Public Meeting, taken on behalf of USDOT, at Philip Burton Federal Building and Courthouse, 450 Golden Gate Avenue, California/Nevada Room, San Fransicco, California, 94102, commencing at 9:30 a.m., Thursday, October 26, 2006, before KAREN BAUER, CSR No. 6291.

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00007

MR. COTHEN: Good morning.
Can you hear me.
We're getting used to the sound system here.
It appears that the mikes up here are live-wire floor mikes out there.
Okay. We'll do a safety briefing first, which is, of course, our custom.
LeeAnn, would you do our safety briefing, please?
MS. DICKSON: Assistant safety crossing manager.
Safety briefing: If anything happens, don't wait for an alarm foran earthquake. If an earthquake happens, you'll feel it. Don't worry about that. Go out this door, make an immediate left, follow the restroom signs.

You'll see the lunch cart. Make a right. You'll see a staircase. Go down the staircase, out the building, and wait in the street. That's probably the best place to be. Who knows CPR? Julie is our CPR person. There is a telephone out here.

Who's got cell phones? Everybody?

We're in the Nevada Room on the second floor at 450 Golden Gate Avenue in San Francisco. Thank you.

Restrooms. Just pretend you're going out for an earthquake and stop at the door that says restrooms.

MR. COTHEN: Thanks, Lee Ann. It's always good to get your first mistake out of the morning.

Appreciate that.

This is FRA's conference on Safety at Private Highway-Rail Grade Crossings. I see a lot of familiar faces in the room, and some new ones for us. But glad you're here.

It's our desire today to cover as much information as we can. As you know, we're on a bit of a road show here to try to capture issues, sentiment, questions, views from around the country on this subject.

My name is Grady Cothen. I'm Deputy Associate Administrator for safety standards.

And we're pleased to have with us today Clifford Eby, who is our Deputy Administrator, immediately to my right. FRA staff are working on this from Washington, and the field are led by Ron Ries. I'll ask Ron to introduce his staff members, and then we'll ask Anya Carroll to introduce her staff from the National Transportation System Center.

Ron?

MR. RIES: You've already met LeeAnn Dickson from Region 7, one of our great crossing safety team members, and Charlie Hagood is also here for us.

Good to see you.

Also from the headquarters staff, Miriam Kloeppel, who is ramrodding this effort.

We're glad to have everybody here and look forward to having some questions and good input to our discussion today.

MS. CARROLL: Good morning. My name is Anya Carroll. I'm principal investigator of Highway Railway Crossing Safety Research in support of FRA at the Volpe Center in Cambridge.

With me today I've got Steven Peck (phonetic), who is one of our mechanical engineers and Mirna Gustave, who is our conference coordinator for this event.

MR. GRADY: We also have as counsel for this proceeding Assistant Chief Counsel for Safety, Mark Tessler, and we'll hear from Mark in a few minutes.

I would like to start out by asking Cliff Eby to give us a charge and introduction to the subject matter.

MR. EBY: My name is Cliff Eby, last name spelled E-b-y.

Good morning. Welcome. And it's a pleasure being here before you on behalf of our new Secretary of Transportation, Mary Peters and Administrator Boardman (phonetic), we really appreciate your attendance here today and want to thank you all for coming to discuss something very important, the highway grade crossing

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conference.

What I want to do, to get started, is first kind of give you some background on the issue, and then get into my message. So if you haven't gotten into that coffee, you have about five minutes for the caffeine to kick in so then you can really concentrate on the message.

According to the nation on grade crossing inventory, we have about 94,000 private crossings nationwide, each with its own unique history, uses, and local circumstances.

Over the course of the past decade, an average of more than 400 accidents per year have occurred at these private crossings, resulting in 30 to 40 deaths, on average, annually.

Take, for example, what happened in Castle Rock, Washington. On July 3rd, 2006, a southbound Amtrak train struck a passenger vehicle at a private crossing. The road leading to this crossing is a county road. The county maintenance ends shortly before the crossing, and the private roadway extends beyond. The crossing dead-ends after serving 11 residents.

According to the Amtrak engineer, the collision occurred when the motorist entered the crossing after a northbound freight train had cleared it. The train crew

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and train passengers were not injured in the accident. All four occupants of the vehicle were killed.

In another instance, an Amtrak train struck an empty gravel truck at a Private Highway Rail Grade Crossing near Jackson, Mississippi. The private roadway at this crossing is used by an excavating company and by two residences.

In this incident, one train crew member and 15 passengers sustained injury, and a truck driver was killed.

Let's step back for a moment and consider what happened at public crossings in the past. Records from as far back as 1917 show that, on average, more than 2000 people died in accidents at Highway Rail Grade Crossings. Although crossings did occur, such as upgrades to active warnings devices, there was no uniform program on a national scale to help evaluate crossings and to determine which ones were most hazardous.

The arbitrator approach for selecting crossing improvement changed when Congress enacted The Highway Safety Act of 1973. It includes the funding for the national grade crossing inventory and provided funds for crossing improvements to any state that established a system for prioritizing its crossing improvement.

This funding program still exists today and is known as the Section 130 Program.

Since the creation of the national inventory and the Section 130 Program, state's railroads and the U.S. D.O.T. have worked together to systematically improve safety at public grade crossings.

With further contributions from other programs, such as Operation Lifesaver and the additional regulatory changes such as the addition of locomotive crossing lights and rail car reflectorization, the number of fatalities have fallen from about 2000 per year to around 300 to 400.

However, the nation-wide success with safety at public crossings has not been measured at private crossings. Where fatalities at the public crossing have declined by more than 30 percent in the last decade alone, the fatality count at private crossings has remained largely static. The realization that safety at private crossings could also be improved through establishing some nation-wide framework is not particularly new.

In fact, in 1993, the FRA hosted an open meeting to initiate industry-wide discussions on the subject. Following that meeting, the U.S. D.O.T. published the 1994 Highway Safety Action Plan, in which it proposed to develop national minimum standards for private crossings.

In 1997, the National Transportation Safety Board published a study on safety at passive Highway Rail Grade Crossings in which it recommended that the U.S. D.O.T. and the states, together, determine governing oversight responsibility for safety at private crossings.

In 1999, the NSTB, again, recommended that the U.S. D.O.T. eliminate any differences between public and private crossings with regard to funding, or with regard to requirements for safety improvements.

In 2004, the U.S. D.O.T. published an updated Action Plan in which the FRA committed to leading an effort to define responsibility for safety at private crossings.

Today's meeting is a vital part of that effort. Enough on the background. Let me give you my perspective on why Joe Boardman asked me to get involved with private grade crossings.

USA World Reader in providing a safety environment for its citizens, and recently, we've seen it elevate as a top priority at corporations, at government, Federal, State and local, and with parents and children. Ground transportation, in particular, has made tremendous strides in my lifetime. In the past 10 years, accident rates and death tolls have dropped dramatically. Safer cars have more than offset the increases in people and vehicles on our highways. Drunk driving awareness and enforcement has greatly reduced unnecessary injury to

millions. And better engineering to roads has made our road designs safer.

For the railroad industry, there has been a host of initiatives that have resulted in improvement to death and injury rates in all but two areas, trespassing and private grade crossings. And we're here to work on the latter.

Why is it we have cut the accident rate by almost half at public crossings over the last 10 years, but see no improvement at private crossings?

Why aren't we more effective at private crossings? Why does Operation Lifesaver seem to plug on public crossings, but not at private crossings? This is what we're here to learn.

But if I have learned one thing in my time in business, it is that nothing moves on its own. It takes ownership. And nobody really wants to own private grade crossing safety. Instead, each of us has chosen to erect barriers.

Railroads tell us they have no authority at private crossing, but their safety message tells a different story.

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Railroads say everybody owns safety, but apparently not at a private crossing.

Railroads say every accident is preventable, but not at a private crossing.

Railroads say safety is a way of life, but that life stopped at private crossings.

I'm not here to pick on railroads. In fact, if I had to pick on any group that has moved safety forward, it's the railroad's actions to put signage at private crossings.

I believe everybody here is equally to blame. FRA is responsible for enforcement of nationwide railroad safety standards, but nationwide stopped at public roads just short of private crossings. Again, not at private crossing.

We learned in Minnesota that the state has regulations and requirements for private crossings, but doesn't believe it has jurisdiction to enforce them. In Castle Rock, the city I talked about before where four residents were killed, it's a place where each generation passed along to their children a sense of safety.

As you learned just last week, a Walsh Construction truck and a backhoe were involved in a crossing incident. According to the Walsh's website, it places the highest premise on safety, but apparently one

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of its employees didn't at the crossing.

And, finally, to my friends in labor, they want to do away with private crossings and then think the Federal, State, and local governments should share in paying for a solution. They, too, want to pass the buck on ownership.

So we all have legitimate reason for eliminating these barriers. Until each of us is willing

to own the problem, like we have for other safety areas, we don't see any real improvement at private crossings.

Let me conclude by urging each of you to speak up, tell us your ideas, experiences, and viewpoints. The issues we will be discussing today are often complex, and we need your input in order to develop the best possible response to this problem.

MR. COTHEN: Thank you, Cliff. I think that's a charge.

It's particularly propitious that we're in California with this particular discussion. We decided after an initial session covering a broad range of issues that we would try to, in the second portion of our day, first portion of our day to focus our initial remarks for anyone who would like to make them, the second portion of our day to focus on topic areas.

So we've tried focussing on engineering. And

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today we thought we would focus on what Cliff talked about just then, and that's responsibility of taking ownership of the issues.

As we go forward, we'll talk about data needs and then we'll try to bring it altogether. But it's particularly appropriate that we're in California to have this conversation because if you had to pick a state out of the 50 that's tried to take ownership of the problem, it's the State of California.

And the California Public Utilities Commission is the regulatory agency that deals with Highway Rail Grade Crossing issues in California. And so I'm particularly happy to be able to introduce our colleague of many years, Vahak Petrossian, of the California PUC.

Vahak, could you please give us a welcome and a charge, and if you would also introduce your colleagues.

You're here from the commission.

MR. PETROSSIAN: I'll be short, so I'll do it from here, if that's possible.

MS. CARROLL: If you want to use the microphone, you can turn it on.

MR. PETROSSIAN: Can't you hear me? I'm loud enough.

First of all, I would like to say Richard Clark, our Director of Consumer Safety Division would

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have liked to have been here, himself, to welcome everyone. And unfortunately, he's out of town and was unable to be here.

I would like to introduce a couple of people that are with the Commission here.

Pat Berdge, our staff counsel, and George Elsmore, who manages our railroad operations safety branch. And we have other staff present, and a little later on we'll present the Commission's view.

I want to welcome the FRA. I want to thank the FRA for taking this on, and particularly for choosing California as one of the venues, and we ordered really nice weather for you. Just for that, because I know it's

real pretty cold back east.
The folks at FRA have been pretty helpful. Ron Grady and Anya pick up the phone and give us whatever we need, and we really appreciate that.
Private crossing. It's a major issue. And unfortunately, the major problem is the private property owners who don't participate in these proceedings, because -- there are some of them. And they're the ones that I think that need to be heard, need to participate, and take responsibility for a lot of the private crossings at the railroad.
A lot of times the issue is that 50 years ago
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the crossing was established. There was nothing there. Maybe one farmhouse. Over the years we continue with it. And we're taking on a role where we're looking at the environmental portion of it. And we think that the folks who give authority to that building, whether it's the city government, the local governments giving business licenses or something, they also have a responsibility to address railroad safety. So that's the issue.
We want to welcome you. We want to wish you the best. And hopefully, we'll look forward to your report. And hopefully, it will be helpful to all of us.
Thank you for coming to California.
MR. COTHEN: Thank you very much. We appreciate your courtesy and continuing support of all of our activities.
And the same to George, who is our colleague on the compliance program. We're glad you're here.
We also have with us, and we'll introduce in a little while, representatives of the California Department of Transportation.
We appreciate you being here.
And we'll hear from Steve, and his colleague, perhaps, in a little bit.
Steve, do you want to say anything?
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MR. CATES: I want to thank all of you for being here. I think this is an important event. We have an opportunity to talk about private crossings. I'm going to speak pretty much from a parochial viewpoint at being responsible for our passenger rail equipment and grade crossings.
We do wind up with accidents at private crossings, which probably 40 or 50 of them a year are here in California. And they cause delays, death, and damage to private property, and that's something that I would like to see addressed.
I'm glad to be here. Thank you.
MR. COTHEN: Thank you.
Can I ask Mark Tessler, who is counsel for the proceeding, to provide the officer's statement.
MR. TESSLER: Thank you.
As Grady said, I'll be the legal officer for today's meeting. The purpose of the meeting is to enable

the public to provide information to FRA about issues relating to the safety of Private Highway Rail Grade Crossings. We're here to listen to you and to provide an opportunity for you to state your views on the record for review and consideration.

In order to produce an equal opportunity to express your views, the following procedures will be used

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for anyone who wishes to be permitted to make an oral statement.

Persons representing the same organization, here as a group, at the beginning of your statement, please identify yourself, spell your name and identify whether you are appearing as an individual or as a representative of the group.

It would also be helpful if you have a business card, to present it to the reporter today.

At the end of your statement, after, FRA representatives may ask questions in order to obtain clarifications of your points made during your statement.

We'll then move on to the next oral statement. It you refer to documents in your statement that have not yet been provided to FRA, please provide a copy of it to an FRA representative so it can be added to the public docket.

Today's meeting is being transcribed and will become a part of the public docket on this issue.

The transcript of the meeting and all documents related to this inquiry will be available for viewing and downloading at D.O.T.'s docket management website at http: fra.dot.gov. And please note, there is no www in that address. And the entire public docket will be available for viewing at the department's

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transportationdocket room, at 400 Seventh Street, Southwest Washington, D.C. Thank you.

MR. COTHEN: If anyone actually shows at the docket room, I'll buy you lunch. What we try to do at the beginning of each session, is most of us are new. And so, Miriam Kloeppel, who is an operation research analyst for the highway staff will give us a foundation in terms of further description of the problem area following Cliff's remarks. And then I'll ask you all to sign up, not literally sign up, but step forward and speak to the broad range of issues involving all of us.

MS. KLOEPPEL: Good morning. My name is Miriam, K-l-o-e-p-p-e-l.

As Grady said, I'm going to kind of give a baseline so that we're all at least familiar with the same sort of information, and you can use it as a spring board for other conversations.

I thought I would start out with a slide that shows basically that -- it doesn't really matter what the geographic region is, a private crossing still constitutes a significant percentage of all at-grade crossings. The total count nationwide is about 94,000.

Although accidents at public crossings have

declined, as Cliff had noted, over the past 20 years, and is, in fact, declining by one-third over the past decade
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alone, the number of accidents at private crossings has remained comparatively stable, a decline of 10 percent only in the past decade. In most years, the number of fatalities occurring in accidents at private crossings exceed the number of on- duty deaths among railroad employees in all rail operations.

The FRA maintains a national inventory of all crossings, public, private, or pedestrian, at grade or grade separated.

The data are used by many State, Federal, or private organizations for research, or for resource allocation.

It's updated by the States and by the railroads on a voluntary, not mandatory basis. As you can see, only about one third of the records for private crossings have been updated within the past five years, and a significant portion of the records have never been updated.

Analysis on data of this quality must necesssarily be somewhat tentative. The data for public crossings are typically updated much more often than that.

This is not a slide that I expect anyone to actually read off of the screen. I put this up here for illustrative purposes. This is a shot of the form on
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which crossing data are collected for the national inventory. Almost all the data elements are required for public crossings. For private crossings, however, only the sections I have shaded are collected.

As a result, even when the private crossing record is up-to-date, potentially useful data are not collected. This slide shows a small sample of the data collection differences.

As you can see, train counts, number of highway lanes, these are elements that we often use in analysis of the public crossings, and data like that, we just don't get from the private.

According to the FRA's 2002 compilation of state laws and regulations affecting highway rail grade crossings, the State's approaches to private crossing safety are highly varied.

Take, for example, these examples of the extent of control held over the creation or closure of private crossings.

Here are some examples of the degree to which traffic control devices are standardized at private crossings.

According to that same compilation, more than half of the States have no laws or regulations at all related to private crossings.
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The American Association of State Highway and Transportation Officials, or AASHTO, a standing committee

on rail transportation which people nickname SCORT which provides an arena whereby member states and the railroads can exchange technical information, review existing legislation and regulations, and propose changes or new legislation or regulations.

Currently SCORT has adopted a resolution, on railroad safety, improvement, and enforcement calling for research and development into improved and lower-cost technologies for warning systems.

The resolution also believes that any future comprehensive national transportation program must continue to provide funds for consolidating, separating, or otherwise protecting railroad highway grade crossings.

Neither the committee's policy, statements, nor its resolution make any overt distinction between public and private crossings, but it should be remembered that the majority of members represent states. And so their jurisdiction is unlikely to extend beyond that of the member states.

The Federal government, in the guise of various U.S.D.O.T. agencies, does offer some regulations or guidance, documents that may touch on safety at private crossings. As you can see in this sample, however, none

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of these really covers a significant portion of the nation's private crossings.

In fact, there is no Federal regulation or guidance that promotes safety at private grade crossings by specifically or uniformly addressing the special issues presented at private crossings.

Some private crossings may be used only seasonally, like certain farm crossings used only for agriculture equipment movements, or they may be used only for routine personal use, like crossings that serve residences.

Other private crossings, such as this industrial access crossing, are used extensively for private business purposes by employees, contractors, and suppliers. In still other cases, they may be used very heavily by the public to enter commercial facilities.

I hope you can see it, but this slide also illustrates that in some cases, there is no alternative access provided to the private properties for the crossing holder.

The rights assigned to the private crossing holders vary greatly. A holder of the right or privilege to cross may hold outright ownership of the underlying property, may have a documented easement over the railroad property. Where it's recognized the holder may

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have a prescriptive easement or squatter's rights. There may be a documented license under contract, or maybe only a verbal license subject to revocation without notice.

Railroads may require the crossing holders to purchase insurance or provide some other protection in the event of a collision at the crossing. Contracts or other legal documents may further define

responsibilities, such as maintenance of the crossing surface, or providing notifications under stated conditions.

The FRA solicits discussion and comments on all areas of safety at private crossings, but particularly encourages discussion on the following topics:

At-grade highway-rail crossings present an inherent risk to all users, including the railroad and its employees, as well as to other persons in the vicinity should a train derail into an occupied area or release hazardous materials.

From the standpoint of public policy, how do we determine whether creation or continuation of a private crossing is justified?

How do we determine when a private crossing has a public purpose, and is subject to public use?

How should improvement or maintenance responsibility be allocated?

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Is there a need for alternative dispute mechanisms to handle disputes between private crossing owners and railroads?

Should some crossings be categorized as commercial crossings, rather than as private crossings?

Should there be nationwide standards for warning devices at private crossings, or for intersection design for newly created private crossings?

Are there innovative traffic control devices that could improve safety at private crossings on major rail corridors, including those on which passenger service is provided?

Is the current assignment of responsibility for safety at private crossings effective?

Do risk management practices associated with insurance arrangements result in regulation of safety at private crossings?

Should the State and Federal governments cooperatively work to determine responsibility and to provide oversight?

Should the U.S. D.O.T. request enactment of legislation to address private crossings? If so, what should it include?

Now, there is some standardization of treatments at public crossings across the nation. For

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example, the confirmation and use of signs, signals, pavement markings, and any other traffic control devices placed at public crossings generally conform to the guidance provided in the Manual on uniform traffic control devices.

In addition, in 2002, the Department of Transportation published a guidance document created through the efforts of a technical working group made up of representatives from both the public and the private sectors.

In most states, however, there is no such standardization at private crossings.

The arrangement of private crossing signs can be highly individual. And sign maintenance may be sketchy, or almost non-existent.

Yes, there is a sign there.

To gather information on the current state of the art, as well as new ideas about possible solutions to exisiting problems, the FRA is holding a series of public meetings, the first of these was held in August 30 in Fort Snelling, Minnesota.

This is not a complete list of organizations represented at the meeting in Fort Snelling, but rather those who provided either formal statements or substantial input during the meeting.

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Numerous topics were discussed in Fort Snelling, but to my mind, they fell into a few different categories. First, it seemed that attendees agreed there is no existing process that would provide consistent structures to create or to evaluate the relative need for new private crossings or to upgrade or close existing private crossings.

Attendees also seemed to indicate that different parties often used different definitions to decide whether a crossing was public or private.

In addition, much of the discussions centered on the fact that private crossings are created for a wide variety of reasons. For example, residential, industrial, commercial, institutional, or governmental or temporary. And they may be used to varying degrees by members of the general public, they may be traversed by users ranging from pedestrians to construction vehicles or hazardous materials tank trucks.

The second of the meetings was held in Raleigh, North Carolina. Again, this is a list of not of everyone who attended but of the people who actually provided statements or input.

We listened to the State of North Carolina discussing their private crossing safety initiative and the process they used and some of the criteria that they

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used to establish a need for upgrades and so forth.

Basically, the conversation centered on the need for a baseline set of traffic control devices. They thought that there were even more categories of private crossings than those that we had discussed before, and they made some suggestions about the appropriate types of design standards that would be acceptable to the states.

Well, let's move on. I would like to open the discussion now, but I'll leave this information up on the screen in case any of you would also like to provide written statements to the docket.

MR. COTHEN: Thank you, Miriam.

For the rest of the day we've got two pieces. The first is we would like to hear from those who would like to make some opening statements, some general statements. It's a small group, so we're not going to try to constrain the length. At least not at the outset.

And then we will go to a discussion format in which we'll discuss some case studies and hypothetical scenarios as a way of trying to tease out the issues if we can.

I'm happy to start with representatives from the State of California. First, Daren Gilbert from PUC.

Did you want to say anything preparatory before Daren begins?

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Daren is supervisor of the rail crossing engineering section, California Public Utilities.

If you could spell your name for the record?

MR. GILBERT: Sure. My name is Daren Gilbert, D-a-r-e-n, G-i-l-b-e-r-t.

MR. COTHEN: Welcome to California.

MR. GILBERT: Again, my name is Daren Gilbert. I'm supervisor of the rail crossings engineering section.

I have prepared comments that will be supplemented by filed comments at a later time.

The California Public Utilities Commission exercises rail safety oversight over railroads in California under the California Public Utilities Code and under the State Participation Program with the Federal Railroad Administration.

The CPUC also has exclusive jurisdiction over highway rail crossings in the State.

Specifically in regards to private crossings, the CPUC has the authority to determine the necessity for any private crossing and the place, manner, and conditions under which the crossing shall be constructed and maintained, and to fix and assess the costs and expenses of that crossing.

Also, the Commission's General Order 75 (D), which contains administrative rules governing the

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standardization and use of warning devices at highway-rail crossings, and has an entire regulation directed at warning devices at private highway rail crossings.

It requires a minimum of a stop and private crossing sign posted on each approach to the private highway rail crossing.

General Order 75 (D) also requires a written agreement be developed to authorize the crossing between the parties.

Private crossings carry most, if not all, of the safety concerns that public crossings have.

Collisions can and do occur which cause delay, property damage, Hazmat spills, injury, and death. The parties involved in the establishment and use of private crossings must be cognizant of the potential incidents which could occur at such crossings and where appropriate government should exert safety authority to assure such risks are eliminated or minimized.

The following are two recent examples of train-vehicle collisions at private crossings that affected public safety. CPUC staff addressed the safety

concerns for each crossing with the property owners, the railroads, and public authorities which result in crossing upgrades.

And the first example occurred in April 2005. A fatal collision at a private crossing in a rural desert area resulted in two fatalities.

A similar incident had occurred at the same crossing in the year 2000. Investigation revealed that the passive crossing is utilized by various parties accessing a propane company, a planned energy generation facility, an electric substation, a water facility, and open space for recreation.

Passenger trains run through this area at 79 miles per hour. Although there is clear visibility along the track in both directions, drivers have not always taken adequate precautions and often disregard the posted stop signs on approach to the track.

The crossing is an a narrow paved road between a main highway and private properties on the other side of the tracks.

CPUC staff took the position that the private nature of the crossing was no longer valid and that the CPUC staff would seek closure of the crossing unless the warning devices were upgraded to modern public crossing safety standards and, and further, that the local roadway agency needed to take authority for the crossing and ther maintenance costs associated with these improved safety warning devices.

The property owner ultimately agreed and are financing the upgrades and the county has agreed to become the responsible agency for that particular crossing. So that was a positive outcome.

In the second example, a private unpaved road in Ventura County crosses the Union Pacific Railroad tracks. The private crossing provides access to a Christmas tree farm, as well as to three separate private residences.

During the winter holiday season about 100 vehicles traverse the crossing daily.

Daily train traffic includes eight Union Pacific freight trains travelling at 60 miles per hour, 10 Amtrak passenger trains, and four Metrolink commuter trains traveling up to 70 miles per hour. The crossing warning devices include STOP and private crossing signs. There have been a total of five reported collisions at this crossing since 1986.

The collisions resulted in 20 injuries and two fatalities.

The most recent incident occurred in August 2005, involving a dump truck and an Amtrak passenger train.

The CPUC recommended upgrading the warning devices to flashing light signals and gates, advance warning signs, and providing illumination at the

crossing.

Ultimately, the Ventura County Transportation Commission has acquired special Federal funding and together with the UPRR, will upgrade the warning devices at the crossing to gates and flashing light signals. Maintenance costs will be borne by the railroad as specified in thecrossing agreement negotiated with the Ventura County Transportation Commission. Although the crossing will remain a private crossing, automatic warning devices will be installed.

Overall, a private crossing is only justified if it provides sole access to a parcel of land that has no other viable alternative access available, which does not cross the tracks.

Private crossings have been thought of differently than public crossings because, in theory, only the private property owners and their invitees, and guests, and employees use the crossing, and should therefore be aware of the existence of the crossing and associated hazard.

This justified the opinion that there was no need for having warning signage or automatic warning devices, as are typically used at public crossings.

There is also the assumption that if a

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collision occurrs at a private crossing, only the private property owner and the railroad may suffer the consequences of the crash, and therefore, these two interested parties are solely responsible for the safety of the private crossing.

However, many private crossings are on farms which use temporary workers who may not be aware of the presence of the crossing and its associated hazards.

Also, if trains that carry hazardous materials or passengers which are involved in the collision, then the surrounding community may be exposed to the hazardous material or the passengers on board the train may be injured or potentially killed. Therefore, train passengers and the general public, not only the property owner and the railroad, are exposed to the dangers of an accident at private crossings.

Also, unless the approaches to the private crossings are controlled, for example, by locked gates or at least posted as private property, the public, for example, a lost driver may be using it, therefore, individuals other than the invitee, guests, and employees of the property owner may use with or without permission many private crossings.

Furthermore, if a private crossing is publicly used, such as ones that provide access to a business,

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then the general public is exposed to the same level of hazard as with any other public crossing. Anytime there is a probability that the public may be exposed to harm by a private crossing, it becomes a public safety issue requiring diagnostic review and special consideration.

In such cases, state government oversight of

the crossing is appropriate.

Currently, the railroads and private crossing owners share the liability for the safety at private crossings, and the railroads -- to some extent, the property owners share an interest in minimizing their exposure to financial liability.

Because there are few controls at most private crossings assuring usage by only authorized parties, the use of the private crossings can change over time. We are not confident that such changes in use would be identified in a timely manner and addressed by the railroad or the landowner.

Railroads may not be aware of the changes in use. And landowners may not be aware of a need to re-evaluate the crossing and its warning devices based on that changed use.

We recommend some mechanism where the State or local government identifies increased or changed land use in landlocked parcels through permitting or project

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approval to identify such changes in the dynamics in the crossing and its use.

With such a process, the appropriate State agency, the railroads and land owners could make informed decisions regarding the appropriate crossing treatment.

The best time to determine an increase in motor vehicle, bicycle, or pedestrian usage at railroad crossings is when the developer seeks approval of new commercial or residential projects.

For the past three years, the Public Utilities Commission has been reviewing proposed developments, and concerning potential impact on public safety under the California Environmental Quality Act.

This procedure permits the Commission to monitor proposed increases in traffic at crossings.

Under C.E.Q.A., which is the California Environmental Quality Ability, the lead agency for the proposed development is required to respond to public comments concerning the project. There are, however, many instances where we are not aware of private crossings, and therefore, cannot make specific recommendations.

As to costs, generally, allocation of improvement and/or maintenance costs is agreed to by the landowner and railroad as parties entering into the legal

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instrument establishing the private crossing. We believe this is appropriate. In California, where the landowner and railroad do not agree, the Commission may apportion such costs.

The CPUC allows for administrative legal review by public hearing in crossing matters. Administrative law judges hear crossing cases and prepare proposed decisions for consideration by the Commission.

In general, the Commission reviews the facts of the case and the proposed decision, and issues its own carefully reasoned decision.

Moreover, the CPUC has its own alternative dispute resolution mechanism for these and other proceedings in which ARJ's specially trained in mediation procedures and outcomes are used to assist in resolving such matters.

The issues involved with private crossings include property rights, contract law, and the safety responsibility for the traveling public. All of which have traditionally been within the State's responsibility.

Many of the grants of rights-of-way in California were created in the 19th century at the time of the initial railroad line construction. Both the rights-of-way and the crossing agreements may be found in

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deeds of trust, quit claim deeds, and other contractual arrangements between the railroads and landowners subject to the laws of the State of California.

Therefore, we strongly recommend keeping the responsibility of the safety of private crossings with the States.

The FRA may issue guidelines, for the benefit of States that do not have laws on this subject and provide recommended language for laws and regulations. However, the CPUC contends that public and private crossing safety regulation is too dependent on State law and real property and contracts law, and is too focused on regional issues and concerns to permit Federal preemptions of the field. Recommended Federal guidelines may be valuable, wholesale federal preemption is not.

In California, each individual public crossing design is reviewed by a diagnostic team, comprised of experts, to recommend an appropriate design considering the unique nature of the individual highway rail crossings.

Private crossing design is generally specified between the railroad and the landowner in the crossing agreement.

In cases where a private crossing is used by the public or trains carrying hazardous material or

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passenger trains, existing guidelines for public crossings should be used.

In other cases, we recommend the FRA invite a group of experts to develop guidelines for the design of private crossings, similar to the highway rail crossing technical working group that issued the guidance on traffic control devices at highway rail crossings. Where crossings allow unfettered access of passage and routinely invite the general public to use the crossing, a public purpose has been established.

In such cases, guidelines for crossing treatments should be the same as used for public crossing.

Public uses of crossings, which could be classified as private, include crossings at shopping centers and malls, which are generally private property,

crossings to public facilities, such as landfills, recreational areas and other unrestricted public lands, private roads to residences, such as mobile home parks, residential subdivisions and private country clubs, and other businesses and commercial enterprises offering goods or services to the public, such as Christmas tree lots or nurseries.

As stated above, the potential hazard to the public at private crossings should be assumed to be the same for those at public crossings, particularly where the public is invited to the property.

Additionally, many conditions and use of private crossings have changed markedly from those when the agreement was first executed.

As mentioned above, this changed use should be addressed through crossing upgrades or potentially, closure. However, it's very difficult to set a threshold for determining when a crossing is publicly used.

For example, can two private residences share a private crossing? Can 10? Where do you draw the line?

For example, a crossing may have been established 50 years ago when only a farmer and its employees used the crossing so that the document creating the private crossing may have been appropriate for the limited use expected 50 years ago. But if fifty years later, a local farmer's market is established on the property, the changed useage at the crossing may pose a hazard to the general motoring public. The terms of agreement between the railroad and property owner have changed and so must be re-evaluated.

It is extremely difficult to police the usage of each private crossing. Consequently, the private property owner must be given the incentive to upgrade the warning devices at the crossing when the useage changes.

Financial liability, in case of a collision, is one incentive for private property owners to provide proper warning devices at a crossing, but generally not a compelling one until after the incident occurred.

Any guidelines on private crossings considered for adoption should address the changes in use over time and provide for re-evaluation.

California does not believe a distinction should be made between a commercial and private crossing. California treats the crossing as a private crossing, but this may require greater protections to pedestrians or the motoring public, through the addition of improved safety warning devices similar to or identical to private crossings -- or to public crossings, rather.

Also, there are public used crossings that are not commercial in nature. For example, to an apartment building or mobile home park.

Private crossings, again, should be treated much like public ones. Private crossings are subjected to the same kind of diagnostic safety review and level of safety oversight as public crossings. Existing industry

and State safety standards and practices should be maintained. The same innovative traffic control devices considered for public crossings can often be used at private crossings.

We believe that FRA has taken appropriate steps to solicit public comment on the matter to determine the scope of the relevant issues relating to private crossings. It would be premature to consider adoption of new legislature regarding private crossings until the comments of the interested parties are made and considered. Only then will an assessment of regulatory gaps be able to be fully reviewed and potential solutions considered.

In conclusion, the California Public Utilities Commission applauds the initiative taken by Federal Railroad Administration to reduce hazards associated with private crossings.

In our opinion, all private crossings should be provided with the same level of warning devices as public ones based on the use and geometry of the crossing.

The danger posed by a private and a public crossing on high speed passenger rails are basically similar, since passengers, as well as bicyclists, pedestrians and motorists are placed at risk.

Likewise, freight trains carrying hazardous materials have similar potential for the dangerous release of those hazardous materials at both private and public crossings.

California notes that all class one railroads and many short line railroads in the state transport hazardous materials over their rail lines.

California contends that existing protections, particularly under State law, are sufficient to protect the traveling public provided appropriate criteria for providing warning devices are used for both public and private crossings.

The Commission recommends that the FRA assist in the formation of a technical working group to prepare general guidelines for identifying dangerous private crossings and recommend guidlines to be considered in upgrading or designing such crossings.

Thanks very much.

MR. COTHEN: When we come back at a quarter to the hour, we'll offer the opportunity of colleagues on the FRA panel to address any follow-up questions to Daren, and then we'll proceed.

Thank you.

(Recess taken.)

MR. COTHEN: Back on the record, if we may.

You always know if you come to California, you're going to learn something.

When I was a resident at Central Valley, we used to say the Golden State, that California leads the nation. I guess you all still say that out here, don't

you?
We're grateful to the PUC for beginning to give us something to really chew on from the point of view of the regulatory agency responsible here in the State. And we'll get to hear some more as we go forward.
We are also happy to have Steve Cates from the California Department of Transportation here. California, of course, is extremely proactive in fostering passenger rail, inner city and commuter rail.
Come on up, Steve, so we have the benefit of hearing from California D.O.T., from their perspective on the issue of private crossings.
Welcome, if you could, for the Court reporter, do the same for us here.
MR. CATES: Okay. Thank you. I'm Steve Cates, last name spelled C-a-t-e-s.
Probably take about 10 minutes to kind of go over my comments.
California Department of Transportation has a pretty aggressive passenger rail program. I want to talk about our rail program and what we do in regard to grade crossings. Our passenger rail program has a number of elements. We have a capital program, and an operations program, a grade crossing program, and a rolling stock program.

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In our capital program, we spend about a hundred fifty million dollars a year for improvement to the class one railroads to operate our passenger trains. Those would be for increasing capacities andfor improving running times. The types of projects we would be involved with would be for track and signal improvements in those areas where we're going to be running our trains.
We have an operations program. We provide inner city rail service. We carry over four-and-a-half million passengers a year on three different routes. Those routes are the Pacific Surf Liner, the San Joaquin and the Capital Corridor. The Surf Liner operates from San Luis Obispo down to San Diego, on the coast on Union Pacific tracks. The San Joaquin route operates for the most part on PNSF, but it also operates on UP tracks. Bay Area and Sacramento are the origination points, so it kind of operates like a J., meets in Stockton and then goes down through Fresno and Bakersfield.
And we have the Capital Corridor which we started and which we have spun off, and it's operated by the Capital Corridor Joint Powers Authority that operates between Auburn through Sacramento and to San Jose.
We also have an inner city passenger rail rolling stock program. We acquire passenger cars and

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locomotives. Currently we own 88 rail cars and 17 locomotives.
I kind of feel personally connected with 60 of those. I did the inspection testing here, and I have done that on about a dozen more of the cars, the

inspection taking place at the manufacturing plant in Hornell, New York. Whenever one these guys get whacked at a grade crossing, I feel kind of vulnerable about it. But we're also working on funding for some additional cars. We're going to try and purchase 7 new cars and about 10 more locomotives. Our service is expanding 10 to 15 percent a year and we need those vehicles to take care of our standing room only crowds during peak service.

We also have a rail highway grade crossing improvement program. And we have different funding sources for this. There is the Federal 1010, 1103 funds for crossing improvements and high speed rail corridors. We have the Federal section 130 funds that are provided through the U.S. Department of Transportation.

So those are for improvement on public crossings.

And we also have a program here in California, a Section 190 grade separate program. And by the way, our 130 program and our 190 programs are jointly

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administered with the Public Utilities Commission.

These programs provide over $35 million a year to improvement of safety at grade crossings. And we also contribute about 60,000 a year to Operation Lifesaver.

Here are some statistics about California. We have about 312,400 grade crossings; 4,500 of those or about 36 percent are private crossings. The remainder of about 7700 are public crossings.

We have about 150 crashes at grade crossings every year in California. A hundred and thirty of those are public crossings, about 20 of those a year are at private crossings.

And of those 20, two to three involve a passenger train. Typically, that would be a Metrolink train or one of the trains that we subsidize.

Now, to give you the real story of kind of how things work from my perspective, I have equipment staff, I have grade crossing staff. I am on the same floor as our budget staff and our Federal aide liaison. We're all on the same floor, and I'm across the street from the Governor's office, so I have got all these people looking at me.

When we get in an accident at a grade crossing, particularly at a private crossing, my equipment staff come to me and say what are you going to do to fix this

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crossing? We've gotten in three accidents in the last ten years and you're not doing anything to take care of that. Plus, we've got all of the corrugation taken off the side of my cars. And it's going to be two years before I get it back in service.

Then I have my grade crossing staff. You can't fix that. That's a gift of public funds. You can't use public funds. Those are highway funds. Those have to be spent on public crossings. The Governor is across the street. I'm on the third floor. So he's got to yell and

look up at me. You have to reduce your budget and cut your staff. So that's what I have to deal with in trying to improve grade crossings in California.

So what are the current practices? What do we do?

Well, the State doesn't have a specific financial aide program to improve private crossings, although we do have a Public Utilities Commission in California which fortunately has regulatory authority over the private crossings. We have used Federal Sections 1010 and 1103 high speed rail corridor funds to consolidate and close private crossings. And we've worked with and through the class one owner railroads to improve private crossing services during straight supported passenger rail track and signal projects.

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The railroad and private crossing owner have shared the cost of most of these improvements. And the costs were primarily to install lining, like concrete crossing panels. And when we go through and upgrade tracks, put in double tracks or triple tracks or whatever, we'll replace and upgrade, you know, the cross bucks and that sort of thing, at private crossings.

But State funds have not been used, what I call, to directly pay for these improvements. Because of all these people talking at me, we've got to be real sneaky when we go out there and make improvements at private crossings, so we structure our contracts and agreements so the funds don't go through the railroad and through the private crossing owner.

Now, I put out on the front, a hand-out of some of the things we've done with the 1103 money at private crossings. I have examples of other newsletters, and it has a picture right here of a grade separation project that we did. This was on a public crossing, but we've done two of these at private crossings where we've used standard railroad bridges. All of these have been on BNSF class one tracks. One has been in Merced at a private crossing. The other we're constructing now in Oakley, not too far from here. It's a private crossing where we undercut and build a roadway underneath the

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railroad tracks. Our costs to do that runs just a little over a million dollars, between one and a half million dollars through our negotiations with the railroad and the private landowner.

So the public investment has been pretty limited. If we go out and improve a grade crossing, if we put in automatic warning gates, all of the track signal circuitry to detect the trains approaching the grade crossing, put in median islands or some form of delineators, we're talking about three-quarters of a million dollars.

So the cost to us to construct these grade separations is not that much more than it would be to provide active warning devices at those crossings.

So, do I think that warning devices at private

crossings are adequate? No way. I don't think that private crossings, you know, have adequate warning devices.

Daren talked about an accident there that occurred with -- it was one of our trains hit a dump truck. It was out near Selmas. And I'll talk about that a little bit more in a minute.

Most private crossings don't have train-activated warning devices and have poor crossing surfaces and approaches to the crossing.

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So should there be a uniform approach to improving safety at private crossings? Yes. I believe that the FRA or some Federal agency should take a leadership role in developing some standards or guidelines for crossing protection, consolidation, and clear, safe private crossings.

We need to take a look at low cost warning devices. The guidelines, I believe, should be similar to those that are put forth in the manual of uniform traffic control devices.

And, again, Daren didn't think that those should have a regulatory effect. And I would agree, I think they should be guidelines. There seems to be too many variabilities at these public crossings, but at least some guidelines that would give us some direction on how to proceed, and less costly warning devices and train detection systems, other than those that are currently used at public crossings need to be considered as long as they provide adequate warning.

Now, should the Federal government provide financial assistance to improve the safety of private crossings? And I think that the Federal Railroad Administration should take a more pro-active approach to provide funding for improvements at private crossings.

And they, in fact, have done so through the

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Section 1010 and 1103 program where we're allowed to use funds to make improvements to private crossings, particularly in the area of closure and consolidation.

However, all of these funds for the last several years have been earmarked, and so this hasn't really operated too much as a grant program. I would look forward to an increase in funding through that program, with funds distributed on some type of formula basis to provide a stable funding mechanism so we could go in and close, consolidate, and improve crossings in these high speed rail corridors, particularly private crossings, and we would reduce the risks that are associated with those crossings.

And I think that this program should be restructured to include demonstration projected at maybe the working group. And a reasonable working group or some other working group that would identify projects to test the feasibility of new technologies.

So that's kind of what I wanted to present. I don't know if we have anybody here from Venture County.

I don't know, Freddy or Dave may talk about that a little bit. Since Daren brought up the accident at Selmas in Venture County, I wanted to explain a little bit about that particular crossing and what's being done there. Because this is something that the State of

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California hasn't been directly involved with, although we have been involved indirectly along with Union Pacific Railroad, the Public Utilities Commission and Operation Lifesaver and Metrolink, Amtrak, Highway Patrol have all been involved with the Ventura County Transportation Commission.

A few years ago Ventura County -- well, the Ventura County Transportation Commission undertook a review of all of the grade crossings on their main line track in Ventura County.

They identified, and they, also, in doing this -- kind of backtrack here -- they took a look at all of the accidents that occurred at those crossings in the last 10 years. Went out, conducted a survey of those crossings and identified improvements that they thought should make at those crossings.

There were 13 private railroad crossings on the main line track there that have had accidents in the last 10 years. And, in fact, one of those was the crossing that Daren talked about.

Well, Ventura County Transportation Commission has gotten together with Operation Lifesaver, Union Pacific, Metrolink, Amtrak, the Highway Patrol and different farming interests in the Selmas area in working through Operation Lifesaver to educate the public on rail

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crossing safety issues, particularly at private crossings. And they're installing stop, look and listen signs both in English and in Spanish at these grade crossings.

They're also working with the Union Pacific Railroad to replace a bridge. This is a vehicular bridge that would allow workers to access different fields, and, as a result of this, they'll be able to close a couple of private crossings.

Last year, with the assistance of Representative Elton Gallegly, G-a-l-l-e-g-l-y, the Ventura County Transportation Commission was able to seek an earmark of $494,000 in Federal assistance. Those earmarked funds will be running through my office. And those funds, since they were earmarked, are going to be used to install flashing gates -- flashing lights and automatic gates at two private crossings. And those are the two that had the highest accident rates. One of those is the crossing where one of my trains hit a dump truck.

The ironic thing about that that was a dump truck, it was a subcontractor on a CalTrans highway project, so my train hit my dump truck subcontractor.

But Ventura County, they don't own or control any of these tracks. But they've worked with the railroads and with others to improve safety, and I think

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they're to be commended.
That's something else that's being done here in California besides what we're doing with the Public Utilities Commission, with CalTrans, with the railroads, and then, also, with Metrolink. And I don't know if Metrolink is going to speak with -- are you going to be talking later or --
MR. MATHIEU: I could mention right now, the two crossings that we're talking about, Metrolink did.
MR. TESSLER: Excuse me, could you identify yourself for the reporter.
MR. MATHIEU: Okay. My name is Ron Mathieu, and I work for the Southern California Regional Rail Authority, which is Joint Powers Authority that runs the Metrolink commuter rail system. And I just wanted to just bring up a point that Steve, and, also, Daren mentioned about these two private crossings in Ventura County. They are on the Union Pacific main line, but Metrolink and some staff at Metrolink did work with the Ventura County Transportation Commission -- which is VCTC -- to secure funding.
We initially looked at five private crossings. But I think the money that was secured only covered two crossings. And that was the Hangel (phonetic) Tree Farm in Selmas Ranch private crossing, and I got an E-Mail
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here that -- I wanted to mention that the automatic warning devices are now active at those crossings. I just wanted to bring that up because both had mentioned that they were going to be installed, but they are installed.
MR. CATES: So I can go back to my equipment staff and say neener, neener, neener we got those installed.
MR. MATHIEU: They're going to be doing some press event and they've mentioned they were installed.
So I wanted to add that for the record.
MR. CATES: Okay. That concludes my comments. I do want to remind you, I have this little newsletter. This is probably from January of 2006, and it shows an example of the crossing that we did with the 1103 funds.
And then I've also included an executive summary for our California rail plan, and both of those are out on the table in front. So, thank you.
MR. COTHEN: Thanks, Mr. Cates.
Do we have any follow-up questions from the FRA panel, for either of our California folks?
MR. RIES: Appreciate the comments and the information you provided.
Do you have some set guidelines or policies that you use in determining which private crossings would be subject for closure or grade separation? How do you
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make those decisions?
MR. CATES: It's been pretty much opportunistic. We're going to be on track upgrade projects working with the railroad, for the most part, public projects

managers, both Union Pacific and BNSF Railroad are familiar with the private crossings. They're knowledgeable as to who might be more readily interested in improving those crossings. So I think they're kind of the experts on private crossings on their tracks, but all of the work we've done, other than when we're going through an upgrading or putting in new tracks, it's just been purely kind of opportunistic.

One of them was the 130 project that was recommended in Oakley. We started looking at the national highway system map, saw that it was a roadway, that it had been relinquished by the county years before and was under private ownership. A chain across it and private crossing signs on it for a number of years. We took a look at how could we make that improvement.

This is going to be opened up for public use, and again, this is a problem that we have in administering highway funds. But to be able to use the highway funds, it has to be a -- what they call public highway. And to meet that definition it has to be under the ownership, control, and maintenance of a highway

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department authorized under statute to perform that function.

In this particular case, the acquisition of the properties on the far side of the track were being acquired by the Sanitation District, a parks district, and I think it was an irrigation or water district.

And school buses were going to be using this crossing in addition to sanitation trucks carrying hazardous waste. So we were quite concerned about the risks that were going to be posed at this particular crossing.

We operate at 79 miles an hour through there, and NSF operates at 65 miles an hour with the freight trains. And we got together with -- actually, it was the attorney from the sanitation district who negotiated with the sanitation district and the railroad to use some left over funds that we had had through the 1103 program. So it was just -- that's kind of how that one came about.

MR. RIES: I also had a question for Daren.

Certainly, I think there is a wealth of knowledge that since California has taken a very pro-active, you know, stance in working in private crossings, probably one of the few States that does that, how much staff time would you say is dedicated to private crossings?

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MR. GILBERT: Wow, that's tough to estimate. Different staff spent a different amount of time. I probably would venture a guess somewhere between five to 10 percent.

MR. RIES: Okay. And that's out of how big of a staff would you say?

MR. GILBERT: Out of a staff of -- current staff of about a dozen field people.

MR. ELSMORE: I would like to add -- my named is

George Elsmore, E-l-s-m-o-r-e.
I have rail safety staff and we investigate every fatality at the private crossings where there is a vehicle or trespasser, so we have a pretty significant allocation of resources there, as well.
MR. TESSLER: Grady?
MR. COTHEN: Mr. Gilbert, I understand that when you said that the uses change at private crossings over the years, and subsequently, the PUC can order improvement to the crossing, such as automatic warning devices, and you mentioned that after you order it, there is a dispute resolution and different processes, but you ultimately can order those improvements installed?
MR. GILBERT: Yes, it's my understanding that we have the authority to order warning devices at private crossings.

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MR. TESSLER: Have there been challenges?
MR. BERDGE: Not at this point. Pat Berdge, B-e-r-d-g-e, star counsel for California PUC.
MR. TESSLER: When you do order those allocations of costs, could you give us an idea of how it is allocated, generally?
MR. BERDGE: It hasn't happened in a long time. Usually, the parties settle. And there is an agreement by the parties, between the railroad and the property owner to allocate the costs, maintenance, and construction of the crossing protections.
MR. TESSLER: But your testimony said that you allocate the costs. Do you provide --
MR. BERDGE: This is a code provision.
MR. TESSLER: Do you allocate and they can change it?
MR. BERDGE: They can change whatever they want. If they have an agreement, then the Commission is going to step back and let the agreement get filed, and that will be used in allocating the costs.
All we're saying, basically, is that the California Public Utilities Code provides that the Commission can allocate if there is a dispute between the parties. Ultimately, it's the California PUC's call.
MR. TESSLER: But you had mentioned it hasn't

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happened recently.
MR. BERDGE: That's correct.
Can I explain one thing? This is in the Patterson case, the one that Daren talked about. It did not go to the Commission. It was the staff that wrote to the private property owner and said that until Union Pacific will post a 30-day notice unless you will pay for upgrades. And the private property owner, along with the others, made that agreement. And so they are going to pay for the upgrades and then turn the road approaching the private crossing over to the county.
But that did not go to a Commission decision, but the Commission is the one that makes the ultimate decision if it needs to be, but an agreement was made at

that point.
MS. HARRIS: Yes, I'm Carol Harris. And I'm here on behalf of the AAR and, also, Union Pacific Railroad.
But actually, speaking from my experience here in California representing Union Pacific on these matters, and I would agree that the CPUC processes -- well, the CPUC's processes do provide an impetus for reaching agreements which have been very useful, in particular, the ADR processes in some of the CPUC's cases.
But there was one other mechanism that I'm not

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sure that Daren discussed, or maybe he didn't mention that we have used, and that is, also, I think an interesting tool that we have here in California, and that is -- I'm not going to be able to get the Code Section exactly right. I think it's 1202 something. But it's a section that provides that where the Commission determines that a private crossing is publicly used and no one is taking responsibility for it, the Commission can order it closed if the Public Roadway Authority refuses to take responsibility.
This is kind of a lost interpretation of the provision. But essentially, that is a mechanism for putting pressure on local roadway authorities to take responsibility for the crossing.
And in some of these publicly used private crossings, we actually think that's an important remedy because if it becomes a public crossing, then you have an entity that is responsible not only for the crossing, itself, but for the adjoining roadway, and the engineering of the roadway can often be an important factor in the safety of the crossing.
So that's, I think, a very helpful provision. We have invoked it. The railroad has. Because we had a case in San Luis Obispo where we sought to get a crossing closed that was publicly used. It was across from a

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university campus, and we had widespread use with both pedestrians and automobiles. We had captive homeowners that were landlocked. We had a whole variety of uses. We had some school dorms that were not actually adjoining owners, but they had a -- they had developed an improved access to this private crossing for their residents.
And through the Commission's procedures, we brought all of the parties to the table, and that case ultimately settled with an agreement between the railroad and all of the private entities that were using the crossing. We did not have a public entity take over the roadway.
It was a complicated situation in which the university owned the roadway on one side, and the county owned it on -- the county's property began on the other side, but we had to ultimately handle it through a private crossing agreement. That was the only way that we could get that one resolved. But we were able to fund improvements to the crossing, and finally, most

importantly, have a mechanism for enforcing safety using the crossing, and we did manage to use Operation Lifesaver funds.

Even though it is a private crossing, Operation Lifesaver became actively involved, so there is precedence for use of those funds at private crossings.

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But I have to tell you, that it was a very expensive, complicated negotiation, very difficult to get anybody to come to the table if they're not already under the PUC's jurisdiction and reasonably threatened to eliminate the crossing. We were able to bring them in. So, that was our experience.

There is a couple of reasons. Sometimes there is actually another reason. I just want to mention why it can be helpful to ask the public roadway authorities to take responsibility for these publicly used private crossings. And that is because of the law enforcement. With a public crossing, there is nobody that is going to enforce safety, enforce safe driver behavior at a private crossing. And if a public roadway authority takes responsibility for the crossing, then you have some additional legal mechanisms that kick in. So that's been our experience there.

MR. COTHEN: Carol, we'll come back to you a little bit later to pick up any other items that you have.

Anya, did you want to follow-up with the sale rep?

MS. CARROLL: Good morning again. Thank you all for coming. I'm enjoying this conversation immensely. My interest is in the agreements.

My question would be to Daren. One: Is there

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a form, a standard form that is started as a baseline, used as a baseline for these agreements?

Secondly: Who is the responsible party for holding the agreement as current? Who updates that agreement when necessary?

And thirdly: Just as a case in point, from our Raleigh, North Carolina meeting it was found that there were a very small number of formal agreements that could be found in North Carolina in their crossing safety initiative, the private crossing safety initiative, and the most were found within the railroads archives.

So, I have a whole series of questions about these agreements and where are -- where they're found, what the baseline is, and who's responsible for keeping them up-to-date.

MR. GILBERT: Well, I think that you'll find that other case is very similar to North Carolina. And probably, the appropriate parties to address that too is the railroads. There is no form.

We don't hold the agreements, and quite often when issues arise regarding private crossings, the railroad can't put their hands on an agreement or it can't locate it. It may exist, probably, in the archives that you spoke of. But in support, they're difficult to

come by and sometimes impossible to find.

MR. Petrossian: If I could follow-up.

That's why this year we adopted General Order 75 (D). In that -- I'm loud enough?

In that general order, it requires that there be a written agreement between the railroad and the private property owner. And, again, we used that in the Patterson case. We wrote to them saying, send us your agreement, and nobody did. And since there is no agreement, we are going to request that the railroad close the crossing. So now that we have that instrument, which became effective just last month, September 23rd, if I'm not mistaken, the Commission has another tool to use to make sure there is a written agreement between the private property owner and the railroad.

MS. CARROLL: So, within that framework, do you have a baseline form for the agreement that addresses certain pieces and parts, or it's just open, it could be a verbal agreement, or does it have to be a written agreement?

MR. PETROSSIAN: It says in the general order.

MR. BERDGE: Also, as we found out in our visit to the Volpe Center, most of these agreements are in deeds of the property through which the railroad runs its line. And there are a great number of easements in the valley, in the San Joaquin Valley that have easements, but no crossings, but could have crossings.

The matter is also complicated by the fact that when UP purchased or merged with SP, those records are much harder -- those SP records are much harder to find now with the merger after the merger.

MR. COTHEN: Any further follow-up?

MR. MATHIEU: One more comment. Metrolink again. That's one of our concerns, also as a public agency that purchased right-of-ways from the freight railroads, we had to go over responsibilities for many public and private crossings, and finding agreements was a big issue for us.

And we found out that a lot of these agreements, you know, they're in deeds, or the agreements covered, you know, installation of crossing stop signs, those type of things.

And as we're dealing with these private crossing owners, the uses changed in trying to update agreements, or to get them responsible for the installation of automatic warning devices has been difficult. But what we've done is the member agencies that make up the Southern California Regional Rail Authority, they've developed their own agreements.

So we have what used to be a small two-page farm crossing or private crossing agreement, now is a little bigger agreement. So we do have a standard that they've developed.

MR. COTHEN: Then we ask that the Commission provide a copy of General Order 75 (D) for our docket so that we

can kind of look at the detail of that and understand.
MR. PETROSSIAN: And the language I refer to is going to be in the formal statement, as well.
MR. COTHEN: Good. Thank you. And that, also, that Metrolink provide an example with any details extracted that would be unnecessary for the public docket, but just see the format of the crossing agreement that you all are using, please. I appreciate it.
MR. BERDGE: The General Order 75 (D) is online, and in our comments we give the HTTP URL address.
MR. COTHEN: Then all the better. Thank you.
MR. RIES: I just have a follow-up about the written agreements.
Is it required that the agreements be filed with the Commission or they just have to make them available on demand?
MR. PETROSSIAN: Yes, the second.
MR. RIES: On demand.
MR. COTHEN: You have more filing room than we do in our building.
We'll pick back up with Carol, if she has anything else.

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I wanted to recognize Bob Boston, who is another one of our State representatives from the region. Bob is with the Washington Utilities and Transportation Commission, which is a part of FRA State participation. And we're among many of its associations, as well as a sponsor of rail passenger service along with the Washington D.O.T., and the regulatory body.
So, Bob, could you just add anything that you think would be helpful from your standpoint?
MR. BOSTON: Thank you, Grady.
I'm a rail safety specialist with the Utilities and Transportation Commission, and also, the State coordinator for Washington Operation Lifesaver. Just a few short comments.
Washington State is one of the States that does not regulate private crossings. They're basically just a contract between the railroads and the private crossing owners. And, as you know from earlier comments today, we had a terrible four-fatality collision at a private crossing a few months back. And we've also seen a spike in what we call second train incidents at crossings, some at private crossings. We've had a bunch at some public crossings, too, especially with pedestrians up near Seattle.
The Utilities and Transportation Commission has

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a grant program called Grade Crossing Protection Funds or GCPF for short. People can put in for different types of safety improvements.
Washington Operation Lifesaver has put in for some education grants under that. A couple of weeks ago, I noticed that in the GCPF form it talked about private crossings. Even though the Commission does not regulate them, it talked about private crossing improvements,

requesting funds for those. So since we have the second train incidents that have been occurring in Washington, Operation Lifesaver put in for some signage at private crossings where there are two tracks -- two or more tracks, and especially in the corridor between Vancouver, Washington and Bellingham. We estimate there is probably 50 private crossings that have at least two tracks. Some of them may be just a passing track, but some of them are double main line, and we designed a sign at private crossings.

No, MUTCD, the Manual on Uniform Traffic Devices, no code on that. So we came up with a sign that's it's an 18-by-12 inch sign that says, "Two tracks. Watch for second train." And we hope to put these up at crossings. We're going to do some diagnostic at the crossings, and to check for other things, like sight distance and things like that. Even though there is no

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regulatory jurisdiction or different entities, Washington Operation Lifesaver will be working together on that, hopefully, to get something done there and maybe reduce what's happening at the private crossings.

The Commission also is starting to show some interest at private crossings, and the information coming back from this meeting is going to be very, very helpful to take back on that.

Some other things we've done at private crossings, especially in the Columbia River, George, we've been working a lot with the migrant farm worker communities, doing a lot of Operation Lifesaver education to bilingual people. A lot of private crossings are in the fields where they work.

And there has been some incidents of where a train may be stopped on the track and then the workers are anxious to get on the feild, and they're crawling through the train, and there is possibly another train is coming on the second train track or the danger of the train moving. Of course, we put up some English/Spanish signs warning them of that and to see what we can do on that. And basically, those are a couple of things we've got going for private crossings.

I will give this to the panel to take back, and any recommendations you have on this, good idea, bad or

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nay, we would welcome your comments on this.

Thank you.

MR. COTHEN: Thanks, Bob.

Any follow-up, Mr. Ries?

MR. RIES: Bob, in addition to the two-track sign, is there any other guidance for private crossing signage in Washington?

MR. BOSTON: No. There is not even any -- there is no guidance for any signs, that I know of. And, of course, private crossings don't have a two-track sign at all, like your public crossings, underneath the cross buck where it says the tracks. So we wanted to get something that was similar to a danger sign with the red

oval that will say "two tracks" in it. And then, of course, "watch for second train below it." But no guidelines, that I know of.

MR. RIES: Thank you.

MR. GILBERT: One question. I'm wondering, are you guys funding those signs, the installation and acquisition of those, or are you making them available?

MR. BOSTON: The funding would come from the Utilities and Transportation Commission, if they approve our grant. We estimated how many signs we would need, and then most of the signs probably would go below the stop sign. But in some cases, like what's up on the

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screen there, you can see three signs on the post. We might have to have an additional post with the other sign on it, but the Utilities and Transportation Commission would be funding it through their grade crossing protection fund grants.

MS. CARROLL: Bob, I have a question for you.

Your grade crossing protection funds that you mention, that's a State-funded program?

MR. BOSTON: Yes, it is.

MS. CARROLL: Is it set aside from a tax, a gas tax, highway tax?

MR. BOSTON: I'm really not sure where it derives out of. It used to be for grade crossing improvements only, and then I believe two years ago State legislature said it could be used for trespass problems, as well. So we have been through Operation Lifesaver. We have been submitting precedents.

MS. CARROLL: Is there information that documents that funding source?

MR. BOSTON: Yes, I'm sure there is. And I could make that available.

MS. CARROLL: I would like to see a copy of it.

MR. BOSTON: Okay.

MS. CARROLL: Thank you.

MR. COTHEN: Anything else for Mr. Boston?

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Okay. Thanks very much.

I guess I better look at the cell phone because the watch is on eastern time and that will be alarming.

Does anybody know the cafeteria?

Why don't we take our break at a quarter till.

I think we previously heard from Carol Harris. Carol was a general commerce counsel for the Union Pacific Railroad, formerly known as Southern Pacific Transportation Company.

MS. HARRIS: Not exactly.

MR. COTHEN: Kind of slow burn there on that one.

And Carol is also representing the Association of American Railroads today.

Are there other things you wanted to bring to our attention, Carol, before we break for lunch?

MS. HARRIS: There were some questions about these agreements. Many of these agreements take the form of license agreements because in order to cross our

property, it is required that the adjoining property owners hold a property license right.

There are other situations, though, where they have deeded rights or where we are actually operating on their property. And even there, we are pushing for some kind of agreement so that we can monitor the use of the crossing.

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And so with the General Order 75 (D), we hope it will be helpful in that effort.

But in terms of a standard form, each of the railroads has developed terms and conditions for their railroad. It is often necessary to negotiate some of those terms and conditions, and that becomes a very complicated, very difficult process. I get involved in it. I'm not a contract lawyer. It's very painful to have to go through these long agreements and hash through everything.

And we often get people involved on the other side that are -- we can get a lot of legal resources poured into these negotiations on the other side. If it's a development that's at issue, and if enough money is involved in the project, you get a very, very complicated, very difficult negotiation. But to some extent, you do need some customization of the agreements in some cases.

So, it's a situation that is a difficult one, but we're doing our best to get good agreements in effect.

And we've also found most of our agreements, I would like to report, we occasionally have situations where we can't. But we don't just lose them. We have a good mechanism, and so we're administering and keeping

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them and keeping what's negotiated.

I think, finally, the other thing is someone mentioned that a lot of the progress tends to be opportunistic. And I think that is our experience. It is very difficult to get the attention of adjoining landowners who have no reason to communicate with the railroad and no interest in getting involved with anything that might be complicated or expensive. And so, it usually is when there are developments that are at issue and they're seeking to permit developments that we actually will be in contact with these folks, or when there is an incident, unfortunately, that often provides a catalyst for making changes.

The California Environmental Quality Act does provide another avenue for engaging with development interests because if we are alerted in time and become part of the environmental review process, we can often push for some improvements.

And then, finally, one other mechanism that we've found that is quite helpful is that we have tried to stress in Commission proceedings the FRA concept of taking the corridor approach to crossings. And so we have urged that the Commission also do this. So if

someone wants to open a new crossing -- and these are public roadway authorities that typically file the

application -- we have urged that they have to look at the adjoining crossings. In fact, all of the crossings under their jurisdiction, and demonstrate that they have made their best effort to rationalize them, and we've pushed this pretty strenuously.

And we've seen some situations where it's blown through, and where the Commission, itself, that has been willing to look at the situation and some additional crossings so that a community can't come in and build one new crossing that is totally up to the current standard while that crossing is in the middle of three or four crossings that are very substandard. We've managed to shed some light on those crossings that deal more with the public crossings than with the private, but sometimes we're able to bring the condition of the private crossings in, as well, put pressure on the roadway authority to either take responsibility for the crossing or help us get through with the property owners.

All of these things, though, are very time-consuming and often very difficult.

MR. COTHEN: If I could add something for a moment. Then Mr. Schwartz is from -- he's one of our camp followers. Probably the last of the meetings that he'll be allowed to attend.

MR. SCHWARTZ: Stewart Schwartz, with Norfolk

Southern Corporation.

With regards to the types of agreements that exist, it probably bears repeating, at least in our case, there are portions of our railroads that are now 175 years old.

And the railroads that exist today is literally the product of the mergers of hundreds, and multiple hundreds of predecessor railroads. So to the extent that agreements exist, there is little to no uniformity at all.

Going forward for those limited number of circumstances where we may be able to renegotiate existing agreements or execute new agreements, we would attempt to have some uniformity in the form that we use.

As Carol pointed out, there is usually some necessity for customization to meet the unique circumstances. But, in our case, we have 10,000 private crossings, and I can't say with any certainty how many of those are actually covered by an agreement or deed or easement or any other writing. But I could state with some fair level of confidence that there is little to no uniformity in those agreements at all. And probably, in most cases, little ability to force a renegotiation under ordinary circumstances.

MR. COTHEN: So, it raises a really interesting

question about how you proceed on a national basis in terms of some kind of guidelines for moving the process

forward. Where do you start with the individual crossing at the corridor? Do you start with the premise that we would need to document first and improve first? Fascinating complex of issues.

What we'll do at this point is take a one-hour lunch break. Cafeteria is to your left.

I don't know, Mirna, are we going to be able to secure the room, do we know? The room will be secured.

When we come back, if you would like to make some further general statement from your point of view that you have not been able to make at this point, could you identify yourself to the chair and we'll arrange for that before we enter the general topical discussion.

Thank you very much. And we'll be in recess until a quarter to 1:00.

(Recess.)

AFTERNOON SESSION

MR. COTHEN: We'll go back on the record.

Ron, do you want to give us the arrangements for our next meeting, then we'll ask him to tell us about the Transportation Research Board.

MR. RIES: Our next public meeting on private safety will be in New Orleans on December 6th at 800 Iberville

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Street in New Orleans. It will be the last one for this year, and we're looking at a potential fifth one later on the first part of next year in the New York area. That's still tentative, but we're aiming in that direction.

MR. COTHEN: Then, in the interim, between the New Orleans session and the final meeting, probably in February, we do have Transportation Research Board activities. Anya Carroll is the chair of the committee that deals with highway and real crossing issues.

Anya?

MS. CARROLL: Yes, the Transportation Research Board's 86th annual meeting will be held January 21st through the 25th in the Woodley Park area, the three hotels up there.

The Grade Crossing Committee, which I chair, has two paper sessions and also a panel session scheduled. We don't have specific times just yet, but the panel session is in support of this effort. It's on the safety of private crossings. So that will be sometime during January 21st through the 25th in Washington, D.C.

MR. COTHEN: So watch the site for additional detail there.

Okay. Mr. Burcat, are you available now?

MR. BURCAT: I'm available. I have a couple images

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I think would be helpful that I can put up there and make my comments from there, as well.

MR. COTHEN: Come on up, and as before, if you'll identify yourself for the record, please, when you get to the podium.

MR. BURCAT: Good afternoon. My name is Peter Burcat. I'm an attorney from the Bay Area. I'm also

chair of the railroad section of the Association of Trial Lawyers of America, so I'm making some comments based upon my affiliation with the Trial Lawyers of America, and also as a practicing attorney that handles cases involving the railroads. In particular, involvement with private railroad crossing cases.

Certain comments were made today that we certainly agree with, in particular, Mr. Gilbert's comments regarding responsibility, whether it should go to Federal government FRA or remain with the States, and we agree that it should remain with the States.

The States can certainly, as Mr. Gilbert said, take care of the responsibility of the particular crossings. And in particular, the reason we think that that's important is because you can't just take the 50 States and group them together and say we're going to treat all of these States as the same, because each State is different, especially in topography. So if we look at

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crossings in one State, they're totally different than crossings in another State.

For example, the plain States are very wide open. Lots of visibility, very little things blocking the crossings, in most cases.

You go out to places like Colorado, we got mountainous States where we have mountainous crossings. If you go down South, we've got a lot of vegetation issues in crossings down there. We feel it's very important that the responsibilities remain with the States.

Moving responsibility to the FRA also raises the issue of invoking preemptions, and we know we've got that issue with public crossings. Preemptions has not worked to upgrade dangerous crossings. And to now invoke preemptions as a possible remedy and a possible way to avoid updating these crossings is not going to work. And all it's going to do is further immunize responsible parties, and that's not helping.

And the obligation here and the responsibility here, and I think everybody agrees what we want is to protect the public. And the public includes people that are going to use the crossing. It's going to include railroad employees on the trains and it's going to include passengers on the trains. And we've heard that

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that's a consideration and concern of who is going to use this crossing, not just motorists and pedestrians, just public that's crossing it. But it's also who is on that train. If the train were to derail, who might become injured.

And that's our concern. What is the true agenda? And the agenda needs to be safety. And how are we going to get that safety issue handled in the best way?

And again, we'll say it again, that we think that agreeing with Mr. Gilbert, that is with the individual States.

Here in Northern California, for those that are from out-of-State, we have a passenger rail service from San Francisco down to Gilroy, California. CalTrans basically operates trains under agreement with Amtrak on UP tracks or CalTrain tracks.

CalTrains has adopted a crossing safety analysis system, system safety analysis system. It's working. They're looking at crossings, and CalTrains is basically taking out all of the private crossings under the rails that they are under control of, which would be San Francisco to San Jose. San Jose down to Gilroy, unfortunately, doesn't fall under the purview of the CalTrins system, and there is no system safety analysis.

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I am not personally familiar with the FRA having developed a similar system safety analysis, which I think needs to be done.

I'm also concerned that the FRA has taken under its wing public crossings. And with all due respect, there are still many, many dangerous public crossings out there, and they're not being handled the way they should be handled.

FRA taking on now private crossings, in addition to the public crossings is going to overload a system that's already not working the way it should work completely. Therefore, once we've got the public crossings adequately taken care of and we don't have any more dangerous public crossings, then we can look at expanding. But we're not at that point right now.

As I said, public crossings have guidelines and regulations regarding warning devices that are to be used, the condition of the crossings, things that are very important and very good for public safety. We don't have that with private crossings, and we, therefore, have private crossings that look like this.

This is a private crossing here in the Bay Area, UP tracks, UP freight trains. I don't know what the count is that use these tracks. We also had Amtrak trains. The rate of speed on these particular tracks is

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79 miles an hour. That is not a safety crossing, that's something that needs to be taken care of, crossings like this.

And the warning devices at this same crossing, this is the only warning device at the crossing. Defaced signs are not being maintained. So the question comes down to whose responsibility is it. Whose responsibility is it to take care of that crossing? Whose responsibility is it to take care of this crossing to allow something like that to exist and endanger not only the people that are going to drive across that, and that is a business in that particular property. They would sell tire, wood, and repair automobiles. There is a number of people who would cross that crossing, but regardless, even if we were not to consider the people that cross the crossing, we have to worry about the Amtrak trains with the hundreds of people on board. We

have to worry about the freight trains with HAZMATS coming over that crossing, and with the employees on those trains and the people that live in this area. There is a town of probably about 15,000 people. That's our concern.

We want to find what's the best way we're going to take care of crossings like this. And again, we'll agree with the position of Mr. Gilbert, that we should

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leave that with the States right now.

And, Mr. Gilbert, this needs to be addressed here in California, crossings like this. There have been collisions at this crossing, including at lease one fatality, that I'm aware of, and other collisions involving injuries.

Thank you.

MR. COTHEN: Thank you, sir.

Any questions from the panel with this presenter?

Hearing none, okay.

Ron Mathieu from Metrolink is back with us.

Ron, you want to make some additional remarks?

MR. MATHIEU: The Southern California Regional Authority.

We inherited a lot of private crossings from freight railroad. We have all kinds of issues from port crossings that we've worked on to poor line of sights, but, you know, in addition, we've inherited crossings like, for instance, there is one in the Santa Cruz area that's it's an engineering construction company, and they transport like heavy equipment. I got some photos I can show you, but this type of thing where, you know, steel welding equipment and equipment that goes over this crossing, and a lot of times they don't contact us to get

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a flagman out there. And these things are unsafe. And a train coming around the corner and seeing something like that could present big problems.

I've seen some other derailments, and it's not pretty. Liability, of course, is a big issue. And how do we address liability with these old agreements? How do we get the new owners to take responsibility? Most of them will. If it's a small farm owner, they can't afford to pay for upgrades, flashing gates and enhance the crossing. So these are all issues that we're dealing with, which we could seek for protections from liability.

We're trying to do that as we renew the agreements and get the new license agreements. As Carol mentioned, other members and agencies that own the property have a license type of agreement with more indemnification. We're trying to see that. I would like to see where ever we can get some more funding, whether it's from the State or the Federal, to pay for some of these upgrades. Local agencies don't like to take responsibility for private crossings, but again, we're seeing the use change, we're seeing what used to be, say, let's say, one-family crossing is now a multiple-family

crossing.
We've got locations where there is a private school in Orange County, where they're selling parts of

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the property and incurring more ball fields, and there is school buses that use these private crossings, so we've got all kinds of different types of issues that we're dealing with.
Let's see. What else do I have?
You know, with respect to responsibility, if we could find out where we do obtain some funding, I don't know whether it's State.
Steve, do you know any State funding? You mentioned in your talk that there was some Operation Lifesaver money or --
MR. CATES: We put money into Operation Lifesaver for marketing and publications and that sort of thing. But when we use funds out of the public transit account, there is no exclusive prohibition against using that on a non-highway system. If we use highway funds, Federal or State highway funds, we absolutely are prohibited from using those on a private structure. But when we go in and do upgrades for our trap and signal projects with the railroads, the railroads are going through an upgrading. Let's say we're doing 20 miles of track and we'll identify the grade crossings and the private crossings, and the railroad will work with the private owners to do some grading and some things like that.
And some instances, we put in concrete panels,

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but we have the way we, I guess, write our agreements, it's not our money that does that. We enter into a cooperative agreement with the railroad, and there is usually a cost-sharing. And so the railroad agrees to pay, let's say, a certain percentage of the cost to put in this track and upgrade this 10 or 20 miles or whatever it happens to be. And so we pretend like all of those improvements at the private crossing are done with the railroads' share of the funds.
Now, that doesn't deal with the issue of liability. I'm scheduled to be deposed in a couple of weeks over some work that, I guess, was done at a private crossing. I'm not -- I don't even recall exactly what it was we did, but I'm being deposed, I guess, to find out what do I know about this. So it doesn't hold the State Highway Department exempt through the discovery process when we've done this sort of thing.
So that becomes a real concern when my attorneys now are, you know, admonishing me to be very careful about what we do at these crossings.
MR. MATHIEU: That brings up a question.
I know, Carol, you talked a little about liability and licensing agreements, Carol, and my question is: As a railroad operating through a crossing, is it better to have the public crossing have more

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protection as a public crossing versus a private crossing

with a good, solid agreement? Which would be better protection as far as liability?

MS. HARRIS: I want to hesitate about opining. This is actually beyond my expertise. I don't litigate these cases, so I haven't really got the experience. I just know that it's much better to have someone responsible for the crossing. And it has to do with the ownership or the responsibility for the adjoining roadway.

In most cases, that's kind of where you look, is whose road is it that is crossing the track? And if it's a private road, obviously what we want is a good, solid agreement. But if we can't get that, there have been situations in which we would prefer to have a public roadway authority take responsibility for that road, and so that we can work with them under the accepted formula for the public roadways.

MR. COTHEN: Ron, do you have anything else for us?

MR. MATHIEU: That's it for now. I may in a little while.

MR. COTHEN: We'll go around the room as many times as we need to here within the budgeted hour.

I did want to make clear one thing, and that is we talk about responsibility. And I hear some anxiety in the room about taking on responsibility that's not firmly

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placed on one. That's being called a volunteer. And the Federal Administration knows about being a volunteer. In 1994, stepped forward with the rest of the Department of Transportation and said we want to do some more about highway railroad crossing safety. We will search the statute books in vein to find any mandates for us to do that.

We just sensed that there was a void in terms of leadership with regard to highway rail crossing safety on a national basis, and we wanted to see if we could work with our colleagues from California and Louisiana and Minnesota and North Carolina and others to make things better. And that, in essence, is what we're doing here with regard to private crossing problems. And that is to gather as much wisdom as we can from those who have been working in the field and take it to the next level.

But from a statutory point of view, we're not burdened with that responsibility. We're just burdened with that responsibility from a moral perspective, I think.

Okay. Now is the time that I enjoy most about these meetings, when I relinquish the chair to my colleague to hear the discussion on some scenarios and what else that our teams have laid out for discussion.

Miriam will take the first.

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MS. KLOEPPEL: I'm sorry, I thought we had this loaded.

MS. CARROLL: I thought we did, too.

MS. KLOEPPEL: Technical situation seems to be taken care of. All of this is a small set of very sketchy little case studies in the hopes that they would prompt

some good discussion between people. So if you have additional comments or if you want to diverge, feel free.

This is literally just a springboard. It's not something that I intend to use to specifically adhere to. I would just start here.

This is actually something that was mentioned to us at one of our meetings. We have the sole access to an historical home. It has been provided for 75 years by a precriptive easement. A developer purchased the surrounding property and is planning to put in a large industrial complex to which he wants to put in a siding. The siding he wants to put in eliminates the private crossing leading to the residence.

I have a suspicion that's it's different in every State.

I guess the first question I would have is: Is there any organization that is designed to oversee or adjudicate any differences between this one property owner and another when it impinges on a private crossing like this?

MR. GILBERT: The PUC process could be utilized to resolve the disputes between the parties.

MS. KLOEPPEL: How would you hear about it? Would it come up in the Courts?

MR. GILBERT: They would have to file a complaint with the Commission. The property owner whose private crossing was eliminated would have to file a complaint, or the party who wanted to build the crossing -- or build the siding, I guess, would have to file a complaint to demonstrate that the crossing was unneeded.

MS. KLOEPPEL: Carol, you wanted to --

MS. HARRIS: I just wanted to say that you can't get a crossing by prescription in California. So that's actually an important difference maybe between California and other States. It's something other States should be looking at because that's almost impossible to monitor. You get people that build outlaw crossings and you have to be ever vigilant if you have a State that has prescriptive rights.

MS. KLOEPPEL: Asking, what is the mechanism for prohibiting? Is it simply just not recognized totally within State law?

MS. HARRIS: Here is the problem: If they're landlocked, you could post the crossing. If you found that it was one that was under a prescriptive claim, you could post it for closure. But then they could argue that public convenience and necessity requires their access. They would have to argue that to the Public Utilities Commission. But when they did, then they would be forced into an agreement. They would be forced to deal with the railroad. So that would be the way it would work, I think.

MS. KLOEPPEL: What about in other States, would it be -- Bob, do you have anything like that prohibiting preemptive easements in Washington?

MR. BOSTON: Not that I'm aware of.
MS. KLOEPPEL: So they can just spring up like that?
MR. BOSTON: Yeah. And I think they have, in conversations with Steve Mills from BNSF Railway who deals a lot with private crossings, they have found some in eastern Washington that just sprung up, farmer out in the field put some planks across mainline tracks to get his tractor across and stuff like that. And they could spring up occasionally.
MS. KLOEPPEL: Are you aware of anything within your State statutes, or even in the case law or whatever, which indicates the duration of time after which a preemptive easement has some kind of force?
MR. BOSTON: No.

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MS. KLOEPPEL: Okay. I had a few questions. And let's see.

So in some sense, what rights are assigned to the holder of a long established preemptive easement, it sounds like it's different from State to State.

Does anyone have any other perspective on that? Some of you railroads operate through quite a few States. I was curious to see what your experience might have been.

(No answer.)

MS. KLOEPPEL: I think actually a number of these have already been addressed, and I'm going to move forward.

In this case, a developer converts farmland to a large residential neighborhood. A private crossing that serves the farm suddenly sees a vast increase in traffic counts and the type of vehicles using the crossing.

This is something that we've been talking about a lot this morning. And one of the questions that I still have, even after hearing what California does and what other States might do is, who's going to know about the changes to the crossing? How soon is the railroad going to find out about a change like this?

Steve?

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MR. CATES: I'm not sure how the railroad is going to find out, but there should be a public hearing process under the California Environmental Quality Act that would set forth the conditions for the developer to change that farmland to a residential neighborhood. Since there is a change in zoning, it would be a public hearing one.

Kevin, you've done a lot of these. It would more than likely entail an amendment to their general plan, so there would be a long -- not a long -- but there would be a fairly lengthy hearing process.

I was director of the Environmental Counsel of Sacramento for five years, and my experience is a process like that probably would span a period of two or more years.

MS. KLOEPPEL: In your experience, has the question of grade crossing safety come up in these environmental

hearings?
MR. CATES: You know, I'm kind of embarrassed to say this, but I worked for CalTrans at that time and I was an executive director on the California -- the Sacramento -- Environmental Counsel of Sacramento. And I can't remember when it was. It was around 1985 or so.
Even though I worked for CalTrans and worked financing rail projects, it never really occurred to me to even consider the impacts at the railroad grade

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crossing. And our experience at CalTrans is that cities and counties do not consider the impact at public or private railroad grade crossings when they are entertaining changes in their land use.
We had a situation in Sacramento County, Sheldon Road. A developer developed property, owned property on one side of the railroad crossing. The road was widened all the way up to the crossing, and then a barrier was put on that lane. And it was just two lanes on the other side. And so, you know, the county didn't do anything to mitigate the traffic impacts from the crossing and allowed the roadway to be widened right to that crossing. And I have seen that in a number of instances.
MS. KLOEPPEL: I saw your hand first.
MR. BOLES: And the widening is actually illegal in California. Under our General Order 72(B), Part Three makes it illegal to make a bottleneck at a rail crossing. Also, for the development, we now, as Carol Gilbert (sic) had mentioned earlier, we look at environmental documents for even major projects, there are some minor projects that are categorically exempt that we don't have the staff to review at this time, but it's almost improbable for a project right now to go through without our staff getting involved.

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MR. MATHIEU: I want to say what Kevin said. Our agency also looks at amended plans for local agencies, but we do comment on any adjacent developments to the railroads. And railroad traffic impacts is one of the big areas we comment on. So we look at that, as well.
MS. KLOEPPEL: Carol, you had your hand up?
MS. HARRIS: I just wanted to say that CalTrans, another wing of CalTrans actually was very helpful in one of the cases that we dealt with, which is an application for a new closing where it turns out that CalTrans Division 3, which is outside of --
MR. CATES: Our District 3.
MS. HARRIS: -- had submitted comments in an environmental review process for an industrial park pointing out the grade crossing access and grade crossing problems, and it was very helpful in the context of the later Public Utilities Commission proceeding. And I think we, also, in addition to the efforts that the PUC is making to try to monitor these developments on long right of way that could impact crossings, we're independently trying to get on the early side of the

curve where we can, and to get comments in the record in the environmental review process.

MS. KLOEPPEL: Steve, you had --

MR. CATES: Carol mentioned our comments from our

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District 3, our division of rail worked with our District 3 on commenting on that, and what has led to this commenting.

Up until about a year ago, we had a legal theory that CalTrans could not comment on the impacts at railroad grade crossings where there are local streets and roads. We only have direct authority or explicit authority to be a responding agency or to comment when it impacts a State highway. But apparently, there has been some changes in State law, and we've come up with this legal theory that our passenger rail service, passenger rail service both provided by CalTrans and by Amtrak and by the commuter rail agencies provide an alternate route to the freeway, to the State Highway, and, therefore, if a development has an impact on a grade crossing, our districts are required to review and evaluate the environmental document and comment on those potential impacts to the grade crossings.

So we've kind of developed this kind of new theory on how we're approaching that. We issued a directive on that about a year ago.

MR. GILBERT: I wanted to mention a couple of things about the environmental process here in California.

The environmental documents go through a State clearing house, so that's where everybody gets their

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notice about projects and environmental reviews that are underway. And the agency generating environmental documents must respond to comments it receives.

However, we find that they don't always respond in the proper manner, and getting local officials who sometimes have other motivations in approving projects to fully appreciate the comments that we do offer regarding pedestrian/motor safety along the rail corridors is sometimes an uphill battle. And there are times when our comments are sort of not completely in order, at least minimized, and the projects, you know, ultimately go forward.

Our goal is to ensure that the crossings are upgraded as appropriate pursuant to the development, but we find that that doesn't always occur, even if we raise the flag.

So then we're left with the dilemma: Do we challenge the environmental document?

You know, obviously, that involves a lot of staff time and a lot of effort on legal staff and, you know, we haven't challenged one specifically yet, but I think there are some projects that may merit such a challenge.

MS. KLOEPPEL: That's interesting.

So at the moment the only method you have for

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challenging or disputing something is through a complex and time intensive process?
MR. GILBERT: Right. You would have to challenge them in their C.E.Q.A. approval process.
MR. CATES: And there are specific timelines established by statute in which you have to respond during different parts of the process. So, one: You have to be noticed that this action is being taken by the local agency, and two: You have to actually have read that notice and respond within the appropriate period of time or you miss your window of opportunity to comment. So that provides a burden, too.
MR. BOLES: I would like to add on to Steve. If they do minimize your comments, you can then give comments to their comments and file them prior to the Board of Supervisors or City Counsel approving the project, and then you can only legally litigate against specific comments that you have made. And that's pretty much the mechanism.
MS. KLOEPPEL: How long would this take?
MR. BOLES: Well, you get the initial notice. And the standard is 30 days review period, even though it can be up to a hundred and eighty days. And then, depending, generally, it can be 14 days that you have to do your follow-up comments.

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MS. HARRIS: Let me explain the context in which this arises, this suggestion that the public agency, either the PUC and/or the Department of Transportation, or separately, the railroads are injecting themselves into land use planning decisions and the environmental review process associated with that. And we, too, are in the same position where we have submitted comments and we see that our comments are really not being given as much weight as they should in that environmental process or are being glossed over.
We also have the very difficult question of asking: Are we going to expand the kind of resources that you have to expand to find a land use planning decision that doesn't maybe directly, immediately impact the railroad, but will only impact it after the fact?
For example, when we get complaints about horn blowing and we get requests for new crossings, one thing, as far as crossings go, the PUC, they actually sort of have an ace in their hand in this process, because if they do flag in the environmental review process that they may have difficulty getting approval for a crossing before the PUC, and that gets ignored, when that application comes before the PUC, it can be a very rough process for the applicant, public authority that is seeking the crossing. So they have, later, when the

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actual application is filed, they do have some clout in that process. But even that's difficult because of the public convenience and necessity considerations.
MR. GILBERT: One more comment.
We have -- in order to try to get out our

message, we have requested from our State Department of Finance some increased funding to hire additional people to supplement what we're doing on the environmental side so we can get out and meet with local planners and county officials that are approving these projects to make sure that they understand the repercussions on the rail corridors, and specifically, the crossing.

So we are hopeful that we will be given new bodies to go forth and do that work.

MS. KLOEPPEL: Dave?

MR. PETERSON: The comment I would like to make is we're doing a lot of discussion about what California, which, on our system is one of the very few States that actually has a mechanism in place to address the situation exactly like this. The vast majority of States we have, we operate in, there is nothing in place to even call attention to the railroad, the State, or if the State has a regulatory body that they need to look at safety aspects of private crossings that are being converted into a large residential development or a large

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commercial area.

And, typically, what will alert us in the crossing safety area is that either an incident occurs or, as Carol Harris mentioned, complaints come in pertaining to whistle noise. And there is a definite gap in place here. This is even worse in States, the non-regulatory States where we operate in where there is not a PUC where we can go to and say, hey, this is now de facto public crossing and the road authority needs to take it into their road system to make sure all of the signage that's in place for motorists are going to conform with the MUTCD.

It is a real problem that exists out there, and we see it, unfortunately, far more frequently than we care to and what you would think.

MS. KLOEPPEL: Thank you.

Any other comments?

I did have an additional question on this one. What if the city or some public entity chooses to adopt the crossing, make it public. Is there any mechanism for reporting this to the State and to the railroad?

Go ahead.

MR. PETERSON: Well, as I mentioned, when we were in Fort Snelling, in some cases there is, but in many cases both neither the railroad or the State agency that keeps

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track of the crossing records are not updated by the Public Road Authority or the political body that they have accepted a private roadway into the public road network so we can make sure that the signage is correct, that it's now being reviewed by the State and the railroad out there providing the data that's needed for evaluating the crossing devices on a regular basis in accordance with the CFR. And in many States, that mechanism does not exist.

MS. KLOEPPEL: Okay. Go ahead.

MR. JINBACHIAN: Varouj Jinbachian, J-i-n-b-a-c-h-i-a-n, with the Public Utilities Commission.

I had a recent project like this where it was a private crossing and there was a development, and the city took over the private crossing and filed a formal application with us for a new public crossing. We met with them and they operated the warning devices, so there is a formal process.

MS. KLOEPPEL: In the State of California?

MR. JINBACHIAN: Yes.

MS. KLOEPPEL: Any other States?

Is there a process in Washington?

MR. BOSTON: If it goes to a public crossing, if they take a private crossing and want to convert it into a public crossing process, very much like California PUC,

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it goes to a hearing Commission.

MS. KLOEPPEL: Is a hearing a time-intensive process?

MR. JINBACHIAN: It's not always necessarily a hearing. If they file an application and all of the parties are in agreement, then we draft and it goes on to their consent agenda. And there is no hearing held in that case. If there is a contested matter, then there are hearings held.

MR. BOSTON: Very similar in Washington.

MS. KLOEPPEL: So it's not necessarily a long and arduous process and doesn't take necessarily a whole lot of staff time?

MR. JINBACHIAN: Correct.

MS. HARRIS: The benefit, though, of this process is that it does allow for diagnostic, and the railroad would be allowed in that diagnostic. And so you've kind of got a meeting of the minds where the public railway agency, the regulatory Commission, and the railroad, determine what is needed at the crossing to accommodate the intended use, and it also provides an opportunity for evaluating the potential for possibly eliminating crossings that are nearby, as well as grade separation. So these provide valuable opportunities when this occurs to try to promote rail safety, generally.

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MS. KLOEPPEL: Great.

Anyone else?

Very simple case here. You have a private crossing that is apparently unused in various places. Are there processes for identifying the crossing holder? Is this something that -- I understand, on occasion, this is something that railroads are faced with.

Do you have any process?

MS. HARRIS: I have had a lot of experience with this one. The process for identifying the crossing holder, of course, is to review to the extent you can the applicable deeds and the crossing agreements. In addition, if you go a step further and get access to title records, sometimes that gives you some clues, but that is a very arduous process. And in California -- I

think maybe Union Pacific is the only one that's actually required to do this -- we're supposed to post private crossings before we close them to give notice to anybody who is using them before we actually close them.

Where we haven't posted them -- and that actually led to this requirement where we post them -- we did close some that we thought were not being used some years ago, and there was -- there were regulatory processes in response where we had to open some of them, not all of them, but some of them where we had landlocked

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users.

So then, again, California has a pretty well defined process here for dealing with these situations. I think in other areas, I think it's a little bit wild and wooly.

I know in Nevada where I've also had some experience, we have crossings pop up and we have crossings that we have removed sometimes without retribution. But sometimes we've had to reinstate them. So it's hard to know that a crossing has actually been abandoned or isn't used.

In a definitive way, sometimes you have an absentee owner that comes back and suddenly has a use. And that happened at one of our California crossings. We had an absentee owner, and the crossing was being used by high school students to access a river. And it was very unsafe. And that was one of the ones we closed, but the owner was in negotiation with the local sanitation district to sell the property. And so it became a very costly process for us because we had title companies, we had a whole battalion of people fighting to reinstate that crossing.

And so, for the railroad, this is an enormous expenditure of resources to deal with these situations. It shouldn't be underestimated.

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MS. KLOEPPEL: Thank you.

You've answered a couple of these.

Any other comments, questions?

Anya?

MS. CARROLL: I've got a lot of questions coming up.

MS. KLOEPPEL: Thank you for your comments. I think they've given us more that we can dig into at this point.

I'm going to hand it over to Anya Carroll who is going to go through some scenarios here.

MS. CARROLL: Thanks, Miriam.

We're going to shift the pace a little bit. It's getting late in the afternoon. People probably want some coffee.

We're going to go to some game show questions and answers. There is no wrong answers. There is only right answers.

MR. MATHIEU: Do we have a prize?

MS. CARROLL: We got a prize. You get a picture of my dog. How is that?

MR. CATES: Can we get it signed?

MS. CARROLL: By the dog, yeah. She has signed birthday cards.
MR. CATES: That way, I can show it to my dog.
MS. CARROLL: So what we would like to do, we did some brainstorming on the FRA team and came up with some
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scenarios that we would like you to think about and give us some possible responses to.
What would happen if U.S. D.O.T. establishes a requirement that every private crossing have a standard formal agreement, and for those crossings for which the agreement cannot be found or could not be created, they would be closed?
MR. BOLES: Can I ask you one question?
MS. CARROLL: No questions, only answers.
MR. BOLES: Would you consider a deeded agreement to be a reasonable agreement from something from the 19th century?
MS. CARROLL: That's up for debate. In California it says it has to be a written agreement. You know, maybe we're looking at a standard formal agreement. Would that include deeds? Would that include preemptive easements? Would that include written? That's up for debate.
MR. MATHIEU: Can we make it a requirement that even private crossings have a current or updated standard formal agreement, not an old 1920 agreement, but something that's current?
MR. GILBERT: That changes it a lot, though. That changes the amount of work that the railroad would have to go through. I mean, that's a big change. When we
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discussed this in the context of our revised General Order, we talked about a number of different vehicles that could be the formal agreements that we're talking about.
And we were talking contractual agreements, deeds, and some of these documents we realize are over a hundred years old.
But that having been said, Ron's point is well taken. The agreement established a hundred years ago is probably not valid today.
MS. CARROLL: Carol?
MS. HARRIS: Unfortunately, the deed that was established a hundred years ago probably is valid today, and that's going to be a real serious impediment to this proposal because you'll find yourself in court right away. There are court remedies that those deed holders can resort to if we were to tell them we're going to close your crossing if you don't sign this paper. We would find ourselves crosswise quite quickly.
MR. JINBACHIAN: I think the important point there is that the agreement has to be found. If they don't have that piece of paper, they can't go to court. If they do have it, then there is no problem. So I think that might work.
MR. PETROSSIAN: I think you needed to change the

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question and not use the word "standard". I don't know if there is such a thing as a standard formal agreement.
MS. CARROLL: That's not to say that a standard agreement can't be customized based on comments that we've heard earlier based on terms and conditions that are negotiated between the railroad and the holder.
But is there a need for a baseline standard agreement that people could use and then negotiate to that standard so everybody starts off having certain aspects covered?
MR. BURCAT: Yes. My question would go to who has the onus to have a copy of that agreement?
Obviously, the railroads would be very happy to have all private crossings closed for safety purposes.
Does the onus fall on the property owner to maintain the copy of that agreement or the railroad to maintain a copy of that agreement?
MS. CARROLL: Good question.
What's the answer?
MR. MATHIEU: I think both parties are party to it.
It said if there is two parties to the agreement, the private entity that owns the crossing and the railroad, they should both have copies of the agreement.
MS. CARROLL: But if FRA or U.S. D.O.T., whether it
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be a Federal highway or FRA establishes this requirement, shouldn't they have a formal copy of that agreement to say that it's sanctioned and it would be archived, and in yet, a third place?
MR. PETROSSIAN: The other thing is in California is deeds can be recorded with the county recorders, so you would have a formal record.
MS. CARROLL: Within the locality?
MR. PETROSSIAN: Yeah.
MS. CARROLL: So in that county if it's a legally enforceable agreement, then I think that would be fine.
MR. CATES: But it may or may not have been filed with the county recorder at the time like a license agreement, revokable permits, things like that, that the railroad typically issues.
If I were a landowner, I don't think I would go to the county. It would never occur to me to go to the county recorder to file something.
MR. JINBACHIAN: Then they don't have one, and they're out of luck.
MR. CATES: Unless you can find a copy.
MS. CARROLL: I think to search back to find some of these records, from what we've heard in North Carolina and somewhat what we've heard today here, is that even to find these kinds of documents is very difficult.
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So anything further, Carol?
MS. HARRIS: Another problem is that you're going to negotiate a class between the Federal regulation and the State provisions for public convenience and necessity,

and I think that that is something that would have to be addressed in imposing this requirement because those are very significant competing interests.

MR. CATES: Also, the Federal Constitution doesn't give the Federal government the authority over States' rights to control property. So you're dealing with the property rights. That's the exclusive authority of the State.

MS. RANDOLPH: I think from the practical aspect of the second part to your question, you're going to have a lot of issues created on the local level. You're going to have calls come in to you from the mayor, from city counsel members, State senators, and, in particular, first responders, fire personnel, police officers if you go out and close a crossing. And there is no alternative access or try to close it. There is going to be a lot of problems. It's going to take a lot of time to do it and you won't be able to do it.

MS. CARROLL: So, if one of these -- say, then, landlocked property, since its sole access would be exempt from this kind of agreement if there is

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alternative access?

MS. RANDOLPH: Of course.

MS. WATSON: Then you might have somebody like one of those previous situations come along and build something that blocks other alternate accesses, then you're stuck in that landlocked situation again, which you can't necessarily predict.

MR. PETROSSIAN: I don't know if you really want to go there, because then you have the due process issue with at least the PUC. So, if we wanted to close a crossing, the property owner could go to the Commission, get a formal hearing that will take a year and a lot of resources to do that, especially with 4500 crossings in the State, so I don't know if the U.S. D.O.T. wants to take this on and have a huge warehouse to put all of these agreements in.

MR. COTHEN: We were going to contract that to the Volpe Center.

MS. CARROLL: Okay. So that was a great discussion on that question.

And I think earlier in the day we've heard from a number of you who said leave the control with the States. We don't want the Feds involved in regulating private property. So I think that what you've stated supports those previous statements, so let's go to

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question number two.

Everybody ready?

A new independent. What if a new independent Federal agency, similar to the Surface Transportation Board were created to oversee the resolution of private crossing disputes?

MR. PETROSSIAN: We have it here at the PUC. I don't think that that would help us at all.

MS. CARROLL: So what we've heard today is at the

PUC you actually have a dispute resolution process?
MR. PETROSSIAN: My suggestion would be that the FRA come up with some kind of legislation or other recommendations for those States like Washington that do not have it. But we do have the alternate dispute resolution, and we do have due process. We have the hearing process. So that is already taken care of in California.
MS. CARROLL: Okay. Thank you very much.
Carol?
MS. HARRIS: You would need to get a new jurisdictional grant of authority of some sort to be able to also involve the private parties that are using the crossing. I mean, that's one of the dilemmas that we always face is that we have the regulatory agency and they regulate the railroad, but it's only when we can

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somehow get a private party to come into the Commission proceeding, usually because they want something or they're about to have something taken away, that the Commission actually even has some ability to influence their behavior or condition.
The crossing, you would have the same problem at the Federal level. You'd be dealing with private parties and you would be looking for legal case to get hooks on them, and that can be quite difficult.
MS. CARROLL: Thank you.
MR. JINBACHIAN: I want to get back on what Vahak was recommending about giving recommendations to a State. If the recommendation comes from Federal government, that politically it might be easier to get State legislature to adopt a new law. So that might be helpful in that respect.
MS. CARROLL: So is there a consensus that some support would be nice in this -- California may be pro-active and ahead of the curve, in front of all of the other States on this, but maybe if some of the railroads would comment -- are other States moving in that direction or would they -- would they find this helpful?
MR. SCHWARTZ: They're certainly not moving in that direction. I can say that with some level of assurance from the standpoint of private property owners. Already

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got a form and forum and that's called county courthouse.
MS. CARROLL: Right.
MR. SCHWARTZ: And getting divested in the county courthouse and jurisdiction is likely to be a battle of monstrous portions. The interests involved in preventing loss of that jurisdiction would be rather substantial, as you can imagine. Local interests are just not wanting to have to deal with Federal agencies that are going to be a whole lot less sympathetic to them than the local elected judge is going do be. And that's a reality that you have to face square right in front of you in dealing with an issue like this.
MS. CARROLL: Okay. Thank you very much.
Any other comments on this question?

MR. PETROSSIAN: Can I piggyback on what Carol said? And that's the regulation of PUC over the railroad.

When we tell the private property owner we can't enforce anything on them, but what we did was we told the private property owner that unless you do this, we're going to tell the railroad to close the crossing. So, that's where our --

MS. CARROLL: Your hook?

MR. PETROSSIAN: Yeah.

MS. CARROLL: Okay. Well, every hook we can get is a good catch. More fish that way.

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Question number three: What if -- and we could fill in the blanks here -- anybody could do this -- what if the U.S. D.O.T. provided guidance or standards on crossing design and warning device implementation at private crossings?

MR. JINBACHIAN: I think it should be the private or public crossing. They should be treated the same. So in that respect, since there is the technical working groups, guidance documents should be applied to private crossings. So I don't know if there is a new need for a standard for private crossings only.

MS. CARROLL: But a technical working group, I was involved in that group. We did not discriminate between the types of crossings that you see more of, as far as being private, like the industrial crossings and recreational crossings and those types of crossings. If you have propane tankers going across this railroad track at such a frequency, you might need to have gates and lights, that kind of thing.

MR. JINBACHIN: My point is if we were looking at public crossings, we would consider all those, what you just mentioned. So if we're looking at private crossings, again, look at the same issues. And if they're valid, then we recommend gates. If not, it doesn't make a difference. If it's a private or public

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crossing, we're going to look at how it's being used, the railroad traffic and all of the other important factors.

MS. CARROLL: Okay. Any other comments on this one?

MR. COTHEN: Let me just revise the question a little bit. We said this is a great thing to bring the issue of responsibility to California because they're taking responsibility. It's also, you know, there's also a downside to that, and that is that the rest of the nation, by and large, is not so well situated.

Let's put aside -- let's assume that California is in a state of nature and, therefore, we don't have engineering expertise at a State level to apply to private crossing issues. Okay. We don't have public roadway authorities taking responsibility. We don't have regulatory agencies taking responsibility. One of the assumptions that we've sort of made over the years, subject to it being revised, was that if somebody was going to deal with a private crossing issue in the absence of the active involvement of a State regulatory

agency or State D.O.T., that we would need to have some warrants for what fits in various types of crossings that were reasonably standard or we wouldn't make much headway. We don't have the engineering expertise to apply to it, again, in California, which is the State of nature, or Oklahoma, or whereever.

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Is there any prospect, given the complexity of the issue, that we might call out some baseline warrants for various types of engineering improvements, and would that help in terms of providing some degree of uniformity with regard to the safety improvements of private crossings?

MS. CARROLL: You would start off with a minimum requirement of a stop sign and a private crossing sign.

MR. COTHEN: Can I retrogress a little bit.

California and a couple other States have provided for use of a cross buck with a stop sign as default, three major class one train railroads have signage campaigns across the nation basically taking that kind of pattern. So either by State law or as a result of railroad actions, that is the default signage at the majority of private crossings in the United States.

And we actually had suggested the same thing in draft guidelines that were put in a file drawer somewhere. Thereafter, they had some, you know, 10 years ago, and that was long after California had also been a league away. And we tried to have a discussion about this at our last stop. And I think it was fine, but I would like to hear more on it. Right now, where the committee for uniform traffic devices seems to be headed on the public side is default signage would be cross buck

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with a yield sign. Stop sign is indicated based on an engineering study and some other criteria that are called out in the technical working for it and Federal Highway Administration memo, and we hear from time to time that it makes sense just to apply the Manual for Uniform Traffic Control Devices or MUTCD, to private crossings, as well with some experience. How do we feel about this? Is the cross buck and stop sign the appropriate default signage?

MR. PETERSON: I would like to comment a little bit about the National Committee For Uniform Traffic Control Devices, working on -- dealing with signage at private roadways.

What they did was they were discussing signage at roadways that are private roads that have public character. And, accordingly, when you have a road that meets that criteria, they were recommending that the standard signage that is normally in the manual for uniform traffic devices for public roads be used on those roadways.

Where that applies to private railroad crossings is if you have a private roadway that has public character, such as it goes into a shopping mall or to a recreational area, in those circumstances they feel

like cross bucks with a yield sign or cross bucks with a
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stop sign, when a study shows it as being warranted, should be considered.

It was specifically with the ones with public character. I just wanted to put a little clarification on that.

The majority of the crossings that we run into on my railroad don't fall under that character. They're going to be private crossings for the single user or private crossings serving a farm access or something along that line.

MS. CARROLL: Thank you, Dave.

MR. JINBACHIAN: I'm not an attorney. As I understand the rules with MUTC, that applies even on public roads where you get Federal funding for the project then you have to comply with the MUTC.

MS. CARROLL: Minimum.

MR. JINBACHIAN: If it's a private crossing that is not getting any Federal funding, how can the Federal government require any type of warning devices, which was something that Steve brought up earlier? I think it's a constitutional issue.

MR. CATES: I think it would be through the regulatory authority, through the railroads, then the signage would be installed on the road right-of-way.

MR. JINBACHIAN: It would be railroad required, not
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a property owner requirement.

MR. CATES: I think that's the way it would have to be.

MR. COTHEN: There has been a little further background. There has been discussion within the Department of Sanitation about applying the MUTCD criteria to private crossings, and at one point, the Federal Highway Administration entertained that.

Further conversation in the department the feeling was that it would perhaps be an empty statement to say you need to do this, but number one, we have no authority to tell you to do it, and number two: We have no money to tell you to go do it. And that's the reality of the Federal Highway program, of course, in terms of the limitation of the scope of that grand mechanism.

And so it was felt that through the process that we're trying to set in motion here we would make whatever decisions needed to be made at the Federal level, which might include the requirement to go for additional regulations or whatever.

Certainly, the Federal Railroad Administration could, I believe, require -- counsel, I think, feels the same, having worked on the issue as long as I have -- that the Federal Railroad Administration could require minimum signage be placed on railroad property if that
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were an appropriate role for us to undertake. There is no requirement that would issue regulations in the area.

MS. CARROLL: Carol?

MS. HARRIS: Yeah. Just putting on my AAR hat, I do want to caution, it's easy when you're operating mainly in one State that has a well developed regulatory scheme to things that might be simple or easy, but when we go to all of the States, you've got so many different situations, it would be very important. Just as MUTCD process involves a lot of technical input and technical review, it would be important to have that on any effort to provide guidance or standards that would operate independently under an FRA umbrella, but additionally, you need to look at cost effectiveness, and you need to look at what would be involved with implementation. Because I think the worst things would be to create a situation where you had a lot of resources being expended for something that didn't buy that much incremental safety, particularly where you've got different standards that have been adopted and that are working reasonably well in different parts of the country. I think it would require very careful review to come up with something that would be reasonable and that could be successfully done.

MS. CARROLL: On, yeah, the document that we've been

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discussing, besides the MUTCD is the technical working groups, the U.S. D.O.T. technical working groups guidance on warning device applications. That was done over a 12 to 16-month period of time. It brought in private and public stake holders, as well as the railroads, the utilities, the suppliers, and it allowed the group to come up with a consensus by crossing type, passive crossing, active crossing, grade separation, and it came up with performance guidance as basically what the document holds. And it was a very good effort and it was a nationwide consensus effort looking at who is doing what and what works right.

So I think over the course of the three meetings we've had now, including this one, that document keeps resounding as a good performance guidance document for use, and we just want to know how do we need to change it for private crossings versus public crossings, and our friends from PUC say why don't you use the same thing.

MS. HARRIS: Well, I have to actually add an important caveat here. I am not sufficiently familiar with that work to really be able to state a position on behalf of the AAR, but I know that's something that they would want to be able to opine on, and I'm sorry that I'm not.

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MS. CARROLL: That was part of the participants that generated that document, so...

MR. CATES: One thing about the guidance document, it's a guidance document only, it's not a regulatory document like the MUTCD. So on State highway projects, if we were to go out and apply standards, we would be looking to the MUTCD and not to the guidance document.

Now, the guidance document may be referenced

during an engineering analysis or engineering study as providing some direction to the traffic engineers to an appropriate evaluation technique or methodology or whatever at the crossing, but it wouldn't -- it doesn't establish a warrant and it doesn't establish a standard.

The other issue Carol talked about was the economic impacts. That's one of the things that you're supposed to do in every engineering analysis is consider and evaluate the economic impact of the proposed improvements.

If we look at putting in just some signage probably cost about $2,000.00, to put in a post with a couple of signs on it, but I'm not sure what our average cost is to improve a grade crossing with flashing lights and gates, but it's probably around $275,000.

Now, if you've got a landowner that, you know, I mean, if Union Pacific came to me and said, oh, Steve,

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um, we need you to contribute $275,000, you know, to put in some gates and lights here in your driveway so you can be protected, I'm not really sure that I should state in public what I would tell you people. But you know that's close to the value of my home, you know.

So how do you enforce something like that? I would just say, fine, if you guys want to pay for it, I would be happy to have it, but I don't want that bell ringing at any time that I'm here, so you need to go through a quiet zone process. And, you know, I can just imagine all kinds of problems with this when we get into the dollar value.

MR. COTHEN: And when we get to the next stop in New Orleans, we'll be talking about data sheets. And the reason we need data is in order to make decisions that are cost effective. And so I'm sure that the California Department of Transportation and California PUC will be very supportive of our need to gather that data, as you have been over the years.

MR. CATES: We don't have traffic -- good traffic counts of public crossings, so we can't give you any at the private crossings. I mean, that's just a real problem for me. I go to look at these grade crossings and many times the traffic information is 15, 20 years old.

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MS. CARROLL: Or it's extrapolated from the closest State highway available?

MR. CATES: Yes.

MS. CARROLL: Okay. I think we're going to move on.

MR. PETROSSIAN: I think when you're extrapolating the role of the private crossings, that is major public use, like you're talking about the shopping centers or a development, then I think that's when we need to encourage the Public Road Authority to take it over. And then at that time, then we go into diagnostic and require whatever bells and whistles are necessary. And if it's a public road, then we can also, over Section 130 funds, hear if it's there.

So I think that one of the things that may be needed is to encourage States to maybe pass the legislation requiring local governments that when they are granting development rights and they're going to get sales tax revenue and property tax revenues, that along with that they pick up that public crossing as a public road. So that, I think, goes hand-in-hand.

MR. CATES: I think that's a good idea because that's confusing when we're doing these 130 projects. A lot of times we found that grade crossing, in fact, is in public use but not owned by the city or county, and so we can't use Federal funds to make improvements to that

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crossing.

MS. CARROLL: Okay. Thank you. I think that was a very great point you made there.

We're going to move on because we have more than 10 questions, I think, and we don't want to stress you out too much.

So what if -- moving on, we're going to talk a lot about guidance and performance guidance and standards and guidelines. What if organizations such as AASHTO, AREMA, the National Committee on Uniform Traffic Control Devices were to actually include sections on private crossings in all of their existing guidance and standards, say they picked up on public use/ private crossing issue, would it be useful to have guidance in these areas, in these documents that said that this is what you need to do? Besides the fact we don't know who is going to pay for them.

MR. CATES: Yeah, because then it provides something for the traffic engineer to, you know, cite in his engineering analysis.

MR. MATHIEU: With respect to railroads, more guidance or stuff we have to hang on our hats, the better for us to come in and say you should have this.

You tell the private property owner you need to have gates. Why? Because we feel it's safer. But the

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more guidance or documentation I think the better we would get. But, of course, funding is going to be a big issue. And I think funding could be -- if funding comes from the Federal government or where ever it can be used as an incentive. Going back to the previous question, issue number two, I think what if you were either going to get agreement or close the crossing, what if we were to use funding as a way to get them to -- incentive to sign the agreement? If we were to help them, say, 50 percent of the costs or something, through some type of sources, that would give them incentive to sign the agreement, so...

MS. CARROLL: Thank you, Ron.

MR. MATHIEU: And, yes, I want to repeat my answer to one of the previous questions, to treating public same as private, one of the concerns I have is for private crossings is you have a lower threshold or warning devices are lower for public where you have public used

private crossing for at a mall, your public usage, because it's public, someone might say we should put a passive sign, whereas a public one, you might have to use a gate. So standards might work against us. So I would want to caution against having separate standards for private crossings.

MS. CARROLL: Well, I guess the way -- from what I

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was hearing from the discussion, maybe we should separate like there is now, a farm crossing is treated differently and has a different definition than a private crossing, or there is a special category of private crossing.

In our meeting in Fort Snelling the consensus of the group was you have to define all of the different types of private crossings to be able to categorize them in a way that makes them -- you look at the user type, the frequency of the vehicles and the trains, and to start to collect the data that you need to do a risk analysis.

MR. GILBERT: I think that would be a critical part of any sort of inclusion in the existing standards or guidelines or development of your own. If the document that you come up with requires Steve to put $275,000 in warning devices at the end of his driveway, then something has gone horribly wrong. It should be based on the usage, the crossing, and the expected traffic, and I wouldn't expect warning devices -- active warning devices at the end of a driveway for a single residence, so I think that's an important distinction.

MS. CARROLL: Unless they get an awful lot of mail deliveries.

MR. PETROSSIAN: And then once you go into doing that analysis, that's the same as diagnostic for public

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crossings.

MS. CARROLL: Exactly.

MR. GILBERT: The only benefit that may arise out of it is that you would capture the extremely low use crossings and the specialized crossings that maybe you could establish some minimum guidelines for.

MS. CARROLL: Right.

MR. GILBERT: Which you wouldn't necessarily expect on public roadways.

MS. CARROLL: Right.

Well, thank you. That was a very good discussion on that one.

MR. PETROSSIAN: You should have sent the questions out beforehand.

MS. CARROLL: You should have had railroads on one side, States on the other. We should have types.

Here is the next question. What if the railroads were to require all private crossing holders to obtain liability insurance?

MR. SCHWARTZ: Easier said than done.

MR. PETROSSIAN: It's a contractual agreement.

MS. CARROLL: It's good if you can get a contract.

MR. SCHWARTZ: The railroad doesn't always have thet

the ability to require it. If the railroad is holding its title to the property at the acceptance of a property

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owner, how could he go back to the property owner and say we demand that you have insurance, we have an easement on somebody's property for railroad right-of-way, or if we have that railroad right-of-way by means of a deed, which, in the deed has a requirement for a crossing, how does the railroad go back to the property owner and say, well, you had this by deed, but we demand that you have liability insurance when we contract for a private crossing. We routinely have that. But that's only where we have the ability to contract.

MS. CARROLL: Right. So is it an exception versus the rule or is it the rule versus the exception?

MR. SCHWARTZ: I'm not sure I can say which is which.

MS. CARROLL: Carol?

MS. HARRIS: Well, it's actually quite difficult even to get agreements where you have mutual private parties involved to bring everybody to the table to get them to sign the same agreement and they have different situations in terms of their ability or their inclination to secure liability insurance. So it's different.

We often have, when we're in negotiation with licensees, they will ask us where can they get this insurance. And it's -- this isn't simple or easy, either, to get those policies. Then there is quite an

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administrative and maintenance process, just to be sure that the policy each year is reinstated.

So it's a big job and one that I think it's not really a one-size-fits-all.

MR. COTHEN: Thank you.

Are we through with that one?

MS. CARROLL: Yep.

MR. COTHEN: Time for a break. Let's take no more than 10 minutes so that everybody will be able to get close to an early quitting day, hopefully.

(Recess taken.)

MS. CARROLL: We're going to move on now to question number six. If I could have everybody come back and join us, that would be wonderful.

What if a Federal agency, FRA, established a process of working the creation, evaluation and improvement of private crossings, it's a little bit different than setting standards and guidance for what you put there, criteria for creation, evaluation, and upgrades?

MR. GILBERT: That sounds like a combination of requiring an agreement and setting up guidelines and standards. I think it's a combination of question two and four.

MS. CARROLL: So is that a good thing or bad thing?

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MR. SCHWARTZ: Are you talking about something that would apply only to the creation of new crossings or

would it apply to existing crossings as well?
MS. CARROLL: Well, you can take it by subcategory so we can talk about it, just creation or we can talk about just evaluation of those crossings, either by diagnostic or change of views or you can talk about improvements such as standard guidance, performance guidance, a body of work.
MR. PETROSSIAN: I guess the question is does FRA or any other Federal agency have a process in governing the creation or evaluation from a public crossing?
MS. CARROLL: Good question.
MR. COTHEN: Got us there.
MS. CARROLL: So it will be retrofit, we'll do prior crossings first and then work backwards?
MR. CATES: From the perspective of CalTrans, our only authority is one where we're using the Federal Section 130 funds and then we follow the regulatory process and guidelines set forth for that program. But other than that, we don't have any authority over any of that creation evaluation or improvement of any crossing unless we're using those Federal funds.
MR. COTHEN: Let me just clarify that there is public participation, clearly, with respect to public

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roadways, and it doesn't have to be at the Federal level, it can be at the State or local level, county, city, State of California, the California PUC.
We're thinking about the rest of the nation in the absence of any public involvement in decision-making related to private crossings when the national network serves the nation as a whole and public interests at large is involved.
So, you know, we're not trying to transfer the template from public crossings to private crossings here in this hypothetical that we're asking.
What we are saying is in the absence of action at the State level, elsewhere, is there any opportunity for some helpful role from the Federal side so that the public interest in some way is considered as these crossings are created and as the uses of these crossings change?
MS. CARROLL: Peter?
MR. BURCAT: What is the formula for preemptions? It's the three ingredients you put into the pot, stir it up and out comes preemptions, and that's not going to improve the safety at these private crossings.
MR. PETROSSIAN: I think the other way to do it is how the FTA did the safety oversight of light rail transit, for instance.

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MS. CARROLL: State safety oversight?
MR. PETROSSIAN: What you could do is say if a State does not have rules, you require them to adopt the rules, and this is what, you know, if it has told every State that when you have a rail transit agency in your State, you have to have a State safety oversight agency so you could establish -- you know, require the States to

establish a private crossing safety oversight within the State system and then create, evaluate and improve private crossings.

MS. CARROLL: Okay. Thank you.

Moving along, what if question number seven, the ultimate responsibility for safety at private crossings resided with State agencies? I think that's what I've heard all day.

MR. GILBERT: I think we're in agreement with that.

MS. CARROLL: California is in agreement.

How about Washington State?

MR. BOSTON: Oh, yeah.

MR. CATES: I'll disagree with Vahak.

MR. PETROSSIAN: We rarely disagree. This is the first time.

MS. CARROLL: I'm surprised you're sitting next to each other.

Did you have a comment?

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MR. CATES: We're sitting next to LeeAnn Dickson from the FRA.

MS. CARROLL: Community.

MR. CATES: Yeah. This isn't agreement or disagreement because I think you've already discussed you've got lots of different situations in different places. But I think one thing where the Federal government has played an important role has been in adopting a policy in favor of minimization of crossings and in favor of encouraging a corridor approach, encouraging a consolidation closure of crossings.

I would be very unhappy if they were to retreat from that. And I think that that certainly should encompass private crossings and that there may be some opportunities to add some additional teeth, to add some incentives and some additional tools that railroads or States could use to promote those goals.

MS. CARROLL: Did I hear you correctly? Additional guidance on incentives that could be used?

MR. CATES: Yes, incentives.

MS. CARROLL: Tools?

MR. CATES: And even monetary incentives could be quite helpful.

MS. CARROLL: I know in our meeting in Raleigh, North Carolina, they had Section 1010 funding and they

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did a corridor approach and did a whole piece on the high speed rail related to private crossings, so they had money for improvements, and that is one thing that they have collected is incentives to close crossings, both public and private, and to actually negotiate upgrading crossings nearby to close some private crossings. So we do have some information from North Carolina as a particular State, right.

MR. JINBACHIAN: Carol mentioned, I think, the action plan is that what you were referring to earlier, Carol, and what that reminded me of, when we're adopting our General 75 (D), in there we had language saying in

support of the Federal policy or reducing crossings, we're adopting the policy of reducing mainline crossings in California. So if they're addressing Federal policy like this, it would help us to say we're doing what the Feds are recommending.

MS. CARROLL: Right. Okay.

Any other comments?

MR. MATHIEU: Sounds like a collaborative effort, Federal and State guidelines or guidance documents.

MS. CARROLL: Public, private partnerships is what we like to try and support.

Anybody else on this question?

MR. BOSTON: Is that standard procedure of class one railroads? I know in Washington State PNSF private crossings they will offer a landowner, you know, money to close a crossing.

Is that pretty much standard across the nation?

MS. CARROLL: Um, from our North Carolina experience, they've had many different incentives they've used. They've bought property, they've provided alternate access to a crossing that has a higher level, maybe a public crossing that has a higher level of warning device application. So there are various incentives that they've used from that particular State.

Anybody else?

Okay. Question number 8. I can tell you just can't wait.

What if the ultimate responsibility for safety at private crossings resided with the railroads?

Carol.

MS. HARRIS: I do need to go on record with this because we have no ability in many cases even to know who is using that private crossing. We can't regulate the behavior of the motorists except to the extent that we're able to get agreements that have some teeth, and so we are not familiar with the vehicular use of crossings or with the engineering of crossing roads or all of those things that are really unrelated to the expertise and the traditional problems of railroads, and we have no ability to control them. So it would be, we think, inappropriate to proceed in this vein.

MS. CARROLL: I would agree with that.

MS. RANDOLPH: Many times you'll have trucks and other vehicles using the right-of-way following the track, not necessarily on the crossing, close to the private crossing. As Carol said, the railroad doesn't even know they're out. There's lots of times they're supposed to notify the railroad, but sometimes they don't, and they don't even know they're out there.

If you put the onus on the railroad to be completely responsible for a private crossing, that's a big burden to chew off.

MS. CARROLL: Okay. I guess that's a consensus.

MS. RANDOLPH: Trespassing.

MS. CARROLL: Moving on to number 9. What if a

private crossing were categorized based on traffic levels and types of use?

We talked a little bit about this in regard to the Manual of Uniform Traffic Control Devices and the AASHTO green book and also AREMA.

MR. JINBACHIAN: Should I assume that you're referring to vehicular traffic and type of use or both?

MS. CARROLL: Both rail and highway and pedestrian.

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This stemmed from our discussions in Minnesota.

MR. JINBACHIAN: Do you mean -- when you say categorized, do you mean different categories of private crossings whether it warrants this or whether it's categorized as private or public?

MS. CARROLL: Both. I mean, I think in one of our discussions internally after the meeting in Minnesota, and possibly after North Carolina, we looked at a matrix approach that was maybe three or four dimensional as a categorization of private crossings. We had that discussion.

MR. PETROSSIAN: I don't see the difference between this and public crossings in terms of the diagnostics required for the upgrades. But let's say you categorize and you say this category requires this minimum warning device. Who's going to pay for it?

MR. CATES: Is this like a warrant, like if it has 20,000 cars a day, you put --

MS. CARROLL: It could be considered public use. Maybe it then goes into a public category.

MR. BOLES: What happens if it has 19,000 cars? It's really hard to come up with a threshold and make it stick.

MS. CARROLL: From Minnesota BRS stood up and said more than one user, it's public.

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MR. BOLES: Two users.

MS. CARROLL: The brotherhood of railroad signalman in their testimony.

MR. JINBACHIAN: If it's less than one user, you don't need a crossing, so...

MS. CARROLL: Well, how do you determine that? And that's what we're going to try to do in New Orleans and think about data.

Okay. Any other discussion on this one?

Yes, Carol?

MS. HARRIS: Well, I think it can be useful for different purposes to make distinctions between crossings, different types of private crossings, but I think those distinctions need to be made in light of what the activity is, whatever it is that you're going to be doing with your rule or your guidance or whatever it is. It needs to be tied to something and not just occurs as kind of a free form exercise. It seems to me it needs to be in relation with certain goals, objectives, regulations.

MS. CARROLL: So it has to be tied to something?

MS. HARRIS: Yes.

MS. CARROLL: Dave?

MR. PETERSON: Two comments on this. The first one is I was in Minnesota and heard the BRS make that comment, and one thing I would like to point out to the

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FRA is frequently the railroads, where we have two farmers that have crossings that are within, just for example, a hundred and fifty feet apart from one another, on either side of a fence we will end up putting one crossing right at the fence, like that serves two property owners. We eliminated one unnecessary crossing, and it's still a private crossing. It still basically hasn't changed the character. It's a farm crossing. And I would hate to see some sort of recommendation come out that would basically hinder the consolidation of unnecessary crossings because now, suddenly, the only way we can do that is to convert something like that into a public roadway.

The next thing I just wanted to point out about generating traffic levels. As Steve mentioned just a minute ago, it's very difficult getting accurate traffic counts on our public crossings across the United States. And on private crossings it is going to be next to impossible to really determine traffic counts. You have to have a hard roadway surface if you're even going to use the type of equipment that can count vehicular traffic.

Many of these private crossings are on dirt paths or gravel roads and you can't put a traffic count on something like that.

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The other thing is some of these private crossings may go nine months out of the year with zero traffic counts, and then during harvest time there may be a very brief period of intensive traffic, high traffic intensity.

Well, you know, as all traffic engineers that will be in this room will tell you is that you don't base traffic counts off your peak volumes. It's based over an annualized volume.

So how do you do this?

I just want to caution the FRA, if you're dealing with traffic levels, the very best you could hope for is getting a shotgun by someone just making a wild guess as to what the traffic levels are from vehicular traffic at these crossings, and it could prove very expensive to try to ascertain what that traffic level is.

My company, alone, has 11,000 private crossings and going tracking, trying to come up with some sort of level of traffic on those will be quite a challenge.

MS. CARROLL: Thank you, Dave.

Our next meeting in New Orleans is going to discuss data, but we always like to have opinions from our previous groups of participants to help us out for the next one.

Any other thoughts on this one?

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Here's where you get to ask a question.

Anybody have a burning question?
MR. MATHIEU: That's number 10.
MS. CARROLL: I have one, if you don't have any.
I think we've stretched you quite a lot today.
My question would be regarding our next meeting which is going to be on data and data issues.
What would it take to collect the data that's necessary to support a risk analysis, to support the categorization of private crossings in a supportive way, and what mechanisms would you think of to come up with those kinds of processes?
MR. CATES: How would you do that? We've got 4500 crossings like this. I'm going to reference the FRA crossing database. This is some data I pulled off of your website last week. Right across the end of the Bay Bridge over here, Contra Costa County, we have 280 private crossings, 144 public crossings.
Now, cities and counties in Contra Costa County have a hard time updating vehicular traffic counts on public crossings. There is almost twice as many private crossings in that county.
Where are you going to get the folks to do this sort of thing? I mean, it's just, to me, an incredible challenge.

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MR. COTHEN: I shouldn't say this, unfunded mandates.
MR. CATES: Well, we have that in California State law. If we impose a requirement on a Municipal government, our State Constitution requires the State government to pay for that mandate. So, I mean, at the State level we would have a very difficult time doing that.
MR. COTHEN: And I think when we get to a question like this, and it's obviously a very difficult one and it has recurred in the discussions that we've had to this point, how do you simplify that problem; right?
MS. CARROLL: That's correct.
MR. COTHEN: We know we can't get traffic counts on 4500 private crossings.
MR. CATES: We can't get them on 77 public crossings.
MR. COTHEN: If we got them in three years, they would be out-of-date; right?
So, the question becomes: How do you simplify the problem?
I don't know. Do you use survey forms with locomotive engineers? Is there a satellite imaging firm that's got something that will serve? I don't know what. Do we decide that we really want to take data only on

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commercial and industrial crossings? How do we get to the point where we can be meaningful about this?
And we talked earlier about the need for the engineer who goes out there, and nobody is going out there because there is no engineer from a public authority to go out there in States other than

California? But in California you're going to go out there and make a determination about what is cost effective. How do you know what's cost effective if there are not any national level studies, let alone State level studies.

And we know we have very few data points here, so we've got to claim every one we possibly can so long as we can maintain a reasonable quality.

As we move forward towards the end of the discussion, if you can help us think about how we simplify the problem and maybe get a strategy to improve what we know so we can do better going forward.

MR. JINBACHIAN: Speaking of funding mandates, have you considered establishing a new funding similar to Section 130, saying all rail lines that are carrying passenger rails going above "X" miles an hour should have warning devices, then you start with those, then you have the money available for operating these warnings devices. And similar to the Section 130 program through the States

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where you go ahead as crossings and saying we're going to start with double tracks, high speed passenger rail, and we'll start updating those, maybe something like that.

MS. CARROLL: Grady, do you want to talk about track standards? They do include public and the private.

MR. COTHEN: We have requirements above 110 miles an hour that crossings be barricaded, and above 125 miles an hour that you can't -- there is no way to physically cross -- not barricade it, but that there be effective restraint for vehicles, typical vehicles operating at typical speeds. And there is a requirement for submission of a plan for that in the safe standards. And above 125 miles an hour crossings are forbidden. And then we have discussed in the past how it makes sense, certainly, that it shows you how modest our expectations are that above 79 miles an hour that each of the public crossings certainly should have a minimum of flashing lights and gates, and that's in the guideline document, not in a regulation.

Truthfully, when we started talking about these things in the early '90s, people said you're nuts, you'll never be able to do that. There is a high speed rail lobby, et cetera, et cetera. And everybody took their medicine very easily to the extent that we wondered why in the world we weren't more ambitious. And it's because

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from a cost benefit standpoint we think the returns are there and more can be done.

So I think that this is a difficult problem for the government agency at this stage in our history because, let's face it, the categorical programs are not in favor, earmarks are.

And so where do you go with it from a public policy standpoint?

I think that one of the things that we're trying to consider with your help is who benefits if we have a national passenger rail policy?

We know among those who will benefit will be those who use the passenger rail system. And if we have State funded passenger rail, we know among those who will benefit are the passengers. And in that service, commuter rail, as well.

The problem on the freight side is a little more complicated without public funding, and certainly, the user of the crossing benefits substantially on the other hand when the railroad changes its operations. Maybe the equation shifts a little bit and we've seen with respect to public crossings, the STB and environmental proceedings ordering railroads to engage in transactions that shift traffic to contribute to crossing improvements.

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Against that fairly complex background, and I guess I could go on a little longer, but you all don't want to listen to it and I don't want to bore you with it, we're trying to look at this very specialized and difficult problem.

And I think at this point we're saying let's not take any options off the table. At the same time, let's not assume that we're going to be able to take a particular block of resources, whether they're the railroad's resources or the landlocked property owner's resources or the Federal taxpayer's resources, throw them at the problem and have the problem resolved.

Solutions are probably fairly subtle, may involve contributions from a variety of sources. If we can figure out exactly what the problem is, how to target the resources to do the most good and who needs to participate in the solution, then we'll have made some headway.

Steve.

MR. CATES: Kind of some thoughts and a suggestion on that. When one of my trains is involved in a grade crossing accident, damage usually runs anywhere from about 15 to 2 or $300,000 to the locomotive and usually the second -- the first car in the train.

We also wind up with a delay.

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So when we're on a mainline railroad, either single or double track, we're usually hanging up traffic put through that railroad line.

Same thing happens to us when the freight railroad has a grade crossing accident. Usually takes an hour to three hours to clear that. I'm not sure what the requirements are on freight railroads, but whenever we've been involved in a grade crossing accident, I have been on the train, I have had to assist the conductor on both the walk-through inspection and roll-by inspection. That usually takes 30 minutes or so.

Um, so you have a substantial delay in traffic. You're hanging up trains for miles. CalTrans has a contract, I don't know, or traffic people who do traffic counts where they hire a consulting firm to go out and do some traffic counts for local jurisdictions who fail to

submit their traffic counts to CalTrans under the Federal requirement. And this has probably been a year or more since I talked to the folks that were involved in that contract, but they told me it's probably around $150.00 per traffic count for a roadway section. So if we took a look at, let's say, main line private crossings, I'm going to assume, just make a wild guess, there is 1500 private crossings on main line railroad tracks in California at $150 to get a traffic count at those

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crossings, that's $225,000. That's about what it costs for one accident. That's from a risk analysis. You know, that's not a lot of money to spend compared to what it costs if you avoid one accident eventually by collecting this data. So as soon as the FRA provides us with $225,000.

But, I mean, that's a way to do this. We hire a private company to do that where we don't get good traffic counts from cities and counties, that's not very expensive.

MR. GILBERT: I think Anya's question was more global.

Were you talking about identifying the locations and presence of crossings and getting traffic counts and train counts? Is it the overall data collection that you were inquiring about?

MS. CARROLL: Well, being involved with grade crossing safety research for numerous years now, I have a sensitivity toward data issues and data quality issues. And I think there are techniques and tools that the States and the railroads are using that could easily tap into a source to collect this data, inspections, track inspections. You can get GPS locations of private crossings, public crossings. I mean, if you have an accident and you're out there, you collect certain

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amounts of data, whether it be a public or a private crossing.

I'm trying to open up things out of the box of ways. GIS platforms, I know the railroads are using GIS platforms for their networks to stimulate mobility and productivity on the railroads.

Could you use that kind of platform and layer that with your road network and maybe extrapolate whatever road data is there for a nearby private crossing?

I'm just trying to stimulate other possible ways we could gather data that may be not in use now.

And this is -- California is a wonderful forum to do this because you are so pro-active with the way you approach both public and private crossings.

MR. CATES: Yeah, we've just entered into a cooperative contract with the NSF in regard to other track improvements on the San Joaquin Valley line, and they're working with a company -- I don't know exactly what it's called or how it works, but they put a GPS unit on a train, on one of our rail cars, and then they have a

plane that flies over and takes area photos and does GPS coordination. And from that we'll be able to identify all public and private crossings through the aerial survey.

So, that's -- I don't remember what the cost is.

MS. CARROLL: Except for the deeded ones that don't exist yet.

MR. CATES: And some of them, visually, you're not going to be able to identify very clearly, even with a good aerial photo. But there is different ways of doing these things. And there is a lot of information that's available. And as these GIS systems become more readily available, it's easier to do things like this.

MS. CARROLL: Anybody else have a --

MR. PETERSON: As far as GPS?

MS. CARROLL: GIS.

MR. PETERSON: Tie it in with what we're talking about that will work on main line crossings, but we've got a number of these private crossings that are off the main line on industrial leads or intra plant that's not going to even address any of those.

MR. CATES: You'd never get like --

MR. PETERSON: And also, on intra plant crossings, typically there is one D.O.T. number that covers the whole plant, and the plant, itself, may have dozens of crossings within it. And that is in accordance with FRA's guidelines for assigning D.O.T. numbers.

MS. CARROLL: Well, should we consider intra plant crossings as a separate entity or is that actually within your purview of the industry?

MR. PETERSON: Frequently those crossings are on privately owned tracks within the plant, and as a railroad employee trying to get into some of those plants to look at crossing issues, I can tell you, I, personally, had challenges getting into -- especially if it's like a chemical plant. You just don't know what's back up in there, and they really don't want you to know.

MS. CARROLL: Okay. Well, maybe we should take Steve's idea and look at main line private crossings to start with.

MR. PETERSON: That's from a collision standpoint, I have not done any analysis at all, but I would venture to say the preponderance of the incidents that we're looking at on these private crossings are main lines. It's certainly where the greater severity of any incidents would be, would be on the main lines as opposed to the industrial leads.

MS. CARROLL: Okay. Thanks, Dave.

Anybody else have a thought?

Yes, Bob?

MR. BOSTON: I had a question for Steve.

When he was talking about the costs of a collision, like at private crossings, is there a formula

that you use for economic delay, like if a collision delays so many freight trains or passenger trains, do they have a formula to figure out how much that is costing railroads or costing --

MR. CATES: We don't. I guess we could take our ticket price and divide it by the minutes of travel and come up with something. Or, as an example, at this grade crossing where we hit the dump truck, that train, it was annulled. The leading wheels on the truck of the cab car hit the ground. We had 160 passengers on there. If you figure $10.00 an hour, something, and times 160 passengers times half a dozen hours.

And we had 15 people that -- well, I think we had 18 people went to the hospital, three crew members and about 15 passengers.

And you figure, what, about 700 bucks per ambulance. There is a way you could figure those things out. And I'm sure insurance companies would have ways of doing that.

But, to us, it's a good will sort of thing. You have folks that aren't ever going to ride the train again, so it impacts us from our ability to provide an alternate mode of transportation other than hopping in your car.

MR. BOSTON: Does anybody from the railroads have a

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formula or a freight train being delayed an hour, is there a cost analysis that they did or --

MR. PETERSON: It can be calculated. It depends on the type of train that is delayed whether it's a unit train or, say, if it's a local.

Switching local, there is quite a number of variables that go into it. We do have a group within the railroad that can do that kind of analysis. And I'm sure the other railroads have done the same thing.

MR. BOSTON: I can imagine the cost is quite high.

MS. CARROLL: Okay. Well, I'm done with my portion of this afternoon's session.

I would like to welcome you to Washington for the TRB annual meeting, if you can make it. And if you happen to be there, the Highway Rail Crossing, Grade Crossing Committee would love to see you at both their technical paper sessions, at their session on safety of private crossings, and also our committee meeting.

So, if you're able and willing to be in Washington, we would love to see you.

Thanks very much.

MR. BURCAT: What's that date?

MS. CARROLL: January 21st through January 25, 2007.

And you can go up to the TRB website. It's -- I think it's WWW.DTRB.ORG. And the Highway Grade Rail

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Crossing Committee's number is AHB 60.

MR. COTHEN: Thank you for leading that discussion, and Miriam, as well.

But tremendous thanks to everybody who has been in attendance today and has taken the opportunity to

speak on the record or just conduct a conversation on the side about the subject matter. It's very helpful to us to hear from a group so actively engaged in a variety of ways in this issue.

I do want to encourage you, related to the next topic of discussion, as Anya said, will be data needs. We need data to evaluate and develop strategies that may be helpful for reducing risk at private highway grade rail crossings.

I think, clearly, it would be helpful to all of us to have data that's more current to target existing programs, both public and private, whether it's a railroad's effort to get an agreement or State agency's effort to improve service and safety on a passenger rail line, or whatever the need might be.

Certainly, having the data available is going to be helpful.

And then, if, at some point, Federal Railroad Administration or some other body crafts recommended or required standards and/or processes, certainly, you need

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to have good data to undergo that kind of approach.

Cliff, any final words for us?

MR. EBY: Administrative Board, and I thank you for your active participation today.

From my standpoint, as a first-time attendee, it was a very informative session.

I think I can confirm four things from my standpoint about private grade crossings. One: The complexity of the problem; two: The diversity of it; three: California's pro-active and progressive approach to grade crossings. And that there is really no oleo solution here. If you don't know what oleo solution is, one that you spread around, the same solution everywhere.

So thank you for your participation. And I hope to see you in New Orleans.

MR. COTHEN: We're adjourned.

UNITED STATES DEPARTMENT OF TRANSPORTATION

FEDERAL RAILROAD ADMINISTRATION

SAFETY AT PRIVATE HIGHWAY-RAIL GRADE CROSSINGS

PUBLIC MEETING

Chateau Sonesta Hotel

800 Iberville Street

New Orleans, Louisiana 70112

Wednesday, December 6, 2006

9:30 a.m. - 5:00 p.m.

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USDT, FRA

MARK H. TESSLER
Assistant Chief Counsel for Safety
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MIRIAM KLOEPPEL
Operations Research Analyst
USDT, FRA

ANYA A. CARROLL
Principal Investigator
USDT Volpe Center

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Introductory Agenda:

MARK TESSLER
Meeting Format and Rules of Conduct

RONALD RIES
Safety Briefing

RICHARD L. SAVOIE, P.E.
LA DOTD
Welcome address

MIRIAM KLOEPPEL
Introduction of Topics
to be Covered

...oOO...

Presentations and Statements:

BETSEY TRAMONTE
Operation Lifesaver
Louisiana

RICHARD BERTEL
Chairman and CEO
Rio Grande Pacific Corporation

RICHARD CAMPBELL
President
Railroad Controls Limited

BEN B. SAUNDERS
Davis & Saunders, PLC
American Association
of Trial Lawyers

JOHN VAN MOL
Farmer

...oOo...

Discussion:

MIRIAM KLOEPPEL
Discussion Moderator
Identification of
needed data

ANYA CARROLL
Discussion Moderator
Methods of gathering
data

...oOo...

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Attorney at Law
Frilot Partridge

SHANE WHITEMORE
Director
CSX Transportation

P R O C E E D I N G S:

MR. COTHEN: Good morning. This is the Federal Railroad Administration's Public Conference on Safety at Highway-Rail Crossings. You probably figured out from the signs out there there's a population of individuals in here who are interested in railroads and crossing safety, individuals in the communities. The first thing we always like to do at our meetings is a safety briefing. I'll ask Ron Ries, who is our staff director for highway-rail crossings, to do that briefing.

MR. RIES: Good morning. It's good to see everybody here. We appreciate your presence. We don't anticipate any problems, but just in case we do, we want to make sure everyone's aware of how to exit the building safely. The nearest exit is out the doors to the right. You go across Canal Street, and we'll meet over there.

In case we need emergency responders to come, we've been directed the best way to do it is to use the house phone and call the -- dial O to call the hotel operator, and they will call 911 and give them directions. The house phones are in the -- built into the walls, so when you

see the white rectangular box, you open up that door, there's phones in there.

Do we have any folks that are CPR certified? We are in good shape. Hopefully nothing will happen, but we have someone here to take care of it. Are there any folks that do not want to be resuscitated? And we're not going to take a vote. You can't nominate people.

The washroom facilities, if you exit the room, take a left, go down the hall, take another left, and right when you get to the end of that hallway, it's just on the opposite wall on the right side.

I think that takes -- we do have some cards for the stenographer, so if you walk over there, don't trip over those hazards.

MR. COTHEN: Thank you, Ron. We'll do introductions next. My name's Grady Cothen, G-R-A-D-Y, C-O-T-H-E-N, and I'm Deputy Associate Administrator for Safety Standards and Program Development at the Federal Railroad Administration. That's a long bureaucratic title that means that I do rule-making and policy development for the FRA in the safety area.

Our counsel for this proceeding, from

whom you'll hear in a little while, is Mark Tessler. He's Assistant Chief Counsel for Safety at FRA. I'm going to ask Ron Ries to introduce others from the Federal Railroad Administration who are present here from his staff at Volpe Center, and also colleagues from the Federal Highway Administration.

MR. RIES: Thank you. The Federal Railroad Administration has eighteen people or positions that work full-time in grade-crossing safety and trespass prevention across the country. We are very fortunate we have four here today from Region 5, which encompasses Louisiana. Carolyn Cook? Carolyn, if you'll just identify yourself.

She just stepped out? Oh, here's Carolyn coming in, right on cue. Also Jerry Martin is here, as well as Richard Washington. Richard is our newest grade-crossing manager. And from Region 3, to the east, Tom Drake is here as well. So we appreciate their being here.

Also from Washington, D.C., is Miriam Kloeppel, who we'll be hearing making presentations during this. Miriam is an operation research analyst that works with grade-

crossing safety.

From the Volpe National Transportation Center -- if you're not familiar with Volpe, they do a lot of the research for FRA and also the department as a whole. They're the ones who have been putting together these series of workshops, and we appreciate all the good work they're doing. Anya Carroll is here. We have Steve Peck out in back. Pearl Garcia. I think Pearl's out of the table, and Mirna Gustave also is out on the table.

And we work very closely with our DOT partners. We have two representatives from the Federal Highway Administration here for the Louisiana Division: Mary Stringfellow and Seve Cerna (phonetic).

So we appreciate all that, and we look forward to a very productive meeting.

MR. COTHEN: Thank you, Ron. What we've tried to do with the series of conferences is to elicit as much input as we could regionally. Many of you know that we started this road show in Minnesota and moved to North Carolina and California and now to New Orleans, and we'll finish it up in Syracuse in -- we believe in

February.

Our effort has been, as I said, to elicit regional input that gives us a bigger picture, a more complete picture, a picture with finer resolution of the dimensions of the private-crossing challenge across the country.

We've been very pleased to be joined in hosting these meetings by State Departments of Transportation and the Public Utilities Commissions who work on highway-rail crossing safety issues every day and whose role is key to the solution of crossing safety -- resolution of crossing-safety issues.

We're very pleased that Louisiana Department of Transportation has recently championed the creation of the first state-level action plan for highway-rail crossing safety, taking the model of the Secretary's 1994 and 2004 action plans at the national level. That has been a very productive activity, and I know that there's a lot happening in Louisiana as a result of the Department of Transportation in the legislature and across the state.

Our topic today presents a uniquely difficult one for all of us because of the fact

that we don't have public roadways involved, but we're still here together to think about these issues and discuss them. We're very happy to have to welcome us to New Orleans, Louisiana, Richard Savoie -- I know I can get it -- Deputy Chief Engineer from Louisiana Department of Transportation and Development. So, Richard, if you'll come forward and bring greetings, please, sir.

MR. SAVOIE: Thank you, Grady. It's a pleasure to be here this morning. I was asked to do this and I think one of the reasons was maybe my accent. I'm not sure. But if any of y'all have trouble understanding anything I said today, there's plenty of folks from DOTD that may be able to interpret some of the things I did say today.

But it is a pleasure to be in New Orleans. As a matter of fact, I was telling somebody it's my first time back since the storm, so I didn't know what to expect. But the traffic was still here and there was still some clutter in the streets -- I'll call it clutter. And but I saw some guys working on cleaning that stuff up this morning. But it's a pleasure to be here.

Just a few things about Louisiana. Some of y'all may have read the morning newspapers or listened to the news. Louisiana is fortunate enough to have a $2.4 billion surplus of funds, and lo and behold, the legislature says, "We don't want to come to Baton Rouge to spend it." You know, who would have ever thought that you'd have a trough full of money and nobody would want to come to town to spend it? So I think the governor will convince them that hopefully they will start on Friday.

The DOTD has been actively pursuing trying to get some of those funds to do some improvements on our facilities. We've got a backlog of $13 billion worth of needs, and so even if we got the whole 1.6, it would only knock off the top of the mountain. So she's working hard on that, and DOTD has a plan to help her to put some of that surplus into our infrastructure.

Just another little thing is that DOT's undergoing a lot of changes in management, and we've addressed a whole lot of areas in the department. A lot of things are coming out. It's part of Secretary Bradberry's goals and part of the remembrance of this administration is that

DOTD did on to change, and one of them is reducing the DOTD staff.

And one of those things is dear to my heart. You know, cutting employees is never a fun thing to do, but District 02 here in Bridge City was ravaged really hard by the storm, so some of our organizational structure has been really hurt by the storms, and DOTD has knocked back to the 5200 employees that we would have liked to have, but the Secretary has got a goal to have about 4800 staff back -- down to 4800 staff by end of December.

Well, right now he's going to have trouble getting up to the 4800, because all we have is about 4600, plus or minus, on board. So that's some of the things that we're undergoing, just some of the things that just -- you never understand why things are going on.

Just a little bit of -- I'd like to do a little bit of chuckle before I get into the real briefing here, but I was reading this morning admission requirements are a 3.0 GPA, and an ACT score of 22 won't actually get you into LSU. So LSU is truly an institution of higher learning. We're glad to have them coming to the

Sugar Bowl. Maybe more citizens will be here to be able to watch the game instead of going to the Rose Bowl. But anyhow -- and hopefully the payout is the same, so they'll all be the same.

But one thing that really confuses me on a lighter note is lo and behold, you know, how the world is changing. And one of the things that has really perplexed me is the Nebraska football now runs the West Coast offense, so -- and that has a little bit of a touch with one of the folks in the audience, a good friend of mine, my favorite fan.

FROM THE FLOOR: Thanks, Richard.

MR. SAVOIE: You're welcome. Now we get down to the serious side of why all of us are basically here. In Louisiana public crossings we also have a federal reg that says:

> "Public roads means any road under the jurisdiction of and maintained by public authority and open to public travel is declared as public via public authority vote, resolution, or some other legal means, and the local road authority has maintained the road on both sides of the crossing over the

past three years."

Private crossings -- and I'll get further into the slides. I'll show you the numbers of each that we have. But it is a crossing where the property on both sides or at least one side of the railroad track is private property.

Public authority responsibility: Advance warning signs and pavement markings shall be maintained in accordance with the MUTCD, the Manual of Uniform Traffic Control Devices, at public crossings. But there's no authority at private crossings.

In Louisiana, as I mentioned, we have a total of 9,079 crossings. Of those, 3250 are public, 2787 are private, and since 1976, 866 were closed and 2,176 have been abandoned. Of those 2787 private crossings, 1690 are to private farms. We have a lot of farm industry in Louisiana. Three hundred forty-three are at a private residence, 26 are to private recreation, 678 to private industry, and 50 pedestrian.

We're really working on this in Louisiana. We'll talk a little bit about the budget later on. We do have a budget surplus, but it's a tough thing in our budget partition to

divvy out the money when it comes to railroads. But we typically rank in the top five of railroad-crossing crashes and fatalities nationwide. But as of the first half of 2006, I'm pleased to announce that Louisiana is now tenth in the nation. It's not a good thing, but we're moving in the right direction.

Grade-crossing collisions usually caused by motorist error. I was reading in the newspaper this morning about accidents on highways, and the state troopers came to our defense and they said ninety-eight to ninety-nine percent is driver error.

Well, the thing is, at grade crossings, look at all of this slide, how this pie chart is cut up: Did not stop, forty-nine percent. Stopped on tracks, twenty-six percent. Unfortunately, drove around the gates, twelve percent. Stopped and didn't proceed at seven, and other, six percent. So you can see from this it really tells a bleak story of what the drivers do when it comes to crossings.

Grade-crossing warning devices upgrades works, but it cut the accident fatality rate by ninety-three percent. As you can see,

there's the passive crossings or passive locations. The rates of injury and fatality are high. Flashing lights reduces that, and when you have the gates and the signals, it really takes its toll on reducing those type of accidents.

And Louisiana has a revised statute. 48:390.1 was modified to give Department of Transportation authority to close existing public crossings on non-state-maintained highways. It's something we talk about frequently. We're trying to get municipalities and parishes to close some of these crossings.

On the Department of Transportation closure criteria, greater than four crossings per mile in an urban area, greater than one crossing per mile in a rural area, less than 2,000 vehicles per day and less than two trains per day.

And then also, you know, when you want to think about it, when alternative routes are available, skewed angle crossings present hazards, curved tracks and complex crossings, those with multiple tracks switching long periods blocked: Those are the things we would like to attack.

And that's basically the end of my -- no. I think there's more to it than that.

MR. SUAREZ: That was it.

MR. SAVOIE: That was it? Okay. Let me just talk about -- I thought I had some slides about the money.

MR. SUAREZ: You did, but --

MR. SAVOIE: I did. Let me just back up. I just skipped over that. I had some notes.

When it comes to the 9,000 total crossings, if we were to address some of this, we have a budget partition of only $8 million annually in the railroad program, $8 million out of a $400 million program. That's not a whole lot of money, but the budget needs are there.

Some of the issues that cause us to not be able to put up flashing signals and gates is they cost between a hundred and fifty to three hundred thousand dollars each. And as I said, if we have $8 million per year of money in our program, it doesn't take long to suck that up.

With the 1331 public crossings and passive warning locations, if we were to install gates and signals at those locations, it would cost us between two hundred to four hundred

million dollars. At $8 million a year, it would take us twenty-five to fifty years to address. So that some issues there.

We've talked about it. We have issues at these locations. We are working with mayors and public entities to close some of these crossings. It's a huge job. I don't want it to be said that it relies totally on Bill Shrewsberry's shoulders, because it's not just his responsibility. It has to be a mindset that we try to do ourselves. So I guess I'm kind of preaching to the choir here, but sometimes we have to hear ourselves also.

So thank y'all folks for coming to New Orleans. We appreciate y'all, and spend some money here if you have some. I know it's close to Christmas. I plan to stop at the shop across the street, and hopefully not because of a safety issue, but I plan to spend a few hours in town here myself. Thank y'all for coming, and enjoy y'all's stay.

MR. COTHEN: Could I get Bill Shrewsberry and Mark Suarez to stand? And if you all could -- Bill, could you just start by kind of introducing yourself and the role of your

personnel here?

MR. SHREWSBERRY: Okay. I'm Bill Shrewsberry, highway-rail safety engineer for DOTD.

I have been responsible working for the federal safety program for the department for years, trying to work with consolidation of railroad agreements for public projects. I've got several of my staff here.

Mark Suarez is our new supervisor for the railroad unit. And we've got Kim Brunte (phonetic) here, who works with me in the unit. Gretchen Ferguson is from our district office for the department, and has worked, helped us coordinate and facilitate the interaction with the railroads and negotiations with the public for her district and area of the state, and that's been very helpful. Thank you.

MR. COTHEN: Thank you very much.

MR. SUAREZ: The one thing I'd like to say is, I've supervised Bill for a little over a year now, and his group, and they are a very hardworking group. We try like crazy to do the right thing and aggressively go after things. The new law, we haven't actually used the law,

but it gets what we want.

But rather than negotiate a win-win deal with the closure program, instead of jamming it down their throat, so so far we've been pretty successful with that as opposed to forcing them to close. We work with the railroads, and the railroads are donating a little bit of money in closures, so I think it's a win-win deal as opposed to if we use the law, we're not going to give them any money.

I also want to introduce a couple of people, too. Betsey Tramonte is our Operation Lifesaver person for Louisiana, and she's actually putting together a venue for National Operation Lifesaver education program for drivers' ed, I believe is what it is.

And then we also have Karla Schiro. Karla is one of our safety -- she's in our Safety Division and she handles a lot of money on the non-railroad part, but she gets involved sometimes using other safety money to affect some railroad crossings also. She's here today representing our Safety Division. And I don't believe anybody else from DOTD is here.

We want to recognize Mary

Stringfellow, from our FHWA Baton Rouge office, and Seve Cerna (phonetic). Seve also deals with us a lot on the railroad stuff in Baton Rouge, and they're our mentors and counterparts in this area.

And of all of the people that need to be recognized, Mary's taken a very strong focus and was the leader in the action plan that you referred to. Mary gets all the credit for pushing the hurdle along, and I want to compliment her for that.

MR. COTHEN: Very good, Mark. Thank you so much for arranging representation at the meeting and for introducing your colleagues, including your federal colleagues on the federal highway side.

This is the -- I guess I shouldn't say this, but this is the first meeting I think we've had with the Federal Highway Administration. And it matters so much from district to district what kind of personalities we have, and I think Mark has spoken well to that issue here, and we appreciate it. And I know our Federal Highway Administration colleagues are very busy people and have other fish to fry, and no fish are fried

better than here in New Orleans.

Mark Tessler, legal officer's statement, please.

MR. TESSLER: Thank you, Grady. As Grady stated, I'm the legal officer for the state at public meetings. The purpose of the meeting is to provide an opportunity for the public to provide information to the FRA about issues related to safety at private rail-grade crossings. I'm here to listen to you and to provide an opportunity for you to state your views on the record for review and consideration.

In order to provide an equal opportunity to express your views, the following procedure will be used: Anyone who wishes will be permitted to make an oral statement. Persons representing the same group may appear together.

At the beginning of your oral statement, please identify yourself, spell your name, and identify whether you are appearing as an individual or as a representative of an organization. It may also be helpful, if you have a business card, to provide it to the court reporter.

At the end of your statement,

representatives of FRA may ask questions in order to clarify your points made during your statement. We will then move on to the next person wishing to make an oral statement. If you'll be referring to a document in your statement or if you have a prepared statement, please provide it to me either before or after your statement so that it can be added to the public docket of this meeting.

Today's meeting is being transcribed and will be part of the public docket on this issue. The transcript of this and the other public meetings in this series and all other documents related to the inquiry will be available for viewing and downloading at the Department of Transportation's Web site management -- document center, excuse me, at http:/dms/dot.gov, and the entire docket is also available for inspection and viewing at the Department of Transportation headquarters in Washington, D.C., at 400 Seventh Street Southwest. Thank you, Grady.

MR. COTHEN: Thanks, Mark. At this point in the proceedings, as some of you know, our camp followers know, because we have some folks who've

been to previous meetings, we ask Miriam Kloeppel to introduce the topic of the day, give us a little background and perspective and a little flavor of what we picked up along the road to date. Miriam is an operations research analyst on our highway-rail crossing safety staff. Miriam?

MS. KLOEPPEL: Thank you, Grady. Good morning, everyone. Thank you for coming.

Those of you who have already seen this, just try not to snort too loud. Private-crossing safety has for some time been a matter of concern to the United States Department of Transportation and to other federal agencies. In 1993 the FRA hosted an open meeting to initiate industry-wide discussions.

In its 1994 Rail-Highway Safety Action Plan, the US DOT proposed to develop national minimum standards for private crossings. In its 1997 study on safety at passive grade crossings, the NTSB -- National Transportation and Safety Board; I'm sorry -- highlighted the need for some system to improve private-crossing safety and recommended that the US DOT, in conjunction with the states, determine governmental oversight

responsibility for safety at private crossings.

In 1999 the NTSB weighed in again in its report on private-grade-crossing accidents in Portage, Indiana. In this case, the NTSB recommended that the DOT eliminate any differences between public and private crossings with regard to funding or requirements for safety improvements.

In 2004, the US DOT published an updated action plan in which the FRA committed to leading an effort to define responsibility for safety at private crossings. Today's meeting is a vital part of that effort.

About 1:00 p.m. on May 30th, 2006, Amtrak train No. 350 struck an empty gravel truck at a private highway crossing near Jackson, Michigan. The train was traveling at about seventy-four miles per hour with the cab car in the lead when the truck entered crossing in front of the train.

One train crew member and fifteen train passengers received minor injuries. The truck driver sustained fatal injuries. The private road at the accident crossing is used by an excavating company and by two residences, and

on average fewer than thirty highway vehicles and a dozen trains, eight of which are Amtrak trains, traverse the crossing daily.

It's estimated that the crossing was created in 1948, and there is no record of any maintenance contract between the business owner and/or the Southern Railway, the track owner.

About 4:40 p.m. on July 3rd, 2006, a southbound Amtrak train struck a passenger vehicle at a private crossing near Castle Rock, Washington. According to the Amtrak engineer, the accident occurred when the motorist entered the crossing after a northbound Union Pacific train cleared it. The train crew and train passengers sustained no injuries, but all four motor-vehicle occupants sustained fatal injuries.

The road leading to this crossing is a county road with county maintenance, and shortly before the crossing the private road that extends beyond the crossing dead ends after serving eleven residences. About sixty trains daily traverse this crossing. It is not known when this crossing was created, and no maintenance contract has been located for this crossing.

About 7:00 p.m. on June 21st, 2006,

Metro train 921, traveling south, struck a truck trailer traversing a private grade crossing near Lemont, Illinois. A piece of the trailer became wedged under the snowplow of the locomotive. The locomotive derailed at the crossing.

The driver of the tractor-trailer was not injured. There were 170 passengers aboard the train. Five passengers claimed minor injury and were treated and released. No train crew members reported any injury.

This crossing serves two commercial facilities, to which there is no other access. Roughly twenty-eight trains and fewer than thirty highway vehicles use this crossing daily, and the crossing is maintained by the CN, but there is no formal agreement.

I would like to note that about six months prior to this accident, another accident occurred at this same crossing. The truck driver in the December 2005 accident sustained fatal injuries.

Now I've sort of rolled into some additional background here. According to the FRA's 2002 compilation of state laws and regulations affecting highway-railroad grade

crossings, more than half of the states have no laws or regulations related to private crossings.

The federal government, in the guise of their agency, US DOT agencies, does offer some regulations or guidance documents that may touch on safety at private crossings. As you can see in this sample, however, none of these really covers a significant portion of the nation's private crossings.

As a matter of fact, there is no federal regulation or guidance that promotes safety at private grade crossings by specifically or uniformly addressing the special issues presented at private crossings.

Some private crossings may be used only seasonally, like certain farm crossings used only for agricultural equipment, or they may be used only for routine personal use, like crossings that serve residences.

Other private crossings, such as this industrial-access crossing, are used extensively but for private business purposes by employees, contractors, and suppliers. In still other cases, they may be used very heavily by the public to enter commercial facilities. In some

cases, there's no alternative access. As this slide here shows, these two businesses have no other way to get in.

The rights assigned to private crossing holders vary greatly. The holder of the right or privilege to cross may hold outright ownership of the underlying property, or they may have a documented easement of the railroad property.

Where it's recognized, the holder may have a prescriptive easement, or squatter's rights. There may be a documented license under contract, or maybe only a verbal license subject to revocation without notice.

Railroads may require crossing holders to purchase insurance or to provide some other protection in the event of a collision at a crossing. Contracts or other legal documents may further define responsibilities such as maintenance of the crossing surface or providing notifications under stated conditions.

There is some standardization of treatment at public crossings across the nation. For example, the confirmation and use of signs, signals, pavement markings, and any other

traffic-control devices placed at public crossings generally conform to the guidance provided in the Manual on Uniform Traffic Control Devices.

In addition, in 2002, the Department of Transportation published a guidance document created through efforts of a technical working group made up of representatives from both the public and the private sectors. In most states, however, there is no such standardization at private crossings.

The arrangement of private crossing signs can be highly individual, and sign maintenance may be sketchy or almost nonexistent. Just to bear in mind, there is a cross mark in there.

To gather information on the current state of the art as well as ideas about possible solutions to existing problems, the FRA is holding a series of public meetings such as this one. The first of these was held on August 30th in Fort Snelling, Minnesota. The others are listed, as you can see.

In Fort Snelling -- this is not a complete list of those who attended, just those

who seemed to have the most to say at the time. The discussion in Fort Snelling centered around the issue that there was a strong perception that there is no existing process that would provide consistent structures to create or to evaluate the relative need for a new private crossing or to have a grade crossing.

The attendees also seemed to indicate different parties also use different definitions to decide whether a crossing is public or private, and a good deal of discussion centered on the fact that the private crossings are created for a wide variety of reasons -- for example residential, industrial, commercial, institutional, or governmental, or even temporary; and they may be used to varying degrees by members of the general public and may be traversed by users ranging from pedestrians to construction vehicles or hazardous-materials tank trucks.

The second meeting was held in Raleigh, North Carolina, and this is again some of the attendees. The conversation in North Carolina centered largely on engineering solutions, and we learned about North Carolina's

private-crossing safety initiative, discussed the need for a baseline set of traffic-control devices at private crossings, again delved into a discussion of what are the uses and categories for private crossings, and solicited and received some suggestions for design standards, both in traffic control and in actual roadway design for private crossings.

Our third meeting was held in San Francisco, California, and there was a short list of some of the attendees, again various states and railroads and some private citizens. In California and San Francisco, the meeting was very informative regarding the methods that the state of California is able to employ in order to learn what's happening in terms of improvements or changes to private crossings.

A lot of the discussion centered on California's ability to use this California Environmental Quality Act to find out what was going on at crossings. We discussed a few case studies and went through a body of hypothetical questions just to solicit some information on how they felt the responsibilities should be assigned at private crossings.

And as Mark mentioned, we are soliciting not only oral statements, but if anybody wants to submit a written statement, he's welcome to do so at the U.S. Docket Management System, and I will just leave this slide up here in case anyone wants to write it down.

That's all I've got for right now. Thank you.

MR. COTHEN: Thank you, Miriam. What we try to do at these meetings is to first make it possible for anyone who wants to make an initial statement, any issues they have, any suggestions that they have, on the record, and then go to a discussion format led by our safety staff here in the Volpe Center.

We have, in addition to the prepared statements shown here from Betsey Tramonte, who has previously been introduced to you, an appearance, I believe, by Jim Kvedaras with CN; is that correct? Is Jim here?

MR. KVEDARAS: I'm here.

MR. COTHEN: There you go. Are you going to speak on the record?

MR. KVEDARAS: I am not prepared to speak on the record.

MR. COTHEN: Okay.

MR. BROWDER: That was to warn you, Grady.

MR. COTHEN: I keep trying, Bill. You know, I keep trying to tease out these railroad participants if there's any way I possibly can.

That was taken from -- you probably called and said you were coming.

MR. KVEDARAS: I called to say I was coming, yes.

MR. COTHEN: Then we have from Rio Grande Pacific Mary Beth Meyer and Richard Bertel. We'll look forward to hearing from you all. And Rick Campbell has been solicited to come and brief us on behalf of the National Committee on Patrol Guards regarding safety activities with his committee, a subcommittee of the national committee, but we'll hear from Rick.

I haven't gotten from the front desk others that may wish to make opening statements, so we'll hold them while we're hearing from these folks, and then if you're prompted, or as we used to say in the South in certain religious forums, if the spirit moves you, we'll be happy to hear from you on any issues or concerns that you have in this area.

So let's start with Ms. Betsey Tramonte, the executive director of Louisiana Operation Lifesaver. We'll start with education.

MS. TRAMONTE: While we're waiting for my PowerPoint to come up -- oh, there it goes -- I first want to get a show of hands from everyone here who's heard of Operation Lifesaver, been to an Operation Lifesaver event, familiar with the program in any way, shape, or form.

Okay. That's pretty much almost everyone here, which is great, so I'm not going to spend a lot of time in this prepared statement on discussing what Operation Lifesaver is, what Operation Lifesaver does. Most of you in this room know that.

We were asked to come here today to discuss what private crossings mean to Operation Lifesaver. And the first way I thought to approach this would be to look at our national mission statement. Our national mission statement says:

> "Operation Lifesaver is a nonprofit international continuing public education program, first established in 1972, to end collisions, deaths, and

injuries at places where roadways cross train tracks and on railroad rights-of-way."

As you see in that mission statement, it says, "Where roadways cross train tracks." There's no distinction between a public roadway and a private roadway.

Next, how does Operation Lifesaver save lives? We have trained and certified speakers that provide free safety training for various professions and all age groups in order to increase public safety around railroad tracks. Once again, there's no designation between, A, a public road that crosses railroad tracks, or a private road.

In summary, looking at public crossings versus private crossings, Operations Lifesaver's goal is to stop crashes at places where roadways cross train tracks. Our organization educates the public on safety at all highway-rail intersections, regardless of the highway's owner.

And that's what I'm here to state today: That is what Operation Lifesaver does when we go to the presentations. It is as a

whole, to a whole community, to all age groups, regardless of what crossings they live near, be those crossing public or private.

And honestly, that is all that I have as a prepared statement, just to inform you of that. If you have any questions for me, this is my contact information. I'm also -- I can e-mail a presentation to you if you need, and I have business cards.

Does anyone have any questions or -- no one has any questions?

MR. COTHEN: He has a question.

MS. TRAMONTE: Yes, sir?

MR. BROWDER: Bill Browder, from the Association of American Railroads.

You obviously represent Louisiana Operation Lifesaver. Could you give us how that fits into the national picture in terms of the forty-eight other state organizations, the national organization, and how that's set up with a board of directors, and maybe talk a little bit about the fact that your current national director, after fifteen years, is leaving at the end of the year?

MS. TRAMONTE: Okay. Well, our current

president, Jerry Hall, is leaving at the end of this year. To answer your question, Mr. Browder, I guess you would like me to describe what the structure is of Operation Lifesaver, and --

MR. BROWDER: And how do you get your money?

MS. TRAMONTE: Well, we get our money several different ways. On a national level we receive money from Congress, and then it's up to the states on an individual level to get funding within the states. I can only speak to Louisiana Operation Lifesaver, because I'm the spokesperson of that program.

And I can tell you here in Louisiana we receive money from the railroads. All of the Class I railroads pitch in in contributions to us. We also have short-line railroads. I believe we have three that pay a small sum in.

Then we also have public money, federal money. We receive money from the Louisiana Highway Safety Commission, and then we also receive money from the Louisiana Department of Transportation and Development.

And as I say, I can only speak to Louisiana Operation Lifesaver. That's what we

do. If you were to look at our budget, two thirds of our money comes from those state agencies and then a third of our money comes from railroad contributions.

MR. BROWDER: Thank you.

MS. TRAMONTE: Does that answer your question?

MR. BROWDER: Sure.

MS. TRAMONTE: Okay. Anyone else? Okay. Thank you very much.

MR. COTHEN: Thank you, Betsey. Just to fill it out, the Federal Highway Administration and the Federal Railroad Administration are proud funding partners as well -- and the Federal Transit Administration, Ron reminds me. And we're proud to serve on the National Program Development Council. So now all the officers are disclosed, and we're proud of them.

Anya has been featuring her menagerie here during this road show.

The Union Pacific system includes a railroad operating in Louisiana, both in New Orleans, and I believe we have Mary Beth Meyer; is that correct?

MS. MEYER: That's correct.

MR. COTHEN: Mary Beth, we don't have mikes at the table here, so if you wouldn't mind coming to the podium, that will assist in getting an accurate record. Ms. Meyer, I believe, is counsel to the railroad?

MS. MEYER: Yes.

MR. COTHEN: Okay. Please introduce yourself again, and when we have your voice, spell your name and also identify your affiliation more precisely.

MS. MEYER: Good morning. My name is Mary Beth Meyer, and I'm with the Christovich & Kearney law firm. And we have been counsel to the New Orleans and Gulf Coast Railway Company, in particular Rio Grande Railway Corporation in New Orleans. And we're here today because in many ways this railroad is sort of a poster child for the problems that railroads are facing with private crossing issues.

What we have within New Orleans and Gulf Coast railroads is a small railroad company, short-line railroad, small business, who is trying to deal with a -- has stepped up to the plate to, you know, meet the challenge of closing private crossings and has had a very difficult

time of it in -- on every front, basically.

The statistics themselves say a lot. I think if we had a nationwide contest for the highest percentage of railroad crossings, we would get the blue ribbon. This railroad, New Orleans and Gulf Coast, was founded in 1888-'89, was built around 1890. It's been there for well over a hundred years, predated all kinds of the development in this area that has created a lot of this problem.

When the NOGC -- when Rio Grande acquired this railroad in 1999, there were 275, 276 at-grade crossings. How do we know there were that many? We know that because one of the first things that the company did out of the gate was to do an inventory. They hired a local well-respected planning -- professional planning company to help look at the situation and advise them on how to deal with the situation.

We created an inventory of these -- we have the maps over here that I should have probably brought up to show you this a little bit better. Created an inventory to define exactly what kind of crossings we had, and this is a -- if you want to take at look at these later, you

can certainly see that.

This is an aerial view, and this map maps out each and every one of these. We have an inventory list that defines exactly what kind of use all of these crossings are put to: Private, industrial, commercial, multifamily residential. We have succeeded in closing a number of crossings since then, but the numbers are still very high.

These are primarily in Jefferson and Plaquemine Parish, Louisiana. And one of the reasons we have this problem, you can see from this illustration, is the proximity of the railroad to the Mississippi River and to the only -- basically only north-south highway running through Plaquemine Parish, Highway 23, which is on the -- the tracks are on the river side of the highway, obviously.

So we have a real situation where we have a very limited or no-access issue for a lot of the length of this line. This is -- just shows some of these representative crossings. Many of them are just -- you can see how they're situated right on top of each other, many, you know, in clusters that are so close that it's

unimaginable that there hasn't been more sharing just on a voluntary basis.

Among the crossings that we see, this first one up here, Madison Street, the railroad actually runs through the city street for a good long way and as it was initially built that way, and it runs right down through the city of Gretna and for quite a distance. So you see very close proximity.

This is Mardi Gras World over in Algiers, and a train runs very close, and there's just a series of access points there. As you get farther down, you start seeing more kind of typical configuration over here with Wright Avenue, and then the motel, used-car lots. Windsor Place subdivision is the one that's in the bottom middle slot, and then this is a particular example of one of the problems we face.

Entergy sees -- has had a -- faced a lot of the same problems that were identified in the other hearings along the way of the difficulties with implementing a permitting program: very, very high resistance from local landowners into entering agreements or agreeing

to consolidate crossings.

And we've also had the instance where we have worked out an agreement with the landowner-developer only to have the landowner turn around and go to the local government, in this case the parish, to have it declared a public crossing and then basically renege on all the agreements they had made about signage, controls, passive controls.

And also in this case we have a high wall that blocks sight, a visual view of the track, and it creates a huge problem. And this is -- despite a lot of efforts, remains in place as a definite -- a serious problem there. School busses will no longer go in there, because it is a problem, and yet we've had a difficult time trying to get the attention of the local authorities to deal with this situation.

As you get into the more rural area, we go from very dense commercial development in the upper part of the line, through Jefferson Parish primarily, and then in the community of Belle Chasse, which is a very densely crowded suburban area. And this is as you get into the more industrial and less developed, more rural

areas.

The railroad serves a number of refinery customers in the parish. And a large grain elevator at the end of the -- near the terminus of a line and is an important -- certainly is an important contributor to the local economy and commerce in the area. It is a very significant part of the local infrastructure yet is not recognized for its contribution in this peculiar situation with the traffic down there.

We also constantly need to remind them, the local people, of the fact that we keep so many trucks off the roads down there. We have a real congestion bottleneck where the Highway 23 crosses the industrial -- one of the industrial canals, and so we have a huge traffic-bottleneck problem with this one main highway there already.

So we're keeping many thousands of trucks off the roads each year and saving on that infrastructure, but we're not finding a very welcoming environment from the local authorities in trying to implement some of the proposals that we've made about crossing consolidations.

When the railroad was acquired, we --

as I mentioned, we went to a local planning company. We prepared a very detailed and well-thought-out crossing-plan proposal to show the municipalities, the local governments in the state, proposals around which we could work to consolidate many of these crossings.

This is just one example. This is a stretch of the railroad as it runs through Jefferson Parish, which is a New Orleans suburb on the west bank of the Mississippi, and this is a largely commercial and residential development area.

This area we're looking at right now is a big, more or less undeveloped tract surrounded by -- there's a large Wal-Mart complex to the right and then a big intersection with a number of businesses to the right. We have the situation here where we have a public-owned right-of-way that is to the -- it would be above the tracks.

The tracks are in turquoise on this -- no. I'm sorry. It's the red. We have a public-owned right-of-way, a fifty-foot right-of-way that is available for access roads and is -- presents an opportunity to create an access-road

situation there.

This is a cluster, for example, a cluster of four residences here, and -- four or five residences, and this is one example of the kind of proposals that we have on several alternative proposals here involving use of an access road to combine and eliminate crossings and get around a use of an access road here as demonstrated in this lower slide, this smaller slide.

So these are the sorts of proposals that we have come up with and funded the study to address, really, the clusters of crossings all up and down the right-of-way.

This is another example from the lower rural part around a citrus nursery and orchard in which there were a number of crossings, essentially to one property. And again the work involved, you know, identifying how to close crossings, and with the goal in all of these cases to have fewer but well-constructed, properly signalized or protective crossings and to ultimately end up with a lot better infrastructure and a lot safer environment.

In this part of the line, we don't

have the availability of that publicly owned buffer on the other side. In fact we have in many instances a very close, very narrow right-of-way and close -- houses in close proximity to the tracks, so we have more of a problem in trying to identify ways to consolidate.

These are just a couple of examples just to show the kind of work that we have done to try to, you know, get some consensus and to, you know, work on proposals around consolidation.

We have not enjoyed a lot of success in going to local authorities, and I think one of the main -- you know, the bottom line in many cases is the bottom line: The lack of funding resources and attention to this.

I think we have a preoccupation with the public-crossing problem that is -- you know, affects many communities in the state, and we have local parishes without a lot of money to -- you know, for road infrastructure.

In this case we have a very peculiar development pattern where you had primarily plantation areas that were -- when the railroad went in, they were an appropriate number of farm crossings in place. There was no highway there

until well into the '20s, and we did not have a problem created by the railroad. The problem grew up around the railroad.

Over the years, we have the typical situation of properties being subdivided and subdivided again and again, and every time someone has purchased one of those subdivided properties, their idea is to punch out and create their own crossing to the highway. So over the years we've had a problem of changing use and also a failure to properly police.

In many cases we've had this development pattern existing for quite a long time. We have very few crossing agreements in place. We have -- most of those are with our commercial and industrial users, and we have had very good cooperation for the most part in the industrial and commercial, the Kmarts, the -- you know, large users, but we have had this sort of tolerance of these for quite a while, and there's a great deal of resistance to having the game plan change.

We see down here this sort of gravel. There's a series of gravel crossings in the residential areas where we have circular

driveways. We have a lot of multiple people with multiple crossings who are very reluctant to take them out. When we have -- we have a lot of bootleg crossings, what we call them, basically people who come in the middle of the night and dump gravel down and call it a crossing.

And when we have gone in to take these out and have been then faced with people going to court and getting a TRO against the railroad and preventing the railroad from taking them out and inviting a costly legal battle at that point.

In fact we are currently involved in litigation over this situation because of the strong resistance that we have gotten from local landowners. That's ongoing right now, and I can't -- I don't want to get too much into the specifics of the situation but except to point out that we've filed a federal lawsuit in order to try to, I guess, even the playing field a little bit here.

Louisiana is among the majority of states that has an elected judiciary, and its people elect judges who go to bat for them, essentially. And this is a very unpopular situation in these areas, and we face an

extremely difficult battle in the local courts in trying to convince them of the safety issues that this presents.

We've filed a federal lawsuit that was recently, after being maintained for several years and at great expense, only to get to the -- down to the -- near the trial to be dismissed for lack of jurisdiction by the federal court, and which sort of leads into one of the problems I would like to raise just from a regulatory and legal aspect here; and that is, the lack of federal standards and regulations addressing this in any way has really hampered the railroad's effort to deal with landowners.

"Well, there's no federal regulation, so it can't be a safety issue, because they would have done something about it." That's one of the attitudes we face. "If this was such a problem, why haven't the -- you know, why haven't the feds done something?" And also, in a very concrete and specific way, means that it not only doesn't help us; it really has impeded our effort to call attention to this problem and to gain any traction.

It has really essentially -- was one

of the problems underlying the fact that we were unable to establish jurisdiction in the federal court. If you don't have diversity jurisdictions, for you non-lawyers out there, unless you can show that you are an out-of-state railroad, you aren't going to be able to establish federal jurisdiction. So we -- it was a direct impediment in that instance.

We also found it very difficult to establish jurisdiction based on the conflicts with other federal regulations created by the local laws which a lot of people have been relying on to get these crossings. And they say they're entitled to them out of necessity because they're enclosed properties.

And that's one of the issues that's presented in the lawsuit, is whether these are in fact -- you know, whether they have properly followed the law and whether these are enclosed properties. But we've had a difficult time, you know, showing that this is a kind of local law situation that creates a conflict with the federal law.

One of the safety issues that we have faced and identified in this situation is a real

conflict with the track maintenance and regulations and standards that are on the books. And what we have is a -- just a nightmare in terms of trying to do any kind of programmed maintenance and to try to, you know, maintain and upgrade the roadbed itself.

With this many crossings, you know, using mechanized tamping and regulating machinery, it's just very impractical, and it undermines the utility of using those mechanized systems to do that kind of work, because you've got to pull up every crossing and then you automatically have a conflict with that crossing owner who wants their crossing put back. They don't want to pay for it.

So then you have -- you know, you have an automatic conflict built in and you'll have these same owners who want their crossing but, you know, don't want to maintain it, don't want to have any part of it except it's the railroad's problem, and you fix it. And that's been a lot of the reaction.

So these crossings create drainage problems, they cause premature deterioration of the crossties, and really have a very substantial

negative impact on the maintenance and the stability of the underlying roadbed.

So we really do have a problem and a conflict, but it's not clearly defined, and without any standards for crossings to address the drainage problems and the profile problems and the -- what's appropriate for a residence, what's appropriate for a commercial farm development, what's appropriate in these instances.

So we have faced really every issue there is out there facing all the other railroads, but multiplied times ten. So I just wanted to propose that we do need -- we need some help in a regulatory sense, because there are no standards to point to.

There is no voice out there saying private crossings are safety hazards and they're disfavored, and if you need a crossing, you, user, it is up to you to really show you have some sort of entitlement or right, some need, no alternative, and that you've exhausted all of your state property rights in order -- against your ancestors' entitled to get a passage across the tracks.

And we need a very strong statement to, you know, give railroads who are trying to step up and do the right thing something to go on. I mean, what we have found is the lack of regulation has not just been the neutral. It has really hurt us in trying to bring home the importance of limiting the number of crossings.

And we obviously need some standards for how these are built and how they are protected, and we are looking for a uniform national approach we think is appropriate to drive home the importance of the safety aspects and to -- you know, to help the railroads, like Entergy, who stepped up to the plate only to have kind of hit a brick wall at every turn.

We have approached local governments and the state, and we have really not -- and with detailed planning, which we did, you know, at great expense on our dime. We have, I believe, handled this in a responsible way and have responded to the challenge to close crossings, but without the tools to do that, we are very severely limited.

So that's some of the points I would like to make. And I think Rick Bertel, of Rio

Grande Pacific, would probably like to add something from the standpoint of a small-business owner who is trying to operate a railroad in this regulatory environment.

MR. BERTEL: Thank you, Mary Beth.

MR. COTHEN: Rick, if you would introduce yourself again and spell your name for the record. Proceed.

MR. BERTEL: Sure. My name is Richard Bertel. I'm the chairman and CEO of Rio Grande Pacific Corporation in Fort Worth, which is the parent company of the New Orleans and Gulf Coast. I appreciate the opportunity to speak today and would like to share some of our experiences in Louisiana as well as some observations and a couple of our frustrations.

Mary Beth has told me I can't talk about pending litigation, lawyers, public officials, or state officials, so I'm through with my speech. But I hope -- if I've offended anybody here, I hope I'm an equal-opportunity offender.

A couple of statistics about who we are and what we do. Rio Grande has four railroads. We operate in six states, and the

NOGC is the smallest in terms of miles of the railroads that we operate. We acquired the property in, as Mary Beth said, in 1999. It originally was twenty-four miles, and it's been expanded now to thirty-six miles and goes from Avondale to Gouldsborough, from Gouldsborough to Myrtle Grove.

One point that I'd like to get across to the people that are here is that while our parent company is the Rio Grande Pacific, the only thing we have in common with, like, Union Pacific is the Pacific. We are a very small business, operating in a heavily regulated environment that is very hostile, particularly in Louisiana.

Let me just give you a couple of statistics. For example, the total revenues of the New Orleans and Gulf Coast annually are exceeded by Union Pacific in three hours. So the first day UP works three hours, they've generated more revenue than we do in an entire year.

We have eighteen employees. The ones that made it back after the Katrina episode, a lot of them have stayed, a lot of them haven't. Employing people is a difficult thing in New

Orleans at best right now, so anybody that needs a job, see me after the meeting.

Our total maintenance-of-way expenditures on the railroad are approximately $30,000 per mile per year, which is approximately what Union Pacific pays on their -- or what it costs Union Pacific to maintain the fifty-six-odd-thousand miles of track that they have.

Our maximum speed is ten miles an hour, even though we do try to maintain the railroad to a higher standard than that. Since we acquired the property, we have, as Mary Beth mentioned, brought in highly mechanized, modernized equipment, surfacing equipment, alignment equipment, tie equipment, ballast regulators.

We've done a tremendous amount of ditching and drainage work and, of course, crossings. I'm not sure if it came out, but we have 276, or we had 276 when we took over. Now you never know unless you go look, because they're like rabbits: They just show up.

And the typical problem that we have is that somebody goes out and decides that you're going to sell part of their lot to the neighbor,

and he doesn't ask, he doesn't talk to anybody, doesn't care; goes and gets his load of gravel or a load of asphalt and he comes out there, and the first time we know about the crossing is when it's installed.

And we inspect the track every day. Something on the order of ninety percent of the traffic that we handle on this railroad is hazardous, because we serve a Chevron refinery and a bulk terminal at Marrero. Some of the miles on our railroad exceed thirty crossings to the mile. I'm not sure if that came out.

And over the last two years, we have spent approximately $15,000 per mile per year in our failed effort to deal with the bootleg-crossing dilemma by going through the courts. Put another way, we've spent about $600,000 in legal expense in that period of time, gone through discovery, gone to court without so much as getting a hearing, and we get turned back to the state courts, where the outcome is foregone as far as I can see.

That $600,000 would have gone a long way back in the track. It also exceeds the net income of the whole railroad for the period. For

a small railroad with this much traffic in hazardous material, we think that these scarce resources could have been applied more efficiently with the application of just a modicum of reason and common sense.

You know, Mary Beth alluded to the number of trucks. If you take the volume of cars that we handle and you do the math, it's about 50,000 trucks a year that don't run on Highway 23 because of the railroad.

In keeping with the code of scoundrels that Mary Beth alluded to, I can't talk about lawyers or cases. I'm going to share just a couple of vignettes about some of the frustrations that we have with regard to these crossings.

Our effort, as she mentioned, is a comprehensive study. We hired a prominent engineering firm, we met with parish officials, we met with the state. We came up with a consolidation plan to reduce and eliminate crossings, because we thought that was the mandate -- was going back fifteen or twenty years, when this all started, to reduce crossings.

And I think the reduction of crossings has been successful, as the statistics have borne out, while we're still talking about private crossings. We have -- as she mentioned, we've had a high level of cooperation with the refineries, the large commercial entities, the people that provide the jobs in the community, because they understand that there is such things as liability and generating jobs and trying to, you know, do something productive or good for the worker.

The first case that I'd like to talk about, and I can't mention the name, was one of these situations where the person had a crossing to get from Highway 23. They had an existing crossing to get across the railroad to get to their trailer. And they decided unilaterally that one wasn't enough; they needed another crossing, so that when they went across the track it was easy to turn around and come back over the second crossing on what you'd call a U-turn.

And so our maintenance-and-way people protested and said, "If you do that, you have to go through the following process: You have to get a permit, you have to discuss the

construction," and we went through an exhaustive procedure where we took all the permits for all the Class I railroads that operate in Louisiana.

We did what I would think would be a remarkable cut-and-paste job on all of them, submitted it through counsel. We came up with a permitting process that was less onerous than any of the Class I's currently have.

Our offender with the bootleg crossing said, "Well, we're not doing that. There's no way we're going to do that." So we said, "If you put the crossing in, we're going to remove it." They put the crossing in, and we did remove it.

And we got slapped with a lawsuit where we were sued for -- I believe it was in the hundreds of thousands of dollars, because the mother of the person who owned the trailer was an elderly lady, and she suffered pain and suffering because she was afraid that the ambulance could not be turned around, even though they had an existing crossing. So that's why kind of where this odyssey sort of started.

I would move on to the next deal, next little story, which deals with Plaquemines Parish. Plaquemines Parish decided that they

needed to get to an area that they wanted to do some excavating work. And so they contacted our offices. They were told about the permitting process. They asked for an application, we forwarded it, and we didn't hear anything.

So one of our managers was down here one day. He's driving down the street and comes over a hill, and he sees a big yellow Caterpillar bulldozer sitting in the middle of our main line. And being a curious kind of guy, he thought he'd go over and check it out. He went over, and of course the Caterpillar dozer belonged to the parish, and it was broken down in the middle of the track.

So in a friendly tone of voice, I'm sure, he asked the guys with the parish if they would mind removing the dozer off of our main line, because we tried to run trains up and down it once in a while. And there was a ruckus about that, and some threats, you know, and "By God this" and "By God that," and "We'll get to the bottom of it."

Well, eventually, when they got the dozer off, we discovered that they had broken the rail with their illegal movement across the

track. It was 112-pound rail, and it broke the rail and did some other damage that amounted to about $7,000. And we managed to collect a thousand of it and had to write off most of the rest, or all of the rest of it. So even the parish disregards the rules when it comes to crossing your property.

And what scares me is the guy who winds up responsible for this, is that had they moved the dozer and not known anything about the rail, if they had not discovered that the rail was broken, and the next train through there was the chemical train had come through there and derailed, with the hazmats bill, I'd be on CNN explaining something that really had nothing to do with me. And so these are the kinds of issues that are very sensitive to small companies that operate railroads.

Another little story we had a problem with, when we found out that our railroad right-of-way exists within the state right-of-way through a portion of the railroad, we thought, "Well, this permitting process will be easy. We'll go to the state, we'll work through the state," because the people have to have a permit

for the state to access Highway 23.

Well, that process is not utilized, and so we weren't able to piggyback our own permitting process onto the state's, because they disregard their own process. And it's difficult to enforce that, because -- you know, our process -- because they say, "Hey, we don't have to do that because we don't want to. Take us to court."

The next little story that I got was -- Mary Beth talked to you about this one crossing, and there was an agreement negotiated with the developer. It was approved by the lawyers. It was several pages.

It described in specific detail what the developer had to do upon the sale of various lots within the subdivision: He had to put up active warning devices, they had to clear sight lines. There were all these things to do.

Then the last item on the contract was to the extent -- and I could get the language -- it says, "Unless this crossing is deemed to be a public crossing by some agency." So the next week the local parish proclaims it's a public crossing, and the whole agreement is abrogated.

There's no active warning, there's a sight distance that is in violation of Louisiana state law, and as Mary Beth described, the school busses won't even go in there now.

Of course the first call we get, hey, we need to replace the surface on the crossing now that it's a public crossing, which doesn't endear us to the process.

I'm almost done. In some of the pending litigation we have now, one of the lead attorneys has repeatedly told us that the issue -- we removed a crossing when we told -- when somebody wouldn't agree to a permit, or they wouldn't negotiate with us. They just said, "Go pound sand."

So we removed the crossing. We were sued in court, and the attorney says, "This issue has nothing to do with safety." So once the crossing was out and he went out there and looked, there were found some defective ties in the crossing. He threatened us with another letter and said, "If you don't come out and correct these track deficiencies in accordance with the CFR, we're going to call the FRA and gets them down on your throat."

And so it was kind of interesting that the lawyers can hide behind the fact that there's no federal oversight of the surface or of the whole process, but then once it's removed and is found to be unsafe, they want to also run and say, "Okay. We're going to call FRA if you don't come out here right now and fix it."

We're short-handed, and so now that I've got a couple of lawyers that are qualified track inspectors, you know, I think we can probably fix it. You know, in the lawsuit they said that safety wasn't an issue, because we're only going ten miles an hour. And of course obviously he's never seen a grain car turn over at ten miles an hour or he's never had to pick one up or he's never seen a chemical car turn over.

But my goal is not to be on CNN. I really don't want to do that. And these guys are -- I mean, they are a threat to safety. We're kidding ourselves if we say otherwise. And I got served with papers yesterday on a crossing accident that happened in April, and it was interesting.

I would like to read about our

egregious stealth train, if I could. This accident happened in April. It was investigated by our people and by the insurance company ad infinitum. This is just part of it. It says:

> "Suddenly and without warning, the railroad train operated by our employee attempted to cross a private driveway and struck the vehicle, causing a violent collision and causing plaintiff to sustain painful and serious personal injury and economic damage."

Well, Louisiana state law says you have to stop -- I believe -- I get these mixed up because I'm in different states and the standards aren't the same, but it's fifty feet. It's fifteen to fifty. And so this railroad goes parallel to a major highway. These guys ring and blow the whistle and bell and, you know, they do all the appropriate things.

Somebody drives out in front. They can't see the train, which is okay. And we -- you know, our ten miles an hour, the attorney doesn't think this is a safety issue, but I'm going to have to defend this lawsuit. And it starts to lose its fun as a railroad owner when

the lawyers wind up working for them.

And it says we failed to maintain control of our vehicles and railroad train, failed to keep a proper lookout, driving in a careless and reckless manner, failing to see what should have been seen, failing to properly and timely sound the warning horns and lights and whistles on the railroad train, failing to safely cross the private drive over the railroad tracks.

We didn't go out in the street and get this guy. I mean, "All of the above acts are in violation of the laws and orders of the Parish of Plaquemines, State of Louisiana, and are pleaded herein and so copied."

My final -- there's a recent one which has happened and didn't happen in Louisiana, because we do kind of watch this issue in other places that we operate in. Several years ago we had a fatality where -- a crossing accident in Nebraska. And our train crews operate 24/7, 365 out there.

And it was about 1:00 o'clock in the morning. We had an ethanol train that was moving between two points at ten miles an hour. A guy in an eighteen-wheeler who was estimated to be

going in excess of eighty miles an hour hit -- I believe it was the forty-fourth car in the train, hit it so hard it knocked the tank car into the corn field.

It was a fatality. It split the cab of the truck. One side was on one side of the track and the tank was on the other side of the track. The cab was full of uppers and pills and stuff that the driver was taking to stay awake. And the highway patrol shows up and they say, "What were you guys doing out here?"

And that is endemic of the problem. We have instances all the time where we're in the right place, doing what we're supposed to be doing, what we're mandated under federal law and certificated by the Surface Transportation Board. And why don't we arrest some of these people or write them a ticket when they do something like this?

I mean, I watched this earlier this morning, and how many tickets are written when somebody violates these laws? I mean, if they start writing tickets for stuff like that, when we go to court, juries pay attention to that. But we just ignore it, you know.

And to bring this to a close, some conclusions that I've tried to put together: It's imperative that we start to recognize that the railroads are in fact interstate highways of commerce. And that's confirmed by many years of ICC and SCC doctrine, which requires this.

You can't get in the railroad business just because you feel like it. You have to go before the Surface Transportation Board, get a certificate to operate, because it's a public necessity and convenience. That's why we're here.

As such, railroads should have the right, if given the responsibility via safety mandate of the FRA, to control what goes on over, under, around, and through our railroad rights-of-way. No one should be able to build or alter the track structure without our consent and permission.

At least notify us, because if I'm going to be responsible for that car that gets dumped over, I don't want some joker that knows nothing about what he's doing filling the track structure full of God knows what.

If we've seen much consolidation in

the railroad business, we've also seen much consolidation in the field and plaintiff attorneys that are a significant threat to our industry. Over and over we see the same law firms that sponsor the beer-and-barbecue meetings teaching our employees about the railroad lottery.

Moving now into the injury and plaintiff work for trespasser litigation, let's have some kind of help on trespassers. I was looking at some of these statistics from the 2004 study, and it showed from '90 to 2002 on public crossings where there's an active protection, that's dropped -- the fatality rate's dropped about forty-five or fifty percent, and that may be even better now. And the trespasser fatalities are flat.

Well, it doesn't take a rocket scientist to figure out that the crossings that are protected are helping us, and the trespassers are not helping us. You know, rather than fine the railroad for enforcing it on the -- fines on the railroad to make us the keeper of the safety, let's involve some of the other people that make things unsafe. Because we're trying.

I think the railroad industry right now has one of the safest records it's ever had. The absurdity of continued safety inaction is malfeasance in face of the empirical evidence stretching back to the early '90s, when we started looking at these crossings.

How many more years, how many more seminars must the public sector study the issue before it acts? Without a federal solution, we'll be meeting at these type conferences in another fifteen years.

In Louisiana, state and local transportation agencies have been absent at best and openly hostile for the most part. Economics and politics will always trump sanity in the public sector, even to the detriment of the public and the regulated. What are we supposed to tell our customers who follow the rules, the people that enter into the agreements, the people that get permits, the people that do it right?

Is our experience of being twice thrown out of federal court here or remanded back to the state court, it's only -- we're beginning to see other squatters being emboldened by that procedure: pipeline people and other people with

encroachments.

Finally, let me -- I've ranted and raved here. I got my five minutes in the sun here. But let me leave you with a hypothetical solution that may bear some discussion or it may not. In my railroad career, I've had the opportunity to travel around the world and look at the acquisition of railroads in Australia and South America, Africa, Canada, Khazakstan, and other places.

And one of the things when we were trying to acquire a railroad in the late '90s in Australia that was interesting to me that the Australian National Railroad at that time had a policy is if there was a crossing, it was going to be protected, active protection. And I mean Australia had at the time, like, 19 million people, and it's the size of the United States. We've got 300 million, so it's a little different game.

But the point is, you go out into the agriculture and the wheat fields or wherever, and if there was a crossing, it was protected. They took the attitude that if it was important enough to be there, it was important enough to be

protected.

So let's assume the following: There's 90,000-odd private crossings in the United States. And my good friend Rick Campbell -- don't quote him and don't put this in the record -- but he seems to think for $150,000 a crossing you could actively protect them, all these crossings. You do the math. That's about $13 billion.

So let's add a little federal creep, and we'll call it 15 billion, because these kind of programs have a way of expanding, taking more time, being more costly. I mean, what do we spend in fifteen minutes in Iraq? I don't know, but $15 billion is a lot of money.

But if this is a serious problem for enough of us to have conferences and meetings and study it for twenty years, I think we should talk about this. Let's bring all the stakeholders to the table.

Let's say, for example, that the FRA allocates $15 billion to the state DOTs for purposes of adding active warning protection to all private crossings. The DOTs will have to determine the need based upon federal guidelines.

The railroads will build and maintain just the same as the public crossings, the same as we do now, once the state DOTs determine whatever state crossings stay or go.

Users of the private crossings would pay the state DOTs an interest rental based on the investment. You get a crossing, you have to pay for it. And this is all -- within the final analysis, this is all about money, anyway, and how you spend the money to get the safety: What's the cost benefit?

If the DOTs can close crossings, they get to keep the money. I'm sure that some scheme like that with an incentive might close a lot of crossings. The interest rental that the stakeholders use on the crossings would go into a fund for the maintenance of these private crossings in the future, administered by the states.

And realistically, I figured, talking to Rick, that minimally it would take five years to do all this, to protect all these crossings. If the FRA says go tomorrow, time you gear up, build them, and install them, it's going to take five years. So you could probably do this at $3

billion a year for five years one time, and you could take the money out of the RIF program.

Finally, well, and what that would do is that the federal government would get its desired objective of fewer crossing accidents, because the statistics show that the protected crossings have declined fifty or sixty percent. The state DOTs would get massive new bureaucracies around the country, which would make them happy.

The railroads would get crossing protection, which frankly helps me, because I get tired of looking at that insurance guy every year. And they just shake their head say, "How did you go from 276 crossings to 300 crossings?" And I said, "Well, it's kind of difficult, because people just go out there and build them. I have no control over that."

And my insurance premiums hopefully would go down. And the person who actually uses the crossings, and we're kind of in a user-paid society these days, would have to pay. And if you want to turn it into a social program or socialism, then the states could administer -- you know, you can gouge through commercial guys

and give it away to the guy in the small rural house or trailer. That's -- for two cents you got my solution.

Oh, yes. Finally, we appreciate the FRA declaring a safety emergency in Louisiana to stop the insanity of the state and local inaction on the subject of private crossings. This is a real problem. It deals with real businesses like mine and like the big guys. You know, waiting another twenty years to get an answer really defeats the purpose of coming to these kind of conferences.

Thank you for allowing me to provide my thoughts and observations, and I'll be around if anybody has questions. Thank you.

MR. COTHEN: Thank you, Rick, for that. You'll also find a very complete statement on the subject in the public document if you want to revisit some of those points. Mary Beth?

MS. MEYER: Right. That's the point I was going to make in closing, very quickly. The insurance question that you addressed, we have looked into that and find that it's just a nonstarter for users in the local market in particular because of the insurance crisis we're

in. But beyond that, residential users, you know, insuring around the liability issues is a very, very difficult nut to crack here.

Thank you.

MR. COTHEN: Thank you. The docket again is identified in the material that you've been provided, No. 23281, and it's available online at dms.dot.gov. And you can go there and find transcripts of the prior meetings as well as written submissions to the public docket.

We're now going to take, for everyone's comfort and convenience, a fifteen-minute break, after which we'll hear from Mr. Campbell. So please return promptly at thirty-five minutes after the hour.

(Following a brief recess, the proceedings continued as follows:)

MR. COTHEN: Mr. Rick Campbell, of Railroad Controls Limited, has been solicited to speak today and help us understand the relationship among this issue, public-crossing issues, and highway-based traffic control standards, and in particular the thought that folks are putting into the issue of public-access private grade crossings.

So, Rick, please come forward, introduce yourself for the record, and proceed. Thank you for being here.

MR. CAMPBELL: Good morning. I'm Rick Campbell, and the spelling is C-A-M-P-B-E-L-L, like the soup. No relation. And I have the pleasure of knowing most everyone in this room from various dealings and meetings that we've attended. And I wanted to thank FRA and Grady and his staff for inviting me to speak today.

Private crossings are an issue that we deal with, and I'm going to qualify that "we." I work for a firm called Railroad Controls Limited. But part of my duties, we're very active in support of standards and recommended practices within the railroad industry.

And I'm involved with both AREMA, which is the American Railway Engineering and Maintenance of Way Association, and highway-rail grade crossings, and I'm also involved with a group called the National Committee on Uniform Traffic Control Devices, or NCUTCD.

And NCUTCD -- to give you a little background on NCUTCD, they are a private organization. They're not connected with FHWA.

They do date back to the 1920s through various associations and organizations. And NCUTCD is made up of slightly over 200 professionals that are involved with all elements of traffic-control devices, traffic and transportation engineering.

Within the NCUTCD there are various subcommittees or technical committees, as they're referred to, one of which is the Railroad and Light Rail Transit Technical Committee, of which I serve as chair, being elected by my peers.

Within our technical committee we have responsibility to comment to FHWA on parts 8 and 10 of the NCUTCD, part 8 being the section that deals with railroads and part 10 being the section that deals with transit, specifically light rail transit but also other types of transit such as streetcars and on-rail running.

Within that group, of course, we're responsible for changes, edits, comments to those particular parts of the manual, and it's interesting because one of the things that we wrestle with within our technical committee is private highway-rail grade crossings.

And private highway-rail grade crossings are a unique issue within NCUTCD

because NCUTCD is a document that is actually set up to deal with public travel and addresses issues relative to that public travel.

NCUTCD -- and I'm going to read an excerpt here regarding NCUTCD from comments on the FHWA Web site -- is that at the present time NCUTCD deals with roads that are open to public travel. And "open to public travel" is a term that's not defined in the Code of Federal Regulations.

There is an underlying effort on behalf of the national committee, who has convened a task force to deal with traffic-control devices on private property. And what's interesting is this task force spun out of traffic-control issues on private property for things that you might consider like shopping centers and malls.

And their goal is, as Tom Hicks, who has served as chair of that task force, has told me: He says, "Our goal has been to prevent green stop signs." And I'm sure everybody in here has driven through some type of private facility where you find a green stop sign or a stop sign that may be square or round because it was part

of an architectural enhancement.

But while it had a specific traffic-control function, it didn't conform to standards within the NCUTCD. Hence this development of the task force to be able to go in and try and set up guidelines for traffic-control devices on private property.

One of the things I think that we get sidetracked on in part of this entire process is the whole public-private-type issue: Who owns the land, or who actually is the titleholder to the access way for whatever facility it is?

And it strikes me that that's not really not the issue; that we've dealt with public and private ownership, but the real issue has to deal with expectation of access: Does the public have the expectation of access to the crossing, to the intersection within a mall, to whatever the facility might be where there's some traffic-control-device requirement?

And this issue of course extends beyond private crossings. It gets into that, the area that we find with malls and shopping centers and businesses or business parks where there's actually a large number, a significant number of

vehicles, publicly operated vehicles, that access that private property, if you will.

And as part of that, I would like to encourage FRA to give consideration maybe to the fact that there's a need for a third classification that we apply besides public and private. And I would like to suggest that FRA consider what we call semipublic.

And semipublic would be an access way, and specifically narrowed to our hearing today, a highway-rail grade crossing that is owned by other than a public agency but to which the public expects free access.

And examples of that could be of course shopping centers and various commercial establishments. It could be a large facility or crossing to access a single facility such as a fast-food restaurant or a convenience store. We generally find that these semipublic crossings could fall into categories such as industrial, commercial, recreational, or to access multifamily homes.

So I would like to propose that we at least give consideration to the term "semipublic" as it might apply to highway-rail grade crossings

and all types of traffic-control devices. We would still retain the category as private crossings, but we would generally define that as crossings that there is no public expectation of free access.

And examples of those might be crossings that serve a single residence or a crossing that a landowner has for access from field to field or for access from a public roadway to a field or private access outside of a residence.

Those are crossings that are generally assumed not to have just open access to the public, and in many cases they're fenced and locked; or in the case of a driveway to a private residence, one that there's very limited access by the public, generally the landowners or residents of the residence and service providers, such as delivery trucks, commercial vehicle operators who could have training to be able to deal with access over these crossings and private facilities.

So that begs the question. Once we can define what this particular crossing is, is how do we actually deal with private crossings

and need for traffic-control devices? And some thoughts that we've struggled with within the Railroad and Light Rail Technical Committee involve if we do have a private or a semiprivate-type crossing, do we have a need for a specific traffic-control device to deal with access over that crossing?

Many states -- of course California, through their Public Utilities Commission, has taken a lead in development of a sign to be used at private crossings which clearly denotes that the crossing is private. And of course the underlying statement there would be that there's no trespassing allowed to the general public.

And if we support that type of sign within our technical committee, that there does need to be a distinction that the crossing is off limits to the general public and that the specialized sign could possibly be adopted for these semipublic crossings, however, we also support the fact that if the public has access, we believe in standardization, which would then involve the use of traditional crossbuck and supporting advance warning signage.

So just in closing with my comments, I

think that it would behoove FRA to be able to step in and try and assist with the problems that we've heard with private crossings and access to private facilities, but as I say, to take it to the step that we look at, Does the public have some expectation of free access?

And if so, we need a methodology to be able to apply standardized traffic-control devices and at the same time to go through a diagnostic process as is already spelled out in part 8 of the NCUTCD. And as part of that, the semipublic crossing would go through permitting-type process that we would like to see FRA have oversight over this.

And things that would be considered to be part of this permitting process would be to define the responsibility for access over the crossing: Who's actually responsible for -- who is the jurisdiction responsible for the crossing? Ultimately that of course would carry over to responsibility for traffic-control devices at the crossing and of course for maintenance at the crossing.

And as part of that agreement that if the responsible agency failed to fulfill its goal

to install or maintain devices, surface access, vegetation, all the items that we could consider issues at crossings, that the crossing would automatically be closed, that there would be no recourse other than to have the crossing closed.

And that alone would serve as an incentive to a commercial or an industrial-type facility to continue the maintenance and access-way improvements necessary to retain the crossing in an open and passable condition.

And finally, in closing, I'd just like to encourage FRA generally in the private-crossing endeavor, that this is an issue that both the national committee and numerous states that I work with wrestle with: How we deal with treatments at private crossings and what rules apply?

And I certainly applaud your effort to deal with this. I encourage you to move forward with regulation and to be able to have enough regulatory teeth to be able to give us some form of control where we can actually provide a level of enforcement to persons wishing to create a private or a semipublic crossing over a railroad.

Thank you.

MR. COTHEN: We have notice of two additional individuals who would like to present on behalf of themselves or others. The first is Mr. Ben Saunders, Association of Trial Lawyers of America; and then on behalf of himself, Mr. John Van Mol, who introduced himself this morning and can give us a perspective from a point of view of private-crossing owners, which we very much look forward to as well.

So let me ask Mr. Saunders to step forward and introduce yourself for the record, spell your name, if you would, and proceed.

MR. SAUNDERS: My name is Ben Saunders, and I served about ten years ago as chairman of what's called the Trial Lawyers Railroad Law Section. It's at the American Trial Lawyers, ATLA, which I know from some of the earlier comments is not necessarily a word or a group that's very engendered by the business industry or defense lawyers.

But the truth is that ATLA represents us. And when I say "us," I mean you and me. ATLA's purpose is people. And so that I don't misconstrue where I'm coming from or you don't misconstrue or downplay what I have to say, let

me say this: I don't do pedestrian crossing cases, so the folks with the short-line railroad here in Louisiana, I don't represent those folks that have the circular driveways going across your track.

Who I do represent are the locomotive engineers. And those locomotive engineers share a unity of interest with the railroads in that the railroads don't want to lose their engines or their engineers. And we're not talking about a situation where the train hits a car, where the train always wins. We're talking about situations like this gentleman referred to earlier about the industries that he serves with the highly flammable cars and leakages into communities.

And I don't do class actions either; okay? So I really don't have a dog in the crossing fight or the class-action fight. I only care about the guys operating the trains, because that's my chosen profession, just like this other gentlemen writes through the NCUTCD. So that's where I'm coming from, so it's not like here's one of those trial lawyers looking to play the lawsuit lottery. That's not my game. I don't

have a dog in that fight.

But what I do say is this: Jolie Molatores (phonetic) was the FRA director several years ago, and she asked a group of us to come up and talk to her. She said, you know, "I want to be responsive, more responsive to the people who I'm chosen to serve and not just the industries that I also have the privilege of serving. And I know that you guys represent the people, and I want to hear at least what you have to say."

And what we had to say was, you know, corporations -- I went to a very liberal Catholic law school here in New Orleans. It was a Jesuit school, and they said, "You know, corporations are fictitious persons and corporations exist to serve the people."

And this gentleman said, "Jolie Molatores, even though she philosophically disagrees with me, you know," he says, "we're here -- we're here to protect the people. We want to have separations so these accidents can't happen."

So although we may philosophically be coming from different parts of the country, at the end of the day we agree that the name of the

game here is to serve the people and use the money that we can get from the government to make life safe for the railroad, the railroad engineer, and those people who have these, quote -- I'm using this as kind of a joke -- these circular driveways across railroad tracks, which are ridiculous, aren't they?

FROM THE FLOOR: Amen.

MR. SAUNDERS: I knew you'd like that. So my point being, we can talk about regulation, making the federal government bigger, having the politics that we have, having the courts do this and the courts do that.

But what's the problem? The problem -- once again, you observed it, sir: The problem is that you have to have an inability for a human being who either works for a railroad or a human being who's driving a vehicle to interact.

And where is the solution to this problem? It's been in Washington for years. The National Transportation Safety Board for years has published and advocated what is called -- and once again I'm on the page with you -- positive train separation. What is positive train separation? You can't have an interaction with

human beings.

Why? Because we can make all the rules you folks want to make, all the regulations, pass responsibility, have your insurance-premium quote go up sky high. In New Orleans we know how bad insurance is. Look at the Hurricane Katrina claims. This poor fellow's trying to run a small company, and his premiums are skyrocketing. Okay.

So you've to say how you solve the problem. The problem is solved by not having an interaction. So does it cost $3 million a crossing or $300,000 a crossing? Do all overpasses have to be built? That's not what the National Transportation Safety Board said.

All of y'all ought to do yourselves a favor and drive down Airline Highway on your way home and go by what's called the Cold Storage Facility, where the Kansas City Southern and IC -- I can't remember which railroad -- has a few telephone poles built up with a roadway that goes under it so that when a train is coming from New Orleans going to Baton Rouge, the trucks going to the cold storage can't -- cannot -- interact with the train.

That's the shortcut we took from Metairie to Uptown to go to law school since the '60s. Never been a wreck there, because they can't interact. Don't worry about reading the sign. You can preach "Stop, look, and listen" all you want. You can put up flashing lights, you can put up stop signs there. It's your responsibility. It's not the state's responsibility.

But look at this problem: Human beings are going to operate like human beings. Governor Blanco said, "Oh, my uncle was killed by Union Pacific. He just forgot to stop one day." I understand that Governor Blanco at the hearings in Baton Rouge, I understand that, because people err. To err is human. We make mistakes.

So how do we design it out? By not having the train operate in a fashion that it can interact with an eighteen-wheeler or a lowboy hang up, a chemical truck, and, going down, a mom and a pop who are having an argument in the car and they stop on top of the track and get whacked; okay?

So my suggestion to everyone is -- and it's not really part of the paper. ATLA made a

presentation or a paper. This gentleman has that. Y'all can read all of that. But my comments are, Why don't we use our heads? Sir, you mentioned everybody in Europe. I've been to Europe and I've watched in every country in Europe the positive train separation.

He was talking about Australia and going to the Far East and so forth and so on, but I've watched it. You go to Italy and you don't cross the track. A bar doesn't just come down like this. The bar comes across, and you don't have a choice.

You do not have the option of driving across the track. That's a solution. You can't drive around. You'd have to drive through the barrier. You can't hook a left then a right and get around it. That's No. 1.

No. 2, do something cheap, like the cold storage, when they're going through Nebraska through the corn fields, and you want to have a situation where the truck is going to some processing plant and you don't want that eighteen-wheeler to have any ability to interact with the train.

And then obviously, if you look again

at Metairie Road, you have to build in some instances overpasses, but the engineering and the technology are there. And again, if we can spend billions and billions and billions of dollars freeing Iraq, why can't we spend a few million protecting our people: You, me, the good guys like him and the bad guys like me, the trial lawyers? What's wrong with that?

And I say that facetiously, and that's my whole speech.

MR. COTHEN: Somebody behind me was talking about how we couldn't get out of here without talking about Metairie Road. Ben's taken care of it, so let's just let it lie. Thank you, sir.

Mr. John Van Mol, still with us? There he is. Could you come up, please, and identify yourself for the record and proceed.

MR. VAN MOL: I'm John Van Mol. I'm a -- looks like I'm kind of slim and minority here this morning. I don't work for the railroad, I don't work for the government, I'm not an attorney, and I have been known to drive a truck from time to time.

It's just from listening to some of

you guys this morning that kind of makes me wonder if we did away with the lawyers and the truck drivers, from the railroad's point of view we'd be in pretty good shape. I don't know how Wal-Mart would fare, or the grocery store.

I'm a farmer. I have a cotton gin, interest in a grain elevator. And all of these things put me in basically the same predicament most of you are in: We have people that work for us that depend on us to make decisions for them. We have a responsibility to their families.

Sometimes when I'm really frustrated with different employees, I try to remind myself that that guy's out here buying diapers for somebody. And that's important to me, that it's a person, just like you alluded to a minute ago.

This is one of the farms that I farm, and it's owned by four different landowners. The Union Pacific Railroad is identified right here, running through the middle of it. Highway 71 is the northernmost border.

This piece of property belongs to one landowner, this piece of property belongs to another, this piece of property belongs to a fellow that fought in the Battle of the Bulge,

D-Day plus zero, and he's not very railroad-friendly, by the way. And this piece of property here belongs to another landowner.

July the 7th of 2005, in an attempt to live up to the rules and regulations that the Federal Rail Administration has set forth, they came through and posted all the private crossings along the breadth of this property that we're farming with the exception of this 427-860-D, which at that time and for the last fifty years prior to that was always believed to be a public road.

It was -- on public record it was called the Oilfield Road. According to our farm management team, the Oilfield Road is a little further down, but according to the public record that's the way it was. That was July the 7th when they were posted.

August 18th: We started harvesting corn and we stopped shelling corn long enough to attend a meeting, a public hearing, public gathering that the Union Pacific had in the small town of Cheneyville, underneath an oak tree out by the bank where they used to gather to play dominoes. So it was kind of a real nice, relaxed

atmosphere.

At that time I met with a railroad representative and gave him basically a list of the crossings, private crossings, that were -- that I was involved in, and asked him that these crossings be left in place. At that time I also inquired about this crossing, No. 427-860-D, which is the main corridor for the entire acreage there.

The farm headquarters is located here, where it's identified as a shop. And of course we service the different fields from that area. That was the 22nd of August.

The 26th of August: I'm sitting in my pickup, and the phone's been buzzing, buzzing, buzzing, buzzing. I know all of y'all have one of those. And I'm ignoring it because I'm doing something else.

And then the radio comes through, and the train hit it. The train hit the truck. The train hit the truck. I didn't know if one of my sons was in that truck or not, because I have a number of children. So it's not just a fatality anymore. All of a sudden it's real personal.

So the safety aspect of everything

we're talking about here today is not just rhetoric as far as I'm concerned. It's real. And for just a few -- until I heard him on the radio saying -- you know, talking to someone else, I was very concerned that my eighteen-year-old son, soon to leave for college in just a few days, could possibly have been involved. That was the 26th of August.

Of course the truck driver in his infinite wisdom, who was unhurt, filed a lawsuit the next day against the railroad. I kind of want to tell the whole truth and be fair to everyone. And you know, it wasn't my truck. It was an independent trucker that I had hired. But he filed a lawsuit against the railroad.

But just kind of some notes from my diary to let you know the framework of the average citizen, August 27th: Elevators are full. River traffic on the Red and the Atchafalaya rivers has stopped.

August the 28th: All trucks are full. Can't find a truck anywhere. August the 29th: Katrina hits New Orleans 6:00 a.m. September the 8th: We finish up going to Cheneyville, moved to Alexandria, another farm.

September the 9th: The Union Pacific Railroad posted this crossing. And I don't know how to do this. There we go. Union Pacific came along and put us a little sign there saying that it was now subject to closure. So be it. They posted the crossing.

September the 12th: We're exfoliating cotton as fast as we can. There are three more storms out in the Caribbean. September 22nd, ten days later: We're picking this field of cotton very close to this sign, and I walked by the sign and I noticed that -- in my mind I think to myself, "Well, the railroad has done it again. They're duplicating what they did. Somebody forgot to do it last time." But I had spoken to the man in charge of the railroad, who spoke with authority and said that he was in charge. And he said this is a public road. It's not subject to closure.

The next morning at 5:00 a.m. we moved out on the highway to go up to the Alexandria farm to pick cotton. September 24th: Rita makes landfall. We had sixteen inches of rain. That's what it looked like after that (indicating). I don't know if y'all can see, but the next time we

saw this sign, I personally saw it, it did not stand out in my mind very clear.

I had just lost enough money for all of us to retire on from the storm. The letters are washed off. Not a big deal. Nothing to be extremely concerned about.

In February, I see a track crew doing some maintenance on the railroad. In passing by, I stopped. There was a piece of broken rail on the ground. This crossing has a tendency to hold water close to the crossing here. It would hold water and it would have spongy places. I don't know if any of y'all are familiar with that in maintaining your tracks.

But they had taken a backhoe and dug some trenches alongside of the track, and there was a broken piece of rail. And the workers led me to believe that "We're repairing the track. It's bad and soft, and we'll be back." That was, I believe, to be mid-February.

In mid-April we rolled back in. We're starting to plant, to do plowing operations. And the track still isn't back. The railroad is not -- from a personal point of view, has not been real responsive to phone calls. It's seldom

that I call someone at the railroad and they answer the telephone. Quite often it takes a number of days of repeated messages, that sort of thing.

And that's kind of downplayed once you get them on the phone. They're the only ones that are really very busy, although according to my wife, I quite often work ninety-hour weeks. But anyway, we finally got ahold of the railroad, and the landowner and I and my partner met with the railroad.

And at that meeting they made it clear that this crossing was going to be closed and that we had adequate -- I'm going to go back here. Let's see. That's not right. They said we have adequate crossings.

"We're going to take your main road out, and you have a crossing here," which that's D-Day. And I'm not trying to put down D-Day. D-Day is very old. He's paid his dues. He doesn't like to be fooled with.

But we have a crossing here. We also have another crossing here. And here's our headquarters, by the way. So "That's adequate. Be happy with what you have. Good luck to you.

So if you want to try to put in an application, you can put in an application. In fact you don't have applications on file with the Union Pacific Railroad on any of these crossings, and as far as the Union Pacific is concerned, they're all subject to closure."

And you know, "The railroad, the Union Pacific Railroad, does not owe you a crossing. The railroad does not owe you a right-of-way. And as long as there's any possibility of you getting to that property any other way, that must be totally exhausted first."

Well, that building right there is movable. It can be moved. So can the railroad track. You can just get plumb outlandish with how much money you can spend, but in the course of just trying to make the best of a bad situation, we said, "Okay. We have to farm, because it's kind of like raising children: Once you have them, you've got to keep going."

We started putting our guys out on the highway, whatever we needed to normally go down this little 500-feet distance and cross the railroad track and disperse on the other side of the farm. We were going south to one side of the

farm and north to the other side. But our problem is, this is a real sharp curve in the road. Like here, this is normally a sugarcane field.

So it's basically from where you're at right there on, you're blind. And that's really a lot easier trip to the center of the farm to go down this road than to enter the highway in this very sharp curve. Can y'all see that truck? That's one of your truck drivers, guys. He's probably doing seventy miles an hour around that curve, and it just so happened that we caught it.

But you can see the road goes up and banks and dips back down. We have a number -- this year we've had two separate occasions where people came around this curve and made a beeline through those first two telephone poles you see on the slide right there. You can see the dropoff there by that telephone pole. It's four or five feet of it.

We go down this road. After we go down this road, we're going to turn in by this sign. And that's all well and good, but our equipment quite often is twenty feet or wider, and so we really have a problem occupying both

the shoulder and the lane in the highway that we were traveling down.

And when we turn in this road, we actually have to slow down enough to maneuver around some obstacles here. The road has not held up. You know, the railroad pointed out to me that the economics of two roads being easier to maintain than one is not their concern.

To this point and date I've spent about ten, twelve thousand dollars improving drainage along these roads in order to help them stand up to the increased traffic of putting all that traffic on one. We've cleaned out some ditches. We've done a number of things, and it still doesn't hold up.

This particular slide right here is a module truck driver. I don't know if you're familiar with what a cotton module looks like. It's very heavy. He came into the road, loaded cotton, and went back out. That's one trip, and it rained, so it wasn't as easy.

We also have a northern route that we can go back to get back to these same places. And it's a nice, wide-open road right there. We have a pretty narrow crossing right there, too.

This also you can see that railroad crossing is in place. We offered to the railroad to exchange crossing for crossing. There was no -- from our standpoint, there was no negotiating with the railroad.

The only option that I was given was "You remove three crossings," which, you know, I'm not the landowner, so I have to go and have body parts cut off, literally get scalped, and ask for these things.

These men, the people were not interested in giving up their access, but I went and asked anyway. And the prospect of giving three crossings up in order to get the main road -- crossing at the main road reestablished was a bit much. It just didn't work.

We needed our crossing put back in. I still need my crossing put back in. We're good people. We're just trying to take care of our people. We have never had a problem with the railroad before. We've always been a good neighbor to the railroad, and we're not --

You know, as a farmer, the railroad comes through quite often and leaves all kinds of obstacles for us to pick up and take care of.

And I understand it is their right-of-way, but the railroad in itself creates some safety hazards, too, and putting folks back out on the highway was a concern of mine.

This slide right here represents a good percentage of my cotton crop, as you can see it across the railroad track right there. That cotton sat there for six weeks longer than it should have, through the month of October while it rained because the Mexican went through the field and ruined the road when he shouldn't have, but it would have normally been very accessible.

The cotton gin ran out of cotton. I'm one of the principal people involved in the gin, so our cotton -- I'm a co-op, but I'm the last. And it cost me dearly, just kind of a haphazard way that the railroad has pursued this, in my mind.

Now, this meeting is all about safety, and I am interested in safety. And I am trying to see things from the railroad's point of view, and I understand that I have a crossing that is not a continuous crossing.

My men and machinery are not continuously crossing that railroad. Even a

public road, there's not continuous use of the crossing. We use these crossings seasonally, but -- we use them seasonally, but when we're using them, we're using them a lot. We put a lot of emphasis on safety in our operation.

And in talking to the railroad, they are very anxious to remove absolutely as many private crossings as they can. But I propose for my -- for the well-being of my farm, I think that it would be very easy if this crossing were reestablished for me to gate it to where it's denied access during off-period times. When we're not using it, we go for a month or two months or three months at a time. It's not abandoned. Basically it's used very infrequently.

Cable that crossing or gate that crossing some kind of way. I'm willing to do that. I don't know -- I believe previous speakers alluded to that sort of thing. You just can't rip them all out, just like you can't get rid of all the truck drivers and all the people who cause the inconvenience.

But I haven't heard that really mentioned here, but I need -- and I'm willing

personally to -- like the man -- I'm sorry, I didn't catch your name -- but be responsible for who comes and goes across the crossings. And I don't have a circular driveway or anything.

Thank y'all very much.

MR. COTHEN: Thank you very much, sir.

Are there others who want to speak in a general way to these issues before we adjourn -- recess; excuse me -- for a lunch break? After which we'll have a topical discussion.

Hearing none, first I'd like to thank all of the speakers this morning, starting with the Louisiana DOT for the welcome introduction, and I'd like to thank all the speakers for their contributions and for their courtesy to others and the sense of inclusiveness that they maintained in addressing the issues.

We have waited until late, and therefore we'll be probably difficult to get food. And so is there any objection to a 2:00 o'clock restart? Is there anybody who is going to lose in terms of discussion? Can we do that? Would you -- it's okay. Not wanting to be blamed. Okay.

Let's come back at 2:00 o'clock. I don't anticipate that we'll go terribly late this afternoon, but we do have this until 5:00, and so we'll see you back at 2:00 o'clock sharp, please.

Thank you.

(After a lunch recess, the proceedings resumed as follows:)

MR. COTHEN: I'm pleased to turn over the proceedings to Miriam Kloeppel to begin the first two sessions of discussion for the afternoon. I would encourage any of those around the back who are interested in filling in and joining directly into the discussion to do so, as several folks have had to leave for the afternoon. So you're welcome at the table.

MS. KLOEPPEL: Good afternoon, everyone. As Grady mentioned, this is going to be a more focussed discussion, this part of the meeting, in which we hope to really isolate, if possible, what kind of data are needed, and if we identify which data are needed, how do we get those data.

A quick review: This is just a tabulation of the number of private crossings, percentages throughout our geographic regions. As you can see, in each of our geographic

regions, the FRA geographic regions, private crossings do constitute a significant percentage of all crossings.

In total, I didn't put the number on the slide, but we have about 93,000 private crossings nationwide. In recent years, in the last ten years -- oops; excuse me -- looks like about twenty years here, we've had a significant improvement in the number of collisions, accidents at public and public grade crossings, thirty percent in the past ten years, but we have had more or less a static performance at private crossings in that same decade. The improvement or change has only been about ten percent, and the numbers are small, so that ten percent could be an artifact of small numbers.

I also want to emphasize that you're to free feel free to interrupt me at any point. This is just a series of slides with some of the current experience at private crossings. If you have any questions or comments, please speak up.

What we have in this slide is the incidence at both public and private crossings per 100 crossings, and we've broken it out by warning-device type. It's quite possible that

you can't see because the letters are probably a little small, but we've got it broken by gates, lights, other active warning devices, crossbucks, stop signs, and other; so some other kind of sign, and also crossings at which there's nothing, or for which the field in our database in the national inventory was blank.

We normalized it by the number of -- by 100 crossings with warning-device type in order to give a kind of picture, a grounds for real comparison. And it does appear, based on this, that we may have some, an abnormally high incidence at private crossings.

Based on our inventory, this is the number of private crossings by the type of development. In the first column we've got farm or agricultural crossings. The second column is residential driveways, essentially. The third column is recreational, so access to parks or some sort of thing like that.

Industrial. And in fact nationwide it looks like industrial crossings constitute about twenty-three percent of all the private crossings. Those that are categorized as commercial are only .3 percent of the crossings,

and we do still have a number of records: 1.8 percent for which there's -- that field is blank.

Yes, sir?

FROM THE FLOOR: Do you have a breakdown of accidents per type?

MS. KLOEPPEL: I think I may. Yes: Number of incidents at private crossings by type of development. In fact, let me step back for a second.

Here's the number of crossings. For farm crossings, sixty percent of crossings, 28.7 percent of the accidents or incidents. The industrial crossings, again, 23.6 percent, but 30.4 percent of the incidents.

And most interestingly to me, we have 1.8 percent of the crossings for which we don't have the information, but 27.9 of the incidents occur at those crossings where we don't have that information. Don't yet know why that would be, but it is something that's raising questions: What characteristics of those crossings makes it so?

We also broke it up by the number of number of incidents by the type of train equipment and the train speed. The light blue

column is for freight trains. That's long freight trains, single cars, or a cut of cars. The dark blue column is for passenger or commuter operations.

And the kind of teal green one is for anything else, and that includes work trains, yard or switching trains, like locomotives. And as you go across the bottom from left to right, you're getting an increase in speed, and of course it makes sense that we're seeing more incidents of higher speeds in the passenger operations. So I don't know if there's anything particularly startling about this.

FROM THE FLOOR: It's purple up here on the screen.

MS. KLOEPPEL: Is it? Thank you. I guess I'll look up there. Light blue here, but --

FROM THE FLOOR: Light purple, dark purple.

MS. KLOEPPEL: Dark purple? All right. I beg your pardon. No deep purple.

In the US DOT national grade crossing inventory, thirty-two percent of the private-crossing records have been updated since 2001. Twenty-one percent of the private-crossing

records have never been updated since they were created in the early '70s.

I don't expect you to read this. This is just a shot of the form, the inventory form. I just wanted to demonstrate that for a public crossing, whoever is filling it out, railroad or state, almost all of those fields on both of these pages need to be filled out. That's for public.

For private crossings, only the area I've shaded is necessary. As you can see, that brings about a huge disparity in the amount and type of data that are available for -- between the two types. Yes, sir?

MR. SHREWSBERRY: I wanted to clarify that only the public tax graded crossings are filled out.

MS. KLOEPPEL: That's true. Thank you. I guess there's not much point in doing it for the ones that are grade separated. I appreciate the correction.

I wanted to step back and think about the uses to which these data are put, and in this case principally we're talking about public crossings. Many people have many different

reasons for collecting and using these data, and these are just a few of the -- it's just an example of a few.

In many cases they are used for resource allocation or prioritizing which crossings are supposed to get some kind of treatment. And examples of programs where we do that, we have the US DOT formula, the resource-allocation formula, and there are various state formulae.

Data are also used to help us determine which warning devices are more appropriate for a given crossing, and a couple of examples of programs to assist in that is the GradeDec allocation system, which has been created and is run by the FRA's office policy.

And there is also the FRA's quiet zone calculator, and some people are familiar with that. When you're trying to develop a quiet zone, we have an online tool that enables people to see what the effect of a change in the warning device would have on the risk that's present in that crossing.

And another purpose for the collection of data would include, say, the warning-device

evaluation: How effective is a particular warning device? And in that case, the example I have is the North Carolina field-corridor study.

Here I've just listed the data elements that are used in the US DOT resource-allocation formula, and this formula gets used in the quiet-zone calculator and is one of the formulae that can be used by GradeDec. And in fact a number of states also use this for their allocations.

My point here is that these are fields that are important for public-crossing evaluation. And the red box at the bottom outlines basically sort of whether or not that data would be available for a private crossing. So out all of those fields, you get -- sort of you get the warning devices present and you get accident frequency at private crossings.

This is just a quick shot of the quiet-zone calculator, and basically we have the same issue. The same fields are being required here, and you're going to have the same issue of most of these data not being available for private crossings.

In the past, a number of different

sources have recommended other data collection, and I'm not here just focussing on private crossings. If there are other data fields that people think are of value in determining risk at a crossing or anything like that, I encourage you to speak up and talk about it here today. I don't want to just focus on whether it's available for public and not for private.

And to sort of spur that conversation on, I looked back at the NTSB study on passive crossings. They had some recommendations wherein they suggested that people collect information on the sight distance available, the presence of curves on the roadway or the tracks, angle of intersection or the presence of nearby intersections.

And they had a catchall phrase in there about any other data that affects the safety at a crossing. And also we do collect latitudes and longitudes, but it may be possible for us to do even more with it than what we're trying to do.

If anybody has any other suggestions about data, we'd certainly love to hear about them. Yes, sir?

MR. CAMPBELL: Miriam, I might throw out a few things to think about, and maybe this will spur the conversation a little bit.

Having done some research tools for some different railroads to do analysis of private crossings, you need to look at -- some of the things you need to look at are additional physical characteristics, like the approach and departure grade for the crossing on both sides, in both directions.

Another thing you need to know is the typical class of vehicle that operates over the crossing; like, for example, a residential crossing is more than -- in all likelihood it will be a passenger car, SUV, or pickup truck, you know, a smaller vehicle, where an industrial crossing will be a larger vehicle.

We did some rough analysis of the quality of the surface, because a degraded surface will obviously increase the time to clear. And then once you get those other elements with what NTSB has recommended, you can look at and develop essentially a clearing-sight distance.

In other words, for the given class of

vehicle, approach grade, distance across the crossing the NCUTCD, you can calculate a time required for that vehicle to be able to start up and clear the crossing. And it's important, one of the things that's happened at a lot of private crossings is installation of a stop sign. But when we introduce a stop at a crossing, the clearing-sight distance grows exponentially.

So if you take the clearing-sight distance, then you can take the maximum authorized speed of the trains on that given section of the track and determine a sight distance that you need to be able to adequately clear, because some of the crossings we go in and put these treatments in, and we create a scenario where, based on physical characteristics, vegetation, either on or off the railroad right-of-way, generally off, it generally is crops or vegetation off the railroad right-of-way where you can't actually come to a stop to comply with the rules, start up and clear prior to train arrival at maximum authorized speed.

So there are some inherent hazards that need to be understood, and collecting some additional data would help to be able to gather

that information.

MS. KLOEPPEL: And is that a complete list of the additional elements that you found useful or --

MR. CAMPBELL: As far as my brain right this minute. I could probably e-mail you a list of them all.

MS. KLOEPPEL: That would be great. Anyone else with other suggested data?

What about the prospect of requiring for private crossings the same data that you have for public crossings or these critical fields that are used in evaluations? Mr. Shrewsberry?

MR. SHREWSBERRY: Well, I like what Rick was saying about the classifications a little bit more from a semipublic to fully private. But one of my concerns as an engineer, although we're involved in the public crossings, which are parish or counties or cities or states approach roadways, we have issues collecting data as far as the traffic for these public reads.

It would be very, very difficult to do it for private, you know. But I think the way Rick's presented this option would be good to look at and get some guidance federally from

that, you know, that I just don't think it's really feasible to get all the data that for every one of these crossings.

We've got almost as many private crossings as public, and we work to try to keep our data fairly well up to date, but I just don't think it's realistic to get the other data for the private ones.

MS. KLOEPPEL: Yes, sir?

MR. MEYER: I just want to second that point. As I understand it, we have a tremendous number of private crossings all over the system, many of which may see only a handful of vehicles a day.

Furthermore, some of these are dirt roads, which makes data collection even more difficult, because the -- somebody can correct me on whatever these vehicle-counting devices are -- they usually lay some kind of tube across the road.

From what I understand, those are ineffective on dirt roads, because you actually have to have a live human being counting every car that goes by, so realistically it would be a nearly impossible task to achieve for every

there ways we can get at it without putting a man on the ground?

MR. MEYER: Gabriel Meyer, Union Pacific.

One thing we would be open to exploring would be, I think you're describing here, some kind of a proxy, some kind of statistical sampling process whereby we look at a certain number of private crossings in a given area that appear to have similar characteristics, and then we can use our data sample to extrapolate from there. I don't know exactly how we would pursue that, but again, it's something we would be willing to consider.

MS. KLOEPPEL: Mr. DePaepe?

MR. DePAEPE: Tim DePaepe, Brotherhood of Signalmen.

I want to step back just a little bit when it comes to identifying. Before breaking down into various types, semiprivate and private, my comments are mainly directed at Class I right now, but they will expand to Class II railroads.

A lot of railroads are doing GPS mapping of their territories and their properties. As they do this type of mapping, they should be able to identify the exact

private crossing.

MS. BRUNTE: (Inaudible) right-of-way issues can be (inaudible) obstruction (inaudible) bushes on a lot of issues (inaudible).

MR. TESSLER: Excuse me. Before you make a comment, could you introduce yourself so the court reporter can -- and obviously she can't hear you.

MR. MEYER: Gabriel Meyer, with Pacific Railroad.

MS. BRUNTE: Kim Brunte.

MS. KLOEPPEL: Well, if we acknowledge that not all fields can be readily collected, are there proxies? Are there other ways to get at a sort of what -- what if we grouped crossings? I'm just talking off the top of my head here. You can shoot me down.

Suppose we had the private crossings and the semiprivate crossings and the public crossings. Within the private category, what if you had just sort of boxed-in categories: You had fewer than ten vehicles a day or fewer than a hundred vehicles a day? And then in semiprivate you'd probably have more opportunity to collect the data. But also in other types of data, are

location of any crossing, be it public, private, semiprivate, or highway-rail grade, to get exact longitude and latitude locations of where these are at.

Then once you have that data, you can break it down into the smaller categories if you want. That's the first problem, because, as you know, with both public and private crossings, regardless if passive or active, they're miscategorized, and that database is still not one hundred percent correct. That's how you get the total amount of crossings and exactly where they're at. Then you can break it down from there.

My recommendation, as I've said in the past at other forums, we're not leery of any regulation, but if they're going to use these technologies, they should be required to do that specific type of mapping when they map their territory for their turnouts and everything else. They should be required to map every crossing, be it stone, rock, asphalt, or whatever.

MS. KLOEPPEL: Thank you. Mr. Browder?

MR. BROWDER: Bill Browder, Association of American Railroads.

Let me preface my remarks by reiterating from 23 CFR the FHWA highways portion that railroads derive absolutely no benefit from highway-rail grade crossings. Therefore, any enforcement of potential actions by government agencies, including the FRA, need to have a substantial safety basis, including the collection of data.

And the reason that I would suggest that is because AAR has concerns about the expenses involved for our members in these endeavors. I can tell you from my thirty-six-plus years' experience with Class I railroads that we don't have an excess of staff engineering, operations, transportation people to collect, maintain, conduct diagnostic testing of these particular crossings. Okay. That's my preface.

Now, back to the subject at hand, taking another step back with Timmy, he's flashed up the inventory form up there, and I can relate to the public inventory form, which is a partnership between the highway authority and the railroad or the rail operator for that territory.

Now, for the part you have in blue for

the private crossings, do you have any perspective on who are the people who submit that for private crossings? That's a yes-or-no question, and if it's a yes, maybe you can give us a number or a percentage.

MS. KLOEPPEL: I don't -- I believe it would be a hundred percent railroad.

MR. BROWDER: That would be my first guess. And you're talking about expanding this forum into areas that are in my opinion somewhat unrelated to the expertise, let alone capabilities, of the railroad to collect.

Whether the data-driven information could be useful to safety, we have always attempted to be good corporate citizens of local, state, and federal communities in conducting this thing.

In fact, AAR developed this form in the early '70s. And again, we're glad to share it with people and we were pleased, as a matter of fact, after I came with AAR in 1995, to see it renamed US DOT form from the AAR form. I certainly get less calls than I used to.

But seriously, I think it's something that we need to look after, because again, just

reiterating my point, I totally agree with you, Miriam. The railroads and my members and the short lines probably do submit a hundred percent of the information that you receive on private grade crossings.

I couple that with the idea that FRA is the regulator of the railroads, not the highway authorities or other people. And I get concerned especially since, if I remember correctly, this administration and previous administrations and friends in Congress have proposed that this inventory be mandatory and become part of the Code of Federal Regulations.

And in talking about it, it's going to put an additional burden on what I feel from my rough calculations, we probably spend in the neighborhood in terms of highway-rail grade crossings, 250 to 300 million dollars a year right now on those crossings. And --

MS. KLOEPPEL: Nationwide?

MR. BROWDER: Excuse me?

MS. KLOEPPEL: Nationwide, you're saying?

MR. BROWDER: Nationwide annually. And again, from the AAR's perspective for our members, have become very much concerned about

any additional monetary burden that may be placed on them in terms of developing data as such. And I would urge everyone to look at alternative ways and constructive means to obtain data that's safety related to improve the situation.

MS. KLOEPPEL: Now you've beat me to the punch. I was going to ask if there were any suggestions for alternative ways, and it's obvious that this could -- I mean, a wholesale demand that everybody fill out all of the data elements for all private crossings would be obviously very burdensome, but I would love to hear from people about what they think in terms of other ways to get at the information or whether in fact all of it would be necessary.

MR. BROWDER: I was very much encouraged at a recent meeting in West Virginia, the Eastern Region Grade Crossing Conference by FRA's Tom Wall, who is involved with this inventory and some of the items that he distributed for making the inventory forms more user friendly.

And I understand secondhand, although I don't have the details, that there is some sort of a pilot project under way that would promote the electronic submission of the data for these

inventory forms to the inventory system.

I would share with you a comment from one of my members who told me antidotally that, given the opportunity and two or three hundred thousand dollars in money, that they could fix the problem of having to submit the current process on this inventory form which that member had told me cost them many, many times more than the current process.

And I would urge that maybe there's some kind of capability, notwithstanding the progress that Tom's making with the process, that this could be something to be considered, not just for private crossings but for the whole crossing-inventory program.

Now, I don't know the details, but I'd be more than happy to put you in touch with this member and see if they can put their mouth where their money is. I'm through.

MS. COOK: Okay. Bill, did you mean to say that the current process -- oh, I'm sorry. This is Carolyn Cook with the Federal Railroad Administration. Did you mean to say that the current process cost many more times than the process that (inaudible)?

MR. BROWDER: That's what I meant to say, is that this member claims, and I have no reason to doubt their claim, that with a good programmer and a couple hundred thousand dollars with a contractor, they could solve this problem that both the states and the railroads have with the submission of these inventory forms, both public and private, and make it so that it is a more current, effective tool that could be used in terms of data collection.

What are you shaking your head for?

MS. KLOEPPEL: I think we would love to hear from this constituent of yours.

MR. BROWDER: Okay. Well, we're going to have to -- we'll do more than love to hear from him, but maybe we can talk, because I'm not familiar and AAR's not familiar with this process. I've been to the point where I've gotten so frustrated with the idea in the current format, even though I know the AAR would support such an effort, that I would be more than happy to approach this member and see if we can do some constructive things together.

MS. KLOEPPEL: Okay. Thank you. Mr. Shrewsberry?

MR. SHREWSBERRY: Bill Shrewsberry, Louisiana DOTD.

I want to just bring up a couple of things for the record. This initial inventory was basically developed for the Highway Safety Act about thirty years ago, and the form that's on there now is not necessarily the inventory that we started out with, nor that Louisiana has within our database system.

Some of this form was developed -- I know I had some concerns as a state when this form was introduced in the other fields and various responsibilities. Also the attorney general's office, the state attorney general's office and the department has been concerned about the regularly availableness of this information, which was developed for the purposes of engineering tools to help distribute limited federal railroad-safety funds.

There have been legal issues. I'm not an attorney. I'm going to try to see if the AG's office or someone else can better articulate what I'm trying to say. But there have been Homeland Security issues and other issues about the availability of the data that started out to help

evaluate the public at-grade crossings.

You know, but since I didn't have much input on this form that's got developed here, one of the things Louisiana does in thinking outside the box is our most significant thing is to close crossings of convenience for effective consolidation.

There's not a reference within the form what's up and down the line in all of this thing, the proximity of crossing on the rail. Our database for Louisiana deals with rail, and there's a program that we have where computer people have set up one, two, three, four down that line.

I don't think the inventory form was set up that way. But when we're looking at things to move into the future, we've got to look at closing public crossings and definitely consolidating these private crossings. And there doesn't seem to be a place within the individual form to deal with that.

You know, one of the first things we asked when we got the surveys all over the state is, Can this crossing be closed? That's the first thing that we look at from our engineering

responsibility. And that needs to be addressed if we're going to be looking at these things. What's up and down the rail line is some of the other things.

And that's just kind of thinking outside of the box for the record. Thank you.

MS. KLOEPPEL: That's what I was hoping for. Thank you. Anyone else have any additional comments about the types of data that might be valuable? Carolyn?

MS. COOK: Carolyn Cook with FRA.

Does GradeDec have the ability to look at a corridor by linking in the information and bringing in the mile posts and DOT? Is that a tool that would be good for corridor analysis?

MS. KLOEPPEL: It's intended for corridor analysis, but I'm not sure how it -- it may rely upon the user to tell it what the crossings are in the corridor. I don't think that they have any fancy algorithm to identify subdivision and division and mile post or anything like that.

Anyone else? Well, I thank you all for your comments. We have one in the back?

MR. ZELLER (phonetic): Yes. Just a quick one. I'm Pete Zeller, for Laredo.

I was just going back to your data and your chart there. It seems like we need to figure out what "other" is, because you've got thirty percent of your accidents occurring in a category that you have no clue as to what type of crossing it is.

MS. KLOEPPEL: That's a good comment. How should we get that data? I'm just being mean. Thank you for your comment.

MR. ZELLER: Well, no. I can go to -- you know, talking about the funding, the fuel tax would have been a great way to fund it.

MS. KLOEPPEL: Interesting point.

MR. BROWDER: Whose fuel tax are you talking about?

MR. ZELLER: Yours.

MS. KLOEPPEL: Mr. Campbell?

MR. CAMPBELL: Rick Campbell. Miriam, are you going to move on to other elements or are you going to --

MS. KLOEPPEL: We can, but I'm trying to --

MR. CAMPBELL: Well, what I wanted to clear up, and maybe it's relevant to stick this in now. This isn't a data-related issue, but two

or three people have mentioned in discussion and comments made about my suggestion of a third category, and two or three times I've heard the term "semiprivate." And I want clarify that.

I specifically called it a semipublic crossing. And let me read from NCUTCD in chapter 1. We have a series of definitions, and number 56 is a public road. And it's "any road or street under the jurisdiction of and maintained by a public agency and open to public travel."

Now, I think we can split the categories to semipublic and private pretty simply if we take the public-road definition and say, "Any road or street under the jurisdiction of and maintained by a private entity and open to public travel," and a private road or a private crossing could be "any road or street under the jurisdiction of and maintained by a private entity and not open to public travel."

So I split those categories out, but I think it's important that we consider semipublic. And part of the idea, we've had some conversation over lunch, and one issue was in regards to the consolidation plan that Mr. Bertel had talked on his railroad, and one of the elements that I

talked about as part of my proposal was that a private crossing would include a driveway or access way for a single residence.

Now, the type of plan that was proposed with a consolidation project where driveways from multiple homes were consolidated to a single crossing, that would change the status of that crossing from private to semipublic.

And part of the logic behind the whole semipublic thing is that FRA, either through their regulatory process, and hopefully in conjunction with FHWA, a key player with this, through this designation of semipublic, would pull in the availability in some instances of the use of public funds, and that the designation or determination to do that would be made as part of the diagnostic process, so all elements of the diagnostic process at a semipublic crossing would apply, including determination as to adequacy of traffic-control devices.

It could be, if a semipublic crossing it to serve a mall owner, that it's determined that a hundred percent of the cost of the devices and maintenance would be paid by the property

owner. But in the case of a semipublic crossing -- see, I'm making the same mistake -- a semipublic crossing that served residences, that there may be either a ninety-percent public share or some split as determined by the diagnostic team as to the types of devices and cost share and funding for these devices.

So there's some method to my madness about semipublic instead of semiprivate. I just wanted to kind of clarify the record on that.

MS. KLOEPPEL: I very much appreciate the clarification. I'm sorry. I'm one of the guilty parties. Thank you. Yes, sir?

MR. ZELLER: Going back to your point, how do you get the data, as the gentleman pointed out here, you make the railroad provide the data. That's how you get it.

MS. KLOEPPEL: Could you say your name again, please, for the court reporter?

MR. ZELLER: Pete Zeller, with Laredo.

MS. KLOEPPEL: Thank you. Any other comments, questions?

MR. DePAEPE: Tim DePaepe on behalf of Railroad Signalmen.

I would just like to point out to all

the members here that many other parties have commented on this at previous public hearings, like my organization commented extensively about the definitions, because the original notice asked for specific comments on about nine different items. So if you'd like to see those comments without them all being repeated again, they're on the Web site. I'd like to be point that out.

MS. KLOEPPEL: Thank you, Tim. I think we've sort of reached a lull in the conversation, and I may now rely on Anya Carroll to revive it. Thank you.

MS. CARROLL: Thank you. Good afternoon, everybody.

FROM THE FLOOR: Good afternoon.

MS. CARROLL: Nap time's over. What we're going to do for the second half of this afternoon is do some brainstorming. We're going to be creative. We've discussed a lot of topics about what types of data, how we use the data.

Well, now it's time to put on your thinking caps and think about, Well, how could we possibly collect this data? Let's think out of the box, as Bill Shrewsberry had mentioned. So

we're going to go through a number of scenarios here, and I'd like it to be interactive.

FROM THE FLOOR: There she is. Can't get away from that dog.

MS. CARROLL: That's my female black Labrador, Shadow. She's six years old.

So we've developed a scenario, maybe eight to ten scenarios that we would like to have you help us work through today, this afternoon, and brainstorm together as a community to see if we could come up with any answers.

So the first one is, and we've touched upon this a little bit, the one where the FRA in partnership with FHWA developed a secure Web site where states and railroads could log in their input data on the inventory. This is being done for private crossings, but also it would be available for public crossings.

MR. BROWDER: Haven't we already done that? That's what I just said a few minutes ago.

MS. CARROLL: You beat me to the punch, Bill. You were being creative before it was time to be creative.

MR. BROWDER: All right. I'll strike my comment.

MS. CARROLL: Is there -- do you have any feedback from the state of Louisiana? Is this a possibility? Mr. DePaepe?

MR. DePAEPE: Tim DePaepe, for the Brotherhood of Signalmen.

What's the motivation? Why do it with a secure Web site if they're not doing it now? I mean, I'm all for this. I think it's a great thing. But if it's not required as far as the priority list, this gets put way to the bottom.

MS. CARROLL: Accessibility and flexibility to be able to do it in an easier manner, to provide the data, whether it's mandatory or voluntary.

MR. BROWDER: The answer is, it's not at the bottom, Tim. Everybody does it now. All forty-nine states, all Class I railroads do it now. It's a very significant factor in looking at data, and they do it voluntarily. And it works very well, as it has for the last thirty years, when AAR had it.

And it will continue to work well, despite the inefficiencies of the current process. And if we could get by the inefficiency of the current process, we could do it better,

more efficiently and more timely.

MR. DePAEPE: I stand corrected. I appreciate the response, Bill. It's just in my personal experience out in the field, I've found that provided to leave wanting for better accuracy. But I stand corrected by AAR, and God bless them.

MR. BROWDER: To stand on what Tim's saying, it is very fortunate in the United States that a lot of his people from the BRS are now responsible for light-rail and transit facilities that are under construction or expansion in the United States, because in my view, this should not be an FRA endeavor. It should be DOT.

And I understand and I've heard Ron say it and other people say that this should be a one-inventory system for all of the highway-rail grade crossings. And as a matter of fact, Tom Wall and I work very closely with APTO to develop their standards and practices for grade crossings.

And quite frankly, the encouraging thing is that the signal maintainers and supervisors are the people that have ensured that a lot of these light-rail and rail-transit

crossings that are concentric to the ones that the Class I's have, have gotten into the system that FRA maintains for the DOT. So this system basically works. Could it be more efficient? The answer is yes.

MR. SHREWSBERRY: Bill Shrewsberry, State of Louisiana DOT.

I like this idea. Louisiana works very hard to upgrade its state internal database with regard to public crossings. You know, there are some things that are cross-referenced to the old grade crossing information form that was done over ten years ago for individual information as far as circuitry and other stuff.

If this could be made available, now we have old data to call the railroads and talk to us to try to enter it into our database. But, you know, our computer people would have to talk with y'all to be sure it is.

But we work real hard. Some of the railroads don't have the staff to update this, but we work hard to oversee the public program for our limited funds.

I think it is being done, but because of the problems with FRA and the communication

effort, we do not report to the FRA. We keep it internally and evaluate that, you know, when changes are made. And that's got to be resolved between our attorneys and what they tell us today. Thank you.

MS. CARROLL: Thank you. In the back?

MR. ZELLER: I was going to ask what the "secure" means.

MS. CARROLL: In this day and age of high tech, there are multiple ways that you could provide secure Web sites with multiple levels of log-ins, depending on what you want to give people access to. So one scenario would be similar to your logging in to get your e-mail, that if you are a state and you wanted to input for state data, that you log in with a secure password. And that allows you to change your data, but it doesn't allow you to change any railroad data.

MR. ZELLER: My question was on the lines of public records and public information and public information, knowing that some of this information would not be available to the public.

MR. COTHEN: Let me address that. Currently national inventory information clearly

is available online in full detail to anyone who wants it. And the Department of Transportation, U.S. Department of Transportation, does not consider any of that information to be security-sensitive information.

The individual states have their own issues and policies, depending upon their own state law, liability incurred and so forth, and under current circumstances we have no way to break through that. In fact I think what we're interested in maintaining for national purposes, which is a slightly different focus than the state DOT, which IS allocating resources in realtime, what we're looking at trying to do is to have a database program that is suitable for safety analysis.

It's suitable for safety analysis and it may be a basis for building tools that can be used in defining risk. Risk is the probability of a mishap times the length and severity of the mishap.

And we're not exactly where we need to be across the nation in that regard, with regard to our investment policies, but we're not far off, because almost everybody is looking at the

likely frequency of events and through the use of diagnostic teams and other risk-ranking factors.

The Federal Railroad Administration over the past few years has issued regulations on alerting lights, probably attributable to about ten-percent reduction in the collision rate out there from the mid-'90s forward.

Recently there have been requirements for locomotive reflectorization, freight-car reflectorization, which has sort of taken hold for freight or whatever. It may be a bust or it may be a boom. We'll see. But certainly, before it's over, it will be 1.6 million units in North American rolling stock.

And we have issued a (inaudible) rule which is affecting hundreds of communities across the community. In each of those efforts, we used all the safety data we could find that seemed to be relevant, certainly including the inventory data, as a basis for understanding what the exposure was.

We can't go much farther. We can go farther, but there's a limit to how far we can go in safety analysis on a national basis in order to build public policy and provide tools to all

of those folks who actually need to make things happen without having adequate data, particularly in the private-crossing areas we're discussing today, being able to associate that with collision risk and likely severity of those collisions.

You know, we've talked earlier during the day about solutions that might be available, but all those solutions cost money, and may cost money because it's necessary to resolve disputes among folks who have an interest in crossings that could be in the category of excess crossings, depending upon the ability to consolidate money associated with doing engineering improvements.

We've spent on the board of $4 billion since the 1976 Act. If you upgraded that based on inflation, it still would be more than about probably ten, something like that.

And then to talk about spending $15 billion on private crossings again, one tenth of the problem worked off, actually more like one fiftieth going back to 1976, something that's going to be hard to swallow for the public fisc at the national level, just as it be would be to

say the level for railroad grades to make contributions to it or individual property owners were asked to make contributions to it.

But why? We need to figure out where the biggest problems are. The only way to do that is to get the data to conduct analysis that doesn't disintegrate as not being statistically significant the first time somebody touches it.

And believe me, we have been in those disputes. It doesn't matter how much reason you use or how much common sense you use. People want statistical cases that are really nice and firm, and even then they're going to argue with you. So objectively, just having a good data, data of adequate quality to include reasonable currency, because things change out in the world. And if we can't get it all at once, we might just get enough of it early enough to make a difference in people's lives without breaking the bank. Yes, sir?

MR. SUAREZ: Mark Suarez, with Louisiana DOT.

The point I needed to make, when you say secure Web site, what is it secure from?

MR. COTHEN: Thank you for raising that

point. It's an ambiguous term. You can have a secure Web site that is secure insofar as it authenticates the user who's inputting data -- that's the reference that Anya was making -- so that we know that it's Louisiana DOT or New Orleans and Gulf Coast Railroad or whoever it is who's entering the data in those respective fields, so the data is sourced. And I think that's what Anya was talking about.

The second aspect of the problem at issue is access to the data. And we don't -- as I said, from our point of view we're looking to get data that we can work with it every day and have credibility in terms of the work that we've done with it for National.

And I understand that that creates an issue for some states, and one would hope it wouldn't, because there's -- obviously there's a provision of federal law that's supposed to protect against misuse of data gathered in support of a Section 130 resource allocation.

Why that isn't effective is difficult for me to say, but if -- you know, if we're going to get at the remainder of the highway-rail crossing safety problem in our generation, we're

going to need good data out. We're going to need enough of it for it to be meaningful, and we're going to have to understand a great deal about the richness of diversity within the data. Not every community is alike.

So there are things that we need to do from the federal level to make it more possible for state agencies or others to provide current data in sufficient detail. That could be certainly a subject of discussion here. Thank you for bringing us back to that.

MR. SUAREZ: The next point I wanted to make, Louisiana's legal jurisprudence, as I understand it, the term for this matter, our attorney general's office wants very much to meet with the FRA legal group to determine ways to protect that data, and we would provide it if it was protected from legal discovery.

If it's on a Web site that anybody can access, that means lawyers are going to sue us to access that data and use it against us, even though it's supposed to be protected. The attorney general's office pretty much has told us not to deliver the data that are not protected.

FHWA -- Mary -- she's not here --

verbally told me over and over again she concurs with the attorney general's office on that matter, because of the, I guess, more lawyers per capita than any other place. And so we're on the cusp of completely getting it stopped or not being able to stop it.

And that, you know, as the gentleman said earlier, a lot of local judges have local constituencies and local flavors of the local lawyers, and they're going to rule in favor of those people for the state over the federal government if they get a chance to do it in some cases.

But data has to be secured or somehow protected to where it can only be used for engineering reevaluation, not be used for legal discovery. I mean, that's what it supposedly says, but it's not quite the case.

MR. COTHEN: Let me ask Mark Tessler for his recommendation. He's a lawyer and he sits in on those discussions, and I'm sure he'd welcome the opportunity to do so.

MR. TESSLER: I'll speak to you. I'll be happy to meet with you folks.

MR. COTHEN: I have a follow-up-question:

What success are Louisiana lawyers having at getting at the data currently?

MR. SUAREZ: Well, because it's not on the FRA database, they're not getting it. If it's on the FRA database, as it currently stands anybody can get to it, so it will be readily available for them.

And I guess I'm not saying they wouldn't use the data exactly verbatim, but they could pull together enough data to come up with some kind of semblance of "You're negligent" or "You're this" or "You're that" because of the preponderance of data that's out there.

They can find that data and use that data to develop their plan of attack to have an overall summary on how they would go after something. So absence of data means they got to figure it out on their own, and that's tough to do.

Now, if you have the data in front of you, you can twist data around and you can come up with some kind of preponderance that, okay. DOT and FHWA decided to work on this crossing. Why don't you work on these other fourteen crossings? Or why do you pick this one instead

of that one? Those kind of things.

I mean, that's supposed to be protected; right? But if they can get their access to it and somehow try to come up with some kind of negligence, local orders are going to rule. If you're going to have to go to federal court, you're going to have to go to the Supreme Court and things like that to get it overturned. So --

MR. COTHEN: So the compulsory process thus far has not been successful in requiring you to turn over your database to the lawyers?

MR. SUAREZ: No. They can't do it. That's how we've prevented it. But it's in the FRA database, which is currently available on the Web. It's there for them to use. I'm speaking to this matter, and I really think that I'm trying to explain something I have no expert ability to do so. I prefer the lawyers discuss this in great detail, and they can discuss it at a level of intelligence that we can't discuss here, because I just don't have that background and ability.

But I've heard them say over and over and over again that they want to talk to the FRA

before they give them the data and they want guarantees that the data won't be made available.

MR. COTHEN: Right. And you know, we're currently not in a position to give those kind of guarantees.

MR. SUAREZ: Right. So it would take changes in the law.

MR. COTHEN: One of the issues that we noticed for comment here was that we do need legislation related to the private-crossing issue, and we made legislation related to a variety of things. It might affect public crossings as well. And I don't know where that takes us, but it's certainly worthy of discussion, and there are a variety of ways to do that.

So just setting that issue aside for now, Mark, if you don't want to pursue it more here, we'll, I guess, pick up with Anya's (inaudible).

MS. CARROLL: Okay. Bill, did you have another comment to make?

MR. SHREWSBERRY: No.

MS. CARROLL: Okay. Well, that was thinking out of the box. We got lots of

interesting issues that came out of that what-if caution.

Let's go to the next one: What if the state supplied information blocks 21 through 25 on the US DOT crossing inventory forms that Miriam showed earlier were used in conjunction with a geographical information system platform to locate and map private crossings?

This was mentioned, I think, by Tim DePaepe as far as the railroads' capability to collect this data for their own use. Does anybody have any thoughts on this particular scenario? Mr. Shrewsberry?

MR. SHREWSBERRY: Bill Shrewsberry, for Louisiana DOT.

When this was first brought up a while back, my concern as a state agency was, although we have gone out there and done some checks for GIS for public crossings, at private crossings could we be considered trespassers if we're going out there and doing a field survey?

And some of these crossing are only accessible by the railroad and other things, so I don't necessarily think the state should be doing that if they want to go this way. I also think

it needs to be protected information. Thank you.

MS. CARROLL: So your point is that it's probably the railroad operator who has access to the crossing should be the responsible party to collect this data and use it in their platform?

MR. SHREWSBERRY: I don't think -- again, I don't think the states can just go out there on the railroad property or private crossings and get that data in an easy manner.

MS. CARROLL: Can I ask a clarifying question before we have another one? Does the state of Louisiana have a GIS platform base for their road network or their rail network or their --

MR. SHREWSBERRY: We do in theory, so -- however accurate it is, just like some of the platforms of the FRA are different levels of accuracy. But -- I'm not the GIS expert, but I know we do have different areas that we're working with, and our computer people work with the FRA for the inventory database.

MR. SUAREZ: Right. Mark Suarez.

They use the ESRI platform for GIS, and we do have our state road network in there to a certain degree of accuracy. We have very poor

representation of the city streets and parish roads, and our primary focus is on funding of doing projects on the state system. So the other system is very much not a part of the mainstream GIS solution, because we have no jurisdiction over those city streets or parish roads. So --

MS. CARROLL: But DOTD does have the capability. They are -- they do have the GIS, however accurate and whatever characteristics it has.

MR. SUAREZ: It has an arc map or ESRI arc map.

MS. CARROLL: ESRI?

MR. SUAREZ: Yes.

MS. CARROLL: Yes?

MS. MEYER: Mary Beth Meyer, Christovich & Kearney law firm, representing NOGC.

My comment really is, we have an inventory, we have the data; but to communicate that would be very expensive. I mean, for us to input it, to draw it out -- I mean, how do we -- is there a way to get that information to you that, you know, would not require administrative time that we don't have to give to that? It's expensive to ferret that information out. You

know, how would we do that?

MR. SUAREZ: Technically if you have the crossing number and the lat and long for the crossing number, it's a matter of -- it's in a spreadsheet format. It's a matter of seconds for inputting that data into a system if the lats and longs are accurate.

I mean, sometimes you put lat/long in a database and in a system, and the lat/long might end up in Texas instead of south Louisiana because there's an error in the data, a typographical error or something.

MS. MEYER: Talking about, like, Excel spreadsheets talking to your Excel spreadsheet, or --

MR. SUAREZ: Well, no. Do you know what the lat/long is, or latitude-longitude coordinate?

MS. MEYER: We have that information.

MR. SUAREZ: If you have that coordinate and it's accurate, you have it tied to the crossing number, it can be sucked into the GIS database in a matter of seconds and displayed in any existing map feature base.

MS. MEYER: Somebody has to type in, you

know --

MR. SUAREZ: If you have --

MS. MEYER: -- data-entry that information, that's part of my point.

MR. SUAREZ: If you have it on a spreadsheet, that's always (inaudible). If you don't have it in a -- if you have it in individual sheets, somebody would have to capture that data in one form, a spreadsheet, and then that could be entered, captured, and drawn into the database.

MS. MEYER: Electronically?

MR. SUAREZ: Correct.

MS. MEYER: Thank you.

MR. COTHEN: Let's just take a little detour to the sidetrack here, if you don't mind, and let Ron Ries address briefly with you some of the issues that we're looking at, the opportunities that we're looking at with regard to the inventory.

We understand that we have a responsibility on behalf of all stakeholders to make the process as easy as it can be made. I think that part of the difficulty is that we all use a different data format sometimes. We define

our fields differently.

There are even multiple ways to designate lat and long, apparently. At some point the Bureau of Transportation Statistics is supposed to resolve a uniform way of doing that, if they haven't already.

We would hope that the federal grandees would, over time, accommodate that, but we currently do accept in a prescribed format electronic downloads of information to update the inventory, so it's not a manual process. However, compatibility of databases is always a big issue. Ron knows more about this, so he can bail me out.

MR. RIES: That's exactly one of the big issues that we're dealing with as the states and the railroads develop databases for their -- to do their job. They each did it independently, and as a result, probably no two states' database or two railroads' databases are identical.

And so when you try and put that into one big database, you get all sorts of compatibility issues. So we have, you know, fifty states with different databases. We have 650 railroads with different databases.

And for example, if we code the DOT inventory codes crossing services 1 through 9, and state codes crossing services, you know, 1 through 15, and a railroad does it A through E or whatever, getting that information to translate is a big issue.

We've had some very serious discussions with our safety-data folks about looking at really analyzing and putting a contract out to look at ways that we can overcome these issues. So we're really looking at finding a way that we can make it easier for everyone to update.

One of the things that we are doing proactively is we're working with one of the Class I railroads on XML format. I'm certainly not an IT person or a software person, but basically it's a software-driven Web-based system that will automatically check for accuracy and look for problems in the data development and do batch updates through the Internet almost realtime from the time it's put in. And we can take a look at the information and make sure that it fits right.

Another thing that we are -- a couple

of other things that we're doing now, we inventoried and established some specific sets of business rules for the inputting of data to avoid the issue of states providing information in a certain data element; the railroad comes in, provides information, and that same data element wipes out the information. So every data element will have pretty much just one party that would be -- that we would accept that data from.

Certainly we would work in conjunction with the state; say, you know, "We'll be the clearing house. The railroad should give us the information, and we'll send it on to FRA." And we'll certainly accept that type of information as well. Those rules are in place.

About four years ago we had a series of outreach meetings on the inventory and what's needed, what would be desired, ways we can make it better. And we're very close to putting out summaries of that and actually encourage you to be checking your e-mails, looking for inventory contacts, passing the word on down, because we'll have something on there for you to look at in the very near future.

Then the other thing -- this is part

of the lat/long, the GIS system -- we also are setting up lat/long boundary rules, so if we get a lat/long and it's supposed to be in the state of Louisiana and it shows up in Texas, we're not going to accept that.

We need to narrow that down to within a county, and we're looking at protocols to help assure that the information that's in there now, the information is submitted (inaudible).

We're looking at data elements that are entered in the (inaudible), and we certainly have issues like that. And we do take electronic in almost any format you can think of for updating inventory from database to Excel sheets. We have several products that FRA has developed itself for that.

So we really do -- we hear very loud and clear we have issues with making it more easier and more productive for putting information into the inventory, and we are looking at attacking it from several different directions right now.

MR. BROWDER: Any more questions to go? While you're waiting for that, may I make one other comment? Bill Browder, from the AAR.

I notice one group that is noticeably absent from today's session, and I really wouldn't have thought about them except that today's session is on data -- is that there have been a number of states who have their own state inventory system that have used contractors to create and update and maintain these states' systems.

And Anya, you're asking a lot of questions that, when I think about it, you ought to ask them, too, because they've got a wealth of experience. The first one that comes to my mind is Ohio. I know that Susan Kirkland and the Ohio Rail Development Commission paid big bucks to some contractor that I met at a regional meeting, and there are others out there.

And you guys probably know them better than I ever would, but there's a resource that you ought to go to if you're looking at data collection, and get their feedback on what they think, not only of your ten questions -- I'll be glad to give -- and will tell you what I think of the ten questions, but also what they have for input to the system itself.

Are you back up?

MS. CARROLL: Getting there.

MR. BROWDER: That's what they say about me sometimes.

MS. CARROLL: I know there are numerous states that have actually worked on automating as much as they can and integrating it into more a multi-use database. Texas is one. Illinois is another state that we could work with on a case-study basis, possibly, to determine best practices for data collection using their contractors. So I think that's a very good comment, and we've captured it.

Sorry. Please excuse the technological interruption. The plug was unplugged from the wall.

MR. BROWDER: I feel like I know this dog.

MS. CARROLL: Shadow's a good girl. What can I say?

MR. BROWDER: I'll bring my dogs.

MS. CARROLL: I actually was asked at our last meeting for an autographed picture.

MR. RIES: Bob, while we're finishing up, just to sort of let you know, we've sent out over 700 invitations twice or three times for this meeting, and all the state inventory contacts and

Section 130 folks were all made aware of this. So we -- one of the things we will be doing is looking at ways we can improve the inventories and certainly getting information from the people that use it on the state and locals that are out there.

MS. MEYER: I'm just curious about what kind of interface you have with the Surface Transportation Board about these issues and the economic implications of a lot of these proposals. Are you talking to the Surface Transportation Board about any of these issues?

MR. COTHEN: FRA briefs STB on issues from time to time. We do not have an active dialogue with the STB at this point on any crossing issues of which I'm aware, and we're certainly happy to do so.

As you know, the STB functions much differently than the executive agency, and they do their business in a rather more formal way. So when we provide briefings, it's a very tightly targeted subject matter, relevant and in an appropriate format and forum. It's something we think we should be doing. And --

MR. RIES: Also, I was just going to say

we have occasions when we work to provide data. One example is when the STB was looking at the D&E Powder River Culm Basin. We provided a lot of coordination on grade-crossing incidents and inventory through that, in that process. So there are some times when there is discussion with that.

MS. CARROLL: Mr. Browder?

MR. BROWDER: Just one brief comment, Grady, was -- Bill Browder again, from AAR.

You've jogged my memory. I'm so doggone old that I forget. But during the heat of the Conrail/Norfolk Southern/CSX situation, it came to AAR's attention, and we actually made this recommendation as part of a policy to Administrator Molatores, that they consider a formal relationship with STB in consideration of abandonments and changes whereby it would be a requirement that crossings involved in those processes be provided for use in relation to the US DOT inventory.

I don't think it ever was pursued. I could be wrong. But the idea would be -- and it came from the fact that one of your staff, Ron, told me that he had 6200 crossings in

Pennsylvania that were not resolved as far as status was concerned, and that obviously it had come about through holes in the crack between the Conrail to CSX and NS situation.

And one way to overcome that issue would be an application to the STB that it require that such be included, as it does now, that the administrator included -- and this was another one of our suggestions -- that the train traffic sign that's been incorporated into the FRA practice for changes that come about as a result of change in ownership, that that's something that you might want to consider and would provide an excellent resource in data. That's it. Sorry for reminding.

MR. COTHEN: That's good.

MS. CARROLL: We talked a little bit about this. What if states were required to collect the data on private crossings? And we touched on this a little bit. Mr. Shrewsberry?

MR. SHREWSBERRY: Bill Shrewsberry, Louisiana DOTD. Not a good idea.

MS. CARROLL: Bill, I think you were out of the room when Bill made this comment a few minutes earlier. And you had referred to a

statement or a premise before that you think that it's the railroads that provide pretty much all of the private-crossing data to the FRA.

MR. BROWDER: Miriam first made that. I just affirmed it.

MS. CARROLL: Okay. Well, Bill mentioned that as he, as a state employee, may be considered a trespasser on private property if he were going to try and collect data from a grade crossing.

MR. BROWDER: That's an interesting perception. I don't know that it would have a factual basis, but anything's possible.

MS. CARROLL: Yes?

MR. BERTEL: Rick Bertel. As an operator of a railroad that's been there 120 years here in the state of Louisiana, as late as last week I was accused of being a trespasser on my own railroad. So, you know, all of this data collection is -- I support it, I applaud it. It will make neat charts and graphs. I know we need data for everything.

But I'm just trying to figure out is in my lifetime, are we going to talk about a solution to the private-crossing problem that

deals with what we're here to talk about?

MS. CARROLL: I'll divert that question to Grady.

MR. BERTEL: They're part of inventory. I can't keep up with them, because they keep putting them in so fast I have no authority from anywhere to stop them.

MR. BROWDER: But you're not going to get the funding without data, and the data supports funding requests. Analysis of the data requires the proof that there's an issue here that has to be solved, so you got to have the data to have the analysis to have the funding. So it's like a circular Catch-22.

MR. BERTEL: But have we not proved any data with the public crossings over the fifteen or eighteen years that we've been doing this?

MS. CARROLL: Oh, we've decreased the incident rate by close to fifty percent. We've been very successful.

MR. BERTEL: Is there any relationship between a public crossing and a private crossing?

MR. COTHEN: One of the interesting questions is whether or not the models that we use to evaluate the likelihood of future events

at public crossings, whether they're transferable or not. It would be nice to be able to do a good study to test the hypothesis that that's the case.

Let me just say one thing. We have our colleagues from the city of Laredo back here, but I do want to say that we're letting -- we're trying to let you all talk. If you want to hear us talk, you'd better look at your watch, because we do have to be out of here before 5:00, but I assure you we won't be out of here a minute before 5:00.

The FRA team, individually and collectively, is beginning to acquire some views on the subject. Mark Tessler and I were involved in the 1994 session on private-crossing guidelines which FRA drafted and put on the table. It's remarkable the number of themes from that document that are similar to the filing by the New Orleans and Gulf Coast Railroad.

And the railroad said, "No. We don't want guidelines." And we said, "Well, the administration's changing. The administrator's interested in private crossings. Seems like it's going by the board. We're going to have to come

back to this at some point." And here we are.

And you know, it's our desire at this point to put together a package of suggestions to the federal railroad administrator, and he'll be chairing the last of these meetings in Syracuse, hopefully in February, and come out with some sort of policy on this issue in consultation with our colleagues in the US DOT.

And then that could send us to a legislative proposal, a regulatory proposal, a suggestion that this -- we're going to be chasing our tails forever, and that there's nowhere to go, and therefore over the next decade we're going to have to accept on the order of 400 fatalities. I don't think that's the answer, that last one.

MS. CARROLL: Sir?

MR. ZELLER: I just wanted to address that very thing: Exactly what would it take to implement something, to mandate the states to do it? Would it take an amendment to the just-passed transportation bill, or is it something that would be done in the reauthorization that's coming up in three or four years?

Exactly how would that be done? I

think we spoke to that issue of the legislative process, to actually do that, force the states to do it. I don't know that it's necessarily a bad idea. They're likely to push it down to the MBO anyway.

MR. COTHEN: And again, we've got two subject matters here: One is keeping the inventory current and at as high quality as possible. And we introduced that issue of additional data elements may be useful for both public and private crossings.

That's a bucket of issues right there; okay. That bucket of issues, we have previously addressed some portion of them that made legislative proposals from US DOT that we make updating of the inventory periodically a mandatory item.

But that doesn't answer the question about the other bucket, and that's the unique set of problems associated with private highway-rail crossings with which we've done much less work over the years, I think we can say collectively in the room, everybody perhaps except the railroads. And you can see an excellent example this morning: a short-line railroad has done

extensive work in the area with little satisfaction.

But from the public sector, our contributions have been minimal. And the question before the house is, Is there more that we could do productively, cost effectively, from the point of view of having it be a safer place out there for the users of those crossings, whether it be the railroad or the road user?

MS. CARROLL: Thank you, Grady. We're going to try and move through these questions a little bit more quickly. What if the railroads were required to collect the data on private crossings? Consensus, opinions? The statement was made that --

MR. MEYER: Gabriel Meyer, Union Pacific.

I just want to restate what I already said earlier: For us to go out and collect data on all of the private crossings would be a monumental burden, and I would question what, if any, benefit is going to come from that.

MR. BROWDER: And Bill Browder. I would question our authority to obtain data on private crossings.

MS. CARROLL: You mean the highway data?

MR. BROWDER: Yeah. Highway, any data. I mean, you don't clarify the data that you're talking about, so I'm not going to clarify the data that I'm going to collect. I'll just make it all-encompassing, as you have --

MS. CARROLL: Okay.

MR. BROWDER: -- and say it's of -- you know, I don't know that we could do it.

MS. CARROLL: Okay. Any other comments on the question?

Moving right along, what if the federal government created a team to collect the data?

MR. HARRIS: We'd all agree with that.

MS. CARROLL: Your name, sir?

MR. HARRIS: Randy Harris, CN. I've got agreement: The burden on the railroad would be -- I mean, look at the job we're doing now. To be honest with you, none of our inventories coincide with the federal government, let alone with the states, the individual states we operate in.

I've recently done some work on our inventory from Memphis south down through here, and I couldn't believe the discrepancies between

our inventory, the GS 32, the FRA's database, and the individual states' inventory. If someone -- if there was one person that could do it all and farm it out to the railroads and the states, it would be wonderful.

MS. CARROLL: Can anybody else comment on that?

MR. BROWDER: It's hard to conceive --

MS. CARROLL: Mr. Browder?

MR. BROWDER: This is Bill Browder.

It's hard to conceive that a railroad person would make that comment in light of the fact that we, the railroads, are the ones who submitted the data originally to FRA. So where is the disconnect? I would maintain it's not with the railroads. It's with the process.

MS. CARROLL: Any other comments?

MR. MEYER: Gabriel Meyer, Union Pacific.

Just as an observation, this is something that I think we would seriously consider if it were offered on the table. The one observation I would have about this, and I think it's a positive one, is that if you had the federal government doing this, there would probably be much more uniformity in the data

collection.

And although I don't have firsthand knowledge of how one railroad's data collection may differ from another's, I think anytime you have one central body with its own formal rules and procedures for collecting the data, I think overall quality of the data gathered will be better. It's like apples to apples as opposed to apples to oranges.

MS. CARROLL: Thank you. I think that's a very good comment. Anyone else?

Moving along, what if track geometry cars were utilized to automate their data collection at private crossings?

MR. RADDY (phonetic): Paul Raddy, Union Pacific. The Union Pacific already has on track precision-measurement vehicles that measure locations for signals and crossings, and that's been in place for years. I don't know how or if that information is available.

MS. CARROLL: Does that include private crossings as well as --

MR. RADDY: All of the crossings.

MS. CARROLL: All road crossings.

MR. BROWDER: Yours gets submitted,

though, doesn't it, your grade-crossing information from the track geometry cars?

MR. RADDY: There was a point brought up, too: We don't go down our yard tracks, so it wouldn't necessarily cover integrity, but it does cover many lines at this time.

MS. CARROLL: And how many miles per year do you cover?

MR. RADDY: I'm not sure what the total is. I know the entire system has been covered.

MS. CARROLL: Okay. Any other railroads have a comment? Mr. Browder?

MR. BROWDER: Automate the data-collection system. Basically I think there's some railroads that are doing that now and incorporate that into providing changes and updates to the inventory system. But that's a very limited number of fields in the total collection of the data.

You're not talking about trying to collect -- I mean, there's a wealth of other data that is included on that inventory form that has absolutely no relation to the track geometry cars, such as train speeds, number of trains, capacity.

Number of tracks might be able to be

collected, but there are a number of other areas, and certainly the highway side of the information would not be able to be collected by a track geometry car.

MS. CARROLL: Not to say that all the data could be collected, but pieces of the data may be -- could be automatically collected to feed into the entire database. Anybody else?

MR. RIES: I was just going to point out for the benefit of the discussion that Bill is certainly right: There is data out there that could be captured by track geometry cars.

There's also some other things that with some of the technology that's out there, and demonstration of a laser linar (phonetic) system that could be mounted on a track geometry car, and the resolution to get to the back of it, and even how many tracks, measure the width of the crossing and all sorts of other.

So there's some technology out there that, you know, probably goes above and beyond just lat/long, but certainly they don't capture just one particular part of it. I think currently in the DOT inventory about eighty percent of the records have lat/longs on them.

Some of them are actual measures -- I think the majority of them are actual measures interpolated by other GIS systems, and (inaudible) did some work with us on that.

We also are taking the office policies GIS system and doing a match on what they have on their system for records of grade crossings and matching it to the DOT inventories and finding the mismatching and working on resolving that.

MS. CARROLL: Does anybody else have a comment on this one? Okay.

No. 7: What if in the course of responding to a mandate on private-crossing agreement the railroad is required to assign a crossing ID number and update the US DOT crossing inventory?

MR. BROWDER: Well, who does it now but the railroads?

MS. CARROLL: Well, we -- obviously I don't think we know who's supplying it. It's a question that I think we need to answer as to who's supplying the private-crossing data. You seem to indicate and think it's a hundred percent of the railroads that's responding.

MR. BROWDER: Well, again, and Miriam did,

too. I think that that's factual, that at least the vast lion's share of the information being submitted on private crossings and ID numbers -- I know that when it was initially done and when it's updated, including the track geometry car-type things, that the submissions come from the railroads on private crossings.

MS. CARROLL: Okay. Anybody else?

MR. DRAKE: Tom Drake, FRA.

Anya, I think I understand what you've got here on No. 7. Are you saying that -- are you suggesting that the government mandates a uniform private-crossing-agreement scheme? Okay.

I think that would be a good idea, because we don't have it right now, and here in Louisiana we've heard the problems this morning. I've not seen that problem in Region 3. Maybe we're fortunate.

How about, as well as being required to assign a crossing ID number and update the crossing inventory, what about the civilian party to the agreement? In other words, the user makes this part of their consideration for getting the agreement, let them absorb the burden. They want the agreement, they want the crossing.

The crossing, as stated earlier, is of no benefit to the railroad. It is to the user. And this would be a small price to pay with a tax, if you wish, a safety tax. But it could be applied evenly at probably a fairly low cost.

Here I am being generous with the taxpayers' money, but we do that sometimes. But I think that would be a good idea.

MS. CARROLL: So you would include the private property owner as supplying basically the roadway data to supplement the railway data?

MR. DRAKE: Let them participate.

MS. CARROLL: Yes, sir?

MR. WHITEMORE: Shane Whitemore, CSX Transportation.

As part of this process, if you're suggesting that as somebody comes to the railroad and if you mandated an agreement process, you know, and you have categories of crossings that they have to fall into a certain briefing that they have to have a primary agreement with the railroad, then the application process could include the data elements that you desire.

It shouldn't -- you know, you just send out the application to them and then work

through the issues, and they have to fill that data in prior to (inaudible). But there is going to be a burden on the railroad going back and forth to validate all those fields are filled in. But there is a benefit.

Now, I'm going to go on and AAR will probably beat me up, but there is a benefit to the railroads to get these crossings under some type of formal arrangement, right, which they don't have today. So if there was a mandate that said, you know, hypothetically it said you have to have some type of arrangement. Either you have a deed restriction or you have some other kind of requirement that's there.

We're going to say you have to have an arrangement with the railroad, because it's a safety issue. We have to know who's using the crossing and how it's being used, and here's this form with these data elements that we need to be filled out, whether it be electronic submissions or whatever it is. It could be a benefit to the railroad industry, help them both out.

MS. CARROLL: Mr. Browder?

MR. BROWDER: Bill Browder, from the AAR.

I haven't polled the AAR members, but

Shane's, I think, on target for our -- what I've heard from our members. I have not heard any objection to this.

My question, though, Anya, is, What prompts this question to begin with? Is there some sort of data-driven basis that you or FRA is aware of that there is some egregious shortcoming in the inventory in terms of initial reporting or maintenance of private-crossing ID numbers?

MS. CARROLL: Not necessarily the ID numbers, but as Miriam's -- one of Miriam's graphs showed that 27.9 percent of the incidents were at private crossings that have no information. They were blank fields. They had a crossing ID, but there was no information to determine where it fit into type of land use or warning-device category and the like.

MR. BROWDER: Then I submit that your problem would not be solved by the assignment of an ID number to private crossings, because if I understand you correctly, that's currently being done by the railroads or somebody in terms of its status. So what's the point of the question?

MR. COTHEN: No. I think, Bill, you know, we have -- based on the number of records that

have been updated since initially submitted, we have a pretty strong feeling that there are crossings out there that don't exist. It wouldn't surprise us if we found many public crossings that were supposed to be out there, and you go to take a picture, and it's not there. The rail's been pulled up.

And conversely, there's some surprise crossings out there. You know, Mr. Bertel's going to go back home this evening, and he may see one he didn't know was there when he left this morning. And you can hardly blame him that that's not in the inventory.

From time to time we do need to refresh the inventory and know that we have a current record on it, because otherwise what you end up doing is you end up dividing by larger and smaller numbers for any particular routine, statistical routine you do than you should have, and getting results that are very likely misleading.

So we think we -- you know, we're pretty sure we might need some additional data elements. And if we need some additional data elements, it's not going to be any easier to keep

the voluntary system.

Maybe we do need more partners doing this so that we have those who control movements over the private crossing kicking in some additional information. Maybe we need to have an ability for a railroad surveyor in an obvious case where there's a problem to go out and take a look at the geometry of the crossing the same way Rick Campbell was talking about earlier, to determine whether or not that combine can possibly stop and get over that crossing, because it may be the railroad, and it may be that the railroad's train encounters that combine on that crossing to the detriment of both.

So we're looking for currency of data, but also real live partnerships out there that permit us to all manage the safety case in realtime as much as possible.

MR. BROWDER: Grady, in light of your comments and in light of Anya bringing up about track geometry for us, AAR would like to throw back to the FRA a suggestion that we had put forward several times before: That since operating-practices inspections normally make inspections in company with railroad-track

personnel online and over grade crossings, that they might monitor and provide input information for the inventory. Just a suggestion.

MR. COTHEN: Is this suggestion part of track inspectors or ordinary practices?

MR. BROWDER: Well, either one or both. On occasions where they are in a situation where they are involved with highway-rail grade crossings, why not ask them to be the additional eyes and ears to the railroad people in looking at and seeing if we have done our job correctly, and if not, bring it -- either bring it to our attention rather than mandating a regulation or ensuring that it gets included in the inventory. It's a rhetorical question. You don't have to answer it.

MR. COTHEN: Well, actually it's not a rhetorical question. Actually it's a -- and we keep finding or trying to find ways of those who are invested in the FRA part of the grade-crossing program in leveraging our resources.

And if we can get a GIS in place that gives us a good trail of what we have out there so that we can put it in the hands of FRA personnel who are on the property, readily usable

material for checking the data on file --

MR. TESSLER: Excuse me, Grady. Somebody -- there is an undercurrent of noise. The court reporter's having difficulty hearing. If we could have one person speak at a time. Thank you.

MR. COTHEN: Thank you, Mark.

There's a possibility of doing something on that order. I would point out, however, that we are out there on an average of about once a year, and your track inspectors are there twice a week on the main lines.

MS. CARROLL: Tim DePaepe?

MR. DePAEPE: Tim DePaepe, Brotherhood of Railroad Signalmen.

That was my point earlier about prioritization. It was not a slap at the railroads or the short lines or anyone else that they're not doing this, but it's like any data collection that we've tried to get collectively through labor and management or through the FRA: Possessors of the data are the railroads themselves.

And I was going to make up the point earlier that we had this gentleman, a COO, who

said his numbers changed on a daily basis, and he's there -- I mean, his people are there. And every time they do their inspection, they're not surprised to find a new one.

Well, a lot of that may be just indigenous to the short lines, where they maybe don't have the personnel that the Class I's have. But the railroads possess the ability to collect this data. I'm all for trying any other ways to get that data, but if there's not a commitment by the railroads --

And as Bill has said, there has been a commitment. They've tried to do a good job. As the other gentleman back here just said, he was surprised at the differences between his data that he just got and the data the state got and the data the FRA had. So we've got to start with the railroads.

And again, I don't know if it warrants regulation, but if you don't put -- you know, I worked seventeen years in the field as a signal maintainer. I was asked once in seventeen years to go get the numbers that the railroad had put on every crossing designating what it was, what the DOT number was. In seventeen years I was

asked to do it once, just on my territory.

It wasn't a system-wide, it wasn't a railroad-wide procedure. And again, that's just my bias, my situation. My suggestion would be, and I don't care what the time frame is, I would throw out: Make it something reasonable. Ten years, twenty years, I don't care. It's better than no year that we have now.

We've got to put some restriction, because then people will make it a priority to get it done. Because on the railroads, there's always something else more to do. As someone who worked in a craft that did a lot of things required by regulations, the priority is, if it's a monthly task, if it's a quarterly task, a semiannual or annual or five years, a ten-year task, you did the tasks that were due first, and everything else waited.

So if you had -- and the ones that had no timeline, if you can get all this done, you can go that get list for us, Tim, and that list probably never got done.

And that's the only way you're going to get at that data. And saying and even suggesting that the government do it, you've got

what, 800 fellow people in the FRA? You've got a small handful of actual inspectors that go and do anything when it comes to the nuts and bolts of the track in maintenance and engineering.

Unless you know about a whole boatload of money that's coming in to FRA that I'm not aware of, I don't see you getting this done that way.

MS. CARROLL: Thank you, Tim. Mr. Suarez?

MR. SUAREZ: I'm Mark Suarez, from Louisiana DOT.

You know, thinking out of the box is something I like to do, but I have to ask a question: How much of this cargo we're hauling that's dangerous, has all these issues for Homeland Security Richard talked about earlier in the day, the stuff that he's hauling up from the coast, and all these private crossings showing up that he has no way to combat?

To me, it would seem like a serious safety risk for the government and the FRA to deal with, to address, because one derailment wipes out a town or whatever because he doesn't even know the crossing existed, and they hit it, and it derails a train.

Is there a possibility -- and maybe it's a question you'll have later on -- permitting private crossings through the FRA, and the railroad has to be involved also to prevent these fly-by-night crossings that come up with serious legal ramifications if you do that, because, I mean, you're endangering everybody in that area with potential derailment of a poison car. Okay?

And I just can't comprehend that that's even a possibility that people could do that for the simple fact that, you know, those kind of things are going to be accidental terrorist acts, when you get out there and you build a crossing, that they have no jurisdiction, authorization, or ability to do.

And you know, downtown New Orleans, downtown wherever, hometown, you know, a little bitty old podunk place, you wipe out everybody. And it's just -- I'm just thinking out of the box: Why wouldn't we permit those crossings?

Why wouldn't we have FRA permit for private crossings to mandate that everything's done exactly right and in accordance to any standards that we might come up with? Is that

something that has been brought up, or a possibility?

MR. COTHEN: Okay. We have not used the word "permitting," to my knowledge, in any of the questions that we've raised for this proceeding, but implicit in the discussion that we have had about responsibilities and about whether or not there's a warrant for any crossing to be out there to start with is the notion of putting a -- should there be some kind of threshold showing in this case, not of public need but of sufficient private need and that is not in concert with the public interest, so that the crossing could be maintained? And that all goes to under what conditions? And that goes to what kind of traffic; right? And what are the characteristics of the rail traffic involved?

And so it's a complex set of issues, and I don't think we want to find ourselves as a federal government with 95,000, or however many it turns out to actually be, permits showing up in our mail system, particularly since all our mail gets irradiated in Ohio, and it's virtually unreadable when it's received.

But I do think that one of the

questions, Mark, that we're raising in this proceeding is, Do we need a process with criteria? If we do, what kind of process should it be? How might it be executed? If there are conflicts that arise associated with it, how might those be resolved?

It might be you could be involved in administration of the process you know, first of all, who has a stake in that process? If you have a semipublic crossing, do the local -- state and local authorities have an interest in the process? All of those things we've got to wrestle until we get them in hand. Yes, sir?

MR. SUAREZ: And I guess, again, I guess the point I'm trying to make is that Mr. Richard has already indicated that the local authorities have no vested interest in the railroad. They have a vested interest in their local political body, political people, the votes they're going to get.

So it has to come from a federal-mandated, federal-jurisdictional-type thing to solve the problems that we're going to face. There's no state issues that that we can get ourselves involved in that would allow us to

solve this problem.

I mean, we had that state law, the closure law, and it came about because of some serious accidents that occurred back to back to back. And, you know, that still put us in a position where we can be overturned by local governmental jurisdictional-legal-type mechanisms or courts of law.

And federal cases are much harder to defeat than federal jurisprudence. The federal law, federal courts, in my opinion, would seem to have more weight. For instance, let's just give you an example. We'll do a rough -- we'll -- we have a lot of Operation Lifesaver stuff, very -- Betsey's operation. I'll call it one of the superior Operation Lifesaver groups in the country.

They do a lot of cops on the train, and they ride out and give a bunch of tickets, you know, go into local courts, and the local judge will throw every ticket out. They'll write a hundred tickets and they'll all be thrown out, because "Y'all just targeted all these people, and that's just not fair to penalize my local people."

Now, and that's the kind of stuff that's going to go on and continue to go on. That's what Richard's up against. And I would encourage you to focus on more the federal mandate, federal law, federal jurisdictional-type things to prevent those types of things from happening.

MS. CARROLL: Thank you, Mark. Moving on to -- yes?

MR. SAUNDERS: I'm sitting here --

MS. CARROLL: Will you state your name, please?

MR. SAUNDERS: I'm Ben Saunders, for the American Trial Lawyers.

I'm sitting here more as an observer today. Do you realize, folks, that there is no problem legally with his company, with the AAR, with CSX, with UP if the problem is solved? There's a solution to the problem.

The solution, in my humble opinion, listening to all of this talk today, is not data collection. It's not, sir, Mr. Suarez using his shield to block yourself legally, which you're obsessed with.

The problem is to solve the problem

from an engineering standpoint. Okay. I heard somebody earlier today say one of the solutions is closing private crossings. That's a solution. Why? Because the train can't interact with the car.

I heard another person say consolidating private crossings makes less crossings, therefore less accidents, less communities vulnerable. You just described a situation, three tragic accidents in Louisiana in a row, which led to some legislation. Legislation is good if it eliminates litigation, but it doesn't solve the problem, does it?

What solves the problem? Not lawyers, not bureaucrats, not presidents of companies. Engineering. Not studying the data and writing books. Engineering, mechanical engineering.

Have gates you don't drive around. That's an engineering solution. Have trestled crossings in the rural country, especially with an industry that's producing chemicals. Then you can't have a town wiped out by a train hitting a car.

My engineers don't want to get killed. They don't want to kill anybody. They don't to

be involved in that. But they want to serve out thirty-five years with the railroad because they're vulnerable, too. So the answer is an engineering solution to the problem, not talking about it.

Once again, I've never met Mr. Bertel in my life. He's right. He said, "I support you collecting all this data, but I want to solve the problem. I want to drive down the river and I don't want to the see all this stuff." He wants the problem rectified, and it can only be rectified from an engineering standpoint.

And if I misspoke, I apologize, but I think that the NTSB years ago had said, "You need positive train separation." It's the last time I'll say it today, but I've sat here diligently and listened to everybody talk about questions 1 through 7 about acquiring more data to make another study, to get more information to the federal government. We'll go to the FRA regulator, we'll maybe go to Congress, we'll maybe go to the president, and then we'll hear the results of that on the NBC Nightly News.

Is the problem solved? No. When CSX runs from Jacksonville to New Orleans and then

through the rural part of Mississippi, is their problem solved? Is the pedestrian's problem solved? No. The problem's solution is engineering, in my humble opinion.

And I apologize if I've misspoken, if I've stepped out of my field.

MR. SUAREZ: Mark Suarez again, to address part of your comments.

It's not engineering per se, because we have 8 million a year in the 1331 crossings that we have passive crossings at right now. It would take between twenty-five and fifty years to gate all of those crossings, with the price ranging from one hundred and fifty to three hundred thousand dollars. No inflation, not touching anything we've already done, you're looking at twenty-five to fifty years. Every grade separation costs anywhere from 10 to 20 million.

The realities are is that there's a lot of, lot of stuff that can't be done by engineering. The law that we're talking about was a closure law. We had nothing but negotiation power to get closures on crossings that were redundant. After those accidents, we

had a closure law, and it gave us a lot more leverage to get closures on redundant crossings. And that's what we're focussing on.

So we're trying to close some of these 1331 crossings. That has nothing to do with the 2800 or whatever the number is of private crossings that we don't look at or deal with in any way, shape, or form. There's another, you know, double the money, double the years, another fifty to a hundred years to deal with those crossings with the money that we have now.

So it's not just an engineering concept. It's a financial concept. Closures are the Fed, Federal Highway Administration, the FRA and the DOT. The federal DOT has said, "Closures is a major requirement, a major push, a major function for the simple fact that we can't possibly afford to deal with what we've already got." And that's a part of where they're going.

And if they're wide open, public crossings -- private crossings anywhere they want, there's no way to stop that. And he's going to court, he's lost the court case, he says -- then it's more than just an engineering issue; okay? And if it was just an engineering

issue, we'd solve the problem, you know, because the engineering's easy to do.

You know, it's easy to put up a gate and block a crossing if you've got enough money and stuff like that. Dealing with the public crossings is a finite problem. Dealing with the private crossings is not a finite problem.

MS. CARROLL: We have two more questions to go, and as Grady said, we have to be out of here before one minute before 5:00.

MR. SAUNDERS: Very quickly, if the money is there, say the money's unlimited, would engineering solve the problem?

MR. SUAREZ: (Inaudible) the money --

MR. SAUNDERS: Can engineering solve the problem of vehicles colliding with trains and trains colliding with vehicles?

MR. SUAREZ: You have to look at North Carolina's closed corridor. Is it -- did it have any accidents on that corridor?

MR. COTHEN: Yeah, they still do have some, but they've been significantly reduced. And there's a pretty good study on our Web site about the sealed-corridor program.

And I certainly wouldn't challenge the

importance of engineering and I don't think anybody here would want to denigrate it. It was our first topic of discussion when we got into political issues in this series of meetings, and it was in North Carolina.

And I think if I could summarize what we heard in this part on the engineering front is that certainly that many of the solutions that are suitable for public crossings are equally suitable for private crossings, grade separations or grade -- and there have been grade separations of private crossings that involved heavy industrial traffic, and perhaps some other illustrations as well.

But that -- they start at about $3 million there, assuming you can maintain the footings. And so we're looking for as many good, cost-effective solutions as we've got. One of the strategies is to close some crossings so that the limited resources that are available can be expended at those that remain, and also so that we close higher-risk crossing that cannot be made safe, which is an engineering solution in itself.

So I don't think there's a lot of conflict in what people are saying here. It's

just moving toward practical implementation.

MR. BROWDER: One more comment before you close the discussion: Six years ago AAR solicited with TTI input from low-cost active warning devices at crossings, and we did not have any success.

My outside-the-box suggestion is that maybe it's time for these low-exposure crossings, public and private, to look at something less than a fail-safe system to provide active-warning-device indications at these crossings.

My legislative people have said that if you were able to get the cost down below $50,000 a crossing -- and we heard $150,000 thrown out as an average here today -- that they would possibly be listened to by Congress in providing that at all at-grade crossings.

So maybe y'all want to consider that perspective in terms of engineering action, that there would be something less restrictive than fail-safe protection, which in my perception currently discourages a number of innovations from being used at these crossings.

MR. COTHEN: And, you know, that's

something we're going to have to continue to work with, Bill. We did authorize a demonstration of a technology which probably cannot be administered fail-safe. It was closed-loop in its application, so as not to take a bad situation and make it worse, involving a GPS train location and made a radio-link activation of highway-rail crossings. This was a project sponsored by the Minnesota Department of Transportation.

That particular technology appears making commercialized major signal houses headed down that road, but it does require that all the locomotives in the territory be equipped for it to be an effective system. And there are some other limitations that would have to be analyzed, depending on the application.

But, you know, the Federal Railroad Administration certainly is open to taking prudent risks to drive the overall risk level down.

MS. CARROLL: Just one last comment before we move to No. 8.

MR. DePAEPE: Tim DePaepe, Brotherhood of Railroad Signalmen.

I can't let Bill's suggestion go unheeded and unresponded to. I'm all for thinking outside the box, but if you're going to look into that type of equipment that Bill's talking about, the FRA has to make sure that they also explore the law of unintended consequences; that is, where you have an engineer who may rely on this highly reliable system too much and not exercise the same caution. Now you've caused an accident that may not have happened if you had no protection there at all. I mean, that's the problem that's been with these systems since they've been talked about in the last five, ten years.

Also I throw out, even though I'm a labor person, a former railroad worker, I care that my railroad makes money. And if you're going to put a system out there that's pretty good but not fail-safe, when there is a wreck, the liability is going to be through the roof, and it's going to be on the railroad. And I'm not aware currently of any federal law or rule that gets them out of that liability now.

MS. CARROLL: Okay. Moving on to question No. 8: What if the railroads, with support from

the states, are required to locate all the crossings and collect the needed data? This is just looking at one piece of the puzzle, one data field, the lat/long. We talked a little bit about this with the track geometry car, possibly.

Are there any other automated means that would -- the track geometry car collecting the lat/long and maybe the grade-crossing number fed into the kind of system Louisiana DOT has, where all they need is a spreadsheet that could then be mapped on their current system. That's it?

We're going to No. 9: What if private crossings were required to have latitude and longitude information and be located through the use of global positioning satellite systems, whether it be the state that does that or a railroad that does that, the private landowner: Is that a viable means for collecting data?

MR. COTHEN: And I guess one version of this is, Is there a good routine we could use to check what we got? The railroads obviously have crossings on main lines geolocated already and that have already sneaked up on some populations empty, as I understand it, lat/long data fields

in the inventory in order to support GIS applications. You know, is it possible to take -- to proceed from the railroad's information to cross-check that, since in fact most of the Class I railroads have data on file?

MS. CARROLL: I think we've run out of gas, Grady. I think we've thought out of the box.

MR. COTHEN: And administratively, the answer to the question is clear: That we could do it. We have the will and resources to do it, but like so many other things, you've got to do it right. Okay.

We've worked y'all pretty hard today. We appreciate as many as had sticking with it and the number of others that just had to leave because of the hour of the day.

Other business: Mr. Browder?

MR. BROWDER: I'd like to put one more statement on the record and indicate that in considering endeavors that have to do with safety and highway-rail grade crossings, the states as well as the FRA have been very supportive of a number of different efforts, not just Operation Lifesaver efforts.

Another major effort that AAR believes in and the FRA has provided support has been the national and regional meetings that have been conducted, usually sponsored by a state or group of states, to promote safety between highway authorities and the railroads.

A number of these meetings, in particular state meetings in Illinois, Wisconsin, Kansas, which now combines areas with Missouri; regional meetings, in particular the string of meetings in the Southeast Region, the Midwest Region, the Eastern Region and to a lesser degree in the Western Region, have received a tremendous amount of support from the individual states and the federal government.

In particular I'd like to say thank you to the Louisiana DOT for the support. And I interface quite a lot with Bill Shrewsberry, who is on Rick Campbell's Railroad Technical Committee. I'd like to point out that AAR has supported the initiative that the FHWA now has become involved and supportive of to add a yield sign to all public passive crossings.

And that initiative and the language from the national committee came from a TAG, a

Technical Advisory Group, out of that Rick Campbell's committee. And the chair of that committee was Bill Shrewsberry over here, of Louisiana DOT.

And he did yeoman work, along with Daniel McDonald of Oregon DOT, John Blair of Illinois DOT, in getting that to the surface. And it's a support that AAR believes will pay in a reduction in the number of fatalities and injuries at public passive crossings.

One problem that exists that needs more support than just the FRA is, it is becoming more and more difficult for these state employees and other highway authority officials to come to these meetings that are held on a national or regional basis.

And we need to encourage FRA and US DOT to support measures that will provide funding where appropriate to the states to allow highway authorities and state employees to come to these very important meetings where they have an opportunity such as we have had today to interface and exchange ideas and efforts that are going on as such.

Anya also chairs the Highway-Rail

Grade Crossing Committee on the Transportation Research Board, which I've always told people I think is one of the most complete committees of stakeholders in the grade-crossing arena and needs the support of all of the people that are involved in crossings and the support to generate the funds for all of the stakeholders and the people who do this kind of work to participate in these meetings. Thank you.

MR. COTHEN: Thanks very much, Bill. I want to just close by saying that we recognize that in the public-crossing arena that enforcement plays a big role. Clearly that wasn't going to be a very productive topic of discussion when it comes to private highway-rail grade crossings, given the number of those crossings and the difficulty of access along 150,000 miles and more of railroad right-of-way, and so we didn't go there, but it's an important dimension to consider, given the fact that in many places in the country, there is, with encouragement from a lot of members, an active effort for enforcement and effective judicial outreach in support of that.

Here we have further difficulties,

because we're talking about people who feel themselves entitled to utilize the crossings in whatever way they see fit, a very -- virtually impossible job in terms of, quote, "policing," end quote, that on the part of railroads.

I want to thank the Louisiana Department of Transportation and Development, Mark and Bill and staff. We really appreciate y'all being here, bringing this sense of reality and practicality and urgency to the discussion, and congratulate you for the directions that you're taking with your program and the hard work that you do in engineering and the outreach and cooperation with the railroads and communities every day, and for being good partners with FRA. We thank you very much for partnering with us in this forum. I learned a lot.

We don't have any additional business, to my knowledge. Anya, do you have an announcement?

MS. CARROLL: Yeah. Bill had just reminded me as chair of the TRB Committee on AAR grade crossings, we are supporting a panel session on January 23rd in Washington, D.C., in the afternoon at the Marriott Hotel that will

discuss safety at private crossings.

And secondly, the fifth and final meeting is tentatively scheduled for Syracuse, New York, in the Windham Hotel on February 15th, so you can be looking for an announcement on that. Thank you.

MR. COTHEN: Syracuse in February. You'll love it. Thank you. We'll adjourn.

(Whereupon, the proceedings were concluded, at approximately 5:00 p.m.)

...oOo...

REPORTER'S CERTIFICATE

I, Kathryn L. Paintin, Certified Court Reporter in and for the State of Louisiana, do hereby certify that the foregoing proceedings were reported by me by the stenotype reporting method and transcribed by me or under my personal direction and supervision, and that the foregoing is a true and correct transcript, to the best of my ability and understanding;

That I am not of counsel nor in any way related to counsel or any of the parties herein, and that I am in no wise interested in the outcome of this matter.

_____

KATHRYN L. PAINTIN
Certified Court Reporter
No. 81029 (Louisiana)

Anyone read this private crossing dribble? The IN CHARGE RR handmaidens saying don't use stop signs because it's more dangerous sometimes. But the same clowns have school buses and haz-mat vehicles stopping everywhere at public/private crossings. The railroads rules have rail employees stopping everywhere at public/private crossings. Some states have stop signs all over. Where are the DON'T STOP HERE RAILROAD CROSSING SIGNS?

http://dmses.dot.gov/docimages/p86/406577.pdf

RICHARD CAMPBELL President Railroad Controls Limited

But when we introduce a stop at a crossing, the clearing-sight distance grows exponentially. So if you take the clearing-sight distance, then you can take the maximum authorized speed of the trains on that given section of the track and determine a sight distance that you need to be able to adequately clear, because some of the crossings we go in and put these treatments in, and we create a scenario where, based on physical characteristics, vegetation, either on or off the railroad right- of-way, generally off, it generally is crops or vegetation off the railroad right-of-way where you can't actually come to a stop to comply with the rules, start up and clear prior to train arrival at maximum authorized speed. So there are some inherent hazards that need to be understood, and collecting some additional data would help to be able to gather that information.

MR. RIES: Bob, while we're finishing up, just to sort of let you know, we've sent out over 700 invitations twice or three times for this meeting.

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I am writing to contribute to the FRA’s discussion on private railroad crossings. It seems to me that nationwide standards for warning devises at rail crossings would be beneficial. We live in a highly mobile society, and creating uniform standards would help system users, whether they are in automobiles, on bicycles, or on foot, to recognize upcoming crossings no matter where the crossing is located. If such standards are, in fact, adopted, I would presume that some agency would be responsible for enforcement.

In addition, I feel that some notification that the private line is, in fact, active might aid drivers, cyclists, and pedestrians. Knowing that the line is active might encourage those who approach the crossing to do so with additional caution.

Brotherhood of Locomotive Engineers and Trainmen

A Division of the Rail Conference — International Brotherhood of Teamsters

NATIONAL LEGISLATIVE OFFICE
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JOHN P. TOLMAN
Vice President and
National Legislative Representative

February 15, 2007

Docket Clerk
DOT Central Docket Management Facility
Room PL-401
400 7th Street, SW (Plaza Level)
Washington, DC 20590-0001

Re: Docket No. FRA-2005-23281

Dear Docket Clerk:

On July 27, 2006, the Federal Railroad Administration ("FRA") published a Notice of safety inquiry, regarding the Safety of Private Highway-Rail Grade Crossings, which was assigned DOT DMS Docket No. FRA-2005-23281. FRA therein solicited comments from interested parties. 71 FR 42713.

These comments are submitted by the Brotherhood of Locomotive Engineers and Trainmen, a Division of the Rail Conference of the International Brotherhood of Teamsters ("BLET"), which is the duly designated and recognized collective bargaining representative for the craft or class of Locomotive Engineer employed on all Class I railroads. BLET also represents operating and other employees on numerous Class II and Class III railroads. Consequently, the issue of safety at private highway-rail grade crossings has a significant impact upon our members.

The BLET believes that private railroad grade crossings in the United States lack a uniform approach to safety, which endangers the lives of our members and the general public. There is a complete absence of regulation involving private grade crossings. This absence endangers both the public and railroad workers.

While accidents and injuries at public highway-rail grade crossings have declined by between one-third and one-half in the past decade, accidents at private crossings have declined by only 10 percent, and the number of injuries in private crossing accidents has actually increased by one percent. This increase is an unfortunate side-effect of both the government and the railroads failing to pay appropriate attention to this issue. We are fortunate, however, that no major accidents or incidents have occurred at such crossings. Nonetheless, the risk remains unacceptable. The

risks of collision and of derailment mean that train crews and the public may be exposed to injury or death caused by derailing equipment or hazardous materials releases.

The boundaries between public and private crossings are often blurred. There are over 94,000 private highway-rail grade crossings in the United States; many of which are used by more than one individual. A private crossing should be defined as one used by a sole land owner or lessee. Once any other individuals routinely use the crossing, it should no longer be considered a private crossing but as a public crossing. We believe it is imperative that any private crossing that serves an industry should be held to the same standards for the highway-rail grade crossing signal system requirements. Due to the types and sizes of trucks, and the materials that they carry, the severity of an accident at these crossings would be greater than an accident between an automobile and a train.

The BLET feels that, at a minimum, all crossings should be required to have active warning devices and must be in compliance with the Manual for Uniform Traffic Control Devices. Active warning devices can significantly improve the level of safety at these grade crossings.

However, we would prefer that FRA prohibit the creation of new private crossings and work toward eliminating as many existing private crossings as possible. If the FRA determines that it wants to allow the creation of new private crossings, then the new private crossings should have active warning devices installed prior to use. FRA should request enactment of legislation to address private crossings.

It is unfortunate that for many years our nation's railroads have chosen to sweep this issue under the rug — ignoring these private crossings until the level of safety had degraded so far that they have become a danger to railroad workers and the general public. We appreciate the fact that FRA has undertaken this effort, and are grateful for the opportunity to participate.

Respectfully submitted,

Vice President and National Legislative Representative

cc: Thomas A. Pontolillo, Director of Regulatory Affairs

Iowa Department of Transportation
800 Lincoln Way, Ames, Iowa 50010
Phone: 515-239-1052
Fax: 515-233-7983

February 20, 2007

Docket Clerk
U.S. DOT Dockets
Room PL-401
400 Seventh Street, SW
Washington, DC 20590

RE: Safety of Private Highway-Rail Grade Crossings; Notice of Safety Inquiry
Docket No. 2005-23281

Dear Mr. Ries:

The Iowa Department of Transportation submits comments in response to the Federal Railroad Administration's (FRA) Notice of Safety Inquiry regarding private highway-rail grade crossings (July 27, 2006 Federal Register).

The Iowa Department of Transportation does not gather, maintain or perform any safety analysis relative to private crossings. State regulation of private crossings is limited to private farm crossings established solely for farming or agricultural purposes. All other private crossings established in Iowa would be governed by terms of contracts or agreements negotiated by the railroads and the owners of private property.

The FRA solicits discussion and comments on all areas of safety relative to private crossings and on ten topics listed in the notice. Comments are as follows:

- *At-grade highway-rail crossings presents inherent risks to users, including the railroad and its employees, and to other persons in the vicinity should a train derail into an occupied area or release hazardous materials. When passenger trains are involved, the risks are heightened. From the standpoint of public policy, how do we determine whether creation or continuation of a private crossing is justified?*

Currently in Iowa the only statutory supported creation of a private crossing is to establish access to land that has no other access available and the "private farm crossing" is used solely for farming or agricultural purposes:

> Iowa Code 327G.11 PRIVATE FARM CROSSINGS.
> When a person owns farmland on both sides of a railway, or when a

> railway runs parallel with a public highway thereby separating a farm from such highway, the corporation owning or operating the railway, on request of the owner of the farmland, shall construct and maintain a safe and adequate farm crossing or roadway across the railway and right-of-way at such reasonable place as the owner of the farmland may designate. A private farm crossing established or installed pursuant to this section shall be used solely for farming or agricultural purposes.

Any continuation or creation of a private crossing for any other purpose requires negotiations between the railroad and private property owners. Thus the parties entering into negotiations for a private crossing would be the most knowledgeable about the use of the crossing and its associated risks.

- *Is the current assignment of responsibility for safety at private crossings effective? To what extent do risk-management practices associated with insurance arrangements result in "regulation" of safety at private crossings?*

Currently, the railroads and private property owners share the responsibility for safety at private crossings. We do not gather or have knowledge of the insurance arrangements relative to risk-management associated with safety at private crossings.

- *How should improvement and/or maintenance costs associated with private crossings be allocated?*

We do not support using public funds for improvements or maintenance of private crossings. Private crossings should be created by formal agreement, and the responsibility of improvement and/or maintenance costs should be determined by the agreement between the railroad and the property owners.

- *Is there a need for alternative dispute resolution mechanisms to handle disputes that may arise between private crossing owners and the railroads?*

Iowa Code section 327G.12 provides for an administrative dispute resolution process:

> Iowa Code 327G.12 OVERHEAD, UNDERGROUND, OR MORE THAN ONE CROSSING.
> The owner of land may serve upon the railroad corporation a request in writing for more than one private crossing, or for an overhead or underground crossing, accompanied by a plat of the owner's land designating the location and character of crossing desired. If the railroad corporation

> refuses or neglects to comply within thirty days of a written request, the owner of the land may make written application to the department to determine the owner's rights. The department of inspections and appeals, after notice to the railroad corporation, shall hear the application and all objections to the application, and make an order which is reasonable and just, and if it requires the railroad company to construct any crossing or roadway, fix the time for compliance with the order and apportion the costs as appropriate. The order of the department of inspections and appeals is subject to review by the state department of transportation. The decision of the state department of transportation is the final agency action.

- *Should the State or Federal government assume greater responsibility for safety at private crossings?*

Private crossings should be created by formal agreement, and the responsibility of improvement and/or maintenance costs should be determined by the agreement between the railroad and the property owners. Since railroads operate as interstate commerce and are already subject to federal safety regulations, the federal government should determine guidelines for appropriate signage at private crossings. Federal guidelines on signage should provide national uniformity, and should provide a consistent message to the road user, whether the crossing is public or private.

- *Should there be Nationwide standards for warning devices at private crossings, or for intersection design of new private crossings?*

Yes, guidelines should be developed by committees of experts similar to the NCUTCD and the Technical Working Group established by the U.S.DOT.

- *How do we determine when a private crossing has a "public purpose" and is subject to public use?*

Guidance, appropriate descriptions and definitions should be provided in the "Highway-Rail Crossing Inventory Instructions and Procedures Manual" published by the FRA. The railroads, with the cooperation of private property owners, should be required to provide adequate data or other information regarding the intended use of the private crossing.

- *Should some crossings be categorized as "commercial crossings" rather than as private crossings?*

No, the option of identifying a private crossing as "commercial" already exists on the

inventory form.

- *Are there innovative traffic control treatments that could improve safety at private crossings on major rail corridors, including those on which passenger service is provided?*

The same traffic control devices considered for use at public crossings should be used for private crossings.

- *Should the DOT request enactment of legislation to address private crossings? If so, what should it include?*

The responsibility for maintenance, signage and safety improvements should remain with the railroad and private road owner. Enactment of new legislative mandates should only be considered if adequate funding is appropriated. The Iowa DOT does not have legal authority to enter onto private property for inventory or regulatory purposes at private crossings, nor do we wish to obtain that authority.

- *Other comments*

According to the national crossing inventory maintained by the FRA, Iowa has 3,423 private crossings of the following types: 73 % farm; 16% industrial; 9% residential; 1% recreational; less than 1% commercial. However, we believe the FRA inventory count is not accurate. As an example, Union Pacific records indicate 654 private crossings in Iowa versus the 1426 UP crossings shown in the national inventory maintained by FRA.

The Iowa Department of Transportation appreciates this opportunity to submit comments regarding safety at private highway-railroad grade crossings. If you have any questions, please contact me at 515-239-1052.

Sincerely,

Peggy A. Baer

Peggy Baer, Director
Office of Rail Transportation

SAFETY AT PRIVATE HIGHWAY RAIL GRADE CROSSINGS

COMMITTEE HEARING

WASHINGTON, D.C.

JANUARY 23, 2007

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SAFETY AT PRIVATE HIGHWAY RAIL GRADE CROSSINGS

Committee meeting, taken at the Marriott Hotel Washington, D.C., commencing at 3:50 p.m., Tuesday January 23, 2007, before CARLA L. ANDREWS, CSR No. 78506.

A P P E A R A N C E S

FOR THE PANEL:

MIRIAM KLOEPPEL

GUAN XU

PAUL WORLEY

RICHARD CAMPBELL

WILLIAM BROWDER

AIDAN NELSON

P-R-O-C-E-E-D-I-N-G-S

THE MODERATOR: The session today No. 071 is a panel session on the safety of private highway rail grade crossings. My name is Anya Carroll, and I am the chair of the Highway Rail Grade Crossings Committee, HB 60. And I am happy to be here today to moderate this session with our distinguished panel, which I will introduce in a moment.

The TRB Committee is happy to support the FRA in its safety inquiry on private crossings. And as such, an occurrence today is that we have a stenographer with us, which will be transcribing the comments so that we can capture everybody's ideas and thoughts and questions on the private crossing issue.

So because of that occurrence, I would like to make sure that before you speak, you actually introduce yourself -- your first and last name. If you could spell your last name the first time that you speak, that would be helpful to the stenographer. Also, if you speak a bit more slowly, she is more than likely to capture your thoughts more accurately.

So thank you all for attending.

Our distinguished panel today from the Federal Railroad Administration is Miriam Kloeppel. And she is with the Office of Safety. We have Guan Xu

from the Federal Highway Administration; Bill Browder from the Association of American Railroads; Rick Campbell from Railroad Controls, Limited; Paul Worley from North Carolina, DOT; and Aidan Nelson from the Rail Safety and Standards Board in the United Kingdom. I would like to welcome our panel of distinguished guests.

With that, I just have a few more opening remarks. As far as the temperament of the panel session this afternoon, each panel member will give a five- to ten-minute position statement, which will take us to about 45, 50 minutes of the session. And then it will be an open discussion amongst all of us here in attendance and the panel members.

And we are open to any comments, questions, concerns that you have about the safety of private highway rail grade crossings. Two other things that I would like to mention is our committee meeting, the Highway Rail Grade Crossing Committee meeting, will be tomorrow at 8 a.m. till noon. And it is in Lincoln II, which is on the exhibition level across from the poster sessions. And I would also like to invite you to Syracuse, New York on February 15, at the Doubletree Hotel where we will be holding our fifth and last public meeting on safety of private crossings highway

rail grade crossings.

So with that, I will have the panel members give a short introduction of themselves and we will continue. So we will start with Miriam Kloeppel.

MS. KLOEPPEL: Good afternoon, ladies and gentlemen. Thank you for coming. Private crossing safety has for some time been a matter of concern to the U.S. Department of Transportation and to other federal agencies. In 1993 the FRA hosted an open meeting to initiate industry-wide discussions.

And in a 1994 rail highway safety action plan, the U.S. DOT proposed to develop national minimum standards for private crossings. In a 1997 study on safety at passive grade crossings, the NTSB highlighted the need for some system to improve private crossing safety and recommended that U.S. DOT, in conjunction with the states, determine governmental oversight responsibility for safety at private grade crossings.

In 1999 the NTSB weighed in again in its report on private grade crossings incidents in Portage, Indiana. In this case, the NTSB recommended that the DOT eliminate any differences between public and private crossings with regard to funding or requirements for safety improvements.

In 2004 the U.S. DOT published an updated

action plan in which the FRA committed to leading an effort to define responsibility for safety of private crossings. Today's meeting is a vital part of that effort.

The FRA, for any of you who are not familiar with us, has eight regional offices geographically distributed across the country. As you can see from this chart, regardless of the region, private crossings constitute a significant percentage of all grade crossings. The total combination wide is about 94,000.

Although accidents at public crossings have declined considerably over the past 20 years, declining by one third over the past decade alone, the number of accidents at private crossings has remained comparatively stable, declining only 10 percent over the past decade. In most years, the number of fatalities occurring in accidents at private crossings exceeded the number of on-duty deaths among railroad employees in all rail operations.

Now, the FRA has not entered into this initiative with any preconceived notions of what direction we are going to take ultimately. In order to best guard the information and the input from members of the public and from members of interested parties,

we have conducted a series of public meetings. As you can see, they have been scattered across the country. And we have had good attendance, although occasionally some bashful participants. And as I have mentioned, we will have our last one on February 15. You know, I left off the seven, so it may be hard because it's going to be February 15, 200. That's a little bit in the past. Sorry about that. But, yes, it will be next month.

Among the issues that we have discussed in the public meetings are these here, particularly the need for standardization, both in science and in design, various rights and responsibilities, according to the different parties involved, private crossing owners and railroads, and what the data might mean. There are obviously other subject areas. These were just a principal topic area. And we have quite a few comments on them. But I don't want to dive into what all those were because I need to make room for everybody else, including you all, to have time to discuss things.

I will be happy to answer questions. Information from the FRA will be published in our report based on the discussions that were held. And we do have a docket in place. As you can see, it's on the

U.S. DOT docket web page. And it is Docket Nos. 23281. So if you are curious about the specifics of what went on in the public meetings or if you have comments of your own to contribute, I would like to encourage you to do so.

Thank you.

MS. XU: Good afternoon. My name is Guan Xu. I am the program manager for Railroad Highway Safety Program and Office of Safety Federal Highway Administration. When I told my team leader that I was put on a panel at the TRB to talk about issues regarding safety at private crossings, he asked me what are you talking about? We haven't done anything for private crossings. Our program is limited to public crossing only. And that's beyond our programmatic authority. So I said, I just got an idea of what I want to say. I think I will talk, you know, briefly about our program. It may be helpful for people to understand why we have not done anything yet. And, you know, also to help people to understand the issues and challenges that we are facing when it comes to private crossings.

The Federal Highway Rail Grade Crossing Safety Program, as most of you already know, is often referred to as the Section 130 because we got our

regulatory and statutory authority from Section -- from Title 23 U.S. Code, Section 130, and also from the 23 CFR, Part 646. That part gives us problematic authority over the railroad highway grade crossings. And the program is one of the federal aid funding programs. So it is funded through transportation bills. The current transportation bill, SAFETEA-LU, authorized $220 million per year was authorized from fiscal year '06 to fiscal year '09 and set aside funds under the Highway Safety Improvement Program.

And Section 130 can be used on installation and updating the protective devices, such as flashing lights, gates, and signs. And it is also attributable to possible public policies. And I will emphasize that one of the important factors for the Section 130 funds is the number of public at-grade crossings in each state. So each state gets their portions based on, you know, 50 percent of Section 130 funds based on the number of public crossings.

You can see that the current Section 130 program is a federal-aid funding program. And current regulations on federal-aid programs limits FHWA's problematic authority to only public grade crossings. And I think this is one of the reasons why we have not been successful to take on issues at private

crossings. For example, in 1999, FHWA proposed a section to the MUTCD that contained a definition, standard, and guidance for traffic control devices at private crossings. But FHWA eventually had to withdraw their proposal because the railroad industry objected to the proposal, challenging FHWA's lack of statutory authority and the economic impact on the industry. And a number of states also opposed the inclusion of private crossing standards due to state laws associated with their lack of jurisdiction of public roads.

So the issue that needs to be addressed includes the allocation of responsibilities, associated costs, and appreciated traffic control devices and, also, what's the appropriate traffic control on these crossings.

As Miriam had talked about, FRA has initiated a safety inquiry to investigate safety concerns at private crossings. And FHWA will continue working with FRA and will take appropriate actions accordingly depending on the outcomes from the FRA's private crossing initiative. And that's all I have to say. Thank you.

MR. WORLEY: Good afternoon, I am Paul Worley. I am director of Engineering & Safety with the North Carolina Department of Transportation. I was

asked to come to be on this panel to talk to you this afternoon about private railroad crossings. And I want to talk to you some about our experience and some of the things we have done in North Carolina. I don't have any slides here, per se.

But you may have heard about our project, the Sealed Corridor. Following the Sealed Corridor Project, we realized that we needed to do something at private crossings because when we had done diagnostics on our corridor between Raleigh and Charlotte, we discovered there were many, many private crossings in various states of maintenance and ownership.

Using the Sealed Corridor approach, we used off-the-shelf technologies different ways. We also emphasized used corridor diagnostic teams and closures and alternative access whenever possible. So we took that same approach when we looked at the private crossing safety initiatives. We even signalized crossings with high volumes and some public use as well.

North Carolina is one of the few states to pursue private crossing safety projects and inventory. We have done this through a $1.9 million grant from the FRA through the Next Generation High-Speed Railway Program by virtue of North Carolina having a federally

designated high-speed railway corridor -- the Southeast high-speed railway corridor.

And the approach that we have taken with private crossings, first of all, was to do a comprehensive diagnostic of all 47 crossings that remain between Raleigh and Charlotte. And the approach there was -- you always hear about data; garbage in and garbage out. We want to make sure we have the most appropriate inventory data that we could provide and use them to make decisions. So we were able to fund that particular study, do that comprehensive diagnostic. And we found that, you know, we had a lot of inaccuracies in inventory. We had already very sparse coverage on private crossings. We also had the sheer number of private crossings out there to deal with as well.

So it certainly opened the eyes of our diagnostic teams and our department as we looked at crossing safety in corridors because in North Carolina we believe that our best approach has been to use the corridor diagnostic approach and creating all the crossings into a particular area, both public and private.

There are many changes that are involved with private crossings. And it is our point of view. We

are not representing any one policy. But this is a unit of government that took on this project and has completed a good part of it.

As far as the challenges go, generally there are no public funds for private crossings that are out there because, as Guan said, you cannot use Section 130 money. You can use Section 130 money for crossings that are lightly travelled public roads because you can't use it for heavily travelled private crossings. So there is a real dichotomy there and issues that have to be within the policy.

There are varied types of private crossings. Various folks have their own definitions. What we looked at were private-use residential, farm, industrial, plant to plant within an industry, railroad use, private crossings. We also had public use for residential development, such as private communities, business, industrial, recreational, and what's most important in North Carolina, golf cart crossings.

Now, by the time private crossing present themselves at the state level and make their way to my office, they are politically charged. And I know this comes as a shock to you, but often all we can do is listen. Sometimes it may be a farmer who has driven all the way to Raleigh and wants someone just to listen

to them because the railroads are going to close their private crossing. And that's what we have had to do in the past. We have tried to listen. We have tried to understand. We have tried to encourage private individuals to keep talking with the railroads and try to negotiate a win-win situation. We try to express why the railroads need less private crossings and better protected private crossings.

Private agreements and deeds may cover the crossings -- private crossings -- and may involve multiple parties over multiple years. And it is very difficult to go back and find one agreement for each crossing on a particular corridor. So you have to do a lot of digging and a lot of research, and still you may not final all the data you are looking for. Resources in state DOT's to maintain an accurate inventory of private crossings are not there at the state DOT or even at the railroad level. We are really trying to work harder on our public rail crossing inventory. But inventory and data gathering remains fairly important. But at the same time, it is something that is unfortunately not well staffed and well funded.

We have also, in addition to looking at the federally designated high-speed corridor, we also looked at private crossing as part of the corridor

studies. We did a commuter line in the Charlotte area in the private crossings there as far as what could be closed, what should be improved, what should be consolidated down to public access crossings. And through doing this, we have learned that we have got to partner with the owning and operating railroads to find comprehensive and innovative approaches.

When we started and we hosted the FRA hearings back earlier late last year in North Carolina, we talked about some of the issues that faced the private crossings that faced FRA and faced the states. And we talked about like, for instance, is the current assignment of responsibility, is that effective. You know, our thoughts on that was it is not consistent.

Each railroad determines what can be done to improve the safety and manage the risk at private crossing. They do their own things. We feel there is a significant need to collect, correct, and update inventory information into the national and state inventories.

And U.S. DOT through the railroads, through the states, through rail transit operators should collaborate to develop a consistent approach, such as was done with the Crossing Technical Workgroup to develop that document through the ITE.

One of the issues was cost -- maintenance cost, improvement cost. Stakeholders, federal and state agencies, local governments, transit authorities, and railroads, and private crossing owners may eventually need to develop some kind of methodology to share costs. It can't all be put on the public side. It can't all be shouldered by the railroads. There is a need to develop a methodology to share costs associated, construction and maintenance, based on local conditions and needs.

Considerations are these transit corridors where there are passenger rail corridors that travel at higher speeds. Are there quiet zones? Are there critical inter-modal corridors for rail freight? All of these have a private and public sector interest as part of a multi-modal transportation system. And capitalization of future maintenance costs should also be considered. That was one of the big issues we had. While we have federal grant funds to pay for the devices and capital, we did not have ongoing maintenance. So we worked with railroad to capitalize maintenance. So that's the approach we considered as well.

Also, disputes. We talk about the farmer coming to your office or property owner and his concern

about losing their private crossing. There is no way to handle these disputes. There is no dispute resolution process. There needs to be some kind of model legislation. One of the issues was should the state or Federal Government assume a higher level of responsibility. Our feelings were that, first, national guidelines should be considered for development by the stakeholders. You have got to get the stakeholders together to figure out what way to go with this.

We talked about warning device standards. Should there be national standards for warning devices at private crossings. And some of this is being done through the National Conference of Uniform Traffic Control Devices. And then, finally, how do you determine a crossing is public purpose and it is subject to public use. Again, we get back to the stakeholder. You need to look at commercial crossings versus private crossings. So there are a number of issues out there as well before you even get to legislation.

That's basically my summary of the issues that we have. We feel that we had a pretty good level of success. But it is not to have funding to be able to go and negotiate with the property owners and buy

alternative access to close any troublesome private crossing or to be able to signal any crossing that may lead into a private trailer park with a lot of residents that need the crossing, too. So that's one of the luxuries we have had in North Carolina. We feel like we can make most of the money. And we think that we could have the beginning of a model that uses the Diagnostic Team process and designates crossings that could perhaps be put to use elsewhere in the public corridors. Thank you.

MR. CAMPBELL: Good afternoon. I am Rick Campbell with Railroad Controls, Limited. And I am here to speak to you, I guess, on behalf of Rick Campbell and a number of different groups that I work with, including the National Committee on Uniform Traffic Control Devices, where I chair the Railroad and Light Rail Transit Technical Committee. However, I want to clarify that a lot of the views that you are going to hear aren't my own. They are derived from numerous meetings and organizations that I work with.

The issue of private highway rail grade crossings, as you have already begun to develop ideas -- and certainly a lot of folks in this room are familiar with -- is a complex issue. It involves the railroad, a private landowner, and then potentially

other governmental agencies, such as FRA and FHWA. And private highway rail grade crossings are unique because they have largely been considered to be private matters of interest between the railroad company and the private landowner. And one of the things is they have been researched and inventoried. And some railroads have made significant strides towards inventory of private highway rail grade crossings. And in many cases, there are no documents that serve to establish the relationship between the railroad and the landowner. And that would include, of course, right of way over the crossing, maintenance of the crossing, and other safety issues, such as site distance and traffic control devices, and who has the responsibility for those.

So from the very basic beginnings of the private highway rail grade crossings, there's a point that exists relative to those crossings and the supporting documentation. In some states as well, although they are not public crossings, the State Public Utility Commission or Commerce Commission has assumed some degree of regulatory authority over private highway rail grade crossings from an agreement perspective but ordinarily from a traffic control device perspective, although this is inconsistent

throughout the United States. However, the lack of progress made in reducing crashes at private highway rail grade crossings has led FRA to undertake a series of information-finding proceedings to solicit comments from railroads, landowners, state departments of transportation, and other stakeholders that have an interest in private highway rail grade crossings to be able to formulate opinions and ideas and possibly even rule making on how to address the private highway rail grade crossing issue.

In order to bring some degree of standardization of private highway rail grade crossings, one of the first things that's going to have to be developed is an inventory that's comprehensive on the private highway rail grade crossing. And, traditionally, the inventory that has been established and maintained by the railroads and FRA has been limited to public highway rail grade crossings. So this is going to provide another large expansion of the inventory.

In addition, FHWA and FRA are going to have to work closely to be able to develop a relationship that will allow establishment, standardized traffic control devices, and definitions as to private highway rail grade crossings in order to have an effective

cooperative effort.

At the present time, the manual on uniform traffic control devices does not specifically define public roadways separately from private roadways. MUTCD deals only with traffic control devices on public roadways or roadways open to public traffic. And recently FHWA has gone through an amendment and regulatory process to more clearly define the term open to public travel. That was handled through 23 CFR 655 and has recently been enacted as a final rule.

One of the things, though, that MUTCD lacks is the definition of other than a public road, which we do have a definition of a public roadway, that being any road or street under the jurisdiction of and maintained by a public agency and open to public travel. So you see where the open to public travel comes into this. MUTCD is silent about any other type of roadway that's not public.

In order to try and bring some order to these different types of crossings because you have already heard some comments from Paul about classes of crossings -- and obviously there is a clear need for a definition of a private roadway. And if we take what exists in MUTCD today and expand on that, one could derive that the definition of a private roadway would

be any road or street under the jurisdiction of and maintained by a private entity and not open to public travel.

Well, those are fairly easy to define as well because that could be a roadway that's closed by a locked gate, posted with no trespassing signs, or there is some other type of barrier or gated access that prohibits the general public from access into this particular roadway. But one of the problems begins to surface when we have crossings that serve businesses. For example, a private roadway that has a highway rail grade crossing, which allows access to a retail development or restaurants or other types of commercial facilities, those that are clearly owned by a private agency but from the public's perspective are open to public travel.

And for that, I have proposed a third category and actually presented this to the Edit Committee of the National Committee on Uniform Traffic Control Devices. And what I proposed is a category known as a semi-public public roadway. And that would be any road or street under the jurisdiction of and maintained by a public entity and open to public travel.

And this third category allows us then to

classify these crossings, which are clearly on private rights of way but, from the public's perspective, open to public travel. Now, this work, of course, will have to go on within FHWA and MUTCD. But one of the benefits of this particular category -- and not to duplicate what Paul just talked about. But one of the points of having a semi-public category is that it would allow the discretionary use of public funding for traffic control devices or other types of improvements. And because this is such a broad category, I don't know that we are going to be able to find successfully a definition to cover all applications.

So with MUTCD traffic control devices at highway rail grade crossings, they are actually developed through a process using a group of folks known as a Diagnostic Team. And the definition of a Diagnostic Team exists in 23 CFR 646. And it is a group of parties of interest in a highway rail grade crossing matter. And if we take that Diagnostic Team concept and expand it to the semi-public crossing category, we now have a means where the Diagnostic Team, which would include representation from the public agency -- applicable public agency. We would have some means to make a determination as to

applicability of federal funds and how they might be applied.

For example, a semi-public crossing that serves a retail development would in probably all circumstances not be deemed to be one which would be subject to the use of federal funds because we looked at a developer or landowner responsible for those traffic control devices. However, a semi-public crossing that serves -- and I will use Paul's example of a private trailer park where there are numerous residents and potentially school buses, which use this crossing -- may be determined to be in the public's best interest received some or all federal or public funding to be able to provide improvements to the crossing and traffic control devices. So it is the ability and the discretion of the Diagnostic Team to be able to on a case-by-case basis make an allocation of whether the use of federal funding is appropriate.

And then finally from FRA's perspective, there was some mention earlier about a short-line railroad that exists in south of New Orleans called the New Orleans Gulf Coast Railroad. And they are currently fighting a battle with unauthorized private highway rail grade crossings. And the establishment through local citizens of the private crossings at will

can literally back up a dump truck and dump asphalt over the tracks and establish a private crossing clearly trespassing upon private right of way owned by the railroad company. However, because there is no clear-cut regulatory authority over these private crossings, the state boards have been reluctant to enforce actions by the railroad to be able to establish their right of way and protect their right of way from these illegal private crossings.

So as the third leg to the stool, if you will, I would like to suggest that FRA, as part of their fact-finding process, consider the rule making which would provide some degree of authority through FRA or a state department of transportation to regulate the establishment of private highway rail grade crossings to provide for the inventory and that that inventory would include data, including maintenance responsibility, surface traffic control devices, and other information, which would be applicable at each crossing.

And as a closing point, I would say that were the party responsible for maintenance of the devices fail to maintain the devices or the surface or track structure or various elements that the crossing would be subject to closure.

So I will close with those comments. Like I say, in closing I want to make the comment that I think that in the past we have been somewhat misdirected by the fact that we have looked at ownership of the roadway as establishing public or private and that the real issue is not ownership or maintenance of the roadway itself but the expectation of free access by the public.

Thank you.

MR. BROWDER: Good afternoon. I am Bill Browder from the Association of American Railroads. And I want to apologize upfront to those of you that have had to listen to my presentation at least one or more times before because a lot of what I will talk about is material that AAR and myself have presented in the past. First, let me tell you a little bit about the Association of American Railroads. It is an old established organization created back in 1888 after the war for the primary purpose of standards and practices.

And the first standard that we established and still use today is standard time. We were the inventors of standard time just like Al Gore says he's the inventor of the Internet. But we put it all together back in 1888 because everybody had a one- or

two-minute's difference in the time that they kept in every locality around that country in those days. And so we created the time zones.

Now, we don't take any credit for Daylight Savings Time. Mark on your calendar March 11 because we will be going back to that before we ever see the sun again in Washington, D.C. or we get away from the snow. But that's your U.S. Congress at work.

More about the AAR. The AAR still is a standards practices organization today maintaining a number of different standards. We also operate for the Federal Railroad Administration the Testing Center in Colorado. And it was premier Testing Center in the world. And folks from all around the world come and use the facilities there for a number of different venues that exist. We also have another profit-making subsidiary in North Carolina outside of Paul's hometown of Raleigh there that is responsible for the interchange documents that we are involved in.

AAR is an association of the members in North America of the Class One railroads and some other folks. And we basically represent them. And the only costs that we have, unlike the Federal Railroads Administration command and control authority through the code of federal regulation, is interchange. We

don't have any more control over any of our members other than interchange. You know, the rails out there again after the war are 56 and half inches apart. And if you want to run them on those rails, you have got to have your equipment 56 and half inches apart. And it goes downhill from there as far as standards are concerned, but we have managed to do that since 1888. And it has developed a long and lasting relationship by private companies who are in business to make money for their stockholders, for their shareholders.

And so as such, AAR has many concerns about any issue that the government may be interested in addressing. I think there isn't a person in this room or organization that isn't interested in the common objective of safety at highway rail grade crossings.

To AAR -- and the views that I will express, especially since they are being transcribed, will be my own and not the AAR's espoused position because we have quite a few members who have different views concerning these particular issues. And I am sure if you talked to them individually and they have come to these public sessions, they will be more than happy to provide comments upon the issues from their individual perspectives. I will give you a few things, though, that do apply.

First of all, at any highway rail grade crossing, railroads derive absolutely no benefit from those crossings being there. And that's stated in 23 CFR distinctly in the highway section of the CFR. And that's a very important thing to us. Another important thing to the railroads is that we are not the experts on treatments at highway rail grade crossings. The Highway Authority is the expert. Now, we are involved in private railroad crossing by default in the issue of treatments at grade crossings. But, again, we have a lot of concerns about those issues, especially as I mentioned in that it affects our stockholders. And these are expensive with the 93,000 private crossings and add to it the 150-sum public crossings that are out there today. Railroads in the United States spend over half a billion dollars a year on highway rail grade crossings, $500 million plus in maintenance, upkeep, liability, and activities that go on at grade crossings.

We don't have any large force of individuals out there to design and promote. We have got to do it within our own engineering departments or contract people to do that. The maintenance that we have to do to CFR Part 234 requires us to make an on-site inspection of every active warning device crossing.

And there are over 65,000 of those out there in the United States. And you can imagine the cost of sending an individual to those crossings. Only about a thousand of the 93,000 private crossings have active warning devices. So they are few and far between. And most of them happen to be there because of the railroad insisting with everyone from state DOT's to private industries that they be installed for safety sake at crossings. I don't think that anything that comes out of hearings and studies will show that there is a one-size-fits-all solution with the number of stakeholders that we have that are involved in this issue.

You can already tell from those that are involved that we have to deal with 50 different state DOT's even though we get 120 through the 130 program to administer the programs that we have. Now, we have very established relationships, but different things work in different places. If you look at the Docket 23281 in case you missed it the first time around in the hearing, you will see a little short-line railroad down in Louisiana. I mean, that's a deposition in the making for you lawyers out there of what happens at private rail crossings. And that includes such things as folks in the good parishes down there going out and

dumping a load of asphalt across their right of way and identifying that as a private highway rail grade crossing. So it is a fertile field as far as issued by the way that railroad took it to court. They have been to federal court twice and had been thrown out. And they spent about $700,000 fighting these innumerable illegal crossings that they say exists down there.

But there are some common things that we can talk about in terms of safety because safety is first, always has been and always will be. And when I say safety, first, there is safety of our employees. We don't get anything out of those crossings, but we get our employees hurt, we get them killed, we get derailments. We get all kinds of issues that occur. UPS and FedEx, two of our best customers, don't care that we have a crossing accident at a private crossing some place on the right of way that delays the delivery of their traffic. And their customers are calling into the FedEx people wanting to know where their materials are. And so are our other industry customers, whether they are J.C. Penney and your sneakers that you are getting or they are a plant or a Chevrolet someplace that needs a widget to complete an auto on an assembly line.

So those are factors that we are interested

in. And, again, it is an important thing to our operations, our equipment, our employees, and safety overall. There are a number of things that have been done. I commend Rick's suggestion in terms of semi-public access -- semi-public crossing for those that have public access. I don't think there is any one-size-fits-all solution, as I said. And I think, quite frankly, I have got to commend the FRA for taking the initiative to at least get the process going on the issue.

So with that, I will finish and pass it along to the other side of the pond. And we are happy to have Aidan here to talk about where all the action is.

MR. NELSON: Thank you. I stood in this room about five years ago when we first talked about managing risk at private crossings. So I thought, well, however the presentation runs, I will just give some thoughts. And the thoughts start right back in the middle of the 19th century because private crossings were the price that railways had to pay to get their line of routes approved.

And for every crossing that was created, it was public. There were very distinct obligations placed on the railway. If it was private, there were pretty generic and often discreet obligations placed on

the railway. But for every crossing that was private back in 1850, it was an agreed, main, authorized user.

So the first issue is trying to keep tabs of the succession from the original authorized user or users if more than one property was accessed a private crossing. It's a considerable challenge to the railway. And in Britain, it has become a far greater challenge in recent years with the planning rules being altered to permit development and agricultural properties to encourage employment in rural areas. And that's actually moved this quite a long way from a single farmer and his family and those associated with his business.

We have a situation, which the authorized user is supposedly responsible for ensuring that his visitors understand the rules of engagement for the private-level crossing. In practice, most farmers will say they do it but don't do anything. And indeed, with a move from farmers having their own hired hands to agricultural contracting, we have moved even further from the idea that the authorized user knows who's coming to work on his land.

We have recently had an accident in which there were a gang of immigrants from Britain, some illegal, none of which had an adequate command of

English to understand the instructions for the use of the crossing.

So in certain parts of the country, we are now producing information leaflets about the safe use of private crossings in a multitude of languages from Polish to Iraqi and Arabic. So we have got that.

We have a second language in parts of Britain -- Welsh. And that gives us a complication because you have in Wales signs in both English and Welsh. But the longer you make the signs, the less people pay attention to them, particularly if Welsh comes first, which hardly anyone uses it, other than officially. That's one of the obligations on the railway is to sign the crossing with the arrangements of its use. And that takes the form of a sign to indicate that it is private, a statement that the penalty for abusing the crossing which, in most cases, is a function of it being five-bar gate on either side of the railway because the railway has an obligation to fence itself. And that was a continuous fence. So at each private crossing you have a five-bar gate on either side.

It is not the safest form of railroad crossing because if you are going to use it properly, you first get off your vehicle, you open the near-side

gate. You walk across the grade crossing to open the far-side gate. You remember to look again, and you come back to get to your vehicle. You mount your vehicle, take it across your third crossing of the railway, you get off. You remember to look again, you walk back over, you close the gate. You come back over for the fifth time and close the other gate.

And if you are the mailman and you are only going to the farm to deliver the mail, what do you do? You leave the gates open for your return. And you think, well, it is Friday, the refuse man comes. So you leave the gates open again. And what you go from is a passive user work crossing with a distinct barrier to indicate the presence of the railway to a passive open crossing.

We all know what happens on passive open crossings. You actually increase the risk. Now, we have been, some would say, a little stupid in Britain where we have high use of property crossings. We have put in miniature warning lights to indicate whether the line is clear or there is a train coming. And that just converts it to an active open crossing. And the idea of returning the barrier and closing the gate is even further from the user's mind.

So we have got a dilemma. What are we going

with regards to the dilemma? Well, first, we are trying to close the things. We have been reasonably successful. But most of the farmers and most of our crossings are in rural areas. Our private crossings are worked out. If the railway wants to close the train crossing and it wants to close a lot of them, it might be paying some reasonable sums of money. But in some cases, the railway has paid reasonable sums of money to close it. In others, it has become extorsion. And they have become ransom trips. And I think whatever you do in the way of legislation, you have got to take the ransom element out of it. And you have got to promote rational armistices.

I have been particularly impressed by what the Irish are doing. And they have just taken a very radical look and sought to reduce the number of private crossings so that you are buying the land from farmers who have land on both sides of the railway and selling the land to other farmers. So they have consolidated the holding on one side of the railway and removed the need for the crossings.

They have also recognized that you can separate an agricultural crossing for far less money than railway engineers would have you believe. They want you to build something appropriate for the

separation of the public highway.

So if all you have got is to get cattle from one side to the other, you want something cattle sized. You don't want to take the biggest truck you can imagine underneath the railway. If you would go over the railway and all you have got to do is to round up the cattle and bring them back across, they can go up around a steep of gradients and you can build suitable bridges. So they have actually gone quite a long way into the British standard of having a solution.

The dilemma we have is when something becomes public. You can blame the Canadians because of this because their first prime minister was born in Scotland. And it was some years ago that the local authority put a sign at the end of the farmer's lane pointing out the birthplace -- a tourist sign pointing out the birthplace of the first Canadian prime minister. That was seen as an invitation to public use.

Common sense did prevail, and I think the sign was taken down because the consequence of going to something that is declared public is that you have to upgrade the crossing to a public space crossing, which in Britain is usually, at the very least, an active open crossing. All the costs would fall to the

railway. So what the railway has become is pretty expert at challenging all of these indications of a public invitation to cross or where there is an established public invitation. But it is clearly a private right of way to reinforcing the private right-of-way dimension.

Sometimes the industry is forced into putting staff out on Saturdays and the holiday season because they give access to the camp sites. So everyone who uses the crossing on the Saturday when they are coming into camp for the week gets a leaflet advising them of the arrangements.

But that's done in partnership between the railway and the landowners. The biggest issue for me in relation to private crossings is that we know quite a lot about the risk profile. We know that on average the vehicles that use the crossings are bigger than most of our rural public crossings, plus farm machinery on average is pretty heavy. Therefore, the potential for a passenger train derailment is increased when compared to the ordinary car.

We know that regular users of grade crossings on work-related journeys are the ones who are most likely to have an accident. And that's a pretty central characteristic of the access of the private

level crossings.

So if we are going to be effective there, we have got to target the employers who are not usually the authorized users at the crossings. That's something that falls to the railway and something that's done to varying degrees of effectiveness.

We have got one other dimension, which I think is particularly important. We have a nonstatutory planning guidance that says the planning authority must consult with -- sorry, should consult with the railway on any development likely to have a material impact on the use of the level crossing.

We believe that should be a mandatory statutory obligation to consult the railway because if we actually got that consultation going first, we might actually get some sense in the planning approvals, which would force the hand of the beneficiary for the planning approval to work with the railway to create an alternative access.

So I think that the possible quick win for us is toughening the planning regime to create a statutory obligation to consult and, in light of that, to use that as leverage to promote alternative access for developments of the road. Thank you.

THE MODERATOR: I would like to thank the

panel one last time. And we will open up for questions after that. Thank you very much. Since the term rules of engagement were used by Aidan in his last speech, I would just like to express again the need for -- if you intend to make a comment or ask a question of the panel -- and it could be separate entities on the panel or the whole panel -- please step up to the mic, state your name, spell your last name for the stenographer, and ask your question and don't speak too quickly.

So with that, is there anybody in the audience that would like to make a statement?

AUDIENCE ATTENDEE: Hi, I am Rich Brown with TransCo Industries. That's B-r-o-w-n. And my question is for Rick Campbell. Rick, the 94,000 population of private crossings, what percentage of those crossings are semi-public as you defined semi-public?

MR. CAMPBELL: Rich, we have had some discussion about that. And because private crossings are not currently inventoried, there is no real way to know. However, there has been a group -- well, Tom is going to come up and tell us about it. Maybe I should say not inventoried to the point that we have the types of data that we have at public crossings in terms of usage of ADT and surface and warning devices. We just don't have the degree of information. It is hard to

say.

However, some folks, I guess, that would be considered experts or extremely knowledgable in the field can talk. And we feel that the number is not tremendously large. It's maybe in the neighborhood of 10 percent or potentially less than all of the private highway rail grade crossings. Sorry, Tom, if I said that wrong.

AUDIENCE ATTENDEE: Tom Woll, W-o-l-l, Federal Air Administration. Most people know me. Yeah, I have got to correct that. Private crossings are in the inventory, okay. So that's a misstatement. You are correct that we don't have ADT's in some of the other information. Sometimes the railroads will provide the train counts on that. But somebody has got to go out there and count those automobiles or whatever is going to cross that. And the question is, Who is going to do it? Obviously, the states are not going to do it.

There is a category for whether or not there is public access in the inventory. We changed that in November of 1999. However, I don't think that it has been updated by all of the various states and railroads. In fact, unfortunately, it was mentioned earlier in one of the other sessions. There are 20

states. And some of them -- I won't say that they are present here -- have not updated their inventory in the last six years and haven't initiated any updates. So if we could get that -- they probably have the data. We would just like for them to send it to us. So that's where the big problem is. And that's why the inventory, in some cases, is not up to date.

AUDIENCE ATTENDEE: My name is Gary Drouin, D-r-o-u-i-n, and I am with Transport Canada. I guess my first comment goes to Aidan. And my question is, was that sign in both Canadian official languages, French and English, because maybe that's what caused the confusion and not necessarily for the private or public voracity. I am just joking.

My real question goes to Rick. In the semi-public crossing if -- well, say, there's a trucking company and there's trucks of course going in -- delivery trucks going in and maybe a few customers like FedEx and so on and so forth. Would you consider that as a private crossing or semi-private crossing?

MR. CAMPBELL: As part of the proposed usage, we would consider that to be a private crossing because it is a private business, which has control over its employees. And then although you do have access by

drivers, such as FedEx or UPS or other types of delivery, all types of delivery, those are generally drivers that possess a commercial driver's license and have had additional training, which includes additional safety training in highway rail grade crossings. And clearly, that would be -- if that crossing was exclusively used to service that private business, if you will, that you would look to the private business to make any funding to support active or improved traffic control devices, which even to this day they could freely do. And, in fact, many private industrial facilities, especially if there are hazardous materials and things, actually do have active traffic control devices at those private crossings.

AUDIENCE ATTENDEE: Okay. Thank you.

MR. BROWDER: I want to go back to Mr. Drouin's inquiry about private grade crossings. And as I stated in the New Orleans public hearing for the 93 or 94,000 that are out there, the resource for most of those in the FRA inventory are the railroads. They are the people that are doing all of the work and submitting the data -- limited amount of data that Tom Woll requires. Again, we are a private company. We don't derive any benefit. We don't see an incredible safety benefit to providing this information for public

purposes.

As a matter of fact, some of our members choose to have fairly extensive information on their private inventories. But, again, that's a matter of choice as far as the stockholders of that company are concerned. And unless we could identify any kind of significant safety value to us to collecting and examining that, right now it is a burden on our daily operations to collect and provide this information to the FRA. Thank you.

AUDIENCE ATTENDEE: Maurice Rached, R-a-c-h-e-d. This question is for Miriam Kloeppel. Miriam, how do we deal with situations where the crossing is owned by an authority that believes that the crossing is private and does not -- and is not subject to FRA regulations?

MS. KLOEPPEL: Are you talking something like a park or something that is apparently a private road but it has public use like access to a municipal dump?

AUDIENCE ATTENDEE: That's a good example.

MS. KLOEPPEL: Those are among the things that have to be considered. But at the moment, if it is in our inventory as private crossing, that's all we know about it.

AUDIENCE ATTENDEE: Okay. So you are not

taking any action in that regard at the present?

MS. KLOEPPEL: Well, I guess ultimately we may. But, as I said, this whole effort is to determine what kind of action we should take for any private crossing. This is just one possible category of many.

AUDIENCE ATTENDEE: Because I agree with Rick and the other panelists when they indicated that the motorist doesn't know if it's a roadway open to the public like the motorist on a public roadway and crossing unless it is specifically assigned and gated and identified. Okay. Thank you.

MS. KLOEPPEL: Thank you.

THE MODERATOR: Aidan brought a different perspective to us on how Britain deals with private crossings. I was wondering if I could ask Mr. Poichuk to describe the Canadian practice of private crossings and classification for us. Mr. Poichuk.

AUDIENCE ATTENDEE: Phil Poichuk, P-o-i-c-h-u-k, Transport Canada. Currently, our standards are departing from the traditional definition. In Canada, traditionally we had private crossings in two categories -- basically statutory and nonstatutory. They are also referred to as by right or by grace. By right being where the railway in the late 1800's severed land and therefore had a right

to -- had the obligation to provide the crossing and, in fact, maintain it. By grace was where subsequently a landowner who hadn't had his land severed originally would need a crossing for other purposes. And then they would be -- they would enter an agreement with the railway and usually pay the cost. And, in fact, that was the by grace one.

It basically dealt more with rights and money, i.e., the maintenance of it, than it did with the safety responsibility. Our new grade crossing standards, which I believe Anya and I believe Steve actually asked me to speak about tomorrow, gets away from traditional definitions relative to ownership. And, in fact, in our grade crossing manual RTD 10, as it is called, we don't use the word public or private. We get away from that distinction. And we now require safety amenities based on whether or not it is restricted or unrestricted for public use.

THE MODERATOR: Thank you, Phil.

Does the panel have any comments on the Canadian description and classification?

MS. KLOEPPEL: I think I think they are very interesting. But it is an interesting different way of looking at categorization of the crossing.

AUDIENCE ATTENDEE: Jim Burnett, former

chairman of the NTSB. What kind of records have been kept of the meetings so far and held in the FRA public meeting series? Are there transcripts of those meetings?

MS. KLOEPPEL: Yes, sir, there are transcripts. And I have been put them up on our -- in our docket as best as I can.

AUDIENCE ATTENDEE: Is the docket available on the Internet?

MS. KLOEPPEL: Yes, it's actually on our docket server.

THE MODERATOR: If you don't have one of these brochures yet, on the back is the docket number. And if you go to the DMS system, if you type in the last five digits, it will take you right to the docket. And it will start with the oldest submission. And there is a little button that you can hit that says reverse order so you see the newest submission first.

MR. BROWDER: There are 21 items on the docket as of yesterday on 23281 that most of them concern. There are two of the transcripts that are already up there that she is talking about.

MR. BURNETT: Thank you.

MR. BROWDER: Don't put the year in when you search.

THE MODERATOR: Okay. I have a question. I have attended all four of the last public hearings. And I have heard the panel's opinions this afternoon on the safety of private crossings. And in order to find a solution, we need to try and push the envelope to determine what options do we have to move forward.

And I would like to ask the panel their opinions on if there were regulations or some guidance or standards that were developed for design characteristics, should that effort come from the states that administer and possibly have legislation over private crossings or should it come from a DOT-wide task force that includes not only the FRA, the FHWA, but stakeholders like the mortar carriers, the Transit Administration, or should it be left to the locals to determine through their Diagnostic Teams the appropriate approaches?

MR. WORLEY: What I will say is the first thing you need is money. There needs to be some more pilot projects, I think, around the country to get some experience with different approaches for private crossings, be it public or private partnerships for closures, for how to go about equipping with warning devices or other treatments. So that would be the first positive step -- to get some experience. I think

ultimately you have got to look at a diagnostic team process that's headed up by the authority that has the experience in the states we are involved in. And that would be the state DOT's right now. And that's my opinion. And it is quite biased because, you know, you look at it and see you have a good idea of how to resolve things based on experience and what has to be accomplished. So I would say that would be the start because I would hate to see us get into something where you constantly try to write a lot of policy and write a lot of specifications without a lot of real world experience out there to draw from.

And, also, by having private crossings and real world experience, you certainly build the support toward doing something. So I think we are clearly moving towards doing something. It is just difficult. I think it also depends on money, which there is not a lot.

MR. CAMPBELL: I think I might add to that, too. I will just say that I agree with Paul because the state agency is the one that really has the clear picture of crossing safety issues within their jurisdictions. And that's exactly why that's included as a part of my proposal that the Diagnostic Team ultimately has say-so in terms of the crossing and what

might be done there.

Also, of course, as many as you know, there are some pretty interesting issues in Section 409 that provides some protection for the Diagnostic Team in terms of isolating their decisions. And there is certainly a large degree of logic that maintains that protection that exists. However, there are some things that the Diagnostic Team could have some latitude in where, for example, it might be possible to take a number of private crossings. In other words, a private driveway that starts at a single-family home and to consolidate those crossings. In other words, take those five or six driveways and build a connecting roadway and then a single crossing to serve that. And then in that case convert those multiple private crossings into a single semi-public crossing. And that may very well be, in that case, a good use of public funding. And it may also be as part of that process that some part of those costs are allocated or assessed to the landowners.

And, again, that would be within the Diagnostic Team's jurisdiction to decide if public funds are to be used and, if so, what percentage and if the landowner should share in the burden of improvement costs as well. So, again, that's why I support that

the local Diagnostic Team really can deal with all of the individual issues and address them on site and then ultimately handle the deal through the DOT if there is one.

MS. XU: Well, I agree with what Paul and Rick just said. Basically, you know, states should have something they demand from, you know, the state level. But I would like to say that at the point that federal funding is involved, then we do need some federal-level guidelines in the general terms. There's all kind of federal guidelines. You know, they are all in general. And the state has a lot -- the states have a lot of power to define details. And so, you know, we would like to have some kind of guidelines in terms of how to initiate the process.

MS. KLOEPPEL: I just wanted to agree effectively with what Guan Xu gave. What I have heard in various meetings suggests that if there is a federal involvement, it should be something to do with establishing a process. Now, I won't say that it is the specific direction the FRA will go, but it is consistent with what we have been hearing from a number of meetings that participants in the meetings have a sense that there is no process and there is even no way to begin attacking the problem. So one reasonable

federal way to be involved is to help with the development of that process and leave in the hands of the people who know best what they are doing the factual decision-making about individual funds, state, and local Diagnostic Teams.

MR. BROWDER: I hope you don't mind me saying this, but it really scares me because I think it shows a lack of understanding and naivete concerning the issues, especially after we have been to the public hearings about the seriousness of the issue itself. I would grant, the last thing the railroads want is probably regulation. But it's one more step down the line. It's something that opens up regulation to more entities out there, such as states, municipalities, and people like that. The current system for public crossings is a mess. We shot ourselves on the railroad -- shot ourselves in the foot when we agreed to the 130 plan.

Finally, I mentioned the amount of money it costs us in maintenance. That continues to go up every year. We are scared to death that that might continue within the private sector. And when I hear you talking about opening up some kind of a process to state and local governments to interface with private companies that don't have large staffs to entertain regulation, I

have concern.

Now, having said that, let me say I think there are some constructive steps that can be done. And I don't disagree about what Miriam and Guan said about things that can proactively address Paul's comments about pilot projects. I can tell you one thing that I think the railroads agree on and may be interested in having whatever the Federal Government entity is that's responsible for. It is to allow us to get agreements on all private crossings. We can't even do that now.

And one thing that would help with the administration of private crossings would be that, although we are not the experts on highway traffic control devices, certainly if there was an agreement that was required of the individual stakeholders, namely, the railroad and the highway user, that that would be, like a couple thousand lawyers tied to the bottom of the ocean, a good start. Thank you.

THE MODERATOR: Thank you, Bill.

MR. NELSON: I think the important thing for me is that we don't make problems that don't exist. And we have problems with private crossings. But very many private crossings are well run. The landowners exercise their responsibilities and they work the

railway. And I think that while you have got something that works, just leave it.

When you haven't got things that work, it is usually because, as a matter of public policy, developments have been allowed on one side of the railway without taking account of the impact on the railway.

If it is public policy for the development, it is allowed. And once you create that sort of development, you should avoid the issue of agreements. And it should be a new form of agreement to recognize the new circumstances. And the greater burden is on those who benefit from the development.

AUDIENCE ATTENDEE: My name is Ray Lewis, L-e-w-i-s. I am with the Division of Highways in West Virginia. We are one of about six or seven states, I think, that has more private crossings than public crossings. And that's not a distinction we would have sought. You said something there that really struck a cord with me as far as managing the crossings.

First of all, in my opinion, out of out 1900 private crossings, probably 1750 of them will never cause of us any trouble except at random because they tend to be farm field crossings. They tend to be individual residential crossings. They go to one or

two dwellings. There is not any room for expansion, say, between the railroad and the river. And you just have to make sure that the responsibility to carry out the farm doesn't do something too close to the tracks or the railroad and at least keep the roads passable for whatever usage. And that may have been a crossing for agricultural use or you may need to add an asphalt surface for the residents going in and out several times a day.

The second thing is that access across the tracks. When we have a highway system we can't control, we can't keep people from coming onto out highway system. Anybody has a right to come on our highway system, but we can set the condition under which they do so. And we require driveway permits. And we have a fairly extensive manual for driveway permits. If that driveway is a new driveway crossing the tracks or it's a change in use of the land to cross the tracks as an existing driveway, then our rules and regulations require the landowner to get a new permit to reflect what's actually going to happen there. And if there is a railroad involved, we do ask for an agreement. Even if the crossing is in there by deed, we feel like we have the right to ask for an agreement.

One of the big problems with private crossings is the records are very difficult to locate. The problem really started to get out of hand on July 4, 1828, when Charles Carroll was the cornerstone of -- but there are different records on different crossings and everything is kept different ways by different railroads. Some are kept by evaluation statements. And you can find a list of all the agreements on the sheets on evaluation sheets. Some of them are kept in separate files in different offices. So it makes it a real interesting search to find out exactly how a crossing got there. I think from what I have seen, one of the bigger problems with private crossings is a sudden change in use of the land.

I had an experience one time when somebody from the Brotherhood of Locomotives Union called and said they were real upset about a private crossing. And I knew where the crossing was. I said, Well, what is the problem? I said, You know, one farmer goes in and out of there. He says, No, no, our guy is on a lumber truck. And I go, What lumber truck? Well, one was carrying lumber up there to that property that had been subsidized and was getting 120 houses built on it. So that translates to about a thousand vehicles a day crossing the tracks at that point. So possibly

that will start some discussion. Thank you.

AUDIENCE ATTENDEE: I am John Henikchen, and my comments are for the panel. I would like to hear what you have in response to what I have to ask less Bill of course. Should regulations and standards or guidance be developed, how will those regulations and guidance standards be interfaced with the existing agreements -- private agreements that we have between the railroad and the landowner? In other words, will your regulations supercede that private agreement?

MS. KLOEPPEL: I hate to disappoint you, but I have to say that I think that's one of those things that is yet to be determined. If we were to develop regulations, that is one of the factors that we would have to consider. But we would certainly have to be sensitive to that as an issue.

MS. XU: I don't have any comment. I think before I say anything, I will have to ask our lawyers.

AUDIENCE ATTENDEE: If we are going to leave it up to the lawyers, then I guess we don't have to worry about this issue. So that will be another 10 years and I will be retired.

MR. NELSON: Last Friday before I -- sorry, Thursday before I came over here, I signed the RSVP response to a consultation from our regulator about

what should be in their standards, their principal documents for level crossings in the ground. The view of RSVP is that there should be a statutory defined user interface for public highway crossings, public pedestrian crossings, and private level crossings. And beyond that user interface, everything else should be dealt with within the standards of the railroad concerned.

MR. WORLEY: One other thing to consider is if you have got some of those agreements out there and some of the crossings are based in deeds. And if someone has a right to that crossing in the deed, you get into a situation where you can't take their property. You can't take it. So you then have to negotiate. So it comes back down to -- I get back into having that pilot program and getting the experience. You learn what are the different scenarios when you can negotiate to try to close and try to eliminate the crossings. It is kind of like the old politician back in North Carolina that once told me. He said, You have got to have something in the sack. You have got to talk to these folks. You have got to have something in the sack. You have got to try to negotiate with them. And I think that's what you are going to have to do.

THE MODERATOR: I would like to get back to

Ray Lewis. Ray Lewis represents a state representative. And as shown in the latest FRA compilation of state laws, there are only 32 -- 22 states that currently have statutes dealing with private crossings. Now, what we heard from Rick and from Paul, with Bill's agreement, is that it should be at a local level. How can the Federal Government now step in to help you that have statutes and those that don't actually be able to manage the safety of private crossings?

AUDIENCE ATTENDEE: (Ray Lewis) Well, I think that the point that Paul made is very pertinent in that if you start intruding into this relationship between property owner or the licensee on the crossing -- it is usually the same person but not always -- I think you get yourself possibly in the position where you could have takings. I don't want to have 1900 takings. You know, I don't want to retire and been responsible for having to go out and have 1900 railroad transactions or more if the railroad happened to run down the property line and you have got two people with underlying interests in something like that.

It goes back to my comments that most of those crossings are never going to cause us any

trouble. I think that the ones that are going to cause us the most potential to cause trouble are the ones that were in the deed but the family has, granted the property has been subsidized, a trailer park has been put in or something. And I think that at that point, there may need to be some mechanism in state law or maybe federal regulations -- I am not sure of the appropriate form -- that would permit that deed to be rolled over into an agreement into a standard private crossing agreement.

When something like this happens, usually there is money being made. And the developer very frequently has the opportunity, as he did with the one with the 120 houses and lumber trucks, to get out from under his obligation to provide good and safe access to his tenants or the people to whom he sells the property or whatever.

Unfortunately, at least in West Virginia we have all of this new case law on change in use. And what we do is come out of circuit courts. And it hasn't been reported, but I think that might be the most fruitful area to look at to try to identify those crossings that are going to pop up and cause you problems.

THE MODERATOR: Thank you.

MR. CAMPBELL: I might add that I agree with what Ray says wholeheartedly. And also to follow-up with John, by and large, I think the majority of the private crossings are not going to be an issue. And we don't need to go into this potential rule-making process and change what goes on at those locations. The ones that are in issue are the ones that do have this free and unrestricted public access and may require some additional treatment. So I think right there we narrow this down to a smaller group of crossings. Potentially I would see that the existing private crossings be retained. However, one thing that we might look at as a benefit to some regulation would be that if the usage for the ADDT on the crossing changes by some percentage or fixed amount that it would prompt a review into the use of the crossing because that's one of our big concerns is if a private landowner sells some or all of the large tract of property, all of a sudden it would become a multifamily access way or potentially a sporting-type facility or other facility where the public all of a sudden gets this expectation of free access.

So the rule-making process, as I see it, really would have minimum impact on a large number of crossings. But the ones where there are changes or

where we do find public access are the ones that need to be addressed. And that's where it would be beneficial.

MR. WORLEY: As Ray was talking, one thing I wrote down was plans and outreach. And I propose a book called the Land Use Planner's Guide to Railroads because I think one thing you have got to try to do if the Feds can do something from a level or the states, as we look at land-use planning and smart growth as we talk about that, is to get information out to land-use planners on county levels and municipal levels what is the railroad about. You know, it is not a dying artery. It is growing. It has got more traffic, but you have got to consider the railroad and the facts about railroads when you are looking at land-use planning.

We went through the steps for working groups on public crossings. Maybe there needs to be some kind of, you know, information in that Land Use Planner's Guide to Railroads, Copyright 2007, Part One, that states all of that information where they can refer to and know that when they approve a subdivision rezoning perhaps they need to require them to get alternative access to private crossings. I think that's the way you continually try to work through these things

because the problems aren't created overnight. And they won't be resolved. And we will all be crazy and muttering before they are ever resolved. But that book is on sale very soon.

THE MODERATOR: Anyway, our time is near closing. I would like the panel members to -- if anybody has one last comment on the topic. Otherwise, I would like to give them all one last round of applause.

Once again, I thank you all for attending. And if you are interested in this topic and any of the other TRB Committee topics, we will be discussing them all tomorrow at the eight o'clock in the morning till noon in Lincoln II. And I also extend an invitation to you if you still have an interest in safety at private crossings to join us in Syracuse, New York in February -- it should be lovely weather -- at the Doubletree Hotel in Syracuse, New York. Thank you very much. The session is closed.

(At 5:34 p.m., the session was concluded.)

Michelle Silva-Docket Clerk
Federal Railroad Administration
1120 Vermont Avenue NW
Washington, DC 20590

February 10, 2007

I am writing this letter today to let the representatives of our community and those involved in railroad safety know that we are very concerned about the railroad crossings in Johnson County. Indiana. Unfortunately, it has taken the severe tragedy involving the death of Travis and Jake Findley, ages 9 and 12, to give this issue the attention that it deserves.

The lack of necessary safety warnings at one of our Johnson County railroad crossings was the cause of these deaths, and we are concerned that if the necessary changes are not taken that it could lead to further incidents.

We would like the railroad crossing at Stones Crossing Road to have first priority, since Center Grove Elem., Center Grove Middle School Central , Center Grove High School and the Center Grove School District Administration officers are all off of this road.

We, the citizens of Johnson County, Indiana want attention taken, plans made, funding available and projects completed to install the proper railroad safety crossing at all railroad crossings that currently only have stop signs. We want crossing arms, bells, signs, lights, and all necessary safety warnings described in the Federal Railroad-Highway Grade Crossing Handbook.

Sincerely,

Rich Sokolowski

Printed name

Signature

2491 Waldon Drive
Greenwood, IN 46143

A concerned, motivated, and caring voting citizen of Johnson County, Indiana

To the Honorable Michelle Silva, Docket Clerk

February 10, 2007

I am writing this letter today to let the representatives of our community and those involved in railroad safety know that we are very concerned about the railroad crossings in Johnson County. Indiana. Unfortunately, it has taken the severe tragedy involving the death of Travis and Jake Findley, ages 9 and 12, to give this issue the attention that it deserves.

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Sincerely,

Myrna Lorenz

Printed name

M. Lorenz

Signature

4671 Running Brook Terrace
Greenwood, In
46143

Add your return address

A concerned, motivated, and caring voting citizen of Johnson County, Indiana

Michelle Silva - Docket Clerk
Federal RailRoad Administration,
1120 Vermont Avenue, N.W.
Washington, DC 20590

February 10, 2007

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Sincerely,

Wendy Taylor
Printed name

Wendy Taylor
Signature

Wendy Taylor
4050 Santa Clara Drive
Greenwood, IN. 46142

A concerned, motivated, and caring voting citizen of Johnson County, Indiana

Alaska is a young, large, largely empty state with emerging infrastructure. There is enough room for approximately 26 other states with their railroads etc. However, we have one railroad to serve the needs of this large, empty state. The Bureau of Land Management in the 1980's issued deeds to applicants in the past that placed residential property in some cases immediately adjoining the railroad right of way. Earlier in Alaska a frontier cooperative spirit existed among all the federal and state agencies. These residential placements alongside railroad tracks were not considered problematic by the AK Railroad. One half the population of Alaska lives in Anchorage. There is a strong desire along the perimeter of Anchorage to branch out for recreational purposes. Private land owners along the perimeter of Anchorage have emerging land title plant needs for access to dwellings. There is a race of recreational coalitions and partnerships who have partnered with the AK Railroad to foreclose the residential use by private land owners. Private land use is seen as the antithesis of recreational efforts. Private land owners still need the private crossings as the only available access possible at all to meet minimum building standards - a driveway to a road from a habitable dwelling. The model of a public crossing for residential needs can cost $250,000 just to bring in non-existing electricity; additionally $350,000 construction costs for a public crossing standard, and $75,000 maintenance annually for a familial dwelling. There is currently NO road existing tying to these properties which are "inholdings". A private crossing is still needed. FRA should encourage the Alaska Railroad to recognize the needs of these "inholders", catalogue their locations, and urge the issuance of private crossings because terrain in Alaska the northernmost state and largest state as an improvement within this municipal city limit. FRA could suggest reasonable stipulations for such private crossings in a rural area in recognition that only approximately one percent of the huge empty state of Alaska is in private ownership. We still have a lot of growing to do and ANILCA crossings must be granted to allow residential development and safety. The FRA best practices should recognize the early primitive stage of development in many parts of Alaska and should encourage and support AK Railroad to continue to deal kindly and supportively with the emerging private property needs...i.e. allow private crossings where environmentally required and suggest engineering and signage which private individuals can afford with strong crossing agreements which are individualized to private owners. AK railroad has contractors with whom it does business and it should allow private individuals to have work done by these trusted contractors to adequate private crossing standards. A private crossing where a road does not exist in the middle of a swamp costing $1 million dollars is not a reasonable and only solution. FRA should realize the early development stages of within Alaska and FRA should suggest to Alaska Railroad to be reasonable because these sites are finite and issuing private crossings at grade is an improvement from the horse trail era from which these properties are emerging. It may be premature and cavalier to discontinue private crossings in Alaska at this time. The ARR should be discouraged form forming "partnerships" with agencies such as the USFS which has published desires to "maintain rustic" standards and recreational facilities built to recreational rustic consistency in this seismic area (1964 earthquake) when private residences are prohibited by egress denials of private crossings (the only access at all) to develop to the minimum safety standards adopted by the State of Alaska by refusal of ARR to all private at grade crossings. This is unreasonable. We are reasoning and reasonable people. Thank you for taking and considering this comment.

committee consensus on a draft for Final Review and Comment (FRAC). The committee will also consider plans for coordination and implementation of its recommendation on T-PED spurious emissions. Working group sessions are on Tuesday and Thursday afternoon. Plenary Sessions are Wednesday and Thursday.

SUPPLEMENTARY INFORMATION: Pursuant to section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92–463, 5 U.S.C., Appendix 2), notice is hereby given for a Special Committee 202 Portable Electronic Devices meeting. The agenda will include:

- April 17:
- Chairmen's Strategy Session—MacIntosh-NBAA & Hilton-ATA Rooms
- Progress and Status Update, Overall Review of Plan and Schedule for Document Completion, recommendations coordination and implementation
- Working Group 5 Kickoff and Coordination—MacIntosh-NBAA & Hilton-ATA Rooms
- Working Groups Sessions
- Working Group 5 Overall DO-YYY Document—MacIntosh-NBAA & Hilton-ATA Rooms
- Working Group 6: PED Spurious Emissions Recommendations—ARINC Conference Room
- Sub Group on PED Statistical Analysis and Characterization—Small Conference Room
- Sub Group on IPL Test—Colson Board Room
- Sub Group on Certification Aspects—Garmin Room
- Chairmen's Strategy Session
- Coordinate Recommendations to Plenary: Plan and Schedule for Remaining Committee Work.
- April 18 and 19:
- Opening Plenary Session (Welcome and Introductory Remarks, Review Agenda, Review/Approve previous Summary)
- Results of RTCA PMC Meeting March 22, 2007 on revisions to SC–202 TOR
- Update from Regulatory Agencies (FAA, UK–CAA, Canadian TSB, FCC, or others present)
- Update on EUROCAE Working Group WG58 Status
- Update on CEA activities, including the CEA Bulletin-Recommended Practice for T–PEDs
- Overview of Work on DO–YYY ''Aircraft Design and Certification for Portable Electronic Device (PED) Tolerance''
- Update on Aircraft IPL Test Methods by WG5 Sub Group
- Update on Target IPL Values for aircraft design by WG5 IPL Sub Group
- Summary of PED Emissions Statistical Characterization by WG5–T–PED Characterization Sub Group
- Summary of Certification Aspects WG5 Certification Sub Group
- Working Group 5: Airplane Design and Certification Guidance
- Plan to complete remaining work, schedule and process for completion of open issues, recommendation to publish FRAC draft, identify any risks to completing final document at the July Plenary and proposed action to mitigate that risk
- Working Group 6: PED Spurious Emissions Recommendations Coordination
- Implementation Assessment (joint working group with CEA)
- Schedule and plan for dialog with CE manufactures
- Committee Discussion on Final Phase 2 Work Plan and Schedule for DO–YYY Document
- Committee Discussion on Final Phase 2 Work Plan and Schedule for DO–YYY Document
- Break-out Session for WG's Required
- WG5 Overall Document and Process—MacIntosh—NBAA & Hilton-ATA-Rooms
- WG6 PED Spurious Emissions Recommendation—ARINC Conference Room
- Sub Group on PED Statistical Analysis and Characterization—Small Conference Room
- Sub Groups on IPL Test—Colson Board Room
- Sub Group on Certification Aspect—Garmin Room
- April 19
- Chairman's Day 2 Opening Remarks and Process Check
- Final Overall Working Group Report
- Identification and Plan for Closure of Open Issues
- Remaining work plan and Schedule for Completion of DO–YYY
- Recommendation on publication of FRAC draft
- Working Group 5 Airplane Design and Certification Guidance recommendation for FRAC
- Working Group 6 PED Spurious Emissions Recommendations (reporting on plan for completion of recommendations coordination and implementation)
- Plenary Consensus on Plans to:
- DO–YYY Recommended Guidance for Airplane Design and Certification ready for FRAC
- WG6 plan to coordinate and implement PED Spurious Emissions Recommendations
- Closing Session (Other Business, Date and Place of Upcoming Meetings (Nineteenth Plenary at RTCA, July 23–27, 2007,)
- Complete Disposition of FRAC comments on draft Airplane Design & Guidance Recommendation draft
- Committee consensus to recommend publication of DO–YYY
- CEA/SC–202 Consenses Recommendation for implementation of SC–202 recommendation
- Plenary Session Tuesday & Thursday, WG Monday, Wednesday, Friday
- Adjourn to Break-out sessions for Working Groups if required and time permits

Attendance is open to the interested public but limited to space availability. With the approval of the chairmen, members of the public may present oral statements at the meeting. Persons wishing to present statements or obtain information should contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section. Members of the public may present a written statement to the committee at any time.

Issued in Washington, DC, on March 13, 2007.

Francisco Estrada C.,

RTCA Advisory Committee.

[FR Doc. 07–1343 Filed 3–20–07; 8:45 am]

BILLING CODE 4910–13–M

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

[Docket No. FRA–2005–23281, Notice No. 4]

Safety of Private Highway-Rail Grade Crossings; Notice of Safety Inquiry

AGENCY: Federal Railroad Administration (FRA), Department of Transportation (DOT).

ACTION: Notice of safety inquiry.

SUMMARY: On July 27, 2006, FRA published a notice announcing its intent to conduct a series of open meetings throughout the United States, in cooperation with appropriate State agencies, to consider issues related to the safety of private highway-rail grade crossings. To date, FRA has conducted four meetings and on January 5, 2007, FRA published a notice announcing the scheduling of an additional meeting to be held February 15, 2007, in Syracuse, New York. Due to inclement weather, it was necessary to reschedule the February 15 meeting for April 26, 2007.

At the meeting, FRA intends to solicit oral statements from private crossing owners, railroads and other interested parties on issues related to the safety of private highway-rail grade crossings,

which will include, but not be limited to, current practices concerning responsibility for safety at private grade crossings, the adequacy of warning devices at private crossings, and the relative merits of a more uniform approach to improving safety at private crossings. FRA has also opened a public docket on these issues so that interested parties may submit written comments for public review and consideration.

DATES: The fifth public meeting will be held in Syracuse, New York on April 26, 2007, at the Renaissance Syracuse Hotel, 701 East Genesee Street, Syracuse, New York 13210, beginning at 9:30 a.m.

Persons wishing to participate are requested to provide their names, organizational affiliation and contact information to Michelle Silva, FRA Docket Clerk, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone: 202–493–6030). Persons needing sign language interpretation or other reasonable accommodation for disability are also encouraged to contact Ms. Silva at the above-referenced telephone number.

FOR FURTHER INFORMATION CONTACT: Ron Ries, FRA Office of Safety, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone: 202–493–6299); Miriam Kloeppel, FRA Office of Safety, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone: 202–493–6299); or Kathryn Shelton, FRA Office of Chief Counsel, 1120 Vermont Avenue, NW., Washington, DC 20590 (telephone: 202–493–6038).

SUPPLEMENTARY INFORMATION: For additional information, please see the initial notice published July 27, 2006 in the **Federal Register** (71 FR 42713) and available at *http://a257.g.akamaitech.net/7/257/2422/01jan20061800/edocket.access.gpo.gov/2006/pdf/06–6501.pdf.*

Request for Comments

While FRA solicits discussion and comments on all areas of safety at private highway-rail grade crossings, we particularly encourage comments on the following topics:

- At-grade highway-rail crossings present inherent risks to users, including the railroad and its employees and other persons in the vicinity, should a train derail into an occupied area or release hazardous materials. When passenger trains are involved, the risks are heightened. From the standpoint of public policy, how do we determine whether the creation or continuation of a private crossing is justified?
- Is the current assignment of responsibility for safety at private crossings effective? To what extent do risk management practices associated with insurance arrangements result in ''regulation'' of safety at private crossings?
- How should improvement and/or maintenance costs associated with private crossings be allocated?
- Is there a need for alternative dispute resolution mechanisms to handle disputes that may arise between private crossing owners and the railroads?
- Should the State or Federal government assume greater responsibility for safety at private crossings?
- Should there be nationwide standards for warning devices at private crossings or for intersection designs of new private grade crossings?
- How do we determine when a private crossing has a ''public purpose'' and is subject to public use?
- Should some crossings be categorized as ''commercial crossings'' rather than as ''private crossings?''
- Are there innovative traffic control treatments that could improve safety at private crossings on major rail corridors, including those on which passenger service is provided?
- Should the Department of Transportation request the enactment of legislation to address private crossings? If so, what should it include?

Issued in Washington, DC, on March 15, 2007.

Jo Strang,

Associate Administrator for Safety.

[FR Doc. E7–5143 Filed 3–20–07; 8:45 am]

BILLING CODE 4910–06–P

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[DOT Docket No. NHTSA–06–26554]

Reports, Forms, and Recordkeeping Requirements

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

ACTION: Request for public comment on proposed collection of information.

SUMMARY: This notice solicits public comment on continuation of the requirements for the collection of information on safety standards. Before a Federal agency can collect certain information from the public, it must receive approval from the Office of Management and Budget (OMB). Under procedures established by the Paperwork Reduction Act of 1995, before seeking approval, Federal agencies must solicit public comment on proposed collections of information, including extensions and reinstatement of previously approved collections.

This document describes a collection of information associated with 49 CFR Part 574, Tire Identification and Recordkeeping.

DATES: Comments must be received on or before April 20, 2007.

ADDRESSES: Comments must refer to the docket notice number cited at the beginning of this notice and be submitted to the Office of Information and Regulatory Affairs, Office of Management and Budget, Att'n: Desk Officer for NHTSA, 725 17th Street, NW., Washington, DC 20503. Please identify the proposed collection of information for which a comment is provided, by referencing its OMB clearance number. It is requested, but not required, that 2 copies of the comment be provided.

FOR FURTHER INFORMATION CONTACT: Complete copies of each request for collection may be obtained from Mr. George Soodoo, NVS–122, National Highway Traffic Safety Administration, 400 Seventh St., SW., Washington, DC 20590. Mr. Soodoo's telephone number is (202) 366–5274.

SUPPLEMENTARY INFORMATION: Under the Paperwork Reduction Act of 1995, before a proposed collection of information is submitted to OMB for approval, Federal agencies must first publish a document in the **Federal Register** providing a 60-day comment period and otherwise consult with members of the public and affected agencies concerning each proposed collection of information. The OMB has promulgated regulations describing what must be included in such a document. Under OMB's regulation (at 5 CFR 1320.8(d)), an agency must ask for public comment on the following:

(i) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(ii) The accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

(iii) How to enhance the quality, utility, and clarity of the information to be collected; and

(iv) How to minimize the burden of the collection of information on those who are to respond, including the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of

Correction --- To date the FRA has had NO safety meetings. A safety meeting would consist of more than brainwashed railroad clowns getting together for a "HO"DOWN.

A. The crossing is safe or B. YOU MURDERED THEM!!!

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

[Docket No. FRA–2005–23281, Notice No. 5]

Safety of Private Highway-Rail Grade Crossings; Notice of Safety Inquiry

AGENCY: Federal Railroad Administration (FRA), Department of Transportation (DOT).

ACTION: Notice of open meeting date change.

SUMMARY: On July 27, 2006, FRA published a notice announcing its intent to conduct a series of open meetings throughout the United States, in cooperation with appropriate State agencies, to consider issues related to the safety of private highway-rail grade crossings. FRA has conducted four meetings to date and on March 17, 2007, FRA published a notice announcing the scheduling of an additional meeting to be held April 26, 2007, in Syracuse, New York. Due to recently developed scheduling conflicts, however, it is necessary to postpone this April 26 meeting. This Notice No. 5 is an announcement that the Syracuse, New York, meeting has been rescheduled for July 26, 2007. FRA regrets any inconvenience this date change may have caused.

At the meeting, FRA intends to solicit oral statements from private crossing owners, railroads, and other interested parties on issues related to the safety of private highway-rail grade crossings, which will include, but not be limited to, current practices concerning the responsibility for safety at private grade crossings, the adequacy of warning devices at private crossings, and the relative merits of a more uniform approach to improving safety at private crossings. FRA has also opened a public docket on these issues so that interested parties may submit written comments for public review and consideration.

DATES: The fifth public meeting will be held in Syracuse, New York on July 26, 2007, at the Renaissance Syracuse Hotel, 701 East Genesee Street, Syracuse, New York 13210, beginning at 9:30 a.m.

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FOR FURTHER INFORMATION CONTACT: Ron Ries, FRA Office of Safety, 1120 Vermont Avenue NW., Washington, DC 20590 (telephone: 202–493–6299); Miriam Kloeppel, FRA Office of Safety, 1120 Vermont Avenue NW., Washington, DC 20590 (telephone: 202–493–6299); or Kathryn Shelton, FRA Office of Chief Counsel, 1120 Vermont Avenue NW, Washington, DC 20590 (telephone: 202–493–6038).

SUPPLEMENTARY INFORMATION: For additional information, please see the initial notice published July 27, 2006, in the **Federal Register** (71 FR 42713) and available at *http://a257.g.akamaitech.net/7/257/2422/01jan20061800/edocket.access.gpo.gov/2006/pdf/06–6501.pdf*

Request for Comments

While FRA solicits discussion and comments on all areas of safety at private highway-rail grade crossings, we particularly encourage comments on the following topics:

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- Should there be nationwide standards for warning devices at private crossings, or for intersection design of new private grade crossings?
- How do we determine when a private crossing has a ''public purpose'' and is subject to public use?
- Should some crossings be categorized as ''commercial crossings,'' rather than as ''private crossings?''
- Are there innovative traffic control treatments that could improve safety at private crossings on major rail corridors, including those on which passenger service is provided?
- Should DOT request enactment of legislation to address private crossings? If so, what should it include?

Issued in Washington, DC, on April 9, 2007.

Jo Strang,

Associate Administrator for Safety.

[FR Doc. E7–7064 Filed 4–12–07; 8:45 am]

BILLING CODE 4910–06–P

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

Notice of Application for Approval of Discontinuance or Modification of a Railroad Signal System or Relief From the Requirements of Title 49 Code of Federal Regulations Part 236

Pursuant to Title 49 Code of Federal Regulations (CFR) part 235 and 49 U.S.C. 20502(a), the following railroad has petitioned the Federal Railroad Administration (FRA) seeking approval for the discontinuance or modification of the signal system or relief from the requirements of 49 CFR part 236 as detailed below.

[Docket Number FRA–2007–27287]

Applicant: BNSF Railway Company, Mr. Gregory C. Fox, Vice President Engineering, P.O. Box 961034, Fort Worth, Texas 76161–0034.

BNSF Railway Company (BNSF) seeks relief from the requirements of the Rules, Standards and Instructions, Title 49 CFR part 236, Section 236.377 Approach Locking, 236.378 Time locking, 236.379 Route Locking, 236.380 Indication Locking, and 236.381 Traffic Locking, on processor-based systems to the extent that only the following be required every four years after initial testing or program change:

- Verification of the CRC/Check Sum/UCN of the existing location specific application logic to the previously tested version.
- Tests on equipment outside the processor (switch indication, track indication, searchlight signal indication, approach locking (if external)) are verified to the processor's inputs and switch locking is tested from the processor's output to the switch machine.
- Testing of the duration of any timers with variable settings.

Applicant's justification for relief: Many of BNSF's interlockings and control points are controlled by solid-state processor-based systems. The 2-year signal locking tests for solid-state

Let's see. CSX was overchargeing in 1993 and now the prices have doubled with more overchares. Is the USDOT OIG a lier and a murdering co-thief with his railroad buds? GOD knows!!!

January 24, 2007
Report 300-4008
CSXT Billing Information Review
EXECUTIVE SUMMARY
The purpose of this Advisory is to report the results of our limited review of allegations made by a former CSX Transportation (CSXT) employee – Mr. David Nelson. The allegations relate to improper or illegal CSXT financial practices. Our review is based on review of invoices, industry knowledge, and discussions with the USDOT Inspector General's Office (USDOT OIG) staff. The ten allegations, which fall into 5 categories, are discussed below.
Due to the impact of these allegations on other states and the federal government, a federal inquiry may be more appropriate. We were unable to substantiate any of the allegations and discontinued our review when the USDOT OIG dropped their review of similar allegations. We will share some of these allegations with the next AASHTO multi-state invoice audit team so they can be considered during the team's next audit.
BACKGROUND
This is not the first time that Mr. Nelson has made allegations against CSXT. In 1994, the Department received a refund from CSXT based partially on Mr. Nelson's allegations. Our discussions with USDOT OIG disclosed that Mr. Nelson had made allegations to them similar to the ones below. The ten allegations made to us were:
? Overtime is being invoiced to the Department by the Savannah Georgia Signal Shop but the Savannah Georgia Signal Shop employees do not work overtime;
? Indirect costs and overhead costs are billed for the Signal Shop employees;
? Burco, a supplier of railroad materials, is obtaining materials at lower prices but the cost savings are not passed on to the State;
? There is a conflict of interest between Safetran and Burco;
? CSXT unnecessarily overcharges freight by sending materials back and forth between Savannah Georgia, West Virginia, and South Carolina;
? Sales Tax is, but should not be, billed to the States for materials;
? Materials are billed at the highest cost;
? CSXT refurbishes crossing materials from road crossing projects and sells the materials;
? Equipment used on Non-State projects is billed to State projects; and
? Crossings are not safe due to signaling issues.
According to USDOT OIG staff, they found no basis to the complaints that warranted additional work and since none of the allegations were substantiated, the decision was made not to proceed with the investigation. When the decision was made by the USDOT OIG not to pursue inquiry, the employee's Qui Tam attorney dropped the case as well.
Report No. 300-4008 • Page 1
Florida Department of Transportation
Office of Inspector General
Report No. 300-4008 • Page 2
PURPOSE, SCOPE and METHODOLOGY
The purpose of this limited review was to evaluate allegations made by a former CSX Transportation (CSXT) employee – Mr. David Nelson.
The scope was limited to a review of the ten allegations.
In order to evaluate the allegations we used the following methodology:
• we reviewed CSXT invoices to determine if we could substantiate any of the allegations,

• we applied our industry knowledge to determine the reasonableness of the allegations, and
• we discussed the allegations with USDOT OIG staff.

FINDINGS

Category 1. Savannah, Georgia Signal Shop Overtime and Indirect Costs

Allegation: Overtime is being invoiced to the Department by the Savannah, Georgia Signal Shop but the Savannah, Georgia Signal Shop employees do not work overtime.

The following CSXT contract invoices were reviewed to evaluate the allegations of overtime being invoiced:

District	Contract No.	Amount	O/T Invoiced
2	AL460	$43,818	No
2	AN585	$111,450	No
7	AK008	$46,363	No
7	AG713	$358,755	No
7	AK903	$93,411	No

We examined the payroll register of the Savannah Georgia Signal Shop. Of the approximately 57,000 hours worked, there were only 423 hours of employee overtime recorded. For the five invoices selected for review, there were not any instances where CSXT invoiced the Department for overtime. Based on our past experience, Signal Shop overtime is rarely billed.

Allegation: Indirect costs and overhead costs are billed for the Signal Shop employees.

The State of Florida allows the billing of overhead rate in addition to the indirect rates for the Savannah, Georgia Signal Shop. These are two separate cost pools and not duplicate costs.

Category 2. Burco

Allegation: Burco, a supplier of railroad materials, is obtaining materials at lower prices but the cost savings are not passed on to the State.

The USDOT OIG investigated this broad allegation and found no corroborating information. A provision in the CSXT/Burco contract allows Burco to purchase materials for CSXT projects from vendors at the CSXT purchase prices. In the event that Burco negotiates a lower price, the contract between CSXT and Burco provides for sharing of such savings (i.e., 50% Burco and 50% CSXT). We will share this allegation with the next AASHTO multi-state invoice audit team so that it can be considered during the team’s next audit.

Allegation: There is a conflict of interest between Safetran and Burco. Burco is a wholly owned subsidiary of Safetran and Safetran provides engineering services to CSXT. Saftran decides what materials are needed for a project then orders those materials from Burco.

The USDOT OIG investigated this issue and found no corroborating evidence supporting the allegation.

Allegation: CSXT unnecessarily charges freight by sending materials back and forth between Savannah Georgia, West Virginia and South Carolina.

Burco has locations in both West Virginia and South Carolina and the CSXT Signal Shop is located in Savannah, Georgia. The Savannah Georgia Signal Shop assembles signal houses but has subsequently sub-contracted some work to Burco. In Florida, freight billed by CSXT is supported by invoices from third party vendors who provide the transport. We did not review to see if these freight charges resulted in higher cost or analyze this business practice to determine if it is cost effective.

Category 3. Materials

Allegation: Sales Tax is, but should not be, billed to the States for materials.

The railroads purchase most of the materials used on State projects from third party vendors who charge sales tax because they are selling to CSXT and not the government. Federal Acquisition Regulations require that we reimburse the costs incurred by the railroads.

Allegation: Materials are billed at the highest cost.

It is our understanding that CSXT uses average costing for materials pricing which is allowed by the Federal Acquisition Regulations. We will share this allegation with the next AASHTO multi-state invoice audit team so that it can be considered during their next audit.

Allegation: CSXT refurbishes crossing materials from road crossing projects and sells the materials.

Department agreements provide for salvage credits for recovered materials. These credits are required to be reported on billings. Mr. Nelson did not provide specifics on where this occurred and we did not review further.

Category 4. Equipment

Allegation: Equipment that is being used on Non-State projects is billed to State projects.

Mr. Nelson did not provide specifics on where this occurred and we did not review further.

Category 5. Safety Concern

Allegation: Crossings are not safe due to signaling issues.

The main issue concerns a safety feature of the fail safe signal circuit. Mr. Nelson alleges it is not fail safe. Since we do not possess the requisite expertise to evaluate these safety issues, we passed them along to the FDOT Rail Office for consideration. The Rail Office looked into this matter but was unable to confirm or refute the allegation. Recently a similar allegation has been made by Mr. Nelson and the Rail Office is responding.

We appreciate the opportunity to provide this service. If you have questions or need additional information, please call Joseph K. Maleszewski at (850) 410-5506, or Carlos Mistry, (850) 410-5832.

ATTACHMENT A - DISTRIBUTION

Fred Wise, Rail Office Manager, FDOT Rail Office

Copies of this report were distributed to the following:

David Nelson

Marion Hart Jr., State Public Transportation and Modal Administrator

Gina Laney, FHWA Resource Center

Tammy Montanez, Railroad and Utility Audit Manager, North Carolina DOT

ATTACHMENT B - ENGAGEMENT TEAM
Engagement Team:
Tom Abney, CGAP, Senior Contract Auditor
Carlos Mistry, CIA, Audit Manager
Joe Maleszewski, CIA, CISA, CIG, Audit Director

...With a current inspector workforce of 385, FRA has limited capability to investigate approximately 3,000 grade crossing collisions that occur each year. Instead, it places heavy reliance on railroad self-reporting....

Geez, at the hillbilly high I went to that's less than 10 crossing collisions a year per inspector. Do we have total FEDERAL corruption here letting the killers self-investigate? YOU BET!!!

Brotherhood of Maintenance of Way Employes Division
of the
International Brotherhood of Teamsters

July 18, 2007

Michelle Silva, Docket Clerk
Attn: Docket No. FRA-2005-23281, Notice No. 1
U.S. Department of Transportation Dockets
400 Seventh Street, S.W, Room PL-401
Washington, DC 20590-0001

RE: Safety of Private highway-Rail Grade Crossings; Notice of Safety Inquiry;
Docket No. 2005-23281, Notice No. 5

Dear Ms. Silva:

The Brotherhood of Maintenance of Way Employes Division (BMWED) submits the following written comments for consideration regarding the safety of private highway-rail grade crossings, referenced as Docket No. FRA-2005-23281, Notice No. 5. We appreciate the opportunity to participate with FRA in this safety effort.

The purpose of the public hearings to which we submit these comments is to examine (1) the current practices concerning responsibility for safety at private grade crossings; (2) the adequacy of warning devices at private grade crossings; and, (3) the relative merits of a more uniform approach to improving safety at private crossings.

FRA specifically requested comments on the following bullet points. BMWED's comment on each of these points will follow in the order presented:

- *At-grade highway-rail crossings present inherent risks to users, including the railroad and its employees, and to other persons in the vicinity should a train derail into an occupied area or release hazardous materials. When passenger trains are involved, the risks are heightened. From the standpoint of public policy, how do we determine whether creation or continuation of a private crossing is justified?*

BMWED believes that FRA should limit the creation of new private grade crossings to those absolutely necessary which meet strictly defined usage guidelines for private crossings

with private use. BMWED believes private crossings should be eliminated where alternative access is practicable. BMWED also believes private crossings must be limited to those used exclusively for farm-to-field crossings and residential driveways (fewer that 4 units). Use of such crossing for commerce, i.e., as assess to a commercial business or other use not consistent with the farm and residential guidelines mentioned above, should trigger a designation as a public crossing. Each existing private crossing should be subject to a periodic risk assessment to determine whether they continue to meet established criteria for "private crossings" and if active warning devises are deemed necessary based upon train speed, line density, train types and consists, site distances, and vehicular crossing usage. All new private crossings should be required, at a minimum, to be protected by a grade crossing signal system flashing light signals.

- *Is the current assignment of responsibility for safety at private crossings effective? To what extent do risk management practices associated with insurance arrangements result in "regulation" of safety at private crossings?*

Clearly, the current assignment of responsibility for safety at private crossings is not as effective as it needs to be. This is reflected in the marginal improvement (10%) in the number of private grade crossing accidents over the past decade, the relatively unchanged rate of fatalities which have occurred between 1996 and 2005, and the slight increase in the number of injuries which occurred at private crossing over the past decade.

BMWED strongly believes that the Federal Railroad Administration should establish, in cooperation and consultation with state agencies, Rail Labor, and other direct stakeholders, enforceable regulations setting minimum site distances for vehicular traffic at all private and public grade crossings without active warning devises. It is BMWED's opinion that insurance arrangements do little to influence safety at private grade crossings due to the inability of insurance underwriters to enforce usage restrictions.

- *How should improvement and/or maintenance costs associated with private crossings be allocated?*

Improvement and maintenance costs for <u>new</u> private grade crossings should be split equally between the State government, Federal government and the property owner. However, each case should be evaluated on its own merit. There may be some cases where the responsibility allocation should be adjusted. The State & Federal government for instance should split the cost of a crossing warning system where school buses are required to use the crossing to pick up or discharge school children, or where emergency vehicles require assess.

Furthermore, BMWED believes that, in all fairness, existing property owners should be grandfathered from full cost sharing and the bulk of the cost for protecting existing private crossings should be shared primarily between the state and federal government, based upon priorities determined by a comprehensive risk assessment of each private crossing.

- *Is there a need for alternative dispute resolution mechanisms to handle disputes that may arise between private crossing owners and the railroads?*

The BMWED chooses not to comment on this matter because such should be jointly determined by the private crossing owners and the railroad.

- *Should the State or Federal government assume greater responsibility for safety at private crossings, or for intersection design of new private crossings?*

Yes, the State and Federal governments should assume greater responsibility for safety at private crossings. As evidenced by the data contained in Docket No. FRA-2005-23281 there is a known safety problem at private crossings. There are far too many accidents and an unacceptable number of fatalities along with these accidents. As stated previously, the BMWED believes that there should be no private crossings created in the future unless they are equipped with active crossing warning devices. If the DOT/FRA is going to allow for the creation of future private crossings, then the State and Federal governments should have regulatory oversight for intersection design, inclusive of line-of-site distances, of these new private crossings.

- *Should there be nationwide standards for warning devices at private crossings, or for intersection design of new private grade crossings?*

Yes, BMWED believes there should be nationwide standards for warning devices at private crossings and for intersection design. BMWED believes that the standards should be uniform and consistent to facilitate the "conditioning" of private crossing users to respond to signage and warning devises they encounter at any grade crossing. BMWED believes the Manual on Uniform Traffic Control Devices (MUTCD) Part 8, Traffic Controls for Highway-Rail Grade Crossings could provide useful guidance in this area.

- *How do we determine when a private crossing has a 'public purpose' and is subject to 'public use'?*

BMWED believes that the term "private crossing" must be clearly and narrowly defined to identify only those private crossings used exclusively for farm-to-field crossings and residential driveways (fewer that 4 units). Any "private crossing" used in commerce, i.e., for private business purposes, used by employees, contractors, and suppliers of private businesses, and those used by the public to enter commercial facilities should be re-designated as public grade crossings and be subject to the safety protocols and regulations related thereto.

- *Should some crossings be categorized as 'commercial crossings' rather than as 'private crossings'?*

BMWED believes that "commercial crossings" are public crossings and should be designated as such.

- *Are there innovative traffic control treatments that could improve safety at private crossings on major rail corridors, including those on which passenger service is provided?*

The BMWED is not aware of any proven "innovative traffic control treatments" outside of standard active warning devises. We believe that "innovative traffic control treatments" may play a significant role at private crossings in the future, especially once the cost and reliability of such systems makes their widespread application at private crossings feasible. However, to address the immediate risk, basic grade crossing flashing light signals and/or gates are proven

technology that would instantly decrease the hazards inherent with all crossings that lack an active warning system.

- *Should the Department of Transportation request enactment of legislation to address private crossings? Is so, what should it include?*

Yes, the DOT should request enactment of legislation to address private crossings. As stated previously, there is not enough being done to reduce accidents and fatalities at private crossings. At a minimum the legislation should include the sight line distances; signage requirements; and grade crossing signal system flashing light signals.

The Brotherhood of Maintenance of Way Employees Division appreciates this opportunity to submit these written comments to the docket. BMWED looks forward to working with all stakeholders to address this important public safety issue.

Respectfully submitted,

Rick Inclima (signed)
BMWED Director of Safety

cc: Mr. Grady Cothen

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July 23, 2007

Ron Ries
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1120 Vermont Avenue, NW
Washington, DC 20590

Re: Safety of Private Highway-Rail Grade Crossings;
Notice of Safety Inquiry
Docket No. FRA-2005-23281

Dear Mr. Ries:

Railroads of New York, Inc., representing New York State's railroad industry, hereby submits comments in response to the Notice of Safety Inquiry referred to above. I serve as Chairman of the Regulatory Review Committee of RONY.

These comments are also submitted on behalf of the Livonia, Avon & Lakeville Railroad (LAL), B&H Rail Corp. (B&H), and Western New York & Pennsylvania Railroad (WNYP).

If you have any questions, please do not hesitate to contact me.

Yours very truly,

William D. Burt
President and Chief Operating Officer

WDB/
attachment

BEFORE THE UNITED STATES DEPARTMENT OF TRANSPORTATION
FEDERAL RALROAD ADMINISTRATION
WASHINGTON, DC 02590

Safety of Private Highway-Rail Grade Crossings; Notice of Safety Inquiry	Docket No. FRA 2005-23281

COMMENTS OF RAILROADS OF NEW YORK, INC.

WILLIAM D. BURT
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July 26, 2007

INTRODUCTION

Railroads of New York, Inc. (RONY) represents the freight railroad industry in New York State, including the four Class I railroads, CSX, Canadian National, Canadian Pacific, and Norfolk Southern, and about thirty short line and regional railroads. RONY members carry over 99 per cent of goods moved by rail in the state.

RONY's mission is "to provide a trade association for all freight railroads that operate in the State of New York to advocate for the rights and needs of railroads and their customers, as well as to encourage economic growth within the State of New York." RONY's mission is also supported by many industries, including suppliers and customers and their employees, which are dependent upon New York's railroads. RONY advocates for successful resolution of key issues facing the rail industry.

RONY has established a Regulatory Review Committee to identify state and local laws and regulations applicable to the rail freight industry that should be eliminated, reformed, or made more cost-effective. These comments are submitted in my capacity as chairman of the committee.

They are also submitted on behalf of the Livonia, Avon & Lakeville Railroad, the B&H Rail Corp., and the Western New York & Pennsylvania Railroad, which I serve as President and Chief Operating Officer. LAL operates 29 miles of rail line south of Rochester in New York's Monroe and Livingston Counties. B&H operates 47 miles of line west of Painted Post in Steuben County. WNYP operates 238 miles of line between Hornell, NY and Meadville, PA, and between Meadville and Rouseville, PA, in southwestern New York and northwestern Pennsylvania. All three railroads are Class III carriers.

Private Crossing Safety in New York State

There are about 5,900 active at-grade highway/railroad grade crossings in New York State. Of these, 2,916 are public crossings and about 3,000 are private crossings. During 2005, thirty-three grade crossing accidents were reported in the state, of which four accidents, or 12%, were at private crossings. Data for these accidents are summarized below:[1]

Grade Crossing Accidents by Crossing Type—2005

Crossing Type	Total Accidents	Total Injuries	Total Fatalities
Public	29	10	11
Private	4	1	2
Total	33	11	13

Grade Crossing Accidents by Railroad Class—2005

Railroad Class	Accidents	Injuries	Fatalities
Class I	25	7	12
Class II	1	0	0
Class III	7	4	1
Total	33	11	13

The 10-year record of accidents at private crossings follows:

Year	Accidents
1996	6
1997	7
1998	8
1999	8
2000	12
2001	10
2002	15
2003	8
2004	2
2005	5

[1] New York State Department of Transportation Rail Safety Bureau, *2005 Annual Report,* Tables 15 and 16, page 31. This report is available at www.nysdot.gov.

During the period, there were a total of 378 grade crossing accidents resulting in 66 fatalities and 192 injuries. 297 accidents (79%) occurred at public crossings while 81 (21%) occurred at private crossings. Class I railroads were involved in 300 (79%) of the accidents, while Class II and III railroads were involved in 78 (21%).[2]

Types of Private Crossings

Generally, private crossings in New York fall into one of three categories:

- Deeded crossings
- Licensed crossings
- Statutory farm or timber extraction crossing

Deeded crossings are provided for by a deed covenant entered into when railroad property was acquired, or by a similar agreement. Their provisions vary case by case. Crossing owners[3] typically assume that they have a right to retain and use the crossing for any purpose, and to assign or subdivide such right. Often, however, the language of the deed refers to a "farm" crossing or even more specific uses, such as "a crossing to lead horses by the bridle across the track." Deed covenants often fail to address issues of maintenance cost and liability, and there is seldom any language addressing the crossing owner's responsibility for safety.

Licensed crossings are provided for by an agreement entered into between the railroad and crossing owner. As licenses, rather than recordable easements, they are typically revocable by the railroad. The more modern agreements address permitted uses and safety requirements, costs, liability, and insurance.

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[2] *Ibid.*, Figures 11 through 16, pages 32-33.

[3] Herein, the owner of a right to have a private crossing is referred to as a "crossing owner." This should not be construed to mean that the crossing is actually owned by such person. The railroad owns the entire crossing within the boundaries of its property or right of way, and pays property taxes thereon, where applicable.

The right to a *statutory farm or timber extraction crossing* is provided for by Section 52 of the New York State Railroad Law under certain circumstances. In order to qualify, a proposed farm crossing's *primary use* must be to permit the *owners* and/or *occupants* of *adjoining* land to access such land to *actively* use it for farming or agriculture. Not included is land that is primarily used for recreational, residential, industrial, or other purposes.[4] The crossing must be *reasonably necessary* for their use, i.e., the least burdensome imposition upon the railroad that accomplishes the statutory purpose. "Reasonably" perhaps also implies some basis to resist a proposed crossing on safety grounds. Timber extraction crossings are similarly restricted.

Because statutory farm and timber extraction crossings are required only under certain circumstances, the railroad's obligation to maintain them ends when the circumstances no longer apply.

A reading of Section 52 makes clear that it is an artifact of a time when state regulatory agencies, reflecting widespread sentiment, felt free to saddle the iron horse with burdens such as the cost of highway grade separation projects, improvements to railroad stations, and other mandates justified in the name of the public interest. Section 52, however, was not for the benefit of the public. By definition, it conferred a benefit upon a *private* interest, the owner of agricultural land, at the expense of another private interest, the railroad. Even in 1910, regulation required the railroad to operate safely, yet it seems to have troubled no one at the time that Section 52 might interfere with that, for railroad track was asked to do less than it is today, and the carriers employed hordes of employees to maintain it. These things have changed over time.

Among other things, Section 52 fails to address responsibility for costs or liability associated with a proposed crossing, leading many applicants to expect that the railroad

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[4] Section 52 was amended in 2002 to add the last sentence, restricting the meaning of "farm crossings" to refer to active farming or agricultural uses only.

bears them. A more contemporary approach to this kind of special interest legislation would provide that all costs and liabilities be assumed by the applicant.

Some Recent Experiences with Private Crossings

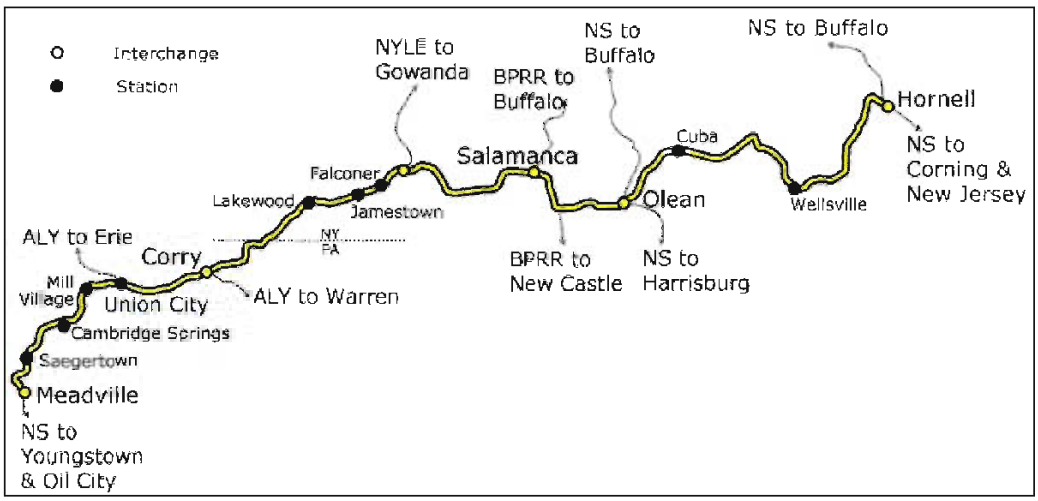
During recent years, both Norfolk Southern and CSX have pursued programs to close some private crossings in conjunction with track upgrades. NS posted signs at certain crossings on its Southern Tier Line implementing a program of removing unused and unauthorized crossings in conjunction with track upgrades. The sign is shown below.

Norfolk Southern private crossing closure sign near Adrian, NY, June 25, 2003.

Reportedly, CSX posted similar signs along a 30-mile line in southwest Virginia. Despite news articles claiming that CSX was backing down following some local protests, CSX continued to pursue a well-organized effort to close crossings.[5]

The Western New York & Pennsylvania Railroad assumed responsibility for the trackage from Hornell, NY to Corry, PA in April 2001, following its lease from Norfolk Southern (see map below). The 63-mile segment from Hornell to Olean, NY and the 29-mile segment from Jamestown, NY to Corry had been out of service for a decade, and the 53-mile Olean-Jamestown segment was operated at 10 MPH. On the out-of-service segments, neighboring landowners had constructed several obviously unauthorized crossings, which in some cases obstructed the safe passage of trains. WNYP lacked reliable, up-to-date information concerning the status of most private crossings.

Western New York & Pennsylvania Railroad map (Oil City Branch not shown)



As WNYP began to rehabilitate track conditions in 2002-03, it became necessary to ascertain which crossings were authorized. Accordingly, we sent over 300 letters seeking copies of deed covenants or other documentation supporting the existence of

[5] Richmond Times-Dispatch, June 18, 2003, and CSX handout obtained at CSX Shortline Trade Show in December 2003, entitled, "The Private Grade Crossing Initiative."

each crossing. The letter was careful to assure recipients that authorized crossings would be restored following completion of track work, and that WNYP would "gladly comply" with the railroad's obligations. On the other hand, persons wishing to retain unauthorized crossings were required to apply for a private crossing agreement. Even there, we offered a $200 application fee and $100 annual rental guaranteed for ten years, subject to inflation indexing.

Some recipients accepted WNYP's offer, but others hired lawyers, wrote letters to elected officials, and planted stories in local newspapers.[6] One threatened to blow up a train.

Locally-based short line railroads, it is said, are better able to serve the customer and nurture rail freight traffic. This was the other side of the coin: Those people who are angry about a private crossing go directly to the railroad's president with phone calls and threats of lawsuits. They complain to elected officials who obtain grant funding for the railroad's rehabilitation. They write letters to the editor. They don't get an answering machine in Harrisburg and a call back after passions have cooled.

An attorney representing several crossing owners wrote that his clients possessed "the absolute right" to cross WNYP tracks, adding that "You have no right to interfere with my clients' right to the use of their property, [and they] will not tolerate molestation from you or your company." He and others flatly refused to supply documentation, asserting that the railroad had no right to expect anything from crossing owners.[7]

WNYP closed one farm crossing on a newly rehabilitated segment of our main line after a contractor excavating gravel from the property dumped a large quantity of dirt and stones on the crossing to make it wider and smoother for his trucks. While resolution

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[6] "Landowners angry over requested railroad fees," Cuba (NY) Patriot, March 26, 2003.

[7] Of course, such documentation could be obtained through discovery in a lawsuit. We can envision a scenario in which the railroad proceeds to tear out private crossings for which documentation is not provided, is sued, and then uses the process to obtain the necessary documentation. But this hardly seems practical, as it might well involve the destruction of legitimate private crossings, followed by their restoration later on. Surely there must be a better way.

of this matter was being negotiated, the landowner persuaded the county legislature to pass a resolution opposing the railroad's efforts to require license fees for continuance of unauthorized crossings. He then enlisted the New York State Farm Bureau to publish an article in its magazine, and the Cornell Cooperative Extension and U.S. Department of Agriculture wrote letters supporting his cause. Not one of these entities acknowledged the illegality and danger of tampering with the track.

Common threads in these recent experiences include:

- Lack of up-to-date information on status of crossings.
- The belief on the part of some crossing owners that they have absolute rights but no responsibility to cooperate with the railroad's efforts to determine crossing status or improve safety.
- Tampering with railroad property.

The Private Crossing Problem

The "private crossing problem" is actually a cluster of related issues:

Inadequate records

The threshold issue with most private crossings is to establish which ones should continue to exist. Many railroads lack good records of how private crossings came into being, especially where they operate lines acquired on a quit-claim deed or "as is" lease subject to prior encumbrances, whatever they may be. Valuation maps often show the authorized crossings, but not the way in which they became authorized, i.e., deeded vs. statutory farm crossing. The deed language is pivotal, of course.

The owners of deeded crossings often construe their rights expansively. Many crossings could be closed if their rights were better understood, but litigation may be burdensome for short lines and larger railroads may not wish to dedicate staff resources.

Noncompliance of crossing use with the terms of its authorization

As land uses have evolved over time, some crossings have come to be used in ways not provided for in the deed, license agreement, or Section 52 of the Railroad Law. Examples include:

- Conversion of farm crossings to residential and/or recreational use.
- Assignment of the right to use a farm crossing to third parties extracting timber. Very often, the timber is skidded across the track, which poses a risk of derailment due to wide-gauge. Loggers skidding logs across the track may not be able to clear the crossing in time to avoid being hit by an approaching train.
- Assignment of the right to use a farm crossing to third parties extracting gravel. These operations usually foul the track with mud and stones, and the heavy truck traffic is more than the farm crossing was designed to bear.
- Farm crossings leased out for use as part of snowmobile trails, which results in hard-packed snow in the flangeways and heightened risk of derailment. In upstate New York, snowmobile clubs are politically active and supported by state appropriations to build and maintain a network of trails.
- Farm crossings used for public access to strawberry fields, pine tree plantations, and other retail agriculture.

Unauthorized signage installed at private crossing being used as public snowmobile trail.

Conversion to public crossing

Some private crossings have been illegally converted to public use:

- *De facto* public crossings created through subdivision of the crossing owner's property.
- Public crossings created through sale of the owner's property to a buyer that will use it for public access (to retail or industrial facilities, for example).

Compulsory provision of statutory crossings

Section 52 of the Railroad Law continues to confer a right to a private crossing upon those who can qualify for it, regardless of the safety issues involved. In addition, attorneys engaged by crossing owners sometimes contend that the railroad cannot pursue any crossing closure that would result in property owners being landlocked. This argument leads to demands for compulsory provision of a crossing.

Safety and Cost Impacts

In addition to the safety and liability exposure presented by private crossings, they are costly to the railroad. In 2003, CSX estimated the construction cost of a new 15-foot crossing at $7,500 and its life at ten years. At that time, CSX engineering data classified nearly 9,000 crossings as private, yet only about 3,000 had active crossing agreements.[8]

The cost and risk of providing these crossings has been magnified by the advent of farm equipment having a wide wheelbase. If the railroad accommodates this equipment, it bears the cost of the wider crossing. If it declines to provide more than a standard width crossing, the farmer often operates the equipment over the tracks anyway, running the risk of snagging a rail and pulling the track out of alignment.

Private crossing agreements traditionally require the owner to construct the approaches up to the toe of the ballast. WNYP prohibits the crossing owner from doing any work on railroad property due to safety, liability, and engineering reasons. This increases the costs borne by the railroad.

As heavier cars have become common, modern track structure has evolved toward more robust standards: Heavy welded rail on good ties on carefully specified rock ballast, to a depth that was seldom required even thirty years ago. Ideally, welded rail has a constant anchor pattern (usually every other tie) and expands and contracts evenly, but each fixed obstacle such as a crossing or bridge abutment interferes with that ideal and represents a point where, despite extra anchoring, the rail is more likely to "kink" in hot weather. Today's mainline track requires mechanized maintenance and is less amenable to small repairs like those required in and around private crossings; when they are made, a surface deviation from the adjoining track often persists despite efforts to eliminate it. Due mainly to heavier axle loads, modern track is much less tolerant of drainage issues and fouled ballast.

[8] CSX Transportation Property Services Dept., "The Private Grade Crossing Initiative" (2003).

The private crossing is thus a focal point of trouble. It holds moisture and dirt, accelerating crosstie decay and causing surface defects. It is often fouled with manure and mud that freezes in the winter and can cause derailments. Its approaches obstruct the railroad's drainage ditches, and their small-diameter sluice pipes are subject to blockage.

Private crossings located at the foot of sidehill roads present a special problem. As shown below, uncontrolled drainage can do great damage to the track. If the railroad had the ability to approve plans for such crossings before they are built, it could require the crossing owner to address drainage issues. With deeded and statutory farm crossings, however, the railroad is usually powerless to impose such requirements.

Uncontrolled drainage ran over the track and washed out ballast at this private crossing.

As the track is resurfaced, it gets higher. Remember—More inches of clean ballast under the ties is a *good* thing! But private crossing owners seldom see it that way. They sometimes take it upon themselves to build up the approaches, usually by dumping dirt fill. No one wants a crossing that is too steep, but crossing approaches should nonetheless slope away from the track. Unfortunately, these self-help projects often end up directing water and mud toward the track.

Steep sidehill road flooded the track with silt.

The same crossing, showing ditches full of silt and weed growth from fouled ballast.

The Private Crossing Solution

It seems clear that if railroads were permitted to manage their property free of compulsory obligation to provide private crossings, authorization for new private crossings would be rare. Norfolk Southern's web site is blunt:

> "Norfolk Southern is committed to employee and public safety and is opposed to the establishment of any new grade crossings. The best plan for safe crossings is no crossings at all. Our Safety and Real Estate Departments work hand in hand to eliminate grade crossings wherever possible… We strongly urge you to find an alternate means of access to your property."[9]

These sentiments reflect a widespread view in the rail industry as well as longstanding federal and state policies encouraging reduction in the number of crossings for safety reasons. Accordingly, voluntary authorization for new private crossings would, I suspect, tend to be limited to industrial crossings that are part of site development for new rail-served industries, which are usually carefully designed and often equipped with warning devices. Elsewhere, private crossings represent a safety, liability, and cost burden without offsetting benefit to the railroad.

Where private crossings continue to exist, private crossing owners should be:

- Responsible for the costs and liabilities associated with their private benefit, except as governed by deeds or other agreements.
- Accountable for compliance with the terms of the applicable crossing agreement, instead of the scofflaw state of nature that now exists.
- Expected to do their part to support railroad safety, including cooperation with railroad efforts to determine crossing status.

[9] www.nscorp.com, Real Estate Services home page, July 23, 2007.

Responses to Specific Questions Posed by FRA

1.) How do we determine whether creation or continuation of a private crossing is justified?

With respect to creation of new crossings, the factors are too site-specific to be adequately defined in regulation. With respect to continuation of existing crossings, the crossing owner may have a deeded crossing, licensed crossing, or statutory farm or timber extraction crossing, as discussed above. The railroad industry is capable of sorting out and considering these issues on a case-by-case basis, if empowered to do so.

2.) Is the current assignment of responsibility for safety at private crossings effective? To what extent do risk management practices associated with insurance arrangements result in "regulation" of safety at private crossings?

Where private crossings are licensed, the license agreements assign responsibilities adequately. With respect to many deeded and statutory crossings, however, the rail industry's hands are tied. At a minimum, if railroads are going to be compelled to provide private crossings, they should be shielded from liability for doing so. Likewise, this shield should be extended to cover deeded crossings, inasmuch as many of these deeds fail to address liability.

3.) How should improvement and/or maintenance costs associated with private crossings be allocated?

As discussed above, private crossings are for the sole benefit of the crossing owner, who should be expected to bear all costs of providing them, insofar as deed or contractual arrangements permit.

4.) Is there a need for alternative dispute resolution mechanisms to handle disputes that may arise between private crossing owners and the railroads?

Perhaps, but this may not be feasible with many deeded crossings.

5.) Should the State or Federal government assume greater responsibility for safety at private crossings?

The railroad industry can be counted on to promote safety in connection with private crossings, if empowered to do so.

6.) Should there be nationwide standards for warning devices at private crossings, or for intersection design of new private grade crossings?

Private crossing specifications are too site-specific to be adequately defined in regulation, especially once we consider that drainage control, maintenance of approaches, brush control, vehicles on or near crossings, and the owner's planned use of the crossing, etc., must all be addressed.

7.) How do we determine when a private crossing has a "public purpose" and is subject to public use?

In layman's terms: When it extends beyond employees, agents, invitees, etc., or they are so numerous as to constitute an invitation to the public. Conversion to public use is already prohibited by state regulation.

8.) Should some crossings be categorized as "commercial crossings" rather than as "private crossings?"

It is not clear that a need exists for a third category of crossing.

9.) Are there innovative traffic control treatments that could improve safety at private crossings on major rail corridors, including those on which passenger service is provided?

Individual railroads are better situated to respond to this question. Of course, the safest crossing is a closed crossing.

10.) Should the Department of Transportation request enactment of legislation to address private crossings? If so, what should it include?

Clearly, something must be done to empower the railroad industry to manage the private crossing issue in the interest of safety, by eliminating compulsory provision of private-crossings-on-demand. Whether this is better handled at the state or federal level should be discussed. New York currently requires NYSDOT approval for new private crossings in intercity rail passenger service or commuter rail service corridors.[10] Public policy should continue to presume that private crossings are disfavored for safety reasons.

[10] Sections 97 and 97-a of the New York State Railroad Law.

RAILROADS OF NEW YORK

RONY Executive Committee (2007)

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Name: Robert Pines
E-mail:
Employed as: Other, non-employee, for N/A
Posted: 24 July 2007

http://www.youtube.com/watch?v=jxJWspDonYs
Here's another math question for ya Slackie.

Hillary says there are 219,000 miles of track.
Hillary says the FRA inspects point two per-cent of this track.
That would be 438 miles of track inspected a year or 438 x 5280 = 2,312,640 feet of track inspected a year
Hillary says there are 400 FRA inspectors
There are 2,080 working hours in a year. (52 x 8 x 5)
The FRA inspectors are off say 20% of these hours for vacation, sick days, and holidays so 1,664 hours times 400 inspectors = 665,600 FRA hour inspections.
2,312,640/665,600 = 3.47 feet of track inspected per FRA inspection hour.

What size shoe does Hillary wear and where do the FRA inspectors sleep?

Safety at Private Highway-Rail Crossings
Alternative Approach Discussion Topics

Findings:

1. The use of public funds to make improvements has played an important role in improving safety at public crossings. Except in very rare circumstances, however, public funding has not been, and currently is not available for use at private crossings. As a result, the proportion of private crossings equipped with more effective warning devices, particularly active warning devices, is much lower than the proportion of public crossings so equipped. Improvements in safety (as reflected in the accident, fatality, and injury counts Nationwide) at private crossings, therefore, have lagged behind the improvements seen at public crossings.
2. The data currently stored in the National Highway-Railroad Crossing Inventory for private crossings are inadequate for most analyses, and insufficient to support effective resource allocation.
3. In particular, current data are not sufficient to allow analyses of trends in either highway or rail traffic at private crossings. Assuming, however, that exposure trends at private crossings are similar in direction to those at public crossings, even if they are not similar in scale, it seems reasonable to believe that exposure at private crossings has risen somewhat over the past decade. Based on this assumption, accident, incident, and casualty rates at private crossings have likely fallen somewhat over the same time period. National totals of accidents, incidents, fatalities, and injuries are stagnant, however.
4. Population increases, changes in land use, and both recent and projected growth in rail and highway traffic suggest that exposure to accident risk at private crossings is likely to continue increasing. Accordingly, the number of opportunities for accidents, and therefore for casualties, will also increase unless new initiatives for improving private crossing safety are identified and effectively implemented.
5. Absence of a cohesive policy or regulatory structure at any level has led to the existence of private crossings that are redundant, inadequately designed, and/or poorly maintained.
6. Motorists represent only a portion of the populations at risk due to accidents at private crossings. The risks of collision and of derailment mean that the train crews, train passengers, and others in the vicinity of the crossing may be exposed to derailing equipment or hazardous materials releases.
7. With few exceptions, no public bodies at the State or local level are vested with authority or responsibility for safety at private crossings.

Safety at Private Highway-Rail Crossings

Alternative Approach Discussion Topics

8. No process currently exists that predicates the creation of new private crossings or the continuation of existing crossings on considerations of public safety or necessity.
9. In most States, there are no publicly-sanctioned engineering criteria for private crossings. Accordingly, users of those crossings may encounter a variety of signage, road surface conditions, and other engineering attributes.
10. For most private crossings in the Nation, there is no agreement in place specifying the responsibilities of the railroad and the holder. Disputes must typically be resolved through direct interaction between the railroad and the crossing holder, or, failing that, through litigation.
11. The level and type of highway use, i.e. whether the public has an expectation of free access to a crossing, is a key factor affecting the safety at that crossing.
12. In general, local planning and zoning authorities do not regularly take into account the impacts on interstate rail transportation of the development decisions that they oversee.
13. Railroads' ability to control roadway design or traffic control device selection and placement is limited. They also often lack the authority to control the highway usage of a given crossing
14. .At substantial cost, railroads make significant efforts to close or improve private crossings. However; they are hampered by common law, and in some cases statutory law, which do not recognize the degree to which private crossings threaten the safety of road users, railroad employees, and potentially other members of the public in the vicinity.
15. The contribution of education and awareness programs to safety at private crossings is not documented, but safety knowledge and awareness would appear relevant to private crossing safety, provided that engineering arrangements present suitable cues to facilitate safely traversing the intersection.
16. Since State laws applicable to public roadways do not apply at private crossings, and since most users of private crossings are likely authorized users, law enforcement does not appear to be a useful strategy for improving safety at private crossings.
17. Effective solutions to improving safety at the Nation's private highway-rail grade crossings will require active collaboration between the parties involved. These parties include, but may not be limited to:
    - the holders of the right to cross the railroad,
    - the railroads,
    - local public planning approval authorities,

- state agencies that enforce crossing design standards,
- professional and/or industry organizations responsible for developing standards,
- the U.S. Department of Transportation (DOT).

18. Within the DOT, the Federal Railroad Administration (FRA) is the only agency with statutory authority directly relevant to the subject matter. However, in the interest of effectively serving the multimodal populations at risk, other DOT surface modes should participate in program development.

Proposed Actions

Option A

The FRA proposes to publish new National Policy, to include the following:

- A clear declaration that new private crossings are disfavored, except where clearly necessary after evaluation of all reasonable alternatives.
- A declaration that every private crossing should have a recorded agreement addressing, at a minimum, safety-related factors.
- Establishment of an enhanced private crossing classification scheme for inclusion in the National Grade Crossing Inventory, and for use by diagnostic teams, that resembles the following:
    - Private crossings with private use (where there is not a perception that the general population is invited or allowed access)
        - Residential driveways (fewer than 4 units)
        - Farm field-to-field crossings
    - Private crossings with public use
        - Large residential driveways
        - Commercial crossings where the public access is expected (shopping centers, business parks, medical offices, parking lots, sports arenas, other recreational sites)
        - Industrial crossings (dependent on traffic count, design vehicle)
- Note: In determining public use, the type of train traffic should also be a factor taking into consideration the impact of a collision on passengers on the train or on near-by facilities.
- A declaration that States should establish programs for review of existing private crossings, and publication of exemplar State legislation for those States that do not currently have jurisdiction over safety at private crossings.

Safety at Private Highway-Rail Crossings

Alternative Approach Discussion Topics

- A declaration that States should establish or identify a process whereby they are notified of land use changes that might affect safety at a private grade crossing, and publication of exemplar State legislation for those States that do not currently have jurisdiction over safety at private crossings.
- A declaration that States should establish or identify a process for notifying affected railroads of any land use changes that might affect safety at a private grade crossing, and publication of exemplar State legislation for those States that do not currently have jurisdiction over safety at private crossings.
- Establishment of guidelines or thresholds of exposure or other factors affecting safety, to determine when those new private crossings, or those crossings at which land use changes affect safety, when they are deemed necessary, should be subject to a risk-based evaluation by a diagnostic team.
- Establishment of guidelines for diagnostic teams that promote a Nationally consistent approach to making improvements at private crossings, to include the following:
    - Risk levels should be calculated for each private crossing. Analysis should be performed to determine the appropriate risk remediation treatments. Risk above a certain threshold should trigger use of AASHTO roadway design standards.
    - Diagnostic teams should consider crossing closure before considering any other treatment option.
    - Where possible, diagnostic teams should consider consolidating crossings. This may be accomplished by providing access either to a nearby public crossing, or to a nearby private crossing that can be adequately upgraded to improve safety.
    - Where closure or consolidation proves infeasible, diagnostic teams should examine the possibility of implementing inexpensive grade separations.
    - Should the preceding options prove infeasible, determination of the appropriate treatment should be predicated in part on whether the private roadway is open to public travel, and on whether there are access restrictions.
    - Crossings at which there is an expectation of public use should be treated in a manner consistent with the guidelines in the MUTCD.

FRA will also pursue the following pilot project:

- A study of the feasibility of using diagnostic team approach on private crossings in a corridor.
- A study of the effectiveness or applicability of new low cost solutions.

- Study methods of using best available technology for transmitting private crossing data to inventory.

Option B

U.S. DOT will seek legislation providing explicit authority to be vested in the Secretary, supplementing the Railroad Safety Laws, for regulation of safety at private highway-rail grade crossings. The legislation should be sufficiently broad to enable the following:

- Adopt a clear declaration of National Policy that new private crossings are disfavored, except where clearly necessary after evaluation of all reasonable alternatives.
- Require that a Statement of Essential Need be provided to the railroad before any new private crossing is created (whether public use, agricultural, or other) or the use changes (e.g., light residential to commercial or industrial).
- Require that the Statement specify the intended use (volume, type of traffic, nature of permission to use), and why alternative access is not available or is not suitable.
- Provide a procedure for the railroad, State agency, or FRA to challenge the Statement or propose alternative access.
- Establish that no new private crossing may be opened for traffic, or subjected to a change in use, until equipped in according with the requirements above.
- Require that the railroad and holder enter into an agreement with specified elements where the crossing cannot be closed.
- Specify the responsibilities of the crossing holder and the railroad. Since use of the crossing is determined by the holder, place a clear responsibility on the holder to participate in making necessary improvements at the crossing.
- Provide a mechanism for the railroad(s) using the rail line to challenge the continued necessity for the crossing.
- Provide one or more mechanisms for alternative dispute resolution when a dispute arises regarding the opening, closing or improvement of a private crossing. (Shared cost, railroad and holder.)
- Provide a mechanism for dispute resolution, available only where alternative dispute resolution has failed. (Public cost.)
- Provide a means of certifying any State capable of handling these issues within the State.
    - Certification would be based on substantial conformity with the policies adopted at the National level, provision of legal opinion that the State agency is authorized to undertake the function, and periodic affirmation by

the State agency that it is funded at a level permitting it to show progress in addressing the issue.

- Classify private crossings by use, providing suitable objective definitions.
- Require treatments based on private crossing classifications, as follows:
    - All private crossings:
        - Specify minimum signage to consist of a crossbuck, supplemented by a stop or yield sign, and, in the case of non-public use crossings, a standard plate stating, "Private Crossing - Authorized Users Only." Require replacement of existing signage as needed, not to exceed 7 years from date of final rule.
    - Private crossings with Public Use:
        - Provide that public use crossings shall conform to the MUTCD.
        - Make public use crossings eligible for improvement under section 130; however, require a documented statement of public benefits before funds are expended.
        - Except where a quiet zone is in effect, require use of the train horn at public use crossings under the same rules as public crossings.
        - Provide risk-based regulatory requirements for improvements at public use crossings and other private crossings (except agricultural crossings; see below), including sight distance requirements as applicable. Consider factors such as road traffic, rail traffic, presence of rail passenger service, maximum train speeds, etc.
        - After period of progressive work to improve these crossings, require that they be closed if not equipped according to requirements.
    - Private Crossings with Seasonal or Agricultural Use:
        - Specify use of locked gates or minimum signage (above) for agricultural crossings on tracks where the maximum authorized train speed exceeds 25 mph.
        - Specify a requirement for railroad dispatcher approval to traverse the crossing where maximum authorized train speed exceeds 49 mph, except where some form of active warning is provided.
- Improve the National Highway-Rail Grade Crossing Inventory with respect to private crossings:
    - Require railroad to populate private crossing data fields in the inventory, providing updates not less frequently than once every 3 years.
    - Add data elements as needed for analysis.
    - Permit railroad to estimate information not directly available.

NEW YORK STATE DEPARTMENT OF TRANSPORTATION

COMMENTS TO DOCKET NO. FRA-2005-23281
SAFETY OF PRIVATE HIGHWAY-RAIL GRADE CROSSINGS

I. BACKGROUND ON NEW YORK LAWS

To address safety at private rail-highway crossings, the New York State Legislature enacted Railroad Law, Sections 97 and 97-a in 1994 and 2001, respectively. (Attachment 1) These laws authorize the Commissioner of the New York State Department of Transportation (NYSDOT) to regulate private rail crossings on lines where "intercity rail passenger service" (such as Amtrak) or commuter rail service is operated on a regularly scheduled basis.*

The Railroad Law defines public crossings as locations where a public street existed prior to 1897 or where such crossings have been designated as such by order of the Commissioner of Transportation. Other crossings, which are private, are classified into three categories:

1. **Farm Crossings.** Farm crossings are authorized by Section 52 of Railroad Law. (Attachment 1) As used in this section, the term "farm crossings" means at-grade rail crossings that are utilized primarily as access to and from adjoining property that is actively used for farming or agricultural purposes by the owner or the tenant of such property.

2. **Deeded Crossings.** Deeded crossings exist where landowners have priority crossing rights, granted them when a rail line was constructed and recorded in a deed.

3. **Agreement Crossings.** Agreement crossings are established by formal agreement between railroads and land owners or occupants; the clearest agreement will document the allocation between the railroad and the landowner/occupant of cost responsibility for the establishment, inspection and maintenance of the crossing.

II. IMPLEMENTATION OF SECTIONS 97 AND 97-a OF THE RAILROAD LAW

NYSDOT has promulgated regulations under Section 97 of the Railroad Law (17 NYCRR Part 919) (Attachment 2), and, in consultation with the Metropolitan Transportation Authority ("MTA"), NYSDOT is drafting regulations under Section 97-a. In addition, NYSDOT is preparing new standards and specification guidelines for the design and protection of private rail crossings, along with guidelines for the allocation of cost responsibility associated with establishing and maintaining new private crossings.

NYSDOT has created an updated inventory of all private crossings covered under Sections 97

*In addition, the Commissioner of Transportation retains the power to acquire any real property, easements, rights-of-way or similar rights with respect to private crossings pursuant to the New York Eminent Domain Procedure Law. Notably, this authority has not been exercised to date.

and 97-a, identifying locations with the highest vehicular use. NYSDOT is using this information to prioritize efforts to improve protection at private crossings or to close those crossings that present the highest safety exposure. Since 2002, the Long Island Railroad has actively pursued closure of private crossings and has successfully eliminated approximately 50% of all private crossings on the Long Island Railroad.

The legal basis for a private crossing is not always discernable. Records do not generally exist for farm crossings. And, even when there is a deed or agreement documenting the legal basis for a private crossing's creation, such records can be difficult and sometimes impossible to locate. A search of county real estate records may provide some information for deeded rights to a private crossing, but there appear to be few deeded crossings, and a search for such records can be extremely time intensive. Often, records have been misplaced over the years, particularly where railroad consolidations have occurred.

And yet, no public inventory of these sites existed until 1974, when the Federal Railroad Administration ("FRA") created its first Crossing Inventory. Since the enactment of Section 97 of New York's Railroad Law, an extensive effort involving railroad, NYS and FRA representatives has been undertaken to improve inventory information for both public and private grade crossings along corridors where passenger trains operate.

III. CONCERNS

NYSDOT has encountered a number of obstacles in its efforts to address safety at private crossings and the following four (4) interconnected issues should be considered as FRA develops an overall action plan.

1. **Lack of Funding** – NYSDOT has a pending grant application under the High Speed Hazard Mitigation Program for federal funds for private grade crossing safety. But the High Speed Hazard Mitigation Program, which was first created in Intermodal Surface Transportation Efficiency Act (ISTEA) and reauthorized in SAFETEA-LU, allocated very limited federal funding for state regulation of the safety of private rail crossings, and such funds can only be used on designated High Speed Corridors. Existing grade crossing safety funds available under the Section 130 program are not only restricted to *public* rail crossings, but are also insufficient to address all the needs that exist on the public highway system. An expansion of that program to cover private crossings would not be recommended without a commensurate increase in funding levels. In short, there is a need for increased federal grade crossing safety funds, and for the funds to be available for improvements on private crossings outside the High Speed Corridors.

2. **Lack of Records** – Managing private crossings will require updating the existing federal inventory of all private crossings, including, where available, the legal provenance (agreement or deed) of the particular crossing. The federal inventory is, of course, a valuable resource for the states. A complete and accurate inventory is an essential first step to defining the scope of the project and to identifying the parties responsible for private crossings. Historically, railroads have not consistently managed access to their right-of-way so as to adequately restrict usage over private crossings. As a result, some private crossings have transitioned from use for legitimate farming

purposes to a much greater level of non-farming use with no limitations or protection. (Accordingly, New York State recently clarified the definition of "farm crossings" to crossings actively utilized primarily for farming purposes by the owner or by the tenant of such property.) The railroads should be required to report data on private crossings to the FRA, which should continue to build and refine the existing federal inventory.

3. **Litigation**

A. **Federal Preemption** – The United States District Court for the Northern District of New York recently held that the Interstate Commerce Commission Termination Act of 1995 ("ICCTA"), 49 USC sections 10101, et seq., preempts an order issued by NYSDOT under section 97 of the New York Railroad Law to close a private rail crossing. Notwithstanding the State's legitimate police power to protect the public safety at railroad crossings, the court permanently enjoined New York State from using section 97 of the Railroad Law to close this crossing. The court found that the private crossing and the closure order fall within the exclusive jurisdiction of the Surface Transportation Board, as established by the ICCTA. New York State has appealed this decision to the Second Circuit United States Court of Appeals. A decision is not expected for some time. A copy of the decision in *Island Park, LLC v CSX, et al.*, 2007 U.S. Dist. LEXIS 46608 (June 26, 2007, Kahn, DJ) is attached as Attachment 3.

B. **Private Property Rights** – Property owners and railroads have sued NYSDOT to block the Department's efforts to limit access points to private crossings, to close private crossings, or to require the installation of enhanced warning systems or protective devices. Challenges can arise out of cost considerations or out of NYSDOT's allocation of cost and responsibility between landowner and railroad. In addition, landowners may allege an unconstitutional taking and may seek either compensation or an injunction to block enforcement if closing a private crossing will leave private property landlocked. In a recent case challenging NYSDOT's determination to designate a private crossing as a farm crossing and to direct the railroad to install appropriate grade crossing warning devices, the New York State Supreme Court, Appellate Division, Third Department affirmed NYSDOT's authority under section 97-a of the Railroad Law to render such determinations to alter private railroad crossings. A copy of the decision in *Long Island Railroad Company v Madison, Commissioner of NYSDOT*, 36 A.D.3d 1106 (3d Dept. 2007) is attached as Attachment 4.

The unique operating characteristics encountered at private grade crossings necessitate application of different treatments for both passive and active devices than presently exist in the national Manual on Uniform Traffic Control Device (MUTCD). As an example, restricted access is generally appropriate for private crossings versus open access at all public grade crossings.

IV. RESPONSE TO FRA QUESTIONS

1. **How do we determine whether creation or continuation of a private crossing is justified?**

   New York State Railroad Law requires administrative hearings prior to establishing any new private crossings or modifying existing private crossings. This process provides all parties with an opportunity to explain their position before an Administrative Law Judge, whose recommendation to the Commissioner is guided by the considerations set forth in the Railroad Law.

2. **Is the current assignment of responsibility for safety at private crossings effective? To what extent do risk management practices associated with insurance arrangements result in "regulation" of safety at private crossings?**

   There is currently no formal assignment of responsibility for safety at private crossings; the determination is made only on a case by case basis. A formal assignment of responsibility might better address the increased need for public safety on lines on which passenger trains operate. Insurance arrangements only apply to crossings where a formal agreement exists between the railroad and property owner; this represents a very small percentage of the total number of crossings.

3. **How should improvement and/or maintenance costs associated with private grade crossings be allocated?**

   NYSDOT is currently developing cost allocation guidelines for private crossings. An Administrative Law Judge may consider the unique characteristics of a particular case in assigning responsibility for cost.

4. **Is there a need for alternative dispute resolution mechanisms to handle disputes that may arise between private crossing owners and the railroads?**

   More facts are needed to answer this question. Mechanisms for alternative dispute resolution could be helpful.

5. **Should the State or Federal Government assume greater responsibility for safety at private grade crossings?**

   There is a clear need for government action at both the state and federal levels to foster greater responsibility for safety at private crossings where the public is impacted. At a minimum, the FRA should address private crossings which are open to public usage and crossings along lines where passenger trains are operated. National standards consistent with the MUTCD should be created which address the unique operating characteristics of these private roads.

6. **Should there be nationwide standards for warning devices at private crossings, or for intersection design of new private grade crossings?**

Nationwide standards should be adopted for warning devices at private crossings and for intersection designs which are consistent with the MUTCD.

7. **How do we determine when a private crossing has a 'public purpose' and is subject to public use?**

   Government has a responsibility to address safety for the traveling public. A private crossing should be considered to have a public use whenever passenger trains are operated over the line or when the public has access over the crossing.

8. **Should some crossings be categorized as 'commercial crossings' rather than as 'private crossings'?**

   Under New York State Railroad Law, crossings are categorized as public, if they existed as public roads over the crossing prior to 1897 or were designated by the Commissioner as public through the regulatory hearing process. All other crossings are private (farm, deeded, or agreement) crossings. Most commercially used crossings are subject to agreement between the railroad and property owner. There does not appear to be a need to create a new category of "commercial crossings." The level of highway traffic using such a crossing, along with train speed and volumes, should dictate whether or not warning devices are required.

9. **Are there innovative traffic control treatments that could improve safety at private crossings on major rail corridors, including those on which passenger service is provided?**

   Private crossings present unique operating characteristics that are not encountered at public crossings. Treatments are needed that can effectively restrict access over a private crossing and provide warning of an approaching train. New York State is preparing design standards that recognize the need for some custom systems to address specialized conditions, such as secure gate activation systems, impenetrable barriers and vehicle presence detection systems.

10. **Should the Department of Transportation request enactment of legislation to address private crossings? If so, what should it include?**

    It is recommended that USDOT sponsor federal legislation to address private crossings patterned after New York State statutes. Consideration should also be given to cover all rail lines where the public could be impacted. In order to avoid pre-emption claims it is critical that federal statutes and regulations recognize and validate the jurisdiction of the states to address safety concerns related to all grade crossings, including those categorized as private.

V. CLOSING

NYSDOT requests that the FRA take steps to update the crossing inventory to create a complete, accurate, and accessible database of all private crossings, including the legal basis for the crossings. In addition, NYSDOT recommends that FRA help secure funding for minimal safety improvements on private crossings, and establish national standards for the installation and use of safety devices at private crossings. Resolving these interconnected issues will enable New York State to continue its efforts to improve safety on both public and private crossings.

MEMORANDUM

To: Docket No. FRA-2005-23281

From: Kathy Shelton
FRA Office of Chief Counsel

Date: August 14, 2007

Re: Summary of Meeting on Private Crossing Issues

On July 17, 2007, FRA hosted a meeting to discuss private crossing issues with representatives of the railroad industry. The following individuals were in attendance at the meeting:

Douglas Werner, Burlington Northern Sante Fe Railway
Stuart Schwartz, Norfolk Southern Corporation
William Browder, Association of American Railroads
Thomas Healey, Canadian National
David Reeves, Kansas City Southern
Grady Cothen, FRA
Ronald Ries, FRA
Miriam Kloeppel, FRA
Kathy Shelton, FRA

During the meeting, participants discussed the wide-ranging variations in private crossings, from agricultural crossings to private commercial crossings, and the attendant difficulty in establishing a uniform policy to effectively address private crossing issues. The lack of extensive involvement in private crossing issues by State and local governments was also discussed.

Railroad representatives at the meeting shared the view that private highway-rail grade crossings do not benefit railroads, as they generally interfere with railroad operations and create litigation and maintenance-related burdens. However, the conversion of private crossings into public crossings can also impose a burden on railroads, especially when crossing conversions occur without any notification to, or input from, the affected railroad(s). Therefore, FRA was asked to facilitate communication between railroads and the communities they serve.

A number of railroad representatives also expressed interest in a uniform private crossing sign that could incorporate a stop message for motorists.

August 23, 2007

Docket Clerk
U.S. DOT Dockets
Room PL-401
400 Seventh Street, SW
Washington, DC 20590

Response to Request for Comments; FRA-2005-23281

To Whom It May Concern:

After reading the entire contents of the public docket on this topic, this concerned citizen feels compelled to submit several points for your consideration. As a matter of generic introduction, the writer has studied the railroad industry for over 30 years and worked for over 10 years in private service enterprise and 10 years with public transportation agencies.

The thoughts presented herein are intended to provide a balanced perspective on the issue. Comments are based upon a solid working knowledge of the FRA's inventory system and the FHWA's Section 130 requirements, as well as a good familiarity with the location-specific concerns facing railroad companies and public employees at highway-railroad grade crossings.

This contribution to the discussion is organized in the same order as the original FRA issues were presented, with the FRA questions reprinted in italics:

> *FRA Issue: At-grade highway-rail crossings present inherent risks to users, including the railroad and its employees, and to other persons in the vicinity should a train derail into an occupied area or release hazardous materials. When passenger trains are involved, the risks are heightened. From the standpoint of public policy, how do we determine whether creation or continuation of a private crossing is justified?*

Public transportation policy and programs should not bear the cost and burden of determining conditions of access, use or establishment of crossing facilities that exist only to serve private interests. Instead, as necessary, the involved private entities should consult their own respective legal representation for the purpose of allowing existing property law and negotiation determine the outcome of whether or not private crossings are justified. Public policy should remain fixed on addressing the safety needs of all public highway-railroad crossings.

It is interesting to note that the same inherent risks to users of highway-rail crossings also exist at rail-rail crossings. While certainly lesser in number, those types of crossings surely present possible incidents of far greater magnitude – yet there is no demand for public policy or government oversight regarding creation or continuation of rail-rail crossings. Consequently, participants in this discussion should realize that the root issue here may not really be so much about 'public safety' as much as it is about resolving long-standing fundamental disagreements between private property owners. As such, any proposed changes to public safety policy should be very carefully considered as there are significant far-reaching consequences of introducing new policy related to grade crossing regulation.

> *FRA Issue: Is the current assignment of responsibility for safety at private crossings effective? To what extent do risk management practices associated with insurance arrangements result in "regulation" of safety at private crossings?*

Regardless of the current assignment of responsibility for safety at private crossings, the motorist's decision-making process is the primary contributing factor in any car-train crash. Because trains cannot steer or stop, it is contingent upon road users to make intelligent judgments as to safe operation over railroad tracks.

Private property owners and railroads can assist motorists in making good decisions at grade crossings by installing appropriate warning devices and providing good crossing maintenance – but the bottom line is that ultimate responsibility still lies with the person behind the wheel. No amount of rule-making or legislation will ever change that simple fact.

Lacking familiarity with risk management practices associated with insurance arrangements, it is difficult to assess whether those practices may create an informal regulatory atmosphere.

> *FRA Issue: How should improvement and/or maintenance costs associated with private crossings be allocated?*

All costs for private crossings should be borne proportionally by the private entity or entities that benefit from the use of the crossing on a case-by-case basis. This should be spelled out in the private crossing agreement.

> *FRA Issue: Is there a need for alternative dispute resolution mechanisms to handle disputes that may arise between private crossing owners and the railroads?*

Disputes should be settled through the use of existing mechanisms such as direct negotiation, impartial third-party arbitrators or the court system. If enough documented evidence exists to suggest that current practices are unsatisfactory to all parties, it may be advisable to develop – in consultation with appropriate legal counsel – a new procedure that would be mutually acceptable to advocates representing private property owners and the railroad industry.

> *FRA Issue: Should the State or Federal government assume greater responsibility for safety at private crossings?*

If private crossing safety becomes subject to public agency jurisdiction, it is reasonable to predict that the sheer volume and nature of private crossing data management will create an immense workload for public agencies, not to mention the myriad of complications that would arise, such as but not limited to the following issues:

1. Many private crossings are actually inside large industrial or manufacturing facilities. Who will be responsible for funding and coordinating the extensive and often confidential safety training required to enable public employees to enter said facilities for the purpose of crossing regulation? Will there be any concern on the part of private industry regarding proprietary or trade secret issues that would be unduly exposed by access to certain facilities?
2. Many private crossings are located well within private property, such as in farmed fields, on grazing land or several hundred feet down secluded driveways. What are the location-specific risks or liabilities to be faced by public employees entering upon private property for the purpose of crossing regulation, and how will these be mitigated?
3. If access to private crossings is currently restricted by gates, will private property owners provide keys and/or timely cooperation to public agencies for the purpose of

enabling crossing inspection? For adequate review of sight distances on crossing approaches, will private land owners allow public employees free access to all necessary areas of their property?

4. Will private property owners be willing to remove vegetation or other obstacles that may restrict view of the private crossing; and if not, what authority will the public agency have to enforce safety recommendations affecting private property?
5. A review of the FRA database shows that most states have a volume of private crossings that is roughly 50-75% the volume of public crossings. However, while public crossings are spread through a limited number of public road agencies having permanent contact data (on the order of a few hundred per state), most private crossings will be individually owned and subject to frequent change of ownership (on the order of thousands per state). Without added funding and personnel, how will the states be expected to handle the addition, review and management of what can reasonably be predicted as thousands of new crossing contacts?
6. With so many public crossings still in need of safety enhancements, how will the state or federal government be able to justify any expenditure of time or funding to enhance private property? Won't there be a public outcry the moment there is a fatality at an unimproved public crossing, if that crossing remained unimproved due to the reallocation of resources toward private crossings?

Given that each of these issues would seem to have expensive, if not impossible or highly impractical solutions, it would seem inadvisable for the state or federal government to extend their respective jurisdictions to private crossings.

FRA Issue: Should there be Nationwide standards for warning devices at private crossings, or for intersection design of new private grade crossings?

For continuity and consistency of motorist information, existing national standards for traffic control devices on public roads should be used as a guideline for the private crossing issue. The same could be said for the design of the crossing surfaces and roadway approaches.

FRA Issue: How do we determine when a private crossing has a 'public purpose' and is subject to public use?

There may currently be crossings having a 'public purpose' subject to 'public use' incorrectly listed as 'private' in the national inventory. Some of these 'public purpose-public use' crossings may include driveways to local, state or federal government office facilities, public park entrances or public boat launches, national forest roads, and roads on college or university campuses that are recognized as having public agency status. In all cases, these types of crossings exist to allow the general public to directly access some type of publicly-funded facility directly from a public road. These types of so-called 'private crossings' should be re-classified as public.

Other crossings listed as 'private' in the national inventory may also have 'public use' but the use is not for a 'public purpose.' For example, entrances to retail establishments or other private business property may be accessible to the general public, but the use of said crossings would be for the benefit of the private property owner. Absent the property owner's desire to generate sales and profit, the crossing would not exist – therefore it would seem clear that this type of crossing should remain classified as private.

FRA Issue: Should some crossings be classified as 'commercial crossings' rather than as private crossings.

No. The current FRA inventory form already contains a commercial crossing classification as a type of private crossing. Due to the fact that a commercial operation takes place to generate income for private gain, it would seem logical that the expenses required to allow public access to the facility would be the burden of private business.

If the intent of creating a 'commercial crossing' classification is to establish these types of crossings as somehow being quasi-public or 'public use' crossings eligible for public regulation or funding, this would appear to be misguided. The reason for this judgment is that even though the public may use these crossings, they do so for the sole purpose of frequenting commercial property wherein the private property owner stands to gain the benefit of the public use. Therefore, it would stand to reason that the private party who would benefit from the public use of the crossing should be responsible for the costs associated with the crossing, and the crossing should remain classified as private.

For example, if there was a river or a stream to cross in order to gain access to a private commercial operation, it would be contingent on the private business to adequately resolve that access issue. Any subsequent bridge would not be a 'public' bridge, nor would it be eligible for public inspection or funding. The construction, maintenance, safety, insurance and liability elements of the bridge are quite simply a cost of doing business when deciding to establish a facility on the other side of a previously existing obstacle.

It would seem that the same logic should apply to the matter of a private railroad crossing.

> *FRA Issue: Are there innovative traffic control treatments that could improve safety at private crossings on major rail corridors, including those on which passenger service is provided?*

Full roadway gates, barrier gates, raised median dividers or other channelization and barrier-type devices would appear to be reasonable methods that could be used to contain traffic at crossings of high-volume/high-speed/passenger lines.

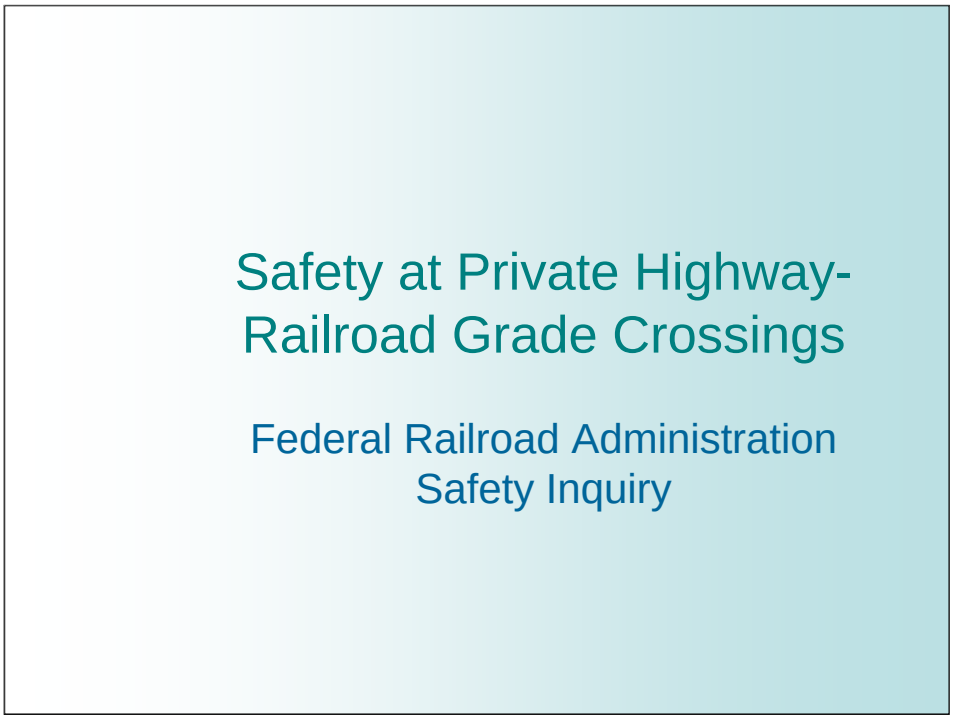
> *FRA Issue: Should the Department of Transportation request enactment of legislation to address private crossings? If so, what should it include?*

No. If anything, public policy and legislation should be strengthened in such a manner that enables the states to increase their efforts toward improving safety at public crossings. However, if there is any legislation to address private crossings, it should direct private crossing owners to use as a guideline the national standards established in current highway design manuals governing construction and traffic control.

Summary Statement

While the FRA initiative to better research and clarify private crossing issues is to be commended, this writer is greatly concerned by the many complications and implications of adding private crossings to the jurisdiction of state and federal agencies. If anything of public benefit is to come of this effort, perhaps the best result would be to establish standards that clearly define the difference between public and private crossings and to develop a set of guidelines for the review, re-classification and subsequent treatment of any public crossings which may be omitted from or improperly categorized in the current national public crossing inventory.

Thank you for allowing public contribution on this important subject.



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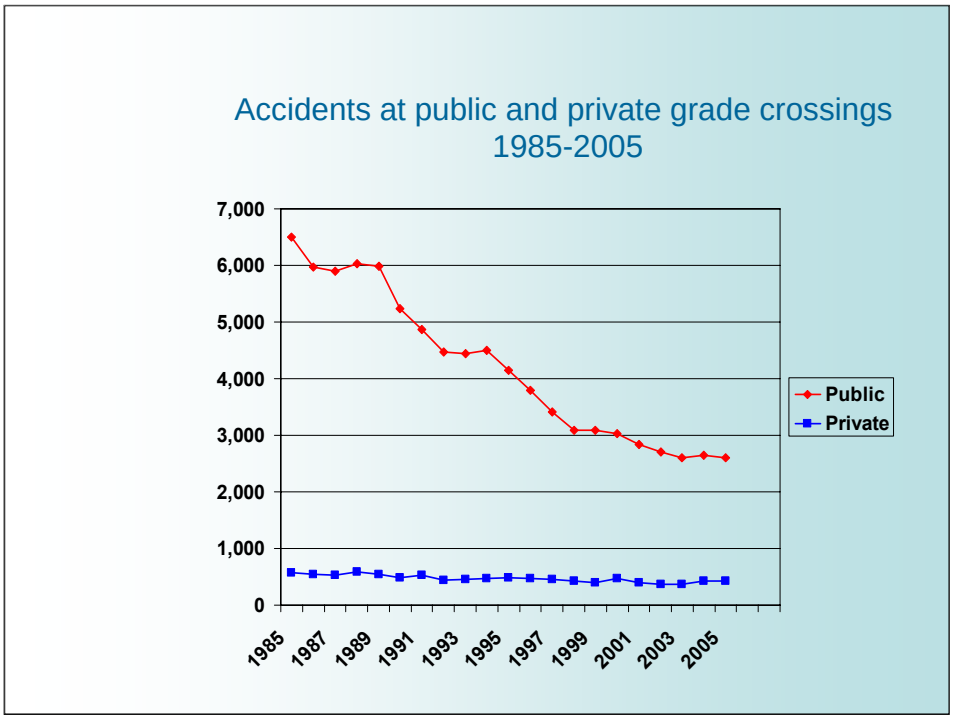

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The private road at the accident crossing is used by an excavating company and by two residences, and on average fewer than 30 highway vehicles and a dozen trains, 8 of them Amtrak trains, traverse the crossing daily. It is estimated that the crossing was created about 1948, and there is no record of any maintenance contract between the business owner and Norfolk Southern Railway, the track owner.

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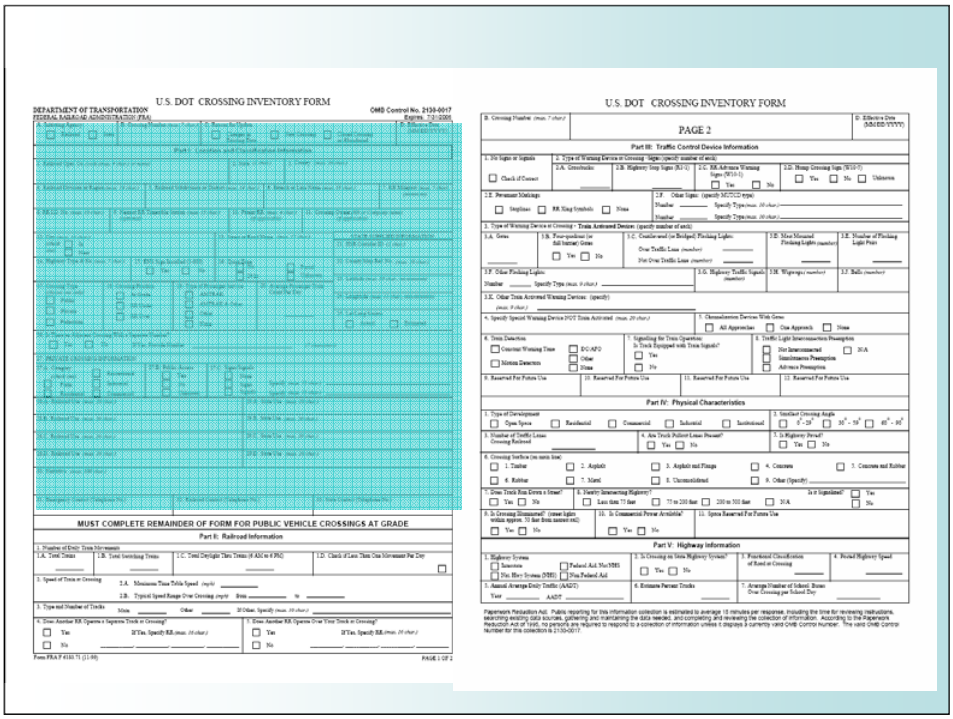

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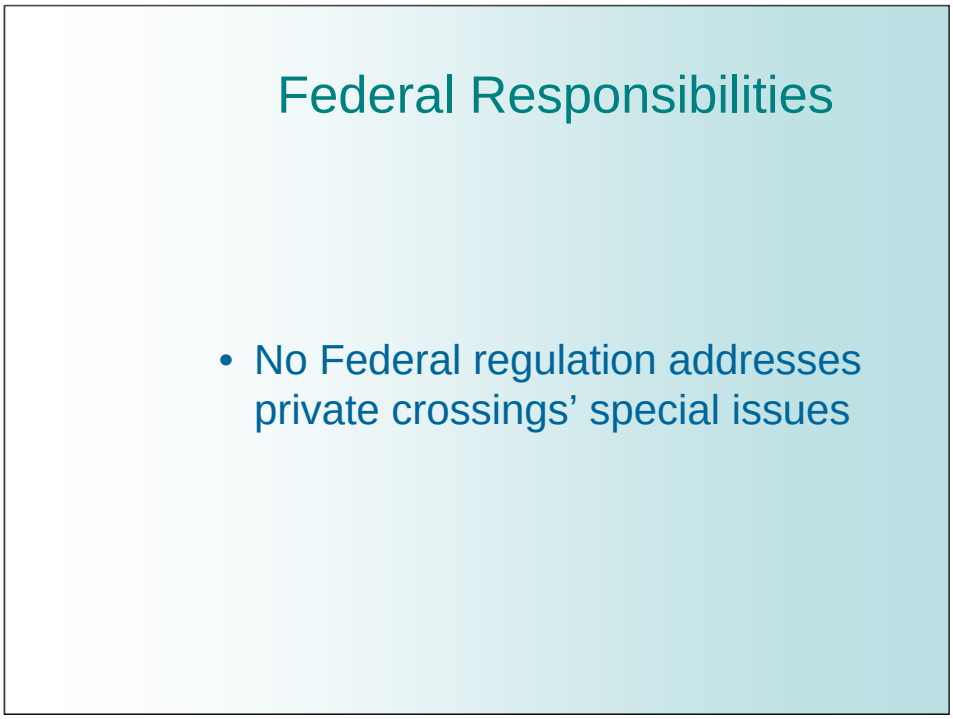
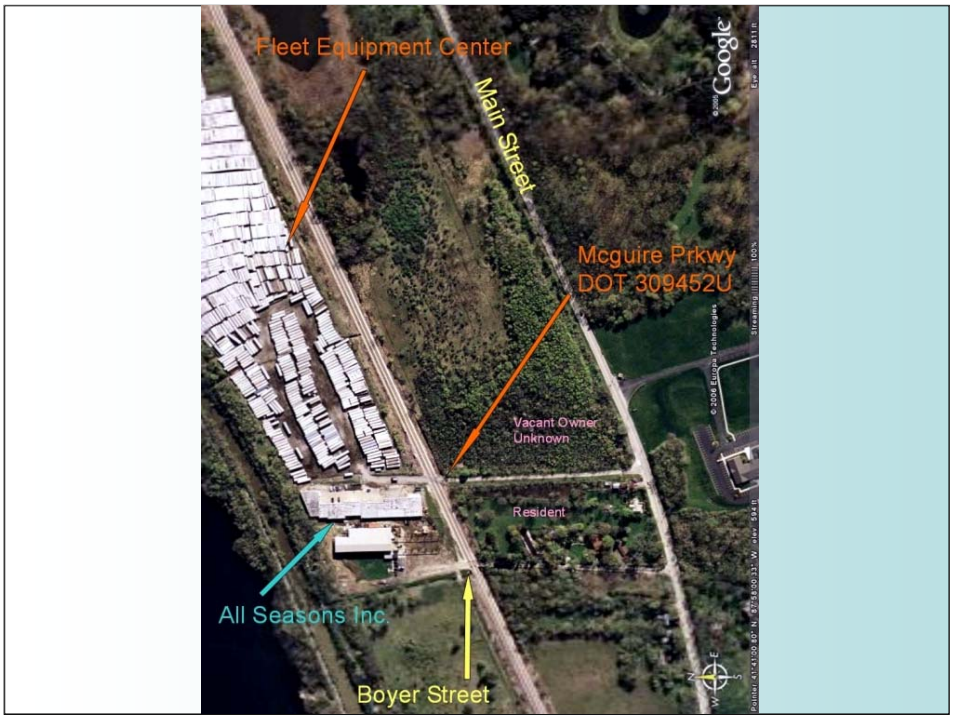


In fact, there is no Federal regulation or guidance that promotes safety at private grade crossings by specifically or uniformly addressing the special issues presented at private crossings.

Some private crossings may be used only seasonally, like certain farm crossings used only for agricultural equipment movements, or they may be used only for routine personal use, like crossings that serve residences.



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Legal Status

- Ownership of fee simple
- Documented easements
- Prescriptive easements
- Documented licenses
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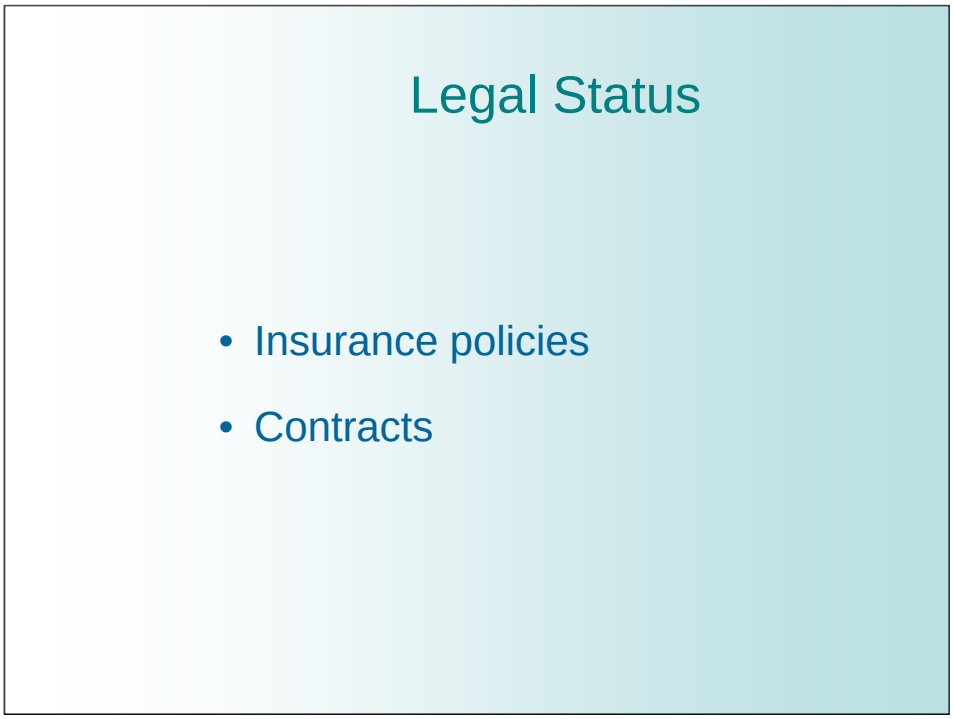
The rights assigned to the private crossing holders vary greatly

An holder of the right (or privilege) to cross may hold outright ownership of the underlying property, or have a documented easement over the railroad property. Where it is recognized, the holder may have a prescriptive easement (squatter's rights). There may be a documented license under contract, or maybe only a verbal license subject to revocation without notice.



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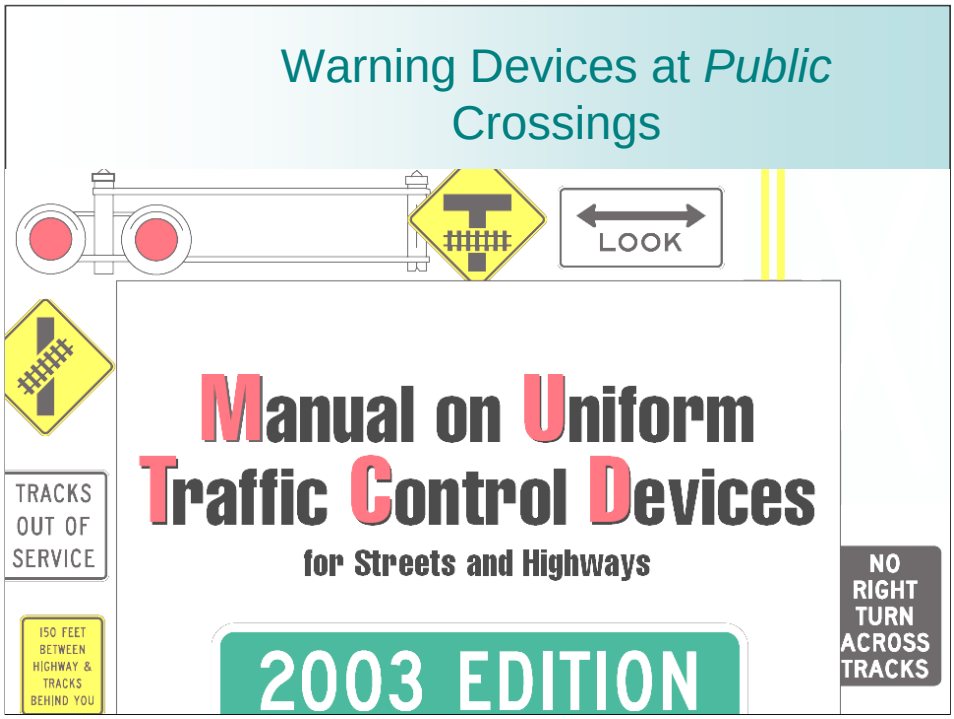

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Warning Devices at Private Crossings

In most States, this is not true of private crossings.


RAIL
CROSSING
ROAD


RAIL
ROAD
CROSSING
STOP
PRIVATE
CROSSING
LOOK

The arrangement of private crossing signs can be highly individual.


CAUTION
ALL VEHICLES
MUST STOP AT
RAILROAD CROSSING.
WARNING
THIS YARD PROTECTED
AND MONITORED BY:
HAWKEYE
VIDEO & SECURITY
(630) 739-4708


END OF
COUNTY
ROAD
MAINT.

And sign maintenance may be sketchy,

Or almost nonexistent.

Request for Comments

- Creation or continuation criteria
- Public use definition
- Allocation of responsibilities
- Alternative dispute resolution
- Commercial crossings

The FRA solicits discussion and comments on all areas of safety at private crossings, but particularly encourages discussion on the following topics:

At-grade highway-rail crossings present an inherent risk to users, including the railroad and its employees, as well as to other persons in the vicinity should a train derail into an occupied area or release hazardous materials. From the standpoint of public policy, how do we determine whether creation or continuation of a private crossing is justified?

How do we determine when a private crossing has a public purpose, and is subject to public use?

How should improvement or maintenance responsibilities be allocated?

Is there a need for alternative dispute mechanisms to handle disputes between private crossing owners and railroads?

Should some crossings be categorized as commercial crossings, rather than as private crossings?

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Should there be Nationwide standards for warning devices at private crossings, or for intersection design for newly created private crossings?

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Is the current assignment of responsibility for safety at private crossings effective? Do risk management practices associated with insurance arrangements result in 'regulation' of safety at private crossings?

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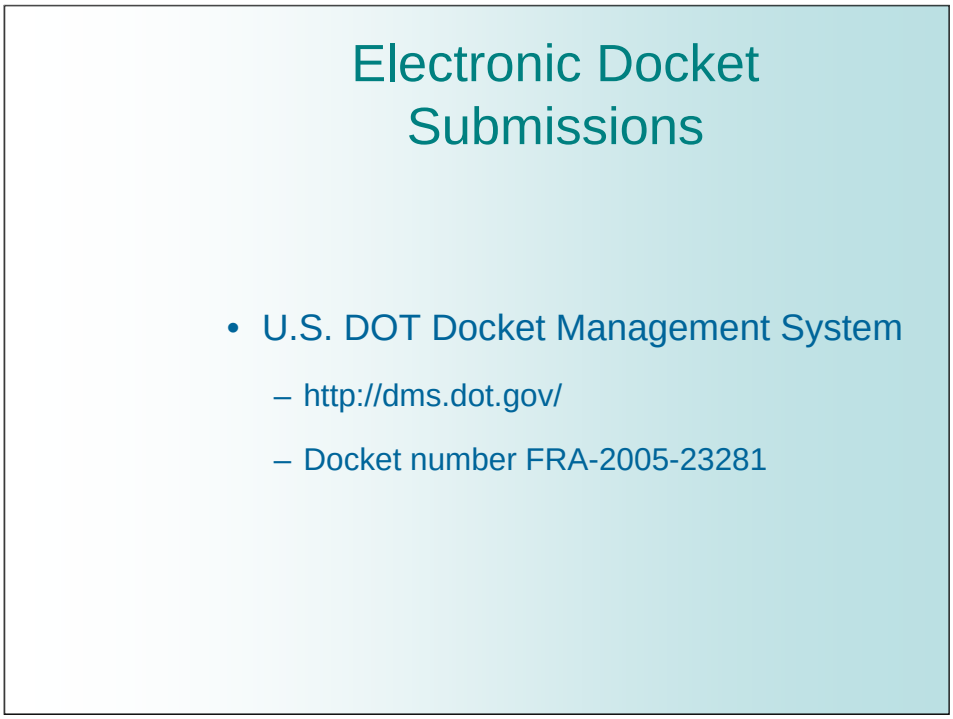

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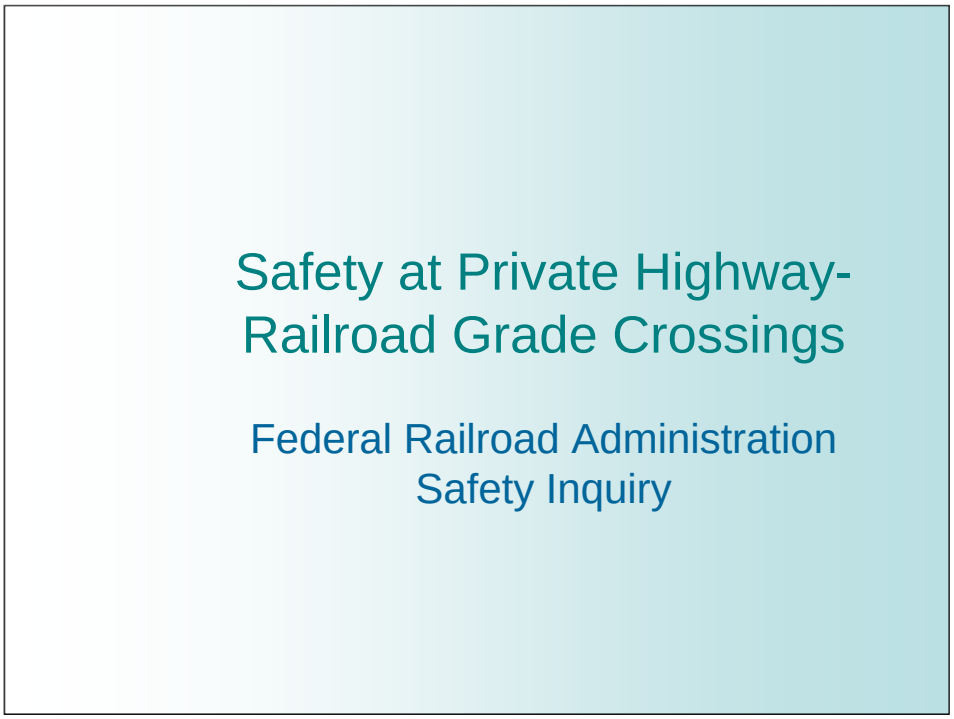

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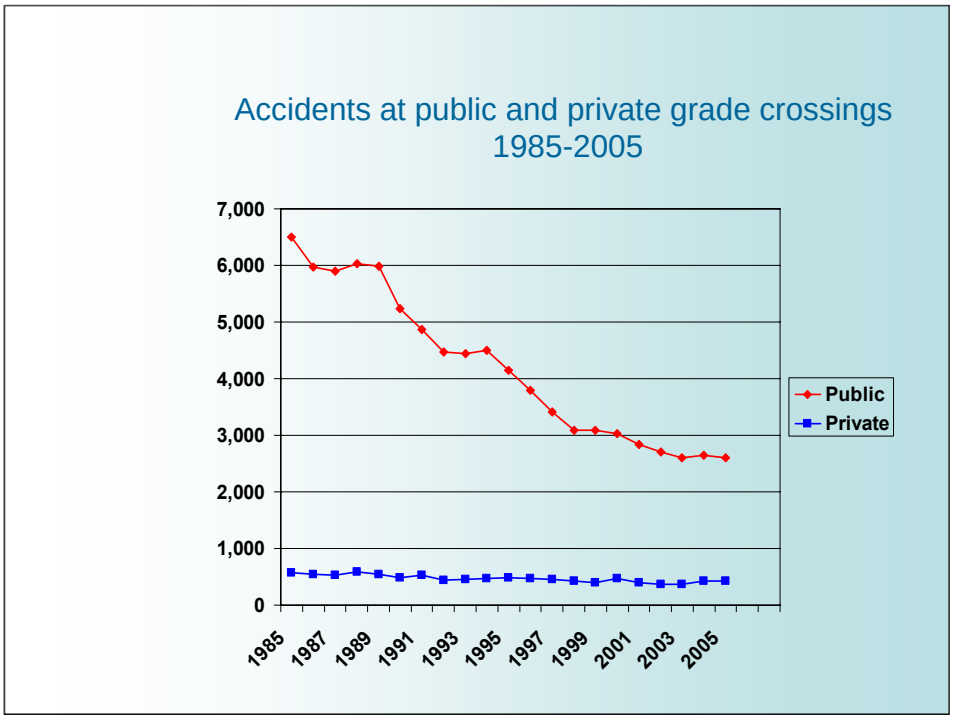

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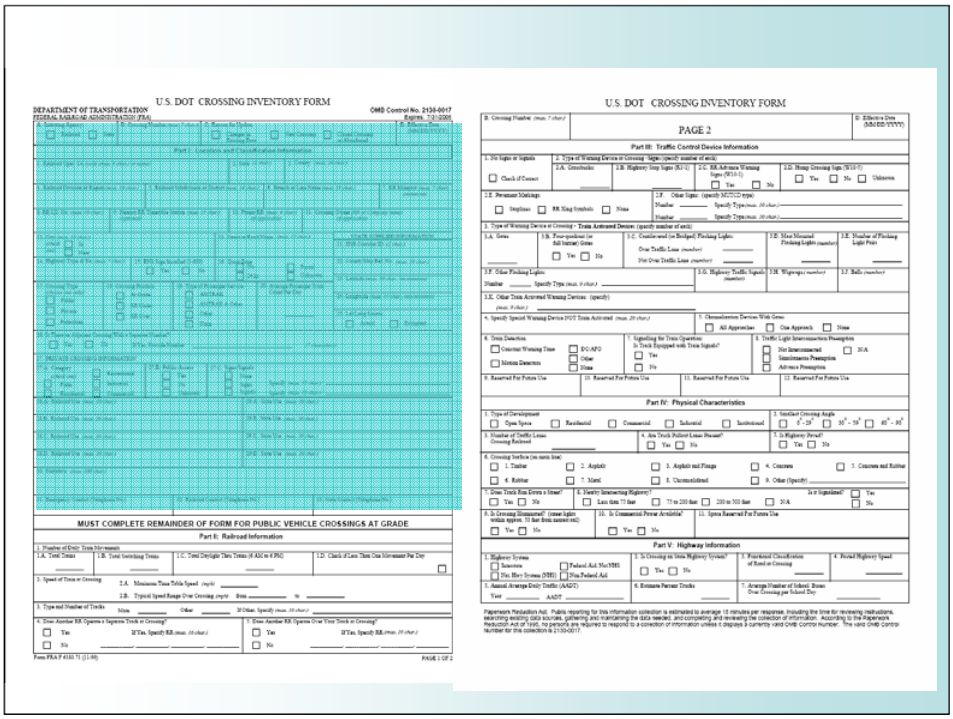

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State Responsibilities

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  - Standing Committee on Rail Transportation

SCORT provides an arena whereby member States and the railroads can exchange technical information, review existing legislation and regulations, and propose changed or new legislation or regulations.

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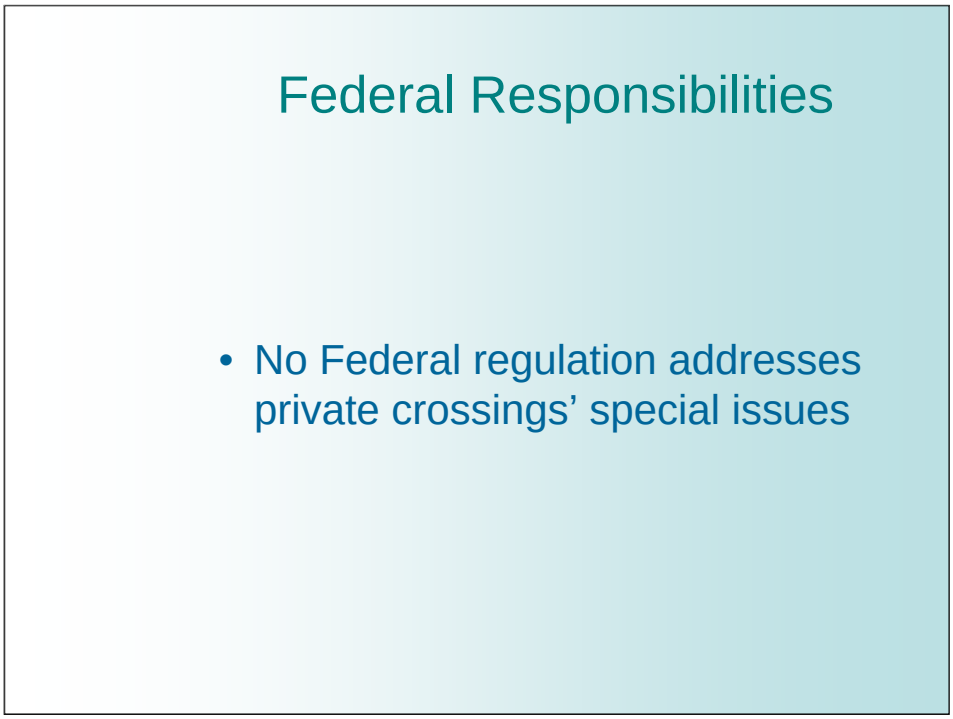

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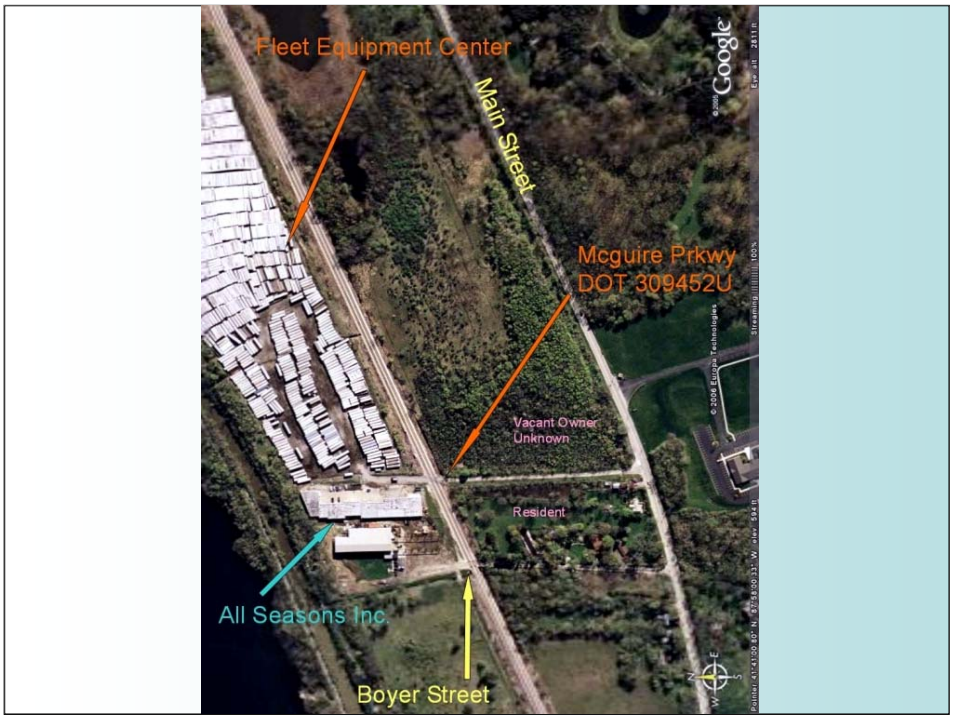

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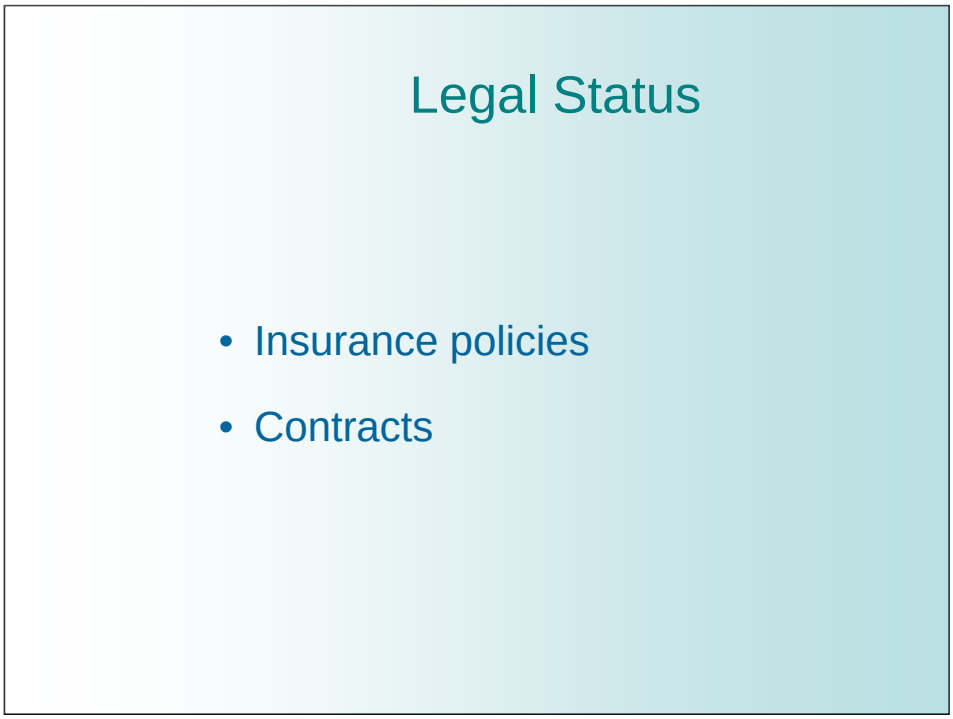

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Electronic Docket Submissions

- U.S. DOT Docket Management System
  - http://dms.dot.gov/
  - Docket number FRA-2005-23281

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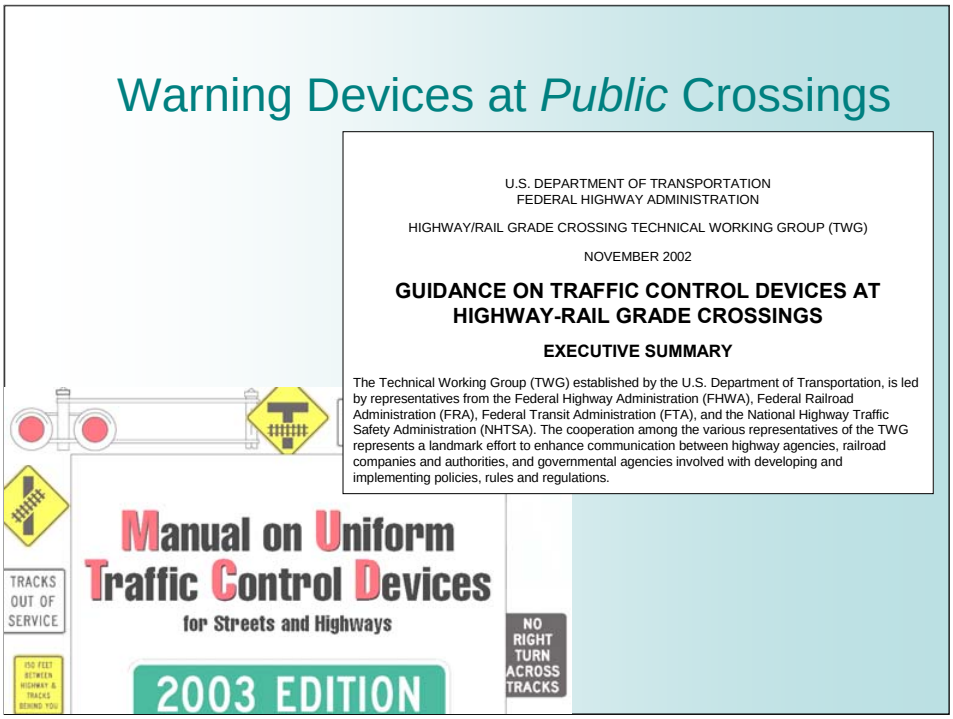


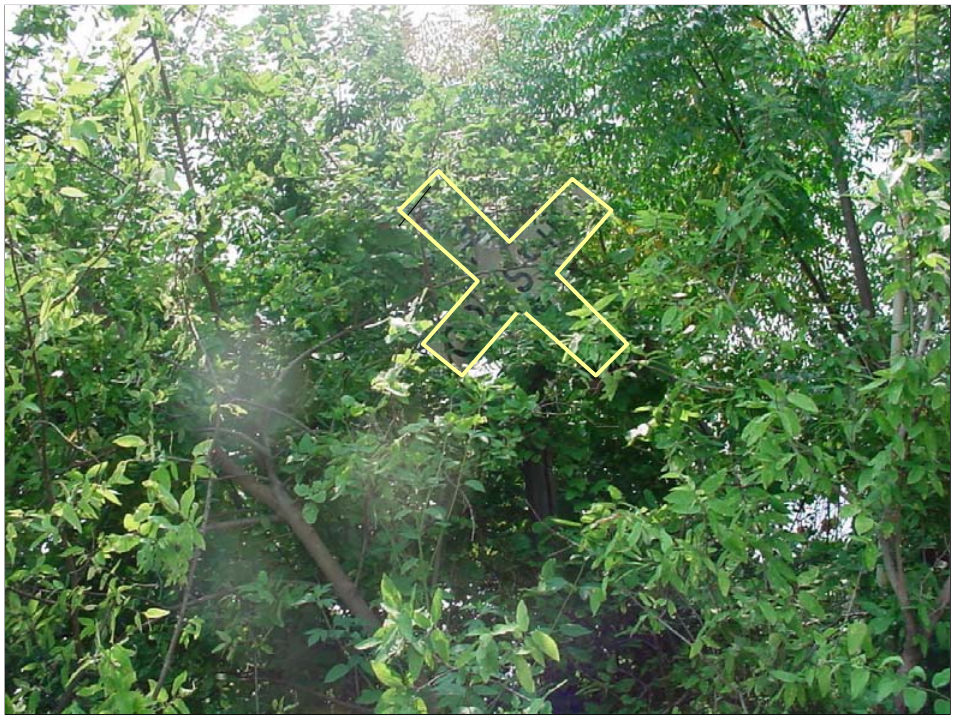
There is some standardization of treatments at public crossings across the Nation. For example, the conformation and use of signs, signals, pavement markings, and any other traffic control devices placed at public crossings generally conform to the guidance provided in the Manual on Uniform Traffic Control Devices. In addition, in 2002, the DOT published a guidance document created through the efforts of a Technical Working Group made up of representatives from both the public and the private sectors.

Warning Devices at Private Crossings

In most States, there is no such standardization at private crossings.

The arrangement of private crossing signs can be highly individual.

And sign maintenance may be sketchy,



Or almost nonexistent.

Public Meetings

- August 30, Fort Snelling, MN
- September 27, Raleigh, NC
- October 26, San Francisco, CA
- December 6, New Orleans, LA

To gather information on the current state of the art, as well as ideas about possible solutions to existing problems, the FRA is holding a series of public meetings. The first of these was held August 30 in Fort Snelling, Minnesota.

Discussion Update: Fort Snelling, MN

- AAR
- BRS
- Citizens for Rail Safety
- State of Minnesota
- State of Wisconsin
- State of Iowa

This is not a complete list of organizations represented at the meeting in Fort Snelling, but rather those who provided either formal statements or substantial input during the meeting.

Discussion Update: Fort Snelling, MN

- No Private Crossing Processes
  - Creating
  - Evaluating
  - Upgrading
  - Closing
- No clear private crossing definition
- Many types/uses of private crossings

Numerous topics were discussed in Fort Snelling, but to my mind, they fell into a few of different categories. In the first, it seemed that attendees agreed that there is no existing process that would provide consistent structures to create (or to evaluate the relative need for) new private crossings, or to upgrade or close existing private crossings.

Attendees also seemed to indicate that different parties often used different definitions to decide whether a crossing was public or private.

In addition, much discussion centered on the fact that private crossings are created for a wide variety of reasons, (residential, industrial, commercial, institutional (govt), or temporary), may be used to varying degrees by members of the general public, and may be traversed by users ranging from pedestrians to construction vehicles or HazMat tank trucks.

Safety at Private Highway-Railroad Grade Crossings

Federal Railroad Administration
Safety Inquiry

Good morning, Ladies and Gentlemen. Thank you for coming.

FRA Region	All Crossings	Private Crossing Percentage
Region 1	13,573	44%
Region 2	27,945	43%
Region 3	44,075	36%
Region 4	43,295	33%
Region 5	34,478	36%
Region 6	34,920	40%
Region 7	16,115	38%
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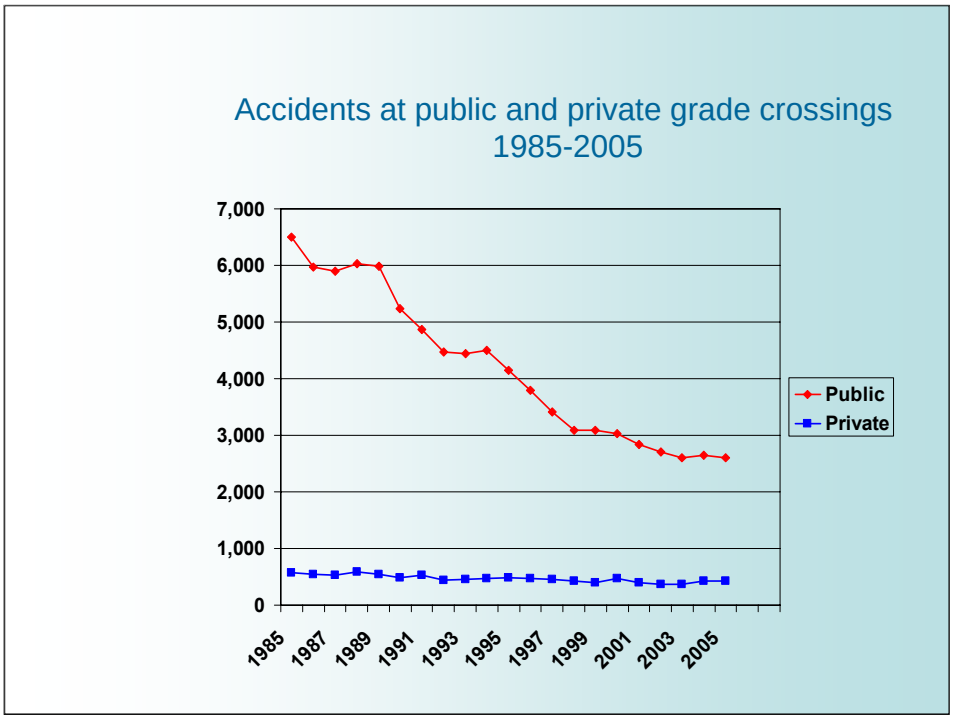
Total	241,608	39%

As you can see, regardless of the geographic region, private crossings constitute a significant percentage of all at-grade crossings. The total count Nationwide is about 94,000.



Although accidents at public crossings have declined considerably over the past 20 years (declining by 1/3 over the past decade alone), the number of accidents at private crossings has remained comparatively stable, declining only 10 percent over the past decade.

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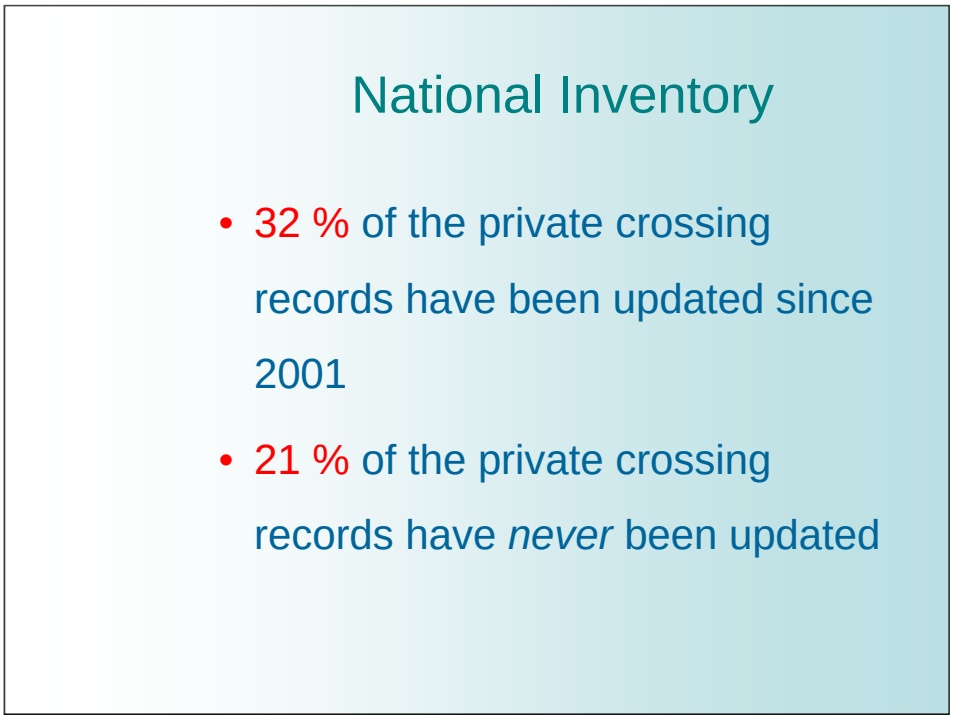
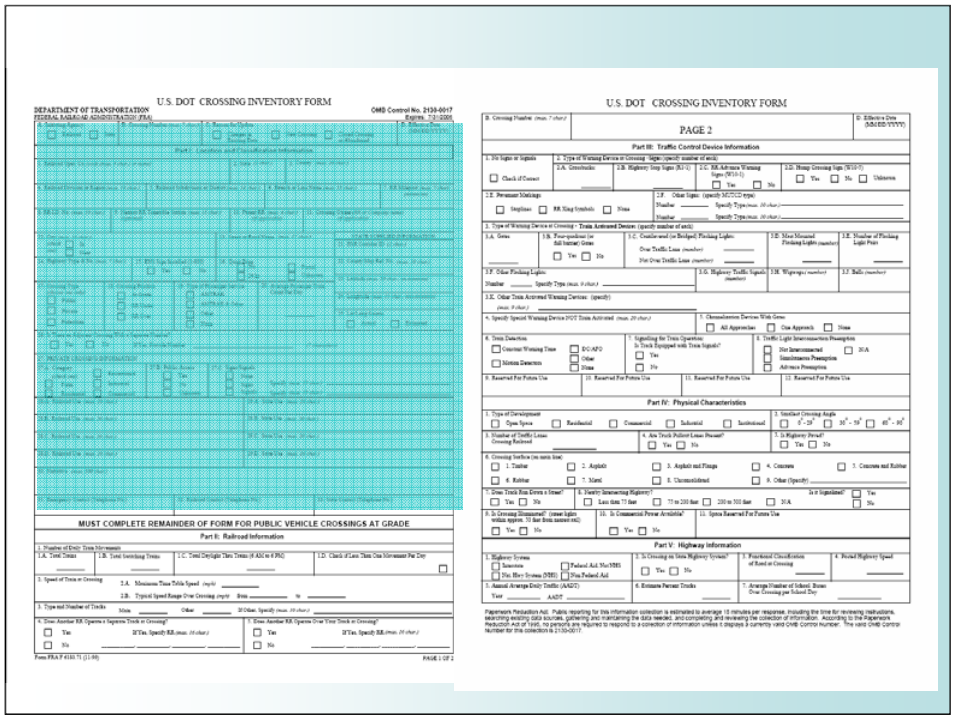


The FRA maintains a national inventory of all crossings, public, private, or pedestrian, at grade or grade separated. The data are used by many State, Federal, or private organizations for research, or for resource allocation (determining which crossings are most in need of improvements). It is updated by the States and by the railroads on a voluntary, not mandatory basis.

As you can see, only about 1/3 of the records for private crossings have been updated within the past five years, and a significant portion of the records have never been updated. Analysis on data of this quality must necessarily be somewhat tentative.

The data for public crossings are typically updated more often than this.



This is a shot of the form on which crossing data are collected for the National Inventory. Almost all the data elements are required for public crossings. For private crossings, however, only the sections I have shaded are collected.

Data Collection Comparison

Data Item	Public Crossing	Private Crossing
Train counts	✓	✗
Active Warning Devices	✓	✓ *(partial)*
Number of highway lanes	✓	✗
AADT	✓	✗

As a result, even when the private crossing record is up-to-date, potentially useful data are not collected. This slide shows a small sample of the data collection differences.

State responsibilities

- VA: State forbids creating new private at-grade crossings
- NJ, OK: railroad must provide and maintain private crossings, when required
- RI: State may close private crossings

According to the FRA's 2002 Compilation of State Laws and Regulations affecting Highway-Rail Grade Crossings, the States' approaches to private crossing safety are highly varied. Take, for example, these examples of the extent of control held over the creation or closure of private crossings.

State Responsibilities

- FL: crossbucks required at all crossings, signs must comply with MUTCD
- SC: private crossings to be equipped in same way as public crossings

Here are some examples of the degree to which traffic control devices are standardized at private crossings.

According to FRA's 2002 Compilation of State Laws and Regulations Affecting Highway-Railroad Grade Crossings, more than half the States have no laws or regulations related to private crossings.

State Responsibilities

- American Association of State Highway and Transportation Officials (AASHTO)
  - Standing Committee on Rail Transportation

SCORT provides an arena whereby member States and the railroads can exchange technical information, review existing legislation and regulations, and propose changed or new legislation or regulations.

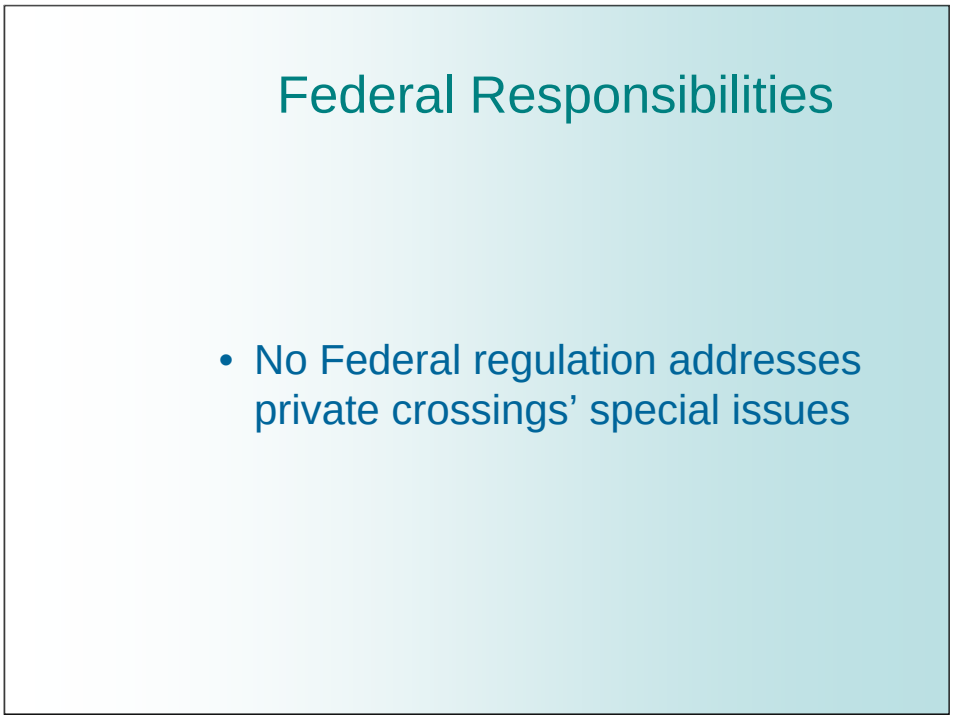
Currently SCORT has adopted a resolution on Railroad Safety Improvement and Enforcement calling for research and development into improved and lower-cost technologies for warning systems. The resolution also believes that any future 'comprehensive national transportation program must continue to provide funds for consolidating, separating, or otherwise protecting railroad-highway grade crossings'.

Neither the committee's policy statements nor its resolutions make any overt distinction between public and private crossings, but it should be remembered that the majority of members represent States. (unlikely to reach beyond current extent of jurisdictions)

Federal Responsibilities

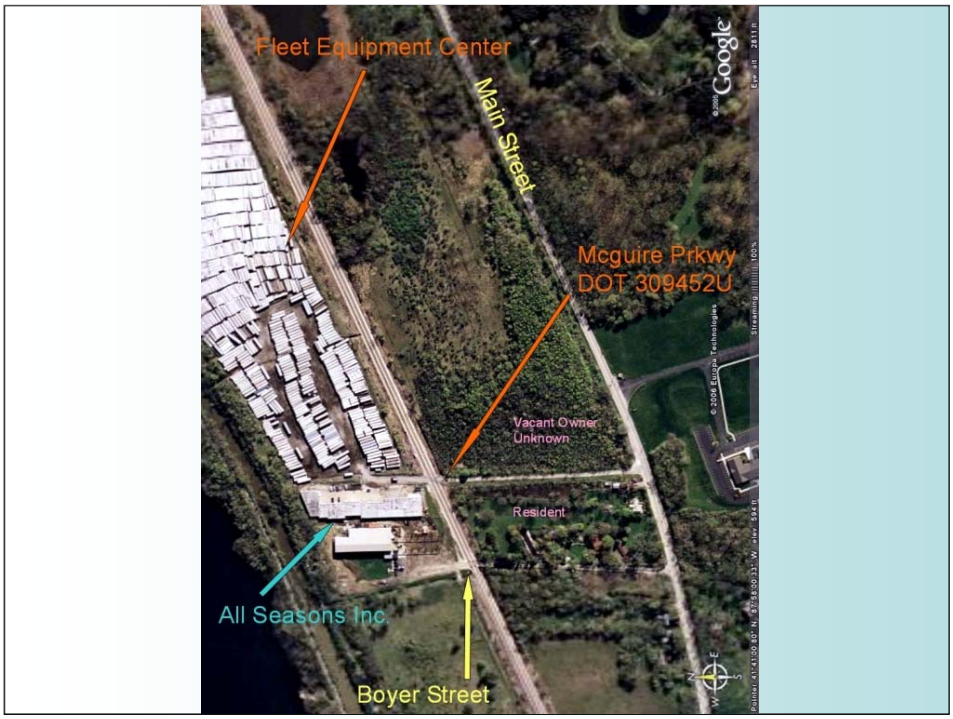
- 49 C.F.R. §234 –signal system inspection, testing, and maintenance
  - About 1% of all private crossings
- 49 C.F.R. §224 – freight car reflectorization
  - Under 25% of all crossing accidents
- Manual on Uniform Traffic Control Devices
  - Applies to public crossings

The Federal Government, in the guise of various U.S. DOT agencies, does offer some regulations or guidance documents that may touch on safety at private crossings. As you can see in this sample, however, none of these really covers a significant portion of the Nation's private crossings.



In fact, there is no Federal regulation or guidance that promotes safety at private grade crossings by specifically or uniformly addressing the special issues presented at private crossings.

Some private crossings may be used only seasonally, like certain farm crossings used only for agricultural equipment movements, or they may be used only for routine personal use, like crossings that serve residences.



Other private crossings, such as this industrial access crossing, are used extensively for private business purposes by employees, contractors, and suppliers. In still other cases, they may be used very heavily by the public to enter commercial facilities.

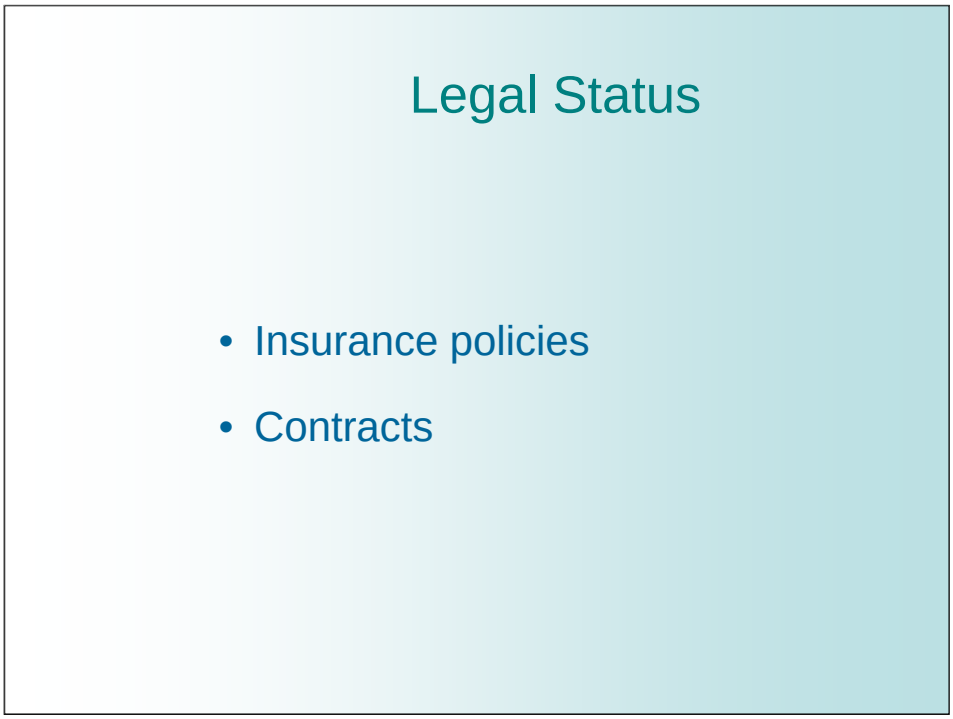
This slide also illustrates that in some cases, there is no alternative access provided the private property owner.

Legal Status

- Ownership of fee simple
- Documented easements
- Prescriptive easements
- Documented licenses
- Verbal licenses

The rights assigned to the private crossing holders vary greatly

An holder of the right (or privilege) to cross may hold outright ownership of the underlying property, or have a documented easement over the railroad property. Where it is recognized, the holder may have a prescriptive easement (squatter's rights). There may be a documented license under contract, or maybe only a verbal license subject to revocation without notice.



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Contracts or other legal documents may further define responsibilities, such as maintenance of the crossing surface, or providing notifications under stated conditions.

Request for Comments

- Creation or continuation criteria
- Public use definition
- Allocation of responsibilities
- Alternative dispute resolution
- Commercial crossings

The FRA solicits discussion and comments on all areas of safety at private crossings, but particularly encourages discussion on the following topics:

At-grade highway-rail crossings present an inherent risk to users, including the railroad and its employees, as well as to other persons in the vicinity should a train derail into an occupied area or release hazardous materials. From the standpoint of public policy, how do we determine whether creation or continuation of a private crossing is justified?

How do we determine when a private crossing has a public purpose, and is subject to public use?

How should improvement or maintenance responsibilities be allocated?

Is there a need for alternative dispute mechanisms to handle disputes between private crossing owners and railroads?

Should some crossings be categorized as commercial crossings, rather than as private crossings?

Request for Comments

- Nationwide standards
- Innovative warning devices
- Safety responsibility assignment
- Increased State and Federal involvement
- Legislation

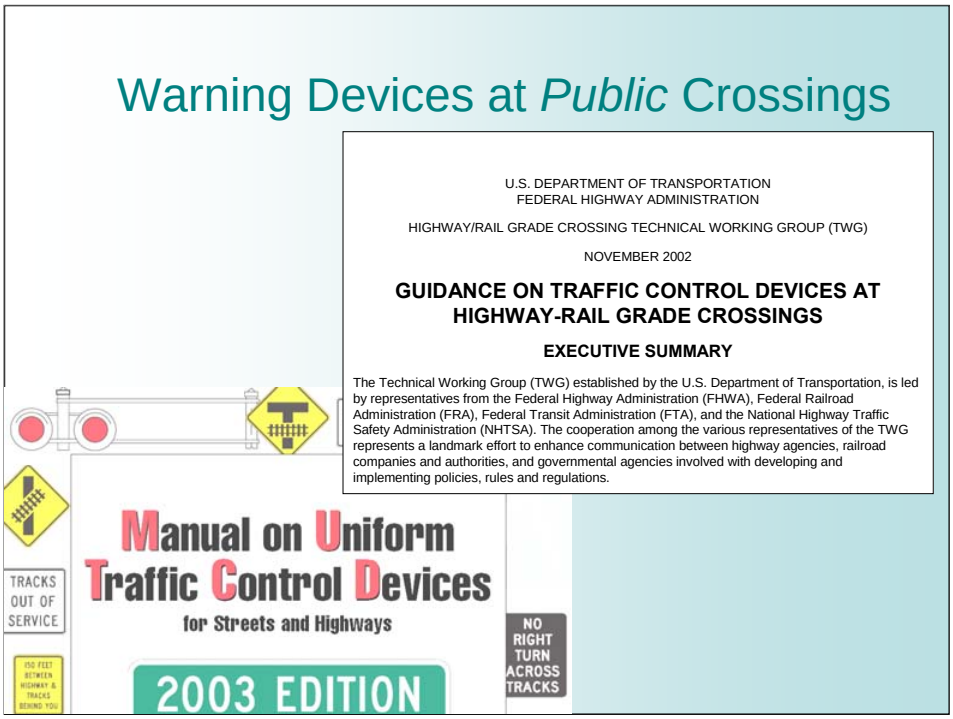
Should there be Nationwide standards for warning devices at private crossings, or for intersection design for newly created private crossings?

Are there innovative traffic control devices that could improve safety at private crossings on major rail corridors, including those on which pax service is provided?

Is the current assignment of responsibility for safety at private crossings effective? Do risk management practices associated with insurance arrangements result in 'regulation' of safety at private crossings?

Should the State and Federal governments cooperatively work to determine responsibility and to provide oversight?

Should the USDOT request enactment of legislation to address private crossings? If so, what should it include?



There is some standardization of treatments at public crossings across the Nation. For example, the conformation and use of signs, signals, pavement markings, and any other traffic control devices placed at public crossings generally conform to the guidance provided in the Manual on Uniform Traffic Control Devices. In addition, in 2002, the DOT published a guidance document created through the efforts of a Technical Working Group made up of representatives from both the public and the private sectors.

Warning Devices at Private Crossings

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The arrangement of private crossing signs can be highly individual.

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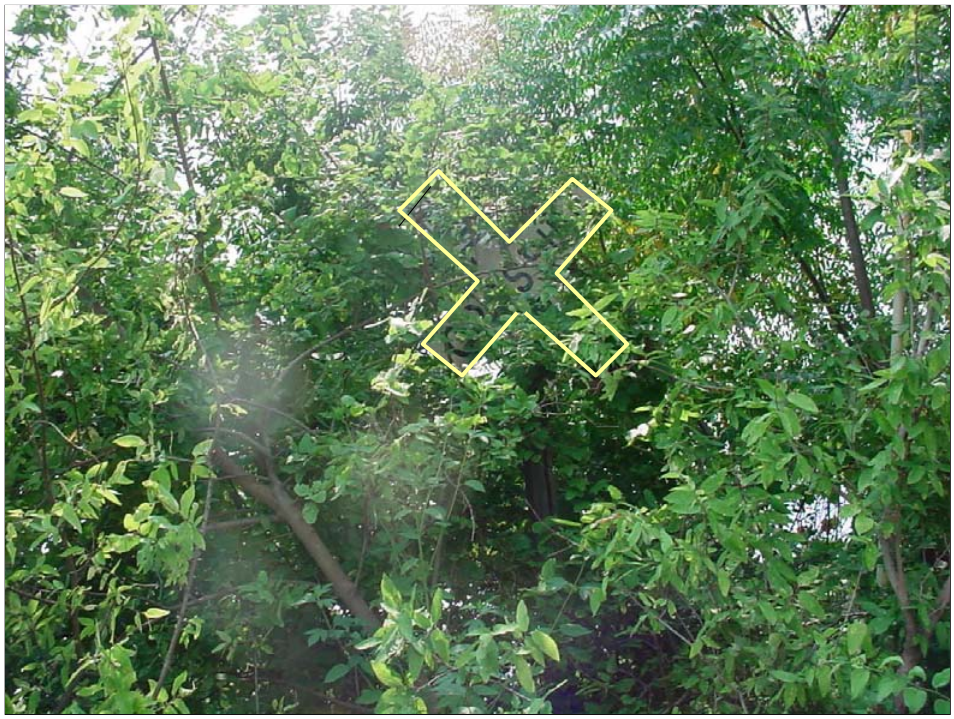

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Public Meetings

- August 30, Fort Snelling, MN
- September 27, Raleigh, NC
- October 26, San Francisco, CA
- December 6, New Orleans, LA

To gather information on the current state of the art, as well as ideas about possible solutions to existing problems, the FRA is holding a series of public meetings. The first of these was held August 30 in Fort Snelling, Minnesota.

Discussion Update: Fort Snelling, MN

- AAR
- BRS
- Citizens for Rail Safety
- State of Minnesota
- State of Wisconsin
- State of Iowa

This is not a complete list of organizations represented at the meeting in Fort Snelling, but rather those who provided either formal statements or substantial input during the meeting.

Discussion Update: Fort Snelling, MN

- No Private Crossing Processes
  - Creating
  - Evaluating
  - Upgrading
  - Closing
- No clear private crossing definition
- Many types/uses of private crossings

Numerous topics were discussed in Fort Snelling, but to my mind, they fell into a few of different categories. In the first, it seemed that attendees agreed that there is no existing process that would provide consistent structures to create (or to evaluate the relative need for) new private crossings, or to upgrade or close existing private crossings.

Attendees also seemed to indicate that different parties often used different definitions to decide whether a crossing was public or private.

In addition, much discussion centered on the fact that private crossings are created for a wide variety of reasons, (residential, industrial, commercial, institutional (govt), or temporary), may be used to varying degrees by members of the general public, and may be traversed by users ranging from pedestrians to construction vehicles or HazMat tank trucks.

Discussion Update: Raleigh, NC

- State of North Carolina
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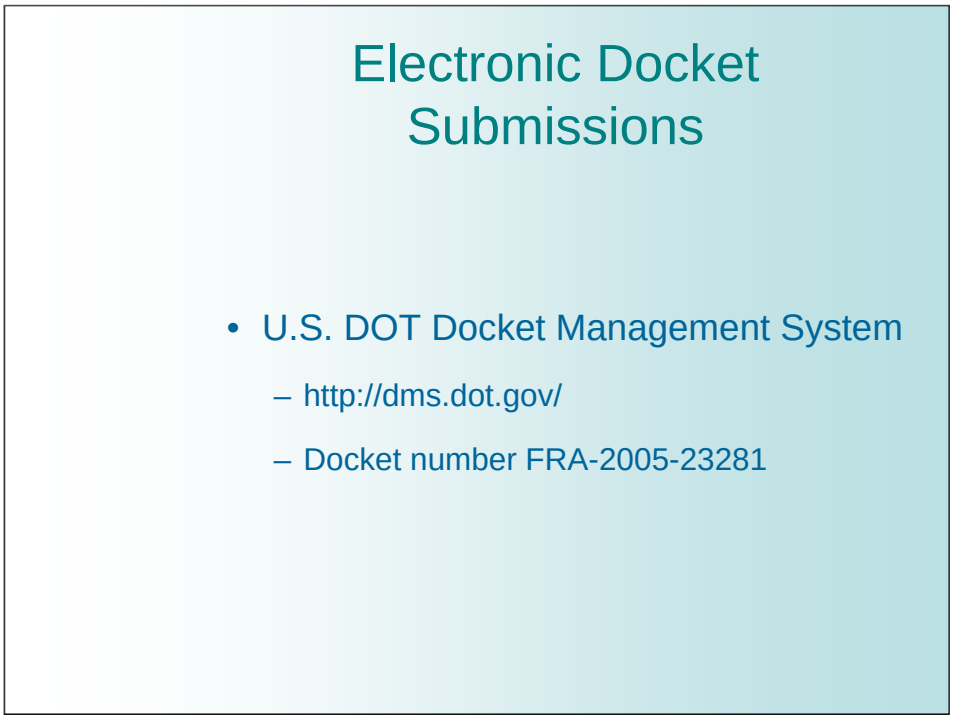
- Design standards suggestions



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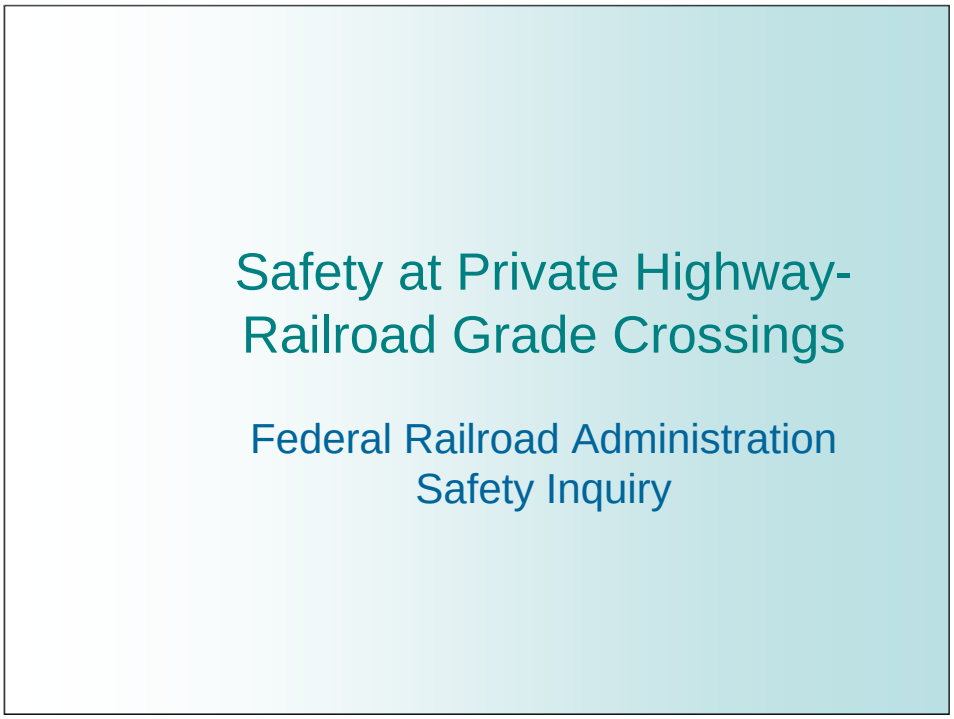

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Private crossing safety has for some time been a matter of concern to the US Department of Transportation and to other Federal Agencies.

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•In its 1994 Rail-Highway Safety Action Plan, the USDOT proposed to develop national minimum standards for private crossings.

•In its 1997 study on Safety at Passive Grade Crossings, the NTSB highlighted the need for some system to improve private crossing safety, and recommended that the USDOT, in conjunction with the States, determine governmental oversight responsibility for safety at private grade crossings.

•In 1999, the NTSB weighed in again in its report on a private grade crossing accident in Portage, Indiana. In this case, the NTSB recommended that the DOT eliminate any differences between public and private crossings with regard to funding or requirements for safety improvements.

•In 2004, the USDOT published an updated Action Plan, in which the FRA committed to leading an effort to define responsibility for safety at private crossings. Today's meeting is a vital part of this effort.

About 1 pm on May 30, 2006, Amtrak train no. 350 struck an empty gravel truck at a private highway-railroad grade crossing near Jackson, Michigan. The train was traveling about 74 mph with cab car 90218 in the lead when the truck entered the crossing in front of the train. One train crewmember and 15 train passengers received minor injuries in the accident; the truckdriver sustained fatal injuries.

The private road at the accident crossing is used by an excavating company and by two residences, and on average fewer than 30 highway vehicles and a dozen trains, 8 of them Amtrak trains, traverse the crossing daily. It is estimated that the crossing was created about 1948, and there is no record of any maintenance contract between the business owner and Norfolk Southern Railway, the track owner.

About 4:40 p.m. on July 3, 2006, southbound Amtrak train A507-03 struck a passenger vehicle at a private crossing near Castle Rock, Washington. According to the Amtrak engineer, the accident occurred when the motorist entered the crossing after a northbound UP train cleared it. Traincrew and train passengers sustained no injuries, but all four motor vehicle occupants sustained fatal injuries.

The road leading to this crossing is a county road, but county maintenance ends shortly before the crossing and the private road that extends beyond the crossing dead-ends after serving 11 residences. About 60 trains daily traverse this crossing. It is not known when this crossing was created, and no maintenance contract has been located for this crossing.

About 7 p.m. (6:52) on June 21, 2006, Metra Train No. 921, traveling south at a recorded speed of 79 mph, struck a truck trailer traversing a private grade crossing near Lemont, Illinois. A piece of the trailer became wedged under the snow pilot of the locomotive and the locomotive derailed at the crossing. The driver of the tractor/trailer was not inured. There were 170 passengers aboard the train, five passengers claimed minor injuries and were treated and released, no train crew members reported any injury.

This crossing serves two commercial facilities to which there is no other access. Roughly 28 trains and fewer than 30 highway vehicles use this crossing daily. The crossing is maintained by the CN, but there is no formal agreement.

Note: about 6 months prior to this accident (December 19, 2005), another accident occurred at this crossing. The truckdriver in the December accident sustained fatal injuries.

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Federal Responsibilities

- No Federal regulation addresses private crossings' special issues

In fact, there is no Federal regulation or guidance that promotes safety at private grade crossings by specifically or uniformly addressing the special issues presented at private crossings.

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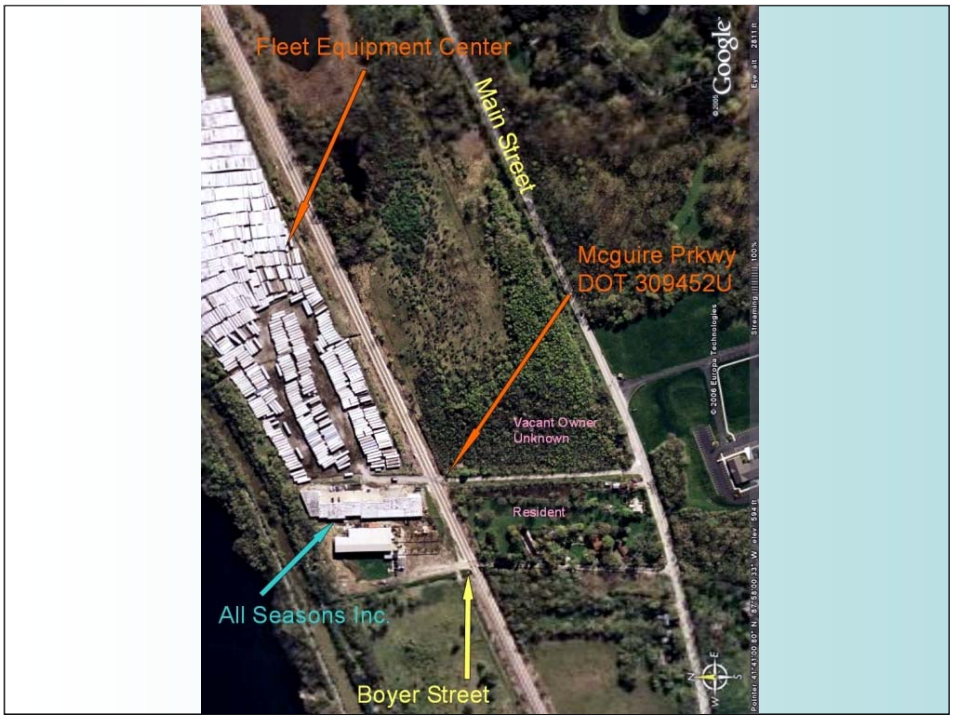

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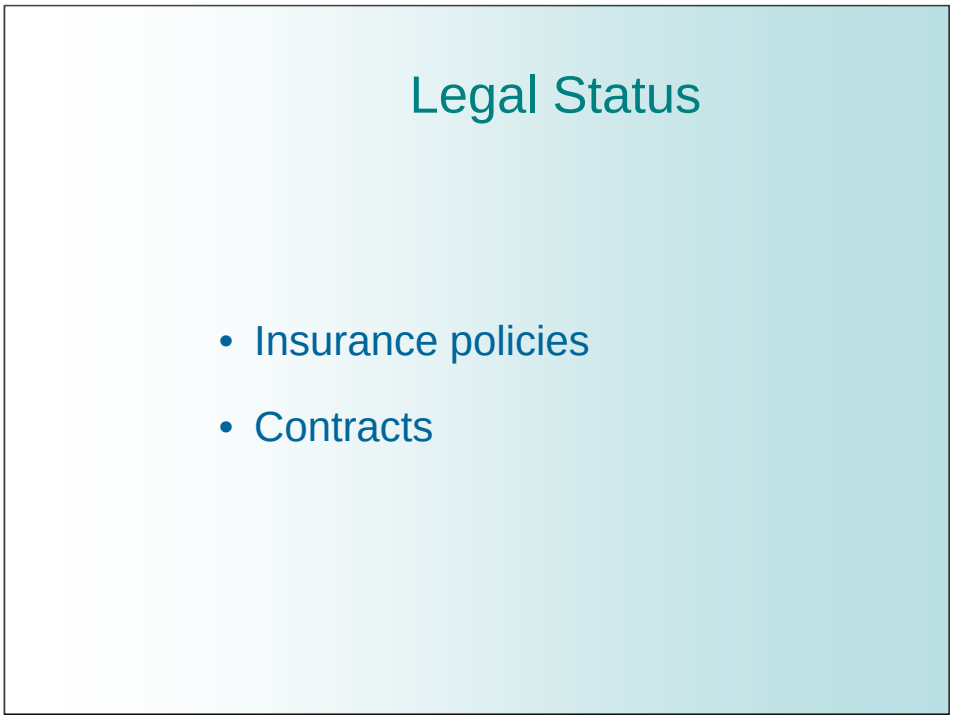

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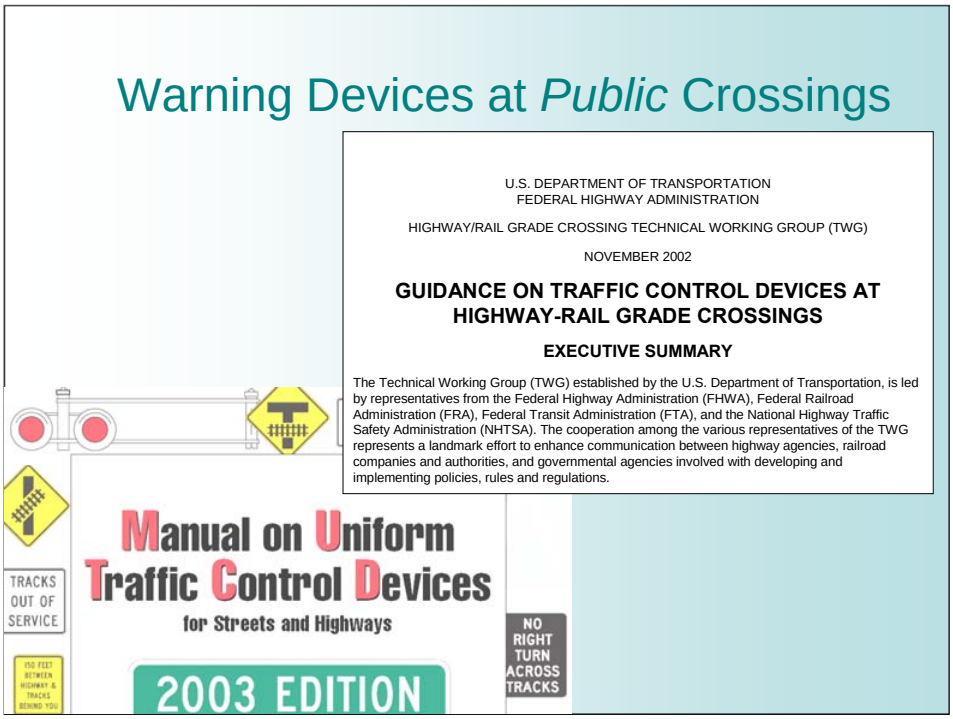

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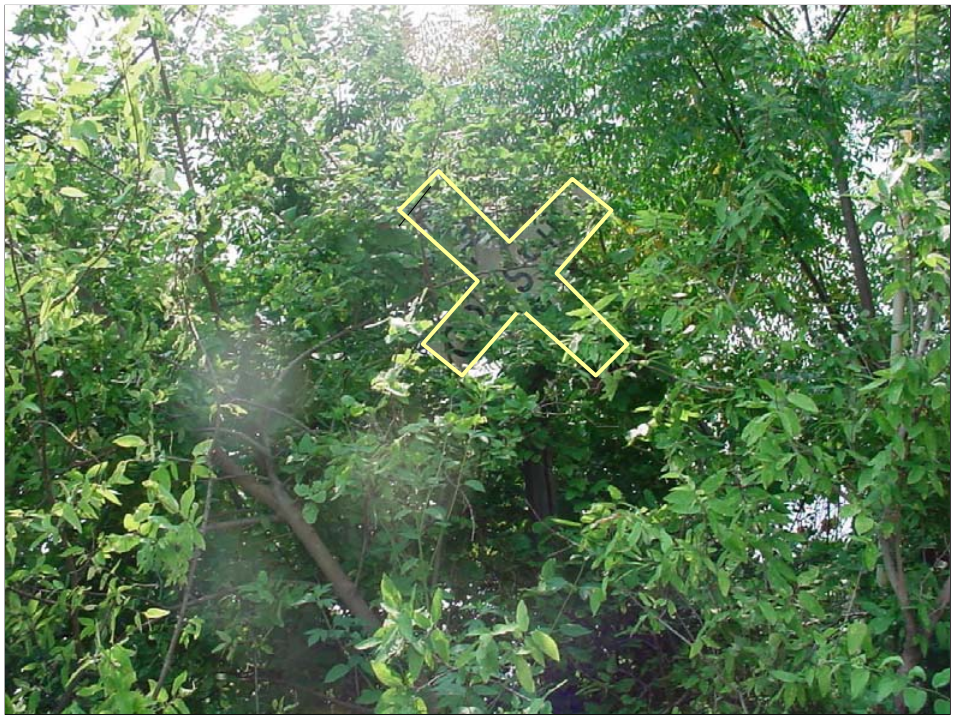

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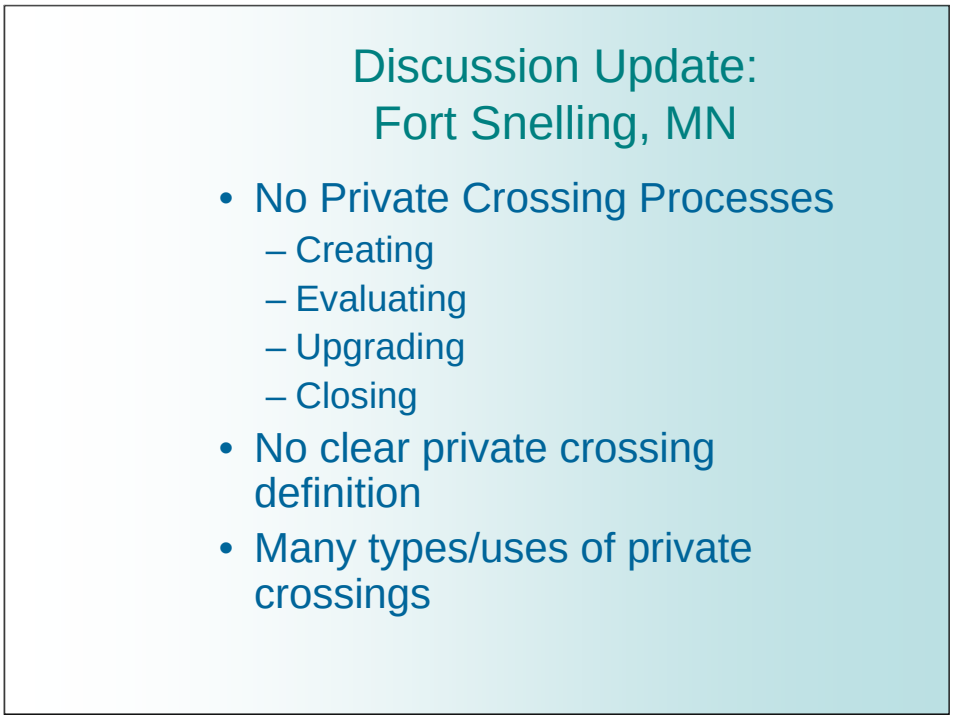

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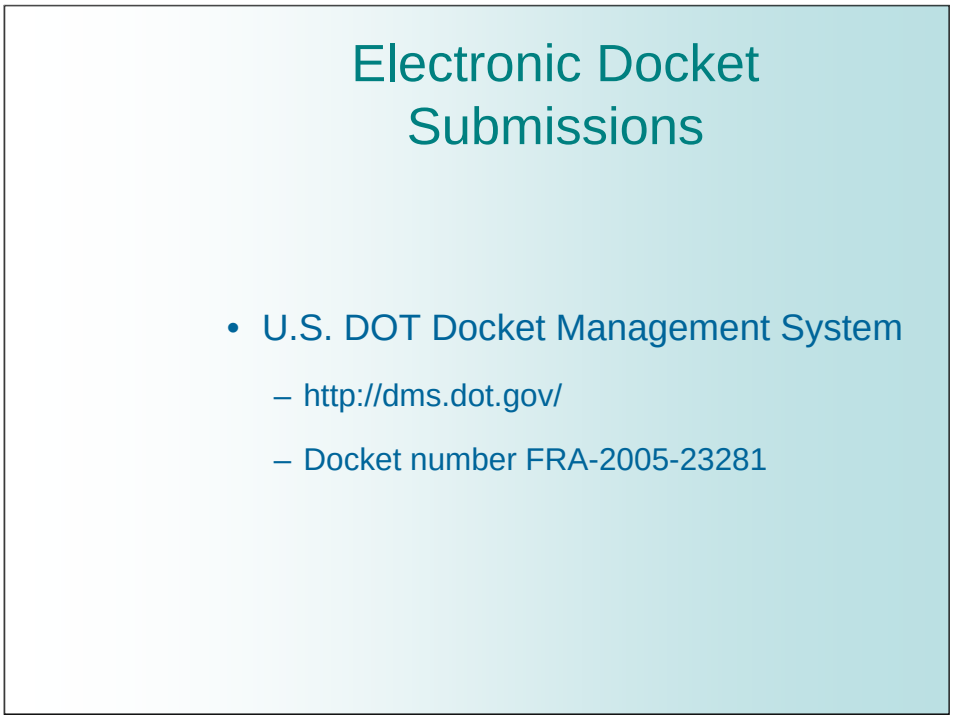
- Need for a baseline set of traffic control devices
- More crossing categories
- Design standards suggestions

Discussion Update: San Francisco, CA

- State of California
- State of Washington
- Union Pacific Railroad
- Metrolink
- Norfolk Southern Corp.
- Attorneys at Law

Discussion Update: San Francisco, CA

- State of California's methods
- California Environmental Quality Act (CEQA)
- Case Studies
- Hypothetical Questions



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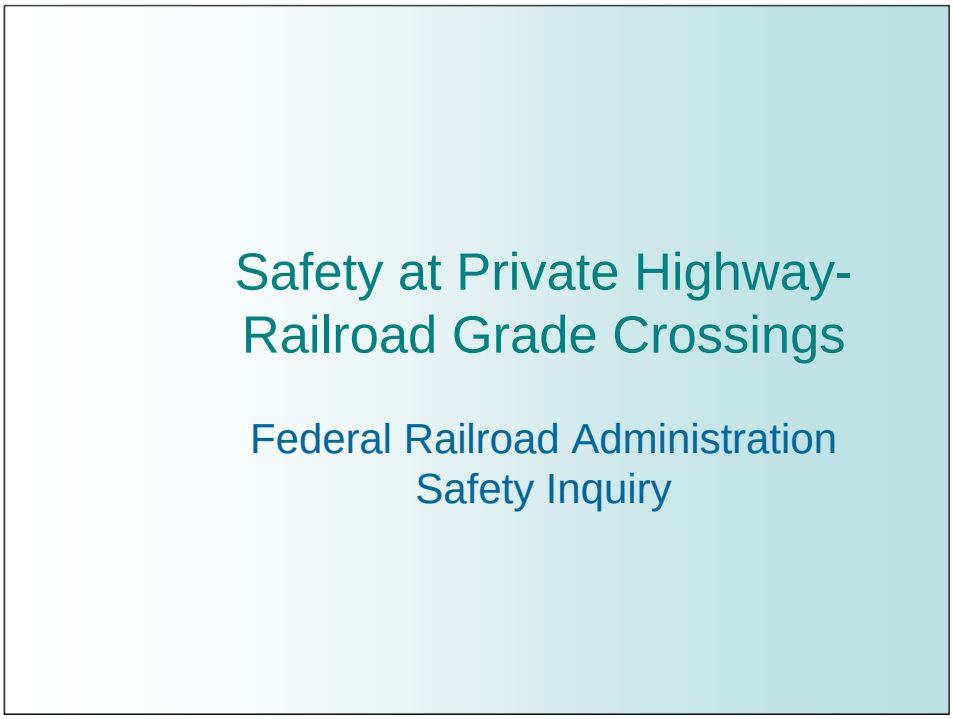

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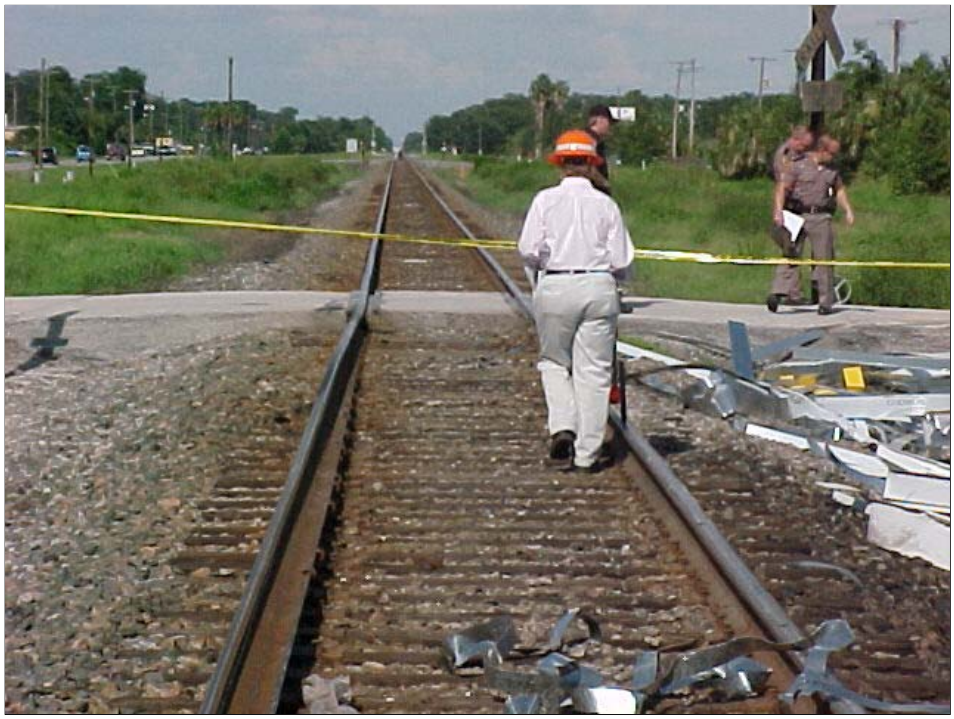
I'm going to start off with a quick reminder of why we are looking into this issue. Just last week, on July 17, 2007, a northbound Amtrak train collided with a tractor semitrailer combination vehicle loaded with scrap metal at a private grade crossing near Plant City, Florida.

This accident is currently under investigation, but preliminary data are available.

Current reports state that both locomotives and 9 passenger cars derailed, but remained upright. Between 16 and 18 passengers were treated, and as many as 5 train crewmembers were treated for injuries sustained in this accident.



The accident crossing lies on an access road to an industrial area, and is equipped with crossbuck signs.

Reports indicate that the truckdriver was ejected from his vehicle, and that he sustained fatal injuries.

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• In 1993, the FRA hosted an open meeting to initiate industry-wide discussions.

•In its 1994 Rail-Highway Safety Action Plan, the USDOT proposed to develop national minimum standards for private crossings.

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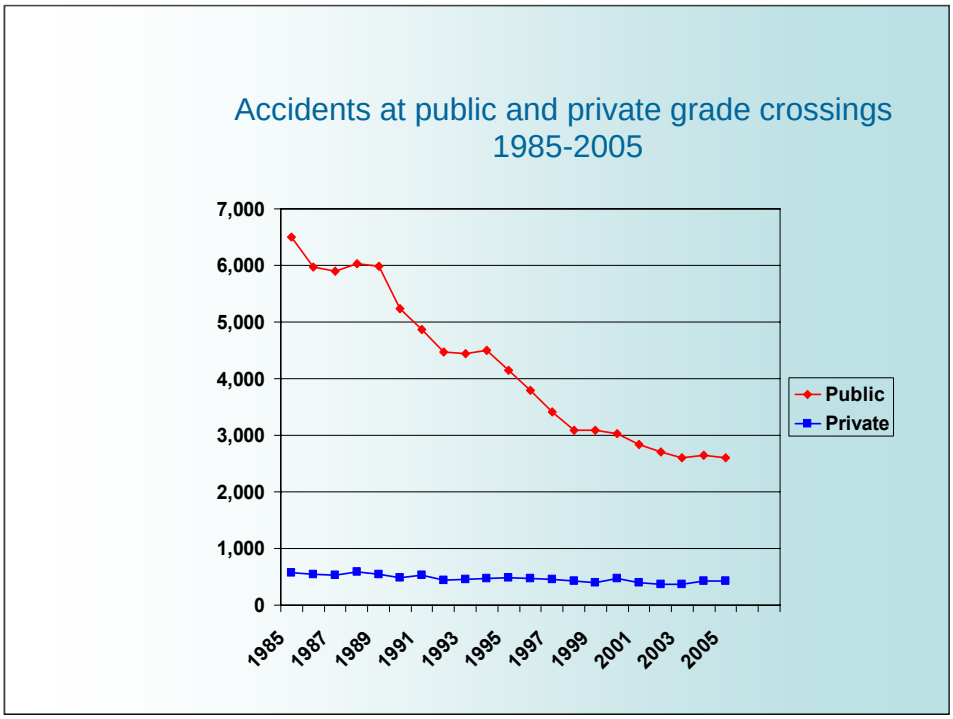

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- February 15, 2007, Syracuse, NY

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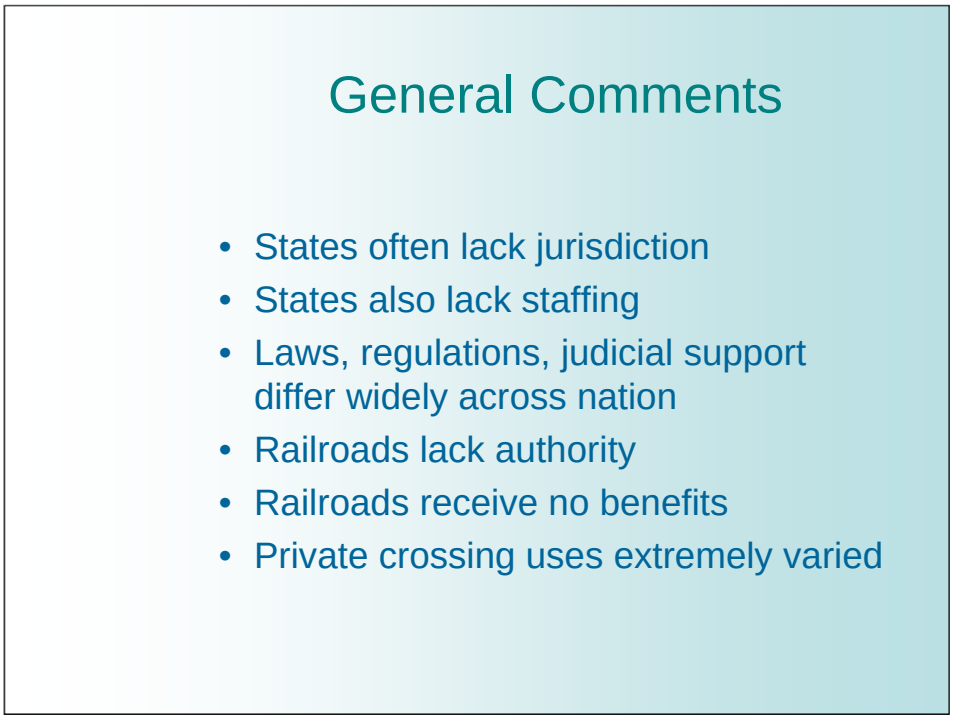
Discussion Topics

- General Comments
- Grade Crossing Categories
- Design and Signage Standards
- Rights and Responsibilities
- Data Needs

The FRA sought comments on a wide variety of subjects relating to private crossings. These are some of the principle topic areas.



At each meeting, a number of attendees emphasized the difficulty in approaching a solution to the problem of safety at private crossings. Most States, for example, indicated that they had little or no jurisdiction to affect decisions about creation of private crossings, or, except in fairly limited ways, even determine the traffic control devices placed at such crossings. Railroads indicated that, although safety at all grade crossings was a matter of vital interest to them, they were often powerless to induce private landowners to make needed improvements.

Railroads also noted that they receive no benefits from the existence of most private crossings—benefits fall almost entirely to the holder of the right to cross.

General Comments

- Create process
- Limit new crossings
- Consolidate existing crossings
- Respect crossing holder's rights, needs
- Partner with States, Railroads, crossing holders

The FRA asked a series of questions in this initiative's initial Federal Register notice. One of these was "How should we justify crossing creation or continuation?

Many meeting attendees indicated that there is currently no process in place to help the parties involved make decisions that consider safety issues at private crossings.

Several parties, including the Brotherhood of Railroad Signalmen and Citizens for Rail Safety advocated fairly aggressive elimination of private crossings, by prohibiting the creation of new crossings, and by closing or consolidating existing private crossings.

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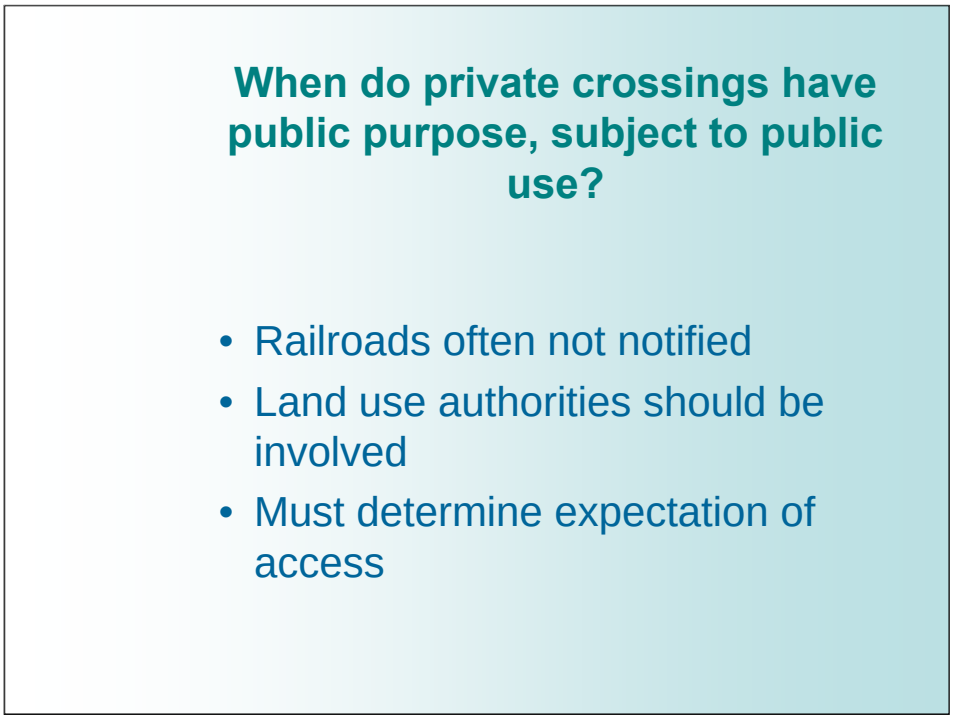
Grade Crossing Categories

- Many categories
  - Seasonal agricultural
  - Residential
  - Commercial, etc
- Need to look at expected use levels
  - Private
  - Public Use

Meeting attendees provided a long list of the various ways in which crossings can be categorized.

They asserted that it would be difficult to revise the inventory to encompass all possible types of crossings, and expressed concern that by 'over-specifying' crossing categories, the railroads might find it much more difficult to arrange crossing consolidations and closures.

Later discussions focused on the benefits of creating a category known as 'public use', which would be a crossing where the roadway was owned by other than a public agency, but to which the public had an expectation of free access.

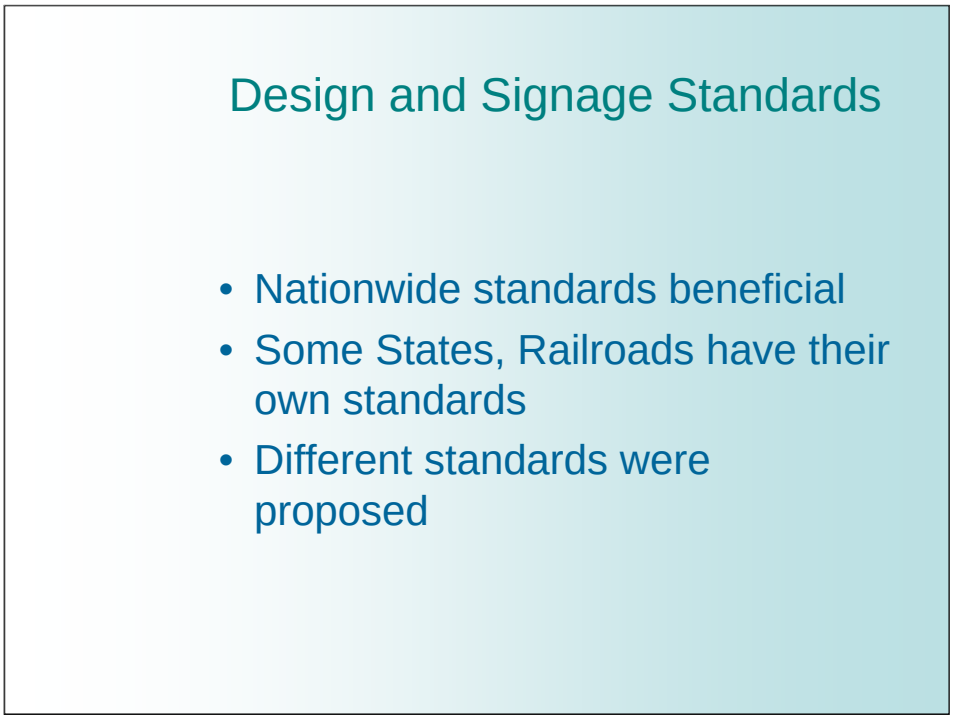


In expanding on the 'public use' categorization, attendees centered the discussion around the instances where land use changes. As land is developed, a farm field-to-field crossing can become access to a large residential development, or even a commercial establishment like a shopping center. Attendees stated that when this occurs, the amount of highway traffic can increase dramatically, and the risk at that crossing will rise with it.

Attending railroad representatives stated that in most states, there is no mechanism for alerting the railroad to any such change in use at a private crossing. They indicated that, in their experience, the State of California is unique in its ability to identify such land use changes, and to effect crossing improvements at such private crossings.

Under the California Environmental Quality Act, the CPUC has the authority to review all proposed developments concerning potential impact on public safety. They have done so for the past three years. In the CPUC's opinion, the best time to identify land use changes is when the development is undergoing the planning and permitting process; for this reason they strongly advocate involving local permitting authorities.

Even where land use is not changing, attendees agreed that it was important to identify existing private crossings with public use. One participant suggested that it would be most valuable to identify whether the public has an expectation of free access to the private roadway.



Should there be Nationwide standards for signs and roadway design? Meeting attendees all seemed to agree that development and application of Nationwide standards, both for crossing engineering design and for placement of traffic control devices at private crossings would be beneficial.

It was noted, however, that a handful of States, as well as several individual railroads, have created standards of their own, each one different from the other.

Some attendees suggested that private crossings should be treated exactly the same as public crossings, but others believed that appropriate guidelines should be developed through partnership with AASHTO, AREMA, APTA, and the National Committee on Uniform Traffic Control Devices.

Are innovative traffic control devices available?

- Need exists
- None yet ready for widespread use
- Liability, cost, lack of effectiveness hinder implementation

Although most attendees agreed that the development of less expensive warning devices could be beneficial, none had found one that had provided enough of a cost reduction, or enough of a safety improvement, to justify their use on a systemwide basis. Further comments suggested that railroads could not use non-failsafe options because of liability considerations.

Although the State of California asserted a willingness to continue their strong presence in the area of private crossing safety, most States indicated that they did not even have the ability to keep up with their responsibilities at public crossings, let alone private crossings.

California and Washington were concerned that Federal preemption might damage existing protections at the State level, and one railroad indicated a preference for Federal policies and recommendations instead of regulations.

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Not too surprisingly, there was little agreement between attendees on this issue. Currently, the allocation of costs vary according to the State, and according to any existing agreements between the railroads and crossing holders.

The State of Wisconsin explained that in many cases, States and local authorities lacked the funds and/or the staff to assume responsibility for the maintenance of private roadways.

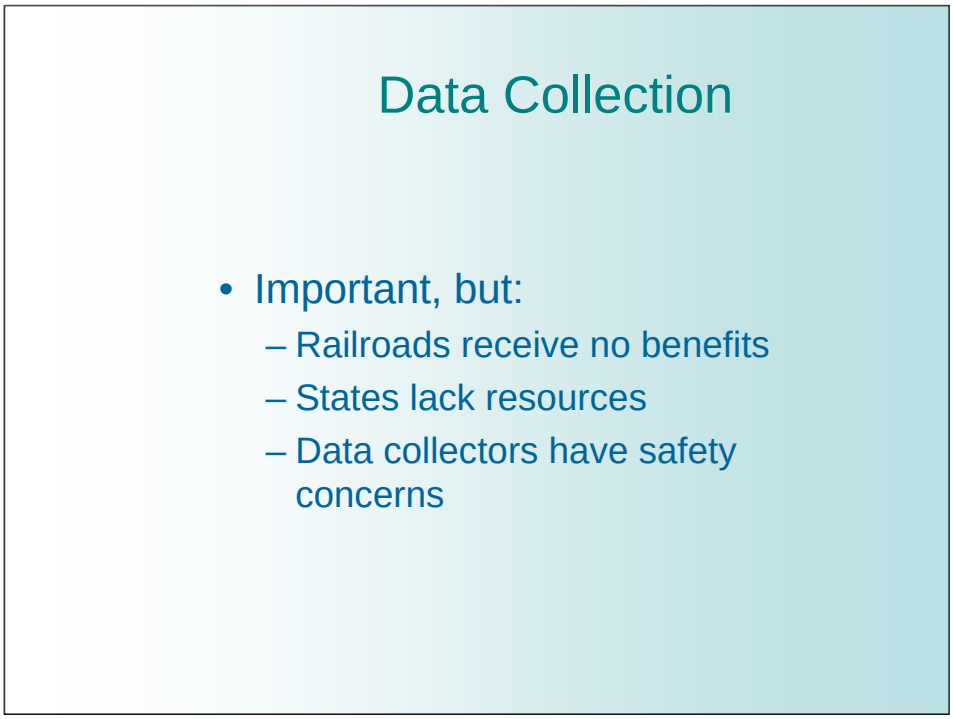
The Association of American Railroads suggested that the private crossing user should bear the costs, while others proposed various schemes for sharing the costs between the government and the private crossing user.

The State of North Carolina pointed out that there are generally no State or Federal funds available for improvements at private crossings, and suggested that the Stakeholders (Federal, State, and Local governments, transit authorities, railroads, and private crossing holders) should develop a methodology to share the costs associated with grade crossing safety treatment, construction, and maintenance.

In most States, disputes must be solved through direct interaction between the railroad and the crossing holder, a process that is cumbersome and fraught with difficulties for both parties. Representatives of the New Orleans and Gulf Coast Railroad indicated that their ability to negotiate is weakened by the lack of any Federal standards or guidelines, and that, therefore, their negotiations often fail.

Failed negotiations may be resolved in a court of law. Both the railroads and the States, however, indicated that local courts may be biased in favor of the crossing holder, and the lack of Federal standards has made it difficult for railroads to establish jurisdiction in Federal courts.

The State of California indicated that the CPUC allows for administrative legal review, and has a dispute resolution process in place. They suggested that, because of the legal issues involving property rights, and contract law, responsibility for dispute mechanisms should remain with the States, and that Federal guidelines or recommendations could assist States that do not currently have dispute resolution processes.

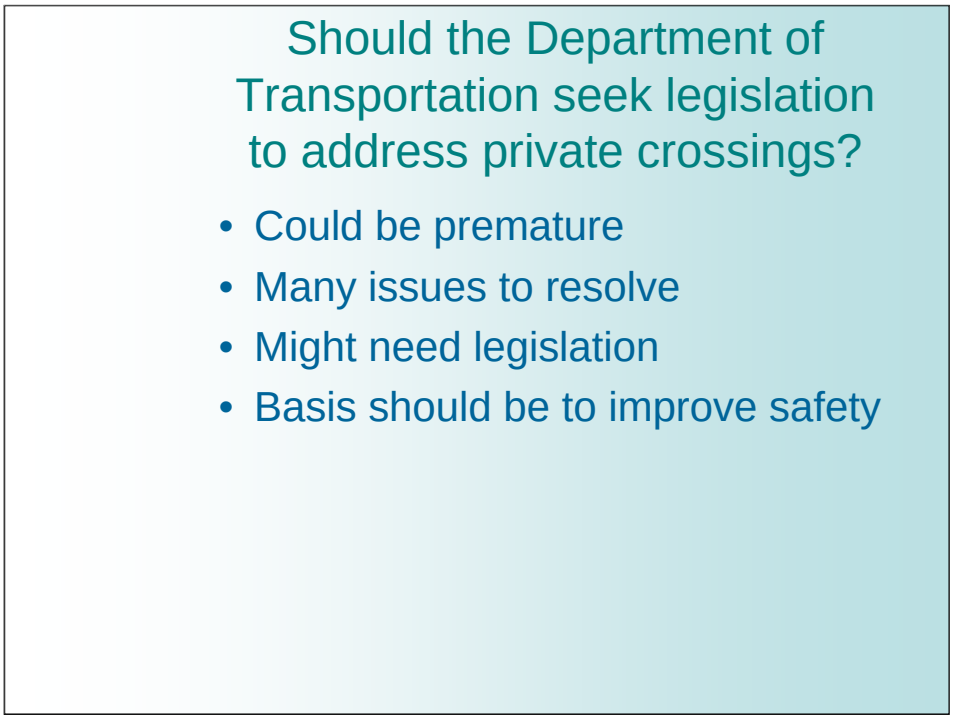


The existing National Inventory coverage of private crossing data was deemed largely inadequate for most analyses, as well as for resource allocation. Some participants suggested additional fields, others looked for greater specificity in the data currently collected. On the whole, participants agreed that safety at private grade crossings would benefit from enhanced or improved data collection.

They noted several issues, however, that would need to be resolved in order for data collection efforts to be successful. First, although the existing private crossing data are currently collected by the railroads, the railroads believe that they receive no material benefit from performing this work. They add that requiring railroads to collect additional data would impose a substantial burden.

Second, States indicated that they do not have staff to conduct an inventory, nor in many cases would they allowed to spend public monies to inventory private property.

Thirdly, many private crossings are in remote or less safe neighborhoods, and data collectors may face some personal risks just to collect the data.



When we raised this question, we elicited some rather spirited responses. Several participants suggested that such an action would be premature until the FRA had had time to consider the comments of the interested parties. Others noted that numerous issues would need to be resolved, including identification of crossing users, establishing crossing agreements, funding, and National security issues.

Other parties, however, strongly encouraged the FRA to seek such legislation, in order to gain enough “regulatory teeth” to control safety issues through a permitting process.

The AAR noted that, should such legislation be sought, the basis for any regulation or action by the FRA would have to be that of increased safety.

Electronic Docket Submissions

- U.S. DOT Docket Management System
  - http://dms.dot.gov/
  - Docket number FRA-2005-23281

The Volpe Center and the FRA will be publishing a report based on the discussions held at the public meetings.

Safety at Private Highway-Railroad Grade Crossings

What if…

What if:

- 1. US DOT establishes a requirement that every private crossing have a standard formal agreement. Crossings for which an agreement cannot be found or created will be closed.

What if…

- 2. A new independent Federal agency (similar to the Surface Transportation Board) were created to oversee the resolution of private crossing disputes?

What if…

- 3. The US DOT provided guidance or standards on crossing design and warning device implementation at private crossings?

What if…

- 4. Organizations such as AASHTO, AREMA, and the NCUTCD were to include sections on private crossings in all existing guidance and standards documents?

What if…

- 5. The railroads were to require all private crossing holders to obtain liability insurance?

What if…

- 6. A Federal Agency (FRA or other) established a process governing the creation, evaluation, and improvement of private crossings?

What if…

- 7. The ultimate responsibility for safety at private crossings resided with State Agencies?

What if…

- 8. The ultimate responsibility for safety at private crossings resided with the railroads?

What if…

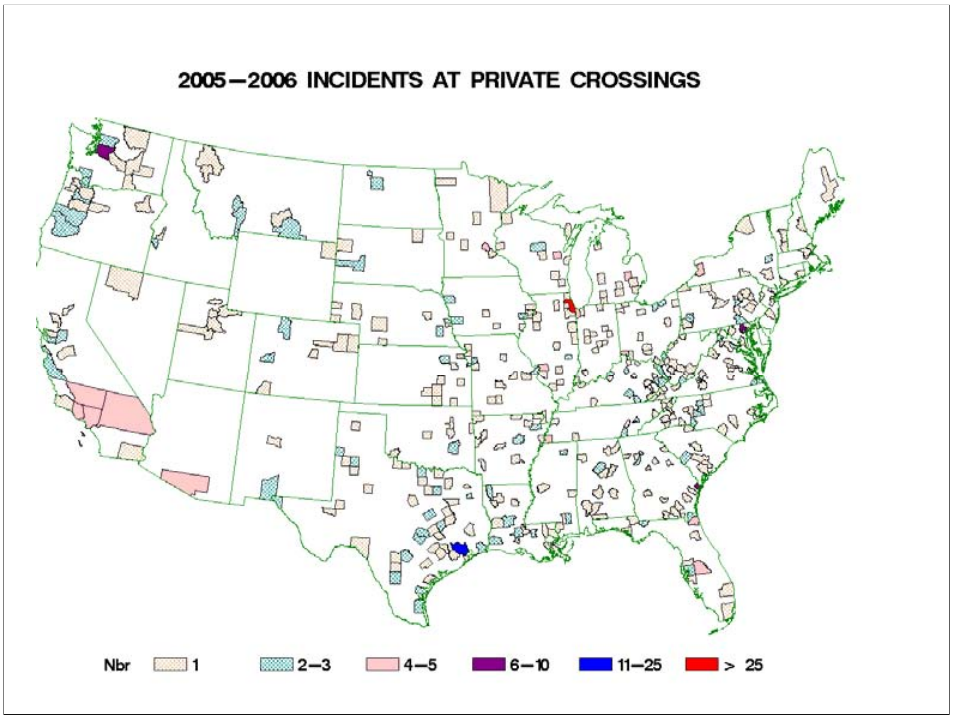
- 9. A private crossing were categorized based on traffic levels and type of use?

What if…

- The FRA were to require that all data currently collected for public crossings also be collected for private crossings?

Safety at Private Highway-Railroad Grade Crossings

Case studies


2005—2006 INCIDENTS AT PRIVATE CROSSINGS
Nbr
1
2—3
4—5
6—10
11—25
> 25

Case 1:

- For 75 years, sole access to historical home provided by prescriptive easement
- Neighboring developer puts in siding that eliminates the private crossing leading to the residence

Case 1

- What rights are assigned to the holder of a long-established prescriptive easement?
- Does the developer/railroad have responsibilities toward the affected crossing holder? If so, what?
- Do State governments (outside the court systems) bear a responsibility for crossings created via prescriptive easements?

Case 2:

- A developer converts farmland to a large residential neighborhood. A private crossing serving the farm suddenly sees a vast increase in traffic counts, and in the type of vehicles using the crossing.

Case 2:

- Who bears responsibility for safety at the crossing? The developer, homeowners, or railroad?
- If a city or county chooses to convert it to a public crossing, who is responsible for reporting this to the State and railroad?

Case 3:

- A private crossing is apparently unused.

Case 3:

- Is there a process for identifying the crossing holder?
- Can the crossing be closed by the railroad?
- Are there statutory or regulatory restrictions that govern this situation?

Safety at Private Highway-Railroad Grade Crossings

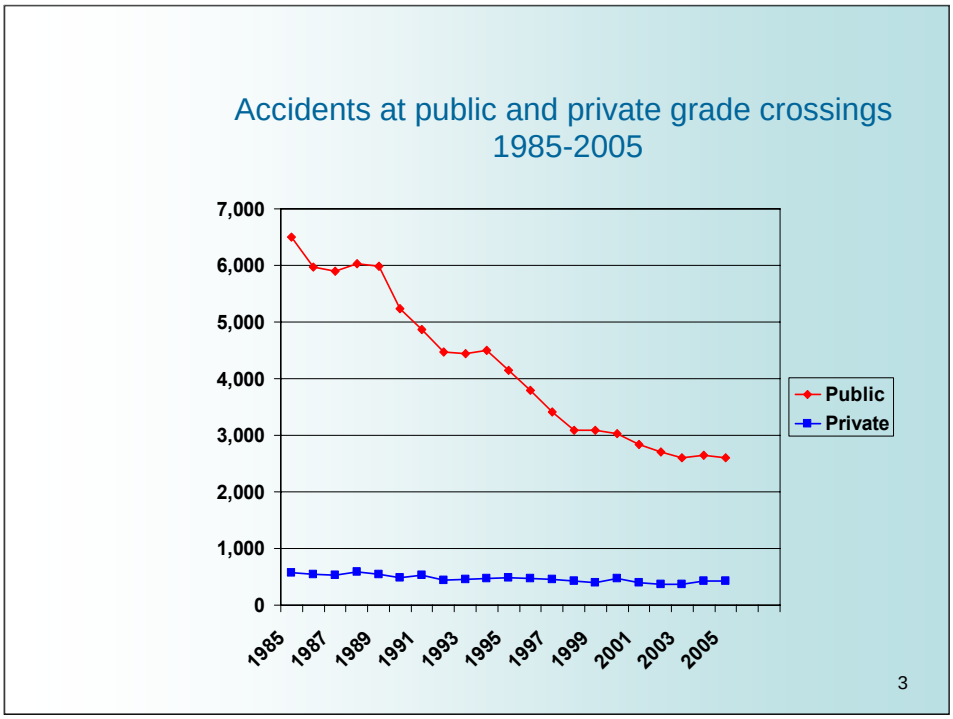
Data Needs

1

FRA Region	All Crossings	Private Crossing Percentage
Region 1	13,573	44%
Region 2	27,945	43%
Region 3	44,075	36%
Region 4	43,295	33%
Region 5	34,478	36%
Region 6	34,920	40%
Region 7	16,115	38%
Region 8	27,207	46%
Total	241,608	39%

2

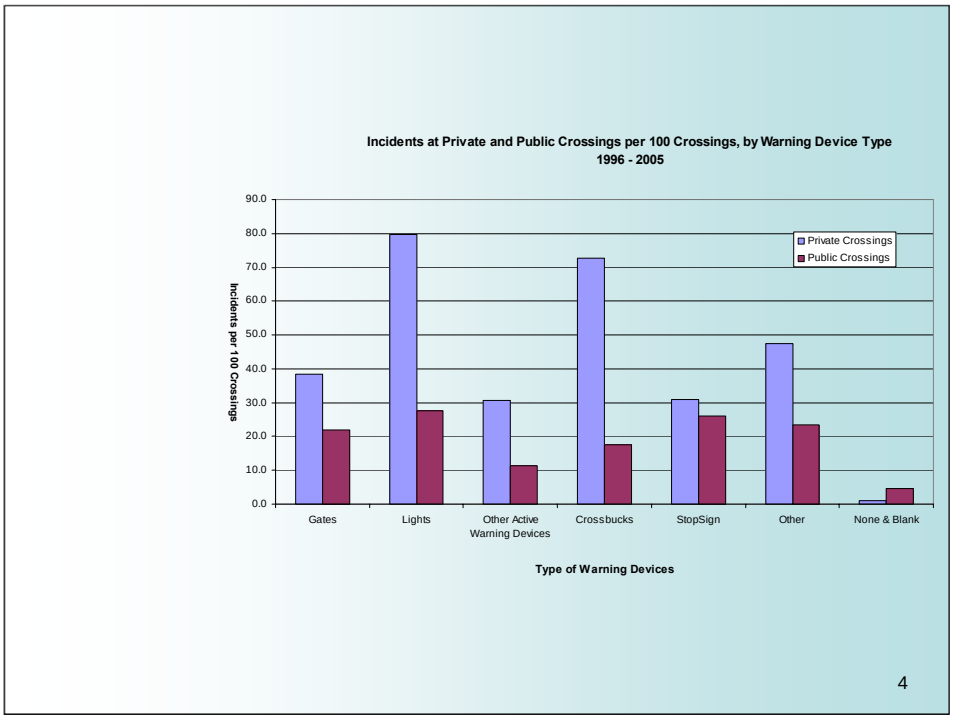
As you can see, regardless of the geographic region, private crossings constitute a significant percentage of all at-grade crossings. The total count Nationwide is about 94,000.

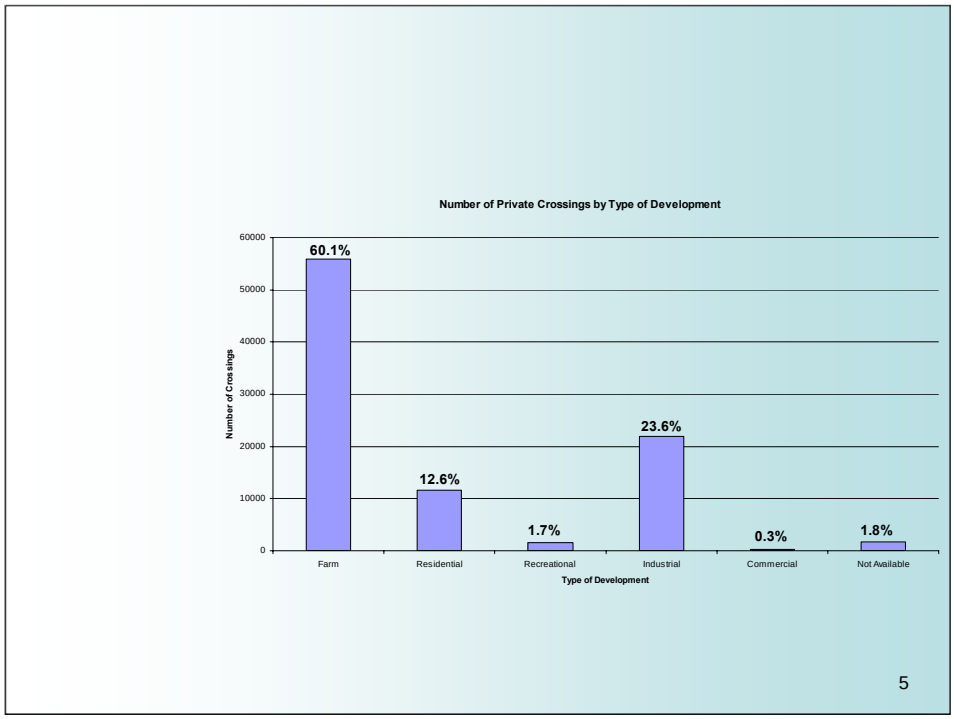


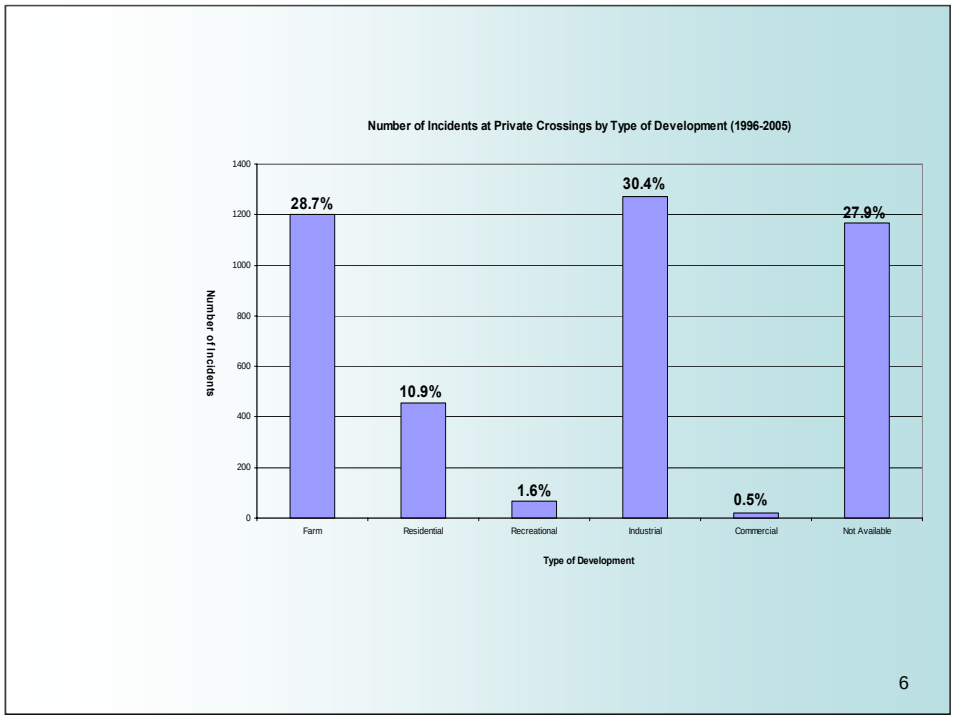
Although accidents at public crossings have declined considerably over the past 20 years (declining by 1/3 over the past decade alone), the number of accidents at private crossings has remained comparatively stable, declining only 10 percent over the past decade.

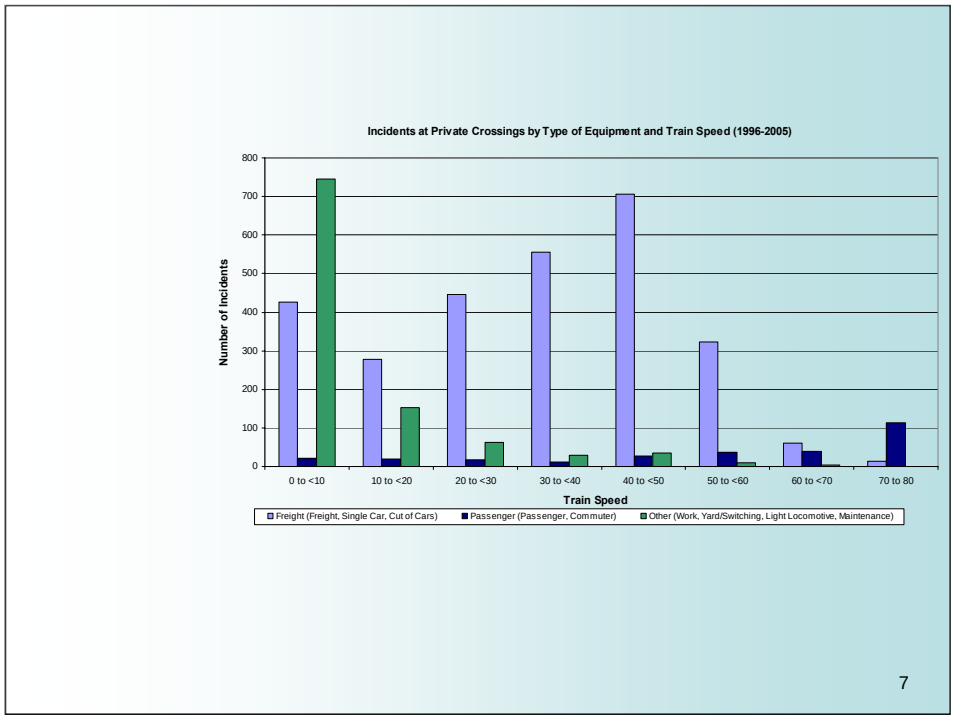
In most years, the number of fatalities occurring in accidents at private crossings exceeded the number of on-duty deaths among railroad employees in all rail operations.

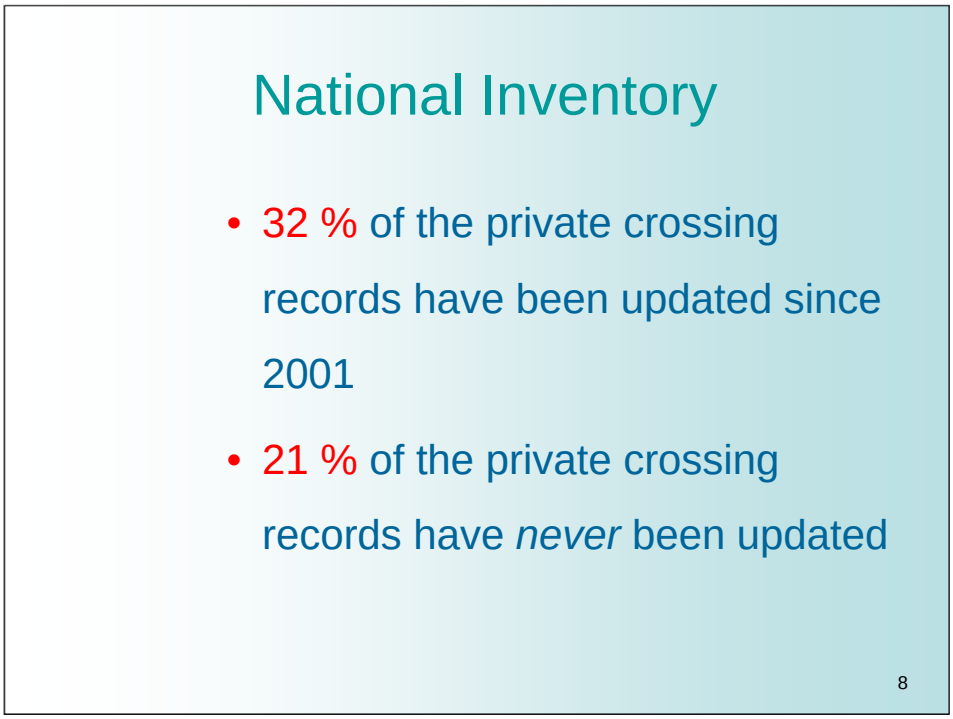
The following are a few examples:


Incidents at Private and Public Crossings per 100 Crossings, by Warning Device Type
1996 - 2005
Incidents per 100 Crossings
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
Private Crossings
Public Crossings
Gates
Lights
Other Active Warning Devices
Crossbucks
StopSign
Other
None & Blank
Type of Warning Devices
4


Number of Private Crossings by Type of Development
60000
50000
40000
30000
20000
10000
0
Number of Crossings
60.1%
12.6%
1.7%
23.6%
0.3%
1.8%
Farm
Residential
Recreational
Industrial
Commercial
Not Available
Type of Development
5


Number of Incidents at Private Crossings by Type of Development (1996-2005)
Number of Incidents
1400
1200
1000
800
600
400
200
0
28.7%
10.9%
1.6%
30.4%
0.5%
27.9%
Farm
Residential
Recreational
Industrial
Commercial
Not Available
Type of Development
6

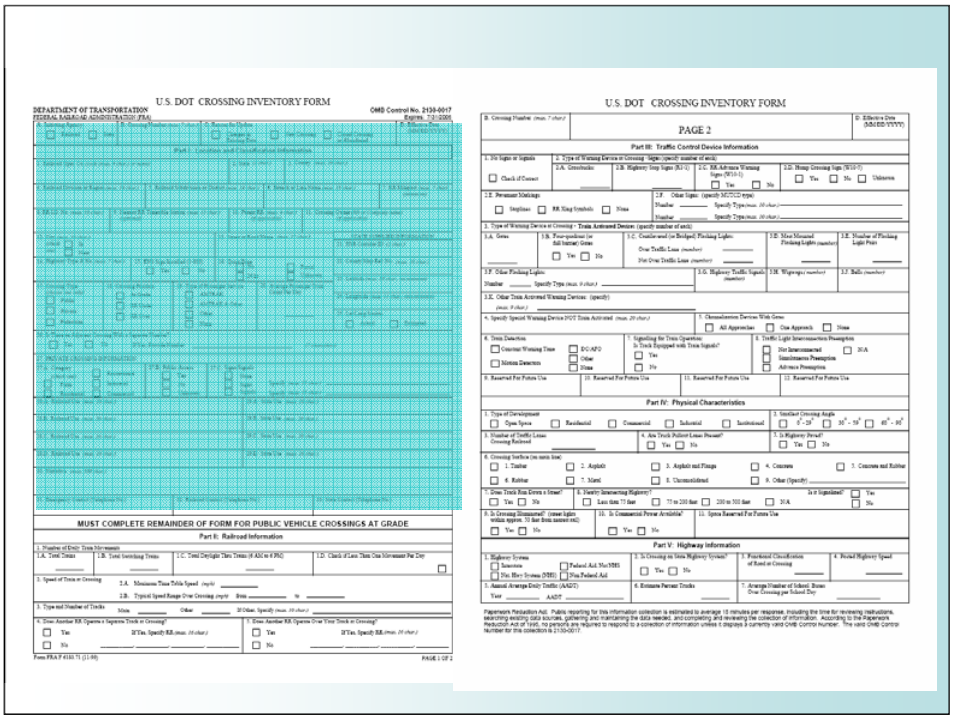

Incidents at Private Crossings by Type of Equipment and Train Speed (1996-2005)
Number of Incidents
800
700
600
500
400
300
200
100
0
0 to <10
10 to <20
20 to <30
30 to <40
40 to <50
50 to <60
60 to <70
70 to 80
Train Speed
Freight (Freight, Single Car, Cut of Cars)
Passenger (Passenger, Commuter)
Other (Work, Yard/Switching, Light Locomotive, Maintenance)
7



The FRA maintains a national inventory of all crossings, public, private, or pedestrian, at grade or grade separated. The data are used by many State, Federal, or private organizations for research, or for resource allocation (determining which crossings are most in need of improvements). It is updated by the States and by the railroads on a voluntary, not mandatory basis.

As you can see, only about 1/3 of the records for private crossings have been updated within the past five years, and a significant portion of the records have never been updated. Analysis on data of this quality must necessarily be somewhat tentative.

The data for public crossings are typically updated more often than this.


U.S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION (FRA)

OMB Control No. 2130-0017
Expires 7/31/2005

MUST COMPLETE REMAINDER OF FORM FOR PUBLIC VEHICLE CROSSINGS AT GRADE

Part II: Railroad Information

Form FRA F 6180.71 (11-98)

PAGE 1 OF 2

U.S. DOT CROSSING INVENTORY FORM

PAGE 2

Part III: Traffic Control Device Information

Part IV: Physical Characteristics

Part V: Highway Information

Paperwork Reduction Act. Public reporting for this information collection is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for this collection is 2130-0017.

This is a shot of the form on which crossing data are collected for the National Inventory. Almost all the data elements are required for public crossings. For private crossings, however, only the sections I have shaded are collected.

Data Uses

- Resource Allocation
  - **USDOT Formula**
  - State Formulae
- Crossing Treatment Selection
  - GradeDec
  - **FRA Quiet Zone Calculator**
- Warning Device Evaluation
  - Sealed Corridor Study

10

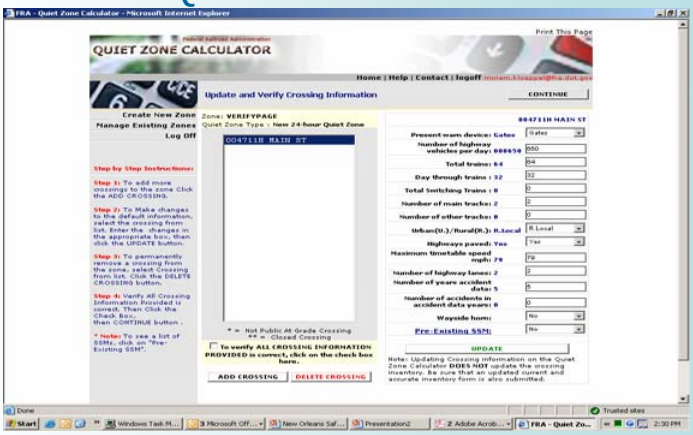
Resource Allocation

- US DOT resource allocation formula
  - Highway and rail traffic counts
  - Number of daily through trains
  - Maximum timetable speed
  - Number of main tracks
  - Highway paved
  - Number of Highway lanes
  - [redacted]
  - [redacted]

11

Crossing Treatment Selection

- FRA Quiet Zone Calculator



Essentially the same fields as for resource allocation

Other Data Desires

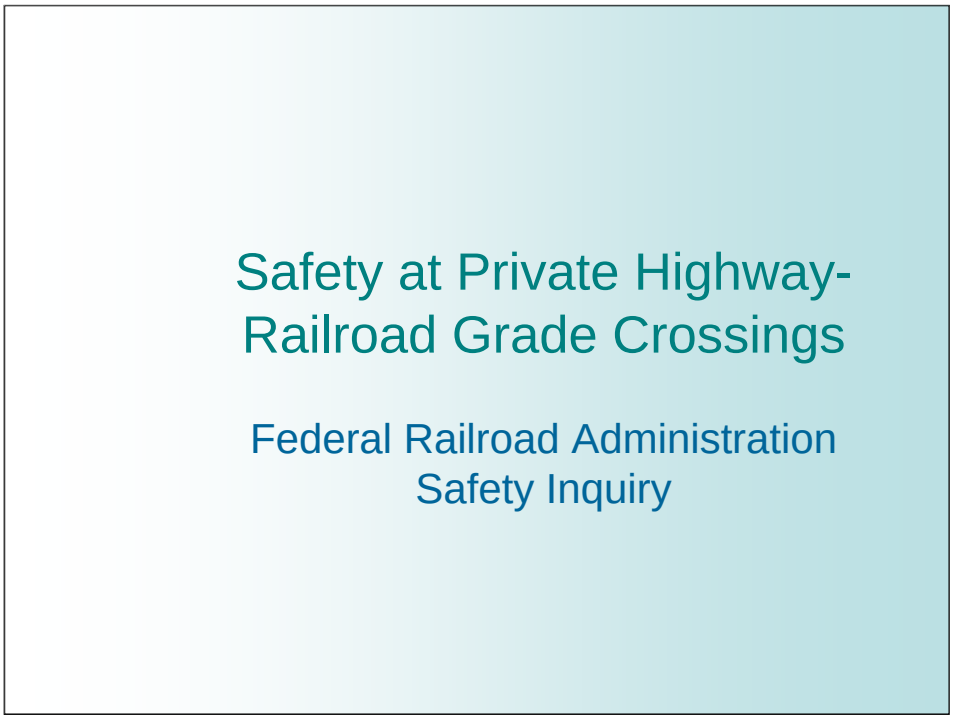
- NTSB recommendations:
  - Sight distance
  - Presence of curves on roadway and track
  - Angle of Intersection
  - Presence nearby intersections

13

Other Data Desires

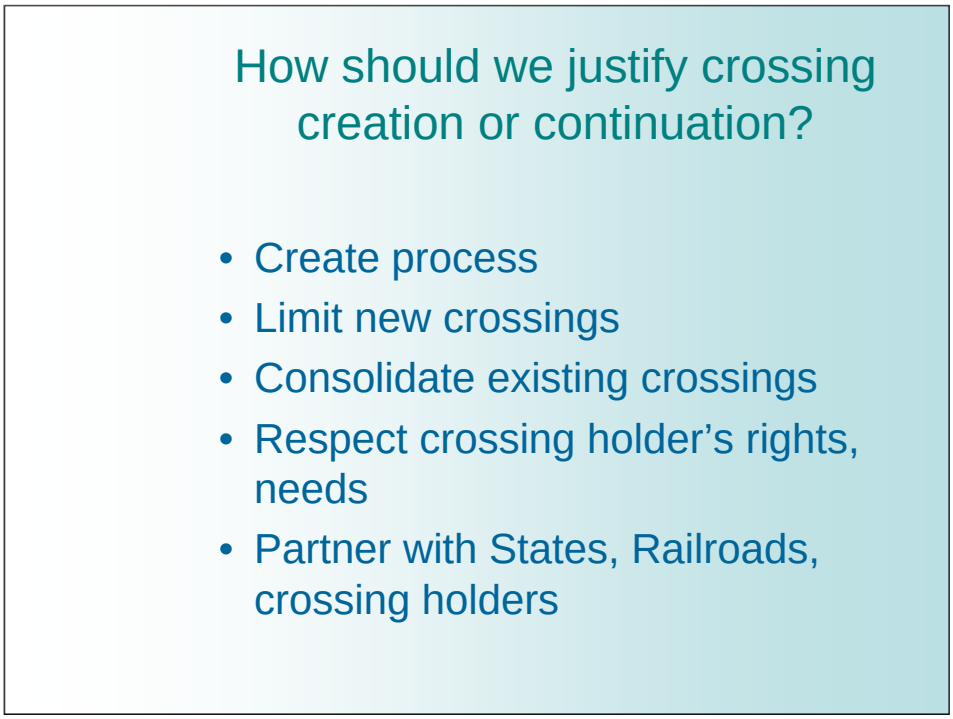
- Latitude/Longitude
- Other suggestions?

14



Good afternoon, Ladies and Gentlemen. Thank you for coming.

At each meeting, a number of attendees emphasized the difficulty in approaching a solution to the problem of safety at private crossings. Most States, for example, indicated that they had little or no jurisdiction to affect decisions about creation of private crossings, or, except in fairly limited ways, even determine the traffic control devices placed at such crossings. Railroads indicated that, although safety at all grade crossings was a matter of vital interest to them, they were often powerless to induce private landowners to make needed improvements.



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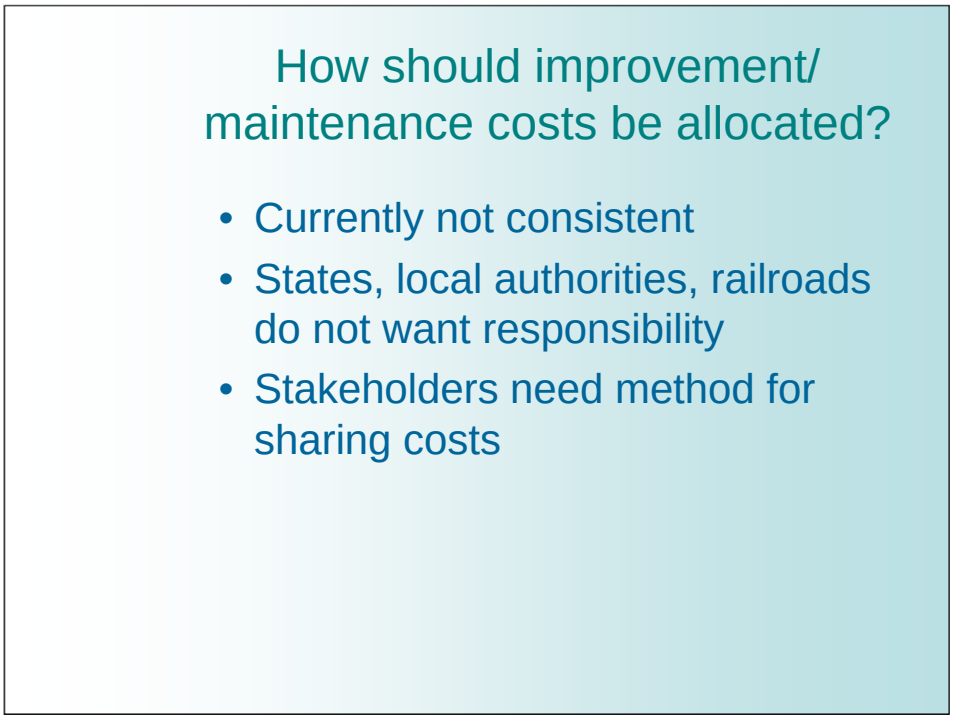

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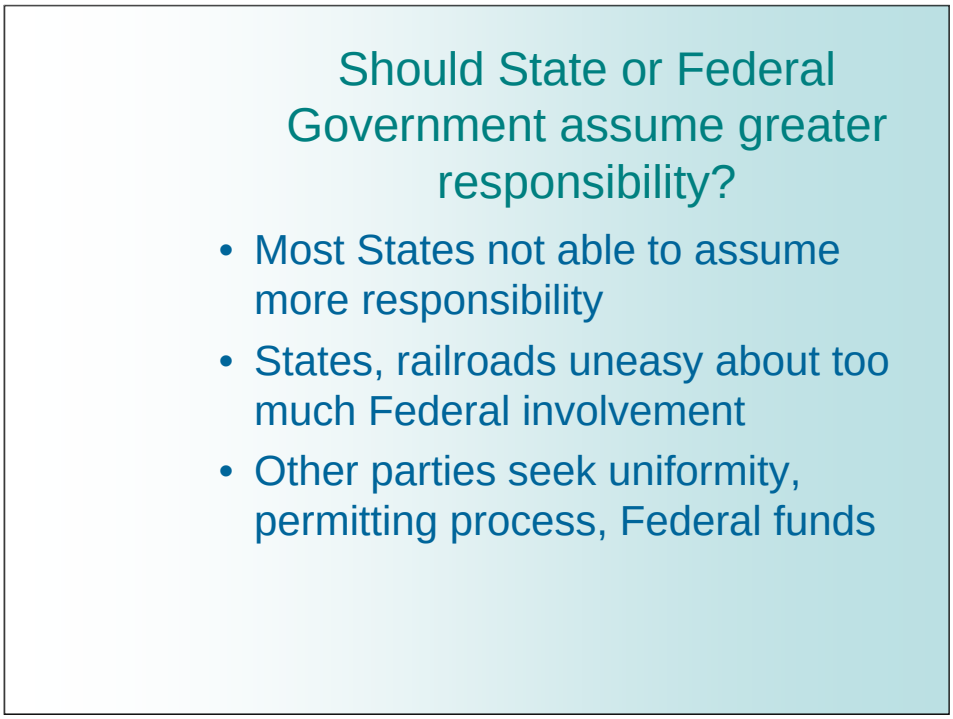

The responses to this question were also varied. Although the State of California asserted a willingness to continue their strong presence in the area of private crossing safety, most States indicated that they did not even have the ability to keep up with their responsibilities at public crossings, let alone the private crossings.

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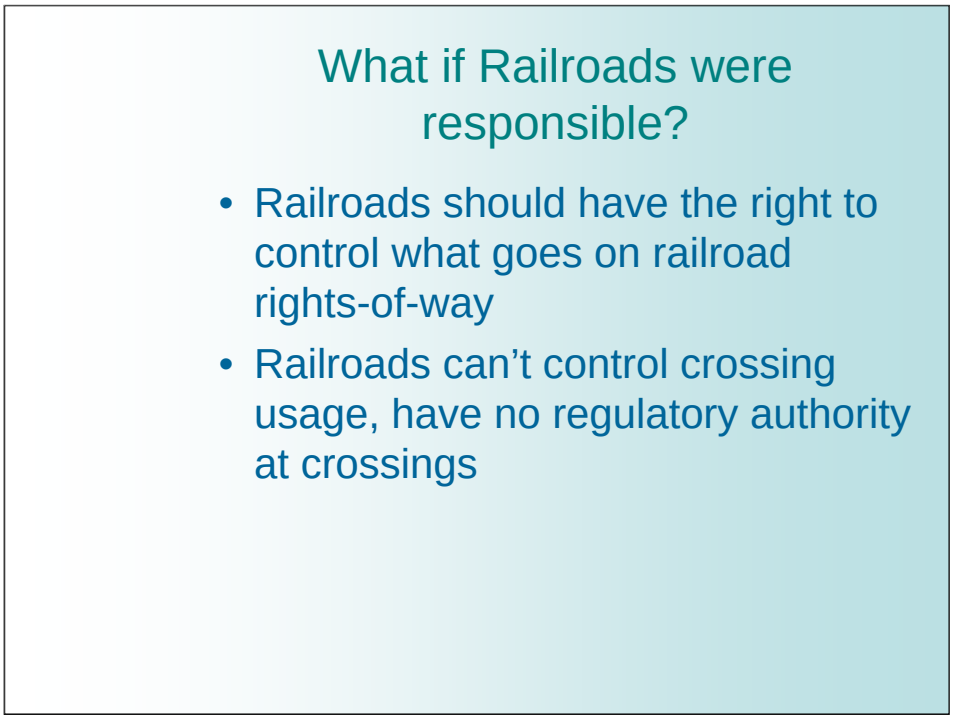
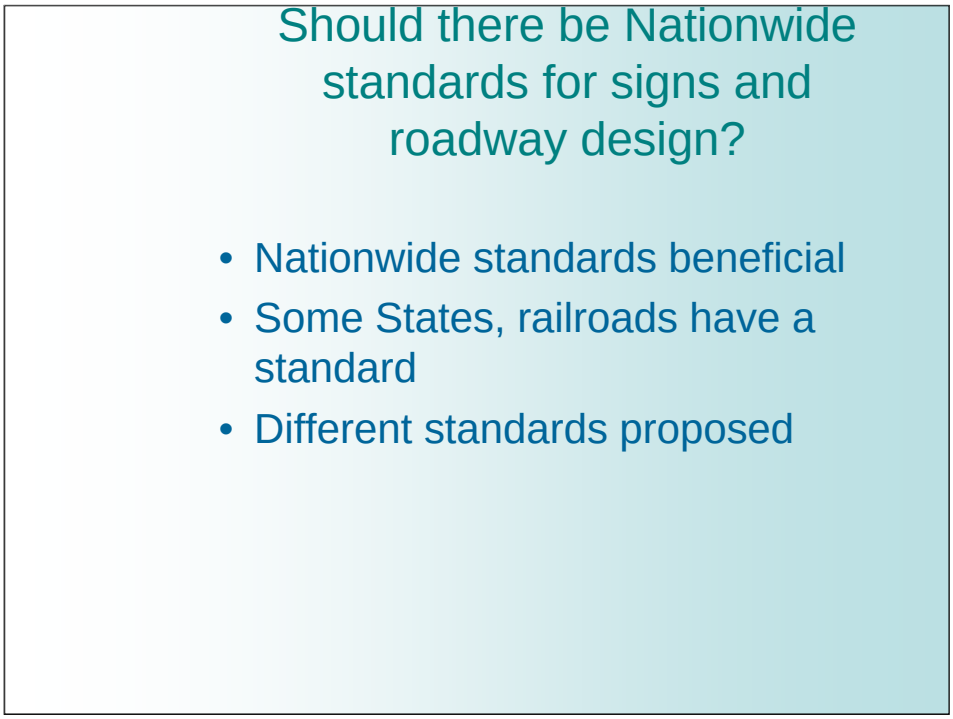


One railroad insisted that railroads should be recognized to be interstate highways of commerce, and that they should have the right to control what goes on their rights of way.

Others, however, noted that railroads cannot control crossing usage, and that they have no regulatory authority at crossings.

It was generally agreed that trying to place the full responsibility for safety at private crossings on the railroads would likely not lead to a successful program of safety improvements.



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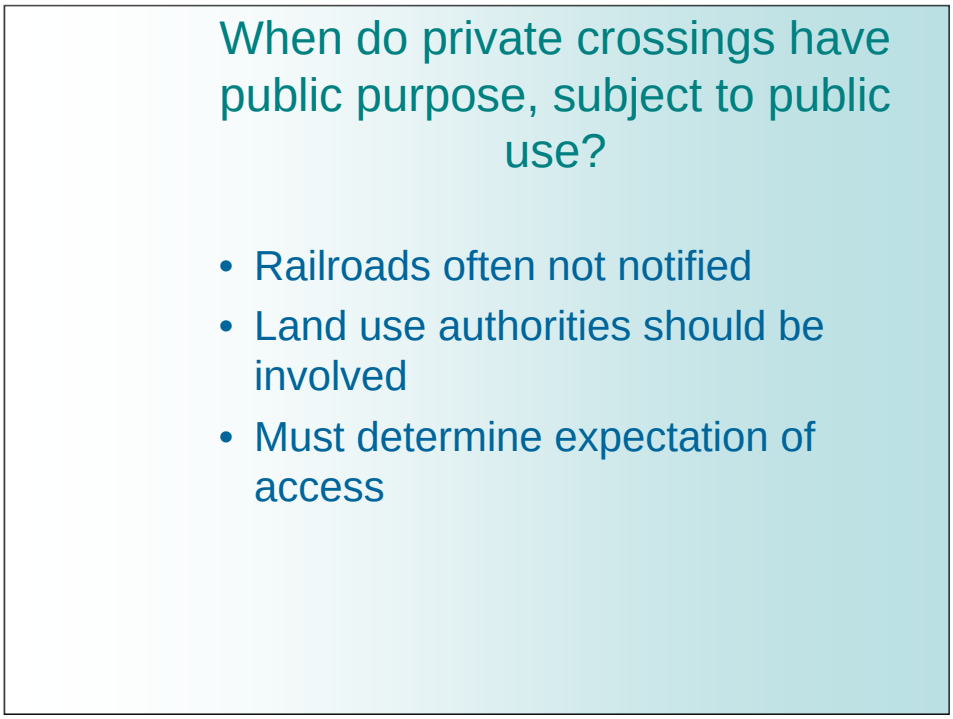


Much of this discussion centered around the instances where land use changes. As land is developed, a farm field-to-field crossing can become access to a large residential development, or even a commercial establishment like a shopping center. Attendees stated that when this occurs, the amount of highway traffic can increase dramatically, and the risk at that crossing will rise with it.

Attending railroad representatives stated that in most states, there is no mechanism for alerting the railroad to any such change in use at a private crossing. They indicated that, in their experience, the State of California is unique in its ability to identify such land use changes, and to effect crossing improvements at such private crossings.

Under the California Environmental Quality Act, the CPUC has the authority to review all proposed developments concerning potential impact on public safety. They have done so for the past three years. In the CPUC's opinion, the best time to identify land use changes is when the development is undergoing the planning and permitting process; for this reason they strongly advocate involving local permitting authorities.

Even where land use is not changing, attendees agreed that it was important to identify existing private crossings with public use. One participant suggested that it would be most valuable to identify whether the public has an expectation of free access to the private roadway.

Meeting attendees listed a great many different uses for private crossings, each with its own risk characteristics. They noted, however, that it would be hard to reach agreement about thresholds for categorization based on traffic counts or traffic types. One railroad also contended that such categorization might hinder efforts at consolidation.

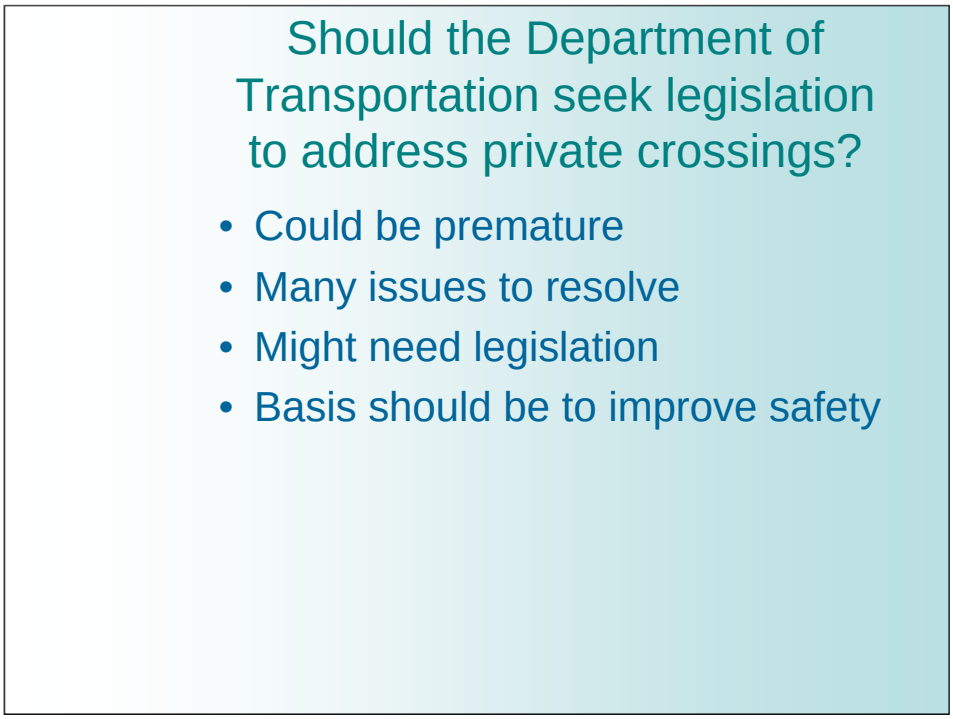
More than one attendee noted that in Canada, instead of depending on roadway ownership to determine appropriate treatment levels, they classify crossings as either “restricted” or “unrestricted” based on whether the public has access.

One attendee suggested that we adopt a categorization system almost as simple as that used in Canada. He proposed that crossings could be public, private, or semi-public. He defined a semipublic crossing to be a highway-railroad grade crossing that is owned by other than a public agency but to which the public expects free access.

Are innovative traffic control devices available?

- Need exists
- None yet ready for widespread use
- Liability, cost, lack of effectiveness hinder implementation

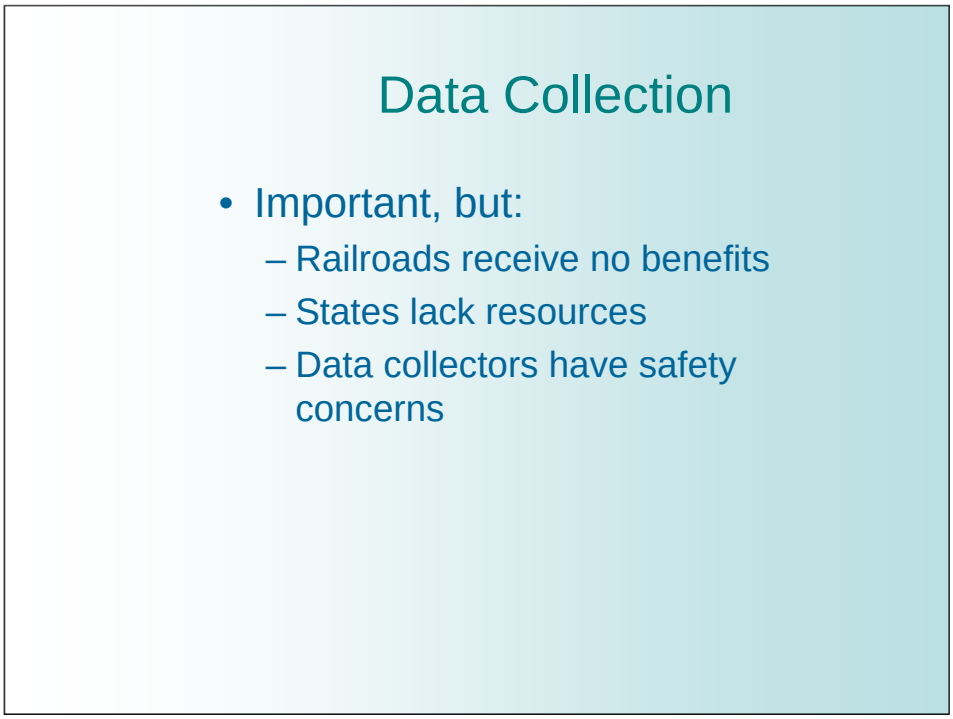
Although most attendees agreed that the development of less expensive warning devices could be beneficial, none had found one that had provided enough of a cost reduction, or enough of a safety improvement, to justify their use on a systemwide basis. Further comments suggested that railroads could not use non-failsafe options because of liability considerations.



When we raised this question, we elicited some rather spirited responses. Several participants suggested that such an action would be premature until the FRA had had time to consider the comments of the interested parties. Others noted that numerous issues would need to be resolved, including identification of crossing users, establishing crossing agreements, funding, and National security issues.

Other parties, however, strongly encouraged the FRA to seek such legislation, in order to gain enough “regulatory teeth” to control safety issues through a permitting process.

The AAR noted that, should such legislation be sought, the basis for any regulation or action by the FRA would have to be that of increased safety.



The existing National Inventory coverage of private crossing data was deemed largely inadequate for most analysis, as well as for resource allocation. Some participants suggested additional fields, or more specificity in the existing data. On the whole, meeting attendees agreed that safety at private crossings would benefit from enhanced or additional data collection.

They noted, however, a series of issues that would need to be resolved in order for data collection efforts to be successful. First, although data on private crossings are currently collected by railroads, the railroads believe they receive no material benefit from doing this work—they add that requiring railroads to collect additional data would impose a serious burden.

Second, States do not have the staff to conduct an inventory, nor in many cases would they be allowed to spend public monies to inventory private property.

Thirdly, some private crossings are in remote or less safe neighborhoods, and the data collectors may face some personal risks just to collect the data.

Next Steps…

- U.S. DOT Docket Management System
  - http://dms.dot.gov/
  - Docket number FRA-2005-23281

Good afternoon, Ladies and Gentlemen. Thank you for coming.

Private Crossing Findings

- Safety not improving as rapidly as at public crossings
  - Public funding helps improve safety
  - Public funding generally not available at private crossings
  - Proportionately fewer active crossings

The use of public funds to make improvements has played an important role in improving safety at public crossings. Except in very rare circumstances, however, public funding has not been, and currently is not available for use at private crossings. As a result, the proportion of private crossings equipped with more effective warning devices, particularly active warning devices, is much lower than the proportion of public crossings so equipped. Improvements in safety (as reflected in the accident, fatality, and injury counts Nationwide) at private crossings, therefore, have lagged behind the improvements seen at public crossings.

Private Crossing Findings

- Accident, incident, and casualty rates may have dropped
  - Inventory data lacks traffic counts
- Accident, incident, and casualty counts remain stagnant
- Opportunities for accidents may rise
  - Population increases
  - Changes in land use
  - Growth in highway and rail traffic

- Current data are not sufficient to allow analyses of trends in either highway or rail traffic at private crossings. Assuming, however, that exposure trends at private crossings are similar in direction to those at public crossings, even if they are not similar in scale, it seems reasonable to believe that exposure at private crossings has risen somewhat over the past decade. Based on this assumption, accident, incident, and casualty rates at private crossings have likely fallen somewhat over the same time period. National totals of accidents, incidents, fatalities, and injuries are stagnant, however.
- Population increases, changes in land use, and both recent and projected growth in rail and highway traffic suggest that exposure to accident risk at private crossings is likely to continue increasing. Accordingly, the number of opportunities for accidents, and therefore for casualties, will also increase unless new initiatives for improving private crossing safety are identified and effectively implemented.

Private Crossing Findings

- No cohesive policy, regulatory structure
  - Redundant crossings
  - Inadequately designed crossings
  - Poorly maintained crossings
- Numerous populations at risk
  - Motorists
  - Train occupants
  - Others in crossing vicinity

- Absence of a cohesive policy or regulatory structure at any level has led to the existence of private crossings that are redundant, inadequately designed, and/or poorly maintained.
- Motorists represent only a portion of the populations at risk due to accidents at private crossings. The risks of collision and of derailment mean that the train crews, train passengers, and others in the vicinity of the crossing may be exposed to derailing equipment or hazardous materials releases.

Private Crossing Findings

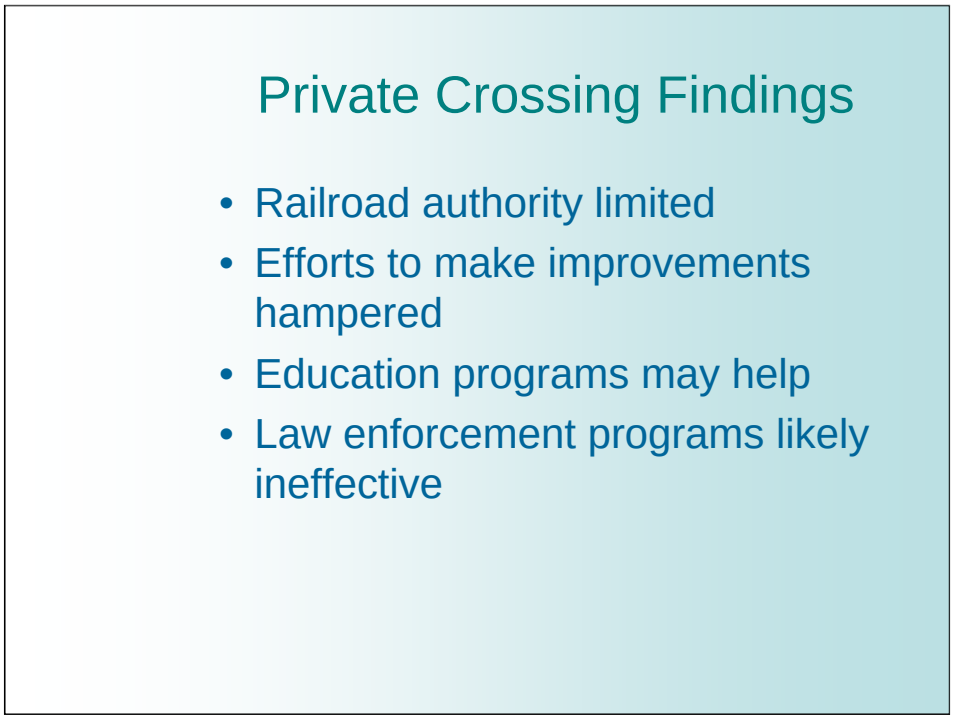
- States, local authorities generally lack jurisdiction
- Crossings created without considering public safety, necessity
- No Standards (in most States)
  - Signage
  - Roadway design

- With few exceptions, no public bodies at the State or local level are vested with authority or responsibility for safety at private crossings.
- No process currently exists that predicates the creation of new private crossings or the continuation of existing crossings on considerations of public safety or necessity.
- In most States, there are no publicly-sanctioned engineering criteria for private crossings. Accordingly, users of those crossings may encounter a variety of signage, road surface conditions, and other engineering attributes.

Private crossing Findings

- Most crossings lack agreements
- Public use a key safety concern
- Local planning departments not involved

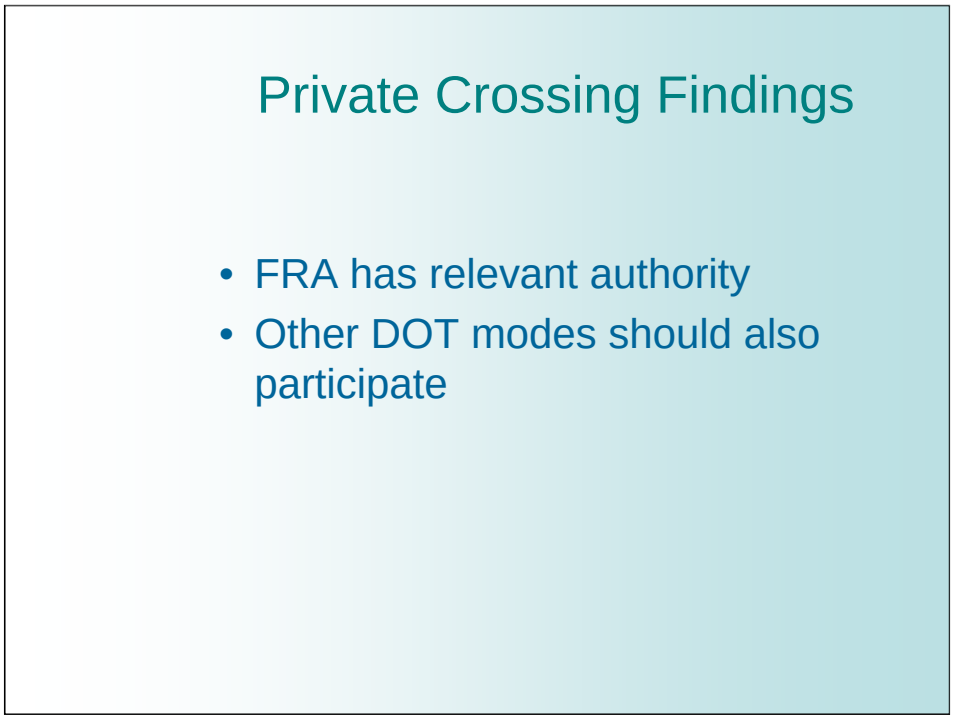
- For most private crossings in the Nation, there is no agreement in place specifying the responsibilities of the railroad and the holder. Disputes must typically be resolved through direct interaction between the railroad and the crossing holder, or, failing that, through litigation.
- The level and type of highway use, i.e. whether the public has an expectation of free access to a crossing, is a key factor affecting the safety at that crossing.
- In general, local planning and zoning authorities do not regularly take into account the impacts on interstate rail transportation of the development decisions that they oversee.



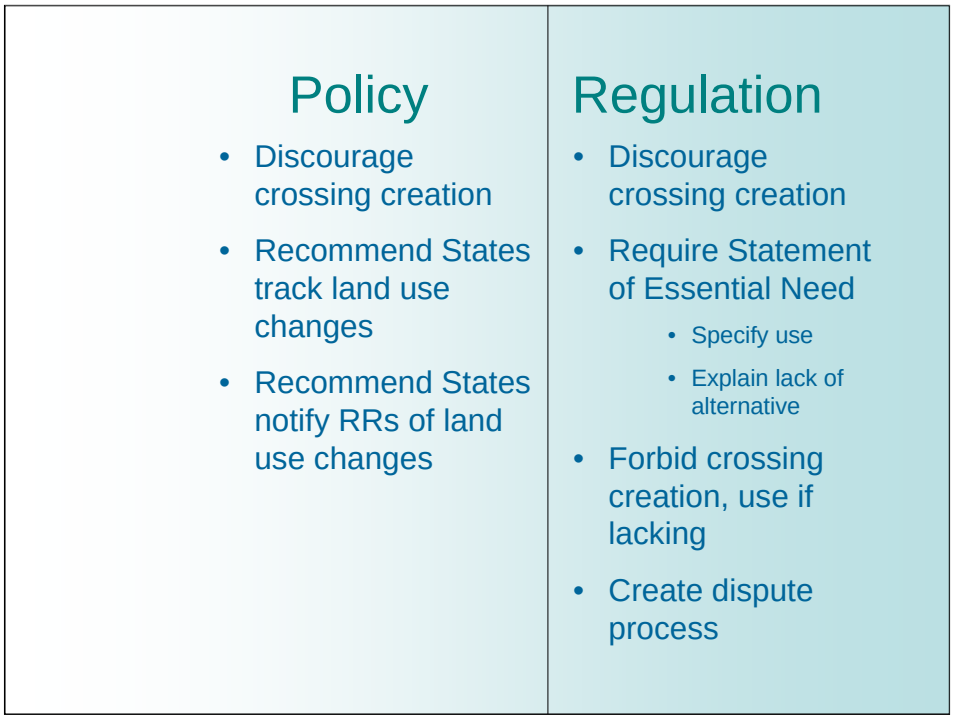
- Railroads' ability to control roadway design or traffic control device selection and placement is limited. They also often lack the authority to control the highway usage of a given crossing
- At substantial cost, railroads make significant efforts to close or improve private crossings. However; they are hampered by common law, and in some cases statutory law, which do not recognize the degree to which private crossings threaten the safety of road users, railroad employees, and potentially other members of the public in the vicinity.
- The contribution of education and awareness programs to safety at private crossings is not documented, but safety knowledge and awareness would appear relevant to private crossing safety, provided that engineering arrangements present suitable cues to facilitate safely traversing the intersection.
- Since State laws applicable to public roadways do not apply at private crossings, and since most users of private crossings are likely authorized users, law enforcement does not appear to be a useful strategy for improving safety at private crossings.

Effective solutions to improving safety at the Nation's private highway-rail grade crossings will require active collaboration between the parties involved. These parties include, but may not be limited to:

- the holders of the right to cross the railroad,
- the railroads,
- local public planning approval authorities,
- state agencies that enforce crossing design standards,
- professional and/or industry organizations responsible for developing standards,
- the U.S. Department of Transportation (DOT).



Within the DOT, the Federal Railroad Administration (FRA) is the only agency with statutory authority directly relevant to the subject matter. However, in the interest of effectively serving the multimodal populations at risk, other DOT surface modes should participate in program development.



The FRA proposes to publish new National Policy, to include the following:

•A clear declaration that new private crossings are disfavored, except where clearly necessary after evaluation of all reasonable alternatives.

•A declaration that States should establish or identify a process whereby they are notified of land use changes that might affect safety at a private grade crossing, and publication of exemplar State legislation for those States that do not currently have jurisdiction over safety at private crossings.

•A declaration that States should establish or identify a process for notifying affected railroads of any land use changes that might affect safety at a private grade crossing, and publication of exemplar State legislation for those States that do not currently have jurisdiction over safety at private crossings.

U.S. DOT will seek legislation providing explicit authority to be vested in the Secretary, supplementing the Railroad Safety Laws, for regulation of safety at private highway-rail grade crossings. The legislation should be sufficiently broad to enable the following:

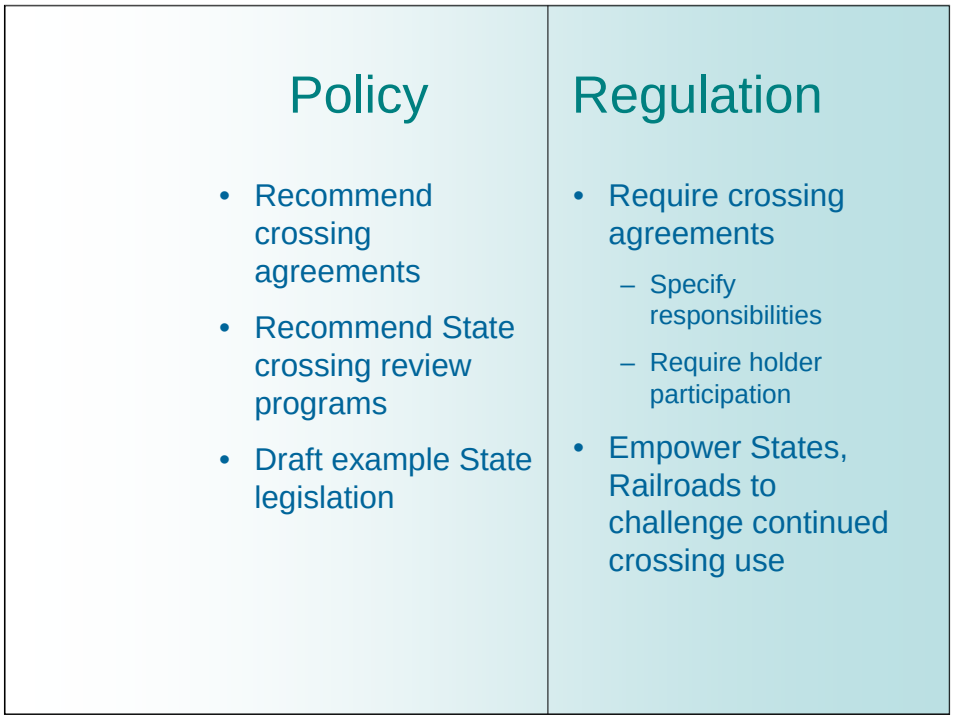
•Adopt a clear declaration of National Policy that new private crossings are disfavored, except where clearly necessary after evaluation of all reasonable alternatives.

•Require that a Statement of Essential Need be provided to the railroad before any new private crossing is created (whether public use, agricultural, or other) or the use changes (e.g., light residential to commercial or industrial).

•Require that the Statement specify the intended use (volume, type of traffic, nature of permission to use), and why alternative access is not available or is not suitable.

•Establish that no new private crossing may be opened for traffic, or subjected to a change in use, until equipped in according with the requirements above.

•Provide a procedure for the railroad, State agency, or FRA to challenge the Statement or propose alternative access.



Policy:

•A declaration that every private crossing should have a recorded agreement addressing, at a minimum, safety-related factors.

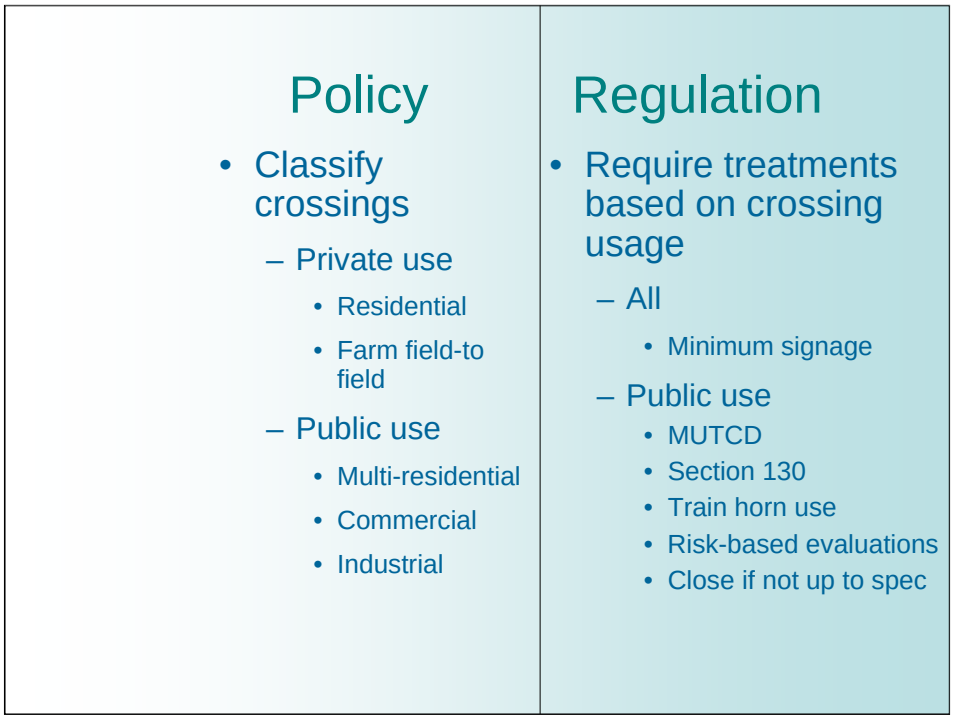
•A declaration that States should establish programs for review of existing private crossings, and publication of exemplar State legislation for those States that do not currently have jurisdiction over safety at private crossings.

Regulation:

•Require that the railroad and holder enter into an agreement with specified elements where the crossing cannot be closed.

•Specify the responsibilities of the crossing holder and the railroad. Since use of the crossing is determined by the holder, place a clear responsibility on the holder to participate in making necessary improvements at the crossing.

•Provide a mechanism for the railroad(s) using the rail line to challenge the continued necessity for the crossing.



Policy:

•Establishment of an enhanced private crossing classification scheme for inclusion in the National Grade Crossing Inventory, and for use by diagnostic teams, that resembles the following:

- •Private crossings with private use (where there is not a perception that the general population is invited or allowed access)
  - •Residential driveways (fewer than 4 units)
  - •Farm field-to-field crossings
- •Private crossings with public use
  - •Large residential driveways
  - •Commercial crossings where the public access is expected (shopping centers, business parks, medical offices, parking lots, sports arenas, other recreational sites)
  - •Industrial crossings (dependent on traffic count, design vehicle)

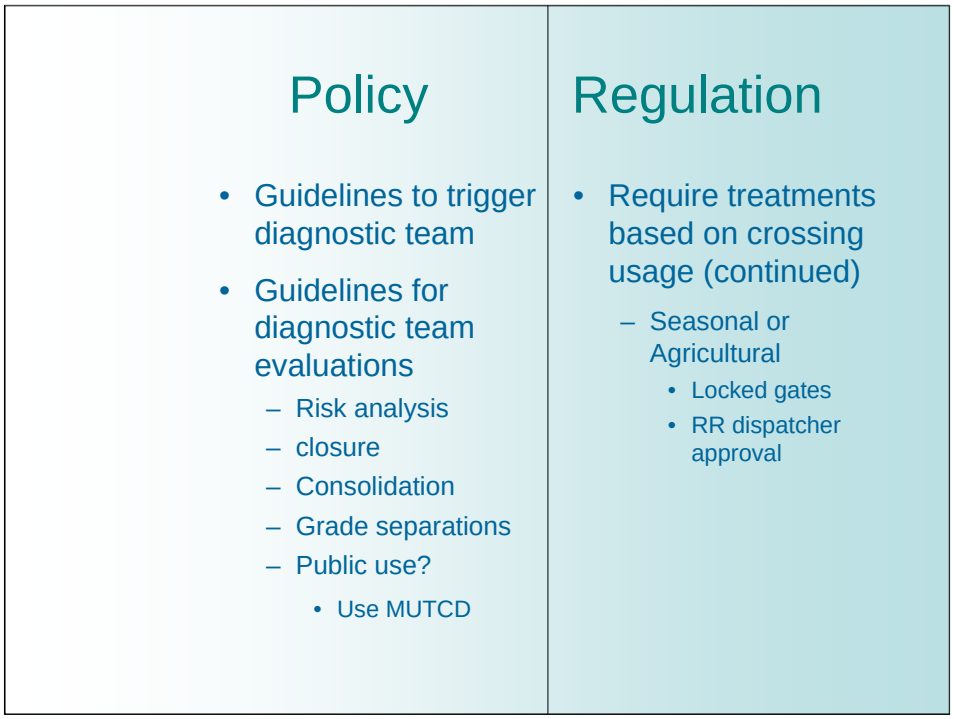
•Note: In determining public use, the type of train traffic should also be a factor taking into consideration the impact of a collision on passengers on the train or on near-by facilities.

Regulation:

•Classify private crossings by use, providing suitable objective definitions.

•Require treatments based on private crossing classifications, as follows:

- •All private crossings:
  - •Specify minimum signage to consist of a crossbuck, supplemented by a stop or yield sign, and, in the case of non-public use crossings, a standard plate stating, “Private Crossing - Authorized Users Only.” Require replacement of existing signage as needed, not to exceed 7 years from date of final rule.
- •Private crossings with Public Use:
  - •Provide that public use crossings shall conform to the MUTCD.
  - •Make public use crossings eligible for improvement under section 130; however, require a documented statement of public benefits before funds are expended.
  - •Except where a quiet zone is in effect, require use of the train horn at public use crossings under the same rules as public crossings.
  - •Provide risk-based regulatory requirements for improvements at public use crossings and other private crossings (except agricultural crossings; see below), including sight distance requirements as applicable. Consider factors such as road traffic, rail traffic, presence of rail passenger service, maximum train speeds, etc.
  - •After period of progressive work to improve these crossings, require that they be closed if not equipped according to requirements.



Policy:

•Establishment of guidelines or thresholds of exposure or other factors affecting safety, to determine when those new private crossings, or those crossings at which land use changes affect safety, when they are deemed necessary, should be subject to a risk-based evaluation by a diagnostic team.

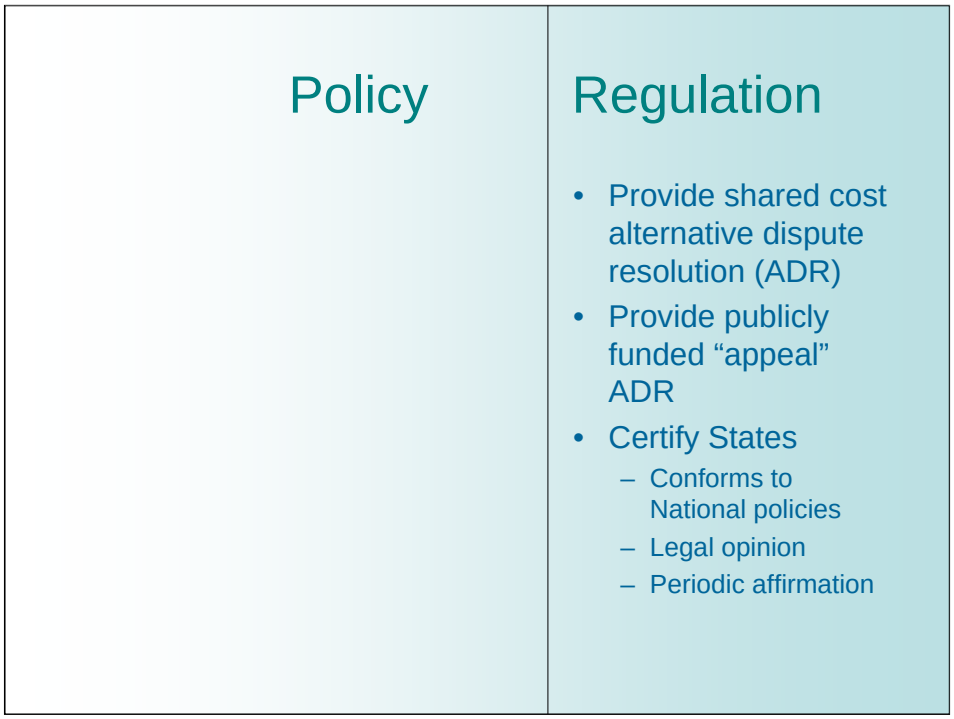
•Establishment of guidelines for diagnostic teams that promote a Nationally consistent approach to making improvements at private crossings, to include the following:

- •Risk levels should be calculated for each private crossing. Analysis should be performed to determine the appropriate risk remediation treatments. Risk above a certain threshold should trigger use of AASHTO roadway design standards.
- •Diagnostic teams should consider crossing closure before considering any other treatment option.
- •Where possible, diagnostic teams should consider consolidating crossings. This may be accomplished by providing access either to a nearby public crossing, or to a nearby private crossing that can be adequately upgraded to improve safety.
- •Where closure or consolidation proves infeasible, diagnostic teams should examine the possibility of implementing inexpensive grade separations.
- •Should the preceding options prove infeasible, determination of the appropriate treatment should be predicated in part on whether the private roadway is open to public travel, and on whether there are access restrictions.
- •Crossings at which there is an expectation of public use should be treated in a manner consistent with the guidelines in the MUTCD.

Regulation:

•Private Crossings with Seasonal or Agricultural Use:

- •Specify use of locked gates or minimum signage (above) for agricultural crossings on tracks where the maximum authorized train speed exceeds 25 mph.
- •Specify a requirement for railroad dispatcher approval to traverse the crossing where maximum authorized train speed exceeds 49 mph, except where some form of active warning is provided.



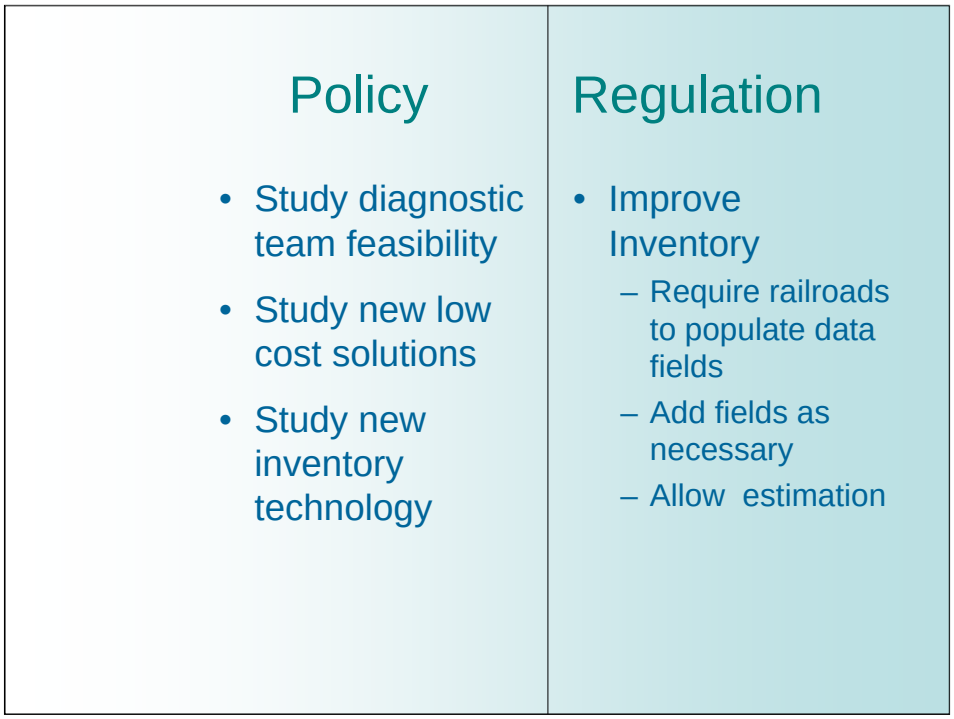
Regulation:

•Provide one or more mechanisms for alternative dispute resolution when a dispute arises regarding the opening, closing or improvement of a private crossing. (Shared cost, railroad and holder.)

•Provide a mechanism for dispute resolution, available only where alternative dispute resolution has failed. (Public cost.)

•Provide a means of certifying any State capable of handling these issues within the State.

> •Certification would be based on substantial conformity with the policies adopted at the National level, provision of legal opinion that the State agency is authorized to undertake the function, and periodic affirmation by the State agency that it is funded at a level permitting it to show progress in addressing the issue.



FRA will also pursue the following pilot projects:

•A study of the feasibility of using diagnostic team approach on private crossings in a corridor.

•A study of the effectiveness or applicability of new low cost solutions.

•Study methods of using best available technology for transmitting private crossing data to inventory.

Regulation:

•Improve the National Highway-Rail Grade Crossing Inventory with respect to private crossings:

- •Require railroad to populate private crossing data fields in the inventory, providing updates not less frequently than once every 3 years.
- •Add data elements as needed for analysis.
- •Permit railroad to estimate information not directly available.

Safety at Private Highway-Railroad Grade Crossings

Federal Railroad Administration
Safety Inquiry

Good afternoon, Ladies and Gentlemen. Thank you for coming.

Private crossing safety has for some time been a matter of concern to the US Department of Transportation and to other Federal Agencies.

• In 1993, the FRA hosted an open meeting to initiate industry-wide discussions.

•In its 1994 Rail-Highway Safety Action Plan, the USDOT proposed to develop national minimum standards for private crossings.

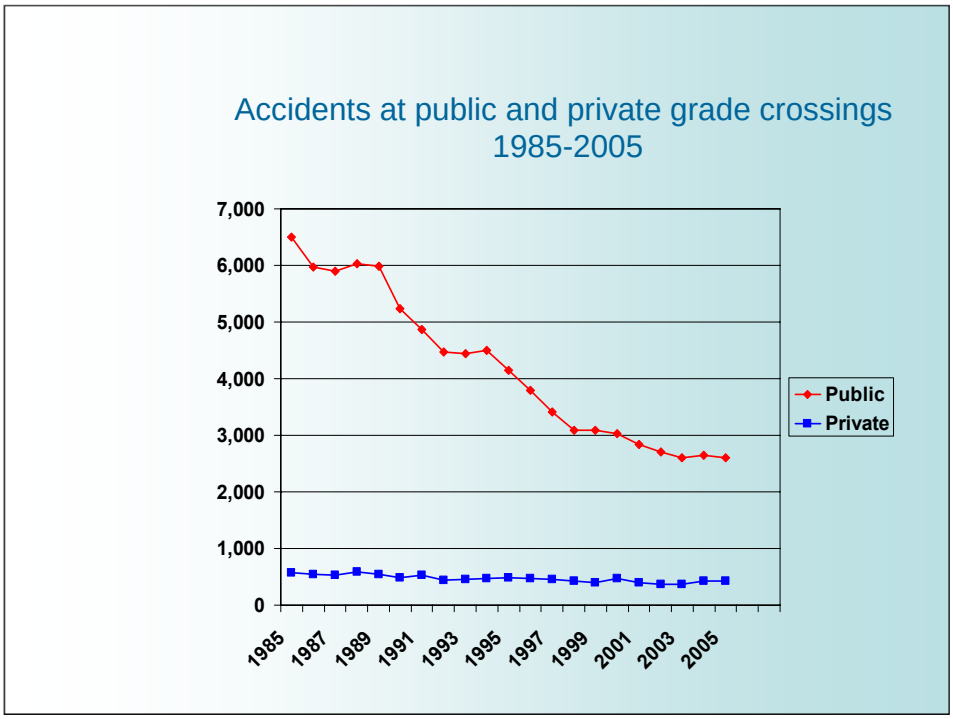
•In its 1997 study on Safety at Passive Grade Crossings, the NTSB highlighted the need for some system to improve private crossing safety, and recommended that the USDOT, in conjunction with the States, determine governmental oversight responsibility for safety at private grade crossings.

•In 1999, the NTSB weighed in again in its report on a private grade crossing accident in Portage, Indiana. In this case, the NTSB recommended that the DOT eliminate any differences between public and private crossings with regard to funding or requirements for safety improvements.

•In 2004, the USDOT published an updated Action Plan, in which the FRA committed to leading an effort to define responsibility for safety at private crossings. Today's meeting is a vital part of this effort.

FRA Region	All Crossings	Private Crossing Percentage
Region 1	13,573	44%
Region 2	27,945	43%
Region 3	44,075	36%
Region 4	43,295	33%
Region 5	34,478	36%
Region 6	34,920	40%
Region 7	16,115	38%
Region 8	27,207	46%
Total	241,608	39%

The FRA maintains offices in each of 8 geographic regions. As you can see, regardless of the region, private crossings constitute a significant percentage of all at-grade crossings. The total count Nationwide is about 94,000.



Although accidents at public crossings have declined considerably over the past 20 years (declining by 1/3 over the past decade alone), the number of accidents at private crossings has remained comparatively stable, declining only 10 percent over the past decade.

In most years, the number of fatalities occurring in accidents at private crossings exceeded the number of on-duty deaths among railroad employees in all rail operations.

The following are a few examples:

Public Meetings

- August 30, Fort Snelling, MN
- September 27, Raleigh, NC
- October 26, San Francisco, CA
- December 6, New Orleans, LA

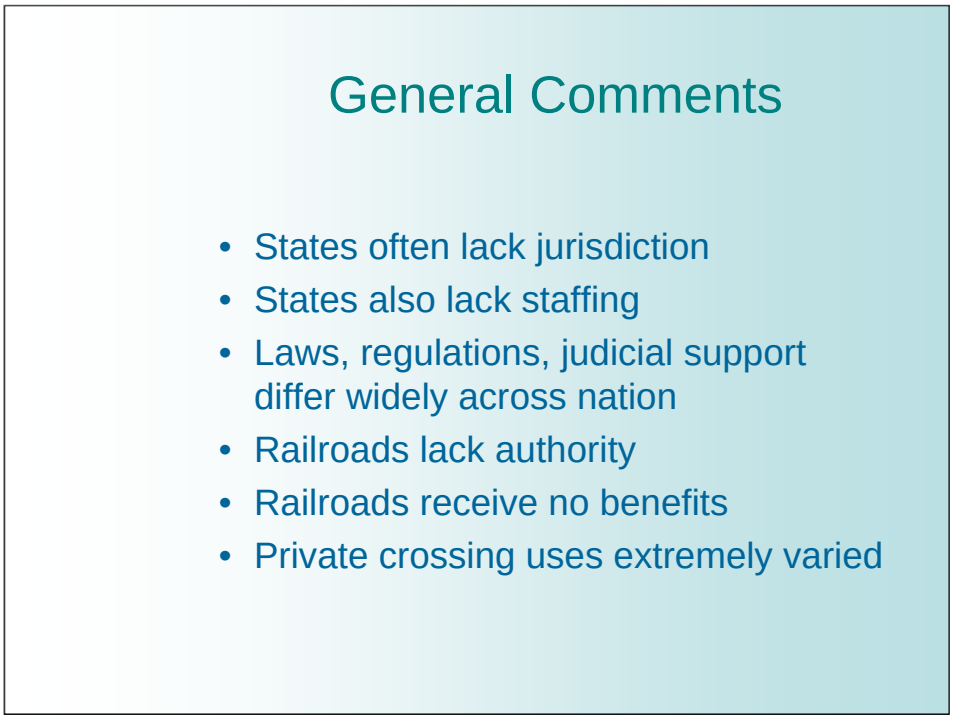
- February 15,200, Syracuse, NY

To gather information on the current state of the art, as well as ideas about possible solutions to existing problems, the FRA has held a series of public meetings.

Discussion Topics

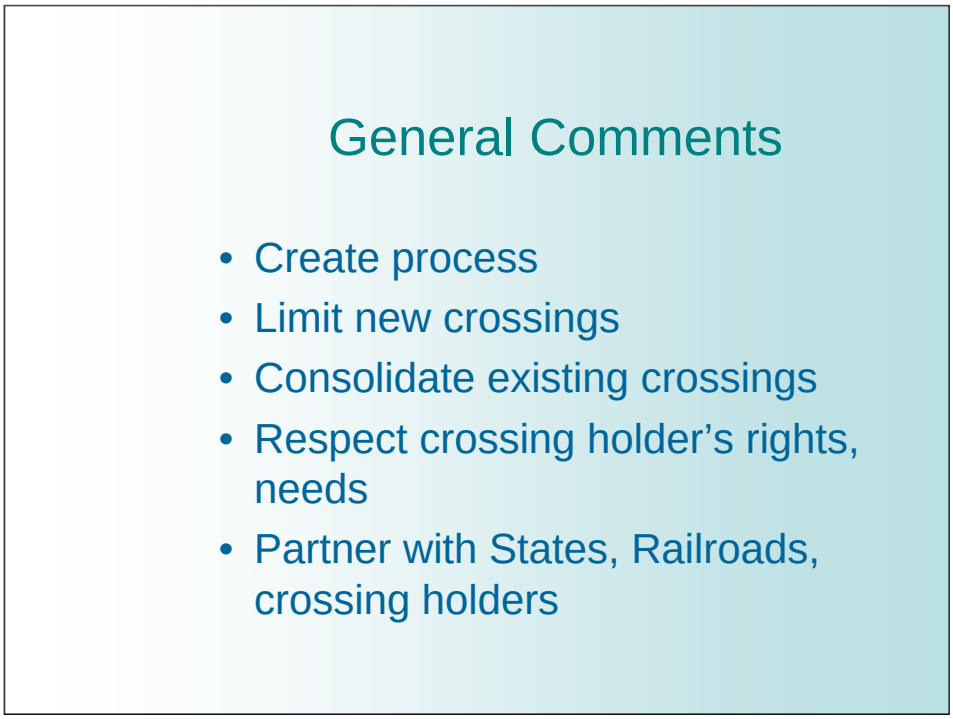
- General Comments
- Grade Crossing Categories
- Need for Standard Signs
- Design Standards
- Rights and Responsibilities
- Data Needs

The FRA sought comments on a wide variety of subjects relating to private crossings. These are some of the principle topic areas.



At each meeting, a number of attendees emphasized the difficulty in approaching a solution to the problem of safety at private crossings. Most States, for example, indicated that they had little or no jurisdiction to affect decisions about creation of private crossings, or, except in fairly limited ways, even determine the traffic control devices placed at such crossings. Railroads indicated that, although safety at all grade crossings was a matter of vital interest to them, they were often powerless to induce private landowners to make needed improvements.

Railroads also noted that they receive no benefits from the existence of most private crossings—benefits fall almost entirely to the holder of the right to cross.



Many meeting attendees indicated that there is currently no process in place to help the parties involved make decisions that consider safety issues at private crossings.

Several parties, including the Brotherhood of Railroad Signalmen and Citizens for Rail Safety advocated fairly aggressive elimination of private crossings, by prohibiting the creation of new crossings, and by closing or consolidating existing private crossings.

Other parties pointed out that this was more difficult than it sounded, with the New Orleans and Gulf Coast Railroad stating that in their case, local authorities gave them little or no support in their efforts to close redundant crossings or prevent new ones.

Some private crossing holders perceived the current methods for addressing crossing closure to be unfair, giving them little or no input into how their property would be affected.

The State of North Carolina, however, appears to have had some success at resolving these types of apparently conflicting interests by partnering with the interested parties to improve safety at private crossings.

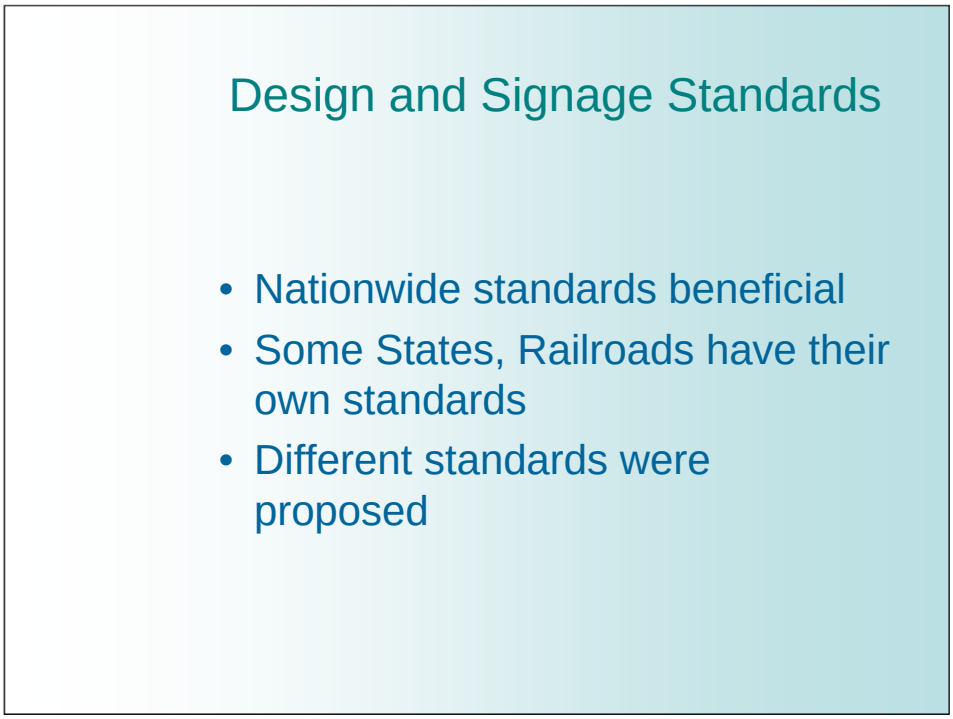
Grade Crossing Categories

- Many categories
  - Seasonal agricultural
  - Residential
  - Commercial, etc
- Need to look at expected use levels
  - Private
  - Public Use

Meeting attendees provided a long list of the various ways in which crossings can be categorized.

They asserted that it would be difficult to revise the inventory to encompass all possible types of crossings, and expressed concern that by 'over-specifying' crossing categories, the railroads might find it much more difficult to arrange crossing consolidations and closures.

Later discussions focused on the benefits of creating a category known as 'public use', which would be a crossing where the roadway was owned by other than a public agency, but to which the public had an expectation of free access.



Meeting attendees all seemed to agree that development and application of Nationwide standards, both for crossing engineering design and for placement of traffic control devices at private crossings would be beneficial.

It was noted, however, that a handful of States, as well as several individual railroads, have created standards of their own, each one different from the other.

Some attendees suggested that private crossings should be treated exactly the same as public crossings, but others believed that appropriate guidelines should be developed through partnership with AASHTO, AREMA, APTA, and the National Committee on Uniform Traffic Control Devices.

The responses to this question were also varied. Although the State of California asserted a willingness to continue their strong presence in the area of private crossing safety, most States indicated that they did not even have the ability to keep up with their responsibilities at public crossings, let alone private crossings.

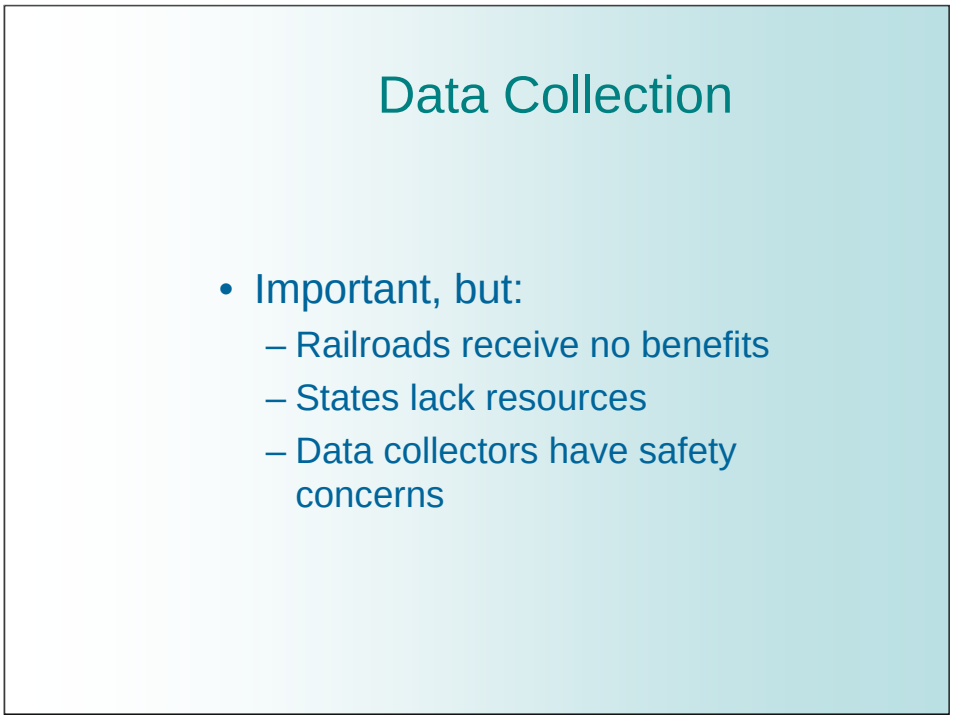
California and Washington were concerned that Federal preemption might damage existing protections at the State level, and one railroad indicated a preference for Federal policies and recommendations instead of regulations.

Others, however, advocated more uniformity in decisionmaking through use of a permitting process overseen by the FRA; one party also suggested that the FRA should take a more proactive approach to providing funding for improvements at private crossings.

Meeting attendees agreed that in many cases, there is no documentation available assigning rights or responsibilities for safety at private crossings. Attendees indicated that such legal documents often provide a basis for negotiations to modify or close a crossing, and that their absence could render negotiations impossible.

The Association of American Railroads indicated that railroads generally lacked the authority to close or relocate private crossings, or even to require appropriate safety measures. Like numerous other States, the State of North Carolina indicated that they lacked direct authority over private crossings, and stated that they needed tools to improve safety.

By comparison, the California Public Utilities Commission stated that, unlike a great many States, they have the authority to determine necessity for crossing, and to require safety improvements. They emphasized the need, however, for the local authorities who give permission for new development to accept responsibility to address railroad safety.



The existing National Inventory coverage of private crossing data was deemed largely inadequate for most analyses, as well as for resource allocation. Some participants suggested additional fields, others looked for greater specificity in the data currently collected. On the whole, participants agreed that safety at private grade crossings would benefit from enhanced or improved data collection.

They noted several issues, however, that would need to be resolved in order for data collection efforts to be successful. First, although the existing private crossing data are currently collected by the railroads, the railroads believe that they receive no material benefit from performing this work. They add that requiring railroads to collect additional data would impose a substantial burden.

Second, States indicated that they do not have staff to conduct an inventory, nor in many cases would they allowed to spend public monies to inventory private property.

Thirdly, many private crossings are in remote or less safe neighborhoods, and data collectors may face some personal risks just to collect the data.

Should the Department of Transportation seek legislation to address private crossings?

- Could be premature
- Many issues to resolve
- Might need legislation
- Basis should be to improve safety

When we raised this question, we elicited some rather spirited responses. Several participants suggested that such an action would be premature until the FRA had had time to consider the comments of the interested parties. Others noted that numerous issues would need to be resolved, including identification of crossing users, establishing crossing agreements, funding, and National security issues.

Other parties, however, strongly encouraged the FRA to seek such legislation, in order to gain enough “regulatory teeth” to control safety issues through a permitting process.

The AAR noted that, should such legislation be sought, the basis for any regulation or action by the FRA would have to be that of increased safety.

Electronic Docket Submissions

- U.S. DOT Docket Management System
  - http://dms.dot.gov/
  - Docket number FRA-2005-23281

The Volpe Center and the FRA will be publishing a report based on the discussions held at the public meetings.

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UNITED STATES DEPARTMENT OF TRANSPORTATION

FEDERAL RAILROAD ADMINISTRATION

Safety at Private Highway-Rail

Grade Crossings

Public Meeting

----------x

Public Meeting held on July 26, 2007, at 9:33 AM, at the Renaissance Syracuse Hotel, 701 East Genesee Street, Syracuse, New York, before Sally B. Maiorano, Registered Merit Reporter, Certified Realtime Reporter, Certified CART Provider, Certified Shorthand Reporter, and Notary Public in

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GRADY C. COTHEN, JR., Deputy Associate Administrator for Safety Standards and Program Development, Federal Railroad Administration

ANYA A. CARROLL, Principal Investigator, Rail and Transit Systems Division, Volpe National Transportation Systems Center

RONALD E. RIES, Staff Director, Crossing Safety & Trespass Prevention Program, Federal Railroad Administration

MIRIAM KLOEPPEL, Highway-Rail Grade Crossing and Trespasser Safety Division, Office of Safety, Federal Railroad Administration

Also Present:

CLARENCE W. "IKE" SCOTT, Director of Rail Safety, New York State Department of Transportation, Office of Safety and Security Services

Also Present (Continued):

WILLIAM D. BURT, Chairman, Regulatory Review Committee, Railroads of New York, Incorporated

STUART A. SCHWARTZ, Norfolk Southern Corporation

JAMES P. LOUIS, Secretary-Treasurer, Brotherhood of Locomotive Engineers and Trainmen

GREGORY LUND, Brotherhood of Locomotive Engineers and Trainmen

BRIAN K. SALTZ, General Attorney, Long Island Railroad

WILLIAM M. BROWDER, Director of Operations, Association of American Railroads

JAMES STEM, Alternate National Legislative Director, United Transportation Union

CAROL A. HARRIS, General Commerce Counsel, Union Pacific Railroad

Also Present (Continued):

PHILLIP R. POICHUK, Senior Crossing Engineer, Railway Safety Inspector, Engineering Branch, Transport Canada

SHANE WHITEMORE, CSX Transportation

RANDY DICKINSON, Regional Program Manager for Grade Crossing Safety, Federal Railroad Administration

MARK H. McKEON, Regional Administrator, United States Department of Transportation, Federal Railroad Administration

CARL FORD, Regional Director, New York State Department of Transportation

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MR. COTHEN: Let's try to get settled if we can. Can you hear me back there? Sort of? 09:33

Okay. Perhaps we'll try as time goes on to turn up the mikes a little bit. Please be generous in letting us know if you're having trouble hearing anyone today. If we can't communicate we can't make progress. 09:33

Good morning. This is the Federal Railroad Administration safety inquiry on private highway-rail grade crossing safety. 09:33

We're glad you're here today. But we always start out all FRA meetings, as all railroad-related meetings start out, with a safety briefing. Randy Dickinson from FRA's Region 1 will present the briefing. Randy? 09:34

MR. DICKINSON: Thanks, Grady. 09:34

A couple of housekeeping items. First of 09:34

all, for those of you who want to make comments later on, we have mikes around the room, and we can pass those around. 09:34

Right outside the main doors there are the restrooms on the right. You'll notice over those two doors and these two doors back here you have exit signs in the event of the need for an emergency evacuation from the 09:34

building. The main entrance is down that hallway. 09:34

There's also another entrance over here: Go out the door, turn to the left, turn to the left again, and they're out here. 09:34

For those of us at this end of the room we can use these to go right out to the street. 09:34

Is anyone CPR -- Bob. And we got the CSX guys. Anybody else? So if somebody has a heart attack, God forbid, or any other kind of problem, these fellas will be responsible for that. 09:34 09:35

And if we need an ambulance, anybody got cell phones in the room want to be responsible for calling the ambulance? Show of hands. Bob, okay. And I think that should pretty 09:35

much be it. Did I miss anything? I guess 09:35

that's it. Thanks. 09:35

MR. COTHEN: Thank you, Randy. In a 09:35

minute we'll make introductions of the FRA 09:35

staff so you can -- and our colleagues so that 09:35

you can know who to contact as we proceed with 09:35

discussion of these issues. 09:35

What I'd like to very quickly ask Carl 09:35

Ford, who's Regional Director of New York 09:35
State Department of Transportation, to bring 09:35
greetings. Carl? 09:35
MR. FORD: Thank you and good morning. 09:36
On behalf of Governor Eliot Spitzer, 09:36
Commissioner Astrid Glynn, and the New York 09:36
State Department of Transportation, it is my 09:36
privilege to welcome -- excuse me. It's my 09:36
privilege to welcome Deputy Associate 09:36
Administrator Grady Cothen and the Federal 09:36
Railroad Administration to Syracuse for 09:36
today's public meeting on safety at private 09:36
highway-rail grade crossings. 09:36
Commissioner Glynn has demonstrated a 09:36
strong personal commitment to all modes of 09:36
transportation, primarily to enhance the 09:36
efficiency of moving people and goods, but 09:36

most importantly to improve the safety of the transportation network. 09:36

The department is very pleased to have the opportunity to participate in today's public meeting. We trust this will be a most productive session. Thank you. 09:36

MR. COTHEN: Thanks very much, Carl. The federal Railroad Administration has a very 09:37

close and productive working relationship with the New York Department of Transportation, as of course as do other modes of the department -- U.S. Department of Transportation. So we're particularly pleased that we have strong participation from the New York DOT today. 09:37

I want to talk just a minute about who's here and who's not here. This has been a rather frustrating exercise for all of us putting this meeting together. Those of you who followed the developments have noted that we were going to be here in February, and Administrator Boardman was going to be here. And I went up to his office that cold day, it was even cold in Washington, D.C., so you know it was cold up here, and he got on the phone 09:37

to the guys at New York DOT who clear the snow and take care of the emergencies up here, and he said, Grady, we're going to have to cancel. 09:37 09:38 09:38

Of course, he's the former commissioner of New York State Department of Transportation, so he knew who to call. 09:38 09:38 09:38

We tried again in April, and we had to scrub the event because of a Congressional 09:38 09:38

hearing. And Administrator didn't want to reschedule, he said go on without me, it's embarrassing, you know. We said no, boss, we want you here. 09:38

So we scheduled for today, and you guessed it, another Congressional hearing, this time before the Senate Surface Transportation Subcommittee, and it's on rail safety legislation. It's a very serious hearing for everybody involved with railroad safety, and the subcommittee of course expects the Administrator to be there. And we managed to convince the boss that that's where he needed to be to represent us. 09:38 09:39

But he's very frustrated and displeased that he's not here with you today to lead this event. And he wants me -- he wanted me to 09:39

express his regrets that he could not be here. Obviously we've made -- he had made every effort to participate in this activity.

This is the concluding public conference of our safety inquiry on private crossings. We've been around the country now from Minnesota to North Carolina to Louisiana to California and concluding here. And at each

stop we've gotten a little bit different 09:39
perspective on the problem, and we certainly 09:39
learn more. 09:39
This is an opportunity to sort of wrap 09:39
up, summarize, and talk about some 09:40
preliminarily crystallized options for further 09:40
action. 09:40
We will do the proceeding a little bit 09:40
differently today because we'll save the 09:40
summation of what we've learned today to a 09:40
point in the proceedings after the initial 09:40
speakers for this session. And then we'll try 09:40
to very quickly in our own minds internalized 09:40
what we've learned from them and then 09:40
integrate that into the summary of proceedings 09:40
today. 09:40
And then in the afternoon, rather than 09:40

focusing on a particular topic such as 09:40

engineering or public/private responsibilities 09:40

or whatever topical kind of issues we've done 09:40

at some of the meetings in the past, we will 09:40

talk about what is preliminarily identified 09:41

options and ask for your participation in it. 09:41

Let me make sure that we have our team 09:41

introduced first. It's comprised of folks 09:41

from the FRA region headquartered at Cambridge, Massachusetts, but these folks live all over the place, including the state of New York. 09:41 09:41 09:41 09:41

The second group is our highway-rail crossing safety team at the Federal Railroad Administration headquarters in field. 09:41 09:41 09:41

And the third is the team from the Volpe Transportation Systems Center, Cambridge, Massachusetts, which has supported and continues to support this effort from the beginning and is our valued partner across a wide range of issues in railroad safety. 09:41 09:41 09:41 09:41 09:41

Let me first call on Mark McKeon, who's the regional administrator for this region. 09:41 09:42

Mark is the dean of railroad safety. I get to name the dean, and he's it, senior regional 09:42 09:42

administrator and jack-of-all-trades, and Mark I'm sure will be proud to introduce his colleagues here. 09:42

MR. McKEON: Thank you, Mr. Cothen. One of course acquires deanship by not dying, and in relating seniority, and I've managed to do that. 09:42

I'd like to welcome everyone to FRA 09:42

Region 1, which is comprised of the six New England states, New York, and New Jersey. 09:42

Accompanying me today are -- I'll ask them to stand up as they're introduced -- Bob Winstel is signal and train control inspector headquartered in the Buffalo area. Randy Dickinson we have already met, is our grade crossing and trespasser program manager headquartered in the Albany area. Mike Grizkewitsch is our assistant grid crossing and trespasser program manager who is headquartered in the Boston area. 09:42 09:42 09:42 09:42 09:42 09:43 09:43 09:43

All these folks are available to attempt to meet your needs and concerns, both on the subject of private crossings and other railroad safety issues. Thank you. 09:43 09:43 09:43

MR. COTHEN: Thanks, Mark. Ron Ries is 09:43

staff director for grade crossing safety and trespass prevention at the Federal Railroad Administration. He's the key guy on these program areas. And Ron will introduce our colleagues from FRA. 09:43

MR. RIES: Thank you, Grady. In addition to our Region 1 crossing managers, we also have with us today Evelyn Hendricks. And 09:43

Evelyn, would you stand? She works in grade crossing safety in Region 2 and is based out of Ohio. 09:43 09:43 09:44

And all the way from Chicago we have crossing managers Tammy Wagner and Michael Bennett, who are here with us as well. 09:44 09:44 09:44

And I would also like to introduce, who you'll hear from later, Miriam Kloeppel. 09:44 09:44

Miriam is a very valued member of -- was a very valued -- she's still very valued, but she is transitioning to a new job at FRA but still will retain grade crossing safety interest in her things. 09:44 09:44 09:44 09:44 09:44

We look forward to your comments today, and if you have any grade crossing safety issues, trespass prevention, feel free to cross -- contact any of us on the crossing 09:44 09:44 09:44 09:44

team. Thank you. 09:44

MR. COTHEN: I certainly won't suggest 09:44

that Anya is a part of the gainships or 09:44

anything because she's not that old, but Anya 09:44

is certainly the senior staff person who's 09:44

worked with us over the years on grade 09:45

crossing safety issues and has led a variety 09:45

of research that's benefited all of us here 09:45

for a number of years. And we continue to benefit from the initiatives that she has helped to volunteer. 09:45

So Anya Carroll, will you please introduce your colleagues in the Volpe Center? 09:45

MS. CARROLL: Good morning. Thank you very much, Grady. 09:45

Welcome to Syracuse, New York. I hope you enjoy the meeting and the space, and if you have any questions, please don't hesitate to ask myself or anyone of our staff. 09:45

In the back corner we have Mr. Glenn Goulet, who is the chief of the Rail and Transit Systems Division at the Volpe Center. 09:45

Steve Peck, who is standing by the door, is one of our mechanical engineers who's been helping to shepherd this effort throughout 09:45

these five meetings. And Mirna Gustave is out at the registration desk. She's our conference coordinator and has helped to set up this meeting and all five of them to date. 09:45 09:46 09:46 09:46

So thank you very much for attending, and I hope you enjoy the day. 09:46 09:46

MR. COTHEN: Thanks, Anya. Now we come to the highlight of the meeting. 09:46 09:46

We always have a legal officer statement, 09:46
and if I never hear one of these -- another 09:46
one of these as long as I live, it will be too 09:46
soon. But this is go going to be a special 09:46
treat because we don't have our legal officer 09:46
here today. Ron will read the statement, and 09:46
if I have to I'll come out of retirement as a 09:46
lawyer and provide advice to the chair, which 09:46
should be fairly simple. 09:46
MR. RIES: Thank you, Grady. This is a 09:46
little bit like the Holiday Inn Express 09:46
commercials where the people are able to do 09:46
brain surgery because they stayed at the 09:46
Holiday Inn. I am not an attorney, but I am 09:46
married to one, so that gives me some 09:46
credence. 09:47
Good morning. This statement will be in 09:47

response to the legal officer's statement. The purpose of this meeting is to provide an opportunity for the public to provide information to the FRA about issues related to safety at private highway-rail grade crossings. We are here to listen to you and to provide an opportunity for you to state your view on the record for review and

consideration.

In order to provide an equal opportunity to express your views, the following procedure will be used: Anyone who wishes will be permitted to make an oral statement. Persons representing the same group may appear together. At the beginning of your oral statement please identify yourself, spell your name, and identify whether you are appearing as an individual or as a representative of an organization. It may also be helpful to provide a business card to our court reporter at the time.

At the end of your statement FRA representatives may ask questions in order to obtain clarification of points made during your statement. We will then move on to the

next person wishing to make an oral statement. 09:48

If you will be referring to a document in 09:48

your oral statement, or if you have a prepared 09:48

statement, please provide it to me either 09:48

before or after your statement so that it can 09:48

be added to the public docket of this meeting. 09:48

Today's meeting is being transcribed and 09:48

will become part of the public docket on this 09:48

issue. The transcript of this and other 09:48
public meetings in this series and all other 09:48
documents related to the inquiry will be 09:48
available for viewing and downloading at the 09:48
Department of Transportation's Docket 09:48
Management System website at 09:48
http://dms.dot.gov. 09:48
The entire docket is also available for 09:48
inspection at the DOT's docket facility at 09:48
400 7th Street Southwest in Washington, D.C. 09:48
Thank you. 09:49
MR. COTHEN: Thanks, Ron. 09:49
Just very preliminarily, we're here to 09:49
talk about private crossings because every 09:49
year 30 or 40 fatalities occur and serious 09:49
injuries occur at private crossings across the 09:49
nation. 09:49

And as Miriam will describe in more detail, while we seem to be making significant headway in the public crossing arena, it's been more difficult to make headway with respect to private crossings. The nation is growing in population, and developments are springing up all over the place and on both sides of the railroad. 09:49

And what that means is that even though 09:49
the consolidation of the National Rail System 09:49
has occurred so that traffic is more 09:50
concentrated on fewer lines, nevertheless, 09:50
exposure now again probably will go up, just 09:50
because we're a growing nation. 09:50
We would like to see what we can do as 09:50
the U.S. Department of Transportation to help 09:50
address the problem. It's key first to 09:50
understand what the problem is; secondly, what 09:50
the options are; third, what partners we have 09:50
available to work on this. 09:50
Very frankly, to this point, with the 09:50
exception of some activity in minority of the 09:50
states, this has been a burden carried largely 09:50
by railroads, large and small, passenger and 09:50
freights. And they've tried to work with 09:50

local property owners and others who have the 09:50
right to cross the railroad, and we call those 09:50
folks holders, holders of the right to cross, 09:50
and they may own the underlying property, they 09:50
may have a prescriptive easement, they may 09:50
have a license under a agreement to cross, or 09:51
they may just have been doing it for years and 09:51
it's kind of hard to stop. 09:51

So it's an important issue, it's one that we need to share responsibility for, but we also need to more carefully define specific responsibilities. So that's our task today. 09:51

We would like to start out by hearing from speakers who signed up ahead of time. And they're two in number. 09:51

The first is Ike Scott, who's director of Intermodal Projects Bureau in the Freight and Economic Development Division of the New York State Department of Transportation. 09:51

Ike's been involved in railroading issues in the state of New York for a number of years; we've had the pleasure to work with him. We'll hear from Ike, and then Bill Burt, representing Railroads in New York State, will be speaking. 09:51 09:52

Are there others who want to make 09:52

preliminary statements before we begin hearing 09:52

from those gentlemen? Just kind of so we know 09:52

where we are in the agenda as we go along. 09:52

Okay. And then I hope everyone 09:52

understands that as the morning goes on, if it 09:52

goes into the afternoon that's good, that any 09:52

and all persons wishing to participate in the 09:52

discussion are encouraged to do so. And that 09:52
includes anybody who heard about the meeting 09:52
on the radio or the TV this morning or saw a 09:52
note in the local periodical who can bring us 09:52
information. That's why we're here. 09:52
Ike, would you come forward, please, sir, 09:52
and address the issue from New York State 09:52
perspective. We appreciate it. 09:53
MR. SCOTT: Thank you for the opportunity 09:53
to speak to this group. First I'd like to 09:53
correct the record a little bit. Just for the 09:53
record, my full name is Clarence Scott; 09:53
everyone knows me as Ike. 09:53
And also, within our organization we've 09:53
had a reorganization of the department, and at 09:53
this time I'm Director of Rail Safety, 09:53
Department of Transportation, in the Office of 09:53

Safety and Security Services. 09:53

As Director of Rail Safety for New York 09:53

DOT I welcome Federal Railroad 09:53

Administration's interest in private highway 09:53

grade crossing safety. 09:53

Your efforts to solicit input from across 09:53

the country should provide valuable 09:53

information to better define the scope of this 09:53

problem and help to identify reasonable solutions.

Based on experience gained in New York since 1994, when the state legislature first granted authority for the commission of DOT to address this subject, it's become apparent that two key safety factors take priority when assessing risk at private crossings.

First and foremost is the public safety risk encountered when use of a private crossing has evolved to public usage without a commensurate change in legal classification or application of national standards for warning systems.

Second is the location of many of these private crossings along passenger train corridors which creates derailment potentially

in the event of an accident.

New York State has the largest commuter rail and transit operations in the United States, with ridership of more than 1.3 billion passengers per year. In addition, Amtrak provides intercity passenger service across the state with connections to some of the busiest stations in the country.

The Empire Corridor, from New York City to Albany and on to Buffalo, is a designated high-speed rail corridor where trains have operated at speeds up to 110 miles per hour since 1980 over portions of the corridor. 09:55

As efforts were advanced to expand and improve high-speed service, it was recognized that safety concerns at private rail crossings must be addressed due to the potential accident risk at such locations. 09:55

New York State's Public Transportation Safety Board identified similar concerns on commuter lines. New York State has a long history of safety improvements at public rail highway crossings with extensive efforts to reduce the total number of crossings and a program to install the highest level of active 09:55

warning devices at the remaining locations. 09:55

According to FRA inventory data, there 09:55

are presently 2,878 public crossings and 2,900 09:55

private crossings in the state, with 09:56

approximately 400 of these private locations 09:56

falling under New York's regulatory 09:56

jurisdiction. 09:56

Through state- and federally-funded 09:56

programs, New York now has over 70% of the public crossings equipped with active warning devices. However, it's estimated that less than 1% of private crossings have any form of active devices. There is also inconsistent application of signage at private crossings, and road profiles are often very poor. 09:56

As New York State advanced efforts in the mid '90s to improve high-speed passenger service, it became necessary to expand state authority for grade crossing safety to include private crossing locations. 09:56

The following problems were encountered in this effort: First, the federal inventory has significant inaccuracies with regard to private crossing locations. For example, a field review of the Amtrak rail corridors 09:56

revealed the existence of some new crossings not in the inventory, while many crossings shown on the inventory no longer existed. 09:57 09:57 09:57

Accurate records of the legal basis for the existence of a private crossing have not always been maintained regularly by involved parties. There are no national standards to provide guidance on safety enhancements that 09:57 09:57 09:57 09:57 09:57

should be utilized consistently at private crossings, including passive signs. 09:57

And lastly, and most importantly, there are very limited public funding sources that can be utilized for safety improvements at private crossings. 09:57

As requested, the FRA give careful consideration to address these issues as an action plan is developed from the public meetings held across the United States. I've provided testimony to enter into the docket that really outlines kind of the background of New York's laws and covers these in more detail the complications that we've encountered and provides copies of the -- a couple legal cases that we've encountered in our efforts to try to address these locations 09:57

and take actions to close. I would be glad to answer any questions on here. 09:58

In the testimony we've addressed the ten key questions raised by the FRA, but I didn't want to bore the group with the details of all this. Whichever way you would like to go. 09:58

MR. COTHEN: Very much your call, Mr. Scott. Obviously we're going to go 09:58

through things topically later today, and if you would like to interject at that point, feel more comfortable doing that, we would love to have it. 09:58

MR. SCOTT: Okay. Very good. Thank you. 09:58

MR. COTHEN: Thank you, sir. William Burt. 09:58

Bill is a working railroader and chairman of the Regulatory Review Committee, Railroads of New York, Incorporated. 09:59

MR. BURT: Thank you, Grady. I'm here today representing the Railroads of New York. 09:59

I would like to acknowledge first that I see several of our members here have their own representation and undoubtedly have good detail and background to add from their own experiences and on their own railroads. 09:59

One of the things we've found in preparing for today's testimony is that the experiences of railroads differ by the type of territory that they operate in. Some people may be, for instance, in mountainous territory, others may be running through flat country and they may encounter different issues in terms of design and the functioning

and the safety aspects of private crossings. 10:00

I'd like to comment for those who are 10:00

unaware of the organization what it covers 10:00

briefly here. 10:00

Railroads of New York represents the 10:00

freight railroad industry in New York State, 10:00

including the four Class I railroads, CSX, 10:00

Canadian National, Canadian Pacific, and 10:00

Norfolk Southern, and about 30 short line and 10:00

regional railroads. 10:00

RONY members carry over 99% of all goods 10:00

moved by rail in New York State. RONY's 10:00

mission is to provide a trade association for 10:00

all freight railroads that operate in the 10:00

state of New York to advocate for rights and 10:00

needs of railroads and their customers, as 10:00

well as to encourage economic growth within 10:00

the state of New York. 10:00

RONY's mission is also supported by many 10:00

industries, including suppliers and customers, 10:00

industrial users of railroads, and their 10:00

employees which are dependent upon New York's 10:01

railroads. 10:01

RONY advocates for a successful 10:01

resolution of key issues facing the rail 10:01

industry. And this issue here today is a good example of the work we do in the regulatory area. 10:01

To do that work RONY has established a Regulatory Review Committee to identify state and local laws and regulations applicable to rail freight that either should be eliminated, reformed, or made more cost effective. And these comments are submitted in my capacity as chairman of the committee. 10:01

I'm also the president/chief operating officer of three railroads, Livonia, Avon & Lakeville Railroad, the B & H Rail Corp., and the Western New York & Pennsylvania Railroad. And at the present time those railroads in New York and Pennsylvania operate just under 400 miles of track. 10:01

So we've had in our own specific 10:01

experience some experience with private 10:02

crossings as we have brought some of those 10:02

lines back from inactivity to higher levels of 10:02

activity, which usually brings these issues 10:02

into some focus. 10:02

I'd like to just talk briefly about 10:02

what's in 19 pages of testimony that's in the 10:02

docket as of a couple of days ago. It -- I 10:02
haven't figured out how to make a .pdf file 10:02
yet that isn't a monster, so it may be too 10:02
big, and if it is feel free to contact me 10:02
through either anyone here that can provide my 10:02
name, I would be happy to send a printed copy, 10:02
and I have nine extra copies here, ten extra I 10:02
guess actually counting the one in my hand, 10:02
that I would be happy to leave behind here 10:02
with anyone who's interested in having a copy. 10:02
I'll summarize briefly by saying that in 10:02
New York State we find we have three types of 10:02
crossings, typically. They are deeded 10:03
crossings, which is a catchall term that can 10:03
cover something that was agreed to at the time 10:03
that the railroad acquired the property or 10:03
acquired a right-of-way in some cases across 10:03

the property. That deed is usually in the 10:03
nature of a covenant or an easement. It may 10:03
be in many cases more than 150 years old at 10:03
this point. 10:03
And so the record keeping on a lot of 10:03
that has suffered through the decades of 10:03
railroad bankruptcies, transitions, property 10:03
changes, you know. And people who wonder why 10:03

all this isn't perfect should take into account the fact that on some of the lines that we've revived in my own experience we've found houses built on railroad property. How that came to be, how the building code officer permitted that, how the town board, responsible officials permitted that no one knows, but if that can happen, surely it suggests there's a little bit of chaos out there in some of these places relating to the record keeping. And it varies jurisdiction by jurisdiction. 10:03 10:03 10:03 10:03 10:03 10:03 10:04 10:04 10:04 10:04

Deeded crossings are often not available. The language, the text, the documentation not available to the current operator, as I said, because of bankruptcies, a lot of that documentation may have disappeared about 30 or 10:04 10:04 10:04 10:04 10:04 10:04

40 years ago and never was passed on. 10:04

What you typically get in a short line 10:04

environment, and here I speak from a short 10:04

line perspective, is that if you're taking 10:04

over a line that is being leased or acquired 10:04

from a Class I, you're going to get a 10:04

quitclaim deed or a as-is, where-is type 10:04

lease. 10:04

And so you attempt to obtain in that transaction as much documentation as you can, but you won't necessarily get perfection; a long ways from it. 10:04

The Class Is are normally very cooperative in that effort, but again, they're starting from a standpoint of not necessarily having all the information as well. 10:05

There's deeded crossings, then there is a more -- a limited category of recent, let's say within the last 50 years or 30 years in some cases, licenses, license agreements. They're actually fairly rare in our experience, although larger railroads may have a different experience. 10:05

The large railroads at this point are typically, judging from the printed material 10:05

on their websites, very reluctant to grant new crossings. 10:05

Norfolk Southern, I'll single that out as an example, is very blunt on the real estate page, and this is in my testimony quoted, essentially they say the only safe crossing is no crossing. And they go on to say they work hard to eliminate crossings in compliance with 10:05

long-standing state and federal policies to reduce the number of crossings. 10:05 10:06

I think all of us in the business who have respect for the demands of the track and what's needed to establish and build up and keep good track understand that crossings present a variety of problems, and that's worth talking about here today if people have the interest, because that's underlying some safety issues or potential safety issues. 10:06 10:06 10:06 10:06 10:06 10:06

Last but not least, in New York State you have Section 52 of the Railroad Law, which mandates essentially a crossing on demand under certain highly limited circumstances that are referred to as either farm crossings or timber extraction crossings. 10:06 10:06 10:06 10:06 10:06

The people who believe that they have a 10:06

right to a crossing under Section 52 10:06

ordinarily take a much more expansive view of 10:06

that right than the law actually provides. 10:06

And the other thing that bears on this is 10:07

that as Section 52 is fairly specific -- 10:07

because it's fairly specific about what 10:07

qualifies for those crossings, when the 10:07

circumstances change, that crossing can be 10:07

removed and is no longer something that's an entitlement. 10:07

So that's something that the people that -- the landowners that the railroads deal with ordinarily tend not to understand very well. So there's a great deal of, shall we say, learning that goes on where the conversations occur. 10:07

But that will bring me to my final comments here. We do appreciate the effort, and Grady, I want to thank you personally, because I know that you think long and hard about areas in which the FRA might have overlooked anything in safety, and I think that may be part of what I see here, is that there is a problem, it is a varying problem, in some places a large one, in other places a 10:08

small one, but it's clearly not working as it should, the system that's in place. 10:08

So -- and part of it I would describe simply as a breakdown in the function of -- you can almost say the rule of law, because as railroads, especially small railroads, attempt to defend and act upon their property rights, they find that they're not being upheld in 10:08

many cases, and so we are actually in many cases unable to do what we know to be right because we are faced with either excessive litigation or an unfriendly hearing in a court of law, perhaps. 10:08

So it's an issue that's worthy of discussion. I don't think -- certainly I don't come here with any total answer to this, and I doubt that many of our railroads do. 10:08

We've all -- we've talked -- those of us out in the audience talked with our track people about this issue, we're well aware that there's an ongoing issue that we all live with, and as you said in your opening comments, have largely borne the burden of over the past several years and with varying degrees of success. 10:08 10:09

So with that, as preliminary comments I would offer to provide copies here until I run out, and I hope to participate in the conversation and answer any questions I can. Thanks. 10:09

MR. COTHEN: Thanks very much, Bill. As we transition into the next phase of the activity here I'd like to just call attention 10:09

to something that's probably obvious to most in the room but nevertheless deserves to be said. 10:09

And that is that there are an awful lot of people who have an interest in safety at private highway-rail crossings. They include, among others, railroad employees who operate equipment over these crossings, trains, high-rail vehicles over those crossings, and who may be adversely affected by a collision with a heavy motor vehicle who will definitely be affected by any collision that involves a casualty, because that's not something that that employee in most cases can prevent, yet that employee becomes an unwilling witness. 10:09 10:09 10:09 10:09 10:10 10:10 10:10 10:10 10:10 10:10 10:10

All users of that crossing are potentially affected if appropriate safety 10:10 10:10

measures are not provided, including a person who has the whatever legal right it is to cross, and those -- that person's personal guests, business guests, others who may happen to be on the property and try to negotiate that crossing. 10:10 10:10 10:10 10:10 10:10 10:11

Others in the community are potentially affected. A collision with a heavy vehicle at 10:11 10:11

a highway-rail crossing can result in 10:11
derailment of a train. And that can affect 10:11
passengers on board or it can affect members 10:11
of the community as a result of release of 10:11
hazardous materials. 10:11
So this is a -- an issue that has -- 10:11
should have broad interest, but as it happens, 10:11
that broad interest is spread very thin in the 10:11
sense that we've got a lot of these crossings, 10:11
they're all over the country, and the 10:11
manifestations of the risk which they present 10:11
are not always evident to each of us in our 10:11
normal daily lives. 10:11
So that's the issue that we've got, and I 10:11
think you've heard from a public policy and a 10:11
railroad point of view what perspectives we 10:11
have here in the state of New York. 10:12

Before we have the beginning of a 10:12

recapitulation of the findings to date, are 10:12

there any others -- I'll make one other 10:12

invitation -- are there others, any member of 10:12

the public, other person here who would like 10:12

to make official remarks before we proceed? 10:12

Because that's what we're here for. 10:12

We have tried to make a -- as you can 10:12

see, there's -- we've had press in and out this morning. We've had -- made every effort to try to contact press so that those who may be affected by this issue could come and talk. 10:12

Okay, not hearing from anybody now doesn't mean you're foreclosed from speaking later. Please feel free to do so as we get into the topical discussion. 10:12

At this point I would like to call on Miriam Kloeppel. And Miriam will be giving you a recapitulation of issues and findings to date. Miriam? 10:12

MS. KLOEPPEL: Good morning, everyone. There we go. I thought I would actually start on the first page here. 10:13

My plan was actually to start off with a very brief reminder of why we're looking into 10:13

this issue at all. 10:13

Just last week on July 17th of this 10:13

year a northbound Amtrak train collided with a 10:13

tractor-semi-trailer combination vehicle 10:13

loaded with scrap metal at a private grade 10:13

crossing near Plant City, Florida. 10:13

This accident is currently under 10:13

investigation, but we do have some preliminary 10:13

data available. Current reports state that 10:13
both locomotives and nine passenger cars 10:13
derailed but remained upright. Between 16 and 10:14
18 passengers were treated, and as much as 10:14
five train crew members were treated for 10:14
injuries sustained in this accident. 10:14
The accident crossing lies on an access 10:14
road to an industrial area and is equipped 10:14
with crossbuck signs. Reports indicate that 10:14
the truck driver was ejected from his vehicle 10:14
and that he sustained fatal injuries. 10:14
Because accidents like this occur all the 10:14
time, and have for quite some time, private 10:14
crossing safety has for some time been a 10:14
matter of concern to the U.S. Department of 10:14
Transportation and to other federal agencies. 10:14
In 1993 the FRA hosted an open meeting to 10:14

initiate industry-wide discussions. In its 1994 Rail-Highway Safety Action Plan the United States Department of Transportation proposed to develop national minimum standards for private crossings.

In its 1997 study on safety at passive grade crossings, the NTSB, National Transportation Safety Board, highlighted the

need for some system to improve private crossing safety and recommended that the U.S. DOT in conjunction with the states determine governmental oversight responsibility for safety at private crossings. 10:15

In 1999 the NTSB weighed in again in its report on a private grade crossing accident in Portage, Indiana. In this case the NTSB recommended that the DOT eliminate any differences between public and private crossings with regard to funding or requirements for safety improvements. 10:15

In 2004 the U.S. DOT published an updated action plan in which the FRA committed to leading an effort to define responsibility for safety at private crossings. As with the other meetings, today's meeting is a vital 10:16

part of this effort. 10:16

The FRA maintains offices in each of 10:16

eight geographical regions across the nation, 10:16

and as you can see, regardless of the region, 10:16

private crossings constitute a significant 10:16

percentage of all at-grade crossings. The 10:16

total count nationwide is about 94,000 private 10:16

crossings. 10:16

Although accidents at public crossings 10:16
have declined considerably over the last 20 10:16
years, declining by one-third over the past 10:16
decade alone, the number of accidents at 10:16
private crossings has remained comparatively 10:16
stable, declining only 10% in the last decade. 10:16
In most years the number of fatalities 10:16
occurring in accidents of private crossings 10:17
exceeded the number of on-duty deaths among 10:17
railroad employees in all rail operations. 10:17
To gather information on the current 10:17
state of the art, as well as ideas about 10:17
possible solutions to existing problems, the 10:17
FRA's held a series of public meetings. And 10:17
as you can see, the -- we started in Fort 10:17
Snelling, Minnesota, last August, went to 10:17
Raleigh, North Carolina, San Francisco, 10:17

California, New Orleans, Louisiana, and 10:17

intended to be here, as Grady mentioned, in 10:17

February. But since Grady has already 10:17

capitulated the reasons for our being here 10:17

today, I'm not going to dwell on it anymore. 10:17

What my plan here was -- at this point 10:17

was to summarize the -- what we got out of the 10:17

participant comments at these previous 10:18

meetings. And in the act of summarizing these things we actually came across basically these basic categories. 10:18

We have some general comments. There was much discussion of grade crossing categorization; also in -- much discussion of the design and signage standards, rights and responsibilities, and data needs. 10:18

At each meeting a number of attendees emphasize the difficulty in approaching a solution to the problem of safety at private crossings. Most states, for example, indicated that they had little or no jurisdiction to effect decisions about creation of private crossings or, except in fairly limited ways, even to determine the traffic control devices placed at such 10:18

crossings.

Railroads indicated that although safety at all grade crossings was a matter of vital interest them, they were often powerless to induce private landowners to make needed improvements. Railroads also noted that they receive no benefits from the existence of most private crossings; that benefits, in fact,

fall almost entirely to the holder of the right to cross. 10:19

And as I mentioned, we also indicated that the types of users and the types of crossings in fact are extremely varied, as Grady mentioned, all the different populations that can be affected by this. 10:19

The FRA asked a series of questions in this initiative's Federal Register Notice. One of these was how should we justify crossing creation or continuation. 10:19

Many meeting attendees indicated that there is currently no process in place to help the parties involved make decisions that consider safety issues at private crossings. 10:20

Several parties, including the Brotherhood of Railroad Signalmen and Citizens 10:20

for Railroad Safety, advocated fairly 10:20

aggressive elimination of private crossings by 10:20

prohibiting the creation of new crossings or 10:20

by closing and consolidating existing private 10:20

crossings. Other parties pointed out that 10:20

this was more difficult than it sounded, with 10:20

the New Orleans and Gulf Coast Railroad 10:20

stating that in their case local authorities 10:20

gave them little or no support in their efforts to close redundant crossings or to prevent new ones. 10:20

Some private crossing holders perceive the current methods for addressing close -- crossing closure to be unfair, giving them little or no input into how their property would be affected. 10:20

The state of North Carolina, however, appears to have had some success at resolving these types of -- of apparently conflicting interests by partnering with all of the interested parties to improve safety at the private crossings. 10:20

On to the second of these general categories, meeting attendees provided a long list of the various ways in which crossings 10:21

could be categorized. They asserted that it would be difficult to revise the inventory to come -- encompass all possible types of crossings and expressed concern that by overspecifying crossing categories the railroads might find it much more difficult to arrange crossing consolidations and closures. 10:21

Later discussions focused on the benefits 10:21

of creating a category known as public use, in which a crossing where the roadway is owned by somebody other than a public agency but to which the public had an expectation of free access would be established. 10:21 10:21 10:21 10:22 10:22

Can I get that out of there? No, I can't. Pardon me, I'm going deal with some technical issues here. I just wanted to be sure I got to the right slide. Good, I've gotten rid of the extraneous thing. Sorry about that. 10:22 10:22 10:22 10:22 10:22 10:22

In expanding on the public use categorization, attendees centered on -- centered the discussion around the instances where land use changes. As land is developed, a farm field-to-field crossing can become access to a large residential development or 10:22 10:23 10:23 10:23 10:23

even a commercial establishment like a shopping center. 10:23

Attendees stated that when this occurs the amount of highway traffic can increase dramatically, and the risk of a crossing will rise with it. 10:23

Attending railroad representatives stated that in most states there's no mechanism for 10:23

alerting the railroad to any such change in use at a private crossing. They indicated that in their experience the state of California is unique in its ability to identify such land use changes and to effect crossing improvements at such private crossings. 10:23

Under the California Environmental Quality Act, the California Public Utilities Committee -- Commission, excuse me, the CPUC, has the authority to review all proposed developments concerning potential impact on public safety. They have done so for the past three years. 10:23

In the CPUC's opinion, the best time to identify land use changes is when the development is undergoing the planning and 10:24

permitting process. For this reason they 10:24

strongly advocate involving local permitting 10:24

authorities. 10:24

Even where land use is not changing, 10:24

attendees agreed that it was important to 10:24

identify existing private crossings with 10:24

public use. One participant suggested that it 10:24

would be most valuable to identify whether the 10:24

public has an expectation of free access to the private roadway. 10:24

Another of the questions the FRA asked in its Federal Register Notice was should there be nationwide standards for signs and roadway design. 10:24

Meeting attendees all seemed to agree that development and application of nationwide standards, both for crossing engineering design and for placement of traffic control devices at private crossings would be beneficial. It was noted, however, that a handful of states as well as several individual railroads have created standards of their own, each one different from the other. 10:25

Some attendees suggested that private crossings should be treated exactly the same 10:25

as public crossings, but others believed that 10:25

appropriate guidelines should be developed 10:25

through partnership with AASHTO, AREMA, APTA, 10:25

the National Committee on Uniform Traffic 10:25

Control Devices. Now, AASHTO -- someone may 10:25

need to help me out on it this -- is the 10:25

Association -- America -- 10:25

MR. BROWDER: American Association of 10:25

State Highway and Transportation Officials. 10:25

MS. KLOEPPEL: Thank you, Mr. Browder. 10:25

And AREMA. 10:25

MR. BROWDER: American Railroad 10:25

Engineering and Maintenance-of-Way 10:25

Association. 10:25

MS. KLOEPPEL: APTA is the American 10:25

Public Transit Association, is it not? 10:25

MR. COTHEN: Transportation. 10:26

MS. KLOEPPEL: Transportation? 10:26

MR. BROWDER: Transportation, that's 10:26

right. Thank you, Grady. 10:26

MS. KLOEPPEL: I knew I would need help. 10:26

I appreciate it. 10:26

Another of the questions was are 10:26

innovative traffic control devices available. 10:26

Although most attendees agreed that the 10:26

development of less expensive warning devices could be beneficial, none had found one that provided enough of a cost reduction or enough of a safety improvement to justify their use on a system-wide basis. 10:26

Further comments suggested that railroads could not use non-fail-safe options because of liability considerations. 10:26

Should state or federal government assume greater responsibility? 10:26

Although the state of California asserted a willingness to continue their strong presence in the area of private crossing safety, most states indicated that they did not even have the ability to keep up with their responsibilities at public crossings, let alone private crossings. California and the state of Washington were concerned that federal preemption might damage existing protections at the state level, and one railroad indicated a preference for federal policies and recommendations instead of regulations. 10:26 10:26 10:26 10:26 10:27 10:27 10:27 10:27 10:27 10:27 10:27

Others, however, advocated more uniformity in decision making through use of a 10:27

permitting process overseen by the FRA. One party also suggested that the FRA should take a more proactive approach to providing funding for improvements at private crossings. 10:27

Is the current assignment of responsibility effective? 10:27

Meeting attendees agreed that in many cases there is no documentation available 10:27

assigning rights and responsibilities, as we just heard this morning. Attendees indicated that such legal documents often provide a basis for negotiations to modify or close a crossing and that their absence could render negotiations impossible. 10:27 10:28 10:28 10:28 10:28 10:28

The Association of American Railroads indicated that railroads generally lacked the authority to close or relocate private crossings or even to require appropriate safety measures. Like numerous other states, the state of North Carolina indicated that they lacked direct authority over private crossings and stated that they needed tools to improve safety. 10:28 10:28 10:28 10:28 10:28 10:28 10:28 10:28 10:28

By comparison, the California Public Utilities Commission stated that, unlike a 10:28 10:28

great many states, they have the authority to 10:28
determine the necessity for a crossing and to 10:28
require safety improvements. They emphasize 10:28
the need, however, for the local authorities 10:28
who give permission for new development to 10:28
accept responsibility to address railroad 10:28
safety. 10:28
How should improvement or maintenance 10:29

costs be allocated? 10:29

Not too surprisingly, there was little 10:29

agreement between attendees on this issue. 10:29

Currently, the allocation of costs vary 10:29

according to state and according to any 10:29

existing agreements between the railroads and 10:29

crossing holders. 10:29

The state of Wisconsin explained that in 10:29

many cases states and local authorities lacked 10:29

the funds and/or the staff to assume 10:29

responsibility for the maintenance of private 10:29

roadways. The Association of American 10:29

Railroads suggested that the private crossing 10:29

user should bear the costs, while other 10:29

proposed various schemes for sharing the costs 10:29

between the government and the private 10:29

crossing user. 10:29

The state of North Carolina pointed out that there are generally no state or federal funds available for improvements at private crossings and suggested that the stakeholders, federal, state, and local governments, transit authorities, railroads, and private crossing holders, should develop a methodology to share the costs associated with grade crossing

safety treatment, construction, and maintenance. 10:30

Is there a need for alternative dispute resolution mechanisms? 10:30

In most states disputes must be solved through direct interaction between the railroad and the crossing holder. A process that is cumbersome and fraught with difficulties for both parties. 10:30

Representatives of the New Orleans and Gulf Coast Railroad indicated that their ability to negotiate is weakened by the lack of any federal standards or guidelines and that therefore their negotiations often fail. Failed negotiations may be resolved in a court of law. 10:30

Both the railroads and the states, 10:30

however, indicated that local courts may be biased in favor of the crossing holder, and lack of federal standards has made it difficult for railroads to establish jurisdiction in federal courts. 10:30 10:30 10:31 10:31 10:31

The state of California indicated that the CPUC allows for administrative legal review and has a dispute resolution process in 10:31 10:31 10:31

place. They suggested that because of the 10:31
legal issues involving property rights, 10:31
contract law -- and contract law, 10:31
responsibility for dispute mechanisms should 10:31
remain with the states and that federal 10:31
guidelines or recommendations could assist 10:31
states that do not currently have dispute 10:31
resolution processes. 10:31
The discussion on data collection 10:31
indicated that the existing national inventory 10:31
coverage of private crossing data is largely 10:31
inadequate for most analyses as well as for 10:31
resource allocation. Some participants 10:32
suggested additional fields; others looked for 10:32
greater specificity in the data currently 10:32
collected. 10:32
On the whole, participants agreed that 10:32

safety at private grade crossings would 10:32

benefit from enhanced or improved data 10:32

collection. They noted several issues, 10:32

however, that would need to be resolved in 10:32

order for data collection efforts to be 10:32

successful. 10:32

First, although the existing private 10:32

crossing data are currently collected by the 10:32

railroads, the railroads believe that they receive no material benefit from performing this work. They add that requiring railroads to collect additional data would impose a substantial burden. 10:32

Second, states indicated that they do not have staff to conduct an inventory, nor in many cases would they be allowed to spend public monies on inventorying private property. 10:32

Thirdly, many private crossings are in remote or less safe neighborhoods, and data collectors may face some personal risks just to collect data. 10:32

Should the Department of Transportation seek legislation to address private crossings? 10:33

When we raised this question we elicited 10:33

some rather spirited responses. Several participants suggested that such an action would be premature until the FRA had had time to consider the comments of the interested parties. Others noted that numerous issues would need to be resolved, including identification of the crossing users, establishing crossing agreements, funding,

national security issues. 10:33

Other parties, however, strongly 10:33

encouraged the FRA to seek such legislation -- 10:33

why I write a sentence that's so difficult to 10:33

say I'm not sure -- in order to gain enough 10:33

regulatory teeth to control safety issues 10:34

through a permitting process. 10:34

The Association of American Railroads 10:34

noted that should such legislation be sought, 10:34

the basis for any regulation or action by the 10:34

FRA would have to be that of increasing 10:34

safety. 10:34

This actually concludes my summarizing 10:34

the comments from the previous meetings. And 10:34

I'd like to know, does anyone have any 10:34

questions or statements? Mr. Browder. 10:34

MR. BROWDER: Bill Browder from the 10:34

Association of American Railroads, Miriam. 10:34

Just an administrative question. I know 10:34

that your statement will be made part of a 10:34

docket, but could I ask that you ensure that 10:34

the PowerPoint presentation be posted on the 10:34

docket also so people can have access to the 10:35

update that's contained in there? 10:35

MS. KLOEPPEL: I would be glad to do 10:35

that. 10:35

MR. BROWDER: Great. 10:35

MS. KLOEPPEL: Other questions? Thank you. 10:35

MR. COTHEN: Thank you, Miriam. Okay. We've had preliminaries and some introductory statements, summary of the work to date. We need to take a break. 10:35

Let's do that and please be back at ten minutes before the hour. Thank you. 10:35

(A brief recess was taken from 10:35 AM until 10:55 AM.) 10:35

MR. COTHEN: If we can ask folks to begin to move toward their seats. 10:55

Around the country in any given year there are a number of events that focus on how railroad crossing safety wanted to feature the 10:56

next regional activity. 10:56

Ike, would you go ahead, please? 10:56

MR. SCOTT: I just wanted to make a quick 10:56

announcement that this year the Regional 10:56

Railroad Grade Crossing Conference is go to be 10:56

held in New York in the Albany area at the 10:56

beginning of October, I believe. Bill, I 10:56

think it's October 3rd? Bill Browder? 10:56

And I'd like to welcome everybody to attend. There will be information posted on it on our website very soon. Bill, that conference was October 3rd? 10:56

MR. BROWDER: October the 2nd to 4th at the Holiday Inn in Albany, New York. And it's for the Eastern region, which is all of New England and down through Virginia, as a matter of fact, and through Pennsylvania. It's Regions 1 and 2. 10:57

And Randy Dickinson up here can also help, besides Ron and his staff there in Washington, D.C. 10:57

MR. SCOTT: We're just organizing now, and we're looking for anybody that would like to do a presentation at the conference. We welcome input. Thank you. 10:57

MR. COTHEN: Very good. Thank you, sir, for that commercial announcement. Not commercial announcement, of course. These conferences are put together as a labor of love to try to address these issues, and we appreciate it. 10:57

We've got two representatives of the Connecticut Department of Transportation here 10:57 10:57 10:57 10:57 10:57 10:57 10:58

today, Julie Thomas and Stephen Curley. Could you all say hello there? 10:58

We're glad you're here and obviously invite your active participation in the discussion to follow. 10:58

I'd also like to point out, very often, you know, you get the Office of the Inspector General, the General Accounting Office, the press, they all want know do you ever talk to your colleagues internationally, you might learn something. And actually, we do with some regularity. Phil Poichuk from Transport Canada is here. 10:58

Phil, would you just stand and -- thank you very much for being here. We are in conversation with Transport Canada about these and many other railroad safety issues on a 10:58

regular basis, and it's great that Phil could come down and be here for this meeting. 10:58 10:58

Okay. I think that's the introductions for now. 10:58 10:59 10:59

The next order of business is not an easy one to pull off, I think. We have a PowerPoint to sort of guide the discussion. 10:59 10:59 10:59

You have in your packet a one-page list of 10:59

questions that we initially brought to this activity, and we started in Fort Snelling and it's still open for comment in the docket. 10:59

The -- and I believe it's correct to say, Miriam, that that docket remains open indefinitely at this point? 10:59

MS. KLOEPPEL: Yes, sir. 10:59

MR. COTHEN: When we say indefinitely, don't figure it's going to go on forever, because it's not. What we're going to try to do is this fall include a report that will be prepared with the assistance of the Volpe Center and then specific recommendations to Administrator Boardman and the Secretary regarding how to proceed in this area. And we'll bring it together as quickly as we can. But certainly within the next few weeks 10:59 11:00

following this meeting you would be safe to submit any additional thoughts that you have and could be sure that they would be considered. 11:00

There is also in your pocket a draft for discussion captioned safety and highway-rail crossing alternative approach discussion topics. That document is in three sections. 11:00

The first section is a set of suggested findings. The second two portions consist of two kind of generic alternative approaches to the subject matter. 11:00 11:00 11:00 11:01

What we've done for this discussion is to skip over the findings, which I really -- I won't -- I'll invite comment on that, but the purpose of this PowerPoint presentation is to focus on the two alternative approaches. And as you can imagine, one of them is sort of a voluntary initiative package. The other is your usual heavy-handed federal approach. And we don't believe for a moment that the individual items in those are mutually exclusive necessarily, except for in some limited respects. 11:01 11:01 11:01 11:01 11:01 11:01 11:01 11:01 11:01 11:01

So we can certainly pick from either 11:01

column, and we can mix and match. And that should certainly be part of the discussion today. We don't want to put ourselves in the context of an either/or kind of discussion; however, we did want to present preliminary options in a specific enough way so as to elicit as much feedback as possible. That was our purpose. 11:01 11:01 11:01 11:02 11:02 11:02 11:02 11:02

So I believe you've had the opportunity to have access prior to today to these, but if you haven't because you weren't on our email list or whatever, we do have a list of findings. 11:02

Here are some of the highlights: Public funding helps improve safety. We've done a lot of studies at FRA and others have done studies that show that pretty clearly. We're thinking principally of funding for engineering improvements. And since 1976? 11:02

MR. RIES: '73. 11:03

MR. COTHEN: '73, over $4 billion has been committed by the Federal Government and hundreds of millions of additional dollars by state and local governments to improve conditions at public highway-rail crossings. 11:03

Very little money has been spent at private crossings. 11:03

There is what's known colloquially as 1103 Program, which is for designated high-speed rail corridors, and I think you heard some of the -- a flavor of reference to that in Mr. Scott's remarks. And we certainly heard it in North Carolina and elsewhere, 11:03

where public funding has been available for corridors that have the potential to serve city pairs through high-speed rail. 11:03

There has been some federal money available for closing and making improvements in private crossings. And certainly the state of New York has been energetically involved in a lot of that here on the Empire Corridor, perhaps elsewhere. 11:03 11:04

The question being should there be additional funding; if so, where should it come from. Should it come from the railroad; should it come from the property holder; should it come from the public purse; should it come from public purse at the federal, state, or local level? How do we make this happen? 11:04

We have very few private crossings that have automated warning systems. Put in an automated warning system and you're going to cut your risk on the order of 70% at that crossing, depending upon the installation. Obviously many private crossings couldn't support that kind of investment because of the low traffic volume, and thousands and

thousands of farm crossings where that clearly wouldn't be warranted. 11:05

But increasingly, as I think commenters in this room pointed out, the growth of developments on either side of the railroad presents situations where investments really are needed. And if investments can't be made, then public authorities need to adopt those crossings. 11:05

Comments on these proposed findings in this category. Mr. Browder has got his tent up. 11:05

MR. BROWDER: Grady, I know it wasn't intentional, but I would just like to add to the individuals that you identified as provided funding to crossings, both public and private, that the railroads have gone way 11:05

beyond what is required under public law and for improvements, and that they have contributed literally millions of dollars in the improvements, crossing consolidations, and areas that they feel have been to their benefit as good corporate citizens of the area where the crossings exist. And that that is a significant factor in them being a stakeholder

in that particular agenda. 11:06

MR. COTHEN: Thank you, Bill. And that 11:06

goes to the point that I made earlier about 11:06

the railroads carrying the burden of this 11:06

issue. And it's not just investment in 11:06

signage campaigns; for instance, a number of 11:06

railroads have gone throughout their system to 11:06

put new signage at all their private 11:07

crossings. 11:07

Investments have also been made through 11:07

their local vice presidents, law departments, 11:07

and all sorts of folks working with crossing 11:07

holders. Bill Burt referred earlier to the 11:07

efforts being made by short line railroads on 11:07

a retail basis to try to deal with crossing 11:07

hazards at individual locations and with 11:07

individual landowners and others affected. 11:07

And that time is money in any business, and that's a substantial investment, and I certainly, certainly don't want to understate that at all. 11:07

MR. BROWDER: Two big examples of that out in Ms. Harris' area include the Alameda Corridor and the Reno Trench that have been very successful endeavors that have spent an 11:07 11:08

incredible amount of money to address at-grade crossings. 11:08

MR. COTHEN: Those are notable public-private partnerships that certainly have greatly beneficial impacts on quite densely packed urban communities. 11:08

Any -- can I elicit more comments on these findings? Are we over or understating it here? Do we need to add thoughts? 11:08

MR. SCHWARTZ: Grady. 11:08

MR. COTHEN: Mr. Schwartz, could you identify yourself, please? 11:08

MR. SCHWARTZ: Stuart Schwartz, S-T-U-A-R-T, S-C-H-W-A-R-T-Z, Norfolk Southern Corporation. 11:08

It's clear that over the 30 years or so that the Section 130 program has been in 11:08

effect that it's had an enormous positive impact on improving -- it's clear that the Section 130 program has had an enormous positive impact on improving safety at public highway-rail grade crossings. You see that constant downward trend in the curve that each of the railroads can show individually and that as a group we can all show. It's in your

statistics I think as well.

But a major concern that our company has, and I suspect some of the other companies have as well, is that the pot of money available for crossing improvements may not be unlimited, and we all do have a concern that diluting the impact of the Section 130 program by increasing or enlarging the number of crossings that would be eligible for the use of that money is a concern.

It's not to suggest we want to discourage the notion that there are appropriate crossings where public funds should be expended, because clearly public safety is at issue, but we do have concern that to increase the mandate without increasing the funding, that does have a dilutive impact on the

overall prospects for the usefulness of that program. 11:10

MR. COTHEN: So the scarce resources currently devoted to investments in engineering improvements, the Safety Loop Bill did up the amount a little bit but probably didn't even compensate for inflation in terms of long-term trend of federal investment, and 11:10

we're still in a situation where we have a minority of public crossings with automated warning systems among the improvements that are available to be made. 11:10

Mr. Stem, do you want to identify yourself? You're next up. 11:10

MR. STEM: Yes, good morning. My name is James Stem. I'm here today representing the United Transportation Union. 11:10

I was going to hold my comments until later in the day, but Mr. Cothen specifically asked for comment on this concept. 11:11

I'd like to make three points: Number one, to the passengers and the neighbors of the crossing that Miriam showed a few minutes ago in Plant City, Florida, as well as the operating crew, there's no difference between 11:11

a public grade crossing and a private grade crossing. Whether you live next to the track, whether you're a passenger on that track, whether you're a business that is shipping a car that's contained in that train that's operating on that track, you don't know whether that crossing that's involved in a collision, whether it's involved in a

discussion about public safety, is a private crossing or a public crossing. 11:11 11:11

I'm somewhat dismayed at the fact that we have conceded that less than 1% of these private crossings have any type of warning protection other than a passing cross button. 11:11 11:11 11:12 11:12

My second point is that safety not improving as rapidly as public crossings. And I agree with Mr. Schwartz that Section 130 funds and their allocation should be involved in this equation. 11:12 11:12 11:12 11:12 11:12

I'd like to inject the thought that maybe we should segregate these crossings according to track place. Using a traditional risk assessment model, the risk of a private grade crossing on Class I or II track where the speed is either 10 miles an hour or 25 miles 11:12 11:12 11:12 11:12 11:12 11:12 11:12

an hour is much less than what we saw at Plant City, Florida, where that was a private crossing and the class of track and the track speed was considerably higher. 11:12

And to the operating crew and to those passengers, every one of those crossings is a significant crossing that deserves the same consideration as a highway-to-highway 11:12 11:12 11:12 11:12 11:13 11:13

crossing. We would recommend that speeds above 25 miles an hour that we try to adopt the same interstate highway concept where you separate those grades. 11:13

And my third and final comment is I don't think the government has a choice. And I don't mean the state of New York, I don't mean the Federal Railroad Administration, I mean the representatives of the public. Every agency, state government, and the United States Congress. We've got to take some action. 11:13

There's no doubt in my mind that legislation is needed. And I encourage FRA and the New York DOT to work together to find a model for both state legislation that will give them the authority and hopefully the 11:13

funding to address this problem, and I encourage FRA also to develop a model and solicit support not only from the industry, but the employees, private interest groups.

I know that Amtrak passengers have several organizations that consider grade crossing collisions to be a top safety priority.

I encourage you to find a way to broaden that coalition of people that's interested enough to be here today to declare this as a number one public safety problem. 11:14

MR. COTHEN: Thank you, James. Anything else on that before we move to the next? Mr. Scott? 11:14

MR. SCOTT: I would like to comment that certainly I support what you just said, and I'd like to explain a little bit what we've encountered in New York in our efforts to address this issue. 11:14

Our legislature did pass laws that gave us authority over private crossings on intercity rail lines and commuter lines, and we've actively been working on trying to address the safety at those locations; 11:15

however, approximately three weeks ago, as a result of a challenge to our authority, a federal court issued a decision which preempts the state's laws. It's our intent to appeal that decision, and that's discussed in the testimony I presented. 11:15

This federal court decision concluded that the STB has sole authority over 11:15

crossings, all crossings; it didn't say 11:15
private. So this presents another hurdle that 11:15
will have to be sorted out in the courts now. 11:15
But that's been our biggest problem is 11:15
you can pass the laws and try to exercise that 11:15
authority, but you keep running into legal 11:16
challenges as you move forward in that area. 11:16
Thank you. 11:16
MR. COTHEN: Thank you. Important point. 11:16
My colleagues at the STB staff will be shocked 11:16
to hear they have that responsibility. 11:16
MR. SCOTT: I thought that may be the 11:16
case. 11:16
MR. SCHWARTZ: If I may respond to that, 11:16
Mr. Cothen. 11:16
This is one of the issues of rail safety 11:16
that states have been unsuccessful in 11:16

regulating. And from a laymen's standpoint, what that judge -- what the federal judge told the state of New York is positive, not negative. 11:16

And the message he sent to all of us is that this issue is so significant it must be dealt with nationally, not state by state. 11:16

So I would hope that that was an 11:16

encouragement for you to then go to Senator Schumer and Senator Clinton and the Congressional representatives you have in the state of New York with that message: We agree with the federal judge, it takes national legislation to address this problem. 11:16 11:17 11:17 11:17 11:17

And that's one of about three issues that are being resolved that had been preempted or rule preempted by a federal judge in current rail safety legislation that's moving in Congress today. 11:17 11:17 11:17 11:17

MR. COTHEN: Okay. With the threat we may not get to slide two, I'm just going to go to it, okay? And this is good because what we end up doing is getting right to the heart of it. And these are just ways of trying to get us there. 11:17 11:17 11:17 11:17 11:17

Here you see some findings regarding 11:17
accidents. And we've discussed each of those 11:17
issues, Miriam has or you have in the 11:17
discussion already. 11:17
Any further comment on accident trends, 11:17
the whys, wherefores? You think these 11:18
findings are okay? Okay. 11:18
I think we would have to say in light of 11:18

the feedback that we have from New York State today, which has made an effort on its passenger lines to provide the leadership, that clearly we are faced with what is not as a practical matter de facto a cohesive policy in regulatory structure in this area. There are a lot of redundant crossings out there; that's evidence of that. Many of them are inadequately designed, they were just thrown in quickly, sometimes by folks that didn't even ask the railroad. And some, unfortunately, are poorly maintained for various reasons. 11:18 11:18 11:18 11:18 11:18 11:18 11:18 11:18 11:18 11:18 11:18 11:18 11:19

And then I think we talked about the populations that are at risk. Any further comment about this? State's local authorities generally lack jurisdiction. Bill? 11:19 11:19 11:19 11:19

MR. BURT: Grady, I would like to comment just to the extent of adding a focus on four examples that I'll draw from the written testimony that were put into the docket, but perhaps to add something to the discussion here. 11:19

The risk involved in crossings that are inadequately designed, and maintenance comes 11:19

out of design in some cases, but redundant crossings and the lack of a policy or a structure, that leads to a couple of things. 11:19 11:19 11:19

It leads to defects in the track that are often not the focus of these discussions. And I've noticed that a little bit this morning. 11:20 11:20 11:20

So far we've talked about the potential for collisions at crossings, but I can cite at least four different types of situations here that we see out in the field. 11:20 11:20 11:20 11:20

We see people trying to take tracked vehicles across private crossings, steel-tracked vehicles, such as an excavator or a dozer. That, of course, presents the risk of throwing the track out of gauge, and of course they don't know it, or if they do they're not telling us. It gets caught in the 11:20 11:20 11:20 11:20 11:20 11:20 11:20

next track inspection hopefully, but that may not be soon enough. 11:20

We have people skidding logs across crossings. The same kind of issues arise. We tell crossing holders time and time again not to do that, or if you're going to do that make sure we've got an employee on the scene supervising the operation so to at least 11:20

inspect the track immediately after it to see 11:21
that there was no damage. Because we do have 11:21
some people that insist on their right legally 11:21
to skid logs across the crossing. And under 11:21
Section 52 in New York State they may indeed 11:21
have such a right, depending on how the courts 11:21
would view that. 11:21
And then you have oversized farm 11:21
equipment. The farm equipment that's in use 11:21
today is often wide enough now that it can't 11:21
even go down the highway within the right-hand 11:21
lane and needs to occupy both the right-hand 11:21
lane and the shoulder, and that tells you 11:21
something. That tells you that when that farm 11:21
equipment gets to your 12-foot-wide planks on 11:21
the private crossing, it's not going to go 11:21
across those planks, it's going to drop down 11:21

into the gauge. Some portion of the frame of that equipment or the hubs on the wheels may well hook and once again hook the rail, drag it out of gauge. And the farmer will do that feeling that he has a God-given right to do it, and you're blocking him otherwise from getting to his property. 11:21

So the other answer would be to provide I 11:21

suppose 25-foot-wide planks, but whose expense is that going to be and how do we know where it's even required. 11:22

Finally, last but not least, I provided some photos in the written testimony of side hill drainage situations in some of the hilly territory that we have here in this part of the country, not so much in the Northern Tier of New York, but in the Southern Tier. 11:22

Many, many crossings are at the foot of a side hill road where there is absolutely nothing done about the drainage except to let the water run down the road and down the sides of the road until it encounters the railroad, and in a cloudburst it floods the railroad repeatedly. 11:22

And so the crossing becomes filled in, a 11:22

focal point of siltation and mud that's carried to the railroad. And the farm occupant or the crossing holder is not alone in this regard. Municipalities and many others often view the railroad as the dumping ground for their drainage issues, where if they were private developers doing this under the normal building code process in New York

State they would be required to have a storm water discharge plan. But in the case of the railroad it seems to be a free shot. You get to dump your water to the railroad, and then it becomes the railroad's problem with whatever came along with it in the way of silt and mud. 11:23

Those are the four examples. And they -- they come in under your populations at risk, because the risk is not just collision, it's also derailment due to tract defects which may be gradual over time or may be sudden in the nature of a piece of equipment, for instance, hooking the track and putting it -- throwing it out of gauge. 11:23

I looked at that photo of the Amtrak derailment in Florida, and my eye immediately 11:23

went to the fact that there was a dip in that crossing. I don't know if anybody else saw that. And on supposedly what presumably was good 50-mile-an-hour, 60-mile-an-hour track. So that again we see a lot of. 11:23 11:23 11:23 11:23 11:24

MR. COTHEN: And our FRA track inspectors certainly see that as well. Thank you, Bill. 11:24 11:24

Okay. We talked about the absence of a 11:24

cohesive policy, the folks who are at risk. 11:24
Bill calls attention to the fact that there's 11:24
a derailment risk. 11:24
Pretty much outside of California and 11:24
New York, with the caveats that Mr. Scott has 11:24
provided, we've seen that state governments 11:24
generally lack jurisdiction over private 11:24
crossing issues. We have state of Connecticut 11:24
reps here today, and they can correct us if 11:24
there's a different situation there. 11:25
So what you have -- thank you very much, 11:25
Anya. 11:25
MS. CARROLL: Sure. 11:25
MR. COTHEN: What you have is that you 11:25
have no counterpoint to the legitimate 11:25
interests of the property owner accessing that 11:25
field or proceeding with the development. You 11:25

don't have the kind of tension that needs to be there in public policy to ensure that both the public and private goods are met. And that the private interests are worked out as well. 11:25

When it comes to engineering design, again, there's largely a vacuum, and that's already been referred to in testimony and 11:25

remarks today. 11:25

Any further comments on this slide and 11:25

these findings? Mr. Dickinson. 11:25

MR. DICKINSON: I might comment, Grady, 11:26

as far as engineering designs are concerned, 11:26

if there is indeed a consensus that the Agency 11:26

needs to establish standards for engineering 11:26

designs, you were actually involved, as we 11:26

were, in the corridor between Charlotte and 11:26

Burlington, Vermont, several years ago. And 11:26

most of those crossings up there were private 11:26

crossings, and those folks have done some very 11:26

innovative things up there to private 11:26

crossings, and I think there could be some 11:26

lessons learned there. 11:26

So you might make a note of that and look 11:26

at those in the future as far as establishing 11:26

these kinds of standards. 11:26

MR. COTHEN: Randy Dickinson, again from 11:26

Region 1. And Randy is referring to a case 11:26

where interesting train horn issues generated 11:26

some creative activity in a community which 11:26

extended to what were effectively private 11:26

crossings. 11:26

Ms. Harris. 11:27

MS. HARRIS: Yes. I just wanted to make the point that public safety and necessity, or public convenience and necessity, as we call it in California, isn't necessarily an adequate safeguard, because unless it's tied back into land use planning, you find yourself in a situation where the subdivision has already been approved and now you've got a lot of people that are landlocked. 11:27

So it's got to go -- it's actually -- from a planning standpoint it's got to start a lot earlier if you want to produce a situation that will minimize at-grade crossings. 11:27

MR. COTHEN: The Federal Railroad Administration started working on this issue actively in the 1990s, and I think it's a former -- as a former resident of California 11:27

we used to say California leads the nation. 11:27

It's very indicative of the state of play 11:27

of this issue that California is now getting 11:27

around to -- and to their credit they're 11:27

getting around to some active public 11:28

discussion through a commission established by 11:28

the state legislature that includes the point 11:28

that Carol Harris just made. 11:28

And how long it will take, you know, to move across the breadth of the nation is hard to say, but we're interested in doing whatever we can. 11:28

I just saw I'm spotted on a meeting of the Transportation Committee of the National Conference of State Legislature is coming up, so Miriam is in charge of making sure that I adequately address that issue to that group. We'll take it to every venue that we can. 11:28

Okay. Yes, sir. 11:28

MR. WHITEMORE: Shane Whitemore, W-H-I-T-E-M-O-R-E, with CSX Transportation. 11:28

To address the zoning and the land use plans that we've brought up earlier, I've had the opportunity to participate in no fewer than ten local zoning boards in the areas 11:28 11:29

where we operate where housing communities are being designed and planned trying to take a preemptive stance to go out there and say hey, consider us in your plans. 11:29

Because the states and local authorities may have conflicting priority with the issue because they want to develop their areas, they don't take our comments as being necessarily 11:29

part of the decision. So any kind of 11:29

overarching plan as a land use must consider 11:29

this would be appropriate in my opinion. 11:29

Also, as we sit there and we look at 11:29

design of crossings within the design 11:29

engineering and warning systems on private 11:29

crossings, the state for public crossings sets 11:29

that warning system requirement. They come to 11:29

us and they say we want this type of warning 11:29

system at this crossing based on use. 11:29

The private crossings don't have that, so 11:29

the railroad is then put in a position of 11:30

trying to make that determination, what is the 11:30

appropriate level of warning system at this 11:30

crossing. Which puts the railroad in a 11:30

position -- the unenviable position of 11:30

assuming all the risk should an accident occur 11:30

at that location. 11:30

So as we look at governments and state 11:30

organizations taking responsibility of trying 11:30

to determine appropriate warning systems with 11:30

stop sign, crossbars, it needs to be applied 11:30

uniformly, and the railroad doesn't assume all 11:30

that risk because our first inclination would 11:30

go to four-quadrant gates and, you know, 11:30

systems out there that would be cost prohibitive. Of course, the private individual doesn't have the ability to pay for those kinds of things. 11:30

So thank you. 11:30

MR. COTHEN: Thank you, Shane. 11:30

Okay. Here is some additional findings: 11:30

There are a lot of agreements out there, and there are a lot of title documents back in the registrar's office, if the county court hasn't burned. I believe we had at least one burned down county courthouse as we went around the country. 11:31

But most crossings lack agreement, formal arrangements between the railroad and the holder to allocate responsibilities. You know, is the drainage adequate, is the surface 11:31

properly maintained within and outside the gauge of the approach, and is that sign appropriate given the type of vehicle that's moving over the crossing and so forth. 11:31

You know, frankly, the Federal Railroad Administration is highly unlikely to get into the business of liability and allocation of liability, but putting that aside, most of the 11:31

elements -- essential elements of a crossing 11:31
agreement are going to be of interest at some 11:31
point to the public. And that there is an 11:31
agreement and that it's kept current is 11:31
something that appears to be important and 11:32
useful to making headway here. 11:32
We talked about public use being a key 11:32
safety concern. It's clearly Department of 11:32
Transportation policy -- U.S. Department of 11:32
Transportation policy that public use 11:32
crossings should get the same engineering 11:32
treatments that the Manual for Uniform Traffic 11:32
Control Devices applies to public crossings, 11:32
but it's easy enough to say it, it's not so 11:32
easy to make it happen. 11:32
And we've talked about the absence of 11:32
involvement by local planning departments at 11:32

this juncture, something we'd like to see changed. Stop me at any point. 11:32 11:32

Additional findings: Railroads have got some muscle, but they're facing a lot of obstacles, so their authority clearly is limited in terms of looking out for the public interest as well as their own. 11:32 11:32 11:32 11:33 11:33

Very often efforts to make improvements 11:33

may be hampered. It can include obstacles 11:33
presented by budding landowners who won't 11:33
provide for an access road so we can close 11:33
some crossings. 11:33
We concluded in going around the country 11:33
and just talking to people that public 11:33
education and awareness probably helps in this 11:33
regard. It's probably why our numbers are -- 11:33
along with the railroad's efforts, it's 11:33
probably why our numbers are flat rather than 11:33
going up. 11:33
But obviously in our three E array of 11:33
tools here, engineering, education, and 11:33
enforcement, there's a limited amount that can 11:33
be done on the enforcement side. The 11:33
railroads clearly continue to employ -- the 11:34
larger railroads police forces, but they're 11:34

spread over a very large area.

Phil, could you introduce yourself for the record and take a mike there?

MR. POICHUK: Phil Poichuk, Transport Canada. Poichuk is spelled P-O-I-C-H-U-K.

Grady, you mentioned that in many cases there is a lack of an agreement, and also I believe you previously alluded to the fact

that in many cases the actual rights are no longer documented for whatever reason in those cases where the crossing has rights. 11:34

In the U.S. do railroads routinely challenge these cases, challenge the right to the crossing where, in fact, they can find no agreement or expression of rights? 11:34

MR. COTHEN: Who would like to from the railroad side explain some of the efforts being made? Mr. Browder can -- meets with these people on a regular basis and can give us an overview. 11:34 11:35 11:35 11:35

MR. BROWDER: Phil, why don't I give you a generic answer, and that answer is that the Class Is, the seven Class Is have a very assertive campaign to close crossings. And they have a program that they have initiated. 11:35 11:35 11:35 11:35 11:35

In some cases they have established 11:35

standards and practices for closing private 11:35

crossings. In many cases those standards and 11:35

practices don't work without citing any 11:35

specific railroad. 11:35

I would relate an incident that occurred 11:35

to one of the Class Is in South Carolina where 11:35

after establishing a program and initiating 11:35

action they actually went out to private 11:35
crossings that they could identify and didn't 11:36
know who the landowner was, didn't know who 11:36
the user was, if anyone, and posted signs 11:36
showing that in 90 days if they didn't contact 11:36
this particular railroad that they were 11:36
going -- planning on closing that particular 11:36
crossing. And the railroad eventually became 11:36
frustrated because they got thrown out of 11:36
local court so many times. 11:36
We have found that it is much better to 11:36
work assertively with the local governments 11:36
and with the state DOTs in efforts to 11:36
consolidate crossings. And we don't neglect 11:36
any opportunity to do that. 11:36
And as was mentioned earlier by 11:36
another -- in reference to another Class I 11:37

railroad, there is a very assertive program 11:37

not to permit new crossings except where they 11:37

meet criteria and establish things that make 11:37

them in the interest of all parties or in the 11:37

public good. 11:37

So it is a very instrumental program that 11:37

goes on, it's very frustrating to railroads, 11:37

but they do have a very clearly defined 11:37

programs within their own companies to close crossings and to consolidate crossings as such. 11:37

I would add, and I mentioned this to the FRA several times recently, is that one area that appears to be providing more assistance in consolidating crossings to date has been the implementation of the train horn rule and the accompanying quiet zone initiatives. And those communities that have initiated quiet zone initiatives appear to be providing additional local support for some of the railroad initiatives to close private crossings. 11:37 11:37 11:37 11:38 11:38 11:38 11:38 11:38 11:38

Because I used to cite -- my figures were that I would go to 15 public hearings to get one crossing closed. Because if there was one 11:38 11:38 11:38

person or local voter who opposed the closing 11:38
of that crossing, usually that was the kiss of 11:39
death with whatever the supervisory 11:39
organization was that was considering action 11:39
on that proposal. And now with the quiet zone 11:39
initiative there appears to be in some cases 11:39
local pressure from the general public, the 11:39
community, and local government to work 11:39

constructively toward realistic programs to eliminate especially those crossings that have a higher probability of a collision occurring. 11:39

I hope I answered your question. 11:39

MR. COTHEN: Okay. Thank you for that. 11:39

MR. SCOTT: Grady, can I -- I would just -- 11:39

MR. COTHEN: Mr. Scott. 11:39

MR. SCOTT: Just like to say that we've actually found in New York since we had the legislation on the books that grants us authority over, as I said, intercity lines and commuter corridors, we've worked with the Long Island Railroad, who has actively pursued efforts to close private crossings, and over the past two to three years they've successfully closed over 50% of the crossings 11:40

that did exist on their lines. 11:40

So it can work, you have the laws on the 11:40

books that help the railroads out and clarify 11:40

the definition. Thank you. 11:40

MR. COTHEN: Excellent. Thank you. We 11:40

had a finding related to the necessity for 11:40

some cooperative work among the parties 11:40

involved. 11:40

You know, we can fight all we want to and run up the legal bills and tie up the courts and so forth, but I think most would agree that what we're looking for here is cooperative efforts. And these are the parties that have been identified to date. Anybody else you would like to add? 11:40 11:40 11:41 11:41 11:41 11:41 11:41

MR. WHITEMORE: Grady, I would suggest that adjacent landowners. You have the private crossing holder -- 11:41 11:41 11:41

MR. COTHEN: Yes. 11:41

MR. WHITEMORE: -- but in a lot of cases when you look for alternate access, adjacent landowners are also part of the process. 11:41 11:41 11:41

MR. COTHEN: Thank you. Anybody else? 11:41

Okay. So here we get to the dry stuff, right? FRA has some relevant authority. Our 11:41 11:41

relevant authority is over railroads and railroad safety. 11:41

You know, Farmer Smith doesn't know us from nobody, and that's I think the problem. And the local resident who with two or three other residents uses the crossing, they have no idea who we are. 11:41

They've heard of the Federal Aviation 11:42

Administration, they saw a sign at the airport, but they don't know who we are. And we don't know in many cases, of course, their needs and concerns as well. 11:42

Other Department of Transportation modes are interested in this issue. The Federal Highway Administration has ensured that it stays in play with regard to the Manual for Uniform Traffic Control Devices. And clearly National Highway Traffic Safety Administration, Federal Motor Carrier Safety Administration are interested in this issue but may not have specific relevant authority to bring to bear here. 11:42

Another reason, by the way, that probably, you know, we're keeping these numbers flat is our automobiles are safer 11:42

today. And if you do have a collision down 11:43
below 25 miles an hour, with a side air bag, 11:43
you may mitigate or even prevent in some cases 11:43
an injury. 11:43
We're working across a broad front of 11:43
issues as a society to reduce the risk here, 11:43
but, you know, if that motor vehicle gets hung 11:43
up or if it's a higher-speed collision, 11:43

there's only so much reasonably that can be done in that regard. So those are just kind of straightforward actual findings. 11:43

But Mr. Browder had a comment? 11:43

MR. BROWDER: Well, I can't help but when you ask about other modal agencies within the DOT go back to one question that AAR has raised for a number of years concerning the issue of highway-rail grade crossings. 11:43

You mentioned the interest of the Federal Highway Authority with the MUTCD, and I can attest as the token representative from the railroads to the National Committee that FRA has done a excellent job in supporting the initiatives of the National Committee, including the proposal to FHWA to add yield or stop signs where -- as appropriate for public 11:44

crossings. 11:44

The other part of the initiative though 11:44

that I see and I've seen in my activities 11:44

involves the Federal Transit Administration, 11:44

the National Highway Traffic Safety 11:44

Administration, and the initiative that has 11:44

either converted former highway-rail grade 11:45

crossings from Class Is and short lines to 11:45

transit or new ones that have appeared in transit modal organizations. 11:45

And similar to the perspectives that James so eloquently presented about the general public not knowing the difference between a public and a private crossing, I would allow that a vehicle operator out here doesn't know the difference between a Class I railroad crossing and a rail transit crossing if it's in the traditional mode of having highway bells, gates, and lights. 11:45

I point out with some trepidation that the U.S. DOT inventory maintained by FRA may or may not include those public and private crossings that exist under the Rail Transit Administration. And many of them do. And they do because of the tireless effort of 11:45 11:45 11:45 11:45 11:45 11:45 11:45 11:45 11:45 11:46 11:46 11:46

FRA's staff, of the railroads and their staff, of railroad suppliers, of former railroad signal and communications people that are now employed in the rail transit industry to maintain and keep the inventory under FRA. 11:46

And the suggestion that AAR has been putting forward for several years consistent with Anya Carroll's Volpe Center and the 11:46

Transportation Research Board looking at studies to improve safety at highway-rail grade crossing is -- really is an intermodal issue that you're absolutely right, you need to involve those other stakeholders. 11:47

I've bugged you several times about FHWA participation. I believe they have come to one session in New Orleans. And that again for a even more complete discussion I'm sure you'll be contacting the other modal agencies, the American Public Transportation Administration and others, to ensure that we get a perspective in that area. 11:47

I couldn't help but add that, Grady. 11:47

MR. COTHEN: I assure you, Secretary Peters, who's the Federal Highway Administrator, will ensure the DOT agencies 11:48

work together on this issue. 11:48

MR. BROWDER: But she doesn't have much 11:48

time left. 11:48

MR. COTHEN: Doesn't have much time left. 11:48

Okay. Looking around the room. 11:48

We are now in the -- what is this, 11:48

point-counterpoint, is that it -- portion of 11:48

the discussion. And we just broke out 11:48

topically, you know, elements of Plan A and Plan B. Plan A we just captioned policy and Plan B regulation. We're not trying to bias you against Plan B, but we had to have a title. 11:48

Here are some matched initiatives under each of these plans or options. And as you can see, in the first instance it's the same idea, whatever else we do we want to discourage creating new crossings. That doesn't mean there won't be some; there will be a public necessity for some to be created or a private necessity for some to be created. But we want to discourage that. 11:48 11:49

That could be matched up with some additional initiatives that are shown there, including some state-level oversight of land 11:49

use changes. That's difficult, and that 11:49

assumes relationships between state-level 11:49

bodies and regional and local planning boards 11:49

that may or may not exist. However, at least 11:49

in the state of California through their 11:49

environmental process it's something that 11:49

they're giving a try at. 11:50

With that would of course go the notion 11:50

that states would have a flow of information 11:50
to the railroad so that the railroads know how 11:50
they need to interact perspectively with those 11:50
who are planning changes in land use abutting 11:50
or affecting the railroad. 11:50
And a counterpoint to that or a different 11:50
way of doing it would be some sort of 11:50
requirement that for each new crossing there 11:50
be a statement of essential need that would 11:50
have whatever attributes were called out 11:50
there, but certainly including the use that 11:50
was to be put to and some explanation as to 11:50
why there's not alternative access on a 11:50
reasonable basis. 11:50
And it would be the ability there to 11:50
simply say no. And then there would be the 11:51
need for some kind of way to resolve disputes 11:51

that might arise. 11:51

We have some further discussion, I 11:51

believe, of dispute resolution downstream from 11:51

this, so let's not get hung up on this on this 11:51

slide, but we'll get back to it I'm pretty 11:51

sure. And if I don't, Miriam will make sure 11:51

that I do. 11:51

Comments on these notions here? We'll 11:51

start with Stu and then go to Phil. 11:51

MR. SCHWARTZ: Grady, I guess my comment 11:51

would be directed not towards the specifics of 11:51

any bullet points within those two categories, 11:51

just to the general notion of the choices the 11:51

agency has to make about whether to proceed 11:51

with policy or regulation. 11:52

And speaking for myself and perhaps for 11:52

my company, we don't think the policy is a 11:52

good policy choice. Given the lack of 11:52

interest among the various states in 11:52

regulating private grade crossings -- or 11:52

addressing -- addressing private grade 11:52

crossings, let's leave the word regulation out 11:52

of it. Given the lack of interest in most of 11:52

the states, apparently 48 of them, have in 11:52

addressing questions of private grade 11:52

crossings, it strikes me that having a policy 11:52
out there and on the shelf that somebody could 11:52
refer to is not going to make those states 11:52
anymore interested in addressing those issues 11:52
than they are now. 11:52
The FRA has -- or DOT has over the years 11:52
expressed itself most vociferously that the 11:52
best crossing is a closed crossing and that we 11:53

should be closing crossings. 11:53

It's still no less torturous a process 11:53

than it was when the DOT first expressed that 11:53

theme. When the question comes down to is 11:53

this landowner going to lose his crossing, the 11:53

judge or the local regulatory body, most 11:53

likely is going to be a judge, is going to 11:53

make that decision not based on whether the 11:53

federal government has a policy that 11:53

discourages the existence of private grade 11:53

crossings, but he's going to make that 11:53

decision based on the local impact it's going 11:53

to have on that particular landowner and 11:53

perhaps his neighbors. 11:53

I know regulation is kind of a dirty 11:53

word, and there is -- there are all kinds of 11:53

degrees of regulation, and once we get to 11:53

regulation we can talk about details. But 11:53

what I'm suggesting is that as a general 11:53

proposition a policy option does not advance 11:54

the ball down the field. 11:54

MR. COTHEN: Okay. Phil? 11:54

MR. POICHUK: Grady, I would like to 11:54

address your point of forbidding crossings for 11:54

creation and the use of the crossing if it's 11:54

lacking.

My understanding of the American government system is that it is not unlike the Canadian one relative to the jurisdictional problems that exist between municipal levels of government versus state or provincial versus the federal. And what I am curious about is what legal instrument would it take to allow you to actually forbid a lower level of government to exercise its own rights that were traditionally given to it?

MR. COTHEN: Where is our lawyer?

The issue that -- and actually, you know, it was first Administrator Gil Carmichael who said we ought to take a run at these issues back in the 1990s. He's from Mississippi, and nobody's going to accuse him of being a

flaming liberal. But his point was that the nation needs the service of its railroads in aid of interstate commerce, including a growing role for passenger rail as well as freight rail. And Mr. Carmichael's point was that we all as a nation have an interest in that and that dealing with these issues related to

safety at highway-rail crossings was necessary 11:56
to meet the nation's transportation mobility 11:56
needs, and that the Commerce Clause of the 11:56
U.S. Constitution, which permits the Congress 11:56
to regulate interstate commerce, should be -- 11:56
give impetus to this kind of effort, and the 11:56
Supremacy Clause of the Constitution does 11:56
permit preemption of conflicting state and 11:56
local policies. And you can do that in a 11:56
variety of ways but allowing greater or lesser 11:56
discretion for action at the state or local 11:56
level and still having a national policy. 11:56
The interesting question that's presented 11:56
here that's the other side of the issue of 11:56
Farmer Smith doesn't know the Federal Railroad 11:57
Administration is, you know, to what extent we 11:57
could view those folks as somewhat -- somehow 11:57

within the ambit of our current statutory jurisdiction, that is the jurisdiction that the Congress gives us. 11:57

And that's an interesting question. When we first addressed this back in the 1990s we said, well, what about the notion of we tell the railroad you get an agreement with that crossing holder or you put the barricades up. 11:57

1	And that's sort of the issue writ large.	11:57
2	So what we're looking for here is a model	11:57
3	that says, okay, here is a national policy	11:57
4	that takes into consideration the interest of	11:57
5	people across the country in safety and the	11:57
6	mobility of our society, and it then asks of	11:57
7	each of us appropriate responses so that, you	11:58
8	know, the kid who's driving for the first time	11:58
9	by herself is going to cross to see the	11:58
10	neighboring kid on the other side of the	11:58
11	private crossing is just as safe traversing	11:58
12	that private crossing as she would be a public	11:58
13	crossing in the community.	11:58
14	So I don't -- our team doesn't think and	11:58
15	our counsel doesn't think that we're without	11:58
16	authority in the matter currently. We are	11:58
17	asking the question whether or not we need a	11:58

new charter from the Congress that would more 11:58
carefully define what the expectations are of 11:58
all of us, including role for state agencies 11:58
that are trying to get their job done in terms 11:58
of serving members of the communities here in 11:58
New York and elsewhere. 11:58
We think this is something that can be 11:58
done, but we're asking the question of whether 11:58

or not and how to proceed. 11:59

And Mr. Burt I guess is -- 11:59

MR. BURT: Grady, just as Stuart thought 11:59

he ought to dive in at the head end of this 11:59

presentation, I guess my feeling is the same 11:59

as I look down through the slides I think I 11:59

better try to contribute this 2 cents' worth 11:59

now. 11:59

Our written testimony stated in several 11:59

places that if the private sector railroads 11:59

were only empowered to do the job, they would 11:59

do the job. And that is a balanced job. 11:59

That's a job that takes into account the 11:59

deeded rights of those who have deeded rights, 11:59

yet at the same time takes into account the 11:59

pressing safety issues involved and the public 11:59

safety of them as well as the safety of the 11:59

employees of the railroads and the safety of 11:59
the private crossing holders themselves. 11:59
And yet I haven't heard -- and I guess 11:59
you could infer in that position a certain 11:59
caution in representing the diverse members of 12:00
our organization, large and small, with 12:00
various types of views on a wide range of 12:00
things. But I haven't heard any one of the 12:00

members come to any one of our executive committee and say we will not consider one thing or another as we approach this question. It's far too early in process for people to do that I think. 12:00

So with that in mind, my perception of it is, and perception of many that I talked to in our organization, is that we really have three options on the table. We can take the most conservative option if that's a possible label and simply try to make the private property system work better. 12:00

The falling down of that seems to be that the local courts in many cases won't enforce it probably, and we get caught in this situation of local politics, and the private crossing holder may be the brother-in-law of 12:01

the judge, that sort of thing. 12:01

So that -- I won't say it's a nonstarter, 12:01

it's awful attractive to a lot of people who 12:01

believe in trying to make more traditional 12:01

methods work, but it does seem to have that 12:01

major defect. 12:01

And that New Orleans -- the railroad down 12:01

in Louisiana stated passionately and in a way 12:01

that many of our members would agree with. 12:01

The second option which should not be 12:01

dismissed entirely is the state level. I'd 12:01

like to say a kind word for the processes that 12:01

we go through as railroads with New York State 12:01

to close public crossings. There is a process 12:01

to take it in front of an administrative law 12:01

judge. We work cooperatively with DOT. The 12:01

interests of the communities, the neighboring 12:01

landowners, everyone's interests are taken 12:01

into account, and there seems to be 12:01

remarkably, although I'm sure maybe I have a 12:01

skewed sample, but in our experience a 12:01

surprisingly good, effective process there 12:02

with less controversy than one would think, 12:02

partly because everyone involved understands 12:02

there is a bottom line here and that is that 12:02

the state's policy is to further reduce the 12:02
number of public crossings and to discourage 12:02
the creation of new public crossings if at all 12:02
possible. 12:02
So, you know, it's not hard to 12:02
extrapolate from that the possible scenario 12:02
that perhaps if similar authority were 12:02
extended to private crossings we might be able 12:02

to make that work. But once again I think we 12:02
do have a problem evident there with local 12:02
courts, lawsuits, litigation, dragging that 12:02
into a less effective process than it might 12:02
otherwise be. 12:02
When we consider the third option of 12:02
federal regulation or federal -- greater 12:02
federal involvement more broadly, I would like 12:02
to at least suggest the possibility, and I -- 12:02
trepidation is a good word here, I say this 12:02
with trepidation since there are greater 12:03
experts in the room, most notably yourself, 12:03
about how to do this kind of a process. 12:03
But my understanding is that in the past 12:03
the FRA has found it possible to occupy the 12:03
field and draw up certain very broad standards 12:03
without necessarily micro-prescribing the ways 12:03

in which those regulations are implemented. 12:03

And I know that's a very broad statement, 12:03

but the bridge issues in the past come to mind 12:03

and the way that bridge inspections have been 12:03

handled over a number of years. 12:03

And I think that's part of what some of 12:03

our members have suggested in our 12:03

conversations, that perhaps there's a way here 12:03

for the FRA to make statements to policy and occupy the field in such a way that preempts the defective processes we see at a local level but at the same time doesn't result in an unnecessary amount of regulation. 12:03 12:03 12:03 12:03 12:04

So with those thoughts, perhaps I put those out now rather than try to weigh in at a later stage when we're down to the details. 12:04 12:04 12:04

MR. COTHEN: Okay, thank you. I'm reassured to hear that we're making headway with public crossings in New York State. 12:04 12:04 12:04

Mr. Scott, you want to add to that? 12:04

MR. SCOTT: I just wanted to add in support of what Bill was saying that in New York the laws that we have on the books for private crossings has a section in it that prevents the creation of any new private 12:04 12:04 12:04 12:04 12:04

crossing until we have an administrative law hearing, which gives the parties an opportunity to present their case. 12:04

And we found that to be quite effective, at least controlling the numbers of any new ones. Dealing with the existing ones has turned out to be an entirely different story. 12:04

And I would also like to note under your 12:05

policy comments that I would tend to think 12:05
from a state perspective that it's difficult 12:05
for the states to track land use changes, and 12:05
certainly we think that the railroads are in a 12:05
better position to do that because they have 12:05
people out along the railroad all the time. 12:05
We've usually found that the railroads 12:05
advise us when there's a -- change is taking 12:05
place, and then we can act on it. But I'm not 12:05
quite sure how the states would have that 12:05
information. 12:05
MR. COTHEN: Yeah, I think with what 12:05
we're struggling with, you know, the 12:05
roadmaster goes out there and sees the 12:05
utilities going in, yeah, the railroad's aware 12:05
and probably before you are, but it's too late 12:05
and -- very often. 12:05

So I guess what we were asking is whether 12:05
or not from a planning point of view we could 12:05
get -- whether it would be possible to have 12:05
communication mechanisms within state, 12:06
regional, and local government to get these 12:06
things identified early enough so that you can 12:06
deal with them in the least costly manner. 12:06
That's basically the question. 12:06

Yes, Randy. 12:06

MR. DICKINSON: I have just one 12:06

suggestion, Grady. That there may be a third 12:06

way between policies and regulations to skin 12:06

the cat, so to speak. 12:06

But before I get started on that I should 12:06

apologize, earlier I didn't identified myself 12:06

for purposes of the recorder there. 12:06

My name is Randy Dickinson, R-A-N-D-Y, 12:06

last name is D-I-C-K-I-N-S-O-N. And I'm the 12:06

Regional Program Manager for Grade Crossing 12:06

Safety for the Federal Railroad 12:06

Administration. 12:06

And I'm sitting listening to this and I'm 12:06

thinking that we're debating back and forth 12:06

between policy and regulation or mandate and 12:06

persuasion, and there may actually be a third 12:07

way, and that might be to approach it from an incentive standpoint. And I'm just wondering if there has been -- I'm sure that we wouldn't -- that our agency wouldn't get necessarily involved in it, but for some of the other organizations, the AAR and various other organizations, there may be some merit in approaching the tax incentive approach. 12:07 12:07 12:07 12:07 12:07 12:07 12:07

And in other words, providing perhaps tax incentives or property tax relief to the private crossing holders for purposes of relieving the financial burden for any costs that they may have to bear, and it may actually provide incentives for them to close crossings outright. 12:07

So that's just a suggestion you might want to put on the record. 12:07

MR. COTHEN: Okay, thank you. I do want to emphasize that this is for purposes of eliciting comment, and, you know, you might just -- regulation may not be a regulation, it might be a federal statute that specifies goods and responsibilities and that leaves administration to the states or private parties. It doesn't necessarily have to 12:07 12:08 12:08 12:08 12:08 12:08

involve -- doesn't necessarily have to involve 12:08
FRA, although clearly we want to help if we 12:08
can. 12:08
Okay. Here is some more of the same sort 12:08
of stuff. We could offer a model state law 12:08
related to crossing agreements. We could -- 12:09
on the other hand, there could be something 12:09
more clearly mandatory from the federal level. 12:09

And I think you see the conundrum there 12:09
under existing statutory law and when we talk 12:09
about requiring holder participation in the 12:09
agreement. It's easy enough to say railroad, 12:09
go make an agreement. It's less -- you know, 12:09
that's easy for us, but then the railroad 12:09
first has to determine who the holder is, as 12:09
you've heard, and then somehow elicit 12:09
cooperation and get an agreement, and on a 12:09
basis that's fair, how do you do that? 12:09
We have a state safety participation 12:09
program for our regulations that apply to the 12:09
railroads, and we invite the participation by 12:09
the states in terms of enforcement of those 12:10
regulations. States supplement federal 12:10
regulations in areas where we have not, quote, 12:10
occupied the field, end quotes. 12:10

And it's possible if we go to the 12:10

Congress on this to imagine a tailor-made 12:10

structure which provides for appropriate 12:10

involvement by those states that are able to 12:10

participate. It would empower them to act 12:10

under the federal stated policies or 12:10

requirements. And it might provide the 12:10

railroads a friend before the Administrative 12:10

Law Judge or in court or wherever if a dispute cannot be worked out so that there's a balance of public policy presented. 12:10 12:10 12:10

Whether there is an ability to eventually remove a dispute to federal court could also be addressed in any legislation. 12:11 12:11 12:11

Comments about these particular bullets other than the thoughts we've already had? 12:11 12:11

I should note that when we talk about state safety participation, and New York DOT among others is among the 30 states participating, not only does the state need to have, you know, a blessing from Uncle Sam, but it also needs to have authority under its own state law to engage in this activity. So it's a decision by the legislature and Governor to get into the fray. 12:11 12:11 12:11 12:11 12:11 12:11 12:11 12:11 12:11

We've had, by the way, you know, additional states participate in this activity where the staffs of the respective departments of transportation or public utilities commission have indicated an interest from their standpoint in playing a more significant role or continue a significant role that they're currently playing.

And I take it that while they are careful 12:12
to say they're not authorized to speak on 12:12
behalf of the full legislature or perhaps even 12:12
the Governor's office in that regard, that 12:12
that indicates an awareness within the state 12:12
of the importance of the issue. 12:12
A lot of discussion during this road show 12:12
has gone into the issue of appropriate 12:12
treatments for different types of crossings. 12:12
And Miriam has addressed that in her remarks. 12:12
We've suggested here, it's possible, 12:13
though not without difficulty and not without 12:13
exceptions, to sort of group some of the 12:13
typical categories. 12:13
And it matters a lot what you think a 12:13
public use crossing is. And it's difficult to 12:13
say what a public use crossing is. 12:13

A multi-residential community, for instance, even if it's a gated community, is going to have the plumber and the yard service and so forth in and out. And not only that, the personal guests of those who live there. 12:13

So one can argue there is some public use. If it's a shopping center, commercial use, certainly there's going to be the public 12:13

freely accessing that area. Industrial crossing may have mostly trucks full of gravel or it may have a more active or diverse use. 12:14

And we're sensitive to the fact that some of the categories might move between the super categories that have been put on there, but one of the jobs that we would have together if we move forward on this is to appropriately classify crossings, and any hard, tough examples you have that you can throw in the public docket would I think help us think about that with a higher degree of resolution. 12:14

I got a question from a reporter out here during the break about the Rome, New York, collision which was, quote, in a private crossing. However, I believe it's correct to say, Ike, that after investigation we all 12:15

concluded it was a public road. 12:15

MR. SCOTT: Yes, it's a public road, but 12:15

it has not gone through process to make it a 12:15

public crossing. And in this state our laws 12:15

are quite clear that if a public road existed 12:15

as of 1897 it was grandfathered in as a public 12:15

crossing. After that time the only way it can 12:15

become a public crossing is through the 12:15

regulatory process. 12:15

Therefore, we do wind up occasionally we see situations where a road has been made public but they have not gone through the correct process to make the crossing public. So that's a difficult one. 12:15

MR. COTHEN: And that's the level of nuance that I will say it totally escaped us to this point, but indicative of the potential complexity of, you know, the issue. 12:15

But obviously if we're having trouble deciding what's a public crossing versus a private crossing, the first thing that happened after the -- you're going to have to help me out now -- oh, the accident at Portage, Illinois -- Indiana, Portage, Indiana, was a great deal of weeping and 12:16

wailing and gnashing of teeth as to whether 12:16

that was a public or a private crossing. 12:16

It had steel coil trucks just one after 12:16

another after another. You could just sit 12:16

there watching the trucks go through with -- 12:16

almost without having a time when there wasn't 12:16

a truck in view. And it had flashing lights 12:16

and gates and I don't know what, four or five 12:16

tracks, Amtrak service, NICTD service, which is the commuter authority there, and freight rail service on Conrail. And was this a public or a private crossing. 12:16 12:16 12:16 12:17

Well, in the end of the day it didn't matter, you know, it -- I mean, but the circumstances of the crossing certainly mattered to the three people who were killed in that collision. It only took I think four or five years after that to get a grade separation in, as I recall. Dave Blackmore from our regional office in Chicago put days and days into that to try to get that one crossing addressed. And it was. 12:17 12:17 12:17 12:17 12:17 12:17 12:17 12:17 12:17 12:17

But the point is sometimes it's difficult to tell, and these things matter, I guess, are -- those are the take-aways from it that 12:17 12:17 12:17

we have to this point.

Bill or Ike, did you have something more?

MR. SCOTT: Can I add, when we looked at this situation we also considered the public safety concerns and therefore focused on the lines that have passenger trains operating over them.

So in addition to the use -- highway use

over a crossing, we have to look at the rail usage as well because of the passengers on the train. I feel you should put it into the public use category when there's passenger trains operating in the corridor. 12:18

MR. BURT: I just wanted to mention, Grady, with the assistance of the New York DOT, Western New York and Pennsylvania Railroad just closed an example of what we were talking about here, a private crossing that had slipped in public use. And when we went to investigate the responsibilities for that so-called public crossing, the local jurisdictions disavowed any responsibility for it. 12:18

But apparently one of the predecessor railroads deep in the past had allowed 12:18

crossbucks to be put up there, and it was an absolutely horrendous engineering layout, a T intersection with a busy public highway right next to the railroad on a steep grade. So we were happy to get rid of it. 12:18 12:18 12:19 12:19 12:19

And I think when short lines get into some of these acquisitions that -- of lines that have been neglected for a few years, they 12:19 12:19 12:19

usually come with a collection of these situations. So it's not unknown. 12:19

MR. COTHEN: Okay. Phil? 12:19

MR. POICHUK: Phil Poichuk, Transport Canada again. 12:19

In the United States do you -- do you have any legal instrument of convenience that can allow an empowered individual to -- federal probably, to declare a particular crossing de facto public for purposes of crossing usage? 12:19

MR. COTHEN: I think it's fair to say that there are -- unless the Surface Transportation Board has been working diligently over the last few days, that the answer to that is no, we don't have at the federal level such an ability. 12:19

Obviously states manage differently from state to state the issue of what sometimes we call adoption of private crossings, in effect making them public roadways. And I'm not an authority on that, but Mr. Scott is for New York. 12:20

MR. RIES: Grady, I would add for purposes of discussion, we've used the 12:20

definition of public crossing as what Federal Highway Administration has deemed for use of the Section -- eligibility for Section 130 funding. So that's the definition of the term public. 12:20

MR. COTHEN: Okay. One of our folks stuck under my nose lunch options. I'm not sure what she was -- what Anya was suggesting. 12:20

Are you suggesting that maybe we need to have lunch? Is that -- 12:21

MS. CARROLL: Yeah, that would be a good idea. 12:21

MR. COTHEN: Okay. I guess we have to do that then. I've got a revolt in the ranks. 12:21

Why don't we try to do it between now and 1:30. Anya, you want to explain what options folks have? 12:21

MS. CARROLL: Yeah. There's some menus and also a list of options of restaurants in this area that are on the registration desk for you to pick up and use. There's also a menu for the restaurant that's in the hotel itself. And there are three or four different options listed, including pizzeria and subs and salads and deli options. 12:21 12:21 12:21 12:21 12:21 12:21 12:21 12:22

So please make use of the information the hotel has put together for us, and we'll see you back here at 1:30. Thank you. Enjoy. 12:22

MR. COTHEN: We're in recess. 12:22

(A luncheon recess was taken from 12:22 PM until 1:33 PM.) 12:22

MR. COTHEN: Out of deference to everybody that is here, and quite a few are, why don't we go ahead and kind of settle back into our places, and hopefully others will come in here shortly. 13:33

So we'll resume. And where we left off, the slide in front of you was up, we were talking about, among other things, categories of private crossings. 13:33

One of the, you know, probably most difficult issues because it involves execution 13:33

of engineering improvements is on the left -- 13:34

or right-hand side of the page there, and I 13:34

suppose it needn't be displayed quite that 13:34

way. We've had a good deal of comment to this 13:34

point in the proceeding that it probably would 13:34

be helpful at some point to convene, either 13:34

reconvene or reconstitute or have something 13:34

like a technical working group, which was used 13:34

by the Department of Transportation to freshen up the guidance for treatments at public highway-rail crossings a couple of years back. 13:34

That group did an excellent job, very professional job, and whether or not you have a more directive role federally it would seem to me useful at some point to have that kind of work done and available for reference, even if only as a voluntary standard. 13:34 13:35

But in contrast to a voluntary standard, it's possible to imagine some pretty directive federal guidance similar to the MUTCD or as a part of the MUTCD that would, for instance, provide for minimum treatments at crossings. 13:35

There's been a fair amount of suggestion at your typical farm crossing a locked gate works pretty well. The gate's often there 13:35

because the livestock need to be controlled, and the lock on the gate is an indication that the guy who comes through in a four-wheel drive vehicle wanting to go hunting on the other side of the railroad really shouldn't be traversing that crossing. Maybe a practical impediment. 13:35 13:35 13:35 13:35 13:35 13:35 13:36

On the other hand, the farmer's got the 13:36

key to the padlock and in season when he or she needs to can traverse the crossing and take care of business. 13:36

For all other crossings it would seem that some kind of standard for minimum signage be required. We have a de facto -- I say de facto because of the actions of states and railroads -- de facto standard sign of private crossings now, which probably if you look at the preponderance of crossings consists of a small crossbuck and small stop sign. I don't know how many of them are reflectorized on both sides of the post. And the -- in other cases simply a crossbuck. 13:36

Bill's referenced the fact that we want to be going to a regime in which every crossbuck has something else on it that's 13:36

appropriate for that location, either a stop or yield sign in particular so that the motorist is not required to guess at what the intended action is at that crossing. 13:37

The subject of exactly how you would execute that seems to me would be something that a technical working group would need to work out. 13:37

Right now the predominant regime seems to be on the public side, somebody can correct me who knows more, a number of people in this room, a room full of people know more than I do, but seems to be trending toward a default for a yield sign with standard crossbuck and then the stop sign where an engineering study indicates that's appropriate. And there is some guidance from Federal Highway and Federal Rail encouraging use of the stop sign in appropriate cases. 13:37 13:37 13:37 13:37 13:37 13:37 13:37 13:37 13:37 13:38

On the private crossing side the default again, as I indicated, seems to be a stop sign. Clearly there are going to be some industrial crossings where it's good to have an evaluation of what kind of motor vehicles are using that crossing on a regular basis, 13:38 13:38 13:38 13:38 13:38 13:38

what the sight distances are, and the timing, 13:38

the relevant timing in terms of traversing the 13:38

crossing from a dead stop. And the -- and 13:38

whether or not if there's not a stop sign 13:38

there's going to be an opportunity to have a 13:38

good preview of the rail approaches from the 13:38

roadway approach. 13:38

In some of these cases if some of the 13:38

research done in Canada is any indication, you know, you're going to find locations where the crossing can't be made safe within the available geometry. 13:38 13:38 13:39 13:39

And what do we do now? And again, if you go back to a previous slide, one of the options is a mandate for a crossing which cannot be made safe to be closed. 13:39 13:39 13:39 13:39

Discussion about minimum signage and whether we're chasing something that's not really important or whether it's something we really should be emphasizing because of the desire to be consistent in terms of how the motorist responds, pedestrian for that matter, responds to the signage provided. 13:39 13:39 13:39 13:39 13:39

Obviously we're not writing regulations under this new statute yet, but the question 13:39 13:39

is what, if any, advances can we make here 13:39
from a safety standpoint by taking a more 13:39
consistent and rigorous approach. 13:39
Must have been good pizza. 13:40
MR. SALTZ: Brian Saltz from Long Island 13:40
Railroad. Sorry, I came in about a minute 13:40
late, so you may have already mentioned this. 13:40
We had a question about this issue that's 13:40

coming up now in New York State, what's the minimum signage. Where did they come up with you have the stop sign right above the private crossing sign right above -- I assume that's a sign with a phone number underneath that. 13:40

MR. COTHEN: Well, we've seen a variety of signage. In some cases you see a crossbuck above the stop sign, then the other way. I think that's an emergency notification plate down below that particular one, which is recommended by U.S. DOT. And I think as a matter of fact there's going to be a Senate bill introduced today that may require that. 13:40

That is not a MUTCD recommended plate. I believe we ended up sticking with blue background and the white lettering? No? Bill. 13:41

MR. BROWDER: It's being changed. The 13:41

national committee has recommended that that 13:41

be a standard in the MUTCD, but it's also -- 13:41

blue and white is what Fred and I came up with 13:41

in 2000 and stuck with MUTCD as a compromise, 13:41

and of course there were concerns about size 13:41

also. 13:41

But essentially there's a 15-year 13:41

implementation period once that MUTC is enacted in 2009 to go to this more traditional sign that would be the standard. 13:41 13:42 13:42

So if all else fails in the U.S. Congress, and heaven forbid that they shouldn't pass legislation to require that, it will be in the MUTCD and we'll be doing it anyway. Excuse me, Grady. 13:42 13:42 13:42 13:42 13:42 13:42

MR. COTHEN: That's all right. You know, there has been a press for standardization. A lot of people did a lot of good things in the initial years of emergency notification to get something out there that was helpful to motorists, and then we all said hmm, maybe we ought to try to do it the same way everywhere so we're not looking for the sign over here on the signal house one place and the -- you 13:42 13:42 13:42 13:42 13:42 13:42 13:42 13:42 13:42

know, the crossbuck post in other place and so forth and so on. 13:43

And undoubtedly it would be a progressive process of trying to move toward greater standardization. Bill again. 13:43

MR. BROWDER: That was another education process by you and AAR and others of the highway authority in terms of those signs. 13:43

And another good example of the issues that occur because of the lack of communication and understanding with media and the general public concerning issues that address us as stakeholders was again the highway people felt that that sign should face the motoring public and be large enough for them to see coming down the highway at whatever the speed limit sign -- limit was. 13:43

And we said no, we want it as it is in the manual right now, facing the crossing where the vehicle would be or where the situation would be. And it doesn't need to be so large, it just needs to be read by the people at the crossing rather than somebody a half a mile away with the motoring public. 13:43

Couldn't help but add that, Grady. 13:44

MR. COTHEN: Right. No, that's fine. 13:44

I don't know, Mr. Scott, does New York 13:44

DOT have guidance for the private crossing 13:44

signs? 13:44

MR. SCOTT: We're developing standards. 13:44

They're in draft form. But we have to 13:44

coordinate the approval of those with the MPA. 13:44

So I originally had them included with my 13:44

testimony, but we took it out. So shortly I should be able to provide you that information. I can follow up on that testimony once we get concurrence from -- through the MPA. 13:44

MR. COTHEN: So another shoe is going to drop in New York. 13:45

MR. SALTZ: Since we're a subsidiary of the MPA, that's why I brought this issue up, because we had a question when we did get those draft standards. So I assume at some point we'll work it out. 13:45

MR. COTHEN: I'm sure you will. 13:45

Again, the real question before the House is not which sign, but should there be standard signs and what kind of considerations would go into it. 13:45

Obviously one thing that would go into it would be a gradual transition if signage was changed out, if we should ever go there, nobody wants to waste money. 13:45

The other thing one can imagine, and this is a little bit -- this is by all means bolder, it kind of goes to the core of the issue here. One can imagine if we had public 13:45

use crossings subject to full MUTCD 13:46

requirements and a requirement for -- I 13:46

suppose the term in the trade is warrants for 13:46

automated warning devices in situations where 13:46

it seemed to make sense. 13:46

Is that -- in the public arena we have a 13:46

certain amount of money and we accept for 13:46

whatever reason the premise that, you know, 13:46

we'll get to it when we're able given the 13:46

funding stream. 13:46

In the private crossing arena if we came 13:46

out of this discussion with a desire to go 13:46

farther and no funding stream, I mean, 13:46

obviously if we had -- if Section 130 was 13:47

augmented, for instance, that might define for 13:47

us to some extent how fast we could go in 13:47

terms of addressing problem industrial and 13:47

commercial crossings, depending upon the 13:47
contemplated shares that others would kick in. 13:47
If we came out of this with no such 13:47
augmentation, then we would be asking, you 13:47
know, what are we going to require of whoever 13:47
is identified as responsible. 13:47
FRA has posited in the past, and not just 13:47
because we work with the railroads every day, 13:47

that in many situations the benefit derived 13:47
from the crossing is one that is directly 13:47
proportional to the gain that the private 13:48
holder gets out of that arrangement. And 13:48
that, in fact, a control over the use in most 13:48
cases is with the holder and not with the 13:48
railroad. So that holder should be expected 13:48
to take care of the safety issue at the 13:48
crossing. 13:48
And of course in an industrial/commercial 13:48
kind of setting that would not be an unusual 13:48
position to take from a public policy 13:48
standpoint. 13:48
If we went down that course, then we 13:48
would be looking at risk-based evaluations of 13:48
the crossings, much in the same way that 13:48
New York DOT or another state transportation 13:48

agency would look at a plan for public 13:48

crossings and would be asking for 13:48

participation through agreement to make those 13:49

improvements over what period of time seemed 13:49

to be appropriate up to the limit where we 13:49

couldn't pay for those improvements with 13:49

societal benefits. And that's the avoidance 13:49

of loss of life, personal injury, property 13:49

damage to the motorist and anyone surrounding the area, property damage to the railroad, potential in worst cases for injury to passengers, crew members, road crew members. And those more serious events. All of which should be taken into consideration. 13:49 13:49 13:49 13:49 13:49 13:49

As Mr. Scott I think has referenced, increasingly in doing transportation planning for passenger rail corridors we try to take all of that into consideration. 13:49 13:49 13:50 13:50

The consequence is -- and obviously there would be some requirement depending on the circumstances for some public -- either public in the case of passenger rail probably, or railroad contribution, freight railroad contribution, depending upon the circumstances. 13:50 13:50 13:50 13:50 13:50 13:50 13:50

Transactionally, for instance, Surface 13:50

Transportation Board from time to time in the 13:50

environmental area has required freight 13:50

railroads involved in transactions to ante up 13:50

some money for improvements at crossings where 13:50

traffic will increase in those kinds of 13:50

situations where things are changing on the 13:50

railroad rather than in terms of the private 13:50

use of the crossings. That seems would be relevant as well. 13:50 13:51

But if we got to the point then where we would make it a risk-based evaluation, we would determine that by warrant this crossing needed flashing lights and gates, and if the funds were not available to do it, then the consequence would be that crossing needed to be closed. That would be logical outcome of that kind of reasoning. 13:51 13:51 13:51 13:51 13:51 13:51 13:51

Comments on that, please, on that sort of radical suggestion. Yes, Phil. 13:51 13:51

MR. POICHUK: Grady, Phil Poichuk again. 13:51

How easy would it be to close a crossing if, in fact, it was demonstrated by the -- if it was a crossing that had rights attached to it, private though it was, how easy could it 13:51 13:51 13:52 13:52

be to close it if you could demonstrate that it was the only reasonable access? 13:52

MR. COTHEN: Well, that's the -- that's the question, you know, the public policy question. You know, the public policy question is how seriously do we take safety. 13:52

And I think one question is reasonable access to what. You know, we ended up on 13:52

Northeast Corridor between New York and Boston 13:52
with a half dozen crossings left after the -- 13:52
a major effort to close crossings. And 13:52
because it was a major passenger route, mostly 13:52
federal money and Amtrak's passenger money 13:53
went into some fairly elaborate treatments on 13:53
each and every one of those crossings. 13:53
You know, but very truly, there were a 13:53
number of locations along there where one was 13:53
hard-pressed from a public policy standpoint 13:53
to explain why that -- why that crossing 13:53
needed to remain so light was the use of the 13:53
property. 13:53
And of course to the extent that a 13:53
crossing is of really high value and we can't 13:53
make it safe otherwise, grade separation may 13:53
be an option. 13:53

So what -- how much do we value what's going on on the other side of the railroad versus the risk that the public's going to incur traversing the railroad in order to get to that location. 13:53

And I don't know that -- you know, in the end I think a lot of the decisions -- and please forgive me -- but a lot of these 13:53 13:53 13:53 13:53 13:53 13:53 13:54 13:54

decisions do end up getting made politically. 13:54

But happily, you know, in the case of 13:54

these crossings on the Northeast Corridor 13:54

subject to the improvement project, at least 13:54

there was a major effort to make the crossings 13:54

as safe as possible. In that case by tying in 13:54

four-quadrant gates to the cab signal system 13:54

so that if we had somebody on the crossing at 13:54

least we had a mitigation. 13:54

And which is a plausible mitigation for 13:54

heavily-used passenger line; it's not 13:54

necessarily a plausible litigation for 13:54

heavily-used freight line because the 13:54

considerations are simply different. 13:54

Mr. Scott? 13:54

MR. SCOTT: I'd just like to note that 13:54

based on the experience gained in New York 13:54

since we've had laws on the books, I think it would be very difficult to close a crossing simply because there's no funds to pay for warning devices that are deemed necessary. I think the courts would not allow that to -- that action. You would have to have a stronger case than simply lack of funds. It's -- particularly if you're looking to the 13:54 13:55 13:55 13:55 13:55 13:55 13:55

private property owner to provide those funds. 13:55

That's just for the limited amount of 13:55

experience that we've gained. 13:55

MR. COTHEN: Right. And I understand 13:55

what you're saying. I don't know, maybe we 13:55

should have a lawyers' caucus here, but thus 13:55

far to the extent that I've been, you know, 13:55

able to follow the case law on a federal 13:55

level, we're not yet at the point where our 13:55

Supreme Court has taken the notion of a taking 13:55

to the extent that a reasonable regulation is 13:56

foreclosed. 13:56

This is one of those cases that would -- 13:56

might get up there, you know, but we're not -- 13:56

we're not -- this construct is not suggesting 13:56

that someone would be left landlocked except 13:56

in the case where public safety required it. 13:56

And I don't know. It's interesting. We would find out.

From the point of view of -- from the point of view of writing a federal statute, that's easy enough. From the point of view I believe of the federal bar and judiciary taking federal statute seriously and saluting and going along, I don't think that it would

be a serious issue. Not withstanding that the 13:57
private property owner ended up with something 13:57
they couldn't use in that situation. 13:57
But whether or not it would present a 13:57
Constitutional issue at that point, you know, 13:57
I -- make the last four appointments to the 13:57
court I suppose is the cynical way of looking 13:57
at it. 13:57
But then I would never say that, being a 13:57
member of the district of Columbia bar. 13:57
All I can tell you is I've been told in 13:57
my career over and over again the things that 13:57
couldn't be done because the courts were going 13:57
to strike it down, and we're doing pretty well 13:57
so far. 13:57
MR. SCHWARTZ: Presumably if the 13:58
crossings that are deemed to be appropriate 13:58

for that kind of treatment, presumably those crossings would be ones that have a higher level of commercial traffic or industrial traffic with a going concern, holding the crossing in a position to contribute a substantial portion of the cost of doing that.

You're not talking about putting up four-quad gates so a farmer can get over his

crossing to plow his field. You're talking 13:58
about a steel mill or a coal transload 13:58
facility or something like that where you got 13:58
a commercial business and it's going to be a 13:58
part of their cost of doing business. 13:58
And clearly to the extent that you're 13:58
putting active warning devices at these 13:58
crossings if that's what was mandated, the 13:58
railroad is under -- is going to incur an 13:58
expense as well, a perpetual expense for the 13:58
continued maintenance of that crossing. 13:59
So we clearly would be undertaking some 13:59
kind of burden as well, unless that cost is 13:59
accounted in some kind of agreement. 13:59
But again, if you're talking about doing 13:59
this where you've got a going concern there, 13:59
presumably there should be some kind of pot of 13:59

money, perhaps with federal or state assistance, but there would be a pot of money to pay for the installation. 13:59

MR. COTHEN: And I appreciate that. And I think that the happy correspondence of events, you know, would obtain in most cases. 13:59

It's also true that litigation costs a lot of money on the other hand. 13:59

Carol Harris. 13:59

MS. HARRIS: Yes, this is Carol Harris, 13:59

Union Pacific. 13:59

And I just wanted to caution that in 13:59

terms of the definition and the way that 14:00

crossings get classified as public use, there 14:00

are -- you're dealing with so many different 14:00

kinds of fact patterns and situations, that in 14:00

itself could require quite an extensive 14:00

examination. 14:00

What they've got where we've done it in 14:00

California, they have publicly-used private 14:00

crossings, it's one category. But they're not 14:00

defined as such until they've been 14:00

judicially -- the commission has gone through 14:00

and evaluated the situation and made a factual 14:00

determination. I think in any kind of 14:00

regulatory scenario you would have to have a process for that. 14:00

And then in terms of the attention that they get for the in-depth examination of the safety evaluations, there would have to be some kind of a prioritization, because otherwise we would be left suddenly with thousands, conceivably, of these crossings 14:00 14:00 14:00 14:00 14:01 14:01 14:01

that would have to be addressed in -- there's 14:01
got to be some orderly fashion for working 14:01
through the inventory, because there would be 14:01
quite a few, whatever the thresholds are, that 14:01
are set for public. 14:01
MR. COTHEN: Well, without question. 14:01
Talking about progressive improvements in 14:01
safety here, nothing -- nothing happens in 14:01
this arena all at once without creating 14:01
enormous disruption and disappointment. 14:01
So Carol's point is that simply the 14:01
designation of public is an issue. 14:01
Seasonal or agricultural crossings, I 14:02
think we talked about the notion of something 14:02
just to deter casual use by those who are on 14:02
the property for other reasons other than the 14:02
principal reason the property is maintained. 14:02

The farmer clearly knows the railroad's there, so we're not so worried about the farmer. 14:02

There have been arrangements contemplated on passenger lines, higher-speed passenger lines over time that would require some kind of interlock that might require some kind of acknowledgement and release from a dispatching 14:02

center or through a train control system. And that's perhaps a technology that's available in a case that warrants it. 14:02 14:02 14:03

Mr. Burt? 14:03

MR. BURT: Just to pick up on that thought, we have landowners who make money by leasing out the property during certain seasons to hunting clubs, to snowmobile organizations, to ATV clubs. They most often do so without contacting the railroad. We may find out about it when we see signage, sometimes snowmobile clubs have gotten into the habit of putting up various types of signage in and around railroad crossings on railroad property, again, without notifying anybody. So that's the first time we find out about it. 14:03 14:03 14:03 14:03 14:03 14:03 14:03 14:03 14:03 14:03 14:03

So there's a lot more in background than a simple agricultural versus nonagricultural, because most of these folks are attempting to keep up with the property tax burden and the costs of running a farm by doing side businesses that complicate this question frequently enormously. So just a thought. 14:03 14:03 14:03 14:04 14:04 14:04 14:04

MR. COTHEN: You left out the paint ball 14:04

people. 14:04

Okay. Good point. And in a presenting 14:04

landscape that's changing, I'm sure, all the 14:04

time. 14:04

So, if we stirred up this pot, the last 14:04

pot we stirred, you know, was train horns, and 14:04

there's still people mending their wounds over 14:04

train horns. Probably will be for several 14:04

years to come. 14:04

And, you know, our staff is basically 14:04

saying about this issue -- I know they are 14:04

because I have a listening device in the 14:05

office. You know, that's not true, but I know 14:05

what they're thinking, same thing I would 14:05

think, and that is for crying out loud, let us 14:05

get on top of the workload we've got. 14:05

This would be obviously something for 14:05

everyone concerned, railroads, state agencies involved, and private holders that would become, very rapidly, if we went to a regulatory model, something that would really kick up the dust. Really kick up the dust. 14:05

And if we were to do something like this we would want to learn as much as we could from the efforts of states and others that 14:05

have had some success in this arena. And 14:05
that's one of the things we've been trying to 14:05
do with this road show. 14:05
The -- I'll tell you that I kind of get 14:06
three versions of it. I believe it's three 14:06
versions I get. I get a version from some 14:06
railroads who have been working successfully 14:06
in this area leave us alone, we're doing 14:06
pretty good; we're getting some -- we're 14:06
getting a lot of them closed. 14:06
And basically, you know, I think the 14:06
message is we're not down to the point yet 14:06
where we need anybody's help; there's still 14:06
plenty of low-hanging fruit, and we just want 14:06
to work on it. 14:06
Now, those are -- that's one or two or 14:06
more big railroads with good-sized law 14:06

departments and lots of legal talent on retainer in the field. 14:06

And so that's one thing to be taken into consideration, because you don't want to double the hill there, and if good things are getting done, then you don't want to interfere. 14:06

Now, you've heard from Bill today, and we 14:06

heard elsewhere on the road, the difficulty 14:06
that the smaller railroads sometimes have. 14:07
And usually after really having gone out of 14:07
the way to explain things to people, to be 14:07
flexible about what they request, to take into 14:07
consideration the needs of the community in 14:07
which -- which they serve, and do they want to 14:07
be good corporate citizens and still facing 14:07
greater or lesser obstacles, depending upon 14:07
where they're operating. But usually almost 14:07
always significant obstacles. 14:07
And then we have the public policy model 14:07
which involves some sweetening in the sense of 14:07
state or federal money involved to begin to 14:07
work with these situations and get it done. 14:07
And if there is an administrative process 14:08
within the state that can be utilized, it's 14:08

difficult, but there's some success. And then 14:08

we hear but the courts may not weigh things in 14:08

the balance quite the way that we do at the 14:08

state government level. 14:08

94,000, maybe only 90 left, depending 14:08

upon what the inventory is, you know, how bad 14:08

the inventory really is, maybe 87, but that's 14:08

a lot. We got thousands and thousands still 14:08

out there. And anecdotally, but saying that 14:08
in a sense of lots of anecdotes, still 14:08
situations that could be a lot better, despite 14:08
the good efforts of many in this room over a 14:08
significant period of time now. 14:08
So we would assume that if there was some 14:09
public policy impetus from the federal level 14:09
to get this done somewhat more rapidly, like 14:09
in our lifetime, then we probably would need 14:09
some kind of dispute resolution mechanisms. 14:09
What the folks who study this a lot say, 14:09
and the American Arbitration Association, the 14:09
American Bar Association, there's a whole 14:09
community out there of people who are involved 14:09
in alternative dispute resolution, what they 14:09
say is that we really ought to -- whenever we 14:09
have the potential for folks going head to 14:09

head in the courts in particular, we really 14:09

ought to have mechanisms to deal with those 14:09

issues short of tying up our court system. 14:09

Or if it's not going to go through the 14:10

courts, per se, at least on the facts and 14:10

administrative law kind of system, because 14:10

even an administrative law system can be 14:10

extraordinarily costly and involve a lot of 14:10

time and money. And incidentally, is probably 14:10
as hard as courts to corral in terms of 14:10
keeping the eye on the ball in terms of 14:10
administrative -- that is, the public policy 14:10
objectives that are trying to be achieved. 14:10
There are various forms, and there are 14:10
people in the room, again, that know much more 14:10
about this than I do, of alternative dispute 14:10
resolution that are available, various models 14:10
of mediation and arbitration that proceed in 14:10
different ways. One can lead to another; the 14:10
whole thing can stop right there. There can 14:10
be recourse or no recourse depending upon the 14:10
determination at arbitration, although 14:11
normally -- normally arbitration is final, 14:11
absent fraud or -- and here you go -- public 14:11
policy being thrown out the door. And so we 14:11

would want to describe processes that worked well. 14:11 14:11

One possibility, and I don't even know if you could do this or not from a due process standpoint, would be to create a significant incentive, at least, for parties to use, shared cost ADR at the front end, before we got into more difficult types of conflict. 14:11 14:11 14:11 14:11 14:11

I mean, it's increasingly the case, I believe, that the federal judges are in effect intelligently forcing parties to evaluation of the use of these kinds of alternatives in order to manage caseloads. It would seem that there should be a way for the Congress to do it. 14:12

But probably at some point there would be need for a safety valve, we hypothesize. If we had to do this from a federal level we would need a lot of help. And we hypothesize that states that already have existing mechanisms that are interested in working in this area and were responsive to whatever the federal policy was that came down could be recognized to handle the issues in order to bring more resources to bear and in order to 14:12 14:13

ensure to the maximum extent possible needs of all the citizens in the state were taken into consideration. 14:13

So that's that side. Now, what do you think? Can something like this be structured that would actually work? Or would we all be in the ditch within the first six months? What do you think? Yes, sir? 14:13

MR. LUND: Greg Lund, L-U-N-D, with the Brotherhood of Locomotive Engineers. 14:13

I'm just saying this as somebody that will probably be on a locomotive tomorrow going over one of these crossings. 14:13 14:14

The one thing that I see kind of missing in all of this is essentially education. And it's educating the general public as far as what their responsibilities are when they come to either a private crossing when they see signage. It's something that can be accomplished on a state level through like driver education courses. I mean, most states require like a five-hour course before you license somebody, or in the retraining courses where essentially you're targeting your higher-risk drivers. A lot of your trucking 14:14 14:14 14:14 14:14 14:14 14:14 14:14 14:14 14:14 14:14 14:14

companies require safety training. 14:14

Does that safety training include what 14:14

that -- what the driver's responsibilities are 14:14

when they approach a cross? Maybe that's 14:14

something that could be included in either the 14:14

policy or the regulation, that there be some 14:14

sort of educational requirement if, say, a 14:14

company uses a private crossing on a regular 14:15

basis.

MR. COTHEN: Very good point. And somewhere back up here we did reference education; we haven't emphasized it. But to the extent that we have problem crossings that are industrial or commercial, particularly industrial crossings, targeted education is a very important aspect.

As you know so well, Operation Lifesaver, Inc., Federal Railroad Administration do a lot of this work, including with private and interstate truckers.

But that clearly is something that can be included in the mix of mitigations and make a big difference if it's a sustained effort.

Thank you. Other comments? Mr. Schwartz is back up, and then Mr. Burt.

MR. SCHWARTZ: I think from our standpoint, this is not to downplay the importance of this aspect of the whole process, but up until now we've been talking about the substance of what the agency or the government should or shouldn't do in addressing the safety of private grade crossings. 14:16

If you can accomplish what that policy 14:16
should be, this -- I don't want to say this 14:16
part would be easy, but it should be easier. 14:16
This is -- this is implementation. 14:17
I don't mean to say it's easy, it isn't, 14:17
certainly won't be easy when you suddenly 14:17
change the status of 94,000 crossings. But if 14:17
you think -- it seems to me that the hard part 14:17
is coming up with policy or regulatory regime 14:17
in the first place. And this part, addressing 14:17
how you resolve disputes, will be a simpler 14:17
matter. 14:17
The government, the U.S. Government and 14:17
all the state governments already have 14:17
procedures in place to address disputes that 14:17
arise out of regulations. So it strikes me as 14:17
not beyond the ability of the FRA to design a 14:17

process that does same thing. 14:17

Some of these disputes may get very ugly 14:17

because they will involve private property 14:17

rights, and some guy who has had a crossing in 14:17

the family for 180 years and all of a sudden 14:17

he has to justify the existence of it, I mean, 14:18

at some points it may not be very pretty. But 14:18

if you can get the policy right or the 14:18

regulation right, this part I think won't be as much of a struggle. It may be for the first couple years, it may be very clogged up and slow; presumably this whole process is going to be rolled out over a period of time anyway so that you're not going to have a rush down to the ALJ 85,000 petitions on the first day that the regulations go into effect, but I think that this part shouldn't worry us as much as the other stuff. 14:18

MR. COTHEN: Okay. Bill? 14:18

MR. BURT: I've been listening throughout the whole day wondering how this will play when it's first taken out into the field, and I guess my comments here will be aimed at both the legalities of it and the education aspect of it. 14:18

This audience seems to be knowledgeable and cares about railroad safety. What we encounter much of the time, and I think it's true of large railroads as well as small, is really a rampant attitude of entitlement on the part of the crossing holders and very little sense of responsibility; the responsibility for rail safety in particular. 14:19 14:19 14:19 14:19 14:19 14:19 14:19 14:19

The cutting edge of that that we've seen in some cases is that when we even tried to determine the legal status of the crossing, the lawyers that were retained by their clients, crossing holders, basically said do your own legal research and stop bothering my clients. And in a sense perhaps they were within, strictly speaking, their legal rights in that regard. 14:19 14:19 14:19 14:19 14:19 14:19 14:19 14:19 14:20

I think there is an argument to be made for a broader understanding of the responsibilities of everyone concerned. You would think at a minimum that a crossing holder would have some shared responsibility to produce the documents if they have a deed in their possession to produce it and make it available to the railroad if the railroad 14:20 14:20 14:20 14:20 14:20 14:20 14:20 14:20

doesn't have it. Is that too much to ask, for instance? 14:20

So but my point here will be that we need to have that initiative beyond firm legal footing when it comes out of the box, and at the same time engage in a very strong effort to educate. 14:20

I'm certain that the railroads would be 14:20

partners in that, but it will need to come from whatever arm of government or arms of government are involved in order to make it clear that it is based on strong legal footing. 14:20 14:20 14:20 14:20 14:20

If we have some legal basis to set aside deeded crossings or modify the terms of deeded crossings, we should be prepared to say so. 14:20 14:21 14:21

Much of the time -- and I'm sure this is part of the feedback you've been getting when you say that railroads say we've been making progress -- much of the time that progress can be made simply by engaging all parties and finding out what people have. But again, a lot of the time we can't even get to that point because there's a simple refusal to accept any responsibility and any need to 14:21 14:21 14:21 14:21 14:21 14:21 14:21 14:21 14:21 14:21 14:21

engage. 14:21

So I don't know how you overcome that, 14:21

but it says to me that we have both a need for 14:21

a good, strong legal approach on this and also 14:21

education. That point is an excellent point. 14:21

And it's probably the single biggest part of 14:21

what we need to overcome out there right now 14:21

at the cutting edge of it is just the simple 14:21

lack of understanding of what these issues are all about, with people on one hand saying we have all the rights and none of the responsibilities, and the railroads the railroads. 14:21 14:21 14:21 14:21 14:22

MR. COTHEN: Okay. Thank you. 14:22

Any further thoughts right here? 14:22

Just to let you know, Federal Railroad Administration has one hearing officer, and he handles all the locomotive engineer certification, appeals for the nation. Does a good job, makes the parties work. And DOT has a small stable of ALJs. But I think we're looking at a budget request to go with this policy, if that's the one we choose. 14:22 14:22 14:22 14:22 14:22 14:22 14:22

Okay. This is good stuff. You all are doing a good job today. 14:23 14:23

Here is one that always churns up some interest, and that's the national crossing inventory. 14:23

Back at the shop our folks have been working hard to improve the means by which updates can be provided. My understanding is we've segmented the field so responsibility is clearer. It's all been pretty clear for 14:23

private crossings; the railroads have got the responsibility. 14:23

If we did a more aggressive effort in this area we would either need on the policy side to find ways of addressing things on a retail basis in terms of the use of diagnostic teams, which would be a whole new model since we don't have a highway traffic authority to go out there with us. We would need to study low-cost solutions, which is something actually we're always doing in the crossing area, and studying new inventory technology. 14:23 14:23 14:23 14:23 14:24 14:24 14:24 14:24 14:24

I think it's fair to say -- Ron, you want to comment a little bit on this -- that Rinelle Rivera back at our shop is looking at a variety of options for easing the updating of the inventory. 14:24 14:24 14:24 14:24 14:24

MR. RIES: We are currently involved in a pilot project with CSX using realtime internet transfer of information using XML type of protocol, and I'll be real honest with you, I don't understand what that is, but the system would enable state and/or railroad to provide information to the inventory. It would do a lot -- do the auto-checks, make sure that

everything is compatible with the field that's being entered into, much the same that our contractor does now. 14:25

And then once it -- if it doesn't meet the parameters it would get sent back immediately so the state or railroad would know that there's a problem, rather than waiting for the batch process, which depending on when it's sent in by the state or railroad, could take up to 60 days for it to be returned to them. And also it would enable a much faster update of the inventory information that would be available to the public. 14:25

MR. COTHEN: So hopefully we'll see this get better. As you know, the department has also sent a Bill to the Hill that would require mandatory updating of the inventory by 14:25

railroads and states on a periodic basis, and including getting any crossings in that are not in there today. 14:25 14:26 14:26

It looks like we -- well, we do have support in the House of Representatives for that bill, and it looks like we may get support as of today from the United States Senate. 14:26 14:26 14:26 14:26 14:26

The railroads obviously have a difficult task in addressing -- see if I can make this work. Here is the crossing inventory form, two pages. And there is the portion of this -- I don't know how Miriam pulled this off -- but those are the fields that are filled out for private crossings. 14:26

And it's a much more modest dataset. And railroads of course have been instrumental in getting the information that we do have into inventory. If we were to make -- take a risk-based approach to private crossings, we would need additional data. And the possibility of getting that data from tens of thousands of crossing holders is slim to none. 14:26

So it would probably mean some additional burden on the railroads to give us some 14:27

information about the characteristics of the traffic over the crossing at least. And I suppose we need more on the geometry. What do we need? Miriam? 14:27

MS. KLOEPPEL: Well, you -- currently the risk calculations that we perform for public crossings include such information as the number of trains that go over the crossing, 14:27

the amount of highway traffic that goes over 14:28
the crossing -- and feel free to pitch in too, 14:28
Ron -- the number of accidents that have 14:28
occurred at that crossing within a certain 14:28
number of years. 14:28
MR. RIES: Train speed, number of lanes 14:28
of traffic, number of tracks, and the type of 14:28
warning device. The setting, whether it's 14:28
urban or rural, is also used. 14:28
MR. COTHEN: So we would have a big job, 14:28
which, again, if we did it, it couldn't be 14:28
done all at once and would need to be 14:28
prioritized. 14:28
And then we would need to build a -- 14:28
either from scratch or off the existing APF 14:28
suite we would need to build a risk calculator 14:29
for use in determining warrants for these 14:29

crossings.

Any regime that we had would also need some impetus to ensure that upon inquiry crossing holders would provide at least some information to the railroad. Because I don't think it's reasonable to suppose we're going to have railroads putting out traffic counters, for instance. And that would need

to be a part of the agreement process. 14:29

Arguing against doing something like this 14:29

is thousands and thousands of data points that 14:29

have to be kept up over a long period of time. 14:29

Arguing for it would be the ability to focus 14:30

potentially on areas of greatest need, get the 14:30

job done there, and get it done over a shorter 14:30

period of time, with tools, hopefully -- some 14:30

tools provided from the federal level. 14:30

Thoughts; current concerns; 14:30

considerations; unfunded mandates? Anybody? 14:30

We've also had discussions on the road 14:30

about the possibility that state governments 14:30

could produce the public -- the highway side 14:30

portion of the inventory here. And, you know, 14:30

it's -- it doesn't sound too plausible, 14:31

frankly, from what we've been told. 14:31

And it is private property, in many cases we're talking about, in order to just simply even access the site. The railroad can do it on a high rail vehicle. The railroad may have some privity with these individual crossing holders, or should by agreement, and so that seems to be the logical channel for information to come in through it. 14:31

But it's one more thing for very large railroads to do on a very large scale. 14:31

Ms. Harris? 14:31

MS. HARRIS: Yeah, I think -- I think one of the biggest problems of -- you noted that the traffic volumes would be difficult. We can't establish traffic counters, obviously, at these crossings. But also ascertaining the public character of the crossings is very tough. 14:31

Now, it's possible that under a regulatory approach there could be some burden on the crossing holder to disclose that, and maybe even some liability that would flow if they didn't disclose it. 14:32

I mean, I think that it should be incumbent upon them. If they're operating 14:32

seasonal Christmas tree farms or this kind of thing where they are inviting the public onto the property, they're going to know about it. Or even if it's multiple use, they should know about it. 14:32

And it's very hard for the railroad to start that out because we don't know whether -- even if we could count the 14:32

vehicles, we don't know whether they're 14:32
invited guests or not. Or where they're 14:32
going. 14:32
MR. COTHEN: Excellent point. So you 14:32
want to keep your crossing, you need to ante 14:32
up some information, would be the theory that 14:32
would be obtained. Which is arguably fair, 14:33
but not only fair, necessary in order to have 14:33
a risk-based approach. 14:33
It does not ask too much of crossing 14:33
holders but asks what's reasonable from those 14:33
who need to respond. 14:33
Other thoughts about data? Anybody got 14:33
some ready-made sources of data that we could 14:33
plug into the computer? Bring any tapes with 14:33
you? Or what's the media now? I guess it's 14:33
DVD these days. 14:33

Okay. Miriam and Anya included a chart here that shows that we've used in previous meetings on the data elements that are collected currently from public and private crossings. I think the railroad probably knows the train counts for those private crossings.

But certainly the issue of the traffic

and the characteristics of the traffic over the crossing is something that would be very difficult to catch as you're going by at 49 miles an hour. 14:34

Okay. That's the set piece part of this conference. Maybe something we put up or something someone else said has caused somebody to have a thought about a dimension of this issue that we haven't even considered today. 14:34

The floor is open. And again, we looked at this and had a conference in 1993, and everybody said this problem can't be solved. But people have been working on it ever since. 14:35

We've come back to it now, and we need final recommendations to give to our administrator and the Secretary as to a 14:35

direction to take. 14:35

Shall we fold our tents; shall we charge 14:35

boldly ahead into the valley; or some 14:35

combination thereof? 14:35

Yes, sir? 14:35

MR. LOUIS: Thank you. James Louis, 14:36

L-O-U-I-S. I'm the treasurer of the New York 14:36

State Legislative Board, and I'm the Alternate 14:36

General Chairman for the Conrail-CSX-Northern Committee. 14:36

I'm representing Vice President and National Legislative Chairman John Tolman, who's also unable to be here today because he's testifying before the Senate on the rail bill. 14:36

But John asked me if he could pass along his regrets for not being here, especially because this one was being held, of course, as John puts it, in Joe Boardman's neighborhood, and because Central New York is proud of Administrator Boardman's accomplishments, as we are proud of our working relationship that we have with the Administrator and with the FRA under his leadership. 14:36

On February 15th we submitted comments 14:36

to the dockets in this matter, which I would like to incorporate by reference at this time. 14:36

Having done that, we'd now like to specifically comment on the discussion draft previously circulated by the FRA. 14:36

We generally concur with the FRA findings. Furthermore, we support an approach to a problem of private crossing safety that 14:37

involves all relative stakeholders to ensure that the policy development is thorough. 14:37

It appears to us that the most significant difference between the two options proposed by the FRA is that option A would have the FRA take a point of developing, promoting, and implementing a national policy to standardize the various processes by which private road crossing safety can be enhanced, while option B would provide the statutory framework within the FRA to oversee the safety enhancements. 14:37

We applaud the bold action proposed by the FRA in dealing aggressively with the private road crossing safety; moreover, we are confident the FRA has what it takes to produce a national success with option A. 14:37

That being said, however, we favor option B. We do so because we believe option B is more likely to produce a greater degree of improved private crossing safety in the broadest possible way. 14:37 14:37 14:37 14:38 14:38

The first proposed option requires that a level of enthusiasm, the commitment on the part of each state that equals the energy that 14:38 14:38 14:38

the FRA has brought forth in this process in order to maintain maximum success. Given sometime the vast differences in the available resources and the laws among the various states, we question whether it's realistic to expect that across-the-board commitment by states to treat private road crossings as a priority issue in absence of a strong federal incentive. 14:38

We believe the legislation approach outlined in option B provides that such an incentive. Legislation as outlined in option B will focus the attention of all states on the needs to prioritize private crossing safety in a way that can lead to the development and implementation of policies to harmonize the current jumble of conditions. 14:38

Further, those states who do share our commitment of the serious improvements can step up to the plate. Even the state certification process. 14:38 14:39 14:39 14:39

Finally, option B provides railroads a single set of conditions with dealing with crossing holders. 14:39 14:39

These advantages will, we believe, 14:39

maximize the positive safety outcome, and 14:39

therefore, best serve our interest. 14:39

Of course, because I am filling in for 14:39

Brother John Tolman today, I would ask you to 14:39

direct any question you have to his attention. 14:39

And I thank you very much. 14:39

MR. COTHEN: Thank you, sir. I've got 14:39

John's testimony in my computer here if 14:39

anybody wants to see what he's saying today. 14:39

Actually, my computer is over there. 14:39

Sorry John couldn't be here. We 14:39

appreciate your bringing the views from BLET. 14:39

Anyone else? Yes, sir? 14:39

MR. SALTZ: Brian Saltz, Long Island 14:40

Railroad. I know we've talked today about the 14:40

cost issues and federal funding, but has there 14:40

been -- when all is said and done, is there a 14:40

belief on how much of these costs will be on the railroads, and do we expect to get the federal funds to have this done? 14:40

MR. COTHEN: I think an important thing to do is to -- before we get too much farther down this road is to understand what kind of impacts, order of magnitude we're talking about. 14:40

You know, my own sense is that certainly new start-up commuter railroads, for instance, generally have made a pretty good effort to get the private crossings out at time when -- as part of the design process, and where they're not able to get them out to include in the initial capital investment a standard array of automated warning devices. 14:40 14:40 14:40 14:40 14:41 14:41 14:41

So that's just in the case of commuter railroads. Commuter railroads that are a legacy system that are working off some of these issues on branch lines and so forth, you know, may have needs that we simply don't understand. But we need to understand them. 14:41 14:41 14:41 14:41 14:41

So, you know, for instance, on behalf of Long Island Railroad, which carries more passengers than any other passenger railroad 14:41 14:41 14:41

in the United States, if you've got some information you can give us about what you see on your property, that would help us to understand what we need to be asking for. 14:41 14:41 14:41 14:41

Right now there's nothing, quote, in the works, that's going to provide a new pot of money to address this need from a federal standpoint. But if there are impacts on 14:42 14:42 14:42 14:42

federal transit administration budget or 14:42
Federal Highway Administration budget or 14:42
Federal Railroad Administration budget, that's 14:42
one of the things we need to understand. 14:42
MR. BURT: On behalf of the Railroads of 14:42
New York, once again I would like to thank you 14:42
and your colleagues at FRA for taking an 14:42
interest and the work you've put into these 14:42
road shows, as you put it. 14:42
I think we're all at an early stage in -- 14:42
engaged in this process, but obviously, as you 14:42
indicated, the thought process in your shop 14:43
has gone on for a number of years. 14:43
I believe I can speak for our 14:43
organization in saying that we urge you not to 14:43
accept the advice that the problem can't be 14:43
solved, so that it's worth sticking to it; 14:43

it's worth progressing. I'm not sure any of us here in the room knows exactly what we would do to fix it, but it needs to be fixed. 14:43

And with that, I've been impressed with the level of seriousness of the discussion all around the room, and we look forward to working with you as we go forward on this and other issues. 14:43

MR. COTHEN: Thanks very much. If there's -- that's a good note to end on if there are no further necessary comments. 14:43

I do want to -- I do want to say that we had hoped that coming out, you know, would draw in some folks who had issues with private crossings because their residence is on the other side of the tracks. 14:43

We've had a few of those folks, a very few of those folks happily in other meetings have come in, but we really would have wished to expand this discussion further. And, in fact, the Volpe Center on our behalf has made a number of contacts with a number of organizations representing those kinds of interests in a specific targeted effort to get them involved. 14:44

That's I think our only serious regret at 14:44
the end of this series of public conferences, 14:44
that we didn't hear more from those folks. 14:44
But we understand they too have busy lives, 14:44
and we'll try to take their concerns into 14:44
consideration as we go forward. 14:44
Thanks to everybody, staff for putting 14:44
this together. Thanks very much to New York 14:44

DOT for hosting us here and for participating 14:45
actively in the meeting. Thanks to all of you 14:45
who came, some of you from a good, long way, 14:45
to participate in the meeting and to listen 14:45
and learn, as we have tried to do. 14:45
And we promise to put in the docket this 14:45
fall a report summarizing our findings and 14:45
probably at some point after that a addendum 14:45
that will indicate clearly the policy 14:45
direction that we're going to take, there 14:45
having been decisions by folks well above our 14:45
level. 14:45
But I know Administrator Boardman would 14:46
want me to note again his distress at not 14:46
being with you today and not having the 14:46
opportunity to hear from you directly. He did 14:46
want to be here; he does take this issue very 14:46

seriously; and he does miss the opportunity to be back in New York. That's when he seems to smile the broadest, when he's heading back home. 14:46

If there's nothing else, we will stand adjourned. Thanks to everybody. 14:46

(The proceeding was concluded at 2:46 PM.) 14:46

C E R T I F I C A T I O N

I, SALLYANNE B. MAIORANO, Registered Merit Reporter, Certified Realtime Reporter, Certified CART Provider, Certified Shorthand Reporter, and Notary Public in and for the State of New York, DO HEREBY CERTIFY that I attended the foregoing proceedings, took stenographic notes of the same, that the foregoing is a true and correct copy of same and the whole thereof.

_____

SALLYANNE B. MAIORANO, RMR, CRR, CCP, CSR

Dated: August 7, 2007

BEFORE THE
FEDERAL RAILROAD ADMINISTRATION

DOCKET NO. FRA–2005–23281:
SAFETY OF PRIVATE HIGHWAY-RAIL GRADE CROSSINGS: NOTICE OF SAFETY INQUIRY

COMMENTS OF THE ASSOCIATION OF AMERICAN RAILROADS

The Association of American Railroads (AAR),[1] on behalf of itself and its member railroads, submits the following written comments regarding FRA's inquiry into the safety of private highway-rail grade crossings. AAR and member railroads participated in each of the public meetings conducted by FRA on this issue. These comments supplement statements made by AAR representatives at those meetings.

Grade-crossing safety is of paramount concern to the railroad industry. While the number of grade-crossing fatalities has declined 56 percent since 1980 and 47 percent since 1990, grade-crossing accidents do account for 40 percent of the railroad industry's fatalities. As the statistics published by FRA show, a significant percentage of the grade-crossing fatalities, roughly 10 percent, are attributable to private crossings.

There are a wide variety of private grade crossings, ranging from agricultural crossings that might be used only a couple of times annually to crossings widely used by the public, but located on private property. From a public safety perspective, the crossings of most concern are the quasi-public crossings that are

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[1] AAR is a trade association whose membership includes freight railroads that operate 76 percent of the line-haul mileage, employ 93 percent of the workers, and account for 95 percent of the freight revenue of all railroads in the United States; and passenger railroads that operate intercity passenger trains and provide commuter rail service.

private in name but that have a traffic volume that closely resembles public crossings.

A significant problem with these quasi-public crossings is that while they present all the problems that public crossings do, public agencies generally do not take responsibility for the crossings from a safety perspective. It would make sense for public authorities to take responsibility for such crossings. After all, private crossings do not exist for the benefit of the railroad industry.

Another step that would make sense would be to prohibit the creation of new private crossings unless there was a specific agreement with the railroad owning the track and a public authority determines that the crossing is needed. Agreements ensure that responsibilities for the crossing are well understood.

Of course, the best solution to grade-crossing accidents of all types is to close grade crossings. While many grade crossings are a necessary component of a transportation system and cannot be closed, some are redundant and can be closed relatively easily and in other cases it is worth the investment to separate the motor vehicle traffic from the railroad right-of-way or secure rights to alternative access that avoids an at-grade crossing. Grade-crossing closure is a specific objective of DOT's 2004 action plan for highway-rail crossing safety and should remain a Department objective.[2] In particular, AAR encourages rail corridor crossing safety reviews that focus on identifying opportunities for closure and consolidation of both public and private crossings.

For the public meetings, FRA circulated an "options paper" containing two options. AAR's comments on the two options follow.

Option A provides for a new "National Policy" addressing private grade crossings. It contains some laudable policies, such as:

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[2]Secretary's Action Plan: Highway-Rail Crossing Safety and Trespass Prevention, p. 8 (http://www.fra.dot.gov/downloads/safety/action_plan_2004.pdf).

· a declaration that new private crossings are disfavored except where the need is clearly established;

· a declaration that every private crossing should have a recorded agreement;

· a declaration that states should be notified of land use changes that might affect safety at a private crossing; and

· national guidelines for diagnostic teams evaluating private crossings.

It is unclear that option A would actually result in any improvements. Many of the objectives are admirable, but option A avoids the difficult question of how to accomplish them. Indeed, many of the objectives have been discussed before. Merely identifying the objectives in a national policy would not bring the nation significantly closer to accomplishing them.

Furthermore, option A would rely heavily on encouraging states to increase involvement in safety at private crossings even though most states do not choose to exercise jurisdiction over private crossings and there is little reason to believe that mere encouragement of such involvement would actually yield positive results. At best, adoption of recommended standards by some states and not others would lead only to widely divergent and inconsistent practices across the country.

Under option B, Congress would explicitly give DOT the authority to regulate safety at private grade crossings. DOT regulations would embody some of the same objectives contained in option A and would include the following features:

· provide a procedure for railroads, state agencies, and FRA to challenge the creation of new private crossings;

· provide a procedure for railroads to challenge the continued necessity for existing private crossings;

· require agreements between railroads and the holders of private crossing rights;

· provide a dispute resolution procedure where disputes arise between railroads and holders of private crossing rights;

· specify signage;

· require signage or locked gates for agricultural crossings where train speed exceeds 25 mph;

· require the approval of a railroad dispatcher to cross where the maximum authorized train speed exceeds 49 mph;

·· treat "public use" private crossings as if they were public crossings for the purposes of signage and train horns; and

· require railroads to include private crossings in their inventories.

It is unclear to AAR why FRA is suggesting new legislation for Option B. It would be problematic if legislation were necessary, because it is extremely unlikely legislation would be enacted in the foreseeable future. Rail safety reauthorization legislation is currently winding its way through Congress and it likely will be a considerable period of time before a new reauthorization bill is considered. A second problem with Option B is that such an approach is likely to engender considerable opposition from holders of private crossing rights and the general public at large. (For example, communities might strongly oppose the proposal to treat private crossings the same as public crossings for the purpose of sounding the train horn.) A third problem is that there has been no analysis showing that the benefits of the various provisions would be commensurate with the costs, i.e., would the provisions really enhance safety at private crossings? Finally, while AAR believes it premature to address all the details of this option, the concept of using a railroad dispatcher to control motor vehicle traffic is inimical to safety.

AAR recognizes that it is "easy to be a critic." Clearly, there is no simple solution to the "problem" of private crossings. AAR does believe that the public meetings in this docket have been very helpful in shedding light on this difficult situation and in identifying some of the constraints on government intervention at the federal, state, and local levels. AAR and its members are certainly willing to explore with FRA and other interested parties ways that FRA could work with the

railroads to improve the safety of private crossings. For example, government can play a useful role in promoting public education and should consider incentive programs similar to the Section 130 program for public crossings.

Respectfully submitted,

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September 28, 2007

Appendix A.8

State Law Compilations

Private Crossings: State Laws Outline

6/4/2008

		1999 edition	Supplement or State MUTCD (as of 2005)	$ Provided by FRA In 2002	RHCSAPSP	Comments
Region1						
CT		X	X		X	
ME		X				
MA		X	X		X	
NH		X				State Law states that when it is determined that a private crossing is being used to an extent that it may be considered a public highway, the State may require the grade crossing to be laid out as a public highway, constructed and equipped as such. The railroad will not be charged.
NJ		X				Railroads must provide and keep in good condition all private crossings.
NY		X	X	X $1,500,000	X	If any new private crossing is established, the state may prescribe the manner of the crossing, whether it is to be at grade or separated, the location, the type of warning devices and the apportionment of the responsibility for maintenance thereof.
RI		X				The state may close a private crossing if it is deemed hazardous to safety.
VT						
Region 2						
DE			X		X	
MD		X	X			The conversion of a private road grade crossing to a public highway grade crossing is a projection of a public highway over the railroad by the public authority taking jurisdiction of the private road.
OH		X	X	X $163,000	X	
PA			X			
VA		X	X		X	The state forbids the construction of at-grade crossings of railroads and private roads. Such crossings must be grade separated.
WV			X (under development)			
Region 3						
AL				X $383,000	X	
FL		X			X	The state requires crossbuck signs be erected at all private highway-rail crossings. The state also requires all traffic control devices, including those signs and pavement markings on private property where the public is invited, to meet MUTCD standards
GA					X	
KY					X	
MS				X $1,417,000		
NC			X			The state will close all private crossings where feasible and protect the ones that will remain open with crossbucks, automatic flashers, signals and gates
SC		X		X $800,000		The state is to protect private road crossings as the law requires them to protect public highways
TN					X	
Region 4						
IL			X		X	
IN			X		X	
MI		X	X		X	State law states that any unauthorized traffic control device or other sign or message placed on highway right-of-way by a private organization should be removed.
MN		X	X	X $250,000	X	The state shall adopt rules that establish minimum safety standards at all private railroad grade crossings in the state.
WI			X	X $250,000	X	
Region 5						
AR						
LA				X $200,000		
NM						
OK		X				The railroad is required by state law to build and maintain a private crossing upon request
TX			X		X	

	1999 edition	Supplement or State MUTCD (as of 2005)	$ Provided by FRA In 2002	RHCSAPSP	Comments
Region 6					
CO		X			
IA	X				In section 321.259, the state law states that all unauthorized signs, signals and markings are prohibited on public and private property
KS	X	X			The railroad is required by state law to build and maintain a private crossing upon request
MO	X			X	If it is determined that a private crossing is utilized by the public to such an extent that it is necessary to protect the public safety, then the state may order the installation of crossing warning devices and apportion the cost among the parties according to the benefits accruing to each
NE	X	X		X	The state has jurisdiction over all crossings outside of incorporated villages, towns, and cities, both public and private, across, over or under all railroads in the state.
Region 7					
AZ		X			
CA	X	X	X $200,000	X	The state may order STOP signs be placed at all farm and private crossings where no automatic gates exist, unless the signs would constitute an additional safety hazard.
NV					
UT	X	X			
Region 8					
AK		X		X	Alaska is mentioned in the Railroad-Highway Crossing Safety Action Plan Support Proposal as a state who has acted to standardize responsibilities and treatments for private crossings
ID		X			
MT					
ND					
OR	X	X		X	The state shall, at every private crossing with no automatic protective device installed, install and maintain one or more stop signs. Also, private property owners are encouraged to conform to the MUTCD when installing devices.
SD	X				State law reserves the right to order railroads to construct and maintain a private crossing.
WA		X			
WY					

Appendix A.9

Statistical Data Review

Crossing Incidents, 1985-2006			
Year	**Public**	**Private**	**Total**
1985	6353	566	**6919**
1986	5868	528	**6396**
1987	5859	532	**6391**
1988	6025	590	**6615**
1989	5979	546	**6525**
1990	5235	481	**5716**
1991	4862	525	**5387**
1992	4478	449	**4927**
1993	4480	455	**4935**
1994	4523	476	**4999**
1995	4168	481	**4649**
1996	3799	469	**4268**
1997	3416	451	**3867**
1998	3097	424	**3521**
1999	3110	402	**3512**
2000	3113	476	**3589**
2001	2843	394	**3237**
2002	2709	368	**3077**
2003	2607	370	**2977**
2004	2654	423	**3077**
2005	2633	420	**3053**
2006	2505	419	**2924**
TOTAL	**90316**	**10245**	**100561**
Max	**6353**	**590**	**6919**
Min	**2505**	**368**	**2924**
% Change	**60.6%**	**37.6%**	**57.7%**

Source: *US DOT FRA RAIRS Database, October 2007*

Collision at Private Crossings, 1986-2006			
Year	**Incidents**	**Fatalities**	**Injuries**
1985	566	45	137
1986	528	38	110
1987	532	26	107
1988	590	37	150
1989	546	44	141
1990	481	49	130
1991	525	43	140
1992	449	44	130
1993	455	41	83
1994	476	43	107
1995	481	54	117
1996	469	39	122
1997	451	42	133
1998	424	43	97
1999	402	39	136
2000	476	56	140
2001	394	35	119
2002	368	41	133
2003	370	34	114
2004	423	38	137
2005	420	30	128
2006	419	44	133

Source: *US DOT FRA RAIRS Database, October 2007*

Number of Incidents at Crossings by Warning Devices, 1997-2006								
	Gates	Lights[1]	Other Active Warning Devices[2]	Crossbucks	StopSign	Other[3]	None	Total
Private	122	183	36	1289	1432	137	948	4147
Public	8860	6272	376	9927	2988	97	167	28687

Source: US DOT FRA RAIRS Database, October 2007

1 Light includes incident at crossing with Standard & Cantilever Flashing Lights

[2] Other Active Warning Devices includes incidents at WigWag, Highway Traffic Signal, and Audible

[3] Other includes incidents at crossing with Watchman, Flagged by Crew, and Other

Collision at Private Crossings by Train Speed, 1997-2006												
	0 to <10	10 to <20	20 to <30	30 to <40	40 to <50	50 to <60	60 to <70	70 to <80	80 to <90	90 to <100	00 to <110	TOTAL
1997	110	49	64	52	110	43	8	9	0	1	1	**447**
1998	126	50	53	59	81	29	12	12	0	0	1	**423**
1999	132	37	48	55	68	33	10	16	0	0	0	**399**
2000	135	51	56	73	77	53	10	14	1	0	0	**470**
2001	105	46	40	65	74	39	8	14	0	0	0	**391**
2002	102	36	52	43	63	39	11	16	2	0	0	**364**
2003	97	39	59	55	66	27	11	12	0	0	0	**366**
2004	113	51	59	66	81	31	11	6	2	0	0	**420**
2005	135	40	45	70	70	37	8	9	0	0	0	**414**
2006	139	36	53	56	74	37	10	11	0	0	0	**416**
TOTAL	**1194**	**435**	**529**	**594**	**764**	**368**	**99**	**119**	**5**	**1**	**2**	**4110**

Note: 2.25% of the incident data were not coded for train speed.
Source: US DOT FRA RAIRS Database, October 2007

Number of Incidents at Crossings by Type of Development, 1997-2006						
	Farm/Open Space	**Recreational / Institutional**	**Residential**	**Industrial**	**Not Available**	**Total**
Private	1223	75	509	1333	1007	4147
Public	8337	320	6338	11910	1782	28687

Source: *USDOT National Highway-Rail Crossing Inventory, November 2006*
US DOT FRA RAIRS Database, October 2007

Number of Incidents at Crossings by Roadway Users, 1997-2006												
	Auto	Truck	Truck-trailer	Pickup truck	Van	Bus	School bus	Motorcycle	Other motor vehicle	Pedestrian	Other (specify in narrative)	Total
Private	1280	673	1176	566	144	6	1	6	185	32	78	4147
Public	14674	3028	3493	4220	1140	49	22	86	690	883	400	28685

Source: *US DOT FRA RAIRS Database, October 2007*

Type of Private Crossing by Warning Devices									
	Gates	**Lights**	**Other Active Devices**	**Stop sign**	**Crossbucks**	**Other**	**None**	**Blank**	**Total**
Farm	100	35	24	2707	944	213	20314	31511	**55848**
Residential	45	28	16	606	466	25	3495	6991	**11672**
Recreation	12	8	1	68	34	1	471	972	**1567**
Industrial	143	144	88	826	439	60	6465	13759	**21924**
Commercia	11	12	5	25	57	4	123	29	**266**
Not Availab	1	0	0	4	3	0	261	1382	**1651**
Total	**312**	**227**	**134**	**4236**	**1943**	**303**	**31129**	**54644**	**92928**

Source: *US DOT National Highway-Rail Crossing Inventory, November 2006*
Note: 59% of the private crossing were not coded for warning device types and 1.8% of private crossing were not coded for private crossing types

Motor Vehicle Collisions at Private Crossings by Traffic Control Device, 1986-2006																		
	Automatic gates		Flashing lights		Highway signals, wigwag, or Audible		Watchman, or Flagged by crew		No signs or signals		Crossbucks		STOP signs		Other signs		Total	
Year	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1997	14	3.1	21	4.7	4	0.9	6	1.3	111	24.6	167	37.0	118	26.2	10	2.2	451	100.0
1998	11	2.6	20	4.7	7	1.7	10	2.4	104	24.5	146	34.4	122	28.8	4	0.9	424	100.0
1999	12	3.0	13	3.2	5	1.2	5	1.2	121	30.1	127	31.6	113	28.1	6	1.5	402	100.0
2000	8	1.7	21	4.4	4	0.8	9	1.9	103	21.6	164	34.5	159	33.4	8	1.7	476	100.0
2001	12	3.0	14	3.6	3	0.8	7	1.8	84	21.3	142	36.0	126	32.0	6	1.5	394	100.0
2002	13	3.5	14	3.8	2	0.5	2	0.5	69	18.8	128	34.8	132	35.9	8	2.2	368	100.0
2003	14	3.8	21	5.7	3	0.8	7	1.9	93	25.1	111	30.0	115	31.1	6	1.6	370	100.0
2004	18	4.3	21	5.0	6	1.4	4	0.9	100	23.6	101	23.9	168	39.7	5	1.2	423	100.0
2005	12	2.9	22	5.2	0	0.0	6	1.4	81	19.3	114	27.1	177	42.1	8	1.9	420	100.0
2006	8	1.9	16	3.8	2	0.5	16	3.8	82	19.6	89	21.2	202	48.2	4	1.0	419	100.0

Source: *US DOT FRA RAIRS Database, October 2007*

year 1997-2006			
Traffic control device	**Incidents**	**Percent**	**Cumulative %**
STOP signs	143	34.5	34.5
Crossbucks	129	31.1	65.6
No signs or signals	95	22.9	88.5
Flashing lights	18	4.4	92.9
Automatic gates	12	2.9	95.8
Watchman or Flagged by Crew	7	1.7	97.6
Other signs	7	1.6	99.1
Highway signal, WigWag, or Audible	4	0.9	100.0
Total	414		

Source: *US DOT FRA RAIRS Database, October 2007*

Incident at Private Crossings by Train Speed, 1997-2006			
Train Speed	**Incident**	**% of Incident**	**Cumulative %**
0 to <10	1194	29.1%	29.1%
40 to <50	764	18.6%	47.6%
30 to <40	594	14.5%	62.1%
20 to <30	529	12.9%	75.0%
10 to <20	435	10.6%	85.5%
50 to <60	368	9.0%	94.5%
70 to <80	119	2.9%	97.4%
60 to <70	99	2.4%	99.8%
80 to <90	5	0.1%	99.9%
90 to <100	1	0.0%	100.0%
100 to 110	2	0.0%	100.0%
TOTAL	4110		

Source: US DOT FRA RAIRS Database, October 2007

Incident at Public Crossings by Train Speed, 1997-2006			
Train Speed	**Incident**	**% of Incident**	**Cumulative %**
40 to <50	5444	19.5%	19.5%
0 to <10	5400	19.3%	38.8%
30 to <40	4688	16.8%	55.5%
20 to <30	4450	15.9%	71.4%
10 to <20	3847	13.7%	85.2%
50 to <60	2459	8.8%	93.9%
60 to <70	955	3.4%	97.4%
70 to <80	710	2.5%	99.9%
80 to <90	25	0.1%	100.0%
90 to <100	5	0.0%	100.0%
100 to 110	0	0.0%	100.0%
TOTAL	27983		

Source: US DOT FRA RAIRS Database, October 2007

Incidents at Public Crossings by Train Speed												
	0 to <10	10 to <20	20 to <30	30 to <40	40 to <50	50 to <60	60 to <70	70 to <80	80 to <90	90 to <100	100 to 110	TOTAL
1997	647	472	517	559	679	279	93	77	2	0	0	**3325**
1998	602	435	448	509	604	274	91	66	3	0	0	**3032**
1999	571	408	474	513	580	309	122	62	1	0	0	**3040**
2000	539	413	483	530	610	273	119	80	2	1	0	**3050**
2001	532	378	455	472	495	261	98	74	4	1	0	**2770**
2002	527	354	426	452	491	221	99	77	1	0	0	**2648**
2003	503	363	385	414	501	211	80	75	4	2	0	**2538**
2004	472	360	446	430	497	222	91	72	4	0	0	**2594**
2005	519	353	424	406	488	211	90	59	1	1	0	**2552**
2006	488	311	392	403	499	198	72	68	3	0	0	**2434**
TOTAL	**5400**	**3847**	**4450**	**4688**	**5444**	**2459**	**955**	**710**	**25**	**5**	**0**	**27983**

Source: US DOT FRA RAIRS Database, October 2007

Freight Train Incidents at Public Crossings by Train Speed												
	0 to <10	10 to <20	20 to <30	30 to <40	40 to <50	50 to <60	60 to <70	70 to <80	80 to <90	90 to <100	100 to 110	TOTAL
1997	335	351	455	515	619	240	49	4	0	0	0	**2568**
1998	282	313	387	472	555	236	38	8	0	0	0	**2291**
1999	273	288	416	458	527	256	60	4	1	0	0	**2283**
2000	283	312	421	473	569	232	68	10	0	0	0	**2368**
2001	269	242	385	436	454	226	59	8	0	0	0	**2079**
2002	265	248	368	403	461	198	59	10	0	0	0	**2012**
2003	264	271	326	378	457	177	48	7	0	0	0	**1928**
2004	230	265	391	392	447	201	44	4	0	0	0	**1974**
2005	257	256	376	369	452	180	48	6	0	0	0	**1944**
2006	219	227	341	371	460	168	38	2	0	0	0	**1826**
TOTAL	**2677**	**2773**	**3866**	**4267**	**5001**	**2114**	**511**	**63**	**1**	**0**	**0**	**21273**

Source: US DOT FRA RAIRS Database, October 2007

Passenger Train Incidents at Public Crossings by Train Speed												
	0 to <10	10 to <20	20 to <30	30 to <40	40 to <50	50 to <60	60 to <70	70 to <80	80 to <90	90 to <100	100 to 110	TOTAL
1997	12	16	24	23	29	24	43	73	2	0	0	**246**
1998	5	9	20	13	27	33	51	58	3	0	0	**219**
1999	10	23	20	32	31	43	61	57	0	0	0	**277**
2000	11	20	20	25	28	33	49	70	2	1	0	**259**
2001	14	15	19	20	30	29	39	66	4	1	0	**237**
2002	3	13	25	25	18	20	40	67	1	0	0	**212**
2003	2	11	20	20	27	31	32	68	4	2	0	**217**
2004	10	14	18	22	34	17	43	66	4	0	0	**228**
2005	10	18	17	15	23	28	42	52	1	1	0	**207**
2006	8	15	16	23	26	28	32	66	3	0	0	**217**
TOTAL	**85**	**154**	**199**	**218**	**273**	**286**	**432**	**643**	**24**	**5**	**0**	**2319**

Source: US DOT FRA RAIRS Database, October 2007

Other Train Incidents at Public Crossings by Train Speed												
	0 to <10	10 to <20	20 to <30	30 to <40	40 to <50	50 to <60	60 to <70	70 to <80	80 to <90	90 to <100	100 to 110	TOTAL
1997	299	105	38	21	31	15	1	0	0	0	0	**510**
1998	315	113	41	24	22	5	2	0	0	0	0	**522**
1999	288	97	38	23	22	10	1	1	0	0	0	**480**
2000	245	81	42	32	13	8	2	0	0	0	0	**423**
2001	249	121	51	16	11	6	0	0	0	0	0	**454**
2002	259	93	33	24	12	3	0	0	0	0	0	**424**
2003	235	80	39	16	17	3	0	0	0	0	0	**390**
2004	224	75	37	16	16	4	4	2	0	0	0	**378**
2005	239	72	31	21	13	3	0	1	0	0	0	**380**
2006	241	64	33	9	13	2	2	0	0	0	0	**364**
TOTAL	**2594**	**901**	**383**	**202**	**170**	**59**	**12**	**4**	**0**	**0**	**0**	**4325**

Source: US DOT FRA RAIRS Database, October 2007

Incidents at Private Crossings by Train Speed												
	0 to <10	10 to <20	20 to <30	30 to <40	40 to <50	50 to <60	60 to <70	70 to <80	80 to <90	90 to <100	100 to 110	TOTAL
1997	110	49	64	52	110	43	8	9	0	1	1	**447**
1998	126	50	53	59	81	29	12	12	0	0	1	**423**
1999	132	37	48	55	68	33	10	16	0	0	0	**399**
2000	135	51	56	73	77	53	10	14	1	0	0	**470**
2001	105	46	40	65	74	39	8	14	0	0	0	**391**
2002	102	36	52	43	63	39	11	16	2	0	0	**364**
2003	97	39	59	55	66	27	11	12	0	0	0	**366**
2004	113	51	59	66	81	31	11	6	2	0	0	**420**
2005	135	40	45	70	70	37	8	9	0	0	0	**414**
2006	139	36	53	56	74	37	10	11	0	0	0	**416**
TOTAL	**1194**	**435**	**529**	**594**	**764**	**368**	**99**	**119**	**5**	**1**	**2**	**4110**

Source: US DOT FRA RAIRS Database, October 2007

Freight Train Incidents at Private Crossings by Train Speed												
	0 to <10	10 to <20	20 to <30	30 to <40	40 to <50	50 to <60	60 to <70	70 to <80	80 to <90	90 to <100	100 to 110	TOTAL
1997	43	30	54	50	106	35	2	0	0	0	0	**320**
1998	42	32	47	55	74	25	5	2	0	0	0	**282**
1999	48	21	41	51	59	31	6	2	0	0	0	**259**
2000	48	27	49	70	72	43	6	0	0	0	0	**315**
2001	40	34	35	60	66	34	6	2	0	0	0	**277**
2002	30	22	44	39	57	35	5	2	0	0	0	**234**
2003	33	27	53	51	60	24	9	2	0	0	0	**259**
2004	38	29	48	61	74	26	8	1	0	0	0	**285**
2005	49	28	38	64	65	32	4	0	0	0	0	**280**
2006	39	23	48	51	69	31	7	0	0	0	0	**268**
TOTAL	**410**	**273**	**457**	**552**	**702**	**316**	**58**	**11**	**0**	**0**	**0**	**2779**

Source: US DOT FRA RAIRS Database, October 2007

Passenger Train Incidents at Public Crossings by Train Speed												
	0 to <10	10 to <20	20 to <30	30 to <40	40 to <50	50 to <60	60 to <70	70 to <80	80 to <90	90 to <100	100 to 110	TOTAL
1997	3	3	3	1	0	7	6	9	0	1	1	**34**
1998	5	3	0	2	4	3	7	10	0	0	1	**35**
1999	1	2	2	2	2	2	4	14	0	0	0	**29**
2000	3	3	2	1	3	8	3	14	1	0	0	**38**
2001	3	2	0	2	4	5	2	12	0	0	0	**30**
2002	1	1	1	1	4	4	5	14	2	0	0	**33**
2003	2	2	2	1	3	2	2	10	0	0	0	**24**
2004	1	1	3	0	5	1	3	5	2	0	0	**21**
2005	1	1	0	2	1	5	3	9	0	0	0	**22**
2006	2	2	2	2	3	5	3	11	0	0	0	**30**
TOTAL	**22**	**20**	**15**	**14**	**29**	**42**	**38**	**108**	**5**	**1**	**2**	**296**

Source: US DOT FRA RAIRS Database, October 2007

Other Train Incidents at Public Crossings by Train Speed												
	0 to <10	10 to <20	20 to <30	30 to <40	40 to <50	50 to <60	60 to <70	70 to <80	80 to <90	90 to <100	100 to 110	TOTAL
1997	64	16	7	1	4	1	0	0	0	0	0	**93**
1998	79	15	6	2	3	1	0	0	0	0	0	**106**
1999	83	14	5	2	7	0	0	0	0	0	0	**111**
2000	84	21	5	2	2	2	1	0	0	0	0	**117**
2001	62	10	5	3	4	0	0	0	0	0	0	**84**
2002	71	13	7	3	2	0	1	0	0	0	0	**97**
2003	61	10	4	3	3	1	0	0	0	0	0	**82**
2004	73	21	7	5	2	3	0	0	0	0	0	**111**
2005	83	9	6	4	4	0	1	0	0	0	0	**107**
2006	98	9	3	3	2	1	0	0	0	0	0	**116**
TOTAL	**758**	**138**	**55**	**28**	**33**	**9**	**3**	**0**	**0**	**0**	**0**	**1024**

Source: US DOT FRA RAIRS Database, October 2007

Private Crossing Incidents by Train Speed, 1997-2006												
	0 to <10	10 to <20	20 to <30	30 to <40	40 to <50	50 to <60	60 to <70	70 to <80	80 to <90	90 to <100	100 to 110	TOTAL
1997	110	49	64	52	110	43	8	9	0	1	1	**447**
1998	126	50	53	59	81	29	12	12	0	0	1	**423**
1999	132	37	48	55	68	33	10	16	0	0	0	**399**
2000	135	51	56	73	77	53	10	14	1	0	0	**470**
2001	105	46	40	65	74	39	8	14	0	0	0	**391**
2002	102	36	52	43	63	39	11	16	2	0	0	**364**
2003	97	39	59	55	66	27	11	12	0	0	0	**366**
2004	113	51	59	66	81	31	11	6	2	0	0	**420**
2005	135	40	45	70	70	37	8	9	0	0	0	**414**
2006	139	36	53	56	74	37	10	11	0	0	0	**416**
TOTAL	**1194**	**435**	**529**	**594**	**764**	**368**	**99**	**119**	**5**	**1**	**2**	**4110**

Source: US DOT FRA RAIRS Database, October 2007

Private Crossing Injuries by Train Speed, 1997-2006												
	0 to <10	10 to <20	20 to <30	30 to <40	40 to <50	50 to <60	60 to <70	70 to <80	80 to <90	90 to <100	100 to 110	TOTAL
1997	17	15	12	19	34	24	5	6	0	0	0	**132**
1998	18	8	18	9	21	12	3	8	0	0	0	**97**
1999	16	13	20	31	24	13	10	8	0	0	0	**135**
2000	19	15	13	18	38	19	4	10	3	0	0	**139**
2001	14	6	18	23	32	11	3	11	0	0	0	**118**
2002	14	9	11	13	30	17	2	15	20	0	0	**131**
2003	12	4	17	15	30	6	5	24	0	0	0	**113**
2004	14	11	26	22	37	15	5	6	1	0	0	**137**
2005	22	5	17	27	26	13	10	5	0	0	0	**125**
2006	14	5	22	22	23	12	8	26	0	0	0	**132**
TOTAL	**160**	**91**	**174**	**199**	**295**	**142**	**55**	**119**	**24**	**0**	**0**	**1259**

Source: US DOT FRA RAIRS Database, October 2007

Private Crossing Fatalities by Train Speed, 1997-2006												
	0 to <10	10 to <20	20 to <30	30 to <40	40 to <50	50 to <60	60 to <70	70 to <80	80 to <90	90 to <100	100 to 110	TOTAL
1997	1	0	4	4	18	6	3	5	0	0	1	**42**
1998	0	0	1	8	17	8	4	4	0	0	1	**43**
1999	0	2	1	6	12	7	3	8	0	0	0	**39**
2000	1	0	2	14	12	14	8	4	0	0	0	**55**
2001	1	0	1	6	12	6	3	6	0	0	0	**35**
2002	2	0	1	5	11	12	4	6	0	0	0	**41**
2003	0	0	1	3	7	5	10	8	0	0	0	**34**
2004	0	0	2	9	7	11	2	6	1	0	0	**38**
2005	1	1	1	2	11	7	5	2	0	0	0	**30**
2006	2	0	2	5	14	8	3	10	0	0	0	**44**
TOTAL	**8**	**3**	**16**	**62**	**121**	**84**	**45**	**59**	**1**	**0**	**2**	**401**

Source: US DOT FRA RAIRS Database, October 2007

Overall Distribution of Crossings by Type of Development									
	Farm	Open Space	Residential	Industrial	Commercial	Recreational	Institutional	Not Available	Total
Private	55846	**N/A**	11672	21924	266	1567	**N/A**	1651	92926
Public	**N/A**	55298	34048	22903	30883	**N/A**	1802	0	144934

Source: US DOT National Highway-Rail Crossing Inventory, November 2006

Collision at Private Crossings by Roadway User, 1997-2006												
	Auto	Truck	Truck-traile	Pick-up tru	Van	Bus	School bus	Motorcycle	Other moto	Pedestrain	Other	Total
1997	185	92	118	30	6	1	0	0	8	1	10	**451**
1998	133	88	117	46	13	0	0	0	20	2	5	**424**
1999	142	65	104	47	18	1	0	0	12	4	9	**402**
2000	165	79	112	72	16	0	0	0	19	1	12	**476**
2001	114	57	112	59	11	1	1	0	14	4	21	**394**
2002	116	59	102	54	11	1	0	1	11	0	13	**368**
2003	104	59	102	58	16	1	0	0	25	3	2	**370**
2004	98	68	121	80	16	0	0	1	32	6	1	**423**
2005	107	56	142	62	25	0	0	2	20	3	3	**420**
2006	116	50	146	58	12	1	0	2	24	8	2	**419**
TOTAL	**1280**	**673**	**1176**	**566**	**144**	**6**	**1**	**6**	**185**	**32**	**78**	**4147**

Source: *US DOT National Highway-Rail Crossing Inventory, November 2006*
Source: *US DOT FRA RAIRS Database, October 2007*

Collision at Farm Private Crossings by Roadway User, 1997-2006												
	Auto	Truck	Truck-traile	Pick-up tru	Van	Bus	School bus	Motorcycle	Other moto	Pedestrain	Other	Total
1997	53	25	23	7	0	0	0	0	2	0	3	113
1998	46	32	21	13	1	0	0	0	11	1	2	127
1999	41	18	13	12	5	0	0	0	6	1	3	99
2000	63	28	19	37	4	0	0	0	7	0	8	166
2001	43	16	19	19	3	0	0	0	8	1	11	120
2002	42	19	19	19	4	0	0	1	1	0	6	111
2003	36	24	15	27	3	0	0	0	15	1	1	122
2004	36	14	21	32	3	0	0	1	18	4	0	129
2005	34	15	28	23	6	0	0	2	8	2	2	120
2006	36	14	20	15	1	0	0	1	10	3	1	101
TOTAL	**430**	**205**	**198**	**204**	**30**	**0**	**0**	**5**	**86**	**13**	**37**	**1208**

Source: *US DOT National Highway-Rail Crossing Inventory, November 2006*
Source: *US DOT FRA RAIRS Database, October 2007*

Collision at Industrial Private Crossings by Roadway User, 1997-2006												
	Auto	Truck	Truck-traile	Pick-up tru	Van	Bus	School bus	Motorcycle	Other moto	Pedestrain	Other	Total
1997	32	21	47	5	2	0	0	0	0	0	1	108
1998	21	27	55	11	2	0	0	0	3	0	1	120
1999	30	18	43	10	5	0	0	0	2	0	2	110
2000	27	25	51	14	4	0	0	0	7	0	0	128
2001	19	14	65	22	3	0	0	0	2	1	4	130
2002	20	26	55	13	4	1	0	0	7	0	4	130
2003	22	21	60	16	5	0	0	0	4	1	0	129
2004	20	29	64	21	8	0	0	0	4	0	0	146
2005	21	27	76	15	11	0	0	0	9	0	0	159
2006	16	13	75	12	9	0	0	0	6	1	1	133
Total	**228**	**221**	**591**	**139**	**53**	**1**	**0**	**0**	**44**	**3**	**13**	**1293**

Source: *US DOT National Highway-Rail Crossing Inventory, November 2006*
Source: *US DOT FRA RAIRS Database, October 2007*

Collision at Commercial Private Crossings by Roadway User, 1997-2006												
	Auto	Truck	Truck-traile	Pick-up tru	Van	Bus	School bus	Motorcycle	Other moto	Pedestrain	Other	Total
1997	2	0	0	0	0	0	0	0	0	0	0	2
1998	0	1	0	0	0	0	0	0	0	0	0	1
1999	0	0	0	0	0	0	0	0	0	0	0	0
2000	0	1	0	0	0	0	0	0	0	0	0	1
2001	2	0	1	0	0	0	0	0	0	0	0	3
2002	2	0	1	0	0	0	0	0	0	0	0	3
2003	0	0	1	0	1	0	0	0	0	0	0	2
2004	1	1	0	1	0	0	0	0	0	0	0	3
2005	3	0	0	0	0	0	0	0	1	0	0	4
2006	1	0	0	1	0	0	0	0	0	0	0	2
Total	**11**	**3**	**3**	**2**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**21**

Source: *US DOT National Highway-Rail Crossing Inventory, November 2006*
Source: *US DOT FRA RAIRS Database, October 2007*

Collision at Recreational Private Crossings by Roadway User, 1997-2006												
	Auto	Truck	Truck-traile	Pick-up tru	Van	Bus	School bus	Motorcycle	Other moto	Pedestrain	Other	Total
1997	4	0	1	0	0	0	0	0	0	0	1	6
1998	3	1	1	1	0	0	0	0	0	1	1	8
1999	1	0	1	3	0	0	0	0	0	0	0	5
2000	6	1	1	2	1	0	0	0	0	0	1	12
2001	2	2	1	0	0	0	0	0	0	1	1	7
2002	4	0	1	1	0	0	0	0	0	0	0	6
2003	4	1	1	1	1	0	0	0	0	0	0	8
2004	1	3	2	1	0	0	0	0	0	0	0	7
2005	2	0	2	2	1	0	0	0	0	0	0	7
2006	5	2	1	1	0	0	0	0	0	0	0	9
Total	**32**	**10**	**12**	**12**	**3**	**0**	**0**	**0**	**0**	**2**	**4**	**75**

Source: *US DOT National Highway-Rail Crossing Inventory, November 2006*
Source: *US DOT FRA RAIRS Database, October 2007*

Collision at Residential Private Crossings by Roadway User, 1997-2006												
	Auto	Truck	Truck-traile	Pick-up tru	Van	Bus	School bus	Motorcycle	Other moto	Pedestrain	Other	Total
1997	15	10	5	4	1	0	0	0	0	0	1	36
1998	19	5	9	3	2	0	0	0	1	0	0	39
1999	23	10	2	3	1	0	0	0	2	1	0	42
2000	28	4	3	8	3	0	0	0	1	0	1	48
2001	26	7	7	8	1	0	0	0	1	1	3	54
2002	28	5	3	11	2	0	0	0	2	0	2	53
2003	23	4	5	10	0	0	0	0	5	1	0	48
2004	23	10	5	10	3	0	0	0	3	1	1	56
2005	26	8	15	18	1	0	0	0	1	0	0	69
2006	26	4	11	14	0	0	0	0	1	1	0	57
Total	**237**	**67**	**65**	**89**	**14**	**0**	**0**	**0**	**17**	**5**	**8**	**502**

Source: *US DOT National Highway-Rail Crossing Inventory, November 2006*
Source: *US DOT FRA RAIRS Database, October 2007*

Average Collisions at Private Crossings by Roadway Users for year 1997-2006						
	Collisions		Fatalities		Injuries	
Roadway User	Count	Percent	Count	Percent	Count	Percent
Auto	128	30.87	15.6	38.81	37.9	29.84
Truck-trailer	117.6	28.36	3.5	8.71	37.1	29.21
Truck	67.3	16.23	6.2	15.42	22.5	17.72
Pickup truck	56.6	13.65	8.9	22.14	18.1	14.25
Other motor vehicle	18.5	4.46	1.7	4.23	4.4	3.46
Van	14.4	3.47	1.1	2.74	5.1	4.02
Other (specify in narrative)	7.8	1.88	0.8	1.99	0.8	0.63
Pedestrian	3.2	0.77	2.3	5.72	0.7	0.55
Bus	0.6	0.14	0	0.00	0.2	0.16
Motorcycle	0.6	0.14	0.1	0.25	0.2	0.16
School bus	0.1	0.02	0	0.00	0	0.00
Total	414.7	100.00	40.2	100.00	127	100.00

Source: US DOT FRA RAIRS Database, October 2007

Average Collisions at Public Crossings by Roadway Users for year 1997-2006						
	Collisions		Fatalities		Injuries	
Roadway User	Count	Percent	Count	Percent	Count	Percent
Auto	1467.4	51.16	157.5	44.59	515.3	49.60
Truck	302.8	10.56	33.4	9.46	121.3	11.68
Truck-trailer	349.3	12.18	14.4	4.08	120.2	11.57
Pickup truck	422	14.71	55.4	15.69	155.6	14.98
Van	114	3.97	20.2	5.72	46.5	4.48
Bus	4.9	0.17	0	0.00	2.3	0.22
School bus	2.2	0.08	0.6	0.17	5.5	0.53
Motorcycle	8.6	0.30	2	0.57	3.4	0.33
Other motor vehicle	69	2.41	9.6	2.72	24.5	2.36
Pedestrian	88.3	3.08	50.6	14.33	31.2	3.00
Other (specify in narrative)	40	1.39	9.5	2.69	13.1	1.26
Total	2868.5	100.00	353.2	100.00	1038.9	100.00

Source: US DOT FRA RAIRS Database, October 2007

Year	Truck	Pickup truck	Auto	Truck-trailer	Total
1997	92	30	185	118	425
1998	88	46	133	117	384
1999	65	47	142	104	358
2000	79	72	165	112	428
2001	57	59	114	112	342
2002	59	54	116	102	331
2003	59	58	104	102	323
2004	68	80	98	121	367
2005	56	62	107	142	367
2006	50	58	116	146	370
Total	**673**	**566**	**1280**	**1176**	**3695**

Source: US DOT FRA RAIRS Database, October 2007

Appendix A.10

Contact Database

Identifier	Last Name	First Name	Company Name	Industry	Address	City	State/Province	Postal Code
1			GA- Chatham Urban Transportation Study	MPO	110 East State Street	Savannah	GA	31412-
2			Carson City MPO	MPO	3303 Butti Way	Carson City	NV	89701-
3			Ohio Steel Association	Steel				
4			Associated General Contractors of America	Construction	2300 Wilson Boulevard, Suite 400	Arlington	VA	22201-
5			Association of Construction Inspectors	Construction	1224 North Nokomis NE	Alexandria	Minnesota	56308-
6			Baltimore Chemical Association	Chemical	928 Whispering Ridge Lane	Bel Air	MD	21015-
7			Synthetic Organic Chemical Manufactures Associatio	Chemical	1850 M St NW, Suite 700	Washington	DC	20036-5810
8			American Chemical Society	Chemical	1155 16th St, NW	Washington	DC	20036-
9			Chemical Industries Association	Chemical	Kings Buildings	Smith Square	London	
10			Louisiana Chemical Association	Chemical	One American Place, Suite 2040	Baton Rouge	LA	70825-
11			Illinois Fertilizer and Chemical Association	Chemical	1201 East Bell St. PO Box 1326	Bloomington	IL	61701-1326
12			National Association of Chemical Distributors	Chemical	1560 Wilson Blvd, Suite 1250	Arlington	VA	22209-
13			Southwest Chemical Association	Chemical		Huston	TX	77001-
14			Canadian Chemical Producers Association	Chemical	350 Sparks St. Suite 805	Ottawa	ON	
15			Chemical Manufacturers Association	Chemical				
16			Association of Chemical Consultants and Chem-Es	Chemical	ACC&CE PO Box 297	Sparta	NJ	07871-
17			Chemical and Industrial Consultants Association	Chemical	The CICA Honorary Secretary, 12, Oughton Close	Yarm		
18			Wisconsin Fertilizer and Chemical Association	Chemical	2317 International Lane, Suite 102	Madison	WI	53704-3154
19			Huston Chemical Association	Chemical	1960 West #348	Huston	TX	77069-
20			American Chemistry Council	Chemical	1300 Wilson Blvd.	Arlington	VA	22209-
21			Chlorine Institute, Inc.	Chemical	1300 Wilson Blvd.	Arlington	VA	22209-
22			Fertilizer Institute	Chemical	820 First St. N.E., Suite 430	Washington	DC	20002-
23			Virginia Association of Realtors	Realtor	10231 Telegraph Road	Glen Allen	VA	23059-4578
24			Charlotte Regional Realtor Association	Realtor	1201 Greenwood Cliff	Charlotte	NC	28204-
25			Greater Greenville Association of Realtors	Realtor	50 Airpark Ct.	Greenville	SC	29607-
26			Realtors Association of Bowling Green	Realtor	180 W. Professional Park Court	Bowling Green	KY	42104-
27			Illinois Association of Realtors	Realtor	3180 Adloff Lane, Suite 400	Springfield	IL	62703-
28			Realtor Association of Southern Minnesota	Realtor	2115 Rolling Green Lane	North Mankato	MN	56003-
29			Alaska Association of Realtors	Realtor	4205 Minnesota Dr.	Anchorage	AK	99503-
30			West Contra Costa Association of Realtors	Realtor	423 46th St.	Richmond	CA	94805-2301
31			Firelands Association of Realtors	Realtor	2710 Campbell St.	Sandusky	OH	44870-
32			Greater Syracuse Association of Realtors	Realtor	1020 Seventh North St., Suite 140	Liverpool	NY	13088-
33			Eugene Association of Realtors	Realtor	2139 Centennial Plaza	Eugene	OR	97401-
34			Chicago Association of Realtors	Realtor	200 South Michigan Ave., Suite 400	Chicago	IL	60604-
35			Nebraska Realtors Association	Realtor	145 South 56th St., Suite 100	Lincoln	NE	68510-2150
36	Nierzwicki	Frank	IN- Bloomington Area Transportation Study	MPO	Showers Center City Hall, Suite 160 401 North Morton Street	Bloomington	IN	47404-
37	Ackermans	Faye	Canadian Pacific Railway - AAR		401 9th Avenue, SW., Suite 2000	Alberta	Calgary	T2P 4Z4
38	Adair	Richard	Richland County Regional Planning Commission	MPO	35 North Park Street, Suite 230	Mansfield	OH	44902-
39	Aguilar	Jay	Cache MPO	MPO	North Main Street, Room 305	Logan	UT	84321-
40	Ahlert	Glen	FL- Lee County MPO	MPO	4980 Bayline Drive, 4th Floor	North Fort Myers	FL	33918-
41	Ahrendsen	Mark	Durham-Chapell Hill-Carrboro MPO	MPO	101 City Hall Plaza, 4th Floor	Durham	NC	27701-
42	Albright	William	Kingsport MPO	MPO	225 West Center Street	Kingsport	TN	37660-
43	Allen	Robert	Abilene MPO	MPO	555 Walnut Street	Abilene	TX	79604-
44	Althof	John	Montana Department of Transportation	US DOT HIGHWAY-RAIL	2701 Prospect Avenue, P.O. Box 201001	Helena	MT	59620-1001
45	Ameen	Patrick T.	AAR		50 F Street NW	Washington	DC	20001
46	Anderson	Eric	AZ- Maricopa Association of Governments	MPO	302 North 1st Avenue, Suite 300	Phoenix	AZ	85003-
47	Anderson	Janet	Erie MPO	MPO	Erie County Courthouse, Room 119 140 West 6th Street	Erie	PA	16501-
48	Anderson	Bill	Tennessee Dept. of Transportation	US DOT HIGHWAY-RAIL	James K. Polk Building, Suite 400	Nashville	TN	37243-
49	Arch	Robert	MD - Hagerstown-Eastern Panhandle MPO	MPO	County Administrative Annex 80 West Baltimore Street	Hagerstown	MD	21740-
50	Armstrong	James	AK- Anchorage Met. Area Trans. Solutions	MPO	4700 South Bragaw	Anchorage	AK	99507-
51	Ashburn	Ron	Iron and Steel Society (AIST)	Steel	186 Thorn Hill Road	Warrendale	PA	15086-
52	Atkinson	Michael	Canadian Construction Association (CCA)	Construction	75 Albert Street, Suite 400	Ottawa	ON	K1P 5E7
53	Aulick	Michael	Capital Area MPO	MPO	1101 San Jacinto, 2nd Floor	Austin	TX	78701-
54	Aull	Adam	IL- Danville Area Transportation Study	MPO	17 West Main Street	Danville	IL	60606-
55	Averey	Dan	IN- Northeastern Indiana Regional Coord. Council	MPO	City-County Building, Room 630 One East Main Street	Ft. Wayne	IN	46802-1804
56	Ayer	Lucie	FL- Hillsborough County MPO	MPO	County Center Building, 18th Floor 601 East Kennedy Boulevard	Tampa	FL	33601-
57	Baechtold	Dan	French Broad River MPO	MPO	70 Court Plaza, Mezzanine	Asheville	NC	28801-

Identifier	Last Name	First Name	Company Name	Industry	Address	City	State/Province	Postal Code
58	Bailey	Ronald	Lancaster County Transportation Coordinating Commi	MPO	New Courthouse, 6th Floor 50 North Duke Street	Lancaster	PA	17608-3480
59	Baker	Tim	Colorado Dept. of Transportation	US DOT HIGHWAY-RAIL	4201 East Arkansas Ave., Empire Park	Denver	CO	80222-
60	Baker	Chuck	National Railroad Construction & Maintenance Association		122 C Street NW	Washington	DC	
61	Baldwin	Ira	Public Service Commission of West Virginia		201 Brooks Street	Charleston	WV	25301
62	Ball	Charles	AL- Gadsden-Etowah MPO	MPO	90 Broad St. (City Hall, c/o City of Gadsden)	Gadsden	AL	35901-
63	Ballinger	Forrest	GE Transportation Systems	AHB60 MEMBER	P.O. Box 600	Grain Valley	MO	64029-
64	Balster	Ron	Kansas Dept. of Transportation	US DOT HIGHWAY-RAIL	Docking State Office Bldg., Room 830	Topeka	KS	66612-
65	Barley	Harold	FL- METROPLAN Orlando	MPO	315 East Robinson Street, Suite 355	Orlando	FL	32801-
66	Barrett	Bruce	FL- Tallahassee - Leon County MPO	MPO	City Hall, 4th Floor 300 South Adams Street	Tallahassee	FL	32301-
67	Basden	Bruce	Steel Erectors Association of America	Steel	2216 W. Meadowview Rd.	Greensboro	NC	27407-
68	Batory	Ronald L.	Conrail		1000 Howard Boulevard	Mount Laurel	NJ	8054
69	Becker	Scott	Association of Railway Museums		One Museum Road	Washington	PA	15301
70	Beigay	Bradford	Cambria County MPO	MPO	401 Candlelight Drive, Suite 213	Ebensburg	PA	15931-
71	Beleon	David	Harlingen-San Benito MPO	MPO	502 East Tyler Street	Harlingen	TX	78550-
72	Bernard	R. A. (Bob)	CSX Transportation - AAR		500 Water St.	Jacksonville	FL	32202
73	Berrada	Sam	Canadian National - AAR		935 de la Gauchetiere St West-15th Floor	Montreal	Quebec	H3B 2M9
74	Bigham	Robert	Lawton MPO	MPO	103 SW 4th Street	Lawton	OK	73501-4078
75	Bishop	Ricahrd	GA- Columbus Annex Center 420 10th Street	MPO	Columbus Annex Center 420 10th Street	Columbus	GA	31902-
76	Black	George	National Transportation Safety Board	AHB60 MEMBER	490 L'Enfant Plaza East, SW	Washington	DC	20594-
77	Blair	Jerry	MO - East-West Gateway Coordinating Council	MPO	10 Stadium Plaza	St. Louis	MO	63102-1714
78	Blanshan	Kevin	IA- Black Hawk Metro Area Trans. Policy Board	MPO	501 Sycamore Street, Suite 333	Waterloo	IA	50703-
79	Blindum	Ulrik	Niels Juels Gade 13	AHB60 MEMBER	PO Box 9018	Copenhagen K	Denmark	
80	Bloom	Harvey S.	MD - Baltimore Regional Transportation Board	MPO	2700 Lighthouse Point East, Suite 310	Baltimore	MD	21224-4774
81	Bodeman	Dan	BNSF		2600 Lou Menk Drive	Fort Worth	TX	76161
82	Bohne	Bill	International Brotherhood of Electrical Workers - IBEW		900 7th Street, NW	Washington	DC	20001
83	Boice	James	Connecticut Dept. of Transportation	US DOT HIGHWAY-RAIL	P.O. Box 317546	Newing	CT	06131-
84	Bolton	Bernadette	Brotherhood of Maintenance of Way Employees		10 G Street, NW	Washington	DC	20002
85	Bosley	Molly	Killeen-Temple Urban Transportation Study	MPO	550 East 2nd Avenue	Belton	TX	76513-
86	Bostinelos	Michelle	Janesville Area MPO	MPO	Municipal Building, 3rd Floor 18 North Jackson Street	Janesville	WI	53545-
87	Boucher	Anita	Nevada Dept. of Transportation	US DOT HIGHWAY-RAIL	1263 South Stewart Street	Carson City	NV	89792-
88	Bovee	Darlene	Iowa Dept. of Transportation	US DOT HIGHWAY-RAIL	800 Lincoln Way	Ames	IA	50010-
89	Bowgren	Michael	International Brotherhood of Elecrical Workers - IBEW		900 7th St. NW	Washington	DC	20001
90	Bowman	Clair	ID- Comm. Planning Asso. of Southwestern Idaho	MPO	800 South Industry Way, Suite 100	Meridian	ID	83642-
91	Bowman	Brian	Auburn University	AHB60 MEMBER	236 Harbert Engineering Center	Auburn	AL	36849-
92	Bragdon	David	Metro	MPO	600 NE Grand Avenue	Portland	OR	97232-2736
93	Brawley	Eddie	AR- West Memphis Area Trans. Study	MPO	796 West Broadway	West Memphis	AR	72301-
94	Brewin	Nicole	Railway Supply Institute	50 F Street, N.W. Suite 7030	Washington , DC 20001			
95	Bridges	Jerrold	IN- Madison County COG	MPO	16 East 9th Street, Room 100	Anderson	IN	46016-
96	Bridwell	Alan	Johnson City Metropolitan Transportation P.O.	MPO	137 West Market Street	Johnson City	TN	37604-
97	Brienzo	Michael	Lincoln MPO	MPO	531 Westgate Boulevard, Suite 100	Lincoln	NE	68528-
98	Briers	Ken	Parsons		1133 15th Street, NW, Suite 800	Washington	DC	20005
99	Bright	Robert	Fargo-Morehead Metropolitan COG	MPO	Case Plaza, Suite 232 1 North 2nd Street	Fargo	ND	58102-
100	Brooks	Walter R.	LA - Regional Planning Commission	MPO	Amoco Building, Suite 2100 1340 Poydras Street	New Orleans	LA	70112-5276
101	Browder	Bill	AAR		50 F Street NW	Washington	DC	20001
102	Brubeck	Greg	Corpus Christi MPO	MPO	5151 Flynn Parkway, Suite 404	Corpus Christi	TX	78411-
103	Brummett	Ronald	CA- Kern COG	MPO	1401 19th Street, Suite 300	Bakersfield	CA	93301-
104	Brunkerhoefer J	James M.	United Transportation Union		304 Pennsylvania Avenue, SE	Washington	DC	20003
105	Bryan	Jerry	FL- Martin County MPO	MPO	Martin County Administrative Center 2401 SE Monterey Road	Stuart	FL	34996-
106	Bubb	Donald	York Area MPO	MPO	York County Government Center 100 West Market Street	York	PA	17401-
107	Bulat	Denise	IL- Bi-State Regional Commission	MPO	1504 Third Avenue	Rock Island	IL	61204-
108	Bunnewith	Denise	FL- First Coast MPO	MPO	128 East Forsyth Street, Suite 304	Jacksonville	FL	32202-
109	Burges Sicking	Terri	KY- FIVCO Area Development District	MPO	3000 Louisa Street	Catlettsburg	KY	41129-
110	Burgh	J. Dan	Blacksburg-Christiansburg-Montgomery Area MPO	MPO	755 Roanoke Street	Christiansburg	VA	24073-3181
111	Burket	Wesley	Blair County Planning Commission	MPO	301 Valley View Boulevard, East Wing	Altoona	PA	16602-6409
112	Buss	Mike	Florida East Coast Rwy.		One Malaga Street	St. Augustine	FL	32085

Identifier	Last Name	First Name	Company Name	Industry	Address	City	State/Province	Postal Code
113	Butler	James	CT- Southeastern Connecticut COG	MPO	5 Connecticut Avenue	Norwich	CT	06360-4592
114	Buxton	Robin	IBEW		25 Woodard Circle	East Ridge	TN	37412
115	Byington	Mori	ID- Bannock Planning Organization	MPO	214 East Center	Pocatello	ID	83205-
116	Byrne	Angie	AR- Hot Springs Area MPO	MPO	P.O. Box 700	Hot Springs	AR	71902-
117	Byrne	Terry	URS	AHB60 MEMBER	38 Chauncy Street	Boston	MA	02111-
118	Campbell	David	Delaware Transit Corporation	US DOT HIGHWAY-RAIL	400 South Madison Street	Wilmington	DE	19801-
119	Cannito	Peter A.	MTA Metro-North Railroad		347 Madison Avenue	New York	MY	10017
120	Capon	Ross	National Association of Railroad Passengers		900 Second St., NE	Washington	DC	20002
121	Carpenter	David	Las Cruces MPO	MPO	City Office Center 575 South Alameda Blvd.	Las Cruces	NM	88005-
122	Carroll	Anya	Volpe Center	AHB60 MEMBER	55 Broadway	Cambridge	MA	02142-1093
123	Casteel	Anthony	Cleveland Area MPO	MPO	185 Second Street, NE, Suite 1	Cleveland	TN	37311-
124	Chambers	Sir Vithaldas	Indian Chemical Manufacturers Association	Chemical	16 Mumbai Samachar Marg	Mumbai		40002-3
125	Chambers	Ray	National Railroad Construction & Maintenance Association		122 C Street, NW	Washington	DC	20001
126	Chappell	Chuck	Wasatch Front Regional Council	MPO	295 North Jimmy Dolittle Road	Salt Lake City	UT	84116-
127	Chatman	Donnie	Goldsboro Urban Area MPO	MPO	City Hall Annex 222 North Center Street	Goldsboro	NC	27530-
128	Chelius	Timothy	South Jersey Transportation Planning Organization	MPO	782 S. Brewster Road, Unit B-6	Vineland	NJ	08361-
129	Chew	Jonathan	CT- Housatonic Valley Council of Elected Officials	MPO	Old Town Hall Route 25 and 133	Brookfield	CT	06804-
130	Chicka	Ron	MN - Duluth-Superior Metro Interstate Committee	MPO	221 West 1st Street	Duluth	MN	55802-
131	Chinn	Bruce	Missouri Dept. of Transportation	US DOT HIGHWAY-RAIL	P. O. Box 1216	Jefferson City	MO	65102-
132	Church	David	Newburgh-Orange County Transportation Council	MPO	1887 County Building 124 Main Street	Goshen	NY	10924-
133	Ciaramella	Pasquele	MA - Old Colony MPO	MPO	70 School Street	Brockton	MA	02301-4097
134	Clark	Jon	CA- Butte County Association of Governments	MPO	965 Fir Street	Chico	CA	95928-
135	Clark	Alan	Houston-Galveston Area Council	MPO	3555 Timmons, Suite 120	Houston	TX	77027-
136	Clarkson	James	Transportation Security Administration		601 South 12th Street	Arlington	VA	22202
137	Claytor	Preston	Rail America, Inc. - AAR		5300 Broken Sound Blvd., N.W.	Boca Raton	FL	33487
138	Clements	Andrew	MO - St. Joseph Area Trans Study Organization	MPO	1100 Frederick Avenue, Room 204	St. Joseph	MO	64501-
139	Colegrove	Geoffrey	CT- Midstate Regional Planning Agency	MPO	100 DeKoven Drive	Middletown	CT	06457-
140	Conard	Richard	Massachusetts Highway Department	US DOT HIGHWAY-RAIL	10 Park Plaza, Room 6340	Boston	MA	02116-
141	Conley	Yvette			1666 K Street, NW	Washington	DC	20006
142	Conyers	Max	KY- Lexington Area MPO	MPO	Government Center, 10th Floor 200 East Main Street	Lexington	KY	40507-
143	Cook	Chapin W.	MI - Genesee County Metro Planning Commission	MPO	1101 Beach Street, Room 223	Flint	MI	48502-
144	Cook	Robert	Mecklenburg-Union MPO	MPO	600 East Fourth Street	Charlotte	NC	28202-
145	Cooper	Eli	Puget Sound Regional Council	MPO	1011 Western Avenue, Suite 500	Seattle	WA	98104-
146	Copeland	Cynthia	Seacoast MPO	MPO	2 Ridge Street	Dover	NH	03820-
147	Corcoran Jr.	Andrew P.	Norfolk Southern Corporation - AAR		3 Commercial Place	Norfolk	VA	23510
148	Covey	Becky	Ohio Steel Association	Steel	P.O. Box 369	Columbus	Ohio	43216-0369
149	Cox	Robert	Midland-Odessa MPO	MPO	2910 LaForce Blvd	Midland	TX	79711-
150	Craig	Don	ME - Androscoggin Transportation Resource Center	MPO	125 Manley Road	Auburn	ME	04210-
151	Craig	Michelle	KYOVA Interstate Planning Commission	MPO	1221 6th Avenue	Huntington	WV	25701-
152	Cronk	Jay R.	International Association of Machinists and Aerospace Workers		9000 Machinists Place	Upper Marlboro	MD	20772
153	Croome	Jim	Construction Suppliers' Association	Construction	Sandersville Builders Supply P.O. Box 1116	Sandersville	GA	31082-
154	Cruz	Ric	North Carolina Dept. of Transportation	US DOT HIGHWAY-RAIL	P.O. Box 25201	Raleigh	NC	27611-
155	Cunningham	James	CPR		Gulf Canada Square	Calgary	AB	T2P 4Z4
156	Curtis	James	AL- Calhoun Area MPO	MPO	1130 Quintard Ave., Quintard Tower, Suite 300	Anniston	AL	36201-
157	Dalton	Leah	Ohio Public Utilities Commission	US DOT HIGHWAY-RAIL	Highway-Rail Crossing Inventory	Colombus	OH	43215-
158	D'Amato	Jim	Spartanburg Area Transportation Study	MPO	366 North Church Street	Spartanburg	SC	29303-
159	Danjczek	Thomas A.	Steel Manufacturers Association	Steel	1150 Connecticut Avenue, NW Suite 715	Washington	D.C.	20036-
160	Davidson	Cliff	CO- North Front Range MPO	MPO	235 Mathews Street	Fort Collins	CO	80524-
161	Davidson	Jeff	IA- Johnson County COG	MPO	410 East Washington Street	Iowa City	IA	52240-
162	Davis	Roger	Licking County Area Transportation Study	MPO	20 South 2nd Street	Newark	OH	43055-
163	Day	Sandeeo	MI - Western Michigan Shoreline Regional Dev. Comm	MPO	316 Morris Avenue, Suite 340	Muskegon	MI	49443-
164	de Aragon	Fernando	Ithaca-Tompkins County Transportation Council	MPO	121 East Court Street	Ithaca	NY	14850-
165	Deardorff	Thomas	FL- Polk Trans. Planning Organization	MPO	330 West Church Street	Bartow	FL	33830-
166	Dearing	Mike	IN- Indianapolis MPO	MPO	200 East Washington Street, Suite 1841	Indianapolis	IN	46204-
167	DeCarli	Ronald	CA- San Luis Obispo COG	MPO	1150 Osos Street, Suite 202	San Luis Obispo	CA	93401-
168	DeGoyler	Lisa	Construction Owners Association of America	Construction	2727 Paces Ferry Road	Atlanta	GA	30339-
169	DePaepe	Tim	Brotherhood of Railway Signalmen	AHB60 MEMBER	9175 Shenandoah Shores Road	Front Royal	VA	22630-
170	DePaepe	Timothy J.	Brotherhood of Railroad Signalmen		917 Shenandoah Shores Road	Front Royal	VA	22630
171	DesGroseilliers	Rich	Lakeway MPO	MPO	100 West 1st North Street	Morristown	TN	37814-
172	DeVerter II	Paul L	AAPRCO		12114 Taylorcrest St.	Houston	TX	77024
173	Devine	Steve	Rhode Island Dept. of Transportation	US DOT HIGHWAY-RAIL	2 Capital Hill, Room 231D	Providence	RI	02903-

Identifier	Last Name	First Name	Company Name	Industry	Address	City	State/Province	Postal Code
174	Dewhurst	Philip	Nuclear Industry Association (UK)	Nuclear	Carlton House 22a St James's Square	London	England	SW1Y 4JH
175	Diaz	Nacho	MN - Metropolitan Council	MPO	Mears Park Center 230 East 5th Street	St. Paul	MN	55101-
176	Dickinson	Bob	South East Texas Regional Planning Commish MPO	MPO	2210 Eastex Freeway	Beaumont	TX	77703-
177	Dickson	Gary	CA- Stanislaus COG	MPO	900 H Street, Suite D	Modesto	CA	95354-
178	Dimit	John	IL- Champaign-Urbana Urban Area Trans. Study	MPO	1776 East Washington Street	Urbana	IL	61803-
179	Dix	Dennise	FL- Hernando County MPO	MPO	20 North Main Street, Room 262	Brooksville	FL	34601-
180	Dorpalen	Peter	CT- Council of Gov of the Central Naugatuck Valley	MPO	20 East Main Street, Suite 303	Waterbury	CT	06702-2399
181	Dowd	Robert	Danville MPO	MPO	1 Starling Avenue	Martinsville	VA	24112-
182	Dowell	Michael	Florida Department of Transportation	US DOT HIGHWAY-RAIL	605 Suwannee Street, MS-25	Tallahassee	FL	32399-0450
183	Drake	John	CSX Transportation - AAR		500 Water Street - J260	Jacksonville	FL	32202
184	Drouin	Gary	Transport Canada	AHB60 MEMBER	Place de Ville	Ottawa	Ontario	K1A ON5
185	Duane	James	Ohio-Kentucky-Indiana Regional COG	MPO	720 East Pete Rose Way, Suite 420	Cincinnati	OH	45202-
186	Duffy	Dennis	Union Pacific Railroad - AAR		1416 Dodge Street, Rm 1206	Omaha	NE	68179
187	Duncan	John	ME - Portland Area Comprehensive Trans Committee	MPO	233 Oxford Street	Portland	ME	04101-
188	Durst	Randy	Wood-Washington-Wirt Interstate Planning Commish	MPO	531 Market Street	Parkersburg	WV	26101-
189	Dysard	David	Toledo Metropolitan Area COG	MPO	300 Dr. Martin Luther King, Jr. Drive	Toledo	OH	43602-
190	Edmonds	Richard	National Conference of Firemen an Oilers		972 Norburne Ave	Vinton	VA	24179
191	Edmunds	Rhonda	Charlottesville-Albemarle MPO	MPO	300 East Main Street, 1st Floor	Charlottesville	VA	22902-
192	Edwards	Billy	GA- Hinesville MPO	MPO	115 East Martin Luther King, Jr. Drive	Hinesville	GA	31313-
193	Edwards	Jim	Rock Hill-Fort Mill Area Transportation Study	MPO	155 Johnston Street	Rock Hill	SC	29731-1706
194	Edwards	Steve	Mississippi Dept. of Transportation	US DOT HIGHWAY-RAIL	P.O. Box 1850	Jackson	MS	39215-
195	Egelhaff	John	MI - Southwestern Michigan Commission MPC	MPO	185 East Main Street, Suite 701	Benton Harbor	MI	49022-
196	Eich	Austin	Southeastern COG	MPO	1000 NW Avenue Suite 210	Sioux Falls	SD	57104-
197	Eigen	Richard	CT- Valley COG	MPO	Derby Railroad Station 12 Main Street	Derby	CT	06418-
198	Eisele	Donald	New Jersey Transit	AHB60 MEMBER	One Penn Plaza Est	Newark	NJ	07105-2246
199	Elkin	Robin	Santa Fe MPO	MPO	200 Lincoln Avenue	Santa Fe	NM	87504-
200	Elliott	Diane	American Association of Private Railroad Car Owners		630-B Constitution Avenue, NE	Washington	DC	20002
201	Elliott	David J.	LTK Engineering Services		317 Madison Ave.	New York	NY	10017
202	Elmer	Lowell	Dixie MPC	MPO	P.O. Box 1550	St. George	UT	84771-
203	Elston	Murray	Canadian Nuclear Association	Nuclear	130 Albert Street, Suite 1610	Ottawa	Ontario	K1P 5GA
204	Ernst	Steven	IL- Rockford Area Transportation Study	MPO	425 East State Street	Rockford	IL	61104-
205	Errett	Gregory	Winston-Salem Urban Area MPO	MPO	City Hall South, Room 307 100 East First Street	Winston-Salem	NC	27102-
206	Evans	Adam	AL- Auburn - Opelika MPO	MPO	2207 Gateway Drive	Opelika	AL	36801-6834
207	Evenson	Philip	Southeastern Wisconsin Regional Planning Commish	MPO	West 239 North 1812 Rockwood Drive	Waukesha	WI	53188-
208	Faella	Tom	La Crosse Area Planning Committee	MPO	400 4th St. North La Crosse County Administrative Building	La Crosse	WI	54601-
209	Fanning	Dallas	AL- Huntsville Area Transportation Study	MPO	308 Fountain Circle	Huntsville	AL	35801-
210	Farmer	Dwight	Hampton Roads MPO	MPO	The Regional Building 723 Woodlake Drive	Chesapeake	VA	23320-
211	Fast	Melba	MO - Capital Area MPO	MPO	320 East McCarty Street	Jefferson	MO	65101-
212	Fawver	Gary	Pennsylvania Dept. of Transportation	US DOT HIGHWAY-RAIL	400 North Street, 7th Floor	Harrisburg	PA	17120-
213	Felton	Mark	BCKP Regional Intergovernmental Council	MPO	315 D Street	South Charleston	WV	25303-
214	Filipovic	Mark	International Association of Machinists and Aerospace Workers		9000 Machinists Place	Upper Marlboro	MD	20772
215	Finger	Linda	KS- Lawrence-Douglas County Metro Planning Office	MPO	City Hall, 1st Floor 6 East 6th Street	Lawrence	KS	66044-
216	Fink	Fred	Transport Workers Union of America, AFL-CIO		5390 Karen Isle	Willoughby	OH	44094
217	Finney	George	CA- Tulare County Association of Governments	MPO	5961 South Mooney Boulevard	Visalia	CA	93277-
218	Fisher	Tom	CO- Grand Junction / Mesa County MPO	MPO	750 Main Street	Grand Junction	CO	81501-
219	Fisk	James	Kansas City Southern Railway - AAR		114 West 12th Street	Kansas City	MO	64105
220	Fitzgerald	Cheri	FL- St. Lucie MPO	MPO	2300 Virginia Avenue, Room 203	Fort Pierce	FL	34982-
221	Fitzpatrick	Gary	Florida Department of Transportation	US DOT HIGHWAY-RAIL	605 Suwannee Street, MS-25	Tallahassee	FL	32399-0450
222	Flagg	Diane	FL- Collier County MPO	MPO	2685 South Horseshoe Drive	Naples	FL	34104-
223	Fleck	John	MO - Columbia Area Trans. Study Organization	MPO	701 East Broadway	Columbia	MO	65205-
224	Fontenot	Abe	LA - Imperial Calcasieu Regional Planning & Dev. C	MPO	Lake Charles City Hall, 4th Floor 326 Pujo Street	Lake Charles	LA	70602-
225	Forbes	F. James	Greenville Area Transportation Study	MPO	301 University Ridge, Suite 400	Greenville	SC	29601-
226	Foskett	Richard	State of Delaware, DOT	US DOT HIGHWAY-RAIL	PO Box 778	Dover	DE	19903-
227	Fountain	Jesse	GA- Warner Robins Area Transportation Study	MPO	700 Watson Boulevard	Warner Robins	GA	31099-
228	Fraga	Robert	Construction Management Association of America	Construction	7918 Jones Branch Drive, Ste. 540	McLean	VA	22102-
229	Fraley	Charles	Sheet Metal Workers International Association		3512 E. Lydius Street	Guilderland	NY	12303
230	Friedman	C. Marshall	C. Marshall Friedman, P.C. - TCIU/BRC		1010 Market Street	St. Louis	MO	63101
231	Garland	Dewey	Sheet Metal Workers International Association		1750 New York Ave, NW	Washington	DC	20006

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232	Gates	Danny	Brotherhood of Maintenance of Way Employees		10 G St. NE, Suite 460	Washington	DC	20006
233	Gayle	Steven	Binghamton Metropolitan Transportation Study	MPO	Broome County Office Building, 5th Floor 44 Hawley Street	Binghamton	NY	13902-
234	Gellerman	Tom	Minnesota Department of Transportation	US DOT HIGHWAY-RAIL	395 John Ireland Blvd.	St. Paul	MN	55155-
235	Getchey	John	Eastgate Regional COG	MPO	5121 Mahoning Avenue	Austintown	OH	44515-
236	Ghirardi	Kevin	LA - Houma-Thibodaux MPO	MPO	5058 West Main Street	Houma	LA	70360-
237	Gibson	David	Arizona Department of Transportation	US DOT HIGHWAY-RAIL	1739 W. Jackson St. 064R	Phoenix	AZ	85250-
238	Gibson	Gary	Indiana Harbor Belt Railway		2721 161st Street	Hammond	IN	46323
239	Gilbert	Darien	California Public Utilities Commission	US DOT HIGHWAY-RAIL	515 "L" Street, Suite 1119	Sacramento	CA	95814-
240	Gilbert	Danny	Rail Safety Consultants	AHB60 MEMBER	1820 Dorset Drive	Roanoke	VA	24018-
241	Gilyard	Roy	El Paso MPO	MPO	10767 Gateway Boulevard West,Suite 605	El Paso	TX	79935-
242	Gleason	Steve	Genesee Transportation Council	MPO	CityPlace, Suite 8112 50 West Main Street	Rochester	NY	14614-1227
243	Gonzales	Henry	New Mexico Dept. of Transportation	US DOT HIGHWAY-RAIL	P.O. Box 1149, San Mateo Plaza, 1st Floor	Santa Fe	NM	87504-1149
244	Goodwin	Barbara	CA- Council of Fresno County Governments	MPO	2100 Tulare Street, Suite 619	Fresno	CA	93721-
245	Gott	Judy	CT- South Central Regional COG	MPO	127 Washington Avenue, 4th Floor West	North Haven	CT	06473-
246	Grady	James	Conrail (AAR)		1000 Howard Blvd.	Mt. Laurel	NJ	8054
247	Graham	James (Hank)	Gaston Urban Area MPO	MPO	181 South Street	Gastonia	NC	28052-
248	Gray	Carter	Memphis Urban Area MPO	MPO	1075 Mullins Station Rd. NW Wing, 1st floor	Memphis	TN	38134-
249	Greene	Julia	CA- San Joaquin COG	MPO	6 South El Dorado Street, Suite 400	Stockton	CA	95202-2804
250	Griffin	Brad	GA- Madison-Athens Clarke Oconee Reg Trans Study	MPO	120 West Dougherty Street	Athen	GA	30601-
251	Grimaila	Robert M.	Union Pacific Railroad		1400 Douglas Street	Omaha	NE	68179
252	Grizard	Bill	American Public Transportation Association	AHB60 MEMBER	1666 K Street NW	Washington	DC	20006-
253	Gross	John	AZ- Yuma MPO	MPO	502 South Orange Avenue	Yuma	AZ	85364-
254	Groves	Kenneth	AL- Montgomery Area MPO	MPO	103 North Perry Street, Room 121-Q	Montgomery	AL	36104-
255	Grzymski	Andy	High Point Urban Area MPO	MPO	211 South Hamilton St., Room 210	High Point	NC	27261-
256	Guffain	Pam	The Fertilizer Institute		820 First Street, N.E., Suite 430	Washington	DC	20002
257	Guldner	Ralf	World Nuclear Association	Nuclear	Carlton House, 22a St. James's Square, London SW1Y 4JH	London		
258	Gumula	Mark	FL- Charlotte County - Punta Gorda MPO	MPO	28000 Airport Road, A-6	Punta Gorda	FL	33982-2409
259	Guthrie	John	AR- Bi-State MPO	MPO	1109 South 16th Street	Fort Smith	AR	72901-
260	Guy	Michael	FL- Sarasota-Manatee MPO	MPO	7632 15th Street East	Sarasota	FL	34243-3248
261	Hahs	D. M.	Brotherhood of Locomotive Engineers		1370 Ontario Street	Cleveland	OH	44113
262	Hall	Gerri	Operation Lifesaver Inc	AHB60 MEMBER	1420 King Street	Alexandria	VA	22314-
263	Halstead	Lori	Washington Utilities & Transportation Comm.	US DOT HIGHWAY-RAIL	P.O. Box 47250	Olympia	WA	98504-
264	Hambley	Jim	Navy Nuclear Weapons Association	Nuclear				
265	Hamilton	Paul	MI - Tri-County Regional Planning Commission	MPO	Southwind Office Building, Suite 201 913 West Holmes Road	Lansing	MI	48910-
266	Hammer	Ed	Marathon County Metropolitan Planning Commission	MPO	210 River Drive	Wausau	WI	54403-
267	Hansen	William G.	MN - St. Cloud Area Planning Organization	MPO	1040 County Road 4	St. Cloud	MN	56303-0643
268	Hanson	Kenneth	Akron Metropolitan Area Transportation Study	MPO	146 South High Street, Room 806, Citicenter	Akron	OH	44308-1423
269	Hardy	Clarence	Australian Nuclear Association	Nuclear	P.O. Box 85, Peakhurst, NSW Australia, 2210	Peakhurst	NSW	2210
270	Harkrader	Bob	Burlington-Graham MPO	MPO	425 S. Lexington Avenue	Burlington	NC	27215-
271	Harpole	Keith	KY- Green River Area Development District	MPO	3860 U.S. Hwy 60 West	Owensboro	KY	42301-0200
272	Harris	Brad	MA - Montachusett MPO	MPO	R 1427 Water Street	Fitchburg	MA	01420-
273	Hasenstab	Michael D.	Healey Railroad Corporation		1500 Huguenot Rd Suite 101	Midlothian	VA	23113
274	Hassinger	James	Southwestern Pennsylvania Commission	MPO	425 6th Avenue, Suite 2500	Pittsburgh	PA	15219-1852
275	Hatley	Dan	Charleston Area Transportation Study	MPO	5290 Rivers Avenue, Suite 400	North Charleston	SC	29406-
276	Haugen	Earl	Grand Forks-East Grand Forks MPO	MPO	City Hall, Room 202 225 North 4th Street	Grand Forks	ND	58206-
277	Hawkins	Jeff	AR- Northwest Arkansas Regional Trans. Study	MPO	1311 Clayton Street	Springdale	AR	72762-
278	Hawley	James	IN- Tippecanoe County Area Plan Commission	MPO	20 North 3rd Street	Lafayette	IN	47901-
279	Headley	Kim	CO- Pueblo Area COG	MPO	229 West 12th Street	Pueblo	CO	81003-
280	Hebert	Roland J.	MA - Southeastern Regional Planning & Economic Dev	MPO	88 Broadway	Taunton	MA	02780-
281	Heckler	Herb	Kingston MPO	MPO	244 Fair Street	Kingston	NY	12401-
282	Heicksen	Rick	Fayetteville Area MPO	MPO	130 Gillespie Street, 2nd Floor	Fayetteville	NC	28302-1829
283	Heinz	Glenn			204A Riverbend Drive	London	KY	40744
284	Hellstrom	Carl E.	MA - Central Massachusetts MPO	MPO	35 Harvard Street	Worcester	MA	01609-2801
285	Heminger	Steve	CA- Bay Area MPO	MPO	Metro Center 101 8th Street	Oakland	CA	94607-
286	Henderson	Mell	MO - Mid-Amercia Regional Council	MPO	300 Rivergate Center 600 Broadway	Kansas City	MO	64105-1554
287	Hendrix	David	AL- South Wiregrass Area MPO	MPO	Roy Drigger Municipal Building, Room 303 126 North St. Andrews Street	Dothan	AL	36303-
288	Henn	Raymond W.	American Underground Construction Association	Construction	3001 Hennepin Avenue, So., Suite D202	Minneapolis	MN	55408-

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289	Herstein	Robert	Maryland State Highway Administration	US DOT HIGHWAY-RAIL	7491 Connelley Drive	Hanover	MD	21076-
290	Higgins	Sue	MI - Macatawa Area Coordinating Council	MPO	400 136th Avenue, Suite 416	Holland	MI	49424-
291	Hill	Jim	Wheeling and Lake Erie Railway Company - AAR		100 East First Street	Brewster	OH	44613
292	Hiller	Sue	GA- Floyd-Rome Urban Transportation Study	MPO	607 Broad Street	Rome	GA	30162-
293	Hilton	Cynthia	Institute of Makers of Explosives		1120 Nineteenth St., NW, Suite 310	Washington	DC	20036
294	Himes	Larry	Clark County-Springfield Transportation Study	MPO	City Hall 76 East High Street	Springfield	OH	45502-
295	Hinrichs	Rex	Wisconsin Department of Transportation	US DOT HIGHWAY-RAIL	4802 Sheboygan Ave., Room 933	Madison	WI	53707-7913
296	Hissong	Tina	Michigan Dept. of Transportation	US DOT HIGHWAY-RAIL	P.O. Box 30050	Lansing	MI	48909-
297	Hoge	William	Sumter Urban Area Transportation Study	MPO	33 North Main Street	Sumter	SC	29151-
298	Hokenstad	Carl	Bismark-Mandan MPO	MPO	221 North 5th Street	Bismark	ND	58506-
299	Holden	Martin	Sheboygan MPO	MPO	Old Fort Square, Suite 211 211 North Broadway	Green Bay	WI	54303-2757
300	Holst	Richard	AL- Northwest Alabama Council of Local Govs.	MPO	103 Student Drive	Muscle Shoals	AL	35661-
301	Hooper	Fran	American Public Transportation Association (APTA)		1666 K Street, NW	Washington	DC	20006
302	Hopkins	Harry	IL- Springfield Area Transportation Study	MPO	200 South 9th Street, Room 212	Springfield	IL	62701-1629
303	Horn	Roger A.	Safe Travel America		1793 East Fort Douglas Circle	Salt Lake City	UT	84103
304	Horton	Willie	MS - Hattiesburg-Petal-Forrest-Lamar MPO	MPO	200 Forrest St	Hattiesburg	MS	39401-1898
305	Horton	Patsy	Rapid City Area MPO	MPO	300 Sixth Street	Rapid City	SD	57701-
306	Hull	Steve	Indiana Department of Transportation	US DOT HIGHWAY-RAIL	100 N. Senate Ave,	Indianapolis	IN	46204-
307	Ice	Carl	Burlington Northern Santa Fe - AAR		2600 Lou Menk Drive	Ft. Worth	TX	76161
308	Inclima	Rick A.	Brotherhood of Maintenance of Way Employes		10 G Street, N.E.	Washington	DC	20002
309	Itani	Abed	MI - Grand Valley Metropolitan Council	MPO	40 Pearl Street NW, Suite 410	Grand Rapids	MI	49503-
310	Ives	Larry	IN- Kokomo & Howard County Gov Coordinating Counci	MPO	120 East Mulberry Street, Suite 116	Kokomo	IN	46901-
311	Jaeger	Paul	Stark County Area Transportation	MPO	201 3rd Street, NE, suite 201	Canton	OH	44702-
312	Jilla	Robert	Alabama Department of Transportation	US DOT HIGHWAY-RAIL	1100 John Overton Drive	Montgomery	AL	36110-
313	Johnson	Edison	Capital Area MPO	MPO	127 West Hargett St.	Raleigh	NC	27601-
314	Johnson	Arthur	Safe Travel America		10600 Red Barn Lane	Potomac	MD	20854
315	Johnson	David	National Association of Railroad Passengers		900 Second St. NE	Washington	DC	20002
316	Johnson	Julie Ann	Association of Railway Museums		28W351 Geneva Road	West Chicago	IL	60185
317	Johnson	Richard A.	Transportation Communications International Union/BRC		3 Research Place	Rockville	MD	
318	Kaiser	Michael	Lehigh Valley Transportation Study	MPO	961 Marcon Boulevard, Suite 310	Allentown	PA	18109-
319	Kamm	Bob	FL- Brevard MPO	MPO	Transportation Planning Office 2725 Judge Fran Jamieson Way, Building A, Room 109	Viera	FL	32940-
320	Kane	Tom	IA- Des Moines Area MPO	MPO	Merle Hay Centre, Suite 300 West 6200 Aurora Avenue	Urbandale	IA	50322-2866
321	Karns	Nathaniel W.	MA - Berkshire MPO	MPO	1 Fenn Street	Pittsfield	MA	01201-
322	Karr	Patricia A.	MI - Battle Creek Area Transportation Study	MPO	Springfield Municipal Building 601 Avenue A	Springfield	MI	49015-1474
323	Kawada	Kim	CA- San Diego Association of Governments	MPO	401 B Street, Suite 800	San Diego	CA	92101-
324	Keane	Bob	Canadian National - AAR		17641 South Ashland Avenue	Homewood	IL	60430
325	Keating	Robert	FL- Indian River County MPO	MPO	County Administration Building 1840 25th Street	Vero Beach	FL	32960-
326	Keller	Ray	IL- DeKalb-Sycamore Area Transportation Study	MPO	223 South Fourth Street, Suite A	DeKalb	IL	60115-
327	Kelly	Patrick	American Petroleum Institute		1220 L Street NW	Washington	DC	20005
328	Kemp	Jim	CA- Santa Barbara County Association of Gov.	MPO	260 North San Antonio Road, Suite B	Santa Barbara	CA	93110-
329	Kenerson	Rob	ME - Bangor Area Comprehensive Trans. System	MPO	One Cumberland Place, Suite 300	Bangor	ME	04401-
330	Kerr	Steve	Winchester-Frederick County MPO	MPO	103 East 6th Street	Front Royal	VA	22630-
331	Kholbuss	Terry	IL- Peoria-Peskin Urban Area Trans. Study	MPO	Associated Bank Building, Suite 2001 411 Hamilton Boulevard	Peoria	IL	61602-
332	Kienzler	Jim	Canadian Pacific Railway - AAR		Suite 500, Gulf Canada Square	Calgary	AB	T2P 4Z4
333	Kiesow	Harlan	Appleton-Oshkosh-Fond du Lac MPO	MPO	132 Main Street	Menasha	WI	54952-3100
334	Kirby	Ronald	DC- National Capital Region Trans. Planning Board	MPO	777 North Capitol Street, NE, Suite 300	Washington	DC	20002-
335	Kirn	Marjie	CA- Merced County Association of Governments	MPO	369 West 18th Street	Merced	CA	95340-
336	Klette	Cynthia	Missoula Transportation Policy Coordinating Commit	MPO	435 Ryman Street	Missoula	MT	59802-
337	Knight	William	Chittenden County MPO	MPO	30 Kimball Avenue, Suite 206	South Burlington	VT	05403-6825
338	Knoblauch	Glenn	Reading Area Transportation Study	MPO	Berks County Services Center, 14th Floor 633 Court Street	Reading	PA	19601-4309
339	Koegler-Vaughan	Tammy	Steel Industry Systems Association	Steel	Gallatin Steel Company U.S. Hwy. 42 West	Ghent	Kentucky	41045-
340	Komornick	Anthony	MA - Merrimack Valley MPO	MPO	160 Main Street	Haverhill	MA	01830-
341	Kouzchkanani	Amir A.	MA - Pioneer Valley MPO	MPO	26 Central Street, Suite 34	West Springfield	MA	01089-2787
342	Kovacich	Daniel	CA- Shasta County Regional Trans. Planning Agency	MPO	1855 Placer Street	Redding	CA	96001-
343	Krause	Linda	CT- CT River Estuary Regional Planning Agency	MPO	455 Boston Post Road	Old Saybrook	CT	06475-

Identifier	Last Name	First Name	Company Name	Industry	Address	City	State/Province	Postal Code
344	Krause	Gregory	Regional Transportation Commission of Washoe Cty	MPO	600 Sutro Street	Reno	NV	89512-
345	Krautler	Charles	GA- Atlanta Regional Commission	MPO	40 Courtland Street, NE	Atlanta	GA	30303-
346	Kreie	Gregory S.			10 G Street, NW	Washington	DC	20002
347	Kruzelnick	Richard	New Jersey Dept. of Transportation	US DOT HIGHWAY-RAIL	1035 Parkway Avenue P.O. Box 600	Trenton	NJ	08625-
348	Kunishige	Karl	Hawaii Dept. of Transportation	US DOT HIGHWAY-RAIL	869 Punchbowl Street	Honolulu	HI	96813-
349	Kush	Donald	Chippewa-Eau Claire MPO	MPO	800 Wisconsin Street, Mail Box 9	Eau Claire	WI	54703-
350	Kushner	Mark	Tri-Cities Metropolitan Area Trans. Study	MPO	1622 Terminal Drive	Richland	WA	99352-
351	Kyle	Joe	Oklahoma Dept. of Transportation	US DOT HIGHWAY-RAIL	200 N. E. 21st Street	Oklahoma City	OK	73105-
352	Laffey	Steve	Illinois Commerce Commission	AHB60 MEMBER	527 East Capital Avenue	Springfield	IL	62701-
353	Lake	Robert	AL- Tuscaloosa Area MPO	MPO	4200 Highway 69 North, Suite 1	Northport	AL	35473-
354	Lamb	Stephen	Mechanical Contractors Association of Chicago	Construction	221 N. LaSalle St. Suite 3400	Chicago	IL	60601-
355	Lamine	Chuck	Green Bay MPO	MPO	City Hall, Room 608 100 North Jefferson Street	Green Bay	WI	54301-5026
356	Lanning	David	Oregon Dept. of Transportation	US DOT HIGHWAY-RAIL	555 13th Street NE, Suite 3	Salem	OR	97310-
357	Largent	Richard	MO - Joplin MPO	MPO	303 East 3rd Street	Joplin	MO	64801-
358	Larreau	Jimmy D.	SEIU, NCFO S.C. 19		12697 Saddle Road	North Platte	NE	69101
359	Lasker	Jerry	Indian Nations COG	MPO	201 West 5th Street, Suite 600	Tulsa	OK	74103-4236
360	LaSut	Linda	Bryan-College Station MPO	MPO	3608 East 29th Street, Suite 113	Bryan	TX	77802-
361	Lawler	Robert	Mid-Ohio Regional Planning Commission	MPO	285 East Main Street	Columbus	OH	43215-
362	Lawrence	Wendell	KY- Radcliff-Elizabethtown MPO	MPO	613 College Street Road	Elizabethtown	KY	42702-0604
363	Lehman	Briad	Arizona Department of Transportation	US DOT HIGHWAY-RAIL	1739 W. Jackson St. 064R	Phoenix	AZ	85250-
364	Lenox	Jack	MD - Salisbury-Wicomico MPO	MPO	P.O. Box 870	Salisbury	MD	21803-
365	Lewis	Ted R.	Union Pacific Railroad		1400 Douglas Street	Omaha	NE	68179
366	Lewis II	Charles	West Virginia DOT; Division of Highways	AHB60 MEMBER	1900 Kanawha Blvd East	Charleston	WV	25305-
367	Lindsay	Harry	Lackawanna-Luzerne Transportation Study	MPO	Courthouse Annex Building, 6th Floor 200 Adams Avenue	Scranton	PA	18503-
368	Lindsey	Alan	BNSF Railway		2600 Lou Menk Drive	Fort Worth	TX	76161
369	Lingenfelter	Chad	IA- Sioux City MPC	MPO	507 Seventh Street, Suite 401	Sioux City	IA	51102-
370	Lockhart	Lawrence	Mississippi Dept. of Transportation	US DOT HIGHWAY-RAIL	P.O. Box 1850	Jackson	MS	39215-
371	Lookingbill	Dean	Southwest Washington Regional Trans. Council	MPO	Clark County Public Service Center 1300 Franklin Street, 4th Floor	Vancouver	WA	98660-
372	Lott	Doug	Utah Steel Fabricators Association	Steel				
373	Lund	Mark	Brownsville MPO	MPO	1150 East Adams St. El Tapiz Building	Brownsville	TX	78520-
374	Lupo	Vincent F.	Municipal Construction Officials Association of NJ	Construction	C/O MUNCO 475 Demott Lane	Somerset	NJ	08873-
375	Lynn	Tommy	West Kentucky Construction Association	Construction	2201 McCracken Blvd., P.O. Box 1059	Paducah	KY	42001-
376	Lysy	Daniel	Richmond Area MPO	MPO	2104 West Laburnum Avenue, Suite 101	Richmond	VA	23227-
377	MacDonald	Robert	CO- Pikes Peak Area COG	MPO	15 South 7th Street	Colorado Springs	CO	80905-
378	MacNicol	Alex	Policy Committee of the Erie Regional Planning Com	MPO	2900 Columbus Avenue	Sandusky	OH	44870-
379	Maier	Howard	Northeast Ohio Areawide Coordinating Agency	MPO	1299 Superior Avenue	Cleveland	OH	44114-3204
380	Maley	Patricia	CA- Madera County Trans. Commission	MPO	1816 Howard Road, Suite 8	Madera	CA	93637-
381	Mann	Lawrence M.	Alper, Mann and Weisbaum - UTU		9205 Redwood Avenue	Bethesda	MD	20817
382	Manster	Stephen	Fredericksburg Area MPO	MPO	3304 Bourbon Street, 3rd Floor	Fredericksburg	VA	22408-
383	Marceau	Rick			14600 Detroit Avenue	Cleveland	OH	44107
384	Marvin	Robert E.	Ohio Public Utilities Commission		180 East Broad Street	Columbus	OH	43215
385	Marzec	Dennis	KCS Railway		4601 Shreveport-Blanchard Hwy	Shreveport	LA	71107
386	Maslanka	Gary	Transport Workers Union of America AFL-CIO		1700 Broadway - 2nd Floor	New York	NY	10019
387	Mason	Thomas	Cheyenne MPO	MPO	2101 O'Neil Avenue, Room 309	Cheyenne	WY	82001-
388	Mastrangelo	M.	Norfolk Southern Corporation	AHB60 MEMBER	110 Franklin Road SE	Roanoke	VA	24042-
389	Mather	Dick		AHB60 MEMBER	1485 Ammon Street NW	Salem	OR	97304-2035
390	Matthews	Ronald	AL- Decatur MPO	MPO	216 Jackson Street, SE	Decatur	AL	35601-
391	Mattingly	Joe L.	Brotherhood of Railroad Signalmen		400 Contessa Lane	Trenton	KY	42286
392	Mattix	Ramona	Yellowstone County Planning Board	MPO	Parmly Library, 4th Floor 510 North Broadway	Billings	MT	59101-
393	Mazur	Tom	Lima-Allen County Regional Planning Commission	MPO	130 West North Street	Lima	OH	45801-
394	McCaleb	Brad	Texarkana MPO	MPO	220 Texas Blvd.	Texarkana	TX	75501-
395	McCann	F. Leo	American Train Dispatchers Association		1370 Ontario St. Suite 1040	Cleveland	OH	44113
396	McCaskill	Mark	Roanoke Valley MPO	MPO	313 Luck Avenue, SW	Roanoke	VA	24016-
397	McDaniel	Harold	Amarillo MPO	MPO	City Hall, Room 204 509 SE 7th Avenue	Amarillo	TX	79105-1971
398	McDonald	Robert	Madison Area MPO	MPO	121 South Pinckney Street, Suite 400	Madison	WI	53703-
399	McDonald	George J.	Transport Workers Union of America, AFL-CIO		1700 Broadway - 2nd Floor	New York	NY	10019
400	McDougal	Brian	GA- South Georgia Reg. Development Center	MPO	327 West Savannah Avenue	Valdosta	GA	

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401	McIntosh	Kevin	KCS		Cathedral Square	Kansas City	MO	64105
402	McKenna	Francis G.	Anderson & Pendelton, CA, Inc. - Tourist Railway Assoc.		206 N. Washington Street, S. 330	Alexandria	VA	22314
403	McKenzie	Jim	AR- Metroplan	MPO	501 West Markham Street, Suite B	Little Rock	AR	72201-
404	McKenzie	Maurice	Anderson Area Transportation Study	MPO	401 South Main Street	Anderson	SC	29624-
405	McKinnon	Jim	AR- Jonesboro Area Trans. Study Policy Committee	MPO	P.O. Box 1845	Jonesboro	AR	72403-1845
406	McNeely	Hugh	Waco MPO	MPO	300 Austin Avenue	Waco	TX	76701-
407	Meddin	Jeffrey D.	RailWorks Corporation		4027 Log Trail Way	Reisterstown	MD	21136
408	Mehta	Jamsheed	KS- Wichita-Segwick County Metro Area Plannin Comm	MPO	City Hall, 10th Floor 455 North Main Street	Wichita	KS	67202-1688
409	Mesa	Jose Luis	FL- Miami - Dade MPO	MPO	111 NW 1st Street, Suite 910	Miami	FL	33128-
410	Meyer	Bill	GA- Gainesville MPO	MPO	440 Prior Street, SE	Gainesville	GA	
411	Meyer	Tyler	Greensboro Urban Area MPO	MPO	300 West Washington Street	Greensboro	NC	27402-
412	Meyer	M. Lee	Lebanon County MPO	MPO	Municipal Building, Room 206 400 South 8th Street	Lebanon	PA	17042-6794
413	Mikorski	Jeff	Morgantown-Monongalia County Transportation P.O.	MPO	389 Spruce Street	Morgantown	WV	26505-
414	Miles	Glenn	Spokane Regional Transportation Council	MPO	221 West First Avenue, Suite 310	Spokane	WA	99201-3613
415	Miller	Harry	Herkimer-Oneida Counties Transportation Study	MPO	Boehlert Center at Union Station 321 Main Street	Utica	NY	13501-
416	Miller	Ray	Victoria MPO	MPO	700 Main Center, Suite 201	Victoria	TX	77901-
417	Miller	Jim	Whatcom COG	MPO	314 East Champion Street	Bellingham	WA	98225-
418	Miller	D.	Rocky Mountain Steel Construction Association	Steel	2875 W. Oxford Ave. #3	Englewood	CO	80110-
419	Miller, Jr.	John	LA - Rapides Area Planning Commission	MPO	5610 East Coliseum Boulevard Suite E	Alexandria	LA	71303-
420	Mitchell	Douglas	LA - Ouachata Council of Governments	MPO	1913 Stubbs Ave.	Monroe	LA	71201-
421	Mogan	Dennis	METRA (NIRC)		547 West Jackson Blvd	Chicago	IL	60661
422	Molitor	Edward	Hidalgo County MPO	MPO	311 North 15th Street	McAllen	TX	78501-4705
423	Moller	Jeffrey F.	AAR		50 F Street NW	Washington	DC	20001
424	Monning	Jay	West Virginia Dept. of Transportation	US DOT HIGHWAY-RAIL	1900 Kanawha Blvd., East	Charleston	WV	25305-
425	Montgomery	Rex	Bristol MPO	MPO	City Hall Annex 104 8th Street	Bristol	TN	37621-
426	Moody	Marta	IN- Delaware-Muncie Met. Planning Commission	MPO	Delaware County Building, Room 206 100 West Main Street	Muncie	IN	47305-2827
427	Moon	Young-Jun	The Korea Transport Institute	AHB60 MEMBER	2311 Daehwa-dong, Llsan-gu	Koyang-city	Kyonggi-do	
428	Moore	Dan	Rogue Valley COG	MPO	155 North 1st Street	Central Point	OR	97502-
429	Morales	Bill	Tyler Urban Transportation Study MPO	MPO	Address 423 West Ferguson	Tyler	TX	75702-
430	Morgan	Bill	AL- Mobile Area Transportation Study	MPO	651 Church Street	Mobile	AL	36633-
431	Morganbesser	Marvin	Connecticut Construction Industries Association	Construction	912 Silas Deane Highway	Wethersfield	CT	06019-
432	Morris	Michael	North Central Texas COG	MPO	616 Six Flags Drive, Suite 200	Dallas/Fort Worth	TX	76011-6347
433	Morris	Dennis	Tri Cities Area MPO	MPO	1964 Wakefield Street	Petersburg	VA	23805-
434	Morse	Hal	Greater Buffalo-Niagara Regional Transportation `	MPO	438 Main Street, Suite 503	Buffalo	NY	14202-
435	Mumford	Bob	MA - Cape Cod MPO	MPO	3225 Main Street	Barnstable	MA	02630-
436	Munn	Darrell	South Carolina Dept. of Transportation	US DOT HIGHWAY-RAIL	P.O. Box 191	Columbia	SC	29202-
437	Munoz	Rosa	California Public Utilities Commission	US DOT HIGHWAY-RAIL	320 West 4th Street, Suite 500	Los Angeles	CA	90013-
438	Napier	Marvin	Transportation Communications International Union/BRC		3 Research Place	Rockville	MD	20850
439	Neisler	Don	LA - Capital Regional Planning Commission	MPO	333 North 19th Street	Baton Rouge	LA	70802-
440	Nelson	Dan	Mountainland Association of Governments	MPO	Stratford Park 586 East 800 North	Orem	UT	84097-4146
441	Nelson	Aidan	Rail Safety & Standards Board	AHB60 MEMBER	160 Euston Road	London	England	
442	Nolat	Merv	IN- West Central Indiana Economic Dev. District	MPO	1718 Wabash Avenue	Terre Haute	IN	47808-
443	Northcraft	James	Wheeling and Lake Erie Railway Company -AAR		100 East First Street	Brewster	OH	44613
444	Novakovic	Alex	Transportation Communications International Union/BRC		3 Research Place	Rockville	MD	20850
445	Nunn	Mike	Cabarrus-South Rowan Urban Area MPO	MPO	118 South Main St.	Kannapolis	NC	28081-
446	Olasimbo	Noble	FL- Lake Sumter MPO	MPO	123 N. Sinclair Avenue	Tavares	FL	32778-
447	Owen	Karen	Longview MPO	MPO	300 West Cotton Street	Longview	TX	75601-
448	Pagano	Philip A.	METRA - AAR		547 W. Jackson Blvd	Chicago	IL	60661
449	Pajunen	Kirsi	VTT Building and Transport	AHB60 MEMBER	P.O. Box 1800			
450	Palombo	Carmine	MI - Southeast Michigan COG	MPO	535 Griswold Street, Suite 300	Detroit	MI	48226-3602
451	Papadakis	Nicholas	CA- Association of Monterey Bay Area Governments	MPO	445 Reservation Road, Suite G	Marina	CA	93933-
452	Paprocki	Mike	Brook-Hancock-Jefferson Metropolitan Planning Comm	MPO	124 North 4th Street	Steubenville	OH	43952-
453	Parcall	Darby	KY- Bowling Green MPO	MPO	177 Graham Avenue	Bowling Green	KY	42102-9005
454	Pardlo	Greg A	American Train Dispatchers Association		1681 Summit Ave	Willow Grove	PA	19090
455	Pardlo Sr.	Greg	American Dispatchers Association	AHB60 MEMBER	1681 Summit Avenue	Willow Grove	PA	19090-
456	Park	Drew	Pacific Northwest Steel Fabricators Association	Steel	Columbia Wire & Iron Works, Inc. 5555 N Channell Ave., Bldg 4 Annex	Portland	OR	97217-
457	Patty	George	GA- Augusta Regional Transportation Study	MPO	525 Telfair Street	Augusta	GA	30901-
458	Payne	George	Tourist Railway Association Inc		420 West Greenwood	Linthicum Hgts.	MD	21090

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459	Peacock	Thomas	American Public Transportation Association (APTA)		1666 K Street, NW	Washington	DC	20006
460	Peagler	Joseph	Idaho Transportation Department	US DOT HIGHWAY-RAIL	P.O. Box 7129	Boise	ID	83707-
461	Pebworth	B.J.	Florence Area Transportation Study	MPO	218 West Evans St.	Florence	SC	29501-
462	Penne	Leo	Intermodal and Industry Activities - AASHTC		444 North Capital Street, NW Room 249	Washington	DC	20001
463	Peters	Don	National Chemical Credit Association	Chemical	1100 Main St	Buffalo	NY	14209-2356
464	Peterson	John	GA- Brunswick Area Transportation Study	MPO	1803 Glouchester Street, Suite 100	Brunswick	GA	31520-
465	Phillips	James	Georgia Dept. of Transportation	US DOT HIGHWAY-RAIL	935 E. Confederate Ave, Bldg 24	Atlanta	GA	30316-
466	Phipps	William	Belmont-Ohio-Marshall Transportation Study	MPO	105 Bridge Street Plaza	Wheeling	WV	26003-0290
467	Pickett	Dan	Brotherhood of Railroad Signalmen		917 Shenandoah Shores Road	Front Royal	VA	22630
468	Pierce	Jerry	Rocky Mount Urban Area MPO	MPO	One Government Plaza	Rocky Mount	NC	27801-
469	Pike	Dan	Skagit COG	MPO	204 West Montgomery	Mt. Vernon	WA	98501-1284
470	Pilant	Stanley	Jackson Urban Area MPO	MPO	111 East Main Street, Suite 201	Jackson	TN	38301-
471	Pisano	Mark	CA- Southern California Association of Governments	MPO	818 West 7th Street, 12th Floor	Los Angeles	CA	90017-
472	Poichuk	Phillip	Rail Safety Transportation Canada	AHB60 MEMBER	330 Sparks St.	Ottawa	Ontario	
473	Pontolillo	Tom	Brotherhood of Locomotive Engineers and Trainmen		1370 Ontario Street	Cleveland	OH	44113
474	Poorman	John	Capital District Transportation Committee	MPO	5 Computer Drive West	Albany	NY	12205-1606
475	Porth	Richard	CT- Capital Region COG	MPO	241 Main Street, 4th Floor	Hartford	CT	06106-5310
476	Prusak	Paul	AK- Fairbanks Metro Area Trans. Study	MPO	2301 Peger Road	Fairbanks	AK	99709-
477	Puko	Dennis	Shenango Valley Area Transportation Study	MPO	2491 Highland Road	Hermitage	PA	16148-
478	Rael	Lawrence	Mid-Region COG	MPO	317 Commercial Street NE, Suite 104	Albuquerque	NM	87102-
479	Ramsey	Alene	Omaha-Council Bluffs Metropolitan Area Trans. Agcy	MPO	2222 Cuming Street	Omaha	NE	68102-4328
480	Randall	James	Texas Department of Transportation	US DOT HIGHWAY-RAIL	P.O. Box 149217	Austin	TX	78714-
481	Ranfranz	James	IN- Northwest Indiana Regional Planning Commission	MPO	6100 Southport Road	Portage	IN	46368-
482	Rangel	Benjamin	Great Falls City-County Planning Board	MPO	Great Falls Civic Center 2 Park Drive South	Great Falls	MT	59403-
483	Raub	Richard	Northwestern University	AHB60 MEMBER	405 Church Street	Evanston	IL	60208-
484	Reid	Ray	International Brotherhood of Electrical Workers		7100 SW Shady Lane	Portland	OR	97223
485	Reinauer	Tom	ME - Kittery Area Comprehensive Trans. Study	MPO	21 Bradeen Street, Suite 304	Springvale	ME	04083-
486	Reiner	Frank	Chlorine Institute, Inc.		1300 Wilson Blvd	Arlington	VA	22209
487	Reisdorf	Charles	MI - Region 2 Planning Commission	MPO	Jackson County Tower Building, 16th Floor 120 W Michigan Ave	Jackson	MI	49201-
488	Reithel	Jay	MI - Saginaw Metro Area Transportation Study	MPO	615 Court Street	Saginaw	MI	48602-
489	Rezendes	Guy	Massachusetts Highway Department	US DOT HIGHWAY-RAIL	10 Park Plaza, Room 6340	Boston	MA	02116-
490	Rhodes	Karen	Chattanooga Urban Area MPO	MPO	Development Resource Center, Suite 2000 1250 Market Street	Chattanooga	TN	37402-2713
491	Ries	Ron	Federal Railroad Administration	AHB60 MEMBER	1120 Vermont Avenue, NW	Washington	DC	20590-
492	Risk	Mike	Kentucky Transportation Cabinet	US DOT HIGHWAY-RAIL	501 High Street	Frankfort	KY	40622-
493	Rivera	Eddie	Federal Highway Administration	US DOT HIGHWAY-RAIL	Federal Building, U.S. Courthouse, Room 329 Carlos Chardon Street	San Juan	PR	00918-
494	Robertson	Jim	Construction Association of South Florida	Construction	3550 Northwest Ninth Avenue	Ft. Lauderdale	FL	
495	Robinett	William	Casper Area MPO	MPO	200 North David Street, Room 203	Casper	WY	82601-
496	Robinette	P. Michael	Miami Valley Regional Planning Commission	MPO	40 West 4th Centre, Suite 400	Dayton	OH	45402-
497	Robinson	Rob	Illinois Dept. of Transportation	US DOT HIGHWAY-RAIL	2300 South Dirksen Parkway	Springfield	IL	62764-
498	Robusto	Ron	National Rail Passenger Corporation		1 High Speed Way	Willmington	DE	19801
499	Roe	Bill	Union Pacific Railroad		1400 Douglas Street	Omaha	NE	68179
500	Rogers	J. Kent	LA - Northwest Louisiana COG	MPO	401 Market Street, Suite 460	Shreveport	LA	71101-
501	Rogers	Rhonda	Jacksonville MPO	MPO	211 Johnson Blvd	Jacksonville	NC	28540-
502	Roop	Steve	Texas A&M University	AHB60 MEMBER	3135 TAMU	College Station	TX	77843-2135
503	Root	Rick	Bend MPO	MPO	710 Wall Street	Bend	OR	97709-
504	Rouse	Ken	Union Pacific Railroad	AHB60 MEMBER	24125 Aldine	Westfield Spring	TX	77373-
505	Rousseau	Kevin	Maine Department of Transportation	US DOT HIGHWAY-RAIL	16 State House Station	Augusta	ME	04333-0016
506	Rowlands	Mary	Syracuse Metropolitan Transportation Council	MPO	100 Clinton Square, Suite 100 126 North Salina Street	Syracuse	NY	13202-
507	Royer	Jennifer	Vermont Agency of Transportation	US DOT HIGHWAY-RAIL	National Life Building	Montpelier	VT	05633-
508	Ruble	Steve	IN- Columbus Area MPO	MPO	123 Washington Street	Columbus	IN	47201-
509	Rudge	Daniel	MO - Springfield Area MPO	MPO	840 Boonville Avenue	Springfield	MO	65802-
510	Russel	Paul	IL- McLean County Transportation Study	MPO	211 West Jefferson Street	Bloomington	IL	61701-
511	Russell	Eugene	Kansas State University	AHB60 MEMBER	2118 Fiedler Hall	Manhattan	KS	66506-2905
512	Salomon	Kealy	Poughkeepsie-Dutchess County Transportation Counci	MPO	27 High Street, 2nd Floor	Poughkeepsie	NY	12601-
513	Sanderson	Marlie	FL- Metropolitan Trans. Planning Organization	MPO	2009 NW 67th Place, Suite A	Gainsville	FL	32653-1603
514	Scardelletti	Bobby			3 Research Place	Rockville	MD	20850
515	Scharl	Christian	New York State Dept. of Transportation	US DOT HIGHWAY-RAIL	1220 Washington Avenue, State Campus	Albany	NY	12232-
516	Schaufele	Jennifer	FL- Broward County MPO	MPO	115 South Andrews Avenue, Room 329H	Fort Lauderdale	FL	33301-
517	Schell	Ann	Fond du Lac Area MPO	MPO	160 South Macy Street	Fond du Lac	WI	54936-

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518	Schick	Tom	American Chemistry Council		1300 Wilson Boulevard	Arlington	VA	22209
519	Schissell	Jay	Elmira-Chemung Transportation Council	MPO	400 East Church Street	Elmira	NY	14901-
520	Schmid	Richard	Salem-Keizer Area Transportation study	MPO	105 High Street, SE	Salem	OR	97301-
521	Schmitz	Joe	Farmington MPO	MPO	800 Muncipal Drive	Farmington	NM	87401-
522	Schulze	Tom	New York Metropolitan Transportation Council	MPO	199 Water Street, 22nd Floor	New York City	NY	10038-
523	Schulze	Mark	BNSF		2600 Lou Menk Drive	Ft Worth	TX	76131
524	Schwetz	Thomas	Lane COG	MPO	99 East Broadway, Suite 400	Eugene	OR	97401-3111
525	Scott	Donald C.	National Railroad Passenger Corporation - AMTRAK (Amtrak Training Center)		1 High Speed Way	Willmington	DE	19801
526	Seanor	Sandra	IN- Michiana Area COG	MPO	227 West Jefferson Boulevard, Room 1120	South Bend	IN	46601-
527	Seely	Mike	Utah Department of Transportation	US DOT HIGHWAY-RAIL	4501 South 2700 West	Salt Lake City	UT	84114-
528	Seese	Steve	Wichita Falls MPO	MPO	2100 Seymour Highway	Wichita Falls	TX	76301-
529	Selig	Mike	Arkansas Highway & Transportation Dept	US DOT HIGHWAY-RAIL	P.O. Box 2261	Little Rock	AR	72203-
530	Selman	Keith	Laredo Urban Transportation Study	MPO	1110 Houston Street	Laredo	TX	78042-0579
531	Shannis	Donald	Delaware Valley Regional Planning Commission	MPO	111 South Independence Mall East	Philadelphia	PA	19106-
532	Sharkey	John	Safetran Systems Corporation	AHB60 MEMBER	37W890 Acorn Lane	Elgin	IL	60123-
533	Sharkey, III	Andrew G.	American Iron and Steel Institute	Steel	1140 Connecticut Ave., NW Suite 705	Washington	D.C.	20036-
534	Sharma	Manindra	Southern New Hampshire Planning Commission	MPO	438 Dubuque Street	Manchester	NH	03102-
535	Shrewsberry	Bill	Louisiana Dept. of Transportation & Development	US DOT HIGHWAY-RAIL	Capitol Station, Room 501P P.O. Box 94245	Baton Rouge	LA	70804-
536	Siipola	Rosemary	Longview-Kelso-Rainier MPO	MPO	207 4th Avenue North	Kelso	WA	98626-
537	Simpson	Fred	BMWE Division		20300 Civic Center Drive, Suite 320	Southfield	MI	48076
538	Simpson	Thomas D.	Railway Supply Institute, Inc		50 F Street, N.W.	Washington	DC	20001
539	Singer	Robert A.	Construction Association of Michigan	Construction	43636 Woodward P.O. Box 3204	Bloomfield Hills	MI	48302-
540	Sinnott	Cliff	Salem-Plaistow-Windham MPO	MPO	156 Water Street	Exeter	NH	03833-
541	Skinner	Allan	AR- Southeast Arkansas Regional Planning Comm.	MPO	1300 Ohio Street	Pine Bluff	AR	71601-
542	Skone	Don	Yakima MPO	MPO	6 South 2nd Street, Suite 605	Yakima	WA	98901-
543	Slay	Greg	FL- Ocala - Marion County MPO	MPO	121 SE Watula Ave.	Ocala	FL	34478-
544	Sleemi	Rashid	D.C. Traffic Services Administration	US DOT HIGHWAY-RAIL	2000 14th Street, NW, 7th Floor	Washington	DC	20009-
545	Smart	Gilbert	Connecticut Dept. of Transportation	US DOT HIGHWAY-RAIL	P.O. Box 317546	Newing	CT	06131-
546	Smetana	E'Lisa	San Angelo MPO	MPO	72 West College Avenue	San Angelo	TX	76903-5814
547	Smith	Mark	IL- Decatur Urbanized Area Transportation Study	MPO	141 South Main Street, Room 501	Decatur	IL	62523-
548	Smith	Larry T.	MS - Central Mississippi Planning & Dev Distric	MPO	1170 Lakeland Drive	Jackson	MS	39269-
549	Smith	Kurt	Alaska Dept. of Transportation & PF	US DOT HIGHWAY-RAIL	3132 Channel Drive	Juneau	AK	99801-
550	Smith	Tim	Georgia Dept. of Transportation	US DOT HIGHWAY-RAIL	935 E. Confederate Ave, Bldg 24	Atlanta	GA	30316-
551	Smith	Greg	Kentucky Transportation Cabinet	US DOT HIGHWAY-RAIL	501 High Street	Frankfort	KY	40622-
552	Smoot	Chuck	Indiana Department of Transportation	US DOT HIGHWAY-RAIL	100 N. Senate Ave,	Indianapolis	IN	46204-
553	Snow	Jacob	Regional Transportation Commission of S. NV	MPO	600 South Grand Central Parkway Suite 350	Las Vegas	NV	89106-
554	Sokolsky	Joseph	Railroad Safety & Health		1100 N. Eutan St. Room 300	Baltimore	MD	21201
555	Solie	Cynthia	Oregon Cascades West COG	MPO		Corvallis	OR	
556	Soolman	Arnie	MA - Boston MPO	MPO	State Transportation Building, Suite 2150 10 Park Plaza	Boston	MA	02116-
557	Soper	Michael	New Hampshire Dept. of Transportation	US DOT HIGHWAY-RAIL	1 Hazen Drive, P.O. Box 483	Concord	NH	03302-
558	Spenle	Robert	State Line Area Transportation Study	MPO	City Hall, 3rd Floor 100 State Street	Beloit	WI	53511-
559	Spinar	Ronald	AZ- Flagstaff MPO	MPO	211 W. Aspen Ave.	Flagstaff	AZ	86001-
560	Sposato	Suzanne	US DOT/RSPA/Volpe Center	AHB60 MEMBER	55 Broadway	Cambridge	MA	02414-2
561	Srankenseld	Aaron	Adirondack/Glens Falls Transportation Council	MPO	Washington County Municipal Center, A-231 383 Upper Broadway	Fort Edward	NY	12828-
562	Stanley	Gary M.	MI - Bay City Area Transportation Study	MPO	515 Center Avenue, Suite 505	Bay City	MI	48708-5126
563	Start	Jonathon	MI - Kalamazoo Area Transportation Study	MPO	3801 East Kilgore Road	Kalamazoo	MI	49001-5534
564	Stem	James A.	United Transportation Union		304 Pennsylvania Ave, SE	Washington	DC	20003
565	Stephani	Carl	CT- Central Connecticut Regional Planning Agency	MPO	225 North Main Street, Suite 304	Bristol	CT	06010-4993
566	Stevens	Jeanne	Nashville Area MPO	MPO	730 2nd Avenue South	Nashville	TN	37201-
567	Strachan	R. Stephen	National Railroad Passenger Corporation - AMTRAK		15 S. Poplar Street, Consolidated National Operations Center	Willmington	DE	19801
568	Streicher	Thomas E.	ASLRRA		50 F Street, N.W.	Washington	DC	20001
569	Strider	William	Harrisonburg-Rockingham MPO	MPO	112 MacTanly Place	Staunton	VA	24401-
570	Styron	Jim	North Dakota Dept. of Transportation	US DOT HIGHWAY-RAIL	608 E. Boulevard Avenue, Room 323	Bismarck	ND	58505-
571	Suder	Steve	Centre Region MPO	MPO	2643 Gateway Dr., Suite 4	State College	PA	16801-
572	Sullivan	Tom	UTU Local 7-E		1711 West Philip	North Platte	NE	69101
573	Swanson	Tom	AZ- Pima Association of Governments	MPO	177 N. Church Avenue, Suite 405	Tucson	AZ	85701-
574	Swint	Robert	ATA Associates	AHB60 MEMBER	1301 Gemini	Houston	TX	77058-
575	Szymborski	James	Harrisburg Area Transportation Study	MPO	112 Market Street, 2nd Floor	Harrisburg	PA	17101-
576	Taylor	Zach	Association of Central Oklahoma Governments	MPO	21 East Main Street, Suite 100	Oklahoma City	OK	73104-2405
577	Teel	Mitzi	Columbia Area Transportation Study	MPO	236 Stoneridge Drive	Columbia	SC	29210-
578	Thomas	James	GA- Macon Area Transportation Study	MPO	682 Cherry Street, Suite 1000	Macon	GA	31201-

Identifier	Last Name	First Name	Company Name	Industry	Address	City	State/Province	Postal Code
579	Thomas	Scott	Alaska Dept. of Transportation & PF	US DOT HIGHWAY-RAIL	PO Box 196900	Anchorage	AK	99519-
580	Thompson	C. Kenneth	Grand-Strand Area Transportation Study	MPO	1230 Highmarket Street	Georgetown	SC	29440-
581	Thompson	Bill	Wyoming Transportation Department	US DOT HIGHWAY-RAIL	P.O. Box 1708	Cheyenne	WY	82003-
582	Thompson	Dinetha	ATT Associates	AHB60 MEMBER	9796 Thornbush drive	Fairfax station	VA	22039-
583	Thompson	Jonathan	Virginia Tech	AHB60 MEMBER				
584	Thompson	Paul C.	United Transportation Union		304 Pennsylvania Avenue, SE	Washington	DC	20003
585	Thurbon	David	KS- Topeka-Shawnee County Metro Plannin Commission	MPO	515 South Kansas Street, Suite 404	Topeka	KS	66603-
586	Tingle	Carl A.			9015 Lemon Rd	Slaughter	LA	70777
587	Tinkler	Mark	Wilmington Urban Area MPO	MPO	305 Chestnut Street, 4th floor	Wilmington	NC	28401-
588	Tippett	John	Unifour MPO	MPO	736 Fourth Street SW	Hickory	NC	28602-
589	Tobin	Bill	IA- Dubuque Metro Area Transportation Study	MPO	3999 Pennsylvania Avenue, Suite 200	Dubuque	IA	52002-
590	Tolman	John	Brotherhood of Locomotive Engineers andf Trainmen		25 Louisiana Ave NW	Washington	DC	20001
591	Tramel	Tony	LA - Lafayette MPO	MPO	705 W. University	Lafayette	LA	70506-
592	Trapani	Katherine	State Planning Council	MPO	1 Capitol Hill	Providence	RI	02908-
593	Tull	Harold	KY- Kentuckiana Regional Planning & Dev. Agency	MPO	11520 Commonwealth Drive	Louisville	KY	40299-
594	Tuttle	Martin	CA- Sacramento Area COG	MPO	1415 L Street, Suite 300	Sacramento	CA	95814-
595	Tysinger	Tom	Greenville Urban Area MPO	MPO	1500 Beatty Street	Greenville	NC	27834-
596	Uden	Doug	FL- Pasco County MPO	MPO	7530 Little Road, Suite 320	New Port Richey	FL	34654-
597	Van den Bosch	Larry	GA- North Georgia Regional Development Center	MPO	503 West Waught Street	Dalton	GA	30720-3475
598	Van Miller	Mike	IL- Kankakee Area Transportation Study	MPO	189 East Court Street, Suite 201	Kankakee	IL	60901-
599	VanderClute	Bob	AAR		50 F Street, N. W.	Washington	DC	20001
600	Vaughn	Gary C.	WATCO Companies, Inc		315 W. 3rd Street	Pittsburg	KS	66762
601	Viciudas	Aristides	IL- Chicago Area Transportation Study	MPO	300 West Adams Street, 2nd Floor	Chicago	IL	60606-
602	Vidal	Guillermo	CO- Denver Regional COG	MPO	4500 Cherry Creek Drive South, Suite 800	Denver	CO	80246-
603	Voeltz	David	South Dakota Dept. of Transportation	US DOT HIGHWAY-RAIL	700 East Broadway Avenue	Pierre	SD	57501-
604	Vonasek	Beverly	Nebraska Department of Roads	US DOT HIGHWAY-RAIL	P.O. Box 94759	Lincoln	NE	68509-4759
605	Waldrip	John	Arkansas Highway & Transportation Dept	US DOT HIGHWAY-RAIL	P.O. Box 2261	Little Rock	AR	72203-
606	Wallis	Jason	Colorado Dept. of Transportation	US DOT HIGHWAY-RAIL	4201 East Arkansas Ave., Empire Park	Denver	CO	80222-
607	Walls	Jerry	Williamsport Area Transportation Study	MPO	48 West 3rd Street	Williamsport	PA	17701-
608	Walsh	Joanne	San Antonio-Bexar County MPO	MPO	1021 San Pedro	San Antonio	TX	78212-
609	Want	James	CT- Greater Bridgeport / Valley MPO	MPO	525 Water Street	Bridgeport	CT	06604-4902
610	Ward	Sarah	FL- Pinellas County MPO	MPO	600 Cleveland Street, Suite 750	Clearwater	FL	33755-
611	Waters	Kathryn D.	Dallas Area Rapid Transit		1401 Pacific Avenue	Dallas	TX	75266
612	Watson	Steve	ID- Lewis-Clark Valley MPO	MPO				
613	Watts	Larry	AL- Birmingham MPO	MPO	1731 First Ave. North, Suite 200	Birmingham	AL	35203-
614	Wehrmeister	Charles J.	Norfolk Southern Corporation - AAR		110 Franklin Road, SE - Box 73	Roanoke	VA	24042
615	Weigand	Paul	IA- Ames Area MPO	MPO	515 Clark Avenue	Ames	IA	50010-
616	Weiner	Joel	North Jersey Transportation Planning Authority	MPO	One Newark Center, 17th Floor	Newark	NJ	07102-
617	Welch	Jeffrey	Knoxville Regional Transportation P.O.	MPO	400 Main Street, Suite 403	Knoxville	TN	37902-
618	Welzenbach	Karl	FL- Volusia County MPO	MPO	1190 Pelican Bay Drive	Daytona Beach	FL	32119-1381
619	West	Darell	ID- Bonneville MPO	MPO	380 Constitution Way	Idaho Falls	ID	83405-
620	Wheatley	Dean	IA- Linn County Regional Planning Commission	MPO	50 2nd Ave. Bridge, 6th floor	Cedar Rapids	IA	52401-
621	Wheeler	Philip H.	MN - Rochester-Olmsted COG	MPO	2122 Campus Drive SE	Rochester	MN	55904-
622	White	Bob	Central Virginia MPO	MPO	915 Main Street, Suite 202	Lynchburg	VA	24504-
623	Whitifield	Randy	FL- Palm Beach County MPO	MPO	160 Australian Avenue, Suite 201	West Palm Beach	FL	33406-
624	Wieczoreck	Juanita	DE- Dover / Kent County MPO	MPO	655 Bay Road, Suite 208	Dover	DE	19903-
625	Wiggins	Richard	Tahoe MPO	MPO	128 Market Street	Stateline	NV	89449-5310
626	Wigglesworth	Eric	Accident Research Centre	AHB60 MEMBER	Monash University	Clayton	Victoria	
627	Wilkens	Jeff	Wenatchee Valley Transportation Council	MPO	300 South Columbia Street	Wenatchee	WA	98801-
628	Wilkinson	Elaine G.	MS - Gulf Regional Planning Commission	MPO	1232 Pass Road	Gulfport	MS	39501-
629	Willet	Mike	AZ- Central Yavapai MPO	MPO	c/o Yavapai County 1100 Commerce Drive	Prescott	AZ	86305-
630	Williams	Stephen	Nashua Regional Planning Commission	MPO	115 Main Street	Nashua	NH	03061-
631	Williams	Stan	Clarksville Urban Area MPO	MPO	329 Main Street	Clarksville	TN	37040-
632	Williams	Jenny	Alabama Department of Transportation	US DOT HIGHWAY-RAIL	1100 John Overton Drive	Montgomery	AL	36110-
633	Wills	Doug W.	Union Pacific Railroad - AAR		1400 Douglas Street	Omaha	NE	68179
634	Wilson	Robert	CT- South Western Region MPO	MPO	888 Washington Boulevard	Stamford	CT	06901-
635	Wimmer	Bill	Union Pacific Railroad - AAR		1416 Dodge Street	Omaha	NE	68179
636	Wise	Henry	Brotherhood of Maintenance of Way Employees		3465 Smith Hill Road	Slatington	PA	18080
637	Wood	Robert	Sherman-Denison MPO	MPO	1117 Gallagher Dr., Suite 300	Sherman	TX	75090-
638	Woods	Beverly A.	MA - Northern Middlesex MPC	MPO	Gallagher Terminal, Floor 3B 115 Thorndike Street	Lowell	MA	01852-3308
639	Woods	Samuel	Lubbock MPO	MPO	Address 916 Main Street, Suite 706	Lubbock	TX	79401-

Identifier	Last Name	First Name	Company Name	Industry	Address	City	State/Province	Postal Code
640	Wooten	Richard	GA- Albany - Dougherty County Planning Comm.	MPO	240 Pine Ave., 3rd floor	Albany	GA	31702-
641	Worley	Paul	North Carolina DOT	AHB60 MEMBER	1556 Mail Service Center	Raleigh	NC	27699-1556
642	Wray	Michael	Virginia Department of Transportation	US DOT HIGHWAY-RAIL	1401 East Broad Street	Richmond	VA	23219-2000
643	Wyrick	Lon	Thurston Regional Planning Council	MPO	2404 Heritage Court SW, Suite B	Olympia	WA	98502-
644	Xu	Guan	Fedearl Highway Administration	AHB60 MEMBER	400 7th Street NEW	Washington	DC	20590-
645	Zacker	Mark	Missouri Dept. of Transportation	US DOT HIGHWAY-RAIL	P. O. Box 1216	Jefferson City	MO	65102-
646	Zaldivar	Fernando	Michigan Dept. of Transportation	US DOT HIGHWAY-RAIL	P.O. Box 30050	Lansing	MI	48909-
647	Zegeye	Tigist	DE- Wilmington Area Planning Council	MPO	850 Library Avenue, Suite 100	Newark	DE	19711-7146
648	Zeigler	Mike	FL- Okaloosa-Walton Trans. Planning Organization	MPO	3435 North 12th Avenue	Pensacola	FL	32503-
649	Zigenfus	Rose	IN- Evansville Urban Transportation Study	MPO	1 NW Martin Luther King Boulevard	Evansville	IN	47708-1833
650	Zumwalt	William	CA- Kings County Association of Governments	MPO	1400 West Lacey Boulevard	Hanford	CA	93230-

Appendix A.11

USDOT FRA National Crossing Inventory Form with Instructions

U.S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION (FRA)

OMB No. 2130-0017

A. Initiating Agency ☐ Railroad ☐ State	B. Crossing Number *(max. 7 char.)*	C. Reason for Update ☐ Changes in Existing Data ☐ New Crossing ☐ Closed Crossing or Abandoned	D. Effective Date (MM/DD/YYYY)

Part I: Location and Classification Information

1. Railroad Oper. Co. *(code (max. 4 char.) or name)*	2. State *(2 char.)*	3. County *(max 20 char.)*

4. Railroad Division or Region *(max. 14 char.)*	5. Railroad Subdivision or District *(max. 14 char.)*	6. Branch or Line Name *(max. 15 char.)*	7. RR Milepost *(max. 7 char.)* *(nnnnn.nn)*

8. RR I.D. No. *(max. 10 char.)*	9. Nearest RR Timetable Station *(max. 15 char.)* *(optional)*	10. Parent RR *(max. 4 char.)* *(if applicable)*	11. Crossing Owner *(RR or Company name)* *(if applicable)*

12. City *(max. 16 char.)* *(check one)* ☐ In ☐ Near	13. Street or Road Name *(max. 17 char.)*	STATE SUPPLIED INFORMATION 21. HSR Corridor ID *(2 char.)*

14. Highway Type & No. *(max. 7 char.)*	15. ENS Sign Installed (1-800) ☐ Yes ☐ No	16. Quiet Zone ☐ No ☐ Partial ☐ 24 hr ☐ Unknown	22. County Map Ref. No. *(max. 10 char.)*
			23. Latitude *(max. 10 char., nn.nnnnnnn)*
17. Crossing Type *(choose one only)* ☐ Public ☐ Private ☐ Pedestrian	18. Crossing Position ☐ At Grade ☐ RR Under ☐ RR Over	19. Type of Passenger Service ☐ AMTRAK ☐ AMTRAK & Other ☐ Other ☐ None	20. Average Passenger Train Count Per Day _____
			24. Longitude *(max. 11 char., nnn.nnnnnnn)*
			25. Lat/Long Source ☐ Actual ☐ Estimated

26. Is There an Adjacent Crossing With a Separate Number?
☐ Yes ☐ No If Yes, Provide Number _____ *(7 characters)*

27. PRIVATE CROSSING INFORMATION

27.A. Category *(check one)* ☐ Farm ☐ Residential ☐ Recreational ☐ Industrial ☐ Commercial	27.B. Public Access ☐ Yes ☐ No ☐ Unknown	27.C. Signs/Signals ☐ None ☐ Signs Specify *(max. 15 char.)* _____ ☐ Signals Specify *(max. 15 char.)* _____

28.A. Railroad Use *(max. 20 char.)*	29.A. State Use *(max. 20 char.)*
28.B. Railroad Use *(max. 20 char.)*	29.B. State Use *(max. 20 char.)*
28.C. Railroad Use *(max. 20 char.)*	29.C. State Use *(max. 20 char.)*
28.D. Railroad Use *(max. 20 char.)*	29.D. State Use *(max. 20 char.)*

30. Narrative *(max. 100 char.)*

31. Emergency Contact (Telephone No.)	32. Railroad Contact (Telephone No.)	33. State Contact (Telephone No.)

MUST COMPLETE REMAINDER OF FORM FOR PUBLIC VEHICLE CROSSINGS AT GRADE

Part II: Railroad Information

1. Number of Daily Train Movements

1.A. Total Trains _____	1.B. Total Switching Trains _____	1.C. Total Daylight Thru Trains (6 AM to 6 PM) _____	1.D. Check if Less Than One Movement Per Day ☐

2. Speed of Train at Crossing
2.A. Maximum Time Table Speed (mph) _____
2.B. Typical Speed Range Over Crossing (mph) from _____ to _____

3. Type and Number of Tracks Main _____ Other _____ If Other, Specify (max. 10 char.) _____

4. Does Another RR Operate a Separate Track at Crossing? ☐ Yes ☐ No If Yes, Specify RR *(max. 16 char.)* _____, _____, _____, _____	5. Does Another RR Operate Over Your Track at Crossing? ☐ Yes ☐ No If Yes, Specify RR *(max. 16 char.)* _____, _____, _____, _____

U.S. DOT CROSSING INVENTORY FORM

B. Crossing Number *(max. 7 char.)*	PAGE 2	D. Effective Date (MM/DD/YYYY)

Part III: Traffic Control Device Information

1. No Signs or Signals ☐ Check if Correct

2. Type of Warning Device at Crossing – **Signs** (specify number of each)

2.A. Crossbucks _____

2.B. Highway Stop Signs (R1-1) _____

2.C. RR Advance Warning Signs (W10-1) ☐ Yes ☐ No

2.D. Hump Crossing Sign (W10-5) ☐ Yes ☐ No ☐ Unknown

2.E. Pavement Markings ☐ Stoplines ☐ RR Xing Symbols ☐ None

2.F. Other Signs *(specify MUTCD type)*
Number _____ Specify Type *(max. 10 char.)* _____
Number _____ Specify Type *(max. 10 char.)* _____

3. Type of Warning Device at Crossing – **Train Activated Devices** *(specify number of each)*

3.A. Gates _____

3.B. Four-quadrant (or full barrier) Gates ☐ Yes ☐ No

3.C. Cantilevered (or Bridged) Flashing Lights
Over Traffic Lane *(number)* _____
Not Over Traffic Lane *(number)* _____

3.D. Mast Mounted Flashing Lights *(number)* _____

3.E. Number of Flashing Light Pairs _____

3.F. Other Flashing Lights
Number _____ Specify Type *(max. 9 char.)* _____

3.G. Highway Traffic Signals *(number)*

3.H. Wigwags *(number)*

3.J. Bells *(number)*

3.K. Other Train Activated Warning Devices: (specify)
(max. 9 char.) _____

4. Specify Special Warning Device NOT Train Activated *(max. 20 char.)*

5. Channelization Devices With Gates ☐ All Aproaches ☐ One Approach ☐ None

6. Train Detection ☐ Constant Warning Time ☐ DC/AFO ☐ Motion Detectors ☐ Other ☐ None

7. Signalling for Train Operation: Is Track Equipped with Train Signals? ☐ Yes ☐ No

8. Traffic Light Interconnection/Preemption ☐ Not Interconnected ☐ N/A ☐ Simultaneous Preemption ☐ Advance Preemption

9. Reserved For Future Use

10. Reserved For Future Use

11. Reserved For Future Use

12. Reserved For Future Use

Part IV: Physical Characteristics

1. Type of Development ☐ Open Space ☐ Residential ☐ Commercial ☐ Industrial ☐ Institutional

2. Smallest Crossing Angle ☐ 0° - 29° ☐ 30° - 59° ☐ 60° - 90°

3. Number of Traffic Lanes Crossing Railroad _____

4. Are Truck Pullout Lanes Present? ☐ Yes ☐ No

5. Is Highway Paved? ☐ Yes ☐ No

6. Crossing Surface (on main line) ☐ 1. Timber ☐ 2. Asphalt ☐ 3. Asphalt and Flange ☐ 4. Concrete ☐ 5. Concrete and Rubber ☐ 6. Rubber ☐ 7. Metal ☐ 8. Unconsolidated ☐ 9. Other (Specify) _____

7. Does Track Run Down a Street? ☐ Yes ☐ No

8. Nearby Intersecting Highway? ☐ Less than 75 feet ☐ 75 to 200 feet ☐ 200 to 500 feet ☐ N/A
Is it Signalized? ☐ Yes ☐ No

9. Is Crossing Illuminated? (street lights within approx. 50 feet from nearest rail) ☐ Yes ☐ No

10. Is Commercial Power Available? ☐ Yes ☐ No

11. Space Reserved For Future Use

Part V: Highway Information

1. Highway System ☐ Interstate ☐ Federal Aid, Not NHS ☐ Nat. Hwy System (NHS) ☐ Non Federal Aid

2. Is Crossing on State Highway System? ☐ Yes ☐ No

3. Functional Classification of Road at Crossing _____

4. Posted Highway Speed _____

5. Annual Average Daily Traffic (AADT)
Year _____ AADT _____

6. Estimate Percent Trucks _____

7. Average Number of School Buses Over Crossing per School Day _____

DRAFT

U.S. DOT CROSSING INVENTORY FORM INSTRUCTIONS
(Form version dated 11/1/99)

1.1 Recording Instructions

The U.S. DOT Crossing Inventory Form is one of several methods to submit crossing inventory changes. The previous form consisted of one page with four colored sheets. The new form will consist of two pages, normally printed back-to-back on white paper. The appropriate copies should be made by using photocopy reproduction on standard white paper. The following explains the process of filling out the new U.S. DOT Crossing Inventory Form, Form FRA F 6180.71.

1.2 U.S. DOT Crossing Inventory Form Heading

A. Initiating Agency

Enter a check mark in the appropriate box (for either Railroad or State) to indicate the initiator of the update, adding a new crossing, or closing a crossing.

B. Crossing Number

Enter a valid crossing inventory number (6-digits followed by an alpha character).

C. Reason for Update

Enter a check mark in the appropriate box to indicate the reason for submittal of the form:

(1) change(s) in existing data,
(2) adding a new crossing, or
(3) crossing being closed or abandoned

D. Effective Date

Enter the date (MM/DD/YYYY) the change was completed or put into effect. Ideally, all public, private and pedestrian crossings, including grade-separated, should be updated to at least verify that the crossings still exist. A current effective date should be indicated. If it is verified that there are no changes in the data and the crossing still exists, an effective date of January 1 of the current year (e.g., 01/01/1999) should be indicated.

1.3 Part I: LOCATION AND CLASSIFICATION INFORMATION

Item 1. Railroad Operating Company

Enter the valid railroad code for the "operating" railroad company, i.e., the railroad that operates train movements over the crossing. The operating railroad will normally be the reporting railroad, but may or may not own and maintain the roadbed, tracks, and signal system controlling the crossing. If the operating railroad company is not the owner of the track, it is suggested the owner's name be entered in Item 6, *Branch or Line Name* and/or Item 11, *Crossing Owner*. Valid railroad codes can be obtained or will be assigned by FRA.

NOTE: Crossings are to be assigned to the operating railroad, that is, the identity of the railroad company that operates over the trackage where the crossing is located and not necessarily to the owner of the track or property itself, unless it is also the operating railroad. Thus, designations such as "XYZ Corporation" should be changed to the name of the railroad that is actually operating on the specific line since they are the operating railroad.

When this data is processed, a maximum of 4 characters will be allowed. If the valid Railroad or Company Code is not known, and instead the name is provided, FRA will match the name to the valid code and will enter that code. If the name cannot be matched to a code, the report cannot be processed. Either a new code will be assigned or the form will be returned to the Initiating Agency for correction.

Item 2. State

Enter the abbreviation for the name of the State where the crossing is located. If the crossing is located on a State boundary so that parts of the crossing lie in two or more States, agreement must be made between the two States as to which shall claim the crossing for inventory record purposes. When a crossing is located on a State line, it is suggested that the crossing be inventoried by and in the State that is south or east geographically.

Item 3. County

Enter the name of the county where the crossing is located. If the crossing is on a county line so that parts of the crossing lie in two or more counties, a decision must be made to place it in one county only. When a crossing is located on a county line, it is suggested that the crossing be inventoried in the county that is south or east geographically.

Item 4. Railroad Division or Region

Enter the name of the division, region, or major district, if the railroad system is divided into such groups.

Item 5. Railroad Subdivision or District

Enter the name of the sub-division or other classification, if the railroad system is divided into such groups.

Item 6. Branch or Line Name

Enter the name of the line or branch as used by the railroad to describe this segment of track. If the track is an industry lead, industry spur, yard lead, wye, etc., enter the name of the track or industry.

Item 7. Railroad Milepost

Enter the railroad milepost number in miles and hundredths of miles (53 feet is approximately 1/100 mile.) Enter the number with the decimal point (nnnn.nn).

NOTE: Because of data-retrieval anomalies, alphabetical letters in the milepost field need to be avoided.

Item 8. RR I.D. No.

Enter the railroad identification of the crossing or the track line segment number. If a crossing has an identification number other than the DOT number, such as a State agency number (e.g., a Public Utility Commission (PUC) assigned number), enter that number. However, with the expansion of the data fields, State PUC's should now consider using one of the "State Use" fields (Items 29.A.-D.; preferably Item 29.A.) for the State PUC number.

Item 9. Nearest RR Timetable Station

This is now an optional field. Enter the name of the nearest timetable station of the operating company.

Item 10. Parent RR

If applicable, enter the code for the parent railroad (that is, the railroad which is parent to the railroad entered in Part I, Item 1, *Railroad Operating Company*. This must be a valid railroad code.

Item 11. Crossing Owner (Railroad or Company name)

If applicable, enter the code for the owner of the crossing. This must be a valid railroad or company code, and if unknown, it can be obtained from FRA.

When this data is processed, a maximum of 4 characters is allowed. If the valid Railroad or Company Code is not known, and the name is instead provided. An attempt will be made to match the name to its valid code, and that code will be entered. If the name cannot be matched to a code, the report cannot be processed. Either a valid code will be assigned or the form will be returned to the Initiating Agency for correction.

Item 12. City

Enter a check mark to indicate if the crossing is located "In" or "Near" the city to be specified. If the crossing is not within the boundaries of a city, town, or village, enter a check mark in the box for "Near."

Enter the name of the city, town, or village where the crossing is located (maximum of 16 characters) which must be a valid location within the State. If "In" is checked, the entered city name must be located in the county specified in Part I, Item 3, *County*. If the crossing is on a city line so that parts of the crossing lie in two or more cities, identify only one city.

Item 13. Street or Road Name

Enter the name of the highway or street, if the highway or street has a name. If it is a private roadway and it has a name, enter the name of the road or the owner's name, otherwise just enter "private."

Item 14. Highway Type and No.

Enter the type of highway such as Interstate (I), U.S. numbered (US), State (ST), county (C), local (L), etc., and number of the highway, if it has one. Please abbreviate, as I-95, US-1, ST-234, C-2096, etc. The number of the highway should be posted on the highway or found on State or county maps. If there is more than one number, enter the most important route, or all the numbers.

Item 15. ENS Sign Installed (1-800)

If there is an Emergency Notification System (ENS) sign installed at the crossing, check the box preceding "Yes." Otherwise, check the box preceding "No."

The ENS sign may be any sign posted at the crossing that displays a phone number (e.g., a 1-800 number) that the public, motorists, State Highway, Law Enforcement, and others can call to report problems, signal malfunctions, or emergencies at a highway-rail crossing. This sign will also usually display the Crossing Number for the crossing.

Item 16. Quiet Zone

Enter a check in the appropriate box to indicate whether or not a whistle ban is in effect for the crossing. If a whistle ban is in effect, indicate if it is for 24 hours per day or only a partial day (usually 10 p.m. to 6 am). This item must be completed for public, private, and pedestrian crossings.

Note: The "Whistle Ban" NPRM (expected release is Fall 1999) will provide for a whistle (horn) ban area where a quiet zone can be established.

Item 17. Crossing Type

Enter a check in the appropriate box to indicate the type of crossing. Valid choices are (1) Public, (2) Private, or (3) Pedestrian.

Item 18. Crossing Position

Enter a check in the appropriate box for the position of the railroad relative to the crossing. Valid choices are (1) At Grade, (2) Railroad Under, or (3) Railroad Over.

Item 19. Type of Passenger Service

If there is passenger service over the crossing, enter a check in the appropriate box to indicate the type(s) of passenger trains using this crossing. Valid values are:

- **AMTRAK** only
- **AMTRAK and Other** (commuter, tourist, etc.)
- **Other**, including commuter, tourist, etc.
- **None** (no passenger service)

Item 20. Average Passenger Train Count Per Day

Enter the average number of passenger trains using this crossing, per day, on a typical operating day. The value cannot exceed the total train count in Part II, Item 1, *Typical Number of Daily Train Movements, 1.A. Total Trains*. If the passenger type in Part I, Item 19, *Type of Passenger Service* is "None," then the passenger train count should be 0.

Item 21. HSR Corridor ID (State Supplied Information)

Enter the High Speed Rail (HSR) Corridor Identifying Code from the pre-identified list of corridor codes (if in question, contact FRA) if the crossing is located on such a corridor. This field is used to identify the "Section 1010" or "Section 1103" high-speed rail corridor on which the crossing is located.

FRA will provide the HSR ID and will assign a code for each corridor. Once assigned, States can modify records to add or delete crossings (e.g., when deleting a crossing, a State can remove code if crossing is not on the corridor).

Item 22. County Map. Ref. No. (State Supplied Information)

Enter the county map identification or other reference number provided by the highway agency to specifically identify the crossing on the street and road system. If it is not available, leave this entry blank.

Item 23. Latitude (State Supplied Information)

Enter the crossing latitudinal coordinate as measured at the center of the crossing. This field, along with Longitude, is used to identify the crossing location using a standardized GPS location point. Latitude should be entered in decimal format (nn.nnnnnnn).

In order to convert latitude from degrees, minutes, seconds to decimal form:

Latitude in Decimal Format = Degrees + (Minutes divided by 60) + (Seconds divided by 3600)

Item 24. Longitude (State Supplied Information)

Enter the crossing longitudinal coordinate as measured at the center of the crossing. This field, along with Latitude, is used to identify the crossing location using a standardized GPS location point. Longitude should be entered in decimal format (nnn.nnnnnnn). It will be processed as a negative value.

In order to convert longitude from degrees, minutes, seconds to decimal form:

Longitude in Decimal Format = Degrees + (Minutes divided by 60) + (Seconds divided by 3600)

Item 25. Lat/Long Source (State Supplied Information)

Enter a check in the appropriate box to indicate the source of the Latitude and Longitude coordinates provided, "Actual" or "Estimated." Actual values are those where GPS measurements are taken at the crossing or determined by some other positive identification method. Otherwise, the values are indicated as "Estimated." Latitude and Longitude values, in general, should be measured at the center of the highway-rail crossing.

Note: In 1997, FRA hired a contractor to determine the latitude and longitude (by interpolation) of about 80% of the crossings in the Nation. In January 1999, these values were inserted into the National file and are shown as "Estimated."

Item 26. Is there an Adjacent Crossing with a Separate Number?

Enter a check in the appropriate box to indicate whether or not there is an adjacent crossing with a separate number. If there is, enter the valid crossing number (6-digits followed by an alpha character).

Item 27 PRIVATE CROSSING INFORMATION

When the type of crossing is **Private**, this item must be completed.

Item 27.A. [Private Crossing] Category

Enter a check in the box which best describes the usage of the private crossing based on the following categories:

Category Descriptions:

Farm. A farm crossing is any crossing used for the movement of farm motor vehicles, farm machinery or livestock in connection with agricultural pursuits, forestry, or other land-productive purposes.

Residential. A residential crossing is any crossing used to provide vehicular access for residence owners.

Recreational. A recreational crossing is any crossing used to provide access to recreational areas.

Industrial. An industrial crossing is any crossing used to provide access to industrial plant facilities or other industrial areas.

Commercial. A Commercial crossing is any crossing used to provide access to privately owned commercial facilities that openly invite and solicit the general public as patrons (e.g., shopping centers and stores).

Item 27.B. [Private Crossing] Public Access

Enter a check in the box to indicate "Yes" if the private crossing is open to public access or "No" if it is not, or "Unknown" if it is not known.

Examples where "Yes" is appropriate are shopping centers, certain residential areas, fairgrounds, parks, schools, libraries, hospitals, clinics, airports, bus terminals, beaches, piers, boat launching ramps, and recreational facilities.

Item 27.C. [Private Crossing] Signs/Signals

Enter a check in the appropriate box(s) for the type(s) of crossing warning device. If signs and/or signals exist, enter a brief description in the spaces provided.

Items 28.A., 28.B., 28.C., and 28.D. Railroad Use

The railroad may enter text or data of its choice in these fields. No editing will be performed on these fields.

Items 29.A., 29.B., 29.C., and 29.D. State Use

The State may enter text or data of its choice in these fields. No editing will be performed on these fields. It is suggested that a State which has a separate PUC number for a crossing may wish to use one of the Item 29, *State Use*, fields for this purpose. (For those States that have used the RR I.D. field for this in the past, FRA will move that data to Item 29 if requested.)

Item 30. Narrative

Enter any narrative comments desired in this field. No editing will be performed on this field.

Item 31. Emergency Contact (Telephone No.)

Enter the telephone number (area code and phone number) for the Emergency Notification System Contact (e.g., Law Enforcement, Railroad Emergency Contact, or State Emergency Contact) associated with the crossing. Normally, this will be the ENS telephone number posted at the crossing or along the railroad branch line. This should be a 24-hour number that can be called to speak with an Emergency Notification Center who can send emergency responder(s) to the crossing in the event of problems, signal malfunctions, or other emergencies at the crossing. (This might be performed as a mass update by contacting FRA.)

Item 32. Railroad Contact (Telephone No.)

Enter the telephone number (area code and phone number) of the railroad contact associated with the crossing. This would normally be the Railroad Inventory Contact or Public Project Coordinator. (This can be performed as a mass update by contacting FRA.)

Item 33. State Contact (Telephone No.)

Enter the telephone number (area code and phone number) of the State highway contact associated with the crossing. This may be the State Inventory Contact or the DOT Engineering Contact responsible for crossing improvement projects. (This can be performed as a mass update by contacting FRA.)

NOTE:	If the crossing is Public at-Grade, Parts II, III, and IV **must** be completed before the data can be entered into the file. For Private at-Grade crossings, complete or partial submittals are optional, but all submitted information will be entered into the file.

1.4 Part II: RAILROAD INFORMATION

Item 1. Typical Number of Daily Train Movements

Item 1.A. Total Trains
Item 1.B. Total Switching Trains
Item 1.C. Total Daylight Thru Trains (6 AM to 6 PM)

Enter the number of the train movements through the crossing and the number of switching movements at the crossing, as follows:

Total Trains are the total of the number of through trains and switching trains (per day) through the crossing during normal railroad operating periods.

Total Switching Trains are the number of switching trains through the crossing (per day) during normal railroad operating periods.

Total Daylight Thru Trains are the number of through trains through the crossing between the hours of 6 AM and 6 PM.

Typical number of daily train movements means the normal or average daily train movements. "Through Trains" are trains whose primary responsibility is to move cars over the road, and there may be a limited number of pickups and setouts along the route. Classify all others, (i.e., locals, industrial runs, switch engine) as switching movements. Include the total number of the train movements both for the reporting "operating" railroad and for any other railroad operating over the crossing.

Item 1.D. Check if Less Than One Movement Per Day

Enter a check in the box if train frequency is less than one train per day.

Item 2. Speed of Train at Crossing

Item 2.A. Maximum Timetable Speed

Enter the maximum timetable speed in miles per hour (mph). This field must not be less than the value in Item 2.B, *Typical Speed Range Over Crossing*.

Item 2.B. Typical Speed Range Over Crossing

Enter the typical minimum speed ("from") over the crossing in miles per hour (mph). This must be less than the maximum timetable speed in Item 2.A.

Enter the typical maximum speed ("to") over the crossing. This cannot be greater than the maximum timetable speed in Item 2.A. and cannot be less than the typical minimum speed range.

Item 3. Type and Number of Tracks

Enter the number of main line tracks and specify the number and type of any "Other" tracks. A track is considered main if through trains operate on the track. If "Other," specify.

Item 4. Does Another RR Operate a Separate Track at Crossing?

Enter a check mark in the appropriate box to indicate if another railroad operates a separate track at the crossing. If "Yes," enter the FRA railroad code for all railroads that operate a separate track within the warning devices at the crossing. Up to four railroad codes, in codes of up to four characters each, may be entered in this field.

Item 5. Does Another RR Operate Over Your Track at Crossing?

Enter a check mark in the appropriate box to indicate if another railroad operates over the track at the crossing. If Yes, enter the FRA railroad code for all railroads that operate trains over the track at the crossing. Up to four railroad codes, in codes of up to four characters each, may be entered in this field.

1.5 Part III: TRAFFIC CONTROL DEVICE INFORMATION

Item 1. No Signs or Signals

Enter a check to indicate if no signs or signals are present. If no signs or signals are present, there is no need to complete Items 2 or 3.

Item 2. Type of Warning Device at Crossing - Signs.

NOTE:	If more than one type of warning device is present, indicate all applicable types of warning device(s). Enter a "9" where the number is 9 or greater. Provide short descriptions of "Other" devices in the appropriate spaces.

Item 2.A. Crossbucks

Enter the number of masts with crossbucks, not a count of all crossbuck signs. Two or more crossbucks mounted on a single mast are counted as one crossbuck. Include in the count all masts with crossbucks, without making a distinction as to the reflectivity type.

Item 2.B. Highway Stop Signs (R1-1)

Enter the number of Standard Highway Stop Signs (this is the MUTCD specified Stop Sign, R1-1). A standard highway stop sign is red with white letters and has eight sides as defined in the Manual on Uniform Traffic Control Devices (MUTCD).

Any other non-standard MUTCD stop signs should be listed in the field for "Other Signs."

Item 2.C. RR Advance Warning Signs (W10-1)

Enter a check in the appropriate box to indicate the existence of advance warning signs along the highway approaches that are in compliance with the MUTCD (normally, would be on both sides).

Item 2.D. Hump Crossing Sign (W10-5)

Enter a check in the appropriate box to indicate whether or not high profile hump surface signs are present at the crossing or such are scheduled for installation in the immediate future. The standard Advance Warning Signs for High-Profile Crossings is identified in the MUTCD as W10-5. Non-standard warning signs or advisories should be listed in "Other Signs."

Item 2.E. Pavement Markings

Enter a check in the appropriate box for each type of pavement marking present that conforms to the MUTCD. If both stop lines and RR crossing symbols are present, check both boxes. If neither stop lines nor RR crossing symbols are present, check "None."

Item 2.F. Other Signs

Enter the number and specify the type of any other passive signs at crossing. Specify MUTCD Type. Non-standard stop signs should also be reported in this item.

Item 3. Type of Warning Device at Crossing - Train Activated Devices

Item 3.A. Gates

Enter the count of gates. Include in the count all gates without making a distinction as to the color or reflectivity of the gate or arms.

Item 3.B. Four-quadrant (or full barrier) Gates

Enter a check in the appropriate box to indicate whether or not four-quadrant (or full barrier) gates are present at the crossing. Full barrier gates apply in the case of 1-way streets or where the gate arms reach across the entire roadway.

Item 3.C. Cantilevered (or Bridged) Flashing Lights

Enter the number of cantilevered (or bridged) flashing lights in the appropriate block. Separate cantilevered flashers from those over traffic lanes and those not reaching the roadway (over only parking lanes, turnout lanes, or shoulders). Count individual cantilever units; do not count the flasher head pairs mounted on the units.

Item 3.D. Mast Mounted Flashing Lights

Enter the number of mast mounted flashing light units. Count all flashers on a single mast as one flasher. Do not count flasher heads or a pair of flashing lights separately.

Item 3.E. Number of Flashing Light Pairs

Enter the total number of pairs of flashing lights mounted on signal masts in Item 3.D. and on cantilever (or bridge) units in Item 3.C. and/or on other masts or poles.

Item 3.F. Other Flashing Lights

Enter the number of other flashing lights not in accordance with the MUTCD. Specify type.

Item 3.G. Highway Traffic Signals

Enter the number of highway traffic signals (red-yellow-green signals) that are train activated and which control street traffic over the crossing. Do not count highway signals controlling a nearby intersection even if they are interconnected with the crossing devices.

Item 3.H. Wigwags

Enter the number of wigwag signals.

Item 3.J. Bells

Enter the number of all bells, if present, that are either alone or in conjunction with other train activated warning devices.

Item 3.K. Other Train Activated Warning Devices

List any train activated devices not otherwise specified, such as an arrester net, dragnet or other new technology.

Item 4. Specify Special Warning Device NOT Train Activated

Enter the type of any special warning device which is not train activated. Examples of special warning devices not train activated are:

a. Manually operated signals and/or gates
b. Train crew flagging the crossing
c. Watchmen
d. Floodlights (may be train activated)

For watchmen and for manually operated gates, the number of hours daily in effect should also be indicated. For floodlighting, the number of masts with lights should be reported. Only floodlighting which is distinctive from other ordinary street lighting in intensity, light distribution, focus or color is to be reported.

Item 5. Channelization Devices With Gates

Enter a check in the appropriate box to indicate whether or not there are channelized devices (i.e., median barriers) with gates at the crossing. If channelized devices are present, indicate if they are on all approaches or just one approach.

Item 6. Train Detection

Enter a check to indicate type of train detection used at the crossing. Choices are:

- Constant Warning Time (or Predictors)
- Motion Detectors
- DC/AFO
- Other
- None

The following apply to <u>active crossings only</u>: Constant Warning Time, Motion Detectors, DC/AFO, or Other. If the crossing is not active, "None" should be checked.

NOTE: This item, *Train Detection*, replaces Part II, Item 8, *Does Crossing Signal Provide Speed Selection for Trains?* (Yes, No, N/A) that was on the previous version of the inventory form (Form FRA F 6170.71 (8-84)). Data in the system provided for *Does Crossing Signal Provide Speed Selection for Trains?* will be converted (on or before December 31, 1999) as follows:

Speed Selection (Previous Values)		**Train Detection (Converted Values)**
Yes	—>	CWT
No	—>	DC/AFO
N/A	—>	None

None of the data will be converted to Motion Detectors or Other.

Item 7. Signalling for Train Operation: Is Track Equipped with Train Signals?

Enter a check to indicate whether the track has train operation or interlocking signals to control train operations.

Item 8. Traffic Light Interconnection/Preemption

Enter a check in the appropriate box to indicate the type of crossing interconnection/ preemption.

DEFINITIONS:

The following are definitions for highway and rail signal interconnections. The definitions which are in italics are those defined by the Technical Working Group (TWG) on Rail-Highway Intersections:

1. ***Interconnection:*** *The electrical connection between the railroad active warning system and the traffic signal controller assembly for the purpose of preemption.*

   Interconnection consists of an electrically connected control circuit at a highway-rail intersection which has railroad active warning devices utilizing a supervised closed-circuit principle activated by the approach or presence of a train and which is used to preempt the normal operation of a highway traffic signal.

2. ***Preemption****: The transfer of the normal operation of traffic signals to a special control mode.*

Preemption is the activity when, as a result of a signal received from the railroad active warning device system, the normal operation of a highway traffic signal is interrupted and transferred to a specific programmed sequence.

3. ***Simultaneous Preemption****: The notification of an approaching train is forwarded to the highway traffic controller unit or assembly and the railroad active warning devices at the same time.*

   Simultaneous Preemption is the activity when the highway traffic signal controller receives notice from the interconnection control circuitry and is activated at the same time as the railroad active warning system. Usually, this will be used to prohibit highway vehicular traffic from traversing through the crossing intersection.

4. ***Advanced Preemption****: The notification of an approaching train is forwarded to the highway traffic controller unit or assembly by the railroad equipment for a period of time prior to activating the railroad active warning devices.*

   Advance Preemption is the activity when the highway traffic signal controller receives notice from the interconnection control circuit before the railroad active warning system is activated (usually 20-25 seconds before train arrival) to interrupt the signal's normal operation to begin its specific programmed sequence. Usually, this will be used to move the highway vehicular traffic through a storage area between the highway-rail intersection and the highway-highway intersection well before the railroad active warning devices start to operate to clear the crossing and eliminate the potential of vehicular entrapment on the crossing.

Items 9-12. Reserved for Future Use

These items are reserved for future use. No input required.

1.6 Part IV: PHYSICAL CHARACTERISTICS

Item 1. Type of Development

Enter a check in the appropriate box which best describes the predominant type of development in the vicinity (up to 1000 feet) of the crossing based on the following categories:

1. **Open Space**. Sparsely or undeveloped, lightly populated, or agricultural.
2. **Residential**. Built-up residential area.
3. **Commercial**. Retail stores and businesses, offices, personal services.

4. **Industrial**. Manufacturing, construction, heavy products, factories, and warehouses.
5. **Institutional**. Schools, churches, hospitals, parks, and other community facilities.

Item 2. Smallest Crossing Angle

Enter a check in the appropriate box which most closely describes the smallest angle between the highway and the track. (The angle may be estimated by eye or with a simple device, such as a protractor.)

Item 3. Number of Traffic Lanes Crossing Railroad

Enter the number of through traffic lanes crossing the track. Do not include shoulders or lanes that may be used for parking.

Item 4. Are Truck Pullout Lanes Present?

Enter a check in the appropriate box for special added lanes provided to accommodate commercial vehicles which are required to stop at the crossing.

Item 5. Is Highway Paved?

Enter a check in the "Yes" box if the highway is paved with material on which pavement markings can be effectively maintained. Enter a check in the box preceding "No" if the highway surface is gravel, dirt, or has a surface treatment on which markings cannot be maintained.

Item 6. Crossing Surface (on main line)

Enter a check in the appropriate box which most closely fits one of the following descriptions. If there are multiple tracks which have different types of surfaces, indicate the lower grade surface material on the Inventory Form.

1. **Timber.** Includes Sectional Treated Timber and Full Wood Plank:

   Sectional Treated Timber is prefabricated units approximately 8 feet in length of treated timber individually installed and removable for maintenance and replacement purposes. **Full Wood Plank** is a timber surface which covers the entire crossing area above the crossties, made of ties, boards, bridge ties, etc.

2. **Asphalt**. Asphalt surface over the entire crossing area.

3. **Asphalt and Flange.** Asphalt surface in the area between flange timber planks or other material forming flangeway openings which may include the use of rubber.

4. **Concrete.** Includes Concrete Slab and Concrete Pavement.

   Concrete Slab is precast concrete sections which are usually individually installed and removable for maintenance and replacement purposes. **Concrete Pavement** is a concrete surface which is continuous over the track area and is not removable except by destruction of the surface.

5. **Concrete and Rubber.** An installed crossing surface which consists of both concrete and rubber materials.

6. **Rubber**. Preformed rubber sections which are usually individually installed and removable for maintenance and replacement purposes.

7. **Metal.** Includes Metal Sections and Other Metal.

   Metal Sections are sections of steel or other metal which are usually individually installed and removable for maintenance and replacement purposes. **Other Metal** includes other metal materials which are usually not removable in sectional units which provide complete coverage of the crossing area within the track.

8. **Unconsolidated**. Ballast or other unconsolidated material placed over crossties, with or without planks, on one or both sides of the running rails.

9. **Other** (Specify). Surfaces other than the previously described surfaces and would include structural foam, plastic, "high-tech," etc.

Note: On or before December 31, 1999, the Crossing Surface data will be converted as follows:

New Categories	**Old Categories**
1. Timber	Sectional Treated Timber (1) and Full Wood Plank (2)
2. Asphalt	Asphalt (3)
3. Asphalt and Flange	(New)
4. Concrete	Concrete Slab (4) and Concrete Pavement (5)
5. Concrete and Rubber	(New)
6. Rubber	Rubber (6)
7. Metal	Metal Sections (7) and Other Metal (8)
8. Unconsolidated	Unconsolidated (9)
9. Other (Specify)	Other (0)

Item 7. Does Track Run Down a Street?

Enter a check in the appropriate box for whether the crossing involves a railroad track which is parallel to and within a street or highway.

Item 8. Nearby Intersecting Highway?

Enter a check in the appropriate box for whether the street or highway at this crossing is intersected by another street or highway and at what approximate distance from the crossing.

Valid values are:

Yes, within 500 feet	=	Less than 75 feet; 75 to 200 feet; 200 to 500 feet
No, or greater than 500 feet	=	N/A

Note: Conversion of data previously entered will be:

Yes –> Less than 75 feet
No –> N/A

Is it Signalized?

Enter a check mark (Yes or No) to indicate if the nearby intersecting highway contains traffic signals.

Item 9. Is Crossing Illuminated?

An Illuminated Crossing is defined as when overhead street lighting provides reasonable illumination of trains present at the crossing and is within approximately 50 feet of the crossing. If street lights are present within 50 feet of the nearest rail, the "Yes" box should be checked. Since street lamp light-intensity can vary, sufficient lighting may be present for street lights located up to 100 feet from the crossing.

Item 10. Is Commercial Power Available?

Enter a check to indicate if there is commercial electric power available within 500 feet of the crossing.

Item 11. Space Reserved for Future Use

This item is reserved for future use. No input is required.

1.7 Part V: HIGHWAY INFORMATION

Item 1. Highway System

Enter a check for the correct highway system code.

The Highway System Codes for the National Highway-Rail Crossing Inventory File were revised as a result of the 1991 Intermodal Surface Transportation Efficiency Act, (ISTEA) Section 1006. ISTEA required the redefinition of the National Highway System (NHS) which is included in the total Federal-Aid Highway (FAH). The three classifications are: (1) National Highway System, (2) Other Federal-Aid Highway, and (3) Non-Federal-Aid. The National Crossing Inventory File uses this classification, but subdivides the National Highway System into "Interstate" and "Other NHS."

The Highway System Codes are listed in the following table.

Code	Definition	Included
1	Interstate National Highway System	Interstate, rural, and urban
2	Other National Highway System	Other urban and rural principal arterial, Non Interstate
3	Other Federal-Aid Highway, Not NHS	Rural major collector and higher category, or urban collector and higher category, not part of NHS
8	Non Federal Aid	Local rural roads, rural minor collectors, and local urban city streets or any other non-Federal-Aid roadway

Table 1-1. Highway System Codes

Item 2. Is Crossing on State Highway System?

Enter a check in the appropriate box to indicate whether (or not) the crossing is on a State highway system.

If "Yes" is indicated, be sure that the *Highway Type and Number* are entered in Part I (Item 14).

Item 3. Functional Classification of Road at Crossing

Enter the appropriate code for the highway functional classification which the State has determined in accordance with the Federal-Aid Highway Program Definitions. The current functional classification codes are listed in Table 1-2.

Category	Codes	Functional Classification
Rural	01	Interstate
Rural	02	Other principal arterial
Rural	06	Minor arterial
Rural	07	Major collector
Rural	08	Minor collector
Rural	09	Local
Urban	11	Interstate
Urban	12	Other freeway and expressway
Urban	14	Other principal arterial
Urban	16	Minor arterial
Urban	17	Collector
Urban	19	Local

Table 1-2. Functional Classification Codes

NOTE: The tens digit for the Rural codes must be "0" and for Urban must be "1".

Item 4. Posted Highway Speed

Enter the posted highway speed at the crossing. The "Posted Speed" is defined as the assigned roadway speed limit. Where no speed signage exists, the State's statutory speed limit would apply.

Item 5. Annual Average Daily Traffic (AADT)

Enter the annual average daily traffic (total both directions) based on available traffic information. A reasonable estimate of the AADT is acceptable if actual traffic counts are not readily available. Enter the year which matches the AADT data supplied.

Item 6. Estimate Percent Trucks

Enter the estimated percentage of trucks in the traffic stream.

Item 7. Average Number of School Buses Over Crossing per School Day

Enter the daily average number of scheduled school buses passing over the crossing on a normal school day. Back and forth counts as 2.

Appendix A.12

CANADA: Grade Crossing Regulation (Draft) December 3, 2002

Railway/Road Grade Crossing Policy

October 2000

RAILWAY SAFETY ACT

RAILWAY/ROAD GRADE CROSSING POLICY

Table of Contents

1. Policy objective

The objective of the crossing policy is to clarify Transport Canada`s (TC) role and responsibilities concerning railway/road crossings at grade.

(**NOTE**: The railway/road grade crossing regulation will specify the roles of other parties concerned with road crossings.)

2. Policy background

Historically, federal government agencies have been significantly involved with the day to day responsibility to ensure safety at railway road crossings. The basis for this was the requirement to issue orders for virtually all aspects of the crossings, including construction details and financial responsibilities. In practice, the federal agencies usually took the lead in involving the railways and road authorities in discussions and decisions on crossing issues prior to issuance of an “Order”. A Canadian Transport Commission (CTC) “Order” relating to crossing works was, in both origin and effect, a legal and binding record of a decision taken by consensus, or in the absence of consensus, by the CTC itself.

The Railway Safety Act (RSA) of 1989 and the amendments which came into force on June 1st 1999 redefined roles by implicitly placing crossing safety responsibilities on the railways and the road authorities. This policy reflects the objectives of Section 3 of the RSA, which are to:

a) promote and provide for the safety of the public and personnel, and the protection of property and the environment, in the operation of railways;

b) encourage the collaboration and participation of interested parties in improving railway safety;

c) recognize the responsibility of railway companies in ensuring the safety of their operations; and

d) *facilitate a modern, flexible and efficient regulatory scheme that will ensure the continuing enhancement of railway safety. "*

Transport Canada's national transportation strategy calls for a transportation system that is safe, smart, strategic, and sustainable — the top priority being safety. The Safety and Security Strategic Plan (see next page) defines how the department intends to contribute to the safety and security of Canada's transportation system. The railway/road crossing policy, through its requirements, will support and fulfill the mandate of the Strategic Plan.

THE SAFETY & SECURITY STRATEGIC PLAN OVERVIEW

Where we are headed- Our Vision
The safest transportation system in the world
The impact we want to have - Our intended Outcomes
Protection of life, health, environment and property
Public confidence in the safety & security of our transportation system
How we get there - Our Mission
To further advance the safety and security of an efficient, accessible and sustainable transportation system through:
Awareness & Education
Monitoring & Enforcement
Establishment and Implementation of Policies & Rules
What we want to achieve
Safe Practices Risk Reduction Stakeholder Awareness
Positive External and Internal Impact Effective Intervention
How we do it
Continue to develop a new safety culture
Build constructive relationships internally and with stakeholders
Implement a systematic approach to risk management
Improve our tools, practices & techniques
Adopt a systems approach to human resources management
Broker international best practices

3. Authority

Under subsection 2.(2) of the RSA, the federal government has jurisdiction in *"respect of transport by railways to which Part III of the Canada Transportation Act applies"*. In general, this means that TC has jurisdiction over companies which have a certificate of fitness issued by the Canadian Transportation Agency (CTA). This jurisdiction applies to all road crossings on rail lines under federal jurisdiction.

The authority to regulate engineering standards of road crossings is provided in Section 7 of the RSA. The authority to regulate the operation and maintenance of crossing works is provided under subsection 18.2 of the RSA. Under subsection 24.(1) this authority respecting road crossings is not limited to the physical crossing itself but also extends to vehicles, pedestrians, road approaches and adjoining lands. Jurisdiction includes items such as approach grades, signage, nearby intersections, removal of sight line obstructions, and under subsection 31.(2.1), further includes powers respecting the method of operating a vehicle over a road crossing.

The jurisdiction of the federal government is intended only to extend to those aspects which have a direct relationship to the safety of the road crossing, respecting the jurisdiction of the Provinces for the design, construction and maintenance of roads within the Province.

4. Policy requirements

To maximize the department's impact on transportation safety, the focus of this policy is to ensure a positive approach to railway/road crossing safety through awareness of regulatory requirements, education through guidance, counselling and advice, and compliance monitoring to ensure compliance of regulated parties. Departmental activities to fulfil this policy will be accommodated in the Rail Safety Business Plan, in accordance with approved resources.

The policy of Transport Canada is to:

1) Maintain and enhance public safety by requiring through regulation or other means permitted under the RSA, uniform safety standards for all farm, private and public railway/road crossings at grade. The regulation will establish responsibilities for implementation of the standards by all federally regulated railways, 2,500 road authorities and many individuals and companies that have railway/road crossings under federal jurisdiction.

2) Promote awareness of regulatory requirements and education through guidance, counselling and advice to railways, road authorities, municipalities, police departments, consultants and other interested and affected parties concerning railway/road crossing safety.

3) Maintain a compliance monitoring program including surveillance, site inspections and audits to assess regulatory compliance and ensure effective intervention.

4) Support, initiate and conduct railway/road crossing safety research to identify emerging technologies and best practices and to encourage railways, road authorities and municipalities to adopt those best practices which are not regulatory requirements.

5) Obtain data through research, accident/incident investigation, and in partnership with railways, road authorities, municipalities, police departments and other government departments.

6) Analyse data to identify safety concerns, trends and emerging risks for use directly at individual railway/road crossings or systemically in the orientation of our regulatory, research or program activities.

7) Support and carry out safety promotional activities with respect to crossing safety through continued support of Direction 2006, Operation Lifesaver as well as TC programs.

8) Funding grade crossing safety improvement and crossing consolidation projects based on risk management principles.

5. Role and responsibilities

The Rail Safety Directorate is responsible to ensure the regulatory instruments (i.e. regulations) are enacted and enforced and to develop the national programs, policies, guidelines, data analysis requirements and methodologies for consistent application throughout the Regions. A key role is to establish constructive and beneficial relationships with partners through comprehensive consultation.

The Surface Regions are responsible to ensure that regulated parties meet the regulatory requirements and that regional activities are implemented and carried out consistently and in accordance with the national programs, policies, guidelines, data collection requirements and methodologies. A key role is to contribute and participate with headquarters during formulation of national policy and programs.

In accordance with Section 31 of the RSA, Railway Safety Inspectors shall take action where a threat or immediate threat is identified.

6. Monitoring

The implementation and effectiveness of this policy will be assessed by the Director General Rail Safety through periodic internal audits, program reviews and input from interested and affected parties.

7. Inquiries

Inquiries about this policy should be directed to

Rail Safety
Place de Ville
Tower C, 10th Floor
330 Sparks Street
Ottawa, Ontario
K1A 0N5

Phone:(613) 998-2985
Fax:(613) 990-7767

Transport Canada

IDENTIFICATION AND EXAMINATION OF SAFETY AT PRIVATE CROSSINGS

PHASE 2 INTERIM REPORT - REFERENCE #T8200-044506

JUNE 2006

IBI GROUP

UMA | AECOM

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1. INTRODUCTION

1.1 Background

Over the past several years, the safety of private crossings has come under increasing scrutiny. Between 1995 and 2003 there has been an average of 45.1 collisions per year at private and farm crossings. These incidents can affect numerous stakeholders, such as the vehicle and equipment drivers, railway operating personnel, railway passengers, property owners, municipalities, and federal authorities.

Some potential causes of grade-crossing incidents have been identified and include, but are not limited to, increased exposure times, operator expectancy violations, poor crossing designs, and lack of education and notification.

In July 2005, IBI Group in association with UMA Engineering Ltd. (hereafter referred to as the IBI Group Team) was retained to complete a study to identify and examine the key factors of safety at private crossings (Reference Number: T8200-044506).

The study is comprised of the following three phases:

- **Phase 1: Review of Available Information and Data** – Obtain and evaluate available literature, statistics and data relating to private crossing collisions/incidents, warning systems and signage, access, operations, maintenance, user education and applicable laws and regulations;

- **Phase 2: Collection of New Information and Data** – Conduct surveys and interviews of stakeholders in relation to the provision, use, operation, management and safety of private crossings. These tasks will then be used to identify and assess risk mitigation strategies specific to these crossing types; and

- **Phase 3: Conclusions and Recommendations** – The formulation and documentation of the conclusions and recommendations relating to the root causes, symptoms and risk mitigation strategies relating to collisions/collision potential at private crossings.

Phase 1 has been completed and submitted to the Project Steering Committee. The Phase 2 stakeholder interviews have been completed. This document represents an Interim Report covering Phase 2 of the study.

1.2 Phase 2 Scope and Objectives

Phase 2 comprised of the following tasks and objectives:

- **Task 1: Develop Phase 2 Plan** – IBI submitted a detailed work program for review and comment. This work program included a comprehensive description of the tasks to be undertaken in Phase 2 and the specific methodology for each. A revised project schedule was created.

- **Task 2: Survey Instrument Design and Approvals** – IBI designed a survey instrument that facilitated the collection of information from identified stakeholder groups. Stakeholder groups and potential interview candidates were selected. IBI focused on conducting interviews via telephone, and created a summary template for

documenting information presented by the stakeholders. The interview questions and the summary template were reviewed and approved by the Project Steering Committee.

- **Task 3: Conduct and Analyze Surveys/Interviews** – IBI prepared meeting notes for each stakeholder. IBI followed up with participants to ensure that the conversations were properly documented. IBI met with the PSC to provide an overview of the consultation responses to date.

- **Task 4: Identify and Assess Risk Mitigation Strategies –** IBI prepared a comprehensive private crossing "Life Cycle" analysis based on Phase 1 findings and the stakeholder consultation. IBI identified and assessed the contributory factors to determine the areas of risk associated with private crossings and identified risk mitigation strategies.

2. STAKEHOLDER CONSULTATION PROCESS

The following subsections describe the stakeholder consultation process, including the types and numbers of individuals consulted, the interview and reporting processes, and the challenges encountered along the way.

2.1 Stakeholder Categories and Level of Participation

Six general stakeholder categories were identified for participation in Phase 2. The six stakeholder categories are listed below; the level of participation (i.e., the number of stakeholders interviewed) for each category is given in parenthesise; and a brief description of the types of individuals interviewed is provided:

- **Railway Engine Crews (6)** – Locomotive engineers representing the passenger train and freight train sectors;

- **Railway Regulatory Affairs/Public Works/Technical Services Officers (15)** – Public works managers, railway planning managers, commuter rail officials, real estate departments, track supervisors, and public services agents;

- **Private Crossing Owners and Users (11)** – Farmers, snowmobile clubs, small business owners, cottage owners, industries, golf course directors, and land developers;

- **Railway Regulatory Officials (5) –** Transport Canada officials/crossing inspectors, and railway works engineers;

- **Transportation Safety Board (TSB) Accident Investigators (5)** – Senior TSB accident investigators from across Canada; and

- **Canadian Transportation Agency (CTA) Officials (2)** – Senior CTA officials familiar with all practices of the agency as they pertain to railway crossings.

The varying levels of participation for the six stakeholder groups are representative of the diversity of the types of individuals that make up the category and the depth and consistency of the information provided by the stakeholders in the category.

2.2 Interview Process

After identifying potential interview candidates and arranging for their participation in the study, interviews were scheduled, and a letter containing a brief project description and a list of stakeholder-group-specific discussion questions was e-mailed to each participant. For the most part, the interviews were conducted one-on-one via telephone (some interviews were conducted in-person) and were treated more as open, candid discussions, rather than formal surveys.

Initially, it was expected that each stakeholder interview would take approximately 30 minutes; ultimately, the interviews ended up lasting, on average, between one and two hours, due to the abundance of information provided by the stakeholders and their interest in discussing the subject. Identifying and making initial contact with stakeholders also proved more difficult than originally anticipated, and finding participants from the crossing owners and users category was particularly challenging. However, a broad cross-section of participants was eventually assembled, and the insight that they provided has resulted in a wealth of information regarding the state of private crossings in Canada. The assurance that the stakeholders' identities would be kept confidential contributed to their candidness.

2.3 Reporting Process

The project team interviewers recorded important/relevant discussion items (not formal minutes) during the stakeholder interviews, and later transcribed those notes into standardized stakeholder survey note forms. The completed survey note forms were forwarded to the corresponding stakeholders, generally via e-mail, for their approval. Once any comments received from the stakeholders were incorporated into the records, the survey notes were finalized. Versions of the finalized notes, with all stakeholder-identifying information removed, were then posted to the Transport Canada FTP site for review by the Project Steering Committee. A complete set of survey notes is included in **Appendix A**.

3. PRIVATE RAIL CROSSING "LIFE CYCLE"

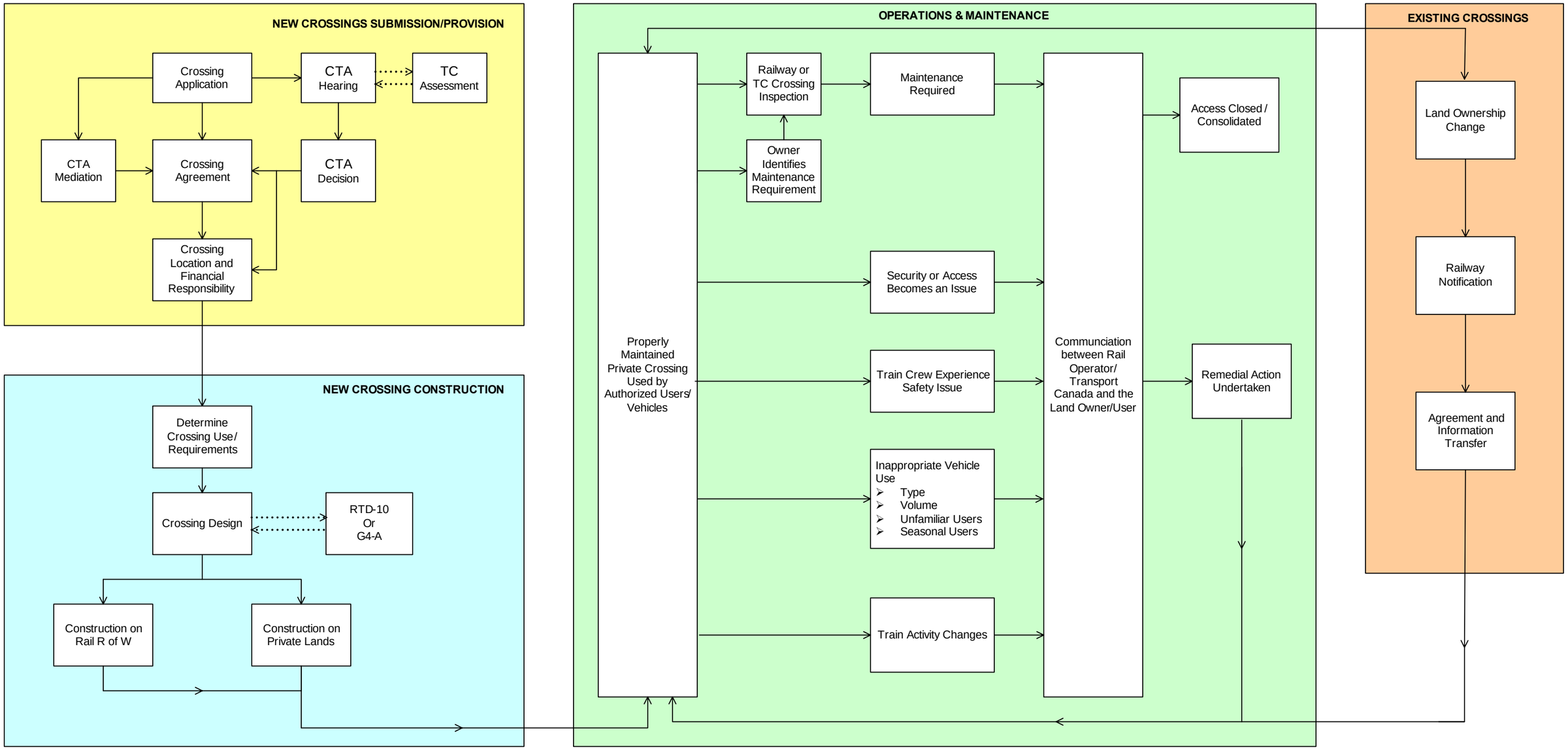
The initial work plan for Phase 2 described plans to develop a "weighted cumulative factors" risk assessment model for identifying and evaluating contributory factors related to the level of safety associated with a private crossing. Through the efforts of Phases 1 and 2 and discussions with the Project Steering Committee, it was determined that the initially proposed methodology was poorly suited to assessing safety at private crossings for the following reasons:

- The risk of a collision at a private crossing may be attributed to one or two major deficiencies and would not be properly identified through a cumulative factors approach, i.e., change in ownership and subsequent use of a crossing by uninformed users; and

- There are fundamental policy, operating and maintenance issues relating to private crossing safety that require remedial action, regardless of their apparent "weighted effect" on risk.

Based on this assessment of the initially proposed methodology, a new evaluation process was developed. The new evaluation process is more intuitive and involves describing and analysing the private crossing "life cycle." Using the information collected through Phases 1 and 2 of this study of safety at private crossings, the IBI Group Team was able to gain an understanding of and document the events, processes, and stages that comprise the private crossing "life cycle." **Exhibit 3-1** illustrates the private crossing "life cycle."

Exhibit 3-1: Private Crossing "Life Cycle"



The remainder of Section 5 describes the various stages of the private crossing "life cycle" in detail. The information presented in Section 5 is based on the research conducted in preparing the Phase 1 report and is supported by new information gathered from the stakeholder interviews. The information is primarily verifiable and fact-based; however, the opinions and observations of stakeholders are also provided, where they demonstrate the perceived state of private crossings in Canada.

3.1 New Crossing Submission/Provisions

3.1.1 EXISTING LEGISLATION, REGULATIONS AND POLICIES

The Canada Transportation Act (1996) governs the authorization of new private crossings. Administering the Act is the primary responsibility of the Canadian Transportation Agency. With respect to private crossings, the relevant sections of the Act are Part III, Division II, Construction and Operation of Railways, Sections 100 to 103. The relevant sections of the Act, as they pertain to new crossing authorization, are described in detail in Sections 5.1 and 6.1 of the Phase 1 report.

The informal terms crossing "by right" and crossing "by grace" are used by the CTA when referring to crossings authorized under Sections 102 and 103 of the Canada Transportation Act, respectively. The terms crossing "by right" and crossing "by grace" have been adopted, for simplicity sake, for use in this report.

The CTA has no specific safety mandate, but rely on the railways and Transport Canada to ensure that all crossings are safe. If no particular safety issues are identified to the CTA with the crossing application, it is assumed that no extraordinary safety concerns exist. If safety concerns are identified during the application process, any authorized crossing (a "suitable crossing" in the terms used by the CTA) would have to meet the requirements for safety as stipulated by Transport Canada. All new crossings, private or otherwise, authorized by the CTA are authorized on the conditions that the crossing must comply with the safety requirements mandated by the Railway Safety Act. The Railway Safety Act is treated in greater detail in Section 6.2 of the Phase 1 report.

The existing application, review and approvals process does not appear to be explicitly negatively affecting the level of private crossing safety.

3.1.2 DECISION PROCESS, NEGOTIATION AND ARBITRATION

In general, there are three means by which a crossing agreement can be reached:

- **Independent settlement between the railway and the landowner** – Independent negotiation between the railway and the landowner is the most common means of establishing a crossing agreement. Section 101 of the Canada Transportation Act states that agreements reached between parties can be filed with the CTA, and upon filing, those agreements become Orders of the CTA;

- **Agreement between the railway and the landowner mediated by the CTA -** For several years the CTA has been offering its services as mediators, providing the service when landowners and railway companies are unable to reach an agreement on their own, but both parties are interested in achieving a negotiated settlement. The agreements reached through mediation are binding, but the negotiation process often allows the parties to achieve certain compromises that might not present themselves otherwise (e.g., the agreement might include a provision allowing the railway to

traverse the landowner's property to access their right-of-way), and it generally helps to build a more positive working relationship between parties; or

- **Decision handed down by a CTA tribunal** – In cases where the railway and the landowner are unable to reach an agreement the CTA can be called upon to rule on the matter. The decisions of the CTA are final and binding.

The CTA decision/arbitration process includes a review of the crossing usage and vehicle type; however, there is no legislative/legal documentation of these conditions in the resultant decision. Although not a direct safety concern, this deficiency does have implications in other aspects of the crossing "life cycle".

3.1.3 AGREEMENT TERMS

For independently negotiated crossing agreements, the railway's real estate department is the primary point of contact between the railway and the landowners [It should be noted that many smaller railway companies do not have their own real estate departments.]. At Canadian Pacific (CP), requests for new crossings are generally received from the landowner via one of three means: direct contact, through the engineering department, or on the Community Connect line/website.

Generally, the railways have standard private crossing agreement procedures; however, the specific details of every crossing agreement are exclusive to the crossing. The railway companies generally have three common (i.e., non-site-specific) requests when it comes to negotiating a crossing:

- The landowner must pay an annual fee for the right to a crossing;
- The landowner must show proof of having liability insurance for the crossing; and
- The landowner must agree to a provision stating that the railway company can terminate the crossing agreement given 30 days notice.

Often, a caveat is added to the agreement stipulating that if the use of the crossing changes significantly (e.g., changes in operating equipment or frequency of use) the appropriateness of the crossing will have to be reviewed. Many railway industry stakeholders cited changes in crossing use as a major safety risk, since often the crossing is not designed to accommodate the usage. There is also a concern that landowners are not forthcoming enough when it comes to informing the railways of changes in usage, and frequently the railways only discover such changes through coincidental observations.

Inability (due to prohibitive costs) or unwillingness on the part of the landowner to accommodate these requests often results in the case ending up at a CTA hearing. The rulings handed down by CTA tribunals are based on precedent; as such, the decisions reached are very consistent. Crossing authorizations granted by the CTA indicate the location where the crossing is to be built, the parties responsible for the cost of construction, maintenance, etc., and the conditions under which the crossing is authorized.

Many older crossings have no documentation of terms or formal agreements. As such, the railways are often unable to determine whom they should contact regarding crossing issues, and the landowners are not always aware of the conditions and/or responsibilities that apply to their crossing. The lack of a comprehensive database of all private crossings and their related

agreements is a fundamental disconnect in the current private crossing system; this reality is further described in **Section 3.3.3**.

3.1.4 FINANCIAL RESPONSIBILITY

Financial responsibility is dependent on the terms of the agreement reached between the railway and the landowner or the terms of the decision handed down by the CTA.

Independently negotiated agreements and agreements reach through mediation often result in part of the cost being apportioned to the railway and part to the landowner. The relative size of the apportioned costs is specific to the particular agreement.

When a CTA tribunal decides to authorize a crossing "by right," usually, the railway is financially responsible for all costs associated with establishing a safe crossing. When a crossing "by grace" is granted, the landowner is usually financially responsible for all costs associated with establishing a safe crossing. The CTA does not have the discretion to apportion costs for crossing granted "by grace" or by the Agency's discretion under section 103 of the Canada Transportation Act.

The allocation of financial responsibility for the crossing construction and maintenance does not appear to have a direct impact on the resultant level of crossing safety.

3.2 Crossing Construction

Construction practices are dictated by the safety requirements mandated by the railways, which are based on Transport Canada safety requirements (e.g., the Railway Safety Act). In order to determine the long-term, best-fit crossing requirements, the landowner is asked to provide information regarding the purpose of the crossing, the intended frequency of use, the type of equipment that will be used, and if the applicant has intentions of significantly changing or increasing the use in the foreseeable future, with regards to; development, subdivision, or significant commercial or industrial plans.

Once the intended use of the crossing has been determined, a request is sent to the railway's engineering, operations, and capacity groups for their approval. If they have no objections to the crossing, a drawing is created showing the location of the new crossing, and the requirements with respect to approaches, culverts, gates, signs, etc. are determined. All construction that takes place on the railway right-of-way is conducted by railway personnel or authorized private contractors. Depending on the terms of the crossing agreement, the applicant might be responsible for the construction of the approaches, any culverts or drainage features that are required, and installation of signs and/or gates. Typically, all work has to be done under flag protection by the railway. The typical private crossing is at grade, with a timber-plank crossing surface, and has gravel/dirt approaches.

During the interviews with stakeholders, differing viewpoints were expressed concerning the technical standards that are used for the design of private crossings. Most often, the technical standard now used for the design of public crossings is the proposed standard "RTD-10 Road/Railway Grade Crossing Technical Standards and Inspection, Testing and Maintenance Requirements." Certain stakeholders feel that this document is adequate for the design of private crossings; however others (including both railway and Transport Canada representatives) expressed many concerns. The list below provides a summary of the thoughts expressed by the stakeholders concerning technical standards.

- The requirement to include the design vehicle characteristics into the calculation of sightlines (under RTD-10) is seen as beneficial by some due to the very long and wide equipment sometimes accommodated at farm crossings, these participants had not had difficulty obtaining the correct information and found the methods to be adequate despite the amount of time required to obtain information;

- The calculations required by RTD-10 address many safety concerns that currently exist at private crossings;

- A simplified form of RTD-10 is required;

- Some railway personnel have identified the consideration of design vehicle characteristics in the calculation of sightlines as very difficult or complex. Comments provided indicated that technical data required is rarely available; owners are not able to provide the level of detail required (such as acceleration characteristics), especially for farm equipment.

- Railways are not always provided with the correct information and indicated that observation is the only way of obtaining the information required for RTD-10 calculations. As well, the specific types of vehicles using crossings change rapidly.

- The existing and less complex “Minimum Railway/Road Crossing Sightline Requirements for all Grade Crossings without Automatic Warning Devices, G-4A” continues to be used in some areas, especially for low volume private crossings.

- Some comparisons conducted by railway personnel have indicated that the G4-A method yields similar results to RTD-10. Others have indicated that a past study showed that clearance time required for certain vehicles under RTD-10 greatly exceeded the requirements set out in G-4A;

- Participants indicated that a simplified tool/calculation/method for RTD-10 is needed especially for low use crossings (similar to the current G-4A);

- The complexity of the RTD-10 may require some owners to pay engineering firms to do the design work necessary for the development of drawings needed when applying for a crossing, thereby increasing the costs to the applicant;

- Software that could be used in the field, that would be able to provide the requirements of the crossing based on crossing data entered on location (slopes etc.) was suggested;

- There are few technical standards that are applicable to private crossings, but experience along with standards for public crossings is usually sufficient;

- Requirements for different types of crossings should be included in the new regulations and the standards should also address items such as fencing and farm gates at crossings leading to multiple residences.

The primary issue relating to the initial crossing construction is the cost/delay associated with the application of technical standards. At the time of construction the crossings are constructed to operate in a safe manner. The main concerns arise during the operations and maintenance stages.

3.3 Operations and Maintenance

This section describes operations and maintenance procedures and practices, as they pertain to both new and existing private crossings.

3.3.1 EXISTING LEGISLATION, REGULATIONS AND POLICIES

The interview process has yielded the following information concerning existing legislation, regulations and policies with respect to the operation and maintenance of private crossings.

Owners of private and farm crossings are typically unaware of the legislation and regulations that apply to their crossing. Some owners are aware of the contents of an agreement that they may have with the railway (usually for crossings "by grace"), however this is not always the case. Certain owners indicated that they feel that the railway should be providing them with much more information in this regard. Owners of crossings that have existed for many years seem to be the least aware of legislation and agreements, whereas owners who have recently obtained permission to a crossing are the most aware. Some owners indicated that the only legislation that they are aware of is the provincial Highway Code. In the case of snowmobile users in Ontario, they indicated that they are aware of the Motorized Snow Vehicle Act, which requires them to stop at all railway crossings.

Crossing agreements and owner information need to convey both the owner's and the railway's responsibilities regarding maintenance, vehicle use, access, etc.

The railway representatives indicated that the railways are responsible for the maintenance of the crossings; however, responsibility for the maintenance of the approaches and sightlines varies. The railways are responsible for maintaining all aspects of crossings granted "by right," the agreements established between the railway and the crossing owner govern the responsibilities for the maintenance of crossings granted "by grace". In all cases, the railway is responsible for conducting all maintenance within the railway right-of-way (crossing approach maintenance is not typically the responsibility of the railways). However, for a crossing granted "by grace" the crossing owner may pay fees to the railway to cover these costs. In some cases, the agreements entered into by the railway and crossing owner stipulate the type of vehicle that is permitted to use the crossing as well as the type of use permitted (such as access to a small business) and require the owner to advise the railway if they plan to use any other type of vehicle or modify the type of use. The railways are of the opinion that these types of agreements are important; however, the crossing owners do not always abide by them. Some agreements may be lacking in clauses relating to maintenance of, or use permitted at crossings, posing a challenge to the railways. The addition of such clauses would improve safety at crossings.

Transport Canada personnel indicated that they may intervene with either the railway or the crossing owner in cases where there is a threat to safety at an existing crossing. They do not usually provide recommendations; rather they require that dangerous situations be corrected. Usually Transport Canada will intervene with the Railway rather than with the crossing owner. Certain different methods of intervention were identified. Transport Canada may issue "Notices" or "Notices and Orders" in cases where there are safety concerns. A "Notice" issued to a railway allows the railway 14 days to advise Transport Canada of the corrective measures to be applied, however, one Transport Canada representative indicated that the solutions presented may be weak and unsatisfactory, based on economics. Alternatively, a "Notice and Order" may be issued which may restrict train operations (often applies speed restrictions on the railway), or crossing use, until the situation is corrected. Transport Canada finds this to be very effective in correcting dangerous

situations; often the threat of issuing a “Notice and Order” is sufficient to ensure that adequate corrective measures are applied. Alternatively, Transport Canada has the authority to order a crossing to be closed; this seems to be used in exceptional cases. Currently Transport Canada inspectors do not have the power to issue fines immediately on site upon detection of unsafe situations or behaviour at crossings. The desire to have this power (as currently exists in the United States at the Federal Railroad Administration) was expressed. As well, it was indicated that enacting the currently proposed new regulation and associated technical standard (RTD-10) would address certain safety concerns at these crossings.

It is a widely held belief amongst railway industry stakeholders that many of the safety issues created by inadequate designs in the past and/or current maintenance practices, could be addressed by putting the RTD-10 guidelines into force. Currently, there are no enforceable standards for private crossing design and maintenance that can be used to force crossing upgrades.

Railway personnel interviewed (public works officers, real estate representatives, track supervisors) have provided differing viewpoints concerning existing legislation as it refers to the maintenance of sightlines at crossings. The majority of those interviewed indicated that the current “Minimum Railway/Road Crossing Sightline Requirements for all Grade Crossings without Automatic Warning Devices, G-4A” is adequate for use during inspections of private crossings, and that it is a tool that is easily applicable in the field. These participants indicated that they are concerned that the proposed technical standard, RTD-10, is too difficult for use in the field by track supervisors. They indicated that a simplified tool is required for use in the field during inspections. Other parties interviewed indicated that the proposed standard is superior for this use, given its consideration for design vehicles.

3.3.2 CROSSING INSPECTION AND MAINTENANCE

The railways generally have policies in place to inspect all of their crossings on a yearly basis; however, a general lack of resources to perform inspections is having an impact on the actual frequency of private crossing inspections.

When the railways conduct inspections the focus is generally on sightlines and crossing surface condition. Depending on who is conducting the inspections, sightlines could be evaluated using either the G4-A or RTD-10 guidelines; it seems to be a matter of individual preference.

Transport Canada undertakes annual inspections of all crossings (public, farm, private) to ensure that all crossings are safe. An inspection report is issued to the railway that is then responsible to ensure that deficiencies are corrected. In particular, signage and sightlines are reviewed. The railways are now looking at a more programmed approach to ensuring that sightlines are adequately maintained, according to one stakeholder, there has been a marked improvement in recent years.

There must be an easily accessible, consistent and formal mechanism for the crossing owner to inform the railways of inspection needs.

All maintenance on the railway right-of-way is conducted by railway personnel or approved private contractors. Occasionally, landowners will do some brush trimming to clear sightlines, but

technically they are not authorized to do any such work on the railway right-of-way. Conversely, more than one railway industry stakeholder cited challenges in gaining access to private land for the purpose of clearing brush or tree limbs (originating from that land) that where obstructing sightlines.

3.3.3 PRIVATE CROSSING INVENTORY AND TRACKING

During the interviews conducted with both railway and Transport Canada personnel, it became clear that significant challenges exist regarding maintaining an up-to-date inventory of private crossings.

Transport Canada does not maintain a database of these crossings. Railways have difficulties in maintaining their databases, especially for crossings granted "by right" since they are not made aware of changes in land ownership. As a result, the databases become outdated quickly. Short line railways indicated that they did not acquire up-to-date lists of crossings and owners, or even the crossing agreements, at the time they purchased the railway line. The representatives of these railways indicated that they do not have the personnel required to establish and maintain a database, although some have made significant efforts in this regard and are in the process of cataloguing the crossings on their lines. Crossings governed by agreement (typically crossings "by grace") are often easier to track than those without agreements (typically crossings "by right") since the railways regularly issue invoices for maintenance fees to the owners of the crossings. There are cases, however, where the documents concerning existing crossings are missing and ownership information is no longer available. The department responsible for establishing and maintaining inventory listings varies by railway; this may be done by the Real Estate or Technical Services departments, or by the General Manager's office.

The lack of a comprehensive and current inventory of all private crossings and their owners creates critical communication deficiencies throughout the "life cycle" of a private crossing.

Ultimately, a comprehensive crossing (private and public) inventory/database is fundamental and critical to crossing safety across the country. To some extent the railways have recognized this necessity, and numerous railway divisions have begun the process of cataloguing their private crossings; however, the scope and accessibility of those databases is extremely limited (sometimes they are only available to one railway department). The absence of a proper, truly comprehensive, accessible inventory of crossings delays and/or prevents the notification and communication processes and significantly impacts crossing safety.

3.3.4 INSURANCE AND FEES

Typically the railways request that the owner of a crossing granted "by grace" pay an annual maintenance fee to the railway and that the owner show proof of liability insurance (usually $5M). These elements are regularly included in the agreement governing the crossing. Annual fees and proof of insurance are not required in the case of a crossing granted "by right."

Information provided by representatives of the CTA indicated that, in cases where they are required to intervene, the railway's request for maintenance fees and liability insurance are frequently reviewed. In cases where the owner has no other access to his land, the Agency will typically decide that the annual fee must be waived, as well, since there is no legal obligation for the landowner to carry liability insurance for the crossing, the Agency almost always determines that it is up to the landowner to determine the necessity of carrying such insurance.

Railway representatives indicated that there are frequently instances of crossing owners neglecting or refusing to pay their annual fees, and yet they will continue to use the crossing.

The financial responsibility for maintenance or insurance does not appear to have a direct effect on private crossing safety; however, it may have a direct impact on the owner's awareness of their liability/responsibilities associated with the crossing.

In cases where improvements are required to a crossing "by grace," the railways require that the owner pay the costs of the necessary work. In some cases, the costs are significant and the owners cannot afford to pay. Transport Canada officials indicated that this has happened in certain instances where Transport Canada has imposed restrictions on the railway, due to an unsafe crossing, and the railway then passes on the often-prohibitive costs of the improvements to the crossing owner. It was suggested that legislation should be established requiring that owners be responsible for the cost of the works to upgrade/modify crossings, especially when the modifications are due to changes in use of the crossing, changes in vehicle type, and changes in the volume of traffic using the crossing.

3.3.5 SECURITY AND ACCESS CONTROL

Controlling the use of private crossings is a challenge, based on the information provided by the many user groups interviewed. It is difficult for railways to control unauthorized use of these crossings.

Few of the participants indicated that access to their crossings was physically restricted (for example, by farm gates). In addition, differing opinions were provided concerning the safety of the use of farm gates at crossings. One Transport Canada representative indicated that there should be a regulation requiring locked gates at restricted crossings, thereby preventing unauthorized access. On the other hand, one experienced locomotive engineer indicated that safety problems frequently occur when a crossing user parks their vehicle on the tracks, in order to unlock or open a farm gate. The suggestion was made that in locations where farm gates are deemed necessary, they should be set well back from the tracks in order to provide sufficient space for a vehicle between the gate and the track. Another situation was described concerning a farm gate installed on one side of the track only, thereby allowing unrestricted access onto the track but not allowing a vehicle to get off the track, creating a safety risk.

In cases where a crossing leads to camps, or seasonal cottages, the camp members or residents are the only ones authorized to use the crossing. However, in reality, visitors to these locations use the crossings, as well as hunters, etc. One crossing owner indicated that the installation of signs and gates had been effective in stopping unauthorized use.

Unrestricted access to a private crossing is a fundamental safety risk.

Railway representatives indicated that safety issues could result from a crossing owner allowing others to use their crossing for a use that was not intended when the crossing was established. An example of such a situation is the authorization given to a snowmobile club to run their trail across private land and then to use the owner's railway crossing. Owners are not all aware that they must restrict access to their crossings and adhere to the stipulations set forth in the agreement with the railway. The railway representatives indicated that improvements are required, that owners must become responsible concerning the access and use of their crossings.

Railway representatives also indicated that access control is also affected when there is a change in property owners, new owners are often unaware of the requirements associated with the use of their crossing, and the railway is unaware of a change in ownership (this will be addressed further in **Section 3.4**).

Private crossing owners may not understand the responsibility and implications of authorizing the use of their crossing by others. This may include employees (permanent or temporary), visitors, recreational users, or negotiated property access.

The example was provided of old logging roads where the public uses the crossings since there is unrestricted access to them; these crossings may then become unrestricted de facto public crossings.

One railway representative indicated that there seem to be fewer accidents and incidents at crossings for farm use, granted "by right," than at private crossings granted "by grace" since often crossings for farm use have limited access whereas other private crossings allow unrestricted access.

One participant indicated that a golf course was located across a private crossing, and that both members and the public use the course. In this case there is no control over the access to the crossing.

In order to restrict access to a large, fully automated, private crossing, located in the centre of a transport company's fenced yard, the company had installed crossing gates (operated through the use of a magic eye type detector) in advance of the railway crossing gates, in order to ensure that no traffic could access the track without being well aware of the manner in which to proceed safely. This particular crossing was designed and is maintained as if it were a public crossing, with additional access restrictions.

Improper use of access control devices poses a safety risk that is at least as significant as unrestricted access.

3.3.6 WARNING AND INFORMATION SIGNS/DEVICES

In many cases, unfamiliar or occasional users of private crossing have little education or understanding regarding the safe use of the crossing. The only opportunity may be the information and guidance provided at the crossing itself through signing and warning devices.

Nearly all of the stakeholders interviewed provided input regarding warning and information signs at private crossings, concerning the signs that exist as well as their views concerning improvements to be made. It was found that most private crossings (especially "farm" crossings) do not have any warning or information signs posted. The most popular suggestion in order to improve safety at these types of crossings is to post cross bucks and stop signs on both approaches to every crossing that does not having an automated warning system.

The information provided from the stakeholders is summarized below.

Stop Signs

- Stop signs are seen as an effective way of ensuring that users stop and look for approaching trains, they are considered to be effective since they are a standard sign that drivers are used to and tend to respect;

- The use of stop signs at private crossings varies by railway and even by subdivision. The size and condition of sign are not regulated and therefore some stop signs are small and easily overlooked, while others are not properly maintained;

Standard regulatory, warning and information signs are the foundation of all transportation intersections. Private crossings should not be an exception to this principle.

- Some railway representatives indicated that they feel stop signs should be placed at each approach to every private crossing (at both "by grace" and "by right" crossings) and that this should be standard practice;

- Snowmobile clubs post their own signage along their trails, one representative contacted indicated that there are supposed to be "stop ahead" signs in advance of the crossing and "stop" signs at the crossings, these signs are considered to be effective; and

- Crossbucks should be placed at all crossings along with stop signs, on each approach.

Whistle Posts

Whistling is typically not required at private crossings and often is only employed in emergency situations.

Owners having a crossing located close to a public crossing where trains are required to whistle indicated that the train whistle provided a significant safety benefit. It is important to note that this benefit might only exist for trains travelling in one direction. The safety benefit is not as significant when the crossing is further away in areas where train speeds are slow. There are whistle posts at very few private crossings. The requirement to whistle at a private crossing may be added by the railway for safety reasons. Transport Canada will only order whistling reluctantly as they believe other measures are more effective in correcting safety deficiencies. Snowmobile users, and other similar users, are unlikely to hear the train whistle due to their insulated helmets and the noise from their machines.

Whistling has a proven safety benefit, and would be especially effective at private crossings where sight lines are limited.

Automated Warning Systems

- Few fully automated warning systems are installed at private crossings. They tend to be installed at large crossings with higher vehicular traffic, such as at private industrial crossings; these are typically crossings granted "by grace" and are governed by an agreement;

- Requests by owners for fully automatic flashing lights, bells and gates in order to improve safety at a crossing are often forgotten when the cost of such devices is discovered;

- The addition of flashing lights would draw further attention to crossings thereby improving safety;

- Railway and Transport Canada stakeholders along with some owners expressed a desire for Transport Canada to establish grants for the installation of automated warning systems.

Mirrors

Mirrors have been placed at certain locations in order to offer better visibility, such as close to a rock cut (placed at low use private crossings). Few short line railways indicated that they have used mirrors. Information was provided indicating that both convex mirrors and flat mirrors are used, although one railway representative indicated that convex mirrors give a false sense of security since the train is actually closer to the crossing than it appears in the mirror, and drivers think that they have more time to cross that is actually available. Mirrors must be well maintained in order to ensure that their angle of placement does not change and that their reflecting surfaces are in good condition. Mirrors can become damaged easily. Also, mirrors can fog up or cause visibility problems by reflecting the sun at certain times of day.

Emergency Contact Numbers

At present, emergency contact number are not provided at most crossings. Emergency contact numbers should be posted at all crossings to ensure that owners and users know where to call in case of a safety issue or other problem.

Emergency contact numbers have repeatedly been identified as a critical piece of information that should be posted at every crossing.

Other

The following real or perceived safety improvements have been incorporated at some specific crossings:

- "Private crossing", "Caution look both ways", "No trespassing" and "Use at own risk" signs posted at the crossing;

- Conventional roadway signs such as "Walk/Don't Walk" signals;

- The use of a private flagman where there have been safety problems (close calls);

- Flashing amber lights installed by owners;
- Large signs describing how to safely use the crossing;
- Signs on high speed corridors reminding users to be careful due to high speed trains;
- Signs at locations having poor visibility reminding users to look carefully;
- Retro-reflective materials on signs and sign posts;
- Rumble strips in paved approaches to alert drivers to the crossing;
- Colour schemes for signs that would allow them to stand out from their surroundings.

A poorly marked or maintained crossing may lead an unfamiliar user to incorrectly assume that the railway operations are not active, nor a substantial threat.

The absence of signage, or damaged signage, at crossings leads users to believe that the train line is no longer used. This misconception leads users to believe that it is safe to cross the tracks at all times.

Information obtained during the interviews with Transportation Safety Board investigators provided additional insight into the issues relating to signage. The information provided is as follows:

- The investigators indicated that most often deficiencies found relate to lack of signage and/or poor maintenance practices;
- Emergency contact numbers should be posted on signs at all crossings;
- Lack of reflective surfaces on signage is a factor contributing to collisions;
- A standardized private crossing sign should be developed to increase visibility and conspicuousness of private crossings.

It was also noted that, a change in ownership of the railway might lead to changes in the way signage is maintained. As well, a new railway owner may not understand the reasoning behind certain specific warning signs placed at a certain location for safety reasons, and may remove them. This was noted to be particularly problematic for railways where the management is not situated locally to the operations. Issues relating to changes in ownership are addressed in greater detail in **Section 3.4**.

3.3.7 SUPPLEMENTAL SAFETY DEVICES

The issue of supplemental safety devises is somewhat contentious. Some stakeholders expressed an interest in testing out new technologies while others were adamant that minor improvements to safety could not justify the costs and risks associated with applying any type of experimental technology.

Those who refuted the use of new technologies indicated that the available safety devices (e.g., mirrors, bells, gates, whistles, etc.) were sufficient. In addition to cost concerns, the primary objection to using unproven safety devices was that they would need to be failsafe. Also, the

remoteness of many private crossing locations would make testing and maintenance challenging, given that the railways are already short on resources.

Those who supported the use of supplemental safety devices suggested the following technologies/systems:

- Block repeater systems whereby the presence of a train is communicated to downstream crossings;
- Low-cost automatic warning systems (possibly solar powered);
- LED lights on gate arms;
- Flashing lights instead of signs (particularly in areas prone to fog, etc.);
- Illuminated signs;
- Wayside warning systems (horns situated at the crossing and directed more effectively to the approaching motorists, not just on trains); and
- In-vehicle crossing warning systems.

3.3.8 VEHICLE USE AND TYPE

New and reconstructed private crossing are designed and constructed to accommodate a range of vehicles based on the available information and technical knowledge at the time. According to several railway industry stakeholders, the fact that the railways and railway authorities do not have control over the types of vehicles that can use a crossing is one of the biggest issues facing crossing safety.

Issues pertaining to vehicle use and type exist across the country; furthermore, there appear to be some regional inconsistencies regarding those issues. For example, in western Canada, the vehicle type issues seem to centre on industrial and agricultural uses, whereas, in the eastern part of the country, recreational clubs and passenger vehicles were mentioned more frequently.

Most of the railway industry stakeholders were able to identify specific vehicle types that are frequently involved in incidents at private crossings. They also noted that when incidents occur, it is often as a result of an incompatibility between the vehicle and the crossing design (i.e., the crossing being used by vehicles for which it was not designed). Such an observation reinforces the need for disclosure and due diligence, on the part of the crossings owners and users, in notifying the railways of the types of vehicles that are operating on their crossings. That disclosure and due diligence is equally important during the crossing application process and throughout the life of the crossing if the crossing usage changes. As mentioned in **Section 3.1.3**, crossing owners/users are not always very forthcoming with information regarding changes in crossings usage, and as a result, incidents of vehicle/crossing design incompatibility can occur. Conversely, where crossing owners are unaware of the type of vehicles for which their crossing was designed, it might not occur to them to notify the railway when their use of the crossing changes. Given the general lack of knowledge that exists on the part of the crossing owners with respect to crossing agreements, etc., it is probable that many are unaware of the terms that govern the types of vehicle that should be used with their crossing.

Use of a private crossing by a vehicle for which it was not designed is a fundamental safety issue.

In addition to vehicle/crossing design incompatibilities, issues related to vehicle type and crossing maintenance where mentioned by stakeholders. For example, several railway industry stakeholders described incidents where frequent snowmobile use at private crossings (usually by members of snowmobile clubs) resulted in snow and ice becoming compacted between the rail and the rut, which is derailment risk. When the railways are aware that snowmobile clubs are using a crossing they can adjust their maintenance practices accordingly; however, clubs sometimes arrange to use private crossings without notifying the railways, which can lead to issues like that described above.

Ensuring the crossing is designed for, and used only by, appropriate vehicle types is a safety issue that spans the entire "life cycle" of the crossing. There are concerns associated with legal, education, communication and ownership aspects.

Where they do not already exist, streamlined processes by which crossing owners can notify the proper railway authorities of intended changes in or deviations from normal crossing use should be developed and communicated to all crossing owners.

3.3.9 USER INFORMATION AND EDUCATION

Although there are a few sceptics, the general opinion amongst all of the stakeholder groups interviewed is that education campaigns and public information sessions have a positive impact on crossing safety. However, many stakeholders also identified deficiencies in the current education and information dissemination practices, particularly with respect to informing crossing owners and users about private crossing procedures and responsibilities. Below is a list of areas where stakeholders identified deficiencies:

- Crossing owners are not provided with any safety information or training. Many users do not even have the contact information for the railways;
- Often, driver training and driver handbooks give very little attention to crossing safety In some instances crossing information has been removed from handbooks or has been omitted from training programmes;
- The general public need to be educated on what procedures they should follow if their vehicle becomes disabled on a railway crossing (private or otherwise);
- Commercial drivers and farm equipment operators are two user groups that need to be targeted by education and information campaigns;
- Children are well targeted by existing general education and awareness campaigns, but adults are not as effectively reached; and
- Non-railway police and 911 operators need to be better educated to deal with crossing incidents.

Those who criticise information and education practices typically cited one or more of the following issues:

- Education and awareness campaigns are not far-reaching enough;
- They don't target the right user groups;
- The campaigns work initially, but people quickly become complacent and revert to old behaviours;
- There are not sufficient resources to reach everyone who needs to be educated; and
- Information needs to be redistributed or re-taught every year (or more frequently) requiring more resources.

Several stakeholders raised the idea of distributing information packages to private crossing owners during the application process as well as periodically throughout the life of the crossing. Doing so would have the double benefit of keeping owners and users informed about crossing safety and procedures, plus it would maintain a state of ongoing communication between them and the railways.

The need for safety information and education is at the site, not on a billboard. Signage and information distributed directly to crossing owners is more likely to reach and impact its target audience.

3.3.10 TRAIN ACTIVITY NOTIFICATION

The vast majority of private crossing owners and users receive no notification regarding train activity at or around their crossing from the railways. As such, the only information that crossing owners and users have is based on their personal experience. The railway industry stakeholders interviewed all took the opinion that informing crossing users of scheduled train activity breeds complacency. The railways would like all crossing users to live by the adage that "anytime is train time." The crossing owners and users interviewed for the study stated that knowing roughly when to expect trains at their crossings would allow them to better plan their activity at the crossings and avoid times when trains were more likely to be in the area.

There are currently no formal mechanisms for railways to inform crossing owners that train activity at a particular crossing is changing.

Owners and users whose crossings are located near adjacent public crossings noted that train whistles sounded at those public crossings provided them with some advanced warning of approaching trains.

3.4 Change in Ownership/Access

3.4.1 EXISTING LEGISLATION, REGULATIONS AND POLICIES

Changes in land ownership may bring changes in the owner's right to a crossing, changes to existing agreements, or changes to the status of a crossing.

The most straightforward case occurs when a landowner having a crossing granted "by right" giving access to his land located on either side of the railway tracks sells his land, without subdividing it. In such cases the new owner retains the right to the crossing. Since these crossings are not governed by an agreement with the railway, the new owner is not required to enter into a revised agreement with the railway, and does not pay any fees.

The situation changes when an owner subdivides his property, and may become more complex. Section 102 of the Canada Transportation Act stipulates, "When the construction of a railway line crosses a landowner's land, the landowner has the right to a suitable crossing of the railway." This right is determined based on historical data (i.e., records regarding the previous ownership and subdivision of the land). In cases where land is subdivided and sold, the railway track may no longer sever the owner's property, eliminating the right to a crossing.

The third type of land transfer identified is the sale of land on which a crossing "by grace" (subject to the terms of the agreement between the landowner and the railway) exists. In these cases, the agreement between the railway and the landowner must be modified; the title on the land ownership registry must match the title on the crossing agreement.

Regardless of the type of crossing, there should be a legal mechanism that requires railway notification prior to land ownership or land use changes.

3.4.2 RAIL AUTHORITY NOTIFICATION

During the interviews conducted with railway stakeholders it was indicated that that the second type of land sales identified above (cases where land is subdivided) have caused significant problems. These problems were noted in all regions of Canada, and on all railways. In fact, this was indicated as being one of the most significant difficulties with private crossings in Canada.

Numerous situations have arisen where property has been subdivided, and a lot on one side of the tracks has been sold without any legal access to that lot. The only means of accessing the property is across the railway tracks. Landowners do not realize that the right to the crossing (as per Section 102 of the Canada Transportation Act) is negated upon division of their land, and they falsely assume that the ownership of a crossing comes along with the purchase of land.

From the discussions, it became clear that lawyers/notaries do not verify that there is legal access to a lot before finalizing the land sale. In many cases, land is sold and housing subdivisions are built without any access except across the tracks. Municipalities have issued building permits without ensuring that there is legal access to the new residential area.

Transport Canada and railway representatives have indicated that this is a serious problem that must be addressed. Transport Canada representatives indicated that the railways should be responsible for ensuring that these situations do not occur by identifying activity near the tracks and intervening quickly. Railway representatives indicated that they are not advised, by anyone, prior to or upon the sale or subdivision of land, and that they are therefore unable to intervene until it is too late; they have no control over the use of the crossing. There do not seem to be any standards to control the change in vocation of a crossing, or to support the decision of a railway to ban access to a crossing when such changes occur.

A solution proposed by railway representatives is that municipalities should ensure that access roads are built to existing public crossings (significantly improving safety); that lawyers/notaries/municipalities should be required to verify that there is legal access to land prior to finalizing sales agreements/issuing building permits; and that they be obliged to contact and consult

with adjacent landowners (including the railway) during this process. It was noted that this process had been followed in one recent case in Western Canada with success, but that there does not seem to be any legal requirement to do so. Once houses are built, the crossing becomes used by all residents and is required for emergency services access, and therefore it cannot be closed. The crossing becomes a de facto public crossing, providing unrestricted use that the crossing was not designed for, but does not fall under the responsibility of the road authority because there is no agreement governing it. The railway becomes the only one responsible for the crossing.

For crossings where there is a change in status from a crossing "by right" to a crossing "by grace" the landowner/road authorities requiring the crossing must negotiate with the railway and apply to obtain a crossing "by grace," which must be governed by an agreement. The owner is responsible for the fees associated with the crossing, as per the terms of the agreement with the railway. In these cases, safety concerns arise as the crossings may not be located in the best place in terms of safety, based on the modified usage. Additional safety devices may also be required, based on visibility and changes usage. Cases of this nature may be brought to the Canadian Transportation Agency if the railway and the owner are unable to come to an agreement. If the Agency deems the crossing to be necessary for the owner to enjoy his land, they may issue an order allowing the crossing to remain. Grants to upgrade these types of crossings may be available through the "Grade Crossing Improvement Fund," subject to certain conditions.

3.4.3 AGREEMENT TRANSFER

Railway representatives indicated, once again, that often the railway is not advised during the land transfer process and that new land owners are often unaware of their responsibilities concerning the crossing, including stipulations regarding usage permitted, associated fees, maintenance requirements etc. As well, the new owners are often unaware of the safety implications of owning and using their crossing.

Formal information outlining the owner's responsibilities with respect to a crossing should be provided to the new owner at the time when the new owner takes possession of the land.

Upon the sale of land having a crossing granted "by grace", the new owner must arrange for a revised crossing agreement with the railway, in the name of the new owner. The railway will be required to review the crossing and ensure that it is suitable for the use that is intended by the new owner. This owner is responsible for respecting all clauses of the agreement, including fees and costs of any modifications required to the crossing, based on usage. Due to the fact that the railways are seldom advised of changes in ownership, there are many agreements that are not in the name of the present owner, but rather are still in the name of the original owner.

On occasions where agreements are transferred, often no training/safety information is provided to the new owner. This agreement transfer process could be modified to ensure that safety information is provided.

3.5 Crossing Closure and Consolidation

3.5.1 EXISTING LEGISLATION, REGULATIONS AND POLICIES

Different ways in which crossings may be closed were identified; the three ways discussed are as follows:

Voluntary Closure

The crossing owner may close crossings voluntarily. As discussed in Section 7.5 of Phase 1 of this report, Transport Canada's Grade Crossing Closure Program currently in place offers subsidies to voluntarily close passive crossings permanently. The subsidy offered for the closure of a private crossing is $5,000. This grant is offered to the person with whom the rights to the crossing reside, and in accepting the grant, the owner gives up their right to use the crossing.

Transport Canada representatives interviewed indicated that there has been a varied response to the Grade Crossings Closure program. In certain regions the program is seen to be effective due to the efforts of railways in encouraging owners to close crossings, while there have been no closures in other regions. Both Transport Canada and Railway representatives indicated that the subsidy offered is not sufficient to encourage owners to give up their rights to a crossing. They have indicated that additional subsidies should be available to grant alternative access to property (to permit the closure of private crossings) or to pay for other safety improvements aside from closure.

Transport Canada should have the freedom to provide subsidies to pay for safety improvements and alternative access, in addition to crossing closures.

Transport Canada Order

In addition to voluntary crossing closures, according to discussions with Transport Canada representatives, Transport Canada does have the authority to permanently order a crossing to be closed where there is a threat to safety. This action is rarely taken, however an example of such a situation was provided where Transport Canada ordered the closure of a farm crossing, in the case discussed, the Canadian Transportation Agency was asked to intervene by the crossing owner and the Agency ruled in favour of the closure of the crossing.

One Transportation Safety Board representative interviewed indicated that they feel that Transport Canada needs to have the authority to enforce the closure or consolidation of redundant or unsafe crossings.

Railway Initiated Crossing Closure

Railways, being responsible for safety, may also order the closure of crossings that have been established "by grace", such as where a crossing owner does not respect the stipulations of the crossing agreement that is in place. This seems to be done in extreme circumstances only; in some cases the threat to close the crossing may generate a change in behaviour at the crossing and an improvement in safety. In cases where the railway orders a crossing closed, the owner may appeal to the Canadian Transportation Agency who will review the case. Railways will also remove crossings that are no longer in use.

Railway companies actively promote the closure and consolidation of crossings, and expressed a desire to receive more active participation from Transport Canada in this process, including the desire for Transport Canada to exercise their authority to require the closure of certain crossings for safety reasons. As well, non-financial active involvement in promoting voluntary crossing closures was suggested.

Railway representatives interviewed indicated that it is difficult to close private crossings when the crossing owner involves the Canadian Transportation Agency. The individuals interviewed indicated that the Agency might allow the crossing to be kept even if the railway, supported by Transport Canada, wished to close the crossing for safety reasons. Both Transport Canada and

railway representatives indicated that the Canadian Transportation Agency's decisions seem to go against the desire to close crossings in some cases. They feel that there is not enough interest from the Agency concerning the closure of crossings and that the Agency should be more proactive in this regard when making decisions regarding the authorization of crossings.

3.5.2 NEGOTIATION AND ARBITRATION

Within the context of Transport Canada's grade Crossing Closures Program, some railways have begun contacting crossing owners to review the need for their crossings, and to look at alternative access options. The owner would be the recipient of the federal grant discussed above if they agree to the permanent closure of their crossing.

The Canadian Transportation Agency may become involved in cases where the railway has removed a crossing and the landowner wishes to have the crossing reinstated, and the landowner and the railway cannot come to an agreement regarding the crossing or its status. As well, in cases where the crossing is one that was initially authorized by the Agency, the railway must obtain a new ruling from the Agency to close the crossing.

Railways have made considerable efforts to contact owners of private crossings that are not used, in order to close these crossings. Railways endeavour to close unused crossings as quickly as possible, limiting the possibility of unauthorized use. As well, the railways may negotiate with owners of multiple crossings to consolidate their crossings, or may negotiate the use of a single crossing by multiple users.

It was also indicated that small private crossings for residential use are nearly impossible to close, no matter how dangerous they may be. These crossings are often the only access to the property.

An example was provided of the successful closure of two crossings. In the case presented, the railway was able to convince owners of two separate crossings located near a curve to use a roadway alongside the track instead of their crossing.

Railways also find the there is some confusion regarding the number of crossings that a landowner is entitled to, and that this can cause difficulties when negotiating the closure or consolidation of crossings. They indicated that it would be very useful if there were standards dictating the number of crossings permitted by lot, or the number permitted over a certain length of track. There are cases where 4 or 5 crossings exist, over a distance of 500 feet along the track. As well, the suggestion was provided to establish a distance from a public crossing along which no private crossings would be permitted.

Many stakeholders interviewed indicated that the closure of many private crossings could be accomplished if access roads leading to a public crossing or to a consolidated private crossing could be built. Train crews indicated that the closure of crossings is highly desirable as there are far too many crossings; that many crossings should be consolidated since many are redundant.

3.5.3 CLOSURE PHYSICAL WORKS

The railway must do physical work within the railway right-of-way. When a crossing is closed, all planking is removed, fencing may be added and approaches may be modified or removed.

In some cases, track supervisors are asked to remove crossings that do not seem to be in use. If a request to reinstate the crossing is received by the owner, the crossing will be rebuilt, on the condition that the owner still has the right to a crossing.

On occasion, railways will cut through crossing approaches during ditching works when it appears that a crossing is not in use, limiting access to the crossing. Again, if it is subsequently found that the crossing is required, the approaches are repaired.

Some railways remove seasonal use crossings for the off-season to ensure that they are not used illegally. These crossings are reinstated annually.

4. IDENTIFICATION OF CONTRIBUTORY FACTORS

Based on the Phase 1 work and the analysis of the stakeholder interviews, a number of primary issues have been identified, that solely, or in combination, have the potential to contribute to safety concerns at private rail crossings. Provided below is a summary of these potential contributing factors.

4.1 Comprehensive List of Potential Contributory Factors

To maintain consistency with the rest of the report, the potential contributory factors are presented as they apply to the major stages of the private crossing 'life cycle."

4.1.1 NEW CROSSING SUBMISSION/PROVISIONS

- The CTA decision/arbitration process includes a review of crossing usage and vehicle type; however, there is no legislative/legal documentation of these conditions in the resultant decision. Although it is not a direct safety concern, this deficiency does have implications in other aspects of the crossing "life cycle."

4.1.2 CROSSING CONSTRUCTION

- The primary issue relating to the initial crossing construction is the cost and/or delay associated with the application of technical standards, as most new crossings are built using the guidelines identified in RTD-10. At the time of construction, the crossings are constructed to operate in a safe manner.

4.1.3 OPERATIONS AND MAINTENANCE

- Crossing agreements and owner information need to convey both the owner's and the railways' responsibilities regarding maintenance, vehicle use, access, etc., to establish a permanent record of those responsibilities. The absence of formal records could lead to confusion, disagreements and/or issues that affect safety.

- Currently, there are no enforceable standards for private crossing design and maintenance that can be used to force crossing upgrades (for safety or otherwise). It is a widely held belief amongst railway industry stakeholders that many of the safety issues resulting from inadequate designs and maintenance could be addressed by putting the RTD-10 guidelines into force.

- To compensate for long delays between inspections, there must be an easily accessible, consistent and formal mechanism for the crossing owner to inform the railways of maintenance needs.

- The lack of a comprehensive and current inventory of all private crossings and their owners creates critical communication deficiencies throughout the "life cycle" of a private crossing. Such disconnects in communication compound safety issues by delaying remedial action.

- Unrestricted access to a private crossing is a fundamental safety risk. It allows the crossings to be used by individuals who are more likely to be unfamiliar with crossing use restrictions and emergency procedures.

- Private crossing owners may not understand the responsibility and implications of authorizing the use of their crossing by others. This may include employees (permanent or temporary), visitors, recreational users, or negotiated property access.

- Improper use of access control devices poses a safety risk that is at least as significant as unrestricted access. For example, stopping on the railway tracks to unlock a gate is a serious safety hazard.

- The lack of standard regulatory, warning and information signs could result in improper use of crossings due to drivers not being familiar with the signs used.

- A poorly marked or maintained crossing may lead an unfamiliar user to incorrectly assume that the railway operations are not active or a substantial threat.

- The standard practice of not whistling at private crossings might be resulting in an unnecessary safety risk, especially given the proven safety benefit shown at public crossings.

- Many crossing users are unfamiliar with the appropriate action to be taken in the event of an incident at a crossing. As such, emergency contact numbers have repeatedly been identified as a critical piece of information that should be clearly posted at every crossing.

- Use of a private crossing by a vehicle for which it was not designed is a fundamental safety issue. Therefore, it is imperative that the owners, users, and the railways be aware of the types of vehicles for which the crossing is designed and is being used throughout the crossing "life cycle."

- Safety information and education is does not always reach and impact its target audience. Therefore, the need for safety information and education is at the site not in a general public information campaign.

- There are currently no formal mechanisms for railways to inform crossing owners to that train activity at a particular crossing is changing. The complacency that can develop on the part of the crossing user increases the risk of incidents when normal train activity changes, and no warning is provided.

4.1.4 CHANGE IN OWNERSHIP/ACCESS

- Regardless of the type of crossing, there should be a legal mechanism that requires railway notification prior to land ownership or land use changes, to increase the likelihood that information reaches the appropriate parties.

- Formal information outlining the owner's responsibilities with respect to a crossing should be provided to the new owner at the time when the new owner takes

possession of the land, which would help the transition process and reduce breakdowns in communications.

4.1.5 CROSSING CLOSURE AND CONSOLIDATION

- Transport Canada does not have the freedom to provide subsidies to pay for safety improvements and alternative access, in addition to crossing closures, to provide a safer transportation environment for as many people as possible. In some cases a railway crossing is the only feasible option for accessing a parcel of land.

5. RISK MITIGATION STRATEGIES

Each of the safety-related issues identified in Sections 6 and 7 were reviewed to determine potential approval, legal/regulatory, physical and/or operational strategies, which would address their fundamental cause. Outlined in **Exhibit 5-1** is a summary of the potential risk mitigation strategies.

Exhibit 5-1: Potential Risk Mitigation Strategies

Contributory Causes	Potential Risk Mitigation Strategy
New Crossing Submission and Approval:	
• Railway/land owner agreements are not created for all crossings	• Railway/land owner agreement must be created for all private crossing regardless of type: “by right” or “by grace”
• Agreements and CTA decisions do not document crossing use and vehicle type permissions	• Agreements and CTA decisions must explicitly document intended crossing use and vehicle type at time of approval
Operations and Maintenance:	
• Railways are not properly notified of changes in crossing use or vehicle type	• Crossing owners should be provided with explicit information regarding their crossing permissions. This could be conveyed through the railway/owner agreement and reiterated in a crossing owner “information package”.
• Crossing owners need explicit information regarding the use and operations of their crossing	• Crossing owners need explicit information regarding their crossing responsibilities, use, maintenance, liabilities and communication protocol
• Railway operators do not have a comprehensive list of private crossing nor their ownership	• Establish a comprehensive and current list of private crossing locations and ownership status.
• Unfamiliar or infrequent users of a private crossing are not provided with education with regards to the crossing operations	• Create and distribute one comprehensive crossing owner’s information package, which outlines basic safety at private crossing education materials, including contact information.

Contributory Causes	Potential Risk Mitigation Strategy
• Unfamiliar or infrequent users of a private crossing are not always provided with widely recognized and understood regulatory, warning and information signs. • Emergency contact information is not provided at the crossing site. • Poorly marked or maintained crossing may lead an unfamiliar user incorrectly assuming the railway operations are not active or a substantial threat.	• Crossbucks, stop signs and emergency contact numbers must be posted at all private crossings and kept in a good state of repair
• Crossing owners may not understand the responsibility and implications of authorizing the use of their crossings by other	• Create and distribute one comprehensive crossing owner's information package, which outlines the safety implications and responsibilities of allowing access to their private crossing.
• Crossing owners are not provided with procedures or contact information to convey maintenance or operational issues to the appropriate rail official	• Create and distribute one comprehensive crossing owner's information package, which outlines rail general and emergency contacts and basic crossing maintenance and operations information, i.e., sight lines, approach condition, etc.
• There are no standard designs or operating procedures for access control devices such as gates	• Develop standard access control applications.
• There are no formal mechanisms for railways to inform crossing owners that train activity at a particular crossing is changing	• Establish a comprehensive and current list of private crossing locations and ownership status.
Change in Ownership/Access:	
• Railways are not properly notified of changes in ownership	• Legal transfer of lands adjacent to rail right-of-way must include railway notification or approval
• Railways are not properly notified of changes in land use permissions	• Municipalities should treat railways as stakeholders for development next to railway rights-of-way.
• Owners/potential owners are not properly notified of their crossing operations and ownership responsibilities	• Crossing owners should be provided with explicit information regarding their crossing permissions • Legal transfer of lands adjacent to rail right-of-way must include railway notification or approval • Private crossing information must be forwarded to new owner with real estate documents. A crossing owner information package would facilitate this process.
Crossing Closure and Consolidation:	
• The ability to reduce the number of private crossings is limited to the crossing closure incentive program and limited railway/owner negotiations.	• Transport Canada should have the freedom to provide subsidies to pay for safety improvements and alternative access, in addition to crossing closures.

The intention is to carry forward these potential risk mitigation strategies into Phase 3 of the study where each strategy will be further described in terms of applications, benefits, delivery participants/responsibility, costs, funding sources and implementation issues.

6. OVERALL FINDINGS

Based on the work completed as part of the Phase 2 component of the Safety at Private Crossing Study, a number of fundamental policy, operation, and communication/ documentation deficiencies were identified that have the potential to affect the level of safety at a private rail crossing. The objective of Phase 3 of the study, outlined in the following section, will be to assess the application of the preliminary risk-mitigation strategies, their benefits, costs and implementation feasibility.

7. PHASE 3 WORK PLAN

7.1 Introduction

In July 2005, IBI Group in association with UMA Engineering Ltd. was retained to complete a study to identify and examine the key factors or drivers of safety at farm and private crossings (Reference Number: T8200-044506). The first task of the study is to provide a detailed work plan and schedule to complete the project

This document represents the proposed work plan and schedule derived from the Project Implementation Plan and the IBI Group Team proposal submission.

7.2 Communication and Project Management

Provided below in **Exhibit 7-1** are the key contacts for the project management of the Safety at Farm and Private Crossings project. Day-to-day project management and correspondence will be communicated between the TDC and IBI Group Project Manager. Alternative contacts for the IBI Group Team are also noted below.

Exhibit 7-1: Phase 3 – Primary Study Contacts

Project Role	Contact Information
Technical Authority Transportation Development Centre Project Manager	Anthony Napoli Senior Project Manager Transportation Development Centre Transports Canada 800 West Rene Levesque Blvd, 6th Floor Montreal, Quebec, H3B 1X9 514-283-6609 Fax: 514-283-7158 napolia@tc.gc.ca
IBI Group Team Project Manager	Ron Stewart, P. Eng. Associate Director 230 Richmond Street West Toronto, Ontario, M5V 1V9 416-596-1930 X1347 Fax: 416-596-0644 rstewart@ibigroup.com

Project Role	Contact Information
IBI Group Deputy Project Manager	Russell Brownlee, P. Eng. Associate 230 Richmond Street West Toronto, Ontario, M5V 1V9 416-596-1930 X1344 Fax: 416-596-0644 rbrownlee@ibigroup.com

7.3 Project Schedule and Project Progress

The TDC Project Implementation Plan and IBI Group Team proposal identified a one-month duration for Phase 3 of the study. It is proposed that this project timeline be maintained.

Project progress reports will be prepared in the format specified in the project RFP and as identified in the project schedule. Progress reports will be submitted prior to Project Steering Committee (PSC) meetings and approximately on a monthly basis.

7.4 Work Plan

Provided below is a summary of the detailed work plan for Phase 3 of the subject study. For each task, the activities, deliverables and assistance/data/information to be supplied by others are identified.

7.4.1 TASK 3.1 – DEVELOP CONCLUSIONS AND RECOMMENDATIONS

For this task, the IBI Group Team will:

- Develop a set of risk mitigation strategies and outline the:
  - Primary benefits of each strategy and its application to a specific contributory factor or group of factors;
  - Implementation of pilot or trial projects, preliminary study designs (including potential deployment milestones) and future research requirements for each;
  - Probable delivery participants and if applicable, potential partnerships initiatives;
  - Budgetary level costs and potential funding sources; and
  - Potential barriers to implementation including legal, regulatory, project finance, technical, land owner acceptance.

Deliverables:

- To be incorporated into the Final Report.

Assistance/Data/Information to be Supplied by Others:

- None identified.

7.4.2 TASK 3.2 – FINAL DOCUMENTATION

For this task, the IBI Group Team will:

- Prepare a draft of the final report in accordance with TDC Publication Standards and Guidelines for Contractors (TP 929), which will include:
  - An executive summary;
  - A description of data/information sources, study methodologies and task findings; and
  - Conclusions and recommendations including future directions and implementation thereof.
- Meet with the PSC (PSCM #10) to present the rationale behind the conclusions and recommendations and receive input.
- Prepare a final draft of the report, incorporating input from the PSC;
- Upon acceptance, digital and hard copies of the final report in English will be provided to the Technical Authority for translation; and
- Provide the Technical Authority with the final version of the reports.

Deliverables:

- Draft project report;
- Meeting minutes from PSC Meeting #10; and
- 100 copies in English and 50 copies in French of the final report. In addition, camera ready and digital copies of the report will be provided in accordance with Section 8.3 of the RFP.

Assistance/Data/Information to be Supplied by Others:

- Technical Authority and PSC to review and comment on the draft Project Report.

7.5 Phase 3 Budget

The Phase 3 Budget will be $20,190.00. This represents no change from the current contract.

APPENDIX A

STAKEHOLDER INTERVIEW NOTES

Safety at Private Crossings – Crossing Owner #1

Discussion Item	Applicability
Where are your private crossing(s) located? Were you the land owner/user prior to the crossing's construction, or has it always been there? The crossing is located at St-Charles de Bellechasse, Québec. The crossing has been there since we have owned the property.	
Do you know the railway name, the subdivision and the mileage point that corresponds to your crossing? The railway concerned is CN. The subdivision and mileage point are unknown.	**T**
Do you know whom to contact, and how to contact them, if a problem arises at your crossing? No.	**M** **C**
Could you briefly describe the characteristics of the private railway crossing, and the challenges you have met? *Number of lanes to cross?* One railway line. *Type of surface on approach (i.e. paved, treated, boards, gravel/sand, etc.)?* The approaches are gravel. *The size, slope or state of the crossing?* The approaches are one lane wide. The crossing is in good condition. The approach slopes were lessened compared to those that were there in the past. *The physical environment surrounding the crossing (i.e. curves in the road or railway, hills or slopes, lines of sight, etc.)?* The visibility is very good. The trees have been cut in order to ensure adequate visibility. *Questions of maintenance?* Maintenance is done well by CN.	**M** **M**
Does your private crossing have a warning system or some other device that advertises the presence of an oncoming train (i.e. an automatic warning system, mirrors, etc.)? There are stop signs as well as crossbucks installed on either side of the line.	**W**

Discussion Item	Applicability
Can you hear the train whistle beforehand from a nearby public crossing? If this is the case, do you consider this to be a significant security benefit for your crossing? No, the train's whistle at public crossings is not heard at this location.	**W**
Regarding private crossing(s) that you have or use: *Who uses it? How often is it used? Are there times of day, week or year where the frequency of use changes significantly?* The crossing is used by company employees, as well as owners of nearby neighbourhood cottages. The crossing is used from May to November, and is travelled more frequently Monday to Friday. There are approximately 50 to 60 users who use the crossing each day. *What types of vehicles use the crossing (ex. Passenger vehicles, trucks, heavy equipment, recreational vehicles, farm equipment, etc.)? Do you know how long it takes these vehicles to cross?* Cars, 10-wheel trucks transporting peat, tractors and low-floored tractor-trailers use this crossing. The approaches were modified so that the trucks with low floors could safely cross the railway. He is not sure of the time required to stop, to start up again and clear the crossing. *Are there operating features of the vehicles that affect the detection of approaching trains or could have an impact on the release time of the crossing?* No. *Are there any particular conditions concerning line of sight or lighting that affect the crossing?* No. *Do all of the trains that travel on your crossing pass at about the same speed or do speeds vary significantly? Do you know at what speeds they move, approximately?* The train speeds vary. Ultramar's "Ultra-Train" passes slowly. Other trains carrying passengers pass more quickly. *What safety precautions or training, if necessary, do those using the crossing receive?* There are regular meetings with employees. Employees are advised to obey the railway crossing stops at all times. No safety information was ever received from the railway.	**U** **V** **T** **O** **T**

Discussion Item	Applicability
Can you comment on the effect of environmental conditions on visibility and the time it takes to travel across the crossing? No comment. The crossing is never used in the winter.	
What legislation are you aware of that affect crossing operations? Can you comment on exchanges or communication you've had with a rail company or with a regulator regarding possession, operations or access to your private railway crossing? He knows a little about legislation. They asked the railway to install a system with lights and barriers. The railway recommended a system that could be placed at the owner's expense at a cost of approximately $300 000. They decided to keep the stop signs. In the case of a power failure, the stop signs would be safer than a system of lights that isn't functioning properly.	**A**
Based on your experiences, what modifications (physical or procedural) would you suggest to improve the safety of private crossings? The addition of lights and barriers would improve safety at this crossing. There has already been an incident at this crossing, where a train hit a truck. The train now whistles at the crossing.	**C**
Is there any other information or personal experience you would like to share relating to the overall safety of railway crossings or to a problem with your crossing? Safety is the primary goal at this location. He has always wanted to have an automatic warning system with lights and barriers, but doesn't understand why the costs are so high. He would like to get a subsidy for this system. They considered installing an ordinary traffic light at this location but this is not safe in a power outage. So, this type of system is not good enough. The system has to be safe at all times.	**W** **C**

Safety at Private Crossings – Crossing Owner #2

Discussion Item	Applicability
1. *Where is the location of your private crossing(s)? Did you own/use the property prior to the private crossing being built, or has it always been there?* There are 2 crossings, located about 9.5 miles apart, leading from the highway to 2 camps. These crossings existed prior to his purchase of the land. These crossings give access to other peoples camps as well, and a lake, and also serve as a fire road for these camps.	**U**
2. *Do you know the name of the railway, subdivision, and mileage marker that correspond to your crossing?* • North East Railway (former CN line); • One crossing is located at mile 34.1, but unsure of the name of the subdivision. The second crossing is located 9.5 miles from the first	
3. *Do you know who to contact, and how to contact them, in the case that there is a problem at your crossing?* Yes, although it took some time to obtain this information, eventually the name of the correct contact person was provided by someone at Transport Canada, and the telephone number was found in the Yellow Pages.	**M**

Discussion Item	Applicability
4. *Could you briefly describe the characteristics and any particular challenges you have with the private crossing?* *4.1. Number of tracks to cross?* One track to cross. *4.2. Approaches to the crossing, i.e., paved, surface treated, planks, gravel/dirt, etc.?* One of the crossings is elevated, with a difference in elevation of about 8ft. from the ground to the rail, the approach grades are quite steep. The second crossing is quite flat. The crossing surfaces are made of planking, and the approaches are gravel. *4.3. Width, grade or condition of the crossing?* The crossings are about 12ft wide. *4.4. Physical surrounding of the crossing, i.e., roadway or railway curves, hills or grade issues, sightlines, etc?* The track is straight, for about 50 miles, visibility is good, except when brush is allowed to grow to the point where it restricts sightlines. *4.5. Maintenance issues?* There have been difficulties with the crossing maintenance. There was a situation where a car caught the planking of the crossing, and subsequently a second car caught the planking. It took many phone calls before the crossing was repaired, initially the railway did not respond to the phone calls. Eventually, once the correct contact person was found (through Transport Canada) repairs were made. At one of the crossings, the railway does a poor job of ensuring that brush is cut to ensure that there are adequate sightlines for those using the crossing. In particular, sightlines are poor for passenger car drivers.	**M** **C** **M** **M**
5. *Does your private crossing have a warning system or other device that assists in determining the presence of an approaching train (i.e., automated warning system, mirrors, etc.)?* No, there are no cross-bucks either. One of the crossings has a stop sign in place.	**W**
6. *Do you ever hear train whistles from nearby public crossings? If so, do you consider this to be a significant safety benefit to your crossing?* Yes. There are public crossings located near both of the crossings. Train whistles at these crossings provide a significant safety benefit.	**W**

Discussion Item	Applicability
7. In relation to the private crossing(s) that you have or use:	
7.1. Who uses the crossing? How often is it used? Are there particular times of the day, week or year, where the frequency of use changes significantly? The crossings are used by owners of the camps. There is no traffic in the winter, most use occurs in the summer and in the fall.	**U**
7.2. What types of vehicles use your crossing (e.g., passenger vehicles, trucks, heavy construction equipment, recreational vehicles, farm equipment, etc.)? Do you know how long it takes for those vehicles to clear the crossing? The crossing is used by passenger cars and ATVs. It only takes seconds for them to clear the crossing. In the past, once of the crossings was used by logging trucks (no longer the case, the land has now been cleared). The approaches were built up for use by the logging trucks at the time. Also, these trucks tended to block the highway (60 ft between the highway and the track) when crossing the track.	**V**
7.3. Are there any vehicle operating characteristics that affect the detection of approaching trains or that would impact its time to clear the private crossing? No.	
7.4. Are there any particular sightline or lighting conditions that affect the operations at the private crossing? The only ongoing issue is brush that needs to be cleared as it blocks sightlines.	**M** **C**
7.5. Are all the trains that pass your crossing travelling at roughly the same speed, or do their speeds vary significantly? Do you know approximately how fast they are moving? Speeds vary; there are passenger trains that travel at about 60mph, and freight trains that are slower. As well, there is a siding located close to one of the crossings, trains entering/exiting travel at different speeds. There are some slow orders at times as well.	**O**
7.6. What, if any, precautions or training are given to the people using the crossing in regards to safety? None.	**T**
8. Can you comment on the effects of environmental conditions on visibility and the time it takes to clear the private crossing? No problems experienced to date.	

Discussion Item	Applicability
9. What legislation are you aware of which affects the operation of the private crossing? Can you comment on any dealings or communications you have had with any railway or regulatory authority in relation to the ownership, operations or access relating to your private crossing?	
Dealings with the railway were not simple, until someone provided the correct contact person. Would like to know more about the status (farm/private) of the 2 crossings.	**A**
10. Based on your experience, what modifications (physical or process-based) would you suggest to improve safety at private crossings?	
• Keep the brush cut to improve visibility;	**M**
• Install stop signs at all private/farm crossings;	**W**
• All crossings that do not have bells should have stop signs installed.	**W**
11. Is there any other anecdotal information or personal experience that you would like to share, with respect to overall private crossing safety or your specific location?	
The owner was not provided any information about the crossings when he purchased the properties. He recently purchased his second parcel of land and was not provided any information about the crossing. He was later told that the crossing was a private one and that he would have to pay to maintain it, even though tit leads to other peoples' property as well. Eventually it was determined that it is, in fact, a farm crossing.	**A**
He is aware of an instance when someone sold their property because they were unable to use the property since the railway would not allow them to have a crossing in order to access it. The new property owner fought to have a crossing and was granted one in order to access the same plot of land.	**A**

Safety at Private Crossings – Crossing Owner #3

Discussion Item	Applicability
Where are your private crossing(s) located? Were you the land owner/user prior to the crossing's construction, or has it always been there? The crossing existed before Robert Transport was present. The crossing is located in the middle of the land. The lot is cut by the railway line. Robert Transport purchased the land on the other side of the rail line. They received permission from CN to have a railway crossing.	
Do you know the railway name, the subdivision and the mileage point that corresponds to your crossing? The railway name is known (CN), and the other information is stored on file.	
Do you know whom to contact, and how to contact them, if a problem arises at your crossing? Yes. They have a toll-free number for CN. They have contacted CN in a case of defectiveness, broken equipment (barriers). There haven't been any incidents to date.	

Discussion Item	Applicability
Could you briefly describe the characteristics of the private railway crossing, and the challenges you have met? *Number of lanes to cross?* One rail line. *Type of surface on approach (i.e. paved, treated, boards, gravel/sand, etc.)?* The crossing is paved, with mud rails. It consists of a private road with controlled access. The yards on either side of the rail line are fenced. The crossing was built according to very high standards and according to the requirements of the vehicles circulating. Also, there is private signalisation that was added and trained. The approaches are channelled with company barriers, which are equipped with a magic eye to sense vehicles (barriers do not work with pedestrians), giving access to the crossing situated ± 75 feet in front of the railway barriers. The private barriers do not lower if the truck has not yet completely crossed the passageway so that the truck can always cross completely. The approaches are constructed in such a manner that only one truck at a time in either direction can cross. Vigilance is required, nevertheless, because the yard barriers are not connected to those of the railway crossing. The fact that the yard barrier is open does not guarantee that there is no train. The railway lights should always be minded. *The size, slope or state of the crossing?* The approaches have a slight slope. The crossing is well maintained. *The physical environment surrounding the crossing (i.e. curves in the road or railway, hills or slopes, lines of sight, etc.)?* The lane is straight, without curves. The yard is mostly used for trailer parking. The approaches are well built and do not obstruct visibility. *Questions of maintenance?* Call the railroad in case of difficulties. There haven't been any problems he is aware of.	
Does your private crossing have a warning system or some other device that advertises the presence of an oncoming train (i.e. an automatic warning system, mirrors, etc.)? Yes, there is a complete system with flashing lights, warning sounds and barriers. Additionally, there is a sign describing the "modus operandi" to use the crossing and the approaches (company barriers, railway barriers, etc.)	

Discussion Item	Applicability
Can you hear the train whistle beforehand from a nearby public crossing? If this is the case, do you consider this to be a significant security benefit for your crossing? Yes, there is a public crossing located ± 300 metres from this private crossing.	
Regarding private crossing(s) that you have or use: *Who uses it? How often is it used? Are there times of day, week or year where the frequency of use changes significantly?* The crossing is used often. There are few times when the crossing is not used. The crossing is a connection between two areas. There are lots of heavy vehicles that travel between the two yards. The yards are made up of warehouses, parking and offices. The crossing is used more often during rush hours (05:00 to 08:00 and 15:00 to 19:00) *What types of vehicles use the crossing (ex. Passenger vehicles, trucks, heavy equipment, recreational vehicles, farm equipment, etc.)? Do you know how long it takes these vehicles to cross?* There are some cars, but mostly trucks, heavy equipment and semi-trailers, which roll at low speed. Trucks with 53 ft trailer take ± 5 to 8 seconds to traverse the crossing. *Are there operating features of the vehicles that affect the detection of approaching trains or could have an impact on the release time of the crossing?* Yes. Drivers should never change gear when crossing the rail line (manual transmission). With the new automatic transmissions, the clutch is computer controlled but the vehicle still should not stop and start while crossing the rail line. For this type of transmission, there can be a slight delay when starting to move the truck forward. So, drivers must still pay attention to avoid action that could cause the truck to stop, even with an automatic transmission. Ex. Drivers have a bad habit of stopping after they've crossed the barrier if they see the lights begin to flash. This crossing is built at a 90˚ angle to the railway line. The long truck cabins do not impair the visibility of this type of crossing. On the other hand, if the crossing angle is more severe, the driver must stop and get up to see out of the passenger window to see what is on the right-hand side of the vehicle (based on experiences at other locations.)	

Discussion Item	Applicability
Are there any particular conditions concerning line of sight or lighting that affect the crossing? Well lit even at night (the yard is well lit), visibility is not a problem. *Do all of the trains that travel on your crossing pass at about the same speed or do speeds vary significantly? Do you know at what speeds they move, approximately?* The speeds of the trains can vary. This crossing is located near a residential area and a switchyard where there are railway operations. There are no passenger trains and the trains do not travel at high speeds.	
What safety precautions or training, if necessary, do those using the crossing receive? Training is given to operators and there are clear guidelines attached to the crossing, which are useful to all, but mostly for the drivers of non-company cars that are driving in the yards. Also, there is some training given to non-drivers that includes general safety training.	
Can you comment on the effect of environmental conditions on visibility and the time it takes to travel across the crossing? There are few difficulties (system automated with barriers) in addition to the company barriers. The drivers are aware of the crossing because is it very well marked. Visibility is nevertheless good (locomotive light) even with rain and snow. Fog is very rare.	
What legislation are you aware of that affect crossing operations? Can you comment on exchanges or communication you've had with a rail company or with a regulator regarding possession, operations or access to your private railway crossing? The only known legislation is the road safety code. There have been no exchanges with rail companies except for repair.	
Based on your experiences, what modifications (physical or procedural) would you suggest to improve the safety of private crossings? Having driven the trucks in the large rail company yards, there should be improvements to the crossing angle (an angle hinders visibility) and there should be indications and lights/barriers to the crossings in the yards, particularly since there are other vehicles travelling around.	

Discussion Item	Applicability
Is there any other information or personal experience you would like to share relating to the overall safety of railway crossings or to a problem with your crossing? In situations where barriers are broken by a truck, the cause is often hesitation on the part of the driver when the lights start to flash. It would be desirable for the barriers of the company to be interconnected with those of CN. It seems it is not possible.	

Safety at Private Crossings – Crossing Owner #4

Discussion Item	Applicability
1. *Where is the location of your private crossing(s)? Did you own/use the property prior to the private crossing being built, or has it always been there?* The crossing is located off the highway, 4.5 miles south of Carberry, Manitoba, and it gives access from the highway to the golf course. There is about 70 to 80 feet between the highway and the track. The crossing is at 90% to the track. The crossing was already there when the land for the golf course was purchased in 1983 (the land was a farm before).	
2. *Do you know the name of the railway, subdivision, and mileage marker that correspond to your crossing?* The track belongs to Canadian National, on the Carberry Subdivision, unsure of the mileage point.	**M**
3. *Do you know who to contact, and how to contact them, in the case that there is a problem at your crossing?* If there is a problem, they are to contact CN in Brandon, Manitoba, unsure of the telephone number to use.	**M**
4. *Could you briefly describe the characteristics and any particular challenges you have with the private crossing?* *4.1. Number of tracks to cross?* One track to cross. *4.2. Approaches to the crossing, i.e., paved, surface treated, planks, gravel/dirt, etc.?* The approaches are gravel. *4.3. Width, grade or condition of the crossing?* The crossing was rebuilt last year and is in excellent condition. The approaches are flat and are 16 to 20 feet wide. *4.4. Physical surrounding of the crossing, i.e., roadway or railway curves, hills or grade issues, sightlines, etc?* There is a curve in the track about 800 yards away from the crossing, with a steep grade. There is good visibility to the end of the curve on one side, and on the other side of the crossing there is good visibility for at least 1 mile. *4.5. Maintenance issues?* The crossing is very well maintained.	**M**

Applicability:
A – Arbitration or Negotiations, **C** - Collision Risk/Safety Issues, **M** – Crossing Maintenance, **O** - Operations and Maintenance Procedures, **R** - Regulations, **S** – Crossing Security and Access, **T**- Training/Awareness, **U** – Crossing Utilization, **V** – Types of Vehicles, **W** – Warning System/Signage

Discussion Item	Applicability
5. *Does your private crossing have a warning system or other device that assists in determining the presence of an approaching train (i.e., automated warning system, mirrors, etc.)?* There are crossing signs and stop signs on both sides of the tracks. There are no lights, bells or crossing arms.	**W**
6. Do you ever hear train whistles from nearby public crossings? If so, do you consider this to be a significant safety benefit to your crossing? There is a public crossing about 1 mile away, but they don't always hear the train whistle. The train speeds are low, about 15 mph, so it takes a while for the train to get to the golf course crossing. The whistle at the public crossing does not provide much of a safety benefit.	**W**

Discussion Item	Applicability
7. *In relation to the private crossing(s) that you have or use:* *7.1. Who uses the crossing? How often is it used? Are there particular times of the day, week or year, where the frequency of use changes significantly?* The crossing is used by golf course users (members and the public). The course is open from April until the end of October. There are a few hundred cars per day, plus occasional delivery trucks. As well, one farmer uses the crossing a few times per year to haul hay from land that the golf course leases out to him. *7.2. What types of vehicles use your crossing (e.g., passenger vehicles, trucks, heavy construction equipment, recreational vehicles, farm equipment, etc.)? Do you know how long it takes for those vehicles to clear the crossing?* 90% of the vehicles using the crossing are passenger cars, the remaining 10% is delivery trucks and the occasional farm truck and hay wagon. It takes a few seconds for cars to cross the tracks. *7.3. Are there any vehicle operating characteristics that affect the detection of approaching trains or that would impact its time to clear the private crossing?* No. *7.4. Are there any particular sightline or lighting conditions that affect the operations at the private crossing?* Nothing significant. There are dusk to dawn lights in the parking lot located about 100 yards away from the crossing, and the trains have bright lights. *7.5. Are all the trains that pass your crossing travelling at roughly the same speed, or do their speeds vary significantly? Do you know approximately how fast they are moving?* All trains travel at about 15mph, there is a steep grade limiting their speed. There is 1 coal train per day plus the occasional extra train. *7.6. What, if any, precautions or training are given to the people using the crossing in regards to safety?* No particular training or precautions are given.	**U** **V** **O** **T**
8. *Can you comment on the effects of environmental conditions on visibility and the time it takes to clear the private crossing?* There have been no issues to date, no fog or adverse conditions. As well, there is good visibility and train speeds are slow.	

Discussion Item	Applicability
9. *What legislation are you aware of which affects the operation of the private crossing? Can you comment on any dealings or communications you have had with any railway or regulatory authority in relation to the ownership, operations or access relating to your private crossing?* Pleased with dealings with the railway to date. At one point, CN wanted to close the crossing. The golf course has rights to a crossing at another location, however this second location is on a curve in the track. In the end, CN agreed to leave the crossing in its existing location. The golf course has an agreement in place with the railway and pays maintenance fees for the crossing.	**A**
10. *Based on your experience, what modifications (physical or process-based) would you suggest to improve safety at private crossings?* The crossing to the golf course is quite safe. The addition of flashing lights and a bell would further enhance safety as they draw extra attention to the crossing.	**W**
11. *Is there any other anecdotal information or personal experience that you would like to share, with respect to overall private crossing safety or your specific location?* Nothing further.	

Safety at Private Crossings – Crossing Owner #5

Discussion Item	Applicability
The crossing was first authorized in 1992 for the previous owner; the crossing agreement was transferred/renegotiated, by the owner's son, when the land was purchased.	**A**
If there were ever a problem with the crossings, the owner would contact the track maintenance supervisor for the area.	**O**
Crossing Characteristics: • One set of tracks to cross (used to be two); • Approaches are gravel roads; • There is a downhill grade leading towards the crossing on the road side (terrain is level at the crossing), there is a locked gate near the crossings on the road side, which was request by CP as part of the crossing agreement; • The crossing surface is approximately 25 feet wide (standard is 16 feet); and • As part of the crossing agreement, the owner is responsible for clearing brush around the crossing; the railway does all other maintenance.	**A, S, O**
There are whistle posts on at least one (probably both) side of the crossing; on that side the tracks curve in the distance. There are no other warning systems at the crossing.	**W**
Camp members are the only ones authorized to use the crossing. There are 20 members, but only 10 have cabins on the land, at present. The crossing is used infrequently in the winter.	**U**
Traffic at the crossing is composed of passenger cars and pickup trucks.	**V**
All trains that pass the crossing are travelling roughly the same speed (50-60mph), and they are all freight trains.	**V**

Discussion Item	Applicability
All crossing user are told to keep the gate closed and locked at all times, as stipulated in the crossing agreement. The requirement to stop, get out of the vehicle, and unlock/open the gate when crossing acts as a safety procedure, and requires users to think about the crossing often.	**S, T**
Winter maintenance (e.g., snow clearing) conducted by the railway prevents any environmental issues at the crossing.	**M**
In general, the experience of dealing with the railway has been easy and friendly. The owner pays an annual fee for the crossing and also has liability insurance for the crossing, as part of the agreement with the railway.	**A**
Whistle posts at all private crossing accessible to the public would be a good way of improving safety.	**W**

Safety at Private Crossings – Crossing Owner #6

Discussion Item	Applicability
The crossing is about 3km outside of the town of Wabigoon, ON. It is a driveway crossing on the north edge of the property. The current owner acquired the land in 1998; however, the owner estimates that the crossing has been around for about 80 years.	**A**
The only communications between the owner and the railway have been related to the payment of the annual crossing fees.	**A**
Crossing characteristics: • 2 sets of tracks; • Gravel road approaches; • Crossing surface is timber planks (roughly 16' wide); • The approach form the road to the crossing is fairly level and the there is a slight grade from the property to the crossing; • Visibility at the crossing is good (open fields, no hills, curves or cuts); and • There have been no issues with respect to crossing maintenance.	**C, M**
The only warning devices at the crossing are crossbucks.	**W**
There is a public crossing approximately a half-mile to the east. The train whistle for that crossing can be heard, and the owner considers that a safety benefit.	**W**
There are two homes on the property; family and friends of the homeowners use the crossing, as do patrons of the weekend storage business that is operated by the owner. Vehicle composition is mostly passenger cars; however, storage traffic can include RVs, boats on trailers, and infrequently tractor-trailers.	**U, V**

Discussion Item	Applicability
Most of the trains that pass the crossing are traveling the same speed (estimates roughly 50mph).	**U**
Crossing users are given no formal training.	**T**
It is possible that the approaches could get slippery if there was freezing rain; the municipality owns the road on both sides of the crossing, and they are responsible for snow removal and de-icing.	**O**
The owner is not familiar with the regulations that govern private crossings. Plans to further develop the land were disrupted when the municipality sided with the railway's objections to the development.	**R, A**
Safety could be improved through better communications between the railway and owners, enforceable safety regulations, and "simple" automatic warning systems.	**A, R, W**
There have been a number of crossing incidents in the area recently, so the general public might be more aware of the dangers, and it might be a good time to enact an education campaign.	**T**

Safety at Private Crossings – Crossing Owner #7

Discussion Item	Applicability
Three adjacent landowners use the crossing for farming purposes. There is also a cattle underpass at this location (not in use). At times, there is a warn, dirt path that links the crossing to Fairview Line.	**U**
The relative location or the crossing and subdivision name are known, but not the exact mileage.	
Owner is aware of the 1-800 emergency contact numbers for crossings, but doesn't have the number at home.	**T**
Crossing Description (photos were provided by owner): • Crosses 2 sets of tracks; • Approaches are grass and dirt with a 6-8% grade; • Crossing surface: wood planking, asphalt, and loose stone (currently in a state of disrepair, but according to track supervisor maintenance is scheduled); • Adjacent land on both sides is flat ploughed fields; and • Sightlines were cleared in recent years and generally allow for good visibility.	**M**
The crossing currently features no advanced warning systems or signage.	**W**
Trains must whistle at the HWY 40 crossing, which can be heard at the private crossing.	**W**
Crossing users consist of three people from three farms and on rare occasions a neighbour. The crossing is used an average of 10 times per year between may and October.	**U**

Discussion Item	Applicability
The vehicles using the crossing are farm pickups and tractors with ploughs, which take a maximum of 1 minute to make a crossing.	**V**
No formal training is provided to crossing users, they all use cautions and their own discretion when crossing.	**T**
The crossing was established "by right" many years ago. The current owner is the third owner of the land divided by the railway.	**A**
Safety Improvement Recommendations: • Safety information mailed along the annual crossing invoice; • Warning signs (e.g. crossbucks); • Post emergency contact numbers at private crossings; and • Gates are not necessary in most cases.	**S, T, W**

Safety at Private Crossings – Crossing Owner #8

Discussion Item	Applicability
There is a CN depot just down the road that is where he would go if there were a problem at one of the crossings. He also has the mailing address for a contact a CN if there were a less urgent issue.	**O**
Crossing characteristics are as follows: • Two sets of tracks; • Gravel/dirt approach, which is pretty steep and should probably be longer; • Surface is 20' wide timber planks; • The land on both sides of the crossings is worked (i.e., fields); • The crossing at the 210.1 mark is on a curve (CN has expressed that they would like to close the crossing due to sightline issues; and • All three crossings are well maintained.	**C, M**
There are no warning systems at any of the crossings. A letter was received from CN stating that they were going to install mirrors at the crossing, but it never happened.	**W**
There is a public crossing at a side road 1 mile east of the crossings where trains whistle, and it provides some advanced warning of westbound trains.	**W**
The owner and part-time help are the only users of the crossing. The crossing is used almost daily in the spring, summer, and fall, but very infrequently in the winter.	**U**
Traffic at the crossing is made up of pickup trucks and various types of farm equipment.	**V**
Train speeds vary significantly, the crossings are located on a high-speed corridor. Both passenger trains and freight trains used the corridor (46 trains per day, 24 passenger and 22 freight).	**U, V**

Discussion Item	Applicability
The only recent dealing between the owner and the railway company has been regarding the closure of the crossing at mile 210.1. In the past the railway has been very good about reinstalling the crossings when they have been removed for track maintenance.	**O**

Safety at Private Crossings – Crossing Owner #9

Discussion Item	Applicability
Bear's Pass, ON, roughly a half-mile from milepost 68.1 (i.e., mile 68.6), established in 1943 or 1944, crossing "by grace."	**A**
Have the telephone number for the CN Road Master in case of emergencies or issues related to the crossing.	**C**
Crossing characteristics: • One set of tracks; • Gravel road approach; • Timber plank crossing surface; • One side of the crossing is in a rock cut, the other is open; • There is a hydro right-of-way at the same location; and • Maintenance is carried out by CN and has never been a problem.	**C, M**
CN asked to have a mirror installed at the crossing because of the rock cut. The owners also installed a gate and turning circle between the crossing and the road, and they put up signs that inform others to the gate and crossing. CN posted "use at own risk" and stop signs at the crossing.	**S, W**
Trains whistle at the lift bride approximately a half-mile east of the crossing and 100-150m west of the crossing there is a whistle post.	**W**
Only family and friends use the crossing, and it is used almost exclusively in the summer and on weekends. There used to be a lot of hunters that would use the crossing, but the gate and signs have pretty much stopped that.	**U**
Traffic at the crossing is composed of mostly passenger vehicles with some hydro and CN vehicles and the odd snowmobile in the winter.	**V**

Discussion Item	Applicability
Trains passing the crossing are travelling at slower speeds as they approach and depart the lift bridge. The trains haul mostly grain and coal. Over the past few years, the frequency of trains has decreased, but they are longer than they used to be.	**U**
Family have been using the crossing they whole lives. No formal training is provided for crossing users.	**T**
Owner's father negotiated the original crossing agreement. The agreement has been transferred to the current owners. Generally, a fee is paid on a 5-year basis for the use and maintenance of the crossing.	**A**

Safety at Private Crossings – Crossing Owner #10

Discussion Item	Applicability
It is estimated that the club uses more than 400 crossings across the province. Every crossing was established through an agreement with the appropriate railway company and/or a landowner.	**A**
Railroad contacts are identified in through the crossing agreements. However, in an emergency, members contact local authorities, who, in turn, will contact the appropriate railway personnel.	**O**
Given the large number of crossings that the club deals with, it is impossible to comment on the physical characteristics of each one; however, the railways work with the clubs to ensure that the crossings meet their needs.	**C**
Not aware of any type of automated warning system at any of the private crossings. All crossings are supposed to have stop ahead (100-120m out) and stop signs. Drivers are required by law to stop at every crossing. Police patrol trails.	**W, R**
None of the private crossings have whistle posts, but those that are near public crossings might get some benefit form whistling.	**W**
Crossing users are primarily club members, trespassing is only a minor issue. The peak season goes from early January to late February. Rail companies used to remove crossings in the off-season, but now they leave them in year-round.	**U**
In addition to snowmobiles, trail groomers also use the crossings, and they can be as long as 50 feet. Some multi-use trails may also be used by ATVs.	**V**
Operating characteristics of snowmobiles are not a major concern at private crossings (i.e., they don't require much time to cross and stopping distances are not excessive).	**V**

Discussion Item	Applicability
The crossings can be over single or multiple sets of tracks (mainline or sidings), trains speeds range from approximately 60mph down. No club crossings cross high-speed corridors.	**O**
Rail crossings are addressed specifically in the motorized snow vehicle act. Drivers must stop at all rail crossings. Drivers between the ages of 12 and 16 year of age are required to take a mandatory course before they can be licensed (some adults take the course too); the course highlights railway crossings safety.	**R, T**
Communications with the railways have been very positive. The railways are quick to point out any issues or deficiencies at crossings, and they ensure that those issues get resolved promptly.	**C**
The existing signage and rule seem to be working. Building up the approach with snow can often be an effective way of treating approach grade issues. A greater police presence on the trails would be welcome.	**O, W**
Safety awareness campaigns are generally well received by the club members, and effective in informing them of safety issues.	**T**

Safety at Private Crossings – Crossing Owner #11

Discussion Item	Applicability
There are 10 private crossings authorized for club use (4 CN, 3CP, and 3INCO). All of the crossings were established through negotiations with the railways and landowners (for land use permission). The club has the subdivision and milepost information for all of the crossings on file; they also have contacts in both the real estate and engineering departments of the railways.	**A**
Crossing characteristics: • One crossing is for mainline and a siding, all the rest are single track crossings; • The approaches are made of dirt or gravel and the trails are groomed in the winter; • An effort has been made to ensure that all crossings are level (i.e., no significant grade at the tracks); • Crossing surfaces are either 10 or 12 feet in width, made of timber planks; • Surrounding land uses vary, but there are no sightline issues at any of the crossings; • The crossings are maintained by the railways for a fee; and • Signage is provided by the club and is in place year-round.	**O, M**
There are no automated warning systems at any of the crossings.	**W**
Don't know of any whistle posts near crossings and given engine noise and helmets, users might not hear them regardless.	**W, C**
Two of the club's crossings are shared with hydro; the others are for the exclusive use of club members (non-members are trespassing). The crossings are used exclusively in the winter.	**U**
Snowmobiles, groomers, and hydro vehicles use the crossings. The groomers are the greatest safety concern, given that they can be over 30 feet long and travel at 10km/h.	**V, C**

Discussion Item	Applicability
Train speeds at the crossings very, but the maximum is about 50-60mph. There are no high-speed corridors crossings.	**U**
Groomer operators are asked to stop, look both ways, open the doors, and proceed with caution at all crossings.	**T**
Members are required (through the motorized snow vehicle act) to stop at all crossings; the club also encourages them to shut off their machines and listen for trains.	**T**
The club also conducts educational programmes with CN and CP Police Services at schools and community events.	**T**

Safety at Private Crossings – Crossing Owner #12

Discussion Item	Applicability
The crossing is a driveway crossing; it is accessible to the public, and has been there as long as the owner has owned the land. The crossing is most likely a crossing "by grace."	**A**
If there were ever a problem with the crossing they would contact Rail Term (they do all of the track maintenance in the area).	**O**
Crossing characteristics: • There is one set of tracks at the crossing; • The approach on one side of the crossing is paved, the other side is gravel, and the approach is relatively level; • The crossing is sufficiently wide for all traffic; • The property is tree lined on the business side and vehicles must go slowly up to the crossing; and • Rail Term carries out all crossing maintenance.	**M**
The crossing has no automatic warning systems. There are stop signs, but they are small and easily overlooked.	**W**
Train whistles can be heard from a nearby public crossing as they approach the private crossing in one direction.	**W**
Crossing users consist of employees, suppliers, and sometimes solicitors. There is less traffic in the winter.	**U**
The composition of traffic at the crossing varies from passenger cars and pickup trucks to transport trucks and dump trucks. The transport trucks have to back into the property (the owner always assigns an observer to help) and they occupy the crossing for a maximum of 30 seconds.	**V**

Discussion Item	Applicability
There are no sightline issues beyond the tree line, which is set back from the crossing.	**C**
The trains that pass the crossing are almost all high-speed commuter trains (100mph), and there is usually one freight train per night.	**V**
The owner warns all expected visitors of the crossing prior to their arrival, and provides observers when necessary. Employees are all aware of the trains and the use of the crossing.	**T**
The only communications that they've had with railway officials have been regarding looking into alternative access options (i.e., closing the crossing). It is unlikely that the funding offered would cover the costs of constructing a new driveway that would connect to the road and not cross the tracks.	**A, S**

Safety at Private Crossings – Railway Industry Stakeholders #1

Discussion Item	Applicability
Factors contributing to collisions: • Sightlines – in addition to environmental obstructions (e.g. brush, buildings, etc.), sightline are sometimes blocked by the large side mirrors on the vehicles themselves; • Driver behaviour – drivers are often distracted and inattentive when using crossings at times they simply ignore warning signs and even stop signs at seldom used crossings; and • Vehicle and crossing characteristics – vehicle speed, crossing grade and angle, crossing surface condition, etc.	**C**
Poor maintenance of crossing surface and/or sightlines are common deficiencies. If it is not possible to achieve the desired sightlines at a crossing, additional warning systems (e.g. whistle posts) can be recommended.	**C, M, W**
Generally, crossing users/owners are willing and quick to comply with safety advisories.	**C**
Emergency contact 1-800 numbers should be clearly posted at all farm and private crossings.	**W**
Any private crossings that are accessible to the general public should feature full identification (e.g. crossbucks).	**W**
A TV add campaign focussing on farm crossing safety would be particularly beneficial. There seem to be fewer television commercials related to crossing safety these days then there were a couple years ago.	**T**

Safety at Private Crossings – Railway Industry Stakeholders #2

Discussion Item	Applicability
Factors contributing to Collisions: • Approach conditions (e.g. geometric design, grade, materials, and maintenance); • User complacency; and • Driver inattention or lack of training.	**C**
TSB identifies safety deficiencies at crossings and reports them to Transport Canada. Transport Canada then decides what improvements should be made to improve safety.	**C, O**
TSB issues an Investigation Report or Safety Advisory to Transport Canada, and then TSB evaluates the response by Transport Canada. TSB investigators have very little contact (usually only during the investigation) with crossing owners/users.	**O**
High-speed commuter rail lines (e.g. CN Kingston subdivision) are the main safety concern with respect to crossing.	**C**
Education/Training: Local and Railway police organizations are doing a good job educating school-aged children about railway crossing safety. However, adults don't regularly tend to congregate in such large groups, which makes it harder to get the message to them.	**T**
Regulations should require crossing owners and users to inform the railways of the types of vehicles using the crossings, and the owners/users should have to inform the railways of changes in the types of vehicles and/or goods crossing.	**U, R, V**
Transport Canada need to have the authority to enforce the closure or consolidation of redundant or unsafe crossings.	**R, A**

Applicability:
A – Arbitration or Negotiations, **C** - Collision Risk/Safety Issues, **M** – Crossing Maintenance, **O** - Operations and Maintenance Procedures, **R** - Regulations, **S** – Crossing Security and Access, **T**- Training/Awareness, **U** – Crossing Utilization, **V** – Types of Vehicles, **W** – Warning System/Signage

Safety at Private Crossings – Railway Industry Stakeholders #3

Discussion Item	Applicability
Via has a vested interest in this study, and would like to see the industry take a proactive approach to private crossing safety using remote warning systems (e.g., pilot studies similar to the one for remote public crossings done by UNB).	
The current standards and regulations for establishing private crossings are reasonable; however, there should be some legislation put in place for consolidating (redundant) existing crossings (e.g., 3 crossings on one plot of land).	**R**
Crossings "by right" can become an issue in land mergers or where development makes crossings unnecessary, whereby the right still exists, but there is a safer alternative to a private crossing(s).	**R**
The proposed RTD-10 guidelines are comparatively user-friendly and provide a step-by-step process for crossing design. The consideration for a design vehicle is also a step in the right direction; however, at present there is no requirement for users to inform the railways of changes in operating vehicle type, and inspection/observation is the only way of getting information.	**R, U, V**
High-speed trains travelling at 80-100mph can require sight lines of 2000' or more to provide advance warning via whistles.	**R, W**
Crossing approach grades and materials have a significant impact on vehicle operating characteristics. Crossing surface condition and width are just as important when it comes to affecting crossing time/speed.	**C, M**
Vehicle type is a definite issue, the size, speed, and manoeuvrability of the vehicle all affect the time required for it to clear the crossing. Also, the contents of the vehicle (e.g., dangerous goods) are a concern.	**V**
Noise in the driver cab can over power the sound of train whistles.	**V, W**

Discussion Item	Applicability
There is a concern that current education programmes are not getting the information to the actual crossing users (e.g., farm hands, migrant workers, machinery operators, delivery people).	**T**
Many private crossings are in isolated locations, which poses a problem given that the primary means of reporting a collision risk at a crossing is via telephone.	**C, W**
Mirrors and pedestrian heads at private crossings are helpful, but can't be used at all locations where sight lines are an issue or warning systems are required.	**W**
There is definite interest in seeing some pilot deployments of stand-alone warning systems using solar panels, LED lights, and track sensors. In general, there is interest in exploring potential uses for new technologies in private crossing warning systems.	**W**

Safety at Private Crossings – Railway Industry Stakeholders #4

Discussion Item	Applicability
An engineer's knowledge of his territory (including the locations of private crossings) is based primarily on experience and information shared with other engineers. Engineers often rely on visual reference points to orient themselves along their routes.	**T**
Via locomotive engineers generally work one territory for their entire career, which allows them to become very familiar with the routes.	**T**
Unsafe or potentially dangerous situations are encountered quite frequently at private crossings, particularly in the summertime and during the framing season; most such situations result from drivers being distracted by a variety of outside factors.	**C**
Recreational vehicles and farm equipment are more frequently involved in near misses at private crossings than passenger vehicles. Tractor-trailers are generally not an issue at crossings, which could be a result of their drivers having a better understanding/familiarity of their equipment and surroundings. The general public seem to be less familiar with crossing environments (quasi public crossings) and often appear more distracted (e.g., radios and cell phones).	**C**
A crossing's location relative to curves or hills is one characteristic that contributes significantly to collision risk. Multiple tracks at a crossing is also a serious concern (second train incidents).	**C**
Inadequate sightlines (resulting from curves, hills or overgrown brush) are a serious collision risk.	**C**

Discussion Item	Applicability
The public needs to be better informed of the dangers that exist at private crossings, this could be achieved through: • Rail police education programmes; • Adds on the sides of buses and/or locomotive engines; and • Handing out information pamphlets along with drivers licence renewals.	**T**
Farmers and recreational groups need to be targeted and emphasis needs to be placed on private crossing safety in add campaigns.	**T**

Safety at Private Crossings – Railway Industry Stakeholders #5

Discussion Item	Applicability
When a landowner and a railway company are unable to reach an agreement regarding the construction of a private crossing, the Canadian Transportation Agency (CTA) will hear their arguments, and determine if the construction of a crossing should be authorized.	**A**
The railway companies generally have three common (i.e., none site specific) requests when it comes to constructing a crossing: • That the landowner pay an annual fee for the right to a crossing; • That the landowner show proof of having liability insurance for the crossing ($5M); and • That the landowner agrees to a provision stating that the railway company can terminate the crossing agreement given 30 days notice. Inability (due to prohibitive costs) or unwillingness on the part of the landowner to meet these requests often results in the case ending up at a CTA hearing.	**A**
If the railroad company sites a safety issue as a reason for opposing the construction of a crossing, Transport Canada will be asked by the CTA to evaluate the concern and determine what is necessary to ensure a safe crossing.	**C**
The CTA authorizes the construction of private crossings on one of two conditions: • "By right," (Section 102 of the Canada Transportation Act) where private land has been subdivided by the construction of a railway, and the landowner is entitled to a crossing (to be constructed and maintained at the expense of the railway); or • "By grace," (Section 103 of the Canada Transportation Act) where a landowner requires a crossing for access to and proper enjoyment of his land (in this case the costs of construction and maintenance are incurred by the landowner).	**R**

Discussion Item	Applicability
The rulings handed down by CTA tribunals are based on precedent; as such, the decisions reached are very consistent.	**A**
Whether a crossing is authorized "by right" or "by grace" the decisions regarding the three common railway company requests are typically as follows: • Since the landowner is either entitled to the crossing or has no other options but a crossing to enjoy his land, the annual fee is waived; • Since there is no legal obligation for the landowner to have liability insurance for the crossing, it is up to him to determine its necessity; and • Since the CTA authorized the crossing, the railway company must seek a new ruling to terminate the crossing.	**A**
Crossing authorizations from the CTA indicate the location where the crossing is to be built, the parties responsible for the cost of construction, maintenance, etc., and the conditions under which the crossing is authorized.	**A**
All crossing authorizations issued by the CTA are conditional in that the crossing must comply with the safety requirements mandated by Transport Canada in the Railway Safety Act.	**C**
For some time now CTA has been offering their services as mediators, providing the service when landowners and railway companies are unable to reach an agreement on their own, but both parties are interested in achieving a negotiated settlement.	**A**
The agreements reached through mediation are binding, but the negotiation process often allows the parties to achieve certain consolations that might not present themselves otherwise (e.g., the agreement might include a provision allowing the railway to traverse the landowner's property to access their railway), and it generally helps to build a more positive working relationship between parties.	**A**

Discussion Item	Applicability
Depending on the circumstances, mediation proceeding could include representatives form a number of stakeholder groups (e.g., Transport Canada, local municipalities, adjacent landowners, etc.).	**A**
In some cases the mediation process can result in multiple landowners agreeing to share one crossing, thereby reducing the number of crossings that might otherwise be constructed.	**A**
In the previous parliament, there was a proposed bill that would have changed the mediation process – currently, both parties must agree to go into mediation; under the proposed bill, if one party request mediation then both parties would be required to participate in at least one mediation session.	**A**
In addition to agreements on constructing crossings, mediation can also be used after the fact to come to terms on agreements for other issues (e.g., maintenance, etc.).	**A**

Safety at Private Crossings – Railway Industry Stakeholders #6

Discussion Item	Applicability
Dealing with private crossings "by right" can be challenging in that many older crossings have no documentation of the crossing agreement or maintenance contracts.	**A, M**
With respect to new crossings, if a crossing is authorised it is subject to appropriate/thorough safety regulations.	**R**
RTD-10 needs to be put into force, because it addresses many of the concerns that currently exist regarding private crossings. G4-A only requires 10 seconds of sightline distance. The calculations required under RTD-10 are involved, but they address a lot of the safety issues. In general, RTD-10 is the answer to many safety issues; the regulations could be grandfathered in or phased in to help manage costs and effort.	**R**
Approach and crossing surface conditions have a significant impact on safety, but a lot depends on the vehicle characteristics. Grades can cause stopping issues in winter. Speeds on approaches are also an issue there need to be enforceable speed limits on approaches or stop signs at all crossings.	**C, W**
Large farm and industrial equipment can be an issue at private crossings. Many operators are not professional drivers (and as such are not required to log time at the controls) they work long days and are not always alert or are distracted when it comes time to cross the tracks at the end of the day (farmers are a particularly important user group).	**U, V**
Out West, industrial areas are a real problem, particularly site operated by small developers since they generally have less experience with crossings. Town want to grow so they allow development "anywhere" with no regard for safety or long-term planning.	**A**

Discussion Item	Applicability
CN and Cp police services run education programmes at schools that are effective. Industrial drivers could be targeted at union meeting or tailgate meetings and educated on crossing safety (may need to get gory with details to impact this group). Police services do a good job, but they don't appear to have the resources to reach everyone that they should.	**T**
Mitigating measures: • RTD-10 has a section on crossbucks with retro reflective materials that is a good idea; • The colour schemes for signs, pavement markings, etc. around railway crossings could be changed (i.e., made different than other areas) to make crossings more visible; and • Rumble strips could be used on paved crossings (one crossing had speed bumps installed, but a car got hung up on them and a near miss resulted – not a good idea).	**W**

Safety at Private Crossings – Railway Industry Stakeholders #7

Discussion Item	Applicability
Factors contributing to collisions: • Sightlines (impaired by vegetation or structures); • Crossing gradient; and • Maintenance.	**C**
Today, many private crossings (especially on the CN Kingston subdivision) are located within a short distance of a public crossing. As such, a lot of public crossings could be closed or consolidated; however, this would likely require the construction of access roads, which would have to be maintained by some road authority.	**O**
Not every railway crossings incident triggers a full TSB investigation; however, identifying safety deficiencies to stakeholders is usually worth the effort. Generally stakeholders will acknowledge safety deficiencies, but often actions are delayed by the perception of liability. As such reaching an agreement amongst stakeholders can be a challenge.	**C**
The existing legislation regarding how private crossings are granted should be changed. Private crossings should only be granted as an absolute last resort.	**A**
Regulations should focus on sightlines and proper design based on the type of vehicle using the crossing. The regulations need to be enforceable and not be "grandfathered" in.	**R**
Crossing mileposts and emergency 1-800 numbers should be installed at every private crossing.	**W**
Driver education and handbooks need to address crossing safety, they also need to make drivers aware of emergency contact numbers. Driver training with respect to railway safety needs to be consistent across all provinces. Truck driver training also needs to address railway crossing safety with greater emphasis.	**T**

Safety at Private Crossings – Railway Industry Stakeholders #8

Discussion Item	Applicability
Factors contributing to collisions: • Sightlines (impaired by vegetation, structures, or topography); • Road approach grades too steep; • Lack of signage and reflective surfaces (i.e. no stop signs or crossbucks); • Driver behaviour (e.g. complacency, don't obey signs, don't know speed of trains); • Crossing surface condition/materials in disrepair; • No whistling at private crossings; and • Traffic at many crossings is increasing and many crossings are now very close to busy roadways.	**C**
TSB has no authority to enforce safety improvements, they only conduct investigations and identify deficiencies.	**C**
A standardized private crossing sign (e.g. crossbucks with a "private crossing" tag) should be developed to increase visibility/conspicuousness of private crossings.	**W**
What legal bearing does a stop sign at a private crossing (on private land) have?	**W**
Trucking companies should have to provide drivers with regular, formal training/education regarding private crossings.	**T**
Farmers and farm hands need to be trained in the use of private crossings and associated emergency procedures.	**T**

Discussion Item	Applicability
Driver education programmes and manuals need to place more emphasis on railway crossings safety and emergency procedures.	**T**
Non-railway police need to know how to deal with railway incidents in an efficient comprehensive manor.	**T**
911 operators need to know how to get the necessary information from callers (e.g. mileage, Transport Canada call number, etc.).	**T**

Safety at Private Crossings – Railway Industry Stakeholders #9

Discussion Item	Applicability
All crossings are dealt with on a case-specific basis. The CTA has no specific safety mandate. If no particular safety issues are identified to the CTA, it is assumed that no extraordinary safety concerns exist. If safety concerns are identified, any authorized "suitable crossing" would meet the requirements for safety as stipulated by Transport Canada.	**C**
Instances where crossings are not granted occur more frequently with Section 102 applications, since the rulings are based on demonstrable historical facts. Under Section 103 crossings are granted based on a proven need.	**A, R**
The CTA only gets involved in crossing affairs when there is a dispute between the railway and the landowner.	**A**
The existing regulations are sufficient given the mandate of the CTA. The government has been quite clear as to what it expects from the CTA. Funding seems to be one of the major hurdles with respect to crossing safety.	**R**
Generally, the CTA is pleased with the mediation process, it is becoming more common and the success rate is high.	**A**
Existing crossings usually only come up when land is transferred and the new landowner has an issue with the existing agreement (that can't be resolved with the railway) or the landowner simply wants to renegotiate the crossing agreement. Also, CTA may become involved in cases where a crossing has been removed and the landowner has requested to have it replaced.	**A**
The CTA no longer has the discretion to apportion costs for crossing granted "by grace" or by the Agency's discretion under section 103 of the Canada Transportation Act.	**R**

Safety at Private Crossings – Railway Industry Stakeholders #10

Discussion Item	Applicability
There seems to be some confusion about the difference between farm and private crossings; there needs to be one clear definition used across the industry.	
Some of the issues in dealing with private crossings include the inability to enforce speed limits on private land, a lack of formal records regarding crossing agreements, and the fact that there is typically no train whistling.	**C, A**
Rather than simply authorizing crossings based on landowner rights, there should be some enforceable criteria that can be applied to determine if a crossing is safe and/or required at particular location.	**R**
G4-A doesn't make direct reference to private crossings, but it does recommend speed limits for crossing approaches; unfortunately, there is no way of enforcing those speed limits at private crossings. The RTD-10 references to design vehicles are a good addition given the types of vehicles that might be using private crossings (e.g., farm equipment). There can be significant costs associated with the RTD-10 requirements (e.g., if a land survey is necessary).	**R**
Crossing approach grades have a direct impact on the acceleration and breaking abilities of vehicles using the crossing. RTD-10 takes those factors into consideration.	**C, R**
Education programs have the potential to make a big difference, but they can be difficult to administer. It's hard to target everyone that uses the crossings. Education would be most effective if administered on a crossing-specific basis, targeting the particular users at the crossing.	**T**
Go Transit has crossbucks, "caution look both ways" signs, "no trespassing" signs, and stop signs at all private crossings. They also have a plan to post emergency contact numbers at the crossings.	**W**

Discussion Item	Applicability
Possible considerations for improved safety at private crossings include low-cost warning systems, lights/flashers, and wayside warning systems.	**W**

Safety at Private Crossings – Railway Industry Stakeholders #11

Discussion Item	Applicability
Crossing users often have trouble judging the speed of approaching trains until it is too late.	**C**
Traffic at most crossings on the subdivision seems to be seasonal with most of the activity occurring during the spring and summer months.	**U**
Driveway crossings are used year-round and generally it seems that crossing users exercise more caution at driveway crossings.	**U**
Speed restrictions have been imposed on one section of the subdivision where the desired sightline distances can't be met due to the curvature of the tracks at two private crossings.	**C**
Some private crossings along the subdivision receive indirect whistling as a result of whistle posts at nearby upstream public crossings. However, no private crossings have their own whistle posts.	**W**
Several sets of mirrors have been installed at private crossings along the subdivision in the past year or so.	**W**
Locomotive engineers are not provided with any records of the locations of private crossings and must rely on experience and memory to know where private crossings exist.	**T**
Trains speeds are more or less dictated by speed restrictions and on-time performance requirements; as such, they can't really slow the train in areas were they know there is a lot of crossing activity. Additionally, if they sound the train whistle at private crossings they often receive complaints.	**W**

Discussion Item	Applicability
Crossings could be equipped with LED flashers in addition to crossbucks to help increase their visibility to drivers who are often distracted or only focused on what is directly in front of them.	**W**

Safety at Private Crossings – Railway Industry Stakeholders #12

Discussion Item	Applicability
Crossings "by right" can pose additional challenges in that they are sometimes authorized at locations that do not suite the railway (e.g., multiple tracks, poor sightlines, etc.), efforts are made to negotiate on the location of such crossings, but it doesn't always workout.	**A**
Mediation has been used as a means of trying to reach an agreement that works for both parties. Crossing agreements can at times take a very long time to negotiate.	**A**
One major issue with older crossings (particularly older crossings "by right") is that they are not always documented and there is no record of who owns them.	**A**
The CP Real Estate department handles most of the initial negotiations between the railway and landowners regarding new private crossings. The CP Real Estate department has put together a document for new crossing requests that contains a sample crossing plan and identifies technical requirements that are based on RTD-10. Real Estate informs operations personnel of any potential impacts that might result of new crossings; however, at times, there can be some disconnect in the communications between the two groups.	**A, R**
Another challenge occurs when new landowners takeover crossings as part of land transfers; they are often not aware of their responsibilities with respect to the crossing.	**A, O**
At present there is no real trigger for review of crossing uses/vehicle types. Railway personnel do try to anticipate the types of vehicles that will be using a private crossing when they are installing it.	**U, V**
G4-A is a good document; it's easy to use and understand. The calculations that are required for RTD-10 can be difficult for some. Comparisons of sightline requirements based on G4-A and RTD-10 showed that the two methods yielded similar results.	**R**

Discussion Item	Applicability
Crossings surface condition plays an important role in collision risk. The standard crossing is constructed of timber planks. The condition of the timbers relates directly to the amount of time it takes vehicles to cross. It is also important that the crossing is wide enough to accommodate the vehicles using it.	**C, O, V**
Sometimes, it happens that old logging roads with private crossings are abandoned and get used by the public. As such, the crossings become de facto public crossings, but they don't get proper upgrades. The new users are often infrequent users that are unfamiliar with the crossing and its operations.	**U**
Typically, education programmes are only moderately effective, they work well enough at firs, but compliance diminishes after a while. One reason for the pattern is that users (e.g., logger, truckers, etc.) come from all over and there is a lot of user turnover.	**U**
It might be a good idea to send out crossing safety packages (containing emergency contact information, etc.) to crossing owners every couple of years. One possible challenge with the idea is that may crossing owners are not registered (i.e., there is no record of who they are).	**T**
Measures to improve safety at private crossings: • Flagmen at logging, mining, industrial crossings; • Automated warning systems (very costly); • Safety reviews with owners/users after near misses or observed non-compliances; • Mirrors; • Whistle posts; and • Users have installed their own flashing amber lights.	**W**
Private crossings safety could be improved by adopting the practice of posting stop signs at all crossings, using more retro-reflective materials at crossings, ensuring proper sightlines, and closing many private crossings.	**W, R**

Safety at Private Crossings – Railway Industry Stakeholders #13

Discussion Item	Applicability
Factors Contributing to Collisions: • Driver Behaviour: inattention, distraction, taking unnecessary risks, and complacency; • Crossing Design: multiple sets of tracks, approach geometry, crossing angle, sightlines, grade; • Visibility: Inadequate audible or visual indicators of the presence of approaching trains and inadequate protection at crossings (e.g., not enough reflective surfaces on trains, no warning signs); and • Frequency of train traffic: irregular/infrequent train traffic can increase risk.	**C**
Typically, TSB investigators point out deficiencies and report them to Transport Canada and/or other action agents who determine what corrective action should be taken. Most often deficiencies relate to lack of signage and/or poor maintenance practices (particularly with respect to sightlines).	**C, S**
Missing, damaged or lack of signage, infrequent train traffic, poor crossing conditions, and/or sightlines not being maintained may lead crossing users to believe that the crossing is no longer in use.	**C, W, M**
Landowners should be provided a crossing safety awareness course, the course should be re-offered every time the land changes hands.	**T**
Railway crossings in general need to be more of a focus in driver training courses and examinations, and crossing safety and emergency contacts should be featured in driver handbooks.	**T**

Discussion Item	Applicability
More thought should be given to providing more effective warning at private crossings rather than simply relying on signs, such as crossbucks, and locomotive horns on the trains (e.g., horns situated at the crossing and directed more effectively to the approaching motorists, not just on trains).	**W**
The existing legislation is adequate, provided that inspections are carried out and a real effort is made to improve safety at dangerous crossings.	**R**

Safety at Private Crossings – Railway Industry Stakeholders #14

Discussion Item	Applicability
Historically, the majority of crossings "by right" were used for farming purposes, which usually translated into fewer crossings, and most crossing activity was seasonal. Land uses are changing with development, and private crossings "by right" are being used by the general public, which is resulting in higher crossing volumes and more crossings by users with limited crossing experience.	**U, C, A**
When crossing "by right" are authorized, they are generally located wherever the landowner wants them, which can become very expensive for the railway companies, given that they are required to meet all safety measures mandated by Transport Canada (e.g., grade separations, warning systems, etc.).	**R, C**
There are also issues with crossings "by grace" with respect to changes in land use (e.g., if a landowner builds a house on an otherwise inaccessible segment of land their private crossing becomes a necessity and user composition changes).	**U, C**
Another issue with crossings "by grace" arises when the land changes hands; typically, the rights of the crossing agreement are transferred to the new owner through the real estate department, and no training etc. is provided. As a result, new owners often don't have any real understanding of the railway operations at their new crossing.	**A, C, T**
There are sufficient regulations in place to determine if a crossing should be authorized (and TC will conduct a safety review if there are concerns). However, the railways should have more input into the exact placement of crossings "by right" (for reasons of both safety and cost).	**R, A**
G4-A guidelines for sightlines are straightforward and the table of distances is easy to apply. The calculations required under RTD-10 can be difficult for some to compute, but the provision for design vehicles is more comprehensive.	**R, V**

Discussion Item	Applicability
Crossing surface condition and crossing approach grade impact safety if they are incompatible with the vehicles using the crossing. Generally, the only time that CP hears about crossing uses (vehicle types) is when there is an incompatibility issue; there should be some requirement for owners/users to disclose that information to the railways.	**C, U, R, V**
Vehicle type and user do have an impact on collision risk. Crossings accessible to the public (e.g., driveway crossings) are often used by new or infrequent crossers that don't understand the dynamics of the crossings.	**C, U, V**
New drivers need more training on how to deal with crossings and the situations that can arise at crossings. Crossings should be more of an issue in driver training and handbooks. All crossing users should have some degree of training, but the logistics involved in arranging training would be a challenge.	**T**
Types of safety systems that have been seen in the past: • Crossbucks and/or stop signs; • Whistling posts (installed at the request of the owner); • Convex mirrors (particularly effective at night); and • Pedestrian type "walk"/"don't walk" signals (not endorsed by CP as they are not a standard installation for railway crossings).	**W**
Crossing closures are always welcome; however, crossing consolidation has the potential to change usage patterns, traffic composition, and user groups, which could be problematic.	**R, U**

Safety at Private Crossings – Railway Industry Stakeholders #15

Discussion Item	Applicability
Crossing users often have trouble judging the speed of approaching trains until it is too late.	**C**
Traffic at most crossings on the subdivision seems to be seasonal with most of the activity occurring during the spring and summer months.	**U**
Driveway crossings are used year-round and generally it seems that crossing users exercise more caution at driveway crossings.	**U**
Speed restrictions have been imposed on one section of the subdivision where the desired sightline distances can't be met due to the curvature of the tracks at two private crossings.	**C**
Some private crossings along the subdivision receive indirect whistling as a result of whistle posts at nearby upstream public crossings. However, no private crossings have their own whistle posts.	**W**
Several sets of mirrors have been installed at private crossings along the subdivision in the past year or so.	**W**
Locomotive engineers are not provided with any records of the locations of private crossings and must rely on experience and memory to know where private crossings exist.	**T**
Trains speeds are more or less dictated by speed restrictions and on-time performance requirements; as such, they can't really slow the train in areas were they know there is a lot of crossing activity. Additionally, if they sound the train whistle at private crossings they often receive complaints.	**W**

Discussion Item	Applicability
Crossings could be equipped with LED flashers in addition to crossbucks to help increase their visibility to drivers who are often distracted or only focused on what is directly in front of them.	**W**

Safety at Private Crossings – Railway Industry Stakeholders #16

Discussion Item	Applicability
Real estate is the primary contact between the railway and the landowners with respect to private crossing agreements.	
Requests for new crossings are generally received from the landowner via one of three means: Direct contact; Through the engineering department; or The Community Connect line/website.	
Upon receiving a request the real estate department will contact the owners to request information about their intents regarding the use of the crossing. Having knowledge of the area where the crossing is being requested helps in anticipating future changes in crossing usage. The real estate department can also get information on planned development. Disclosure is sometimes an issue.	
In order to determine the long-term, best-fit crossing requirements, the landowner is asked to provide information regarding the purpose of the crossing, the frequency of use, the type of equipment that will be used, and if the applicant has intentions of significantly changing or increasing the use in the foreseeable future, with regards to; development, subdivision, or significant commercial or industrial plans.	
Once the intended use of the crossing has been determined/identified the request is sent to the railway's engineering, operations, and capacity groups for their approval. If they have no objections to the crossing a drawing is created showing the location of the new crossing, and the requirements with respect to approaches, culverts, gates, signs, etc. are determined.	
The railway has a more or less standard crossing agreement. Often, a caveat is added to the agreement stipulating that if the use of the crossing changes the appropriateness of the crossing will have to be reviewed. Copies of the plans and agreement are sent to the landowner to be signed. The agreements are then executed by CPR and copies of the fully signed agreements and plans are returned to the applicant for their records.	

Discussion Item	Applicability
The owner makes arrangements with the track maintenance supervisor to have the crossing constructed. CPR constructs the crossing surface (planks, asphalt, rubber, or concrete, depending upon what the applicant wants to pay for) only -- the applicant constructs the approaches and any culverts or drainage that is required and installs the signs and gates. All work has to be done under flag protection by CP.	
With respect to existing crossings, documentation of the crossing agreements does not always exist. The real estate department has access to real estate title searches, which can be used to identify the current owner of a plot of land. Track maintenance supervisors usually make the requests for searches.	
When land is sold, due diligence, on the part of the purchaser and the real estate agents, is necessary to ensure that the crossing agreements are updated/transferred to the new owners. This seems for be happening more frequently of late.	
According to the lawyers, CP cannot put a restrictive covenant on land that belongs to someone else based on a crossing that is on CP land. Potentially, the railway could ask to have a registered notation put on land titles for properties with private crossings; however, it would cost money.	
CP does not have an interdepartmental database of all private crossings. They have paper files for all crossings with documented agreements. Conversion of old paper documents to digital files is in progress.	
When asked CPR will assist the smaller railway companies that are leasing and operating former CPR lines where CPR is still the underlying landowner, as the issues relate to land title issues.	

Safety at Private Crossings – Railway Industry Stakeholders #17

Discussion Item	Applicability
1. *In your opinion, what specific crossing placements, approach scenarios, or surrounding conditions create an elevated risk of incidents at private crossings?*	
Sightlines and excessive grades: – however this seems to vary regionally. In Eastern Canada the railways are old and have many curves, as well the approaches have a lot of curves. These elements create poor sightlines. This may not be the case in the Prairie region.	**C**
Approach grades of 7 %to 9% are seen, (occasionally grades over 15% exist)	
Sightline maintenance should be a dual responsibility between the owner and the railway	**M**
Transport Canada undertakes annual inspections of all crossings (public, farm, private) to ensure that all crossings are safe. An inspection report is issued to the railway that is then responsible to ensure that deficiencies are corrected. In particular, signage and sightlines are reviewed. The railways are now looking at a more programmed approach to ensuring that sightlines are adequately maintained, there has been a marked improvement in recent years. Corrections are made by the railways.	
In cases where there is a siding used to park trains, there are difficulties when trains are not parked far enough away to ensure that sightlines are respected. This situation causes the user's view of the mainline to be blocked. In the Atlantic region, many sidings are being removed so this may become less of a problem	**O**

Discussion Item	Applicability
1. *In your opinion, what specific crossing placements, approach scenarios, or surrounding conditions create an elevated risk of incidents at private crossings?* …..continued	
<u>*Changes in technology*</u> – farm crossings are now used by semi-trailers instead of small trucks as they were in the past. These larger vehicles encounter difficulties at crossings due to differences in elevation of tracks where there are multiple tracks, and due to approach grades. Trucks have become stuck on the rails in cases where the mainlined and a siding are not at the same elevation. These difficulties must be addressed on a case by case basis.	**C** **T**
<u>*Changes in operating procedures:*</u> in cases where there has been a change in railway ownership, such as when a rail line is sold, some elements that were added to improve safety at specific locations (such as the requirement to whistle at a specific farm crossing) are removed by a new operator who may be unaware or uninterested in the local problem. This is especially true in cases where the new owner is not local.	**O**
<u>*Crossing surface:*</u> The condition of the crossing surface is becoming more problematic. Track lifts are undertaken during standard maintenance and road approaches are not adjusted accordingly. The rough condition increases exposure time at the crossing.	**C**
<u>*New regulations:*</u> How will the new regulations be applied at farm crossings? The new regulation allows a maximum approach grade of 2 %.	**R**
<u>*Many farm crossings are actually unrestricted*</u> as very few are gated. As well, there are cases where crossings have a gate on one side of the track only; this creates the dangerous situation of allowing access to the track but not allowing access off the track once a vehicle is on the crossing.	**C**
<u>*Complacency*</u> – the opinion that since a crossing has been in existence for over 100 years, therefore that it must be fine as it is.	
<u>*Changes in land use*</u>: Farms are transformed into land for other uses, such as conversion to campgrounds. The vehicles using the crossing change and approaches are not modified to suit the new vehicle type. For example, in a campground and there will be long RVs using the crossing. Railways should be cognisant of these changes in land use and should be interceding and correcting the situation before Transport Canada has to intervene.	**U** **T**

Discussion Item	Applicability
2. *Please, provide some examples of mitigation measures recommended in the past at private crossings, and comment on their effectiveness in improving private crossing safety.* Transport Canada does not say what must be done, however Transport Canada will indicate if something is unsafe. However, through discussions with stakeholders ideas are discussed. Transport Canada will step in and require railways to reduce train speeds, and will threaten to issue an order for the railway to "Stop and proceed". The railways react very quickly to correct the situation in these cases. The closing of crossings would be beneficial in certain instances, although to date no crossings have been closed in the Atlantic region in response to Transport Canada's new program offering financial compensation for the closure of a crossing. Examples of mitigating measures: 1) There was a case where there were 3 or 4 private crossings, serving 1 or 2 homes each, having restricted sightlines. Convex mirrors were placed in the quadrant having restricted sightlines. 2) The case of a private crossing located near a rock cut. Transport Canada advised that the crossing was not safe, and the railway advised the owner that the crossings would have to be removed. Consequently, the owner would no longer have access to his property. The result was that the owner spent a significant amount of money to cut the rock in order to maintain his access. 3) In the case where a private crossing became a "de facto" public crossing due to the development of a new subdivision, if the crossing has been used by the public for 3 or more years, Transport Canada may be able to provide a financial contribution to close other nearby crossings and install warning devices at the crossing (via the Grade Crossing Improvement Fund)	**W** **C**

Discussion Item	Applicability
3. *What, if any, difficulties have you encountered in the past in ensuring that the changes suggested/requested are put in place? Have there been any particular jurisdictional challenges?* No real jurisdictional challenges have been experienced so far. However, since 1989, Transport Canada has been operating without a regulation and without an approved technical standard. Road authorities have agreed with the intent of respecting the proposed standard (RTD-10) Transport Canada's threat of issuing "Orders" and "Notices" is quite effective, situations get corrected quickly. Transport Canada offers comments when requested on proposed crossings, but does not approve crossing placement/configuration. In cases of short line railways that are under provincial jurisdiction, there have been instances where the province indicates that crossing issues must be sorted out between the land owner and the railway. These cases become "political" and both politicians and Transport Canada may be drawn into the case. Transport Canada will review the case form a safety standpoint if needed.	**R**
4. *What specific changes (to technical requirements, legislation, education or other areas) would you like to see implemented to reduce the risk of collisions at private crossings?* - Approval of the new regulation and RTD-10 as soon as possible; - RTD-10 to be presented in a simplified form for use by owners and small municipalities; - Low cost warning devices to be reviewed. Currently if the devices does not respect the old general order E-6 to the letter it is not permitted. There is a hesitancy to try something new.	**R** **R** **W**

Discussion Item	Applicability
5. *Is there any other anecdotal information or personal experience that you would like to share, with respect to private crossing safety?*	
- Railways react after Transport Canada threatens to become involved where there is a safety issue at a crossing. The railways could be more proactive instead of waiting.	**C**
- Crossing surfaces are worse than they were in the past, due to a reduction in railway staff. The railways seem to be trying to "put out fires" and end up letting some maintenance go. Feels that this is due to in house budgeting at the railways.	**M**
- All crossings are different and must be handled individually.	
- Sightline brush clearing is always a temporary measure and must be constantly reviewed. As well, railways should check sightlines from within a passenger car on the crossing approaches, not from within a high-rail truck as the perspective from a car is very different.	**M**
- About 20 or 25 years ago CN placed stop signs at some farm and private crossings, however the signs have not been maintained and many have deteriorated significantly.	**M**

Safety at Private Crossings – Railway Industry Stakeholders #18

Discussion Item	Applicability
1. *In your opinion, what specific crossing placements, approach scenarios, or surrounding conditions create an elevated risk of incidents at private crossings?* • Skewed crossings, in particular where one quadrant has blind spot; • Steep grades, most important in winter with icy conditions; • Crossings where there is a highway parallel to the tracks located less than 8 meters away. In these cases, longer vehicles can foul the track and get hit by a train because they cannot get onto the road due to traffic on the road; • Poor sightlines due to vegetation, curvature, obstructions (buildings and rock cuts); • Rotted crossing planks – vehicles get stuck (including wheel chairs); • Humped crossing – low bed trailers get caught or hook rail; • Super-elevation – low vehicles can hit the rail and become incapacitated on track (highest risk for these incidents is on double track); • New developments – in these cases a private crossing gets unrestricted use which it was not designed for; • High speed tracks with crossings without protection or whistling; • Use by low vehicles (cars, lowbed trucks); • Have cases of snowmobiles using crossing in winter only (seasonal use) in the off-season the crossing becomes an access point to the tracks (trespassing) • Complacency by regular users of crossings, cases of a homeowner with their own crossing the user became complacent and there have been accidents; • Cell phones and other distractions (i.e. disciplining children in car) – Education needed.	
2. Please, provide some examples of mitigation measures recommended in the past at private crossings, and comment on their effectiveness in improving private crossing safety. • Closure of crossings: Transport Canada had to order the closure of a farm crossing with small business (hay, produce store, shop). The user did go to the CTA but CTA ruled in favour of TC (this happens very rarely). Closing a crossing solves the entire problem • Should increase the contribution for closure of a crossing beyond $5000. Contributions should pay for moving infrastructure, and for making modifications such as a road to access another crossing. • Speed restrictions by Notice & Order. Railways react and remedy situations very quickly in these cases • Transport Canada will order whistling reluctantly (speed restrictions are more effective). When whistling is ordered in some cases will order 10 seconds whistle, not ¼ mile, there have been good results from this • Order vegetation to be cut • Relocate crossings • Restrict length / type of vehicle using crossing by order of Transport Canada (especially used when track is close to a parallel road)	

Discussion Item	Applicability
3. What, if any, difficulties have you encountered in the past in ensuring that the changes suggested/requested are put in place? Have there been any particular jurisdictional challenges? Transport Canada issues Notices or Notice and Orders to railways in cases where there are safety concerns: • A Notice is issued when there is a threat to railway safety, it gives a railway 10 to 14 days to advise Transport Canada of the solutions/measures that will be put in place. The problem with a Notice is that the solutions presented by the railways are often very weak, based on economics and are unsatisfactory • A Notice and Order is issued when there is an immediate threat and will restrict trains / crossing use until problem resolved. Few notices issued now, more Notices and Orders issued because 100% of the time this gets timely attention for serious deficiencies from the railway. There is often reluctance on part of the railways to admit that there are safety issues. In many cases, the high cost of remedial action is passed on to the crossing owner by the railway after Transport Canada gets tough with the railway. For example, a railway did assessments of all crossings, and prepared a timeline to fix them, they then gave estimates of the required work to the owners of the crossings ($30 000 and up). This caused a political nightmare. Transport Canada does have a tribunal that is set up to hear appeals where a railway or road authority may refute a Notice and Order, this tribunal has ruled in favour of Transport Canada on the one case in Western Canada In cases where an appeal is made to the CTA by a crossing owner after a railway has indicated that they object to the placement of a crossing, 99% of the time the CTA rules in favour of crossing owner, unless Transport Canada can prove that a valid safety concern exists. The CTA will order a railway to make a suitable crossing at a particular location. If it is not at all safe, the railway can then involve Transport Canada. The CTA will then try to mediate Transport Canada and the railways wish to have as few level crossings as possible, in certain cases Transport Canada will even contact the CTA directly. There is a good relationship between the CTA and Transport Canada.	

Discussion Item	Applicability

4. What specific changes (to technical requirements, legislation, education or other areas) would you like to see implemented to reduce the risk of collisions at private crossings?
• There should be regulations with respect to locked gates at restricted crossings, would like to see this based on railway speed.
• Would like to see G4-A as a regulation
• More government funding needed to relocate and close crossings
• Enact the proposed Grade Crossing Regulations as soon as possible
• More powers for Transport Canada inspectors, including
  o The power to request and receive documents from the railways without having to be on site;
  o Strengthen the RSA, there is too much discretion, Section 11 needs to be strengthened (a qualified engineer must take responsibilities for all railway work.)
  o Would like Transport Canada's inspectors to be able to issue fines (ticket book) to users / railways for unsafe use of crossing, and to have inspectors given the power to issue fines immediately (not to be done via the Minister) (as is done at the FRA)
• Specific crossing accidents should be investigated jointly by the railway and regulator
• Transport Canada can close crossings to vehicular access, they do have the authority to do so.	

5. Is there any other anecdotal information or personal experience that you would like to share, with respect to private crossing safety? • The railways' response to Transport Canada's involvement varies based on attitudes. For example: One national railway has had many slow orders placed at crossings in British Columbia due to unsafe use. They have assessed all of their crossings and provided timelines for improvement. There has been a major improvement in crossing maintenance. The other national railway challenges Transport Canada on every issue irrespective of the safety ramifications, and accuses Transport Canada of being unprofessional. The result is that the conditions at their crossings in British Columbia are much poorer than at their competitor's crossings. • Short-line railways don't have the money or the personnel to assess and to maintain crossings as needed. These lines have more injuries and more accidents. • Funding for public crossings in the West has been increased for Transport Canada, there are some pedestrian crossings with automatic protection, paid for privately.	

Safety at Private Crossings – Railway Industry Stakeholders #19

Discussion Item	Applicability
1. *Can you comment on the different challenges, be they technical, administrative, jurisdictional, or otherwise, involved in dealing with private crossings "by right" versus other types of crossings?* Technical – not too many challenges, few problems. Sight lines and approaches must be well maintained. Administrative – quite simple, no agreements required Jurisdictional – no challenges	
2. *Are there sufficient technical standards available in order to establish if a private crossing should be permitted and under what conditions?* Transport Canada's draft RTD-10 contains extensive information concerning minimum standards, these are sufficient. Once the railway receives a request, they meet with the applicant and go to the site to review all issues before putting a crossing in place.	
3. *Do you have any thoughts regarding the determination or the preservation of sight lines at private crossings:* 3.1 *G4-A vs. the new requirements taking into account specific vehicle types, as set out in RTD-10?* G4-A is not as elaborate as RTD-10, but does not cause problems.	
3.2 *Calculation of minimum sight line requirements?* NBEC has completed a review and evaluation of the sightlines at all of their crossings last year.	
3.3 *Are the methods adequate and can the required information be readily collected?* No bad experiences so far. Usually applicants are able to provide the equipment information that is required. Private crossings are governed by an agreement, in which the type of vehicle using the crossing is identified. The owner must advise the railway if they plan to use any other type pf vehicle.	

Discussion Item	Applicability
4. *Do you feel that the private crossing condition or the approach grades have a significant impact on the crossing safety? What associated issues have you experienced?* Both are significant. If the crossing surface planks are in poor condition, cehicles can get stuck. The surface must be well maintained. Approach grades: have had few incidents. During visits to the sites, approaches are identified and they try to create a flat an approach as possible within +/- 15 feet from the track to allow improved visibility and crossing time.	
5. *In your experience, does the type of vehicle (e.g., passenger vehicles, trucks, heavy construction equipment, recreational vehicles, farm equipment, etc.) or certain types of users affect the collision risk at the private crossing?* Yes. The type of vehicle is critical. For example: an owner requested that heavy equipment be brought onto their property. The contractor tried to cross at a private crossing with questionable grades for the specific vehicle (low flat bed). The vehicle became caught on the rails and was hit by an approaching train. The tracks were damaged and the train derailed. Luckily there were no injuries. Vehicles such as Winnebagos with trailers require a longer time to cross than smaller vehicles. ATVs and snowmobiles are not the worst type at crossings (however they cause many problems trespassing)	
6. *Do you feel that education, awareness or training could be used effectively to address a particular type of user or groups of users?* Yes. With reference to the example in #5, it was discovered that the contractor had absolutely no knowledge of how to approach/negotiate the crossing with his vehicle. Education is needed for heavy equipment operators, this must be improved. Public crossings are very different from private/farm crossings. As well, the owner did not contact the railway prior to bringing the heavy equipment over the crossing (as was required by the agreement).	

Discussion Item	Applicability
7. *What types of mitigating measures have you seen implemented to improve safety or address a specific concern at a private crossing? Do you have any suggestions for additional remedial measures?* - Control sightlines - Try to eliminate crossings; NBEC is currently negotiating to close some. A successful example is a recent occasion in Belledune where 2 individuals had crossings near a curve where the railway convinced the owners to use a roadway alongside the tracks instead of a crossing. - NBEC does not have any mirrors in place at the moment - Has seen other locations on CN territory with mirrors, an another location with a signal indication that there is a vehicle on the track - Typically there is a Private Crossing Sign at most of these crossings, some have cross bucks and stop signs	
8. *Can you suggest any specific changes that you would like to see enacted to reduce the risk of incidents at private crossings?* Education and awareness. This could be coordinated through the Railway Association of Canada and Direction 2006 and directed specifically for farm and private crossing users, as well as to target specific groups such as heavy equipment operators. The level of awareness among farm crossing owners/users is variable.	
9. *Is there any other anecdotal information or personal experience that you would like to share, with respect to overall private crossing safety or a specific problem location?* When at CN, participated in a detailed review of RTD-10 VIA travels at a maximum of 70 mph, freight trains travel at a maximum of 55 mph.	

Safety at Private Crossings – Railway Industry Stakeholders #20

Discussion Item	Applicability
1. How do you become familiar with the locations, and conditions, of private crossings? How do you use that knowledge? By experience, these are not identified on train bulletins. Be aware, however the train speed and schedule are to be maintained.	
2. How often do you encounter situations at private crossings that you would consider unsafe or dangerous? Could you please describe examples of unsafe or high-risk situations that you have encountered in the past? Once per trip (at any type of crossing or trespassing issue) Private / farm crossings: more common Example: Picnics beside track – not fenced next to a park in Pointe-St-Charles Crews report areas where pedestrians are seen often	
3. In your experience, what types of vehicles are most commonly involved in near misses, risky-behaviour or collisions (e.g., passenger vehicles, trucks, heavy construction equipment, recreational vehicles (ATVs or snowmobiles), farm equipment, etc.)? No particular vehicle types, can be any type including - trucks - busses - (School buses → rare) - Les Cèdres – ATV death - Mostly "normal" people doing stupid things - Young kids on ATVs alone are the most dangerous. - Farm equipment pretty good – no problems on corridor (Montreal – Toronto) - Semi-trailers – close to CP / CN Get caught between gates Brighton to Grafton a bad spot	

Discussion Item	Applicability
4. *Which of the following crossing location/design characteristics do you feel contributes the most to the collision risk at a private crossings:* 4.1 Proximity to a curve, siding or hill? Curves worst Eliminate some crossings: example Brockville: 4 to 5 crossings within 100 feet Farm crossings – don't need all as some not used and should be eliminated	
4.2 *Sightlines for crossing users or train crews?* Sightlines are not well enough maintained for train crews: - Varies by location - Montreal – Cornwall an effort has been made recently and CN has done a good job - West of Cornwall - problems (brush) - Alexandria - Different zones – not solved yet	
4.3 *Crossing approach or surface condition?* -	
4.4 *Number of tracks to cross?* Double track worst. Example 2 girls were killed because they didn't notice the second train	
5. *What impact do the following have on collision risk at a private crossing:* 5.1 *Weather conditions such as snow, rain, fog, etc?* - people may not see signs	
5.2 *Time of day or night?* Worst time of day : once school is out. Season: holiday season, i.e .summer when there is no school (problems with kids)	

Discussion Item	Applicability
5.3 *Lighting conditions?* Seem to be less problems at night – train is more visible, as well cars with lights on can see signs well.	
6. *What role do surrounding conditions (i.e., urban, agricultural area, industrial area, woodlands, etc.) play in private crossing safety?* Urban areas have big problems. Montreal has trespassing issues and the Toronto area has a lot of fatalities (trespassing people cut fences regularly, such as at DeCourcelles in Montreal next to Acceuil Bonneau (mission for the homeless). Someone was even crossing the tracks with his snow blower on the track) Kingston: people cross fields Brockville: has blind spots No whistling at farm/private crossings (public crossings: Belleville has added crossing guards) (public crossing at St-Ambroise in Montreal is bad)	
7. *Is there any other anecdotal information or personal experience that you would like to share, with respect to overall private crossing safety or a specific problem location?* R. Hart has participated in Operation Lifesaver and has given presentations to this group in the past Crossing design is not always conducive to safety; Locomotive Engineers should be consulted for design. The Human Factors affecting the crew must be accounted for. The effect of a fatality on the train crew is enormous (serious stress, psychological trauma, burnout Farm crossings – too many – how many does a farmer need? Find way to group together People think their "rights" prevail over safety concerns. Best solution everywhere is to install 4 quadrant gates or full width gates. People are stupid: - no age group in particular - "It won't happen to me" syndrome - People in too much of a hurry and will try to save 10 seconds by going in front of a train	

Discussion Item	Applicability
7. *Is there any other anecdotal information or personal experience that you would like to share, with respect to overall private crossing safety or a specific problem location?* *…continued:* Mirrors not useful for Locomotive Engineer, train travels too fast for them to be useful Rang Ste-Catherine - lots of switching – people race crossings Eliminate brush = eliminate hiding spots Public crossings should all be GCP protected Lancaster crossing with Highway 38 dangerous Geographically – certain crossings more dangerous (before curve or after hill) – should be removed Guess that there must be ± 900 to 1000 crossings between Montreal and Toronto, ± 350 that whistle is applied at LED lights on gate arms would be a good improvement Flashing lights instead of signs (especially in foggy conditions) would be very useful at private/farm crossings Low cost warning devices would be useful, example: solar powered, or illuminated signs visible at night (Interviewer's observations: - generally good visibility from locomotive due to height, but significantly affected by brush, curves, natural obstacles. - very high number of crossings on territory from Montreal to Kingston, both public and farm, fewer private)	

Safety at Private Crossings – Railway Industry Stakeholders #21

Discussion Item	Applicability
1. How do you become familiar with the locations, and conditions, of private crossings? How do you use that knowledge? Familiar based on experience on the route. The best crew on one route would be the worst on another route because of their knowledge of the territory Cobourg / Trenton to Brighton – dangerous areas Locations where CP and CN tracks are close together: example: 2 Freightliner trucks stuck between the CN and CP tracks (near Ile Perrot, Quebec)	
2. How often do you encounter situations at private crossings that you would consider unsafe or dangerous? Could you please describe examples of unsafe or high-risk situations that you have encountered in the past? 2 times in 10 runs will see a dangerous situation at a crossing	
3. *In your experience, what types of vehicles are most commonly involved in near misses, risky-behaviour or collisions (e.g., passenger vehicles, trucks, heavy construction equipment, recreational vehicles (ATVs or snowmobiles), farm equipment, etc.)?* No particular vehicle type Example: Private transport company: accidents because drivers always racing trains across crossings, also had limited visibility. Possible solution: company to add a flagman to ensure drivers cross tracks safely. This was even suggested by the crew to the crossing owner after a near miss.	

Discussion Item	Applicability
4. *Which of the following crossing location/design characteristics do you feel contributes the most to the collision risk at a private crossings:* 4.1 *Proximity to a curve, siding or hill*? Farmers – less of a problem. No particular age group Owners OK – visitors can be dangerous Industrial crossings are often gated. Stop signs are a good idea Granby subdivision (CN) – many accidents in the past - People not aware of safety issues - Park right next to the track Farm gates help Mirrors are not useful for train crew but likely help owner Skidoo / ATVS – few problems at crossings (however there are many problems with these groups due to trespassing) Curves are the worst issue People don't expect train to come quickly	
4.2 *Sightlines for crossing users or train crews?* Restricted speed due to sightlines at some location	
4.3 *Crossing approach or surface condition?* -	
4.4 *Number of tracks to cross?* People often do not see a train on a second track, they are impatient to cross the tracks and do not check well (true at all crossings)	
5. *What impact do the following have on collision risk at a private crossing:* 5.1 Weather conditions such as snow, rain, fog, etc?	

Discussion Item	Applicability
5.2 *Time of day or night?* At night, the trains have good headlights and can be well seen	
5.3 *Lighting conditions?* As above	
6. *What role do surrounding conditions (i.e., urban, agricultural area, industrial area, woodlands, etc.) play in private crossing safety*? More developed area = more people around to use crossings. Example: problems in Brockville due to youths engaging in risky behavior at crossings	
7. *Is there any other anecdotal information or personal experience that you would like to share, with respect to overall private crossing safety or a specific problem location?* Idea – put stop sign at every farm crossings Pedestrian crossing (at Morgan Rd.) multiple tracks – a dangerous location. The difficulties with the road crossing have been addressed but there is still a pedestrian crossing (commuter train station)	

Safety at Private Crossings – Railway Industry Stakeholder #22

Discussion Item	Applicability
Regarding railway crossings, what specific crossing locations, approach conditions or environmental conditions create an elevated risk of incident, in your opinion? Conditions affecting line of sight, including curves in the road, gradients, vegetation, visible pollution, and automobile headlights, as they could be confused with train headlights. Gradients affect a vehicles acceleration time. The vehicle type, especially because of the slopes, and the time needed to clear a crossing (long vehicles).	
Provide some examples of mitigative measures recommended in the past regarding private railway crossings, and comment on their effectiveness to improve safety. Transport Canada does not provide those recommendations. Rather, the role of Transport Canada is to require the problem to be corrected. Nevertheless, some measures that have been beneficial are: - the addition of crossing St-André - the addition of a sign at private crossings - the addition of stop signs - the installation of a completely automated system - the installation of a system using block repeaters could be effective (the lights are lit when there is no train; the lights go out when a train is in the block) The question of using low-cost automatic systems is still under investigation since these installations must be “fail safe.” They have to do with developing new techniques.	
What difficulties, if any, have you encountered in the past in verifying that suggested/required changes were implemented? Were there any particular jurisdictional challenges? Problems are usually settled.	

Discussion Item	Applicability
What specific changes (with the technical, legislative, educational requirements or other areas) would you like to see introduced in order to reduce the risk of collision at private crossings? There exists a lack of tools. It is necessary to better define the requirements in the regulations for different types of private crossings and the standards should better define what to do at these locations. Also, specific technical standards should be established. For example, standards indicate the type of protection (fence or no fence, etc.) when there is a crossing providing access to more than one house. There should be a contact telephone number affixed to crossings that is not only for emergency cases. There is currently a subsidy program for farm crossings. It would be useful to have one for private crossings as well (particularly to improve the private crossings that have been around for a long time.)	
Is there any other information or personal experience that you would like to share regarding the overall security of private crossings? Private crossings have more problems and more users who are not accustomed to the crossing type, as opposed to farm crossings, with which users are more familiar. There is a significant problem when developers build housing without making a request that private crossings be made into public crossings. In this case, the railway lines are not sufficiently vigilant and allow the construction of these developments without access. The definitions of crossing type (private, farm, open, restricted, etc.) should be cleared up.	

Safety at Private Crossings – Railway Industry Stakeholders #23

Discussion Item	Applicability
Private Crossings: Agreements signed in the past have been lost during the change of ownership of the railroad. It is difficult to find these documents and to do follow-up. The new owners do not know about the agreements and their responsibilities. The bigger problem occurs when owners of private crossings give approval to other users, without informing the railroad of it. The level crossings are not built for everyday use. The owners believe that they can do whatever they want. **Farm Crossings:** There are difficulties when an owner only sells land on one side of the tracks. The railroad is not informed at the time of the sale of the land. Education is necessary in order to avoid these situations. Since 2005, much work has been done to close crossings, which are not used. The railroad wants to remove them as quickly as possible. Over the last 2 years, the railroad has closed ± 10 farm crossings (which were not necessary any more because the grounds had been divided) Changes in ownership (railroad or landowner) bring confusion. The railroad has problems convincing landowners to pay and sign crossing agreements. For example, a level crossing providing access to a residence has expenses associated with it but the owner does not want to pay. Also, there is a problem with several private level crossings because the former owner of the railroad began the process of negotiating an agreement with the owners, but there was no agreement of concluded. Nonetheless, people use the level crossings anyway. It would take a full-time person (for 3 to 4 months) to sort it all out. This would be too expensive for the railroad.	
The existing standards for authorizing crossings are sufficient.	

Discussion Item	Applicability
Regarding sightlines, the G4-a standard is rather clear and adequate. There are situations there where there can be breaks in communications (especially with respect to public level crossings) which could cause a doubt in the establishment of sightlines, this needs to be clarified. The G4-a standard is used primarily. The conservation of sightlines is not easy when there are rocks, etc. Sometimes, requests for new crossings result in speed limits being imposed in order to have the necessary sightlines. Also, there are difficulties with maintenance when the vegetation is not on railway property. It is not easy to access private lands (there are a staff and resource shortages) The methods outlined in RTD-10 are rather clear. (For public crossings, it is necessary to imply the municipalities. For example, the City will install advanced warning signs telling the drivers to prepare to stop. The small municipalities do not know about the necessary steps the majority of the temps for establishing a crossing) Le railroad can generally get the necessary information to calculate sightline requirements. On the other hand, it all has to be put in order. It is difficult to approach the owners in order to negotiate. Regarding new requests, the costs as well as the steps to be followed discourage the applicants from proceeding. These people do not know about the regulation and the necessary steps.	
The approach slopes are problematic in several places. When there are steep slopes, the tractors do not want to stop, therefore, they do not take the time to look around well. This is often the cause of situations of near misses. The surface of crossing must be kept in good condition (must avoid the ice in winter and the holes).	

Discussion Item	Applicability
Farm equipment us very broad and farm crossings must be widened in order to accommodate it. Private crossings have fewer problems related of the widths of the approaches. Largest of the problems is with recreational vehicles. The users do not think that there is a danger or that there are trains using the tracks. There is a lack of respect and/or ignorance of the dangers. The railroad transmits correspondences each autumn explaining the dangers associated with the railways, etc., but the railroad does not receive replies from the organizations. There are ± 12 snowmobile clubs on the territory, which use the private level crossings (they obtain an agreement of the owners before travelling on their land). Very often, these level crossings are defined for the exclusive use of the owners but the latter are not aware that they should not allow other users to use their crossings. The snowmobile clubs are not well informed. The railroad threatened to close these level crossings if people do not conform to the regulations. It is necessary that these clubs seek other trails because it is a very big problem. Also, especially for railways with little traffic, the snowmobiles cause a problem of snow and ice at the level crossings because these machines compact snow between the rail and the rut. This can cause a derailment and thus more maintenance is necessary. Also, trespassing is a major problem with snowmobiles. There have been improvements in dealing with contractors. The large contractors all know about the steps to be taken during work close to the railway. They were trained. On the other hand, small contractors know less the dangers and procedures. The latter trust the schedules of the trains and do not think that there can be a train in any time.	
More training and of education is required, particularly with the snowmobile clubs. It would be easier if the railroad could contact a provincial association, which would be given the responsibility to train their clubs. It is difficult when volunteers manage the clubs. Regarding owners, they must learn to be more responsible concerning the use of their level crossings. If they want to modify the use of their level crossings, they must make a request to the railways. Concerning the maintenance costs, the owners never want to pay these expenses but they want to use their crossings nevertheless (there are especially problems with crossings established by the former owner of the railroad whose agreements are not easily available)	

Discussion Item	Applicability
Every fall and winter, the railroad transmits a letter to the municipalities, explaining the dangers associated with level crossings, such as snowdrifts at crossings and poor visibility. Also, the railroad explains the dangers with the association of snowmobile clubs as well as the problems, which they can cause. At private level crossings, additional panels indicating that the crossing is a private crossing were added in addition to the crossbucks and of the stop signs.The railroad does not install mirrors at crossings. There are very few crossings on curves (5 or 6%). On the roughly 200 miles of tracks operated by the railway there must be several hundred private crossings.	
The installation of stop signs on each side of the private level crossings is recommended. These are reflective and draw the driver's attention. There is another small railroad, which adopted these measures and installed crossbucks with a stop sign at each crossing. This would increase safety on the territory.	
It is necessary to improve training and education. It is necessary to clarify the rules with the municipalities, the users and the clubs so that they pay more attention. The users should be trained to not rely on the schedules of the trains (often, those who are struck by trains are those who live near the railways and rely blindly on the schedules, without considering the dangers.	

Safety at Private Crossings – Railway Industry Stakeholders #24

Discussion Item	Applicability
1. *Can you comment on the different challenges, be they technical, administrative, jurisdictional, or otherwise, involved in dealing with private crossings "by right" versus other types of crossings?* Problems associates with Farm crossings: - the railway has no control over usage; - vehicles using crossings change often; - safety often not addressed by user; - property owners change and new owners are not aware of the dangers of "by rights" crossings; - difficult for railway to restrict unauthorized use - land owners operations can change yet the railway is still responsible for the crossing: Examples: case where a farm became a golf course and a sod company took over a farm, both new owners become upset when their crossings (farm crossing) becomes blocked by trains	
2. *Are there sufficient technical standards available in order to establish if a private crossing should be permitted and under what conditions?* - Uses personal experience. - Railways are not required to allow the construction of private crossings, and when they do allow them they are governed by an agreement - Does not feel that technical standards are required, a location by location assessment is performed by CN and by the prospective crossing owner based on the railways experience with crossings; - All technical standards that are used for public crossings are a resource for private crossings. The railway decides if it can build the crossing safely, and the owner must follow the restrictions that are placed according to the agreement. - Old crossings must be upgraded to meet current requirements. Track supervisors must assess the crossing (they have the responsibility to monitor safety) and to modify the crossing with the costs assessed as per the agreement. Crossings are closed if needed.	

Discussion Item	Applicability
3. *Do you have any thoughts regarding the determination or the preservation of sight lines at private crossings:* 3.1 *G4-A vs. the new requirements taking into account specific vehicle types, as set out in RTD-10?* - Not much difference between G4-A and RTD-10, as G4-A indicates that sightlines must be increased by ½ if needed for the type of vehicle. - RTD-10 requires the use of a design vehicle. This is based on observation, local knowledge and common sense. Example: in Saskatchewan a "super-B truck" 80 feet long (3 trailers) is now used, and therefore the railway s must accommodate this vehicle at crossings. - Private crossings are under agreement. Since the railway is responsible for safety, they can barricade a crossing if required to ensure safety. No further restrictions are required. - Farm crossings cannot be closed. No additional guidelines are needed. Users must be educated. Also, when repairs/modifications are required to approaches, the users must be aware not to use the crossing until these approaches have been repaired. 3.2 *Calculation of minimum sight line requirements?* No further rules are required. The railway is responsible to make crossings safe, therefore they are responsible for accidents and incidents at farm crossings 3.3 *Are the methods adequate and can the required information be readily collected?* Sightlines must be determined using common sense and must be monitored by the railway. G4-A and RTD-10 are resources only.	
4. *Do you feel that the private crossing condition or the approach grades have a significant impact on the crossing safety? What associated issues have you experienced?* No, they don't. Experience dictates that private crossing owners must maintain their crossings in good shape (maintenance const them money). If the railway is afraid of a safety issue they must repair the crossings (at no cost to the railway), there is no excuse. -Has not found a private crossing where the grades/planks are unsafe. - Farm crossings are similar. If planks are rotten it is an indication that the crossing is not used and can be removed (the railway can put the crossing back if it receives a request to do so). Farm users are not aware of sightlines, they are aware that they must cross safely.	

Discussion Item	Applicability
5. *In your experience, does the type of vehicle (e.g., passenger vehicles, trucks, heavy construction equipment, recreational vehicles, farm equipment, etc.) or certain types of users affect the collision risk at private crossings?* Yes. Private crossing owners are less at risk since they have good communication with the railway. It is up to CN and the owner to assess the risk and implement proper measures or close the crossing. When under agreement the owner has a responsibility for use and for costs. It is the railway's responsibility to ensure safety. The owners are not educated concerning risks.	
6. *Do you feel that education, awareness or training could be used effectively to address a particular type of user or groups of users?* Yes. In the case of private crossings, the agreement becomes a training tool. Owners are aware of what they have signed. Transport Canada's brochures are handed out to private crossing owners in order to describe risks & responsibilities. As a public works officer, seldom have the occasion to talk directly to owners. Track supervisors do communicate with the owners to straighten out issues. Snowmobile clubs are getting better as they now install signs along their trails. At locations where snowmobiles use old abandoned crossings, the railway closes the crossing. It is difficult for clubs with large membership to control all of their members.	
7. *What types of mitigating measures have you seen implemented to improve safety or address a specific concern at a private crossing? Do you have any suggestions for additional remedial measures?* Mitigating measures seen: - installation of standard cross buck at private crossings; - installation of stop signs at private crossings; - locked gates; - "Watch for trains" signs; - stop signs at farm crossings; - implement whistling at certain locations, depending on risk; - mirrors have been successful so far, but they must be maintained (correct angle, and kept in good condition – sometimes they get used for target practice) - Track supervisors provide a report concerning the condition of all crossings in their territory (farm, private, public), so conditions are well reported and this allows good follow up by the regulatory officer Additional suggestions: - Close as many crossings as possible (no crossing = no risk); - Crossings should be established based on a need and not on a right - not all are needed - Transport Canada and the CTA must understand that many crossings that were installed a very long time ago and have not been assessed in time, vehicles have changed and owners do not understand the need to modify the crossings based on their usage (change from horse & buggy to "super B" trucks).	

Discussion Item	Applicability
8. *Can you suggest any specific changes that you would like to see enacted to reduce the risk of incidents at private crossings?* - Correct the false assumption that the ownership of a private crossing comes along with the purchase of land. This assumption creates dangers. If the railways were involved during the sale of land, they would have the opportunity to discuss the safety and responsibility issues related to the crossing.	
9. *Is there any other anecdotal information or personal experience that you would like to share, with respect to overall private crossing safety or a specific problem location?* No new private crossings have been permitted in the past 2 years in this territory. The first answer provided to someone requesting a crossing is to "find another way." As well, often the construction of a crossing is too costly for the owner/user. A problem occurred when the City of Saskatoon sold land where there was no legal access to the property. An owner cannot sell property with a crossing without negotiating rights for the railway crossing. The name on the land title must match the name on the crossing agreement. Legally, one cannot provide access to another person's property. In this territory, land is very flat and generally farm crossings are quite safe. There was one issue with the CTA (that was only negotiated over the telephone) whereby the railway had to accept a crossing with the farmer paying a portion of the costs. Few situations are taken to the CTA. The railway informs farmers that a crossing may be granted, not as many as they want. Usually the need for a crossing is understood, as well as the need to build the crossing the right way. There are some grey areas: in particular the definition of "a crossing", this seems to vary by location and becomes problematic when land is subdivided. Track supervisors are told that if a crossing is not being used, to take it out. If a farmer then complains, the railway will put the crossing back in service after performing a title check (land ownership) and ensuring that the person requesting the crossing has the right to it. Data bases of owners (private crossings) are difficult to maintain, this requires extensive follow-up (railway not advised when land is sold). Municipal participation is requested when updating the data base of farm crossings, eliminating the need for the railway to perform title searches.	

Safety at Private Crossings – Railway Industry Stakeholders #25

Discussion Item	Applicability
There have not been a lot of implications to date as Technical Services usually took care of these elements. He is consulted concerning visibility and obstacles: The elements that generate bad visibility are: big slopes, bends, and rock cuts. Train speed equally affects visibility. There have not been any administrative or jurisdictional issues.	
No issues so far, the existing technical standards are sufficient for determining whether or not private crossings should be permitted.	
Rule G4A is presently used for determining sightline distances. He does the calculations on the spot according to the rule G4A, especially for the farm crossings. The calculations for RTD-10 are not so simple/clear. Appraisal of methods and availability of data is often an issue of the individual's interpretation of the requirements and depends on experience and knowledge of the territory.	
Yes. For example: At farm crossings: tractor-trailers with heavy loads can have problems because of the approaches. The slopes can also create problems for ploughs. Long equipment can be problematic, the situation can arise where the tractor is on one side of the tracks and the trailer is on the other; this position creates a big risk with hanging on the rail. In these situations, the rail can be broken without the driver even realizing it. Often, issues arise out of a general lack of information.	

Discussion Item	Applicability
Long vehicles Example: Private crossings at a golf club. The club did the snow clearing at the crossing with a small shovel and they were completely unaware of how dangerous their actions were. Furthermore, if the owners do not clear the snow from their crossing correctly, the snow can become very hard. Recently, a train derailed under similar conditions. The owners are not aware of the problems that can be created by their actions. Again, people often lack information or they are not aware of the dangers. Recreational vehicles (e.g., snowmobiles, 4 wheelers) are very dangerous. These users do not generally use enough caution/sensibility. The conditions can equally be different, depending on the manner in which the crossing was built. Example: When he was at CN, there were private crossings used by a lot of truck drivers. The risk depended on the driver and his education concerning the safe use of the crossing.	
Yes. Sensibility is required since there is a general lack of information concerning the dangers. Example: Snowmobile clubs can have an authorization for a crossing, but these clubs do not give any information to the users. The railways feel powerless facing the clubs, etc. since there is an impact on the local economy (tourism) if the crossings are closed on a trail.	
There are no mirrors used on the territory of the CFMG, but maybe it would be advantageous to some to add them in places with rock cuts. There is a lack of information from the municipalities. The municipalities should have to consult the railways before issuing a construction permit. Example: A municipality granted a construction permit for cottages, when the lone access was through a farm crossing. As a result the people now use this crossing as municipal access. The municipalities are not concerned with the status of the crossings. They should have to try to channel traffic towards a public crossing that is already built.	

Discussion Item	Applicability
The municipalities should me made aware of the required procedures concerning private crossings, especially regarding construction permit agreements (these problems rarely exist for the public crossings). They should have to consult the railways before issuing permits.	

Safety at Private Crossings – Railway Industry Stakeholders #26

Discussion Item	Applicability
Technical challenges: The configuration (slope and width); the number of level crossings (many); how to improve the existing level crossings at farms (in comparison, the new private level crossings, can refer to RTD-10 and can refuse some if it is necessary); in general, tries to avoid building new level crossings at farms but must agree to build some even if the conditions are not ideal because these owners have a right acquired to the passage. ***Administrative challenges***: How to control the use of these level crossings. In the case of the level crossings at farms, it is extremely difficult to make the follow-up with the owners and the users (sale of grounds etc). It will be necessary to develop regulations considering this reality. In the case of the new private level crossings, they are built and signposted according to RTD-10. A contract is signed between the parties, which makes management much easier. ***Jurisdictional challenges***: The closing of level crossings at farms, or even the refusal, is difficult when an owner decides to involve the Office of Transport. The OTC can grant the right to conserve/construct the level crossing even if the railroad, supported by Transports Canada, wishes to close it or not to allow the construction of a new level crossing at a farm, for reasons of safety.	
The technical standards are rather clear. The regulations suggested prohibited the construction of all level crossings when the speed of the trains is more 80mph. On the other hand, the legal standards lack precision, for example, the number of level crossings of per lot or owner, or over a certain length of the way, is not defined.	

Discussion Item	Applicability
i) RTD-10 must be simplified in order to apply it to the level crossings at farms. Necessary time to cross to the passage must be provided. The type of vehicle using the level crossings at farms changes very quickly. Concerning the level crossings at farms and the private level crossings, precise information that will be required by RTD-10 concerning the vehicles is seldom available. With respect to the private level crossing of a company, the level crossing is built according to the standards for public level crossings, and information is usually available. Given how serious the consequences of an accident can be, we also have to use our best judgement to determine the sightlines, e.g., increase necessary time in comparison with the necessary time calculated according to RTD-10. ii) It is difficult to apply RTD-10 to the site. It is necessary to have a simple chart, which could be applied by the personnel on the spot. Also, it is difficult to apply the new requirements to existing level crossings. iii) It is necessary to simplify the procedures, necessary information are not available for the level crossings at farms. For the majority of the private level crossings, too much research is necessary in order to obtain the information from the owners.	
The technical element having the most impact seems to be the visibility. The second element seems to be the configuration including the slope, especially for farm crossings. It is difficult to establish the sedentary maximum slope, in order to make sure that the equipment does not get hung-up on the tracks. The equipment using the crossings changes with time. The modernization of the equipment creates a risk because the level crossings at farms were not conceived with consideration this equipment. The railroads are not specialists in farm equipment (dimensions, acceleration, etc.). Equipment such as trucks "low-beds" can get hung-up on the rails because of the approaches. It seems however that we have fewer accidents at farm crossings in comparisons with the private crossings because there is often public access to the private crossings.	
The various types of vehicles can generate variances on the severity of the consequences of an accident. The farm equipment seems less problematic because their users know their equipment well and are aware of the risks associated with it. The collision risk, in my opinion, is associated with the users more than with the vehicles. There is often a lack of concentration on the part of the drivers, which generates a more significant risk for collisions. Also, there is a higher risk when the users trust the usual hours planned for the passage of the trains.	

Discussion Item	Applicability
Education is a good tool, but more training and awareness is necessary. This would be an effective means to improve safety with the level crossings. The creation of targeted advertising campaigns, including the setting in specific situation would be probably beneficial (e.g. of the advertisements to television directed to the users of farm or private crossings). More training is provided for public level crossings (by the railroads with the municipalities and by Transports Canada) compared to what is made for the private level crossings. When the railroad is in liaison with the users of the private level crossings, there is indirect training/awareness. Concerning farm crossings, there is little or no contact with the owners. The railroads do not have a database of the owners. The track supervisor is, in many cases, the only contact with these people.	
Mitigating measurements: - To require the trains to sound their whistles; - The addition of mirrors improves the visibility. - "Walk/Don' T walk" pedestrian signals (at farm crossings); - Automatic Warning Systems (for transport companies, factories, etc.). Suggestions: - To consolidate level crossings in order to eliminate some; - To give responsibility for the maintenance of the approaches of the level farm crossing owners (as has been done for the private crossings).	
To set up subsidies for automated systems at level crossings with public access (e.g. country cottages, etc.) especially those which are pseudo-public level crossings. This would improve safety and could interest the municipalities to take part. Also, by improving these level crossings, it could make it possible to close other level crossings in the vicinity. More initiative on the part of Transport Canada and the Office of transportation of Canada to consolidate and close level crossings, e.g. proactive approach, contact the owners in order to offer subsidies.	

Discussion Item	Applicability
The pseudo-public level crossings seem more at risk. They cannot be closed because they give access to several properties and must also give access to emergency services. The railroad does not have control over the users. The right to use the level crossing is usually given to an owner, but, as an example in the case of access to a country cottage, several residences can be added without the railroad being informed, so they don't have a chance to intervene. The possibility that several users use the level crossing is very probable. Level crossings at farms as well as the level crossings without restricted access are exposed to this type of risk.	

Safety at Private Crossings – Railway Industry Stakeholders #27

Discussion Item	Applicability
1. *Can you comment on the different challenges, be they technical, administrative, jurisdictional, or otherwise, involved in dealing with private crossings "by right" versus other types of crossings?* *Technical:* Farm crossings – problems with existing crossings. Crossings were placed where the farmer wanted them, not necessarily at the safest place. More vigilance is applied today. The type of equipment used at farm crossings today is larger machinery As equipment usage has changed over the years as the technology of moving goods has changed. Existing conditions do not support the type of equipment that is now used. Owners should be required to pay to upgrade their crossing according to the usage of unusual vehicles. Technical information isn't always available. Example: farm crossings typically 16 to 20 feet wide in the past. Now, equipment (combines, sprayers, etc.) now require 40 feet plus for crossing surfaces. Trucks are heaver and longer than the 5 ton truck used in the past. *Administrative:* Small private crossings for residential use are almost impossible to close, no matter how dangerous they can be. Example: 1.) Cost to protect crossing may exceed users' ability to pay, however still need crossing to access home. 2.) A property having access via a small private crossing can get subdivided and lots sold off. The crossing then becomes a "de facto" public crossing that the railway is responsible for (no road authority involved).	

Discussion Item	Applicability
1. *Can you comment on the different challenges, be they technical, administrative, jurisdictional, or otherwise, involved in dealing with private crossings "by right" versus other types of crossings?* *Continued:* A solution to this type of problem is to implement a requirement that developers' permits be screened by adjacent land owners (including the railways). Some improvement has been seen in the Edmonton area in this regard. *Jurisdictional:* Have received rulings form the CTA in the past that were based on convenience, not necessarily on safety. The CTA must be more critical in their definition of necessity versus convenience. There is room for involvement from the CTA to help reduce the number of crossings. A push to consolidate crossings has not been seen from the CTA.	
2. *Are there sufficient technical standards available in order to establish if a private crossing should be permitted and under what conditions?* Currently use the Highway-Railway Grade crossing regulations, Transport Canada sightlines, the TAC Manual and RTD-10. These are also used at private and farm crossings within limitations. Small private crossings can be difficult because the owners are not aware of these standards and cannot provide adequate information in order to use the standards easily. These can be the worst type of crossing. Larger private crossing (i.e. industries) can usually provide the required information. The railways use the standards to ensure that crossings meet the requirements.	

Discussion Item	Applicability
3. *Do you have any thoughts regarding the determination or the preservation of sight lines at private crossings:* 3.1 *G4-A vs. the new requirements taking into account specific vehicle types, as set out in RTD-10?* RTD-10 will be hard to achieve due to the lack of information available regarding vehicle types that are used at these crossings. This information is not often available to the railway. Currently use G4-A and increase the time by 50% for vehicles or grades. Some relaxing of the rules may be required for certain types of crossings, such as for low use private crossings, or seasonal crossings (snowmobile trails that are only used for part of the year). Preservation of sight lines: Private crossings achieve G4-A requirements when they are installed. However, the areas around these crossings get built up later (sheds, hay bales, trees, etc. sometimes intentionally to reduce noise from the railway tracks). The owners are not aware of the importance of the preservation of sightlines. As well, there is a lack of information regarding the responsibility of the owner/user in this regard.	
3.2 *Calculation of minimum sight line requirements?* Currently use G4-A + 50%. Applicants do not understand the requirements, and it may become necessary to involve engineering firms for this.	
3.3 *Are the methods adequate and can the required information be readily collected?* It becomes questionable if the methods using G4-A plus 50% is adequate. A past study undertaken by Transport Canada regarding truck acceleration showed that trucks can require as much as 30 seconds plus to cross tracks. G4-A + 50% is not sufficient in these cases. Always try to account for the vehicle type when an applicant is requesting a crossing. However, the railways are not always provided with the correct information.	

Discussion Item	Applicability
4. *Do you feel that the private crossing condition or the approach grades have a significant impact on the crossing safety? What associated issues have you experienced?* Grades play a major role in the clearance time. Approaches must be well kept, the gravel approaches must be well maintained and may not have an earth crossing within the distance of the largest vehicle using the crossing in order to ensure that the vehicle can get onto and off of the tracks as quickly as possible. The approaches must be well maintained to ensure that the vehicle has good traction. Curvature of the approaches just after a crossing must be carefully considered (example: a fork in the road just after the crossing) The build up pf signage can block sightlines (example: small business signs)	
5. *In your experience, does the type of vehicle (e.g., passenger vehicles, trucks, heavy construction equipment, recreational vehicles, farm equipment, etc.) or certain types of users affect the collision risk at the private crossing?* Yes. Vehicles: Large slow moving vehicles at industrial crossings with passive signs, where no whistling is required are dangerous. Similar for farm crossings. Users: The most dangerous are drivers paid by the haul, they are always in a rush. (ATVs and snowmobiles cause few problems at crossings, clubs are not bad at self policing, this is more of a trespassing issue)	
6. *Do you feel that education, awareness or training could be used effectively to address a particular type of user or groups of users?* Yes. However, one can give a lot of information out, but driver attitude will still be the controlling factor. Example: Transport Canada has brochures designed specifically for users of farm and private crossings. These are given out when a crossing is granted. Large industries having Health and Safety officers are not bad, their drivers are aware of safety issues. It is much more difficult to impose industry safety rules on independent drivers; however safety should be part of their contract to work.	

Discussion Item	Applicability
7. *What types of mitigating measures have you seen implemented to improve safety or address a specific concern at a private crossing? Do you have any suggestions for additional remedial measures?* Anything that is used at public crossings can be used at a farm or private crossing, including full automatic warning systems although this is often a last resort due to the cost and is more common at industries. Mirrors have been installed at farm crossings. Flagmen (private) have been used at location where many close calls were observed. Example: an industry where a high number of independent drivers used the crossing was advised that their crossing would be closed unless they used a flagman to ensure that no vehicles crossed the tracks when trains were approaching. This initiative was also backed by Transport Canada. Small independent crossing owners cannot afford signal systems. Transport Canada should make funding available to these owners, especially in situations where the crossing usage has changed. Crossings should be consolidated and closed. This is especially desirable in cases where warning systems become necessary, it is better to build a road to a public road, or use a better crossing location.	
8. *Can you suggest any specific changes that you would like to see enacted to reduce the risk of incidents at private crossings?* Grant fewer crossings There is a need for more awareness of the standards required, it is difficult for residential applicants to understand the requirements and to provide the required information. Must continue to refuse to grant crossings. Once a crossing had been refused, applicants then take their case to the CTA. The CTA's role is to arbitrate concerning the necessity of the crossing, the application does not include information required to review the safety of the crossing. While the CTA does consult Transport Canada, the CTA often does not require detailed plans, therefore it is not possible for Transport Canada or the railway to determine if the crossing is safe. More consultation is required concerning the minimum information required for a proper review.	

Discussion Item	Applicability
9. *Is there any other anecdotal information or personal experience that you would like to share, with respect to overall private crossing safety or a specific problem location?* There are now as many farm and private crossings as public crossings. Some work has been done with Transport Canada to consolidate public crossings. Would like to see Transport Canada become involved in the consolidation of private crossings (in terms of funding). Currently the $5000 that Transport Canada grants for the closure of a farm/private crossing is the only funding available. Railways need the backing of Transport Canada in order to get municipalities involved in cases regarding access to cottages etc., in order to build a common road for landowners (need finding to purchase land and for construction).	

Safety at Private Crossings – Railway Industry Stakeholders #28

Discussion Item	Applicability
Requests for new crossings: the railroad generally refuses them in order to avoid the addition of level crossings on their network. At present, these three railroads together have more than 200 private level crossings or farm crossings on 1130 miles of railway. When a request is received, the railroad warns the applicant to re-examine the surrounding level crossings in order to close some or to combine the crossings before building new ones. Until now, there no was call to TC. Existing Crossings: these level crossings are re-examined if the SMS (Safety Management System) requires it, or according to an incident/investigation. These crossings are re-examined according to the RTD-10 guidelines. Following the evaluation, there are level crossings, which change status (2 recent cases). When there are recommendations put forth to the owners by the railroad, the owners accept them because they want to preserve their level crossings. To date, a complete database of these level crossings is under development. This is a challenge because of the resources required. An administrative challenge is the lack of contracts in certain cases or the clauses concerning maintenance. This railroad is a small railroad, which has bought lines of a "Class 1" railway company in 1997; the original documents are often missing.	
There are sufficient technical standards for determining if private crossings should be allowed. At the legal or regulatory level, if they oppose the TC requirements, since RTD-10 is not yet the official standard, it could create difficulties.	
The G4-a standard is not used. RTD-10 is the basic tool for a detailed evaluation for new requests. Calculations are done according to the requirements' of RTD-10. The observations are made on the spot and a detailed evaluation is made with the agent. The information is available and the methods are adequate. However, to collect information, that takes resources and time. The standard is current and applies relatively well (RTD-10).	

Discussion Item	Applicability
Absolutely, crossing surface and approach conditions affect crossing safety. For example, a company, which refills cisterns for propane gas has a private level crossing where the slopes are not adequate, the approaches will have to be re-examined. The visibility is inadequate also. There have been dangerous incidents there.	
Yes, the type of vehicle is important. For example, the company that refills cisterns for propane gas has many tankers for propane/gasoline. The municipal regulation requires that the supply center be enclosed (protected). This causes a problem with the private level crossing approaches; there are fences on each side of the crossing, which increases the possibility of obstructions ("queuing") from these trucks full of dangerous goods. A better geometric configuration and the installation of barriers would help decreased the risk. Technically, it is a private level crossing, but contactors also use it. Also, there are ±30 passages per day, which is far more than the 2 outlined in the agreement.	
The education/training/awareness could be effective if there were penalties enforceable by the law to support the actions. Information is provided when an applicant makes an application for a level crossing. The owners understand the importance of safety but do not invest in improvements if they do not have obligations to do so. The work of Transport Canada/Direction 2006 is very good. There could be even more awareness training aimed at the public. Changes to standards, as well as changes to existing level crossings, over time, create non-conforming crossings.	
Observations to date: private level crossings and farm crossings do not have automatic warning systems. The approaches (levelling) and the sightlines are significant. Lighting and fences are installed were need. Last year, there was a crossbuck installation program for private crossings (work was carried out by a private contractor) Convex mirrors could be also added, at particular locations.	

Discussion Item	Applicability
Transport Canada could create a data-processing tool in order to index the data in the field, plus an algorithm, which would give requirements following the data-processing analysis, would be useful. RTD-10 is not easy to put into action within a day or two because of the resources it requires. Prioritisation is thus needed to determine what needs to be done first.	
It is unfortunate that there are not enough resources for the small railways. Until RTD-10 becomes obligatory by legislation, the thing to do would be to urge the provincial and municipal governments to close level crossings (not to open some). At present, no municipality is taking the initiative to close level crossings. It seems that they do not know about the benefit associated with closures. The financial assistance should be offered for the construction of alternative means of access (i.e., not rail crossings). The current Transport Canada practice of giving subsidies of $5000 (private) and $20 000 (public) for crossing closures is not sufficient.	

Safety at Private Crossings – Railway Industry Stakeholders #29

Discussion Item	Applicability
The majority of these crossings were constructed many years ago. Often it is impossible to get in touch with the owner when the land has been sold. The owners sell or subdivide the grounds without informing the railroad. Thus there are difficulties because the railroad does not have control, nor are they informed. It would be necessary to make sure that the passages meet the minimal standards of today, on the other hand it can be very expensive to modify certain level crossings in order to be in conformity with the standards of today. Over of the years, there are cases where certain level crossings were granted “by right,” ignoring the existing laws of the time and the crossings should not be considered level crossings “by grace." When this type of crossing is removed and that thereafter the owner makes a request to get it back, it is difficult to convince people that they do not have the right to have a level crossing.	
With regard to farm crossings, the owners can do what they want with them, example: change of vocation, subdivision, etc. With regard to private level crossings, there are few technical standards. For example, there are no applicable technical standards for the level crossings for all terrain vehicles or snowmobiles. There are many risks associated with these types of level crossings and there are more and more crossings of this type. Equally, concerning companies that ask for private level crossings, there are few technical standards, but one can use those that apply to public level crossings. However, the difficulties arrive when owners ask for level crossings for use by cars, small trucks, or for the personal use, but later, they start to use it for larger equipment and the level crossing is not conceived for this use. There are no standards to control the change of vocation of a level crossing and are there not of standards to support the decision of the railroads to prohibit the access to them.	

Discussion Item	Applicability
The vehicle type used at a level crossing is often difficult to determine. Transport Canada should make a study with RTD-10 in order to check if the requirements of the G4-A standard would not be always acceptable. It is necessary to simplify the analysis and the data requirements. At present, the railroad uses the G4-A standard for the sightlines during inspections. In my opinion, new RTD-10 seems to give results similar to the G4-A standard. The track supervisors are responsible for maintaining sightlines. RTD-10, in its current form, is too complicated to use for the private level crossings. In general, it is complicated for a track supervisor to use RTD-10 on the site and it is not very practical (not very "user-friendly"). Normally, information is extracted according to discussions' with the applicant. It becomes more difficult in the cases of change of vocation, (e.g. in the beginning, a user having a house uses its crossing for access with a car but later the owner builds a garage for 18-wheel trucks, etc.)	
There are problems with approach slopes. There are many cases of steep slopes and especially on dirt tracks, ice forms quickly in winter. It thus becomes difficult to go up to the approaches and moreover, to descend a slope slipping towards the railway increases the risk of accidents. Perhaps other recommendations could be made in order to increase necessary time according to G4-A? For example to include more adjustments which could be applied in order to take account of particular conditions. When inspecting a level crossing, it is necessary to inspect the sightlines according to the sitting position in a vehicle, because there is a great difference in visibility between this position and that a person standing trackside. The surface of a crossing must be well maintained. If the surface is jolty, the vehicles will slow down and take more time to cross the tracks.	
Slow vehicles, as well as the slow and long vehicles bring more risks. Also, low vehicles ("flatbeds") can have difficulty because they rub on the rail and get wedged (there were recent incidents of this nature). Equally, I was recently a witness at an incident with a truck at an un-signed level crossing. The approaches were gravel. The truck-driver did not stop, but rather slowed down until the level crossing and accelerated thereafter. He did not have the chance to check well if a train approached. The truck could easily have been struck by a train. In this case, the sightlines were not adequate for the user of the level crossing.	

Discussion Item	Applicability
It is not very probable that the education/training makes a great difference. The public adopts an attitude, which is difficult to change. There is a complacency, which is well anchored in the practices of the users. People cross the crossings 10 times per day during several years and believe that they are in control. It is difficult to reverse this attitude. It would be perhaps useful to reinforce the idea that a train can circulate in any time, on the mainlines.	

Attenuating measures include:
 	
• The installation of mirrors in the event of lack of visibility
  • The mirrors can help
  • Applicable to level crossings having a very low volume only, that will not be adequate for situations with many users
• Stop signs
  • Were installed at farm crossings on two complete subdivisions
  • These signs are more effective because people are accustomed using them
 	
Other suggestions:
 	
• On the high-speed lines, install signs indicating to pay attention because there are trains at high-speed. These panels will have to be standardized, especially for the less frequent users.
• At the places where there is a geographical situation, which could divert the attention of the user, add a sign reminding them to look around and use mirrors at the places where it is warranted, etc.
• To have Transport Canada subsidies in order to improve these level crossings.	

Discussion Item	Applicability
Require owners to make the necessary investments/improvements to the level crossings. Often level crossings built 70 years ago are adequate for use of today. The vocation often changes. At the time, small vehicles used the crossings, now large trucks use them. Also, there are level crossings, which gave access to small companies, but these companies have changed and the public now has access to these places via the small level crossing. Have a requirement, which would require the owner to warn the railroad when there are changes of crossing usage. Obligation for the owners of private crossings to combine level crossings and build ways on the private properties in order to connect them together. There are many situations where there are 4 or 5 crossings in a distance of ± 500 feet. Also, it would be desirable to have subsidies for this work.	

Discussion Item	Applicability
It would be significant to educate the municipalities and lawyers implied in the sales of land. The problem is that the municipalities and the lawyers do not always check if there is a legal access to a property at the time of a sale. There is no communication with the railroad during this process. Often, the new owner does not have any right to have a level crossing. There should be a legislation to force the municipalities to make necessary research to check if there is a legal access to the properties, before the purchase or the construction of a residence. It would be significant to have subsidies form Transport Canada in order to improve the safety of level crossings as much as the public level crossings. Often, if the railroad refuses to grant a level crossing, thereafter the applicant implies the CTA. The CTA decides that the applicant has the right to have a level crossing because it is landlocked. In these cases, the CTA should be a little more reticent with these requests. For example, with a distance X (to be determined) of a public level crossing, there should not be private level crossing. One should try not to increase the number of private level crossing. For example, a resident asks to have a level crossing which existed 60 years ago and which was dismantled 20 years ago. In this type of situation, the CTA should require a look at the possibility of having access other than by a private crossing. A recent example: The railroad refused to grant a level crossing (the applicant did not have the right to have one). Then, the applicant demanded a private level crossing but did not want to pay to have it (construction and maintenance). The railroad tried to convince the applicant to build a driveway towards another level crossing. There is one on each side, a public and private. This alternative would be probably less expensive than the adjustment of a new level crossing. Clear standards should be established. The owner has the impression that the railroad is responsible for all and expects to receive this access without large expenditure. It would be better to have additional support from Transport Canada (non-financial), such as a more active participation in the closing of level crossings.	

Safety at Private Crossings – Railway Industry Stakeholders #30

Discussion Item	Applicability
1. *In your opinion, what specific crossing placements, approach scenarios, or surrounding conditions create an elevated risk of incidents at private crossings?*	
- Steep approach grades;	**M**
- Poor sightlines due to curves, brush, rock cuts;	
- Road intersections very close to crossing generating conditions where there is not enough room for a tractor with a trailer.	**C, V**
2. Please, provide some examples of mitigation measures recommended in the past at private crossings, and comment on their effectiveness in improving private crossing safety.	
- Any measures taken are usually taken against the Railway, however Transport Canada may apply measures against a private individual or against a road authority as well;	**C**
- Measures applied against the railway usually consist of slow orders which are required until remedial measures have been applied. The application of slow orders is very effective;	
- Transport Canada often participates in meetings with the railway and the crossing owner when there are difficulties, and may discuss appropriate measures to be taken;	**C**
- Rarely suggests the addition of mirrors, while may be effective at crossings used by an individual farmer, they can also have problems due to the reflection of the sun at certain times of day, and they may also fog up;	**S**
- Rarely suggests the addition of stop signs at farm crossings;	**S**
- Often suggests improvements to approach grades;	**M**
- Transport Canada may refuse to allow the construction of a crossing for a given reason, if the elements based on which the crossing was refused are corrected, Transport Canada may not refuse to permit the installation of a crossing.	**R**
3. What, if any, difficulties have you encountered in the past in ensuring that the changes suggested/requested are put in place? Have there been any particular jurisdictional challenges? Few difficulties have been experienced. Most railways and municipalities will react quickly if a "Notice & Order" is issued, although these are rarely issued. The threat of a "Notice & Order" is often sufficient to generate a response.	

Discussion Item	Applicability
4. What specific changes (to technical requirements, legislation, education or other areas) would you like to see implemented to reduce the risk of collisions at private crossings? The coming into effect of the new regulation and associated standard (RTD-10) will be adequate. Once the regulation will have been enacted, education will be required for the preparation of Safety Assessments (as well, the safety assessments are too detailed and he feels that this process needs to be modified and simplified). He feels that RTD-10 is applicable at farm and private crossings.	**R**
5. Is there any other anecdotal information or personal experience that you would like to share, with respect to private crossing safety? To his knowledge, no difficulties have arisen in Ontario due to the sale or subdivision of land having a private or farm crossing. In his experience, the railways are always aware of upcoming developments and are involved. He is not aware of any situations where land was sold without proper access. In the past (10 years ago) there seem to have been more safety issues with these types of crossings. Crossing surfaces and grades have been improved, and crossing approaches have been widened to accommodate larger farm equipment. As well, the crossing closures program has been effective due to the efforts made by the railways in encouraging owners to close crossings.	**U**

Safety at Private Crossings – Railway Industry Stakeholders #31

Discussion Item	Applicability
1. *In your opinion, what specific crossing placements, approach scenarios, or surrounding conditions create an elevated risk of incidents at private crossings?* All farm and private crossings are dangerous simply by their existence, The government has no control over design and placement regarding safety matters for these types of crossings. There are no legislative requirements for Transport Canada to oversee the design, or location of these crossings. This will partly be mitigated by the proposed crossings legislation to be enacted as this proposed legislation will address the main issues. The biggest issue is that there is no control by a railway or by Transport Canada over the vehicles used at farm crossings, often these were built for use by horse and buggy. Now large vehicles with hazardous materials use these crossings. By law, the users have the right to cross. (RTD 10 will help this issue – design vehicle requirement)	
2. Please, provide some examples of mitigation measures recommended in the past at private crossings, and comment on their effectiveness in improving private crossing safety. Not many mitigating measures recommended by Transport Canada At some locations the following are used: convex mirrors Block indicators or lights indicating the presence of trains are of assistance . Transport Canada does not regulate the design of these types of crossings. They must ensure that is safe from railway point of view. Generally, railways do not consult TC for these. Obviously, if Transport Canada sees one with an obvious threat to safety, they will act.	
3. What, if any, difficulties have you encountered in the past in ensuring that the changes suggested/requested are put in place? Have there been any particular jurisdictional challenges? Transport Canada cannot order road authority / private owner to make changes, instead Transport Canada can place speed restrictions on the railway as the railway is responsible for ensuring safety. In the past, Transport Canada has encouraged the railways to act with individuals, this works reasonably well. Transport Canada will intervene when there is an immediate threat to safety.	

Discussion Item	Applicability
4. What specific changes (to technical requirements, legislation, education or other areas) would you like to see implemented to reduce the risk of collisions at private crossings? Putting the proposed legislation & RTD-10 into place is an absolute must, as quickly as possible. Under the current legislation there is no clear definition of who is responsible for safety, this will be remedied by the proposed new regulation (including the associated technical standard RTD-10) Transport Canada and the Canadian Transportation Agency (CTA) have a good relationship. The CTA is only involved in cases of dispute and they always consult Transport Canada if they are involved. If the CTA is not involved, Transport Canada does not necessarily know that a crossing will be put in. The CTA rules based on the legal right to a crossing. Transport Canada has no ability to deny a crossing, they may only provide recommendations based on safety that may make the crossing prohibitive. .	
5. Is there any other anecdotal information or personal experience that you would like to share, with respect to private crossing safety? Generally, road use on farm and private crossing is fairly low. Generally they don't pose as high a threat as is associated with the higher level-of-use of public crossings. In the prairies there seems to be fairly good knowledge by farmers as they are closely linked to the railway. They seem to be a bit more aware than farmers in other regions. There have been few accidents in the 3 Prairie provinces. Transport Canada is involved with railways for closure of farm crossings. However, there has been somewhat limited success to date. There is little incentive for the farmers to close the crossings. Even if the crossing gets closed, they can apply and have it put back into place. There is a bit of a "disconnect" between the CTA and the farm crossing closures program, this needs to be clarified. Private and farm crossings typically fall below the radar, Transport Canada does not have a database of these crossings and does not inspect them unless there is a problem (manpower issue). There are probably about 4000 private/farm crossings in Manitoba, Saskatchewan and Alberta.	

Safety at Private Crossings – Railway Industry Stakeholders #32

Discussion Item	Applicability
Locomotive engineers familiarize themselves with the locations and conditions of private crossings on their subdivisions through experience, trial and error, and the shared experiences of other engineers. They are provided with subdivision profiles; however, the lack of details in the profiles seriously limits their usefulness.	**T**
Crossing conditions generally change very slowly over time (as brush, trees grow along the right-of-way). However, when brush or trees grow to a size where there inhibit sightlines, it can be a challenge and can take a significant while to get sightlines cleared when the obstruction originates on private lands.	**O**
For safety sake, the railways should be granted the authority to clear sightline obstructions that originate on private lands after a significant notification period, if the landowners do not act on their own.	**R**
Locomotive engineers encounter some type of unsafe behaviour/activity on virtually every trip (e.g., stalled vehicles on the tracks, cars or people playing "chicken" with the train, ATVs or snowmobiles on the tracks, people not paying attention/distracted by other activities – cell phones are a major distracter).	**C**
One of the major detriments to crossing safety in western Canada is the installation/use of farm gates at private crossings. All too frequently crossings users will park their vehicles across the tracks when they get out of their vehicles to unlock/open the gates.	**C**
In situations where farm gates a deemed necessary for farming activities or access control, the gates should have to be set back (100m) from the railway right-of-way. Texas gates could be used as an alternative to farm gates to prevent livestock from wandering onto the railway right-of-way.	**S**

Discussion Item	Applicability
Based on experience, the worst types of users are as follows: 1. Passenger vehicles (particularly SUVs and old beaters); 2. Farm equipment and bulk fuel delivery vehicles; 3. Commercial trucks (tractor trailers); 4. Bicycles; and 5. Recreational vehicles (ATVs, dirt bikes, and snowmobiles).	**V**
The railways have a near miss policy; however, "most near misses go unreported." The justification is that the relative speeds of trains and vehicles make getting the required details virtually impossible. As such, nothing generally results of reporting a near miss, and engineers take to opinion that it is not worth their effort to make a report. A conservative estimate is that 75% of near misses don't even get called in.	**R**
The following features have a significant impact on crossing safety: • Crest of hill – limits sightlines; • Sidings – no crossing should ever be authorized over/near a siding; • Crossing surface condition – poor conditions causes an increase in crossing time; • The number of tracks – second train issues, greater exposure • Multiple users served by a single crossing – lakeside cottages or subdivisions.	**C**
Extreme weather conditions have a significant impact on crossing safety, particularly weather events that reduce visibility (e.g., hoarfrost, whiteouts). The fact that whistle posts have a white backing doesn't help in these conditions.	**C**

Discussion Item	Applicability
Time-of-day and/or time-of-year factors affect crossing safety. For example, holidays and rush-hour spikes in traffic volumes increase the probability that an incident will occur (increased exposure).	**C**
Lighting conditions affect visibility and crossing safety; darker conditions allow for greater contrast and it is easier to spot headlights, whereas well-lit crossings are easier to navigate.	**C**
Industrial areas are particularly dangerous, because of their characteristic close quarters and buildings that extend to the edge of the railway right-of-way.	**C**
Suggestions: • Billboards and other roadside distractions/obstructions should not be allowed near crossings; • The industry should move towards building more parallel access roads rather than more private crossings; and • The railway authorities should close or consolidate as many private crossings as possible.	**C**
Has been involved in several (including fatal) crossing collisions and has vivid firsthand understanding/appreciation of the dangers and impacts.	

INSERT CLIENT LOGO IF AVAILABLE

Transport Canada

IDENTIFICATION AND EXAMINATION OF SAFETY AT PRIVATE CROSSINGS

PHASE 3 INTERIM REPORT - REFERENCE #T8200-044506

SEPTEMBER 2006

IBI GROUP

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1. INTRODUCTION

1.1 Background

Over the past several years, the safety of private crossings has come under increasing scrutiny. Between 1995 and 2003 there was on average 45.1 collisions per year at private crossings. Crossing incidents can affect numerous stakeholders, such as the vehicle and equipment drivers, railway operating personnel, railway passengers, property owners, municipalities, and federal authorities.

Some potential causes of grade-crossing incidents have been identified and include, but are not limited to, increased exposure times, operator expectancy violations, poor crossing designs, and lack of education and notification.

In July 2005, IBI Group in association with UMA Engineering Ltd. (hereafter referred to as the IBI Group Team) was retained to complete a study to identify and examine the key factors of safety at private crossings (Reference Number: T8200-044506).

The study is comprised of the following three phases:

- **Phase 1: Review of Available Information and Data** – Obtain and evaluate available literature, statistics and data relating to private crossing collisions/incidents, warning systems and signage, access, operations, maintenance, user education, and applicable laws and regulations;

- **Phase 2: Collection of New Information and Data** – Conduct surveys and interviews of stakeholders in relation to the provision, use, operation, management and safety of private crossings. Based on the interview findings, identify and assess risk mitigation strategies specific to private crossings; and

- **Phase 3: Conclusions and Recommendations** – Formulate and document conclusions and recommendations relating to the root causes, symptoms, and risk mitigation strategies related to collisions/collision potential at private crossings.

Phases 1 and 2 have been completed and submitted to the Project Steering Committee (PSC). This document represents an Interim Report covering Phase 3 of the study.

1.1.1 PHASE 1: REVIEW OF AVAILABLE INFORMATION AND DATA

Through the efforts of Phase 1, the IBI Group team gained a greater understanding to the state of private crossing safety in Canada. Crossing incident statistics and reports were reviewed in detail, as were existing standards, regulations, legislation, and educational initiatives. Based on the information gathered from those sources, the IBI Group Team formed several conclusions regarding their impact on safety at private crossings. The information gathered in Phase 1 contributed to the development of the stakeholder interview questions for Phase 2, allowing the IBI Group Team to compare/evaluate the conclusions with/against the opinions and insights provided by stakeholders.

1.1.2 PHASE 2: COLLECTION OF NEW INFORMATION AND DATA

A total of forty-four (44) stakeholders nationwide, including representatives from across the railway industry, and private crossing owners, were interviewed as part of Phase 2 of the study. Based on their input, and the information collected through Phase 1, the IBI Group Team was able to conduct an analysis of private crossing safety using a "life cycle" approach. Considering new crossing submissions, new crossing construction, crossing operations and maintenance, and management of existing crossings, the IBI Group Team identified a set of contributory factors that influence private crossing safety. Subsequently, a series of potential risk mitigation strategies was developed to address the contributory factors. The contributory factors and potential risk mitigation strategies identified under Phase 2 are summarized in **Exhibit 1-1**.

Exhibit 1-1: Contributory Factors and Potential Risk Mitigation Strategies

Contributory Factors	Potential Risk Mitigation Strategy	Project Profile
New Crossing Submission and Approval:		
[1] Railway/land owner agreements are not created for all crossings	• Railway/landowner records must be created and maintained for all private crossing regardless of type: "by right" or "by grace"	Crossing Inventory
[2] Agreements and CTA decisions do not document crossing use and vehicle type permissions	• Agreements and CTA decisions must explicitly document intended crossing use and vehicle type at time of approval.	Access Management
Operations and Maintenance:		
[3] Railways are not properly notified of changes in crossing use or vehicle type	• Crossing owners should be provided with explicit information regarding their crossing permissions. This could be conveyed through the railway/owner agreement and reiterated in a crossing owner "information package".	Crossing Inventory/ Education and Awareness Programmes
[4] Crossing owners need explicit information regarding the use and operations of their crossing	• Crossing owners need explicit information regarding their crossing responsibilities, use, maintenance, liabilities and communication protocol.	Crossing Inventory/ Education and Awareness Programmes
[5] Railway operators do not have a comprehensive list of private crossing nor their ownership	• Establish and maintain a comprehensive and current list of private crossing locations and ownership status.	Crossing Inventory
[6] Unfamiliar or infrequent users of a private crossing are not provided with education with regards to the crossing operations	• Create and distribute one comprehensive crossing owner's information package, which outlines basic safety at private crossing education materials, including contact information.	Education and Awareness Programmes

Contributory Factors	Potential Risk Mitigation Strategy	Project Profile
[7] Unfamiliar or infrequent users of a private crossing are not always provided with widely recognized and understood regulatory, warning and information signs. [8] Emergency contact information is not provided at the crossing site. [9] Poorly marked or maintained crossings may lead an unfamiliar user incorrectly assuming the railway operations are not active or are not a substantial threat.	• Standardized private crossing signs, unique crossing identification numbers, and emergency contact numbers must be posted at all private crossings and kept in a good state of repair. The installation of stop signs, mirrors or other devices could also be an effective tool in some locations.	Crossing Design
[10] Crossing owners may not understand the responsibility and implications of authorizing the use of their crossings by other	• Create and distribute one comprehensive crossing owner's information package, which outlines the safety implications and responsibilities of allowing access to their private crossing.	Education and Awareness Programmes
[11] Crossing owners are not provided with procedures or contact information to convey maintenance or operational issues to the appropriate rail official	• Create and distribute one comprehensive crossing owner's information package, which outlines rail general and emergency contacts and basic crossing maintenance and operations information, i.e., sight lines, approach condition, etc.	Education and Awareness Programmes
[12] There are no standard designs or operating procedures for access control devices such as gates	• Develop standard access control applications/procedures.	Access Management
[13] There are no formal mechanisms for railways to inform crossing owners that train activity at a particular crossing is changing	• Establish a comprehensive and current list of private crossing locations and ownership status.	Crossing Inventory
Change in Ownership/Access:		
[14] Railways are not properly notified of changes in ownership	• Legal transfer of lands adjacent to rail right-of-way must include railway notification or approval	Access Management
[15] Railways are not always properly notified of changes in land use permissions	• Municipalities should always notify railways of plans for development next to railway rights-of-way and at locations to be served by any such adjacent lands.	Access Management
[16] Owners/potential owners are not properly notified of their crossing operations and ownership responsibilities	• Crossing owners should be provided with explicit information regarding their crossing permissions • Legal transfer of lands adjacent to rail right-of-way must include railway notification or approval • Private crossing information must be forwarded to new owner with real estate documents. A crossing owner information package would facilitate this process.	Access Management

Contributory Factors	Potential Risk Mitigation Strategy	Project Profile
Crossing Closure and Consolidation:		
[17] The ability to reduce the number of private crossings is limited to the crossing closure incentive program and limited railway/owner negotiations.	• The current subsidy of $5,000 offered by Transport Canada for the closure of a private crossing should be increased to more realistically reflect the costs of establishing an alternative access; the railways should also be more actively involved in attempting to establish access alternatives.	Access Management
[18] The current funding programs limit contributions of Transport Canada to supporting crossing closures.	• Transport Canada should have the freedom to provide subsidies to pay for safety improvements and alternative access, in addition to crossing closures.	Access Management

1.2 Phase 3 Scope and Objectives

Phase 3 is comprised of the following tasks and objectives:

- **Task 1: Develop Conclusions and Recommendations** – For this task, the IBI Group Team has developed a set of risk mitigation strategies (comprised of short-term risk mitigation strategies and risk mitigation project profiles).

  A two-stage approach is proposed for implementing the risk mitigation strategies. The first stage involves the undertaking, in the short-term, of a series of direct, uncomplicated tasks, intended to encourage immediate progress in addressing private crossing safety. The short-term strategies are outlined in Section 2. Section 3 on the other hand, presents a set of project profiles that define longer-term assignments, which will require significantly more time to plan and implement. The following are outlined for each of the risk mitigation project profiles:

  - Primary benefits of each strategy and its application to a specific contributory factor or group of factors;
  - Implementation of pilot or trial projects, preliminary study designs (including potential deployment milestones) and future research requirements for each;
  - Probable delivery participants and if applicable, potential partnerships initiatives;
  - Budgetary level costs and potential funding sources; and
  - Potential barriers to implementation, including legal, regulatory, project finance, technical, and landowner response.

- **Task 2: Final Documentation** – The final documentation will be an amalgam of the Phase 1, 2, and 3 interim reports, and will include an executive summary. Task 2 will be completed after a review of the Phase 3 interim report by the PSC.

2. SHORT-TERM RISK MITIGATION STRATEGIES

In addition to the risk mitigation projects described in Section 3 of this document, the IBI Group Team has developed a series of risk mitigation strategies that could be implemented in the short-term. The short-term strategies focus on relatively simple tasks that with little initial planning could have an immediate impact on safety at private crossings.

2.1.1 INFORMATION SHARING AND AUDITING

Transport Canada should request each railway to forward a comprehensive set of their most up-to-date crossing records. This would provide Transport Canada with knowledge of the current record keeping practices of the railways, and allow the railways to demonstrate their existing processes for conducting inventories and updates. Based on the information provided Transport Canada could determine what data would need to be included in any future data management system. The goal of the task would be to review current data management practices and gauge the need to place more stringent requirements on the types of data collected and maintained by the railways.

2.1.2 CROSSING IDENTIFICATION CODES

Transport Canada should develop, in consultation with the railways, a unique crossing identification code/number for every crossing. Ideally, the crossing identification code would reference the proprietary railway, subdivision, and mileage of the crossing. This would then be added to the crossing records inventory. The goal of the inventory would be to gain an up-to-date count of all private crossings in Canada, and to assign each crosssing a quick-reference identification code for use in emergency situations. Although it is recognized that most railways are already using similar naming conventions, the addition of an abbreviated railway name to the code would be of benefit to emergency responders. Emergency services will have to be made aware of the conventions used, and partnered with to maximize efficient use of the information (e.g., geographic/GPS mapping of crossings to improve response times).

2.1.3 MINIMUM SIGNAGE FOR PRIVATE CROSSINGS

As a minimum, every private crossing should be equipped with a sign that clearly displays the emergency contact telephone number for the appropriate railway. Signs should have the contact number posted on both sides of the crossing, and be kept in a good state of repair. As an additional measure, crossing mile markers and/or unique crossing identification numbers should be posted along with the emergency contact telephone numbers. The railways should be requested to deploy these signs at private crossings immediately, as a retrofit program. The goal of posting emergency contact telephone numbers at the crossing site is to provide a mechanism for all crossing users to inform the railways of potential hazards.

2.1.4 CROSSING DESIGN STANDING COMMITTEE

Transport Canada, along with the railways, should seek to form an inter-jurisdictional private crossing design/standards development group. The group would be similar in nature and intent to the Railway Safety Consultative Committee, which appears to have ceased operation (last meeting minutes posted online – October 22nd, 2001). The group would be tasked with determining the initial requirements for such initiatives as a "private crossing" sign, minimum requirements for standard private crossing installations (e.g., access controls, geometry, signs, inspection tools, etc.), and target groups for education/awareness programmes. The group could be a one-time venture or it could meet at regular intervals. The goal of the group would be to determine which railway safety projects should be conducted, and limit the amount of legwork required to obtain input from the railway industry on future projects, such as those profiled below, in Section 3.

2.1.5 PRIVATE CROSSING RECORDS

Each railway should develop a standard crossing record document (or form), to act as a surrogate for a formal crossing agreement, and to be completed for every new crossing "by right." The record should contain such information as: crossing owner contact information, intended/design use and

vehicle type for the crossing, and owner and railway responsibilities (physical and/or financial). Traditional crossing agreements should continue to be documented for all new crossings "by grace," and they should contain, as a minimum, the information described above. Periodic reviews and updates of all crossing records and agreements should also be conducted to maintain current information. All parties should receive a copy of the record, and records should be filed with the CTA. The goal of private crossing records is to formally document crossing constraints, responsibilities, and contact information.

3. RISK MITIGATION PROJECT PROFILES

Realizing that some of the factors having a negative impact on private crossing safety will require further investigation, and the proposed mitigation measures will require a significant timeframe for implementation, the IBI Group Team has developed a set of recommended risk mitigation project profiles. The project profiles provide "work plan"-level details for the implementation of risk mitigation measures. The proposed project profiles address the following areas:

- **Access Management** (development reviews, crossing applications, and crossing closures);
- **Crossing Inventory** (cataloguing, land/crossing transfer tracking, and crossing status);
- **Crossing Design** (crossing standards, tools for the railway industry, and technologies); and
- **Education and Awareness Programmes** (approach, target groups, and proliferation).

The third column of **Exhibit 1-1** identifies the project profile(s) that address each of the contributing factors listed in the first column of the exhibit. A summary of the contributing factors addressed by each project profile is also provided with the respective profile below.

3.1 Access Management

This project addresses contributory factors 2, 12, 14, 15, 16, 17, and 18.

3.1.1 OBJECTIVE

To review existing development/planning review processes and establish a set of access control guidelines for private crossings that are similar in nature to those used in the roadway engineering industry, and that include consideration for crossing applications, development reviews, and crossing closures.

3.1.2 PROJECT TASKS

Task 1: Development/Planning Process Review – Conduct a nationwide evaluation of provincial and municipal planning and development review processes to determine the level of railway inclusion. The task would seek to explore the differing levels of input and influence afforded to railways concerning development or land use changes on lands adjacent to railway rights-of-way. The review would also include an internal audit of the railways, to determine whether or not their existing processes of providing feedback for planning/development reviews include input from all the appropriate departments.

Task 2: Land Transfer Process Review – Conduct a nationwide examination of land transfer laws and processes to determine the extent to which the railways are notified of changes in landownership, particularly for lands having private crossings. Should there be a duty within the real estate community to notify the railways of land transfers? The study would also explore the level of railway input on land transfers, and the need to provide the railways with a mechanism for protecting their interests with respect to land transfers (e.g., to explain the impact of land transfer on crossing rights and responsibilities, and to help the railways keep their records current).

Task 3: Access Management Guidelines – Develop a set of access management guidelines, similar in nature and intent to those use in the roadway engineering industry, for private crossings. The guidelines would have implications on virtually all stages of the private crossing "life cycle." Exhibit 3-1 maps some of the elements that would potentially be included in the guidelines to the stages of the private crossing "life cycle" that they would affect.

Exhibit 3-1: Potential Access Management Guideline Elements

Guideline Element	Stage of Private Crossing "Life Cycle"
• Number of crossings allowed	• Crossing submission/provision
• Proximity of adjacent crossings	• Crossing submission/provision
• Functional design of crossings	• New crossing construction
• Conditions on crossing uses	• Operations and maintenance
• Closure of Crossings	• Operations and maintenance

The Draft Railway Right of Way Access Control Regulations (15 November 2002) appear to have been developed with similar intents; however, the access management guidelines, as proposed above, would take the concept to the next level. The proposed guidelines would provide Transport Canada and the CTA with more options and greater influence over where and how private crossings are allowed.

Task 4: Crossing Closure Funding Study – Review the existing programmes (formal or otherwise) offered by the railways and Transport Canada. Evaluate the effectiveness of the existing programmes in closing private crossings and improving crossing safety. Also, conduct a study into the actual costs of closing a private crossing, and establishing alternative means of access. The study could include surveying potential closure sites and conducting engineering estimates for the construction of alternative means of access to the property. The goal of the study would be to determine a reasonable subsidy to be offered to private crossing owners as an incentive to close their crossings, and recommend the set of conditions under which the subsidy should be offered.

3.1.3 DELIVERABLES

- Access management guidelines for private crossings document.
- Recommendations for changes to private crossing closure funding programmes.

3.1.4 PARTICIPANTS

- Railway Departments: Public Works, Engineering, Real Estate
- Transport Canada
- Canadian Transportation Agency

- Crossing Owners
- Real Estate Community
- Municipal/Provincial Government Planning Departments

3.1.5 BENEFITS

- Ensuring that the railways have an opportunity to represent their interests in the land development process;
- Helping the railways keep their records current;
- Developing consistent standards or requirements for access to and across the railway right-of-way;
- Educating planners on railway standards and requirements; and
- Establishing guidelines that railway staff can apply quickly and consistently.

3.1.6 COSTS

A high-level estimate of the cost for this project is $100,000, to retain outside consultants. The cost estimate does not include the costs to the railways or other agencies for their participation or the costs of any hardware or equipment that might be required.

3.1.7 POTENTIAL BARRIERS

Any changes to legislation could face resistance, and would be subject to lengthy review and approval processes. Altering the mandates of Transport Canada and/or the Canadian Transportation Agency could prove to be a significant challenge. Development moves rapidly, and any delays incurred as a result of additional review processes would be costly and strongly opposed.

3.2 Pilot Crossing Inventory Update

This project addresses contributory factors 1, 3, 4, 5, and 13.

3.2.1 OBJECTIVE

To update, document and track the ownership, design, and maintenance status of a cross-section of private crossings through a pilot study, as a means of estimating the resources required for monitoring crossing conditions and use, and maintaining direct lines of communication between the railways and crossing owners.

3.2.2 PROJECT TASKS

Task 1: Contact Crossing Owners – Establish a line of communication with the owners of a sample of private crossings under the jurisdiction of each railway. Communication could be established through existing records or through a contact initiative, for crossings where the contact information of record is out-of-date (e.g., a notice to contact the railway posted at the crossing site).

The pilot study would be used to gauge the rate of response of crossing owners to various contact initiatives.

Task 2: Crossing Agreements and Records – Ensure that a crossing agreement (for crossings "by grace") or official record (for crossings "by right") exists or is created for every private crossing included in the pilot study. This will require the acquisition of and subsequent review/update of the existing crossing agreements and follow up to ensure that the proper individual (current owner) is indicated on the agreement/record.

Task 3: Data Management – Create a single comprehensive database of crossings for each railway (using the information gathered through the pilot study to initially populate the database), and provide all railway departments with access to the database. Some discussion will be required to determine the extent of information to be contained within the database (e.g., crossing ID, location, owner contact information, design vehicles/use conditions, date of last inspection, link to crossing agreement/record, GPS coordinates, etc.). The databases provided as part of the pilot project will be incomplete, in that they will only contain data for the crossings included in the pilot project.

Task 4: Database Maintenance – Develop procedures for maintaining and updating the database. This could involve creating a new step in the crossing inspection process and/or periodic follow up with crossing owners to update contact information. Task 4 could include a subproject of developing mechanisms by which the railway and real estate communities can efficiently and accurately exchange information regarding land transfers and changes in ownership.

3.2.3 DELIVERABLES

- Updated information for crossing included in the pilot study;
- A database of private crossings for each participant railway to be completed by the railways; and
- Procedures for maintaining the database and ensuring communication between railways and real estate regarding land transfers.

3.2.4 PARTICIPANTS

- Railway Departments: Real Estate, Public Works, Engineering
- Real Estate Community
- Crossing Owners

3.2.5 BENEFITS

- Shorter reaction/response times for railways and emergency services in dealing with safety issues and emergency situations;
- Up-to-date records and agreements that provide official documentation of private crossing responsibilities;
- Established lines of communication between stakeholders (e.g., railways, landowners, and the real estate community); and

- "Lessons learned" from pilot project can be used to design and implement a program to be followed by all railways, for all crossings in Canada.

3.2.6 COSTS

A high-level estimate of the implementation costs for this project is $200,000. Creating and maintaining the database might require the hiring of additional railway personnel, as it is unlikely that the railways would outsource the work, and some railways might not currently have the human resources to perform the task. Equipment costs might be realized through the need for new or additional servers or computer terminals for storing, sharing, and accessing data. The cost estimate does not include the costs to the railways or other agencies for their participation or the costs of any hardware or equipment that might be required.

3.2.7 POTENTIAL BARRIERS

The greatest barrier to this project will likely be the identifying, contacting, and following up with crossing owners. The response rate of crossing owners will also have a significant impact on the duration of the project and the evaluation of contact initiatives.

3.3 Crossing Design

This project addresses contributory factors 7, 8, and 9.

3.3.1 OBJECTIVE

To develop standard private crossing installations, tools to aid railway industry personnel, and explore the potential of new crossing technologies.

3.3.2 PROJECT TASKS

Task 1: "Private Crossing" Sign – Design a "private crossing" sign that would be easily recognizable to new crossing users and serve to notify potential crossing users that the railway is active and should be treated with caution. The sign could also incorporate the emergency contact telephone number and the crossing identification code.

Task 2: Standard Private Crossing Installation – Design a standard low volume private crossing installation, including but not limited to:

- Required signage and placement (e.g., "private crossing" signs, emergency contact numbers, and crossing identification numbers);
- Proper and appropriate conditions for the use of stop signs at private crossings;
- Specifications for the installation of mirrors (size and placement);
- Specifications for the installation of gates or other physical access controls (including setback from the railway right-of-way); and
- Specifications for the installation of additional crossing technologies at low volume crossings (e.g., wayside horns, block repeaters with lights, etc.), including proper and appropriate conditions/guidelines for their installation.

Task 3: Railway Industry Tools – Develop a set of easy-to-use tools (e.g., charts, spreadsheets, and/or conceptual design of software applications) for use by railway industry personnel in designing and inspecting private crossing. The tools would facilitate the calculation of crossing parameters; such as, sightlines and approach grades. The tools would be based on the proposed RTD-10 guidelines, and as such, they would consider design vehicle characteristics. Ideally, the tools would accurately calculate crossing parameters while requiring only a few easily attainable input variables. A set of charts or manuals containing the operating characteristics of various types of vehicles and industrial/agricultural equipment (more information than what is currently available in RTD-10) could also be developed to accompany the tools.

Task 4: New Technologies – Conduct an evaluation of new technologies with the potential to contribute to improvements in railway safety and/or assist in crossing inspections. Develop recommendations for the application of new technologies (under specific deployment) at private crossings. The evaluation could involve one or several pilot deployment studies and a re-evaluation of the need for wayside technologies to be failsafe.

3.3.3 DELIVERABLES

- A standardized design for a "private crossing" sign to be installed at all private crossings.
- A set of specifications for a standard private crossing installation.
- Easy-to-use tools for railway industry personnel to employ in the design and inspection of private crossings, and possibly an accompanying manual of vehicle operating characteristics and acceleration charts.
- Recommendations on the applicability of new technologies at private crossings.

3.3.4 PARTICIPANTS

- Railway Departments: Public Works, Engineering
- Transport Canada

3.3.5 BENEFITS

- The likelihood of design standards being applied correctly will increase if the standards are easier to work with and apply.
- Consistency in crossing installations across regions and jurisdictions.
- Improved tools for the railways.

3.3.6 COSTS

A high-level estimate of the implementation costs for this project is $150,000. The development of standards and tools will require significant consultation with the railways, and evaluating new technologies could involve a fairly exhaustive research assignment, as such, the cost of this project will be comprised primarily of consulting fees. The cost estimate does not include the costs to the railways or other agencies for their participation or the costs of any hardware or equipment that might be required.

3.3.7 POTENTIAL BARRIERS

One potential barrier could be the difficulty involved in trying to minimize the required input data for new tools while trying to maintain the accuracy of the results. Also, the applicability of new technologies could be limited by the railway industry requirement that they be failsafe.

3.4 Education and Awareness Programmes

This project addresses contributory factors 3, 4, 6, 10 and 11.

3.4.1 OBJECTIVE

To inform private crossing owners and users of their responsibilities, and to raise the general level of awareness regarding the proper use of private railway crossings and appropriate emergency procedures.

3.4.2 PROJECT TASKS

Task 1: Information Package – Develop a crossing owner/user information package that describes the general requirements and responsibilities of a private crossing owner, for example:

- Notifying the railway of changes in crossing use or vehicle type;
- Adhering to the terms of the crossing agreement;
- Educating users on the proper use of the crossing; and
- Paying for improvements, when required.

The package would also include general information for the owner, including general and emergency contact numbers, emergency procedures, and basic crossing maintenance and operations information. More specific information (e.g., a copy of the crossing agreement/record indicating permitted vehicle types, conditions of use, etc.) could be included in the package depending on the level of detail available to the railways and their desire to build customized packages. **It is imperative that the information package and all of its contents be presented in layman's terms, as to make it explicitly clear.**

Task 2: Information Package Distribution – Distribute the information package to private crossing owners at the time of crossing authorization, when they take ownership of a crossing via land transfer, and/or periodically over the life of the crossing (e.g., on an annual basis). Distribution of the information package could be conducted in conjunction with Tasks 2 and/or 3 of the Crossing Inventory project or subsequent to the completion of that project.

Task 3: Driver Education – Conduct a thorough review of the various driver education handbooks, courses, and exams used across Canada and internationally; evaluate their treatment of railway crossing safety issues; and develop a set of recommendations to address any shortcomings. Recommendations could include a set of standardized emergency procedures for inclusion in provincial and territorial manuals or specific focus on railway crossing safety issues during driver examinations. Particular emphasis should be placed on educating commercial drivers and drivers who more often frequent rural areas.

Task 4: Public Awareness Campaign – Given the recommendations for installing emergency contact number, crossing identification number, and standardized "private crossing" signs at all private crossings, a public awareness campaign explaining how to use the new information, launched through the media, would help with driver recognition.

3.4.3 DELIVERABLES

- A crossing owner/user information package containing general (and/or site-specific) information, contact numbers, and descriptions of procedures.
- Recommendations for improvements to driver education related to railway crossing safety.
- A public awareness campaign explaining the significance and use of "private crossing" signs and emergency contact numbers.

3.4.4 PARTICIPANTS

- Railway Departments: Public Relations, Public Works, Real Estate, Engineering, Police Services
- Crossing Owners/Users
- Ministries of Transportation
- Emergency Services
- Media Outlets

3.4.5 BENEFITS

- Crossing users (as well as potential crossing users) better educated in the proper use of railway crossings and the risks involved.
- A "ground floor" approach to railway crossing use education.

3.4.6 COSTS

A high-level estimate of the implementation costs for Tasks 1,2, and 3 of this project is $150,000. Without knowing the scope and degree of proliferation desired, it is difficult to price Task 4. There could be significant costs associated with printing and distributing the information packages, depending on the approach taken. The cost estimate does not include the costs to the railways or other agencies for their participation or the costs of any hardware or equipment that might be required.

3.4.7 POTENTIAL BARRIERS

As with most education and awareness programmes, the success of this project will depend on obtaining the full participation of all parties involved, particularly the public and Ministries of Transportation. It will also be a challenge to see that the information reaches its target audience.

There is also a substantial financial component to this project that could be pushed even higher depending on the extent of Task 4.

4. DEPLOYMENT

The recommended course of action for deployment of the strategies and projects described in Sections 2 and 3, respectively, is as follows:

- Initiate the short-term risk mitigation strategies immediately; the strategies could be conducted in parallel; and
- Use the project profiles to secure funding and resources. There are no real prerequisites for any of the proposed projects; however, some synergies might be realized through strategic prioritization of the proposed projects.

GENERAL:

Private crossings provide access to industrial sites, private properties or other areas not open to the public, or provide grade level crossings of tracks within such sites.

Responsibilities for design, construction and maintenance of private crossings are to be delegated by private agreement between the railway and property owner.

Design and maintenance must, at a minimum, be to the standards described in this section.

RTS 2003.1 CROSSING ATTRIBUTES

CROSSING SURFACE:

Flangeway Width:	Minimum: 65 mm Maximum: 100 mm
Flangeway Depth:	Minimum: 50 mm Maximum: Top of crosstie
Thickness:	Dependant on material and attachment method
Wear Tolerance:	Top of rail to top of surface: ± 50 mm

Performance Requirements:

1. Surfacing to be installed level with top of rails.
2. Flangeway must be maintained and gauge side of rail protected at all times.
3. Surfacing material to be selected to provide stability and wear resistance.
4. Crossing surfacing must provide riding surface for crossing vehicles, but need not provide continuous plane across crossing.
5. Non-standard crossing surfaces may be utilized with agreement of property owner and written approval of railway inspector.

CROSSING WIDTH:

1. Crossings surfaces shall be constructed to a width as agreed to, in a written agreement, between the railway and the property owner.
2. All such agreements as referred to above, and any changes/modifications made thereto, must be copied to the department.

APPROACHES:

1. Approaches are to be constructed and maintained by the property owner.
2. Gradient approaching and leaving a crossing shall be at the discretion of the property owner. Gradient shall not be so steep as to pose risk of equipment hanging up on track or causing damage to track.
3. Crossing shall be level across the track.
4. Approaches shall have provisions to allow free drainage or passage of water from one side of the approach to the other side.
5. Any damage to the track, rail bed or railway property during or after installation of the crossing approach is the responsibility of the property owner.

2003.2 AGREEMENTS

MAINTENANCE:

1. Crossings shall be maintained in accordance with the standards set out herein and with any other requirements specifically defined in the crossing agreement between the railway and the property owner.
2. All such crossing agreements and any changes/modifications made thereto, must be copied to the department.
3. Costs and labour for maintenance and installation of crossings shall be determined in accordance with the crossing agreement.

2003.3 SIGNAGE

DISCRETIONARY SIGNAGE:

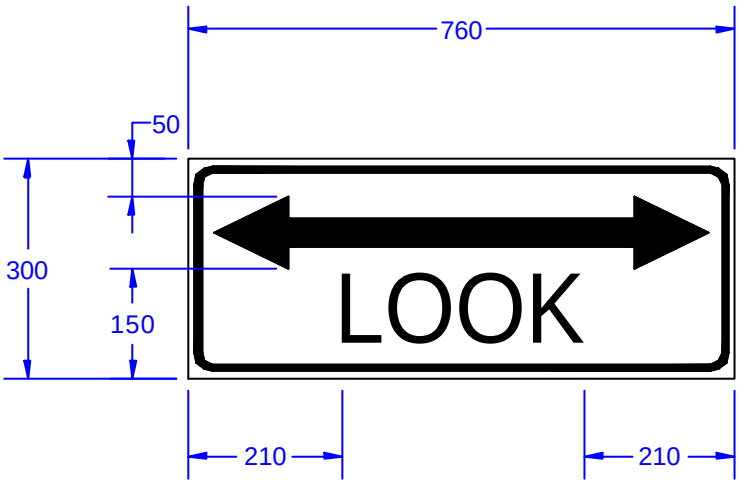
1. Discretionary signage may be added to the SRCS post and/or the AWS post as appropriate upon approval by a railway inspector.
2. Discretionary signage may be ordered installed by the railway inspector where required.
3. All discretionary signage must be listed in this section or adhere to standard design and materials as listed below.
4. At no time shall any equipment, sign, fence or permanent or temporary structure be placed within the clearance box of the railway track without the written consent of the railway.

LOOK SIGN

Look sign is installed directly below the SRCS (or stop sign where appropriate) to increase driver attention to the need to look in both directions for oncoming train traffic.

Look signs are installed where, in the opinion of a railway inspector, additional caution is required by traffic due to partially obscured sightlines (due to topography, structures or vegetation) or driver attention may be distracted or drawn away from the crossing.

Look signs are to be installed only at the discretion of a railway inspector, however road authorities or railways may request a recommendation from an inspector.



All dimensions in millimetres

BUMP AHEAD

Bump ahead sign is installed below AWS sign to warn of rough crossing surface. This sign should be temporary until the rough crossing surface is repaired.

WHISTLE POSTS:

1. Whistle posts are to be placed at a distance from the crossing that provides 20 seconds advance warning to motorists prior to the train reaching the crossing.
2. Whistle posts in place prior to these guidelines must be relocated to ensure the correct warning time is provided to road traffic approaching grade crossings unless otherwise temporarily approved by a railway inspector.
3. Whistle boards are to be installed adjacent to the rail track outside of the clearance box, but clearly visible to the operating personnel.

Appendix A.13

UNITED KINGDOM: Level Crossing to Which the Public Have Access – Guidance on Legislation and Enforcement RGD-2005-03

	HM Railway Inspectorate & Safety Policy Directorate	**Rail Guidance Document** RGD-2005-03

LEVEL CROSSINGS TO WHICH THE PUBLIC HAVE ACCESS – GUIDANCE ON LEGISLATION AND ENFORCEMENT

Open Government Status		Fully Open	
Date of issue/last review	09/01/2006	**Date of next review**	23/05/2009
RGD postholder/owner		Topic Strategist - Level Crossings:	
National Team (where appropriate)		Level Crossing NET	
RGD cleared by			
RGD type		Policy ☐ Information ☒ Procedure ☐	
Target audience		HMRI ☒ Policy ☐ Inspectors ☒ Admin ☐	
Assign to block		Process/New Legislation ☒ Topic/Technical ☐ Stakeholder Management ☐ Legal ☐ Business Support/Transition ☐	

Keywords LEVEL CROSSINGS; PUBLIC ACCESS; STANDARDS; ENFORCEMENT

Summary This Rail Guidance Document (RGD), gives guidance on the health and safety legislation governing level crossings to which the public has access and gives advice to Inspectors on the approach to be adopted when considering enforcement action.

Detail

1 The purpose of this RGD is to give guidance on the appropriate legislation to be used when enforcing physical standards at level crossings in England and Wales. Similar advice may be appropriate for level crossings in Scotland, but different legal provisions may apply.Enforcement for crossing misuse is dealt with in RGD-2004-08.

2 Level crossings currently present the largest source of train accident risk. There are some 7,800 railway level crossings on the mainline railway and a further 1,000 or so on heritage railways and in docks and other industrial premises.

3 Definition of 'crossing operator' – The crossing operator referred to in this RGD is the company that manages the railway. In relation to the Level Crossings Act 1983 (LCA) (as amended) it is defined as the organisation responsible for maintenance of the permanent way at the crossing. In most cases on the national network this will be the infrastructure controller, Network Rail, although in some cases such as freight only lines it may be a train operator such as EWS.

LEVEL CROSSING TYPES AND STATUS

4 Historically crossings have been categorised as public or private; this status is fundamental to the ways in which protection methods are specified and provided.

5 **Public crossings** are either vehicular, bridleway, or footpath crossings; the crossing operator has a duty to ensure that the crossing is properly maintained, safe and suitable for use. Public level crossings are normally authorised under an Act of Parliament, Consent, or Light Railway Order. [Not to be confused with Level Crossing Orders (made under the LCA) which only specify or modify protection arrangements].

6 **Private crossin gs** are usually vehicular crossings but can be footpath or bridleway crossings. The crossing operator has a duty to provide certain protective facilities but there is a greater responsibility on the authorised user to ensure the crossing is used safely, for example obeying any warning signs, closing the gates, or using the telephone (if one is provided) before crossing.

7 **Crossings to which the public have access.** Private crossings may become 'crossings to which the public have access' due to circumstances such as changes in land use, or adoption of private roads by local authorities. In these circumstances the protection methods may have to be reviewed.

Public vehicular crossings

8 "Public carriage road" level crossings were created and identified by name in the original Act of Parliament, which authorised the construction of the railway. The relevant Act normally incorporates section 47 of the

Railways Clauses Consolidation Act 1845. Some crossings may have been authorised under subsequent Railway Acts, for example where a new road was required to cross an existing railway. The construction of new crossings may be authorised under an Order made under the Transport and Works Act 1992 (section 1).

Public bridleway and footpath crossings

9 These crossings are not specifically identified by name in the original Act authorising the construction of the railway, but have been authorised using alternative powers such as those in s46 of the Railways Clauses Consolidation Act 1845 for highways **other than** public carriage roads.

Private crossings

10 Private crossings were installed when the railway was built, for the benefit of farmers and other individuals whose land was divided by the railway. These are either:

> **Accommodation level crossings** built to let landowners gain access to their land when it was divided by the railway; or
>
> **Occupation level crossings** built to access private dwellings, farm buildings etc, when a private access ('occupation') road was crossed by the railway.

11 Inspectors should be aware that some private level crossings with limited protection are being used by members of the public as a result of changes in land use or by the public gaining access to the countryside. The crossing operator should be monitoring these situations and understand the type (vehicular or pedestrian) and amount of additional usage. As an independent regulator it is HMRI's responsibility to ensure that the crossing operator controls the risks on the infrastructure. In such situations the crossing operator should risk assess the crossing and ensure that there is adequate protection for the type and level of usage or move to close or secure the crossing to prevent additional use.

Combined crossings

12 There may be locations where more than one crossing type exists side by side, for example a private road and adjacent public footpath. These should be treated as two separate crossings with their own safety arrangements.

PROTECTION ARRANGEMENTS

Public vehicular crossings

13 Generally these crossings will have a Level Crossing Act Order if they have been upgraded or changed since 1983. Crossings built under the original railway Act had to have "Good and sufficient gates and

employ a proper person to operate them" with the crossing either open to rail or to road. Most of these have been upgraded and those that remain are generally distinguished by the presence of mechanical gates and a signal box overlooking the crossing. When the protection measures at a crossing require to be upgraded the provisions of the original Act are modified by a level crossing Order.[1]

14 A small but significant number of crossings are covered by 'consents' made under various pieces of other Railway Legislation, such as Light Railway Orders, or consents under the Road and Rail Traffic Act 1933. Inspectors should be aware that many of these look very similar to a Level Crossing Order, but are not enforceable.

15 The relevant Order for the crossing will specify the signs, signals, road markings and method of operation of the crossing.

Public bridleway and footpath crossings

16 Generally these crossings may have a Level Crossing Act Order if it they have been upgraded or changed since 1983.

17 Gates or stiles normally protect these crossings. Gates should be self-closing without any latches and should open away from the railway. It is essential to provide the same facility at each side of the crossing (i.e. gates and stiles are not intermixed at one crossing, and both gates must be of the same width) so that users do not become trapped on the crossing. Miniature red and green warning lights may be provided where sighting distance is limited and, as a last resort, whistle boards provided to give further warning of an approaching train.

18 It should be possible for horse riders to open gates on bridleway crossings without dismounting, unless there is a risk of contact with overhead power lines.

Private crossings

19 These crossings generally do not have Level Crossing Act Orders; they are provided with signs and basic protective measures, usually hand operated gates or barriers and sometimes telephones. Their safe operation relies on the user operating them properly. Signs are specified under the Private Crossings (Signs and Barriers) Regulations 1996. As with footpath crossings, red and green warning lights or whistle boards are sometimes used to reinforce the basic protection measures provided.

Guidance on protection arrangements

20 Full guidance on protection arrangements is detailed in HS(G)153/6 Railway Safety Principals & Guidance (RSPG) part 2 section E. However the requirements of the RSPG are not retrospective and

protection arrangements that were specified prior to 1996 may not comply with the current guidance.

ENFORCEMENT

Public crossings - Securing changes to existing protective arrangements or requiring new protective arrangements

21 In this situation Inspectors should use the LCA 1983, as the requirements are more specific than the general requirements of HSWA.

22 A Notice can be issued requiring the crossing operator to seek a new level crossing order or requiring changes to an existing order. Such a Notice would be issued under the LCA 1983. Inspectors should consult the Level Crossing National Expertise Team (see paragraph 32) if they are considering a formal enforcement notice in these circumstances.

Public Crossings - Failing to maintain existing protective arrangements

23 Protective arrangements are normally specified in a LCA Order. It is a requirement under Reg 3(1) of the Level Crossing Regulations 1997 to comply with the requirements of a Level Crossing Order and failure to do so constitutes an offence. An Improvement Notice (under HSWA) can be used where appropriate to require compliance with a LCA Order (an example of an IN is attached as appendix 1). Note that the requirements of an Order are absolute and not subject to a "reasonable practicability" test unless explicitly permitted in the Order.

24 Where deficiencies in the protection arrangements are noted EMM should be applied to determine the risk gap. A list of matters to consider is given in appendix 2. Serious deficiencies to the decking or in the boom's mechanism may warrant a notice. The method of operation of the crossing will normally also be a relevant matter.

25 Simple non-compliance with a Level Crossing Order such as incorrect signage should be brought to the attention of the crossing operator and confirmed in writing. It may be worthwhile reminding crossing operators that motorists might have a technical defence of improper use of the crossing if they can show that incorrect or deficient signage was provided at the crossing. It is the responsibility of the crossing operator in the first instance to liaise with the Highway Authority to rectify any problems with signs.

26 Disputes involving the Highway Authority regarding the maintenance of signage, cutting back of vegetation etc. should be discussed with both the crossing operator and the Highway Authority.

Non-vehicular crossings

27 These are mainly footpath crossings. The HSWA will be the primary legislation to apply at such crossings since the majority of issues likely to arise are concerned with vegetation clearance, decking and sighting times, which are not generally covered by other legislation.

Private crossings

28 The crossing operator has a duty to provide a safe and suitable crossing. Subsequent changes in use may require increased protection arrangements, however there may be difficulties in actioning and funding these as most crossing operators believe they have limited liability under the original railway Act. This can lead to disputes and delays and Inspectors may have to intervene to ensure that safety is maintained, (e.g. by prohibiting increased use until suitable protective arrangements are in place). Any changes introduced by the crossing operator (e.g. increased speeds over a crossing) would make the crossing operator liable for upgrading the crossing.

29 A common failing by users of private crossings is to leave gates open. This is an offence under the Railways Clauses Consolidation Act 1845 and Transport and Works Act 1992 but is not enforceable by HSE. Inspectors should liaise with the BTP or other relevant police forces over the investigation of such offences.

30 Where the user is a duty holder under the HSWA, (e.g. a farmer), and the crossing is used in the course of the conduct of a business, or employment, inspectors should consider enforcement against the mis-user under S3 of HASWA, (see RGD 08-2004-08 for more information and liaison arrangements)

FURTHER INFORMATION AND CONTACT

31 Inspectors will come across a range of level crossings made under different legislation in the course of their work. Guidance on the category of individual crossings can be obtained from the HSE Level Crossing Database, (currently under development), or from the crossing operator directly.

32 For information on legal operational matters arising from this RGD please contact S Johnston or M Whitham (Scotland Team) or for technical matters John Tilly, Level Crossing NET.

[1] Historically this was done by using powers in various pieces of legislation but is now done by making an Order under the LCA that specifies the protection arrangements for the individual crossing

Earlier Orders made under s66 of the British Transport Commission Act 1957 and under s124 of the Transport Act 1968 are effectively considered as Orders made under s10(A) of the LCA 1983.

APPENDIX 1

Improvement Notice

To: Name Network Rail Infrastructure Ltd
Address 40 Melton Street
London NW1 2EE
Trading as Network Rail

Inspector's full name I, ***** **********

Inspector's official designation one of Her Majesty's Inspectors of Health and Safety, being an Inspector appointed by an instrument in writing made pursuant to section 19 of the said Act and entitled to issue this Notice

Official address of Rose Court, 2 Southwark Bridge, London SE1 9HS

Telephone number 01234 56780

hereby give you notice that I am of the opinion that

Location of premises or place of activity at Summer House Automatic Half Barrier Level Crossing, Lincolnshire

you, as The level crossing operator
are contravening the following statutory provisions :˜
Regulation 3(1) of the Level Crossing Regulations 1997
The British Railways (Summer House Level Crossing) Order 1989
The reasons for my said opinion are:
That you are failing to comply with the requirements of the level crossing Order

Date for compliance **and I her eby requir e y ou to remedy the said contraventions or, as the case may b e, the matters occasioning them, by 30th April 2004**

[SM1]**and I direct** that the measures specified in the Schedule which forms part of this Notice shall be taken to remedy the said contraventions or matters

Signature ..... Date .....

[SM2]An Improvement Notice is also being served on

SEE NOTES OVERLEAF or ATTACHED

The said contraventions shall be remedied by:

1. Repair or replacement of the crossing surface between both Stop lines so as to create ‘a good and even surface’ removing all tripping hazards as required by item 22 of Schedule 2, Part II of the Level Crossing Order.

2. Applying White Lining, and fitting reflective road studs, in accordance with the Traffic Signs Regulations and General Directions 2002 as required by items 11, 12, 13 and 14 of Schedule 2, Part I of the Level Crossing Order.

3. Applying Yellow box marking, in accordance with the Traffic Signs Regulations and General Directions 2002 as required by item 15 of Schedule 2, Part I of the Level Crossing Order.

4. Repair or replacement of the cattle-cum-trespass guards as required by item 20 of Schedule 2, Part I of the Level Crossing Order

5. Review of the system of inspection, maintenance and repair of level crossing defects and implementation of a time bound action plan to develop a system to ensure that the requirements of the Level Crossing Order are complied with.

APPENDIX 2

When inspecting crossings, the critical physical standards to consider are as follows:

a) The condition and safety of the decking system over the crossing - both from the car driver and pedestrian viewpoint. Loose or poorly fitted decking is a risk to users and could also derail a train. Where proprietary (removable unit type) decking is used, end restraints to prevent the units moving along the track are an important safety feature.

b) At automatic public vehicular level crossings, the vertical road profile - this should be designed and maintained to prevent grounding of long low road vehicles.

c) Vegetation clearance - to ensure that signs and warning equipment are visible and not obscured, and at footpath, bridleway and user-worked crossings the sighting distances for trains are maintained. Vegetation clearance on the highway is the responsibility of the Highway Authority, but the crossing operator may need to raise this with the Highway Authority.

d) Cattle/trespass guards –should be provided where livestock is regularly moved over the crossing, or where there is a significant risk of trespass by pedestrians. Guards should be provided on all crossings where the railway is electrified by a live conductor rail and be accompanied by a gap in the conductor rail. Where fitted, guards should be in sound condition with no missing or loose rails.

e) All road markings such as white line/yellow box markings/ reflective studs detailed in the crossing Order are the responsibility of the crossing operator (including the centre of carriageway markings on the crossing approach). The use of rubber surfaced crossings has resulted in the need to renew road markings on crossings more frequently.

f) Signage detailed in the crossing Order is the responsibility of the crossing operator. Other signage (usually warning signage) is the responsibility of the Highway Authority

[SM1]Delete or strike-through if no Schedule[SM2]Delete or strike-through [SM2]Delete or strike-through these four lines if not required

HM Railway Inspectorate & Safety Policy Directorate	Rail Guidance Document RGD-2005-03

LEVEL CROSSINGS TO WHICH THE PUBLIC HAVE ACCESS – GUIDANCE ON LEGISLATION AND ENFORCEMENT

Open Government Status		Fully Open	
Date of issue/last review	09/01/2006	**Date of next review**	23/05/2009
RGD postholder/owner		Topic Strategist - Level Crossings: D. Whitmarsh	
National Team (where appropriate)		Level Crossing NET	
RGD cleared by			
RGD type		Policy ☐ Information ☒ Procedure ☐	
Target audience		HMRI ☒ Policy ☐ Inspectors ☒ Admin ☐	
Assign to block		Process/New Legislation ☒ Topic/Technical ☐ Stakeholder Management ☐ Legal ☐ Business Support/Transition ☐	

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FURTHER INFORMATION AND CONTACT

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APPENDIX 1

Improvement Notice

To: Name Network Rail Infrastructure Ltd
Address 40 Melton Street
London NW1 2EE
Trading as Network Rail

Inspector's full name I, ***** **********

Inspector's official designation one of Her Majesty's Inspectors of Health and Safety, being an Inspector appointed by an instrument in writing made pursuant to section 19 of the said Act and entitled to issue this Notice

Official address of Rose Court, 2 Southwark Bridge, London SE1 9HS

Telephone number 01234 56780

hereby give you notice that I am of the opinion that

Location of premises or place of activity at Summer House Automatic Half Barrier Level Crossing, Lincolnshire

you, as The level crossing operator
are contravening the following statutory provisions :˜
Regulation 3(1) of the Level Crossing Regulations 1997
The British Railways (Summer House Level Crossing) Order 1989
The reasons for my said opinion are:
That you are failing to comply with the requirements of the level crossing Order

Date for compliance **and I her eby requir e y ou to remedy the said contraventions or, as the case may b e, the matters occasioning them, by 30th April 2004**

[SM1]**and I direct** that the measures specified in the Schedule which forms part of this Notice shall be taken to remedy the said contraventions or matters

Signature ..... Date .....

[SM2]An Improvement Notice is also being served on

SEE NOTES OVERLEAF or ATTACHED

The said contraventions shall be remedied by:

1. Repair or replacement of the crossing surface between both Stop lines so as to create ‘a good and even surface’ removing all tripping hazards as required by item 22 of Schedule 2, Part II of the Level Crossing Order.

2. Applying White Lining, and fitting reflective road studs, in accordance with the Traffic Signs Regulations and General Directions 2002 as required by items 11, 12, 13 and 14 of Schedule 2, Part I of the Level Crossing Order.

3. Applying Yellow box marking, in accordance with the Traffic Signs Regulations and General Directions 2002 as required by item 15 of Schedule 2, Part I of the Level Crossing Order.

4. Repair or replacement of the cattle-cum-trespass guards as required by item 20 of Schedule 2, Part I of the Level Crossing Order

5. Review of the system of inspection, maintenance and repair of level crossing defects and implementation of a time bound action plan to develop a system to ensure that the requirements of the Level Crossing Order are complied with.

APPENDIX 2

When inspecting crossings, the critical physical standards to consider are as follows:

a) The condition and safety of the decking system over the crossing - both from the car driver and pedestrian viewpoint. Loose or poorly fitted decking is a risk to users and could also derail a train. Where proprietary (removable unit type) decking is used, end restraints to prevent the units moving along the track are an important safety feature.

b) At automatic public vehicular level crossings, the vertical road profile - this should be designed and maintained to prevent grounding of long low road vehicles.

c) Vegetation clearance - to ensure that signs and warning equipment are visible and not obscured, and at footpath, bridleway and user-worked crossings the sighting distances for trains are maintained. Vegetation clearance on the highway is the responsibility of the Highway Authority, but the crossing operator may need to raise this with the Highway Authority.

d) Cattle/trespass guards –should be provided where livestock is regularly moved over the crossing, or where there is a significant risk of trespass by pedestrians. Guards should be provided on all crossings where the railway is electrified by a live conductor rail and be accompanied by a gap in the conductor rail. Where fitted, guards should be in sound condition with no missing or loose rails.

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User Worked and Footpath Level Crossing Research

Railway Safety's response to the Arthur D Little Research Report

Summary Report

September 2002

RAILWAY SAFETY

Working for a safer railway

The picture on the cover was reproduced with the kind permission of
Arthur D Little

Railway Safety's response to the report by Arthur D Little entitled 'User Worked and Footpath Level Crossing Risk Review Study'

1. Purpose

1.1. The purpose of this paper is to outline Railway Safety's response to the attached report, and to summarise the actions being taken by Railway Safety.

1.2. The report, commissioned by Railway Safety, was prepared by Arthur D Little. The research was designed to explore the hazards and risks at 'passive' level crossings *ie* those at which the person crossing, whether in a vehicle or on foot, is responsible for making the decision to cross. Specifically, it examines the relationship between user perceptions of risk and other locational factors such as sighting times. It goes on to examine and recommend ways of improving risk controls and data collection.

1.3. Included is the Executive Summary of the report, plus exerpts covering data collection, an overview of risk factors and scoring, and an explanation of a simulation model developed as part of the research. Some examples of the case studies of level crossings are also included. The full report is available on CD-Rom from Railway Safety.

2. Railway Safety's response

2.1. Railway Safety recommends the general adoption of a standardised and enhanced data collection methodology with priority being given to its application, including user interviews, at all crossings with a history of accidents and near misses. The methodology developed by Arthur D Little should form the basis of this as it appears effective in helping to identify the presence of bad actor factors relating to both the crossing environment and user behaviour.

2.2. Railway Safety recommends the development of an enhanced and standardised approach to the gathering and recording of evidence as to the factors and underlying causes of accidents and incidents occurring on level crossings. Railway Safety is to identify how Safety Management Information System (SMIS) might be upgraded to support analysis of this data and will consider incorporation of the agreed approach as a mandatory Railway Group Standard requirement.

2.3. Railway Safety recommends and will facilitate the further use of the 'risk scoring' method developed by AD Little to support better identification of crossings to which particular attention should be given.

2.4. Railway Safety recommends that remedial actions to address sighting time deficiencies are not considered in isolation and are always developed in the context of the development of measures to address the risk factors of ‘high’ crossing utilisation, ‘gates left open’ and infrequent trains which appear to have the potential to make a more significant contribution to risk reduction. Railway Safety further recommends that HM Railway Inspectorate always take these dependencies into account should they need to consider enforcement action.

2.5. Railway Safety is to commission further research to better understand user perception of risks associated with the use of passive level crossings with particular regard to the factors associated with the work related user, gate abuse and failures to use the telephones where provided.

2.6. In light of the outputs of the further research pertaining to user perception of risks Railway Safety will consider further development of the scenario based simulation model.

2.7. Railway Safety will commission research to explore the benefits that might be gained from a more general use of train (or wayside) horns on the approach to passive level crossings.

2.8. Railway Safety is developing a research proposal for ‘low cost’ co-acting gates / barriers that would reduce the number of traverses per vehicle traverse at a properly used crossing from five to one.

2.9. Railway Safety will solicit views and consider mandating a maximum traffic moment that is acceptable at an unimproved pedestrian or user worked crossing / user worked crossing with telephones.

2.10. Railway Safety will continue to work with Railtrack PLC in Railway Administration (known as Railtrack), the Health and Safety Executive and British Transport Police to secure the development of a national level crossing strategy that supports the management of risk at all level crossings to as low as is reasonably practicable through enabling, engineering, education and enforcement activities.

2.11. In doing so, Railway Safety will continually champion the importance of railway businesses having ‘zero tolerance’ of unsafe conditions, unsafe decisions and unsafe acts that have the potential to lead to a catastrophic rail accident that might result from striking a vehicle on a level crossing.

2.12. Railway Safety recognises transferable lessons from this work and commends their application to the development of controls at ‘active’ level crossings.

2.13. Railway Safety will use the outputs of this research to support the development of the Railway Group Safety Plan.

3. Contact

3.1. For a full copy of the report please contact:

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Stop

Executive Summary

Introduction

Railway Safety commissioned research in March 2000 to explore the hazards and risks at '*passive*'[1] level crossings, specifically to examine the relationship between user perception of risk and other locational factors such as traffic moment.

Aims and Objectives

The overall aim of the study is to facilitate the development of improved risk control strategies at passive level crossings and to inform the development of Railway Group Safety Plan objectives. The study has involved the following key aspects:

- Survey of literature in human behaviour and level crossing risks.
- Identification of hazards at level crossings working with Railtrack Level Crossing Managers.
- A survey of over 300 passive level crossings (approximately 5% of the total network population) involving 121 user interviews, observation of user behaviour, as well as a recording of physical crossing characteristics and the environment in which the crossing is located.
- A comprehensive analysis of accident data, to establish the suitability of current data recording, and to help gain an understanding of the causes of accidents.

Conclusions

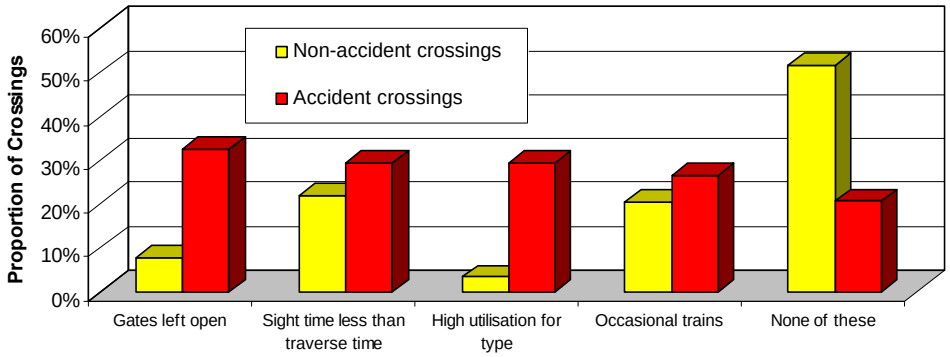
The results of the work provide evidence for the influence of certain 'risk factors', i.e. crossing and user characteristics that influence the risks at passive level crossings. The results also provide recommendations for improving risk controls and data collection.

Risk Factors

Certain crossing and user characteristics recorded in the survey are more prevalent at crossings where accidents have occurred; these are considered to be 'risk factors'. The study reveals that such risk factors can be associated with some 80% of crossings where accidents have occurred, compared with 50% of crossings where no accidents have occurred. Therefore, whilst accidents at passive level crossings are very scattered and rarely repeat at the same location, there are some common characteristics for the locations where accidents do occur, which is encouraging from the perspective of developing effective risk controls. The risk factors are shown in the figure, and described below.

[1] 'Passive' crossings are those at which the user is responsible for making the decision to cross (including crossings with telephones which may be used in order to make a more informed decision on whether to cross or not).

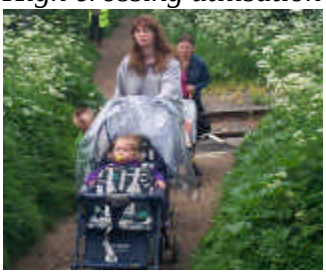
'Risk Factors'



Gates left open

A problem at nearly one-third of crossings surveyed where accidents have occurred, compared with only 8% of crossings with no accident history.

High crossing utilisation



A characteristic of nearly one-third of crossings surveyed where accidents have occurred, compared with only 4% of crossings with no accident history.

Occasional trains

Occasional trains (two or fewer trains per hour) is a marginally more common characteristic of crossings with accidents than those without accidents (25% versus 20% receptively).

Conversely, the analysis provides little evidence that crossings with poor sight times[2] are associated with the occurrence of accidents. This is counter to the traditional view that providing good sighting at passive level crossings is the most important factor in risk control.

[2] Either sight times that are measured to be less than the nominal traverse time, or there is less than five seconds spare time during which a decision to cross can be made

User perception of risks
The study highlights the importance of the users' perception of the risk at the level crossing, how this influences their behaviour, and therefore the extent of risk to which they are exposed. The interviews conducted reveal that users generally perceive:

- crossings to be 'dangerous' where there are fast trains and sighting is poor,
- crossings to be 'safe' where there is good sighting, and trains are slow and infrequent.

These perceptions underlie the risk compensation behaviour which explains the weak correlation between poor sight times and occurrence of accidents. Crossing users are aware of poor sight times, and will respond by traversing more rapidly with heightened vigilance. To a lesser extent where trains are infrequent regular users may not regard the risks as so significant, and behave less cautiously.

Vehicles are involved in a proportionally greater number of accidents
A review of accident statistics reveals that accidents involving vehicles are comparatively more frequent than might be expected from their total exposure in comparison with pedestrian accidents. Whilst the reasons for this are not fully understood, many vehicle accidents can be associated with the abuse of gates and the failure to use telephones where provided. The survey revealed instances of regular users such as farm workers and delivery vehicles deliberately taking 'short-cuts' when working gated crossings.

Current data reporting
Current data reporting provides neither sufficiently detailed nor consistent data on which to develop a significantly more advanced understanding of the factors which influence the risks at passive level crossings. Recommendations for improved data collection are provided.

Recommendations

Based on the survey and analysis, recommendations are made for improving risk controls, and for improving incident reporting and data collection activities, which in many cases are required in order to gain a better definition of the extent of risks.

Overall, it is recommended that the findings of this study and those of the recently completed review of the application of the automatic crossing risk model are synthesised to ensure that lessons learned are realised across the spectrum of crossings.

When developing new infrastructure risk controls for passive level crossings, care should be taken to avoid lowering the user perception of the risks as this could have a detrimental influence on user behaviour. In other words, providing the user with a false sense that 'risks are low' without actually increasing the protection could lead to an *increase* in accidents.

Risk controls

- The traffic moment is a key factor and must be monitored closely to ensure that any potential increases in level or type of use are anticipated and appropriate risk controls implemented before incidents occur.

- Drivers of works vehicles need an improved understanding of risks at level crossings which might be achieved through contacting HGV driving schools, delivery depots, etc. In some instances (for example at busy construction sites or during peak harvest times) consideration should be given to mandating crossing wardens as part of the conditions of use.

- At certain crossings where gate abuse is a problem Railtrack should pursue the development of alternative technical solutions such as:
  - Pneumatically or electrically driven barriers that can be operated from a push button (interlocked with the railway).
  - Advanced warning systems using new technologies.

- Crossings that are to be affected by increased train frequencies and/or line speeds should be considered as 'high risk' and action taken according to ensure that regular users are made aware of the increasing risk caused by the proposed change in train movements.

- Level crossings on lines with low train frequencies (e.g. less than 2 per hour) should not necessarily be regarded as 'low risk'. Consideration should be given to sounding the whistle on approach to such crossings.

- To ensure that whistles are sounded consistently by all trains, consideration should be given to development of a device that automatically activates the whistle on approach to crossings.

- Consideration should be given to providing clearly marked decision points where possible, such as painted lines on road surfaces.

Improving data records

Improved accident data reporting is considered to be essential in gaining a further definition of risk factors, and therefore the development of improved risk controls. We recommend that the following additional data be collected:

- Details of the vehicle or pedestrian involved (reason for use, type of vehicle, etc). It would be particularly useful to record any accidents to vehicle users who were traversing on foot while working the crossing.

- Details of gate abuse.

- Evidence of failure to use the telephone including a regular audit of signallers logs.

- Whether the accident victim was a regular user of the crossing or an unfamiliar user.

- Whether the train involved was scheduled and on time, scheduled but not on time, or unscheduled.

- For vehicle accidents, a record should be made of whether the vehicle was stuck or otherwise stopped on the crossing, making the traverse, or 'nosing out', i.e. foul of the line while making a decision on whether to cross.

- A steep fall in occasional crossing use can be anticipated during the current period of restricted access during the 'Foot and Mouth' epidemic. A special data collection and analysis effort should be mounted to take analytical benefit from this temporary reduction in crossing usage.

Data Collection

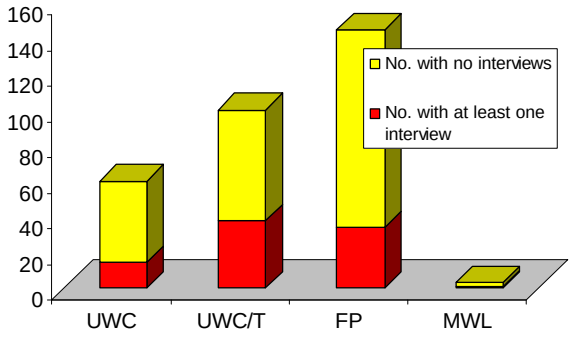
This section provides an overview of the data collection activities.

The survey work was a core activity of the project with the aim of collecting crossing and user data for a sample of passive level crossings. The process comprised two main elements:

- A survey of the crossing itself, including physical characteristics, and notes regarding the environment of the crossing (e.g. situation relative to nearby residential and commercial areas).
- Behaviour of level crossing users, based on interviews and observation. As expected, it was not possible to carry out interviews at the majority of the crossings surveyed as many of these crossings are, by their very nature, not heavily used. However, wherever possible, interviews have been conducted and recorded. Interviews focused on the users':
  - Awareness of the crossing features such as signs.
  - Perceptions of risks (e.g. "Dangerous", "Like crossing the road", "Safe")
  - Opinions as to how the crossing might be improved.
  - Knowledge of other users and accidents / near misses.

308 passive level crossings have been surveyed across the seven Railtrack Zones, (Figure 1). The surveys were conducted over a period of approximately six months (May to October 2000) with comparatively full foliage in situ.

Figure 1 Crossings Surveyed by Type

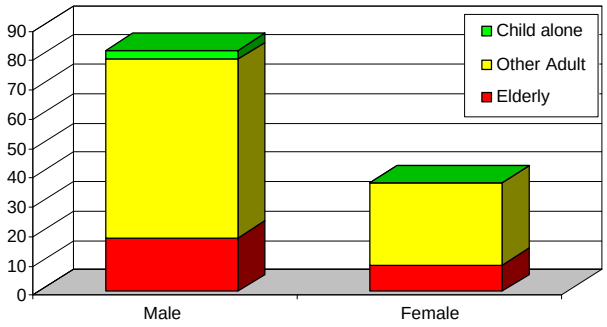


Crossing Type	Total	With at least one interview	With accident history
Footpath	145	34	18
UWC	61	15	6
UWC/T	99	37	10
MWL*	3	1	-
Total	**308**	**87**	**34**

Note: MWL were included in the surveys so as to identify any differences in use and user behaviour than at other passive crossings

A total of 121 interviews were conducted at 87 crossings. Most of the interviews were conducted after the individual had used the crossing, allowing observation of use, although to extend the interview sample as far as possible some interviews were held with users away from the crossing (for example at their homes). The distribution of interviews conducted by age group and gender (Figure 2) shows a bias towards males and adults (adult males representing about 50% of the interviewee sample).

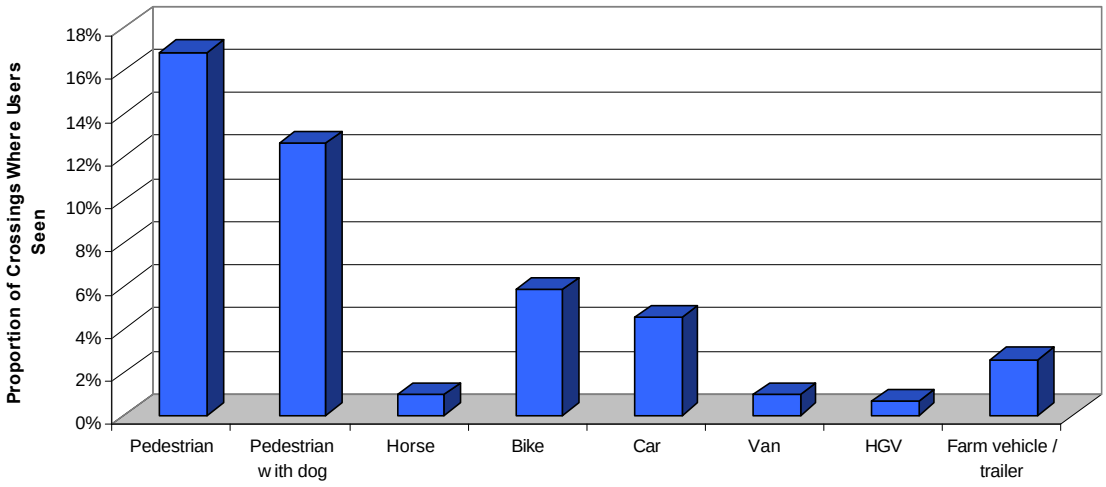
Figure 2 Summary of Interviews



	Total	Elderly	Other Adult	Child alone
Male	84	18	61	3
Female	37	9	28	0
Total	**121**	**27**	**89**	**3**

Users were seen at 96, just under a third, of the 308 crossings surveyed. Figure 3 shows the proportion of crossings where users were seen during the survey. By far the most common users seen were pedestrians (seen at 16% of crossings) closely followed by dog walkers (12%). Vehicles were much less common, particularly 'work vehicles' such as tractors, vans and HGVs, which were seen at only about 5% of the crossings surveyed.

Figure 3 Proportion of Crossings Surveyed Where Users Seen



Of the 121 users interviewed over half were using the crossing for recreational purposes, with the remainder fairly evenly split between using for work, travelling to or from work, or to and from the shops (Figure 4).

Over half of users used the crossing at least daily, with a further 37% using the crossing at least weekly (Figure 5).

Figure 4 Interview Sample: Reasons for Use

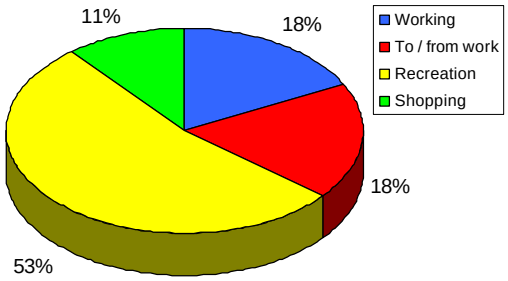
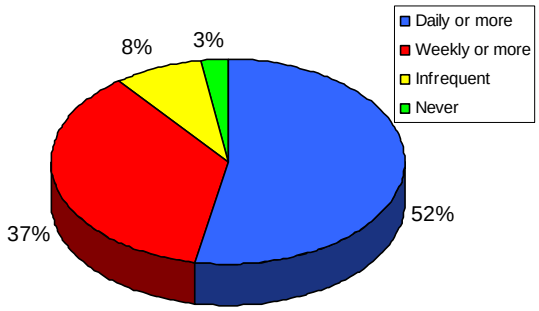


Figure 5 Interview Sample: Familiarity



Risk Factors

This exert identifies factors that influence the risk at passive level crossings, based on the results of the survey, and available accident data for those crossings.

In addition, it discusses how different factors associated with crossing features and user characteristics may be combined to produce risk scenarios as the basis for a simulation model of crossing accident opportunities.

Overview

An overview of the influence of readily identifiable risk factors on the occurrence of accidents is shown in Figure 6 which compares the distribution of risk factors at crossings surveyed with no history of accidents, with those where accidents have occurred.

Overall, it is shown that 80% of the crossings surveyed where accidents have occurred can be associated with at least one risk factor. By contrast, about half of those crossings surveyed where no accidents have been recorded have any of these risk factors.

In summary, the analysis has identified the following risk factors:

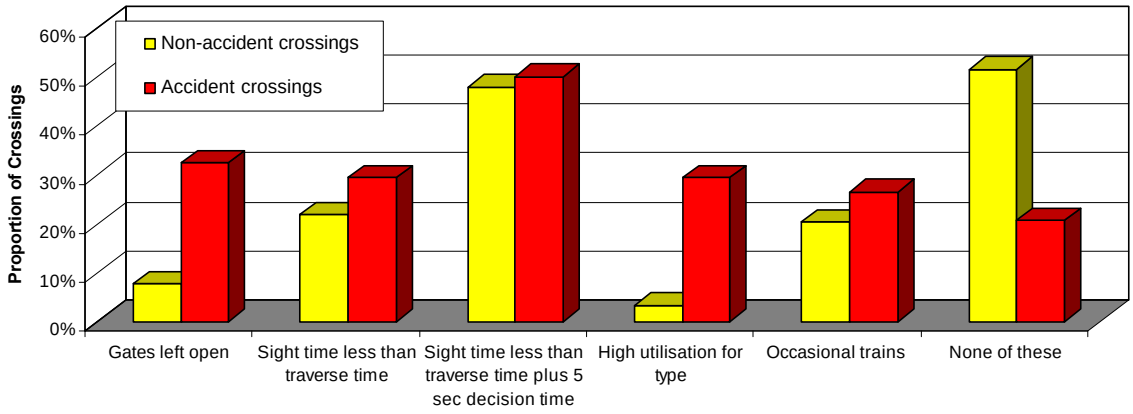
- "High crossing utilisation" appears to be a much more dominant factor at crossings where there have been accidents than crossings where there is no record of accidents (31% versus 4% respectively).

- Similarly "Gates left open" is a characteristic of 32% of crossings surveyed where accidents have been recorded, compared with 8% of crossings with no accident history.

- "Occasional trains". There also appears to be some evidence that occasional trains (i.e. about two or fewer trains per hour) are a factor in accidents, with 25% of the accident crossings versus 20% of the sample as a whole having two trains an hour or fewer. Whilst initially the evidence does not appear to be that strong, it must be remembered that intuitively, one would expect accidents to increase directly with the number of trains that pass a crossing (probabilistically more chance of a train arriving during the traverse).

While accidents at passive level crossings are very scattered and rarely repeat at the same location the survey findings suggest some common characteristics for the locations where they do occur, which is encouraging from the perspective of developing effective risk controls.

Figure 6 Distribution of Risk Factors



Conversely, the analysis provides little evidence that crossings with poor sight times can be associated with the occurrence of accidents. Two cases are considered:

- Crossings where the smallest measured sight time is less than the measured traverse time. This is a characteristic of 22% of crossings surveyed where no accident had occurred compared with 28% of crossings surveyed with accident histories.

- Crossings where the sight time is less than five seconds greater than the traverse time (in this case an allowance of five seconds is given for the decision time taken by the user before making the traverse). This is a characteristic of 48% of crossings surveyed where no accident had occurred compared with 50% of crossings surveyed with accident histories.

These findings show that sight times alone do not adequately discriminate crossings at which there have been accidents from all other crossings. This is counter to the traditional view that providing good sighting at a passive level crossings is the most important factor in risk control. Additionally, because such a high proportion of crossings, some 50% based on those surveyed, appear to have poor sight times, this alone cannot provide an effective basis for focussing risk controls.

Figure 7 shows how a simple 'risk score', given to each crossing, is able to differentiate crossings where accidents have previously occurred from those with no accident history. *It must be noted that the 'risk score' is not intended to be an accurate measure of risk, rather a quick and simple way of describing the main risk characteristics, based on a comparatively short inspection time at each crossing. The risk score is derived from readily identifiable crossing and user characteristics which were observed during the inspection, such as the level of utilisation, whether gates are left open, signage, crossing surface, etc.*

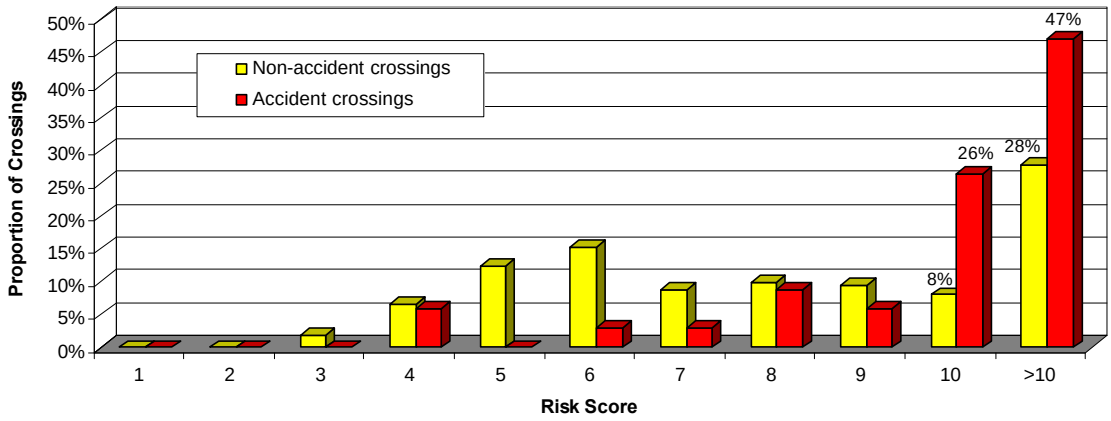
Nevertheless, a comparison of the scores obtained for those crossings where accidents have occurred with crossings with no accident history provides further evidence that accidents can be associated with fairly simple 'risk factors':

- 28% of crossings surveyed with no accident history were scored in the 'highest risk score' category, (i.e. above 10), with 36% scoring 10 or more.
- For crossings with accident histories, the proportion in the 'highest risk score' category is greater at 47%, with 73% scoring 10 or more.

In other words, most accidents (i.e. 73%) can be associated with a *combination* of simple risk factors.

However, the remaining 27% of accidents cannot be accounted for by the simple scoring system, and further investigation is required to establish the cause of these accidents, or whether they were 'random' events.

Figure 7 Distribution of Risk Scores Across Survey Sample



Note: the 'risk score' is not intended to be an accurate measure of risk, rather a quick and simple way of describing the main risk characteristics, based on a comparatively short inspection time at each crossing. It is based on readily identifiable crossing and user characteristics which were observed during the inspection, such as the level of utilisation, whether gates are left open, signage, crossing surface.

Risk Scenarios

This section describes how crossing characteristics may be combined with the way that crossings are used by different user types to produce a series of 'risk scenarios'. The scenarios represent how a user may be at risk because:

- He or she has a particular *mental model* of the crossing, and may therefore traverse when it is not safe to do so.
- The sight time is less than the time taken for the user to traverse – so despite taking care when approaching the crossing and making the traverse they are caught out.
- They get stuck on the crossing or for some reason take longer than 'normal' to traverse (e.g. they cross with their dog off the lead which wanders onto the line, their pushchair gets stuck on a poor surface, etc).

These scenarios have been developed from the information gathered during the survey (interviews, crossing features, and direct observation), the evidence for risk factors provided by the analysis, and a workshop with Railtrack Level Crossing Managers. The purpose of the scenarios is to:

- Form a basis for a model that simulates the occurrence of potential accidents for each scenario based on random arrival of users and a number of trains through the day.
- Provide further evidence, based on the simulation model, for factors that adversely influence risk.

The scenarios are summarised in Table 1.

Table 1 Risk Scenarios

	Scenario Description	*Sequence of Events Leading to Accident*	*Crossing Features*	*User Characteristics*
1	"Nip across" - user crosses in front of approaching train but misjudges time	• User arrives at crossing and sees approaching train • User begins to traverse quickly • User has misjudged the speed of the approaching train or the time taken to traverse - unable to get out of the way	• Good sight time • Variable train approach speeds • Straight track (more difficult to judge speed) • High train frequency	• Familiar users short of time – use for going to work / jogging / etc • Poor judges of speed
2	"Lazy user" - vehicle user passes through gates left open without taking due care	• User arrives at crossing and gates are open • User does not telephone and passes through gates without taking due care to look for approaching train • Train arrives and user is unable to get out of the way	• High utilisation by a few regulars • Low train frequency	• Leaves gates open • Vehicle • Regular use or work for intensive period
3	"Disregard" - user fails to acknowledge risk of crossing	• User approaches crossing unaware of danger • They begin the traverse at normal pace without taking due care to look for a train • They may see the train as it gets close but the user is then unable to get out of the way	• Low train frequency • Nearby distractions • Gates left open or no barriers	• Distracted • Regular user with low perception of risk (e.g. infrequent trains) • Unfamiliar with crossings and unaware of risks
4	"Mis-communication" – error in misunderstanding of information provided by telephone	• Vehicle user arrives at crossing and calls signalman on telephone provided • User misunderstands signalman's instruction not to proceed, or signalman gives incorrect information • User begins traverse with perception that a train will not come • They may see the train as it gets close but the user is then unable to get out of the way	• Telephones provided • Error by signalman or information is inaccurate (e.g. long sections of line)	• Fails to understand signalman's instructions
5	"Stuck" - user gets 'stuck' or otherwise takes longer to cross than expected	• User arrives at crossing and takes care to stop, look and listen for a train • They begin the traverse at a normal pace • During the traverse they get stuck or fall, chase a dog that is off the lead, or their vehicle gets grounded or stalls • The train approaches and the user is unable to get out of the way	• Uneven surface • Queues develop on crossing • Exit gates difficult and close to the line	• Encumbered with bicycle, pram, or elderly and infirm • Dog walkers with dogs off lead • Livestock handlers
6	"Unseen train" - user caught out by negative sighting time	• User arrives at the crossing and takes care to stop look and listen for a train • The train either does not sound its horn or is not heard by the user • The user begins the traverse moving quickly as they are aware of the short sight time • A train comes into sight and the user is unable to get out of the way before the train arrives at the crossing	• Short sight time • Long traverse time (surface, many tracks, angle, exit not opposite entrance)	• Take longer to traverse than sight time
7	"Second train comes" – user waits for train to pass but is caught out by second train from opposite direction	• User arrives at the crossing and sees an approaching train • They wait for the first train to pass • They fail to look in the opposite direction for an approaching train, or the view is blocked by the first train • They begin the traverse at normal pace • The second train arrives at the crossing and the user is caught by surprise	• Double track • Many trains • Trains scheduled to pass (e.g. near station) • Track curvature conceals second train	• User fails to check both directions i.e. thinks it is safe to cross when a train has passed

Simulation Model

A mathematical model has been developed which simulates the opportunity for accidents (i.e. a user struck by a train) for each of the risk scenarios described above.

In overview, the model comprises two main parts:

- Estimation of the *relative likelihood* of each risk scenario actually arising based on consideration of user and crossing features (as shown for each scenario in Table 1). For example, where gates are left open, this is deemed to make 'disregard' more likely, and poor surfaces are judged to make getting 'stuck' more likely.

- *Simulation of an accident* occurring based on train arrivals distributed evenly through the day (and subject to a certain degree of random punctuality) and the random arrival of users. An accident may occur if the user begins the traverse, and during the traverse the train arrives at the crossing.

The product of these provides the output of the model: a number of theoretical opportunities for an accident in a year by scenario. The model does not include the probability that a user can avoid the accident, so the output is the number of 'events' (or potential accidents) per year, not actual accidents.

What does simulation tell us about risks?

A selection of model outputs are presented in Figure 8, in which results for crossings on the same line of route are shown on each graph.

In overview, the model tests show the following:

- Proportionately higher number of events for crossings with high traffic moments (as expected).

- There is a comparatively small chance of two randomly distributed trains passing a crossing in close succession so that the user may be caught out by the second train (Scenario 7). This, of course, does not apply to crossings where trains are timetabled to pass close together.

- Users can be caught out by 'unseen trains' (Scenario 6) at crossings with sight times shorter than the traverse time. However, there is usually a correspondingly smaller chance of other events such as 'nipping across' (Scenario 1), and 'disregard' (Scenario 3).

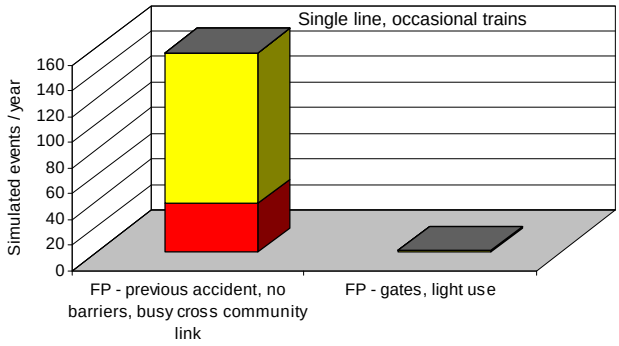
- 'Lazy users' (Scenario 2) can increase the overall number of events where gates are left open.

- The results for getting 'stuck' on the crossing (Scenario 5) are very sensitive to whether the crossing is judged to have a surface on which users might get stuck.

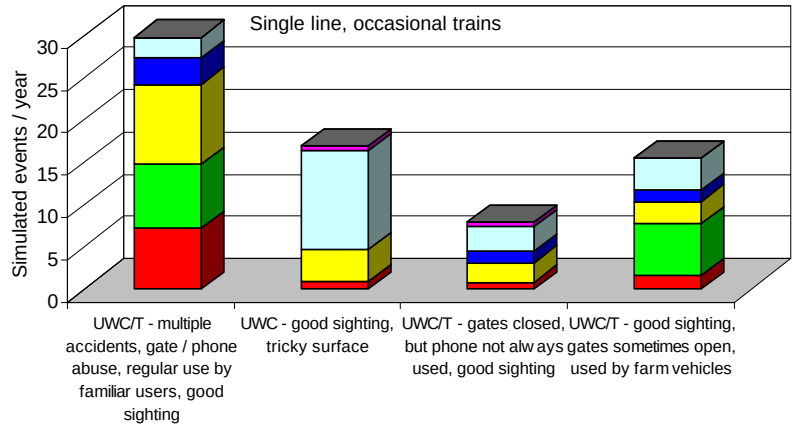
In summary, a model based on a Monte Carlo simulation may be a useful basis for predicting the chance of random accidents at passive crossings. However, to model

more accurately the relative contributions of different accident scenarios, further work would be required. In particular, a more detailed understanding of how user behaviour is influenced by crossing features would be required to develop more robust 'weightings' for each scenario.

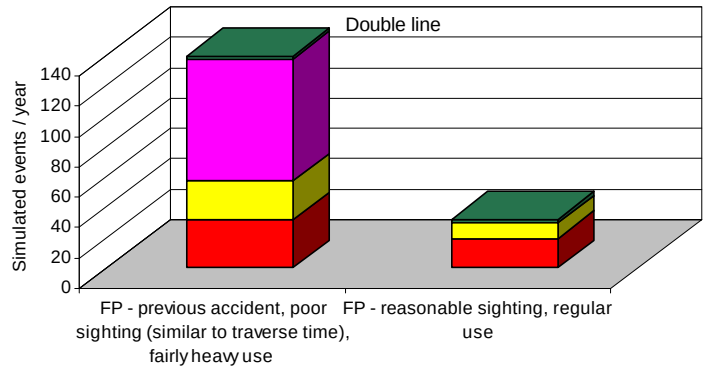
Figure 8 Example Simulation Model Outputs – Predicted Events/Year



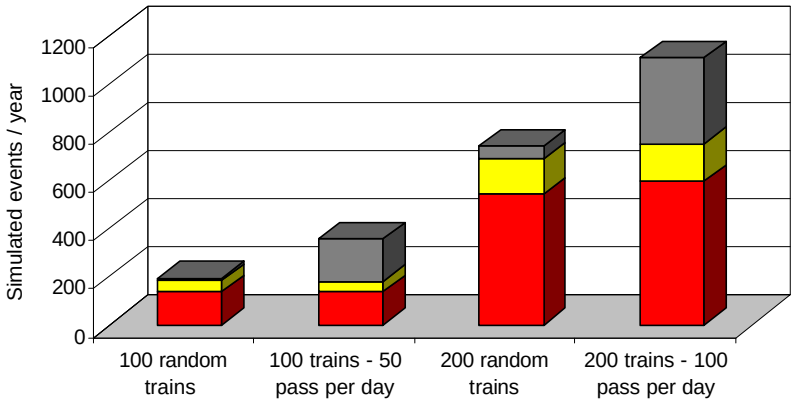
- Dominance of utilisation on results (first crossing over 100 users per day, second crossing very few traverses per day).
- The main problem at first crossing is disregard (there are few trains and no barriers).



- Effect of gate abuse on results ("Lazy User" at first and fourth crossings).
- Problem of grounding at second crossing makes chances of 'getting stuck' greater



- Simulation of negative spare sight times. First crossing has poor sighting, and "Unseen train" is the dominant problem. Whilst the simulation of occurrences of being caught by the unseen train is quite low, the result dominates because the *likelihood* of other scenarios is low (e.g. unlikely to "disregard" or "nip across")
- At the second crossing '"nipping across" is the dominant problem, sighting is not a problem

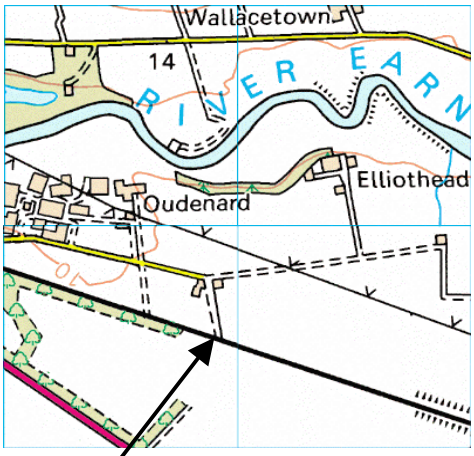


- Shows effect of increasing number of trains from 100 to 200 per day.
- At this crossing, the dominant risks are “nip across” and “disregard”.
- The crossing is on double line, but where train are randomly distributed, the simulation shows the chances of two passing in close succession to be low.
- However, where trains are timetabled to pass (second and third columns) the risk of being caught by two trains is much more significant

Examples of Case Studies of Level Crossings

Crossing Oudenarde 1	**OS Ref** N0149175	**Zone** Scotland	**Date/Time** 23/10/00 11am

Location



Oudenarde 1

Crossing Information

Type:	UWC
Users count:	None
Evidence of other use:	Interview suggested seasonal use by farmer and farm workers
Train count:	1 2 car PT-DMU
Speed (mph):	40, visual estimate
Distance across tracks (m):	50
Distance along tracks (m):	3.5
Angle with track (deg):	60º
Accident history:	None known of
Other Information:	Single track

Photographs

North approach. No signs due to farmers request.
Crossing between private farm land.

North side looking west.

Protection of the line (awareness of crossing) Score

A single track leads from a quiet road, past farm building to the north side of the crossing. Farmers fields are on the south side of the crossing. Both gates were closed and padlocked. No signs on farmers request. No telephone. 1

Warning of train approach (basis for decision) Score

Sighting times approximately 50 seconds looking east and reduced to 25 seconds looking west due to a bridge. Crossing time is 9 seconds but may be much longer for large farm vehicles. The train that passed did not sound its horn. 1

Risks of crossing use Score

The user could be distracted by the nearby busy road. There are trip hazards on the crossing and the crossing is slippery when wet for pedestrians – but mainly used by vehicles. 3

Traffic moment Score

Estimated traffic moment: Approximately 25 trains pass the crossing per day. The number of users per day is estimated to be 2. 3

Main Risk Factors Total

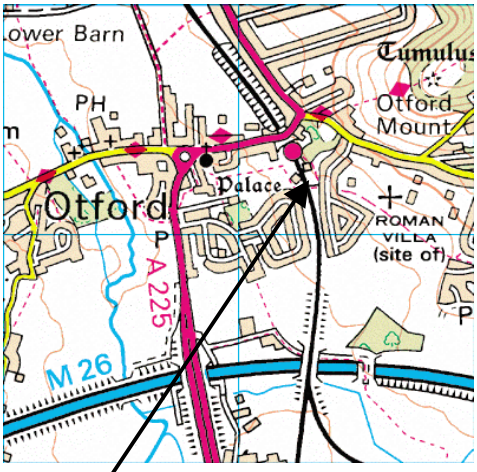
Long crossing times with farm vehicles. Trip and slip hazards on crossing. 8

Remediation Options Based on Observation

Overgrown hedges should be cut back. A telephone could be installed to improve the safety of the crossing if the user would agree.

Crossing	Pilgrims Way	OS Ref	TQ533593	Zone	Southern	Date/Time	23/8/00 12.30pm

Location



Crossing Information

Type:	FPS
Users count:	1 child 2 elderly pedestrians
Evidence of other use:	Clearly a frequently used crossing
Train count:	1 3 car PT-EMU
Speed (mph):	varies
Distance across tracks (m):	11.0
Distance along tracks (m):	1.5
Angle with track (deg):	60º
Accident history:	None known of
Other Information:	One interview carried out Station visible from crossing

Photographs

West side of crossing looking north. Note adjacent station. Some trains are fast and do not stop at station.

Trip hazard on crossing.

West side of crossing looking south Good visibility. Train speeds vary.

Protection of the line (awareness of crossing) — Score

Stiles generally appear to be in good condition although both are worn. Signs faded and obscured by bushes, otherwise in good condition. — 1

Warning of train approach (basis for decision) — Score

1 train passed the crossing during the visit and sounded its horn. Sighting times vary due to slowing and accelerating trains at the adjacent station.. — 2

Risks of crossing use — Score

Generally the crossing appears to be in good condition however crossing boards have cracked and some are at various levels producing trip hazards for pedestrians users. Decision point is lineside of stiles. — 2

Traffic moment — Score

Estimated traffic moment: Approximately 70 trains per day — 4

Main Risk Factors — Total

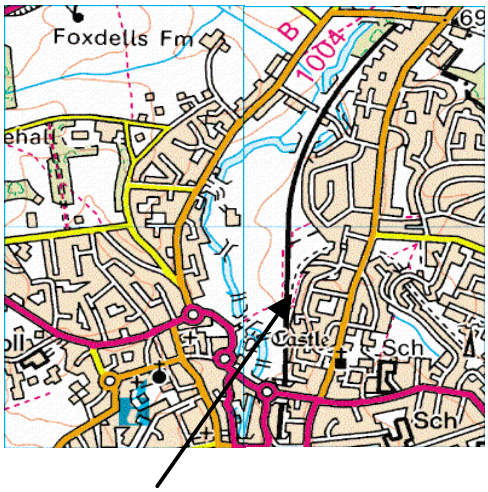
Crossing boards at various levels present tripping hazards for pedestrians. User distraction from adjacent station and varying train speeds also present risks to crossing users. — 9

Remediation Options Based on Observation

Repair crossing boards to provide even crossing for all users. Cut back bushes on approaches to crossing to improve visibility of signs.

Crossing	Johnsons	OS Ref	TL 492216	Zone	Anglia	Date/Time	28/06/00

Location



Johnsons

Crossing Information

Type:	FP
Users count:	1 elderly pedestrian 1 pedestrian with 5 dogs 2 cyclists and 2 unaccompanied school children
Evidence of other use:	Heavy use – "cross community link"
Train count:	5 4 car PT-EMU
Speed (mph):	70
Distance across tracks (m):	9.0
Distance along tracks (m):	1.5
Angle with track (deg):	90
Accident history:	unknown
Other Information:	The stiles on either side of the crossing are heavily worn

Photographs

Crossing looking west Note poor condition of crossing boards and temporary works

West side looking south

East approach stile
Note worn condition of stile

Protection of the line (awareness of crossing) Score 0

Johnsons crossing is a FP crossing on a public footpath into a local recreation park near the town and nearby residential areas. Stiles worn (complaints from interviewee) but robust - and signs are OK.

Warning of train approach (basis for decision) Score 4

3 out of 5 trains sounded their horns during the visit. Traverse times about 6 secs (longer – about 10 secs - for a lady walking her 5 dogs) compared with sighting times of between 10 and 20 secs (10 for East looking North).

Risks of crossing use Score 5

The crossing surface is in poor condition and requires remedial works to prevent tripping/slipping accidents. Also decision point is on lineside of styles and due to vegetation not in position of safety (may change during Autumn / Winter).

Traffic moment Score 5

Estimated traffic moment:

Main Risk Factors Total 14

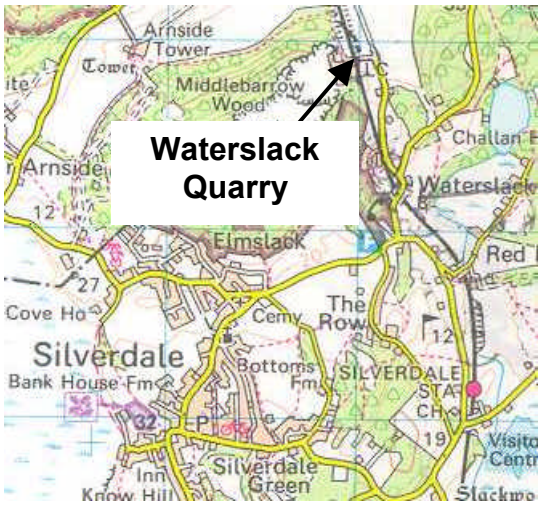
Large numbers of public using the crossing to gain access to town and parks on either side, together with high trains speeds.

Remediation Options Based on Observation

Review use of stiles – consider gates – elderly complained during interview. Condition of crossing is poor and requires improvements to prevent tripping accidents.

Crossing	OS Ref	Zone	Date/Time
Waterslack Quarry	SD 470 769	North West	16/8/2000 14:00 to 14:50

Location



Crossing Information

Type:	UWC/T Manned
Users count:	13HGV 1 Car 10 Pedestrian
Evidence of other use:	Very regular HGV use Very regular footpath
Train count:	2 x 2 car DMU
Speed (mph):	45
Distance across tracks (m):	10
Distance along tracks (m):	9
Angle with track (deg):	75
Accident history:	Unknown
Other Information:	Crossing serves Middlebarrow Quarry Records indicate:- 80-100 HGV / day 25 Trains / day (15/8/00)

Photographs

West side looking South
Typical long sighting distance

East side approach

View from East side
Quarry in background

Protection of the line (awareness of crossing) — Score

Signs OK.
Gates OK.

0

Warning of train approach (basis for decision) — Score

Minimum sight time = 23 secs (West side looking South)
Crossing Time = 7 secs (HGV) , 9 secs (Pedestrian) , 14 secs (Pedestrian Group)
Warning Time – Crossing Time = Over 10 secs

0

Risks of crossing use — Score

Decision Point is on lineside of stile.
Background noise and quarry activity may cause user distraction – although careful use should be ensured through manning arrangements.

3

Traffic moment — Score

Estimated Traffic Moment: Over 1000 (2 Trains per hour, 20 to 30 Walkers per day , 80 to 100 HGV's per day , 20 Cars per day) 5*

Main Risk Factors — Total

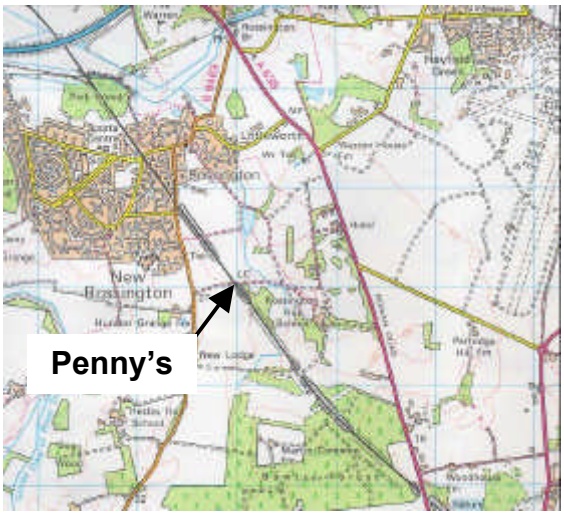
Very heavily used by construction vehicles..
Procedure for closing gates is for signaller to ring up the crossing operator to warn of an approaching train and instruct the gates to be closed. This is not fail safe if the signaller fails or cannot contact the crossing operator.

N/A

Remediation Options Based on Observation
Monitor and review crossing procedures to ensure that the system provides suitable protection from potentially high consequence accidents.

Crossing	OS Ref	Zone	Date/Time
Penny's	SK 630 970	North East	25/10/2000 12:45 to 13:20

Location



Crossing Information

Type:	FPG
Users count:	1 Dog Walker
Evidence of other use:	Regularly used by pedestrians
Train count:	3 x 10 Car HST 1 x 22 Car Freight
Speed (mph):	100 – 125 (HST) 30 (Freight)
Distance across tracks (m):	12
Distance along tracks (m):	2
Angle with track (deg):	80
Accident history:	None known of
Other Information:	Adjacent to open heath land with evidence of high usage particularly for dog walking

Photographs

West side approach
Fence missing

View from West side

East side gate
Note: regularly used path inside fenceline

East side looking South

Protection of the line (awareness of crossing)	Score
Signs are in acceptable condition. Fence alongside West gate has been removed, probably to provide access for motorbikes. East gate is rotten and does not self close fully. Evidence of regular walking routes on lineside of fencing.	3

Warning of train approach (basis for decision)	Score
Minimum sight time = 26 secs (West side looking South). Crossing Time = 10 secs Warning Time – Crossing Time = 16 secs Trains do not always use horns (Based on interview, 2out of 4 observed)	1

Risks of crossing use	Score
Decision Point is on lineside of gate. No crossing boards are provided in the 6 foot which may cause a trip hazard.	3

Traffic moment	Score
Estimated Traffic Moment: Over 1000 (6 Trains per hour, 20 to 40 Users per day)	5

Main Risk Factors	Total

Very high usage and high numbers of very fast trains. Lack of protection provided and possible use of lineside walking routes. Trip hazards caused by partial crossing boarding.	12
Remediation Options Based on Observation Reinstate lineside fencing and replace gates immediately. Investigate use of lineside walking routes and if possible fence off to restrict them. Provide crossing boards across full width of crossing.	

Appendix A.14

NORTHERN IRELAND: The Private Crossings (Signs and Barriers) Regulations 2007 SR No. 41

2007 No. 41

TRANSPORT

The Private Crossings (Signs and Barriers) Regulations (Northern Ireland) 2007

Made - - - - -	*26th January 2007*
Coming into operation	*2nd March 2007*

The Department for Regional Development in exercise of the powers conferred on it by Section 5 of, and Schedule 1 to, the Railway Safety Act (Northern Ireland) 2002(a) and of every other power enabling it in that behalf hereby makes the following Regulations:

PART 1
PRELIMINARY

Citation and commencement

1. These Regulations may be cited as the Private Crossings (Signs and Barriers) Regulations (Northern Ireland) 2007 and shall come into operation on 2nd March 2007.

Interpretation

2. In these Regulations—

"crossing" means a level crossing;

"crossing operator" means an operator of a railway that is crossed in any place by a private road or path;

"the 2002 Act" means the Railway Safety Act (Northern Ireland) 2002;

"the 1997 Regulations" means the Traffic Signs Regulations (Northern Ireland) 1997(b).

(a) 2002 c. 8 (N.I.)
(b) S.R. 1997 No. 386

PART II
GENERAL PROVISIONS

Crossing Signs to be of the size, colour and type shown in diagrams

3. Subject to the provisions of these Regulations, for the purposes of section 5 of, and Schedule 1 to, the 2002 Act, a crossing operator may cause or permit the placement on or near a private road or path of a crossing sign of a size, colour and type described and shown —

(a) in a diagram in Schedule 1; or

(b) in a diagram in Schedule 3 to the 1997 Regulations;or

(c) in one of the diagrams numbered 601.1, 602, 1001, 1002.1, 1003, 1003.2, 1004, 1004.1, 1005.1, 1005, 1008, 1008.1, 1010, 1012.1, 1013.1, 1014, 1022, 1023, 1026, 1045, in Schedules 2 and 6 to the 1997 Regulations.

PART III
CROSSING SIGNS SHOWN IN SCHEDULE 1

Colours of backs of crossing signs

4. The back of any crossing sign shown in a diagram in Schedule 1 and any post or other structure specially provided for mounting the sign shall be coloured black or grey.

Dimensions

5.—(1) Any variation in a dimension specified in Schedule 1 shall be treated as permitted by these Regulations if the variation is not more than 5% more or less than the dimension specified.

(2) In the diagrams in Schedule 1 the dimensions given are expressed in millimetres.

Permitted variants

6.—(1) Where the circumstances so require the indication given by a crossing sign shown in a diagram in Schedule 1 may be varied in the respect (if any) shown below the diagram relating to that sign.

(2) Where a crossing sign in a diagram in Schedule 1 contains an indication as to the penalty relating to a failure to obey the requirements on that sign, the indication of the penalty may be varied when necessary to accord with changes in the legislation governing the nature and level of penalty.

Illumination of Crossing Signs

7.—(1) Subject to paragraphs (2) and (3) of this regulation all parts other than the back of every crossing sign shown in a diagram in Schedule 1 shall be illuminated by means of retro reflecting material.

(2) No retro reflecting material shall be applied to—

(a) any part of a crossing sign coloured black; or

(b) the red and green lights in the crossing signs shown in diagrams 107 and 108 and prescribed in regulation 8.

(3) Retro reflecting material need not be applied to a crossing sign at a crossing that is not used by motor vehicles.

Miniature stoplights

8.—(1) The crossing signs shown in diagrams 107 and 108 shall contain red and green lamps which are internally illuminated by a steady light in such a manner that—

(a) when one light is illuminated the other is not illuminated;

(b) the green lamp is and remains illuminated for so long as no railway vehicle is approaching the vicinity of the crossing from either direction; and

(c) the red lamp is and remains illuminated for so long as the green lamp is not illuminated.

(2) The lenses of the lamps shall be—

(a) circular and not less than 60 millimetres in diameter; or

(b) rectangular with each side measuring not less than 60 millimetres; and the distance between the edges of the lenses of the green lamp and the red lamp shall be not less than 40 millimetres.

(3) The information, warnings, requirements and prohibitions conveyed by the lamps described in paragraphs (1) and (2) shall be as follows—

(a) the red lamp when illuminated shall convey the warning that a railway vehicle is approaching the vicinity of the crossing and the prohibition that persons must not proceed across the crossing;

(b) the green lamp when illuminated shall convey the information that no railway vehicle is approaching the vicinity of the crossing and persons may proceed across the crossing;

(c) if neither the red nor green lamp is illuminated persons should either telephone the crossing operator or proceed across the crossing with caution after having ascertained that no railway vehicle approaching the vicinity of the crossing in accordance with the instructions shown on the sign.

PART IV
BARRIERS

Barriers to be of the character described in Schedule 2 or Schedule 3

9. For the purposes of section 5 of, and Schedule 1 to, the 2002 Act, where a railway is crossed in any place by a private road or path, the operator of that railway may cause or permit a barrier to be placed on or near the private road or path near the crossing if it is, in the case of a gate, of the character described in Schedule 2, or, in the case of any other form of barrier, of the character described in Schedule 3.

PART V
CROSSING SIGNS RELATING TO TELEPHONES

Placement of signs relating to telephones

10. The authority which these Regulations give for the placement of crossing signs relating to telephones at a crossing shall only apply where telephones are, or are to be, provided on both sides of the crossing and connected direct to the crossing operator.

Sealed with the Official Seal of the Department for Regional Development on 26th January 2007.

(L.S.)

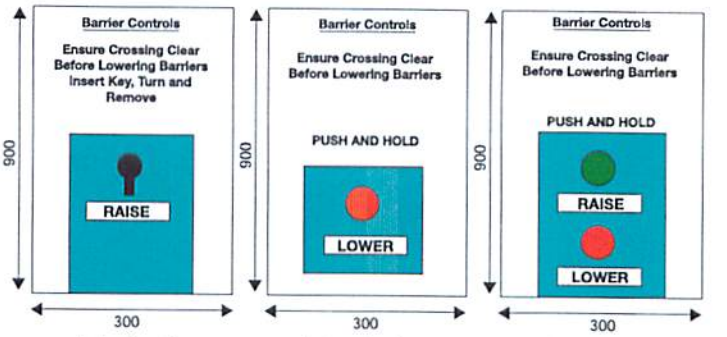
B. R. D. White

A senior officer of the Department for Regional Development

SCHEDULE 1

(Regulation 3)

CROSSING SIGNS



Instructions for Miniature Stop Light with barriers Entry Raise Key Switch

Diagram 97

Instructions for Miniature Stop Light with barriers Entry Lower Plunger

Diagram 98

Instructions for Miniature Stop Light with barriers Entry Raise and Exit Lower Plungers

Diagram 99

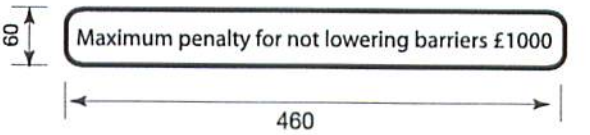
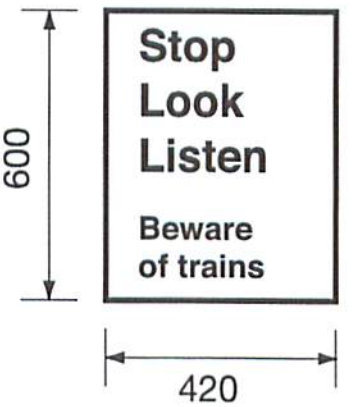


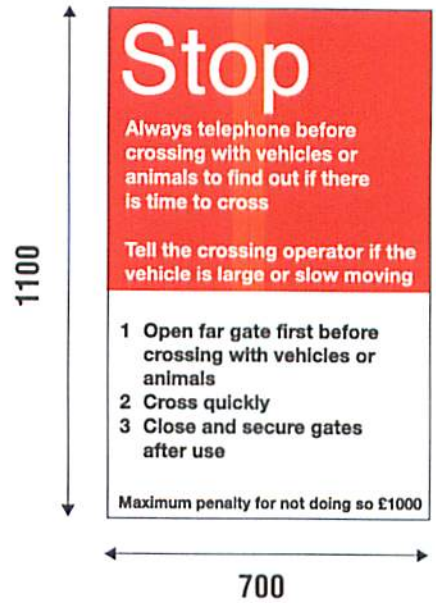
Diagram 100



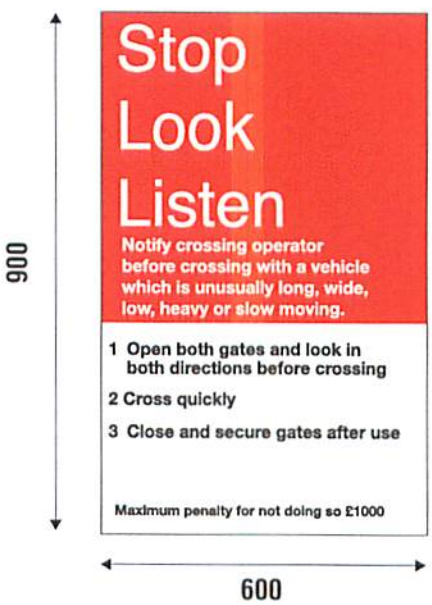
Black lettering on white background with black border

Warning sign for a non-vehicular crossing

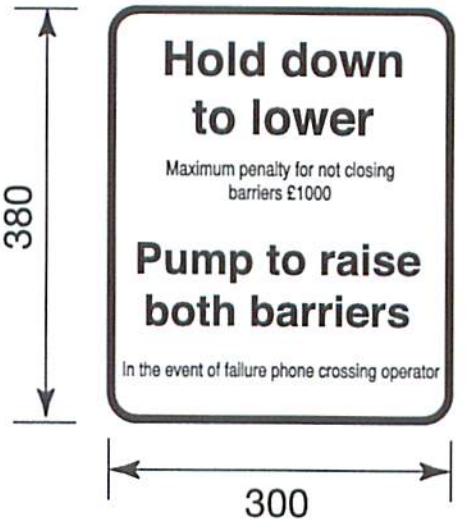
Diagram 101



Upper section — White lettering on red background
Lower section — Black lettering on white background
Instructions for use at a vehicular crossing without a telephone
Diagram 102
Permitted variant: Telephone number of crossing operator may be added.



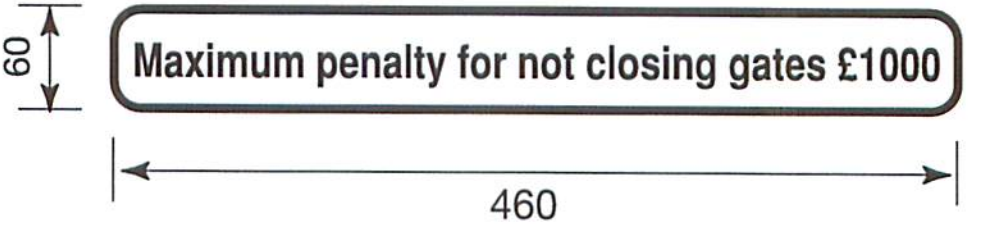
Upper section — White lettering on red background
Lower section — Black lettering on white background
Instructions for use at a vehicular crossing with a telephone
Diagram 103



Black lettering and border on white background

Operating instructions for barrier

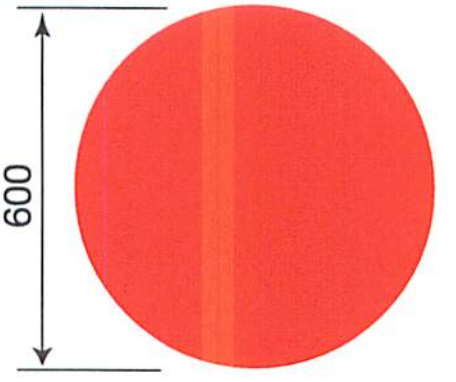
Diagram 104



Black lettering and border on white background

Sign indicating the penalty for failure to shut the gate at a vehicular crossing

Diagram 105



Red background

Target for crossing gate

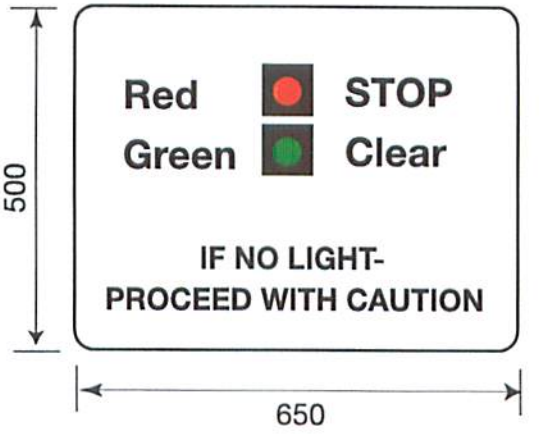
Diagram 106

Black lettering and border on white background

Sign for use with miniature stop lights at a crossing with a telephone

Diagram 107

Permitted variant: The lenses of the lamps may be rectangular instead of circular

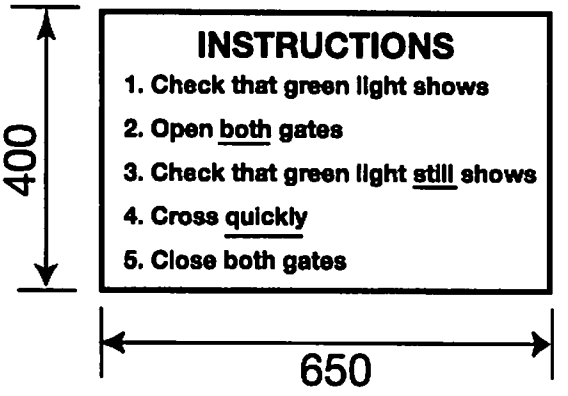


Black lettering and border on white background

Sign for use with miniature stop lights at a crossing without a telephone

Diagram 108

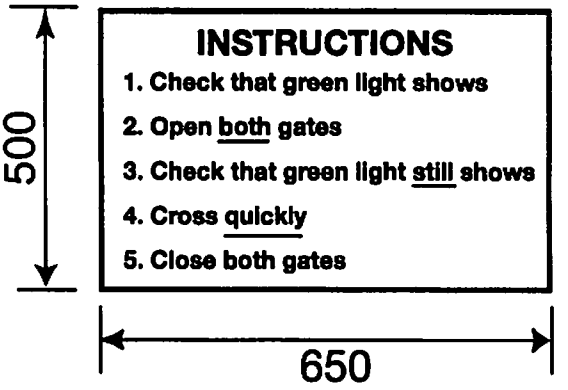
Permitted variant: The lenses of the lamps may be rectangular instead of circular



Black lettering and border on white background

Instructions for use at a crossing with miniature stop lights and user-operated gates

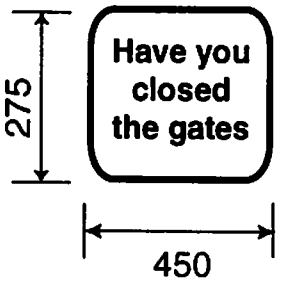
Diagram 109



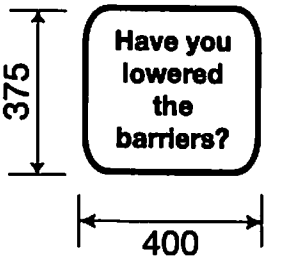
Black lettering and border on white background

Instructions for use at a crossing with miniature stop lights and user-operated barriers

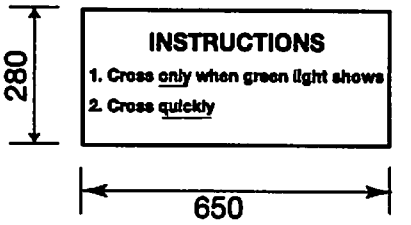
Diagram 110



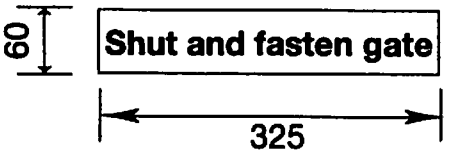
Black lettering and
border on white background
Reminder at a crossing
with user-operated gates
Diagram 111



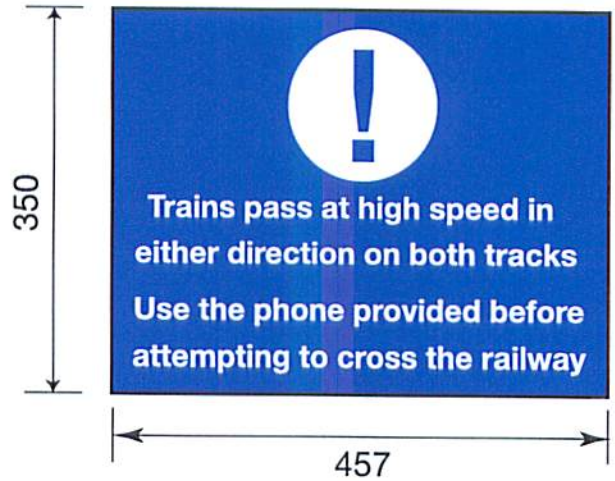
Black lettering and
border on white background
Reminder at a crossing
with user- operated barriers
Diagram 112



Black lettering and border on white background
Instructions to non-vechicular traffic at a crossing with miniture stop light
Diagram 113



Black lettering and border on white background
Instructions at a crossing with gates
Diagram 114



Upper section — Blue exclamation mark inside white circle
Lower section — White lettering on blue background
Warning sign for use on bi-directional double track
Diagram 115

Black lettering on white background with red border
Warning sign for withdrawal of timetabled services
Diagrams 116

SCHEDULE 2 (Regulation 9)

GATES

1. Where gates are used, each gate shall (by itself or with another gate on the same side of the railway) be long enough to extend across the full width of a private road or path, and shall be pivoted to open away from the railway.

2. When a gate is closed, the uppermost surface of the gate shall not be less than 1350 millimetres above the road surface at the centre of the private road or path and the under clearance between each gate and the road shall not exceed 150 millimetres. Where the private road or path is an unmetalled track, the under clearance between the gate and the ground shall be no greater than 150 millimetres than is reasonably necessary, having regard to the need to avoid the gate grounding during opening and closing movements.

3. Where a gate is not installed solely for use by pedestrians, it shall be furnished with suitable mechanisms for securing it in the open and in the closed positions.

4. So far as reasonably practicable, a gate shall be constructed so as to be strong enough to withstand distortion or fracture caused by wind pressure or by a farm animal, and, subject thereto, it shall be as light in weight as possible.

SCHEDULE 3 (Regulation 9)

BARRIERS OTHER THAN GATES

1. Where barriers are used, they shall when lowered across a private road or path be long enough to extend either—

(a) across the full width of the private road or path, or

(b) from the left-hand side of the private road or path (as seen from a vehicle approaching the crossing) to a point as close as possible to the centre of the private road or path as is consistent with allowing a clear passage at least 3 metres wide between the tip of the barrier and the other side of the private road or path.

2. When a barrier is lowered its uppermost surface shall be not less than 900 millimetres above the road surface at the centre of the private road or path and the under clearance between a barrier and the road surface shall not exceed 1000 millimetres.

3. A barrier shall be provided with means to raise it and hold it in the raised position and means to release the holding mechanism. A barrier may be so linked with any other barrier at the crossing that the barriers can be raised or lowered simultaneously from either side of the crossing.

4. A cover shall be provided for each pivot post for the purposes of guarding against danger to any person from the operating mechanism and the moving parts of the barrier machine.

5. The barriers when lowered shall display on both front and rear faces alternate red and white bands each approximately 600 millimetres long and to the full depth of the barriers. A strip of retro reflecting material not less than 50 millimetres deep, in colour matching that of the bands, shall be provided along the full length of each band.

6. The barriers may be fitted with skirts which fence in the space between the barriers and the road surface. Skirts shall be of a light colour.

7. Electric lamps may be fitted to the barriers and each lamp shall show a red light, when illuminated, in each direction along the private road or path.

8.—(1) So far as reasonably practicable—

(a) a barrier shall be constructed so as to be strong enough to withstand distortion or fracture, and

(b) a skirt fitted to a barrier shall be capable of withstanding damage, caused by wind pressure or by a farm animal.

(2) Subject to sub-paragraph (1) above, a barrier (with a skirt, if fitted) shall be as light in weight as possible.

EXPLANATORY NOTE

(This note is not part of the Regulations)

Section 5 of, and Schedule 1 to, the Railway Safety Act (Northern Ireland) 2002 authorises the operator of a railway that is crossed by a private road or path to cause or permit the placement near the crossing of crossing signs or barriers that are prescribed in Regulations made by the Department for Regional Development.

These Regulations prescribe crossing signs and barriers for the purpose of section 5 and Schedule 1. Any person who fails to comply with any requirement, restriction or prohibition conveyed by a crossing sign lawfully placed on or near a private road or path near a place where it crosses a railway shall be guilty of an offence under the Railway Safety Act (Northern Ireland) 2002 and shall be liable on summary conviction to a fine not exceeding level 3 on the standard scale (£1000).

These Regulations have been notified to the European Commission pursuant to European Parliament and Council Directive 98/34EC of 22 June 1998 (O.J. No. L204, 21. 7.98, p. 37) as amended by European Parliament Council Directive 98/48 of 20th July 1998 (O.J. No. L217, 5.8.98, p. 18) laying down a procedure for the provision of information in the field of technical standards regulations and of rules on Information Society services.

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