



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



Southern Rapid Rail Transit Commission

Transportation Equity Act for the 21st Century and High-Speed Ground Transportation



**Gallier Hall
Grand Ballroom, Second Floor
545 St. Charles Avenue
New Orleans, Louisiana 70130
November 18, 1998**

HIGH SPEED RAIL CONFERENCE

Transportation Equity Act for the 21st Century

November 18, 1998

Gallier Hall, New Orleans

Wednesday

I. REGISTRATION - 7:45 to 8:30 a.m.

II. WELCOME - Honorable Revius O. Ortique, Chairman, New Orleans Aviation Board (8:30 a.m. to 8:45 a.m.)

III. WELCOME - The Honorable Kirk Fordice, Governor of Mississippi (8:45 a.m. to 9:15 a.m.)

IV. CONFERENCE OVERVIEW - The Honorable Jolene M. Molitoris, Federal Railroad Administrator (9:15 to 9:45 a.m.)

- o Welcome to Briefing and Conference Overview
- o TEA 21 Opportunities and Challenges for Rail Programs

V. Break - 15 minutes

VI. OVERVIEW OF REAUTHORIZATION - Congressional Staff Panel - Moderated by William Nevel, HSGTA (10:00 to 11:00 a.m.)

- o Overview of Reauthorization
- o Program Initiatives for the Department
- o Amtrak Report - Sandy Brown, Amtrak

VII. TEA-21 INTERMODAL OPPORTUNITIES FOR RAIL - James T. McQueen, Associate Administrator for Railroad Development (11:00 a.m. to 12 p.m.)

- o ISTEA Continuing Programs
- o Railroad Rehabilitation and Improvement Financing Program
- o Other Rail-Related Initiatives
- o Maglev Deployment Program

VIII. PRESS CONFERENCE - The Honorable Rodney E. Slater, United States Transportation Secretary and Other Notables (12:00 to 1:00 p.m.)

- o Designation of Gulf Coast High Speed Rail Corridor

IX. Lunch - 1:00 p.m. - Courtesy of High Speed Ground Transportation Association

X. STATE DOT PANEL - State Staff Panel Discussion - Moderated by John Cikota, FRA (1:30 to 2:30 p.m.)

- o HSR Corridor Planning Activities - Willard Keeney, Morrison Knudsen
- o Next Steps - Louisiana, Mississippi, Alabama DOT Directors

XI. MAGNETIC LEVITATION DEPLOYMENT PROGRAM - Arnold Kupferman (2:30 to 3:00 p.m.)

- o Program Overview
- o Draft Announcement
- o Project Eligibility, Selection and Funding
- o Timetable

XII. NEXT GENERATION HIGH SPEED RAIL UPDATE AND SAFETY RESEARCH AND DEVELOPMENT - Robert McCown, FRA (3:00 to 4:00 p.m.)

- o Positive Train Control
- o Non-electric High Speed Locomotive
- o Grade Crossing Technology

XIII. SUMMARY AND DISCUSSION - James T. McQueen, Associate Administrator for Railroad Development (4:00 to 4:30 p.m.)

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6. TIFIA, Sections 1501-15-3
7. Other TEA-21 Rail Related Initiatives
8. FY 1999 Budget Material
9. High-Speed Rail Safety Initiatives
10. Next Generation High-Speed Rail Program R&D Safety
Initiatives

○ TAB 1 - Agenda, List of Attendees

- **Agenda**
- **List of Attendees**



○ TAB 2 - Contacts

- **Federal Railroad Administration**
- **High Speed Ground Transportation Association**
- **Amtrak**



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Section 7201- High-Speed Rail (Swift Act Reauthorization, Corridors)

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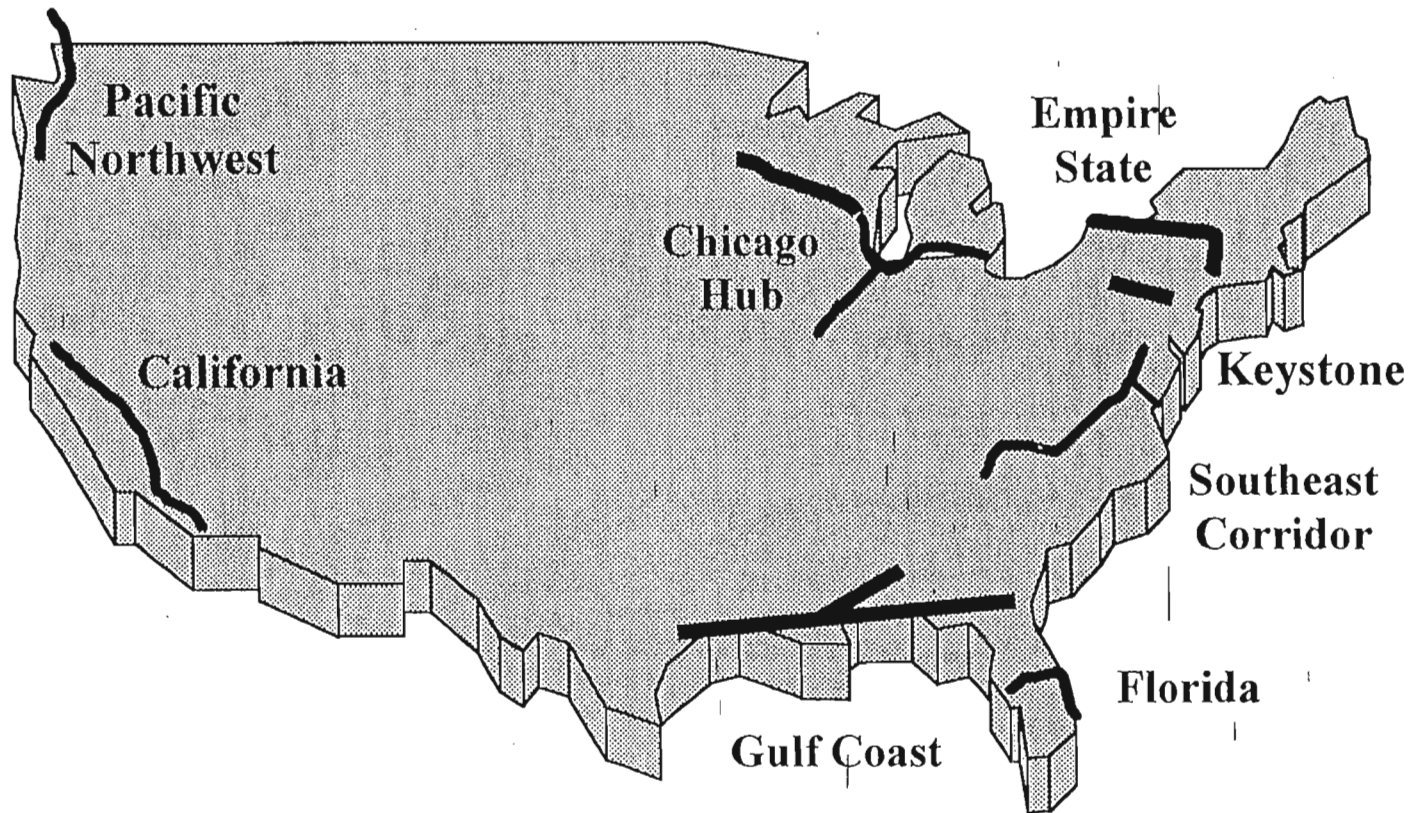
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**○ TAB 3- Rail Highway Crossing Hazard Elimination,
HSGT Corridors**

- **High Speed Rail Corridor Map**
- **High Speed Rail Grade Crossing Improvement Program - Factsheet**
- **Operation Lifesaver and High Speed Rail Corridors - Bill Language**



High-Speed Rail Corridors Designated Under ISTEA And TEA-21*



***Three additional Corridors to be designated by
the Secretary of Transportation.**

HIGH SPEED RAIL GRADE CROSSING IMPROVEMENT PROGRAM

Year	1998	1999	2000	2001	2002	2003
Trust Funds	\$5.25M	\$5.25M	\$5.25M	\$5.25M	\$5.25M	\$5.25M
Authorization	\$15M	\$15M	\$15M	\$15M	\$15M	\$15M

Program Purpose

The purpose of the high speed rail grade crossing improvement program is to reduce or eliminate the hazards at highway-rail grade crossings in designated high speed corridors as provided in Section 1103(c) of the Transportation Equity Act for the 21st Century ("The Act;" P.L. 105-178, June 6, 1998).

Program Description

The Secretary is authorized to provide financial assistance to states (or authorities designated by one or more states) to fund crossing improvements that range from various options for improved warnings to physical closure or grade separation. This program extends and expands the program established under Section 1010 of the Intermodal Surface Transportation Efficiency Act ("ISTEA," P.L. 102-240, December 18, 1991). It is a two part program that first designates passenger rail corridors as eligible for funding, and second provides funds in response to applications for improvements at specific highway/rail grade crossings. The five corridors designated under Section 1010 of ISTEA are being supplemented by three corridors identified in Section 1103(c) of The Act, and three other corridors to be selected based on applications to be submitted by October 31, 1998. To be eligible for designation, a corridor shall be a rail line where railroad speeds of at least 90 miles per hour are occurring or can reasonably be expected to occur in the future.

- Work eligible for Section 1103(c) funding may include any of the following to eliminate hazards of highway-rail grade crossings, in the selected corridors: (i) Installation or improvement of warning devices; (ii) Improvement of track circuitry which activates warning devices; (iii) Other crossing improvements such as improved crossing surfaces, improved sight distances, crossing illumination, etc; (iv) Closure of crossings with or without attendant highway relocations; (v) Grade separation construction or reconstruction; (vi) Combining crossing warning systems with advanced train control and/or intelligent highway traffic control systems; and (vii) Any combination of the above.

Formula

The Federal share of the costs of improvements funded under Section 1103(c) may be up to 100 percent of the costs of engineering and construction. However, allocation of funds will consider the extent to which other private, state, local and Federal entitlement (e.g., Surface Transportation Program) funds are being committed to corridor improvements in conjunction with these funds.

Funding

Contract authority out of the Highway Trust Fund (other than the Mass Transit Account) is provided for fiscal years 1998-2003 totaling \$31.5 million. An authorization for an appropriation is provided for an additional \$75 million over fiscal years 1999-2003.

Eligible Corridors

Corridors identified under the ISTEA authorization remain eligible. These are: the Pacific Northwest Corridor, linking Eugene, Oregon and Vancouver, British Columbia through Seattle Washington; California, linking San Diego, Los Angeles, and San Francisco; the Chicago Hub linking St. Louis, Missouri, Minneapolis, Minnesota, Milwaukee Wisconsin and Detroit, Michigan; the southeast, extending the northeast corridor to Charlotte, North Carolina; and Florida, linking Miami to Tampa via Orlando. The new corridors are: the Gulf Coast corridor linking Houston, New Orleans and Jacksonville plus New Orleans to Birmingham; the Empire Corridor linking New York to Buffalo via Albany; and the Keystone corridor linking Pittsburgh and Philadelphia, Pennsylvania. In addition, three other corridors may be established by the Secretary.

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— **Sec. 1103 (c) Operation Lifesaver and High Speed Rail Corridors.**—

Section 104(d) of such title is amended—

(1) in paragraph (1) by striking "The" and all that follows through "\$300,000 for each" and inserting "Before making an apportionment under subsection (b)(3) of this section for a fiscal year, the Secretary shall set aside \$500,000 for such"; and

(2) by striking paragraphs (2) and (3) and inserting the following:

"(2) Railway-highway crossing hazard elimination in high speed rail corridors.—

"(A) In general.—Before making an apportionment of funds under subsection (b)(3) for a fiscal year, the Secretary shall set aside \$5,250,000 of the funds made available for the surface transportation program for the fiscal year for elimination of hazards of railway-highway crossings.

"(B) Eligible corridors.—Subject to subparagraph (E), funds made available under subparagraph (A) shall be expended for projects in—

"(i) 5 railway corridors selected by the Secretary in accordance with this subsection (as in effect on the day before the date of enactment of this clause);

"(ii) 3 railway corridors selected by the Secretary in accordance with subparagraphs (C) and (D);

"(iii) a Gulf Coast high speed railway corridor (as designated by the Secretary);

"(iv) a Keystone high speed railway corridor from Philadelphia to Harrisburg, Pennsylvania; and

"(v) an Empire State railway corridor from New York City to Albany to Buffalo, New York.

"(C) Required inclusion of high speed rail lines.—A corridor selected by the Secretary under subparagraph (B) shall include rail lines where railroad speeds of 90 miles or more per hour are occurring or can reasonably be expected to occur in the future.

"(D) Considerations in corridor selection.—In selecting corridors under subparagraph (B), the Secretary shall consider—

"(i) projected rail ridership volume in each corridor;

"(ii) the percentage of each corridor over which a train will be capable of operating at its maximum cruise speed taking into account such factors as topography and other traffic on the line;

"(iii) projected benefits to nonriders such as congestion

relief on other modes of transportation serving each corridor (including congestion in heavily traveled air passenger corridors);

“(iv) the amount of State and local financial support that can reasonably be anticipated for the improvement of the line and related facilities; and

“(v) the cooperation of the owner of the right-of-way that can reasonably be expected in the operation of high speed rail passenger service in each corridor.

“(E) Certain improvements.—Not less than \$250,000 of such set-aside shall be available per fiscal year for eligible improvements to the Minneapolis/St. Paul-Chicago segment of the Midwest High Speed Rail Corridor.

“(F) Authorization of appropriations.—There is authorized to be appropriated \$15,000,000 for each of fiscal years 1999 through 2003 to carry out this subsection.”

TAB 4 - “Swift Act” Reauthorization

- **High Speed Rail Factsheet**
- **High Speed Rail - Bill Language**

HIGH-SPEED RAIL

Year	1998	1999	2000	2001
Authorization	\$10M-planning \$25M-technology	\$10M-planning \$25M-technology	\$10M-planning \$25M-technology	\$10M-planning \$25M-technology

Program Purpose

The high-speed rail program, in Section 7201 of TEA-21, is designed to extend the life of an existing high-speed rail corridor planning and technology development program.

Program Description

- The high-speed rail provisions of TEA-21 extend the ability of Congress to provide funding out of the general fund for the existing high-speed rail assistance program created in the Swift Rail Development Act of 1994 (See 49 U.S.C. 26101 *et seq.*). Program funding can be used by the Secretary to provide financial assistance (1) to public agencies for high speed rail corridor planning activities and certain other pre-construction activities, including right of way acquisition, and (2) to any United States business, educational institution, State or local government or public authority, or Federal agency to support the development of high-speed rail technology improvements.

Formula

The Secretary is authorized to provide financial assistance for up to 50 percent of the publicly financed costs of corridor planning activities and up to the full cost of technology improvements.

Funding

The TEA-21 authorization covers fiscal years 1998-2001 and is a general fund authorization, which means that the funds must first be made available by Congress in an appropriations act before the program can be implemented and any financial assistance can be provided.

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SEC. 7201. HIGH-SPEED RAIL.

(a) Authorization of Appropriations.—Section 26104 of title 49, United States Code, is amended—

*(1) by redesignating subsection (d) as subsection (h); and
(2) by inserting after subsection (c) the following new subsections:*

“(d) Fiscal Year 1998.—(1) There are authorized to be appropriated to the Secretary \$10,000,000 for fiscal year 1998, for carrying out section 26101 (including payment of administrative expenses related thereto).

“(2) There are authorized to be appropriated to the Secretary \$25,000,000 for fiscal year 1998, for carrying out section 26102 (including payment of administrative expenses related thereto).

“(e) Fiscal Year 1999.—(1) There are authorized to be appropriated to the Secretary \$10,000,000 for fiscal year 1999, for carrying out section 26101 (including payment of administrative expenses related thereto).

“(2) There are authorized to be appropriated to the Secretary \$25,000,000 for fiscal year 1999, for carrying out section 26102 (including payment of administrative expenses related thereto).

“(f) Fiscal Year 2000.—(1) There are authorized to be appropriated to the Secretary \$10,000,000 for fiscal year 2000, for carrying out section 26101 (including payment of administrative expenses related thereto).

“(2) There are authorized to be appropriated to the Secretary \$25,000,000 for fiscal year 2000, for carrying out section 26102 (including payment of administrative expenses related thereto).

“(g) Fiscal Year 2001.—(1) There are authorized to be appropriated to the Secretary \$10,000,000 for fiscal year 2001, for carrying out section 26101 (including payment of administrative expenses related thereto).

“(2) There are authorized to be appropriated to the Secretary \$25,000,000 for fiscal year 2001, for carrying out section 26102 (including payment of administrative expenses related thereto).”

(b) Definition.—Section 26105(2) of title 49, United States Code, is amended to read as follows:

“(2) the term ‘high-speed rail’ means all forms of nonhighway ground transportation that run on rails or electromagnetic guideways providing transportation service which is—

“(A) reasonably expected to reach sustained speeds of more

than 125 miles per hour; and

“(B) made available to members of the general public as passengers, but does not include rapid transit operations within an urban area that are not connected to the general rail system of transportation;”.

○ TAB 5 - Maglev Technology Deployment Program

- **Maglev Deployment Program - Slide Presentation**
- **Maglev Deployment Program Factsheet**
- **Maglev Deployment Program - Bill Language**
- **Maglev Interim Final Rule with Request for Comments**



MAGLEV

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MAGLEV DEPLOYMENT IN §1218 OF TEA21

- COMPETITION FOR FUNDS TO BUILD A SHORT 240+mph SYSTEM
- \$55 M CONTRACT AUTHORITY & \$950 M FROM FUTURE APPROPRIATIONS
- MUST INVOLVE A CORRIDOR WITH PUBLIC/PRIVATE “PARTNERSHIP POTENTIAL”
- MUST BE A REVENUE PRODUCING PUBLIC/PRIVATE VENTURE
- 1/3 STATE/LOCAL/PRIVATE MATCHING
- IF FOREIGN, MUST INVOLVE TECHNOLOGY TRANSFER: ALSO 70% U.S. CONTENT

FRA'S OBJECTIVES

- IDENTIFY AND PREPARE PRELIMINARY PLANS FOR ABOUT 5 VIABLE MAGLEV PROJECTS IN THE U.S.
 - To Demonstrate the Technology
- SELECT THE PROJECT WITH THE MOST POTENTIAL
- CONSTRUCT, EQUIP, AND DEPLOY IN REVENUE SERVICE AT AN EARLY DATE

FRA'S APPROACH

- MULTI-PHASED PROGRAM
- PHASE I: APPLICATION FOR PRECONSTRUCTION PLANNING GRANTS
- PHASE II: PROJECT DESCRIPTION DEVELOPMENT
- PHASE III: PROJECT SELECTION
- PHASE IV: PROJECT DEVELOPMENT & COMPLETION OF SITE-SPECIFIC EIS
- PHASE V: COMPLETION OF DETAILED ENGINEERING & CONSTRUCTION

FRA PROGRAM OVERSIGHT

- TECHNICAL SUPPORT FOR PROGRAM PARTICIPANTS
 - Further Guidance to Applicants
 - Technical Information for Grantees

- PROJECT EVALUATION AND SELECTION
 - Review Applications and Select Grantees
 - Review Project Descriptions and Select One Project

- PROJECT OVERSIGHT
 - Monitor Progress of Each Grantee
 - Ensure Consistency of Information Submitted

- FRA TEAM
 - FRA Staff
 - Volpe Center
 - Consultant to be Selected in 1999

IMPLEMENTATION OF MAGLEV PROGRAM

- 10/13/98 PUBLICATION OF "INTERIM FINAL RULE" FOR APPLICATION FOR PRECONSTRUCTION PLANNING GRANTS
- PROBABLY ABOUT 5 GRANTS, AWARD IN EARLY 1999
- EACH GRANTEE TO PREPARE MARKET STUDIES, REVENUE, COST AND BENEFIT PROJECTIONS, ENVIRONMENTAL ASSESSMENTS, FINANCIAL PLANS, ETC.
- WILL RESULT IN PROJECT DESCRIPTIONS AND PROVIDE BASIS FOR SELECTING ONE PROJECT FOR ENGINEERING AND CONSTRUCTION
- PROJECT SELECTION AND DETAILED ENVIRONMENTAL ASSESSMENT/EIS IN YEAR 2000/EARLY 2001 TIME FRAME

PROJECT ELIGIBILITY STANDARDS

- **PROJECT HAS SIGNIFICANCE**
 - Revenue Producing Facility
 - Top Speed at Least 240mph

- **BENEFITS THE US ECONOMY**
 - Technology Transfer
 - 70% US Content

- **PARTNERSHIP POTENTIAL**
 - Private/Public Partnership in Place for Project
 - Revenues Exceed Operating Expenses
 - Benefits Exceed Costs

PROJECT ELIGIBILITY STANDARDS (contd.)

- **COMPLETION WITHIN AUTHORIZATION LIMITS**
 - No § 1218 Funding beyond Authorization
 - At Least 1/3 Match from other than § 1218
 - Can Use Other TEA21 Funds for Match

- **SOUND PROJECT EXECUTION PLANS**
 - Must Provide Management Plan
 - Must Provide Project Schedule
 - Must Provide Financial Plan

- **MEETS PLANNING/ENVIRONMENTAL REQUIREMENTS**
 - Must Adhere to State & Federal Environmental Regs.
 - Letters of Endorsement from State & MPO's

PROJECT SELECTION CRITERIA

- SIGNIFICANCE OF PROJECT
 - Attractive to Passengers
 - Reduces Congestion/Emissions/Energy Dependence
 - Demonstrates US Operating Conditions
 - Augments Corridors with “Partnership Potential”

- TIMELY IMPLEMENTATION

- BENEFITS THE U.S. ECONOMY

- DEGREE OF PARTNERSHIP POTENTIAL

- LOCAL SUPPORT
 - Extent of State/Local/Private Financial Commitment

APPLICATION FOR PLANNING FUNDS

- APPLICATION SHOULD MAKE A CONVINCING CASE THAT THE PLANNING WORK WILL LEAD TO A PROJECT DESCRIPTION THAT WILL MEET THE ELIGIBILITY STANDARDS
- WORK STATEMENT FOR PRE-CONSTRUCTION PLANNING WORK
 - Studies to be Done
 - Use of Studies Already Completed
 - Public Participation
 - Management Plan, Schedule, Financial Plan (For Planning Activities)
 - Description of Project Concept, Location, etc.
- LETTERS OF ENDORSEMENT
- CERTIFICATIONS
 - Availability of Matching Funds for the Planning Grant
 - Meet Project Eligibility Standards if Selected

PROGRAM SCHEDULE

- | | |
|-------------|---|
| OCT. 13 '98 | PUBLISH GUIDELINES FOR PLANNING FUNDS APPLICATION |
| DEC. 31 '98 | PLANNING FUND APPLICATIONS DUE |
| MAR. 30 '99 | AWARD GRANTS |
| NOV. 30 '99 | CERTAIN ENVIRONMENTAL INFO. DUE |
| MAR. 31 '00 | PROJECT DESCRIPTIONS DUE |
| JULY 31 '00 | SELECTION OF ONE SUCCESSFUL PROJECT (Final engineering may proceed) |
| JULY 31 '01 | SITE-SPECIFIC EIS RECORD OF DECISION (Construction may proceed) |

**MAGNETIC LEVITATION TRANSPORTATION
TECHNOLOGY DEPLOYMENT PROGRAM**

Year	1998	1999	2000	2001	2002	2003
Contract Authority		\$15M	\$20M	\$25M		
Authorization			\$200M	\$200M	\$250M	\$300M

Program Purpose

The magnetic levitation transportation technology deployment program, in Section 1218 of TEA-21, has three principal purposes: (1) fund preconstruction planning activities (such as preparation of feasibility studies, major investment studies, environmental impact statements) of one or more feasible high-speed maglev systems, (2) fund final design, engineering and construction activities for one high-speed maglev system to be selected by the Secretary, and (3) fund grants for research and development of low-speed superconductivity magnetic levitation technology related to public transportation in urban areas.

Program Description

- The Secretary is authorized to provide financial assistance to states (or authorities designated by one or more states) to fund preconstruction planning activities (such as preparation of feasibility studies, major investment studies, environmental impact statements) of one or more feasible high-speed maglev systems, and final design, engineering and construction activities for one high-speed maglev system to be selected by the Secretary.
- Maglev is defined to mean transportation systems employing magnetic levitation that would be capable of safe use by the public at a speed in excess of 240 miles per hour.
- To be eligible, projects would have to exhibit partnership potential (i.e. be able to attract non-Federal investment and be undertaken through a public-private partnership), be able to be constructed within the Federal and non-Federal funding that is available, produce an operating transportation system in revenue service, satisfy applicable statewide and metropolitan planning requirements, be approved by the Secretary based on a state application, be carried out as a technology transfer project to the extent non-U.S. maglev technology is employed, and involve materials at least 70 percent of which are manufactured in the United States.
- Statutory project selection criteria (e.g. national importance of the project, project contribution to reducing congestion, non-Federal financial support, job creation, etc.) are

included to guide the Secretary's decision in determining which projects to fund for preconstruction activities and which project to fund for final design and implementation.

- The Secretary is also authorized to make grants for research and development of low-speed superconductivity magnetic levitation technology for public transportation purposes in urban areas.

Formula

The Federal share of full project costs (the total capital costs of a maglev project, including fixed facilities and stations, vehicles and equipment) cannot be more than 2/3, except as explained below. There is no statutory match requirement for the low-speed maglev research and development grants.

Funding

Contract authority out of the Highway Trust Fund (other than the Mass Transit Account) is provided for fiscal years 1999-2001 totaling \$60 million. \$55 million of this amount is available to fund preconstruction planning activities and design/construction of the selected maglev project. \$5 million of the \$60 million is available only for research and development grants related to low-speed superconductivity maglev technology for public transportation purposes in urban areas.

An authorization for an appropriation out of the Highway Trust Fund (other than the Mass Transit Account) is provided for an additional \$950 million over fiscal years 2000-2003 to be used to help fund construction of the high-speed maglev project selected by the Secretary. These funds would have to be appropriated by the Congress before they would be available for expenditure by the Secretary.

States are also authorized to use Surface Transportation Program and the Congestion Mitigation and Air Quality Improvement Program funds that are available to the states to pay all or a portion of the state share of full project costs of an eligible project, without the requirement for non-Federal funds. An eligible maglev project would also be eligible for other forms of financial assistance provided in Title 23, United States Code, and TEA-21, including loans, loan guarantees, and lines of credit.

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**SEC. 1218. MAGNETIC LEVITATION TRANSPORTATION TECHNOLOGY
DEPLOYMENT PROGRAM.**

(a) In General.—Chapter 3 of title 23, United States Code, is amended by inserting after section 321 the following:

“Sec. 322. Magnetic levitation transportation technology deployment program

“(a) Definitions.—In this section, the following definitions apply:

“(1) Eligible project costs.—The term ‘eligible project costs’—

“(A) means the capital cost of the fixed guideway infrastructure of a MAGLEV project, including land, piers, guideways, propulsion equipment and other components attached to guideways, power distribution facilities (including substations), control and communications facilities, access roads, and storage, repair, and maintenance facilities, but not including costs incurred for a new station; and

“(B) includes the costs of preconstruction planning activities.

“(2) Full project costs.—The term ‘full project costs’ means the total capital costs of a MAGLEV project, including eligible project costs and the costs of stations, vehicles, and equipment.

“(3) MAGLEV.—The term ‘MAGLEV’ means transportation systems employing magnetic levitation that would be capable of safe use by the public at a speed in excess of 240 miles per hour.

“(4) Partnership potential.—The term ‘partnership potential’ has the meaning given the term in the commercial feasibility study of high-speed ground transportation conducted under section 1036 of the Intermodal Surface Transportation Efficiency Act of 1991 (105 Stat. 1978).

“(b) Financial Assistance.—

“(1) In general.—The Secretary shall make available financial assistance to pay the Federal share of full project costs of eligible projects selected under this section. Financial assistance made available under this section and projects assisted with the assistance shall be subject to section 5333(a) of title 49, United States Code.

“(2) Federal share.—The Federal share of full project costs under paragraph (1) shall be not more than $\frac{2}{3}$.

“(3) Use of assistance.—Financial assistance provided under paragraph (1) shall be used only to pay eligible project costs of projects selected under this section.

“(c) Solicitation of Applications for Assistance.—Not later than 180 days after the date of enactment of this subsection, the Secretary shall solicit applications from States, or authorities designated by 1 or more States, for financial assistance authorized by subsection (b) for planning, design, and construction of eligible MAGLEV projects.

“(d) Project Eligibility.—To be eligible to receive financial assistance under subsection (b), a project shall—

“(1) involve a segment or segments of a high-speed ground transportation corridor that exhibit partnership potential;

“(2) require an amount of Federal funds for project financing that will not exceed the sum of—

“(A) the amounts made available under subsection (h)(1); and

“(B) the amounts made available by States under subsection (h)(3);

“(3) result in an operating transportation facility that provides a revenue producing service;

“(4) be undertaken through a public and private partnership, with at least $\frac{1}{3}$ of full project costs paid using non-Federal funds;

“(5) satisfy applicable statewide and metropolitan planning requirements;

“(6) be approved by the Secretary based on an application submitted to the Secretary by a State or authority designated by 1 or more States;

“(7) to the extent that non-United States MAGLEV technology is used within the United States, be carried out as a technology transfer project; and

“(8) be carried out using materials at least 70 percent of which are manufactured in the United States.

“(e) Project Selection Criteria.—Prior to soliciting applications, the Secretary shall establish criteria for selecting which eligible projects under subsection (d) will receive financial assistance under subsection (b). The criteria shall include the extent to which—

“(1) a project is nationally significant, including the extent to which the project will demonstrate the feasibility of deployment of MAGLEV technology throughout the United States;

“(2) timely implementation of the project will reduce congestion in other modes of transportation and reduce the need for additional highway or airport construction;

“(3) States, regions, and localities financially contribute to the project;

“(4) implementation of the project will create new jobs in traditional and emerging industries;

“(5) the project will augment MAGLEV networks identified as having partnership potential;

“(6) financial assistance would foster public and private partnerships for infrastructure development and attract private debt or equity investment;

“(7) financial assistance would foster the timely implementation of a project; and

“(8) life-cycle costs in design and engineering are considered and enhanced.

“(f) Project Selection.—

“(1) Preconstruction planning activities.—Not later than 90 days after a deadline established by the Secretary for the receipt of applications, the Secretary shall evaluate the eligible projects in accordance with the selection criteria and select 1 or more eligible projects to receive financial assistance for preconstruction planning activities, including—

“(A) preparation of such feasibility studies, major investment studies, and environmental impact statements and assessments as are required under State law;

“(B) pricing of the final design, engineering, and construction activities proposed to be assisted under paragraph (2); and

“(C) such other activities as are necessary to provide the Secretary with sufficient information to evaluate whether a project should receive financial assistance for final design, engineering, and construction activities under paragraph (2).

“(2) Final design, engineering, and construction activities.—After completion of preconstruction planning activities for all projects assisted under paragraph (1), the Secretary shall select 1 of the projects to receive financial assistance for final design, engineering, and construction activities.

“(g) Joint Ventures.—A project undertaken by a joint venture of United States and non-United States persons (including a project involving the deployment of non-United States MAGLEV technology in the United States) shall be eligible for financial assistance under this section if the project is eligible under subsection (d) and selected under subsection (f).

“(h) Funding.—

“(1) In general.—

“(A) Contract authority; authorization of appropriations.—

“(i) In general.—There is authorized to be appropriated from the Highway Trust Fund (other than the Mass Transit Account) to carry out this section \$15,000,000 for fiscal year 1999, \$20,000,000 for fiscal year 2000, and \$25,000,000 for fiscal year 2001.

“(ii) Contract authority.—Funds authorized by this subparagraph shall be available for obligation in the same manner as if the funds were apportioned under chapter 1, except that—

“(I) the Federal share of the cost of a project carried out under this section shall be determined in accordance with subsection (b); and

“(II) the availability of the funds shall be determined in accordance with paragraph (2).

“(B) Noncontract authority authorization of appropriations.—

“(i) In general.—There are authorized to be appropriated from the Highway Trust Fund (other than the Mass Transit Account) to carry out this section (other than subsection (i)) \$200,000,000 for each of fiscal years 2000 and 2001, \$250,000,000 for fiscal year 2002, and \$300,000,000 for fiscal year 2003.

“(ii) Availability.—Notwithstanding section 118(a), funds made available under clause (i) shall not be available in advance of an annual appropriation.

“(2) Availability of funds.—Funds made available under paragraph (1) shall remain available until expended.

“(3) Other federal funds.—Notwithstanding any other provision of law, funds made available to a State to carry out the surface transportation program under section 133 and the congestion mitigation and air quality improvement program under section 149 may be used by the State to pay a portion of the full project costs of an eligible project selected under this section, without requirement for non-Federal funds.

“(4) Other assistance.—Notwithstanding any other provision of law, an eligible project selected under this section shall be eligible for other forms of financial assistance provided under this title and the Transportation Equity Act for the 21st Century, including loans, loan guarantees, and lines of credit.”.

(i) LOW-SPEED PROJECT-

(1) IN GENERAL- Notwithstanding any other provision of this section, of the funds made available by subsection (h)(1)(A) to carry out this section, \$5,000,000 shall be made available to the Secretary to make grants for the research and development of low-speed superconductivity magnetic levitation technology for public transportation purposes in urban areas to demonstrate energy efficiency, congestion mitigation, and safety benefits.

(2) NONCONTRACT AUTHORITY AUTHORIZATION OF APPROPRIATIONS-

(A) IN GENERAL- There are authorized to be appropriated from the Highway Trust Fund (other than the Mass Transit Account) to carry out this subsection such sums as are necessary for each of fiscal years 2000 through 2003.

(B) AVAILABILITY- Notwithstanding section 118(a), funds made available under subparagraph (A)-

(i) shall not be available in advance of an annual appropriation; and

(ii) shall remain available until expended.''

(b) Conforming Amendment.-The analysis for chapter 3 of title 23, United States Code, is amended by inserting after the item relating to section 321 the following:

''322. Magnetic levitation transportation technology deployment program.''

accommodate petitioner's desired transmitter site. The coordinates for Channel 263C3 at Baird, Texas, are 32-23-45 North Latitude and 99-23-44 West Longitude. With this action, this proceeding is terminated.

EFFECTIVE DATE: Effective November 16, 1998.

FOR FURTHER INFORMATION CONTACT: Victoria M. McCauley, Mass Media Bureau, (202) 418-2180.

SUPPLEMENTARY INFORMATION: This is a synopsis of the Commission's Report and Order, MM Docket No. 97-242, adopted September 23, 1998, and released October 2, 1998. The full text of this Commission decision is available for inspection and copying during normal business hours in the FCC Reference Center (Room 239), 1919 M Street, NW., Washington, DC. The complete text of this decision may also be purchased from the Commission's copy contractor, International Transcription Services, Inc., (202) 857-3800, 1231 20th Street, NW., Washington, DC 20036.

List of Subjects in 47 CFR Part 73

Radio broadcasting.

Part 73 of Title 47 of the Code of Federal Regulations is amended as follows:

PART 73—[AMENDED]

1. The authority citation for Part 73 continues to read as follows:

Authority: 47 U.S.C. 154, 303, 334, 336.

§ 73.202 [Amended]

2. Section 73.202(b), the Table of FM Allotments under Texas, is amended by removing Channel 236A at Eastland and adding Channel 236C3 at Baird.

Federal Communications Commission.

John A. Karousos,

Chief, Allocations Branch, Policy and Rules Division, Mass Media Bureau.

[FR Doc. 98-27354 Filed 10-9-98; 8:45 am]

BILLING CODE 6712-01-U

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 73

[MM Docket No. 96-255; RM-8960 and RM-9044]

Radio Broadcasting Services; Laramie and Rock River, WY

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: In response to the *Notice of Proposed Rule Making* in this

proceeding, 61 FR 67765 (December 24, 1996), this document allots Channel 254A at Laramie, Wyoming, (at reference coordinates 41-18-42 and 105-35-06) to provide an additional local radio service and as a means of resolving the mutual exclusivity between two applicants for Channel 244A at Laramie. This document also allots Channel 240A at Rock River, Wyoming (at reference coordinates 41-44-24 and 105-58-24), as its first local aural transmission service. The window period for filing applications for Channel 240A at Rock River, Wyoming, will not be opened at this time. Instead, the issue of opening a filing window for this allotment will be addressed by the Commission in a subsequent order. This document terminates the proceeding.

EFFECTIVE DATE: November 16, 1998.

FOR FURTHER INFORMATION CONTACT: R. Barthen Gorman, Mass Media Bureau, (202) 418-2180.

SUPPLEMENTARY INFORMATION: This is a synopsis of the Commission's Report and Order, MM Docket No. 96-255, adopted September 23, 1998, and released October 2, 1998. The full text of this Commission decision is available for inspection and copying during normal business hours in the FCC's Reference Center (Room 239), 1919 M Street, NW., Washington, DC. The complete text of this decision may also be purchased from the Commission's copy contractors, International Transcription Service, Inc., (202) 857-3800, located at 1231 20th Street, NW., Washington, DC 20036.

List of Subjects in 47 CFR Part 73

Radio broadcasting.

Part 73 of Title 47 of the Code of Federal Regulations is amended as follows:

PART 73—[AMENDED]

1. The authority citation for Part 73 continues to read as follows:

Authority: Secs. 303, 48 Stat., as amended, 1082; 47 U.S.C. 154, as amended.

§ 73.202 [Amended]

2. Section 73.202(b), the Table of FM Allotments under Wyoming is amended by adding Channel 254A at Laramie, Wyoming, and Channel 240A at Rock River, Wyoming.

Federal Communications Commission.

John A. Karousos,

Chief, Allocations Branch, Policy and Rules Division, Mass Media Bureau.

[FR Doc. 98-27353 Filed 10-9-98; 8:45 am]

BILLING CODE 6712-01-P

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

49 CFR Part 268

[FRA Docket No. FRA-98-4545]

RIN 2130-AB29

Magnetic Levitation Transportation Technology Deployment Program

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

ACTION: Interim final rule with request for comments.

SUMMARY: The Transportation Equity Act for the 21st Century (TEA 21) adds a new section 322 to title 23 of the United States Code. Section 322 provides a total of \$55 million for Fiscal Years 1999 through 2001 for transportation systems employing magnetic levitation ("Maglev"). Section 322 requires FRA to establish project selection criteria, to solicit applications for funding, to select one or more projects to receive financial assistance for preconstruction planning activities and, after completion of such activities, to select one of the projects to receive financial assistance for final design, engineering, and construction activities. Section 322 authorizes—but does not appropriate—additional Federal funds of \$950 million for final design and construction of the most promising project. Section 322 provides that the portion of the project not covered by the funds provided under section 322 may be covered by any non-Federal funding sources—including private (debt and/or equity), State, local, regional, and other public or public/private entities—as well as by Federally-provided Surface Transportation Program, and Congestion Mitigation and Air Quality Improvement Program funds, and from other forms of financial assistance under TEA 21, such as loans and loan guarantees.

This Interim Final Rule creates a new part to title 49 of the Code of Federal Regulations which establishes the regulations governing financial assistance under section 322, including the project selection criteria, and solicits applications for Maglev planning grants. **DATES:** (1) This Interim Final Rule is effective October 13, 1998.

(2) Written comments concerning this rule must be filed on or before November 12, 1998.

(3) Applications for financial assistance for preconstruction planning must be received by December 31, 1998.

ADDRESSES: Written comments should refer to the docket number of this notice

and be submitted in duplicate to: DOT Central Docket Management Facility located in room PL-401 at the Plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC 20590. All docket material will be available for inspection at this address and on the Internet at <http://dms.dot.gov>. Docket hours at the Nassif Building are Monday-Friday, 10 a.m. to 5 p.m., excluding Federal holidays. Those desiring notification of receipt of comments must include a self-addressed, stamped envelope or postcard.

Applications for preconstruction planning financial assistance must be submitted to FRA in accordance with the provisions of this Interim Final Rule.

FOR FURTHER INFORMATION CONTACT: Neil E. Moyer, Chief—Program Development Division, FRA, 400 Seventh Street, SW., Washington, DC 20590 (telephone 202-493-6365; E-mail address: Neil.Moyer@fra.dot.gov), or Gareth Rosenau, Attorney, Office of Chief Counsel, FRA, 400 Seventh Street, S.W., Mailstop 10, Washington, D.C. 20590 (telephone 202-493-6054; E-mail address: Gareth.Rosenau@fra.dot.gov).

SUPPLEMENTARY INFORMATION:

Electronic Access

Internet users can access all comments received by the U.S. DOT Dockets, Room PL-401, by using the universal resource locator (URL): <http://dms.dot.gov>. It is available 24 hours each day, 365 days each year. Please follow the instructions online for more information and help.

An electronic copy of this document may be downloaded using a modem and suitable communication software from the Government Printing Office Electronic Bulletin Board Service at (202) 512-1661. Internet users may reach the Federal Register's home page at: <http://www.nara.gov/fedreg> and the Government Printing Office's database at: <http://www.access.gpo.gov/nara>.

What Is Maglev?

This background information covers high-speed Maglev (240 mph) and does not necessarily apply to the low-speed variations on this technology, which are covered by a separate program under 23 U.S.C. 322(i).

Maglev is an advanced transport technology in which magnetic forces lift, propel, and guide a vehicle over a specially designed guideway. Utilizing state-of-the-art electric power and control systems, this configuration reduces the need for many mechanical parts, thereby minimizing resistance

and permitting excellent acceleration; with cruising speeds on the order of 240 mph or more. This high performance would enable Maglev to provide air-competitive trip times at longer trip distances than other high-speed ground transportation (HSGT) options. Germany has a Maglev technology ready for commercial use and planned for application in the Berlin-Hamburg corridor; Japan has a technologically different system under test. In the more than three decades since passage of the HSGT Act of 1965, a number of Maglev system concepts have undergone varying degrees of research and development in the United States, under private or governmental auspices. There are no Maglev systems currently operating in commercial transportation service.

Maglev Deployment Program Under 23 U.S.C. 322

Multi-Stage Competition

Section 1218(a) of TEA 21, Pub. L. 105-178, adds a new section 322 to title 23 of the United States Code. Section 322 authorizes the funding for the design, construction, and deployment of one full-scale revenue-service Maglev system, to be sponsored by a State or group of States in a private/public partnership. Section 322 bases the selection of the system to be deployed on a multi-stage competition. Initially FRA is to establish selection criteria and to solicit applications, within 180 days after the enactment of TEA 21 (which would be by December 6, 1998), for financial assistance for preconstruction planning activities. FRA may select one or more projects of those submitted to receive funding for such activities. After the completion of the preconstruction planning activities, FRA will select one of the projects to receive financial assistance for final design, engineering, and construction activities. Any decision to proceed with possible construction of the project selected after the preconstruction planning phase of the program will be contingent upon the receipt of appropriations, and upon completion of appropriate environmental documentation. The section 322 program, which is described in greater detail below, will be referred to as the "Maglev Deployment Program."

This Interim Final Rule establishes the regulations governing financial assistance under the Maglev Deployment Program, including the project selection criteria, and solicits applications for Maglev planning grants.

Federal Funding of the Maglev Deployment Program

Section 322 provides two types of funding from the Highway Trust Fund for the Maglev Deployment Program; for purposes of this Interim Final Rule, these funds are referred to as "Federal Maglev Funds." First, \$55 million has been made available as contract authority for Fiscal Years 1999 through 2001; this would be used to fund the competition in all its phases and could also be used for final design, engineering, and construction activities of the selected project. Of the \$55 million, the Congress has made available up to \$15 million for Fiscal Year 1999, up to \$15 million for Fiscal Year 2000, and \$25 million for Fiscal Year 2001. Second, \$950 million has been authorized to be appropriated for Fiscal Years 2000 through 2003. No guarantee exists that the Executive Branch will request, or that Congress will appropriate, the \$950 million (or any portion of that amount) to build a Maglev project. Of the \$950 million, \$200 million is authorized to be appropriated for each of Fiscal Years 2000 and 2001, \$250 million for Fiscal Year 2002, and \$300 million for Fiscal Year 2003.

Section 322 also provides that the portion of the project not covered by Federal Maglev Funds may be supported by any non-Federal funding sources—including private (debt and/or equity), State, local, regional, and other public or public/private entities—as well as by Federally-provided Surface Transportation Program ("STP") (23 U.S.C. 133), and Congestion Mitigation and Air Quality Improvement Program ("CMAQ") (23 U.S.C. 149) funds, and by other forms of financial assistance provided under title 23, or under TEA 21, such as loans and loan guarantees.

Standards a Maglev Project Must Meet To Be Eligible for Financial Assistance

Section 322 provides that in order to be eligible to receive financial assistance, a Maglev project shall:

- (1) Involve a segment or segments of a high-speed ground transportation corridor that exhibit partnership potential;
- (2) Require an amount of Federal funds for project financing that will not exceed the sum of Federal Maglev Funds, and the amounts made available by States under STP and CMAQ;
- (3) Result in an operating transportation facility that provides a revenue producing service;
- (4) Be undertaken through a public and private partnership, with at least 1/3 of full project costs paid using non-

Federal funds—funds provided under STP and CMAQ qualify as non-Federal fund for purposes of the 1/3 match requirement;

(5) Satisfy applicable statewide and metropolitan planning requirements;

(6) Be approved by FRA based on an application submitted by a State or authority designated by 1 or more States;

(7) To the extent that non-United States Maglev technology is used within the United States, be carried out as a technology transfer project; and

(8) Be carried out using materials at least 70 percent of which are manufactured in the United States.

The Interim Final Rule explains these requirements in more detail.

FRA recognizes that applicants for preconstruction planning assistance will not have detailed information with respect to these requirements, and that the purpose of the preconstruction planning assistance is to develop much of this information with respect to a particular Maglev project. The preconstruction planning application requirements of the Interim Final Rule are designed to elicit whatever information an applicant may have pertaining to these requirements and to secure a commitment from the applicant that the applicant fully intends to comply with these requirements if the project is selected as the project to receive financing for final design, engineering, and construction activities.

Maglev Project Selection Criteria

Section 322 requires the agency to establish criteria for selecting which eligible projects will receive financial assistance. The criteria are required to include the extent to which—

(1) A project is nationally significant, including the extent to which the project will demonstrate the feasibility of deployment of Maglev technology throughout the United States;

(2) Timely implementation of the project will reduce congestion in other modes of transportation and reduce the need for additional highway or airport construction;

(3) States, regions, and localities financially contribute to the project; implementation of the project will create new jobs in traditional and emerging industries;

(4) The project will augment Maglev networks identified as having partnership potential;

(5) Financial assistance will foster public and private partnerships for infrastructure development and attract private debt or equity investment;

(6) Financial assistance would foster the timely implementation of a project; and

(7) Life-cycle costs in design and engineering are considered and enhanced.

The Interim Final Rule establishes the criteria FRA will use in selecting projects to receive funding; these criteria are an elaboration of the list of requirements contained in section 322.

FRA recognizes that applicants for preconstruction planning assistance may not have detailed information with respect to each of these criteria, and that the purpose of the preconstruction planning assistance is to develop much of this information with respect to a particular Maglev project. The preconstruction planning application requirements of the Interim Final Rule are designed to elicit whatever information an applicant may have pertaining to these criteria. As previously noted, FRA will select one of the various Maglev projects that receives preconstruction planning grants to receive financing for final design, engineering, and construction activities. The project selected must meet all of the project eligibility standards contained in this Interim Final Rule. If more than one project meets these standards, FRA will evaluate and compare the eligible projects according to the project selection criteria.

Eligible Project Costs

Section 322 provides that the following project costs are eligible to be paid with Federal Maglev Funds made available under section 322: preconstruction planning activities and the capital cost of the fixed guideway infrastructure of a Maglev project, including land, piers, guideways, propulsion equipment and other components attached to guideways, power distribution facilities (including substations), control and communications facilities, access roads, and storage, repair and maintenance facilities. The costs of stations, vehicles, and equipment are not eligible project costs.

Preconstruction planning activities that are eligible to be funded under section 322 include:

(1) Preparation of such feasibility studies, major investment studies, and environmental impact statements and assessments as are required under State law;

(2) Pricing of the final design, engineering, and construction activities proposed to be assisted; and

(3) Such other activities as are necessary to provide FRA with sufficient information to evaluate

whether a project should receive financial assistance for final design, engineering, and construction activities.

Construction Contracts Must Comply With the Davis Bacon Act

Section 322 requires that the "Prevailing Wages" requirement of the Davis Bacon Act (40 U.S.C. 276a—276a—5) applies to construction contracts under the Maglev Deployment Program.

FRA's Outreach Efforts Regarding the Maglev Deployment Program

FRA is conducting an extensive outreach program to inform the public of the availability of funding of new and expanded programs under TEA 21, including the Maglev Deployment Program. Based on discussions to date, FRA believes that fewer than 10 States are likely to apply for financial assistance under the Maglev Deployment Program.

Initial Outreach Session

On July 23, 1998, FRA, in cooperation with the High Speed Ground Transportation Association and Amtrak, held an all day meeting to explain the TEA 21 rail-related programs to representatives of constituent interest groups at Union Station, Washington D.C. Included was a session on the Maglev Deployment Program. In conjunction with this meeting FRA made available to all participants a loose leaf notebook with information regarding each of the new programs. The Maglev information included an earlier draft of the substance of this rule, in the form of guidelines for applicants for planning grants, a "fact sheet" on the program, and the statutory language behind it. The guidelines were also published on FRA's internet web page. Part of the Maglev session included a question and answer period involving a number of interested persons attending the meeting. Attendance was about 65.

"Piggybacking" on Other DOT Outreach Meetings

Other DOT components are having similar outreach meetings on parts of TEA 21 of particular interest to them; examples are an early Federal Highway Administration-sponsored meeting with representatives of most State DOTs in Dallas, and a recent Federal Transit Administration-sponsored meeting in Harrisburg. FRA has been represented at these meetings and has briefly described the Maglev Deployment Program.

Three Other Outreach Sessions

FRA has scheduled two other meetings similar to the Union Station meeting described above. They will

each have similar Maglev components, including publication of the Interim Final Rule. The first will be held in Los Angeles on October 23. Another session is planned to be held in New Orleans. In October, 1998, FRA also plans to schedule at least one meeting specifically addressing the Maglev Deployment Program and inviting the general public as well as States known to have a particular interest and which are likely to apply for financial assistance. This session will include a focused question and answer period intended to clarify for all concerned any issues associated with the Interim Final Rule.

Why FRA Is Issuing an Interim Final Rule

This document is published as an Interim Final Rule, without prior notice and opportunity for comment. Because this regulation relates to a grant program, the requirements of the Administrative Procedure Act (APA), 5 U.S.C. 553, are not applicable. Moreover, even if the notice and comment provisions of the APA did apply, the agency believes that there is good cause for finding that providing notice and comment in connection with this rulemaking action is impracticable, unnecessary, and contrary to the public interest.

FRA's decision to proceed with an Interim Final Rule in this proceeding rather than a notice of proposed rulemaking was guided by several considerations. First, the enabling legislation requires the Secretary to solicit applications from States or authorities designated by one or more States within 180 days after the date of enactment of TEA 21 (June 9, 1998). This time constraint simply did not provide sufficient time for FRA to frame an approach to implementing the program, develop proposed implementing regulations, consult with interested groups, and publish draft and final regulations by December 6, 1998 (180 days after enactment). The development of appropriate implementing procedures was further complicated by Congressional consideration of TEA 21 technical corrections legislation that was ultimately adopted on July 22, 1998 (Pub. L. 105-206). The technical corrections legislation contained modifications to a number of TEA 21 programs, including the Maglev Deployment Program. FRA's decision to proceed with an Interim Final Rule was also bolstered by an extensive outreach conducted with the interested Maglev and state transportation communities. States officials and others with an

interest in Maglev development had an opportunity to receive briefings from agency officials and to review and comment on FRA's proposed approach to the application and award processes before FRA completed this Interim Final Rule.

In addition, States need the information contained in this Interim Final Rule immediately in order to determine what type of Maglev projects qualify for preconstruction planning assistance, to gather supporting information, and to begin to prepare applications immediately upon this Interim Final Rule's publication in the Federal Register. For all of these reasons, pursuant to 5 U.S.C. 808 (Pub. L. 104-121) (The Congressional review provisions of the Small Business Regulatory Enforcement Fairness Act), the agency also, for good cause, finds that notice and public procedure are impracticable, unnecessary, and contrary to the public interest, and, therefore, this Interim Final Rule can be made effective upon publication.

As an Interim Final Rule, this regulation is fully in effect and binding upon its effective date. No further regulatory action by the agency is necessary to make the rule effective. However, in order to benefit from comments which interested parties and the public may have, the agency is requesting that comments be submitted to the docket for this rule. All comments submitted in response to this Interim Final Rule, will be considered by the agency. Following the close of the comment period, the agency will publish a document responding to the comments and, if appropriate, the agency will amend the provisions of this Interim Final Rule.

Section-by-Section Analysis

Subpart A—Overview

Section 268.1 Definitions

The terms used in this part are defined; many of these definitions are taken from 23 U.S.C. 322.

Section 268.3 Different Phases of the Maglev Deployment Program

This section identifies the five different phases of this program, and FRA's projected timetable for implementing these phases. In Phase I, States will submit applications, and FRA will select projects for preconstruction planning assistance. In Phase II, financial assistance recipients will prepare and submit to FRA project descriptions and supporting preconstruction planning reports and environmental documentation (environmental assessment (EA)). After

completion of the EA, each financial assistance recipient will initiate activities aimed at preparing a site-specific draft environmental impact statement ("EIS"). In Phase III, FRA will select the one project which could ultimately be constructed, subject to appropriation of funds to cover such construction. Each recipient of financial assistance will be expected to continue to work on the site-specific draft EIS in Phase III. In Phase IV, the financial assistance recipient selected in Phase III will undertake final design and engineering work for the selected project together with completing the site-specific final EIS. Detailed agreements for the construction and operation of the project would be negotiated. The other planning grant recipients may also elect to continue their work on preparing a site-specific draft EIS and bring it to completion. In Phase V, the sponsoring State or State designated authority would oversee the efforts of the public/private partnership formed to progress the selected project, to complete the detailed engineering designs, finance, construct, equip, and operate the project in revenue service.

Section 268.5 Funding Sources for the Maglev Deployment Program

This section identifies the amounts of funding available under 23 U.S.C. 322 (referred to as "Federal Maglev Funds") to support the program. It also identifies other potential Federal funding sources. These various funding sources were outlined earlier in this document.

Section 268.7 Federal/State Share and Restrictions on the Uses of Federal Maglev Funds

This section contains the various restrictions imposed on the use of Federal Maglev Funds. First, Federal Maglev Funds may only be used for "eligible project cost." Eligible project costs include preconstruction planning activities and the capital costs of fixed guideway infrastructure of a Maglev project. Eligible project costs do not include costs incurred for Maglev stations, vehicles, and equipment; these non-eligible project costs would be part of the full project cost.

Second, the Federal share of full project costs shall be not more than $\frac{2}{3}$, with the remaining $\frac{1}{3}$ paid by the applicant using non-Federal funds. For purposes of this cost sharing arrangement, funds made available to the applicant under STP and CMAQ count as non-Federal funds. Federal funds made available to the applicant under title 23 and TEA 21 can be used to pay full project cost. To ensure that the cost sharing requirements are met,

all preconstruction planning grants will require States or designated authorities to provide a match of at least 1/3 from non-Federal funds.

Third, Federal Maglev funds provided under a preconstruction planning grant may be used only for Phase II activities, and for completion of a site-specific draft EIS; see § 268.3;

Finally, the "prevailing wages" requirement of the Davis Bacon Act (40 U.S.C. 276a—276a-5) applies to any construction contracts under the Maglev Deployment Program.

Subpart B—Procedures For Financial Assistance

Section 268.9 Eligible Participants

Any State, or any authority designated by one or more State(s) to carry out the preconstruction planning activities under the Maglev Deployment Program, is eligible to participate in the Maglev Deployment Program.

Section 268.11 Project Eligibility Standards

This section identifies the standards which projects must meet to be eligible for funding under the Maglev Deployment Program. See the earlier discussion of project eligibility standards; there FRA set out the eight project eligibility standards contained in 23 U.S.C. 322. FRA recognizes that applicants for preconstruction planning assistance will not have detailed information with respect to the eight standards, and that the purpose of the preconstruction planning assistance is to develop much of this information with respect to a particular Maglev project. The preconstruction planning application requirements of the Interim Final Rule are designed to elicit whatever information an applicant may have pertaining to these requirements and to secure a commitment from the applicant that the applicant fully intends to comply with these requirements if the project is selected as the project to receive financing for final design, engineering, and construction activities.

FRA has described section 322 standards in more detail for purposes of eligibility for final design, engineering, and construction financing. These standards, and the reference to corresponding citation in section 322, are as follows:

Purpose and Significance of the Project. (1) The project description shall point to a Maglev facility and daily operation the primary purpose of which is the conduct of a revenue-producing passenger transportation service between distinct points, rather than a

service solely for the passengers' riding pleasure. (*subsection 322(d)(3), "result in an operating transportation facility that provides a revenue producing service."*)

(2) The project description shall incorporate scheduled operation at a top speed of not less than 240 mph. (*subsection 322(a)(3), definition of Maglev as "capable of safe use by the public at a speed in excess of 240 mph."*)

Benefits for the American Economy. The project description shall include a certification as to (1) and (2) below and, as appropriate, a technology acquisition/transfer plan, which describes the strategy for their accomplishment.

(1) Processes will be established that will enable an American-owned and -sited firm (or firms) to gain, in the course of the project, the capability to participate in the design, manufacture, and installation of the facilities and vehicles needed for a Maglev operation, if the owner of the selected version of Maglev technology is not an American owned and -sited firm (thus meeting the technology transfer requirement of Section 322). (*subsection 322(d)(7)*)

(2) The 70 percent U.S. content provision of Section 322 (*subsection 322(d)(8)*) will be carried out.

Partnership Potential. The project shall exhibit partnership potential by satisfying all three items (1), (2), and (3) below.

(1) A private/public partnership must be in place that is ready, willing, and able to finance, construct, operate, and maintain the project; and

(2) The private/public partnership either owns the version of Maglev technology proposed to be implemented in the project, or has an agreement with the owner which affords full cooperation to the partnership in progressing the project, including implementation of the technology acquisition/transfer plan if applicable; and

(3) The recipient of a preconstruction planning grant or the FRA has developed and endorsed a projection of system capital costs, demand, revenues, operating expenses, and total costs and benefits, that—

(A) Covers either the entire corridor in which the Maglev project is involved ("Corridor"), or the project considered independently;

(B) Demonstrates that private enterprise would be able to run the Corridor or the project—once built and paid for—as a completely self-sustaining entity, in which revenues will cover operating expenses and continuing investment needs; and

(C) Shows total benefits equal to or exceeding total costs. (*subsection 322(d)(1), "involve a segment or segments of a high-speed * * * transportation corridor that exhibit partnership potential." Under subsection 322(a)(4), Definitions, "partnership potential" is given the definition it received in the FRA report, High-Speed Ground Transportation for America, September 1997. This portion of the Interim Final Rule applies FRA's definition of "partnership potential" to the availability of funds for planning a Maglev program.)*

Funding Limits and Sources. The project description shall include a financing plan that demonstrates project completion with Federal Maglev Funds not in excess of the remaining funds from the total of \$1,005 million authorized in Section 322, and funds made available to the recipient under STP and CMAQ. At least 1/3 of Full Project Costs must come from non-Federal funds; funds made available to the recipient under STP and CMAQ qualify as non-Federal funds for purposes of this cost-sharing requirement. Federal funds made available under title 23 and TEA 21 may be used to pay for full project costs. (*subsections 322(b), (d)(2) and (4), and (h)(3) and (4)*)

Project Management. The State, the technology owner, and all other relevant project partners must include in the Project Description an agreed upon—

(1) **Management plan** that defines the partnership, responsibilities, and procedures for accomplishing the project;

(2) **Project schedule** that shows how timely implementation of the project will be accomplished, including, to the extent possible, a construction plan and schedule; and

(3) **Financial plan** that shows how funds will flow, in accordance with the other project eligibility standards. (*FRA considers effective project management, making use of the minimal tools specified in this provision, as essential to the fulfillment of, and therefore implicit in, the other project eligibility standards as called for in section 322.*)

Planning/Environmental Process. (1) **Assessment of environmental consequences of the proposed project.** Recipients of preconstruction planning grants shall prepare EAs and site-specific draft EISs.

EAs shall include information to support the grantee's decision to pursue the proposed project. The grantee shall develop the information and discuss the environmental consequences of the proposed technology and route in

sufficient detail for the preparation of appropriate documentation by FRA to support selection of one project. This shall include the identification of potential positive and negative environmental effects resulting from the technology (e.g. energy consumption compared to other transportation options), generic noise emissions at various distances from the centerline of the guideway, changes in electromagnetic field levels at various distances from the centerline of the guideway, as well as environmental screening of the proposed route (e.g., identification of land use; identification of endangered species possibly present and location of their critical habitat; identification of navigable waterways, wetlands and other sensitive water resources; and identification of the location of parks, wildlife refuges, historic and archaeological sites of National, State or local significance and other sites protected by Section 4(f) of the Department of Transportation Act.). The latter information and analysis shall be submitted four months in advance of the remainder of the project description.

Site-specific draft EISs will consist of all work necessary to support selection of a preferred alignment within the proposed corridor discussed in the EA. (subsection 322(d)(5))

(2) The project description must also include letters of endorsement of project implementation from all the State departments of transportation involved, and from all Metropolitan Planning Organizations for metropolitan areas that would be served by the project.

Section 268.13 Deadline for Submission of Applications for Preconstruction Planning Assistance

Applications for preconstruction planning assistance shall be submitted to the FRA Administrator by December 31, 1998. The section identifies the address to which the applications must be sent.

Section 268.15 Form and Contents of Applications for Preconstruction Planning Assistance

This section identifies the information that must be contained in each application.

Section 268.17 Project Selection Criteria

This section identifies the project selection criteria that FRA will apply in selecting projects for financing under the Maglev Deployment Program. These criteria are based on the seven factors contained in 23 U.S.C. 322, and discussed earlier in this document. These criteria, and the reference to

corresponding citation in section 322, are as follows.

Purpose and Significance of the Project. (1) The degree to which the project description demonstrates attractiveness to travelers, as measured in passengers and passenger-miles. (subsection 322(e)(1))

(2) The extent to which implementation of the project will reduce congestion, and attendant delay costs, in other modes of transportation; will reduce emissions and/or energy consumption; or will reduce the rate of growth in needs for additional highway or airport construction. Measures for this criterion will include but not be limited to the present value of congestion reduction, pollution reduction, and/or facility cost-avoidance benefits. (subsection 322(e)(2))

(3) The degree to which the project will demonstrate the variety of operating conditions which are to be expected in the United States. (subsection 322(e)(1))

(4) The degree to which the project will augment a Maglev corridor or network that has been identified, by any State, group of States, or the FRA, as having partnership potential. (subsection 322(e)(5))

Timely Implementation. The speed with which the project can realistically be brought into full revenue service, based on the project description and on the current and projected development status of the Maglev technology selected by the applicant for the project. (The text of section 322 twice explicitly assumes "timely implementation of the project" (in subsections 322(e)(2) and (7)), and the stringent deadlines established in subsections 322(c) and (f)(1), together with the five-year authorization schedule in subsection 322(h)(1), reinforce the clear Congressional intent that the project shall be implemented in a timely manner.)

Benefits for the American Economy. The extent to which the project is expected to create new jobs in traditional and emerging industries in the United States. (subsection 322(e)(4))

Partnership Potential. The degree to which the project description demonstrates partnership potential for the corridor in which it is involved, and/or for the project independently. (subsection 322(e)(2), (3), (5), (6), and (8))

Funding Limits and Sources. (1) The extent and proportion to which States, regions, and localities commit to financially contributing to the project, both in terms of their own locally-raised, entirely non-Federal funds, and

in terms of commitments of scarce Federal resources from non-Federal Maglev funds (subsection 322(e)(3)); and

(2) The extent and proportion to which the private sector contributes financially to the project. (subsection 322(e)(6))

FRA did not set forth criteria dealing with project management and planning dealing with the environmental process. Commenters are requested to address whether criteria in these two or additional areas are needed and, if so, to provide detailed suggestions as to how such criteria should be worded.

Section 268.19 Evaluation of Applications for Preconstruction Planning Assistance

This section identifies the criteria to be used by FRA in evaluating the applications. FRA will evaluate the applications for their completeness and responsiveness to the requirements listed in § 268.15 (form and content of application). The project eligibility standards (§ 268.11) and project evaluation criteria (§ 268.17) will guide the FRA's review of the project descriptions produced under the planning grants. Although subject to revision, the information in § 268.11 and § 268.17 should assist the States in completing their applications in the competition for planning grants, since the project descriptions will need to respond to the standards and criteria. In evaluating the applications for planning grants FRA will consider how consistent the applicant's project is to the standards and criteria and the application's likelihood of leading to a project that meets all the standards and criteria.

Section 268.21 Selection of one Maglev Project for Final Design, Engineering and Construction Funding

This section is a brief description of the process FRA will follow in selecting the one successful applicant for a construction assistance from among the recipients of planning grants. That one project must meet each and every project eligibility standard contained in § 268.11(b). If more than one project meets all these standards, then the FRA will evaluate and compare the eligible projects according to the set of project selection criteria contained in § 268.17. In reviewing competing projects under the project eligibility standards and project selection criteria, the FRA will exercise particular vigilance regarding the following elements of the preconstruction planning process, although not to the exclusion of others:

(1) The credibility of the demand and revenue forecasts, cost estimates, and benefit/cost comparisons; and

(2) The credibility of the financial plan.

Regulatory Analyses and Notices

E.O. 12866 and DOT Regulatory Policies and Procedures

The agency has evaluated this Interim Final Rule in accordance with existing regulatory policies and procedures and has concluded that it is a nonsignificant regulatory action under E.O. 12866, and a nonsignificant rule under section 5(a)(4) of the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). The Interim Final Rule is not a significant regulatory action under E.O. 12866 because it will not have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities; will not create a serious inconsistency with an action planned or underway by another Federal agency; will not materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; and will not raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles of the Executive Order. The Interim Final Rule implements the preconstruction planning portion of a Congressionally mandated program to provide financial assistance to state and local governments in developing and implementing a transportation project involving magnetic levitation. At this time, the sum of \$55 million dollars is available to implement the program and an authorization for future appropriations totaling \$950 million is in place. However, as noted earlier, the availability of these additional funds is contingent on an appropriation by the Congress.

Regulatory Flexibility Act

The Regulatory Flexibility Act of 1980 (5 U.S.C. 601 *et seq.*) requires a review of rules to assess their impact on small entities. FRA certifies that this rule will not have a significant impact on a substantial number of small entities. Eligible applicants for the Maglev Deployment Program are limited by the enabling statute (23 U.S.C. 322(d)) to States or authorities designated by one or more States. The program implemented by the Interim Final Rule has the potential to benefit some small entities who may be able to participate

as consultants to States or designated authorities in the preconstruction planning activities, final design, engineering and construction activities for Maglev deployment.

Paperwork Reduction Act

The Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*) addresses the collection of information by the Federal government from individuals, small businesses and State and local government and seeks to minimize the burdens such information collection requirements might impose. A collection of information includes requiring answers to identical questions posed to, or identical reporting or record-keeping requirements imposed on, ten or more persons, other than agencies, instrumentalities or employees of the United States. This Interim Final Rule contains information and reporting requirements that would apply to States, groups of States or designated authorities that file applications for Federal funding for preconstruction planning activities, and to grant recipients who would conduct final design, engineering and construction activities in support of Maglev deployment. Based on FRA's long experience in Maglev development in the United States extending back to the early 1970's, including preparation and issuance of the 1997 report "High Speed Ground Transportation for America," the statutory limit on the types of entities that may apply for funding (States, groups of States, and State designated authorities), the rigorous requirements for developing a viable project, and the substantial financial and resource commitment that will be required of applicants, and the information FRA has received through its outreach efforts, the FRA has concluded that fewer than 10 applications for preconstruction planning funds are likely to be received by the FRA from qualified applicants. However, if, as a result of this Interim Final Rule, FRA becomes aware that there are information collection requirements, FRA will submit an information collection package to OMB for approval at that time.

Environmental Impact

FRA has evaluated these regulations in accordance with its procedures for ensuring full consideration of the potential environmental impacts of FRA actions, as required by the National Environmental Policy Act (42 U.S.C. 4321 *et seq.*) and related directives. FRA has concluded that the issuance of this Interim Final Rule, which establishes a process for receiving applications for

planning activities associated with the Maglev Deployment Program, does not have a potential impact on the environment and does not constitute a major Federal action requiring an environmental assessment or environmental impact statement. The Interim Final Rule includes requirements for the preparation of environmental assessments of proposed Maglev projects by successful applicants during the preconstruction planning stage and additional environmental reviews will be undertaken under the auspices of the FRA before one Maglev project is selected for final design and construction funding.

Federalism Implications

This Interim Final Rule has been analyzed in accordance with the principles and criteria contained in Executive Order 12612, and FRA has determined that it does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment. The Maglev Deployment Program provides states with the opportunity to explore the development of a new transportation technology in a working partnership with the Federal Government.

List of Subjects in 49 CFR Part 268

Grant programs-transportation, High speed ground transportation, Maglev, Magnetic levitation.

The Rule

In consideration of the foregoing, FRA adds new part 268 to Title 49 of the Code of Federal Regulations as set forth below:

PART 268—MAGNETIC LEVITATION TRANSPORTATION TECHNOLOGY DEPLOYMENT PROGRAM

Subpart A—Overview

Sec.

268.1 Definitions.

Sec 268.3 Different phases of the Maglev Deployment Program.

Sec 268.5 Federal funding sources for the Maglev Deployment Program.

268.7 Federal/State share and restrictions on the uses of Federal Maglev Funds.

Subpart B—Procedures For Financial Assistance

268.9 Eligible participants.

268.11 Project eligibility standards.

268.13 Deadline for submission of applications for preconstruction planning assistance.

268.15 Form and contents of applications for preconstruction planning assistance.

268.17 Project selection criteria.

268.19 Evaluation of applications for preconstruction planning assistance.

268.21 Selection of one Maglev project for final design, engineering, and construction funding.

Authority: 49 U.S.C. 322, 23 U.S.C. 322; 49 CFR 1.49.

Subpart A—Overview

§ 268.1 Definitions.

As used in this part—

CMAQ means Congestion Mitigation and Air Quality Improvement Program (23 U.S.C. 149).

Environmental assessment (“EA”) means the environmental assessment in support of the project description and containing the information listed in § 268.11(b)(6)(i).

Environmental impact statement (“EIS”) means the environmental impact statement which is required pursuant to §§ 268.3 and § 268.11(b)(6)(i).

Eligible project costs means the costs of preconstruction planning activities and the capital cost of the fixed guideway infrastructure of a Maglev project, including land, piers, guideways, propulsion equipment and other components attached to guideways, power distribution facilities (including substations), control and communications facilities, access roads, and storage, repair, and maintenance facilities, but eligible project costs do not include the cost of stations, vehicles, and equipment.

Federal Maglev Funds means such funds as are provided under the authority of 23 U.S.C. 322 to pay for Eligible Project Costs.

Full project costs means the total capital costs of a Maglev project, including Eligible Project Costs and the costs of stations, vehicles, and equipment.

Phase means one of the five different phases of the Maglev Deployment Program; these phases are described in § 268.3.

Maglev means transportation systems employing magnetic levitation that would be capable of safe use by the public at a speed in excess of 240 miles per hour.

Maglev deployment program means the program authorized by 23 U.S.C. 322.

Partnership potential means the usage of the term in the commercial feasibility study of high-speed ground transportation (*High Speed Ground Transportation for America*) mandated under section 1036 of the Intermodal Surface Transportation Efficiency Act of 1991 (105 Stat. 1978). Under that usage any corridor exhibiting *Partnership Potential* must at least meet the following two conditions:

(1) Private enterprise must be able to run on the corridor—once built and paid for—as a completely self-sustaining entity; and

(2) The total benefits of a Maglev corridor must equal or exceed its total costs.

STP means the Surface Transportation Program (23 U.S.C. 133).

TEA 21 means the Transportation Equity Act for the 21st Century (Pub. L. 105-178).

§ 268.3 Different phases of the Maglev Deployment Program.

(a) The Maglev Deployment Program includes five phases, as described in paragraphs (b) through (f) of this section. The current projected timing for implementing these phases is indicated to assist applicants in planning their projects. All dates beyond the first date (the deadline for the submission of preconstruction planning applications) are for planning purposes only and are subject to change—including possible acceleration of deadlines—based on the progress of the Maglev Deployment Program; grantees will be notified accordingly.

(b) **Phase I—Competition for Planning Grants (Early October 1998–March 31, 1999)**—(1) **Description.** In Phase I, States will apply for funds for preconstruction planning activities. As required by § 268.13, applications must be filed with FRA by December 31, 1998. FRA will select one or more projects to receive preconstruction planning financial assistance awarded under this part to perform Phase II of the Maglev Deployment Program.

(2) **Timing of Major Milestones.**

(i) December 31, 1998—Planning grant applications due.

(ii) February 28, 1999—FRA selects grantees for planning grants.

(iii) March 31, 1999—FRA awards planning grants for the conduct of activities listed in Phase II.

(c) **Phase II—Project Description Development (April 1, 1999–March 31, 2000)**—(1) **Description.** In Phase II, each grant recipient will prepare and submit to FRA a project description and supporting preconstruction planning reports and an EA. Supporting reports may include demand and revenue analyses, project specification, cost estimates, scheduling, financial studies, and other information in support of the project description. FRA will use this information in reaching a decision on which project to select for final engineering and construction financing.

In addition, after completion of the EA, each grant recipient will initiate activities aimed at preparing a site-specific draft EIS. FRA will initiate

documentation of environmental factors considered in the project selection process.

(2) **Timing of Major Milestones.**

(i) November 30, 1999—Deadline for submission of appropriate EA needed by FRA for the selection of one project under Phase III.

(ii) March 30, 2000—Deadline for submission of project descriptions and any related supporting reports needed by FRA for project selection.

(d) **Phase III—Project Selection Process (April 1, 2000)–July 31, 2000)**—

(1) **Description.** FRA will evaluate the information provided by the grant recipients under Phase II and will select one project for final design, engineering, and construction funding. Recipients of assistance will progress work on site-specific EISs.

(2) **Timing of Major Milestones.** July 31, 2000—FRA selects the project.

(e) **Phase IV—Project Development and Completion of Site-specific EIS (August 1, 2000–July 31, 2001)**—(1) **Description.** The financial assistance recipient selected in Phase III will undertake final design and engineering work for the selected project together with completing the site-specific final EIS. Detailed agreements for the construction and operation of the project would be negotiated. The other grant recipients may also elect to complete the site-specific draft EISs initiated during Phase II.

(2) **Timing of Major Milestones.** July 31, 2001—Final Record of Decision on site-specific EIS, confirming the project design.

(f) **Phase V—Completion of Detailed Engineering & Construction (August 1, 2001 and beyond)**—(1) **Description.** In Phase V, the sponsoring State or State designated authority would oversee the efforts of the public/private partnership formed to progress the selected project, to complete the detailed engineering designs, finance, construct, equip, and operate the project in revenue service. Construction would likely be contingent on the appropriation of federal funds.

§ 268.5 Federal funding sources for the Maglev Deployment Program.

(a) **Federal Maglev Funds.** Section 322 of Title 23 provides for the following funds for the Maglev Deployment Program:

(1) **Contract authority.** Fifty-five million has been made available for the Maglev Deployment Program as contract authority from the Highway Trust Fund for Fiscal Years 1999 through 2001; this would be used to fund the competition in all its phases and could also be used for final design, engineering, and construction activities of the selected

project. Of the \$55 million, the Congress has made available up to \$15 million for Fiscal Year 1999, up to \$15 million for Fiscal Year 2000, and \$25 million for Fiscal Year 2001.

(2) *Authorization for appropriations.* Nine hundred fifty million, also from the Highway Trust Fund, has been authorized to be appropriated for the Maglev Deployment Program for Fiscal Years 2000 through 2003. Of the \$950 million, \$200 million is authorized to be appropriated for each of Fiscal Years 2000 and 2001, \$250 million for Fiscal Year 2002, and \$300 million for Fiscal Year 2003. Any decision to proceed with possible Federal funding of the construction of a Maglev system will be contingent upon the receipt of appropriations, and upon completion of appropriate environmental documentation.

(b) *Other Federal funds.* Section 322 of Title 23 provides that the portion of the Maglev project not covered by Federal Maglev Funds may be covered by any non-Federal funding sources—including private (debt and/or equity), State, local, regional, and other public or public/private entities—as well as by Federally-provided STP and CMAQ funds, and by other forms of financial assistance made available under title 23 and TEA 21, such as loans and loan guarantees.

§ 268.7 Federal/State share and restrictions on the uses of Federal Maglev Funds.

(a) *Federal share.* The Federal share of Full Projects Costs shall be not more than $\frac{2}{3}$, with the remaining $\frac{1}{3}$ paid by the grant recipient using non-Federal funds. Funds made available under STP and CMAQ are considered non-Federal funds for purposes of the matching requirement.

(b) *Restrictions on the uses of Federal Maglev Funds.* (1) Federal Maglev Funds may be applied only to Eligible Project Costs;

(2) Federal Maglev funds provided under a preconstruction planning grant may be used only for Phase II activities, and for completion of site-specific draft EIS; see § 268.3;

(3) Federal Maglev Funds may be used to pay for only $\frac{2}{3}$ of preconstruction planning costs; grant recipients are required to pay the remaining $\frac{1}{3}$ of the costs with non-Federal funds; and

(4) The "prevailing wages" requirement of the Davis Bacon Act (40 U.S.C. 276a-276a-5) applies to any construction contracts under the Maglev Deployment Program.

Subpart B—Procedures for Financial Assistance

§ 268.9 Eligible participants.

Any State, or any authority designated by one or more State(s) to carry out the preconstruction planning activities under the Maglev Deployment Program is eligible to participate in the Maglev Deployment Program.

§ 268.11 Project eligibility standards.

(a) *Project eligibility standards for preconstruction planning financing.* (1) As required by 23 U.S.C. 322(d)(4), in order to be eligible to receive financial assistance, a Maglev project shall:

(i) Involve a segment or segments of a high-speed ground transportation corridor that exhibit Partnership Potential;

(ii) Require an amount of Federal funds for project financing that will not exceed the sum of Federal Maglev Funds, and the amounts made available by States under STP and CMAQ;

(iii) Result in an operating transportation facility that provides a revenue producing service;

(iv) Be undertaken through a public and private partnership, with at least $\frac{1}{3}$ of Full Project Costs paid using non-Federal funds;

(v) Satisfy applicable statewide and metropolitan planning requirements;

(vi) Be approved by FRA based on an application submitted by a State or authority designated by 1 or more States;

(vii) To the extent that non-United States Maglev technology is used within the United States, be carried out as a technology transfer project; and

(viii) Be carried out using materials at least 70 percent of which are manufactured in the United States.

(2) FRA recognizes that applicants for preconstruction planning grants will not have detailed information with respect to some of the requirements of paragraph (a)(1) of this section, and that the purpose of a preconstruction planning grant is to develop much of this information with respect to a particular Maglev project. As required by § 268.15, an applicant will need to provide whatever information it has with respect to each of the requirements of paragraph (a)(1) of this section together with a certification that the applicant fully intends to comply with the requirements of paragraph (a) of this section should its project be selected by FRA for final design, engineering and construction financing.

(b) *Project eligibility standards for final design, engineering, and construction financing.* FRA will select the most promising Maglev project for

final design, engineering, and construction financing. To be eligible to be considered, the project must meet each of the following requirements; these requirements restate the requirements in paragraph (a)(1) of this section, but with more detail and in a different order:

(1) *Purpose and Significance of the Project.* (i) The project description shall point to a Maglev facility and daily operation the primary purpose of which is the conduct of a revenue-producing passenger transportation service between distinct points, rather than a service solely for the passengers' riding pleasure.

(ii) The project description shall incorporate scheduled operation at a top speed of not less than 240 mph.

(2) *Benefits for the American Economy.* The project description shall include a certification as to paragraph (b)(2)(i) and (ii) of this section and, as appropriate, a technology acquisition/transfer plan which describes the strategy for their accomplishment.

(i) Processes will be established that will enable an American-owned and -sited firm (or firms) to gain, in the course of the project, the capability to participate in the design, manufacture, and installation of the facilities and vehicles needed for a Maglev operation, if the owner of the selected version of Maglev technology is not an American-owned and -sited firm (thus meeting the technology transfer requirement of 23 U.S.C. 322).

(ii) The 70 percent U.S. content requirement content of 23 U.S.C. 322 will be carried out.

(3) *Partnership Potential.* The project shall exhibit Partnership Potential by satisfying the following:

(i) A private/public partnership must be in place that is ready, willing, and able to finance, construct, operate, and maintain the project;

(ii) The private/public partnership either owns the version of Maglev technology proposed to be implemented in the project, or has an agreement with the owner which affords full cooperation to the partnership in progressing the project, including implementation of the technology acquisition/transfer plan if applicable; and

(iii) The recipient of a preconstruction planning grant or the FRA has developed and endorsed a projection of system capital costs, demand, revenues, operating expenses, and total costs and benefits, that:

(A) Covers either the entire corridor in which the Maglev project is involved ("Corridor"), or the project considered independently;

(B) Demonstrates that private enterprise would be able to run the Corridor or the project—once built and paid for—as a completely self-sustaining entity, in which revenues will cover operating expenses and continuing investment needs; and

(C) Shows total benefits equal to or exceeding total costs.

(4) *Funding Limits and Sources.* The project description shall include a financing plan that demonstrates project completion with the \$950 million in Federal Maglev Funds, funds remaining unobligated from the \$55 million in contract authority, and the funds made available under STP and CMAQ. The project that is selected will be eligible for other forms of financial assistance provided under title 23 and TEA 21, including loans, loan guarantees, and lines of credit. However, at least 1/3 of Full Project Costs must come from non-Federal Funds.

(5) *Project Management.* The State, the technology owner, and all other relevant project partners must include in the project description, an agreed upon—

(i) *Management plan* that defines the partnership, responsibilities, and procedures for accomplishing the project;

(ii) *Project schedule* that shows how timely implementation of the project will be accomplished, including, to the extent possible, a construction plan and schedule; and

(iii) *Financial plan* that shows how funds will flow, in accordance with the other requirements of this subsection.

(6) *Planning/Environmental Process.*

(i) *Assessment of environmental consequences of the proposed project.* Recipients of preconstruction planning grants shall conduct an EA in support of the project description; and will prepare a site-specific EIS for the project. The EA shall include information to support the grantee's decision to pursue the proposed project. The grantee shall develop the information and discuss the environmental consequences of the proposed technology and route in sufficient detail for the preparation of appropriate documentation by FRA to support selection of one project. This shall include: the identification of potential positive and negative environmental effects resulting from the technology (e.g. energy consumption compared to other transportation options); generic noise emissions at various distances from the centerline of the guideway; changes in electromagnetic field levels at various distances from the centerline of the guideway; and environmental screening

of the proposed route (e.g., identification of land use; identification of endangered species possibly present and location of their critical habitat; identification of navigable waterways, wetlands and other sensitive water resources; and identification of the location of parks, wildlife refuges, historic and archaeological sites of National, State or local significance and other sites protected by Section 4(f) of the Department of Transportation Act.). The latter information and analysis shall be submitted four months in advance of the remainder of the project description. The above list is illustrative only. Grantees will be expected to review proposed work statements with FRA at pre-application meetings or through some other means to develop the final scope of this environmental review.

(ii) The project description must also include letters of endorsement of project implementation from all the State departments of transportation involved, and from all Metropolitan Planning Organizations for metropolitan areas that would be served by the project.

§ 268.13 Deadline for submission of applications for preconstruction planning assistance.

Completed application packages shall be returned to FRA by December 31, 1998. Applications shall be submitted to: Honorable Jolene M. Molitoris, Administrator, Federal Railroad Administration, ATTN: Maglev Project, RDV-11, 400 Seventh Street, SW, Stop 20, Washington, DC 20590.

§ 268.15 Form and contents of applications for preconstruction planning assistance.

States, groups of States, or designated authorities that have Maglev projects are invited to submit applications in Phase I of the Maglev Deployment Program, the competition for preconstruction planning grants. The applications shall contain:

(a) (1) If submitted by a State: Name, address, responsible party, telephone, fax number, and e-mail address of the State agency submitting the application; or

(2) If submitted by a designated authority: Name, address, responsible party, telephone, fax number, and e-mail address of the designated authority and of the State agency or agencies on whose behalf the designated authority is submitting the application, together with letters from the State(s) evidencing all such designations;

(b) A description of the project concept, identifying its likely location, market area, length, and the transportation service that it would

perform, and a preliminary estimate of the time that would be required—if funds are made available—to bring the project to the start of construction and then to the initiation of full revenue service. At its option, the Applicant may include any reports already completed on the project as well as any additional descriptive material that would assist the FRA in evaluating the application;

(c) Whatever information the Applicant has to demonstrate that the project meets the project eligibility standards in § 268.11(a), and the project selection criteria in § 268.17, together with a certification that the Applicant fully intends to comply with the requirements in § 268.11 should its project be selected by FRA for final design, engineering and construction financing.

(d) A statement of work for the preconstruction planning activities to be accomplished under the planning grant. The statement shall describe the work to be performed, including but not necessarily limited to:

(1) Preconstruction planning work as is needed to develop a Maglev project, and project description that will satisfy the project eligibility standards in § 268.11(b), and the project selection criteria in § 268.17; and

(2) Preparation of EAs, as described in § 268.11(b)(6)(i);

(e) Management plan, schedule, and financial plan for accomplishing the preconstruction planning work under the planning grant;

(f) Letters supporting the application from the heads of all State departments of transportation involved, as well as from responsible officials of the Metropolitan Planning Organizations of all metropolitan areas to be served by the proposed project;

(g) A certification from the State, or from the authority designated by one or more States, that the 1/3 matching funds required for work under the planning grant are, or will be, available by the time the grants are announced. The source(s) of the matching must be shown in the financial plan under paragraph (e) of this section; and

(h) If the applicant has made a definitive choice of the particular Maglev technology proposed to be included, a description of that technology and the degree to which it has been produced and tested should be submitted. Further, if the applicant has identified organizations that would form members of the team that would implement the project, the names of those organizations and the persons representing them should also be submitted.

§ 268.17 Project selection criteria.

Except as qualified by § 268.19, the following criteria will govern FRA's selection of projects to receive funding under the Maglev Deployment Program.

(a) *Purpose and Significance of the Project.* (1) The degree to which the project description demonstrates attractiveness to travelers, as measured in passengers and passenger-miles.

(2) The extent to which implementation of the project will reduce congestion, and attendant delay costs, in other modes of transportation; will reduce emissions and/or energy consumption; or will reduce the rate of growth in needs for additional highway or airport construction. Measures for this criterion will include but not be limited to the present value of congestion reduction, pollution reduction, and/or facility cost-avoidance benefits.

(3) The degree to which the project will demonstrate the variety of operating conditions which are to be expected in the United States.

(4) The degree to which the project will augment a Maglev corridor or network that has been identified, by any State, group of States, or the FRA, as having Partnership Potential.

(b) *Timely Implementation.* The speed with which the project can realistically be brought into full revenue service, based on the project description and on the current and projected development status of the Maglev technology selected by the applicant for the project.

(c) *Benefits for the American Economy.* The extent to which the project is expected to create new jobs in traditional and emerging industries in the United States.

(d) *Partnership Potential.* The degree to which the project description demonstrates Partnership Potential for the corridor in which it is involved, and/or for the project independently.

(e) *Funding Limits and Sources.* FRA recognizes that applicants for preconstruction planning assistance may not have detailed information with respect to each of these criteria, and that the purpose of the preconstruction planning assistance is to develop much of this information with respect to a particular Maglev project. The preconstruction planning application requirements of the Interim Final Rule are designed to elicit whatever information an applicant may have pertaining to these criteria.

(1) The extent and proportion to which States, regions, and localities commit to financially contributing to the project, both in terms of their own locally-raised, entirely non-Federal funds, and in terms of commitments of

scarce Federal resources from non-Maglev funds; and

(2) The extent and proportion to which the private sector contributes financially to the project.

268.19 Evaluation of applications for preconstruction planning assistance.

The FRA will evaluate the applications for their completeness and responsiveness to the requirements listed in § 268.15. In addition, applicants are advised that the Maglev Deployment Program contains a number of project eligibility standards (minimum threshold standards) and project evaluation criteria that will guide the FRA's review of the project descriptions produced under the Planning Grants. The FRA's implementation of these standards and criteria appears in § 268.11 and § 268.17, respectively. Although subject to revision, the information in § 268.11 and § 268.17 should assist the States in completing their applications in the competition for planning grants, since the project descriptions will need to respond to the standards and criteria. In evaluating the applications for planning grants, FRA will consider how consistent the applicant's project is to the standards and criteria, and the application's likelihood of leading to a project that meets all the standards and criteria.

§ 268.21 Selection of one Maglev project for final design, engineering and construction funding.

(a) Only one project will be selected in Phase III of the Maglev Deployment Program and be eligible for any Federal construction funds that the Congress chooses to make available. That one project must meet each and every project eligibility standard contained in § 268.11(b). If more than one project meets all these standards, then the FRA will evaluate and compare the eligible projects according to the set of project selection criteria contained in § 268.17.

(b) In reviewing competing projects under the project eligibility standards and project selection criteria, the FRA will exercise particular vigilance regarding the following elements of the preconstruction planning process, although not to the exclusion of others:

(1) The credibility of the demand and revenue forecasts, cost estimates, and benefit/cost comparisons; and

(2) The credibility of the financial plan.

(c) FRA intends to make periodic reviews of the processes and products of grant recipients. Such reviews may include, at the FRA's option, reviews at key milestones in the preparation of project descriptions.

Issued in Washington, DC on October 2, 1998.

Jolene M. Molitoris,
Federal Railroad Administrator.
[FR Doc. 98-27245 Filed 10-9-98; 8:45 am]
BILLING CODE 4910-06-P

DEPARTMENT OF COMMERCE**National Oceanic and Atmospheric Administration****50 CFR Part 679**

[Docket No. 980112009-8196-02; I.D. 110697B]

RIN 0648-AK36

Fisheries of the Exclusive Economic Zone Off Alaska; Revisions to Recordkeeping and Reporting Requirements; Correction

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Final rule; correction.

SUMMARY: This document contains corrections to the final rule pertaining to recordkeeping and reporting requirements published in the Federal Register on September 4, 1998.

DATES: This action becomes effective October 5, 1998.

FOR FURTHER INFORMATION CONTACT: Patsy A. Bearden, 907-586-7228.

SUPPLEMENTARY INFORMATION:**Background**

A final rule was published in the Federal Register on September 4, 1998, implementing revisions to recordkeeping and reporting requirements for the Alaska groundfish fisheries (63 FR 47348). As published, errors are present in the September 4, 1998, edition of the Federal Register. NMFS is correcting these errors and is making no substantive change to the document in this action. The corrections are as follows:

Corrections

1. On page 47355, in the first column, last paragraph, in the seventh line, "§ 679.5(l)(2)(v):" is corrected to read "§ 679.5(l)(2)(vi):".

§ 679.20 [Corrected]

2. On page 47367, in the second column, § 679.20(g)(3), in the last line, "paragraph (g):" is corrected to read "paragraph (g)."

3. On page 47368, in the second column, amendatory instruction 12 is corrected to read as follows: "In

TAB 6 - TIFIA, Sections 1501-1503

- **Transportation Infrastructure Finance and Innovation Act Factsheet**
- **TIFIA - Bill Language**

**TRANSPORTATION INFRASTRUCTURE FINANCE AND INNOVATION ACT
(TIFIA)**

Year	1998	1999	2000	2001	2002	2003	Cumulative
Contract Authority	-----	\$80M	\$90M	\$110M	\$120M	\$130M	\$530M
Maximum Amount of Credit	\$1,200M	\$1,200M	\$1,800M	\$2,300M	2,300M	\$2,300M	\$10.6B

Program Purpose

The Transportation Infrastructure Finance and Innovation Act (TIFIA) is a new program under TEA21 that provides Federal assistance in the form of credit (e.g., direct loans, loan guarantees, and standby lines of credit) to help fund major transportation investments of critical national importance. The TIFIA credit program is designed to fill market gaps and to leverage substantial private co-investment by providing supplemental and subordinate capital.

Program Description

The TIFIA credit program consists of three different types of financial assistance designed to address projects' varying requirements throughout their life cycles:

Secured loans are direct Federal loans to project sponsors offering flexible repayment terms. These provide combined construction and permanent financing of capital costs. The interest rate is "not less than" the yield on marketable Treasury securities of similar maturity on the date of execution of the loan agreement.

Loan guarantees ensure a Federal government full-faith-and-credit guarantee to institutional investors making a loan to a project.

Standby lines of credit represent secondary sources of funding in the form of contingent Federal loans that may be drawn upon to supplement project resources if needed during the first ten years of project operations.

Investment funds may be provided by a corporation, a joint venture, a partnership, or a governmental entity. The amount of Federal credit assistance may not exceed 33% of total project costs.

Projects eligible for Federal financial assistance through regular surface transportation programs (Title 23 or chapter 53 of Title 49) are eligible for the TIFIA program. In addition, regionally or nationally significant projects such as inter-city passenger rail facilities and vehicles (including Amtrak and magnetic levitation systems), publicly-owned intermodal freight facilities on the National Highway system, border crossing infrastructure, and other large infrastructure projects such as the FOX project in Florida and the Farley (Penn Station) Redevelopment project are examples which could fit under the TIFIA umbrella.

Formula

To qualify, projects must cost at least \$100 million or 50% of a State's annual apportionment of Federal-aid funds, whichever is *less*. Also, the project must be supported in whole or in part from user fees or other non-Federal dedicated funding sources (e.g., tolls, user fees) and must be included in the State's transportation plan. For ITS projects, the minimum cost must be \$30 million; these might include a regional train control project or a significant advanced train propulsion control system covering a major metropolitan area.

Qualified projects meeting the above threshold eligibility would then be evaluated by the Secretary based on the extent to which they generate economic benefits, leverage private capital, and promote innovative technologies. Each project must eventually receive an investment grade rating (BBBminus or higher) in order to receive Federal credit assistance under TIFIA.

Funding

A total of \$530 million of contract authority is provided to pay the subsidy cost of supporting Federal credit under TIFIA (to cover anticipated losses). The maximum amount of credit that may be provided is capped at \$10.6 billion over the 6 year authorization period.

FRA Contact: Arrigo Mongini (202) 632-3286
***E-Mail:* arrigo.mongini@fra.dot.gov**

SEC. 1501. SHORT TITLE.

This chapter may be cited as the "Transportation Infrastructure Finance and Innovation Act of 1998".

SEC. 1502. FINDINGS.

Congress finds that--

- (1) a well-developed system of transportation infrastructure is critical to the economic well-being, health, and welfare of the people of the United States;*
- (2) traditional public funding techniques such as grant programs are unable to keep pace with the infrastructure investment needs of the United States because of budgetary constraints at the Federal, State, and local levels of government;*
- (3) major transportation infrastructure facilities that address critical national needs, such as intermodal facilities, border crossings, and multistate trade corridors, are of a scale that exceeds the capacity of Federal and State assistance programs in effect on the date of enactment of this Act;*
- (4) new investment capital can be attracted to infrastructure projects that are capable of generating their own revenue streams through user charges or other dedicated funding sources; and*
- (5) a Federal credit program for projects of national significance can complement existing funding resources by filling market gaps, thereby leveraging substantial private co-investment.*

SEC. 1503. ESTABLISHMENT OF PROGRAM.

(a) In General.--Chapter 1 of title 23, United States Code, is amended by adding at the end the following:

"SUBCHAPTER II--INFRASTRUCTURE FINANCE

"Sec. 181. Definitions

"In this subchapter, the following definitions apply:

"(1) Eligible project costs.--The term 'eligible project costs' means amounts substantially all of which are paid by, or for the account of, an obligor in connection with a project, including the cost of--

"(A) development phase activities, including planning, feasibility analysis, revenue forecasting, environmental review, permitting, preliminary engineering and design work, and other preconstruction activities;

"(B) construction, reconstruction, rehabilitation, replacement, and acquisition of real property (including land related to the project and improvements to land), environmental mitigation, construction contingencies, and

acquisition of equipment; and

“(C) capitalized interest necessary to meet market requirements, reasonably required reserve funds, capital issuance expenses, and other carrying costs during construction.

“(2) Federal credit instrument.—The term ‘Federal credit instrument’ means a secured loan, loan guarantee, or line of credit authorized to be made available under this subchapter with respect to a project.

“(3) Investment-grade rating.—The term ‘investment-grade rating’ means a rating category of BBB minus, Baa3, or higher assigned by a rating agency to project obligations offered into the capital markets.

“(4) Lender.—The term ‘lender’ means any non-Federal qualified institutional buyer (as defined in section 230.144A(a) of title 17, Code of Federal Regulations (or any successor regulation), known as Rule 144A(a) of the Securities and Exchange Commission and issued under the Securities Act of 1933 (15 U.S.C. 77a et seq.)), including—

“(A) a qualified retirement plan (as defined in section 4974(c) of the Internal Revenue Code of 1986) that is a qualified institutional buyer; and

“(B) a governmental plan (as defined in section 414(d) of the Internal Revenue Code of 1986) that is a qualified institutional buyer.

“(5) Line of credit.—The term ‘line of credit’ means an agreement entered into by the Secretary with an obligor under section 184 to provide a direct loan at a future date upon the occurrence of certain events.

“(6) Loan guarantee.—The term ‘loan guarantee’ means any guarantee or other pledge by the Secretary to pay all or part of the principal of and interest on a loan or other debt obligation issued by an obligor and funded by a lender.

“(7) Local servicer.—The term ‘local servicer’ means—

“(A) a State infrastructure bank established under this title; or

“(B) a State or local government or any agency of a State or local government that is responsible for servicing a Federal credit instrument on behalf of the Secretary.

“(8) Obligor.—The term ‘obligor’ means a party primarily liable for payment of the principal of or interest on a Federal credit instrument, which party may be a corporation, partnership, joint venture, trust, or governmental entity, agency, or instrumentality.

“(9) Project.—The term ‘project’ means—

“(A) any surface transportation project eligible for Federal assistance under this title or chapter 53 of title 49;

“(B) a project for an international bridge or tunnel for which an international entity authorized under Federal or State law is responsible.

“(C) a project for intercity passenger bus or rail facilities and vehicles, including facilities and vehicles owned by the National Railroad Passenger Corporation and components of magnetic levitation transportation systems; and

“(D) a project for publicly owned intermodal surface freight transfer facilities, other than seaports and airports, if the facilities are located on or adjacent to National Highway System routes or connections to the National Highway System.

“(10) Project obligation.—The term ‘project obligation’ means any note, bond, debenture, or other debt obligation issued by an obligor in connection with the financing of a project, other than a Federal credit instrument.

“(11) Rating agency.—The term ‘rating agency’ means a bond rating agency identified by the Securities and Exchange Commission as a Nationally Recognized Statistical Rating Organization.

“(12) Secured loan.—The term ‘secured loan’ means a direct loan or other debt obligation issued by an obligor and funded by the Secretary in connection with the financing of a project under section 183.

“(13) State.—The term ‘State’ has the meaning given the term in section 101.

“(14) Subsidy amount.—The term ‘subsidy amount’ means the amount of budget authority sufficient to cover the estimated long-term cost to the Federal Government of a Federal credit instrument, calculated on a net present value basis, excluding administrative costs and any incidental effects on governmental receipts or outlays in accordance with the provisions of the Federal Credit Reform Act of 1990 (2 U.S.C. 661 et seq.).

“(15) Substantial completion.—The term ‘substantial completion’ means the opening of a project to vehicular or passenger traffic.

“Sec. 182. Determination of eligibility and project selection

“(a) Eligibility.—To be eligible to receive financial assistance under this subchapter, a project shall meet the following criteria:

“(1) Inclusion in transportation plans and programs.—The project—

“(A) shall be included in the State transportation plan required under section 135; and

“(B) at such time as an agreement to make available a Federal credit instrument is entered into under this subchapter, shall be included in the approved State transportation improvement program required under section 134.

“(2) Application.—A State, a local servicer identified under section 185(a), or the entity undertaking the project shall submit a project application to the Secretary.

“(3) Eligible project costs.—

“(A) In general.—Except as provided in subparagraph (B), to be eligible for assistance under this subchapter, a project shall have eligible project costs that are reasonably anticipated to equal or exceed the lesser of—

“(i) \$100,000,000; or

“(ii) 50 percent of the amount of Federal highway assistance funds apportioned for the most recently completed fiscal year to the State in which the project is located.

“(B) Intelligent transportation system projects.—In the case of a project principally involving the installation of an intelligent transportation system, eligible project costs shall be reasonably anticipated to equal or exceed \$30,000,000.

“(4) Dedicated revenue sources.—Project financing shall be repayable, in whole or in part, from tolls, user fees, or other dedicated revenue sources.

“(5) Public sponsorship of private entities.—In the case of a project that is undertaken by an entity that is not a State or local government or an agency or instrumentality of a State or local government, the project that the entity is undertaking shall be publicly sponsored as provided in paragraphs (1) and (2).

“(b) Selection Among Eligible Projects.—

“(1) Establishment.—The Secretary shall establish criteria for selecting among projects that meet the eligibility criteria specified in subsection (a).

“(2) Selection criteria.—

“(A) In general.—The selection criteria shall include the following:

“(i) The extent to which the project is nationally or regionally significant, in terms of generating economic benefits, supporting international commerce, or otherwise

enhancing the national transportation system.

“(ii) The creditworthiness of the project, including a determination by the Secretary that any financing for the project has appropriate security features, such as a rate covenant, to ensure repayment.

“(iii) The extent to which assistance under this subchapter would foster innovative public-private partnerships and attract private debt or equity investment.

“(iv) The likelihood that assistance under this subchapter would enable the project to proceed at an earlier date than the project would otherwise be able to proceed.

“(v) The extent to which the project uses new technologies, including intelligent transportation systems, that enhance the efficiency of the project.

“(vi) The amount of budget authority required to fund the Federal credit instrument made available under this subchapter.

“(vii) The extent to which the project helps maintain or protect the environment.

“(viii) The extent to which assistance under this chapter would reduce the contribution of Federal grant assistance to the project.

“(B) Preliminary rating opinion letter.—For purposes of subparagraph (A)(ii), the Secretary shall require each project applicant to provide a preliminary rating opinion letter from at least 1 rating agency indicating that the project's senior obligations have the potential to achieve an investment-grade rating.

“(c) Federal Requirements.—In addition to the requirements of this title for highway projects, chapter 53 of title 49 for transit projects, and section 5333(a) of title 49 for rail projects, the following provisions of law shall apply to funds made available under this subchapter and projects assisted with the funds:

“(1) Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.).

“(2) The National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

“(3) The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. 4601 et seq.).

“Sec. 183. Secured loans

“(a) In General.—

“(1) Agreements.—Subject to paragraphs (2) through (4), the Secretary may enter into agreements with 1 or more obligors to make secured loans, the proceeds of which shall

be used--

``(A) to finance eligible project costs; or

``(B) to refinance interim construction financing of eligible project costs;

of any project selected under section 182.

``(2) Limitation on refinancing of interim construction financing.--A loan under paragraph (1) shall not refinance interim construction financing under paragraph (1)(B) later than 1 year after the date of substantial completion of the project.

``(3) Risk assessment.--Before entering into an agreement under this subsection, the Secretary, in consultation with the Director of the Office of Management and Budget and each rating agency providing a preliminary rating opinion letter under section 182(b)(2)(B), shall determine an appropriate capital reserve subsidy amount for each secured loan, taking into account such letter.

``(4) Investment-grade rating requirement.--The funding of a secured loan under this section shall be contingent on the project's senior obligations receiving an investment-grade rating, except that--

``(A) the Secretary may fund an amount of the secured loan not to exceed the capital reserve subsidy amount determined under paragraph (3) prior to the obligations receiving an investment-grade rating; and

``(B) the Secretary may fund the remaining portion of the secured loan only after the obligations have received an investment-grade rating by at least 1 rating agency.

``(b) Terms and Limitations.--

``(1) In general.--A secured loan under this section with respect to a project shall be on such terms and conditions and contain such covenants, representations, warranties, and requirements (including requirements for audits) as the Secretary determines appropriate.

``(2) Maximum amount.--The amount of the secured loan shall not exceed 33 percent of the reasonably anticipated eligible project costs.

``(3) Payment.--The secured loan--

``(A) shall--

``(i) be payable, in whole or in part, from tolls, user fees, or other dedicated revenue sources; and

``(ii) include a rate covenant, coverage requirement, or similar security feature supporting the project obligations; and

``(B) may have a lien on revenues described in subparagraph

(A) subject to any lien securing project obligations.

“(4) Interest rate.—The interest rate on the secured loan shall be not less than the yield on marketable United States Treasury securities of a similar maturity to the maturity of the secured loan on the date of execution of the loan agreement.

“(5) Maturity date.—The final maturity date of the secured loan shall be not later than 35 years after the date of substantial completion of the project.

“(6) Nonsubordination.—The secured loan shall not be subordinated to the claims of any holder of project obligations in the event of bankruptcy, insolvency, or liquidation of the obligor.

“(7) Fees.—The Secretary may establish fees at a level sufficient to cover all or a portion of the costs to the Federal Government of making a secured loan under this section.

“(8) Non-federal share.—The proceeds of a secured loan under this subchapter may be used for any non-Federal share of project costs required under this title or chapter 53 of title 49, if the loan is repayable from non-Federal funds.

“(c) Repayment.—

“(1) Schedule.—The Secretary shall establish a repayment schedule for each secured loan under this section based on the projected cash flow from project revenues and other repayment sources.

“(2) Commencement.—Scheduled loan repayments of principal or interest on a secured loan under this section shall commence not later than 5 years after the date of substantial completion of the project.

“(3) Sources of repayment funds.—The sources of funds for scheduled loan repayments under this section shall include tolls, user fees, or other dedicated revenue sources.

“(4) Deferred payments.—

“(A) Authorization.—If, at any time during the 10 years after the date of substantial completion of the project, the project is unable to generate sufficient revenues to pay the scheduled loan repayments of principal and interest on the secured loan, the Secretary may, subject to subparagraph (C), allow the obligor to add unpaid principal and interest to the outstanding balance of the secured loan.

“(B) Interest.—Any payment deferred under subparagraph (A) shall—

“(i) continue to accrue interest in accordance with subsection (b)(4) until fully repaid; and

“(ii) be scheduled to be amortized over the remaining term of the loan beginning not later than 10 years after the date of substantial completion of the project in accordance with paragraph (1).

“(C) Criteria.—

“(i) In general.—Any payment deferral under subparagraph (A) shall be contingent on the project meeting criteria established by the Secretary.

“(ii) Repayment standards.—The criteria established under clause (i) shall include standards for reasonable assurance of repayment.

“(5) Prepayment.—

“(A) Use of excess revenues.—Any excess revenues that remain after satisfying scheduled debt service requirements on the project obligations and secured loan and all deposit requirements under the terms of any trust agreement, bond resolution, or similar agreement securing project obligations may be applied annually to prepay the secured loan without penalty.

“(B) Use of proceeds of refinancing.—The secured loan may be prepaid at any time without penalty from the proceeds of refinancing from non-Federal funding sources.

“(d) Sale of Secured Loans.—

“(1) In general.—Subject to paragraph (2), as soon as practicable after substantial completion of a project and after notifying the obligor, the Secretary may sell to another entity or reoffer into the capital markets a secured loan for the project if the Secretary determines that the sale or reoffering can be made on favorable terms.

“(2) Consent of obligor.—In making a sale or reoffering under paragraph (1), the Secretary may not change the original terms and conditions of the secured loan without the written consent of the obligor.

“(e) Loan Guarantees.—

“(1) In general.—The Secretary may provide a loan guarantee to a lender in lieu of making a secured loan if the Secretary determines that the budgetary cost of the loan guarantee is substantially the same as that of a secured loan.

“(2) Terms.—The terms of a guaranteed loan shall be consistent with the terms set forth in this section for a secured loan, except that the rate on the guaranteed loan and any prepayment features shall be negotiated between the obligor and the lender, with the consent of the Secretary.

“Sec. 184. Lines of credit

“(a) In General.—

“(1) Agreements.—Subject to paragraphs (2) through (4), the Secretary may enter into agreements to make available lines of credit to 1 or more obligors in the form of direct loans to be made by the Secretary at future dates on the occurrence of certain events for any project selected under section 182.

“(2) Use of proceeds.—The proceeds of a line of credit made available under this section shall be available to pay debt service on project obligations issued to finance eligible project costs, extraordinary repair and replacement costs, operation and maintenance expenses, and costs associated with unexpected Federal or State environmental restrictions.

“(3) Risk assessment.—Before entering into an agreement under this subsection, the Secretary, in consultation with the Director of the Office of Management and Budget and each rating agency providing a preliminary rating opinion letter under section 182(b)(2)(B), shall determine an appropriate capital reserve subsidy amount for each line of credit, taking into account such letter.

“(4) Investment-grade rating requirement.—The funding of a line of credit under this section shall be contingent on the project's senior obligations receiving an investment-grade rating from at least 1 rating agency.

“(b) Terms and Limitations.—

“(1) In general.—A line of credit under this section with respect to a project shall be on such terms and conditions and contain such covenants, representations, warranties, and requirements (including requirements for audits) as the Secretary determines appropriate.

“(2) Maximum amounts.—

“(A) Total amount.—The total amount of the line of credit shall not exceed 33 percent of the reasonably anticipated eligible project costs.

“(B) 1-year draws.—The amount drawn in any 1 year shall not exceed 20 percent of the total amount of the line of credit.

“(3) Draws.—Any draw on the line of credit shall represent a direct loan and shall be made only if net revenues from the project (including capitalized interest, any debt service reserve fund, and any other available reserve) are insufficient to pay the costs specified in subsection (a)(2).

“(4) Interest rate.—The interest rate on a direct loan

resulting from a draw on the line of credit shall be not less than the yield on 30-year marketable United States Treasury securities as of the date on which the line of credit is obligated.

“(5) Security.—The line of credit—

“(A) shall—

“(i) be payable, in whole or in part, from tolls, user fees, or other dedicated revenue sources; and

“(ii) include a rate covenant, coverage requirement, or similar security feature supporting the project obligations; and

“(B) may have a lien on revenues described in subparagraph (A) subject to any lien securing project obligations.

“(6) Period of availability.—The line of credit shall be available during the period beginning on the date of substantial completion of the project and ending not later than 10 years after that date.

“(7) Rights of third party creditors.—

“(A) Against federal government.—A third party creditor of the obligor shall not have any right against the Federal Government with respect to any draw on the line of credit.

“(B) Assignment.—An obligor may assign the line of credit to 1 or more lenders or to a trustee on the lenders' behalf.

“(8) Nonsubordination.—A direct loan under this section shall not be subordinated to the claims of any holder of project obligations in the event of bankruptcy, insolvency, or liquidation of the obligor.

“(9) Fees.—The Secretary may establish fees at a level sufficient to cover all or a portion of the costs to the Federal Government of providing a line of credit under this section.

“(10) Relationship to other credit instruments.—A project that receives a line of credit under this section also shall not receive a secured loan or loan guarantee under section 183 of an amount that, combined with the amount of the line of credit, exceeds 33 percent of eligible project costs.

“(c) Repayment.—

“(1) Terms and conditions.—The Secretary shall establish repayment terms and conditions for each direct loan under this section based on the projected cash flow from project revenues and other repayment sources.

“(2) Timing.—All scheduled repayments of principal or interest on a direct loan under this section shall commence not later than 5 years after the end of the period of availability specified in subsection (b)(6) and be fully

repaid, with interest, by the date that is 25 years after the end of the period of availability specified in subsection (b)(6).

“(3) Sources of repayment funds.—The sources of funds for scheduled loan repayments under this section shall include tolls, user fees, or other dedicated revenue sources.

“Sec. 185. Project servicing

“(a) Requirement.—The State in which a project that receives financial assistance under this subchapter is located may identify a local servicer to assist the Secretary in servicing the Federal credit instrument made available under this subchapter.

“(b) Agency; Fees.—If a State identifies a local servicer under subsection (a), the local servicer—

“(1) shall act as the agent for the Secretary; and

“(2) may receive a servicing fee, subject to approval by the Secretary.

“(c) Liability.—A local servicer identified under subsection (a) shall not be liable for the obligations of the obligor to the Secretary or any lender.

“(d) Assistance From Expert Firms.—The Secretary may retain the services of expert firms in the field of municipal and project finance to assist in the underwriting and servicing of Federal credit instruments.

“Sec. 186. State and local permits

“The provision of financial assistance under this subchapter with respect to a project shall not—

“(1) relieve any recipient of the assistance of any obligation to obtain any required State or local permit or approval with respect to the project;

“(2) limit the right of any unit of State or local government to approve or regulate any rate of return on private equity invested in the project; or

“(3) otherwise supersede any State or local law (including any regulation) applicable to the construction or operation of the project.

“Sec. 187. Regulations

“The Secretary may issue such regulations as the Secretary determines appropriate to carry out this subchapter.

“Sec. 188. Funding

“(a) Funding.—

“(1) In general.—There are authorized to be appropriated from the Highway Trust Fund (other than the Mass Transit

Account) to carry out this subchapter--

- “(A) \$80,000,000 for fiscal year 1999;
- “(B) \$90,000,000 for fiscal year 2000;
- “(C) \$110,000,000 for fiscal year 2001;
- “(D) \$120,000,000 for fiscal year 2002; and
- “(E) \$130,000,000 for fiscal year 2003.

“(2) Administrative costs.—From funds made available under paragraph (1), the Secretary may use, for the administration of this subchapter, not more than \$2,000,000 for each of fiscal years 1998 through 2003.

“(3) Availability.—Amounts made available under paragraph (1) shall remain available until expended.

“(b) Contract Authority.—

“(1) In general.—Notwithstanding any other provision of law, approval by the Secretary of a Federal credit instrument that uses funds made available under this subchapter shall be deemed to be acceptance by the United States of a contractual obligation to fund the Federal credit instrument.

“(2) Availability.—Amounts authorized under this section for a fiscal year shall be available for obligation on October 1 of the fiscal year.

“(c) Limitations on Credit Amounts.—For each of fiscal years 1998 through 2003, principal amounts of Federal credit instruments made available under this subchapter shall be limited to the amounts specified in the following table:

Fiscal year:	Maximum amount of credit:
1998.....	\$1,200,000,000
1999.....	\$1,200,000,000
2000.....	\$1,800,000,000
2001.....	\$1,800,000,000
2002.....	\$2,300,000,000
2003.....	\$2,300,000,000.

“Sec. 189. Report to Congress

“Not later than 4 years after the date of enactment of this subchapter, the Secretary shall submit to Congress a report summarizing the financial performance of the projects that are receiving, or have received, assistance under this subchapter, including a recommendation as to whether the objectives of this subchapter are best served—

“(1) by continuing the program under the authority of the Secretary;

*“(2) by establishing a Government corporation or Government-sponsored enterprise to administer the program; or
“(3) by phasing out the program and relying on the capital markets to fund the types of infrastructure investments assisted by this subchapter without Federal participation.”.*

(b) Conforming Amendments.—Chapter 1 of title 23, United States Code, is amended—

(1) in the analysis—

(A) by inserting before “Sec.” the following:

“SUBCHAPTER I—GENERAL PROVISIONS”;

and

(B) by adding at the end the following:

“SUBCHAPTER II—INFRASTRUCTURE FINANCE

“181. Definitions.

“182. Determination of eligibility and project selection.

“183. Secured loans.

“184. Lines of credit.

“185. Project servicing.

“186. State and local permits.

“187. Regulations.

“188. Funding.

“189. Report to Congress.”;

and

(2) by inserting before section 101 the following:

“SUBCHAPTER I—GENERAL PROVISIONS”.

SEC. 1504. DUTIES OF THE SECRETARY.

Section 301 of title 49, United States Code, is amended—

(1) in paragraph (7) by striking “and” at the end;

(2) in paragraph (8) by striking the period at the end and inserting “; and”; and

(3) by adding at the end the following:

“(9) develop and coordinate Federal policy on financing transportation infrastructure, including the provision of direct Federal credit assistance and other techniques used to leverage Federal transportation funds.”.

TAB 7- Other TEA-21 Rail Related Initiatives

- **TEA-21 Rail Initiatives**
- **Light Density Rail Line Pilot Projects Factsheet**
- **Light Density Projects Bill Language**
- **Railroad Rehabilitation and Improvement Financing Factsheet**
- **Railroad Rehabilitation and Improvement Financing Bill Language**
- **Alaska Railroad Capital Improvements Factsheet**
- **Alaska Railroad Capital - Bill Language**
- **Rail and Intermodal High Priority Projects by Corridor**
- **Atlanta to Charleston High Speed Rail Study**
- **Pilot Program for Oklahoma Intercity Rail**
- **Federal Transit Administration New Start Project Authorizations**
 - **Pittsburgh to Philadelphia High Speed Rail**

**TRANSPORTATION EQUITY ACT
FOR
THE 21st CENTURY**



FEDERAL RAILROAD ADMINISTRATION

TEA-21 HIGH-SPEED GROUND TRANSPORTATION INITIATIVES

- High-Speed Rail Development - Swift Act Reauthorization
- High-Speed Rail Corridor Initiative - Grade Crossing Hazard Elimination Program
- Magnetic Levitation Transportation Technology Deployment Program

§7201: HIGH-SPEED RAIL

- Reauthorizes Swift Rail Development Act of 1994
- Authorizations Subject to Appropriation
- Authorizes Planning & Pre-Construction Funding (including row acquisition) at \$10 m/yr
 - 50/50 matching
- Authorizes Technology Development and Demo Funding at \$25 m/yr
 - basis for FRA Next Generation Program
 - no matching required
- Defines High-Speed Rail
 - “reasonably expected to reach 125 mph+

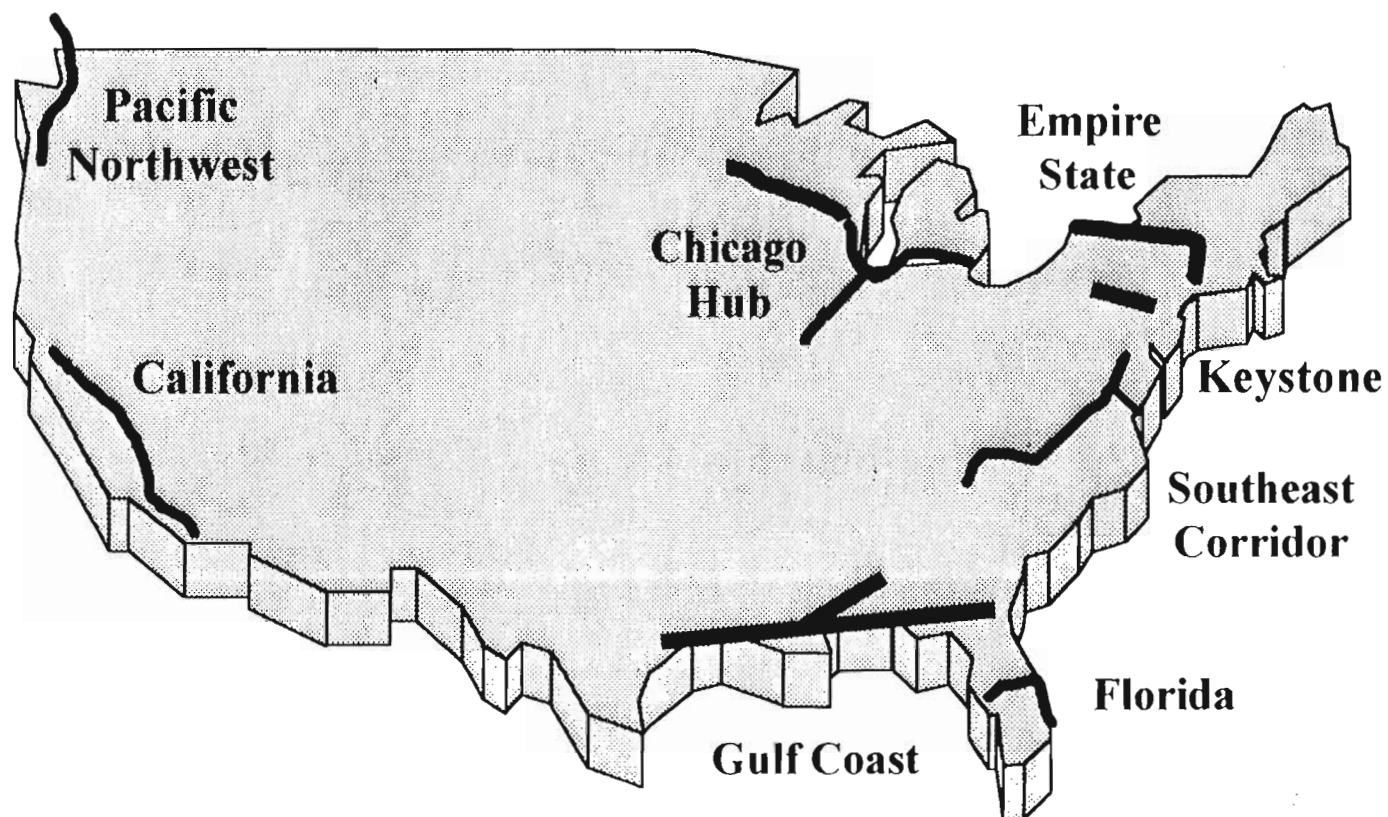


§1103(c): HIGH-SPEED RAIL CORRIDOR INITIATIVE

- Extends ISTEA§1010 – Grade Crossing Hazard Elimination in Designated HSR Corridors
- Designates 3 New Corridors and Extends Chicago Hub (one of five designated corridors) to Twin Cities
- Secretary to Designate Additional 3 Unspecified Corridors
- \$5.25 million/year in Contract Authority
- Additional \$15 million Subject to Appropriation
- FRA Currently Writing Guidelines for Applications for Designation and for Funding



High-Speed Rail Corridors Designated Under ISTEA And TEA-21*



***Three additional Corridors to be designated by
the Secretary of Transportation.**

§ 1218: MAGNETIC LEVITATION TRANSPORTATION TECHNOLOGY DEPLOYMENT PROGRAM

- Competition for Funds to Build a Short 240+mph System
- \$55 m Contract Authority & \$950 m from Future Appropriations
- Must Involve a Longer Corridor with Public/Private “Partnership Potential”
- Must be a Revenue Producing Public/Private Venture
- 1/3 State/Local/Private Matching (20% in Initial Planning Phase)
- Foreign, Must Involve Technology Transfer: also 70% U.S. Content



MAGLEV PROGRAM IMPLEMENTATION

- 10/13/98 Publication of “Interim Final Rule” For Application For Preconstruction Planning Grants
- Probably About 5 Grants, Award in Early 1999
- Each Grantee to Prepare Market Studies, Revenue, Cost/Benefit Projections, Environmental Assessments, Financial Plans, etc.
- Will Result in Project Descriptions and Provide Basis for Selecting one Project for Engineering and Construction
- Project Selection and Detailed Environmental Assessment/EIS in Year 2000/Early 2001 Time Frame



OTHER TEA-21 RAIL FUNDING SOURCES

- Transportation Infrastructure Finance and Innovation Act (TIFIA)
- Rail Rehabilitation and Improvement Financing (RRIF)
- Light Density Line Pilot Program
- Congestion Mitigation and Air Quality Improvement Program (CMAQ)
- Coordinated Border Infrastructure and Safety Programs
- Transportation and Community and System Preservation Pilot Program (TCSP)
- Highway Rail Grade Crossing Program/Operation Lifesaver
- Rail and Intermodal Project Earmarks



§1501: TRANSPORTATION INFRASTRUCTURE FINANCE AND IMPROVEMENT ACT (TIFIA)

- Federal credit program for: secured loans, loan guarantees, standby lines of credit
- Funding limitations: \$530 million of contract authority with annual caps totaling \$10.6 billion
- Eligible projects: intercity bus/rail facilities and vehicles (e.g. Amtrak and components of maglev systems); publicly owned intermodal freight transfer facilities on/adjacent to NHS (FOX project and the Farley Redevelopment Project possible uses).
- Statutory Priority: projects must cost at least \$100 million or 50% of the State's annual apportionment (\$30 million for ITS projects); must be supported by user charges or other non-Federal dedicated sources, STIP



§7203: Rail Rehabilitation and Improvement Financing (RRIF)

- Direct Loan/Loan Guarantee Authority for:
 - State and local governments
 - government sponsored authorities and corporations
 - railroads, and joint ventures that include at least one railroad.
- Funding Limitations:
 - \$3.5 billion aggregate unpaid balance
 - \$1.0 billion benefitting non Class I RRs
 - Credit subsidy amount can be paid by the private sector
- Eligible Projects: Acquisition, Development, Improvement, or Rehabilitation of Intermodal or Rail Equipment or Facilities, Including Track, Bridges, Yards, Buildings, and Shops



RRIF (continued)

- Statutory Priority for Projects That:
 - enhance safety
 - enhance the environment
 - promote economic development
 - included in state transportation plans
 - promote U.S. competitiveness
 - preserve/enhance service to small communities/rural areas

- Program Implementation:
 - Implementing Regulations are currently being developed
 - No Loan Commitments Can be Made Prior to Issuance of Regulations



§7202: Light Density Line Pilot Program

- State Grants to Fund “Light Density Rail Line” Pilot Projects
- Purpose: Capital Improvements to, and Rehabilitation of, Publicly and Privately Owned Rail Line Structures
- Authorization of \$17.5 million per year for FYs 1998-2003
- Report on Public Interest Benefits Due March 31, 2003



§1110: Congestion Mitigation and Air Quality Improvement Program (CMAQ)

- Continues Freight and Passenger Rail Eligibility
- Total Funding of \$8.1 Billion
- Expands Program to Cover Maintenance Areas (former nonattainment areas)
- Redefinition of O₃ and CO Standards Adds 68 Areas to Eligibility
- Major Source of Rail and Rail Related Funding Under ISTEA:
 - Cincinnati Third Track
 - Fairfield Intermodal Facility (Maine)
 - Bensenville Rail Yard in North West Chicago



§1119: Coordinated Border Infrastructure and Safety Program

- Improve Safe and Efficient Transportation at or Across U.S. Borders
- Eligible Projects Include Improvements that Facilitate International Trade
- Coordinated Funding of \$700 million with National Corridor Planning and Development Program
- Improvements to Existing Infrastructure, Construction of Highways and Related Safety Enforcement Facilities, Operational Improvements, Including EDI and International Planning, Programming, and Border Operation



§1221: Transportation and Community and System Preservation Pilot Program (TCSP)

- Research and Grant Initiative to Investigate Relationships Between Transportation, Community, and System Preservation and Private-Sector Based Initiatives
- States, Local Governments and MPOs Eligible for Grants to:
 - plan and implement strategies improving transportation efficiency
 - reduce transportation's environmental impacts
 - reduce future infrastructure investments
 - ensure efficiencies and access to jobs, services and trade
 - examine related private-sector development and investment patterns
- HTF Allocation of \$20 million for FY 1999, \$25 million Each Year FYs 2000-2003



§1108: Highway Rail Grade Crossing Program

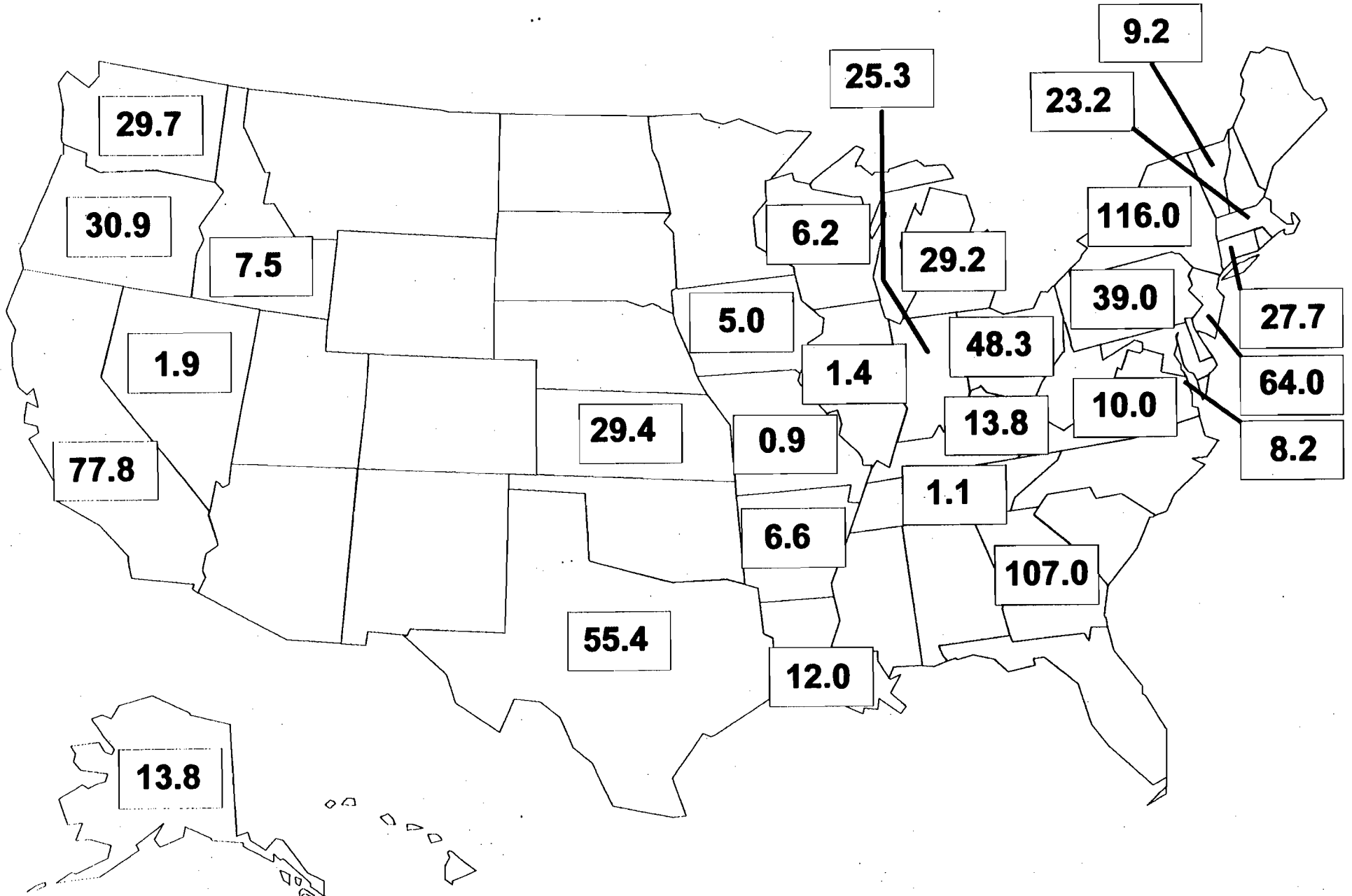
- Continues §130 Program
- Shares Increased 10% STP Safety Set Aside (\$466 million) with §152 Hazard Elimination Program
- Minimum Funding in Each State Tied to FY 1991 Levels, However, all STP Eligible at State Option
- Transfers Out of §1108 More Limited Than Under ISTEA

§1103(c): Operation Lifesaver

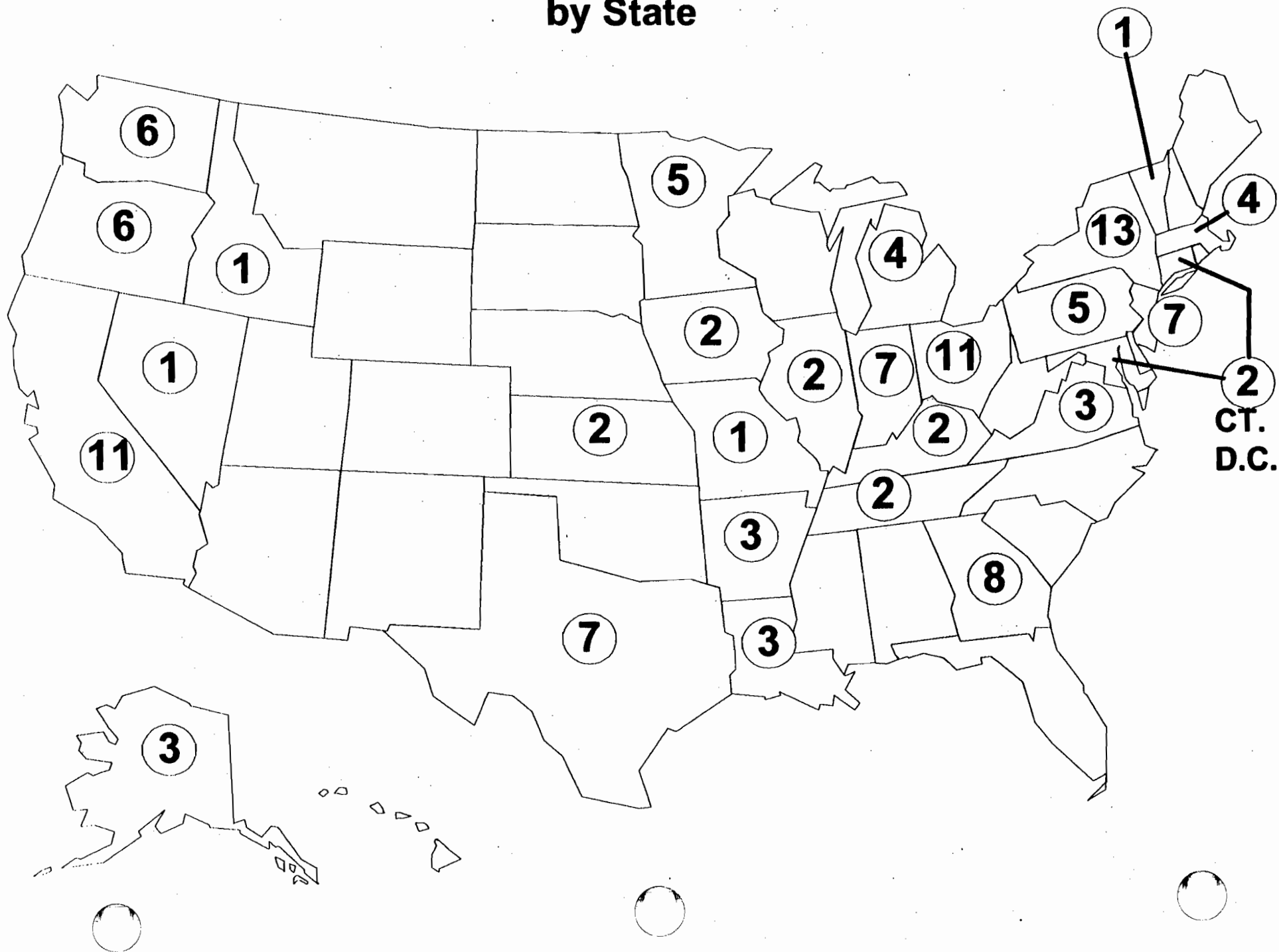
- \$500,000 per year From HTF for FYs 1998-2003
- \$200,000 per year Increase Over ISTEA Funding Levels



Total \$ (in millions) of Rail and Intermodal Projects included in TEA-21 by State



Number of Rail and Intermodal Projects included in TEA-21 by State



LIGHT DENSITY RAIL LINE PILOT PROJECTS

Year	1998	1999	2000	2001	2002	2003
Authorization	\$17.5M	\$17.5M	\$17.5M	\$17.5M	\$17.5M	\$17.5M

Program Purpose

The program, in Section 7202 of TEA-21, is designed to allow the Secretary to fund pilot projects that demonstrate the relationship of light density railroad services to the nation's intermodal transportation system.

Program Description

- The Secretary is authorized to make grants to States (with State rail plans in place) to fund pilot projects involving capital improvements to and rehabilitation of publicly and privately owned rail line structures. Program funds may not be used for operating assistance.

Formula

Grants made by the Secretary for projects on privately owned rail line structures must include contributions from the owner of the structure, based on the benefit to those structures, as determined by the Secretary.

Funding

The TEA-21 authorization covers fiscal years 1998-2003 and is a general fund authorization which means that the funds must first be made available by the Congress in an appropriations act before the program can be implemented and any projects can be funded.

Report

The Secretary is also required to conduct a study of the pilot projects carried out with Federal assistance to determine the public interest benefits associated with light density railroad networks and the contribution these networks make to the multi modal national transportation system. The Secretary is required to report to the Congress not later than March 31, 2003 with recommendations related to the eligibility of light density rail networks for Federal infrastructure financing.

FRA Contact: JoAnne McGowan (202) 493-6390
E-mail: joanne.mcgowan@fra.dot.gov

SEC. 7202. LIGHT DENSITY RAIL LINE PILOT PROJECTS.

(a) Amendment.--Part B of subtitle V of title 49, United States Code, is amended by adding at the end the following new chapter:

CHAPTER 223--LIGHT DENSITY RAIL LINE PILOT PROJECTS

Sec.

22301. Light density rail line pilot projects.

Sec. 22301. Light density rail line pilot projects

(a) Grants.--The Secretary of Transportation may make grants to States that have State rail plans described in section 22102 (1) and (2), to fund pilot projects that demonstrate the relationship of light density railroad services to the statutory responsibilities of the Secretary, including those under title 23.

(b) Limitations.--Grants under this section may be made only for pilot projects for making capital improvements to, and rehabilitating, publicly and privately owned rail line structures, and may not be used for providing operating assistance.

(c) Private Owner Contributions.--Grants made under this section for projects on privately owned rail line structures shall include contributions by the owner of the rail line structures, based on the benefit to those structures, as determined by the Secretary.

(d) Study.--The Secretary shall conduct a study of the pilot projects carried out with grant assistance under this section to determine the public interest benefits associated with the light density railroad networks in the States and their contribution to a multimodal transportation system. Not later than March 31, 2003, the Secretary shall report to Congress any recommendations the Secretary considers appropriate regarding the eligibility of light density rail networks for Federal infrastructure financing.

(e) Authorization of Appropriations.--There are authorized to be appropriated to the Secretary to carry out this section \$17,500,000 for each of the fiscal years 1998, 1999, 2000, 2001, 2002, and 2003. Such funds shall remain available until expended."

(b) Table of Chapters.--The table of chapters of subtitle V of title 49, United States Code, is amended by inserting after the item relating to chapter 221 the following new item:

223. LIGHT DENSITY RAIL LINE PILOT PROJECTS.....
22301".

RAILROAD REHABILITATION AND IMPROVEMENT FINANCING

NO FEDERAL FUNDING AUTHORIZED PROGRAM CAN BE IMPLEMENTED WITHOUT FEDERAL FUNDING

Program Purpose

The railroad rehabilitation and improvement financing program, in Section 7203 of TEA-21, is intended to make funds available for railroad capital improvements through loans and loan guarantees.

Program Description

- The Secretary is authorized to provide direct loans and loan guarantees to State and local governments, government sponsored authorities and corporations, railroads, and joint ventures that include at least one railroad to be used to acquire, improve, develop or rehabilitate intermodal or rail equipment or facilities, including track, bridges, yards and shops.
- The Secretary is to give priority in selecting projects to those that enhance public safety and the environment, promote economic development, enable United States companies to be more competitive in international markets, are endorsed in state and local transportation plans, or preserve or enhance rail or intermodal service to small communities or rural areas.
- The total unpaid principal amount of direct loans and loan guarantees cannot exceed \$3.5 billion at any one time, of which not less than \$1 billion is to be available solely for smaller (non Class I) carriers.
- The Secretary is allowed to accept a commitment from a non-Federal source to fund in whole or in part the required credit risk premiums. Credit risk premiums fund the costs associated with a potential default on the loan/loan guarantee. The private commitments can be used in lieu of or in combination with any appropriations of Federal funds for this purpose that might be provided in the future. The Secretary (in consultation with the Congressional Budget Office) is to determine the amount required for credit risk premiums for each loan/loan guarantee on the basis of the circumstances of the applicant, including the collateral offered, the proposed schedule for disbursing the funds, historical data on the repayment history of similar borrowers, and any other relevant factors.
- No Federal funds are made available in TEA-21 to fund the credit risk premiums nor is there an authorization of appropriations for this program.
- The term of any loan may not exceed 25 years; the assistance must be justified by the present and probable future demand for rail services or intermodal facilities; the applicant must provide reasonable assurance that the facilities or equipment to be acquired,

rehabilitated or established will be economically and efficiently utilized; and the obligation must be reasonably expected to be repaid, taking into account an appropriate combination of credit risk premiums and borrower collateral.

Funding

No direct Federal funding is authorized or provided in TEA-21, however, as noted above, the Secretary is authorized to accept a commitment from a non-Federal source to fund the required credit risk premium.

FRA Contact: JoAnne McGowan (202) 493-6390
***E-mail:* joanne.mcgowan@fra.dot.gov**

SEC. 7203. RAILROAD REHABILITATION AND IMPROVEMENT FINANCING.

(a) Amendments.—Title V of the Railroad Revitalization and Regulatory Reform Act of 1976 is amended—

(1) by striking sections 501 through 504 and inserting the following new sections:

SEC. 501. DEFINITIONS.

For purposes of this title:

(1)(A) The term 'cost' means the estimated long-term cost to the Government of a direct loan or loan guarantee or modification thereof, calculated on a net present value basis, excluding administrative costs and any incidental effects on governmental receipts or outlays.

(B) The cost of a direct loan shall be the net present value, at the time when the direct loan is disbursed, of the following estimated cash flows:

(i) Loan disbursements.

(ii) Repayments of principal.

(iii) Payments of interest and other payments by or to the Government over the life of the loan after adjusting for estimated defaults, prepayments, fees, penalties, and other recoveries.

Calculation of the cost of a direct loan shall include the effects of changes in loan terms resulting from the exercise by the borrower of an option included in the loan contract.

(C) The cost of a loan guarantee shall be the net present value, at the time when the guaranteed loan is disbursed, of the following estimated cash flows:

(i) Payments by the Government to cover defaults and delinquencies, interest subsidies, or other payments.

(ii) Payments to the Government, including origination and other fees, penalties, and recoveries.

Calculation of the cost of a loan guarantee shall include the effects of changes in loan terms resulting from the exercise by the guaranteed lender of an option included in the loan guarantee contract, or by the borrower of an option included in the guaranteed loan contract.

(D) The cost of a modification is the difference between the current estimate of the net present value of the remaining cash flows under the terms of a direct loan or loan guarantee contract, and the current estimate of the net present value of the remaining cash flows under the terms of the contract, as modified.

(E) In estimating net present values, the discount rate shall be the average interest rate on marketable Treasury securities of similar maturity to the cash flows of the direct loan or loan

guarantee for which the estimate is being made.

“(F) When funds are obligated for a direct loan or loan guarantee, the estimated cost shall be based on the current assumptions, adjusted to incorporate the terms of the loan contract, for the fiscal year in which the funds are obligated.

“(2) The term ‘current’ has the same meaning as in section 250(c)(9) of the Balanced Budget and Emergency Deficit Control Act of 1985.

“(3) The term ‘direct loan’ means a disbursement of funds by the Government to a non-Federal borrower under a contract that requires the repayment of such funds. The term includes the purchase of, or participation in, a loan made by another lender and financing arrangements that defer payment for more than 90 days, including the sale of a Government asset on credit terms. The term does not include the acquisition of a federally guaranteed loan in satisfaction of default claims.

“(4) The term ‘direct loan obligation’ means a binding agreement by the Secretary to make a direct loan when specified conditions are fulfilled by the borrower.

“(5) The term ‘intermodal’ means of or relating to the connection between rail service and other modes of transportation, including all parts of facilities at which such connection is made.

“(6) The term ‘loan guarantee’ means any guarantee, insurance, or other pledge with respect to the payment of all or a part of the principal or interest on any debt obligation of a non-Federal borrower to a non-Federal lender, but does not include the insurance of deposits, shares, or other withdrawable accounts in financial institutions.

“(7) The term ‘loan guarantee commitment’ means a binding agreement by the Secretary to make a loan guarantee when specified conditions are fulfilled by the borrower, the lender, or any other party to the guarantee agreement.

“(8) The term ‘modification’ means any Government action that alters the estimated cost of an outstanding direct loan (or direct loan obligation) or an outstanding loan guarantee (or loan guarantee commitment) from the current estimate of cash flows. This includes the sale of loan assets, with or without recourse, and the purchase of guaranteed loans. This also includes any action resulting from new legislation, or from the exercise of administrative discretion under existing law, that directly or indirectly alters the estimated cost of outstanding direct loans (or direct loan obligations) or loan guarantees (or loan guarantee commitments) such as a change in collection procedures.

“SEC. 502. DIRECT LOANS AND LOAN GUARANTEES.

“(a) General Authority.—The Secretary may provide direct loans and loan guarantees to State and local governments, government sponsored authorities and corporations, railroads, and joint ventures that include at least 1 railroad.

“(b) Eligible Purposes.—

“(1) In general.—Direct loans and loan guarantees under this section shall be used to—

“(A) acquire, improve, or rehabilitate intermodal or rail equipment or facilities, including track, components of track, bridges, yards, buildings, and shops;

“(B) refinance outstanding debt incurred for the purposes described in subparagraph (A); or

“(C) develop or establish new intermodal or railroad facilities.

“(2) Operating expenses not eligible.—Direct loans and loan guarantees under this section shall not be used for railroad operating expenses.

“(c) Priority Projects.—In granting applications for direct loans or guaranteed loans under this section, the Secretary shall give priority to projects that—

“(1) enhance public safety;

“(2) enhance the environment;

“(3) promote economic development;

“(4) enable United States companies to be more competitive in international markets;

“(5) are endorsed by the plans prepared under section 135 of title 23, United States Code, by the State or States in which they are located; or

“(6) preserve or enhance rail or intermodal service to small communities or rural areas.

“(d) Extent of Authority.—The aggregate unpaid principal amounts of obligations under direct loans and loan guarantees made under this section shall not exceed \$3,500,000,000 at any one time. Of this amount, not less than \$1,000,000,000 shall be available solely for projects primarily benefiting freight railroads other than Class I carriers.

“(e) Rates of Interest.—

“(1) Direct loans.—The Secretary shall require interest to be paid on a direct loan made under this section at a rate not less than that necessary to recover the cost of making the loan.

“(2) Loan guarantees.—The Secretary shall not make a loan guarantee under this section if the interest rate for the loan exceeds that which the Secretary determines to be reasonable, taking into consideration the prevailing interest rates and customary fees incurred under similar obligations in the private

capital market.

“(f) Infrastructure Partners.--

“(1) Authority of secretary.--In lieu of or in combination with appropriations of budget authority to cover the costs of direct loans and loan guarantees as required under section 504(b)(1) of the Federal Credit Reform Act of 1990, the Secretary may accept on behalf of an applicant for assistance under this section a commitment from a non-Federal source to fund in whole or in part credit risk premiums with respect to the loan that is the subject of the application. In no event shall the aggregate of appropriations of budget authority and credit risk premiums described in this paragraph with respect to a direct loan or loan guarantee be less than the cost of that direct loan or loan guarantee.

“(2) Credit risk premium amount.--The Secretary shall determine the amount required for credit risk premiums under this subsection on the basis of--

“(A) the circumstances of the applicant, including the amount of collateral offered;

“(B) the proposed schedule of loan disbursements;

“(C) historical data on the repayment history of similar borrowers;

“(D) consultation with the Congressional Budget Office; and

“(E) any other factors the Secretary considers relevant.

“(3) Payment of premiums.--Credit risk premiums under this subsection shall be paid to the Secretary before the disbursement of loan amounts.

“(4) Cohorts of loans.--In order to maintain sufficient balances of credit risk premiums to adequately protect the Federal Government from risk of default, while minimizing the length of time the Government retains possession of those balances, the Secretary shall establish cohorts of loans. When all obligations attached to a cohort of loans have been satisfied, credit risk premiums paid for the cohort, and interest accrued thereon, which were not used to mitigate losses shall be returned to the original source on a pro rata basis.

“(g) Prerequisites for Assistance.--The Secretary shall not make a direct loan or loan guarantee under this section unless the Secretary has made a finding in writing that--

“(1) repayment of the obligation is required to be made within a term of not more than 25 years from the date of its execution;

“(2) the direct loan or loan guarantee is justified by the present and probable future demand for rail services or intermodal facilities;

“(3) the applicant has given reasonable assurances that the facilities or equipment to be acquired, rehabilitated, improved, developed, or established with the proceeds of the obligation will be economically and efficiently utilized;

“(4) the obligation can reasonably be repaid, using an appropriate combination of credit risk premiums and collateral offered by the applicant to protect the Federal Government; and

“(5) the purposes of the direct loan or loan guarantee are consistent with subsection (b).

“(h) Conditions of Assistance.—The Secretary shall, before granting assistance under this section, require the applicant to agree to such terms and conditions as are sufficient, in the judgment of the Secretary, to ensure that, as long as any principal or interest is due and payable on such obligation, the applicant, and any railroad or railroad partner for whose benefit the assistance is intended—

“(1) will not use any funds or assets from railroad or intermodal operations for purposes not related to such operations, if such use would impair the ability of the applicant, railroad, or railroad partner to provide rail or intermodal services in an efficient and economic manner, or would adversely affect the ability of the applicant, railroad, or railroad partner to perform any obligation entered into by the applicant under this section;

“(2) will, consistent with its capital resources, maintain its capital program, equipment, facilities, and operations on a continuing basis; and

“(3) will not make any discretionary dividend payments that unreasonably conflict with the purposes stated in subsection (b).

“SEC. 503. ADMINISTRATION OF DIRECT LOANS AND LOAN GUARANTEES.

“(a) Applications.—The Secretary shall prescribe the form and contents required of applications for assistance under section 502, to enable the Secretary to determine the eligibility of the applicant's proposal, and shall establish terms and conditions for direct loans and loan guarantees made under that section.

“(b) Assignment of Loan Guarantees.—The holder of a loan guarantee made under section 502 may assign the loan guarantee in whole or in part, subject to such requirements as the Secretary may prescribe.

“(c) Modifications.—The Secretary may approve the modification of any term or condition of a direct loan, loan guarantee, direct loan obligation, or loan guarantee commitment, including the rate of interest, time of payment of interest or principal, or security requirements, if the Secretary finds in writing that—

“(1) the modification is equitable and is in the overall best

interests of the United States; and

“(2) consent has been obtained from the applicant and, in the case of a loan guarantee or loan guarantee commitment, the holder of the obligation.

“(d) Compliance.—The Secretary shall assure compliance, by an applicant, any other party to the loan, and any railroad or railroad partner for whose benefit assistance is intended, with the provisions of this title, regulations issued hereunder, and the terms and conditions of the direct loan or loan guarantee, including through regular periodic inspections.

“(e) Commercial Validity.—For purposes of claims by any party other than the Secretary, a loan guarantee or loan guarantee commitment shall be conclusive evidence that the underlying obligation is in compliance with the provisions of this title, and that such obligation has been approved and is legal as to principal, interest, and other terms. Such a guarantee or commitment shall be valid and incontestable in the hands of a holder thereof, including the original lender or any other holder, as of the date when the Secretary granted the application therefor, except as to fraud or material misrepresentation by such holder.

“(f) Default.—The Secretary shall prescribe regulations setting forth procedures in the event of default on a loan made or guaranteed under section 502. The Secretary shall ensure that each loan guarantee made under that section contains terms and conditions that provide that—

“(1) if a payment of principal or interest under the loan is in default for more than 30 days, the Secretary shall pay to the holder of the obligation, or the holder's agent, the amount of unpaid guaranteed interest;

“(2) if the default has continued for more than 90 days, the Secretary shall pay to the holder of the obligation, or the holder's agent, 90 percent of the unpaid guaranteed principal;

“(3) after final resolution of the default, through liquidation or otherwise, the Secretary shall pay to the holder of the obligation, or the holder's agent, any remaining amounts guaranteed but which were not recovered through the default's resolution;

“(4) the Secretary shall not be required to make any payment under paragraphs (1) through (3) if the Secretary finds, before the expiration of the periods described in such paragraphs, that the default has been remedied; and

“(5) the holder of the obligation shall not receive payment or be entitled to retain payment in a total amount which, together with all other recoveries (including any recovery based upon a security interest in equipment or facilities) exceeds the actual

loss of such holder.

“(g) Rights of the Secretary.—

“(1) Subrogation.—If the Secretary makes payment to a holder, or a holder's agent, under subsection (g) in connection with a loan guarantee made under section 502, the Secretary shall be subrogated to all of the rights of the holder with respect to the obligor under the loan.

“(2) Disposition of property.—The Secretary may complete, recondition, reconstruct, renovate, repair, maintain, operate, charter, rent, sell, or otherwise dispose of any property or other interests obtained pursuant to this section. The Secretary shall not be subject to any Federal or State regulatory requirements when carrying out this paragraph.

“(h) Action Against Obligor.—The Secretary may bring a civil action in an appropriate Federal court in the name of the United States in the event of a default on a direct loan made under section 502, or in the name of the United States or of the holder of the obligation in the event of a default on a loan guaranteed under section 502. The holder of a guarantee shall make available to the Secretary all records and evidence necessary to prosecute the civil action. The Secretary may accept property in full or partial satisfaction of any sums owed as a result of a default. If the Secretary receives, through the sale or other disposition of such property, an amount greater than the aggregate of—

“(1) the amount paid to the holder of a guarantee under subsection (g) of this section; and

“(2) any other cost to the United States of remedying the default,

the Secretary shall pay such excess to the obligor.

“(i) Breach of Conditions.—The Attorney General shall commence a civil action in an appropriate Federal court to enjoin any activity which the Secretary finds is in violation of this title, regulations issued hereunder, or any conditions which were duly agreed to, and to secure any other appropriate relief.

“(j) Attachment.—No attachment or execution may be issued against the Secretary, or any property in the control of the Secretary, prior to the entry of final judgment to such effect in any State, Federal, or other court.

“(k) Investigation Charge.—The Secretary may charge and collect from each applicant a reasonable charge for appraisal of the value of the equipment or facilities for which the direct loan or loan guarantee is sought, and for making necessary determinations and findings. Such charge shall not aggregate more than one-half of 1 percent of the principal amount of the obligation.”;

(2) by striking sections 505 through 515 (other than 511(c)),

517, and 518;

(3) in section 511(c) by striking "this section" and inserting "section 502";

(4) by moving subsection (c) of section 511 (as amended by paragraph (3) of this section) from section 511 to section 503 (as inserted by paragraph (1) of this section), inserting it after subsection (a), and redesignating it as subsection (b); and

(5) by redesignating section 516 as section 504.

(b) Technical and Conforming Provisions.--

(1) Table of contents.--The table of contents of title V of the Railroad Revitalization and Regulatory Reform Act of 1976 is amended by striking the items relating to sections 502 through 518 and inserting the following:

"Sec. 502. Direct loans and loan guarantees.

"Sec. 503. Administration of direct loans and loan guarantees.

"Sec. 504. Employee protection."

(2) Savings provision.--A transaction entered into under the authority of title V of the Railroad Revitalization and Regulatory Reform Act of 1976 (45 U.S.C. 821 et seq.) before the date of enactment of this Act shall be administered until completion under its terms as if this Act were not enacted.

(3) Repeal.--Section 211(i) of the Regional Rail Reorganization Act of 1973 (45 U.S.C. 721(i)) is repealed.

Dated: July 7, 1998.
 Don A. Christensen,
 Associate Administrator for Investment.
 [FR Doc. 98-18985 Filed 7-15-98; 8:45 am]
 BILLING CODE 8025-01-P

DEPARTMENT OF TRANSPORTATION

Notice of Applications for Certificates of Public Convenience and Necessity and Foreign Air Carrier Permits Filed Under Subpart Q During the Week Ending July 3, 1998

The following Applications for Certificates of Public Convenience and Necessity and Foreign Air Carrier Permits were filed under Subpart Q of the Department of Transportation's Procedural Regulations (See 14 CFR 302.1701 et. seq.). The due date for Answers, Conforming Applications, or Motions to Modify Scope are set forth below for each application. Following the Answer period DOT may process the application by expedited procedures. Such procedures may consist of the adoption of a show-cause order, a tentative order, or in appropriate cases a final order without further proceedings:

Docket Number: OST-98-3997.
Date Filed: June 26, 1998.
Due Date for Answers, Conforming Applications, or Motions to Modify Scope: July 24, 1998.

Description: Application of Passaredo Transportes Aereos S.A. pursuant to Section 402 of the Act and Subpart Q, applies for an air carrier permit authorizing the carriage of passengers on a charter basis between a point or points in Brazil and a point or points in the United States.

Docket Number: OST-98-4009.
Date Filed: June 29, 1998.
Due Date for Answers, Conforming Applications, or Motions to Modify Scope: July 27, 1998.

Description: Application of Tower Air, Inc. pursuant to 49 U.S.C. Section 41108 and Subpart Q, applies for the issuance of a new Certificate of Public Convenience and Necessity or Amendment of its existing Certificate for Route 401, to engage in foreign air transportation of persons, property and mail between any points in the United States, directly and via intermediate points, and any points in France, and beyond France to points in third countries, as limited by applicable bilateral agreements.

Docket Number: OST-98-4010.
Date Filed: June 29, 1998.
Due Date for Answers, Conforming Applications, or Motions to Modify Scope: July 27, 1998.

Description: Application of Federal Express Corporation pursuant to 49 U.S.C. Section 41102 and Subpart Q, applies for issuance of a new Certificate of Public Convenience and necessity authorizing Federal Express to provide scheduled foreign air transportation of property and mail between points in the United States, on the one hand, and points in the forty-eight (48) foreign countries listed, on the other hand.

Dorothy W. Walker,
 Federal Register Liaison.
 [FR Doc. 98-18951 Filed 7-15-98; 8:45 am]
 BILLING CODE 4910-62-P

DEPARTMENT OF TRANSPORTATION

Aviation Proceedings, Agreements Filed During the Week Ending July 3, 1998

The following Agreements were filed with the Department of Transportation under the provisions of 49 U.S.C. Sections 412 and 414. Answers may be filed within 21 days of date of filing.

Docket Number: OST-98-4015

Date Filed: July 1, 1998

Parties: Members of the International Air Transport Association

Subject:

PTC12 Telex Mail Vote 946-r1-4
 USA-Austria/Belgium/Germany/Neth/
 Scand/Switz fares
 r1-002m, r2-054vv, r3-044v, r4-
 064vv
 Intended effective date: August 1,
 1998

Docket Number: OST-98-4016

Date Filed: July 2, 1998

Parties: Members of the International Air Transport Association

Subject:

PTC2 ME 0045 dated June 26, 1998
 Within Middle East Expedited Resos
 r-1-002j, r-2-070ba, r-3-071ea, r-4-
 072c, r-5-079b, r-6-085dd, r-7-
 002o

Intended effective date: August 1/
 October 1, 1998

Docket Number: OST-98-4017

Date Filed: July 2, 1998

Parties: Members of the International Air Transport Association

Subject:

COMP Telex Mail Vote 948
 Standard Condition Resolution for
 Special Fares
 Intended effective date: August 1,
 1998

Docket Number: OST-98-4020

Date Filed: July 2, 1998

Parties: Members of the International Air Transport Association

Subject:

PTC2 EUR-ME 0056 dated June 30,

1998

Europe-Middle East Expedited Resos
 002a

Intended Effective Date: August 1,
 1998.

Dorothy W. Walker,
 Federal Register Liaison.

[FR Doc. 98-18952 Filed 7-15-98; 8:45 am]

BILLING CODE 4910-62-P

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

Railroad Rehabilitation and Improvement Financing

July 9, 1998.

ACTION: Notice.

SUMMARY: The Transportation Equity Act for the 21st Century ("TEA-21"), Pub. L. No. 105-178, 112 Stat. 107 (1998), established the Railroad Rehabilitation and Improvement Financing program ("RRIF"). To assist in its implementation, the Federal Railroad Administration ("FRA") is requesting information on (1) types of projects which might benefit from financial assistance available under RRIF, and (2) potential applicants for such financial assistance.

ADDRESSES: Responses should be sent to James T. McQueen, Associate Administrator, Office of Railroad Development, Federal Railroad Administration, 400 7th Street, S.W., Washington, D.C. 20590.

FOR FURTHER INFORMATION CONTACT: James T. McQueen or JoAnne M. McGowan, Chief, Freight Programs, (202) 632-3290.

SUPPLEMENTARY INFORMATION: TEA-21 amended Title V of the Railroad Revitalization and Regulatory Reform Act of 1976, as amended, 45 U.S.C. 821 et seq., by establishing RRIF, which will make financial assistance, in the form of *direct loans and loan guarantees*, available for eligible railroad projects. The aggregate unpaid principal balance of all financial assistance outstanding may not exceed \$3.5 billion, of which not less than \$1 billion shall be available solely for other than Class I railroads.

Applicants for assistance include State or local governments, government sponsored authorities and corporations, shippers, railroads, and joint ventures, but *each application must include at least one railroad*. Funds can be used to (1) acquire, improve or rehabilitate intermodal or rail equipment or facilities, including track, components of track, bridges, yards, buildings and

shops; (2) refinance outstanding debt incurred for the purposes described above; or (3) develop or establish new intermodal or railroad facilities. Priority will be given to projects that—

- (1) enhance public safety;
- (2) enhance the environment;
- (3) promote economic development;
- (4) enable U.S. companies to be more competitive in international markets;
- (5) are endorsed by plans prepared under 23 U.S.C. 135, by the state or states in which they are located; or
- (6) preserve or enhance rail intermodal service to small communities or rural areas.

Prerequisites to granting financial assistance under RRIF include:

- (1) the repayment of the financial assistance is required to be made within a term of not more than 25 years from the date of its execution;
- (2) the financial assistance is justified by the present and probable future demand for rail services or intermodal facilities;
- (3) the applicant has given reasonable assurances that the facilities or equipment to be acquired, rehabilitated, improved, developed, or established with the proceeds of the financial assistance will be economically and efficiently utilized; and
- (4) the obligation can reasonably be repaid, using an appropriate combination of credit risk premiums and collateral offered by the applicant to protect the Federal Government.

The Federal Credit Reform Act of 1990, 2 U.S.C. 661, requires that before making any loan or loan guarantee, agencies of the Federal Government must have received an appropriation of funds from Congress adequate to cover the cost to the Government of making that loan or loan guarantee (referred to in the TEA-21 as the credit risk premium ("Premium")). However, this requirement is modified by TEA-21 which provides that *the source of the Premium may be either appropriated Federal funds, funds from a non-Federal source, or any combination thereof.* Congress has not appropriated funds to provide the Premium for borrowers, and in the absence of such an appropriation, the Premium associated with any direct loan or loan guarantee must be provided by the project applicant or infrastructure partner, which includes any participant in the project. The Premium must be paid before disbursement of any loan proceeds.

FRA anticipates many different applicants and for many types of projects. These could include *cooperative ventures for railroad acquisition, rehabilitation, or improvement involving railroads, states,*

local governments and/or shippers. Of particular interest to the FRA are the implementation of Positive Train Control systems and the improvement of highway-rail crossing protection. Further, RRIF is not limited to rail freight projects, and passenger service of all types are eligible.

FRA is seeking comments on a project or projects that a potential applicant may submit under the RRIF. Comments should include a brief description of the project, preliminary cost estimates, and type and term of financial assistance that might be sought. The information will not constitute an application, but it will greatly enhance FRA's understanding of the potential scope of applications and accordingly assist in the appropriate implementation of RRIF. Please submit comments by August 14, to provide an opportunity for adequate consideration.

Issued in Washington, D.C. on July 9, 1998.
Jolene M. Molitoris,
Federal Railroad Administrator.
[FR Doc. 98-18941 Filed 7-15-98; 8:45 am]
BILLING CODE 4910-06-P

DEPARTMENT OF THE TREASURY

Commission to Study Capital Budgeting

AGENCY: Commission to Study Capital Budgeting, DOT.

ACTION: Notice of meetings.

SUMMARY: The agenda for the next meetings of the Commission to Study Capital Budgeting includes discussions on capital budgeting issues and the draft outline for the final report on Friday, July 24. On Saturday morning, July 25, the Commission will continue its discussions of different aspects of capital budgeting and discuss the next steps to be taken in preparation of its report. The Commission's final report on capital budgeting is due on December 13, 1998. Meetings are open to the public. Limited seating capacity is available.

Dates, Times and Places of the Next Commission Meetings

July 24, 9:00 a.m. to 5:00 p.m., White House Conference Center, Lincoln Room (9:00 a.m. to Noon); Truman Room (Noon to 5:00 p.m.), 726 Jackson Place, NW, Washington, DC 20503

July 25, 1998, 9:00 a.m. to 12:00 noon, White House Conference Center, Truman Room, 726 Jackson Place, NW, Washington, DC 20503

The Commission is seeking all views on capital budgeting. Interested parties

may submit their views to: Dick Emery, Executive Director, President's Commission to Study Capital Budgeting, Old Executive Office Building (Room 258), Washington, DC 20503, Voice: (202) 395-4630, Fax: (202) 395-6170, E-Mail: capital_budget@omb.eop.gov, Website: <http://www.whitehouse.gov/WH/EOP/OMB/PCSCB/>

FOR FURTHER INFORMATION CONTACT: E. William Dinkelacker, Ph.D., Designated Federal Official, Room 4456 Main Treasury, Washington, DC 20220, Voice: (202) 622-1285, Fax: (202) 622-1294, E-Mail:

william.dinkelacker@treas.sprint.com

Angel E. Ray,

Committee Management Officer.

[FR Doc. 98-18927 Filed 7-15-98; 8:45 am]

BILLING CODE 4810-25-P

UNITED STATES INFORMATION AGENCY

Culturally Significant Objects Imported for Exhibition Determinations: "Monet in the 20th Century"

AGENCY: United States Information Agency.

ACTION: I hereby determine that the objects to be included in the exhibit "Monet in the 20th Century," (see list), imported from abroad for the temporary exhibition without profit within the United States, are of cultural significance. These objects are imported pursuant to a loan agreement with a foreign lender. I also determine that the exhibit or display of the listed exhibit objects at the Museum of Fine Arts, Boston, Massachusetts, beginning on or about September 20, 1998 through December 27, 1998 is in the national interest. Public Notice of these Determinations is ordered to be published in the Federal Register.

SUMMARY: Notice is hereby given of the following determinations: Pursuant to the authority vested in me by the Act of October 19, 1965 (79 Stat. 985.22 U.S.C. 2459), Executive Order 12047 of March 27, 1978 (43 FR 13359, March 29, 1978), and Delegation Order No. 85-5 June 27, 1985 (50 27393, July 2, 1985).

FOR FURTHER INFORMATION CONTACT: Paul Manning, Assistant General Counsel at 202/619-5997. The address is U.S. Information Agency, 301 4th Street, S.W., Washington, DC 20547-0001.

Dated: July 13, 1998.

Les Jin,

General Counsel.

[FR Doc. 98-18973 Filed 7-15-98; 8:45 am]

BILLING CODE 8230-01-M

ALASKA RAILROAD

Year	1998	1999	2000	2001	2002	2003
Authorization	\$5.25M	\$5.25M	\$5.25M	\$5.25M	\$5.25M	\$5.25M

Program Purpose

The program, in Section 7204 of TEA-21, is designed to allow the Secretary to fund capital improvements to the rail passenger operations of the state-owned Alaska Railroad.

Program Description

- This program allows the Secretary to make grants to the Alaska Railroad for capital rehabilitation of and improvements to its passenger services.

Formula

The program does not require a non-Federal funding match.

Funding

The TEA-21 authorization covers fiscal years 1998-2003 and is a general fund authorization which means that the funds must first be made available by the Congress in an appropriations act before the program can be implemented.

FRA Contact: Mark Yachmetz (202) 493-6389

E-mail: mark.yachmetz@fra.dot.gov

SEC. 7204. ALASKA RAILROAD.

(a) Grants.—The Secretary may make grants to the Alaska Railroad for capital rehabilitation of and improvements to its passenger services.

(b) Authorization of Appropriations.—There is authorized to be appropriated to carry out this section \$5,250,000 for each of fiscal years 1998 through 2003.

**TEA-21 §1602 RAIL AND INTERMODAL PROJECTS
BY DESIGNATED HIGH-SPEED RAIL CORRIDOR
(Includes T-21 Restoration Act changes, 7/6/98)**

NO. STATE PROJECT DESCRIPTION DOLLARS IN MILLIONS

California

410	California	Construct grade separation project at Redondo Junction, located in the North end of an Intermodal corridor of economic significance, as defined by California Streets and Highways Code, Division 3 Chapter 4.7 (commencing with the section 2190), Los Angeles \$6.65
448	California	Undertake safety enhancements along Monterey County railroad highway grade, Monterey, Co. \$2.1
465	California	Construct the South Central Los Angeles Exposition Park Intermodal Urban Access Project in Los Angeles \$19.5
481	California	Construct railroad at-grade crossings, San Leandro \$0.375
491	California	Construct Nogales Street at Railroad Street grade separation in Los Angeles County, California \$6.5
816	California	Upgrade Greenville Rd. and construct railroad underpass, Livermore \$5.1
35	California	Construct San Diego and Arizona Eastern Intermodal Yard, San Ysidro \$10
161	California	Enhance Ft. Bragg and Willitis passenger stations \$0.275
187	California	Rehabilitate historic train depot in San Bernadino \$2.625
198	California	Construct Alameda Corridor East Project \$9.5625
280	California	Construct I-5 rail grade crossings between I-605 and State Route 91 in Los Angeles and Orange Counties \$15.09

Chicago Hub

343	Illinois	Consolidate rail tracks and eliminate grade crossings as part of the Gateway Intermodal Terminal access project \$1.125
719	Illinois	Conduct Midwest Regional Intermodal facility feasibility study in Rochelle \$0.3
231	Indiana	Upgrade 4 warning devices on north/south rail line from Terre Haute to Evansville \$0.3
364	Indiana	Upgrade 14 warning devices on east/west rail line from Gary to Auburn \$1.05
901	Indiana	Repair signal wires, grade-crossing warning devices and other safety protections along South Shore railroad between Gary and Michigan City \$0.275
1055	Indiana	Conduct railroad relocation study in Muncie \$0.045
1325	Indiana	Conduct rail-highway feasibility project study in Muncie \$0.075

1354	Indiana	Undertake safety and mobility improvements involving street and street crossings and Conrail line, Elkhart \$1.5
1428	Indiana	Lafayette railroad relocation project in Lafayette, IN \$22.05
157	Michigan	Construct Monroe Rail Consolidation Project, Monroe \$4.5
1051	Michigan	Construct safety enhancements at rail crossings, Linden, Fenton, Swartz Creek and Gaines \$0.75
1221	Michigan	Construct intermodal freight terminal in Wayne, Co. \$18
1620	Michigan	Reconstruct and rehabilitate, including rail and interstate access improvements for the Detroit Waterfront Dock, Detroit \$6
Mid-west (Non-designated)		
1381	Iowa	Construct overpass to eliminate railroad crossing in Burlington \$3.475
1556	Iowa	Design, right-of-way and construction of a bridge over railroad tracks on airport access road in Sioux City \$1.5
527	Kansas	Construct grade separations on US36 and US77 in Marysville, KS \$3.15
754	Kansas	Construct road and rail grade separations in Wichita \$26.25
111	Kentucky	Construct highway-rail grade separations along the City Lead in Paducah \$0.825
1583	Kentucky	Construct highway rail grade separations along the City Lead in Paducah \$0.25
57	Minnesota	Conduct study of potential for diversion of traffic from the I-35 corridor to commuter rail, Chisago County north of Forest Lake along I-35 corridor to Rush City \$0.375
126	Minnesota	Construct grade crossing improvements, Morrison County \$1.35
570	Minnesota	Trunk Highway 53 DWP railroad bridge replacement, St. Louis Co. \$3.6
727	Minnesota	Construct railroad crossing connecting University of MN with City of Crookston \$0.15
1455	Minnesota	Restore MN transportation facility, Jackson Street Roundhouse, St. Paul \$0.75
110	Ohio	Construct highway-rail grade separations on Snow Road in Brook Park \$4.75
467	Ohio	Upgrade 1 warning device on the rail line from Marion to Ridgeway \$0.075
482	Ohio	Construct highway-rail grade separations on Heisley Road between Hendricks Road and Jackson Street in Mentor \$6.205
863	Ohio	Rail mitigation and improvement projects from Vermillion to Conneaut \$4.75
934	Ohio	Construct Black River intermodal transportation center \$3.45
985	Ohio	Upgrade 11 warning devices on the rail north/south line from Toledo to Deshler \$0.825
1046	Ohio	Construct grade separations at Front Street and Bagely Road, Berea \$14.25
1402	Ohio	Construct grade separations at Fitch Road in Olmsted Falls \$3.75

- 1463 Ohio Upgrade 2 warning devices on the rail north/south line from Columbus to Toledo \$0.15
- 1474 Ohio Construct grade separation at Dille Road and London Road in Cleveland \$8.0

Florida

Pacific Northwest

- 323 Oregon Construct right-of-way improvements to provide improved pedestrian access to MAX light rail, Gresham \$1
- 589 Oregon Repair Coos Bay rail bridge, Port of Coos Bay \$5.5
- 782 Oregon Construct South Rivergate rail overcrossing in Portland \$11
- 1346 Oregon Acquire and renovate facility to serve as multimodal transportation center, Eugene \$2
- 1421 Oregon Construct regional multimodal transportation center in Albany \$10
- 1695 Oregon Restore funding for Astoria Hazard Recovery Railroad Slide \$0.175
- 881 Washington Construct Edmonds Crossing Multi-modal transportation project in Edmonds, Washington \$4.5
- 1279 Washington Undertake FAST Corridor improvements with the amounts provided as follows: \$12,000,000 to construct the North Duwamish Intermodal Project, \$3,375,000 for the Port of Tacoma Road Project, \$2,250,000 for the SW Third St./BNSF project in Auburn, \$1,500,000 for the S.277th St/UP project in Auburn Kent, \$1,500,000 for the S. 180th St. E/BNSF project in Tukwila, \$750,000 for the 8th St. E/BNSF project in Pierce Col, and \$1,125,000 for the Shaw Rd. extension Puyallup \$24
- 1776 Washington Port of Longview Industrial Rail Corridor \$0.477
- 1789 Washington Edmonds Crossing multi-modal transportation project \$0.962
- 1803 Washington South 277th, Auburn (UP) \$0.5
- 1804 Washington South 277th, Auburn, (BNSF) \$0.5

Southeast

- 3 Virginia Commuter and freight rail congestion and mitigation project over Quantico Creek \$7.5
- 821 Virginia Construct historic restoration of Roanoke Passenger Station in Roanoke \$0.5
- 1764 Virginia Commuter/freight rail congestion/mitigation project over Quantico Creek \$2
- 1770 Virginia Operate and conduct research on the "Smart Road" in Blacksburg \$6.025

Southeast Non-designated

- 178 Georgia Conduct study of a multimodal transportation corridor along GA-400 \$17.25

288	Georgia	Conduct a study of transportation alternatives in Northwest Georgia between Atlanta and Chattanooga \$5.0
461	Georgia	Construct multi-modal passenger terminal, Atlanta \$12
508	Georgia	Conduct a study of a multimodal transportation corridor from Lawrenceville to Marietta \$2.4
910	Georgia	Construct surface transportation facilities along Atlanta-Griffin-Macon corridor \$29.25
1545	Georgia	Construct Athens to Atlanta transportation corridor \$8
1547	Georgia	Conduct study of multimodal transportation corridor along GA 400 \$25
1522	Georgia	Construct multimodal passenger terminal, Atlanta \$8.1

TEA-21 Designated Corridors

Gulf Coast

951	Louisiana	Construct Metairie Rail Improvements and Relocation project in Jefferson and Orleans Parishes, LA \$6
1593	Louisiana	Louisiana segment, Gulf Coast High speed rail \$1
1600	Louisiana	New Orleans CBD to New Orleans Int'l Airport, commuter rail \$5
430	Texas	Construct Manchester grade separations in Houston \$12
485	Texas	Construct highway-rail-marine intermodal project, Corpus Christi \$8.25
1030	Texas	Relocate railroad tracks to eliminate road crossings, and provide for the rehabilitation of secondary roads providing access to various parts of the Port and the construction of new connecting roads to access new infrastructure safely and efficiently, Brownsville \$4.5
1127	Texas	Construct US highway 59 railroad crossing overpass in Texarkana \$2.625
1271	Texas	Construct rail grade separations (Rosenburg Bypass) at US 59(S) \$3
1812	Texas	Relocate railroad Bryan/College Station at Texas A&M or any other high priority project in Texas \$10
1820	Texas	Relocate railroad line in Bryan and College Station, Texas A&M University \$15

Keystone

318	Pennsylvania	Construct Philadelphia Intermodal Gateway Project at 30 th Street Station \$6
345	Pennsylvania	Eliminate 16 at-grade rail crossings through Erie \$19.4
591	Pennsylvania	Construct rail mitigation and improvement projects from Philadelphia to New Jersey line \$5
1087	Pennsylvania	Construct Route 72 overpass at Conrail in Lebanon \$6.6075
1719	Pennsylvania	Improvements to SR 412 from I-78 Bethlehem Steel site and road improvements for rail intermodal facility, Bethlehem \$2

Empire State

17	New York	Reconstruct Springfield Blvd. between the Long Island rail mail line south to Rockaway Blvd., Queens County \$3
44	New York	Upgrade and improve Saratoga to Albany intermodal transportation corridor \$12.2
162	New York	Capital improvements for the car float operations in Brooklyn, NY for the New York City Economic Development Corp. \$14
204	New York	Rehabilitate Queens Blvd./Sunnyside Yard Bridge, New York City \$6
294	New York	Construct intermodal transportation hub in Patchogue \$1.875
309	New York	Construct Phase II of the City of Mount Vernon's New Haven Railroad Redevelopment Project \$2
580	New York	Construct pedestrian access bridge from Utica Union Station \$.025
1245	New York	Conduct Trans-Hudson Freight Improvement MIS, New York City \$3.5
1295	New York	Construct intermodal facility in Yonkers, Westchester Co. \$8.687
1459	New York	Construct Poughkeepsie Intermodal Facility in Poughkeepsie \$3.75
1675	New York	Construct intermodal project at Castle Clinton and Battery Pk., NYC \$6
1679	New York	Renovate/reconstruct James A. Farley Post Office, NYC as new Amtrak Sta. \$40
1680	New York	Renovate Hellgate Bridge, NYC \$15

Northeast Corridor

394	Connecticut	Improve pedestrian and bicycle connections between Union Station and downtown New London \$3.39
1535	Connecticut	Reconstruction of railroad electrical catenary serving commuter lines between New Haven and Stamford \$23.433
233	D.C.	Implement Geographical Information System, Washington, D.C. \$7.5
1092	D.C.	Conduct MIS of light rail corridors, D.C. \$0.75
281	Massachusetts	Undertake improvements to South Station Intermodal Station \$2.25
429	Massachusetts	Renovate Union Station Intermodal Transportation Center in Worcester \$6.5
781	Massachusetts	Construct Hyannis Intermodal Transportation Center, Hyannis \$2.4
1155	Massachusetts	Rehabilitate Union Station in Springfield \$12
121	New Jersey	Improve grade separations on the Garden State Parkway in Cape May County, New Jersey \$5.0
474	New Jersey	Relocate and complete construction of new multi-modal facility, Weehawken \$12
1039	New Jersey	Construct and/or reconstruct intermodal transportation and maintenance facility in Union City in order to replace the NJ Transit Depot \$2
1082	New Jersey	Undertake improvements associated with the South Amboy Regional Intermodal Center \$12

- 1357 New Jersey Construct, reconstruct and integrate multi-transportation modes – international airport, seaport, rail, national highway system and brownfields – to establish an international intermodal transportation center and corridor between and within the cities of Bayonne, Elizabeth and Newark, NJ.\$2
- 1663 New Jersey Construct roadway network through the Bergen Arches railroad-right-of way, Hudson City \$27.5

Non-Corridor State Projects

- 240 Alaska Construct capital improvements to intermodal freight and passenger facilities servicing the Alaska Marine Highway and other related transportation modes in Seward provided that the state authority which owns the current intermodal facilities carries out this project with the entire amount of funds provided \$4.5
- 517 Alaska Construct Pt. Mackenzie Intermodal Facility \$6.75
- 381 Arkansas Construct Baseline Road RR grade separation, Little Rock \$3.75
- 1420 Arkansas Conduct planning for highway 278 and rail for the Warren/Monticello Arkansas Intermodal Complex \$0.875
- 275 Idaho Construct critical interchanges and grade crossings on U.S. 20 between Idaho Falls and Chester \$7.5
- 1062 Nevada Improve at-grade railroad crossings in Reno \$1.875
- 8 Tennessee Alternative transportation systems, Rutherford \$5.1
- 227 Tennessee Construct park and ride intermodal centers for Nashville/Middle Tennessee Commuter Rail \$8
- 1772 Vermont Upgrade and Improve Publicly-Owned Vermont Rail Infrastructure from Bennington to Burlington \$9.168

Studies and Reports (§1213): (d) Southwest Border Transportation Infrastructure report (U.S./Mexico) is to address adequacy of transportation infrastructure in the border area, including highways, bridges, railway lines, and border inspection facilities (due within 1 year of enactment); (k) Interstate High Speed Ground Transportation report is to address feasibility of providing high speed rail passenger service from Atlanta to Charleston, SC (due within 2 years of enactment).

Section 1213 (k) Study of Interstate High Speed Ground Transportation.--

(1) Study.—The Secretary shall conduct a study to assess the feasibility of providing high speed rail passenger service from Atlanta, Georgia, to Charleston, South Carolina. The study shall also assess the potential impact of rail service on the tourism industry.

(2) Report.—Not later than 2 years after the date of enactment of this Act, the Secretary shall transmit to the Committee on Transportation and Infrastructure of the House of Representatives and to the Committee on Environment and Public Works of the Senate a report on the results of the study, together with any recommendations the Secretary determines appropriate as a result of the study.

Vicksburg/Jackson, MS Rail Facilities (§1217(k): All funds authorized in TEA-21 for the State of Mississippi may be used to construct, reconstruct or rehabilitate rail lines in the vicinity of Vicksburg and Jackson, MS.

Pilot Program for Intercity Rail Infrastructure Investment From Mass Transit Account of Highway Trust Fund (§3021): authorizes the Secretary to create a pilot program in the state of Oklahoma to determine the benefits of using funds from the Mass Transit Account for intercity passenger rail; report due to the Congress by 10/1/2002.

**SEC. 3021. PILOT PROGRAM FOR INTERCITY RAIL INFRASTRUCTURE
INVESTMENT FROM MASS TRANSIT ACCOUNT OF HIGHWAY
TRUST FUND.**

(a) In General.—The Secretary shall establish a pilot program to determine the benefits of using funds from the Mass Transit Account of the Highway Trust Fund for intercity passenger rail. Any assistance provided to the State of Oklahoma under sections 5307 and 5311 of title 49, United States Code, during fiscal years 1998 through 2003 may be used for capital improvements to, and operating assistance for, intercity passenger rail service.

(b) Report.—

(1) In general.—Not later than October 1, 2002, the Secretary shall submit to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Banking, Housing, and Urban Affairs of the Senate a report on the pilot program established under this section.

(2) Contents.—The report submitted under paragraph (1) shall include—

(A) an evaluation of the effect of the pilot program on alternative forms of transportation within the State of Oklahoma;

(B) an evaluation of the effect of the program on operators of mass transportation and their passengers;

(C) a calculation of the amount of Federal assistance provided under this section transferred for the provision of intercity passenger rail service; and

(D) an estimate of the benefits to intercity passenger rail service, including the number of passengers served, the number of route miles covered, and the number of localities served by intercity passenger rail service.

FTA

INDEX

SEARCH

FEEDBACK

ABOUT

U.S. Department of Transportation

U.S. Department of Transportation

FEDERAL TRANSIT ADMINISTRATION

TEA-21 NEW START PROJECT AUTHORIZATIONS

	State	Area	Project	Amount
I- AUTHORIZED FOR FINAL DESIGN & CONSTRUCTION				
1	AK	Hollis-Ketchikan	Hollis-Ketchikan Ferry	
2	AZ	Phoenix	Fixed Guideway	
3	AR	Little Rock	River Rail	
4	CA	Sacramento	Placer County Corridor	
5	CA	San Jose	Tasman Corridor Light Rail	
6	CA	Los Angeles	Metrolink [Union Station-Fullerton]	
7	CA	Sacramento	Folsom Extension	
8	CA	San Francisco	Bayshore Corridor	
9	CA	Los Angeles	MOS-3	
10	CA	Stockton	Altamont Commuter Rail	
11	CA	Los Angeles	Santa Monica Boulevard Transitway	
12	CA	Monterey County	Monterey County Commuter Rail	
13	CA	Santa Cruz	Fixed Guideway	
14	CA	San Francisco	BART to San Francisco International Airport Extension	
15	CA	San Diego	Oceanside-Escondido Corridor	
16	CA	Orange County	Fullerton-Irvine Corridor	
17	CA	San Joaquin	Regional Transit Corridor	\$14,000,000
18	CA	Sacramento	South Corridor	
19	CA	Los Angeles	Metrolink San Bernardino Line	
20	CA	San Diego	Mission Valley East and Mid-Coast Corridor	325,000,000
21	CA	San Diego	Mid-Coast LRT Corridor	
22	CO	Denver	Southwest LRT	
23	CO	Colorado	Roaring Fork Valley Rail	40,000,000
24	CO	Denver	East Corridor [Airport]	
25	CO	Denver	Southeast LRT [I-25 between 6th & Lincoln]	10,000,000
26	CO	Denver	West Corridor LRT	
27	CT	Hartford	Griffin Line	
28	DC/MD	Washington, DC	Largo Extension	
29	FL	Tampa Bay	Regional Rail	2,000,000

30	FL	Miami	Palmetto Metrorail	8,000,000
31	FL	Fort Lauderdale	Fort Lauderdale-West Palm Beach-Miami Tri-County Commuter Rail	20,000,000
32	FL	Orlando	Central Florida Light Rail System	100,000,000
33	FL	Miami	East-West Multimodal Corridor	20,000,000
34	FL	Miami	North 27th Avenue Corridor	
35	FL	Miami	South Busway Extension	
36	GA	Atlanta-Griffin	Atlanta-Griffin Commuter Rail	
37	GA	Atlanta-Athens	Atlanta-Athens Commuter Rail	
38	GA	Atlanta	North Line Extension	
39	IL	Chicago	CTA Douglas Branch	315,000,000
40	IL	Chicago	Navy Pier-McCormick Place Busway	
41	IL	Chicago	North Central Upgrade Commuter Rail	
42	IL	Chicago	Ravenswood Line Extension	
43	IL	Chicago	Southwest Extension	
44	IL	Chicago	West Line Extension	
45	IL	E. St. Louis-St. Clair County	Mid-America Airport Corridor	
46	IN	Northern Indiana	Westlake Commuter Rail Link	
47	KY	Louisville	Jefferson County Corridor	
48	LA	New Orleans	Canal Streetcar	
49	MD	Baltimore	Light Rail Double Track	120,000,000
50	MD	Baltimore/Wash	MARC Commuter Rail Improvements	185,000,000
51	MD	Baltimore	Central LRT Extension to Glen Burnie	
52	MA	Boston	Massport Airport Intermodal Transit Connector	
53	MA	Boston	South Boston Piers Transitway	
54	MA	Boston	North-South Rail Link	
55	MA	Boston	North Shore Corridor & Blue Line Extension to Beverly	50,000,000
56	MN	Twin Cities	Northstar Corridor [Downtown Minneapolis - Anoka County-St. Cloud]	6,000,000
57	MN	Twin Cities	Transitways Corridors	120,000,000
58	MO	St. Louis	Cross County Corridor	
59	MO	Kansas City	Southtown Corridor	
60	MO/KS	Kansas City	I-35 Commuter Rail	30,000,000
61	NV	Las Vegas	Las Vegas Corridor	155,000,000
62	NJ	New Jersey	Urban Core	
63	NJ	New Jersey	New York, Susquehanna & Western Commuter Rail	
64	NJ	West Trenton-Newark	West Trenton Line [West Trenton-Newark]	
65	NJ	Northwest NJ	Northeast Rail Corridor	
66	NM	Albuquerque	High Capacity Corridor	
67	NY	New York	Long Island Railroad East Side Access	353,000,000

68	NY	New York	New York-Staten Island Ferry-Whitehall Intermodal Terminal	40,000,000
69	NY	New York	8th Avenue Subway Connection	
70	NY	New York	New York-Brooklyn-Staten Island Ferry	
71	NH/MA	Nashua,NH/Lowell,MA	Nashua,NH-Lowell, MA Commuter Rail	
72	NC	Southeast North Carolina	Southeastern North Carolina Corridor	
73	NC	Raleigh-Durham	Regional Transit Plan	
74	NC	Charlotte	North-South Corridor Transitway	
75	OH	Cleveland	Cleveland-Akron-Canton Commuter Rail	
76	OH	Cleveland	Waterfront Line Extension	
77	OH	Cleveland	I-90 Corridor to Ashtabula County	
78	OH	Cleveland	Berea Metroline Extension	
79	OH	Cleveland	Euclid Corridor Extension	
80	OH	Cleveland	Blue Line Extension	
81	OR	Portland	Westside-Hillsboro Corridor	
82	OR	Portland	South-North Corridor	25,000,000
83	PA	Pittsburgh	North Shore-Central Business District	20,000,000
84	PA	Pittsburgh	MLK Busway Extension	
85	PA	Pittsburgh	Airborne Shuttle System	
86	PA	Philadelphia	Schuylkill Valley Metro	75,000,000
87	PA	Pittsburgh	Stage II Light Rail	100,200,000
88	PR	San Juan	Tren Urbano Extension to Minillas	
89	PR	San Juan	Tren Urbano	
90	TN	Nashville	Commuter Rail	
91	TN	Memphis	Medical Center Extension	
92	TX	Houston	Regional Bus Plan- Phase I	
93	TX	Austin	NW/North Central/SE - Airport LRT	
94	TX	Dallas/Fort Worth	RAILTRAN [Phase II]	12,000,000
95	TX	Galveston	Trolley Extension	
96	TX	Dallas	North Central Extension	188,000,000
97	UT	Salt Lake City	Light Rail [Airport to University of Utah]	
98	UT	Salt Lake City	Salt Lake City-Ogden-Provo Commuter Rail	
99	UT	Salt Lake City	South LRT	
100	VA	Wash,DC-Richmond,VA	Washington-Richmond Rail Corridor Improvements	
101	VA	Wash,DC/VA	Dulles Corridor Extension	86,000,000
102	VA	Norfolk	Norfolk-Virginia Beach Corridor	
103	WA	Spokane	South Valley Corridor Light Rail	
104	WA	Seattle	Sound Move Corridor [Earmarked funds for Commuter Rail]	40,000,000

105	WA	Seattle	Southworth High Speed Ferry	
106	WV	Morgantown	Personal Rapid Transit	
107	WI	Milwaukee	East-West Corridor	
108	NM	Albuquerque	Greater Albuquerque Mass Transit Project	90,000,000
109	CT	Hartford	City Light Rail Connection to Central Business District	33,000,000
110	MA/RI	Boston-Providence	Boston-Providence Commuter Rail	10,000,000
111	NY	New York	St. George's Ferry Intermodal Terminal	20,000,000
112	NY	New York	Midtown West Ferry Terminal	16,300,000
113	FL	St. Petersburg	Pinellas County- Mobility Initiative	
114	GA	Atlanta	Atlanta-MARTA Extension (S. DeKalb-Lindbergh)	
Total- Final Design & Construction				2,628,500,000

II- AUTHORIZED FOR ALTERNATIVES ANALYSIS & PRELIMINARY ENGINEERING

1	AL	Birmingham	Transit Corridor	87,500,000
2	CA	San Francisco-San Jose	Caltrain Extension to Hollister	
3	CA	Oakland	Oakland Airport-BART Corridor	
4	CA	Fremont	South Bay Corridor	
5	CA	Marin/Sonoma Counties	North Bay Commuter Rail	
6	CA	Los Angeles	MOS-4 East Side Extension (II)	
7	CA	Los Angeles	MOS-4 San Fernando Valley East-West	
8	CA	Los Angeles	LOSSAN- [Del Mar - San Diego]	
9	CA	Los Angeles Area	Riverside-Perris Rail Passenger Service	
10	CA	Los Angeles Area	Redlands-San Bernardino Transportation Corridor	
11	CA	Riverside County	San Jacinto-Branch Line	
12	CO	Colorado	North Front Range Corridor [Fort Collins-Denver]	
13	DC	Washington, DC	Georgetown-Ft. Lincoln	
14	FL	Miami	Northeast Corridor	
15	FL	Miami	Kendall Corridor	
16	FL	Jacksonville	Fixed Guideway Corridor	
17	GA	Atlanta	Georgia 400 Multimodal Corridor	
18	GA	Atlanta	MARTA I-285 Transit Corridor	
19	GA	Atlanta	MARTA Marietta-Lawrenceville Corridor	
20	GA	Atlanta	MARTA South DeKalb Comprehensive Transit Program	
21	IL	Chicago	Comisky Park Station	
22	IL	Chicago	Inner Circumferential Commuter Rail	

23	IN	Indianapolis	Northeast Indianapolis Corridor	10,000,000
24	IA	Sioux City	Light Rail	10,000,000
25	LA	New Orleans	Desire Streetcar	
26	LA	New Orleans	Airport- CBD Commuter Rail	
27	ME	Maine	High Speed Ferry Service	
28	MD	Wash_DC/MD	Maryland Route 5 Corridor	
29	MD	Baltimore	People Mover	
30	MD	Baltimore	Metropolitan Rail Corridor	
31	MA	Boston	Urban Ring	
32	MN	Twin Cities	Washington County Corridor [Hastings-St. Paul]	
33	NJ	Northern NJ	Union Township Station [Raritan Valley Line]	
34	NJ	Bergen County	Bergen County Cross County Light Rail	5,000,000
35	NJ	North NJ	Trans-Hudson Midtown Corridor	5,000,000
36	NM	Albuquerque	High Capacity Corridor	
40	NM	Santa Fe	Santa Fe - El Dorado Rail Link	10,000,000
37	NY	New York	Queens West Light Rail Link	
38	NY	Philadelphia	Lower Merion Township	
39	NY	Newburgh	LRT System	
41	NY	New York	Nassau Hub	10,000,000
42	NY	New York	North Shore Railroad	
43	NY	New York	Manhattan East Side Link - [Second Avenue Subway]	5,000,000
44	NY	New York	Lower Manhattan Access	
45	NY	New York	Brooklyn-Manhattan Access	
46	NY	New York	Broadway-Lafayette & Bleeker Street Transfer	
47	NY	New York	Astoria-East Elmhurst Extension	
48	OH	Cleveland	Northeast Ohio- Commuter Rail	
49	OH	Toledo	CBD to Zoo	
50	OH	Cleveland	Lorain-Cleveland Commuter Rail	
51	OH	Dayton	Regional Riverfront Corridor	
52	OH/KY	Cincinnati	Cincinnati/Northern Kentucky Corridor	65,000,000
53	PA	Philadelphia	Broad Street Line Extension	
54	PA	Philadelphia	Cross County Metro	
55	PA	Scranton	Laurel Line Intermodal Corridor	
56	PA	Harrisburg	Cumberland/Dauphin County Corridor 1 Commuter Rail	20,000,000
57	RI	Providence	Providence-Pawtucket Corridor	
58	SC	Charleston	Monobeam	
59	TN	Knoxville	Electric Transit	
60	TN	Memphis	Regional Rail Plan	

61	TX	Dallas	DART LRT Extensions	
			Southeast Extension	20,000,000
			Northeast Extension	12,000,000
62	TX	Dallas	Las Colinas Corridor	
63	TX	El Paso	International Fixed Guideway [El Paso-Juarez]	
64	TX	Houston	Advanced Transit Program	
65	UT	Salt Lake City	Draper Light Rail Extension	
66	UT	Salt Lake City	West Jordan Light Rail Extension	
67	VA	Tidewater Virginia	Williamsburg-Newport News-Hampton LRT	
68	WA	Seattle	SEATAC- Personal Rapid Transit	
69	IL	Chicago	Northwest Rail Transit Corridor	
70	VT	Burlington	Burlington-Essex Commuter Rail	
Total- Alternatives Analysis & Preliminary Engineering				259,500,000
III- AUTHORIZED [*]				
1	CT	Bridgeport	Intermodal Corridor	34,000,000
2	CT	New London	Waterfront Access	10,000,000
3	CT	Hartford	Old Saybrook-Hartford Rail Extension	10,000,000
4	CT	Stamford	Fixed Guideway Connector	18,000,000
5	NM	Albuquerque	Albuquerque Alvarado Intermodal Center	5,000,000
6	PA	Philadelphia-Pittsburgh	Philadelphia-Pittsburgh High Speed Rail	10,000,000
7	RI	Rhode Island	Integrated Intermodal Transportation	25,000,000
[*] Lists those projects not also included in the (1) Final Design & Construction; and (2) Alternatives Analysis & Preliminary Engineering lists				
Total- Authorized				112,000,000
Total Specified Amounts Authorized for New Starts Projects				\$3,000,000,000
IV- SPECIFIC AMOUNTS TO BE MADE AVAILABLE- FERRY PROJECTS				
1	AK/HI	New Systems- Ferry Projects [\$10.4 million per year- FY 1999 thru FY 2003]- Guaranteed		52,000,000
2	AK/HI	New Systems- Ferry Projects [\$3.6 million per year- FY 1999 thru FY 2003] - Non-Guaranteed		18,000,000
Total Specific Amounts to be made Available- Ferry Projects				\$70,000,000

TAB 8 - FY 1999 Budget Material

- **FY 1999 House Report**
- **FY 1999 Senate Report**
- **FY 1999 Transportation Appropriations
Conference Report**
- **Amtrak Strategic Business Plan Summary**

FY 1999 House Report

LIMITATIONS ON OBLIGATIONS

The Committee recommends a \$100,000,000 limitation on obligations for motor carrier safety grants, the same amount guaranteed under TEA21. The Committee recommends the following allocation:

Basic motor carrier safety grants	\$80,000,000
Performance based incentive grant program	
Border assistance	4,500,000
High-priority activities	4,500,000
Training	1,000,000
Information systems	10,000,000

Safety performance incentive grant program.—The Committee has not provided separate funding for the new safety performance incentive grant program because OMC has yet to issue a rule-making establishing performance-based criteria for the states. Until a final rule is issued that highlights the goals and guidelines of the program and identifies how states will compete for these incentive grants, the Committee believes that it is premature to fund this effort. A final rule is not anticipated until the end of fiscal year 1999. Although the Committee has not provided funding for this effort in fiscal year 1999, such action does not prejudice the grant program from receiving funding in future years.

Border assistance.—The Committee directs that none of the funds provided for border assistance should be provided to the second tier states—states that border Arizona, California, New Mexico, or Texas—until Mexican commercial motor vehicles are allowed to freely traverse the four border states. Second tier states do not need assistance because Mexican carriers cannot proceed beyond the border states and into the second tier states.

Information systems.—The Committee has provided \$10,000,000 for information systems. Of this total, \$3,000,000 shall be used to help each state improve its information systems, computers, and evaluation capabilities; \$1,000,000 shall be for driver safety activities to improve the commercial drivers license program or for judicial outreach; and \$5,000,000 shall be for the expansion of PRISM.

Truck and bus accidents.—The Committee is concerned about the growing number of truck and bus accidents. After years of declining crash rates and fatalities rates, both large trucks and intercity passenger buses are experiencing an upswing in crash and fatality rates. In comparison, accident and fatality rates for all vehicles are much lower and are not increasing. The Committee directs OMC to monitor this situation closely and report to the House and Senate Committees on Appropriations on new and innovative efforts the administration is taking to reduce the number of accidents and fatalities and what additional steps can be taken if this trend continues throughout fiscal year 1998.

FEDERAL RAILROAD ADMINISTRATION

SUMMARY OF FISCAL YEAR 1999 PROGRAM

The Federal Railroad Administration (FRA) is responsible for planning, developing, and administering programs to achieve safe operating and mechanical practices in the railroad industry, as well as managing the high speed ground transportation program.

Grants to the National Railroad Passenger Corporation (Amtrak) and other financial assistance programs to rehabilitate and improve the railroad industry's physical plant are also administered by the FRA.

The total recommended program level for the FRA for fiscal year 1999 is \$729,316,000, which is \$22,043,000 less than requested and \$207,474,000 below the 1998 level. The following table summarizes the fiscal year 1998 program levels, the fiscal year 1999 program requests and the Committee's recommendations:

Program	Fiscal year 1998 enacted level	Fiscal year 1999 request	Recommended in the bill
Office of the administrator	\$20,290,000	\$21,573,000	\$21,367,000
Railroad safety	57,067,000	61,959,000	60,948,000
Nationwide differential global positioning system		3,800,000	
Railroad research and development	20,758,000	20,757,000	20,477,000
Northeast corridor improvement program	250,000,000		
Next generation high speed rail	20,395,000	12,594,000	15,294,000
Rhode island rail development	10,000,000	10,000,000	2,900,000
Grants to the National Passenger Railroad Corporation	543,000,000	621,476,000	509,230,000
Alaska railroad	15,280,000		
Emergency railroad rehabilitation and repair	(9,800,000)		
Total	936,790,000	751,359,000	729,316,000

¹ Funding for the Northeast Corridor Improvement Program is included in capital grants to the National Passenger Railroad Corporation's budget request.

² Includes railroad retirement payments.

³ Funding is for capital grants, the Northeast Corridor Improvement Program, Pennsylvania Station redevelopment and expenses of the Office of the Secretary. All funds are requested from the Highway Trust Fund.

⁴ Excludes reductions of \$49,000 for TASC.

OFFICE OF THE ADMINISTRATOR

Appropriation, fiscal year 1998 ¹	\$20,290,000
Budget estimate, fiscal year 1999	21,573,000
Recommended in the bill	21,367,000
Bill compared with:	
Appropriation, fiscal year 1998	-1,077,000
Budget estimate, fiscal year 1999	-206,000

¹ Excludes reductions of \$29,000 for TASC.

This account provides funds for executive direction and administration, policy support, passenger and freight services, salaries and expenses, and contractual support. The Committee recommends an appropriation of \$21,367,000 to continue the office of the administrator and for passenger and freight service assistance functions.

Recommended adjustments to the budget request are as follows:

Delete funding for the electronic grant project	-\$200,000
Delete funding for acquisition management training	-6,000

The Committee has denied funding for the electronic grant project and acquisition management training department-wide due to budget constraints.

Train traffic noise.—It has been brought to the Committee's attention that increased rail traffic in certain urban areas has given rise to noise and safety concerns. The Committee understands that efforts are underway to develop technology that may address train whistle noise issues and that FRA is currently considering regulations on this issue. The Committee urges FRA to work with the City of Riverside, California, and the affected railroads to address the City's concerns. The Committee also urges the Administrator to

consider the City of Riverside, California, as a test site for any technology developed to reduce whistle noise.

Coon Rapids, Minnesota whistle ban project.—The city of Coon Rapids, Minnesota, has been working to develop safe and quite alternatives to trains blowing their warning whistles at grade crossings. ~~The city has assembled a proposal for implementation of traffic islands, special signing and video cameras as at its grade crossings.~~ The city has assembled a proposal for implementation of traffic islands, special signing, and video cameras at its grade crossings, in lieu of trains blowing their warning whistles. The Committee urges FRA to consider the City of Coon Rapids as a Model test site for any technology developed as alternatives to train whistles.

RAILROAD SAFETY

Appropriation, fiscal year 1998 ¹	\$57,067,000
Budget estimate, fiscal year 1998	61,959,000
Recommended in the bill	60,948,000
Bill compared with:	
Appropriation, fiscal year 1998	+3,881,000
Budget estimate, fiscal year 1999	-1,011,000

¹ Excludes reductions of \$17,000 for TASC.

The federal role in the railroad safety program is to protect railroad employees and the public by ensuring the safe operation of passenger and freight trains. The authority to accomplish this role is found in the Federal Railroad Safety Act of 1970 (as amended), the Department of Transportation Act, and the Hazardous Materials Transportation Act. Greatly expanded railroad safety authority was granted to the FRA under the Rail Safety Improvement Act of 1998.

The Committee recommends a total appropriation of \$60,948,000 for railroad safety programs in fiscal year 1999. The following reductions are made to the budget request:

Hire 24 instead of 32 new inspectors	- \$420,000
Hold travel to a 10 percent increase	- 591,000

Inspectors.—The Committee has provided \$1,271,000 for 24 new safety inspectors. FRA had requested funding for 32 positions. Of these positions, eight positions would conduct administrative and liaison activities. Due to budget constraints and a high number of vacancies currently in the railroad safety program, the committee has denied funding for these eight positions.

Travel and transportation of things.—The Committee has held travel and transportation of things to an increase of 10 percent instead of the 21 percent increase requested (-\$591,000). Such a significant increase is not necessary with fewer personnel being hired.

NATIONWIDE DIFFERENTIAL GLOBAL POSITIONING SYSTEM

Appropriation, fiscal year 1998	
Budget estimate, fiscal year 1999	\$3,000,000
Recommended in the bill	
Bill compared with:	
Appropriation, fiscal year 1998	
Budget estimate, fiscal year 1999	- 3,000,000

The administration has requested a new appropriation to enable the installation of nationwide differential global positioning system (DGPS) transmitters throughout the United States. This system would enhance an existing Coast Guard network. Together, these two networks will be used to support positive train control. The Committee has denied funding for this project under this heading and has also denied funding for a related request within the Federal Highway Administration's limitation on general operating expenses.

In fiscal year 1998, Congress appropriated \$2,400,000 to the Coast Guard to begin converting the Air Force Ground Wave Emergency Network (GWEN) sites into a DGPS network located within the interior of the United States and Alaska. To date, the Coast Guard has not converted any systems because of delays in completing an interagency memorandum of agreement to begin this project.

Beginning in the year 2000, the department plans to collect contributions for this network from up to 17 other federal agencies and private sources to fund the conversion of GWEN sites to a DGPS network. The Department has stated that these agencies, particularly the Department of Agriculture, will be the primary beneficiaries of this information. Since the Department of Transportation is not the principal beneficiary, the Committee believes that it should not be the only source of funding for this system in fiscal year 1999 or beyond. The Committee directs the department to work with other federal agencies that plan on utilizing the DGPS network to develop an equitable funding scheme for (1) the conversion of the GWEN system to DGPS and (2) long-term operations and maintenance costs once the new system is established. The results of this work should be provided to the House and Senate Committees on Appropriations by March 1, 1999. This Committee would be disinclined to re-evaluate budget requests for this program until such information is available.

RAILROAD RESEARCH AND DEVELOPMENT

Appropriation, fiscal year 1998 ¹	\$20,758,000
Budget estimate, fiscal year 1999	20,757,000
Recommended in the bill	20,477,000
Bill compared with:	
Appropriation, fiscal year 1998	- 281,000
Budget estimate, fiscal year 1999	- 280,000

¹ Excludes reductions of \$3,000 for TASC.

The railroad research and development appropriation finances contract research activities as well as salaries and expenses necessary for supervisory, management, and administrative functions. The objectives of this program are to reduce the frequency and severity of railroad accidents and to provide technical support for rail safety rulemaking and enforcement activities.

The Committee recommends an appropriation of \$20,477,000 for fiscal year 1999. The following reductions are made:

Delete funding maglev initiative	-\$150,000
Delete funding for TTC site facilities	- 130,000

Maglev initiative.—The Committee has deleted funding for the maglev initiative. The Administration has requested \$150,000 to

evaluate maglev technology; however, there are no maglev projects currently underway in the United States to transport rail passengers for the FRA to evaluate.

Section 1218 of TEA21 provides funding for maglev deployment within the overall federal-aid highway program limitation. FRA is expected to manage this program. Funding is available to FRA for planning and project oversight once initial project submissions have been approved. Since funding will be available within the Federal Highway Administration, the Committee does not expect to see a request for maglev oversight in future FRA budget requests.

Transportation Technology Center (TTC) site facilities.—Until recently, the Association of American Railroads (AAR) operated and maintained the TTC under a non-competitive arrangement with FRA. Recently, AAR has elected to spin off the TTC into a separate, for-profit entity. As a commercial entity, TTC should not be dependent on federal funds for its upkeep. As such, the Committee has deleted funding for TTC site facilities (-\$130,000).

Bill language.—The Committee has included the requested bill language that allows FRA to sell old aluminum reaction rail at TTC. The aluminum is an unused asset that could be sold to raise funds for needed capital improvements at the TTC. This sale would offset the reductions the Committee made in the budget request for TTC upkeep.

RAILROAD REHABILITATION AND IMPROVEMENT FINANCING PROGRAM

TEA21 established a railroad rehabilitation and improvement financing loan and loan guarantee program. The aggregate unpaid principal amounts of the obligations may not exceed \$3.5 billion at any one time. Not less than \$1 billion is reserved for projects primarily benefiting freight railroads other than class I carriers. The funding may be used (1) to acquire, improve, or rehabilitate intermodal or rail equipment or facilities, including track, components of track bridges, yards, buildings, or shops; (2) to refinance existing debt; or (3) to develop and establish new intermodal or railroad facilities. No federal appropriation is required since a non-federal infrastructure partner may contribute the subsidy amount required by the Credit Reform Act of 1990 in the form of a credit risk premium. Once received, statutorily established investigation charges are immediately available for appraisals and necessary determinations and findings. As such, the Committee has not provided an appropriation for this program.

This loan guarantee program provides an opportunity for developing significant rail infrastructure improvements benefiting the national transportation system. The Committee anticipates that the Department will likely receive applications incorporating non-federal commitments for this risk premium and expects that the Secretary will consider such applications carefully, given the potential risk to the federal government as the guarantor of the loan guarantee amount.

It is the Committee's understanding that the department strongly opposed establishing a separate credit program for private railroads during TEA21 deliberations. The Committee also has a number of concerns about this program, including: (1) how the Federal Railroad Administration will oversee this program; (2) how budg-

etary oversight will occur for a program that requires no federal appropriation for some or all of its loan guarantees; (3) how the costs to administer the loan and loan guarantees will be paid; (4) whether the loans and loan guarantees will be limited to a certain type of rail project or project sponsor; and (5) whether the program will be utilized to offer financing to railroads that could not obtain a loan elsewhere. The department is to address these questions and shall notify the House and Senate Committees on Appropriations of the resolution of these concerns prior to granting the first loan.

NEXT GENERATION HIGH-SPEED RAIL

Appropriation, fiscal year 1998	\$20,395,000
Budget estimate, fiscal year 1999	12,594,000
Recommended in the bill	15,294,000
Bill compared with:	
Appropriation, fiscal year 1998	-5,101,000
Budget estimate, fiscal year 1999	+2,700,000

The next generation high-speed rail program funds the development, demonstration, and implementation of high speed rail technologies. It is managed in conjunction with the program authorized in TEA21.

The Committee recommends \$15,294,000 for the next generation high-speed rail program. Adjustments in total program funding from the budget request are as follows:

	1998 enacted	1999 request	Committee recommendation
Train control systems	\$3,750,000		\$1,500,000
Non-electric locomotives	9,300,000	\$8,800,000	8,000,000
ALPS	(2,000,000)		
Prototype locomotive	(4,800,000)		
RTL-3	(2,500,000)		
Grade crossings & innovative technologies	5,600,000	4,000,000	4,000,000
N.C. sealed corridor	(2,000,000)	(400,000)	(400,000)
Migrating hazards	(2,500,000)	(2,500,000)	(2,500,000)
Lost-cost technologies	(1,100,000)	(1,100,000)	(1,100,000)
Track and structures	1,200,000	1,200,000	1,200,000
Administration	545,000	594,000	594,000
Total	20,395,000	12,594,000	15,294,000

Train control systems.—The Committee is dismayed that FRA has not sought additional funding in fiscal year 1999 for this critical safety program. Positive train control has been on the National Transportation Safety Board's "most wanted list" since the inception of the list in 1990. Also, FRA has testified that positive train control technology is the administration's "highest priority".

Earlier this year, the Association of American Railroads committed \$20,000,000 (in increments of \$5,000,000 annually over four years) to develop positive train control technology between Springfield and Chicago, Illinois. FRA estimates that this project will cost approximately \$60,000,000 over a four-year period. FRA and the Illinois Department of Transportation have \$15,000,000 available for this project. The Committee has provided \$1,500,000 to indicate continuing federal support for this project.

Non-electric locomotives.—The Committee has provided \$8,000,000 for non-electric locomotives, which is an increase of

\$1,200,000 above the budget request. The funds for this program focus on the demonstration of a high-speed, lightweight fossil fuel locomotive that will be able to facilitate the testing of an advanced locomotive propulsion system (ALPS). This is the second year that the Committee has provided funds for the evaluation of non-electric locomotive technologies that utilize modern, recently developed locomotive car bodies and meet forthcoming FRA Tier II passenger rail car construction standards and other applicable safety regulations. These locomotives will be designed to facilitate the testing of a flywheel turbine developed under the ALPS program. The locomotives should have the potential to operate at 150 miles per hour, yet be available for revenue demonstration speeds of 125 miles per hour within a two-year period. According to FRA, to have a full-scale test of a high-speed, non-electric locomotive by the year 2000, \$8,000,000 is necessary in fiscal year 1999 because 65 percent of the manufacturing will occur in this year. The Committee has provided the necessary funds to meet this deadline.

RHODE ISLAND RAIL DEVELOPMENT

Appropriation, fiscal year 1998	\$10,000,000
Budget estimate, fiscal year 1999	10,000,000
Recommended in the bill	2,000,000
Bill compared with:	
Appropriation, fiscal year 1998	-8,000,000
Budget estimate, fiscal year 1999	-8,000,000

The Committee has provided \$2,000,000 for the Rhode Island Rail Development project, which is \$8,000,000 less than requested. Since fiscal year 1995, a total of \$23,000,000 has been appropriated in federal funds to construct a third track between Davisville and Central Falls, Rhode Island. This funding is matched on a dollar-for-dollar basis by the state. The third track will prevent mixing freight and high-speed passenger rail service and will provide sufficient clearance to accommodate double-stack freight cars.

A record of decision, allowing the project to go forward, was signed on May 14, 1998. At that time, the state issued a Freight Railroad Improvement Project (FRIP) briefing book, which showed that Rhode Island needed a total of \$41,000,000 to meet its expenditures through fiscal year 1999. As of May 1998, the state has spent just over 10 percent of the federal funding, or \$2,400,000. It has \$20,600,000 unobligated. When combined with the state's matching contribution, the state has a total of \$41,200,000 to spend on this project during fiscal year 1999. Thus, the Committee does not believe that the state requires the full request of \$10,000,000 in fiscal year 1999. If the state requires more than the \$41,000,000 projected, additional funding is available from the bond referendum passed in November 1996 that approved \$50,000,000 for FRIP construction costs.

The Committee remains confident that this is a worthwhile project and will continue to consider future appropriations for this project once the unobligated balances have been drawn down.

The Committee has deleted bill language that requires the Providence and Worcester Railroad to reimburse Amtrak and/or the Federal Railroad Administration for damages resulting from legal actions relating to vertical clearances between Davisville and Central

Falls in excess of those required for present freight operations. It is the Committee's understanding that this issue has been resolved.

GRANTS TO THE NATIONAL RAILROAD PASSENGER CORPORATION

Appropriation, fiscal year 1998	\$543,000,000
Budget estimate, fiscal year 1999 ¹	621,476,000
Recommended in the bill	609,230,000
Bill compared with:	
Appropriation, fiscal year 1998	+66,230,000
Budget estimate, fiscal year 1999	- 12,246,000

¹The administration requested a total of \$621,476,000 for capital grants from the Highway Trust fund.

The National Railroad Passenger Corporation (Amtrak) is a private/public corporation created by the Rail Passenger Service Act of 1970 and incorporated under the laws of the District of Columbia to operate a national rail passenger system. Amtrak started operation on May 1, 1971.

STATUS OF AMTRAK

During the past year, significant changes have affected Amtrak. Most notably is the passage of the Amtrak Reform and Accountability Act that, among other things, enacted section 977 of the Taxpayer Relief Act (TRA) of 1997. The TRA made a total of \$2.3 billion available to Amtrak in fiscal years 1998 and 1999 to make capital improvements; to acquire capital assets; and to pay for certain maintenance expenses. From this total, Amtrak is required to pay \$138,000,000 to six states that do not have Amtrak service. Other notable changes included in the authorization Act are: a repeal of the statutory ban on contracting out work that would result in employee layoffs; the elimination of statutory and contractual arrangements that provided up to six years' compensation and benefits for employees who lost their jobs because of discontinuance of service or closure of a maintenance facility; and a reconfigured Board of Directors.

In addition to these legislative changes, the Administration and Amtrak submitted a unique budget request for fiscal year 1999. This request sought \$621,476,000 in capital funds and permission to use the capital appropriations for preventive maintenance. In prior years, the Administration and Amtrak have requested separate grant requests for operating and capital expenses, as well as for the Northeast Corridor Improvement Program.

With the adoption of the new authorization Act, the availability of \$2.162 billion in tax credits, and the new budget proposal, the Committee would expect to be optimistic about Amtrak's future. However, the Committee is not convinced that Amtrak's fiscal year 1999 proposal provides for the long-term viability and solvency of the Corporation.

In February 1998, the General Accounting Office testified that Amtrak is still in "dire financial straits". Other knowledgeable sources have said that the Administration's 1999 request would simply be shifting costs from operating expenses to capital expenses, causing Amtrak to spend down its needed capital appropriations on the daily operation of the system instead of on long-term investments, ultimately bankrupting the Corporation in or

optimistic about Amtrak's future when he testified before the Subcommittee in March 1998; however, he noted that Amtrak would require federal support well after the year 2002, in the form of a capital appropriation.

Since these hearings, Amtrak issued a revised strategic business plan. This plan showed that in fiscal year 1998 the Corporation's net loss would grow to \$845,000,000 or \$83,000,000 more than in fiscal year 1997. This loss is larger than the previous year because of unanticipated labor costs (\$35,000,000) and an inability to enact express service (\$48,000,000).

Amtrak also has serious cash flow problems. The revised strategic business plan shows that Amtrak projects a cash flow deficit of \$200,000,000 at the end of fiscal year 1998, which is \$30,000,000 more than its line of credit. To cover this cash flow deficit, Amtrak plans to use some of the funds provided by the TRA in 1998 for equipment maintenance expenses.

To gain a better understanding of Amtrak's financial condition, the Committee contacted the Department of Transportation's Inspector General, the General Accounting Office, and a diverse group of non-federal railroad experts. The Committee asked this group to comment on whether Amtrak continues to operate in a fragile state, as many testified, or if the recent legislative actions have placed the Corporation on a more stable footing. There was a wide divergence of opinions, but everyone expressed some degree of concern about Amtrak's long-term viability.

GAO noted that "Amtrak is unlikely to ever be free of the need for federal capital subsidies because of the capital intensive nature of railroads . . . Amtrak will depend heavily upon federal subsidies for operating assistance through fiscal year 2003."

Many of the experts questioned Amtrak's ability to increase revenues while further reducing costs. Most noted that Amtrak's ridership has remained flat since 1977. During this twenty-year period, airline traffic has more than doubled and interstate highway traffic has almost doubled. The experts also noted that revenues have been relatively flat throughout the 1990s despite large fare increases in some markets. Currently, less than sixty percent of Amtrak's revenue comes from passenger fares. Real estate, mail contracts, and express services make up the remainder. In the future, Amtrak may not be able to increase fares in most markets without experiencing a further decline in ridership. The one exception may be between New York and Boston, once high-speed rail service is initiated.

Amtrak has not been able to reduce its labor costs. Instead, the Corporation will experience significant labor cost increases over the next few years, which will impact its bottom line. In the year 2000, Amtrak projects that by extrapolating the new Brotherhood of Maintenance of Way Employees agreement to all labor unions, wages will increase by \$150,000,000. Even with productivity savings, this is a significant cost, which Amtrak can ill-afford.

On the positive side, recently approved express service, high-speed rail service between New York and Boston, profits from Amtrak's commuter operations, and increased contributions by states for intercity passenger rail service should have a favorable impact

ridor has excess capacity that could be sold to freight operators who may be interested in better serving the ports in and around New York City.

In summary, it appears that the internal changes Amtrak has made and the external changes provided in the authorization Act and TRA, does not guarantee Amtrak's viability or even disperse the storm clouds which have been looming on Amtrak's horizon for many years. The Committee will continue to review Amtrak's position carefully on an annual basis and awaits the results of the market-based analysis that the Corporation is undertaking to "define a national system that works within reasonable economic parameters".

COMMITTEE RECOMMENDATIONS

The administration requested a total of \$621,476,000 for capital grants from the Highway Trust Fund. Of this total, no less than \$200,000,000 is to be provided for the Northeast Corridor Improvement Program, \$11,746,000 is for Pennsylvania Station Redevelopment, and \$500,000 is for administrative expenses related to the Amtrak Reform Council and annual financial assessment of Amtrak.

The Committee recommends a total funding level of \$609,230,000 for grants to Amtrak to cover capital expenses in fiscal year 1999. This amount is \$12,246,000 less than requested. In addition to these appropriated funds, \$1,091,810,000 will be paid to Amtrak in fiscal year 1999 by the Secretary of the Treasury pursuant to section 977 of the Taxpayer Relief Act of 1997. This represents an all-time high federal funding level for Amtrak.

Northeast corridor improvement program.—The Committee has not provided a specific earmark for the Northeast Corridor Improvement Program. Amtrak has the flexibility to allocate whatever amount it believes is necessary for this project in fiscal year 1999.

Given the Committee's recognition of the importance of addressing the dangers associated with pedestrian access to railroad tracks, which is particularly pressing with the introduction of high-speed rail service along the Northeast Corridor, the Committee directs Amtrak to work closely with the Northeast Corridor communities, as well as state transit officials and owners of the track, to identify danger spots and install perimeter fencing wherever it is needed as quickly as possible. In particular, Amtrak should focus on increased community coordination in urbanized areas where there have been problems or where community concerns have been expressed, such as Attleboro, Foxboro, Mansfield, and Sharon, Massachusetts.

Pennsylvania Station Redevelopment.—The Committee has denied the request for Pennsylvania Station Redevelopment. A total of \$40,000,000 was provided by TEA21 for this project. With this funding, over \$100,000,000 has been provided, fulfilling the federal commitment to this project. The Committee has included a general provision that restricts any federal funding for the James A. Farley/Pennsylvania Station redevelopment project in excess of the original \$100,000,000 federal commitment only for fire and life safety improvements to the East River and North River tunnels

and the subterranean complex of ~~repairs in the tunnels of~~ Pennsylvania Station.

Administrative support.—The Committee has denied the funding request for the Amtrak Reform Council (ARC) and for an independent financial assessment of Amtrak. Funding for these two activities was provided in the emergency supplemental appropriation for fiscal year 1998. A separate appropriation of \$450,000 has been provided for the ARC under the Office of the Secretary. The Committee believes that it is a conflict of interest to use Amtrak's grant to pay for the expenses of a Council that may recommend restructuring the Corporation in fiscal year 2000 if Amtrak is unable to meet its financial goals or would require an operating subsidy after December 2002.

Highway trust fund.—The Committee has not funded Amtrak from the Highway Trust Fund, as requested by the administration. Amtrak only pays about \$3,000,000 to \$5,000,000 per year in fuel taxes. Appropriating a capital grant from the Highway Trust Fund instead of from the general fund, where the Corporation has been funded historically, would take away money from those who pay their "fair share" into the trust fund. The Committee expects to continue to appropriate grants to Amtrak from the general fund.

Capital definition.—The Administration and Amtrak have requested permission from Congress to use a more flexible definition of the term "capital". They have argued that Amtrak should be able to spend its federal capital appropriations on maintenance of equipment, infrastructure, and facilities. In the past, Amtrak's maintenance costs, such as repairing track and switches and reconditioning rail car components have been generally considered an operating expense. Federal capital grants have not paid for these activities. Instead, capital grants have been used for the purchase of locomotives and passenger cars, the construction of new facilities, and rebuilding of tracks.

Amtrak has indicated that as much as \$542,000,000 of the requested \$621,476,000 may be used to pay for maintenance of equipment, infrastructure and facilities. However, in an analysis of the proposed bill language, Amtrak and the Administration are also requesting that capital funds be used to pay for rail trackage rights. Currently, Amtrak spends about \$100,000,000 for these costs. Thus, if the definition change is approved, Amtrak could spend its entire fiscal year 1999 capital appropriation on what have historically been considered operating expenses.

The Committee has not included bill language expanding the definition of items on which Amtrak can spend its capital appropriations. TRA allows the use of capital funds for "the acquisition of equipment, rolling stock, and other capital improvements, the upgrading of maintenance facilities, and the maintenance of existing equipment in intercity passenger rail service". Statutorily, TRA already provides Amtrak with the flexibility to utilize its capital funds for at least \$340,000,000 of its annual operating expenses on overhauls and the maintenance of existing equipment. Expanding this flexibility to include infrastructure, facilities, and trackage rights would decrease the amount of funds available for capital improvements and equipment overhauls. Amtrak's revised strategic business plan, assuming the definition change, anticipates spend-

ing \$1.8 billion (65 percent) of the administration's proposed \$2.8 billion in capital appropriations for maintenance expenses between fiscal year 1999 and 2003 to reduce its net losses and cash-flow deficits. As a result, Amtrak would spend \$800,000,000 less for capital improvements over the next 5 years than it had previously planned under its glidepath approach.

Amtrak has argued in the past that it will reach self-sufficiency only by having ample funding for long-term and deferred capital needs. By not adopting the new "capital" definition beyond what is approved in TRA, the Committee bill ensures that about 40 percent of the appropriation will go towards long-term capital needs. The Committee believes that these capital investments are necessary to increase Amtrak's revenues and reduce costs in the long-term. Accordingly, the Committee disallows the proposed changes in the definition of capital.

Bill language.—The Committee has modified bill language adding the House and Senate Appropriations Committees to those that need to review and approve Amtrak's capital plan.

FEDERAL TRANSIT ADMINISTRATION

SUMMARY OF FISCAL YEAR 1999 PROGRAM

The Federal Transit Administration (FTA) was established as a component of the Department of Transportation on July 1, 1968, when most of the functions and programs under the Federal Transit Act (78 Stat. 302; 49 U.S.C. 1601 et seq.) were transferred from the Department of Housing and Urban Development. Known as the Urban Mass Transit Administration until enactment of the Intermodal Surface Transportation Efficiency Act of 1991, the Federal Transit Administration administers federal financial assistance programs for planning, developing and improving comprehensive mass transportation systems in both urban and non-urban areas.

Much of the funding for the Federal Transit Administration is provided by annual limitations on obligations provided in appropriations Acts. However, direct appropriations are required for the Washington Metropolitan Area Transit Authority as well as for portions of other accounts.

The current authorization for the programs funded by the Federal Transit Administration is contained in the Transportation Equity Act for the 21st Century (TEA21). TEA21 also amended the Budget Enforcement Act to provide two additional discretionary spending categories, the highway category and the mass transit category. The mass transit category is comprised of transit formula grants, transit capital funding, Federal Transit Administration administrative expenses, transit planning and research and university transportation center funding. The mass transit category obligations are capped at \$5,365,000,000 and outlays are capped at \$4,401,000,000 in fiscal year 1999. Any additional appropriated funding above the levels specified as guaranteed for each transit program in TEA21 (that which could be appropriated from general funds authorized under 5338(h)) is scored against the non-defense discretionary category.

The total funding provided for FTA for fiscal year 1999 is \$5,365,000,000, including \$1,113,200,000 direct appropriations and

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FEDERAL RAILROAD ADMINISTRATION

SUMMARY OF FISCAL YEAR 1999 PROGRAM

The Federal Railroad Administration [FRA] became an operating administration within the Department of Transportation on April 1, 1967. It incorporated the Bureau of Railroad Safety from the Interstate Commerce Commission, the Office of High Speed Ground Transportation from the Department of Commerce, and the Alaska Railroad from the Department of the Interior. The Federal Railroad Administration is responsible for planning, developing, and administering programs to achieve safe operating and mechanical practices in the railroad industry. Grants to the National Railroad Passenger Corporation (Amtrak) and other financial assistance programs to rehabilitate and improve the railroad industry's physical infrastructure are also administered by the Federal Railroad Administration.

The Committee recommends new appropriations and obligation limitations totaling \$702,150,000 for the activities of the Federal Railroad Administration for fiscal year 1999. This is \$49,209,000 less than the budget request. In addition to these appropriated Federal funds, \$1,091,810,000 will be paid to Amtrak in fiscal year 1999 by the Secretary of the Treasury pursuant to section 977 of the Taxpayer Relief Act of 1997.

The following table summarizes the Committee recommendations:

Program	Fiscal year—		Committee recommendation
	1998 enacted ¹	1999 budget estimate	
Office of the Administrator	\$20,290,000	\$21,573,000	\$21,020,000
Railroad safety	57,067,000	61,959,000	61,876,000
Railroad research and development	20,758,000	20,757,000	25,760,000
Nationwide differential global positioning system		3,000,000	
Northeast Corridor Improvement Program	250,000,000	(²)	
Railroad Rehabilitation and Improvement Financing Program			
Next generation high-speed rail	20,395,000	12,594,000	23,494,000
Alaska railroad rehabilitation	15,280,000		10,000,000
Rhode Island rail development	10,000,000	10,000,000	5,000,000
Grants to National Railroad Passenger Corporation (appropriations) ³	344,000,000	621,476,000	555,000,000
Taxpayer Relief Act	(1,091,810,000)	(1,091,810,000)	(1,091,810,000)
Subtotal, Amtrak and NECP ⁴	1,685,810,000	1,713,286,000	1,646,810,000
Total budgetary resources	1,829,600,000	⁴ 1,843,169,000	⁴ 1,793,960,000

¹ Excludes reduction for TASC pursuant to section 320 of Public Law 105-56; also excludes reduction to Alaska railroad rehabilitation pursuant to Presidential line item veto.

² Included in Amtrak request.

³ Administration requests fiscal year 1999 appropriation from highway trust fund.

⁴ Includes Taxpayer Relief Act funds.

OFFICE OF THE ADMINISTRATOR

Appropriations, 1998 ¹	\$20,290,000
Budget estimate, 1999	21,573,000
Committee recommendation	21,020,000

¹Excludes reduction for TASC pursuant to section 320 of Public Law 105-66.

The Office of the Administrator provides support and guidance on issues concerning the railroad industry and the day-to-day operations of the Federal Railroad Administration. The appropriation includes budget activities related to executive direction and administration and policy support aimed at resolving problems facing the railroad industry.

COMMITTEE RECOMMENDATION

The Committee recommends the following adjustments to the budget request:

Travel	-\$52,000
Equipment	-101,000
Electronic grant program	-200,000
Decrease amount estimated for vendor increases/inflation	-200,000

The recommendation for the Office of the Administrator is \$21,020,000, which is \$553,000 less than the amount requested in the administration's budget. The Committee is holding travel and equipment expenses to the fiscal year 1998 level, and directs that funds for the electronic grant program be obtained within the agency's base program funding.

RAILROAD SAFETY

Appropriations, 1998 ¹	\$57,067,000
Budget estimate, 1999	61,959,000
Committee recommendation	61,876,000

¹Excludes reduction for TASC pursuant to section 320 of Public Law 105-66.

This appropriation finances the development, administration, and enforcement of programs designed to achieve safe operating and mechanical practices in the railroad industry.

The Committee recommends a \$61,876,000 program level for the Railroad Safety Program, \$83,000 less than the amount requested by the administration.

The Committee has provided funding for the three railroad safety activities at the following levels:

Federal enforcement	\$45,826,000
Automated track inspection program	2,500,000
Safety regulation and program administration	13,550,000
Total, Office of Railroad Safety	61,876,000

Federal enforcement staffing increases.—The FRA has requested a staffing increase of 32 FTE's in fiscal year 1999, for a total of \$1,691,000 in associated personnel costs. The Committee recommendation provides funding for 16 of these requested positions: 8 principal inspectors positions, who will be assigned to each of FRA's regional offices to assist in the agency's Safety Assurance and Compliance Program [SACP]; and 8 field inspectors, who will be distributed throughout selected regional offices to perform site-specific inspections (particularly of small railroads), and to partici-

pate in agency rulemaking working groups. Overall, the workload of FRA's inspector resources has been increased by railroad mergers, where as large railroads consolidate, numerous small feeder railroads are being independently formed. The SACP process has also increased inspector responsibilities. However, the Committee notes that during the last 10 years there has been a substantial increase in the number of FRA staff employed by the Office of Railroad Safety, and in view of the significant improvements in railroad safety during that same period, the Committee maintains that an increase of 32 positions over 2 years is inappropriate.

Operation Lifesaver.—The Committee recommends \$600,000 for Operation Lifesaver to help fund the organization's State assistance grants, educational programs, and 5-year public awareness and education campaign. This level is \$300,000 above that requested by the administration. The Federal Highway Administration provides annual funding from the Surface Transportation Program safety set-aside to cover Operation Lifesaver salaries and benefits and overhead costs (\$300,000 a year under ISTEA; \$500,000 a year is authorized in the Transportation Equity Act for the 21st Century [TEA21]). All the appropriated funds in this account are program funds, supporting Operation Lifesaver's 49 active State programs and national safety initiatives.

In the fiscal year 1998 Senate Report 105-55, the Committee encouraged FRA to increase the percentage of safety inspectors who are certified to be Operation Lifesaver presenters from 60 to 80 percent. FRA's response was immediate and robust. However, it has come to the Committee's attention that some FRA inspectors are not comfortable with, or particularly effective at, public speaking. Therefore, the Committee is broadening the interpretation of this goal to include certification as Operation-Lifesaver associates within the goal of 80 percent FRA inspector participation.

Operation Respond.—Operation Respond is a public/private partnership that provides critical information to first responders at hazardous cargo and passenger train incidents. Subscribers to Operation Respond's software package can access rail and motor carriers' mainframe data bases for access by the emergency response community, so a firefighter or police officer can obtain, via computer modem, a list of the cargo contents and guidelines on how to safely manage a Hazmat spill or passenger train accident. Federal support for Operation Respond is included in the safety regulation and program administration base.

Grade crossing safety.—In addition to the increased Operation Lifesaver funding level, the Committee recommends an additional \$450,000 for FRA's public education, training, and enforcement liaison activities associated with grade crossing and trespasser challenges above the requested funding of \$757,000. The Committee has been informed that FRA was required to conduct an unanticipated environmental impact statement [EIS] for the agency's forthcoming regulation pertaining to whistle bans. The funds to conduct the study were derived from the core grade crossing program—\$220,000 of the additional \$275,000 provided by the conferees in fiscal year 1998 for enhanced grade crossing safety initiatives. Though whistle ban work is one of the six eligible activities listed in the statement of managers, the Committee believes that addi-

tional funds are needed in fiscal year 1999 to strengthen FRA's overall grade crossing safety program, and has provided these funds for the express purposes outlined in the conference report (House Report 105-313). In addition, FRA is encouraged to work with law enforcement personnel on grade crossing activities, and some portion of these additional funds may be used to defer costs associated with these cooperative efforts.

NATIONWIDE DIFFERENTIAL GLOBAL POSITIONING SYSTEM

Appropriations, 1998	
Budget estimate, 1999	\$3,000,000
Committee recommendation	

In 1999, the administration has requested a new appropriation under FRA and FHWA which will enable installation of nationwide differential global positioning system [NDGPS] transmitters by enhancing the existing Coast Guard network throughout the United States. The FHWA portion of the NDGPS installation funding, \$5,500,000 would be administered by FRA to support national NDGPS coverage toward establishing a network that would facilitate positive train control technologies. Also in the FHWA budget, \$4,154,000 was requested under the NDGPS contract for the L5 system (an alternative civil frequency) for the GPS. In total, the Department's budget requests \$15,254,000 for NDGPS activities in fiscal year 1999.

The Committee has not provided the funds requested for NDGPS under this head, and has also denied funding for related requests within the Federal Highway Administration's surface transportation research contract program. However, \$6,920,000 in NDGPS funding has been included in the Coast Guard's "Acquisition, construction, and improvements" account, for continued installation of DGPS transmitters throughout the United States, toward the enhancement of the existing Coast Guard DGPS network, which is now operating only in areas along the coasts and navigable inland waterways.

In terms of transportation needs, the primary benefit of the requested investment for the L5 system would accrue to the Federal Aviation Administration's wide area augmentation system program. The Committee maintains that it would be inappropriate to fund these aviation benefits from the Federal highway trust fund. Furthermore, there is little, if any, evidence of the pressing need for a substantial departmental investment in DGPS to support the National ITS Program or the development of positive train control-based rail systems. The Committee is also concerned that the total costs for construction, operation, and maintenance of the DGPS over the next 15 years could exceed \$90,000,000 and that costs of construction of L5 line has not yet been reliably determined, but could require \$100,000,000 to \$200,000,000.

More generally, the Committee has not provided DGPS funds because the primary benefit of that investment in the near-term would accrue to many other Federal agencies and commercial interests. The Committee maintains that DGPS-related expenses should not be derived solely from the Federal highway trust fund or other DOT accounts. Recognizing the importance of both DGPS and L5 to a wide array of strategic national purposes, the Secretary will

need to obtain funding from other Federal agencies and sources as well as other modal administrations.

The Department is directed to submit a report to the House and Senate Committees on Appropriations as part of the fiscal year 2000 budget justification identifying the long-term costs, benefits, and cost sharing that might be reasonably expected for both DGPS and the L5. The likely financial role of the States, other Federal agencies, and the private sector in those systems should be clearly specified in terms of expected cash and in-kind contributions. The report also should address the role that DGPS will play in the national ITS program and in the development of positive train control systems. Both near-term (next 5 years) and long-term (next 20 years) needs should be considered. The costs and benefits of further investment in DGPS for transportation purposes, and an analysis of the actual number of highway crashes in which emergency responders are substantially delayed because of an inability to obtain exact crash locations also should be addressed in the report.

RAILROAD RESEARCH AND DEVELOPMENT

Appropriations, 1998 ¹	\$20,758,000
Budget estimate, 1999	20,757,000
Committee recommendation	25,760,000

¹ Excludes reduction for TASC pursuant to section 320 of Public Law 105-66.

The Federal Railroad Administration's Railroad Research and Development Program provides for research in the development of safety and performance standards for high speed rail and the evaluation of their role in the Nation's transportation infrastructure. The program also provides support for the Deputy Associate Administrator for Technology Development and the staff of the Office of Research and Development. The Committee recommends an appropriation of \$25,760,000 for railroad research and development.

COMMITTEE RECOMMENDATION

The Committee recommends the following changes to the administration's budget submission:

Equipment, operation, and hazardous materials	+ \$1,800,000
Safety of high speed ground transportation	- 150,000
R&D facilities	- 500,000
Alaska Railroad positive train control research and implementation	+ 4,000,000
Administration	- 147,000

Equipment, operation, and hazardous materials.—The Committee recommends a program funding level of \$7,466,000, which is \$1,800,000 more than the administration's request. Within this amount, \$2,000,000 shall be for a full-scale crash test of rail passenger equipment at the Transportation Test Center [TTC] near Pueblo, CO. Currently, FRA has a contract with the Volpe Transportation Research Center that supports research on rail equipment collision and evacuation safety which depends heavily on computer modeling. It is the Committee's belief that the accuracy and usefulness of this research will be enhanced with a controlled, full-scale, passenger car crash (utilizing donated equipment), which will generate real-time data on which to base further computer modeling and simulation work. The Committee has decreased the

human factors budget activity by \$200,000 for the proposed study on engineer napping strategies.

Track and vehicle-track interaction.—The Committee recommends a program funding level of \$6,950,000, which holds the program to the enacted level. This funding level represents all projects being held to a current services level and an increase of \$500,000 in the bridge safety area. The additional bridge safety funds shall be used to demonstrate and evaluate the use of carbon composites for strengthening aging steel railroad bridges. These funds shall be made available to a constructed facilities center with extensive experience in this area.

Safety of high-speed ground transportation.—The Committee recommends a program funding level of \$4,800,000, a decrease of \$150,000 below the administration's request. Funding is not provided for the assessment of current maglev systems.

Research and development facilities.—The Committee has included the requested bill provision that allows FRA to sell old aluminum reaction rail at the TTC. The aluminum reaction rail test track with side guide rail was built in the 1970's, and does not have any research function in today's high-speed rail testing environment. The aluminum is an unused asset that could be sold to raise funds for needed capital improvements at the TTC. The aluminum has not been formally appraised, and there will be costs associated with removing the track, but estimates of the aluminum's net worth range from \$500,000 to \$1,000,000. The Committee has authorized FRA to use any profits realized from this sale for physical plant improvements at TTC.

The Committee recommends a program funding level of \$130,000 for R&D facilities, and has not provided the requested funds for the T-6 research vehicle (-\$500,000). The Committee is aware that the Association of American Railroads [AAR], which jointly manages many of the research activities at the TTC, has recently purchased a new track research vehicle. To avoid duplicative costs, the Committee directs FRA to include in the fiscal year 2000 budget justification a description of FRA's track research vehicle needs, and an analysis of whether the FRA could utilize the AAR track research vehicle that is currently onsite at TTC.

Alaska Railroad positive train control research and implementation.—The Committee recommends \$4,000,000 for the Alaska Railroad's ongoing efforts to implement collision avoidance positive train control system over the entire Alaska Railroad system. These funds will help fund a satellite-based communications and tracking system that will provide positive train separation for all locomotives and track vehicles, and precision train control with movement-pass planning capabilities. The Committee understands that the Alaska Railroad presents a uniquely suitable staging area for positive train control, because it will be much simpler and quicker to install PTC on the Alaska Railroad than on any other American rail system. The Alaska Railroad does not have any signaling system in place today, only grade crossing signals, and dispatching of trains is done exclusively with voice radio transmission of track warrants. Consequently, unlike the situation on other privately controlled systems in the lower 48 States, on the Alaska Railroad there is no debate over the correct strategy to convert from current.

conventional signaling to PTC signaling. This project, once completed, will be more than a demonstration project—it will be a fully operational PTC system, providing the FRA and rail industry with an invaluable baseline reference for other positive train control system development projects.

Administration.—The Committee has provided \$2,612,000 for administration of the Office of Railroad Research and Development, holding funding to current service levels. The Committee approves the position requested to manage and oversee communications-based positive train control projects, but has not approved the new position for an additional track engineer.

NORTHEAST CORRIDOR IMPROVEMENT PROGRAM

Appropriations, 1998	\$250,000,000
Budget estimate, 1999	(1)
Committee recommendation	

¹ Requested funding of \$200,000,000 for NECIP and \$11,746,530 for Pennsylvania Station redevelopment is included in the proposed "Capital grants to the National Railroad Passenger Corporation (highway trust fund)" appropriation.

For fiscal year 1999, the administration has requested Northeast Corridor Improvement Program [NECIP] funding under the "Capital grants to the National Railroad Passenger Corporation" account.

RAILROAD REHABILITATION AND IMPROVEMENT FINANCING PROGRAM

Section 502 of Public Law 94-210, as amended authorizes obligation guarantees for meeting the long-term capital needs of private railroads. Railroads utilize this funding mechanism to finance major new facilities and rehabilitation or consolidation of current facilities. No appropriations or new loan guarantee commitments are proposed in fiscal year 1999 consistent with the budget request.

The Rail Rehabilitation and Improvement Financing Program, as established in section 7203 of the Transportation Equity Act for the 21st Century [TEA21], will enable the Secretary of Transportation to provide loans and loan guarantees to State and local governments, Government-sponsored authorities and corporations, railroads and joint ventures to acquire, improve, or rehabilitate intermodal or rail equipment or facilities, including track, bridges, yards, and shops. However, due to budgetary constraints, the Committee is unable to provide fiscal year 1999 appropriated general funds to fund the credit risk premium portion of the program as required by the Credit Reform Act.

The Committee anticipates that the Department will likely receive applications incorporating non-Federal commitments for this risk premium, as authorized in the enabling legislation. The Committee expects that the Secretary will consider any such applications carefully, given the extent of the potential risk to the Federal Government as the guarantor of the loan guarantee amount. While this loan and loan guarantee program provides an opportunity for developing significant rail infrastructure improvements benefiting the national transportation system, the Secretary should proceed judiciously to ensure that any approved applications are fully warranted.

NEXT GENERATION HIGH-SPEED RAIL

Appropriations, 1998	\$20,395,000
Budget estimate, 1999	12,594,000
Committee recommendation	23,494,000

The Committee has provided \$23,494,000 in general fund appropriations for the High-Speed Ground Transportation [HSGT] Program. The amount provided is \$10,900,000 more than the administration's request.

The Committee first provided funding for the Next Generation High-Speed Rail [NGHSR] Program in fiscal year 1995. The program funds high-speed rail research, development, and technology programs that are aimed at demonstrations to foster high-speed passenger service on corridors throughout the country. The NGHSR program's authorization lapsed at the end of fiscal year 1998, and has been recently reauthorized in sections 7201 and 1103 of the Transportation Equity Act for the 21st Century. In section 1103, an automatic set-aside of \$5,250,000 a year from surface transportation program safety funds is made available for the elimination of rail-highway crossing hazards. A limited number of rail corridors are deemed eligible for these funds. In addition to the automatic set-aside funding, \$15,000,000 in general funds is authorized to be appropriated for these purposes. However, due to budgetary constraints, no additional funds are appropriated pursuant to this authorization. Section 7201 of TEA21 provides a more general authorization of the high-speed rail program at a total level of \$35,000,000 in general funds each year through fiscal year 2001. Within this total, \$10,000,000 a year is authorized for high-speed rail corridor planning. The current Federal Railroad Administration NGHSR program emphasizes technology development and consequently, the Committee has not provided any new funds for high-speed rail corridor planning activities.

The Committee has made the following adjustments to the administration's next generation high-speed rail programs:

Prototype nonelectric high-speed [HS] locomotive	+ \$4,200,000
Advanced propulsion project	+ 1,600,000
New York RTL-3 turbo trains	+ 2,500,000
Sealed corridor initiative	+ 2,100,000
Positive train control study	+ 500,000

Nonelectric locomotives.—The Committee has provided a total of \$15,100,000 for the high-speed, nonelectric-locomotive program. This is \$8,300,000 more than the level requested by the administration (a request that was \$2,500,000 less than the fiscal year 1998 enacted program level). The Committee is dismayed by the administration's lack of program continuity in the nonelectric locomotive area. FRA should take ownership of these projects, and request a steady and reliable funding stream from year to year. The Committee expects that the fiscal year 2000 budget justification will demonstrate this continuity and commitment to the nonelectric locomotive projects that are currently underway.

Prototype nonelectric HS locomotive and advanced propulsion project.—The funds for these programs focus on the demonstration of a high-speed, lightweight fossil fuel locomotive that will be able to facilitate the testing of an advanced locomotive propulsion system [ALPS]. The Committee recommends \$9,000,000 for the loco-

motive demonstration and \$3,600,000 for the ALPS program. These locomotives will be designed to facilitate the testing of a flywheel turbine developed under the ALPS program. The locomotives should have the potential to operate at 150 mph, yet be available for revenue demonstration at speeds of 125 mph within a 2-year period.

New York RTL-3 turbo trains.—The Committee recommends \$2,500,000 for the refurbishment of two turbo trainsets for revenue service on Amtrak's empire corridor from New York City to Buffalo. This project received \$2,500,000 in fiscal year 1998, which remains unobligated at this time. With this additional funding, the contract to complete the upgrades on two trainsets will be fully realized.

Grade crossing hazard mitigation.—The Committee recommends \$2,500,000 for the North Carolina sealed corridor initiative, \$2,100,000 more than the level requested by the administration. The sealed corridor initiative is a State-supported effort to systematically install crossing hardware that positively prevents crossing incursions on 130 grade crossings on the 140-mile route from Raleigh to Charlotte. This project is also an excellent candidate for the TEA21 set-aside hazard elimination program referenced above, and the Committee encourages FRA to consider granting up to \$2,500,000 of the funds in that program to the North Carolina sealed corridor initiative upon enactment of the authorization bill.

Positive train control study.—The Committee recommends \$500,000 for the FRA to conduct a study that will promote positive train control [PTC] systems used in high-speed rail operations and interoperability among those systems. Currently, there is no assurance that all PTC systems being advanced will allow equipment of one railroad to be used on the track of another. There is no common agreement of the communication formats and information flows that must be shared to allow interoperability. The objective of the proposed study is to characterize the common elements required for interoperability in order to promote high-speed rail development in the United States. The study will provide the basis for developing an open systems architecture to facilitate interoperable PTC systems. The study is an important step toward ensuring that different positive train control technologies, which might be used in the future by different railroads, can communicate or interact effectively with each other. This research will accelerate the development of any high-speed rail project, the RSAC work on positive train control, and the national objective of establishing an interoperable high-speed rail system in the United States. In order to ensure an objective study, these funds shall be awarded to a research institution or organization without a vested interest in any particular PTC technology.

ALASKA RAILROAD REHABILITATION

Appropriations, 1998 ¹	\$15,280,000
Budget estimate, 1999	
Committee recommendation	10,000,000

¹ Excludes reduction of \$5,280,000 pursuant to Presidential line item veto.

The Committee has included a total of \$10,000,000 for rail safety and infrastructure improvements benefiting passenger operations of the Alaska railroad. This railroad extends 470 miles from Sew-

ard through Anchorage, the largest city in Alaska, to the interior town of Fairbanks. It carries both passengers and freight, and provides a critical transportation link for passengers and cargo traveling through difficult terrain and harsh climatic conditions. The \$10,000,000 provided in the bill will continue the railroad's multiyear effort to reduce the backlog of deferred track maintenance and related capital rehabilitation. The railroad has always provided a substantial non-Federal match for past Federal appropriations, and will continue to do so.

RHODE ISLAND RAIL DEVELOPMENT

Appropriations, 1998	\$10,000,000
Budget estimate, 1999	10,000,000
Committee recommendation	5,000,000

The Committee recommends \$5,000,000 for construction of a third track paralleling the Northeast corridor for the 22-mile stretch between Quonset Point/Davisville and Central Falls, RI. This project is an initiative supported by the administration and Amtrak, to avoid mixing freight traffic and high-speed passenger rail service and to provide sufficient clearance to accommodate double-stack freight cars. There is a 50-percent match required on the third-rail project, and Rhode Island voters have approved a \$50,000,000 State bond issue to meet this match requirement.

In May 1998 the Federal Highway Administration and Federal Railroad Administration signed the record of decision on this project, completing the environmental impact statement [EIS] process. This will enable the State of Rhode Island to commence action on final design and construction. To date, this project has received \$23,000,000 in Federal funds, of which \$3,500,000 has been obligated. However, with the completion of the EIS, the Committee anticipates that the spending pace will speed up, and that, by the end of fiscal year 1999, at least \$37,600,000 in total project funds will have been expended. According to the State's project schedule, the total amount of Federal funds that should be obligated by the end of the fiscal year is \$18,800,000, leaving a Federal share unexpended balance of \$4,200,000. Combined with the \$5,000,000 made available from Amtrak in this appropriation, there should be sufficient carryover funds to allow Rhode Island to sign long-lead procurement contracts in 1999, so that the integrated construction plan is not slowed, nor the overall Northeast corridor electrification program impeded.

CAPITAL GRANTS TO THE NATIONAL RAILROAD PASSENGER CORPORATION (AMTRAK)

	Appropriation	Public Law 105-34 section 977	Total
Appropriations and other Federal funding, 1998 ..	\$344,000,000	\$1,091,810,000	\$1,685,810,000
Budget estimate, 1999 ²	621,476,000	1,091,810,000	1,713,286,000
Committee recommendation	555,000,000	1,091,810,000	1,646,810,000

¹ This total includes Northeast corridor improvement program funds.

² The administration requested that 1999 funding be derived from the highway trust fund.

The Fiscal Year 1998 Transportation Appropriations Act, Public Law 105-66, included \$543,000,000 for Amtrak capital and operating grants from general funds. The capital funding portion of this appropriation, \$199,000,000, was included to ensure some level of capital support for Amtrak in the event that the tax refund mechanism contained in the Taxpayer Relief Act (Public Law 105-34 section 977) was not enacted. The bill was signed by the President on August 5, 1997, and on December 2, 1997, the Amtrak Reform and Accountability Act was enacted, triggering the release of the TRA funds. On March 20, 1998, the Secretary of the Treasury made a payment of \$1,161,500,000 to Amtrak—one-half of the total TRA payment, with the remainder due in 1999. Amtrak is statutorily required in the TRA to make payments to each of the six non-Amtrak States (Alaska, Hawaii, Maine, Oklahoma, South Dakota, and Wyoming) of 1 percent of the total Amtrak receives in that year. On April 19, 1998, Amtrak transferred a payment of \$11,615,000 to each non-Amtrak State, for a total of \$69,690,000. Therefore, the net level of Federal funding that Amtrak received from the Taxpayer Relief Act in fiscal year 1998 was \$1,091,810,000. The railroad will receive an identical payment, under the same requirements, in fiscal year 1999.

For fiscal year 1999, the administration has requested an appropriation of \$621,476,000 for capital funding, to be derived from the highway trust fund. These funds would be in addition to the \$1,091,810,000 in fiscal year 1999 TRA funds. The total, \$1,713,286,000, would represent an historically high Federal funding level for Amtrak over its 28-year history as a Government-subsidized for-profit corporation.

Amtrak appropriations history—1971-98

(in millions of dollars)

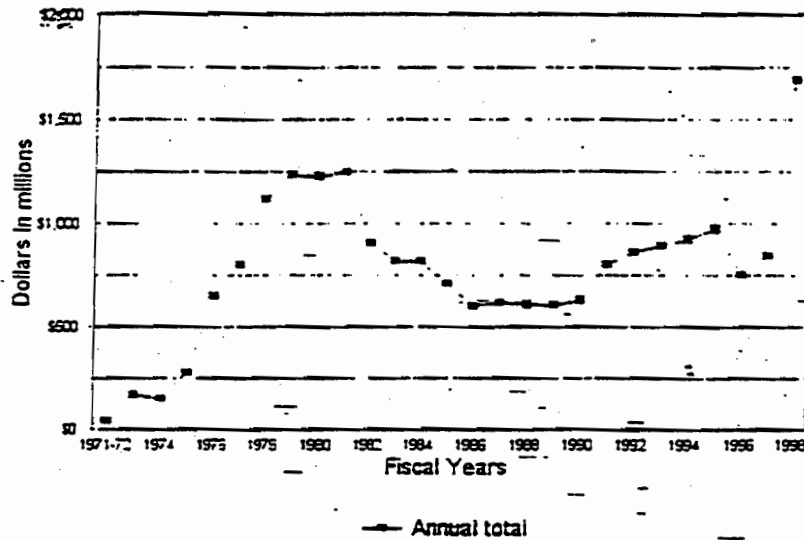
<i>Fiscal year</i>	<i>Annual total</i>
1971-72	40.0
1973	170.0
1974	149.1
1975	276.5
1976	471.2
1976	180.0
Transition quarter (fiscal year change)	800.7
1977	1,116.0
1978	1,234.0
1979	1,223.4
1980	1,246.3
1981	905.0
1982	815.0
1983	816.4
1984	707.6
1985	602.7
1986	618.5
1987	608.3
1988	603.6
1989	629.1
1990	798.9
1991	861.2
1992	846.1
1993	45.0
1993 supplemental appropriations	922.2
1994	972.0
1995	750.0
1996	760.0
1997	

Fiscal year	Annual total
Omnibus consolidated appropriations 1997	82.5
1998 (Taxpayer Relief Act)	1,091.8
1998 (appropriations, Amtrak operations and Northeast corridor improvement program)	594.0
Total	20,937.1

SOURCE.—Amtrak Strategic Business Plan, fiscal year 1998–2000 (September 23, 1997).

Amtrak Federal Funding History

Total federal funds: \$20,937,100,000



Under the administration's fiscal year 1999 request, no less than \$200,000,000 would be for Northeast corridor improvements; \$409,229,470 would be for capital grants; \$11,746,530 would be for the New York Pennsylvania Station redevelopment project; and \$500,000 would be for departmental costs associated with the independent assessment of Amtrak's financial requirements and Amtrak reform council administrative expenses.

COMMITTEE RECOMMENDATION

The Committee recommends an additional \$555,000,000 for Amtrak capital grants in fiscal year 1999. This is \$66,476,000 less than the administration's request, and brings total Federal fiscal year 1999 funding for Amtrak to \$1,646,810,000 when the Taxpayer Relief Act funding of \$1,091,810,000 is included. This funding level should be sufficient to provide for Amtrak's capital infrastructure and equipment needs. In addition, section 977 of the TRA, which allows the use of funds for "the acquisition of equipment, rolling stock, and other capital improvements, the upgrading of maintenance facilities, and the maintenance of existing equipment, in intercity passenger rail service * * *", statutorily provides Amtrak the flexibility to utilize the TRA capital funds in the most effective ways. According to the fiscal year 1999 budget, Am-

trak estimates that approximately \$400,000,000 of its annual operating expenses are spent on progressive overhauls and maintenance of existing equipment, and that these expenses are eligible for funding under the TRA. If Amtrak's own operating revenues are insufficient to cover its fiscal year 1999 costs, an amount of the railroad's eligible expenses could be funded through the TRA.

Use of appropriated capital funds.—The administration's request earmarks \$500,000 for departmental costs associated with the independent assessment of Amtrak's financial requirements and Amtrak reform council administrative expenses. This is not necessary, because the Committee has responded to both these issues within other accounts. The departmental expenses have been incurred primarily by the Office of Inspector General [OIG], and the Committee responded this past spring by allowing the OIG to transfer \$400,000 of the \$2,450,000 provided for the Amtrak Reform Council in the fiscal year 1998 emergency supplemental (Public Law 105-174), to alleviate the costs of new responsibilities associated with administering the contract for the independent financial assessment. In addition, \$1,450,000 is provided for the newly formed Amtrak Reform Council under a separate head in this bill, to pay for administrative expenses incurred in carrying out its mission as outlined in the Amtrak Reform and Accountability Act of 1997.

The administration's request also earmarks \$11,746,530 for the New York Pennsylvania Station redevelopment project. It is not necessary to provide appropriated general funds for this project, because it has been fully funded by a high-priority projects contract authority earmark of \$40,000,000 in the Transportation Equity Act for the 21st Century (TEA21, sec. 1602, No. 1679). The Federal Government committed to a \$100,000,000 share of this project, which will renovate and reconstruct the James A. Farley Post Office in New York City as a new Amtrak station, replacing the current Amtrak connection at Pennsylvania Station one block away. The two stations will be connected by a lengthened underground passenger platform, mitigating crowded conditions, and separating the commuter rail operations from the intercity passenger rail operations. To date, Federal funds provided through ISTEA and appropriations bills total \$88,253,470. With the \$40,000,000 guaranteed highway funds that are provided in TEA21, the Federal commitment will be more than filled, and further appropriated funds are not necessary.

Northeast Corridor Improvement Program.—The Committee has recommended \$200,000,000 of the appropriated capital funds for the Northeast Corridor Improvement Program, as requested by the administration. The Committee is aware that work on implementing Amtrak's Northeast corridor high-speed rail program is progressing rapidly on all fronts. Electrification and infrastructure work and trainset manufacturing are underway, and the railroad is planning every facet of implementation of the new high-speed rail service when the first Bombardier trainset is delivered to Amtrak for revenue service in October 1999. Much of Amtrak's future is riding on the success of this high-speed service. Amtrak estimates in its March 10, 1998 revised strategic business plan that the profits associated with the initiation of high-speed service in the Northeast corridor will net the railroad some immediate level

of profit in fiscal year 1999, and an increasing profit margin of \$93,000,000 in fiscal year 2000, \$190,000,000 in fiscal year 2001, and \$210,000,000 in fiscal year 2002. The cost benefits of high-speed service will allow the railroad to become less dependent on Federal subsidies, and the shorter travel times should make all passenger train service between Washington, DC, and Boston even more competitive with other transportation choices.

Of the appropriated general capital funds provided for Amtrak in this bill, \$4,200,000 shall be dedicated to funding the following projects of high priority in the specified amounts:

Southern Pines, NC, railroad station restoration.—The Committee recommends \$800,000 for restoration of the historic Southern Pines, NC, railroad station, which is owned by the State of North Carolina and is served by Amtrak's Silver Star route. The State will contribute to this project, which enjoys broad local support.

Brattleboro to White River Junction, VT, rail signalization upgrade project.—The Committee recommends \$500,000 for the replacement of outdated pole line signal controls along the main rail line between Brattleboro and White River Junction, VT. The Amtrak Vermonter is routed along this track, which is owned by the New England Central Railroad. These funds shall be used to upgrade the pole line signal system to an electronic control system along this 60-mile stretch of track.

Advanced civil speed enforcement systems upgrade.—The Committee recommends \$1,000,000 for the installation of a speed monitoring system, the advanced civil speed enforcement systems [ACSES], on all locomotives operating between New Haven, CT, and Boston, MA. In the interest of passenger and crew safety, the Federal Railroad Administration has required the installation of the ACSES on all locomotives, of both passenger and freight trains, that operate on the segment of the Northeast corridor between New Haven and Boston, before high-speed rail service is introduced on the north end of the corridor. The funds made available herein shall be distributed to freight or passenger operators who have not yet made this capital upgrade, and priority consideration shall be given to smaller operators who have no alternative Federal source of funds for this purpose.

Amtrak station at T.F. Green Airport.—The Committee is aware of the State of Rhode Island's interest in enhancing high speed passenger rail service and improving intermodal transportation by establishing an Amtrak station at T.F. Green Airport. The Committee believes the airport's close proximity to the Northeast corridor and the State's efforts to date make this a worthy initiative that deserves Amtrak's and the Federal Railroad Administration's [FRA] support and assistance. The Committee instructs Amtrak and the FRA to report on their efforts to assist the State of Rhode Island by February 1, 1999.

Erie, PA, rail passenger station renovation.—The Committee recommends \$1,400,000 for rehabilitation and relocation of the Erie, PA, Amtrak passenger station. Amtrak's Northeast Direct, Lake Shore Limited, and Pennsylvanian routes serve this station, which has become profoundly dilapidated over the years and is in need of repairs and improvements to bring the station into compliance with Americans With Disabilities Act regulations. Amtrak shall

work with the city of Erie and the Commonwealth of Pennsylvania to explore all funding match alternatives, and to begin renovation work on the station with all due speed.

High-speed rail improvements outside the Northeast corridor.—The Committee directs Amtrak and the Federal Railroad Administration to determine what improvements would need to be made on the Washington, DC, to Richmond, VA, corridor and the Las Vegas, NV, to Los Angeles, CA, corridor to bring these two lines higher-speed rail service. Currently, the 107-mile distance between Richmond and Washington takes approximately 2 hours on Amtrak, an average speed of 53 miles per hour. There is no current Amtrak rail service between Las Vegas and Los Angeles, a distance of 269 miles. Amtrak is directed to report its findings to the Committee no later than March 31, 1999. The study shall include an analysis of current and potential ridership, cost-sharing strategies, necessary capital improvements, track use agreement issues, and a cost-benefit analysis for each corridor option. The Committee recommends that Amtrak use up to \$500,000 of the funds provided in this appropriation to prepare this study.

GENERAL PROVISIONS

The Committee has included three general provisions relating to Amtrak funding and operations.

Section 325.—Public disclosure of Amtrak ticket subsidy.—The Committee believes that Amtrak should provide each passenger with a clear and unambiguous description of the American taxpayers' support for its operations. In its recent analysis of Amtrak's route system, the General Accounting Office calculated Amtrak's average per passenger loss by using Amtrak's fully allocated costs and the ridership on its core intercity passenger service. The Committee believes that this method produces a meaningful indication of Amtrak's operating performance. Accordingly, the bill requires Amtrak to incorporate this method of calculating its per passenger loss in its disclosure to passengers. Further, the bill requires Amtrak to verify its calculation with the General Accounting Office. The Committee expects that Amtrak will convey its per passenger loss and continuing need for support from the American taxpayers using the following language: "The American taxpayer subsidized this railroad ticket. Amtrak lost an average of \$47 per passenger in fiscal year 1997." Amtrak would be expected to update the disclosure contained on passenger tickets with the latest annual data.

FEDERAL TRANSIT ADMINISTRATION

SUMMARY OF FISCAL YEAR 1999 PROGRAM

The Federal Transit Administration was established as a component of the Department of Transportation by Reorganization Plan No. 2 of 1968, effective July 1, 1968, which transferred most of the functions and programs under the Federal Transit Act of 1964, as amended (78 Stat. 302; 49 U.S.C. 1601 et seq.), from the Department of Housing and Urban Development.

The missions of the Federal Transit Administration are: to assist in the development of improved mass transportation facilities,

Academy of Sciences [NAS] to review the scope and direction of the OMC research program, its organizational framework, diversity of projects, and allocation of funds. The Administrator of the OMC should report back to the House and Senate Committees on Appropriations no later than May 1, 1999, on the administration's response to the NAS recommendations.

Within the funds provided, the Committee directs the OMC to prepare a report to the House and Senate Appropriations Committees—no later than September 1, 1998—documenting the potential safety advantages of a Federal rule to require a uniform national display policy for inspection stickers on commercial motor vehicles.

TECHNOLOGY DEPLOYMENT PROGRAM

Center for Advanced System Technology.—The Committee recommends \$2,000,000 for the Center for Advanced Simulation Technology, Long Island, NY, of which not less than \$500,000 shall be made available to Auburn University for a transportation management program. These funds will be used to develop outreach initiatives involving technology transfer, technical assistance and training related to transportation management, traffic control, and simulation and human factors.

CONSTRUCTION OF FERRY BOATS AND FERRY TERMINAL FACILITIES

(LIMITATION ON OBLIGATIONS)

The Committee has provided a limitation on obligations of \$38,000,000 for the new construction of ferry boat and ferry terminal facility program. The Committee notes that the authorization of this program reserves \$20,000,000 of the total amount for projects within the marine highway system. Within the \$18,000,000 not reserved for this purpose, \$3,000,000 shall be provided to the North Carolina State ferry system, which is an essential component of the State of North Carolina's hurricane evacuation program. In addition, \$3,000,000 shall be provided to the State of Hawaii to initiate a high-speed ferry boat demonstration program on the Island of Oahu and neighbor islands.

MAGNETIC LEVITATION TRANSPORTATION

TECHNOLOGY DEPLOYMENT PROGRAM

(LIMITATION ON OBLIGATIONS)

(HIGHWAY TRUST FUND)

Appropriations, 1998	_____
Budget estimate, 1999	_____
Committee recommendation	_____ (\$15,000,000)

Pursuant to section 1218 of the Transportation Equity Act for the 21st Century, \$15,000,000 in highway trust funds are made available for obligation in the same manner as if the funds were apportioned under chapter I of title 23, U.S.C. Therefore, these funds are within the highway funding firewall established in TEA21 under the Federal-aid highways program obligation ceiling. Within the funds made available under this heading, \$6,000,000 is directed to be provided to the State of Pennsylvania for a high-speed intercity

magnetic levitation project between Philadelphia and Pittsburgh, that will incorporate an Americanized version of the German Thyssen Transrapid System magnetic levitation train technology. The guideway for the system will be heavy steel plate, presenting the opportunity for market growth in the U.S. precision fabrication industry. The system will be developed for American operational conditions, using American manufacturing methods and materials. The funds provided in this appropriation will support the design and development of: intermodal transportation facilities on the system's right-of-way; right-of-way alignment finalization; a draft environmental impact statement; and magnetic levitation industry standards for communications, control, and power systems. This program will be administered by the Federal Railroad Administration.

APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM

The Committee has provided \$200,000,000 for construction of unfinished segments of the Appalachian development highway system [ADHS]. The ADHS connects largely rural, underdeveloped areas in 13 States. Its completion is critical to the economic development of these often-ignored areas. In many cases, the unfinished segments of the ADHS are high-accident locations in the Appalachian States, so the Committee believes continued construction will have a high payoff in highway safety benefits.

The Committee is aware that the Transportation Equity Act for the 21st Century provided \$450,000,000 per year in contract authority over the next 5 years. However, the Federal share of the current cost to complete the Appalachian development highway system is \$5,800,000,000. Given the funding schedule in the TEA 21 legislation, and without inflationary increases, it would take at least another 13 years to complete the system, putting the completion date at 46 years from its inception in 1965. Given the hazardous conditions of many of the roads on and around the unfinished segments of the ADHS, and the commitment of the Congress to the people of Appalachia, this delay is unacceptable. The funds provided in this legislation should be viewed as an effort to expedite the completion of the system in a reasonable fashion, and not as a substitute for any funds which may be provided in any other legislation.

FEDERAL LANDS HIGHWAYS PROGRAM

The Committee is very concerned with the degree to which funding awards are made on a partisan basis in the Public Lands Program. The General Accounting Office has noted in a draft report that the administration has awarded more projects and total funding to projects in Democratic districts, even though States requested more funds for projects in Republican districts. The Committee directs FHWA to move toward a merit-based approach in funding public lands projects, and to develop specific criteria for the funding of projects under this program. The Secretary shall report to both the House and Senate Appropriations Committees no later than December 1, 1998, with a detailed proposal to address this problem.

**FY 1999 Transportation Appropriations
Conference Report**

Delete funding for the safe communities program	-2,800,000
Delete funding for prelicensure demonstration project	-600,000
Slight reduction in EMS research	-40,000
Slight reduction in records and licensing	-73,000
Head injury management prevention project	+1,000,000
Hold PNGV to 1998 level	-1,004,000
Reduce increase for biomechanics simulation and analysis	-225,000
Reduce increase for crash avoidance research	-340,000
Fund occupant protection survey under Grant Administration	-300,000
Slight reduction in Office of the Administrator	-331,000
Increase Grant Administration reimbursement ...	-4,509,000

Aggressive driving.—NHTSA, in conjunction with the International Association of Chiefs of Police, should conduct a 2-year pilot project to utilize and demonstrate the effectiveness of enforcement devices, such as speed management and imaging devices, in reducing aggressive driving. The project should take place within one or more federal jurisdictions that have experienced high profile crashes, such as the George Washington Memorial Parkway.

Emergency medical services.—Within the emergency medical services program, \$250,000 shall be used to complete the second phase of the head injury prehospital protocols with Aitken Neuroscience Center. The conference agreement also includes \$1,000,000 for a head injury prevention project at the University of Alabama at Birmingham. The initial focus of this effort will be on the prehospital aspect of trauma research involving causative factors of the injury.

Older driver research.—NHTSA should continue demonstrating technologies and practices to improve the driving performance of older drivers and other special groups. Ongoing work at Pennsylvania State University in this area is recognized.

Red light running initiative.—Failure to obey traffic signals is one of the leading causes of urban crashes. NHTSA should evaluate an innovative program initiated by Jefferson Parish Sheriff's Office in Jefferson County, Louisiana, to combat this problem and determine if this program could be deployed nationwide.

Prelicensure demonstration project.—For the same reasons detailed last year, the conference agreement deletes funds for the prelicensure demonstration project.

Bill language is included that prohibits NHTSA from obligating or expending funds to plan, finalize, or implement any rulemaking that would add requirements pertaining to tire grading standards that are different from those standards already in effect. This language was contained in both the House and Senate bills.

NATIONAL DRIVER REGISTER
(HIGHWAY TRUST FUND)

The conference agreement provides \$2,000,000 for the National Driver Register as proposed by the House. The Senate provided \$2,000,000 for this program within NHTSA's operations and research account. Within the total amount appropriated, up to \$250,000 can be used to begin the technology assessment authorized under section 2006 of TEA21.

HIGHWAY TRAFFIC SAFETY GRANTS
(LIQUIDATION OF CONTRACT AUTHORIZATION)
(HIGHWAY TRUST FUND)

The conference agreement provides \$200,000,000 to liquidate contract authoriza-

tions for highway traffic safety grants, as proposed by both the House and the Senate.

HIGHWAY TRAFFIC SAFETY GRANTS
(LIMITATION ON OBLIGATIONS)
(HIGHWAY TRUST FUND)

The conference agreement limits obligations for highway traffic safety grants to \$200,000,000 as proposed by both the House and Senate. A total of \$9,943,000 has been provided for administration of the grant programs as proposed by the House instead of \$5,334,000 as proposed by the Senate. New bill language is included to specify that not more than \$7,500,000 of the funds made available for section 402, not more than \$500,000 of the funds made available for section 405, not more than \$1,750,000 of the funds made available for section 410, and not more than \$193,000 of the funds made available for section 411 shall be available to NHTSA for administering highway safety grants under chapter 4 of title 23. This language is necessary to insure that each grant program does not contribute more than five percent of the total administrative costs.

The conference agreement retains bill language, proposed by both the House and Senate, that limits technical assistance to states from section 410 to \$500,000.

The conference agreement prohibits the use of funds for construction, rehabilitation or remodeling costs, or for office furnishings and fixtures for State, local, or private buildings or structures, as proposed by both the House and Senate.

The bill includes separate obligation limitations with the following funding allocations:

State and community grants	\$150,000,000
Occupant protection incentive grants	10,000,000
State highway safety data grants	5,000,000
Alcohol incentive grants ...	35,000,000

Occupant protection.—The effectiveness of the occupant protection grant on improving safety, saving lives, and preventing injuries along the Route 2 corridor between Gardner and Greenfield, Massachusetts is recognized, and the conference agreement encourages continued funding of this initiative.

FEDERAL RAILROAD ADMINISTRATION
OFFICE OF THE ADMINISTRATOR

The conference agreement appropriates \$21,215,000 for the Office of the Administrator instead of \$21,367,000 as proposed by the House and \$21,020,000 as proposed by the Senate. Of the total amount, \$1,784,000 shall remain available until expended, as proposed by the House instead of \$1,389,000 as proposed by the Senate.

The following adjustments were made to the budget estimate:

Delete funding for electronic grant management	-200,000
Delete funding for acquisition management training	-6,000
Reduce travel increase	-52,000
Reduce increase in vendor inflation	-100,000
Net reduction to budget estimate	-358,000

Funding for the light rail density pilot project is not included in the Office of the Administrator, as proposed by the Senate. The House bill contained no similar appropriation.

Valley trains and trails.—Within the funds appropriated to the Office of the Administrator, FRA should work with the Norfolk Southern Railroad, Valley Trains and Trails,

and the Commonwealth of Virginia to help develop a scenic passenger train service plan in Shenandoah County, Virginia. This study is contingent upon participation by Norfolk Southern.

Bill language is included that authorizes the Secretary to receive payments from the Union Station Redevelopment Corporation, credit them to the first deed of trust, and make payments on the first deed of trust. These funds may be advanced by the Administrator from unobligated balances available to the Federal Railroad Administration and must be reimbursed from payments received by the Union Station Redevelopment Corporation. Both the House and Senate bills contained these provisions.

RAILROAD SAFETY

The conference agreement provides \$61,488,000 for railroad safety instead of \$60,948,000 as proposed by the House and \$61,876,000 as proposed by the Senate. Of the total amount, \$3,825,000 shall remain available until expended. The following adjustments were made to the budget estimate:

Hire 24 instead of 32 new inspectors	-\$420,000
Provide 5 percent increase in travel	-351,000
Increase funding for Operation Lifesaver	+300,000
Net adjustment	-471,000

Bill language is included in this conference report that permits the reimbursement of out-of-state travel and per diem costs incurred by employees of State governments directly supporting the Federal railroad safety program, including regulatory development and compliance-related activities. Both the House and Senate bills contained this provision.

RAILROAD RESEARCH AND DEVELOPMENT

The conference agreement provides \$22,364,000 for railroad research and development instead of \$20,477,000 as proposed by the House and \$25,760,000 as proposed by the Senate and includes the following adjustments to the budget estimate:

Delete funding for assessment of current magnetic levitation systems	-\$150,000
Delete funding for Transportation Test Center site facilities	-130,000
Fund full-scale crash test of rail passenger equipment	+2,000,000
Half-year funding for track specialist	-117,000
Net adjustment to budget estimate	+1,607,000

Track and vehicle-track interaction.—Within funding allocated for track and vehicle-track interaction, \$500,000 shall be used to develop an automatic traffic control and monitoring system and \$500,000 shall be used to evaluate carbon composites in railroad bridges, as specified by the Senate. The GAO recently reported on the safety risk posed by the deteriorating structural integrity of the nation's 100,700 rail bridges. Aging rail bridges are increasingly being required to handle heavier axial loads and higher train speeds. To better address this safety risk, funding has been provided to develop, demonstrate, and evaluate the use of carbon composites for strengthening aging steel railroad bridges. These funds shall be made available to a constructed facilities center with extensive experience in this area.

New full-time employees.—The conference agreement provides half-year funding for the new track specialist position because the Administration has made a convincing case for

this position. No funding is provided for the new communications position.

Bill language is included that allows FRA to sell old aluminum reaction rail currently located at the Transportation Test Center (TTC) and use any proceeds for physical improvements at TTC as proposed by both the House and Senate.

RAILROAD REHABILITATION AND IMPROVEMENT PROGRAM

The conference agreement modifies bill language included in the House bill specifying that no new direct loans or loan guarantee commitments can be made using federal funds for the payment of any credit premium amount during fiscal year 1999. The Senate bill did not have any bill language for this program.

NEXT GENERATION HIGH-SPEED RAIL

The conference agreement provides \$20,494,000 for the next generation high-speed rail program instead of \$15,294,000 as proposed by the House and \$28,494,000 as proposed by the Senate. The following table summarizes the conference agreement by budget activity:

	<i>Conference</i>
Train control systems	\$4,300,000
Illinois positive train control demonstration	(1,300,000)
Alaska railroad	(3,000,000)
Non-electric locomotives ..	9,800,000
ALPS	(2,800,000)
Prototype locomotive ..	(7,000,000)
Grade crossings and innovative technologies	4,600,000
Sealed corridor	(1,000,000)
Mitigating hazards	(2,500,000)
Low-cost HSR crossing ..	(1,100,000)
Track and structures	1,200,000
Administration	594,000
Total	20,494,000

Positive train control.—A total of \$4,300,000 has been provided for positive train control activities in Illinois and Alaska. Funding has not been provided for a positive train control study recommended by the Senate because the goals of this study are being undertaken in the Illinois positive train control demonstration. It is anticipated that the system engineer for the joint AAR, Illinois DOT and FRA project on the Chicago to St. Louis corridor will decisively characterize the common elements required for interoperability, in order to develop an open system architecture. An open architecture is necessary to ensure that different positive train control technologies can communicate and interact effectively with one another.

FRA and the AAR have entered into a cooperative program to develop, test, and demonstrate positive train control capabilities between Springfield and Chicago, Illinois. This project is estimated to cost approximately \$60,000,000 over a four-year period. AAR has committed \$20,000,000 to the project. The conference agreement provides \$1,300,000 to this project in fiscal year 1999 to continue federal support.

The conference agreement provides \$3,000,000 for Alaska Railroad to continue its ongoing efforts to implement a collision avoidance positive train control system over the entire system. These funds will help fund a GPS satellite-based communications and tracking system that will provide positive train separation for all locomotives and track vehicles, and precision train control with movement-pass planning capabilities.

In conjunction with FRA, eastern railroads are developing positive train control, capable of operating with present and future technologies to adapt to the various types of railroad infrastructure. As the first step,

interoperable locomotive platform prototypes are being built at the present time. As the next step, the wayside portion of the positive train separation pilot will be developed and tested on the rail line between Manassas, Virginia through Hagerstown, Maryland to Harrisburg, Pennsylvania. This project, funded jointly by FRA and the railroads, was begun two years ago. FRA should continue funding this pilot project.

Rail-highway crossing hazard eliminations.—Under section 1103 of TEA21, an automatic set-aside of \$5,250,000 a year is made available for the elimination of rail-highway crossing hazards. A limited number of rail corridors are eligible for these funds. Of these set-aside funds: \$1,000,000 shall be used to mitigate grade crossing hazards on the Gulf Coast corridor; \$1,000,000 shall be used along North Carolina's sealed corridor; \$250,000 shall be used between Kalamazoo and Grand Beach, Michigan; and \$250,000 shall be used between Milwaukee and the Wisconsin-Illinois border.

ALASKA RAILROAD REHABILITATION

The conference agreement provides \$10,000,000 for the Alaska Railroad as proposed by the Senate. The House bill contained no similar appropriation.

RHODE ISLAND RAIL DEVELOPMENT

Total funding for the Rhode Island rail development project is \$5,000,000 instead of \$2,000,000 as proposed by the House and \$7,500,000 as proposed by the Senate. The conference agreement deletes Senate bill language that requires, as a condition of accepting such funds, the Providence and Worcester Railroad to reimburse Amtrak and/or the Federal Railroad Administration, on a dollar-for-dollar basis, up to the first \$28,000,000, if damages occur in vertical clearances in excess of those required for present freight operations. The House bill contained no similar provision.

CAPITAL GRANTS TO THE NATIONAL RAILROAD PASSENGER CORPORATION

The conference agreement provides \$609,230,000 for Capital grants to the National Railroad Passenger Corporation (Amtrak) as proposed by the House instead of \$555,000,000 as proposed by the Senate. All funding is to remain available until expended as proposed by the House.

The conference agreement deletes a number of language provisions included in either the House or the Senate bills. These include: (1) language that allocates not less than \$200,000,000 for the Northeast Corridor Improvement Program and \$355,000,000 for capital grants as proposed by the Senate; (2) language that limits the availability of funding for the Northeast Corridor Improvement Program to September 30, 2001 as proposed by the Senate; (3) language proposed by the House that requires the House and Senate Committees on Appropriations to approve Amtrak's capital plan prior to the release of this capital appropriation and funding made available from section 977 of the Taxpayer Relief Act; (4) language proposed by the Senate which identifies those activities on which capital grants may be expended; and (5) language proposed by the Senate that prohibits Amtrak from obligating more than \$222,000,000 prior to September 30, 1999.

Northeast Corridor improvement program.—The conference agreement does not provide a specific earmark for the Northeast Corridor Improvement Program. Amtrak has the flexibility to allocate whatever amount it believes is necessary for this project in fiscal year 1999.

Amtrak shall work closely with the Northeast Corridor communities, as well as state transit officials and owners of the track, to identify danger spots and install perimeter

fencing along the Corridor, wherever it is needed. In particular, Amtrak should focus on increased community coordination in urbanized areas where there have been problems or where community concerns have been expressed, such as Attleboro, Foxboro, Mansfield, and Sharon, Massachusetts.

Capital definition.—The conference agreement considered, but rejected as too broad, the expanded capital definition. However, Amtrak should be permitted to expend its fiscal year 1999 appropriated capital grant on maintenance of existing equipment as well as for capital improvements. Amtrak is already authorized to expend funds received under section 977 of the Taxpayer Relief Act for maintenance of equipment. Since this authority was already granted in a previous Act, there is a legislative precedent for Amtrak to expend its appropriated capital grants for equipment maintenance.

Rail signalization upgrade in Vermont.—Signalizing on the main rail line between Brattleboro and White River Junction, Vermont needs to be upgraded. Amtrak is currently negotiating with the State of Vermont and the New England Central Railroad to upgrade the pole line signal system to an electronic control system. The entire system is estimated to cost \$500,000. Amtrak is urged to continue negotiating with the affected parties. However, these costs should be shared among the users of the system and the state, and not be borne solely by Amtrak.

Erie, Pennsylvania station improvements.—Amtrak currently leases a small portion of a train station in Erie, Pennsylvania to provide service for the Lake Shore Limited. This station is in need of repairs to the platforms, canopies, and lights and requires better access to the tracks to comply with the Americans with Disabilities Act. This work is not currently included within Amtrak's capital plan; however, Amtrak has a set-aside of \$15,000,000 for leveraging state and local partnerships. Amtrak is strongly encouraged to consider funding rehabilitation and renovations at the Erie, Pennsylvania station when selecting projects for state and local partnerships in fiscal year 1999.

High-speed rail improvements outside the Northeast Corridor.—Amtrak has been working with the Commonwealth of Virginia to identify improvements necessary on track between Washington, D.C. and Richmond, Virginia so that passenger trains could operate at higher speeds. Amtrak is directed to report its findings and the estimated costs to do this work to the House and Senate Committees on Appropriations by March 1, 1999.

Las Vegas to Los Angeles service.—Amtrak has been working with the freight railroads, and the states of California and Nevada to begin passenger rail service between Las Vegas and Los Angeles early in 1999. The conferees are supportive of this project and expect that the number of capitalization issues surrounding necessary infrastructure upgrades for Amtrak to operate on this route will be quickly resolved.

FEDERAL TRANSIT ADMINISTRATION ADMINISTRATIVE EXPENSES

The conference agreement provides \$54,000,000 for administrative expenses of the Federal Transit Administration as proposed by both the House and the Senate. Within this total, the conference agreement appropriates \$10,800,000 from the general fund and \$43,200,000 from the Highway Trust Fund, as proposed by both the House and the Senate. The conference agreement provides that the general fund appropriation shall be available until expended.

The agreement includes a provision that transfers \$800,000 from funds made available for project management oversight activities

in this Act shall be consistent with the established reprogramming guidelines and may require the approval of the House and Senate Committees on Appropriations before execution.

DISCRETIONARY GRANT PROGRAMS

The conference agreement deletes the Senate references of priority designations and set-asides within the Federal Highway Administration's discretionary grant programs and the Bureau of Transportation Statistics, except as specifically provided in this conference report.

MAGNETIC LEVITATION TECHNOLOGY DEPLOYMENT PROGRAM

The conference agreement provides \$15,000,000 for the magnetic levitation technology deployment program, of which not more than \$500,000 shall be available to the Federal Railroad Administration for administrative expenses and technical assistance. Within the funds made available under this heading, the conference agreement provides \$5,000,000 for a high-speed intercity magnetic levitation project between Philadelphia and Pittsburgh, Pennsylvania and \$2,000,000 for a magnetic levitation project in Blacksburg, Virginia. Funding allocated to the Blacksburg project shall be conditioned upon the financial participation of the Commonwealth of Virginia.

FEDERAL LANDS PROGRAM

Funds provided for the federal lands program in fiscal year 1999 shall be available for the following activities:

Improvements to roadways on the Kenai Peninsula, Alaska	\$3,500,000
Restoration of the Columbia River Highway in Oregon	500,000
Highway improvements in Hanalei National Wildlife Refuge, Haleakala, and Hawaii National Parks ...	3,000,000
Lake Camp Road, Valley Road, and Beaver Pond Terrace Road, near the Brooks River area, Arkansas	1,000,000
U.S. Army Corps of Engineers study of rural access in Alaska	700,000
Charles M. Russell National Wildlife Refuge, Montana	1,000,000
Construction of Highway 323 between Alzada and Ekalaka, Montana	2,000,000
Glacier National Park, Going-to-the-Sun Road engineering study, Montana	1,000,000
Routes 25 and 58, Cumberland Gap National Park	3,000,000
Route 80, Daniel Boone National Forest	2,000,000
Baltimore-Washington Parkway	4,000,000
Manassas National Battlefield Park Improvements, Virginia	2,000,000
<i>Glacier National Park, Going-to-the-Sun Road.</i> —The conference agreement provides \$1,000,000 for engineering studies on Going-to-the-Sun Road in Glacier National Park. Funds will be used to conduct and support an independent engineering study assessing the best available technology to reduce costs and mitigate impacts; an updated economic analysis taking into account the economic impact of the road on the park and the surrounding communities; and a citizen advisory committee with which the National Park Service and the Federal Highway Ad-	

ministration would consult in making recommendations regarding the reconstruction of Going-to-the-Sun Road.

Highway 93, Montana.—The Conferees concur with the direction of the Senate regarding Highway 9 in Montana.

Manassas National Battlefield Park, Virginia.—The conference agreement includes \$2,000,000 for improvements to the U.S. Route 29 and State Route 234 intersection in the Manassas National Battlefield Park, Prince William County, Virginia. In April 1998, a task force of federal, state and local participants was created to address the unsafe conditions associated with this intersection which is used by local residents and park visitors. As a result of several task force meetings, a memorandum of understanding is being developed outlining improvements which improve safety and preserve the historical integrity of the battlefield. The funds provided in this Act shall be made available to implement improvements to the intersection consistent with the memorandum of understanding.

PROGRAM ADMINISTRATION

Proceeds from the sale or lease of real property.—The language in section 156 of title 23 of the United States Code, relating to the proceeds from the sale or lease of real property, can be applied to providing parking for the Louisiana Stadium and Exposition District.

DeSoto County, Mississippi.—For the purposes of constructing an underpass to improve access and to enhance highway/rail safety and economic development along Star Landing Road in DeSoto County, Mississippi, the State of Mississippi may use funds previously allocated to it under the transportation enhancements program, provided that the state would otherwise be unable to use the funds for transportation enhancement projects consistent with current law.

Georgia I-285.—The revised concept for the East-West Connector, Phase V and I-285 Interchange in Cobb County, Georgia (submitted on April 15, 1998 to the Georgia Department of Transportation, which in turn submitted it to the Federal Highway Administration on May 22, 1998) improves the level of service and operations of the interchange without increasing the capacity of this segment of I-285. The revised concept for the interchange will dramatically improve access to the communities adjoining the interchange without adversely affecting air quality in the Atlanta region. Therefore, FHWA is encouraged to approve the revised concept and allow preliminary design on the interchange to continue.

FEDERAL-AID HIGHWAYS

(LIQUIDATION OF CONTRACT AUTHORIZATION) (HIGHWAY TRUST FUND)

The conference agreement provides a liquidating cash appropriation of \$24,000,000,000 for the federal-aid highways program, as proposed by both the House and the Senate.

MOTOR CARRIER SAFETY GRANTS

(LIQUIDATION OF CONTRACT AUTHORIZATION) (HIGHWAY TRUST FUND)

The conference agreement includes a liquidating cash appropriation of \$100,000,000 for motor carrier safety grants as proposed by the Senate. The House included a liquidating cash appropriation of \$100,000,000 for motor carrier safety grants within the National Highway Traffic Safety Administration.

MOTOR CARRIER SAFETY GRANTS

(LIMITATION ON OBLIGATIONS) (HIGHWAY TRUST FUND)

The conference agreement includes the limitation on obligations of \$100,000,000 for motor carrier safety grants proposed by the

Senate. The House bill included a limitation on obligations of \$100,000,000 for motor carrier safety grants is within the National Highway Traffic Safety Administration.

This agreement allocates the funding in the following manner:

Basic grants to states	\$80,000,000
Border assistance	4,500,000
Priority initiatives	4,500,000
Administrative costs	1,000,000
Information systems and planning	10,000,000
Total	100,000,000

Border assistance.—The conference agreement has provided \$4,500,000 for border assistance, as proposed by the House. Funding has not been provided to the second tier states because Mexican commercial motor vehicles cannot operate beyond Arizona, California, New Mexico, and Texas until the year 2000.

Information systems and planning.—Of the \$10,000,000 provided for information systems and strategic planning, \$3,000,000 shall be provided to states to improve information systems and computer and evaluation capabilities; \$1,000,000 shall be for driver safety activities to improve the commercial drivers license programs or judicial outreach of the various states; and \$5,000,000 shall be for the PRISM project to increase the number of states participating in this program.

Transfer of OMC to NHTSA.—The conference agreement does not include the transfer of the office of motor carriers (OMC) from the Federal Highway Administration to the National Highway Traffic Safety Administration (NHTSA) proposed by the House. In proposing this transfer, the House believed that moving motor carriers under NHTSA's umbrella would strengthen and consolidate the department's vehicle safety programs. A single modal administration could provide a more consistent and synchronous safety program and agenda by focusing on reducing all highway accidents instead of having two organizations focusing on reducing components (passenger vehicles and commercial motor vehicles) of the 42,000 annual highway fatalities. The House intends to further review the possible consolidation of the office of motor carriers within NHTSA during its fiscal year 2000 budget hearings.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION OPERATIONS AND RESEARCH (HIGHWAY TRUST FUND)

The conference agreement provides \$159,400,000 from the Highway Trust Fund for operations and research. The Senate provided \$161,400,000 for operations and research and the National Driver Register from the Highway Trust Fund. The House provided \$72,000,000 for operations and research from the Highway Trust Fund and \$87,400,000 from the general fund. Of the total, \$58,558,000 shall remain available until September 30, 2001 as proposed by both the House and the Senate.

To comply with the levels authorized under TEA21, the conference agreement includes the following adjustments to the budget estimate:

Do not fund 10 new staff positions	-\$780,000
Do not fund new consumer information program	-814,000
Hold NCAP testing to 1998 level	-2,226,000
Delete funding for fuel economy program	-60,000
Slight reduction in vehicle safety compliance	-40,000
Reduce funding for defects investigation	-360,000

COAST GUARD—OPERATING EXPENSES
[Fiscal Year 1999: Conference Agreement]

	House bill	Senate bill	Conference agreement
Personnel Resources:			
Budget estimate	\$1,762,471,000	\$1,762,471,000	\$1,762,471,000
Adjustments to budget estimate:			
Eliminate new officer billets	-5,736,000	0	-5,736,000
Restore FY 1998 FTE savings	-15,000,000	0	-15,000,000
College fund recruiting	-545,000	0	0
Headquarters staffing	-1,000,000	0	-1,000,000
PCS reassignment moves	-1,370,000	0	-1,370,000
Overseas billet eliminations	-560,000	0	-560,000
Military pay and benefits	-10,000,000	-2,377,000	-10,000,000
Civilian pay and benefits	0	-3,077,000	-3,075,000
Health care	0	-2,036,000	0
PCS moves	0	-2,308,000	0
Amount recommended	1,728,260,000	1,752,673,000	1,725,730,000
Operating Funds & Unit Level Maintenance:			
Budget estimate	619,593,000	619,593,000	619,593,000
Adjustments to budget estimate:			
GSA rent for OSC	-1,448,000	0	0
17th district—FY98 level	0	+888,000	+1,768,000
Headquarters directorates	0	-1,156,000	-1,156,000
Other activities—FY98 level	0	-36,000	0
Amount recommended	618,145,000	619,289,000	620,205,000
Depot Level Maintenance:			
Budget estimate	389,641,000	389,641,000	389,641,000
Adjustments to budget estimate:			
	0	0	0
Amount recommended	389,641,000	389,641,000	389,641,000
Account-Wide Adjustments:			
Departmental initiatives	-498,000	0	-498,000
Non-pay inflation	-10,000,000	0	-10,000,000
Non-operational travel	-2,500,000	0	-2,500,000
Advisory/assistance services	-2,000,000	0	-2,000,000
Capitalizable projects	-8,000,000	0	-8,000,000
User fee/reimbursable program	-3,500,000	0	-3,500,000
WLB PCAF	-548,000	0	-78,000
Defense OPTEMPO	-9,000,000	0	-9,000,000
Amount recommended	-36,046,000	0	-35,576,000
Total appropriation	2,700,000,000	2,761,603,000	2,700,000,000

Nationwide ballast water management program.—The conferees agree that the Coast Guard should allocate not less than \$3,000,000 to the nationwide ballast water management program.

Concord, CA marine safety detachment.—The conference agreement accepts the House's concern about the Coast Guard's planned closure of the marine safety detachment in Concord, California and its impact on the protection of the local marine environment from significant oil and chemical traffic and on timely and efficient response to oil and chemical accidents in the sensitive and busy waterways of the Carquinez Strait and other Bay and Delta waterways. The conference agreement agrees with the House's direction that the Coast Guard shall not obligate any funds to begin the closure or termination of this unit until: (1) the Coast Guard enters into discussions with Contra Costa County officials concerning the impact of the closure; (2) the Coast Guard submits a report to the House and Senate Committees on Appropriations that explains how the Coast Guard will assure the timely and efficient response to oil and chemical accidents in the area and continue to perform other critical oversight functions concerning oil and chemical traffic in these waterways; and (3) the House and Senate Committees on Appropriations have had thirty legislative days to review the Coast Guard report.

Nationwide differential global positioning system.—Within the "Acquisition, construction, and improvements" account, the conferees have provided \$7,500,000 for differential global positioning system (DGPS) equipment, of which \$5,500,000 is for electronic equipment costs, site preparation and construction work, and installation of conversion software at Air Force ground wave emergency network transmitter sites throughout the continental United States under the nationwide DGPS program. The conference agreement directs that, of funds made available under Coast Guard "Operating expenses", sufficient operating funds be made available to support this NDGPS activity. The agree-

ment notes that, in the future, these sites may be operated by other DOT personnel through a memorandum of agreement between the Coast Guard and the Federal Railroad Administration or the Federal Highway Administration.

Distribution of funds.—The conferees do not agree with the House proposal to reduce funds for polar icebreaking and fisheries enforcement missions in order to finance additional drug interdiction activities. After development of the House bill, the Coast Guard raised its estimated fiscal year 1999 funding for drug interdiction activities from \$372,000,000 to \$440,000,000—an increase of \$68,000,000 (18 percent) since submission of the President's budget. The Coast Guard believes this increased level can be accomplished without lowering performance in other mission areas. With this development, the conferees agree that it is no longer necessary to reallocate funding from other missions.

Channel marking, Timbalier and Terrebonne Bays, LA.—The conferees direct the Coast Guard to provide adequate navigational markings in the east-west channel from the Houma Navigational Canal to the Havoline Canal in the vicinity of Timbalier and Terrebonne bays, Louisiana to ensure the safe and efficient navigation of maritime vessels. The conferees understand that the existing buoy and lights placed by the Coast Guard in this channel are insufficient. In addition, the conferees expect the Coast Guard to work with the Army Corps of Engineers to address the feasibility of upgrading the channel over the long term.

Container inspection program.—The DOT Inspector General recently reported that the Coast Guard container inspection program was failing to uniformly and aggressively utilize its own targeting system to prioritize and select hazardous material containers for inspection. The IG audit of ten shipping terminals found that fully 68 percent of the containers selected for inspection would have been identified as low risk under the Coast Guard targeting system and should not have

been chosen for inspection. Indeed, the audit revealed that Coast Guard inspectors regularly used alternative methods that did not identify containers posing the highest risks to human life, the safety of port areas, or the environment. The conferees are concerned that the Coast Guard's failure to abide by its own targeting criteria has undermined the effectiveness of the container inspection program and potentially compromised the safety of U.S. ports. Accordingly, the conferees concur in the directive of the Senate Committee regarding staffing of the container inspection program and expect this action will serve to rejuvenate this program. Toward that end, the conferees direct the Commandant to submit a report to the House and Senate Committees on Appropriations detailing the measures he has taken to address the deficiencies cited in the IG audit. This report shall also identify the location and rank of each Coast Guard container inspector.

Military health care.—The conferees are concerned about the structure of the current health care delivery system for service personnel and their dependents in remote or isolated communities with higher than average health care costs. The Coast Guard should explore additional means of assuring that health care services are accessible for Coast Guard personnel and their dependents at an out-of-pocket cost not substantially in excess of that paid by Coast Guard personnel and their dependents stationed in larger communities which have health care costs closer to system-wide average medical costs.

Seasonal search and rescue facility, Southern Lake Michigan.—The conference agreement directs the Commandant to establish an additional seasonal search and rescue facility on Southern Lake Michigan, to better serve the Chicago metropolitan area and the surrounding environment. The conferees understand that this will require the Coast Guard to make arrangements to acquire, refurbish, or otherwise obtain additional helicopter assets for this purpose. The conferees understand that the Coast Guard has two damaged

Amtrak Strategic Business Plan Summary



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Amtrak Board Approves Landmark Business Plan To Revitalize National Passenger Rail for the 21st Century

Plan Achieves Operating Self-Sufficiency; Includes Critically Needed Investments

WASHINGTON, D.C. -- The Amtrak Board of Directors today released Amtrak's four-year strategic business plan designed to meet the dual objectives of creating a more vibrant, modern national rail system and becoming an operationally self-sufficient business.

"This plan will make Amtrak a stronger competitor in the transportation marketplace and improve its bottom line," said Amtrak's newly elected Board Chairman, Wisconsin Governor Tommy G. Thompson. "It responds to both the desires of consumers for a quality national rail system and the demands of Congress for a more fiscally sound business operation."

"The key to Amtrak's long-term success depends on transforming the national passenger rail system into a more market-based system that delivers services that customers want and takes them to and from destinations of their choice," said George Warrington, Acting President and CEO of Amtrak. "Our business strategies put consumers first, and in doing so, Amtrak will capture a greater share of the national transportation market."

Amtrak's four-year business plan maintains a national system that is supported by revenues from passengers and commercial enterprises, such as the mail and express business which generated \$83 million in revenue in fiscal year 1998, ending September 30.

Another important revenue generator is Amtrak's high speed rail service, which is estimated to contribute up to \$180 million in net annual revenue by Fiscal Year 2002. The first high speed trains are scheduled to go into service between Washington, DC and Boston in late 1999. The high speed rail program serves as a model for how a market-based, consumer-oriented service can produce revenues to improve the financial health of the corporation as a whole.

Building on this success, Amtrak will work with states and other partners to expand corridor services in other parts of the country including the Midwest regional hub out of Chicago, California, the Pacific Northwest, the Southeast, along the Gulf Coast, and in New York State.

(more)

Highlights of Amtrak's FY1999-02 Strategic Business Plan

Maximizing Amtrak's Potential in the Marketplace

Key Business Strategies: Amtrak will fulfill its business vision of preserving a national system, achieving operating self-sufficiency, and transforming the company into a more commercially-oriented and economically viable corporation through five key strategies:

- **Build a market-based network** -- An extensive market-based research analysis is now underway to define consumer demand, identify opportunities for growth in rail service, and increase Amtrak's market share of America's travel business.
- **Develop corridor services** -- Amtrak is working with states and partners to develop new rail corridors across the country, using the expertise that Amtrak has acquired while building the high speed rail program, scheduled for launch in late 1999. The corridors of the future include the Midwest regional hub out of Chicago, and those located in California, the Pacific Northwest, the Southeast, along the Gulf Coast, and in New York State.
- **Deliver consistent quality service** -- A service standards program will be developed to ensure consistent, quality service delivery and ultimately, customer loyalty and ridership growth.
- **Revitalize the Amtrak brand** -- A commercial approach to revitalize the corporation's brand and image is underway to better depict Amtrak's new product and to ensure its competitive positioning among all transportation carriers.
- **Leverage public and private partnerships** -- To generate revenue to support basic rail services and maximize Amtrak's own investments, commercial and investment partners will be identified over the next year for business alliances.

Operating Plan: Amtrak is pursuing eleven operating initiatives that directly support two or more of the five key business strategies.

Operating Initiatives	Build a Market-Based Network	Develop Corridor Services	Deliver Consistent Quality Service	Revitalize the Amtrak Brand	Leverage Public and Private Partnerships
Launch High Speed Rail	✓	✓	✓	✓	✓
Grow Mail & Express Business	✓	✓			✓
Manage Sales & Distribution Network	✓		✓	✓	
Improve Equipment Quality & Mgmt	✓	✓	✓	✓	✓
Contain Core Operating Costs	✓		✓	✓	
Pursue New Commercial Ventures	✓	✓		✓	✓
Advance Information Technology	✓		✓		
Continue Safety Excellence	✓		✓	✓	
Conclude Labor Negotiations	✓			✓	
Capitalize on Human Resources	✓		✓		
Develop Contract Commuter Services	✓	✓			✓

AMTRAK STRATEGIC BUSINESS PLAN

FY 1999-2002



Leverage
Public and
Private
Partnerships

To generate revenue to support basic rail services and maximize Amtrak's own investments, commercial and investment partners will be identified over the next year for business alliances. Aggressive and innovative partnerships will be the cornerstone of three of the four other key strategies in this Strategic Business Plan. Partnerships will:

- Be critical to the commercial strategy for long-distance trains as envisioned in the market-based network;
- Form the basic business organizational structure used in the development of corridor services;
- Be fundamental to repositioning Amtrak's brand identity.

Specifically, Amtrak is developing:

- **Commercial Partners.** Like any progressive business, Amtrak seeks leaders throughout the industry to join in maximizing the revenue potential of Amtrak's many assets, be it real estate, communications and electric power corridors, national transportation network, a highly-qualified mechanical work force, or a national reservations system.
- **Service Partners.** As Amtrak redefines the parameters of a national system, it will seek public partners – federal, state, and local – who will contribute to the preservation and expansion of train service. In addition, Amtrak will seek private partners who can transfer their external expertise in service delivery or product offerings to both enhance the travel experience for customers and improve the financial performance of these vital train routes.
- **Investment Partners.** Amtrak does more than merely provide a transportation service – it safeguards the infrastructure of our national passenger railroad system. Like every other element of the country's transportation network – highways, waterways, and airport facilities – the passenger railroad infrastructure requires heavy capital investment. Amtrak will continue its partnership with the federal government by seeking on-going federal capital investment in the railroad, in exchange for Amtrak's wise use of the funds in a way that brings long-term returns. In addition, Amtrak will look to state and private partners to develop innovative business arrangements for investment in future corridor services and equipment purchases.

AMTRAK STRATEGIC BUSINESS PLAN

1999-2002



Revitalize
the
Amtrak
Brand

In today's marketplace numerous factors come into play when consumers make purchasing decisions. Among the most important factors involve the image of a product's brand. A great brand represents a promise defined with a keen understanding of what consumers desire. It delivers on that promise consistently, and thereby continually inspires choices and, ultimately, loyalty.

For Amtrak, the brand is more than just a name and a logo on the side of a train, it is about the total experience of train travel from purchasing a ticket, to entering the station, to the meals and amenities available during the trip.

The first step toward revitalizing the Amtrak brand and generating loyal customers has already begun in the form of market research designed to determine what travelers want. With a greater understanding of what the customer wants, Amtrak will redefine its services, amenities and offerings.

Another key component of the redefinition of Amtrak's brand that is already underway is the development of national service standards. In addition to the strategies defined in this Strategic Business Plan centered around achieving consistent quality service, the launch of high speed rail service will feature these new service standards and provide tangible proof that the company is changing its customer experience. In fact, the entire Northeast Corridor travel experience is being transformed with new equipment, station improvements, reservation system upgrades, comprehensive customer service training, and a new name and look, all of which will be reflected and expressed through the new corporate brand identity.

New initiatives that will support a redefinition of the Amtrak brand are occurring on the West Coast as well:

- In late 1998, new train sets will be introduced to serve the Amtrak Cascades line in the Pacific Northwest;
- In February of 1999, new service will begin between Los Angeles and Las Vegas;
- In March of 2000, new equipment will be introduced into the San Diegan service, Amtrak's second busiest corridor.

These initiatives provide Amtrak with the opportunity to reposition its services and product lines within the overall new national brand and signal a major change to consumers. Once this new brand is introduced in 1999, it will better depict Amtrak's new product, tap into today's consumer values and successfully reflect Amtrak's changing corporate strategies and services.



AMTRAK STRATEGIC BUSINESS PLAN

FY 1998-2002



Deliver
Consistent
Quality
Service

Amtrak is developing new standards of service which focus on ensuring consistent, high-quality service for the customer through the complete rail experience - from purchasing a ticket to stepping off the train. This major initiative, already underway, will take advantage of the market opportunity available to a more customer-focused company.

A group of senior managers has developed the service standards framework, guidelines and recommended actions necessary for successful implementation. The standards, tailored according to product category, specify physical service requirements, as well as behavioral outcomes for service delivery personnel. Implementation of the standards will include mechanisms to ensure Amtrak customer's experience will consistently meet or exceed the promise made to customers.

This initiative will entail significant changes in both the philosophy and systems for internal management, including recruitment, training, evaluation, recognition and discipline throughout the company. It emphasizes a partnership with labor and focuses on aligning the personal interests of employees with the company's interests in the customer experience. The effort will build on Amtrak's significant organizational strengths already evident in its operational and regulatory achievements.

AMTRAK STRATEGIC BUSINESS PLAN

FY 1999-2002



Develop
Corridor
Services

Amtrak is working with other states and partners to expand improved rail services to corridors across the country. The corridor program will use the expertise and knowledge that Amtrak has acquired while building the Northeast Corridor's high speed rail program, scheduled for launch at the end of 1999.

Offering real growth opportunities, the corridors of the future include:

■ **California Corridor.** The focus is on two existing corridors:

Los Angeles and San Diego - As the second busiest corridor in the nation, this service provides a viable alternative to Southern California's congested highways. Together with the state's service, Amtrak serves more than 3.9 million riders in Southern California per year.

San Joaquin Valley - Running from Bakersfield to Oakland, the third busiest corridor in the nation is growing at a phenomenal rate - in FY 1997 ridership increased by 21% over the previous year, and FY1998 ridership had increased 5.6% through May of 1998.

- **Chicago Hub.** Amtrak and nine Midwestern states have joined together in a formal effort known as the Midwest Regional Rail Initiative to develop a series of high speed corridors emanating from Chicago. The corridors targeted for investment include those between Chicago and Carbondale, Cincinnati, Cleveland, Detroit, Milwaukee, Omaha, St. Louis and St. Paul. Travel times are expected to improve by 30% - 50%.
- **Pacific Northwest Corridor.** Amtrak ridership on Northwest trains is forecast to grow 300% by the year 2003, to over one million passengers per year. Amtrak has a long-standing relationship with the states of Washington and Oregon and expects to work in conjunction with states and business partners to develop a corridor for the Vancouver-Seattle-Portland region.
- **Southeast Corridor.** Amtrak and the State of North Carolina are in the early stages of developing a 447 mile high speed corridor between Washington, D.C. and Charlotte, North Carolina. Amtrak is currently partnering with North Carolina to initiate a \$150 million improvement program.
- **Gulf Coast Corridor.** Amtrak is targeting the southern portion of the route of the *Crescent*, from Atlanta to New Orleans, as a focus for ridership growth based on an aggressive new marketing strategy. Some of Amtrak's new market focus will center on sports fans, rail-sail partnerships, group sales, and regional tour packages. Amtrak is also working with Norfolk Southern to build a mail and express dock facility in Atlanta, one of the largest distribution centers in the southeastern portion of the United States.



- **Empire Corridor.** Amtrak has reached an agreement with the State of New York on a comprehensive program to significantly upgrade the Empire Service. The agreement reflects a five-year joint funding program including work north, south, and west of Albany, New York. Components of the program include an upgrade of the mechanical shop at Rensselaer, overhaul of Turboliner trainsets and infrastructure improvements along the right-of-way. Up to \$140 million in infrastructure improvements and up to \$45 million in equipment upgrades will be invested over a five-year period, with the state of New York and Amtrak sharing the cost equally.

- **Keystone Corridor.** Amtrak has formed a long-term partnership with the Pennsylvania Commonwealth and the Southeastern Pennsylvania Transportation Authority (SEPTA) to upgrade the Philadelphia – Harrisburg line by improving tracks, stations, and parking, and by beginning preliminary engineering plans. Upgrades to the Harrisburg line are necessary in order to reduce travel time, and encourage additional growth in this densely populated market. Amtrak and the state are currently in the process of negotiating a multi-year infrastructure improvement program.

AMTRAK STRATEGIC BUSINESS PLAN

FY 1999-2002



**Build a
Market-
Based
Network**

An extensive market-based research analysis is now underway to define consumer demand, identify opportunities for growth of rail service, and increase Amtrak's market share of America's travel business.

The market-based network analysis will:

- Identify and characterize the existing and potential intercity travel market;
- Identify and develop additional commercial opportunities;
- Define a model for intercity passenger rail that works in the marketplace and balances stakeholder interests.

This planning and strategic re-positioning analysis builds on both the considerable market research and economic analysis that was used to assess the opportunities and shape the new business of high speed rail in the Northeast Corridor, as well as extensive analysis of the existing national network's performance.

Research and development has begun for the studies associated with the market-based network analysis. The analysis is expected to be completed in time to develop Amtrak's FY2000 Strategic Business Plan, one year from now. Given the timeframe required for the analysis, care has been given in structuring Amtrak's FY1999 operating and capital programs to ensure that strategies and plans are in alignment with the business vision, and the assumptions and preliminary findings of the analysis.

AMTRAK STRATEGIC BUSINESS PLAN

FY 1999-2002

Business
Vision

Maximizing Amtrak's Potential in the Marketplace

Amtrak has developed a Strategic Business Plan that will meet the dual objectives of creating a more vibrant, modern national rail system and becoming operationally self-sufficient by the end of FY2002. The Business Plan incorporates Amtrak's business vision to provide a market-based national system sustained by increasing passenger revenues and successful commercial ventures.

The business vision and the Plan are based on five key strategies:

- Build a market-based network
- Develop corridor services
- Deliver consistent quality service
- Revitalize the Amtrak brand
- Leverage public and private partnerships

The most immediate example of the business vision, and one that supports all of these strategies, is the launch of high speed rail service. Scheduled to begin in late 1999, high speed rail is expected to generate annual net revenues growing to \$180 million per year by 2002. To build on this success, Amtrak plans to apply its high speed rail expertise and knowledge in other corridors as well. Amtrak is already working with states and partners to develop new services in California, the Pacific Northwest, North Carolina, New York, the Gulf Coast region, and in the regional hub around Chicago.

As part of the new vision, Amtrak is analyzing the market demand for passenger rail service across the country so it may reposition itself to become more relevant to its customers. At the same time, Amtrak is developing service standards to ensure that high quality service is consistently provided, enabling the corporation to adopt a more commercially oriented approach. The commercial orientation sets the framework for Amtrak's future as a profitable business structured around a national network of:

- High-speed commuter corridors;
- Medium and long distance passenger service sustained by a mix of coach, sleeper, dining, mail, and express businesses;
- Medium and long distance passenger service sustained by other profitable commercial businesses, state/local support and/or strategic business partnerships.

The capital investments Amtrak makes to support the business strategies contribute to the goal of operating self-sufficiency, but also work directly to improve customer service. Without continuous, consistent, and predictable capital investment, Amtrak's vision will not be realized. Amtrak's partnership with the federal government must, therefore, continue as annual federal capital funding will be required to maintain and improve the infrastructure that supports this vital transportation mode.





AMTRAK STRATEGIC BUSINESS PLAN

FY 1999-2002

**On the
Path to
Self-
Sufficiency**

The first and most important step Amtrak must take to reach its ultimate goal of economic viability is to achieve operational self-sufficiency by the end of 2002. The Strategic Business Plan sets forth specific actions that will generate a steady increase in Amtrak's overall operating performance, resulting in a national passenger rail service that operates free of federal subsidies.

FY1999 - FY2002

The following table outlines Amtrak's financial goals between now and the year 2002:

Table 1.1 Test for Operating Self Sufficiency

\$ Millions	FY 1999	FY 2000	FY 2001	FY 2002
Revenues	1,866	2,184	2,396	2,501
Expenses	(2,796)	(3,092)	(3,215)	(3,253)
Operating Profit/(Loss)	(930)	(908)	(819)	(752)
Capital for Progressive Equipment Overhauls	76	77	78	80
Depreciation/Noncash Expenses ¹	370	470	499	487
Budget Gap	(484)	(361)	(242)	(185)
Excess Mandatory RRTA	166	172	179	185
Test for Self Sufficiency	(318)	(189)	(63)	0

¹Noncash expenses also include certain employee benefit related expenses

*Amtrak's test for operating self-sufficiency, however, does not include covering the mandatory excess Railroad Retirement Tax (RRTA) payments.

Amtrak will increase its total revenues by \$789 million through expanding the mail and express businesses, increasing focus on commercial opportunities, and providing more frequent, high-quality service based on market demand. Specifically, Amtrak will:

- Produce net incremental revenues of \$180 million per year by inaugurating high speed service;
- Increase the budget result of express operations from \$4 million in 1999 to \$25 million by FY2002;
- Increase ridership by 4.4 million passengers for a four-year increase of 21 percent.



Long term outlook

During the period of the strategic business plan, Amtrak will utilize federal capital support for certain maintenance expenses. However, as the operating performance improves, the amount of federal funds required for capital maintenance expenses will decline, increasing the amount of capital available for investment projects, which bring long-term returns to the corporation.

The success of the business plan is contingent upon continued federal capital investment. The Taxpayer Relief Act (TRA) funds created short-term stability by providing \$2.2 billion toward a nearly \$5 billion need over the FY1998 - 2002 period. The Plan assumes that federal capital support will continue to enable Amtrak to make investments in support of the Plan and to reach the goal of self-sufficiency.




AMTRAK STRATEGIC BUSINESS PLAN

FY 1999-2002


The
Operating
Plan

Amtrak is pursuing 11 operating initiatives that directly support the five key business strategies: build a market-based network; develop corridor services; deliver consistent quality service; revitalize the Amtrak brand; leverage public and private partnerships.

Revenue Enhancements

- 
- **Launch High Speed Rail.** High speed rail directly supports all of Amtrak's corporate strategies and will contribute \$180 million in net annual revenue by FY2002. The first high speed trains are scheduled to go into service between Washington, DC and Boston in late 1999. The high speed rail program serves as a model for how a market-based, consumer-oriented service can produce revenues to improve the financial health of the corporation as a whole.
 - **Grow Mail and Express.** Amtrak's successful mail program is a key element in achieving profitability, which the corporation will emulate for its growing express business. Recent favorable rulings with regard to express shipping mean Amtrak can now compete in the \$247 billion ground transportation market. While Amtrak currently controls less than 1 percent of the goods handling market, even modest gains could make a significant difference in the financial health of long-distance trains.
 - **Pursue New Commercial Ventures.** Another important profit-generating activity involves the implementation of new commercial ventures. Amtrak is pursuing a variety of commercial business ventures, including targeted travel and tourism markets, equipment leasing, mechanical services insourcing, and real estate, telecommunications, advertising and parking.
 - **Develop Contract Commuter and State Supported Services.** Seeking and securing contract services is likely to result in partnering with public and private organizations, thus building critical relationships with service providers who may contribute funds for future projects.

Efficiency and Reduction of Costs

- 
- **Contain Costs.** One of Amtrak's primary goals is to ensure that it manages its cost structure efficiently and effectively. Amtrak will identify specific cost line items including the fare collection process, fuel purchases, other procurement, and food and beverage management to devise ways to take advantage of economies of scale, technology and standardization. The result will be an improvement of overall quality and more effective management of expenses.
 - **Improve Equipment Quality and Management.** As part of an effort to manage existing resources more efficiently, Amtrak has developed a systematic approach to the maintenance of equipment, and is modifying and enhancing equipment, and improving the management of surplus equipment.

Human Resources

- **Capitalize on Human Resources.** To a great extent, Amtrak's ability to fulfill its corporate strategies will depend on its ability to attract, develop, and retain people who can contribute to achieving the business objective. Therefore, Amtrak will implement human resource initiatives to provide proper training and support and identify employee needs.
- **Continue Safety Excellence.** Amtrak has developed a number of programs to improve safety, including more frequent station announcements, formation of safety teams, development of a corporate wide safety mission, and Emergency Preparedness training.
- **Conclude Labor Negotiations.** Amtrak seeks to finalize negotiations on wage rates and work rules in FY1999 with the over half of unionized employees still operating under expired agreements.

Utilizing Technology

- **Manage the Sales and Distribution Network.** Amtrak is responding to customer demand for service amenities, including the demand for high quality, reliable, accessible customer service. At least \$50 million will be invested in technology that makes it easier for customers to learn about and purchase Amtrak products.
- **Advance Information Technology.** By utilizing new information technology, Amtrak can improve its reservation system to sell more tickets, automate its accounting transactions to reduce costs, better distribute business information, and achieve year 2000 information system readiness.

TAB 9 - High Speed Rail Safety Initiatives

- **Regulatory Review**
- **Track Safety Standards; Final Rule**

Regulatory Review

Edward English, Director

Office of Safety Assurance and Compliance, FRA

Power Brakes

- FRA required to revise the power brake regulations
- Strong objections to FRA's published NPRM 9/16/94
- Passenger standards revision
 - Passenger Equipment Safety Standards Working Group asked to incorporate new proposals for revisions in the NPRM for passenger equipment safety

Power Brakes (continued)

- Freight standards revision
 - RSAC accepted task of preparing a second NPRM, 4/1/96
 - ◆ working group initiated efforts in May 1996
 - ◆ impasse declared 12/4/96
 - ◆ task formally terminated 5/29/97
 - ◆ FRA preparing a second NPRM

Power Brakes (continued)

- Two-way end-of-train devices
 - Notice published 2/21/96
 - Regulatory conference convened 3/5/96 to explore remaining issues
 - Final rule published 1/2/97, effective 7/1/97
 - NPRM published 1/16/98 to clarify application of requirements to inter-city passenger trains operating with express equipment at rear

Passenger Safety Standards

- FRA required to issue initial standards within 3 years (1997) and complete within 5 years (1999)
- Agency authorized to consult with industry parties making it possible to conduct an informal negotiated rulemaking

Passenger Safety Standards (continued)

- FRA prepared an ANPRM, published 6/17/96, indicating the issues under review by the working group
- NPRM issued 9/23/97; public hearing 11/21/97
- FRA is preparing the final rule for the first phase of rulemaking

Locomotive Crashworthiness and Working Conditions

- Structural means of preventing harm to crew members in collisions (e.g., collision posts, anticlimbers)
- Matters related to safety, health, and productivity (e.g., noise, sanitation)
- Railroad Safety Advisory Council (RSAC) accepted these two tasks 6/24/97

Railroad Communications

(Including Radio Standards and Procedures)

- Report to Congress on Railroad Communications and Train Control, 7/14/94, noted need to revise standards for radio communications in concert with railroads and employee representatives
- NPRM issued 6/11/97; published 6/26/97; comment period closed 8/25/97;
- FRA is preparing the final rule

Passenger Train Emergency Preparedness

- Federal Railroad Safety Authorization Act of 1994 required FRA to issue emergency preparedness standards for passenger service
- Considered implications of Emergency Order No. 20 and recommendations of NTSB
- NPRM published 2/24/97
- Final rule published 5/4/98; effective 7/6/98

Florida Overland Express

- FRA received petition for a rule of particular applicability for operation over a new high-speed railroad between Miami and Tampa via Orlando
- FRA issued an NPRM 12/12/97

Locomotive Engineer Certification Miscellaneous Revisions

- Final rule effective in 1991
- Examples of issues under review:
 - Status of operators of specialized maintenance-of-way equipment
 - Types of conduct for which decertification is appropriate
- Efforts underway to resolve remaining issues and submit NPRM to full RSAC in very near future

Railroad Operating Practices (Blue Signal Protection)

- Rule permitting utility employees to associate themselves with a train crew to perform functions that require employees to go on, under, or between rolling stock without blue signal protection published 8/16/93
- Rules for locomotive engineers working alone not clearly defined
- Application of requirements to contractors performing the subject functions on railroad property

Track Safety Standards

- Rail Safety Enforcement and Review Act of 1992 required FRA to revise Track Safety Standards to consider:
 - The “excepted track” provision
 - Updating standards to take advantage of research findings for internal rail flaw detection and gage restraint measurement
 - Proposing to adopt track standards for high-speed service
- NPRM published 7/3/97; Hearing held 9/4/97
- Final Rule published 6/22/98; effective 9/21/98

Bridge Structural Safety

- No regulatory action following survey of bridge conditions and railroad inspection practices
- FRA will continue to exercise oversight role
- Emergency Order No. 19 issued 2/12/96, removed from service a bridge on the Tonawanda Island Railroad in New York pending structural repairs

Positive Train Control

- Working group established to:
 - Define PTC functionalities
 - Describe available technologies
 - Evaluate costs and benefits of potential systems
 - Consider implementation opportunities, including demonstration and deployment
- FRA effort is to encourage deployment of innovative technology by providing predictable environment

North Corridor (NEC) Signal and Train Control

- Positive stop and continuous speed control capabilities resulting from Amtrak's plan to operate to 150 mph on portions of NEC and improve automatic train control systems
- Notice of Proposed Order for new signal and train control system authorizing speed to 150 mph published 11/20/97; public hearing 2/17/98; Final Order to be published this week

Event Recorders

- RSAC accepted task 6/97 to develop next generation performance standards
- Working Group is addressing the issues of what data elements should be recorded; survivability; inspection, testing and maintenance; and physical location of the event recorder

Safety Integration Plans

- FRA has requested that petitioners in Conrail acquisition file Safety Integration Plans (SIPs)
- In coordination with the STB, FRA may propose regulations requiring SIPs
- FRA preparing NPRM, taking into consideration Conrail experience

Other Safety Related Projects

- TOFC / COFC Securement
- Hours of Service Electronic Recordkeeping
- Emergency Order No. 20
 - System Safety Plans
- Safety Advisory
- Whistle Bans

Monday
June 22, 1998

Federal Railroad Administration

Part II

**Department of
Transportation**

Federal Railroad Administration

**49 CFR Part 213
Track Safety Standards; Final Rule**

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

49 CFR Part 213

[Docket No. RST-90-1, Notice No. 8]

RIN 2130-AA75

Track Safety Standards

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

ACTION: Final rule.

SUMMARY: FRA amends the Track Safety Standards to update and enhance its track safety regulatory program. To address today's railroad operating environment, these amendments present additional regulatory requirements, including standards specifically addressing high speed train operations. FRA issues these changes to improve track safety and provide the railroad industry with the flexibility needed to effect a safer and more efficient use of resources. The amendments reflect recommendations submitted to FRA by the Railroad Safety Advisory Committee. The provisions included in this notice become effective with this rule. However, FRA anticipates that further amendments will be added to address the use of Gage Restraint Measuring Systems.

DATES: *Effective Date:* This final rule is effective September 21, 1998.

FOR FURTHER INFORMATION CONTACT: Allison H. MacDowell, Office of Safety Enforcement, Federal Railroad Administration, 400 Seventh Street, S.W., Mail Stop 25, Washington, D.C. 20590 (telephone: 202-632-3344), or Nancy Lummen Lewis, Office of Chief Counsel, Federal Railroad Administration, 400 Seventh Street, S.W., Mail Stop 10, Washington, D.C. 20590 (telephone: 202-632-3174).

SUPPLEMENTARY INFORMATION:**Introduction**

The first Federal Track Safety Standards were implemented in October, 1971, following the enactment of the Federal Railroad Safety Act of 1970 in which Congress granted to FRA comprehensive authority over "all areas of railroad safety." See 36 FR 20336 and 49 U.S.C. 20101 *et seq.* FRA envisioned the new standards to be an evolving set of safety requirements subject to continuous revision allowing the regulations to keep pace with industry innovations and agency research and development.

FRA amended the Track Safety Standards with minor revisions several

times in the past two decades. It began a project to revise the standards extensively in 1978, but later withdrew the effort when investigation revealed that considerably more data collection and analysis were necessary to support recommended revisions. A less extensive revision of the Track Safety Standards was issued in November, 1982. Since then, FRA has acquired much information crucial to further development of the Track Safety Standards through the enhanced statistical analysis capabilities resulting from additional field reporting requirements and improved data collection processes.

Statutory Background

The Rail Safety Enforcement and Review Act of 1992, Public Law 102-365, 106 Stat. 972 (September 3, 1992), later amended by the Federal Railroad Safety Authorization Act of 1994, Public Law 103-440, 108 Stat. 4615 (November 2, 1994), requires FRA to revise the track safety regulations contained in 49 CFR Part 213. Now codified at 49 U.S.C. § 20142, the amended statute requires:

- (a) **Review of Existing Regulations.**—Not later than March 3, 1993, the Secretary of Transportation shall begin a review of Department of Transportation regulations related to track safety standards. The review at least shall include an evaluation of—
- (1) Procedures associated with maintaining and installing continuous welded rail and its attendant structure, including cold weather installation procedures;
 - (2) The need for revisions to regulations on track excepted from track safety standards; and
 - (3) Employee safety.
- (b) **Revision of Regulations.**—Not later than September 1, 1995, the Secretary shall prescribe regulations and issue orders to revise track safety standards, considering safety information presented during the review under subsection (a) of this section and the report of the Comptroller General submitted under subsection (c) of this section.

* * * * *

(d) **Identification of Internal Rail Defects.**—In carrying out subsections (a) and (b), the Secretary shall consider whether or not to prescribe regulations and issue orders concerning—

- (1) Inspection procedures to identify internal rail defects, before they reach imminent failure size, in rail that has significant shelling; and
- (2) Any specific actions that should be taken when a rail surface condition, such as shelling, prevents the identification of internal defects.

Petitions for Rulemaking

In May, 1990, the Brotherhood of Maintenance of Way Employees (BMWE) filed a petition with FRA to revise the Track Safety Standards. The petition

suggested substantive changes to the standards, the addition of new regulations addressing recent developments in the industry, as well as the reinstatement of many of the regulations deleted from the standards in 1982. The BMWE also petitioned FRA to further address employee safety by incorporating in the Track Safety Standards certain sections of the Occupational Safety and Health Standards presently administered by the U.S. Department of Labor.

In March, 1992, the Association of American Railroads (AAR) submitted to FRA a list of recommended revisions to the Track Safety Standards. The AAR suggested some changes in the wording of existing regulations to provide additional flexibility to accommodate future innovations in railroad technology. Several suggested revisions included new approaches to determining compliance with certain existing regulations. Most notable among those was AAR's proposal that the revised track standards permit the use of a Gage Restraint Measuring System (GRMS) in place of detailed crosstie and fastener requirements.

Proceedings to Date

On November 16, 1992, FRA published an Advance Notice of Proposed Rulemaking (ANPRM) in this docket. See 57 FR 54038. The ANPRM summarized FRA's knowledge about developments in the rail industry in the past two decades and then posed some 52 questions regarding how those developments should be addressed in the revised track safety standards.

The ANPRM also announced plans for four public workshops in which technically-knowledgeable persons with specialized experience in track maintenance were invited to share their views with FRA in an informal setting. The workshops were fact-finding sessions comprised of informal give-and-take exchanges between industry, labor, and government professionals charged with the administration of the track safety standards on a day-to-day basis. They constituted an initial step by FRA to use more active collaboration with labor, railroad management, manufacturers, state governments, and public interest associations in structuring the revised regulations.

Participants in the workshops included representatives of major and short line railroads, the AAR, the American Short Line Railroad Association (ASLRA), the BMWE, as well as individuals with a particular interest in certain areas of the track safety standards. In addition to the workshops, FRA invited interested

persons to submit written comments to the questions posed in the ANPRM. Approximately 30 individuals, railroads, and industry groups submitted their suggestions and observations.

Following one workshop which included an extensive discussion about the safety of maintenance-of-way employees, FRA decided to isolate that issue from this proceeding so that it could be addressed thoroughly in a separate rulemaking. That issue became the focus of a proceeding addressing roadway worker safety. FRA's first negotiated rulemaking, FRA established its first formal regulatory negotiation committee in 1994. After months of discussions and debates, the committee reached consensus conclusions and recommended provisions for an NPRM to the Federal Railroad Administrator (Administrator) on May 17, 1995. An NPRM based upon those recommendations was published on March 14, 1996 (see 61 FR 10528), and a final rule was issued on December 16, 1996 (see 61 FR 65959). Thus, a significant portion of the mandate of the Rail Safety Enforcement and Review Act of 1992 calling for a general revision of the Track Safety Standards already has become effective.

e Railroad Safety Advisory Committee and the Track Working Group

In past rulemakings, interested parties generally have approached the proceedings in an adversarial manner, a tactic that often inhibited the development of the best regulatory solutions to resolve difficult safety issues. In addition, parties also have resorted to pressuring Congress for legislation that would grant regulatory results with which FRA disagreed or were at odds with FRA's regulatory agenda. FRA concluded, therefore, that inclusion of these parties in its regulatory process would result in a more positive approach to developing the best solutions to pressing safety problems.

Although FRA gathered much information in the 1993 track workshops, as well as in similar workshops associated with other rulemaking proceedings, the agency recognized that continued use of these "ad hoc" collaborative procedures for each rulemaking was not the most effective means of accomplishing the agency's goal of achieving a more consensus-based regulatory program. Following the success in 1995 of the negotiated rulemaking addressing roadway worker safety, FRA decided that several pending rulemakings,

including this proceeding to revise Part 213, should advance under a new rulemaking model that relies upon consensus among various members of the affected industry and the regulated community. On March 11, 1996, FRA announced formation of the Railroad Safety Advisory Committee (RSAC), the centerpiece of the agency's new regulatory program which emphasizes rulemaking by consensus with those most affected by the agency's regulations. See 61 FR 740.

The RSAC is comprised of 48 individual representatives drawn from 27 member organizations. The membership of the RSAC is representative of those interested in railroad safety issues, including railroad owners, manufacturers, labor groups, state government groups, and public interest associations. Its sponsor is the Administrator, who recommends specific issues for it to address. The RSAC operates by consensus. It is authorized to establish smaller "working groups" to research and initially address the issues recommended by the Administrator and accepted by the RSAC to resolve.

Most of the text of this final rule was recommended to FRA by the RSAC. The committee was tasked by the Administrator to formulate and present to FRA recommendations for new regulations and revisions of existing ones.

In accordance with established RSAC procedures, RSAC formed a Track Working Group, comprised of approximately 30 representatives from railroads, rail labor, trade associations, state government, track equipment manufacturers, and FRA, to develop and draft a proposed rule for the revision of Part 213. It met periodically over a span of six months in 1996.

The Track Working Group identified issues for discussion from several sources. One source of issues was, of course, the statutory mandates issued by Congress in 1992 and in 1994. Two other sources were the BMW's petition and AAR proposals. Several issues came to the Track Working Group by way of requests for consideration made by FRA's track safety Technical Resolution Committee. The group also examined track issues involved in a number of recommendations made to FRA by the National Transportation Safety Board (NTSB) in the past decade. Discussions utilized information acquired by FRA through its research and development program, as well as from findings from routine agency investigations and accident investigations. Finally, the Track Working Group systematically surveyed the existing regulations to

identify those sections and subsections that needed updating or, in some cases, deletion.

At a public meeting on October 31, 1996, the Track Working Group presented its proposed rule to the RSAC for approval to recommend it to the Administrator. As required by RSAC procedures, each provision in the proposed rule had received unanimous approval by the members of the Track Working Group. At the request of the BMW, the RSAC agreed to defer the vote on whether to recommend the proposed rule to the Administrator to provide that organization additional time to inform its members. At the time of the formal vote by mail on November 21, 1996, representatives of many of the labor unions withdrew support of the proposed rule and recommended that it be returned to the Track Working Group for further discussion.

Despite the lack of support by many RSAC representatives of rail labor, the number of votes cast in favor of recommending the proposed rule to the Administrator exceeded the number necessary for a simple majority. RSAC's procedures provide that where there is a majority vote to recommend to the Administrator a rule presented to the RSAC with full consensus of the working group that produced it, the RSAC will recommend adoption of the rule by the Administrator. Following those procedures, the RSAC formally recommended to the Administrator that FRA issue the proposed rule as it was drafted.

On July 3, 1997, FRA published a Notice of Proposed Rulemaking (NPRM) which included substantially the same rule text and preamble developed by the Track Working Group. See 62 FR 36138. In developing the regulatory evaluation for the NPRM, FRA attempted to incorporate additional data in the cost/benefit analysis beyond the impact data provided by the Track Working Group. In the NPRM, FRA requested additional relevant data to use in the regulatory evaluation for this final rule, but parties who had access to relevant data did not respond to that request.

Comments and Responses

The NPRM generated comments from 12 sources. Four of the commenters, namely, the AAR, the BMW, the ASLRA, and Amtrak, were represented on the Track Working Group and helped draft the recommended rule which became the basis for the NPRM. All four of those commenters expressed support for the RSAC process.

The BMW stated that it agrees with many of the revisions proposed in the NPRM, but that the standards proposed

therein "do not go far enough to ensure the integrity of the track structure." The BMW stated that "several significant deficiencies" led that group, as well as RSAC members representing other labor organizations, to recommend to RSAC that the proposed rule as drafted by the Track Working Group be returned to that group for further consideration.

The AAR, in its comments to the docket, stated that it continues to support the NPRM and the language drafted by the Track Working Group. However, the AAR also added a request that should FRA revise any of the proposed rule in direct response to comments by RSAC participants who withdrew support of the rule drafted by the Track Working Group, then FRA would also re-examine the positions the AAR originally expressed about those issues. The AAR stated that its support of the proposed rule reflects that organization's willingness to compromise some of its positions in the interest in reaching consensus about the proposed rule in the Track Working Group. Therefore, the AAR's general support of the NPRM should not be misconstrued as agreement by the organization with each and every provision of the NPRM.

FRA has not significantly changed the NPRM based on comments from other RSAC participants who withdrew support for the rule proposed by the Track Working Group. Thus the AAR's suggested revisions based on that contingency are not examined in the "Section By Section Analysis" portion of this final rule.

Continuous Welded Rail (CWR)

In the first track safety standards published in 1971, § 213.119 dealt with CWR in a rather general manner, stating simply that CWR must be installed at a rail temperature that prevents lateral displacement of track or pull-aparts of rail ends, and that it should not be disturbed at rail temperatures higher than the installation or adjusted installation temperature. (See 36 FR 20341.) In 1979, when FRA proposed a significant revision of Part 213, the agency suggested that this subsection be eliminated because it provided "little guidance to railroads" and was "difficult to enforce." The agency further stated that research had "not advanced to the point where specific safety requirements can be established." (See 44 FR 52114.) However, when the proposed revision was withdrawn in 1981 (see 46 FR 32896), the proposal to eliminate § 213.119 was also abandoned. In the November, 1982 revisions to the Track Safety Standards, § 213.119 was deleted.

In the Rail Safety Enforcement and Review Act of 1992, Congress mandated FRA to evaluate procedures for installing and maintaining CWR. In 1994, in the Federal Railroad Authorization Act, Congress added an evaluation of cold weather installation procedures to that mandate. In light of the evaluation of those procedures, as well as information resulting from FRA's own research and development, this final rule returns CWR procedures to Part 213.

CWR is naturally subjected to high compressive and tensile forces which, if not adequately restrained, can result in track buckling or pull-aparts. The potential for track buckling increases as the ambient air temperature increases while the potential for pull-aparts increases as the ambient air temperature decreases. Track buckling tends to occur under train movement and therefore can be instantaneous and somewhat unpredictable.

In recent years, FRA engaged in a research program to develop criteria and guidelines for improving CWR's resistance to buckling. The program sought to (1) define critical forces and conditions associated with track buckling, (2) quantify parameters which govern the resistance of track to buckling, and (3) develop technology to detect incipient failures prior to track buckling. Railroads have also invested considerable resources into CWR research and employee training which has resulted in a marked decrease in the number of reportable buckled track incidents over the last decade. FRA's Accident/Incident data base reveals that the number of reportable buckled track derailments has been reduced by approximately 50% since 1985, dropping from a yearly average of approximately 60 instances to approximately 30 such occurrences per year.

How a railroad provides the adequate lateral resistance to prevent track buckling may vary from railroad to railroad. The Track Working Group found that consistent methodology is not as important as effective methodology in installing and maintaining CWR. Therefore, the Track Working Group's recommendations and the new subsection (§ 213.119) are premised on the concept that the regulations should provide railroads with as much flexibility as safely feasible. The new subsection allows railroads to develop and implement their individual CWR programs based on procedures which have proven effective for them over the years. At a minimum, procedures shall be developed for the installation,

adjustment, maintenance, and inspection of CWR, as well as a training program and minimal requirements for recordkeeping. FRA fully expects the railroad industry to take advantage of continuing research initiatives to update and enhance their CWR procedures, and cautions railroads not to develop less than acceptable CWR procedures as a means to lessen the effect of regulatory oversight. FRA will monitor the railroads' adherence to these procedures as well as the overall effectiveness of the CWR programs.

While the CWR provision, as proposed, received support from some commenters (the NTSB), others were critical of the new provision. The AAR called it "a classic case of overregulation" and suggested that the provision require track owners only to have CWR procedures and training programs in effect and accessible to FRA. While it supported the provision as a means to enhance track safety, the BMW also advised that the provision lacks a means to address railroads' non-compliance with their own CWR programs. The ASLRA suggested that railroads should have the option of excluding from their CWR plans any trackage over which trains do not operate at speeds over 30 m.p.h. and which do not exceed one million gross ton miles in traffic annually. The AAR also stated that it generally supports the provision as drafted by the Track Working Group and that its suggestions for changes were to be considered only in the event FRA decides to revise the proposed provision in response to recommendations of other RSAC participants who, after helping to draft the recommended NPRM, withdrew support for the recommendation. All three commenters who expressed negative comments were active participants in the Track Working Group and helped to draft the language which adds the provision for CWR in this final rule.

Excepted Track

With some limitations, the excepted track regulation permits railroads to designate track as "excepted" from compliance with minimum safety requirements for roadbed, track geometry and track structure. FRA added the excepted track provision (§ 213.4) to the regulations in 1982 in response to an industry outcry for regulatory relief on those rail lines producing little or no income. FRA believed that without some relief for low density lines, railroads would accelerate abandonment of those lines rather than invest their slim resources where returns would be limited.

Therefore, the 1982 revision provided the industry with a means to operate over designated tracks without complying with the substantive requirements of the Track Safety Standards. FRA believed that the designated tracks would be located in yards or otherwise on comparatively level terrain in areas where the likelihood was remote that a derailment would endanger a train crew or the general public.

The 1982 provision contains a number of operating restrictions, including limitations on where excepted track can be located and the number of cars containing hazardous materials (five) that can be hauled in one train. Maximum speed is 10 m.p.h., and passenger service is prohibited.

Despite these limitations, railroads have embraced the concept of excepted track. In 1992, an FRA survey revealed the existence of approximately 12,000 miles of designated excepted track nationwide, far more than FRA envisioned when the provision was added to the regulations. Recent surveys conducted by the AAR and the ASLRA indicate that between 8,000 and 9,000 miles of excepted track presently exist nationwide.

Comments to the ANPRM, the NPRM, as well as some opinions expressed within the Track Working Group, showed that many railroads favor maintaining an excepted track provision in the Track Safety Standards. They argued that accident and injury data do not support the notion that trackage in "excepted" status presents any significant safety hazard. FRA's data show that between 1990 and 1995, track-caused derailments on excepted track caused three reportable injuries and one release of hazardous materials. In commenting on the NPRM, the ASLRA stated that, in a recent survey of short line railroads, 146 railroads that reported having excepted track had 122 reportable accidents in a five-year period from 1991 through 1995. Of those accidents, 87 were track-related.

The ASLRA strenuously argued that short line railroads depend on the excepted track provision in order to keep certain track segments in business. Many short lines operate over track they acquired just before abandonment by a major railroad. A significant number of those lines serve only a handful of industries with comparatively small gross tonnage. The ASLRA commented that the cost to short line railroads to upgrade and maintain excepted track would exceed \$230 million. Elimination of the excepted track provision would cause the abandonment of approximately 95 lines affecting 1,063

shippers who may be then compelled to use highway transportation.

Approximately 65% of all reportable derailments on excepted track from 1988 through the third quarter of 1995 were track-caused. Of those, nearly 33% were attributed to wide gage as a result of defective crossties or rail fasteners. Several commenters expressed approval of some type of gage restriction. The BMW suggested that the revised provision should also address the condition and placement of ties and fasteners, as well as switch maintenance and rail/joint bar defects.

The AAR commented that the gage restrictions proposed in the NPRM should be eliminated. The AAR stated that there are situations where wide gage is safe, for instance, in road crossings. In those cases, pavement would have to be destroyed and replaced to correct wide gage when the pavement would have restricted wheel position and prevented a derailment. The AAR also stated that it recommends that the gage restriction be eliminated only if FRA decides to revise the proposed provision based on the comments of other RSAC participants who helped draft the recommendations and then later withdrew support of them. Otherwise, the AAR supports the NPRM as drafted by the Track Working Group.

Because none of the commenters presented FRA with a compelling reason to make further changes to the gage restrictions in the excepted track provision, this final rule adopts the language as recommended by the Track Working Group and as proposed in the NPRM. Under this final rule, track owners must maintain gage to a 58 $\frac{1}{4}$ " standard and perform periodic switch inspections.

FRA and state inspectors have found instances where railroads have taken advantage of the permissive language in the 1982 provision to conduct operations in a manner not envisioned when FRA drafted the provision. For example, a railroad removes a segment of track from the excepted designation only long enough to move a train with more than five cars carrying hazardous materials, or to operate an excursion passenger train, and then replaces the segment in excepted status as soon as the movement is completed. The BMW and the NTSB suggested that the revised provision include time limits for the use of this provision over any segment of track. The final rule adopts the language as proposed in the NPRM and requires railroads to provide FRA with notification 10 days prior to removing track from excepted status.

The revision also changes the word "revenue" to "occupied" in describing passenger trains prohibited from operating over excepted track. This change codifies FRA's long-standing interpretation of the 1982 provision which allowed trains on excepted track to be occupied by crews, work gangs, and other railroad employees attending to their job-related duties. It is also designed to dispel the misconception by some railroads that passengers could be hauled over excepted track as long as they were not charged, and the railroad received no "revenue," for their transportation. The purpose of the passenger prohibition is to safeguard railroad passengers; its purpose is not concerned with the revenue-generating power of passenger service.

Liability Standard

The current track regulations are enforced against a track owner "who knows or has notice" that the track does not meet compliance standards. This knowledge standard is unique to the track regulations; other FRA regulations are based on strict liability. The knowledge standard is founded on the notion that railroads cannot prevent the occurrence of some defects in track structures that are continually changing in response to the loads imposed on them by traffic and effects of weather. Many defects may not be detected even when the track owner exercises reasonable care. Therefore, track owners should be held responsible only for those defects about which they know or should know. Today, even after years of track abandonments by major railroads, the industry is responsible for maintaining about 200,000 miles of track. Many defects occur suddenly in remote areas, making it difficult for even the most diligent track inspectors to keep pace with all defects as they happen.

With a knowledge standard attached to the track regulations, railroads are held liable for non-compliance or civil penalties for only those defects that they knew about or those that are so evident the railroad is deemed to have known about them. FRA and state inspectors meet this knowledge standard in a number of ways. Sometimes they record and notify a railroad of a defect that they find, and then re-inspect later to see if the defect has been repaired. If it has not, they may cite the railroad for a violation of the track safety standards. While this method provides a failsafe way of proving railroad notice of a defect, it is not always practicable for inspectors to perform follow-up inspections. Such a system would make railroads responsible only for defects

FRA already has detected, which is clearly not a sufficient incentive to comply.

Often, inspectors choose to inspect the railroad's own inspection records to see if a defect they have noted is recorded there. If it is, the inspection record forms proof that the railroad had notice of the defect. If the defect is not recorded in the railroad's inspection records, but is of the nature that it would have had to exist at the time of the railroad's last inspection (for example, defective crossties or certain breaks that are covered with rust) and would have been detected with the exercise of reasonable care, the defect's existence constitutes constructive knowledge by the railroad and the railroad is cited for a violation. FRA's reading of its "knows or has notice" standard has been its long-standing enforcement policy and is explained in FRA's Track Enforcement Manual.

In its petition, the BMW suggested that FRA put track owners under a strict liability standard by removing the phrase "knows or has notice" from § 213.5. Under that standard, any defect found by an FRA inspector could be written as a violation regardless of the railroad's ignorance of it or the railroad's opportunity to have detected it under the required inspection schedule. The AAR requested in its petition that FRA develop performance standards for the track regulations. Certain defects would not be cited as long as the track is performing safely, making unnecessary many of the regulations (for example, inspection requirements and the minimum number of crossties). The inherent weakness in such a proposal is that railroads will develop differing internal requirements for track inspection and maintenance. Some railroads may not be as vigilant as others in spotting defects or potential defects. Track defects compromising safety may not be discovered until the track fails, causing a derailment and possibly injuries and death.

Neither the BMW nor the AAR provided FRA with cost/benefit information to support their respective requests.

The Track Working Group considered and rejected both proposals, finding that the existing language, as it has been enforced to date, strikes the best balance of all interests. Therefore, the NPRM proposed to leave the standard of liability unchanged. In its comments on the NPRM, the BMW again proposed that the standard of liability be changed to that of strict liability. According to the BMW, the current language encourages railroads to under-report track defects and offers the railroads no

disincentive from assigning railroad track inspectors "overly-expansive inspection territories" resulting in less thorough and comprehensive track inspections.

In preparing this final rule, FRA weighed the BMW comments, as well as its own enforcement experience, against the consensus-based recommendation of the Track Working Group which representatives of the railroads, FRA, and labor developed. FRA has concluded that the Track Working Group struck the right balance, and thus in this final rule, railroads will continue to be held liable for track defects of which they knew or had notice. Even if a railroad has not recorded those defects, notice may include constructive knowledge of defects that, by their nature, would have had to be in existence when the railroad was last required to perform an inspection.

Moreover, the penalty provision now makes clear what has been the law for many years, *i.e.*, that anyone who makes a false report under the safety laws is liable for criminal penalties under 49 U.S.C. 21311. This should provide an additional deterrent to anyone who would purposely under-report defects.

Tourist Railroads

The Track Safety Standards apply to only those tourist railroads that operate on the general system. FRA estimates that approximately 95 tourist railroads operating over 1,350 miles of standard gage track off the general system are not currently subject to the track safety standards. The agency sees the need to address this growing market and increasing safety exposure in the area of track safety, as well as other areas of rail operation.

In April, 1996, FRA referred tourist railroad safety issues to the RSAC. The RSAC, in turn, established a working group comprised of agency and tourist railroad industry representatives to analyze the industry's unique aspects and formulate recommendations for appropriate regulation of that specialized industry. Among the issues the working group will examine is track safety. The findings of that group may or may not lead to a recommendation by the RSAC that the Track Safety Standards should be revised to apply to all tourist railroads. However, if such a recommendation is the result, FRA may then consider initiating a separate rulemaking to address that issue. The NTSB took the opportunity of this proceeding to express its opinion that the Track Safety Standards should apply to tourist railroads both on and off the general system. Because many issues

affecting tourist railroads are still under consideration by FRA, this final rule includes no changes to the Track Safety Standards that are directed specifically to those railroads.

Gage Restraint Measurement System

Historically, railroads assess a track's ability to maintain gage through visual inspections of crossties and rail fasteners. However, the inability of the track structure to maintain gage sometimes becomes apparent only after a derailment occurs. Many railroads throughout the country have successfully tested the GRMS, which was developed under a joint FRA/industry research project.

Accident statistics taken from FRA's Annual Accident/Incident Bulletins reveal that from 1985 through 1995, reportable wide gage derailments from defective crossties and fasteners totaled 2,232 instances and cost the industry over 60 million dollars in damages.

Current crosstie and fastener maintenance techniques rely heavily on visual inspections by track inspectors, whose subjective knowledge is based on varying degrees of experience and training. The subjective nature of those inspections sometimes creates inconsistent determinations about the ability of individual crossties and fasteners to restrain track gage. Crossties may not always exhibit strong indications of good or bad condition. If a crosstie in questionable condition is removed from track prematurely, its maximum service life is unnecessarily shortened resulting in added maintenance costs for the railroad. Yet, a crosstie of questionable condition left too long in track can cause a wide-gage derailment with its inherent risk of injury to railroad personnel and passengers and damage to property. In many instances of gage failure caused by defective crossties and/or fasteners, the static or unloaded gage is within the limits prescribed by the current track standards. However, when a train applies an abnormally high lateral load to a section of track that contains marginal crosstie or fastener conditions, the result is often a wide gage derailment.

In 1993, FRA granted CSX Transportation a waiver of compliance for the purpose of conducting a test program to evaluate the GRMS performance-based standard using FRA's research vehicle, in lieu of existing crosstie and rail fastening requirements, on nearly 500 miles of various track segments. The experience gained under this waiver has provided FRA with the opportunity to continually make adjustments to the conditional

requirements of the waiver to the point where the technology has proven itself to be a more consistent method of objectively determining crosstie and fastener effectiveness. FRA believes the technology is now ready to be deployed within the industry.

The Track Working Group could not reach consensus about how the revised Track Safety Standards should address GRMS technology. The RSAC therefore recommended that a small task group continue evaluating the possibility of developing GRMS standards for broader application within the industry. Nevertheless, some parties submitted comments to the NPRM concerning the use of GRMS. The NTSB recommended that the revised standards incorporate the use of advanced track inspection technologies, such as track geometry cars, GRMS, light-weight loading fixtures, and state-of-the-art rail inspection methods for internal rail defects. In its comments to the NPRM, the BMW reitiated its position that GRMS technology be used in conjunction with current inspection requirements. The AAR, in its comments, repeated its position that the revised Track Safety Standards should allow alternate inspection procedures that would permit railroads to use some combination of geometry cars, measurement equipment and instrumentation such as GRMS, hylrail inspections, and other means of inspecting in place of the required visual inspections. At the publication of this final rule, the task group continues to work to reconcile the differences and reach a consensus on what type of GRMS provision would be most effective. FRA, for its part, is still examining the points made for and against incorporation of a GRMS provision and is not prepared to resolve the issue at this time. However, FRA anticipates coming to resolution in the near future. All of the relevant issues appear to have been identified and discussed in this proceeding.

High Speed Rail Standards

The current Track Safety Standards include six classes of track that permit passenger and freight trains to travel up to 110 m.p.h. Passenger trains have been allowed to operate at speeds over 125 m.p.h. under conditional waiver granted by FRA. This final rule adds three new classes of track that designate standards for track over which trains may travel at speeds up to 200 m.p.h. Standards for high speed track classes will be contained in a new Subpart G of Part 213 which will cover track Classes 6 through 9. The new subpart is intended to function as "stand alone" regulations

governing any track identified as belonging to one of these higher classes. In other words, the track owner needs to refer only to Subpart G for compliance with the Track Safety Standards for track over which railroads operate trains at the speeds associated with the high speed track classes. However, if that same track does not meet the standards in Subpart G at any time, the other subparts (A through F) apply.

These track standards constitute only one of several components comprising a regulatory program permitting trains to travel at high speeds. FRA also may address high speed issues in regulations outside of Part 213, such as emergency preparedness, wheel conditions, braking systems, and grade crossings. These track standards are an integral part of that larger regulatory scheme.

FRA's approach to track safety standards for high speeds is based on the fundamental principle that vehicles in the high speed regime must demonstrate that they will not exceed minimum vehicle/track performance safety limits when operating on specified track. In addition, railroads must monitor the vehicle/track system to ensure that the safety limits will be met under traffic conditions.

A panel of experts in high speed rail transportation worked with the Track Safety Working Group to provide recommendations for vehicle/track performance limits and track geometry. The panel identified acceleration and wheel/rail force safety criteria by reviewing technical studies, considering foreign experience and practices, and performing independent computer simulation and analytical studies. Once it identified vehicle/track performance limits, the panel developed specific geometry safety criteria. The panel also recommended requirements necessary for track structure to sustain the forces generated by vehicles at high speeds.

In developing this final rule, FRA sought out the best available technical data about dynamic performance of vehicle/track systems to devise safety standards that are practical to implement. The high speed standards in this notice provide for the qualification of vehicles; geometry standards for gage, surface, and alignment; track structure; and inspection requirements for both automated and visual inspections. While some of the sections in the new Subpart G are identical, or nearly identical, to their counterparts in other sections of the regulation, the standards for high speed operations generally differ markedly from those for the lower track classes which cover a much broader range of railroad vehicles.

Several sections have no counterpart in the standards for the lower classes of track because they address issues unique to the high speed environment. Other sections are simply modifications of the requirements for the lower track classes.

Comments to the new Subpart G proposed in the NPRM came from Amtrak, the NTSB, Bombardier GEC Alstom Consortium, Union Switch and Signal, and the Director of Ground Transportation of the French Ministère de l'Équipement des Transports et du Logement. The commenters were generally supportive of the new standards, but they offered suggestions for modifying some sections in the subpart. Their specific comments are addressed in this notice under segment designated as "Section by Section Analysis."

A representative for the Florida Overland eXpress responded to the NPRM with a request that FRA remove from the final rule reference to Florida Overland eXpress's plans to operate trains at very high speeds. Florida Overland eXpress petitioned FRA in 1996 for a Rule of Particular Applicability for its proposed operation. Such a rule would include a variety of railroad safety regulations, including track safety regulations, that would apply only to the Florida Overland eXpress. FRA issued a Notice of Rule of Particular Applicability, published on December 12, 1997. See 62 FR 65478. Florida Overland eXpress objected to a reference to that operation in the NPRM because this rule of general applicability will not apply to its operation. FRA agrees that the reference in the NPRM to the Florida Overland eXpress, without explanation of its unique circumstances, may mislead others into believing that this rule will apply to that operation. It will not.

Following the closure of the comment period for the NPRM (September 15, 1997), the Volpe National Transportation Systems Center (VNTSC) issued a working paper entitled "Evaluation of Proposed High Speed Track Surface Geometry Specification," dated December 1, 1997. The working paper evaluated the response of different high speed locomotive designs to track profile geometry variations. Because the VNTSC working paper contained relevant and useful information for this final rule but was not available at the time of the publication of the NPRM, FRA placed the paper in the docket for this proceeding and issued a special notice on December 12, 1997, inviting public comment on its content. See 62 FR 65401. The comment period for the

VNTSC working paper expired on December 22, 1997. FRA received only one response to the special notice. The AAR noted that it would not be able to provide comment on the VNTSC working paper without knowing how FRA would use the report to set the geometry standards for the high speed classes of track.

Torch Cut Rails

Torch cutting rail, a practice that was widespread in the railroad industry until a few years ago, is now used by most railroads only for emergency repairs in Classes 3 through 5 track. Technology has advanced to the point where cutting rail with the various types of rail saws that are readily available is more efficient than torch cutting. FRA lacks reliable data on the number of existing torch cuts. The railroads report that torch cuts no longer exist on Class 6 track, and the torch cuts remaining in Class 5 track nationwide probably number "in the hundreds." Nevertheless, torch cuts from years ago when the practice was more prevalent still exist and are believed to pose a safety hazard.

In 1983, following its investigation of an Amtrak derailment in Texas, the NTSB recommended that torch cuts be removed and that trains move at only 10 m.p.h. over torch cuts made in emergency situations or as a preparatory step in field welding. It should be noted, however, that the rail involved in the Texas accident had a type of high alloy content which the industry now recognizes as inferior. It is no longer used in the industry.

Because rails that have been torch-cut have a greater tendency to develop fractures in the short term, the NPRM proposed that the practice of torch-cutting rails in Classes 3 through 5 track should be prohibited in the future except for emergency temporary repairs. The NPRM further proposed that existing torch cuts in Class 3 track over which regularly scheduled passenger trains operate should be inventoried and any torch cuts that are found later but are not listed on the inventory must be removed. Torch cuts in Class 4 track must be removed within two years of the effective date of this final rule, and torch cuts in Class 5 track must be removed within one year. Because torch cuts existing on yard tracks and main tracks where trains operate at slow speeds (Classes 1 and 2) do not pose as high a risk, the NPRM proposed that existing torch cuts in Classes 1 and 2 track be allowed to remain.

In commenting on the NPRM, the NTSB suggested that torch cuts should be prohibited and eliminated from all

track in classes above Class 1, and movement over torch cuts should be restricted to 10 m.p.h. The BMW commented that torch cutting should be prohibited in all classes above Class 2, and that existing torch cuts in Class 2 track should be removed within a reasonable time. The AAR commented that the torch cut provision should simply prohibit torch cutting in Classes 3 through 5 track. However, the AAR further stated that it generally supports the NPRM and offered this suggestion to be considered only in the event FRA decides to change the proposed provision in accordance with the comments of other RSAC participants who helped draft the provision and then later withdrew support of the RSAC recommendations.

This final rule adopts the proposed rule as drafted by the Track Working Group, approved by majority consensus of the RSAC, and proposed in the NPRM. The comment by the NTSB, that torch cuts should be removed from any track class above Class 1, is based upon the NTSB's investigation of the 1983 Amtrak derailment in Texas. However, FRA's analysis of the derailment indicates that the high alloy content of the rail at the site of the accident played a larger part in causing the derailment than did the torch cut. Therefore, FRA is not persuaded by the NTSB's analysis. The BMW offered no clear explanation of its proposal to prohibit all torch cuts in track classes above Class 2. Similarly, FRA was not persuaded by AAR's argument that accident statistics fail to support a torch cut regulation that requires anything more than a prohibition against any future torch cutting in track classes above Class 3. FRA believes that existing torch cuts in the higher classes of track may pose a danger of derailment.

Other Issues

Plant Railroads and Industrial Spurs

In general, FRA has elected not to exercise jurisdiction over the safety of railroads that conduct their operations exclusively within an industrial or military installation. FRA chose this self-imposed limitation because such operations have not demonstrated the same degree and frequency of track problems found on tracks in the general system which are subject to heavier tonnages and more frequent use. Nevertheless, FRA recognizes its responsibility for the safety of railroad employees and operations inside such facilities where a general system railroad provides service on that property, either by picking up and

placing cars for transportation in interstate commerce or by switching for the plant. The same responsibility applies to operations on privately owned industrial spurs used exclusively by a main line railroad to serve an industry.

The applicability section of the current Track Safety Standards (§ 213.3) excludes track "located inside an installation which is not part of the general railroad system of transportation." This broad statement implies that the track standards do not apply anywhere inside a plant, regardless of who operates there or the type of operations that occur on the plant track. However, § 213.3 must be read in conjunction with 49 C.F.R. Part 209, Appendix A, which explains that the track owner of any plant railroad trackage over which a general system railroad operates is responsible for the condition of track used by the general system railroad. With the entrance of a general system railroad, the plant does not become part of the general system, but it does lose some of its insularity as to that part of the track used by the general system railroad.

Since the enactment of the Federal Railroad Safety Act of 1970, FRA has had at its disposal statutory authority to issue emergency orders to repair or discontinue use of industrial or plant trackage should the agency find that conditions of the track pose a hazard of death or injury. See 49 U.S.C. § 20901. It is FRA's opinion that this emergency order authority is sufficient power to ensure track safety within plants, as well as other installations (e.g., military installations). However, if conditions or events in the future tend to demonstrate that track safety within plants or installations should be more specifically regulated, FRA will seek to change the applicability of this Part in a future rulemaking. This final rule leaves the application section of the Track Safety Standards unchanged.

Train Speed/Preemption

Under the current Track Safety Standards, FRA has only an indirect role in determining speed limits. Railroads set train speed in their timetables or train orders. Once a railroad sets a train speed, it must then maintain the track according to FRA standards for the class of track that corresponds to that train speed. The signal and train control regulations also fix limits on train speed based upon the type of signal system that is in place. If the railroad fails to comply with track or signal system requirements for speed at which trains are operated, the railroad is subject to penalty.

FRA's current regulations governing train speed do not afford any adjustment of train speeds in urban settings or at grade crossings. This omission is intentional. FRA believes that locally established speed limits may result in hundreds of individual speed restrictions along a train's route, increasing safety hazards and causing train delays. The safest train maintains a steady speed. Every time a train must slow down and then speed up, safety hazards, such as buff and draft forces, are introduced. These kinds of forces can enhance the chance of derailment with its attendant risk of injury to employees, the traveling public, and surrounding communities.

FRA always has contended that Federal regulations preempt any local speed restrictions on trains. Section 20106 of Title 49, United States Code (formerly 45 U.S.C. § 434) declares that—

[L]aws, regulations, and orders related to railroad safety shall be nationally uniform to the extent practicable. A State may adopt or continue in force an additional or more stringent law, regulation, or order related to railroad safety when the law, regulation, or order—(1) is necessary to eliminate or reduce an essentially local safety hazard; (2) is not incompatible with a law, regulation, or order of the United States Government; and (3) does not unreasonably burden interstate commerce.

FRA's long-held belief that Part 213 preempts local speed laws was verified by the U.S. Supreme Court in 1993 in the case *CSX v. Easterwood*, 507 U.S. 658 (1993). The Court held that legal duties imposed on railroads by a state's common law of negligence fall within the scope of preemption provision of 49 U.S.C. 20106, which preempts any state "law, rule, regulation, order or standard relating to railroad safety." The Court said that preemption of such state laws "will lie only if the federal regulations substantially subsume the subject matter of the relevant state law." *Easterwood*, 664. However, the Court further stated that because Part 213 ties certain track requirements to train speed, it should be viewed as "covering the subject matter" of speed limits.

Notwithstanding some of the language in *Easterwood* that a cursory reading may otherwise indicate, FRA has never assumed the task of setting train speed. Rather, the agency holds railroads responsible for minimizing the risk of derailment by properly maintaining track for the speed they set themselves. For example, if a railroad wants its freight trains to operate at 59 m.p.h. between two certain locations, it must maintain the tracks between those locations to Class 4 standards.

Moreover, there are significant safety reasons for facilitating the fastest transit of trains throughout the railroad system. For example, the risk of releases of hazardous materials is reduced by minimizing the time such shipments spend in transportation. It would be poor public policy to allow local governments to attempt to lower their risk by raising everyone's risk and by clogging the transportation system. Railroads have strong economic motives to minimize the time shipments spend in transportation, so public safety and employee safety are best served by setting and enforcing the standards railroads must meet to travel at particular speeds.

In recent years, FRA has encountered increasing pressure from communities along railroad rights-of-way to set slower train speeds on main tracks located in urban areas. They typically cite the inherent dangers of grade crossings, pedestrian safety, as well as the risk of derailments of rail cars containing hazardous materials.

As to grade crossings, FRA has consistently maintained that their danger is a separate issue from train speed. The physical properties of a moving train virtually always prevent it from stopping in time to avoid hitting an object on the tracks regardless of the speed at which the train is traveling. Prevention of grade crossing accidents is more effectively achieved through the use of adequate crossing warning systems and through observance by the traveling public of crossing restrictions and precautions. Therefore, FRA continues to sponsor and/or support initiatives to improve safety at grade crossings under the Department of Transportation's Grade Crossing Action Plan. These initiatives are geared towards enhancing enforcement of traffic laws at crossings, closing unneeded crossings, enhancing rail corridor crossing reviews and improvements, expanding public education and Operation Lifesaver activities, increasing safety at private crossings, improving data and research efforts, and preventing rail trespassing.

In January, 1995, FRA implemented regulations for maintenance, inspection and testing of warning devices at crossings, such as lights and gates. See 59 FR 50086. The agency also implemented regulations requiring certain locomotives to be equipped with auxiliary lights making trains more visible to motorists, railroad employees, and pedestrians. See 61 FR 8881. FRA believes that these measures are more effective approaches to enhancing safety at grade crossings than an attempt to

design speed limits for each geographic situation.

FRA received no comments on this issue following a similar discussion of the issue in the NPRM.

Vegetation

The vegetation control requirements of Part 213 currently deal with fire hazards to bridges, visibility of railroad signs and signals, interference with normal trackside duties of employees, proper functioning of signal and communication lines, and the ability to inspect moving equipment ("roll by" inspections). The regulation does not address the issues of motorists' and pedestrians' ability to see warning devices at highway-rail crossings.

Since 1978, accidents and fatalities at highway-rail grade crossings have decreased dramatically due to engineering improvements at individual crossings, education of the public, and greater enforcement of highway traffic laws. Nevertheless, FRA finds that the present loss of life, injuries, and property damage are still unacceptable. Projections for 1997 based upon nine months of preliminary data show that 441 people were killed, and 1,525 suffered serious injuries in grade crossing accidents. Second only to trespasser fatalities as a leading cause of death in the railroad industry, highway-rail collisions far out-number fatalities to railroad employees and passengers.

In lengthy discussions about vegetation at grade crossings, the Track Working Group quickly realized that the issue requires the expertise of entities not represented on the Track Working Group or RSAC, e.g., state and federal highway designers, traffic engineers, as well as representatives of local jurisdictions with grade crossings. The NPRM generated no comments concerning the issue of vegetation at grade crossings. FRA agrees with the assessment reached by the Track Working Group that the issue requires the judgment of experts in other transportation arenas. Therefore, this final rule adds only one requirement for railroads in maintaining vegetation. Under this rule, railroads are required to clear vegetation away from signs and signals on railroad rights-of-way at grade crossings. The additional language is intended only to cover the clearing of vegetation at highway-rail grade crossings to provide adequate visibility of railroad signs and signals to the traveling public. It is not intended to cover or preempt state or local requirements for the clearing of vegetation on railroad rights-of-way at highway-rail grade crossings, nor is it

intended to dictate standards for surrounding landowners.

Because concern about this issue remains, the FRA Administrator has recommended that the Department of Transportation initiate a joint regulatory proceeding by FRA and the Federal Highway Administration to address vegetation maintenance and sight distances for motorists at grade crossings. Should the Department of Transportation decide not to initiate such a regulatory project, FRA will then consider the next appropriate action which may include launching its own regulatory proceeding.

Metric System

In the 1992 ANPRM, FRA requested comments in response to a proposal to create a dual system of measurements, English and metric, for inclusion in these regulations. Responses were varied. Some commenters suggested that FRA implement metric standards, while others recommended that a dual system would be better. Still others argued that the addition of metric standards, whether as a single standard or in a dual system with English standards, would cause confusion in the industry. They added that computerized recordkeeping would have to be re-programmed at a significant expense.

The RSAC did not recommend the addition of metric standards in this proceeding. Although the issue was raised in the NPRM, it generated no comments. FRA concludes that the introduction of metric values into the regulations is not appropriate at this time.

Section by Section Analysis—Track Classes 1–5

The Federal Track Safety Standards, until now, included only six classes of track representing speeds up to 110 m.p.h. The regulations applied to all of the classes. This final rule separates the classes of track into two general categories: Classes 1 through 5 for speeds up to 90 m.p.h. (80 m.p.h. for freight) and Classes 6 through 9 for speeds above 90 m.p.h. (80 m.p.h. for freight). Subparts A through F apply to Classes 1 through 5, as they always have. However, the new Subpart G applies exclusively to Classes 6 through 9. This separation of the classes of track is designed for better ease of use. Owners of track over which high speed trains operate need to refer only to Subpart G for almost all of the relevant regulations. (The exceptions are § 213.2, Preemptive effect; § 213.3, Application; and § 213.15, Penalties.) On the other hand, track owners over which train speeds do not exceed 90 m.p.h.

continue to refer to Subparts A through .

Class 6 is included in the category for high speed track, governed by Subpart G, because the safety issues associated with that class of track more closely resemble those associated with the higher classes.

Section 213.1—Scope of the Part

Proposed rule: An amendment to this section would eliminate the word "initial." When the Track Safety Standards were first published in 1971, they were referred to as "initial safety standards" because they were the first Federal standards addressing track safety. Twenty-five years and several amendments later, the current Track Safety Standards are no longer initial standards. Therefore this amendment eliminates a mischaracterization of the standards by removing the outdated descriptive "initial."

Comments: Comments received supported the proposed amendment.

Final rule: The section incorporates the change as proposed in the NPRM and adds a sentence to distinguish the applicability of Subpart G from the applicability of Subparts A through F. Subpart G applies to track over which trains are operated at speeds in excess of those permitted over Class 5 track, a maximum of 80 m.p.h. for freight trains and 90 m.p.h. for passenger trains. Subpart G is designed to be mostly comprehensive, so that a railroad operating at speeds above Class 5 maximum speeds may refer to Subpart G for all of the substantive track safety requirements for high speed rail. Such a railroad needs to refer to the earlier sections of the Track Safety Standards only for the general provisions at § 213.2 (preemptive effect), § 213.3 (application), and § 213.1 (Penalties). On the other hand, railroads which never operate at speeds in excess of the maximum Class 5 speeds need not refer to Subpart G at all.

The final rule also adds language to this section to state that railroads are not restricted from adopting and enforcing more stringent track safety requirements as long as they are not inconsistent with the track safety standards in this Part. This statement is consistent with the earlier statement that these regulations are minimum requirements.

Section 213.2—Preemptive Effect

Proposed rule: This section is added to Part 213 to indicate that states cannot adopt or continue in force laws related to the subject matter covered in this rule, unless such laws are needed to address a local safety hazard and they impose no undue burden on interstate

commerce. This section is consistent with the mandate of 49 U.S.C. 20106, formerly § 205 of the Federal Railroad Safety Act of 1970. Although the courts ultimately determine preemption in any particular factual context, this section provides a statement of agency intent and promotes national uniformity of regulation in accordance with the statute.

Comments: Comments received supported the proposed amendment.

Final rule: The section is modified slightly so that the language more closely corresponds to the language of the statute. See 49 U.S.C. 20106.

Section 213.3—Application

Proposed rule: This section was not proposed to be amended. The Track Working Group discussed amending subsection (b) to reference Appendix A of Part 209 in an effort to clarify FRA's safety policy toward trackage used by general system railroads within the confines of installations. According to Appendix A of Part 209, a plant does not become a general system railroad, subject to all of the attendant safety requirements applied to such railroads, simply because a general system railroad operates over a portion of the plant trackage. Nevertheless, a plant owner is held liable for the condition of any plant trackage over which a general system railroad operates. Under this policy, FRA will not hold plant owners responsible for compliance with ancillary track safety provisions, such as the requirements for recordkeeping or inspection frequencies. However, FRA will judge the safety of the plant railroad against the substantive safety requirements in those standards to assess the need to invoke its emergency order authority against the plant owner.

The Track Working Group advised that a reference in Part 213 to Appendix A of Part 209, which is merely a statement of FRA policy, could have the effect of making all provisions of Part 213, including those ancillary provisions, enforceable against thousands of plant owners, at least to the extent general system railroads operate within plant borders. Such a result would be more far-reaching than intended by the RSAC.

Comments: One commenter suggested that the application of Part 213 be extended to cover standard gage tourist railroads which operate off the general system and meet the FRA's test for insularity. This commenter also suggested that the agency consider developing track safety standards for non-standard gage tourist railroad operations.

Final rule: This section is amended to conform the discussion of jurisdiction over rapid transit service to the statute. See 49 U.S.C. 20102. The statute has been amended since part 213 was issued, but § 213.3(b)(2) was never amended to conform to the statute. The Track Safety Standards will still exclude urban area rapid transit systems that are unconnected to the general system. This change is not intended make the Track Safety Standards applicable to rapid transit whose only connection to the general system is a switch permitting receipt of shipments from the general system.

In response to concerns expressed by and about tourist railroads, FRA proffered, and the RSAC accepted, a task to study tourist railroad concerns. The RSAC has established a working group to perform the task. It is comprised of agency and tourist railroad industry representatives who are analyzing the industry's unique aspects and formulating recommendations for appropriate regulation of that specialized industry. Therefore, the NPRM proposed no changes in that regard.

While FRA does not think a reference to Appendix A to Part 209 would have the effect feared by the Track Working Group, FRA declines to exercise its jurisdiction over plant railroads at this time because the safety issues now presented on their track do not warrant the allocation of agency resources that would be diverted from matters presenting greater safety risks. The agency continues to have safety jurisdiction over those railroads and may invoke its statutory emergency authority if it deems that necessary in order to safeguard anyone from the hazard of death or personal injury.

Section 213.4—Excepted Track

Proposed rule: The NPRM proposed to maintain the provision for excepted track with added restrictions for its use and maintenance. Since its inception in 1982, the excepted track category has become an economic issue for some small railroads, particularly short line railroads and low volume shippers. It allows railroads to continue to use, on a limited basis, low-density trackage that does not earn sufficient revenue to justify the expense of maintaining it to higher track standards. It allows short lines to acquire and use trackage that may have been abandoned by larger railroads, thereby preserving rail service to shippers and avoiding the necessity of shifting traffic over those lines from moving to some other, perhaps more hazardous, means of transport.

Because the majority of reportable derailments on excepted track are track-caused, and the majority of this total are wide gage-related, the NPRM proposed to institute a requirement that gage must not exceed of 58 $\frac{1}{4}$ " on excepted track. This requirement would apply to the actual gage measurement itself, and would not extend to the evaluation of crossties and fasteners which provide the gage restraint. A clarification was added to the inspection requirements on excepted track which specifically reference turnout inspections required under this section.

The NPRM also proposed to include a requirement that railroads notify FRA at least 10 days before removing trackage from excepted status. This provision is intended to prevent the practice FRA has witnessed in the past by some railroads who remove trackage from excepted status only long enough to move a passenger excursion train or a train with more than five cars containing hazardous materials. Furthermore, the NPRM included an edit to § 213.4(e)(2) changing the word "revenue" to "occupied" in describing passenger trains prohibited from operating over excepted track. This change addresses a misconception by some railroads that they could operate passenger excursion trains over excepted track as long as they did not charge passengers admission for a ride. The proposed change clarifies that the prohibition is directed toward all passengers but is not meant to include train crew members, track maintenance crews, and other railroad employees who must travel over the track to attend to their work duties.

Comments: Comments received generally supported the proposed amendments to the excepted track regulation. However, several commenters proposed that additional requirements and restrictions should be incorporated into the regulation. Proposals included a total prohibition of hazardous materials shipments, additional restrictions on where excepted track could be utilized, additional minimum safety standards, and a time limit for length of time a track could remain in excepted status.

Final rule: In preparing its recommended proposed rule, the Track Working Group discussed at length the same requirements and restrictions suggested for inclusion into this final rule by commenters. The final rule includes additional regulatory control over abuses of the excepted track provision which have been documented in the past. The final rule also prescribes a minimum safety standard for gage that addresses the major causal

factor associated with track-caused derailments on excepted track.

FRA rejected the suggestion that the provision should include a prohibition of all hazardous material shipments. Many small short line railroads who operate over excepted track haul hazardous materials on a regular basis. A general prohibition would cause many of these railroads to close operation, and the hazardous materials would be hauled by trucks over public highways. Similarly, a restriction on the length of time track may remain in excepted status, and a restriction on where excepted track could be utilized, would place an undue burden on many short line railroads who operate exclusively on excepted track. Statistics show that 87 track-caused reportable accidents occurred on 8,000 to 9,000 miles of excepted track in five years. These numbers, in FRA's judgment, do not justify implementing restrictions over-burdensome to small railroads.

FRA considered implementing minimum safety standards, in addition to the new gage and switch requirements. However, the ASLRA estimated that the cost to short line railroads to improve excepted track to Class 1 standards would cost the short line industry some \$230 million. FRA believes that this final rule provides needed additional measures of safety for excepted track while maintaining the regulatory relief the excepted track provision provides, but under more restrictive conditional and operational requirements.

Section 213.5—Responsibility of Track Owners

Proposed rule: The NPRM proposed to change subsections (c) and (d) to modify the way in which track owners may assign compliance responsibility to another entity. Under the current regulations, a track owner may petition the Federal Railroad Administrator to recognize another party as the one primarily responsible for the maintenance and inspection of the owner's track. This provision is intended to facilitate compliance by track owners whose track is leased to another entity for operation. Often track owners (e.g., municipal communities, county governments) do not have the necessary expertise to maintain compliance with Federal track standards, but their track lessees do. Thus, track owners can successfully petition FRA for reassignment of primary responsibility by providing certain information about the assigned party and the relationship of the assigned party to the track owner. When such a petition is approved by FRA, the

assigned party becomes responsible, along with the track owner, for compliance with Part 213.

The change for these subsections eliminates the approval process by FRA, shown in years past to be the cause of unnecessary paperwork. Records show that FRA has approved almost every such petition it has reviewed. Under the subsection proposed in the NPRM, a track owner could reassign responsibility to another entity simply by notifying FRA's regional administrator for the FRA region in which the track is located. The notification would include the same information required for the petitions under the current standards. However, FRA would discontinue its practice of publishing in the *Federal Register* the petitions for reassignment, along with requests for public comment. The reassignments would no longer be reviewed by FRA's Railroad Safety Board.

FRA believes that the change would not diminish track safety. Although the intent of the original subsection was to give FRA some control over who should be responsible for maintaining track, the practical application of the subsection has shown that such control by the agency is unnecessary. Rather, it is more important for FRA to know what party or parties to hold responsible for compliance with track safety standards. Therefore, the subsection (c) would require notification to the agency of reassignments of track responsibility, but it would no longer require approval by FRA now required in subsection (d). The text currently shown as subsection (d) would be eliminated.

The NPRM also proposed one minor change in current subsection (e), substituting the name "Surface Transportation Board" for "Interstate Commerce Commission." This substitution is meant to reflect Congress' action in 1995 to eliminate the Interstate Commerce Commission and turn over many of its functions to the new Surface Transportation Board within the Department of Transportation. With the elimination of the current text of subsection (d), this subsection now designated as (e) would become subsection (d).

Comments: Comments received were supportive of these changes.

Final rule: Subsection (f) of this section is added to include in the category of those responsible for compliance with the track standards those who perform the function of complying with the standards, not just the track owner. For example, this addition will hold track maintenance contractors responsible for compliance.

This is not inconsistent with past enforcement and it conforms to the authority given FRA by the statute. See 49 U.S.C. 21301 and 1 U.S.C. 1.

Paragraph (e) of this section is changed to correct a typographical error in the NPRM. The correct cite for the Federal law which gives the Surface Transportation Board authority to direct rail service is 49 U.S.C. 11123.

Section 213.7—Designation of Qualified Persons To Supervise Certain Renewals and Inspect Track

Proposed rule: In the past, FRA has interpreted this section in a way that allowed signal maintainers and other railroad employees to pass trains over broken rails or pull-aparts in situations when they were the first on the scene to investigate a signal or track circuit problem. Under this interpretation, the intent of the regulation would not be violated if signal maintainers or others had been given selected training relating to the safe passage of trains over broken rails and pull-aparts. The BMW, however, has argued that this section was never intended to allow for the partial qualification of personnel on Part 213 standards.

The RSAC recommended the creation of a new subsection (d) which prescribes the manner in which persons not fully qualified as outlined in subsections (a) and (b) of this section may be qualified for the specific purpose of authorizing train movements over broken rails and pull-aparts. Language in the new subsection is specific to employees with at least one year of maintenance of way or signal experience and requires a minimum of four hours of training and examination on requirements related to the safe passage of trains over broken rails and pull-aparts. The purpose of the examination is to ascertain the person's ability to effectively apply these requirements. A railroad may use the examination to determine whether or not a person should be allowed to authorize train movements over broken rails and pull-aparts. However, the examination is not to be used as a test to disqualify the person from other duties.

The maximum speed over broken rails and pull-aparts shall not exceed 10 m.p.h. However, movement authorized by a person qualified under this subsection may further restrict speed over broken rails and pull-aparts if warranted by the particular circumstances. This person must watch all movements and be prepared to stop the train if necessary. Fully qualified persons under § 213.7 must be notified and dispatched to the location promptly

to assume responsibility for authorizing train movements and effecting temporary or permanent repairs. The word "promptly" is meant to provide the railroad with some flexibility in events where there is only one train to pass over the condition prior to the time when a fully qualified person would report for a regular tour of duty, or where a train is due to pass over the condition before a fully qualified person is able to report to the scene. Railroads should not use persons qualified under 213.7(d) to authorize multiple train movements over such conditions for an extended period of time.

Comments: Comments generally supported the proposed amendments to this section. One commenter argued that only those employees fully qualified under § 213.7 should be designated to authorize train movements over broken rails and pull-aparts. FRA disagrees with this statement. For the narrow purpose of temporarily authorizing train movements over broken rails or pull-aparts, a person does not need to be trained in all of the remedial actions included in Part 213, as outlined in § 213.7.

Several commenters suggested that § 213.7 should contain a requirement for the requalification of employees designated to inspect track or to supervise restorations or renewals. A regulation requiring such requalification of designated persons would overlap the existing regulation, as FRA has long held that the requirement to be "qualified" is a continuing requirement, not a static one, and it is the responsibility of the track owner to assure that persons designated under this section are qualified at all times. This mandate for qualification is not periodic, it is continuing. FRA will address this issue by issuing a technical bulletin containing "good practice" industry guidelines for the requalification of persons designated under § 213.7, as drafted by the Track Working Group.

Final rule: FRA believes that persons who are trained, examined, and periodically re-examined on specific issues relating to the singular function of passing trains over broken rails and pull-aparts at restricted speed does not violate the intent of the Track Safety Standards, nor does this practice compromise safety provided those persons demonstrate to the track owner that they know and understand the requirements on which they were examined.

FRA proposes to re-designate paragraph (d) in the NPRM as paragraph (c) in the final rule. Similarly, paragraph (c) in the NPRM will become paragraph

(d) in the final rule with a reference to "persons not fully qualified" for the purpose of maintaining records of those designations. These changes provide for a more orderly structure of the requirements of this section and also recognize FRA's and the railroads "need to know" what persons are being designated under this new paragraph for purposes of compliance with this part.

Section 213.9—Classes of Track: Operating Speed Limits

Proposed rule: The NPRM proposed to move Class 6 standards to Subpart G, a new subpart which establishes track safety standards for high speed rail operations. As proposed in the NPRM, the new subpart would consist of Class 6 and three new track classes, Classes 7 through 9, to accommodate train speeds up to 200 m.p.h. The Track Working Group and the RSAC recommended including Class 6 in the high speed standards because that class of track already requires certain heightened maintenance practices not required by the lower classes of track.

Comments: Comments received generally supported the proposed amendment to this section. One commenter suggested that the provision under § 213.9(b) allowing operation for up to 30 days over track not in compliance with Class 1 standards was too liberal, and this option should only be allowed as an upper limit for track under emergency repairs.

Final rule: FRA believes that the option provided the track owner under subsection (b) of this section, to continue operations over track not in full compliance with Class 1 standards, at Class 1 speeds for a period of not more than 30 days, is appropriate, considering the many types of defects that can occur and the various levels of risks associated with these defects. The regulation requires that the person designated under § 213.7(a) who makes the determination to continue operations at Class 1 speeds shall do so only after personally evaluating the immediate circumstances and the associated risks presented by the non-compliance condition, and then determining that operations may safely continue.

However, this provision is not meant to supplant the remedial actions for defective rails prescribed in § 213.113. If a person designated under § 213.7 determines that tracks containing defective rail may continue in use, the rail must be replaced or the remedial action prescribed in the table in § 213.113 must be initiated.

There are several minor editorial changes to this section. In subsection

(a), the reference to subsection (c) contained in the NPRM was deleted in the final rule because there is no subsection (c) to this section. The final rule also cross-references the maximum allowable speed for excepted track in the § 213.9(a) table concerning "Maximum Allowable Operating Speeds."

Otherwise, this section as proposed, is adopted in this final rule. In grouping Class 6 with Classes 7 through 9, FRA does not suggest, and it would be inaccurate to infer, that Class 6 track or operation of trains over Class 6 track at the speeds permitted is in any way unconventional or unusual. Trains have been run at those speeds for decades.

Section 213.11—Restoration or Renewal of Track Under Traffic Conditions

Proposed rule: An added phrase recommended by the RSAC for the end of this section would clarify a qualified inspector's authority to limit the speed of trains operating through areas under restoration or renewal. In the Track Working Group, the BMW expressed concern that the current language of the section provides no guidance for track inspectors determining the appropriate speed through restoration areas. The language proposed by the NPRM gives a qualified track inspector discretion to set train speed through a work area, but does not allow the inspector to authorize trains to operate at speeds faster than the maximum speed for the appropriate track class. This change does not represent a change to past interpretation and enforcement of this section: it is merely a clarification of established policy.

Comments: Comments received supported the proposed amendment.

Final rule: The section as proposed is adopted in this final rule.

Section 213.13—Measuring Track Not Under Load

Proposed rule: The proposed rule recommended no changes to this section.

Comments: One commenter suggested that the phrase "under a loaded condition" should be more clearly defined.

Final rule: FRA considers that the dynamic loading conditions applied by train operations is implicit in the phrase "under a loaded condition" and therefore the final rule is adopted as proposed by the NPRM.

Section 213.15—Penalties

Proposed rule: The NPRM proposed no changes to this section. The section covers all subparts to this part, including the new Subpart G.

Comments: One commenter advised FRA that Appendix B had not been revised to reflect entries for the new § 213.119 addressing Continuous Welded Rail (CWR).

Final rule: The final rule changes this section in several ways. The section is now entitled, "Penalties" rather than "Civil penalties" because it now includes a provision for criminal penalties. The authority for FRA to initiate criminal penalties is granted by the statute at 49 U.S.C. 21311.

The section also adds language to indicate that "person" as used in this section is defined by the statute at 1 U.S.C. 1 and includes, but is not limited to, a railroad, manager, supervisor, official, agent of the railroad, owner, manufacturer, lessor or lessee of railroad equipment or track, independent contractor to the railroad.

The section also changes the maximum penalties FRA is authorized to assess for violations of the provisions of this Part. The maximum penalty is raised from \$10,000 to \$11,000 for violations, and from \$20,000 to \$22,000 for willful violations. This change is included to comply with the provisions of the Debt Collection Improvement Act of 1996 which requires Federal agencies to adjust civil monetary penalties to counter inflation's effect of diminishing the impact of these penalties. See Pub. L. 104-134, April 26, 1996. According to the Act, the inflation adjustment is to be calculated by increasing the maximum civil monetary penalty by the percentage that the Consumer Price Index for the month of June, 1995, exceeds the Consumer Price Index for the month of June of the last calendar year in which the amount of the penalty was last set or adjusted. The initial adjustment, however, may not exceed 10 percent. Hence, the maximum penalties for violations of this Part are increased by 10 percent. In addition, the minimum civil penalty amount shown in this section is changed from \$250 to \$500 to conform with Rail Safety Enforcement and Review Act of 1992, codified at 49 U.S.C. 21301.

In further compliance with the Debt Collection Improvement Act, FRA reviewed existing penalties contained in Appendix B of Part 213. After examination of those penalties and FRA's enforcement policies, FRA decided that the existing penalties require no adjustment at this time.

The civil penalties shown in Appendix B of the NPRM did not include penalties for CWR, torch cut rail, new provisions in excepted track or Subpart G. The Appendix B in this final rule includes penalties for the new provisions in the final rule. Because

FRA's civil penalties are statements of policy, notice and comment of these changes were not required.

Section 213.17—Exemptions

Proposed rule: The Track Working Group considered a proposal by the BMW that this section be eliminated. However, the group agreed that the existing language allowing for the temporary suspension of certain track standards is appropriate and exemptions are necessary for the industry to experiment with alternative methods of compliance and new technology. Further, FRA is required by law to consider appropriately suggested waiver requests and has adopted generally applicable procedures for doing so in 49 CFR Part 211. Therefore, the NPRM recommended that this section be left as currently written.

Comments: No comments received.

Final rule: The title of this section, as well as the language of the section itself, are changed by the replacement of "exemptions" with "waivers." This language change makes the section consistent with the language contained in 49 U.S.C. 20103, as well as 49 CFR Part 211.

Section 213.19—Information Collection

Proposed rule: The addition of this section was not proposed in the NPRM.

Comments: No comments were received concerning this addition.

Final rule: FRA adds this section to show which sections of this part have been approved by the Office of Management and Budget (OMB) for compliance with the Paperwork Reduction Act of 1995. See 44 U.S.C. 3501 *et seq.* The requirement for approval by OMB has been added since the Track Safety Standards were first issued. While subsequent revisions to the track standards have received OMB approval, those approvals have not been reflected in the standards themselves.

Section 213.31—Scope

Proposed rule: The Track Working Group discussed this section and recommended that it remain as currently written.

Comments: FRA received no comments.

Final rule: FRA agrees with the recommendation of the Track Working Group and this section as proposed is adopted in this final rule.

Section 213.33—Drainage

Proposed rule: In its 1990 petition for revision of the track standards, the BMW requested that this section be expanded to include more specific requirements for drainage and water

diversion around track roadbeds, addressing water seeping toward the track, water falling upon the roadbed, cross drainage, and the use of geotextiles. The proposal was discussed by the Track Working Group, as was a proposal by the AAR that merely modified the phrase "clear of obstruction" to "sufficiently clear of obstruction." The NPRM proposed to follow an RSAC recommendation that the section be left unchanged.

Comments: No comments received.

Final rule: The section as proposed is adopted in this final rule.

Section 213.37—Vegetation

Proposed rule: The NPRM proposed to add a phrase to subsection (b) to include a requirement to clear vegetation from signs and signals along railroad rights-of-way and at highway-rail grade crossings. The current regulation stipulates only that vegetation cannot interfere with visibility of railroad signs and signals. Because the scope of Part 213 limits vegetation requirements to railroad property, this proposal was not intended to be an attempt to dictate standards for surrounding landowners. The additional language was intended only to cover the clearing of vegetation at highway-rail grade crossings to provide adequate visibility to the traveling public of railroad signs and signals; it was not intended to cover or preempt state or local requirements for the clearing of vegetation on railroad rights-of-way at highway-rail grade crossings.

Comments: Comments received supported the proposed amendment.

Final rule: The final rule includes one minor change to the rule text of this section to correct an error regarding the effective date for compliance with the change. In the NPRM, paragraphs (b)(1) and (2) were both exempt from compliance for a period of one year following the effective date of the rule. The requirement for controlling vegetation along the right-of-way so that it does not obstruct the visibility of railroad signs and signals, as outlined in paragraph (b)(1), has been a requirement of the Track Safety Standards since their inception. The final rule will clarify that only paragraph (b)(2), which was added to enhance visibility to the traveling public of railroad signs and signals at highway-rail crossings, will be exempt from compliance for one year following the effective date of the rule.

Section 213.51—Scope

Proposed rule: The Track Working Group discussed this section and

recommended that it remain as currently written.

Comments: FRA received no comments.

Final rule: FRA agrees with the recommendation of the Track Working Group and this section as proposed is adopted in this final rule.

Section 213.53—Gage

Proposed rule: The proposed rule recommended no changes to this section.

Comments: No comments received.

Final rule: The final rule includes one minor editorial change to this section. The section now cross-references the maximum allowable gage for excepted track in the gage table under § 213.53(b) which was inadvertently omitted in the NPRM.

Section 213.55—Alinement

Proposed rule: The NPRM introduced a 31-foot chord requirement, in addition to the present 62-foot chord requirement, for measuring alinement on curves in Classes 3 through 5 track. The RSAC, on advice from the Track Working Group, recommended this addition to control transient short wavelength variations in alinement. This control was considered necessary to introduce an averaging approach for the application of the V_{max} formula which determines the maximum allowable operating speed for each curve. The change in the application of the V_{max} formula is discussed in § 213.57 of this notice.

Comments: Comments received supported the proposed amendment.

Final rule: The section as proposed is adopted in this final rule.

Section 213.57—Curves; Elevation and Speed Limitations

Proposed rule: The existing subsection (a) limits the design elevation on curves to a maximum of six inches. However, this subsection also provides for a deviation from this design elevation, which is contained in the § 213.63 table. For a curve elevated to six inches in Class 1 track, the allowable deviation would be three inches and therefore any point in that curve could have as much as nine inches of elevation and remain in compliance. For a similar situation in Class 3 track, any point in that curve could have as much as seven and three-fourths inches of elevation and still be in compliance. For modern rail cars with a high center of gravity, low speed curve negotiation under excessive levels of superelevation places the vehicle in an increased state of overbalance. This condition creates the possibility of wheel unloading and

subsequent wheel climb when warp conditions are encountered within the curve.

The Track Working Group considered the characteristics of the present-day vehicle fleet and concluded that a lower limit on maximum elevation in a curve should be prescribed in the regulations. Therefore, the NPRM proposed to revise subsection (a) to limit the amount of crosslevel at any point in a curve to not more than eight inches on Classes 1 and 2 track, and not more than seven inches on Classes 3 through 5 track.

Subsection (b) of this section addresses the maximum allowable operating speed for curved track. The equilibrium speed on a curve is the speed where the resultant force of the weight and centrifugal force is perpendicular to the plane of the track. The American Railway Engineering and Maintenance-of-way Association's (AREMA) Manual of Engineering, Chapter 5, states that passenger cars have been shown to ride comfortably around a curve at a speed which produces three inches of underbalance, or otherwise stated, three inches less elevation than would be required to produce equilibrium conditions. The AREMA Manual sets forth a formula based on the steady-state forces involved in curve negotiation which is commonly referred to as the V_{max} formula. This formula considers the variables of elevation, curvature, and the amount of unbalanced elevation or cant deficiency in determining the maximum curving speed. (Note: FRA considers the terms "unbalanced elevation" and "cant deficiency" to be interchangeable.) The present standards under paragraph (b) limit curving speed based on a maximum of three inches of unbalance or cant deficiency and is commonly referred to as the "three-inch unbalance formula." FRA has granted waivers for other levels of unbalance on specified equipment.

Over the years, railroad engineers have differed as to the application of this three-inch unbalance formula. Some engineers have suggested the designed elevation and curvature should be used to calculate the maximum operating speed around a curve. Other engineers recommend that an average of the entire curve or segment of the curve better recognizes situations where steady-state conditions change. For example, the elevation may be decreased through a road crossing to accommodate road levels and then increased beyond the crossing.

Recognizing the origin and purpose of the V_{max} formula, the Track Working Group recommended that an average of the alignment and crosslevel

measurements through a track segment in the body of the curve should be used in the formula to arrive at the maximum authorized speed. This approach recognizes the "steady-state" purpose of the formula. Transient locations (points) are covered by the alignment and track surface tables. Normally, approximately 10 stations are used through the track segment, spaced at 15'6" apart. If the length of the body of the curve is less than 155 feet, measurements should be taken for the full length of the body of the curve.

This uniform or averaging technique over the 10 stations through the track segment is consistent with the concept used by the vehicle/track dynamicists who discuss "g" levels in steady-state conditions, often considered to be one or two seconds. At 80 m.p.h., a vehicle will have traversed approximately 118 feet of track in one second. Measurements taken over 155 feet (10 stations at 15'6") provide the necessary distance to determine the behavior of the vehicle over the one- or two-second steady-state interval.

Analysis has shown that, although application of the V_{max} formula on a point-by-point basis is overly conservative, it does provide for the coverage of certain combinations of alignment and crosslevel deviations in Classes 3 through 5 track which could result in wheel climb derailments. However, further analysis has shown that these transient short-wavelength anomalies can be covered by the introduction of a 31-foot chord to the alignment table contained in § 213.55.

The Track Working Group also recommended the addition of new paragraphs (c), (d), (e), and (f) which will permit curving speeds based on four inches of unbalance or cant deficiency for certain categories of equipment that demonstrate safe curving performance at this level of unbalance. The means of qualification is a basic procedure known as a "static lean" test that has been used many times in recent years for the testing of equipment for operation at higher cant deficiencies. Although four inches of cant deficiency is usually applied to passenger trains, other types of equipment with comparable suspension systems, centers of gravity, and cross-sectional areas may perform equally well. Standard freight equipment, however, typically does not have the prerequisite vehicle characteristics which would allow curving speeds based on more than three inches of cant deficiency. The Track Working Group recommended that FRA review the information provided by the track owner or operator to verify safe curving

performance and approve the proposal before the vehicles are operated at four inches of cant deficiency.

The NPRM proposed to revise Appendix A, which currently contains a table specifying the maximum allowable operating speed for each curve based on three inches of cant deficiency. Under this proposed change, Appendix A would be amended to include two tables. Table 1 would be identical to the current table, while Table 2 would specify curving speeds based on four inches of cant deficiency.

Comments: Comments received supported the proposed amendments.

Final rule: FRA adds paragraph (g) to this section to afford track owners or railroads operating above Class 5 speeds an option to qualify equipment at cant deficiencies greater than four inches in lower track classes. Track owners or railroads operating under the provisions of Subpart G may exercise the option on lower track classes (Classes 1 through 5) that are contiguous with high speed territory without first petitioning FRA for a waiver from compliance with the other provisions of § 213.57.

Under paragraph (g), a track owner or railroad operating under Subpart G on track that is contiguous to lower speed track may request FRA approval to operate at a higher level of cant deficiency using the same procedures available under § 213.329(c) and (d). The track owner or railroad must submit to FRA for approval a test plan which will determine through engineering analysis the safety limits for lateral carbody accelerations which can be used as a surrogate measure to determine the amount of wheel unloading under cant deficient operation.

Upon FRA approval of the test plan, the track owner or railroad may conduct incrementally increasing train speed test runs to demonstrate that wheel unloading is within the prescribed safety limits. Once the test is completed and FRA approves a level of cant deficient operation, paragraph (g) requires geometry car inspections and acceleration measurements to confirm the integrity of the vehicle/track interaction on the curves.

The provision in paragraph (g) does not apply to track owners or railroads which operate trains in only Classes 1 through 5. FRA must consider other factors associated with track in Classes 1 through 5, such as the likelihood of a decrease in overall track quality and an absence of information generated through vehicle qualification testing procedures as required under § 213.345. Therefore, a track owner or railroad wishing to operate in Classes 1 through

5 at cant deficiencies greater than four inches must petition FRA for a waiver.

Section 213.59—Elevation of Curved Track; Runoff

Proposed rule: The Track Working Group discussed this section and recommended that it remain as currently written.

Comments: FRA received no comments.

Final rule: FRA agrees with the recommendation of the Track Working Group and this section as proposed is adopted in this final rule.

§ 213.63—Track Surface

Proposed rule: The present track surface table contained in this section was established in the original standards more than 20 years ago and has served the industry well as a minimum safety requirement. However, some of the parameters need updating to recognize the knowledge gained from investigation of derailment causes, engineering analysis, and changes in terminology. Therefore, the NPRM proposed several changes to track surface requirements to better address current knowledge of track/vehicle interaction.

The NPRM proposed that the parameter referring to the rate of runoff at the end of a track raise and the parameter for deviation from uniform profile should both remain unchanged. The profile parameter is conservative for single occurrences on both rails and less conservative for repeated perturbations.

In the 1982 revisions to the Track Safety Standards, the requirement for maintenance of curve records, including degree of curvature and the amount of elevation designated in curves was removed. Since that time, the term "designated elevation" has been controversial and difficult to apply. The NPRM proposed to remove that term from the revised table.

The NPRM also proposed to revise the way the Track Safety Standards address transition spirals. For many curves, especially in the lower track classes, track maintenance personnel often differ as to the locations where spirals begin and end, as well as to the measured runoff rate. In view of the somewhat subjective nature of the concept of uniform runoff in spirals, the proposed changes in this notice use a different approach from runoff or "variation in crosslevel in spirals" and incorporate this parameter into another parameter.

In the present track surface table, the maximum variation in crosslevel in spirals could exceed that allowed on tangents and in the full body of curves over the same distance. The mechanism

for derailment in the body of the curve is the same as in the spiral. The NPRM proposed that the differences in crosslevel in spirals be included in one parameter to simplify the table and correct the discrepancy that currently exists. The NPRM also proposed that the existing parameters referring to "deviation from designated elevation" and "variation in crosslevel" in spirals are unnecessary, provided spiral variations in crosslevel are included in the "warp" parameter. The "warp" parameter is measured by determining the difference in crosslevel between two points less than 62-feet apart.

While the difference in crosslevel parameter (warp) addresses the majority of situations where wheel climb or rock off can occur, three footnotes are added to the table to address specific situations.

The footnote identified by an asterisk inside the table addresses the present practice on some railroads to design a greater runoff of elevation in spirals due to physical restrictions on the length of spirals. Spiral runoff in new construction must be designed and maintained within the limits shown in the table for difference in crosslevel.

Footnote 1 is included to address the known derailment cause where a warp occurs in conjunction with an amount of curve elevation that approaches the maximum typically in use. When a vehicle is in an unbalanced condition on this curve elevation and encounters a warp condition, the vehicle is subjected to wheel/rail forces that could result in wheel climb.

Footnote 2 is included to address the harmonic rock off problem of which the railroad industry has been aware for many years. Under repeated warp conditions, the vehicle can experience an increase in side-to-side rocking that may result in wheel climb in curves or center plate separation on tangents.

Comments: Comments received supported the proposed amendments. One commenter questioned the use of the terms "variation" and "difference," and recommended the consistent use of one or the other, but not both.

Final rule: The term "variation" only appears in the statement behind the asterisk inside the track surface table. The term "variation" is used because this statement refers to the previous warp standard for spirals which used the same term. In certain locations, the prior standard for warp in spirals will be grandfathered due to physical restrictions and therefore FRA believes the terms should be consistent. In all other instances in this section, the term "difference" is used exclusively. The final rule makes one change in the track

surface table under the parameter described as the difference in crosslevel between any two points less than 62 feet apart, or commonly referred to as the "warp" parameter. The results of recent track twist (warp) studies conducted at the Transportation Technology Center (TTC), where three different vehicle types were tested to determine their responses to crosslevel and combined crosslevel/alinement perturbations on tangent and curved test zones, indicate that a limit for warp of 2¼ inches for Class 2 track would be more appropriate than the proposed limit of 2½ inches by RSAC. The report of the TTC testing was not available to the Track Working Group when their recommendations were made.

Section 213.101—Scope

Proposed rule: The Track Working Group discussed this section and recommended that it remain as currently written.

Comments: FRA received no comments.

Final rule: FRA agrees with the recommendation of the Track Working Group and this section as proposed is adopted in this final rule.

Section 213.103—Ballast; General

Proposed rule: The Track Working Group discussed this section and recommended that it remain as currently written.

Comments: FRA received no comments.

Final rule: FRA agrees with the recommendation of the Track Working Group and this section as proposed is adopted in this final rule.

Section 213.109—Cross ties

Proposed rule: The NPRM proposed to amend this section to include several recommendations made by the Track Working Group and adopted by the RSAC. After reviewing FRA's Accident/Incident data base, the Track Working Group concluded that wide gage resulting from defective crossties continues to be the single largest causal factor associated with track-caused reportable derailments.

Gage widening forces applied to the track structure from the movement of rolling stock tend to increase as track curvature increases. Therefore, the NPRM proposed to increase the number of effective crossties required under subsection (c) for turnouts and curved track with over two degrees of curvature. The purpose of this proposed requirement was to strengthen the track structure to enable it to better resist such forces.

In Class 1 track, the required number of crossties in any 39-foot segment of track would increase from five to six; in Class 2 track, from eight to nine; in Class 3 track, from eight to 10; and in Classes 4 and 5 track, from 12 to 14. These changes were proposed to become effective two years after the effective date of the final rule.

Under subsection (d), the NPRM proposed an optional requirement for the number and placement of crossties near rail joints in Classes 3 through 5 track. The existing requirement calls for one crosstie within a specified distance from the rail joint location, while the proposed optional requirement would allow two crossties, one on each side of the joint, within a specified distance from the rail joint location. FRA previously examined both standards under various static loading conditions. The results indicated that the proposed optional requirement provides equal or better joint support than the present requirement.

The NPRM also proposed to add a new subsection (e) to address track constructed without conventional crossties, such as concrete-slab track. The existing standards do not address this type of construction in which the running rails are secured through fixation to another structural member. The proposed addition addressed this type of track construction by requiring railroads to maintain gage, surface, and alignment to the standards specified in subsections (b)(1)(i), (ii), and (iii).

Comments: Comments received supported the proposed amendments. One commenter suggested that the GRMS technology be incorporated into this section.

Final rule: As discussed earlier in the preamble to this final rule, a separate task group continues to evaluate GRMS technology for possible incorporation into the Track Safety Standards.

The final rule includes subsection (c) as it is currently written, as well as subsection (d) to become effective two years after the effective date of this final rule.

The section as proposed is adopted in this final rule with renumbering of the subsections. Subsection (d) in the NPRM appears as subsection (f) in the final rule, and subsection (e) in the NPRM appears as subsection (g) in the final rule.

Section 213.113—Defective Rails

Proposed rule: The NPRM proposed several substantive changes to this section which reflect the results of FRA's on-going rail integrity research program. The results indicate the need to revise the remedial action tables and

specifications to more adequately address the risks of rail failure, reserving the most restrictive actions on limiting operating speed for those rail defects which are large enough to present a risk of service failure.

Because "zero percent" entries serve no useful purpose, they should be dropped from the remedial action tables. Similarly, "100 percent" of rail head cross-sectional area is not a meaningful dividing point for transverse defects. The proposed revisions to the remedial action table for transverse defects placed a lower limit of five percent of the rail head cross-sectional area. If a transverse defect is reported to be less than five percent, no remedial action would be required under the revised standards. Defects reported less than five percent are not consistently found during rail breaking programs and therefore defect determination within this size range is not always reliable. Furthermore, if the determination is reliable, defect growth to service failure size within the newly established testing frequency under § 213.237 is highly unlikely. The proposed revisions to the remedial action table for transverse defects also established one or more mid-range defect sizes, between five percent and 100 percent, each of which would require specific remedial actions.

In the proposed revised remedial action table, all longitudinal defects were combined within one group subject to identical remedial actions based on their reported size. These types of longitudinal defects all share similar growth rates and the same remedial actions are appropriate to each type. The lower limit of "0" inches was eliminated and the size divisions were revised upward slightly to reflect FRA's research findings which indicate that this class of rail defect has a relatively slow growth rate.

The "0" inch lower limit was eliminated also for bolt hole cracks and broken bases. The proposed revision also included minor changes in the size divisions for bolt hole cracks, as well as changes in the required remedial action for broken bases less than 6 inches and damaged rail.

The NPRM also proposed to add "Flattened Rail" to the rail defect table. Although it is not a condition shown to affect the structural integrity of the rail section, it can result in less-than-desirable dynamic vehicle responses in the higher speed ranges. The flattened rail condition is identified in the table, as well as in the definition portion of subsection (b), as being $\frac{3}{8}$ inches or more in depth and 8 inches or more in length.

The Track Working Group discussed at length a "break out in rail head," but was unable to agree on a standard definition. The RSAC therefore recommended that the industry continue to be guided by FRA's current interpretation that a break out in the rail head consists of a piece physically separated from the parent rail.

The NPRM also proposed to make several substantive revisions to the remedial actions specified under "Notes" in subsection (a)(2) of this section. A new note "A2" was added to address the mid-range transverse defect sizes which were added to the table. This remedial action allows for train operations to continue at a maximum of 10 m.p.h. for up to 24 hours, following a visual inspection by a person designated under § 213.7.

Note "B", which currently does not define a limiting speed, was changed to limit speed to 30 m.p.h. or the maximum allowable speed under § 213.9 for the class of track concerned, whichever is lower.

Notes "C", "D", and "H" were revised to limit the operating speed, following the application of joint bars, to 50 m.p.h. or the maximum allowable speed under § 213.9 for the class of track concerned, whichever is lower. Presently, the standards limit speed to 60 m.p.h. or the maximum allowable speed under § 213.9 for the class of track concerned, whichever is lower.

A second paragraph in Note "C," the remedial action which applies specifically to detail fractures, engine burn fractures, and defective welds, proposed a significant change to the current standards. This revision addressed defects which are discovered in Classes 3 through 5 track during an internal rail inspection required under § 213.237, and whose size is determined not to be in excess of 25 percent of the rail head cross-sectional area. For these specific defects, a track owner may operate for up to four days at a speed limited to 50 m.p.h. or the maximum allowable speed under § 213.9 for the class of track concerned, whichever is lower. If the defective rail is not removed or a permanent repair made within four days of discovery, the speed is limited to 30 m.p.h. until joint bars are applied.

Under the existing standards, these types of defects, predominant on heavy utilization trackage, would require a 30 m.p.h. restriction until joint bars are applied. Practice within the industry today is to operate the rail test vehicle until the number of defects found exceeds the railroad's ability to effect immediate repairs. At that time the rail test vehicle is shut down for the day.

The purpose of this practice is to reduce speed restrictions which not only affect the railroad's ability to move trains, but also can produce undesirable in-train forces that can lead to derailments. However, prematurely shutting down rail test car operations negate any possibility of discovering larger and more serious defects that may lie just ahead.

Furthermore, the results of FRA's research indicate that defects of this type and size range have a predictable slow growth life. Research indicates that even on the most heavily utilized trackage in use today, defects of this type and size are unlikely to grow to service failure size in four days.

Comments: Comments received generally supported the proposed amendments to this section. One commenter suggested that definitions for "bolt hole crack," "defective weld," and "head-web separation" should be added to subsection (b). This commenter also suggested that remedial actions for certain rail defects, which are expressed in terms of an "either/or" option, could be made less ambiguous by bracketing those options.

One commenter suggested that a periodic re-examination of "flattened rails" should be required so that the severity and growth rate of this rail defect can be monitored. This commenter also suggested that "shelled rail" should be defined as a rail defect which would require some specified remedial action.

One commenter argued that when a track owner voluntarily elects to conduct a continuous search for internal defects on Class 1 and 2 track where regulatory requirements for inspections of this type are non-existent, any rail defects found should be subject to the requirements of only remedial action B, regardless of the defect type or size of the defect. The commenter argued that such a provision would ensure that there is not a regulatory disincentive for voluntarily conducting internal rail inspections on Class 1 and 2 track.

Another commenter suggested that FRA's definition of "break out in rail head" should be more restrictive than the present version. This commenter also suggested that the final rule should set parameters for determining "excessive rail wear" in a manner similar to the methods used to measure excessive wheel wear prescribed in the 49 CFR Part 215, Railroad Freight Car Safety Standards.

Final rule: The Track Working Group discussed at length the issues associated with "flattened rail" (localized collapsed head rail) and "shelled rail." FRA and industry research indicates

that these occurrences are more accurately categorized as rail surface conditions, not rail defects, as they do not in themselves cause service failure of the rail.

FRA believes that the risk of detail fractures being masked by "shelled rail" conditions was appropriately addressed in the proposed rule by specifying more restrictive inspection intervals and by requiring specific remedial actions to be taken when surface conditions such as "shelled rail" prevent a valid inspection for internal defects. The proposed rule addresses the issue of "flattened rail" in terms of a specified remedial action for those of a certain depth and length. FRA believes that further monitoring of "flattened rail" conditions can be accomplished without prescribing regulations which mandate inspection procedures beyond which already exist. FRA's rail integrity research program will continue to study "shelled rail" and "flattened rail" conditions, and in the event that research indicates additional regulation is necessary in the future, FRA will not hesitate to do so.

The Track Working Group was unable to improve FRA's current definition of a "break out in rail head." The current definition, when viewed in terms of the remedial action which it requires when met, has been considered too liberal under certain circumstances, while conversely, it has also been considered too conservative under other circumstances. The circumstances primarily dictated by the type and size of defect, along with the location of the defect in the rail. FRA believes that under the current remedial action requirement, the current definition for "break out in rail head" is adequate.

The issue of "excessive rail wear" continues to be evaluated by FRA's rail integrity research program. FRA believes that insufficient data exist at this time which would indicate that parameters for this condition should be proposed as a minimum safety standard.

FRA believes that the remedial action tables and specifications in this final rule better address the risks associated with rail failure. These risks are primarily dependent upon defect type and size and should not be dependent upon the manner or mechanism which reveals the existence of the defect. FRA believes that providing special regulatory relief for defects found during voluntary inspections for internal rail defects would not be a prudent approach to take. However, in revising the remedial action table, FRA has sought to provide enhanced flexibility where warranted by safety considerations.

FRA agrees that additional definitions would be helpful, so this final rule adds definitions for "bolt hole crack," "defective weld," and "head-web separation." FRA also agrees that bracketing certain "either/or" remedial actions will clarify the intent of those requirements.

With the exception of these minor changes, the rule is adopted as proposed by the Track Working Group and endorsed by the RSAC.

Section 213.115—Rail End Mismatch

Proposed rule: The Track Working Group discussed this section and recommended that it remain as currently written.

Comments: FRA received no comments.

Final rule: FRA agrees with the recommendation of the Track Working Group and this section as proposed is adopted in this final rule.

Section 213.119—Continuous Welded Rail (CWR); General

Proposed rule: The NPRM proposed to introduce a requirement for railroads to establish and place in effect written procedures to address CWR. These procedures must address the installation, adjustment, maintenance and inspection of CWR track, and include a formal training program for the application of these procedures. The procedures, including a program for training, must be submitted to FRA within six months following the effective date of this rule. Although many railroads already have in effect a CWR program, FRA will review each submitted set of procedures for compliance with the individual requirements of the proposed regulation.

Within the last decade, through the determined efforts of researchers from industry and government, along with experience gained from accident investigators and track maintenance people, the railroad industry has gained a better comprehension of the mechanics of laterally unstable CWR track. As a result, the industry has identified maintenance procedures that are critical to maintaining CWR track stability.

As proposed, the requirements do not detail how each procedure is to be carried out. Rather, they identify the basic safety issues and permit railroads to develop and implement their own procedures to address those issues, provided the procedures are consistent with current research results as well as findings from practical experience documented in recent years. The procedures should be clear, concise, and

easy to understand by maintenance-of-way employees. A comprehensive training program must be in place for the application of these procedures.

The proposed regulation requires the designation of a "desired rail installation temperature range" for the geographic area in which the CWR is located. By definition contained in the proposed regulation, "desired rail installation temperature range" is the rail temperature range at which forces in CWR should not cause a track buckle in extreme heat, or a pull-apart during cold weather. Current general practice within the industry, based to a large extent on research findings, is to establish a "desired rail installation temperature range" which is considerably higher than the annual mean temperature for the geographic area in which the CWR is located. The regulation, as proposed in the NPRM, provides railroads with flexibility to establish the "desired rail installation temperature range" based on the characteristics of the specific territory involved and the historical knowledge acquired through the application of past procedures.

When CWR is installed and anchored/fastened at the "desired rail installation temperature range," it is considered to be in its initial "stress-free" state, where the net longitudinal force is equal to zero. Research discloses that many factors, some of which are unavoidable, like dynamics of train operation, the necessary lining and surfacing of the track structure, and performing rail repairs all contribute to a gradual lowering over time of the initial rail installation temperature range which increases the potential for track buckling. This phenomenon substantiates the need to install and anchor/fasten CWR at a relatively high rail installation temperature range.

Maintenance of the "desired rail installation temperature range" is critical to ensuring CWR stability. Therefore, the procedures for installation, adjustment, effecting rail repairs, and repairing track buckles or pull-aparts must compare the existing rail temperature with the "desired rail installation temperature range" for the area concerned.

The procedures also must address several other topics, such as rail anchoring, controlling train speed when CWR track has been disturbed, ballast re-consolidation, inspections, and recordkeeping for the installation of CWR and rail repairs that do not conform to the railroad written procedures. A track owner may update or modify CWR procedures as necessary, upon notification to FRA of those changes.

Development of individual CWR programs could prove burdensome for many small railroads. As recommended by the Track Working Group, FRA will work with the ASLRA to develop a generic set of CWR procedures to apply to low speed/low tonnage Class 2 and Class 3 railroad operations.

Comments: Comments generally supported the proposed amendment. One commenter questioned the need for certain railroads that only conduct low speed/low tonnage operations to adopt written procedures addressing CWR. Another commenter questioned FRA's enforceability of the proposed new section.

Final rule: The details of these procedures are to be based on research findings and sound engineering principles. FRA is committed to working with ASLRA to develop a generic set of CWR procedures with wide applicability for the spectrum of smaller railroads. FRA believes that certain requirements contained in the generic procedures, such as a requirement to operate at reduced speed following maintenance work which disturbs the track, will not have an impact on a railroad that normally only operates at 10 m.p.h. Other requirements of this generic set of procedures would also be less burdensome due to the nature of most low speed/low tonnage operations.

This new section is enforceable to the extent that CWR procedures must be developed and implemented, and employees responsible for their application must be trained on these procedures. In the proper exercise of its enforcement discretion, the agency is unlikely to take enforcement action against minor deviations from CWR procedures unless, together with other violations, they are part of a larger problem.

Section 213.121—Rail Joints

Proposed rule: Under existing subsection (a), the phrase "proper design and dimension" often has been interpreted to prohibit the use of any joint bar on a rail section for which it was not specifically designed. This interpretation does not consider the fact that certain joint bars are interchangeable between different rail sections. Therefore, the NPRM proposed to change the word "proper" to "structurally sound" in subsection (a).

In subsection (b), the NPRM proposed to add the modifier "excessive" in front of the phrase "vertical movement." The existing language in this subsection implies that no vertical movement of either rail could be allowed when all bolts are tight. This interpretation is too

strict. FRA's Enforcement Manual suggests that FRA inspectors evaluate excessive vertical movement when determining compliance with this paragraph. This change would make the rule conform to sound practices.

The NPRM proposed to extend to Class 2 track the prohibition of torch cutting bolt holes in rail. The reference to joint bars was removed, the subject to be covered in the proposed new subsection (h) which restricts the practice of re-configuring joint bars. Joint bars for older rail sections are becoming increasingly difficult to find and are no longer being manufactured. Therefore, the new subsection (h) prohibits the re-configuration of joint bars in Classes 3 through 5 track, but not in Classes 1 and 2 track.

Comments: Comments generally supported the proposed amendments. One commenter agreed that the term "structurally sound" is more technically correct, but stated that the term provides no additional guidance as to what joint bars are interchangeable with various rail sections. Several commenters suggested that the prohibition on reconfiguring joint bars with a torch should be extended to Class 2 track. Another commenter suggested that the term "excessive" should be quantified.

Final rule: FRA believes the risks in the lower speed track classes are minimal when a railroad torch cuts bolt holes in joint bars and reconfigures joint bars with a torch. The most critical of joint bar failures are those in which the bar cracks or breaks through the middle two bolt holes. If this were to happen as a result of reconfiguring by a torch, a regulation already exists which prohibits any cracks or breaks in this area of the joint bar for any class of track.

FRA believes that the term "excessive" in the context of this section should be left to the discretion of a qualified person based on that person's evaluation of what risks may be associated with any particular set of conditions. FRA agrees that additional guidance should be provided for the interpretation of "structurally sound" joint bars and will work with the industry to develop and issue guidelines in the form of a Technical Bulletin addressing the interchange ability of joint bars between various rail sections. This approach is similar to a recent recommendation issued by FRA's Technical Resolution Committee.

The rule is adopted as proposed by the NPRM.

Section 213.122—Torch Cut Rail

Proposed rule: The NPRM proposed this new section to address the proper

handling of rails cut by the use of a torch. The practice of torch-cutting rail at one time was commonplace on railroads, but was discontinued in higher speed track several years ago when better saws were developed and railroads discovered that rails that have been torch-cut have a greater tendency to develop fractures. Today, on track Classes 3 and above, the practice is used almost exclusively for temporary emergency repairs, such as quickly returning a track to service following a derailment or washout. These locations are then quickly replaced with new rail. The purpose of this section is to outlaw the practice of torch cutting rails, except for emergency repairs, on all track in classes above Class 2. Train speed on track that has been torch cut for emergency repairs made after the effective date of this rule must be reduced to the maximum allowable speed for Class 2 until the torch cut rail is replaced.

The proposed section also provides railroads with guidance for eliminating old torch cut rail in track Classes 3 through 5. The industry believes no torch cuts exist in Class 6 track. Torch cuts in Class 5 track must be eliminated within a year of the effective date of this final rule, while torch cuts in Class 4 track must be removed within two years. Within one year of the effective date of this final rule, railroads must inventory existing torch cuts in any Class 3 track over which regularly scheduled passenger trains operate. Those torch cuts found and inventoried will be "grandfathered in." Any torch cuts that are found on such track after the expiration of one year and that are not inventoried will be limited immediately to Class 2 speed and removed within 30 days of discovery. If a railroad chooses to upgrade a segment of track from Classes 1 or 2 to Class 3, and regularly scheduled passenger trains operate over that track, the railroad must remove any torch cuts before the speeds can be increased beyond the maximum allowable for Class 2 track. If a railroad chooses to upgrade a segment of track from any class of track to Class 4 or 5, it must remove all torch cuts.

Comments: Comments received generally supported the proposed amendments. Several commenters suggested that torch cut rail ends be prohibited in all but Class 1 track. One commenter also suggested that existing torch cut rail ends be restricted to 10 m.p.h..

Final rule: FRA believes the risks associated with torch cut rail ends in Class 2 track are minimal based on lower speeds and lower impact loads. If

rail defects were to develop as a result of torch cut rail ends, requirements already exist which would address them. FRA also believes that existing torch cut rail ends have survived the early mortality rate which is associated with rails that fail due to poor torch cutting practices, and therefore existing torch cuts do not present a significant risk, given the low frequency of expected failure and lower accident severity at Class 2 speeds.

The rule is adopted as proposed by the NPRM.

Section 213.123—Tie Plates

Proposed rule: The NPRM proposed to add a new subsection (b) to this section which reads, "In Classes 3 through 5 track, no metal object which causes a concentrated load by solely supporting a rail shall be allowed between the base of rail and the bearing surface of the tie plate." The specific reference to "metal object" is intended to include only those items of track material which pose the greatest potential for broken base rails such as track spikes, rail anchors, and shoulders of tie plates. The phrase "causes a concentrated load by solely supporting a rail" further clarifies the intent of the regulation to apply only in those instances where there is clear physical evidence that the metal object is placing substantial load on the rail base, as indicated by lack of load on adjacent ties.

Comments: Comments supported the proposed amendment.

Final rule: The rule is adopted as proposed by the NPRM.

Section 213.127—Rail Fastening Systems

Proposed rule: The NPRM proposed to change the title of this section from "Rail fastenings" to "Rail fastening systems" and to reduce the language of the regulation to one sentence which reads, "Track shall be fastened by a system of components which effectively maintains gage within the limits prescribed in § 213.53(b)."

The change to "rail fastening systems" more adequately addresses the many individual components of modern-day elastic fastening systems, such as pads, insulator clips, and shoulder inserts. The failure of certain critical components within the system could adversely affect the ability of the individual fastener to provide adequate gage restraint. The revised language of the regulation provides for an evaluation of all components within the system, if necessary, in order to evaluate whether they are affording effective gage restraint.

The RSAC considered the current reference to qualified Federal or State track inspectors and the definition of a qualified State track inspector to be redundant, given the adoption of Part 212. Therefore, the NPRM proposed to delete the phrase "qualified Federal or State track inspector," as well as the last sentence of the current section which contains the definition of a qualified state track inspector.

Comments: Comments supported the proposed amendment. One commenter suggested that the GRMS technology be incorporated into this section.

Final rule: As discussed earlier in the preamble to this final rule, a separate task group continues to evaluate GRMS technology for possible incorporation into the Track Safety Standards. The rule is adopted as proposed by the NPRM.

Section 213.133—Turnouts and Track Crossings Generally

Proposed rule: The NPRM proposed to retain the language of subsection (a) which reads, "In turnouts and track crossings, the fastenings must be intact and maintained so as to keep the components securely in place." The AAR proposed to revise the language to say, " * * * the fastenings must be maintained for the safe passage of trains." The AAR contended that turnout and track crossings are designed with a high degree of redundancy, making it unnecessary for each fastening to be intact to maintain safety. However, the RSAC recommended that the regulations allow track inspectors discretion to evaluate immediate circumstances in determining what level of remedial action is necessary for loose or missing fastenings. RSAC recommended that inspectors be provided specific guidance about interpreting this provision, such as the guidance contained in technical bulletin T-95-09 recently issued by FRA.

The NPRM proposed to change subsection (b) to reflect proposals presented by the BMW and by the AAR and FRA. The RSAC recommended that rail anchoring requirements be extended to include Class 3 trackage and that "rail anchors" be changed to "rail anchoring" so that rail anchoring would include elastic rail fasteners.

Comments: Comments supported the proposed amendments.

Final rule: The rule is adopted as proposed by the NPRM.

Section 213.135—Switches

Proposed rule: The NPRM proposed to revise subsection (b) to consider the existence of reinforcing bars or straps on

switch points where joint bars cannot be applied to certain rail defects, as required under § 213.113(a)(2), because of the physical configuration of the switch. In these instances, remedial action B will govern, and a person designated under § 213.7(a), who has at least one year of supervisory experience in track maintenance, will limit train speed to that not exceeding 30 m.p.h. or the maximum allowable under § 213.9(a) for the appropriate class of track, whichever is lower. Of course, the person may exercise the options under § 213.5(a) when appropriate.

The RSAC did not recommend specific dimensions for determining when switch points are "unusually chipped or worn," as provided for in subsection (h). FRA stated that its Accident/Incident data base indicates that worn or broken switch points are the largest single cause of derailments within the general category of "Frogs, Switches, and Appliances." However, the AAR contended that developing meaningful numbers for these measurements would be a difficult task because most of these derailments are related also to other causal factors such as wheel flange condition, track stiffness, and train handling characteristics. The NPRM, therefore, proposed to retain the current wording in subsection (h), allowing qualified individuals to evaluate immediate circumstances to determine when switch points are "unusually chipped or worn."

The NPRM also proposed a new subsection (i) to read, "Tongue and plain mate switches, which by design exceed Class 1 and excepted track maximum gage limits, are permitted in Class 1 and excepted track." This new subsection provides an exemption for this item of specialized track work, primarily used in pavement or street railroads, which by design does not conform to the maximum gage limits prescribed for Class 1 and excepted track.

Comments: Comments generally supported the proposed amendments. One commenter suggested that the term "unusually chipped or worn" be quantified.

Final rule: FRA believes that the term "unusually chipped or worn" in the context of this section should be left to the discretion of a qualified person based on that person's evaluation of what risks may be associated with any particular set of circumstances. The rule is adopted as proposed by the NPRM.

Section 213.137—Frogs

Proposed rule: The NPRM proposed to add a new subsection (d) to this

section, which reads, "Where frogs are designed as flange-bearing, flangeway depth may be less than that shown for Class 1 if operated at Class 1 speeds." This subsection provides an exemption for an item of specialized track work which by design does not conform to the minimum flangeway depth requirements prescribed in subsection (a) of this section.

Comments: Comments received supported the proposed amendment.

Final rule: The rule is adopted as proposed by the NPRM.

Section 213.139—Spring Rail Frogs

Proposed rule: The proposed rule recommended no changes to this section.

Comments: No comments were received.

Final rule: This final rule inserts the word "compression" for that of the phrase "a tension" in subsection (d) to correct a technical error in wording. In order for the wing rail to be held tight against the point rail, the spring must be in compression and not in tension.

Except for this minor change, the rule is adopted as proposed by the NPRM.

Section 213.141—Self-Guarded Frogs

Proposed rule: The Track Working Group discussed this section and recommended that it remain as currently written.

Comments: FRA received no comments.

Final rule: FRA agrees with the recommendation of the Track Working Group and this section as proposed is adopted in this final rule.

Section 213.143—Frog Guard Rails and Guard Faces; Gage

Proposed rule: To facilitate an easier understanding of the requirements contained in this section, the NPRM proposed to add a diagram to illustrate the method for measuring guard check gage and guard face gage. The proposal contained no substantive changes to this section.

Comments: Comments supported the proposed amendment.

Final rule: The rule is adopted as proposed by the NPRM.

Section 213.201—Scope

Proposed rule: The Track Working Group discussed this section and recommended that it remain as currently written.

Comments: FRA received no comments.

Final rule: FRA agrees with the recommendation of the Track Working Group and this section as proposed is adopted in this final rule.

Section 213.205—Derails

Proposed rule: The NPRM proposed to add language to this section designed to ensure that derails are maintained to function properly. The RSAC recommended these changes as additional safety features for train crews, as well as railroad employees working on and around tracks.

Comments: Comments supported the proposed amendments.

Final rule: The rule is adopted as proposed by the NPRM.

Section 213.231—Scope

Proposed rule: The Track Working Group discussed this section and recommended that it remain as currently written.

Comments: FRA received no comments.

Final rule: FRA agrees with the recommendation of the Track Working Group and this section as proposed is adopted in this final rule.

Section 213.233—Track Inspections

Proposed rule: The NPRM proposed several changes to subsection (b). The five m.p.h. restriction over highway crossings is eliminated to permit safe operation of vehicles through highway traffic. However, the subsection would still require an inspector to perform an adequate inspection, regardless of how the inspector operates over the crossing. Also, the word "switch" is replaced by the word "turnout" to clarify the track device originally intended to be addressed in the regulation.

The Track Working Group considered advising the RSAC to recommend specific speed restrictions for inspection vehicles. However, after several lengthy discussions, the group suggested instead that this subsection provide the individual inspector with sole discretion in determining vehicle speed based on track conditions, inspection requirements, and other circumstances that may vary from day to day and location to location. The group also suggested the insertion of a footnote at the end of this section which indicates this discretion is not limited by any other part of this section, and is extended to determine sight distance ("visibility remains unobstructed by any cause") which is referenced in paragraphs (b)(1) and (2) of this section.

The existing language under subsection (b) does not specify how many tracks may be inspected in one pass of an inspection vehicle in multiple track territory. FRA has never issued interpretive language regarding this issue, opting to judge the overall effectiveness of the inspection program

rather than the specific manner in which it was conducted. The NPRM proposed to establish some guidelines for hyrail inspections conducted in multiple track territory.

As a result, subsection (b), as proposed in the NPRM, contains additional language specifying the number of additional tracks that can be inspected, depending on whether one or two qualified individuals are in the vehicle, and depending on the distance between adjacent tracks measured between track centerlines. Inspectors may inspect multiple tracks from hy-rail vehicles only if their view of the tracks inspected is unobstructed by tunnels, differences in ground level, or any other circumstance that would prevent an unobstructed inspection of all the tracks they are inspecting. The revised subsection also requires railroad to traverse each main track bi-weekly and each siding monthly, and to so note on the appropriate track inspection records.

With respect to the inspection frequency required in subsection (c), neither the Track Working Group nor the RSAC could reach agreement in determining a frequency requirement that would be based on speed, tonnage, or track usage. Therefore, the NPRM did not propose to change the language in this subsection.

Comments: Comments generally supported the proposed amendments. Several commenters suggested that the requirements that address inspections in multiple track territory should be more restrictive. Several commenters suggested that a maximum speed limit should be set when performing inspections for compliance with this part, one of which suggested a maximum speed of 15 m.p.h..

Final rule: FRA believes that the appropriate vehicle inspection speed over a particular territory is subject to many variables, i.e., track condition, type of track construction, weather conditions, time of day, as well as many others which may only be apparent to the individual inspector at that moment in time. With this in mind, FRA believes that the appropriate vehicle speed for any particular set of conditions should be determined by the person performing the inspection, including those performed in multiple track territory. The final rule provides for the inspector's discretion as it involves inspection speed and sight distance.

This final rule also changes this section by cross-referencing excepted track in the § 213.233(c) table for required inspection frequency.

Section 213.235—Inspection of Switches, Track Crossings, and Lift Rail Assemblies or Other Transition Devices on Moveable Bridges

Proposed rule: The NPRM proposed to change subsection (a) by adding the word "turnout" after the word "switch" to clarify the track device and the intent of the requirement which is to inspect the entire turnout. The word "switch" is retained to include switch point derails or any other device which is not considered a full turnout.

The NPRM proposed a second sentence to be added to subsection (a) which reads, "Each switch in Classes 3 through 5 track that is held in position only by the operating mechanism and one connecting rod shall be operated to all of its positions during one inspection in every three-month period." The nature of this type of switch requires a thorough inspection of the critical parts, some of which are non-redundant. Thorough inspection is best accomplished by operating the switch mechanism to allow for a better inspection of these components. The phrase "all positions" is intended to cover slip switches and lap switches.

In subsection (b), the word "turnout" is added after the word "switch" for the same reasons explained above.

Comments: Comments generally supported the proposed amendments. One commenter suggested that all switch mechanisms should be operated during inspections required under this section.

Final rule: FRA believes that a requirement to operate all switch mechanisms on a monthly basis would be too burdensome on the industry, especially in some geographical locations that are subject to snow, ice, and freezing conditions for many months of the year.

The final rule includes several changes to this section. On November 23, 1996, more than three weeks after the Track Working Group had submitted its recommendations for revision of the Track Safety Standards to the RSAC, an Amtrak passenger train derailed on the moveable bridge over the Hackensack River in Secaucus, New Jersey. This derailment was the result of a malfunctioning lift rail assembly which provides the transition from the moveable span to the fixed span on the bridge. Because of this derailment, FRA believes that transition devices on moveable bridges should be addressed in the revised Track Safety Standards.

Therefore, this final rule adds moveable bridge lift rail assemblies and other transition devices to the inspection requirements in this section.

This section adds only a requirement to visually inspect on foot; it is not intended to impose additional functional requirements for bridge lift rail assemblies beyond what is already required by the Track Safety Standards. However, FRA considers these assemblies to be no less critical than switches or track crossings, and they should be subject to monthly on-foot visual inspections by a person qualified under § 213.7.

In addition, this section is restructured in order to reference the operation of specified switch operating mechanisms in a separate subsection (b). This change is designed to emphasize the importance of these non-redundant mechanisms.

Section 213.237—Inspection of Rail

Proposed rule: Under existing subsection (a), the Track Safety Standards require Classes 4 and 5 track, as well as Class 3 track over which passenger trains operate, to be tested annually for internal rail defects. This requirement was established at a time when main line freight traffic was considerably lighter than it is today. At the time the original standards were drafted, test frequencies generally equated to intervals between 15 and 20 million gross tons (MGTs), although there existed some track that carried 40 MGTs or more in one year. As a matter of practice, railroads generally test more often than presently required under the standards, with intervals between tests typically ranging from 20 to 30 MGTs. These typical intervals define a good baseline for generally accepted maintenance practices, and the industry's rail quality managers consider these limits as points of departure for adjustment of test schedules to account for the effects of specific track characteristics, maintenance, traffic, and weather.

The NPRM proposed to leave unchanged the present annual test requirement for Classes 4 and 5 track and Class 3 track over which passenger trains operate, based on risk factors associated with freight train speeds and passenger train operations. However, with the high utilization trackage that now exists on Class 1 freight railroads, the original requirement based solely on the passage of time, without regard to tonnage, is no longer adequate.

Selecting an appropriate frequency of rail testing is a complex and somewhat controversial task involving many different factors including temperature differential, curvature, residual stresses, rail sections, and cumulative tonnage. Taking into consideration all of the above factors, FRA's research suggests

that 40 MGTs is the maximum tonnage that can be hauled between rail tests and still allow a safe window of opportunity for detection of an internal rail flaw before it propagates in size to service failure. The NPRM proposed that intervals be set at once per year or 40 MGTs, whichever is shorter, for Classes 4 and 5 track and for Class 3 track over which passenger trains operate.

The NPRM also proposed that Class 3 trackage not supporting passenger traffic be subject to testing for internal rail defects. FRA's Accident/Incident data point to a need for inclusion of all Class 3 trackage in a railroad's rail testing program. Therefore, the NPRM proposed to add a requirement that Class 3 track over which passenger trains do not operate be tested once a year or once every 30 MGTs, whichever is longer.

The NPRM proposed the limit of once a year or 30 MGTs because a more frequent testing cycle or a cycle identical to that proposed for Classes 4 and 5 track would be too burdensome for the industry. The proposed limits are designed to give short line railroads and low tonnage branch lines some relief from the introduction of a new regulatory requirement and still reduce the present risks associated with not testing Class 3 track at all.

The NPRM also proposed the addition of subsections (d) and (e). Subsection (d) addresses the case where a valid search for internal rail defects could not be made because of rail surface conditions. Several types of technologies are presently employed to continuously search for internal rail defects, some with varying means of displaying and monitoring search signals. A continuous search is intended to mean an uninterrupted search by whatever technology is being used, so that there are no segments of rail which are not tested. If the test is interrupted, i.e., as a result of rail surface conditions which inhibit the transmission or return of the signal, then the test over that segment of rail may not be valid because it was not continuous. Therefore, as proposed in the NPRM, a non-test is not defined in absolute technical terms. Rather, the provision leaves this judgment to the rail test equipment operator who is uniquely qualified on that equipment.

As proposed in the NPRM, subsection (e) specifies the options available to a railroad following a non-test due to rail surface conditions. These options must be exercised prior to the expiration of time or tonnage limits specified in paragraph (a) of this section.

Comments: Comments supported the proposed amendments.

Final rule: The rule is adopted as proposed by the NPRM.

Section 213.239—Special Inspections

Proposed rule: The RSAC recommended no change to this section, and likewise, the NPRM proposed no change to the language in the regulation. However, the preamble of the NPRM provided an explanation of agency policy interpreting the section.

Comments: One commenter referred to the Notice of Safety Advisory 97-1, issued by FRA on September 4, 1997. See 62 FR 46793. The commenter recommended that the provisions contained in the advisory be adopted as regulations under this section.

Because of a number of fairly recent train derailments caused by unexpected track damage from moving water, FRA deemed it appropriate to issue the safety advisory to provide railroads with recommended procedures that reflect best industry practice for special track inspections. The procedures include: (1) prompt notification of dispatchers of expected bad weather; (2) limits on train speed on all track subject to flood damage, following the issuance of a flash flood warning, until special inspection can be performed; (3) identification of bridges carrying Class 4 or higher track which are vulnerable to flooding and over which passenger trains operate; (4) availability of information about each bridge, such as identifying marks, for those who may be called to perform a special inspection; (5) training programs and refresher training for those who perform special inspections; and (6) availability of a bridge maintenance or engineering employee to assist the track inspectors in interpreting the inspectors' findings.

Final rule: The rule is adopted as proposed by the NPRM, and does not incorporate the procedures outlined in the Notice of Safety Advisory 97-1. As it stated in that advisory, FRA believes that this section is necessarily general in nature, because it is not practical to specify in a minimum safety standard all the conditions which could trigger a special inspection, nor the manner in which any particular special inspection should be conducted. Of course, all such inspections should be conducted so as to effectively prevent derailments, and the procedures included in the safety advisory are designed to aid railroads in performing effective inspections.

Although this section contains a sample list of surprise events that routinely occur in nature, FRA does not view this provision as limited to only the occurrences listed or to only natural disasters. The section addresses the

need to inspect after "other occurrences" which include such natural phenomena as temperature extremes, as well as unexpected events that are human-made, e.g., a vehicle that falls on the tracks from an overhead bridge, a water main break that floods a track roadbed, or terrorist activity that damages track. This interpretation is not new; FRA has always viewed this section to encompass sudden events of all kinds that affect the safety and integrity of track.

Section 213.241—Inspection Records

Proposed rule: The NPRM proposed to change the requirement that railroads retain a record of each track inspection at division headquarters for at least one year. When this provision in subsection (b) was first written, railroads maintained many division headquarters throughout their systems, making it relatively convenient for railroads to maintain inspection records at these locations. Over the years, however, railroads consolidated many of their headquarters, often naming only a few locations as "division headquarters." FRA has contended that maintaining inspection records in only a few locations over a system that may include thousands of miles of track was not in keeping with the spirit of the regulation. Railroads have argued, on the other hand, that compelling them to maintain headquarters for no other purpose than to store records was a burdensome requirement.

The NPRM proposed to allow railroads to designate a location within 100 miles of each state where records can be viewed by FRA track inspectors following 10 days notice by FRA. The provision does not require the railroads to maintain the records at these designated locations, only to be able to provide viewing of them at the locations within 10 days after notification. The proposal stipulates locations within 100 miles of each state, rather than locations in each state, to accommodate those railroads whose operations may cross a state's line by only a few miles. In those cases, the railroad could designate a location in a neighboring state, provided the location is within 100 miles of that state's border.

A change to subsection (c) requires a track owner to record any locations where a proper rail inspection cannot be performed because of rail surface conditions. A new provision at § 213.237(d) specifies that if rail surface conditions prohibit the railroad from conducting a proper search for rail defects, a test of that rail does not fulfill the requirements of § 213.237(a) which requires a search for internal defects at

specific intervals. The new language in subsection (c) of this section requires a recordkeeping of those instances.

The NPRM also proposed to add a provision for maintaining and retrieving electronic records of track inspections. Patterned after an experimental program successfully tried by the former Atchison Topeka & Santa Fe Railroad with oversight by FRA, the provision in subsection (e) allows each railroad to design its own electronic system as long as the system meets the specified criteria to safeguard the integrity and authenticity of each record. The provision also requires that railroads make available paper copies of electronic records when needed by FRA or by railroad track inspectors.

Comments: Comments supported the proposed amendments.

Final rule: The rule is adopted as proposed by the NPRM.

Section by Section Analysis—High Speed Track Standards

Section 213.301—Scope of Subpart

Proposed rule: Subpart G applies to track required to support the passage of passenger and freight equipment in specific speed ranges higher than those permitted over Class 5 track. For those speeds above Class 5, the track and the vehicles operated on the track must be considered as an integral system. Of course, conventional passenger equipment has been operated for decades by many railroads at speeds up to 110 m.p.h. and on the Northeast Corridor by Amtrak and its predecessors at speeds up to 125 m.p.h. This subpart does not apply to technologies such as magnetic levitation that do not use flanged wheel equipment.

Comments: No comments were received pertaining to this section.

Final rule: A minor change in this section clarifies that Subpart G begins at a speed greater than 90 miles per hour (not at 91 miles per hour) for qualified passenger equipment and a speed greater than 80 miles per hour (not 81 miles per hour) for qualified freight equipment.

Section 213.303—Responsibility for Compliance

Proposed rule: Only two response options are available under this paragraph. Track owners who know or have notice of non-compliance with this subpart may either bring the track into compliance with the subpart or halt operations over that track. This section does not offer the railroad the option of operating under this subpart with the supervision of a qualified person, as in the standards for track Classes 1 through

5. Such an option would permit too much opportunity for disaster from human error. Under this subpart, if a track does not comply with the requirements of its class, it must be repaired immediately or train speeds must be reduced to the maximum speed for the track class with which the track complies. It may be necessary on occasion for the track owner to reduce the class of track to Class 5 or below. When this occurs, the requirements for the lower classes (1–5) will apply.

Comments: No comments were received pertaining to this section.

Final rule: FRA decided to delete the proposed subsection (d), which discussed directed service by the Surface Transportation Board, because this provision is not needed in the high speed context.

FRA decided to add a new subsection (d) of this section to include in the category of those responsible for compliance with the track standards those who perform the function of complying with the standards, not just the track owner. This is consistent with the counterpart regulation for Classes 1 through 5 track in § 213.5(f). It conforms to the authority given FRA by the statute. See 49 U.S.C. 21301 and 1 U.S.C. 1.

Section 213.305—Designation of Qualified Individuals; General Qualifications

Proposed rule: Work on or about a track structure supporting qualified high speed passenger trains demands the highest awareness of employees about the need to perform work properly.

A person may be qualified to perform restorations and renewals under this subpart in three ways. First, the person may combine five or more years of supervisory experience in track maintenance for track Class 4 or higher and the successful completion of a course offered by the employer or by a college level engineering program, supplemented by special on-the-job training. Second, a person may be qualified by a combination of at least one year of supervisory experience in track maintenance of Class 4 or higher, 80 hours of specialized training or in a college level program, supplemented with on-the-job training. Under the third option, a railroad employee with at least two years of experience in maintenance of high speed track can achieve qualification status by completing 120 hours of specialized training in maintenance of high speed track, provided by the employer or by a college level engineering program, supplemented by special on-the-job training.

Similarly, a person may be qualified to perform track inspections in Classes 6, 7, 8 and 9 by attaining five or more years of experience in inspection in track Class 4 or higher and by completing a course taught by the employer or by a college level engineering program, supplemented by special on-the-job training. Or, the person may be qualified by attaining a combination of at least one year of experience in track inspection in Class 4 and higher and by successfully completing 80 hours of specialized training in the inspection of high speed track provided by the employer or by a college level engineering program, supplemented with on-the-job training. Finally, a person may be qualified by attaining two years of experience in track maintenance in Class 4 and above and by successfully completing 120 hours of specialized training in the inspection of high speed track provided by the employer or by a college level engineering program, supplemented by special on-the-job training provided by the employer with emphasis on the inspection of high speed track. The third option is intended to provide a way for employees with two years of experience in the maintenance of high speed track to gain the necessary training to be qualified to inspect track.

For both categories of qualifications, the person must have experience in Class 4 track or above. To properly maintain and inspect Class 4 track or higher requires a level of knowledge of track geometry and track conditions that are not as readily obtained at lower classes. Persons who are qualified for high speed track must know how to work, maintain, and measure high quality track. Experience in Class 4 track is established as a lower limit to provide a pool of candidates, that may be drawn from freight railroads, who would provide the necessary experience on well-maintained track.

This section also includes specific requirements for qualifications of persons charged with maintaining and inspecting CWR. Training of employees in CWR procedures is essential for high speed operations. Each person inspecting and maintaining CWR must understand how CWR behaves and how to prevent track buckles and other adverse track reactions to thermal and dynamic loading.

Comments: No comments were received pertaining to this section.

Final rule: A minor change to subsection (e) has been made to clarify that records must be maintained for those employees qualified to supervise movements over broken rails.

**Section 213.307—Class of Track:
Operating Speed Limits**

Proposed rule: For several years, passenger service on the Northeast Corridor has operated at 125 m.p.h. under conditional waivers granted by FRA. Amtrak has established specific procedures for this category of speed from which the railroad industry has accumulated valuable knowledge about track behavior in this speed range. The speed of 125 m.p.h. is the natural boundary for the maximum allowable operating speed for Class 7 track. Because trainsets have operated in this country at speeds up to 160 m.p.h. for periods of several months under waivers for testing and evaluation, the maximum limit of 160 m.p.h. is established for Class 8. In the next several years, certain operations may achieve speeds of up to 200 m.p.h. Class 9 track is established for this possibility. The exceptions for the maximum allowable operating speeds for each class of track parallels the standards for the lower classes, except that a speed of 10 m.p.h. over the maximum intended operating speeds is permitted during the qualification phase per Section 213.345.

Although high speed rail is most often considered in terms of passenger travel, non-passenger high speed train service (e.g., the mail trains operated by Amtrak on the Northeast Corridor) is also a possibility. All equipment, whether used for passenger or freight, must demonstrate the same vehicle/track performance and be qualified on the high speed track. Hazardous materials, except for limited and small quantities, may not move in bulk on trains operated at high speeds. The limitations noted are similar to those involved in commercial passenger and freight air travel.

Comments: The Florida Overland eXpress commented that a reference to that project in the section-by-section analysis of the NPRM may seem to erroneously suggest that the requirements established for Class 9 track apply to that project.

Final rule: FRA agrees that the language in the preamble to the NPRM may have been confusing. This analysis clarifies that Subpart G is not applicable to the Florida Overland eXpress. The proposed rule itself did not reference that proposed operation, so the language in the rule remains unchanged for the final rule.

FRA does not presently foresee authorization of mixed passenger and conventional freight operations above 150 m.p.h. Accordingly, passenger equipment safety standards, as proposed, address equipment for speeds

only to 150 m.p.h. FRA expects to handle service above 150 m.p.h. through rules of particular applicability. Nevertheless, standards contained here are useful benchmarks for future planning with respect to track/vehicle interaction, track structure, and inspection requirements.

**Section 213.309—Restoration or
Renewal of Track Under Traffic
Condition**

Proposed rule: This section addresses two elements of concern: (1) that the stability of the track structure not be significantly degraded and (2) that roadway worker safety not be compromised. For restoration under traffic conditions, this section allows only track maintenance that does not affect the safe passage of trains and involves the replacement of worn, broken, or missing components or fastenings or minor levels of spot surfacing.

Comments: No comments were received pertaining to this section.

Final rule: The section as proposed is adopted in this final rule.

**Section 213.311—Measuring Track
Under Load; section 213.317 Waivers;
section 213.319 Drainage**

Proposed rule: Proposed language for these sections is identical to the similar sections for track Classes 1 to 5 (§§ 213.13, 213.17, and 213.33).

Comments: Refer to the corresponding sections in classes 1–5 for comments.

Final rule: The sections as proposed are adopted in this final rule, with minor language changes to § 213.317.

Section 213.321—Vegetation

Proposed rule: These sections are identical to the corresponding sections in the standards for track Classes 1 through 5.

Comments: Refer to the corresponding sections in classes 1–5 for comments.

Final rule: The section as proposed is adopted in this final rule.

Section 213.323—Track Gage

Proposed rule: This section introduces limits for change in gage. Analysis has shown that an abrupt change in gage can produce significant wheel forces at high speeds. The minimum and maximum limits for gage values Classes 6, 7, 8 and 9 were set to minimize the onset of truck hunting.

Comments: No comments were received pertaining to this section.

Final rule: With the exception of one minor change, the section as proposed is adopted in this final rule. The title of the heading in the fourth column of the gage table was changed from "the

change of gage in 31 feet" to "the change of gage within 31 feet" to clarify that the change of gage parameter applies between two points anywhere within a 31-foot distance along the track, including two points exactly 31 feet apart.

Section 213.327—Alinement

Proposed rule: Uniformity is established by averaging the offset values for nine points centered around each point along the track at a spacing specified in the table. Uniformity defined in this way applies anywhere—curves, tangent segments, and spirals. Analysis has shown that points in transition areas such as around the "point-of-spiral-to-curve" can be included in this averaging technique. No distinction is made as to where the uniform calculation takes place. Tangent, curve, and spiral transitions have historically been difficult to determine in the field. The use of the uniformity filter obviates the need to make determinations based on the identification of these transitions.

This section provides three chord lengths for different types of vehicle/track interaction modes. Chords of 31-, 62-, and 124-foot lengths provide control of single and multiple defects in the wavelength bands most likely to affect vehicle dynamics and ride quality.

The 62-foot chord was selected because of its proximity to the truck center spacing of most high speed passenger vehicles. In phase carbody resonance modes such as bounce, roll and sway are most affected by track anomalies with a wavelength that is near the truck center spacing. Control of track geometry limits based on the 62-foot chord will help reduce the magnitude of such carbody motion. This chord also is predominantly used for track Classes 1 through 5 and is familiar to track inspection and maintenance personnel.

The 31-foot chord controls short wavelength defects that can result in high wheel forces over a short portion of track. These forces may not produce excessive carbody motion, yet their action on the wheels and truck may cause derailment. Most foreign high speed railroads use a 10-meter chord which is approximately equal in length to the 31-foot chord required in this section.

To control longer wavelengths, most foreign high speed railroads use a 30- or 40-meter chord. The 124-foot chord, which is approximately equal to a 40-meter chord, provides a means to locate and measure longer wavelength track anomalies. These long-wavelength

anomalies provide dynamic input to the high speed rail vehicles and can excite carbody resonance modes at high speeds. Excessive carbody motion can lead to poor carbody accelerations and wheel/rail forces, and in the extreme, may also cause derailment.

Addition of this chord length allows measurement of anomalies with wavelengths up to 300 feet. The Japanese National Railway adopted a 40-meter chord after recent speed increases on its Tokaido line. Research and testing indicated a stronger correlation between carbody motion and track geometry limits based on 40-meter mid-chord offsets.

Comments: No comments were received pertaining to this section.

Final rule: The final rule includes two changes to limits shown in the alignment tables. The permissible limit for track Class 9 for a single alignment deviation for a 124-foot chord is changed from one-half inch to three-quarters inch, and the Class 9 limit for three or more non-overlapping deviations for a 124-foot chord is changed from three-eighths to one-half inch. The limits for these two parameters shown in the NPRM were overly conservative, based on the recommendations of the technical experts who worked with the task group that developed the proposed high speed standards. These recommendations are contained in the report, "Track and Vehicle-Track Interaction Safety Assurance for U.S. High Speed Rail", July 1997, which is contained in the public docket for these proceedings.

Section 213.329—Curves, Elevation and Speed Limitations

Proposed rule: The determination of the maximum speed that a vehicle may operate around a curve is based on the degree of curvature, actual elevation, and amount of unbalanced elevation where the actual elevation and curvature are derived by a moving average technique. This approach is as valid in the high speed regime as in the lower classes. The moving average technique recognizes the steady state (one or two second duration) nature of the V_{max} formula.

The maximum operating speed for each curve is determined by the V_{max} formula:

$$V_{max} = \sqrt{\frac{E_a + E_u}{0.0007D}}$$

where:

V_{max} = Maximum allowable operating speed (miles per hour).

E_a = Actual elevation of the outside rail (inches).

E_u = Unbalance elevation or cant deficiency

D = Degree of curvature (degrees).

While the cant deficiency proposed in Classes 1 through 5 is three or four inches, cant deficiencies proposed for qualified high speed train are considerably higher. FRA has granted waivers for up to nine inches for revenue service and up to twelve inches for testing for qualified equipment. Higher cant deficiencies are allowed for high speed trains that may include tilting systems. The qualification testing will ensure that the vehicle will not exceed the vehicle/track safety performance limits set forth in this subpart when operating at these higher cant deficiencies.

In order to qualify the vehicle at higher cant deficiencies, the railroad must provide technical testing information using the same procedures that have been used in past years for waivers for higher cant deficiencies. This procedure is commonly called the "static lean test" where the vehicle is elevated on one side and wheel loads are measured and the roll angle is determined. Based on acceptable testing information and other technical submissions, FRA will approve the higher cant deficiencies for the specific vehicle type.

The maximum crosslevel on the outside of a curve is established at seven inches. Elevation in excess of that amount presents a safety consideration for freight trains with high centers of gravity, operating at lower speeds in the curve.

Comments: The Bombardier GEC Alstom Consortium (Bombardier/GEC) commented that this section permits FRA to approve a higher of cant deficiency, but the same option does not exist for track classes 1 through 5. Furthermore, Bombardier/GEC urged that the requirements concerning the roll angle between the floor of the vehicle and the horizontal should be deleted and explained that this method was not valid for non-tilting equipment.

Final rule: FRA agrees that the concept of the roll angle would not apply to non-tilting power cars and has changed paragraphs (d)(1) and (2) to apply the requirements for the roll angle only to passenger-carrying equipment. FRA has changed § 213.57 in track Classes 1 through 5 to address the commenter's concern.

FRA has deleted footnote 2 from paragraph (f) of this section because it is no longer necessary. If a waiver previously has been granted to the railroad to operate at a higher level of cant deficiency, the railroad or FRA

should have the static lean and other information readily available for consideration of FRA approval required under this section. This will allow the present waiver, including conditional requirements not necessarily compatible with Subpart G, to be replaced with an FRA approval process which incorporates all necessary requirements under this new subpart.

FRA considered the issue of the difference between a curve that has been introduced in high speed track as a result of maintenance or geometry degradation and a curve that was introduced by design. In either case, superelevation may or may not be present and trains may experience an unbalanced condition. FRA believes that the deviations from uniform profile and uniform alignment, as outlined in sections 213.331 and 213.327, will not preclude longer wavelength misalignments on the order of 200 feet or greater that resemble the characteristics of a curve, from being treated as a curve for which the unbalance formula defined in this section will be applied.

Section 213.331—Track Surface

Proposed rule: The chord lengths in the table are selected for the same reasons discussed in § 213.327 (alignment). The multiple chords measure different surface anomaly wavelengths.

The surface table addresses both single and multiple events. Studies have shown that the smaller limits are necessary when surface anomalies repeat themselves three more times over the specified chord length. The parameter commonly called "warp," the difference in crosslevel between any two points, does not require a specific limit for repeated warp conditions at high speeds.

Comments: Bombardier/GEC and the French Ministère de l'Équipement, des Transports et du Logement separately expressed concerns that the limits for track geometry have been extended from the present class 6 standards, permitting more track defects in the high speed track classes. As an example, Bombardier/GEC said that the proposed rule would permit a single 1.25 inch mid-ordinate offset on a 62 ft. chord for a profile condition, compared to the current requirement of 0.5 inch. In addition, Bombardier/GEC questioned why the difference in crosslevel between two points less than 62 feet apart is lower for Classes 4 and 5 track than it is for Classes 6 through 9 track. Bombardier/GEC urged that the values for all the geometry limits be "verified by industry" before the rule is

promulgated. The Bombardier/GEC also pointed out that the titles in the tables defining surface requirements should not have the "inches" in them since class of track is not defined in inches.

The AAR commented that the NPRM included an inconsistency between § 213.63 for track Classes 1 to 5 and § 213.331 in regard to repeated low joints. The AAR suggested that footnote 2 to the warp parameter (the difference in crosslevel between any two points less than 62 feet apart) should apply to § 213.331 for track Classes 6 through 9. The AAR notes that a condition which is a defect in track Classes 1 through 5 should also be a defect in the higher track classes.

Final rule: FRA has adopted the proposed geometry standards except for a few changes in the limits for the track profile parameter. The changes in the profile parameters are based on a recent study conducted at the VNTSC.

FRA believes it is crucial to revise the standards for Class 6 track. Years of experience by Amtrak on the Northeast Corridor indicate a lack of correlation between the former Class 6 standards and adverse vehicle responses. Adverse vehicle response occasionally occurred on track that was in compliance; on the other hand, track that was not in compliance sometimes did not contribute to any adverse vehicle response.

In response to the concern that the "warp parameter" permits a greater difference in crosslevel between any two points less than 62 feet apart for the higher classes than is permitted in the lower classes, FRA notes that the limit established for Classes 6 through 9 track, one and one-half inches, is the same limit established for Class 5 track. Therefore, FRA does not believe that a discrepancy exists. In addition, FRA believes the format in the surface tables in this section does not need modification since it is similar to the surface table in § 213.63 for the lower classes, a format that has been used in the track standards for many years.

The geometry standards are based on the recommendations of a panel of experts who conducted extensive studies, reviewed foreign practice, and recommended to the RSAC the safety limits shown in the proposed rule. The recommendations of this panel are contained in a working paper dated July, 1997, and entitled "Track and Vehicle Interaction Safety Assurance for J.S. High Speed Rail." The working paper is part of the docket for this proceeding. The proposed high speed standards were based on the principle that the high speed track and the

equipment operating on high speed track are an integral system.

Following the publication of the NPRM, the VNTSC completed a report entitled "Evaluation of Proposed High Speed Track Surface Geometry Specification", dated November 10, 1997, which is in the docket of these proceedings. The study describes an evaluation of the responses of different high speed locomotive designs to track profile geometry variations. The working paper focuses on a comparative analysis of high speed locomotive designs with carbody-mounted traction motors and locomotive designs with truck-mounted traction motors. The minimum amplitudes of track profile variations required to cause excessive vertical accelerations in the operator's cab and to cause suspension bottoming are compared with the maximum amplitudes prescribed in the proposed high speed standards. The analysis shows that a locomotive design with truck-mounted traction motors requires an approximately 33 percent smaller track profile variation amplitude to cause excessive vertical accelerations than a locomotive design with carbody-mounted traction motors. These results indicate that a locomotive with truck-mounted traction motors may exceed the proposed minimum safety limits for a single profile event that were proposed in the NPRM for Subpart G.

In light of those findings, FRA has adopted the proposed surface limits contained in the NPRM, except that the geometry limits for profile are reduced, based on the results of the VNTSC study. This final rule requires that the deviation from uniform profile on either rail at the midordinate of a 31-foot chord may not exceed one inch for track Classes 6 and 7. The deviation from uniform profile on either rail at the midordinate of a 62-foot chord has now been set to one inch for track Classes 6, 7 and 8 and three-quarters of an inch for track Class 9. Similarly, for three or more non-overlapping deviations in track surface, each deviation from uniform profile on either rail at the midordinate of a 31-foot chord may not exceed three-quarters of an inch for track Classes 6 and 7. Also, for three or more non-overlapping deviation in track surface, each deviation from uniform profile on either rail at the midordinate of a 62-foot chord has been changed to three-quarters for track Classes 6, 7 and 8 and one-half inch for track Class 9.

FRA concurs with the comments made by the AAR in regard to repeated low joints. For consistency with § 213.63, footnote two with a minor modification has been added to the table in § 213.331(a).

Section 213.333—Automated Vehicle Inspection Systems

Comments were received from Amtrak and from Bombardier/GEC in regard to the proposed requirements for automated measurement systems. These systems include the track geometry measurement system, the gage restraint measurement system, and the systems necessary to monitor vehicle/track interaction (acceleration and wheel/rail force requirements). Because of the complexity of these systems and the technical nature of the comments, the following discussion addresses each automated measurement system separately in the order of the paragraphs in the proposed rule.

Track Geometry Measurement System (TGMS), Paragraphs (a) Through (g)

Proposed rule: Railroads that operate trains at speeds above 110 m.p.h. universally employ automatic track geometry measuring systems to generate data to point out train safety hazards in the track structure. Reliance upon only visual inspections to locate small track irregularities is difficult. In France, track geometry measuring vehicles are operated quarterly over high speed lines for the purpose of collecting track maintenance data.

Comments: Comments were received concerning the track geometry system.

Final rule: No changes to paragraphs (a) through (g) were made in the final rule.

Gage Restraint Measurement System, Paragraphs (h) and (i)

Proposed rule: The GRMS is primarily used on timber-tied track of certain freight railroads, to evaluate the effectiveness, on a continuous basis, of rail/tie fastening systems. This section requires the use of GRMS in Classes 8 and 9 to measure the gage restraint of the track, including the strength of the ties and the ability of the fastenings to maintain gage. Specified safety limits were established after testing on the Northeast Corridor where the track is predominately concrete-tied with timber tie turnouts. GRMS on concrete ties is effective in identifying defective ties and conditions with missing fasteners or a relaxation of toe load of gage-side rail fasteners. GRMS is required in Classes 8 and 9 to measure the resistance of the track to forces generated by wheel flanging in the gaging space. The use of the GRMS is necessary to insure sufficient gage restraint at the gage limits set to control truck hunting.

Comments: Bombardier/GEC commented that the GRMS requirements are unnecessary. It stated

that the GRMS could be a beneficial tool when used to inspect lower classes of track built with wooden ties, and any requirement for regular GRMS inspection should be limited to lower track classes and tracks with wooden ties where a cost/safety benefit can be shown.

Final rule: FRA does not agree with the recommendation that the GRMS be restricted to timber-tied track. While most of the industry's GRMS experience has been on timber-tied track, FRA and Amtrak jointly conducted a program to evaluate the performance of FRA's GRMS on the Northeast Corridor, a route with large numbers of concrete ties. This joint evaluation program indicated that the GRMS is an important safety tool for the measurement of gage restraint in concrete ties, as well as timber ties. The evaluation program also concluded that the optimum GRMS safety criterion for concrete ties is the gage-widening ratio (GWR) which is based on the unloaded track gage, loaded track gage and actual lateral load applied.

The GWR limit to the high speed standards is a completely different concept than the application of the GRMS technology discussed for the lower track classes. This preamble describes various proposals for implementation of GRMS technology for lower track classes, such as the use of a GRMS to supplant certain crosstie and fastener requirements in the track safety standards. While the GRMS is new to the high speed environment, FRA concludes that GRMS inspections in the higher classes is important to confirm the safety of crossties and fasteners. The GRMS is an important tool which has been proven to identify missing fasteners and help locate other conditions that can affect the ability of both timber and concrete crossties to maintain track gage.

Paragraphs (h) and (i) are unchanged from the proposed rule with two exceptions. Since there is no requirement to calculate Projected Loaded Gage (PLG24) in Classes 8 and 9, the reference to PLG 24 has been removed from the final rule. Several other minor word changes have been made in the language of the rule text to agree with the current language being proposed by the GRMS Task Group.

Vehicle/Track Safety Measurement Systems, Paragraph (j)

Proposed rule: The proposed rule required functional carbody and truck frame accelerometers on at least two vehicles of every train in track Classes 8 and 9. The track owner would be required to have in effect written

procedures when these devices indicate a possible track-related condition.

Comments: Both Amtrak and Bombardier/GEC in separate comments state that the requirements in paragraph (j) are unnecessary. Both commenters objected to the requirement for accelerometers on every train, except for lateral truck frame accelerometers, and also objected to the requirement for written procedures for the notification of track personnel. The commenters argued that such a requirement would likely create significant availability problems for various operators due to the reliability of such permanently installed equipment.

In its comments to the docket, Amtrak re-evaluated an earlier endorsement of a requirement for carbody accelerometers on every train and now recommends that this paragraph be replaced with a requirement for written procedures when on-board crews report indication of a possible track-related condition. Amtrak said that it had earlier assumed that these monitoring systems would be autonomous "black boxes" that would be on each train and report exception to the engineer or directly to the dispatcher. Amtrak said that further investigation into the application of this requirement raised doubts about the necessity for the frequency of the monitoring as well as the ability of an operator to ensure compliance with that frequency because "track deterioration is a slow process occurring over long periods of time." In addition, Amtrak stated that it has had in place for years a process by which engineers report rough track when they encounter it.

Final rule: FRA has received widely differing opinions about the use of accelerometers on daily trains. Some experts point out that accelerometers on every train would be extremely useful to locate track conditions that may need correction. Other experts have differing opinions. The French National Railway (SNCF), for example, employs lateral truck-mounted accelerometers to address truck hunting on every train, but uses vertical and lateral carbody accelerometers only on a vehicle which inspects about twice each month. Those who advocate accelerometers on two cars in every train believe that they may indicate a track-caused response if both vehicles exhibit similar readings. On the other hand, if only one vehicle shows a high acceleration, the cause may be attributed to the dynamics of that vehicle only, not the track. Some experts believe that a requirement to equip every train with carbody and truck frame accelerometers would be costly to implement and would have questionable safety benefits.

However, many experts believe that a requirement for carbody and truck frame accelerometers on one train per day would accomplish several important safety goals that can not be achieved with a periodic program such as the one on the SNCF. The principal advantage is that conditions such as a culvert this is settling would be identified before the next periodic inspection.

While FRA agrees with the commenters that lateral and vertical accelerometers on every train would be unnecessary and that track does generally deteriorate slowly, FRA believes that some undesirable track geometry conditions may occur between periodic inspections for geometry and vehicle/track safety. The engineer's subjective perception of rough track conditions would be enhanced with available technology. FRA concludes that a requirement for functioning carbody and truck-mounted accelerometers on at least one train per day is needed to address those conditions that may occur on a daily basis, such as a culvert which has settled or a track condition that may be inadvertently introduced during track repair. These conditions may not be noticeable to a locomotive engineer.

The final rule is changed to require that at least one vehicle in one train per day operating in Classes 8 and 9 shall be equipped with functioning on-board truck frame and carbody accelerometers. Each track owner shall have in effect written procedures for the notification of track personnel when on-board accelerometers on trains in Classes 8 and 9 indicate a possible track-related condition. The implementation of this requirement and the extent of human involvement in the process and the specific acceleration levels that would trigger notification of track personnel is being left up to the railroad.

Paragraph (k)

Proposed rule: In paragraph (k), the proposed rule requires that for track Classes 7, 8 and 9, an instrumented car having dynamic response characteristics representative of other equipment assigned to service, or a portable device that monitors on-board instrumentation on trains, shall be operated over the track at the revenue speed profile at least twice within 60 days with not less than 15 days between inspections. The instrumented car or the portable device shall monitor vertically and laterally oriented accelerometers on the vehicle's floor level and lateral truck-mounted accelerometers. If the carbody lateral, carbody vertical, or truck frame lateral safety limits in this section are

exceeded, speeds will be reduced until these safety limits are not exceeded.

Comments: Both Amtrak and Bombardier/GEC were generally supportive of this paragraph which requires periodic measurements of truck frame and carbody accelerations. Amtrak recommended that two vehicles be used, rather than one, and Bombardier/GEC questioned the requirement that the accelerometers be mounted above the axle where they would be subjected to damage from snow, ballast, and debris. Bombardier/GEC also stated that the rule should make clear what the remedial action should be taken when these limits are exceeded.

Final rule: FRA agrees with the comments regarding the placement of the accelerometers and has revised the paragraph to clarify the remedial action that must be taken when these safety limits are exceeded. Paragraph (k) is changed to remove the requirement that the accelerometers on the truck frame shall be mounted "directly above the axle." Instead the accelerometers must be mounted on the truck frame. While Amtrak's recommendation that two vehicles be equipped with the accelerometers, FRA concludes that one inspection vehicle when combined with the daily monitoring of accelerometers and the other inspection requirements in the rule, will provide the necessary level of safety. For clarification, the rule is changed to require that "if the carbody lateral, carbody vertical or truck frame lateral safety limits in the following table of vehicle/track interaction safety limits are exceeded, speeds will be reduced until these safety limits are not exceeded." These changes clearly indicate that when the vehicle/track interaction safety limits are exceeded on the inspection vehicle, the speeds of all trains, not just the test train, shall be reduced until the source of the exception is corrected, whether track or vehicle-related.

Paragraph (l)

Proposed rule: In this proposed section, paragraph (l) would require, for track Classes 8 and 9, a car equipped with instrumented wheelsets to be operated annually to ensure that the wheel/rail force safety limits are not exceeded.

Comments: Bombardier/GEC stated that the rule as proposed is not clear about whether the requirement for an annual measurement of wheel/rail forces using instrumented wheelsets is intended to "re-qualify the rolling stock, or verify the quality of the track." Bombardier/GEC stated that, based on the practices of all operators of high

speed equipment around the world, there is no reason to re-qualify a vehicle design once it has been properly qualified. Bombardier/GEC also commented that if the intent of the measurement is to verify the condition of the track, it will be less effective as an indicator than information obtained from the other requirements in the rule that are specifically included for that purpose and which are conducted more frequently. Bombardier/GEC also recommended a few technical changes to the table of vehicle/track interaction safety limits.

Final rule: The commenter recommends that the measurement of wheel/rail forces is only necessary during the qualification period and is not necessary to be employed for periodic inspections. The SNCF relies on accelerometers for the purpose of confirming the safety of its high speed system; however, other high speed railroads use instrumented wheelsets on a regular basis to monitor wheel/rail forces. The final rule establishes safety criteria for both accelerometers and wheel/rail forces that must be monitored during the life of the system. FRA does not agree with the comment that accelerometer measurements alone will ensure safety.

The vehicle/track interaction safety limits are the cornerstone of the high speed standards. Vehicle/track interaction has critical consequences in railroad safety, and so establishing safe parameters and developing a measurement system to adhere to those parameters is highly important for any track safety program. There are several hazardous and unacceptable vehicle/track interaction events that are well-known in railroad engineering, and for the most part, may occur on existing high speed operations, including wheel climb, rail roll-over, vehicle overturning, gage widening, and track panel shift.

The safety limits contained in the Vehicle/Track Interaction Safety Limits table are derived from technical literature, years of research, experience by foreign railroads, and computer simulation and validation. They must not be exceeded either during the qualification phase required under § 213.345 or in the periodic measurement of accelerations and wheel/rail forces required in this section.

The minimum vertical wheel load safety limit is 10 percent of the static vertical wheel load. The static vertical wheel load is defined as the load that the wheel would carry while stationary on level track. These safety criteria assure that no excessive wheel

unloading is experienced by any wheel on the operating vehicle. Significant wheel unloading greatly increases the risk of derailment in the dynamic environment of a vehicle traveling at high speed.

The ratio of the lateral force that any wheel exerts on an individual rail to the vertical force exerted by the same wheel on the rail (L/V ratio) is limited by the Nadal formula. The limit on any wheel's L/V ratio ensures that the risk of a wheel climb derailment is minimized. The wheel flange angle (δ) referenced in the formula should correspond to actual measurements of wheel flange angle as provided by the requirements of the vehicle qualification testing specified in § 213.345.

The net axle lateral force exerted by any axle on the track should not exceed 50 percent of the static vertical load exerted by the same axle. This safety criterion ensures that no excessive track panel shift or misalignment is produced by the moving vehicle. For vehicles operating at high speeds, track panel shift can produce unsafe carbody and/or truck motion and, in the extreme, can cause derailment.

The ratio of the lateral forces that the wheels on one side of any truck exert on an individual rail to the vertical forces exerted by the same wheels on that rail must not exceed 0.60. This limit ensures that the risk of a rail rollover derailment is minimized.

The lateral carbody peak-to-peak acceleration (defined by the algebraic difference between the two extreme values of measured acceleration within a one-second duration) is limited to 0.5 g. Carbody lateral accelerations above this limit reflect a very poor ride quality and a degraded track and/or vehicle condition.

The vertical carbody peak-to-peak acceleration (defined by the algebraic difference between the two extreme values of measured acceleration within a one-second duration) is limited to 0.6 g. Carbody vertical accelerations above this limit also reflect a poor ride quality and a degraded track and/or vehicle condition.

The Root Mean Square (RMS) of the lateral truck acceleration for any two-second duration is limited to 0.4 g. This safety limit ensures that no sustained truck hunting is experienced by the moving vehicle. Sustained truck hunting produces undesirable ride quality and significantly increases the risk of derailment. The RMS of the lateral truck acceleration must be calculated over a two-second window from which the mean value of the acceleration has been removed. The vertical truck zero-to-peak acceleration

is limited to 5.0 g. Exceeding this safety limit can indicate undesirable short wavelength track anomalies.

Ultimately, vehicle/track interaction safety is assured by controlling wheel/rail forces to safe limits. Appropriate limits for track geometry and vehicle response acceleration provide strong indications of the likely wheel/forces which would be produced by operating trains. Use of an instrumented wheelset also provides a level of safety assurance for new and unusual vehicle designs that differ from the conventional vehicle dynamic models that were used to develop the track geometry and vehicle/track interaction limits.

FRA believes that an annual inspection using functioning instrumented wheelsets must be implemented as part of a high speed inspection strategy that includes visual inspections, geometry car inspections, periodic carbody and truck-mounted accelerometer measurements, and other inspections deemed necessary.

The measurement of wheel/rail forces and accelerations is necessary to confirm that the vehicle/track system is performing within safe limits. The Japanese National Railway, for example, employs instrumented wheelsets to measure wheel/rail forces at a frequency of approximately every three months. The purpose of the periodic measurement of wheel/rail forces required in this paragraph is to monitor, or in a sense "requalify," the vehicle/track system, not to "requalify" only the track or only the vehicle design. Neither the track nor the vehicles on the high speed track can be considered in isolation; they must be monitored together as a system.

The final rule contains a few changes to the table of vehicle/track interaction safety limits. A 25 Hz filter is specified so that important high speed events will not be filtered from the data and the location of truck frame accelerometers is changed in Footnote 3.

Paragraph (m)

Proposed: Paragraph (m) requires the track owner to maintain a copy of the most recent exception printouts for the inspection required under paragraphs (k) and (l) of this section.

Comments: No comments were received concerning this paragraph.

Final rule: The paragraph as proposed is adopted in this final rule.

Section 213.335—Cross ties

Proposed rule: Various types of cross ties may be installed in high speed track provided that the ties maintain the proper gage, surface and alignment. Slab track (track imbedded in concrete) or

other construction may also be used if the construction complies with the requirements of this section. Because of the wide use of concrete ties in high speed track throughout the world, this section establishes safety requirements for concrete ties.

The requirements for cross ties in this subpart differ from those in the corresponding section for cross ties in Classes 1 through 5. For non-concrete-tied construction, the requirements for ties parallel those of the lower standards except that permissive lateral movement of tie plates is set at $\frac{3}{8}$ inch instead of $\frac{1}{2}$ inch and a requirement for rail holding spikes is added.

For concrete-tied track, effective ties must not exhibit the known failure modes listed. These failure modes were derived largely from experience in the Northeast Corridor. The number and distribution requirements of both non-concrete ties and concrete ties is more stringent than the requirements for the lower classes. For example, 14 effective concrete cross ties are required in Class 6, and 16 effective concrete ties are required in Classes 7, 8 and 9 in each 39-foot segment of track. For both concrete and timber construction, a minimum number of non-defective ties is specified on each side of a defective tie.

Comments: The AAR commented that a discrepancy exists in that paragraph (e) is inconsistent with the required location of cross ties at rail joint locations for lower speed operations covered by § 213.109.

Final rule: Review of this section also revealed a typographical mistake which is being corrected: in paragraphs (c)(6) and (d)(6), "Able" is changed to "So unable." The discrepancy was inadvertent and has been corrected. The measurement is changed from 25 inches to 24 inches in paragraph (e) to make this subsection consistent with the requirements for the lower track classes.

Section 213.337—Defective Rails

Proposed rule: The requirements for the identification of rail flaws and appropriate remedial action are valid in high speed track classes as well as the lower track classes. This section is unchanged from the standards for the lower classes except that language references to specific lower classes are deleted as unnecessary. Surface conditions such as corrugation, shelling, spalling and checking are not included in the high speed rail defect table since these conditions, if they were to progress to a severe level, would contribute to dynamic loading conditions that are addressed by the requirements for vehicle/track

interaction in § 213.333. The flattened rail head is especially important to identify in high speed track because of the adverse effect on track geometry caused by this short anomaly in the surface of the rail head.

Comments: No comments were received pertaining to this section.

Final rule: To improve clarity, definitions were added and a small change was made to include brackets around some items in the rail flaw table so that this section is identical to the corresponding section in the lower track classes.

Section 213.339—Inspection of Rail in Service

Proposed rule: A continuous search for internal rail defects must be made of all rail in track in track Classes 6, 7, 8 and 9 at a frequency of twice per year. This requirement is consistent with the frequency used on Amtrak's Northeast Corridor (essentially, Class 6 and 7) and as well as the approach used in France which inspects rails twice a year.

Comments: No comments were received concerning this section.

Final rule: The final rule for this section is unchanged from the proposed rule.

Section 213.341—Initial Inspection of New Rail and Welds

Proposed rule: This section provides for the initial inspection of new rail, either at the mill or within 90 days after installation, and for the initial inspection of new welds made in new or used rail. It also provides for alternatives for these inspections. Compliance with the initial inspection of new rail and welds may be demonstrated by in-service inspection, mill inspections, welding plant inspections, and inspections of field welds.

Comments: No comments were received concerning this section.

Final rule: The final rule for this section is unchanged from the proposed rule.

Section 213.343—Continuous Welded Rail (CWR)

Proposed rule: As with CWR for the lower classes of track, FRA will review the railroad's written procedures for the installation, adjustment, maintenance and inspection of CWR, and training for the application of these procedures.

Comments: No comments were received concerning this section.

Final rule: The final rule is unchanged from the proposed rule for this section.

Section 213.345—Vehicle Qualification Testing

Proposed rule: All rolling stock, both passenger and freight, must be qualified for operation for its intended class. This section "grandfathers" equipment that has already operated in the specified classes. Rolling stock operating in Class 6 within one year prior to the promulgation of this rule shall be considered as qualified. Vehicles operating at Class 7 speeds under conditional waivers prior to the promulgation of the rule are qualified for Class 7 at the current level of cant deficiency. This includes equipment that is presently operating on the Northeast Corridor at Class 7 speeds.

The qualification testing will ensure that the equipment will not exceed the vehicle/track performance limits specified in § 213.333 at any speed less than 10 m.p.h. above the proposed maximum operating speed. Testing at a maximum speed at least 10 m.p.h. above the proposed operating speed is required. The test report must include the design flange angle of the equipment that will be used for the determination of the lateral to vertical wheel load safety limit for the vehicle/track performance measurements required in § 213.333(k).

Subsection (d) requires the operator to submit an analysis and description of the signal system and operating practices to govern operations in Classes 7, 8 and 9. This submission will include a statement of sufficiency in these areas for the class of operation intended. Based on test results and submissions, FRA will approve a maximum train speed and value of cant deficiency for revenue service.

Comments: Bombardier/GEC stated that this part of the proposed rule is intended to be followed to qualify equipment types for their intended operation on a specific route, not to determine the operating limits of the equipment and track, as stated. Bombardier/GEC said that to achieve this, it is recommended that the words "* * * and conduct a test program sufficient to evaluate the operating limits of the track and equipment" be replaced with "* * * and conduct a test program sufficient to evaluate the safe operation of the equipment for the intended service."

Bombardier/GEC said that it is not practical to include a requirement to suspend the vehicle qualification tests at the speed where any of the vehicle/track performance limits in § 213.333 are exceeded. The qualification tests, according to Bombardier/GEC, should be completed to determine the safe

operational limits for the equipment throughout the route. In addition, the specific location of all violations should be recorded and the condition of the track in those locations should be checked to determine if the non-compliance is related track or equipment.

Final rule: FRA believes that it is important not to emphasize the vehicle component in the qualification testing. The purpose of this section is not to conduct a test program to evaluate the safe operation of the equipment, but to qualify the vehicle/track system. The consideration of the high speed track and the vehicles together as an integral system is fundamental to the approach adopted in this final rule. To evaluate the system, a test program shall demonstrate vehicle dynamic response as speeds are incrementally increased from acceptable Class 6 limits to the target maximum test speeds.

The commenter believes that the tests should not be suspended when the safety limits are reached. However, these safety limits are set at levels where continued operation could result in a derailment. FRA does not believe it would be prudent to continue the testing on that portion of track if these safety limits are reached. However, the rule is not intended to imply that all testing must be stopped. It can continue, but the locations where the limits are reached must be identified and test speeds may not be increased at those locations until corrective action is taken. This action may be an adjustment in the track, in the vehicle, or in both of these system components.

FRA has considered the consistency of this final rule with the proposed Passenger Equipment Safety Standards, *Federal Register*, September 23, 1997, and has changed § 213.345(b) to state that the testing will not exceed the wheel/rail force safety limits and the truck lateral accelerations specified in § 213.333 and the vertical and lateral carbody acceleration levels listed in (b)(1), (2), and (3). FRA believes the tighter ride quality limits in the proposed Passenger Equipment Safety Standards are more appropriate for a new system. However, as the equipment and track wear, those tighter ride quality limits which were used at the time of system qualification should be used to establish long-term maintenance levels, and the limits contained in § 213.333, which are minimum safety levels, should be used during the life of the system to monitor safety.

A small change has been added to § 213.345(a) which now states that all rolling stock types which operate at Class 6 and above speeds shall be

qualified. This change emphasizes that trains which operate at Class 5 speeds or lower on the high speed line do not need to be qualified to operate on the high speed track.

The rule in § 213.345(e) requires the railroad to submit an analysis and description of the signal system and operating practices to govern operations in Classes 7, 8 and 9. FRA has modified § 213.345(f) to make it clear that trains shall not operate in revenue service until FRA has approved a maximum train speed and value of cant deficiency based on FRA's review of the test results and the other submissions by the track owner.

Section 213.347—Automotive or Railroad Crossings at Grade and Moveable Bridges

Proposed rule: There are no highway or railroad grade crossings on the Amtrak route between Washington, D.C. and New York City. Much of this line is operated by revenue passenger trains at 125 m.p.h. (Class 7 speeds). Highway crossings and railroad crossings at grade (diamonds) may not be present in Class 8 and 9 track.

Technology currently is being developed that would prevent inappropriate intrusion of vehicles onto the railroad rights-of-way. This technology involves the use of barrier systems with intrusion detection and train stop, as well as advance warning systems. Because the technology is under development, it would be premature to include specific requirements for barrier systems and related technology in this section. However, the railroad is required to submit for approval a description of the crossing warning system for each crossing.

Comments: No comments were received for this section.

Final rule: A minor addition was added to paragraph (b) to make it clear that trains shall not operate at Class 7 speeds unless an FRA-approved warning/barrier system exists on the track segment and all elements of that warning/barrier system are functioning.

The rule precludes the presence of highway grade crossings and rail-to-rail crossings for the highest speed operations, track Classes 8 and 9. Presently no highway-rail crossings exist on Class 6 track (on Amtrak and commuter railroads), although highway-rail crossings existed for several years on Class 6 track on the Northeast Corridor. FRA believes highway/grade crossings should be limited in the high speed regime. Where highway/rail crossings exist at higher speeds, the

railroad should install the most advance warning/barrier systems available.

FRA is continuing to conduct risk analysis related to treatments for high-speed crossings. To date, the analysis demonstrates that risk to a motorist is not likely to increase with increasing train speeds above 110 m.p.h. On average, collision frequency should not rise (although sight distance may be an issue in individual situations). Accident severity in the range of 80 m.p.h. is already so high that no further increase in the likelihood of fatal injury in the motor vehicle should result from increases in train speed.

However, FRA does not believe that sufficiently refined analytical techniques currently exist to predict the effect of increased speeds on damage to the passenger train through the initial collision, possible derailment, and possible secondary collisions—including interaction among the units in the consist. Collisions with heavy trucks, construction equipment and agricultural equipment are an issue of particular concern. FRA believes it is prudent to take the safe course and ensure against collisions by the most secure means possible, rather than risk the occurrence of a catastrophic event involving multiple fatalities to crew members and passengers.

Section 213.349—Rail End Mismatch

Proposed rule: Vertical or horizontal mismatch of rails at joints must be less than one-eighth of an inch for Classes 6 through 9. A more restrictive criterion is not necessary and would be impractical.

Comments: No comments were received concerning this section.

Final rule: The final rule for this section is unchanged from the proposed rule.

Section 213.351—Rail Joints

Proposed rule: This section is less permissive than its counterpart for the lower speed classes. Fracture mechanics tests and analyses demonstrate that there is no place in the high speed train operating regime for defective joint bars. The propagation rate of a crack large enough to be visible in a joint bar is unpredictable. Once a joint bar has ruptured, its companion joint bar is immediately in danger of overload. Upon discovery of a defective joint bar, the track owner must reduce the track class at the location of the defective bar and proceed according to the requirements of Subpart D.

Comments: No comments were received for this section.

Final rule: The final rule for this section is unchanged from the proposed rule.

Section 213.352—Torch Cut Rail

Proposed rule: This section mirrors the corresponding section (§ 213.122) track Classes 3 through 5. This provision prohibits future torch cutting of rails in high speed track, except for emergency situations. When a rail end is torch cut in an emergency situation, speed over the rail must not exceed the maximum allowable for Class 2 track.

For existing torch cut rails in Class 6 track, all torch cut rails must be removed within six months of the issuance of the final rule of this proceeding. If after six months from the issuance of the final rule of this proceeding any torch cut rail is discovered in Classes 6 through 9 track, it must be removed within 30 days, and speed over that rail must not exceed the maximum allowable speed for Class 2 track until it is removed.

Comments: No comments were received for this section.

Final rule: After further review, FRA determined that the proposed requirement in § 213.352(a)(2) requiring speeds in existing Class 7, 8 and 9 track to be reduced to Class 6 until a torch cut rail is replaced is unnecessary and has been deleted. For existing torch cut rail ends in Class 6 track, all torch cut rail ends, if any, must be removed within six months of this rule. Following the six-month period, if torch cut rail ends are discovered, train speeds over that rail must be reduced to the maximum allowable for Class 2 track until removed.

Section 213.353—Turnouts, Crossovers and Lift Rail Assemblies or Other Transition Devices on Moveable Bridges

Proposed rule: The requirements in this section are similar to those in the lower classes. Fastenings must be intact and maintained so as to keep the components securely in place. Each switch, frog, and guard rail must be free of obstructions that may interfere with the passage of wheels. Rail anchoring is required to restrain rail movement affecting the position of switch points and frogs.

Experience in this country with the maintenance of turnouts and crossovers in high speed territories is limited. The use of conventional switch and frog components in present-day 125 m.p.h. track can produce harsh vehicle response which, while not necessarily unsafe, is likely to be less and less welcome in the future, particularly at train speeds above 125 m.p.h.

Worldwide, the trend for turnouts and crossovers in high speed lines is toward reliance on long switch points and moveable point frogs. Amtrak has some

limited experience with these features at fairly high train speeds, and the western coal railroads have a great deal of experience, especially with moveable point frogs, with turnout component performance in low speed, cumulative tonnage conditions. This section requires that the track owner, intending to operate trains at high speeds, to develop a turnout and inspection handbook for the instruction of employees involved in this work. Requirements for switches, frogs, and spring frogs that are present in the standards for the lower classes are not specifically listed, but will be addressed in the railroad's Guidebook.

The purpose of such a document is to encourage formal consideration of problems associated with inspection and maintenance of these track features and to establish a consistent system approach to the performance of related work.

Comments: No comments were received for this section.

Final rule: FRA has added a requirement for the inspection and maintenance of lift rail assemblies and other transition devices on moveable bridges. By introducing this requirement, FRA is not encouraging high speeds over moveable bridges. Currently, the highest speed over a moveable bridge is 70 m.p.h. However, in view of the 1997 accident over a lift rail assembly in New Jersey, FRA believes it necessary to introduce a requirement to inspect these transition devices in the high speed standards to address the potential that lift rail technology may change.

Section 213.355—Frog Guard Rails and Guard Faces; Gage

Proposed rule: The most restrictive practical measurements for these important parameters are included. The limits for guard check and guard face gage are set at a limit that permits minimal wear.

Comments: No comments were received for this section.

Final rule: The final rule for this section is unchanged from the proposed rule.

Section 213.357—Derails

Proposed rule: Because it is essential that railroad rolling stock be prevented from fouling the track in front of a high speed train, this section presents strict requirements for derails to be fully functional and linked to the signal systems.

Comments: A railroad supplier commenting on the NPRM suggested that derails also serve to prevent encroachment of main tracks by

locomotives, trains or maintenance-of-way equipment under power, and should not be excepted only because of grade characteristics. The commenter suggested that a better approach would be to permit this exception only where grade characteristics are favorable (significant ascent toward the main track) and where trains are not permitted to clear the main track. The commenter said that turnouts or crossings connecting to yard leads or branch tracks should not be excepted.

The commenter also recommended that the term "sidetrack" be better defined or described to make it clear that the term does not apply to other main tracks, sidings, or rail-to-rail crossings. The commenter was concerned that certain types of derails may be ineffective and described an accident that occurred several years ago when a train moving at over 50 mph passed over a derail. The commenter recommended that the rule include a definition of the term "derail" and suggested that turnouts, wheel stops, bollards, etc. may be equally effective in comparison to a conventional block or split point derail. The commenter expressed a concern that gates, chocks, skates, wire ropes, wood ties, etc., do not assure the same type of arresting action. The commenter asked for FRA's position on the removal of a length of rail, a pile of ballast or a bumper post.

The commenter said that the proposed requirement for each derail to be "interlocked" with the signal system should be modified and included in 49 CFR Part 236 which establishes requirements for hand-operated switches in ABS and TCS territory. The commenter said that the addition of circuit controllers to independent hand-operated derails in ABS will be costly and that such a requirement would tend to discourage voluntary installation of sidetrack derails on Classes 2 to 6 trackage.

The commenter also recommended that the term "interlocked" be replaced with the term "interconnected" and suggested that the phrases "interlocked", "maximally restrictive", "deployed", and "completely functional" are unfamiliar terms and invite confusion and disagreement. The commenter said that there would be little sacrifice of safety in allowing display of a "proceed at restricted speed" aspect on the main train when a sidetrack derail is not in the derailing position. Finally, the commenter suggested that this section be moved to the signal regulations at 49 CFR Part 236 because applicable sections in that part already apply to derails. For example, § 236.205(c) sets forth requirements for

an independently operated fouling point derail equipped with switch circuit controller which is not in the derailing position.

Final rule: FRA does not believe it is necessary to move the entire section on derails to the signal rules at 49 CFR Part 236, because the subject of derails is appropriate for the track standards. However, FRA may wish to consider changes in Part 236 at a later date. FRA agrees with many of commenters recommendations.

The terms "industrial" and "sidetrack" as proposed may lead to confusion. FRA, therefore, has modified the rule to remove these terms and use terminology which is more common to the industry. Paragraph (a) now requires that each track, other than a main track, which connects with a Classes 7, 8 and 9 main track shall be equipped with a functioning derail of the correct size and type. The term "main track" has a familiar meaning in the railroad industry and is defined, for example in § 236.831(a) and § 240.7.

FRA believes the exception to the requirement for derails at locations "where railroad equipment, because of grade characteristics, cannot move to foul the main track" is reasonable. FRA believes it is not necessary to go beyond this exception to address every conceivable circumstance. FRA points out that § 213.361 requires the railroad to submit a right-of-way plan" for FRA approval. This plan must contain provision for the intrusion of vehicles from adjacent tracks.

The final rule under § 213.357(b) explains that a derail is a device which will physically stop or divert movement of railroad rolling stock or other railroad on-track equipment past the location of the device. Ineffective piles of ballast, wire ropes, chains, or similar methods are not sufficient. Other methods may be as effective as conventional derails in accomplishing the goal of preventing the railroad equipment from moving into the clearance envelope of the high speed main track.

Paragraphs (c) through (f) of this section mirror the derail requirements for the lower track classes in § 213.205. FRA agrees with the commenter's concern about the term "interlocked" because it refers to a particular arrangement of signals. FRA concurs with the commenter's concern that a requirement for derails to be connected to the signal system in Class 6 track would be costly and tend to discourage voluntary installation of derails. To address these concerns, paragraph (g) is changed to read that "each derail on a track connected to a Class 7, 8 or 9 main track shall be interconnected with the

signal system." The term "interconnected" is consistent with the signal rules in § 235.205, which requires, in part, that circuits shall be installed so that each signal governing train movements into a block will display its most restrictive aspect "when an independently operated fouling point derail equipped with a switch circuit controller is not in derailing position."

Section 213.359—Track Stiffness

Proposed rule: Track must have sufficient vertical strength and lateral strength to withstand the maximum loads generated at maximum permissible train speeds, cant deficiency and lateral or vertical defects so that the track will return to a configuration in compliance with the track performance and geometry requirements of this subpart. It is imperative that the track structure is structurally qualified to accept the loads without unacceptable deformation.

The track's resistance to track panel shift is difficult to quantify. However, FRA believes that at a future date, it may be possible, based on ongoing research addressing track panel shift, to further refine the safety limit for the Net Axle L/V Ratio in the table of vehicle/track interaction safety limits in § 213.333. The present limit of 0.5 is based on an extrapolation of the Prud'homme limit and experimental data. An FRA sponsored research program is currently in place addressing the development of criteria and possible safety limits for track shift mitigation which are driven by the proposition that lateral loads generated by vehicles operating under maximum speed, cant deficiency, thermal loads, and initial line defect conditions should not cause the exception of an allowable deflection limit. Depending upon the specific track conditions and vehicle characteristics, permissible net axle lateral to vertical load ratios for an allowable deflection limit can be in the range of 0.4 to 0.6. Key influencing parameters are the track lateral resistance characteristics, tie/ballast friction coefficients, vehicle vertical axle loads, track curvature, thermal loads, and constant versus variable lateral axle loads.

Comments: No comments were received concerning this section.

Final rule: This section is unchanged from the proposed rule.

Section 213.361—Right-of-Way

Proposed rule: This section requires that the track owner to submit a barrier plan, termed a "right-of-way plan," to FRA for approval. The plan will include, at a minimum, provisions in

areas of demonstrated need to address the prevention of vandalism by trespassers and intrusion of vehicles from adjacent rights of way. A particular form of vandalism, the launching of objects from overhead bridges or structures, is specifically listed.

Comments: No comments were received concerning this section.

Final rule: The final rule is unchanged from the proposed rule for this section.

Section 213.365—Visual Inspections

Proposed rule: Visual inspections are considered to be an important component of the railroad's overall inspection program. The section largely parallels the requirements for the lower classes. The inspection requirements are twice weekly for Classes 6, 7 and 8 and three times per week for Class 9. Turnouts and crossovers must be inspected in accordance with the Guidebook required under § 213.353. The practice in France of operating a train at reduced speeds following a period with no train traffic is adopted in this section.

Comments: Bombardier/GEC said that the basis to limit the speed of trains in paragraph (f) to 100 m.p.h. after a traffic interruption of eight hours is not clear. Equipment currently is permitted to run at speeds of 110 m.p.h. on Class 6 track, and up to 125 m.p.h. on the Northeast Corridor on the first run of the day. The proposed rule would limit the speed of these trains to 100 m.p.h. after the track is upgraded to Class 8 or Class 9, if the disruption was greater than eight hours. Bombardier/GEC recommended that the rule require the speed to be reduced to Class 7 speeds if an eight-hour disruption in service occurs on Class 8 track.

Final rule: FRA believes the commenter may be misinterpreting the rule which requires that if no train traffic operates for a period of eight hours in track Classes 8 or 9, a train shall be operated at less than 100 m.p.h. before the resumption of the maximum authorized speed. FRA believes the requirement for one train to operate over the track is not burdensome and follows the practice on the SNCF lines for an early morning pilot train. The rule is unchanged from the proposed rule for this section.

Section 213.367—Special Inspections

Proposed rule: The requirements of this section are the same as those for the lower track classes except that the occurrence of temperature extremes is specifically listed as an event that requires a track inspection.

Comments: No comments were received concerning this section.

Final rule: The final rule for this section is unchanged from the proposed rule.

Section 213.369—Inspection Records

Proposed rule: The requirements of this section are the same as those for the lower track classes.

Comments: No comments were received for this section.

Final rule: FRA has made one small change in paragraph (f). The phrase "Each Track/vehicle Performance record" has been changed to "Each Vehicle/track interaction safety record." This change corresponds to the change in the title for the table of vehicle/track interaction safety limits in § 213.333.

Appendix A

Proposed rule: The NPRM proposed to add a curving speed chart based on four inches unbalance. For many years, the track standards included a curving speed chart based only on three inches unbalance. However, the NPRM proposed to allow qualified equipment to operate at curving speeds based on four inches of unbalance, making an additional chart necessary.

Comments: FRA received no comments on the new chart.

Final rule: FRA decided that inclusion of the new chart in Appendix A is necessary to accommodate the provision in the final rule which allows qualified equipment to operate at curving speeds based on four inches of unbalance.

Appendix B

Proposed rule: The NPRM stated that FRA would revise the schedule for civil penalty assessment as it found necessary. At the very least, the schedule would have to be revised to include civil penalties for the new subsections added to the Track Safety Standards. These would include penalties for §§ 213.4(e)(4) and (f) (Excepted track), § 213.119 (Continuous welded rail), § 213.122 (Torch cut rails), and most of the subsections in Subpart G.

Comments: FRA received no comments about the penalty schedule.

Final rule: Under the Debt Collection Improvement Act of 1996 (Pub. L. 104-134, 110 Stat. 1321-373), FRA is required to adjust civil penalties it administers to incorporate the effects of inflation. See 28 U.S.C. 2461 note.

FRA added penalties to the Schedule of Civil Penalties to accommodate the new subsections of the final rule. The amounts for the new penalties were chosen based on penalties that have been used in the enforcement of the Track Safety Standards for years. For

instance, penalties for violations of most of the substantive subsections of the track standards are either \$2,500 or \$5,000, the higher penalty being reserved for the more serious violations. For those subsections under Subpart G that have counterparts in Subparts A through F, the new penalties are the same as those for their counterparts. After some consideration, FRA decided not to include generally higher penalties for high speed rail because there are currently few track owners to which Subpart G will apply. However, FRA will reconsider this decision in the future if experience demonstrates the need to assess higher penalties for Subpart G.

Regulatory Impact, Executive Order 12866 and DOT Regulatory Policies and Procedures

This final rule has been evaluated in accordance with existing policies and procedures. The final rule revising the Track Safety Standards is considered to be significant under both Executive Order 12866 and DOT policies and procedures (44 FR 11034, February 26, 1979) because of substantial public interest and safety implications. FRA has prepared and placed in the docket a regulatory analysis addressing the economic impact of the rule. Document inspection and copying facilities are available at 1120 Vermont Avenue, N.W., Seventh Floor, Washington, D.C. Photocopies may also be obtained by submitting a written request to the FRA Docket Clerk at the Office Chief Counsel, Federal Railroad Administration, 400 Seventh Street, S.W., Mail Stop 10, Washington, D.C. 20590.

Ordinarily, in conducting an analysis of the costs and benefits of a proposed or final rule, FRA gathers more extensive economic data than was made available in this proceeding. However, in light of the consensus in the Track Working Group and the majority vote of the RSAC members, FRA does not believe more data is necessary. FRA has relied principally on the recommendations and experience of the railroad industry and labor representatives who, through the RSAC process, helped develop this rule. The working group members provided valuable non-quantitative data on their preferences. Thus, their unanimous consensus on the contents of the rule allows FRA to conclude that the rule is cost beneficial. Although rail labor subsequently withdrew its support for this rulemaking, their objection to the rule did not relate to the finding that the rule is cost beneficial. Furthermore, the railroads, who will bear the burden of

the costs imposed by the rule, have continued to support the rule. In its conclusion, FRA finds that the net effect of the changes to the existing rule is an increase in safety and an increase in the burden on the railroads, but that the burden on the railroads from the changes is not likely to be as great as the benefit, although there was no way to quantify the magnitude on the net benefit.

The Track Working Group formed, reached a consensus on internal working procedures, and addressed the issues. Several issues were delegated to task groups, which are subgroups of the working group. The procedure remained the same. The task groups could make no recommendations until they had a consensus. The working group would not adopt any recommendation, even if a result of a consensus in the task group, until there was a consensus in the working group. The full RSAC would make no recommendation to the Administrator until there was a majority consensus in the full RSAC, even if there was a consensus in the working group.

An implication of this is that no entity represented would accept a consensus agreement, unless the entity he or she represented would be at least as well off after the agreement as it had been before. This analysis therefore uses as a fundamental assumption that there are no provisions which will impose drastic costs on any segment represented by members of the working group, and Pareto superiority of the revised rule over the current rules. Pareto superiority implies that no party would be willing to pay to return to the current standards, although some party might be indifferent between the current standards and the revised standard. There is no implication that this rule is Pareto optimal, although Pareto optimality has not been excluded. Were the rule Pareto optimal, there would not exist another possible set of rules which at least one party would be willing to pay to adopt, and the amount that party would be willing to pay would be sufficient, were it given to other parties, to induce them to agree to the set of rules. Nor is the final rule assumed to be optimal. Were it optimal the total net benefit would be maximized.

The guidance in E.O. 12866 is that we should select the rule with the maximum net benefit. We believe we have done that here, because no party who is burdened by the rule objected in comments to the docket following publication of the NPRM. What we know is that the revised rule is closer to the optimum than the current rules. The guidance in the Regulatory Flexibility

Act is that we should adopt rules that are flexible, that fit in with how businesses actually conduct operations, and that are sensitive to the concerns of small businesses. Clearly the RSAC process does this. Had we adopted the suggestions of labor organizations objecting to the proposed rule in the full RSAC and in their comments to the docket, then we would have produced a rule with greater benefits and greater costs, which the FRA believes would have substantially lower net benefits than the proposed rule or this final rule.

Estimated Benefit of Changes to the Track Standards

In 1995, there were 827 reported train accidents from track-related causes, which caused about \$62 million in damage to railroad property. These accidents also caused 17 injuries and the evacuation of approximately 1,000 people. See Tables 22, 65, and 27, Accident/Incident Bulletin 164, Calendar Year 1995, FRA 1996. If each accident resulted in \$20,000 in miscellaneous costs, such as rerailing trains, providing emergency response, and legal costs, then the total miscellaneous cost would have been about \$16 million.¹ If each injury cost \$10,000, then the total injury cost would be about \$170,000.² If each evacuation cost \$1,000, then the total evacuation cost would have been about \$1 million.³ These costs are further documented in FRA's economic analysis, available in the public docket. The total for all of these costs would have been about \$80 million.

The FRA believes it is conservative to estimate that these costs will be reduced by five percent, as the revision addresses virtually every accident cause found in the bulletin. That would provide an estimated benefit of about \$4 million per year, or about \$40 million in net present value over 20 years. This value may be significantly higher, as the average cost of accidents in certain categories targeted in the rule tends to be above average. For instance, broken rail derailments on main lines (internal rail flaw detection provisions) and

¹ Internal FRA estimates show that it would cost about \$2,000 to rerail a single car, and that it costs about \$10,000, conservatively, for an emergency response to a small derailment, and about \$8,000 for about 80 hours of legal time at \$100 per hour, which is also conservative as a measure of the resources used in response to a derailment.

² Based on an injury between AIS 1, minor, and AIS 2, moderate, on the Accidental Injury Severity scale, the society would be willing to pay between \$5,400 and \$41,850 to avoid the injury.

³ Based on about \$200 to relocate, house and feed an evacuee for one night, plus other costs to society, such as business, school and road closures, which come to about four times the individual evacuation cost.

accidents caused by buckled track (CWR provisions) tend to be higher-speed accidents with large railroad damage totals and greater potential for third-party impacts, such as evacuations and disruptions in adjacent transportation corridors.

Using reasonably conservative assumptions, it appears that the net burden on railroads will be less than \$2 million per year, a very small number when compared to total rail revenues (\$37.6 billion in 1995 for Class 1 railroads only). Railroads will receive a benefit in the form of greater certainty over the future of track safety standards as a result of their active participation in the RSAC process which provided the framework for the revised rule. They will also receive some benefit where existing provisions have been made less stringent.

It is not clear whether that benefit exceeds the burden, although it appears from the willingness of railroads to consent to the Track Working Group proposal that they would receive a net benefit. Of course, the railroads would be even better off if the provisions which burden them were removed and those which benefit them remained. Other members of the Track Working Group did not accept that proposal. In their comments, railroads agreed that they would rather have FRA implement the proposed rule as a whole than continue with the current standards, although they would prefer that the proposed rule changed certain provisions.

Federalism Implications

This final rule has been analyzed according to the principles of Executive Order 12612 ("Federalism"). It has been determined that these amendments to Part 213 do not have federalism implications. As noted previously, the U.S. Supreme Court, in *CSX v. Easterwood*, upheld Federal preemption of any state or local attempts to regulate train speed. Nothing in this notice proposes to change that relationship. Likewise, the addition to Part 213's requirement for vegetation maintenance near grade crossings is not intended to preempt any similar existing state or local requirements. The provisions that require railroads seeking to operate in Classes 8 and 9 to have a program addressing vandalism and trespassing are directed only to the railroads, and not to state or local governments. If a railroad is unable to provide an adequate program to address these issues, it will not be allowed to operate at Classes 8 and 9 speeds. For these reasons, the preparation of a Federalism Assessment is not warranted.

Regulatory Flexibility Act

This notice contains a summary of a regulatory flexibility analysis (RFA) as required by the provisions of the Regulatory Flexibility Act at 5 U.S.C. 601-612. FRA completed a RFA as part of an economic analysis of costs and benefits, and placed a copy of the RFA in the docket for this proceeding.

1. Why action by the agency is being considered:

The Rail Safety Enforcement and Review Act of 1992, Public Law 102-365, 106 Stat. 972 (September 3, 1992), later amended by the Federal Railroad Safety Authorization Act of 1994, Public Law 103-440, 108 Stat. 4615 (November 2, 1994), requires FRA to revise the track safety regulations contained in 49 CFR Part 213. Now codified at 49 U.S.C. § 20142, the amended statute requires:

(a) Review of Existing Regulations.—Not later than March 3, 1993, the Secretary of Transportation shall begin a review of Department of Transportation regulations related to track safety standards. The review at least shall include an evaluation of—

(1) Procedures associated with maintaining and installing continuous welded rail and its attendant structure, including cold weather installation procedures;

(2) The need for revisions to regulations on track excepted from track safety standards; and

(3) Employee safety.

(b) Revision of Regulations.—Not later than September 1, 1995, the Secretary shall prescribe regulations and issue orders to revise track safety standards, considering safety information presented during the review under subsection (a) of this section and the report of the Comptroller General submitted under subsection "(c)" of this section.

* * * * *

(d) Identification of Internal Rail Defects.—In carrying out subsections (a) and (b), the Secretary shall consider whether or not to prescribe regulations and issue orders concerning—

(1) Inspection procedures to identify internal rail defects, before they reach imminent failure size, in rail that has significant shelling; and

(2) Any specific actions that should be taken when a rail surface condition, such as shelling, prevents the identification of internal defects.

The reasons for the actual provisions of the action considered by the agency are explained in the body of the analysis.

2. The objectives and legal basis for the rule:

The objective of the rule is to enhance the safety of rail transportation, protecting both those traveling and working on the system, and those off the system who might be adversely affected by a rail incident. The legal basis is reflected in the response to "1." above and in the preamble.

3. A description of and an estimate of the number of small entities to which the rule would apply:

The rule would apply to railroads. Small entities among affected railroads would all be short line railroads. There are approximately 700 short line railroads in the United States, but many of them are not small entities, either because they are large enterprises as railroads, or because they are operations of large entities in other industries.

4. A description of the projected reporting, recordkeeping and other compliance requirements of the rule, including an estimate of the classes of small entities which will be subject to the requirement and the type of professional skills necessary for preparation of the report or record:

See the Paperwork Reduction Act analysis.

5. Federal rules which may duplicate, overlap, or conflict with the rule:

None.

Significant Alternatives

In their comments to the NPRM, labor organizations suggested certain enhancements. However, the FRA does not believe that their suggestions would have made the rule more flexible; rather, they would have increased the burden on small entities significantly with relatively little commensurate benefit.

1. Differing compliance or reporting requirements or timetables which take into account the resources available to small entities:

In the two sections most likely to affect small entities, § 213.4 Excepted Track and § 213.109 Cross-ties, the final rule includes a two year phase-in period.

2. Clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities:

Although their needs were considered at every step of the process, there was no way to reduce the burden on small entities that did not apply as well to larger entities.

3. Use of performance, rather than design standards:

Where possible, especially in the geometry standards, the standards were tied to performance. Although they were expressed as specifications, the underlying performance model ensures that they will have the same effect as a performance standard would. In the high speed standards, vehicle qualification is expressed strictly as a performance standard.

4. Exemption from coverage of the rule, or any part thereof, for such small entities:

There was no practicable way to exclude small entities. Further, the low volume operations of the largest railroads often serve shippers which are small entities, and any additional burden on the low volume lines of large railroads would likely have adverse impacts on those small shippers.

Definition of Small Entity

SBREFA incorporates the definition for "small entity" that is established by existing law (5 U.S.C. 601, 15 U.S.C. 632, 13 CFR Part 121) for those businesses to be covered by agency policies. Generally, a small entity is a business concern that is independently owned and operated, and is not dominant in its field of operation. Also, "small governmental jurisdictions" that serve populations of 50,000 or less are small entities. (Commuter railroads are governmental jurisdictions, and some may fit within this statutory delineation for small governmental jurisdictions, or small entities.) An agency may establish one or more other definitions for this term, in consultation with the SBA and after opportunity for public comment, that are appropriate to the agency's activities.

Pursuant to its statutory authority, the Small Business Administration (SBA) promulgated regulations that clarify the term "small entity" by industry, using number of employees or annual income as criteria. See 13 CFR 121.101-108 and 201. In the SBA regulations, main line railroads with 1,500 or fewer employees, and switching or terminal establishments with 500 or fewer employees constitute small entities. The SBA regulations do not address hazardous material shippers in the railroad industry.

Prior to the SBA regulations establishing size categories, the Interstate Commerce Commission (ICC) developed a classification system for freight railroads as Class I, II, or III, based on annual operating revenue. (The detailed, qualifying criteria for these classifications are set forth in 49 CFR part 1201.) The Department of Transportation's Surface Transportation Board, which succeeded the ICC, has not changed these classifications. The ICC classification system has been used pervasively by FRA and the railroad industry to identify entities by size. The SBA recognized this classification system as a sound one, and concurs with FRA's decision to continue using it, provided the public has notice of the classification system in use for any particular proceeding and an opportunity to comment on it.

As explained in detail in the "Interim Policy Statement Concerning Small

Entities Subject to the Railroad Safety Laws," published August 11, 1997 at 62 Fed. Reg. 43024. FRA has decided to define "small entity," on an interim basis, to include only those entities whose revenues would bring them within the Class III definition. This definition is the basis of the small business analysis for this proceeding.

Effect of This Rule on Small Businesses

All of the small entities directly affected by this rule are short line railroads. They are represented by the ASLRA who participated in the Track Working Group. The ASLRA was not, of course, involved in developing those standards which would not apply to any of their members, for example, the high speed track standards. The ASLRA supported the NPRM as drafted by the Track Working Group and recommended by the RSAC. All of the individual short line railroads that participated directly in the Track Working Group agreed to the proposal as well. In addition, the ASLRA and several short line railroads participated in all of the workshops hosted by FRA in 1993 following the publication of the ANPRM in this proceeding.

Almost every change in this final rule will enhance safety. Some provisions serve to reduce burdens, but in most cases, the burden is increased, particularly for the railroads. However, the Track Working Group considered the impact on small entities at every step, and introduced phase-in periods to mitigate the effect on small entities by the crosstie standard and the new gage standard for excepted track. While there is no clear way to measure the net effect of the final rule, it is likely the net benefit will be positive. The RSAC process was intended to take rulemaking into areas where data is sparse, and the end product, as might be expected, is difficult to quantify.

FRA did not quantify the estimated annual cost to the average firm, nor compare it to average annual revenue or profits, because the relative impact of the final rule varies more by condition of the track owned by a railroad than by the size of the railroad. Railroads with better, safer track will face

proportionally much smaller effects from the final rule. The average annual total cost is likely to be less than \$2 million per year for the entire railroad industry, with more than half of the cost borne by large railroads. The average burden per small railroad is likely therefore to be less than \$1,500 per year. The burden will be greater on railroads with more track, and lower on railroads with less.

No provision included in this final rule will have a very adverse impact on the affected firms. A proposal which would have a large beneficial impact is the GRMS as an alternative to the crosstie standard. (See previous discussion in the preamble to this notice.) Some provisions which at first impression seem to have a significant impact, such as an increase in the number of required crossties, in fact will have little impact.

For example, this final rule includes an increase in the number of crossties required on curved track. In a worst case, about 30 percent of the Class 1 track of a very small entity might not comply with the requirement for six ties per 39-foot section of rail. Of this, 80 percent would not comply with geometry standards or standards affecting effective distribution of ties, which likely would be fixed by adding enough ties to comply or exceed the standard. The remaining track, about six percent of all track, would not have sufficient ties to meet the revised standard. Some of this track would not meet the current standard. One tie per section for six percent of the track would be slightly more than eight ties per mile. At a cost of \$40 per tie installed, this would mean a cost of about \$320 per mile, for a worst case. A railroad with track this poor would have presented a serious safety hazard in the first place, and would not be representative. Most small railroads currently exceed the revised standard. A more detailed description of the impact is contained in the complete IRFA, found in the docket for this proceeding.

Throughout the discussions of the Track Working Group, and in the NPRM for this proceeding, FRA asked for additional information on benefits and

costs. On occasion, participants shared such data with FRA. For example, the ASLRA which conducted a survey of its members to analyze the potential impact of increasing the number of crossties required in a 39-foot segment of track. At other times, data were not shared with FRA, and the agency was unable to determine whether the information was withheld for proprietary reasons or whether it simply was not available. However, by voting in the Track Working Group and in the RSAC to accept a provision in the proposed rule, often as part of a compromise with other interested parties, the parties' acceptance of a package of compromises revealed that they preferred the compromise position to a position of no compromise (the existing rule with the possibility of some other rulemaking activity). This implies that the burdens which rail management representatives accepted likely were not significant. Details of provisions that will have little or no impact may be found in the complete IRFA, found in the docket for this proceeding.

Paperwork Reduction Act

The information collection requirements in this final rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995, 44 U.S.C. 3501 *et seq.* The FRA has analyzed the existing burden, and the burden under the final rule analyzed here. According to this analysis, the total annual burden increases from about \$42,000,000 to about \$53,000,000. However, the overwhelming majority of this apparent increase is due to a change in FRA's assumption regarding wages. In an earlier analysis under the Paperwork Reduction Act, the FRA had assumed a wage of \$22 per hour for recording track inspections, but in the analysis of this final rule, the FRA used an assumed wage of \$30 per hour. In addition, the number of railroads calculated by FRA to be covered by the regulations increased from 500 to 680. The sections that contain the new information collection requirements and the estimated time to fulfill each requirement are as follows:

CFR section	Respondent universe	Total annual responses	Average time per response	Total annual burden hours	Total annual burden cost
213.4—Excepted Track:					
—Designation of track as excepted	160 railroads	32 designations	15 minutes	8 hours	\$240
—Notification to FRA about removal of excepted track.	160 railroads	40 notifications	10 minutes	7 hours	210
213.5—Responsibility of track owners	620 railroads	16 notifications	8 hours	120 hours	3,600
213.7—Designation of qualified persons to supervise certain renewals and inspect track:					

CFR section	Respondent universe	Total annual responses	Average time per response	Total annual burden hours	Total annual burden cost
—Designations (fully qualified)	620 railroads	1,500 names	10 minutes	250 hours	7,500
—Designations (partially qualified) ..	31 railroads	300 names	10 minutes	50 hours	1,500
—Notification and dispatched to location.	N/A	N/A	Usual and customary procedure.	N/A	N/A
213.17—Waivers	620 railroads	4 petitions	24 hours	96 hours	2,880
213.57—Curves, elevation and speed limitations:					
—Request to FRA for approval	620 railroads	3 requests	40 hours	120 hours	3,600
—Notification to FRA with written consent of other affected track owners.	620 railroads	2 notifications	45 minutes	1.5 hours	45
—Test plan	1 railroad	6 plans	16 hours	96 hours	2,880
213.119—Continuous welded rail (CWR), general:					
—Written procedures	110 railroads	110 procedures	40 hrs. Class I RRs	2,000 hours	60,000
—Training program	110 railroads	110 programs	16 hrs. Class II RRs	1,200 hours	36,000
—Recordkeeping	110 railroads	4,500 records	40 hrs Class I RRs	750 hours	22,500
			8 hrs Class II RRs		
			10 minutes		
213.122—Torch cut rail	20 railroads	2,000 records	5 minutes	167 hours	5,010
213.233—Track inspections	620 railroads	2,500 inspections ..	1 minute	41.5 hours	1,079
213.237—Inspection of rail	N/A	N/A	Usual and customary procedure.	N/A	N/A
213.241—Inspection records	620 railroads	Varies	Varies	1,763,991 hours	52,919,730
213.303—Responsibility for Compliance	2 railroads	1 petition	8 hours	8 hours	240
213.305—Designation of qualified individuals; general qualifications:					
—Designations (fully qualified)	2 railroads	150 qualifications ..	10 minutes	25 hours	750
—Designations (partially qualified) ..	2 railroads	15 qualifications	10 minutes	2.5 hours	75
213.317—Waivers	2 railroads	1 petition	24 hours	24 hours	720
213.329—Curves, elevation and speed limitations:					
—FRA approval of qualified equipment and higher curving speeds.	2 railroads	1 notification	40 hours	40 hours	1,200
—Written notification to FRA with written consent of other affected track owners.	2 railroads	1 notification	45 minutes	45 minutes	22.50
213.333—Automated Vehicle Inspection System					
—Track Geometry Measurement System.	3 railroads	18 reports	20 hours	360 hours	9,360
—Track/Vehicle Performance Measurement System.					
—Written procedures	1 railroad	1 program	8 hours	8 hours	240
—Copies of most recent exception printouts.	2 railroads	13 printouts	20 hours	260 hours	7,800
213.339—Inspection of rail in service	N/A	N/A	Usual and customary procedure.	N/A	N/A
213.341—Initial inspection of new rail and welds					
—Mill inspection	2 railroads	1 report	8 hours	8 hours	240
—Welding plant inspection	2 railroads	2 reports	8 hours	16 hours	480
—Inspection of field welds	2 railroads	200 records	20 minutes	67 hours	2,010
—Marking of defective rail	N/A	N/A	Usual and customary procedure.	N/A	N/A
213.343—Continuous welded rail (CWR):					
—Written procedures	2 railroads	2 procedures	40 hours	80 hours	2,400
—Training program	2 railroads	2 programs	40 hours	80 hours	2,400
—Recordkeeping	2 railroads	200 records	10 minutes	33 hours	990
213.345—Vehicle qualification testing	1 railroad	1 report	16 hours	16 hours	480
213.347—Automotive or railroad crossings at grade					
—Protection plans	1 railroad	2 plans	8 hours	16 hours	480
213.353—Turnouts and crossovers, generally.	1 railroad	1 guidebook	40 hours	40 hours	1,200
213.361—Right of Way	1 railroad	1 plan	40 hours	40 hours	1,200
213.369—Inspection records:					
—Record of inspection	2 railroads	500 records	1 minute	8 hours	208
—Designation of location where record should be maintained.	2 railroads	2 designations	15 minutes	30 minutes	15

CFR section	Respondent universe	Total annual responses	Average time per response	Total annual burden hours	Total annual burden cost
—Internal defect inspections and remedial action taken.	2 railroads	50 records	5 minutes	4 hours	104

All estimates include the time for reviewing instructions; searching existing data sources; gathering or maintaining the needed data; and reviewing the information. For information or a copy of the paperwork package submitted to OMB contact Mark Weihofen at 202-632-3303.

FRA cannot impose a penalty on persons for violating information collection requirements which do not display a current OMB control number, if required. The information collection requirements contained in this rule have been approved under OMB control number 2130-0010.

Environmental Impact

FRA has evaluated these track safety regulations in accordance with its procedures for ensuring full consideration of the potential environmental impacts of FRA actions, as required by the National Environmental Policy Act (42 U.S.C. 4321, *et seq.*) and related directives. These regulations and this statement of policy meet the criteria that establish this as a non-major action for environmental purposes.

List of Subjects in 49 CFR Part 213

Penalties, Railroad safety, Reporting and recordkeeping requirements.

The Final Rule

In consideration of the foregoing, FRA revises part 213, title 49, Code of Federal Regulations as follows:

PART 213—TRACK SAFETY STANDARDS

Subpart A—General

Sec.

- 213.1 Scope of part.
- 213.2 Preemptive effect.
- 213.3 Application.
- 6213.4 Excepted track.
- 213.5 Responsibility for compliance.
- 213.7 Designation of qualified persons to supervise certain renewals and inspect track.
- 213.9 Classes of track: operating speed limits.
- 213.11 Restoration or renewal of track under traffic conditions.
- 213.13 Measuring track not under load.
- 213.15 Penalties.
- 213.17 Waivers.
- 213.19 Information collection.

Subpart B—Roadbed

- 213.31 Scope.
- 213.33 Drainage.
- 213.37 Vegetation.

Subpart C—Track Geometry

- 213.51 Scope.
- 213.53 Gage.
- 213.55 Alinement.
- 213.57 Curves; elevation and speed limitations.
- 213.59 Elevation of curved track; runoff.
- 213.63 Track surface.

Subpart D—Track Structure

- 213.101 Scope.
- 213.103 Ballast; general.
- 213.109 Crossties.
- 213.113 Defective rails.
- 213.115 Rail end mismatch.
- 213.119 Continuous welded rail (CWR); general.
- 213.121 Rail joints.
- 213.122 Torch cut rail.
- 213.123 Tie plates.
- 213.127 Rail fastening systems.
- 213.133 Turnouts and track crossings generally.
- 213.135 Switches.
- 213.137 Frogs.
- 213.139 Spring rail frogs.
- 213.141 Self-guarded frogs.
- 213.143 Frog guard rails and guard faces; gage.

Subpart E—Track Appliances and Track-Related Devices

- 213.201 Scope.
- 213.205 Derails

Subpart F—Inspection

- 213.231 Scope.
- 213.233 Track inspections.
- 213.235 Inspection of switches, track crossings, and lift rail assemblies or other transition devices on moveable bridges.
- 213.237 Inspection of rail.
- 213.239 Special inspections.
- 213.241 Inspection records.

Subpart G—Train Operations at Track Classes 6 and Higher

- 213.301 Scope of subpart.
- 213.303 Responsibility for compliance.
- 213.305 Designation of qualified individuals; general qualifications.
- 213.307 Class of track; operating speed limits.
- 213.309 Restoration or renewal of track under traffic conditions.
- 213.311 Measuring track not under load.
- 213.317 Waivers.
- 213.319 Drainage.
- 213.321 Vegetation.
- 213.323 Track gage.
- 213.327 Alinement.
- 213.329 Curves, elevation and speed limitations.

- 213.331 Track surface.
 - 213.333 Automated vehicle inspection systems.
 - 213.334 Ballast; general.
 - 213.335 Crossties.
 - 213.337 Defective rails.
 - 213.339 Inspection of rail in service.
 - 213.341 Initial inspection of new rail and welds.
 - 213.343 Continuous welded rail (CWR).
 - 213.345 Vehicle qualification testing.
 - 213.347 Automotive or railroad crossings at grade.
 - 213.349 Rail end mismatch.
 - 213.351 Rail joints.
 - 213.352 Torch cut rail.
 - 213.353 Turnouts, crossovers, and lift rail assemblies or other transition devices on moveable bridges.
 - 213.355 Frog guard rails and guard faces; gage.
 - 213.357 Derails.
 - 213.359 Track stiffness.
 - 213.361 Right of way.
 - 213.365 Visual inspections.
 - 213.367 Special inspections.
 - 213.369 Inspection records.
- Appendix A to Part 213—Maximum Allowable Curving Speeds
Appendix B to Part 213—Schedule of Civil Penalties
- Authority: 49 U.S.C. 20102-20114 and 20142; 28 U.S.C. 2461; and 49 CFR 1.49(m).

Subpart A—General

§213.1 Scope of part.

(a) This part prescribes minimum safety requirements for railroad track that is part of the general railroad system of transportation. The requirements prescribed in this part apply to specific track conditions existing in isolation. Therefore, a combination of track conditions, none of which individually amounts to a deviation from the requirements in this part, may require remedial action to provide for safe operations over that track. This part does not restrict a railroad from adopting and enforcing additional or more stringent requirements not inconsistent with this part.

(b) Subparts A through F apply to track Classes 1 through 5. Subpart G and 213.2, 213.3, and 213.15 apply to track over which trains are operated at speeds in excess of those permitted over Class 5 track.

§213.2 Preemptive effect.

Under 49 U.S.C. 20106, issuance of these regulations preempts any State law, regulation, or order covering the

same subject matter, except an additional or more stringent law, regulation, or order that is necessary to eliminate or reduce an essentially local safety hazard; is not incompatible with a law, regulation, or order of the United States Government; and that does not impose an unreasonable burden on interstate commerce.

§ 213.3 Application.

(a) Except as provided in paragraph (b) of this section, this part applies to all standard gage track in the general railroad system of transportation.

(b) This part does not apply to track—

- (1) Located inside an installation which is not part of the general railroad system of transportation; or
- (2) Used exclusively for rapid transit operations in an urban area that are not connected with the general railroad system of transportation.

§ 213.4 Excepted track.

A track owner may designate a segment of track as excepted track provided that—

(a) The segment is identified in the timetable, special instructions, general order, or other appropriate records which are available for inspection during regular business hours;

(b) The identified segment is not located within 30 feet of an adjacent track which can be subjected to simultaneous use at speeds in excess of 10 miles per hour;

(c) The identified segment is inspected in accordance with 213.233(c) and 213.235 at the frequency specified for Class 1 track;

(d) The identified segment of track is not located on a bridge including the track approaching the bridge for 100 feet on either side, or located on a public street or highway, if railroad cars containing commodities required to be placarded by the Hazardous Materials Regulations (49 CFR part 172), are moved over the track; and

(e) The railroad conducts operations on the identified segment under the following conditions:

- (1) No train shall be operated at speeds in excess of 10 miles per hour;
- (2) No occupied passenger train shall be operated;
- (3) No freight train shall be operated that contains more than five cars required to be placarded by the Hazardous Materials Regulations (49 CFR part 172); and
- (4) The gage on excepted track shall not be more than 4 feet 10¼ inches. This paragraph (e)(4) is applicable September 21, 1999.

(f) A track owner shall advise the appropriate FRA Regional Office at least

10 days prior to removal of a segment of track from excepted status.

§ 213.5 Responsibility for compliance.

(a) Except as provided in paragraph (b) of this section, any owner of track to which this part applies who knows or has notice that the track does not comply with the requirements of this part, shall—

- (1) Bring the track into compliance;
- (2) Halt operations over that track; or
- (3) Operate under authority of a person designated under § 213.7(a), who has at least one year of supervisory experience in railroad track maintenance, subject to conditions set forth in this part.

(b) If an owner of track to which this part applies designates a segment of track as "excepted track" under the provisions of § 213.4, operations may continue over that track without complying with the provisions of subparts B, C, D, and E of this part, unless otherwise expressly stated.

(c) If an owner of track to which this part applies assigns responsibility for the track to another person (by lease or otherwise), written notification of the assignment shall be provided to the appropriate FRA Regional Office at least 30 days in advance of the assignment. The notification may be made by any party to that assignment, but shall be in writing and include the following—

- (1) The name and address of the track owner;
- (2) The name and address of the person to whom responsibility is assigned (assignee);
- (3) A statement of the exact relationship between the track owner and the assignee;
- (4) A precise identification of the track;
- (5) A statement as to the competence and ability of the assignee to carry out the duties of the track owner under this part; and
- (6) A statement signed by the assignee acknowledging the assignment to him of responsibility for purposes of compliance with this part.

(d) The Administrator may hold the track owner or the assignee or both responsible for compliance with this part and subject to penalties under § 213.15.

(e) A common carrier by railroad which is directed by the Surface Transportation Board to provide service over the track of another railroad under 49 U.S.C. 11123 is considered the owner of that track for the purposes of the application of this part during the period the directed service order remains in effect.

(f) When any person, including a contractor for a railroad or track owner,

performs any function required by this part, that person is required to perform that function in accordance with this part.

§ 213.7 Designation of qualified persons to supervise certain renewals and inspect track.

(a) Each track owner to which this part applies shall designate qualified persons to supervise restorations and renewals of track under traffic conditions. Each person designated shall have—

- (1) At least—
 - (i) 1 year of supervisory experience in railroad track maintenance; or
 - (ii) A combination of supervisory experience in track maintenance and training from a course in track maintenance or from a college level educational program related to track maintenance;

(2) Demonstrated to the owner that he or she—

- (i) Knows and understands the requirements of this part;
- (ii) Can detect deviations from those requirements; and
- (iii) Can prescribe appropriate remedial action to correct or safely compensate for those deviations; and

(3) Written authorization from the track owner to prescribe remedial actions to correct or safely compensate for deviations from the requirements in this part.

(b) Each track owner to which this part applies shall designate qualified persons to inspect track for defects. Each person designated shall have—

- (1) At least—
 - (i) 1 year of experience in railroad track inspection; or
 - (ii) A combination of experience in track inspection and training from a course in track inspection or from a college level educational program related to track inspection;

(2) Demonstrated to the owner that he or she—

- (i) Knows and understands the requirements of this part;
- (ii) Can detect deviations from those requirements; and
- (iii) Can prescribe appropriate remedial action to correct or safely compensate for those deviations; and

(3) Written authorization from the track owner to prescribe remedial actions to correct or safely compensate for deviations from the requirements of this part, pending review by a qualified person designated under paragraph (a) of this section.

(c) Persons not fully qualified to supervise certain renewals and inspect track as outlined in paragraphs (a) and (b) of this section, but with at least one

year of maintenance-of-way or signal experience, may pass trains over broken rails and pull aparts provided that—

(1) The track owner determines the person to be qualified and, as part of doing so, trains, examines, and re-examines the person periodically within two years after each prior examination on the following topics as they relate to the safe passage of trains over broken rails or pull aparts: rail defect identification, crosstie condition, track surface and alinement, gage restraint, rail end mismatch, joint bars, and maximum distance between rail ends over which trains may be allowed to pass. The sole purpose of the examination is to ascertain the person's ability to effectively apply these

requirements and the examination may not be used to disqualify the person from other duties. A minimum of four hours training is adequate for initial training;

(2) The person deems it safe and train speeds are limited to a maximum of 10 m.p.h. over the broken rail or pull apart;

(3) The person shall watch all movements over the broken rail or pull apart and be prepared to stop the train if necessary; and

(4) Person(s) fully qualified under § 213.7 of this part are notified and dispatched to the location promptly for the purpose of authorizing movements and effecting temporary or permanent repairs.

(d) With respect to designations under paragraphs (a), (b), and (c) of this

section, each track owner shall maintain written records of—

(1) Each designation in effect;

(2) The basis for each designation; and

(3) Track inspections made by each designated qualified person as required by § 213.241. These records shall be kept available for inspection or copying by the Federal Railroad Administration during regular business hours.

§ 213.9 Classes of track: operating speed limits.

(a) Except as provided in paragraph (b) of this section and §§ 213.57(b), 213.59(a), 213.113(a), and 213.137(b) and (c), the following maximum allowable operating speeds apply—

[In miles per hour]

Over track that meets all of the requirements prescribed in this part for—	The maximum allowable operating speed for freight trains is—	The maximum allowable operating speed for passenger trains is—
Excepted track	10	N/A
Class 1 track	10	15
Class 2 track	25	30
Class 3 track	40	60
Class 4 track	60	80
Class 5 track	80	90

(b) If a segment of track does not meet all of the requirements for its intended class, it is reclassified to the next lowest class of track for which it does meet all of the requirements of this part.

However, if the segment of track does not at least meet the requirements for Class 1 track, operations may continue at Class 1 speeds for a period of not more than 30 days without bringing the track into compliance, under the authority of a person designated under § 213.7(a), who has at least one year of supervisory experience in railroad track maintenance, after that person determines that operations may safely continue and subject to any limiting conditions specified by such person.

§ 213.11 Restoration or renewal of track under traffic conditions.

If during a period of restoration or renewal, track is under traffic conditions and does not meet all of the requirements prescribed in this part, the work on the track shall be under the continuous supervision of a person designated under § 213.7(a) who has at least one year of supervisory experience in railroad track maintenance, and subject to any limiting conditions specified by such person. The term "continuous supervision" as used in this section means the physical presence of that person at a job site.

However, since the work may be performed over a large area, it is not necessary that each phase of the work be done under the visual supervision of that person.

§ 213.13 Measuring track not under load.

When unloaded track is measured to determine compliance with requirements of this part, the amount of rail movement, if any, that occurs while the track is loaded must be added to the measurements of the unloaded track.

§ 213.15 Penalties.

(a) Any person who violates any requirement of this part or causes the violation of any such requirement is subject to a civil penalty of at least \$500 and not more than \$11,000 per violation, except that: Penalties may be assessed against individuals only for willful violations, and, where a grossly negligent violation or a pattern of repeated violations has created an imminent hazard of death or injury to persons, or has caused death or injury, a penalty not to exceed \$22,000 per violation may be assessed. "Person" means an entity of any type covered under 1 U.S.C. 1, including but not limited to the following: a railroad; a manager, supervisor, official, or other employee or agent of a railroad; any owner, manufacturer, lessor, or lessee of

railroad equipment, track, or facilities; any independent contractor providing goods or services to a railroad; any employee of such owner, manufacturer, lessor, lessee, or independent contractor; and anyone held by the Federal Railroad Administrator to be responsible under § 213.5(d) or § 213.303(c). Each day a violation continues shall constitute a separate offense. See appendix B to this part for a statement of agency civil penalty policy.

(b) Any person who knowingly and willfully falsifies a record or report required by this part may be subject to criminal penalties under 49 U.S.C. 21311.

§ 213.17 Waivers.

(a) Any owner of track to which this part applies, or other person subject to this part, may petition the Federal Railroad Administrator for a waiver from any or all requirements prescribed in this part. The filing of such a petition does not affect that person's responsibility for compliance with that requirement while the petition is being considered.

(b) Each petition for a waiver under this section shall be filed in the manner and contain the information required by part 211 of this chapter.

(c) If the Administrator finds that a waiver is in the public interest and is consistent with railroad safety, the Administrator may grant the exemption subject to any conditions the Administrator deems necessary. Where a waiver is granted, the Administrator publishes a notice containing the reasons for granting the waiver.

213.19 Information collection.

(a) The information collection requirements of this part were reviewed by the Office of Management and Budget pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*) and are assigned OMB control number 2130-0010.

(b) The information collection requirements are found in the following sections: §§ 213.4, 213.5, 213.7, 213.17, 213.57, 213.119, 213.122, 213.233, 213.237, 213.241, 213.303, 213.305, 213.317, 213.329, 213.333, 213.339, 213.341, 213.343, 213.345, 213.353, 213.361, 213.369.

Subpart B—Roadbed

§ 213.31 Scope.

This subpart prescribes minimum requirements for roadbed and areas immediately adjacent to roadbed.

§ 213.33 Drainage.

Each drainage or other water carrying facility under or immediately adjacent to the roadbed shall be maintained and kept free of obstruction, to accommodate expected water flow for the area concerned.

§ 213.37 Vegetation.

Vegetation on railroad property which is on or immediately adjacent to roadbed shall be controlled so that it does not—

- (a) Become a fire hazard to track-carrying structures;
- (b) Obstruct visibility of railroad signs and signals:
 - (1) Along the right-of-way, and

(2) At highway-rail crossings: (This paragraph (b)(2) is applicable September 21, 1999.)

- (c) Interfere with railroad employees performing normal trackside duties;
- (d) Prevent proper functioning of signal and communication lines; or
- (e) Prevent railroad employees from visually inspecting moving equipment from their normal duty stations.

Subpart C—Track Geometry

§ 213.51 Scope.

This subpart prescribes requirements for the gage, alignment, and surface of track, and the elevation of outer rails and speed limitations for curved track.

§ 213.53 Gage.

- (a) Gage is measured between the heads of the rails at right-angles to the rails in a plane five-eighths of an inch below the top of the rail head.
- (b) Gage shall be within the limits prescribed in the following table—

Class of track	The gage must be at least—	But not more than—
Excepted track	N/A	4'10' 4".
Class 1 track	4'8"	4'10".
Class 2 and 3 track	4'8"	4'9 3/4".
Class 4 and 5 track	4'8"	4'9 1/2".

§ 213.55 Alinement.

Alinement may not deviate from uniformity more than the amount prescribed in the following table:

Class of track	Tangent track	Curved track	
	The deviation of the mid-offset from a 62-foot line ¹ may not be more than— (inches)	The deviation of the mid-ordinate from a 31-foot chord ² may not be more than— (inches)	The deviation of the mid-ordinate from a 62-foot chord ² may not be more than— (inches)
Class 1 track	5	³ N/A	5
Class 2 track	3	³ N/A	3
Class 3 track	1 3/4	1 1/4	1 3/4
Class 4 track	1 1/2	1	1 1/2
Class 5 track	3/4	1/2	5/8

¹ The ends of the line shall be at points on the gage side of the line rail, five-eighths of an inch below the top of the railhead. Either rail may be used as the line rail, however, the same rail shall be used for the full length of that tangential segment of track.

² The ends of the chord shall be at points on the gage side of the outer rail, five-eighths of an inch below the top of the railhead.

³ N/A—Not Applicable.

§ 213.57 Curves; elevation and speed limitations.

(a) The maximum crosslevel on the outside rail of a curve may not be more than 8 inches on track Classes 1 and 2 and 7 inches on Classes 3 through 5. Except as provided in § 213.63, the outside rail of a curve may not be lower than the inside rail. (The first sentence of paragraph (a) is applicable September 21, 1999.)

(b)(1) The maximum allowable operating speed for each curve is determined by the following formula—

$$V_{\max} = \sqrt{\frac{E_a + 3}{0.0007D}}$$

Where—

V_{\max} = Maximum allowable operating speed (miles per hour).

E_a = Actual elevation of the outside rail (inches).¹

¹ Actual elevation for each 155 foot track segment in the body of the curve is determined by averaging the elevation for 10 points through the segment at 15.5 foot spacing. If the curve length is less than 155 feet, average the points through the full length of the body of the curve.

D = Degree of curvature (degrees).²

(2) Table 1 of Appendix A is a table of maximum allowable operating speed computed in accordance with this formula for various elevations and degrees of curvature.

(c)(1) For rolling stock meeting the requirements specified in paragraph (d) of this section, the maximum operating speed for each curve may be determined by the following formula—

² Degree of curvature is determined by averaging the degree of curvature over the same track segment as the elevation.

$$V_{max} = \sqrt{\frac{E_a + 4}{0.0007D}}$$

Where—

- V_{max} = Maximum allowable operating speed (miles per hour).
- E_a = Actual elevation of the outside rail (inches).¹
- D = Degree of curvature (degrees).²

(2) Table 2 of Appendix A is a table of maximum allowable operating speed computed in accordance with this formula for various elevations and degrees of curvature.

(d) Qualified equipment may be operated at curving speeds determined by the formula in paragraph (c) of this section, provided each specific class of equipment is approved for operation by the Federal Railroad Administration and the railroad demonstrates that:

(1) When positioned on a track with a uniform 4-inch superelevation, the roll angle between the floor of the equipment and the horizontal does not exceed 5.7 degrees; and

(2) When positioned on a track with a uniform 6 inch superelevation, no wheel of the equipment unloads to a value of 60 percent of its static value on perfectly level track, and the roll angle between the floor of the equipment and the horizontal does not exceed 8.6 degrees.

(3) The track owner shall notify the Federal Railroad Administrator no less than 30 calendar days prior to the proposed implementation of the higher curving speeds allowed under the formula in paragraph (c) of this section. The notification shall be in writing and shall contain, at a minimum, the following information—

(i) A complete description of the class of equipment involved, including schematic diagrams of the suspension systems and the location of the center of gravity above top of rail;

(ii) A complete description of the test procedure³ and instrumentation used to qualify the equipment and the maximum values for wheel unloading and roll angles which were observed during testing;

(iii) Procedures or standards in effect which relate to the maintenance of the suspension system for the particular class of equipment; and

(iv) Identification of line segment on which the higher curving speeds are proposed to be implemented.

(e) A track owner, or an operator of a passenger or commuter service, who provides passenger or commuter service over trackage of more than one track owner with the same class of equipment may provide written notification to the Federal Railroad Administrator with the written consent of the other affected track owners.

(f) Equipment presently operating at curving speeds allowed under the formula in paragraph (c) of this section, by reason of conditional waivers granted by the Federal Railroad Administration, shall be considered to have successfully complied with the requirements of paragraph (d) of this section.

(g) A track owner or a railroad operating above Class 5 speeds, may request approval from the Federal Railroad Administrator to operate specified equipment at a level of cant deficiency greater than four inches in accordance with § 213.329(c) and (d) on curves in Class 1 through 5 track which are contiguous to the high speed track provided that—

(1) The track owner or railroad submits a test plan to the Federal Railroad Administrator for approval no less than thirty calendar days prior to any proposed implementation of the higher curving speeds. The test plan shall include an analysis and determination of carbody acceleration safety limits for each vehicle type which indicate wheel unloading of 60 percent in a steady state condition and 80 percent in a transient (point by point) condition. Accelerometers shall be laterally-oriented and floor-mounted near the end of a representative vehicle of each type;

(2) Upon FRA approval of a test plan, the track owner or railroad conducts incrementally increasing train speed test runs over the curves in the identified track segment(s) to demonstrate that wheel unloading is within the limits prescribed in paragraph (g)(1) of this section;

(3) Upon FRA approval of a cant deficiency level, the track owner or railroad inspects the curves in the identified track segment with a Track

Geometry Measurement System (TGMS) qualified in accordance with § 213.333 (b) through (g) at an inspection frequency of at least twice annually with not less than 120 days interval between inspections; and

(4) The track owner or railroad operates an instrumented car having dynamic response characteristics that are representative of other equipment assigned to service or a portable device that monitors on-board instrumentation on trains over the curves in the identified track segment at the revenue speed profile at a frequency of at least once every 90 days with not less than 30 days interval between inspections. The instrumented car or the portable device shall monitor a laterally-oriented accelerometer placed near the end of the vehicle at the floor level. If the carbody lateral acceleration measurement exceeds the safety limits prescribed in paragraph (g)(1), the railroad shall operate trains at curving speeds in accordance with paragraph (b) or (c) of this section; and

(5) The track owner or railroad shall maintain a copy of the most recent exception printouts for the inspections required under paragraphs (g)(3) and (4) of this section.

§ 213.59 Elevation of curved track; runoff.

(a) If a curve is elevated, the full elevation shall be provided throughout the curve, unless physical conditions do not permit. If elevation runoff occurs in a curve, the actual minimum elevation shall be used in computing the maximum allowable operating speed for that curve under § 213.57(b).

(b) Elevation runoff shall be at a uniform rate, within the limits of track surface deviation prescribed in § 213.63, and it shall extend at least the full length of the spirals. If physical conditions do not permit a spiral long enough to accommodate the minimum length of runoff, part of the runoff may be on tangent track.

§ 213.63 Track surface.

Each owner of the track to which this part applies shall maintain the surface of its track within the limits prescribed in the following table:

Track surface	Class of track				
	1 (inches)	2 (inches)	3 (inches)	4 (inches)	5 (inches)
The runoff in any 31 feet of rail at the end of a raise may not be more than	3 1/2	3	2	1 1/2	1
The deviation from uniform profile on either rail at the mid-ordinate of a 62-foot chord may not be more than	3	2 3/4	2 1/4	2	1 1/4

³ The test procedure may be conducted in a test facility whereby all the wheels on one side (right

or left) of the equipment are alternately raised and lowered by 4 and 6 inches and the vertical wheel

loads under each wheel are measured and a level is used to record the angle through which the floor of the equipment has been rotated.

Track surface	Class of track				
	1 (inches)	2 (inches)	3 (inches)	4 (inches)	5 (inches)
The deviation from zero crosslevel at any point on tangent or reverse crosslevel elevation on curves may not be more than	3	2	1 ³ / ₄	1 ¹ / ₄	1
The difference in crosslevel between any two points less than 62 feet apart may not be more than* ^{1, 2}	3	2 ¹ / ₄	2	1 ³ / ₄	1 ¹ / ₂
*Where determined by engineering decision prior to the promulgation of this rule, due to physical restrictions on spiral length and operating practices and experience, the variation in crosslevel on spirals per 31 feet may not be more than	2	1 ³ / ₄	1 ¹ / ₄	1	3 ₄

¹ Except as limited by § 213.57(a), where the elevation at any point in a curve equals or exceeds 6 inches, the difference in crosslevel within 62 feet between that point and a point with greater elevation may not be more than 1¹/₂ inches. (Footnote 1 is applicable December 21, 1999.)

² However, to control harmonics on Class 2 through 5 jointed track with staggered joints, the crosslevel differences shall not exceed 1¹/₄ inches in all of six consecutive pairs of joints, as created by 7 low joints. Track with joints staggered less than 10 feet shall not be considered as having staggered joints. Joints within the 7 low joints outside of the regular joint spacing shall not be considered as joints for purposes of this footnote. (Footnote 2 is applicable September 21, 1999.)

Subpart D—Track Structure

§ 213.101 Scope.

This subpart prescribes minimum requirements for ballast, crossties, track assembly fittings, and the physical conditions of rails.

§ 213.103 Ballast; general.

Unless it is otherwise structurally supported, all track shall be supported by material which will —

(a) Transmit and distribute the load of the track and railroad rolling equipment to the subgrade;

(b) Restrain the track laterally, longitudinally, and vertically under dynamic loads imposed by railroad rolling equipment and thermal stress exerted by the rails;

(c) Provide adequate drainage for the track; and

(d) Maintain proper track crosslevel, surface, and alinement.

§ 213.109 Crossties.

(a) Crossties shall be made of a material to which rail can be securely fastened.

(b) Each 39 foot segment of track shall have—

(1) A sufficient number of crossties which in combination provide effective support that will—

(i) Hold gage within the limits prescribed in § 213.53(b);

(ii) Maintain surface within the limits prescribed in § 213.63; and

(iii) Maintain alinement within the limits prescribed in § 213.55.

(2) The minimum number and type of crossties specified in paragraphs (c) and (d) of this section effectively distributed to support the entire segment; and

(3) At least one crosstie of the type specified in paragraphs (c) and (d) of this section that is located at a joint location as specified in paragraph (f) of this section.

(c) Each 39 foot segment of: Class 1 track shall have five crossties; Classes 2 and 3 track shall have eight crossties; and Classes 4 and 5 track shall have 12 crossties, which are not:

(1) Broken through;

(2) Split or otherwise impaired to the extent the crossties will allow the ballast to work through, or will not hold spikes or rail fasteners;

(3) So deteriorated that the tie plate or base of rail can move laterally more than 1/2 inch relative to the crossties; or

(4) Cut by the tie plate through more than 40 percent of a ties' thickness.

(d) Each 39 foot segment of track shall have the minimum number and type of crossties as indicated in the following table (this paragraph (d) is applicable September 21, 2000)

Class of track	Tangent track and curves ≤ degrees	Turnouts and curved track over 2 degrees
Class 1 track	5	6

Class of track	Tangent track and curves ≤ degrees	Turnouts and curved track over 2 degrees
Class 2 track	8	9
Class 3 track	8	10
Class 4 and 5 track ...	12	14

(e) Crossties counted to satisfy the requirements set forth in the table in paragraph (d) of this section shall not be—

(1) Broken through;

(2) Split or otherwise impaired to the extent the crossties will allow the ballast to work through, or will not hold spikes or rail fasteners;

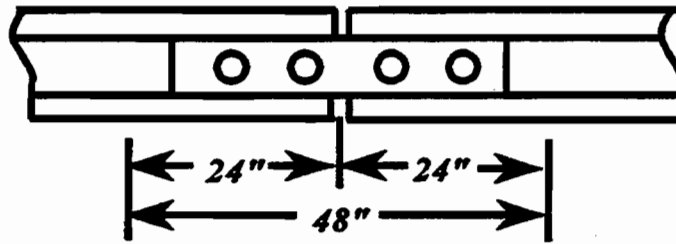
(3) So deteriorated that the tie plate or base of rail can move laterally 1/2 inch relative to the crossties; or

(4) Cut by the tie plate through more than 40 percent of a crosstie's thickness this paragraph (e) is applicable September 21, 2000.

(f) Class 1 and Class 2 track shall have one crosstie whose centerline is within 24 inches of each rail joint location, and Classes 3 through 5 track shall have one crosstie whose centerline is within 18 inches of each rail joint location or, two crossties whose centerlines are within 24 inches either side of each rail joint location. The relative position of these ties is described in the following diagrams:

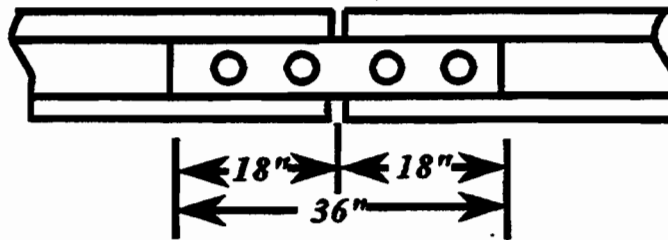
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Classes 1 and 2

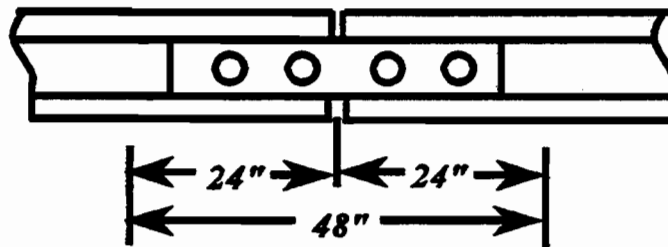


Each rail joints in Classes 1 and 2 track shall be supported by at least one cross-tie specified in paragraphs (c) and (d) of this section whose centerline is within 48' shown above.

Classes 3 through 5



Each rail joints in Classes 3 through 5 track shall be supported by either at least one cross-tie specified in paragraphs (c) and (d) of this section whose centerline is within 36' shown above, or:



Two cross-ties, one on each side of the rail joint, whose centerlines are within 24' of the rail joint location shown above.

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(g) For track constructed without cross-ties, such as slab track, track connected directly to bridge structural components and track over servicing pits, the track structure shall meet the requirements of paragraphs (b)(1)(i), (ii), and (iii) of this section.

§ 213.113 Defective rails.

(a) When an owner of track to which this part applies learns, through inspection or otherwise, that a rail in that track contains any of the defects listed in the following table, a person designated under § 213.7 shall determine whether or not the track may

continue in use. If he determines that the track may continue in use, operation over the defective rail is not permitted until—

- (1) The rail is replaced; or
- (2) The remedial action prescribed in the table is initiated.

Defect	Length of defect (inch)		Percent of rail head cross-sectional area weakened by defect		If defective rail is not replaced, take the remedial action prescribed in note
	More than	But not more than	Less than	But not less than	
Transverse fissure			70	5	B.
			100	70	A2.
				100	A.
Compound fissure			70	5	B.
			100	70	A2.
				100	A.
Detail fracture			25	5	C.
Engine burn fracture			80	25	D.

Defect	Length of defect (inch)		Percent of rail head cross-sectional area weakened by defect		If defective rail is not replaced, take the remedial action prescribed in note
	More than	But not more than	Less than	But not less than	
Defective weld			100	80	[A2] or [E and H].
Horizontal split head	1	2		100	[A] or [E and H].
Vertical split head	2	4			H and F.
Split web	4				I and G.
Piped rail	(1)	(1)	(1)		B.
Head web separation					A.
Bolt hole crack	1/2	1			H and F.
	1	1 1/2			H and G.
	1 1/2				B.
Broken base	(1)	(1)	(1)		A.
	1	6			D.
	6				[A] or [E and I].
Ordinary break					A or E.
Damaged rail					D.
Flattened rail	Depth ≥ 3/8 and Length ≥ 8.				H.

¹ Break out in rail head.

Notes

A. Assign person designated under § 213.7 to visually supervise each operation over defective rail.

A2. Assign person designated under § 213.7 to make visual inspection. After a visual inspection, that person may authorize operation to continue without continuous visual supervision at a maximum of 10 m.p.h. for up to 24 hours prior to another such visual inspection or replacement or repair of the rail.

B. Limit operating speed over defective rail to that as authorized by a person designated under § 213.7(a), who has at least one year of supervisory experience in railroad track maintenance. The operating speed cannot be over 30 m.p.h. or the maximum allowable speed under § 213.9 for the class of track concerned, whichever is lower.

C. Apply joint bars bolted only through the outermost holes to defect within 20 days after it is determined to continue the track in use. In the case of Classes 3 through 5 track, limit operating speed over defective rail to 30 m.p.h. until joint bars are applied; thereafter, limit speed to 50 m.p.h. or the maximum allowable speed under § 213.9 for the class of track concerned, whichever is lower. When a search for internal rail defects is conducted under § 213.237, and defects are discovered in Classes 3 through 5 which require remedial action C, the operating speed shall be limited to 50 m.p.h., or the maximum allowable speed under § 213.9 for the class of track concerned, whichever is lower, for a period not to exceed 4 days. If the defective rail has not been removed from the track or a permanent repair made within 4 days of the discovery, limit operating speed over the defective rail to 30 m.p.h. until joint bars are applied; thereafter, limit speed to 50 m.p.h. or the maximum allowable speed under § 213.9 for the class of track concerned, whichever is lower.

D. Apply joint bars bolted only through the outermost holes to defect within 10 days after it is determined to continue the track in use. In the case of Classes 3 through 5 track, limit

operating speed over the defective rail to 30 m.p.h. or less as authorized by a person designated under § 213.7(a), who has at least one year of supervisory experience in railroad track maintenance, until joint bars are applied; thereafter, limit speed to 50 m.p.h. or the maximum allowable speed under § 213.9 for the class of track concerned, whichever is lower.

E. Apply joint bars to defect and bolt in accordance with § 213.121(d) and (e).

F. Inspect rail 90 days after it is determined to continue the track in use.

G. Inspect rail 30 days after it is determined to continue the track in use.

H. Limit operating speed over defective rail to 50 m.p.h. or the maximum allowable speed under § 213.9 for the class of track concerned, whichever is lower.

I. Limit operating speed over defective rail to 30 m.p.h. or the maximum allowable speed under § 213.9 for the class of track concerned, whichever is lower.

(b) As used in this section—

(1) *Transverse fissure* means a progressive crosswise fracture starting from a crystalline center or nucleus inside the head from which it spreads outward as a smooth, bright, or dark, round or oval surface substantially at a right angle to the length of the rail. The distinguishing features of a transverse fissure from other types of fractures or defects are the crystalline center or nucleus and the nearly smooth surface of the development which surrounds it.

(2) *Compound fissure* means a progressive fracture originating in a horizontal split head which turns up or down in the head of the rail as a smooth, bright, or dark surface progressing until substantially at a right angle to the length of the rail. Compound fissures require examination of both faces of the fracture to locate the horizontal split head from which they originate.

(3) *Horizontal split head* means a horizontal progressive defect originating inside of the rail head, usually one-quarter inch or more below the running surface and progressing horizontally in all directions, and generally accompanied by a flat spot on the running surface. The defect appears as a crack lengthwise of the rail when it reaches the side of the rail head.

(4) *Vertical split head* means a vertical split through or near the middle of the head, and extending into or through it. A crack or rust streak may show under the head close to the web or pieces may be split off the side of the head.

(5) *Split web* means a lengthwise crack along the side of the web and extending into or through it.

(6) *Piped rail* means a vertical split in a rail, usually in the web, due to failure of the shrinkage cavity in the ingot to unite in rolling.

(7) *Broken base* means any break in the base of the rail.

(8) *Detail fracture* means a progressive fracture originating at or near the surface of the rail head. These fractures should not be confused with transverse fissures, compound fissures, or other defects which have internal origins. Detail fractures may arise from shelly spots, head checks, or flaking.

(9) *Engine burn fracture* means a progressive fracture originating in spots where driving wheels have slipped on top of the rail head. In developing downward they frequently resemble the compound or even transverse fissures with which they should not be confused or classified.

(10) *Ordinary break* means a partial or complete break in which there is no sign

of a fissure, and in which none of the other defects described in this paragraph (b) are found.

(11) *Damaged rail* means any rail broken or injured by wrecks, broken, flat, or unbalanced wheels, slipping, or similar causes.

(12) *Flattened rail* means a short length of rail, not at a joint, which has flattened out across the width of the rail head to a depth of 3/8 inch or more below the rest of the rail. Flattened rail occurrences have no repetitive regularity and thus do not include corrugations, and have no apparent localized cause such as a weld or engine burn. Their individual length is relatively short, as compared to a condition such as head flow on the low rail of curves.

(13) *Bolt hole crack* means a crack across the web, originating from a bolt hole, and progressing on a path either inclined upward toward the rail head or inclined downward toward the base. Fully developed bolt hole cracks may continue horizontally along the head/web or base/web fillet, or they may progress into and through the head or base to separate a piece of the rail end from the rail. Multiple cracks occurring in one rail end are considered to be a single defect. However, bolt hole cracks occurring in adjacent rail ends within the same joint must be reported as separate defects.

(14) *Defective weld* means a field or plant weld containing any discontinuities or pockets, exceeding 5 percent of the rail head area individually or 10 percent in the

aggregate, oriented in or near the transverse plane, due to incomplete penetration of the weld metal between the rail ends, lack of fusion between weld and rail end metal, entrainment of slag or sand, under-bead or other shrinkage cracking, or fatigue cracking. Weld defects may originate in the rail head, web, or base, and in some cases, cracks may progress from the defect into either or both adjoining rail ends.

(15) *Head and web separation* means a progressive fracture, longitudinally separating the head from the web of the rail at the head fillet area.

§ 213.115 Rail end mismatch.

Any mismatch of rails at joints may not be more than that prescribed by the following table—

Class of track	Any mismatch of rails at joints may not be more than the following—	
	On the tread of the rail ends (inch)	On the gage side of the rail ends (inch)
Class 1 track	1/4	1/4
Class 2 track	1/4	3/16
Class 3 track	3/16	3/16
Class 4 and 5 track	1/8	1/8

§ 213.119 Continuous welded rail (CWR); general.

Each track owner with track constructed of CWR shall have in effect and comply with written procedures which address the installation, adjustment, maintenance and inspection of CWR, and a training program for the application of those procedures, which shall be submitted to the Federal Railroad Administration by December 21, 1998. FRA reviews each plan for compliance with the following—

(a) Procedures for the installation and adjustment of CWR which include—

(1) Designation of a desired rail installation temperature range for the geographic area in which the CWR is located; and

(2) De-stressing procedures/methods which address proper attainment of the desired rail installation temperature range when adjusting CWR.

(b) Rail anchoring or fastening requirements that will provide sufficient restraint to limit longitudinal rail and crosstie movement to the extent practical, and specifically addressing CWR rail anchoring or fastening patterns on bridges, bridge approaches, and at other locations where possible longitudinal rail and crosstie movement associated with normally expected train-induced forces, is restricted.

(c) Procedures which specifically address maintaining a desired rail installation temperature range when cutting CWR including rail repairs, in-track welding, and in conjunction with adjustments made in the area of tight track, a track buckle, or a pull-apart. Rail repair practices shall take into consideration existing rail temperature so that—

(1) When rail is removed, the length installed shall be determined by taking into consideration the existing rail temperature and the desired rail installation temperature range; and

(2) Under no circumstances should rail be added when the rail temperature is below that designated by paragraph (a)(1) of this section, without provisions for later adjustment.

(d) Procedures which address the monitoring of CWR in curved track for inward shifts of alignment toward the center of the curve as a result of disturbed track.

(e) Procedures which control train speed on CWR track when—

(1) Maintenance work, track rehabilitation, track construction, or any other event occurs which disturbs the roadbed or ballast section and reduces the lateral or longitudinal resistance of the track; and

(2) In formulating the procedures under this paragraph (e), the track owner shall—

(i) Determine the speed required, and the duration and subsequent removal of any speed restriction based on the restoration of the ballast, along with sufficient ballast re-consolidation to stabilize the track to a level that can accommodate expected train-induced forces. Ballast re-consolidation can be achieved through either the passage of train tonnage or mechanical stabilization procedures, or both; and

(ii) Take into consideration the type of crossties used.

(f) Procedures which prescribe when physical track inspections are to be performed to detect buckling prone conditions in CWR track. At a minimum, these procedures shall address inspecting track to identify—

(1) Locations where tight or kinky rail conditions are likely to occur;

(2) Locations where track work of the nature described in paragraph (e)(1) of this section have recently been performed; and

(3) In formulating the procedures under this paragraph (f), the track owner shall—

(i) Specify the timing of the inspection; and

(ii) Specify the appropriate remedial actions to be taken when buckling prone conditions are found.

(g) The track owner shall have in effect a comprehensive training program for the application of these written CWR procedures, with provisions for periodic re-training, for those individuals designated under § 213.7 of this part as qualified to supervise the installation, adjustment, and maintenance of CWR track and to perform inspections of CWR track.

(h) The track owner shall prescribe recordkeeping requirements necessary to provide an adequate history of track constructed with CWR. At a minimum, these records must include:

(1) Rail temperature, location and date of CWR installations. This record shall be retained for at least one year; and

(2) A record of any CWR installation or maintenance work that does not conform with the written procedures. Such record shall include the location of the rail and be maintained until the CWR is brought into conformance with such procedures.

(i) As used in this section—

(1) *Adjusting/de-stressing* means the procedure by which a rail's temperature is re-adjusted to the desired value. It typically consists of cutting the rail and removing rail anchoring devices, which provides for the necessary expansion and contraction, and then re-assembling the track.

(2) *Buckling incident* means the formation of a lateral mis-alignment sufficient in magnitude to constitute a deviation from the Class 1 requirements specified in § 213.55 of this part. These normally occur when rail temperatures are relatively high and are caused by high longitudinal compressive forces.

(3) *Continuous welded rail (CWR)* means rail that has been welded together into lengths exceeding 400 feet.

(4) *Desired rail installation temperature range* means the rail temperature range, within a specific geographical area, at which forces in CWR should not cause a buckling incident in extreme heat, or a pull-apart during extreme cold weather.

(5) *Disturbed track* means the disturbance of the roadbed or ballast section, as a result of track maintenance or any other event, which reduces the lateral or longitudinal resistance of the track, or both.

(6) *Mechanical stabilization* means a type of procedure used to restore track resistance to disturbed track following certain maintenance operations. This procedure may incorporate dynamic track stabilizers or ballast consolidators, which are units of work equipment that are used as a substitute for the

stabilization action provided by the passage of tonnage trains.

(7) *Rail anchors* means those devices which are attached to the rail and bear against the side of the crosstie to control longitudinal rail movement. Certain types of rail fasteners also act as rail anchors and control longitudinal rail movement by exerting a downward clamping force on the upper surface of the rail base.

(8) *Rail temperature* means the temperature of the rail, measured with a rail thermometer.

(9) *Tight/kinky rail* means CWR which exhibits minute alignment irregularities which indicate that the rail is in a considerable amount of compression.

(10) *Train-induced forces* means the vertical, longitudinal, and lateral dynamic forces which are generated during train movement and which can contribute to the buckling potential.

(11) *Track lateral resistance* means the resistance provided to the rail/crosstie structure against lateral displacement.

(12) *Track longitudinal resistance* means the resistance provided by the rail anchors/rail fasteners and the ballast section to the rail/crosstie structure against longitudinal displacement.

§ 213.121 Rail joints.

(a) Each rail joint, insulated joint, and compromise joint shall be of a structurally sound design and dimensions for the rail on which it is applied.

(b) If a joint bar on Classes 3 through 5 track is cracked, broken, or because of wear allows excessive vertical movement of either rail when all bolts are tight, it shall be replaced.

(c) If a joint bar is cracked or broken between the middle two bolt holes it shall be replaced.

(d) In the case of conventional jointed track, each rail shall be bolted with at least two bolts at each joint in Classes 2 through 5 track, and with at least one bolt in Class 1 track.

(e) In the case of continuous welded rail track, each rail shall be bolted with at least two bolts at each joint.

(f) Each joint bar shall be held in position by track bolts tightened to allow the joint bar to firmly support the abutting rail ends and to allow longitudinal movement of the rail in the joint to accommodate expansion and contraction due to temperature variations. When no-slip, joint-to-rail contact exists by design, the requirements of this paragraph do not apply. Those locations when over 400 feet in length, are considered to be

continuous welded rail track and shall meet all the requirements for continuous welded rail track prescribed in this part.

(g) No rail shall have a bolt hole which is torch cut or burned in Classes 2 through 5 track. For Class 2 track, this paragraph (g) is applicable September 21, 1999.

(h) No joint bar shall be reconfigured by torch cutting in Classes 3 through 5 track.

§ 213.122 Torch cut rail.

(a) Except as a temporary repair in emergency situations no rail having a torch cut end shall be used in Classes 3 through 5 track. When a rail end is torch cut in emergency situations, train speed over that rail end shall not exceed the maximum allowable for Class 2 track. For existing torch cut rail ends in Classes 3 through 5 track the following shall apply—

(1) Within one year of September 21, 1998, all torch cut rail ends in Class 5 track shall be removed;

(2) Within two years of September 21, 1998, all torch cut rail ends in Class 4 track shall be removed; and

(3) Within one year of September 21, 1998, all torch cut rail ends in Class 3 track over which regularly scheduled passenger trains operate, shall be inventoried by the track owner.

(b) Following the expiration of the time limits specified in paragraphs (a)(1), (2), and (3) of this section, any torch cut rail end not removed from Classes 4 and 5 track, or any torch cut rail end not inventoried in Class 3 track over which regularly scheduled passenger trains operate, shall be removed within 30 days of discovery. Train speed over that rail end shall not exceed the maximum allowable for Class 2 track until removed.

§ 213.123 Tie plates.

(a) In Classes 3 through 5 track where timber crossties are in use there shall be tie plates under the running rails on at least eight of any 10 consecutive ties.

(b) In Classes 3 through 5 track no metal object which causes a concentrated load by solely supporting a rail shall be allowed between the base of the rail and the bearing surface of the tie plate. This paragraph (b) is applicable September 21, 1999.)

§ 213.127 Rail fastening systems.

Track shall be fastened by a system of components which effectively maintains gage within the limits prescribed in § 213.53(b). Each component of each such system shall be evaluated to determine whether gage is effectively being maintained.

§ 213.133 Turnouts and track crossings generally.

(a) In turnouts and track crossings, the fastenings shall be intact and maintained so as to keep the components securely in place. Also, each switch, frog, and guard rail shall be kept free of obstructions that may interfere with the passage of wheels.

(b) Classes 3 through 5 track shall be equipped with rail anchoring through and on each side of track crossings and turnouts, to restrain rail movement affecting the position of switch points and frogs. For Class 3 track, this paragraph (b) is applicable September 21, 1999.)

(c) Each flangeway at turnouts and track crossings shall be at least 1½ inches wide.

§ 213.135 Switches.

(a) Each stock rail must be securely seated in switch plates, but care shall be used to avoid canting the rail by overtightening the rail braces.

(b) Each switch point shall fit its stock rail properly, with the switch stand in either of its closed positions to allow wheels to pass the switch point. Lateral and vertical movement of a stock rail in the switch plates or of a switch plate on a tie shall not adversely affect the fit of the switch point to the stock rail. Broken or cracked switch point rails will be subject to the requirements of § 213.113, except that where remedial actions C, D, or E require the use of joint bars, and joint bars cannot be placed due to the physical configuration of the switch, remedial action B will govern.

taking into account any added safety provided by the presence of reinforcing bars on the switch points.

(c) Each switch shall be maintained so that the outer edge of the wheel tread cannot contact the gage side of the stock rail.

(d) The heel of each switch rail shall be secure and the bolts in each heel shall be kept tight.

(e) Each switch stand and connecting rod shall be securely fastened and operable without excessive lost motion.

(f) Each throw lever shall be maintained so that it cannot be operated with the lock or keeper in place.

(g) Each switch position indicator shall be clearly visible at all times.

(h) Unusually chipped or worn switch points shall be repaired or replaced. Metal flow shall be removed to insure proper closure.

(i) Tongue & Plain Mate switches, which by design exceed Class 1 and excepted track maximum gage limits, are permitted in Class 1 and excepted track.

§ 213.137 Frogs.

(a) The flangeway depth measured from a plane across the wheel-bearing area of a frog on Class 1 track shall not be less than 1¾ inches, or less than 1½ inches on Classes 2 through 5 track.

(b) If a frog point is chipped, broken, or worn more than five-eighths inch down and 6 inches back, operating speed over the frog shall not be more than 10 m.p.h..

(c) If the tread portion of a frog casting is worn down more than three-eighths

inch below the original contour, operating speed over that frog shall not be more than 10 m.p.h..

(d) Where frogs are designed as flange-bearing, flangeway depth may be less than that shown for Class 1 if operated at Class 1 speeds.

§ 213.139 Spring rail frogs.

(a) The outer edge of a wheel tread shall not contact the gage side of a spring wing rail.

(b) The toe of each wing rail shall be solidly tamped and fully and tightly bolted.

(c) Each frog with a bolt hole defect, or head-web separation shall be replaced.

(d) Each spring shall have compression sufficient to hold the wing rail against the point rail.

(e) The clearance between the holddown housing and the horn shall not be more than one-fourth of an inch.

§ 213.141 Self-guarded frogs.

(a) The raised guard on a self-guarded frog shall not be worn more than three-eighths of an inch.

(b) If repairs are made to a self-guarded frog without removing it from service, the guarding face shall be restored before rebuilding the point.

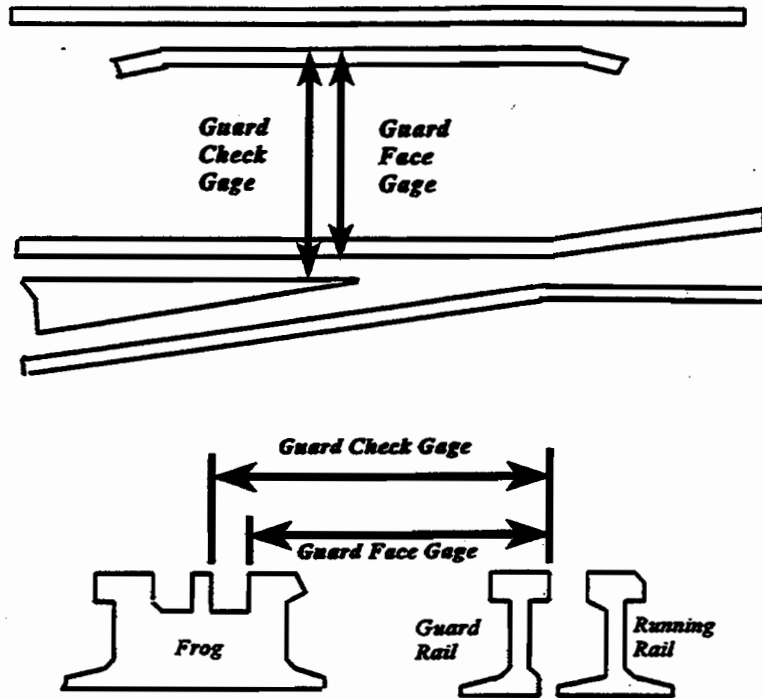
§ 213.143 Frog guard rails and guard faces; gage.

The guard check and guard face gages in frogs shall be within the limits prescribed in the following table—

Class of track	Guard check gage	
	The distance between the gage line of a frog to the guard line ¹ of its guard rail or guarding face, measured across the track at right angles to the gage line ² , may not be less than—	Guard face gage The distance between guard lines ¹ , measured across the track at right angles to the gage line ² , may not be more than—
Class 1 track	4' 6½"	4' 5¼"
Class 2 track	4' 6¼"	4' 5½"
Class 3 and 4 track	4' 6¾"	4' 5¾"
Class 5 track	4' 6½"	4' 5"

¹ A line along that side of the flangeway which is nearer to the center of the track and at the same elevation as the gage line.

² A line ¾ inch below the top of the center line of the head of the running rail, or corresponding location of the tread portion of the track structure.



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Subpart E—Track Appliances and Track-Related Devices

§213.201 Scope.

This subpart prescribes minimum requirements for certain track appliances and track-related devices.

§213.205 Details.

- (a) Each derail shall be clearly visible.
- (b) When in a locked position, a derail shall be free of lost motion which would prevent it from performing its intended function.
- (c) Each derail shall be maintained to function as intended.
- (d) Each derail shall be properly installed for the rail to which it is applied. (This paragraph (d) is applicable September 21, 1999.)

Subpart F—Inspection

§213.231 Scope.

This subpart prescribes requirements for the frequency and manner of inspecting track to detect deviations from the standards prescribed in this part.

§213.233 Track inspections.

- (a) All track shall be inspected in accordance with the schedule prescribed in paragraph (c) of this section by a person designated under §213.7.
- (b) Each inspection shall be made on foot or by riding over the track in a vehicle at a speed that allows the person making the inspection to visually inspect the track structure for compliance with this part. However, mechanical, electrical, and other track inspection devices may be used to supplement visual inspection. If a vehicle is used for visual inspection, the speed of the vehicle may not be more than 5 miles per hour when passing over track crossings and turnouts, otherwise, the inspection vehicle speed shall be at the sole discretion of the inspector, based on track conditions and inspection requirements. When riding over the track in a vehicle, the inspection will be subject to the following conditions—
 - (1) One inspector in a vehicle may inspect up to two tracks at one time provided that the inspector's visibility remains unobstructed by any cause and

that the second track is not centered more than 30 feet from the track upon which the inspector is riding;

- (2) Two inspectors in one vehicle may inspect up to four tracks at a time provided that the inspectors' visibility remains unobstructed by any cause and that each track being inspected is centered within 39 feet from the track upon which the inspectors are riding;
- (3) Each main track is actually traversed by the vehicle or inspected on foot at least once every two weeks, and each siding is actually traversed by the vehicle or inspected on foot at least once every month. On high density commuter railroad lines where track time does not permit an on track vehicle inspection, and where track centers are 15 foot or less, the requirements of this paragraph (b)(3) will not apply; and

(4) Track inspection records shall indicate which track(s) are traversed by the vehicle or inspected on foot as outlined in paragraph (b)(3) of this section.

(c) Each track inspection shall be made in accordance with the following schedule—

Class of track	Type of track	Required frequency
Excepted track and Class 1, 2, and 3 track.	Main track and sidings	Weekly with at least 3 calendar days interval between inspections, or before use, if the track is used less than once a week, or twice weekly with at least 1 calendar day interval between inspections, if the track carries passenger trains or more than 10 million gross tons of traffic during the preceding calendar year.
Excepted track and Class 1, 2, and 3 track.	Other than main track and sidings	Monthly with at least 20 calendar days interval between inspections.

Class of track	Type of track	Required frequency
Class 4 and 5 track	Twice weekly with at least 1 calendar day interval between inspections.

(d) If the person making the inspection finds a deviation from the requirements of this part, the inspector shall immediately initiate remedial action.

Note to § 213.233: Except as provided in paragraph (b) of this section, no part of this section will in any way be construed to limit the inspector's discretion as it involves inspection speed and sight distance.

§ 213.235 Inspection of switches, track crossings, and lift rail assemblies or other transition devices on moveable bridges.

(a) Except as provided in paragraph (c) of this section, each switch, turnout, track crossing, and moveable bridge lift rail assembly or other transition device shall be inspected on foot at least monthly.

(b) Each switch in Classes 3 through 5 track that is held in position only by the operating mechanism and one connecting rod shall be operated to all of its positions during one inspection in every 3 month period.

(c) In the case of track that is used less than once a month, each switch, turnout, track crossing, and moveable bridge lift rail assembly or other transition device shall be inspected on foot before it is used.

§ 213.237 Inspection of rail.

(a) In addition to the track inspections required by § 213.233, a continuous search for internal defects shall be made of all rail in Classes 4 through 5 track, and Class 3 track over which passenger trains operate, at least once every 40 million gross tons (mgt) or once a year, whichever interval is shorter. On Class 3 track over which passenger trains do not operate such a search shall be made at least once every 30 mgt or once a year, whichever interval is longer. (This paragraph (a) is applicable January 1, 1999.

(b) Inspection equipment shall be capable of detecting defects between joint bars, in the area enclosed by joint bars.

(c) Each defective rail shall be marked with a highly visible marking on both sides of the web and base.

(d) If the person assigned to operate the rail defect detection equipment being used determines that, due to rail surface conditions, a valid search for internal defects could not be made over a particular length of track, the test on that particular length of track cannot be considered as a search for internal

defects under paragraph (a) of this section. (This paragraph (d) is not retroactive to tests performed prior to September 21, 1998.

(e) If a valid search for internal defects cannot be conducted for reasons described in paragraph (d) of this section, the track owner shall, before the expiration of time or tonnage limits—

(1) Conduct a valid search for internal defects;

(2) Reduce operating speed to a maximum of 25 miles per hour until such time as a valid search for internal defects can be made; or

(3) Remove the rail from service.

§ 213.239 Special inspections.

In the event of fire, flood, severe storm, or other occurrence which might have damaged track structure, a special inspection shall be made of the track involved as soon as possible after the occurrence and, if possible, before the operation of any train over that track.

§ 213.241 Inspection records.

(a) Each owner of track to which this part applies shall keep a record of each inspection required to be performed on that track under this subpart.

(b) Each record of an inspection under §§ 213.4, 213.233, and 213.235 shall be prepared on the day the inspection is made and signed by the person making the inspection. Records shall specify the track inspected, date of inspection, location and nature of any deviation from the requirements of this part, and the remedial action taken by the person making the inspection. The owner shall designate the location(s) where each original record shall be maintained for at least one year after the inspection covered by the record. The owner shall also designate one location, within 100 miles of each state in which they conduct operations, where copies of records which apply to those operations are either maintained or can be viewed following 10 days notice by the Federal Railroad Administration.

(c) Rail inspection records shall specify the date of inspection, the location and nature of any internal defects found, the remedial action taken and the date thereof, and the location of any intervals of track not tested per § 213.237(d). The owner shall retain a rail inspection record for at least two years after the inspection and for one year after remedial action is taken.

(d) Each owner required to keep inspection records under this section shall make those records available for inspection and copying by the Federal Railroad Administration.

(e) For purposes of compliance with the requirements of this section, an owner of track may maintain and transfer records through electronic transmission, storage, and retrieval provided that—

(1) The electronic system be designed so that the integrity of each record is maintained through appropriate levels of security such as recognition of an electronic signature, or other means, which uniquely identify the initiating person as the author of that record. No two persons shall have the same electronic identity;

(2) The electronic storage of each record shall be initiated by the person making the inspection within 24 hours following the completion of that inspection;

(3) The electronic system shall ensure that each record cannot be modified in any way, or replaced, once the record is transmitted and stored;

(4) Any amendment to a record shall be electronically stored apart from the record which it amends. Each amendment to a record shall be uniquely identified as to the person making the amendment;

(5) The electronic system shall provide for the maintenance of inspection records as originally submitted without corruption or loss of data;

(6) Paper copies of electronic records and amendments to those records, that may be necessary to document compliance with this part shall be made available for inspection and copying by the Federal Railroad Administration at the locations specified in paragraph (b) of this section; and

(7) Track inspection records shall be kept available to persons who performed the inspections and to persons performing subsequent inspections.

Subpart G—Train Operations at Track Classes 6 and Higher

§ 213.301 Scope of subpart.

This subpart applies to all track used for the operation of trains at a speed greater than 90 m.p.h. for passenger equipment and greater than 80 m.p.h. for freight equipment.

§ 213.303 Responsibility for compliance.

(a) Any owner of track to which this subpart applies who knows or has notice that the track does not comply with the requirements of this subpart, shall—

- (1) Bring the track into compliance; or
- (2) Halt operations over that track.

(b) If an owner of track to which this subpart applies assigns responsibility for the track to another person (by lease or otherwise), notification of the assignment shall be provided to the appropriate FRA Regional Office at least 30 days in advance of the assignment. The notification may be made by any party to that assignment, but shall be in writing and include the following—

(1) The name and address of the track owner;

(2) The name and address of the person to whom responsibility is assigned (assignee);

(3) A statement of the exact relationship between the track owner and the assignee;

(4) A precise identification of the track;

(5) A statement as to the competence and ability of the assignee to carry out the duties of the track owner under this subpart;

(6) A statement signed by the assignee acknowledging the assignment to that person of responsibility for purposes of compliance with this subpart.

(c) The Administrator may hold the track owner or the assignee or both responsible for compliance with this subpart and subject to the penalties under § 213.15.

(d) When any person, including a contractor for a railroad or track owner, performs any function required by this part, that person is required to perform that function in accordance with this part.

§ 213.305 Designation of qualified individuals; general qualifications.

Each track owner to which this subpart applies shall designate qualified individuals responsible for the maintenance and inspection of track in compliance with the safety requirements prescribed in this subpart. Each individual, including a contractor or an employee of a contractor who is not a railroad employee, designated to:

(a) Supervise restorations and renewals of track shall meet the following minimum requirements:

- (1) At least:

(i) Five years of responsible supervisory experience in railroad track maintenance in track Class 4 or higher and the successful completion of a course offered by the employer or by a college level engineering program,

supplemented by special on the job training emphasizing the techniques to be employed in the supervision, restoration, and renewal of high speed track; or

(ii) A combination of at least one year of responsible supervisory experience in track maintenance in Class 4 or higher and the successful completion of a minimum of 80 hours of specialized training in the maintenance of high speed track provided by the employer or by a college level engineering program, supplemented by special on the job training provided by the employer with emphasis on the maintenance of high speed track; or

(iii) A combination of at least two years of experience in track maintenance in track Class 4 or higher and the successful completion of a minimum of 120 hours of specialized training in the maintenance of high speed track provided by the employer or by a college level engineering program supplemented by special on the job training provided by the employer with emphasis on the maintenance of high speed track.

(2) Demonstrate to the track owner that the individual:

(i) Knows and understands the requirements of this subpart;

(ii) Can detect deviations from those requirements; and

(iii) Can prescribe appropriate remedial action to correct or safely compensate for those deviations; and

(3) Be authorized in writing by the track owner to prescribe remedial actions to correct or safely compensate for deviations from the requirements of this subpart and successful completion of a recorded examination on this subpart as part of the qualification process.

(b) Inspect track for defects shall meet the following minimum qualifications:

- (1) At least:

(i) Five years of responsible experience inspecting track in Class 4 or above and the successful completion of a course offered by the employer or by a college level engineering program, supplemented by special on the job training emphasizing the techniques to be employed in the inspection of high speed track; or

(ii) A combination of at least one year of responsible experience in track inspection in Class 4 or above and the successful completion of a minimum of 80 hours of specialized training in the inspection of high speed track provided by the employer or by a college level engineering program, supplemented by special on the job training provided by the employer with emphasis on the inspection of high speed track.

(iii) A combination of at least two years of experience in track maintenance in Class 4 or above and the successful completion of a minimum of 120 hours of specialized training in the inspection of high speed track provided by the employer or from a college level engineering program, supplemented by special on the job training provided by the employer with emphasis on the inspection of high speed track.

(2) Demonstrate to the track owner that the individual:

(i) Knows and understands the requirements of this subpart;

(ii) Can detect deviations from those requirements; and

(iii) Can prescribe appropriate remedial action to correct or safely compensate for those deviations; and

(3) Be authorized in writing by the track owner to prescribe remedial actions to correct or safely compensate for deviations from the requirements in this subpart and successful completion of a recorded examination on this subpart as part of the qualification process.

(c) Individuals designated under paragraphs (a) or (b) of this section that inspect continuous welded rail (CWR) track or supervise the installation, adjustment, and maintenance of CWR in accordance with the written procedures established by the track owner shall have:

(1) Current qualifications under either paragraph (a) or (b) of this section;

(2) Successfully completed a training course of at least eight hours duration specifically developed for the application of written CWR procedures issued by the track owner; and

(3) Demonstrated to the track owner that the individual:

(i) Knows and understands the requirements of those written CWR procedures;

(ii) Can detect deviations from those requirements; and

(iii) Can prescribe appropriate remedial action to correct or safely compensate for those deviations; and

(4) Written authorization from the track owner to prescribe remedial actions to correct or safely compensate for deviations from the requirements in those procedures and successful completion of a recorded examination on those procedures as part of the qualification process. The recorded examination may be written, or it may be a computer file with the results of an interactive training course.

(d) Persons not fully qualified to supervise certain renewals and inspect track as outlined in paragraphs (a), (b) and (c) of this section, but with at least one year of maintenance of way or

signal experience, may pass trains over broken rails and pull aparts provided that—

(1) The track owner determines the person to be qualified and, as part of doing so, trains, examines, and re-examines the person periodically within two years after each prior examination on the following topics as they relate to the safe passage of trains over broken rails or pull aparts: rail defect identification, cross-tie condition, track surface and alignment, gage restraint, rail end mismatch, joint bars, and maximum distance between rail ends over which trains may be allowed to pass. The sole purpose of the examination is to ascertain the person's ability to effectively apply these requirements and the examination may not be used to disqualify the person from other duties. A minimum of four hours training is adequate for initial training:

(2) The person deems it safe, and train speeds are limited to a maximum of 10 m.p.h. over the broken rail or pull apart:

(3) The person shall watch all movements over the broken rail or pull apart and be prepared to stop the train if necessary; and

(4) Person(s) fully qualified under § 213.305 of this subpart are notified and dispatched to the location as soon as practicable for the purpose of authorizing movements and effectuating temporary or permanent repairs.

(e) With respect to designations under paragraphs (a), (b), (c) and (d) of this section, each track owner shall maintain written records of:

(1) Each designation in effect;

(2) The basis for each designation, including but not limited to:

(i) The exact nature of any training courses attended and the dates thereof;

(ii) The manner in which the track owner has determined a successful completion of that training course, including test scores or other qualifying results;

(3) Track inspections made by each individual as required by § 213.369. These records shall be made available for inspection and copying by the Federal Railroad Administration during regular business hours.

§ 213.307 Class of track: operating speed limits.

(a) Except as provided in paragraph (b) of this section and §§ 213.329, 213.337(a) and 213.345(c), the following maximum allowable operating speeds apply:

Over track that meets all of the requirements prescribed in this subpart for—	The maximum allowable operating speed for trains ¹ is—
Class 6 track	110 m.p.h.
Class 7 track	125 m.p.h.
Class 8 track	160 m.p.h. ²
Class 9 track	200 m.p.h.

¹ Freight may be transported at passenger train speeds if the following conditions are met:

(1) The vehicles utilized to carry such freight are of equal dynamic performance and have been qualified in accordance with Sections 213.345 and 213.329(d) of this subpart.

(2) The load distribution and securement in the freight vehicle will not adversely affect the dynamic performance of the vehicle. The axle loading pattern is uniform and does not exceed the passenger locomotive axle loadings utilized in passenger service operating at the same maximum speed.

(3) No carrier may accept or transport a hazardous material, as defined at 49 CFR 171.8, except as provided in Column 9A of the Hazardous Materials Table (49 CFR 172.101) for movement in the same train as a passenger-carrying vehicle or in Column 9B of the Table for movement in a train with no passenger-carrying vehicles.

² Operating speeds in excess of 150 m.p.h. are authorized by this part only in conjunction with a rule of particular applicability addressing other safety issues presented by the system.

(b) If a segment of track does not meet all of the requirements for its intended class, it is to be reclassified to the next lower class of track for which it does meet all of the requirements of this subpart. If a segment does not meet all of the requirements for Class 6, the requirements for Classes 1 through 5 apply.

§ 213.309 Restoration or renewal of track under traffic conditions.

(a) Restoration or renewal of track under traffic conditions is limited to the replacement of worn, broken, or missing components or fastenings that do not affect the safe passage of trains.

(b) The following activities are expressly prohibited under traffic conditions:

(1) Any work that interrupts rail continuity, e.g., as in joint bar replacement or rail replacement;

(2) Any work that adversely affects the lateral or vertical stability of the track with the exception of spot tamping an isolated condition where not more than 15 lineal feet of track are involved at any one time and the ambient air temperature is not above 95 degrees Fahrenheit; and

(3) Removal and replacement of the rail fastenings on more than one tie at a time within 15 feet.

§ 213.311 Measuring track not under load.

When unloaded track is measured to determine compliance with requirements of this subpart, evidence of rail movement, if any, that occurs while the track is loaded shall be added to the measurements of the unloaded track.

§ 213.317 Waivers.

(a) Any owner of track to which this subpart applies may petition the Federal Railroad Administrator for a waiver from any or all requirements prescribed in this subpart.

(b) Each petition for a waiver under this section shall be filed in the manner and contain the information required by §§ 211.7 and 211.9 of this chapter.

(c) If the Administrator finds that a waiver is in the public interest and is consistent with railroad safety, the Administrator may grant the waiver subject to any conditions the Administrator deems necessary. Where a waiver is granted, the Administrator publishes a notice containing the reasons for granting the waiver.

§ 213.319 Drainage.

Each drainage or other water carrying facility under or immediately adjacent to the roadbed shall be maintained and kept free of obstruction, to accommodate expected water flow for the area concerned.

§ 213.321 Vegetation.

Vegetation on railroad property which is on or immediately adjacent to roadbed shall be controlled so that it does not —

(a) Become a fire hazard to track-carrying structures;

(b) Obstruct visibility of railroad signs and signals:

(1) Along the right of way, and

(2) At highway-rail crossings;

(c) Interfere with railroad employees performing normal trackside duties;

(d) Prevent proper functioning of signal and communication lines; or

(e) Prevent railroad employees from visually inspecting moving equipment from their normal duty stations.

§ 213.323 Track gage.

(a) Gage is measured between the heads of the rails at right-angles to the rails in a plane five-eighths of an inch below the top of the rail head.

(b) Gage shall be within the limits prescribed in the following table:

Class of track	The gage must be at least—	But not more than—	The change of gage within 31 feet must not be greater than—
6	4'8"	4'9 1/4"	1/2"
7	4'8"	4'9 1/4"	1/2"
8	4'8"	4'9 1/4"	1/2"
9	4'8 1/4"	4'9 1/4"	1/2"

§ 213.327 Alinement.

(a) Uniformity at any point along the track is established by averaging the measured mid-chord offset values for nine consecutive points centered around that point and which are spaced according to the following table:

Chord length	Spacing
31'	7'9"
62'	15'6"
124'	31'0"

(b) For a single deviation, alinement may not deviate from uniformity more than the amount prescribed in the following table:

Class of track	The deviation from uniformity of the mid-chord offset for a 31-foot chord may not be more than— (inches)	The deviation from uniformity of the mid-chord offset for a 62-foot chord may not be more than— (inches)	The deviation from uniformity of the mid-chord offset for a 124-foot chord may not be more than— (inches)
6	1/2	3/4	1 1/2
7	1/2	1/2	1 1/4
8	1/2	1/2	3/4
9	1/2	1/2	3/4

(c) For three or more non-overlapping deviations from uniformity in track alinement occurring within a distance equal to five times the specified chord length, each of which exceeds the limits in the following table, each owner of the track to which this subpart applies shall maintain the alinement of the track within the limits prescribed for each deviation:

Class of track	The deviation from uniformity of the mid-chord offset for a 31-foot chord may not be more than— (inches)	The deviation from uniformity of the mid-chord offset for a 62-foot chord may not be more than— (inches)	The deviation from uniformity of the mid-chord offset for a 124-foot chord may not be more than— (inches)
6	3/8	1/2	1
7	3/8	3/8	7/8
8	3/8	3/8	1/2
9	3/8	3/8	1/2

§ 213.329 Curves, elevation and speed limitations.

(a) The maximum crosslevel on the outside rail of a curve may not be more than 7 inches. The outside rail of a curve may not be more than 1/2 inch lower than the inside rail.

(b) (1) The maximum allowable operating speed for each curve is determined by the following formula:

$$V_{max} = \sqrt{\frac{E_a + E_u}{0.0007D}}$$

D = Degree of curvature (degrees) ⁵.
 3 = 3 inches of unbalance.

$$V_{max} = \sqrt{\frac{E_a + 3}{0.0007D}}$$

Where—

V_{max} = Maximum allowable operating speed (miles per hour).

E_a = Actual elevation of the outside rail (inches) ⁴.

(2) Appendix A includes tables showing maximum allowable operating speeds computed in accordance with this formula for various elevations and degrees of curvature for track speeds greater than 90 m.p.h.

(c) For rolling stock meeting the requirements specified in paragraph (d) of this section, the maximum operating speed for each curve may be determined by the following formula:

Where—

V_{max} = Maximum allowable operating speed (miles per hour).

E_a = Actual elevation of the outside rail (inches) ⁴.

D = Degree of curvature (degrees) ⁵.

E_u = Unbalanced elevation (inches).

(d) Qualified equipment may be operated at curving speeds determined by the formula in paragraph (c) of this section, provided each specific class of equipment is approved for operation by

⁴ Actual elevation for each 155 foot track segment in the body of the curve is determined by averaging the elevation for 10 points through the segment at 15.5 foot spacing. If the curve length is less than 155 feet, average the points through the full length of the body of the curve. If E_a exceeds 4 inches, the V_{max} formula applies to the spirals on both ends of the curve.

⁵ Degree of curvature is determined by averaging the degree of curvature over the same track segment as the elevation.

the Federal Railroad Administration and the railroad demonstrates that—

(1) When positioned on a track with uniform superelevation, E_a , reflecting the intended target cant deficiency, E_a , no wheel of the equipment unloads to a value of 60 percent or less of its static value on perfectly level track and, for passenger-carrying equipment, the roll angle between the floor of the vehicle and the horizontal does not exceed 5.7 degrees.

(2) When positioned on a track with a uniform 7-inch superelevation, no wheel unloads to a value less than 60% of its static value on perfectly level track and, for passenger-carrying equipment, the angle, measured about the roll axis, between the floor of the vehicle and the horizontal does not exceed 8.6 degrees.

(e) The track owner shall notify the Federal Railroad Administrator no less

than thirty calendar days prior to any proposed implementation of the higher curving speeds allowed when the "E_a" term, above, will exceed three inches. This notification shall be in writing and shall contain, at a minimum, the following information:

(1) A complete description of the class of equipment involved, including schematic diagrams of the suspension system and the location of the center of gravity above top of rail;

(2) A complete description of the test procedure⁶ and instrumentation used to qualify the equipment and the maximum values for wheel unloading and roll angles which were observed during testing;

(3) Procedures or standards in effect which relate to the maintenance of the suspension system for the particular class of equipment:

(4) Identification of line segment on which the higher curving speeds are proposed to be implemented.

(f) A track owner, or an operator of a passenger or commuter service, who provides passenger or commuter service over trackage of more than one track owner with the same class of equipment, may provide written notification to the Federal Railroad Administrator with the written consent of the other affected track owners.

§ 213.331 Track surface.

(a) For a single deviation in track surface, each owner of the track to which this subpart applies shall maintain the surface of its track within the limits prescribed in the following table:

Track surface	Class of track			
	6 (inches)	7 (inches)	8 (inches)	9 (inches)
The deviation from uniform ¹ profile on either rail at the midordinate of a 31-foot chord may not be more than	1	1	3/4	1/2
The deviation from uniform profile on either rail at the midordinate of a 62-foot chord may not be more than	1	1	1	3/4
The deviation from uniform profile on either rail at the midordinate of a 124-foot chord may not be more than	1 3/4	1 1/2	1 1/4	1 1/4
The difference in crosslevel between any two points less than 62 feet apart may not be more than ²	1 1/2	1 1/2	1 1/2	1 1/2

¹ Uniformity for profile is established by placing the midpoint of the specified chord at the point of maximum measurement.

² However, to control harmonics on jointed track with staggered joints, the crosslevel differences shall not exceed 1 1/4 inches in all of six consecutive pairs of joints, as created by 7 joints. Track with joints staggered less than 10 feet shall not be considered as having staggered joints. Joints within the 7 low joints outside of the regular joint spacing shall not be considered as joints for purposes of this footnote.

(b) For three or more non-overlapping deviations in track surface occurring within a distance equal to five times the specified chord length, each of which exceeds the limits in the following table, each owner of the track to which this subpart applies shall maintain the surface of the track within the limits prescribed for each deviation:

Track surface	Class of track			
	6 (inches)	7 (inches)	8 (inches)	9 (inches)
The deviation from uniform profile on either rail at the midordinate of a 31-foot chord may not be more than	3/4	3/4	1/2	3/8
The deviation from uniform profile on either rail at the midordinate of a 62-foot chord may not be more than	3/4	3/4	3/4	1/2
The deviation from uniform profile on either rail at the midordinate of a 124-foot chord may not be more than	1 1/4	1	7/8	7/8

§ 213.333 Automated vehicle inspection systems.

(a) For track Class 7, a qualifying Track Geometry Measurement System (TGMS) vehicle shall be operated at least twice within 120 calendar days with not less than 30 days between inspections. For track Classes 8 and 9, it shall be operated at least twice within 60 days with not less than 15 days between inspections.

(b) A qualifying TGMS shall meet or exceed minimum design requirements which specify that—

(1) Track geometry measurements shall be taken no more than 3 feet away from the contact point of wheels carrying a vertical load of no less than 10,000 pounds per wheel;

(2) Track geometry measurements shall be taken and recorded on a distance-based sampling interval which shall not exceed 2 feet; and

(3) Calibration procedures and parameters are assigned to the system which assure that measured and recorded values accurately represent track conditions. Track geometry measurements recorded by the system shall not differ on repeated runs at the same site at the same speed more than 1/8 inch.

(c) A qualifying TGMS shall be capable of measuring and processing the necessary track geometry parameters, at an interval of no more than every 2 feet,

⁶ The test procedure may be conducted in a test facility whereby all wheels on one side (right or

left) of the equipment are raised or lowered by six and then seven inches, the vertical wheel loads

under each wheel are measured and a level is used to record the angle through which the floor of the vehicle has been rotated.

which enables the system to determine compliance with: § 213.323, Track gage; § 213.327, Alinement; § 213.329, Curves; elevation and speed limitations; and § 213.331, Track surface.

(d) A qualifying TGMS shall be capable of producing, within 24 hours of the inspection, output reports that —

(1) Provide a continuous plot, on a constant-distance axis, of all measured track geometry parameters required in paragraph (c) of this section;

(2) Provide an exception report containing a systematic listing of all track geometry conditions which constitute an exception to the class of track over the segment surveyed.

(e) The output reports required under paragraph (c) of this section shall contain sufficient location identification information which enable field forces to easily locate indicated exceptions.

(f) Following a track inspection performed by a qualifying TGMS, the track owner shall, within two days after the inspection, field verify and institute remedial action for all exceptions to the class of track.

(g) The track owner shall maintain for a period of one year following an inspection performed by a qualifying TGMS, copy of the plot and the exception printout for the track segment involved, and additional records which:

(1) Specify the date the inspection was made and the track segment involved; and

(2) Specify the location, remedial action taken, and the date thereof, for all listed exceptions to the class.

(h) For track Classes 8 and 9, a qualifying Gage Restraint Measurement System (GRMS) shall be operated at least once annually with at least 180 days between inspections to continuously compare loaded track gage to unloaded gage under a known loading condition. The lateral capacity of the track structure shall not permit a

gage widening ratio (GWR) greater than 0.5 inches.

(i) A GRMS shall meet or exceed minimum design requirements which specify that—

(1) Gage restraint shall be measured between the heads of the rail—

(i) At an interval not exceeding 16 inches;

(ii) Under an applied vertical load of no less than 10,000 pounds per rail;

(iii) Under an applied lateral load which provides for lateral/vertical load ratio of between 0.5 and 1.25⁷, and a load severity greater than 3,000 pounds but less than 8,000 pounds per rail.

Load severity is defined by the formula—

$$S = L - cV$$

where:

S = Load severity, defined as the lateral load applied to the fastener system (pounds).

L = Actual lateral load applied (pounds).

c = Coefficient of friction between rail/tie which is assigned a nominal value of (0.4).

V = Actual vertical load applied (pounds).

(2) The measured gage value shall be converted to a gage widening ratio (GWR) as follows:

$$GWR = \frac{(LTG - UTG)}{L} \times 16,000$$

Where:

UTG=Unloaded track gage measured by the GRMS vehicle at a point no less than 10 feet from any lateral or vertical load application.

LTG=Loaded track gage measured by the GRMS vehicle at the point of application of the lateral load.

L=Actual lateral load applied (pounds).

(j) At least one vehicle in one train per day operating in Classes 8 and 9 shall be equipped with functioning on-board truck frame and carbody accelerometers.

Each track owner shall have in effect written procedures for the notification of track personnel when on-board accelerometers on trains in Classes 8 and 9 indicate a possible track-related condition.

(k) For track Classes 7, 8 and 9, an instrumented car having dynamic response characteristics that are representative of other equipment assigned to service or a portable device that monitors on-board instrumentation on trains shall be operated over the track at the revenue speed profile at a frequency of at least twice within 60 days with not less than 15 days between inspections. The instrumented car or the portable device shall monitor vertically and laterally oriented accelerometers placed near the end of the vehicle at the floor level. In addition, accelerometers shall be mounted on the truck frame. If the carbody lateral, carbody vertical, or truck frame lateral safety limits in the following table of vehicle/track interaction safety limits are exceeded, speeds will be reduced until these safety limits are not exceeded.

(l) For track Classes 8 and 9, an instrumented car having dynamic response characteristics that are representative of other equipment assigned to service shall be operated over the track at the revenue speed profile annually with not less than 180 days between inspections. The instrumented car shall be equipped with functioning instrumented wheelsets to measure wheel/rail forces. If the wheel/rail force limits in the following table of vehicle/track interaction safety limits are exceeded, speeds will be reduced until these safety limits are not exceeded.

(m) The track owner shall maintain a copy of the most recent exception printouts for the inspections required under paragraphs (k) and (l) of this section.

VEHICLE/TRACK INTERACTION SAFETY LIMITS

Parameter	Safety limit	Filter/window	Requirements
Wheel/Rail Forces¹			
Single Wheel Vertical Load Ratio	≥0.1	5 ft	No wheel of the equipment shall be permitted to unload to less than 10% of the static vertical wheel load. The static vertical wheel load is defined as the load that the wheel would carry when stationary on level track. The vertical wheel load limit shall be increased by the amount of measurement error.
Single Wheel LV Ratio	≤ tanδ— .5 1 + .5tanδ	5 ft	The ratio of the lateral force that any wheel exerts on an individual rail to the vertical force exerted by the same wheel on the rail shall be less than the safety limit calculated for the wheel's flange angle (δ).

⁷ GRMS equipment using load combinations developing LV ratios which exceed 0.8 shall be

operated with caution to protect against the risk of wheel climb by the test wheelset.

VEHICLE/TRACK INTERACTION SAFETY LIMITS

Parameter	Safety limit	Filter/window	Requirements
Net Axle L/V Ratio	≤ 0.5	5 ft	The net lateral force exerted by any axle on the track shall not exceed 50% of the static vertical load that the axle exerts on the track.
Truck Side L/V Ratio	≤ 0.6	5 ft	The ratio of the lateral forces that the wheels on one side of any truck exert on an individual rail to the vertical forces exerted by the same wheels on that rail shall be less than 0.6.
Accelerations			
Carbody Lateral ²	≤ 0.5 g peak-to-peak	10 Hz 1 sec window.	The peak-to-peak accelerations, measured as the algebraic difference between the two extreme values of measured acceleration in a one second time period, shall not exceed 0.5 g.
Carbody Vertical ²	≤ 0.6 g peak-to-peak	10 Hz 1 sec window.	The peak-to-peak accelerations, measured as the algebraic difference between the two extreme values of measured acceleration in a one-second time period, shall not exceed 0.6 g.
Truck Lateral ³	≤ 0.4 g RMS mean-removed.	10 Hz 2 sec window.	Truck hunting ⁴ shall not develop below the maximum authorized speed.

¹ The lateral and vertical wheel forces shall be measured with instrumented wheelsets with the measurements processed through a low pass filter with a minimum cut-off frequency of 25 Hz. The sample rate for wheel force data shall be at least 250 samples/sec.

² Carbody lateral and vertical accelerations shall be measured near the car ends at the floor level.

³ Truck accelerations in the lateral direction shall be measured on the truck frame. The measurements shall be processed through a filter having a pass band of 0.5 to 10 Hz.

⁴ Truck hunting is defined as a sustained cyclic oscillation of the truck which is evidenced by lateral accelerations in excess of 0.4 g root mean square (mean-removed) for 2 seconds.

§ 213.334 Ballast; general.

Unless it is otherwise structurally supported, all track shall be supported by material which will—

(a) Transmit and distribute the load of the track and railroad rolling equipment to the subgrade;

(b) Restrain the track laterally, longitudinally, and vertically under dynamic loads imposed by railroad rolling equipment and thermal stress exerted by the rails;

(c) Provide adequate drainage for the track; and

(d) Maintain proper track crosslevel, surface, and alignment.

§ 213.335 Crossties.

(a) Crossties shall be made of a material to which rail can be securely fastened.

(b) Each 39 foot segment of track shall have—

(1) A sufficient number of crossties which in combination provide effective support that will—

(i) Hold gage within the limits prescribed in § 213.323(b);

(ii) Maintain surface within the limits prescribed in § 213.331; and

(iii) Maintain alignment within the limits prescribed in § 213.327.

(2) The minimum number and type of crossties specified in paragraph (c) of this section effectively distributed to support the entire segment; and

(3) Crossties of the type specified in paragraph (c) of this section that are (is)

located at a joint location as specified in paragraph (e) of this section.

(c) For non-concrete tie construction, each 39 foot segment of Class 6 track shall have fourteen crossties; Classes 7, 8 and 9 shall have 18 crossties which are not—

(1) Broken through;

(2) Split or otherwise impaired to the extent the crossties will allow the ballast to work through, or will not hold spikes or rail fasteners;

(3) So deteriorated that the tie plate or base of rail can move laterally $\frac{3}{8}$ inch relative to the crossties;

(4) Cut by the tie plate through more than 40 percent of a crosstie's thickness;

(5) Configured with less than 2 rail holding spikes or fasteners per tie plate; or

(6) So unable, due to insufficient fastener toeload, to maintain longitudinal restraint and maintain rail hold down and gage.

(d) For concrete tie construction, each 39 foot segment of Class 6 track shall have fourteen crossties. Classes 7, 8 and 9 shall have 16 crossties which are not—

(1) So deteriorated that the prestress strands are ineffective or withdrawn into the tie at one end and the tie exhibits structural cracks in the rail seat or in the gage of track;

(2) Configured with less than 2 fasteners on the same rail;

(3) So deteriorated in the vicinity of the rail fastener such that the fastener

assembly may pull out or move laterally more than $\frac{3}{8}$ inch relative to the crosstie;

(4) So deteriorated that the fastener base plate or base of rail can move laterally more than $\frac{3}{8}$ inch relative to the crossties;

(5) So deteriorated that rail seat abrasion is sufficiently deep so as to cause loss of rail fastener toeload;

(6) Completely broken through; or

(7) So unable, due to insufficient fastener toeload, to maintain longitudinal restraint and maintain rail hold down and gage.

(e) Class 6 track shall have one non-defective crosstie whose centerline is within 18 inches of the rail joint location or two crossties whose center lines are within 24 inches either side of the rail joint location. Class 7, 8, and 9 track shall have two non-defective ties within 24 inches each side of the rail joint.

(f) For track constructed without crossties, such as slab track and track connected directly to bridge structural components, the track structure shall meet the requirements of paragraphs (b)(1)(i), (ii), and (iii) of this section.

(g) In Classes 7, 8 and 9 there shall be at least three non-defective ties each side of a defective tie.

(h) Where timber crossties are in use there shall be tie plates under the running rails on at least nine of 10 consecutive ties.

(i) No metal object which causes a concentrated load by solely supporting a rail shall be allowed between the base of the rail and the bearing surface of the tie plate.

§ 213.337 Defective rails.

(a) When an owner of track to which this part applies learns, through inspection or otherwise, that a rail in that track contains any of the defects listed in the following table, a person designated under § 213.305 shall determine whether or not the track may

continue in use. If the person determines that the track may continue in use, operation over the defective rail is not permitted until—

- (1) The rail is replaced; or
- (2) The remedial action prescribed in the table is initiated—

REMEDIAL ACTION

Defect	Length of defect (inch)		Percent of rail head cross-sectional area weakened by defect		If defective rail is not replaced, take the remedial action prescribed in note
	More than	But not more than	Less than	But not less than	
Transverse fissure			70 100	5 70 100	B. A2. A.
Compound fissure			70 100	5 70 100	B. A2. A.
Detail fracture Engine burn fracture Defective weld.			25 80 100	5 25 80 100	C. D. [A2] or [E and H]. [A] or [E and H].
Horizontal split head Vertical split head Split web Piped rail.	1 2 4	2 4			H and F. I and G. B.
Head web separation	(¹)	(¹)	(¹)		A. H and F.
Bolt hole crack	1/2 1 1 1/2	1 1 1/2			H and G. A.
Broken base	(¹) 1 6	(¹) 6	(¹)		A. D. [A] or [E and I]. A or E.
Ordinary break					D.
Damaged rail					H.
Flattened rail	Depth ≥ 3/8 and	Length ≥ 8			

(¹) Break out in rail head.

Notes:

A. Assign person designated under § 213.305 to visually supervise each operation over defective rail.

A2. Assign person designated under § 213.305 to make visual inspection. That person may authorize operation to continue without visual supervision at a maximum of 10 m.p.h. for up to 24 hours prior to another such visual inspection or replacement or repair of the rail.

B. Limit operating speed over defective rail to that as authorized by a person designated under § 213.305(a)(1)(i) or (ii). The operating speed cannot be over 30 m.p.h.

C. Apply joint bars bolted only through the outermost holes to defect within 20 days after it is determined to continue the track in use. Limit operating speed over defective rail to 30 m.p.h. until joint bars are applied; thereafter, limit speed to 50 m.p.h. When a search for internal rail defects is conducted under § 213.339 and defects are discovered which require remedial action C, the operating speed shall be limited to 50 m.p.h. for a period not to exceed 4 days. If the defective rail has not been removed from the track or a permanent repair made within 4 days of the discovery, limit operating speed over the defective rail to 30 m.p.h. until joint

bars are applied; thereafter, limit speed to 50 m.p.h.

D. Apply joint bars bolted only through the outermost holes to defect within 10 days after it is determined to continue the track in use. Limit operating speed over the defective rail to 30 m.p.h. or less as authorized by a person designated under § 213.305(a)(1)(i) or (ii) until joint bars are applied; thereafter, limit speed to 50 m.p.h.

E. Apply joint bars to defect and bolt in accordance with § 213.351(d) and (e).

F. Inspect rail 90 days after it is determined to continue the track in use.

G. Inspect rail 30 days after it is determined to continue the track in use.

H. Limit operating speed over defective rail to 50 m.p.h.

I. Limit operating speed over defective rail to 30 m.p.h.

(b) As used in this section—

(1) *Transverse fissure* means a progressive crosswise fracture starting from a crystalline center or nucleus inside the head from which it spreads outward as a smooth, bright, or dark, round or oval surface substantially at a right angle to the length of the rail. The distinguishing features of a transverse

fissure from other types of fractures or defects are the crystalline center or nucleus and the nearly smooth surface of the development which surrounds it.

(2) *Compound fissure* means a progressive fracture originating in a horizontal split head which turns up or down in the head of the rail as a smooth, bright, or dark surface progressing until substantially at a right angle to the length of the rail. Compound fissures require examination of both faces of the fracture to locate the horizontal split head from which they originate.

(3) *Horizontal split head* means a horizontal progressive defect originating inside of the rail head, usually one-quarter inch or more below the running surface and progressing horizontally in all directions, and generally accompanied by a flat spot on the running surface. The defect appears as a crack lengthwise of the rail when it reaches the side of the rail head.

(4) *Vertical split head* means a vertical split through or near the middle of the head, and extending into or

through it. A crack or rust streak may show under the head close to the web or pieces may be split off the side of the head.

(5) *Split web* means a lengthwise crack along the side of the web and extending into or through it.

(6) *Piped rail* means a vertical split in a rail, usually in the web, due to failure of the shrinkage cavity in the ingot to unite in rolling.

(7) *Broken base* means any break in the base of the rail.

(8) *Detail fracture* means a progressive fracture originating at or near the surface of the rail head. These fractures should not be confused with transverse fissures, compound fissures, or other defects which have internal origins. Detail fractures may arise from shelly spots, head checks, or flaking.

(9) *Engine burn fracture* means a progressive fracture originating in spots where driving wheels have slipped on top of the rail head. In developing downward they frequently resemble the compound or even transverse fissures with which they should not be confused or classified.

(10) *Ordinary break* means a partial or complete break in which there is no sign of a fissure, and in which none of the other defects described in this paragraph (b) are found.

(11) *Damaged rail* means any rail broken or injured by wrecks, broken, flat, or unbalanced wheels, slipping, or similar causes.

(12) *Flattened rail* means a short length of rail, not a joint, which has flattened out across the width of the rail head to a depth of $\frac{3}{8}$ inch or more below the rest of the rail. Flattened rail occurrences have no repetitive regularity and thus do not include corrugations, and have no apparent localized cause such as a weld or engine burn. Their individual length is relatively short, as compared to a condition such as head flow on the low rail of curves.

(13) *Bolt hole crack* means a crack across the web, originating from a bolt hole, and progressing on a path either inclined upward toward the rail head or inclined downward toward the base. Fully developed bolt hole cracks may continue horizontally along the head/web or base/web fillet, or they may progress into and through the head or base to separate a piece of the rail end from the rail. Multiple cracks occurring in one rail end are considered to be a single defect. However, bolt hole cracks occurring in adjacent rail ends within the same joint shall be reported as separate defects.

(14) *Defective weld* means a field or plant weld containing any

discontinuities or pockets, exceeding 5 percent of the rail head area individually or 10 percent in the aggregate, oriented in or near the transverse plane, due to incomplete penetration of the weld metal between the rail ends, lack of fusion between weld and rail end metal, entrapment of slag or sand, under-bead or other shrinkage cracking, or fatigue cracking. Weld defects may originate in the rail head, web, or base, and in some cases, cracks may progress from the defect into either or both adjoining rail ends.

(15) *Head and web separation* means a progressive fracture, longitudinally separating the head from the web of the rail at the head fillet area.

§ 213.339 Inspection of rail in service.

(a) A continuous search for internal defects shall be made of all rail in track at least twice annually with not less than 120 days between inspections.

(b) Inspection equipment shall be capable of detecting defects between joint bars, in the area enclosed by joint bars.

(c) Each defective rail shall be marked with a highly visible marking on both sides of the web and base.

(d) If the person assigned to operate the rail defect detection equipment being used determines that, due to rail surface conditions, a valid search for internal defects could not be made over a particular length of track, the test on that particular length of track cannot be considered as a search for internal defects under § 213.337(a).

(e) If a valid search for internal defects cannot be conducted for reasons described in paragraph (d) of this section, the track owner shall, before the expiration of time limits—

(1) Conduct a valid search for internal defects;

(2) Reduce operating speed to a maximum of 25 miles per hour until such time as a valid search for internal defects can be made; or

(3) Remove the rail from service.

§ 213.341 Initial inspection of new rail and welds.

The track owner shall provide for the initial inspection of newly manufactured rail, and for initial inspection of new welds made in either new or used rail. A track owner may demonstrate compliance with this section by providing for:

(a) *In-service inspection*—A scheduled periodic inspection of rail and welds that have been placed in service, if conducted in accordance with the provisions of § 213.339, and if conducted not later than 90 days after installation, shall constitute compliance

with paragraphs (b) and (c) of this section;

(b) *Mill inspection*—A continuous inspection at the rail manufacturer's mill shall constitute compliance with the requirement for initial inspection of new rail, provided that the inspection equipment meets the applicable requirements specified in § 213.339. The track owner shall obtain a copy of the manufacturer's report of inspection and retain it as a record until the rail receives its first scheduled inspection under § 213.339;

(c) *Welding plant inspection*—A continuous inspection at a welding plant, if conducted in accordance with the provisions of paragraph (b) of this section, and accompanied by a plant operator's report of inspection which is retained as a record by the track owner, shall constitute compliance with the requirements for initial inspection of new rail and plant welds, or of new plant welds made in used rail; and

(d) *Inspection of field welds*—An initial inspection of field welds, either those joining the ends of CWR strings or those made for isolated repairs, shall be conducted not less than one day and not more than 30 days after the welds have been made. The initial inspection may be conducted by means of portable test equipment. The track owner shall retain a record of such inspections until the welds receive their first scheduled inspection under § 213.339.

(e) Each defective rail found during inspections conducted under paragraph (a) or (d) of this section shall be marked with highly visible markings on both sides of the web and base and the remedial action as appropriate under § 213.337 will apply.

§ 213.343 Continuous welded rail (CWR).

Each track owner with track constructed of CWR shall have in effect written procedures which address the installation, adjustment, maintenance and inspection of CWR, and a training program for the application of those procedures, which shall be submitted to the Federal Railroad Administration within six months following the effective date of this rule. FRA reviews each plan for compliance with the following—

(a) Procedures for the installation and adjustment of CWR which include—

(1) Designation of a desired rail installation temperature range for the geographic area in which the CWR is located; and

(2) De-stressing procedures/methods which address proper attainment of the desired rail installation temperature range when adjusting CWR.

(b) Rail anchoring or fastening requirements that will provide sufficient restraint to limit longitudinal rail and crosstie movement to the extent practical, and specifically addressing CWR rail anchoring or fastening patterns on bridges, bridge approaches, and at other locations where possible longitudinal rail and crosstie movement associated with normally expected train-induced forces, is restricted.

(c) Procedures which specifically address maintaining a desired rail installation temperature range when cutting CWR including rail repairs, in-track welding, and in conjunction with adjustments made in the area of tight track, a track buckle, or a pull-apart. Rail repair practices shall take into consideration existing rail temperature so that—

(1) When rail is removed, the length installed shall be determined by taking into consideration the existing rail temperature and the desired rail installation temperature range; and

(2) Under no circumstances should rail be added when the rail temperature is below that designated by paragraph (a)(1) of this section, without provisions for later adjustment.

(d) Procedures which address the monitoring of CWR in curved track for inward shifts of alignment toward the center of the curve as a result of disturbed track.

(e) Procedures which control train speed on CWR track when—

(1) Maintenance work, track rehabilitation, track construction, or any other event occurs which disturbs the roadbed or ballast section and reduces the lateral and/or longitudinal resistance of the track; and

(2) In formulating the procedures under this paragraph (e), the track owner shall—

(i) Determine the speed required, and the duration and subsequent removal of any speed restriction based on the restoration of the ballast, along with sufficient ballast re-consolidation to stabilize the track to a level that can accommodate expected train-induced forces. Ballast re-consolidation can be achieved through either the passage of train tonnage or mechanical stabilization procedures, or both; and

(ii) Take into consideration the type of crossties used.

(f) Procedures which prescribe when physical track inspections are to be performed to detect buckling prone conditions in CWR track. At a minimum, these procedures shall address inspecting track to identify—

(1) Locations where tight or kinky rail conditions are likely to occur;

(2) Locations where track work of the nature described in paragraph (e)(1) of this section have recently been performed; and

(3) In formulating the procedures under this paragraph (f), the track owner shall—

(i) Specify the timing of the inspection; and

(ii) Specify the appropriate remedial actions to be taken when buckling prone conditions are found.

(g) The track owner shall have in effect a comprehensive training program for the application of these written CWR procedures, with provisions for periodic re-training, for those individuals designated under § 213.305(c) of this part as qualified to supervise the installation, adjustment, and maintenance of CWR track and to perform inspections of CWR track.

(h) The track owner shall prescribe recordkeeping requirements necessary to provide an adequate history of track constructed with CWR. At a minimum, these records shall include:

(1) Rail temperature, location and date of CWR installations. This record shall be retained for at least one year; and

(2) A record of any CWR installation or maintenance work that does not conform with the written procedures. Such record shall include the location of the rail and be maintained until the CWR is brought into conformance with such procedures.

(i) As used in this section—

(1) *Adjusting/de-stressing* means the procedure by which a rail's temperature is re-adjusted to the desired value. It typically consists of cutting the rail and removing rail anchoring devices, which provides for the necessary expansion and contraction, and then re-assembling the track.

(2) *Buckling incident* means the formation of a lateral mis-alignment sufficient in magnitude to constitute a deviation of 5 inches measured with a 62-foot chord. These normally occur when rail temperatures are relatively high and are caused by high longitudinal compressive forces.

(3) *Continuous welded rail (CWR)* means rail that has been welded together into lengths exceeding 400 feet.

(4) *Desired rail installation temperature range* means the rail temperature range, within a specific geographical area, at which forces in CWR should not cause a buckling incident in extreme heat, or a pull-apart during extreme cold weather.

(5) *Disturbed track* means the disturbance of the roadbed or ballast section, as a result of track maintenance or any other event, which reduces the

lateral or longitudinal resistance of the track, or both.

(6) *Mechanical stabilization* means a type of procedure used to restore track resistance to disturbed track following certain maintenance operations. This procedure may incorporate dynamic track stabilizers or ballast consolidators, which are units of work equipment that are used as a substitute for the stabilization action provided by the passage of tonnage trains.

(7) *Rail anchors* means those devices which are attached to the rail and bear against the side of the crosstie to control longitudinal rail movement. Certain types of rail fasteners also act as rail anchors and control longitudinal rail movement by exerting a downward clamping force on the upper surface of the rail base.

(8) *Rail temperature* means the temperature of the rail, measured with a rail thermometer.

(9) *Tight/kinky rail* means CWR which exhibits minute alignment irregularities which indicate that the rail is in a considerable amount of compression.

(10) *Train-induced forces* means the vertical, longitudinal, and lateral dynamic forces which are generated during train movement and which can contribute to the buckling potential.

(11) *Track lateral resistance* means the resistance provided to the rail/crosstie structure against lateral displacement.

(12) *Track longitudinal resistance* means the resistance provided by the rail anchors/rail fasteners and the ballast section to the rail/crosstie structure against longitudinal displacement.

§ 213.345 Vehicle qualification testing.

(a) All rolling stock types which operate at Class 6 speeds and above shall be qualified for operation for their intended track classes in order to demonstrate that the vehicle dynamic response to track alignment and geometry variations are within acceptable limits to assure safe operation. Rolling stock operating in Class 6 within one year prior to the promulgation of this subpart shall be considered as being successfully qualified for Class 6 track and vehicles presently operating at Class 7 speeds by reason of conditional waivers shall be considered as qualified for Class 7.

(b) The qualification testing shall ensure that, at any speed less than 10 m.p.h. above the proposed maximum operating speed, the equipment will not exceed the wheel/rail force safety limits and the truck lateral accelerations

specified in § 213.333, and the testing shall demonstrate the following:

(1) The vertical acceleration, as measured by a vertical accelerometer mounted on the car floor, shall be limited to no greater than 0.55g single event, peak-to-peak.

(2) The lateral acceleration, as measured by a lateral accelerometer mounted on the car floor, shall be limited to no greater than 0.3g single event, peak-to-peak; and

(3) The combination of the lateral acceleration (L) and the vertical acceleration (V) within any period of two consecutive seconds as expressed by the square root of $(V^2 + L^2)$ shall be limited to no greater than 0.604, where L may not exceed 0.3g and V may not exceed 0.55g.

(c) To obtain the test data necessary to support the analysis required in paragraphs (a) and (b) of this section, the track owner shall have a test plan which shall consider the operating practices and conditions, signal system, road crossings and trains on adjacent tracks during testing. The track owner shall establish a target maximum testing speed (at least 10 m.p.h. above the maximum proposed operating speed) and target test and operating conditions and conduct a test program sufficient to evaluate the operating limits of the track and equipment. The test program shall

demonstrate vehicle dynamic response as speeds are incrementally increased from acceptable Class 6 limits to the target maximum test speeds. The test shall be suspended at that speed where any of the safety limits specified in paragraph (b) are exceeded.

(d) At the end of the test, when maximum safe operating speed is known along with permissible levels of cant deficiency, an additional run shall be made with the subject equipment over the entire route proposed for revenue service at the speeds the railroad will request FRA to approve for such service and a second run again at 10 m.p.h. above this speed. A report of the test procedures and results shall be submitted to FRA upon the completions of the tests. The test report shall include the design flange angle of the equipment which shall be used for the determination of the lateral to vertical wheel load safety limit for the track/vehicle interaction safety measurements required per § 213.333(k).

(e) As part of the submittal required in paragraph (d) of the section, the operator shall include an analysis and description of the signal system and operating practices to govern operations in Classes 7 and 8. This statement shall include a statement of sufficiency in these areas for the class of operation. Operation at speeds in excess of 150

m.p.h. is authorized only in conjunction with a rule of particular applicability addressing other safety issues presented by the system.

(f) Based on test results and submissions, FRA will approve a maximum train speed and value of cant deficiency for revenue service.

§ 213.347 Automotive or railroad crossings at grade.

(a) There shall be no at-grade (level) highway crossings, public or private, or rail-to-rail crossings at-grade on Class 8 and 9 track.

(b) If train operation is projected at Class 7 speed for a track segment that will include rail-highway grade crossings, the track owner shall submit for FRA's approval a complete description of the proposed warning/barrier system to address the protection of highway traffic and high speed trains. Trains shall not operate at Class 7 speeds over any track segment having highway-rail grade crossings unless:

- (1) An FRA-approved warning/barrier system exists on that track segment; and
- (2) All elements of that warning/barrier system are functioning.

§ 213.349 Rail end mismatch.

Any mismatch of rails at joints may not be more than that prescribed by the following table—

Class of track	Any mismatch of rails at joints may not be more than the following—	
	On the tread of the rail ends (inch)	On the gage side of the rail ends (inch)
Class 6, 7, 8 and 9	1/8	1/8

§ 213.351 Rail joints.

(a) Each rail joint, insulated joint, and compromise joint shall be of a structurally sound design and dimensions for the rail on which it is applied.

(b) If a joint bar is cracked, broken, or because of wear allows excessive vertical movement of either rail when all bolts are tight, it shall be replaced.

(c) If a joint bar is cracked or broken between the middle two bolt holes it shall be replaced.

(d) Each rail shall be bolted with at least two bolts at each joint.

(e) Each joint bar shall be held in position by track bolts tightened to allow the joint bar to firmly support the abutting rail ends and to allow longitudinal movement of the rail in the joint to accommodate expansion and contraction due to temperature variations. When no-slip, joint-to-rail

contact exists by design, the requirements of this section do not apply. Those locations, when over 400 feet long, are considered to be continuous welded rail track and shall meet all the requirements for continuous welded rail track prescribed in this subpart.

(f) No rail shall have a bolt hole which is torch cut or burned.

(g) No joint bar shall be reconfigured by torch cutting.

§ 213.352 Torch cut rail.

(a) Except as a temporary repair in emergency situations no rail having a torch cut end shall be used. When a rail end with a torch cut is used in emergency situations, train speed over that rail shall not exceed the maximum allowable for Class 2 track. All torch cut rail ends in Class 6 shall be removed

within six months of September 21, 1998.

(b) Following the expiration of the time limits specified in paragraph (a) of this section, any torch cut rail end not removed shall be removed within 30 days of discovery. Train speed over that rail shall not exceed the maximum allowable for Class 2 track until removed.

§ 213.353 Turnouts, crossovers and lift rail assemblies or other transition devices on moveable bridges.

(a) In turnouts and track crossings, the fastenings must be intact and maintained so as to keep the components securely in place. Also, each switch, frog, and guard rail shall be kept free of obstructions that may interfere with the passage of wheels. Use of rigid rail crossings at grade is limited per § 213.347.

(b) Track shall be equipped with rail anchoring through and on each side of track crossings and turnouts, to restrain rail movement affecting the position of switch points and frogs. Elastic fasteners designed to restrict longitudinal rail movement are considered rail anchoring.

(c) Each flangeway at turnouts and track crossings shall be at least 1½ inches wide.

(d) For all turnouts and crossovers, and lift rail assemblies or other

transition devices on moveable bridges, the track owner shall prepare an inspection and maintenance Guidebook for use by railroad employees which shall be submitted to the Federal Railroad Administration. The Guidebook shall contain at a minimum—

- (1) Inspection frequency and methodology including limiting measurement values for all components subject to wear or requiring adjustment.
- (2) Maintenance techniques.

(e) Each hand operated switch shall be equipped with a redundant operating mechanism for maintaining the security of switch point position.

§ 213.355 Frog guard rails and guard faces; gage.

The guard check and guard face gages in frogs shall be within the limits prescribed in the following table—

Class of track	Guard check gage—The distance between the gage line of a frog to the guard line ¹ of its guard rail or guarding face, measured across the track at right angles to the gage line, ² may not be less than—	Guard face gage—The distance between guard lines, ¹ measured across the track at right angles to the gage line, ² may not be more than—
Class 6 track	4' 6½"	4' 5"
Class 7 track	4' 6½"	4' 5"
Class 8 track	4' 6½"	4' 5"
Class 9 track	4' 6½"	4' 5"

¹ A line along that side of the flangeway which is nearer to the center of the track and at the same elevation as the gage line.

² A line 5/8 inch below the top of the center line of the head of the running rail, or corresponding location of the tread portion of the track structure.

§ 213.357 Derails.

(a) Each track, other than a main track, which connects with a Class 7, 8 or 9 main track shall be equipped with a functioning derail of the correct size and type, unless railroad equipment on the track, because of grade characteristics cannot move to foul the main track.

(b) For the purposes of this section, a derail is a device which will physically stop or divert movement of railroad rolling stock or other railroad on-track equipment past the location of the device.

(c) Each derail shall be clearly visible. When in a locked position, a derail shall be free of any lost motion which would prevent it from performing its intended function.

(d) Each derail shall be maintained to function as intended.

(e) Each derail shall be properly installed for the rail to which it is applied.

(f) If a track protected by a derail is occupied by standing railroad rolling stock, the derail shall be in derailing position.

(g) Each derail on a track which is connected to a Class 7, 8 or 9 main track shall be interconnected with the signal system.

§ 213.359 Track stiffness.

(a) Track shall have a sufficient vertical strength to withstand the maximum vehicle loads generated at maximum permissible train speeds, cant deficiencies and surface defects. For

purposes of this section, vertical track strength is defined as the track capacity to constrain vertical deformations so that the track shall return following maximum load to a configuration in compliance with the vehicle/track interaction safety limits and geometry requirements of this subpart.

(b) Track shall have sufficient lateral strength to withstand the maximum thermal and vehicle loads generated at maximum permissible train speeds, cant deficiencies and lateral alignment defects. For purposes of this section lateral track strength is defined as the track capacity to constrain lateral deformations so that track shall return following maximum load to a configuration in compliance with the vehicle/track interaction safety limits and geometry requirements of this subpart.

§ 213.361 Right of way.

The track owner in Class 8 and 9 shall submit a barrier plan, termed a "right-of-way plan," to the Federal Railroad Administration for approval. At a minimum, the plan will contain provisions in areas of demonstrated need for the prevention of—

- (a) Vandalism;
- (b) Launching of objects from overhead bridges or structures into the path of trains; and
- (c) Intrusion of vehicles from adjacent rights of way.

§ 213.365 Visual inspections.

(a) All track shall be visually inspected in accordance with the schedule prescribed in paragraph (c) of this section by a person designated under § 213.305.

(b) Each inspection shall be made on foot or by riding over the track in a vehicle at a speed that allows the person making the inspection to visually inspect the track structure for compliance with this part. However, mechanical, electrical, and other track inspection devices may be used to supplement visual inspection. If a vehicle is used for visual inspection, the speed of the vehicle may not be more than 5 miles per hour when passing over track crossings and turnouts, otherwise, the inspection vehicle speed shall be at the sole discretion of the inspector, based on track conditions and inspection requirements. When riding over the track in a vehicle, the inspection will be subject to the following conditions—

(1) One inspector in a vehicle may inspect up to two tracks at one time provided that the inspector's visibility remains unobstructed by any cause and that the second track is not centered more than 30 feet from the track upon which the inspector is riding;

(2) Two inspectors in one vehicle may inspect up to four tracks at a time provided that the inspector's visibility remains unobstructed by any cause and that each track being inspected is centered within 39 feet from the track upon which the inspectors are riding;

(3) Each main track is actually traversed by the vehicle or inspected on foot at least once every two weeks, and each siding is actually traversed by the vehicle or inspected on foot at least once every month. On high density commuter railroad lines where track time does not permit an on track vehicle inspection, and where track centers are 15 foot or less, the requirements of this paragraph (b)(3) will not apply; and

(4) Track inspection records shall indicate which track(s) are traversed by the vehicle or inspected on foot as outlined in paragraph (b)(3) of this section.

(c) Each track inspection shall be made in accordance with the following schedule—

Class of track	Required frequency
6, 7, and 8.	Twice weekly with at least 2 calendar-day's interval between inspections.
9	Three times per week.

(d) If the person making the inspection finds a deviation from the requirements of this part, the person shall immediately initiate remedial action.

(e) Each switch, turnout, crossover, and lift rail assemblies on moveable bridges shall be inspected on foot at least weekly. The inspection shall be accomplished in accordance with the Guidebook required under § 213.353.

(f) In track Classes 8 and 9, if no train traffic operates for a period of eight hours, a train shall be operated at a speed not to exceed 100 miles per hour over the track before the resumption of operations at the maximum authorized speed.

§ 213.367 Special inspections.

In the event of fire, flood, severe storm, temperature extremes or other occurrence which might have damaged track structure, a special inspection shall be made of the track involved as soon as possible after the occurrence

and, if possible, before the operation of any train over that track.

§ 213.369 Inspection records.

(a) Each owner of track to which this part applies shall keep a record of each inspection required to be performed on that track under this subpart.

(b) Except as provided in paragraph (e) of this section, each record of an inspection under § 213.365 shall be prepared on the day the inspection is made and signed by the person making the inspection. Records shall specify the track inspected, date of inspection, location and nature of any deviation from the requirements of this part, and the remedial action taken by the person making the inspection. The owner shall designate the location(s) where each original record shall be maintained for at least one year after the inspection covered by the record. The owner shall also designate one location, within 100 miles of each state in which they conduct operations, where copies of record which apply to those operations are either maintained or can be viewed following 10 days notice by the Federal Railroad Administration.

(c) Rail inspection records shall specify the date of inspection, the location and nature of any internal defects found, the remedial action taken and the date thereof, and the location of any intervals of track not tested per § 213.339(d). The owner shall retain a rail inspection record for at least two years after the inspection and for one year after remedial action is taken.

(d) Each owner required to keep inspection records under this section shall make those records available for inspection and copying by the Federal Railroad Administrator.

(e) For purposes of compliance with the requirements of this section, an owner of track may maintain and transfer records through electronic transmission, storage, and retrieval provided that—

(1) The electronic system be designed such that the integrity of each record

maintained through appropriate levels of security such as recognition of an electronic signature, or other means, which uniquely identify the initiating person as the author of that record. No two persons shall have the same electronic identity;

(2) The electronic storage of each record shall be initiated by the person making the inspection within 24 hours following the completion of that inspection;

(3) The electronic system shall ensure that each record cannot be modified in any way, or replaced, once the record is transmitted and stored;

(4) Any amendment to a record shall be electronically stored apart from the record which it amends. Each amendment to a record shall be uniquely identified as to the person making the amendment;

(5) The electronic system shall provide for the maintenance of inspection records as originally submitted without corruption or loss of data; and

(6) Paper copies of electronic records and amendments to those records, that may be necessary to document compliance with this part, shall be made available for inspection and copying by the FRA and track inspectors responsible under § 213.305. Such paper copies shall be made available to the track inspectors and at the locations specified in paragraph (b) of this section.

(7) Track inspection records shall be kept available to persons who performed the inspection and to persons performing subsequent inspections.

(f) Each vehicle/track interaction safety record required under § 213.333 (g), and (m) shall be made available for inspection and copying by the FRA at the locations specified in paragraph (b) of this section.

Appendix A to Part 213—Maximum Allowable Curving Speeds

TABLE 1.—THREE INCHES UNBALANCE
[Elevation of outer rail (inches)]

Degree of curvature	0	½	1	1½	2	2½	3	3½	4	4½	5	5½	6
	Maximum allowable operating speed (mph)												
0°30'	93	100	107	113	120	125	131	136	141	146	151	156	160
0°40'	80	87	93	98	103	109	113	118	122	127	131	135	139
0°50'	72	78	83	88	93	97	101	106	110	113	117	121	124
1°00'	66	71	76	80	85	89	93	96	100	104	107	110	113
1°15'	59	63	68	72	76	79	83	86	89	93	96	99	101
1°30'	54	58	62	66	69	72	76	79	82	85	87	90	93
1°45'	50	54	57	61	64	67	70	73	76	78	81	83	86
2°00'	46	50	54	57	60	63	66	68	71	73	76	78	80
2°15'	44	47	50	54	56	59	62	64	67	69	71	74	76
2°30'	41	45	48	51	54	56	59	61	63	66	68	70	72
2°45'	40	43	46	48	51	54	56	58	60	62	65	66	68
3°00'	38	41	44	46	49	51	54	56	58	60	62	64	66

TABLE 1.—THREE INCHES UNBALANCE—Continued
[Elevation of outer rail (inches)]

Degree of curvature	0	1/2	1	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5	5 1/2	6
3°15'	36	39	42	45	47	49	51	54	56	57	59	61	63
3°30'	35	38	40	43	45	47	50	52	54	55	57	59	61
3°45'	34	37	39	41	44	46	48	50	52	54	55	57	59
4°00'	33	35	38	40	42	44	46	48	50	52	54	55	57
4°30'	31	33	36	38	40	42	44	45	47	49	50	52	54
5°00'	29	32	34	36	38	40	41	43	45	46	48	49	51
5°30'	28	30	32	34	36	38	40	41	43	44	46	47	48
6°00'	27	29	31	33	35	36	38	39	41	42	44	45	46
6°30'	26	28	30	31	33	35	36	38	39	41	42	43	45
7°00'	25	27	29	30	32	34	35	36	38	39	40	42	43
8°00'	23	25	27	28	30	31	33	34	35	37	38	39	40
9°00'	22	24	25	27	28	30	31	32	33	35	36	37	38
10°00'	21	22	24	25	27	28	29	31	32	33	34	35	36
11°00'	20	21	23	24	26	27	28	29	30	31	32	33	34
12°00'	19	20	22	23	24	26	27	28	29	30	31	32	33

TABLE 2.—FOUR INCHES UNBALANCE
[Elevation of outer rail (inches)]

Degree of curvature	0	1/2	1	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5	5 1/2	6
	Maximum allowable operating speed (mph)												
0°30'	107	113	120	125	131	136	141	146	151	156	160	165	169
0°40'	93	98	104	109	113	118	122	127	131	135	139	143	146
0°50'	83	88	93	97	101	106	110	113	117	121	124	128	131
1°00'	76	80	85	89	93	96	100	104	107	110	113	116	120
1°15'	68	72	76	79	83	86	89	93	96	99	101	104	107
1°30'	62	65	69	72	76	79	82	85	87	90	93	95	98
1°45'	57	61	64	67	70	73	76	78	81	83	86	88	90
2°00'	53	57	60	63	65	68	71	73	76	78	80	82	85
2°15'	50	53	56	59	62	64	67	69	71	73	76	78	80
2°30'	48	51	53	56	59	61	63	65	68	70	72	74	76
2°45'	46	48	51	53	56	58	60	62	64	66	68	70	72
3°00'	44	46	49	51	53	56	58	60	62	64	65	67	69
3°15'	42	44	47	49	51	53	55	57	59	61	63	65	66
3°30'	40	43	45	47	49	52	53	55	57	59	61	62	64
3°45'	39	41	44	46	48	50	52	53	55	57	59	60	62
4°00'	38	40	42	44	46	48	50	52	53	55	57	58	60
4°30'	36	38	40	42	44	45	47	49	50	52	53	55	56
5°00'	34	36	38	40	41	43	45	46	48	49	51	52	53
5°30'	32	34	36	38	39	41	43	44	46	47	48	50	51
6°00'	31	33	35	36	38	39	41	42	44	45	46	48	49
6°30'	30	31	33	35	36	38	39	41	42	43	44	46	47
7°00'	29	30	32	34	35	36	38	39	40	42	43	44	45
8°00'	27	28	30	31	33	34	35	37	38	39	40	41	42
9°00'	25	27	28	30	31	32	33	35	36	37	38	39	40
10°00'	24	25	27	28	29	30	32	33	34	35	36	37	38
11°00'	23	24	25	27	28	29	30	31	32	33	34	35	36
12°00'	22	23	24	26	27	28	29	30	31	32	33	34	35

Appendix B to Part 213—Schedule of Civil Penalties

Section	Violation	Willful Violation ¹
Subpart A—General:		
213.4(a) Excepted track ²	\$2,500	\$5,000
213.4(b) Excepted track ²	2,500	5,000
213.4(c) Excepted track ²	2,500	5,000
213.4(d) Excepted track ²	2,500	5,000
213.4(e):		
(1) Excepted track ²	5,000	7,500
(2) Excepted track ²	7,000	10,000
(3) Excepted track ²	7,000	10,000
(4) Excepted track ²	5,000	7,500
213.4(f) Excepted track	2,000	4,000
213.7 Designation of qualified persons to supervise certain renewals and inspect track	1,000	2,000
213.9 Classes of track: Operating speed limits	2,500	2,500
213.11 Restoration or renewal of track under traffic conditions	2,500	2,500
213.13 Measuring track not under load	1,000	1,000
Subpart B—Roadbed:		
213.33 Drainage	2,500	5,000
213.37 Vegetation	1,000	2,000

Section	Violation	Willful Violation ¹
Subpart C—Track Geometry:		
213.53 Gage	5,000	7,500
213.55 Alinement	5,000	7,500
213.57 Curves; elevation and speed limitations	2,500	5,000
213.59 Elevation of curved track; runoff	2,500	2,500
213.63 Track surface	5,000	7,500
Subpart D—Track surface:		
213.103 Ballast; general	2,500	5,000
213.109 Crossties		
(a) Material used	1,000	2,000
(b) Distribution of ties	2,500	5,000
(c) Sufficient number of nondefective ties	1,000	2,000
(d) Joint ties	2,500	5,000
(e) Track constructed without crossties	2,500	5,000
213.113 Defective rails	5,000	7,500
213.115 Rail end mismatch	2,500	5,000
213.119 Continuous welded rail		
(a) through (h)	5,000	7,500
213.121 (a) Rail joints	2,500	5,000
213.121 (b) Rail joints	2,500	5,000
213.121 (c) Rail joints	5,000	7,500
213.121 (d) Rail joints	2,500	5,000
213.121 (e) Rail joints	2,500	5,000
213.121 (f) Rail joints	2,500	5,000
213.121 (g) Rail joints	2,500	5,000
213.121 (h) Rail joints	5,000	7,500
213.122 Torch cut rail	2,500	5,000
213.123 Tie plates	1,000	2,000
213.127 Rail fastenings	2,500	5,000
213.133 Turnouts and track crossings, generally	1,000	1,000
213.135 Switches:		
(a) through (g)	2,500	5,000
(h) chipped or worn points	5,000	7,500
213.137 Frogs	2,500	5,000
213.139 Spring rail frogs	2,500	5,000
213.141 Self-guarded frogs	2,500	5,000
213.143 Frog guard rails and guard faces; gage	2,500	5,000
Subpart E—Track appliances and track-related devices:		
213.205 Derails	2,500	5,000
Subpart F—Inspection:		
213.233 Track inspections	2,000	4,000
213.235 Switches, crossings, transition devices	2,000	4,000
213.237 Inspection of rail	2,500	5,000
213.239 Special inspections	2,500	5,000
213.241 Inspection records	1,000	1,000
Subpart G—High Speed:		
213.305 Designation of qualified individuals; general qualifications	1,000	2,000
213.307 Class of track; operating speed limits	2,500	5,000
213.309 Restoration or renewal of track under traffic conditions	2,500	5,000
213.311 Measuring track not under load	1,000	2,000
213.319 Drainage	2,500	5,000
213.321 Vegetation	1,000	2,000
213.323 Track gage	5,000	7,500
213.327 Alinement	5,000	7,500
213.329 Curves, elevation and speed limits	2,500	5,000
213.331 Track surface	5,000	7,500
213.333 Automated vehicle inspection systems	5,000	7,500
213.335 Crossties		
(a) Material used	1,000	2,000
(b) Distribution of ties	2,500	5,000
(c) Sufficient number of nondefective ties, non-concrete	1,000	2,000
(d) Sufficient number of nondefective concrete ties	1,000	2,000
(e) Joint ties	2,500	5,000
(f) Track constructed without crossties	2,500	5,000
(g) Non-defective ties surrounding defective ties	2,500	5,000
(h) Tie plates	2,500	5,000
(i) Tie plates	1,000	2,000
213.337 Defective rails	5,000	7,500
213.339 Inspection of rail in service	2,500	5,000
213.341 Inspection of new rail	2,500	5,000
213.343 Continuous welded rail (a) through (h)	5,000	7,500
213.345 Vehicle qualification testing (a) through (b)	5,000	7,500
(c) through (e)	2,500	5,000

Section	Violation	Willful Violation ¹
213.347 Automotive or railroad crossings at grade	5,000	7,500
213.349 Rail end mismatch	2,500	5,000
213.351 (a) Rail joints	2,500	5,000
213.351 (b) Rail joints	2,500	5,000
213.351 (c) Rail joints	5,000	7,500
213.351 (d) Rail joints	2,500	5,000
213.351 (e) Rail joints	2,500	5,000
213.351 (f) Rail joints	5,000	7,500
213.351 (g) Rail joints	5,000	7,500
213.352 Torch cut rails	2,500	5,000
213.353 Turnouts, crossovers, transition devices	1,000	2,000
213.355 Frog guard rails and guard faces; gage	2,500	5,000
213.357 Derails	2,500	5,000
213.359 Track stiffness	5,000	7,500
213.361 Right of way	5,000	7,500
213.365 Visual inspections	2,500	5,000
213.367 Special inspections	2,500	5,000
213.369 Inspections records	2,000	4,000

¹ A penalty may be assessed against an individual only for a willful violation. The Administrator reserves the right to assess a penalty of up to \$22,000 for any violation where circumstances warrant. See 49 CFR Part 209, Appendix A.

² In addition to assessment of penalties for each instance of noncompliance with the requirements identified by this footnote, track segments designated as excepted track that are or become ineligible for such designation by virtue of noncompliance with any of the requirements to which this footnote applies are subject to all other requirements of Part 213 until such noncompliance is remedied.

Issued in Washington, D.C. on June 10, 1998.

Jolene M. Molitoris,
*Administrator, Federal Railroad
Administration.*

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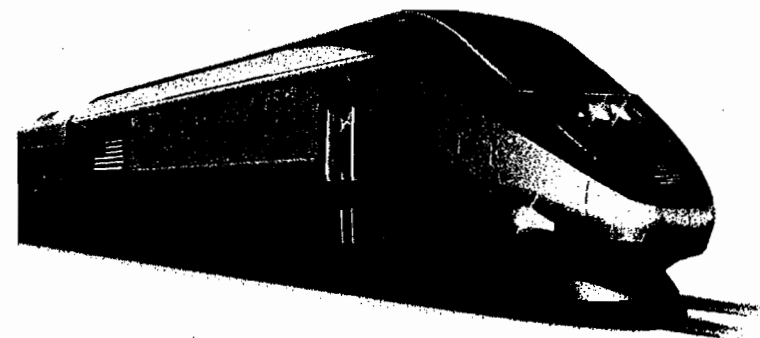


**U.S. Department of Transportation
Federal Railroad Administration**

**Office of Railroad Development
Passenger Programs Division, RDV-13**

***NEXT GENERATION HIGH-SPEED RAIL
TECHNOLOGY PROGRAM***

Program Status Briefing



November, 1998



PROGRAM STRATEGIC OBJECTIVE:

This program seeks to provide and demonstrate the technologies to facilitate delivery to the American public of reliable, high-quality, cost-effective high-speed intercity passenger rail service with competitive trip times in corridors with high travel density.

#



Four Major Next Generation HSR Program Areas:

I. NON-ELECTRIC LOCOMOTIVE

Objective: Achieve the speed and acceleration capability of electric trains without the cost of railroad electrification

Approach - Two steps:

- 1. Turbine powered AC traction unit capable of 125+ mph**
- 2. Add flywheel system (Advanced Locomotive Propulsion System - ALPS) to 125+ mph unit**



I. NON-ELECTRIC LOCOMOTIVE (cont'd)

Status:

- **Cooperative agreement signed 9/98 with Bombardier to develop and demonstrate high-speed turbine-electric locomotive.**
 - **\$ 25M program, Bombardier contributing 50% of cost**
 - **Based on NEC power car**
 - **Capable of up to 150 mph**
 - **Revenue-service demonstration to begin mid - 2000**
 - **Will be used to demonstrate ALPS flywheel in 2001**



I. NON-ELECTRIC LOCOMOTIVE (cont'd)

■ Advanced Locomotive Propulsion Systems (ALPS) and generator flywheel development and demonstration program

- Generator bench testing planned for early 1999**
- Flywheel fabrication underway, final flywheel assembly planned for March 1999**
- Initial flywheel testing planned for mid-CY1999**
- On-railcar testing planned for 2001**
- Generator fabrication to begin shortly**



I. NON-ELECTRIC LOCOMOTIVE (cont'd)

- **New York State RTL-3 upgrade underway for 2 trainsets, 1st expected by mid - CY1999**
 - **Plans underway for a joint Amtrak - New York State DOT agreement to fund upgrade of all remaining Turboliners along with infrastructure upgrades along the corridor**
- **Broad Agency Announcement to solicit additional proposals open until 4/30/99**



I. NON-ELECTRIC LOCOMOTIVE (cont'd)

FY 1999 Budget:

Non-Electric Locomotive (\$\$ in thousands)	
Budget Activity/Project	Conference
ALPS	\$ 2,800
Prototype Locomotive	\$ 7,000
TOTAL - Non-Electric Locomotive	\$ 9,800

- **Supports full scale flywheel & generator testing, integration into locomotive platform**
- **Supports continuing design and fabrication of HS Demonstration locomotive**



II. HIGH SPEED POSITIVE TRAIN CONTROL

Objective: Demonstrate the validity and cost-effectiveness of communications-based train control (CBTC) for high-speed rail.

Approach - **Examine two strategies:**

1. 'Distributed Intelligence'

- Michigan Incremental Train Control System (ITCS)

2. Central Control

- Pacific Northwest Positive Train Separation (PTS)
- Illinois Automatic Train Control System (ATCS)



II. HIGH SPEED POSITIVE TRAIN CONTROL (cont'd)

Status:

- **Michigan ITCS** - Revenue service expected early 1999
- **Pacific Northwest PTS** - Testing is nearing completion
- **Illinois ATCS** - Agreement reached between FRA, IDOT & AAR for program to demonstrate PTC which addresses industry-wide issues of safety, capacity, efficiency and speed improvements while assuring interoperability. AAR to contribute \$ 20 M of \$ 60 M estimated total over 5 years.



II. HIGH SPEED POSITIVE TRAIN CONTROL (cont'd)

Status (cont'd):

- **Oregon** - Oregon agreement (\$2.75 M) to demonstrate digital radios ('Apco 25') essential for future Communications-Based Train Control (CBTC) while addressing spectrum efficiency problems as well is underway
- **Broad Agency Announcement to solicit additional proposals open until 4/30/99**



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

***NEXT GENERATION HIGH-SPEED
RAIL TECHNOLOGY PROGRAM***

II. HIGH SPEED POSITIVE TRAIN CONTROL (cont'd)

FY 1999 Budget:

Train Control Systems (\$\$ in thousands)	
Budget Activity/Project	Conference
Illinois HSPTC Demonstration	\$ 1,300
Alaska Railroad PTC	\$ 3,000
TOTAL - Train Control Systems	\$ 4,300



III. GRADE CROSSING AND INNOVATIVE TECHNOLOGIES

Objective: Provide nearly the same security as grade separations but at much lower cost. Develop and demonstrate innovative technologies which will further the implementation of high-speed rail.

Approach: Identify and demonstrate technologies which serve to further high-speed rail



III. GRADE CROSSING AND INNOVATIVE TECHNOLOGIES (cont'd)

Status:

- **North Carolina 'Sealed-Corridor' initiative underway to treat an entire corridor to reduce risks and evaluate results**
- **FRA/Amtrak/CT-DOT School St. crossing in operation since 7/98 using four-quadrant gates with obstacle detection and engineer notification**
- **TRB ITS IDEA and HSR IDEA programs underway to identify, develop and demonstrate other promising technologies**
- **Broad Agency Announcement to solicit additional proposals open until 4/30/99**



III. GRADE CROSSING AND INNOVATIVE TECHNOLOGIES (cont'd)

Status (continued):

- **Project to demonstrate treatment for private crossings on Empire corridor underway**
- **Proof-of-concept active locomotive noise silencer demonstrated, pre-production prototype development underway, service demonstration to begin late CY1998**



III. GRADE CROSSING AND INNOVATIVE TECHNOLOGIES (cont'd)

FY 1999 Budget:

Grade Crossing and Innovative Technologies (\$\$ in thousands)	
Budget Activity/Project	Conference
NC Sealed Corridor	\$ 1,500
Mitigating Hazards	\$ 2,500
Low-Cost Technologies	\$ 1,100
TOTAL - Grade Crossings & Innovative Technologies	\$ 4,600



IV. TRACK AND STRUCTURES TECHNOLOGY

Objective: Address capacity and ride quality issues associated with mixed freight and high speed passenger use of existing corridors.

Approach: Demonstrate promising technologies in specific locations and by upgrading entire corridors



IV. TRACK AND STRUCTURES TECHNOLOGY (cont'd)

Status:

- **\$5.65 million Portland-Eugene Corridor upgrade underway**
- **Ride quality improvement attained using innovative pads on NEC bridge, further demonstrations planned**
- **Project to develop gage strength criteria for HSR operation on wood tie track underway**
- **Project to develop identification and mitigation techniques for subgrade faults underway**





*** BROAD AGENCY ANNOUNCEMENTS (BAA)**

- **A method to individually evaluate diverse proposed projects on their own merits and select the best proposals**
- **Permits proposers (states, railroads, private industry, academia) to bring forth their best ideas**
- **Flexible - can award as contracts, grants, cooperative agreements or interagency agreements**
- **BAA 98-01 currently open until April 30, 1999 - accepting proposals in all Next Generation HSR program areas**



U.S. Department of Transportation
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**NEXT GENERATION HIGH-SPEED
RAIL TECHNOLOGY PROGRAM**

FY 1999 Next Generation HSR Budget (Thousands of Dollars)	
Budget Activity/Project	Conference
Train Control Systems	\$ 4,300
Non-Electric Locomotive	\$ 9,800
ALPS	\$ 2,800
Prototype Locomotive	\$ 7,000
Grade Crossings & Innovative Technologies	\$ 4,600
Sealed Corridor	\$ 1,000
Mitigating Hazards	\$ 2,500
Low-cost Innovative Technologies	\$ 1,100
Track and Structures	\$ 1,200
Administration	\$594
TOTAL - Next Generation HSR Program	\$ 20,494



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RAIL TECHNOLOGY PROGRAM
NEXT GENERATION HIGH-SPEED

