



***Federal Railroad Administration
Office of Safety
Headquarters Assigned
Accident Investigation Report
HQ-2008-63***

***CSX Transportation Intermodal (CSXT)
Gary, IN
July 7, 2008***

Note that 49 U.S.C. §20903 provides that no part of an accident or incident report made by the Secretary of Transportation/Federal Railroad Administration under 49 U.S.C. §20902 may be used in a civil action for damages resulting from a matter mentioned in the report.

1. Name of Railroad Operating Train #1 CSX Transportation Intermodal [CSXT]		1a. Alphabetic Code CSXT		1b. Railroad Accident/Incident No. 000048918	
2. Name of Railroad Operating Train #2 N/A		2a. Alphabetic Code N/A		2b. Railroad Accident/Incident No. N/A	
3. Name of Railroad Operating Train #3 N/A		3a. Alphabetic Code N/A		3b. Railroad Accident/Incident No. N/A	
4. Name of Railroad Responsible for Track Maintenance: CSX Transportation Intermodal [CSXT]		4a. Alphabetic Code CSXT		4b. Railroad Accident/Incident No. 000048918	
5. U.S. DOT_AAR Grade Crossing Identification Number 155637W		6. Date of Accident/Incident Month 07 Day 07 Year 2008		7. Time of Accident/Incident 04:55:00 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
8. Type of Accident/Incident (single entry in code box)					
1. Derailment		4. Side collision		7. Hwy-rail crossing	
2. Head on collision		5. Raking collision		10. Explosion-detonation	
3. Rear end collision		6. Broken Train collision		11. Fire/violent rupture	
		9. Obstruction		12. Other impacts	
				13. Other (describe in narrative) Code 07	
9. Cars Carrying HAZMAT 0		10. HAZMAT Cars Damaged/Derailed N/A		11. Cars Releasing HAZMAT N/A	
				12. People Evacuated 0	
				13. Division CHICAGO	
14. Nearest City/Town GARY		15. Milepost (to nearest tenth) 241.3		16. State Abbr Code N/A IN	
				17. County LAKE	
18. Temperature (F) (specify if minus) 85 F		19. Visibility (single entry) Code 1. Dawn 3. Dusk 2. Day 4. Dark 2		20. Weather (single entry) Code 1. Clear 3. Rain 5. Sleet 2. Cloudy 4. Fog 6. Snow 1	
				21. Type of Track Code 1. Main 3. Siding 2. Yard 4. Industry 1	
22. Track Name/Number MAIN TRACK NO. 2		23. FRA Track Code Class (1-9, X) 4		24. Annual Track Density (gross tons in millions) 133	
				25. Time Table Direction Code 1. North 3. East 2. South 4. West 3	
OPERATING TRAIN #1					
26. Type of Equipment Consist (single entry)		1. Freight train		4. Work train	
2. Passenger train		5. Single car		7. Yard/switching	
3. Commuter train		6. Cut of cars		A. Spec. MoW Equip. Code	
		9. Maint./inspect.car		27. Was Equipment Attended? Code 1. Yes 2. No 1	
29. Speed (recorded speed, if available) Code R - Recorded E - Estimated 60 MPH R		31. Method(s) of Operation (enter code(s) that apply) a. ATCS b. Auto train control c. Auto train stop d. Cab e. Traffic f. Interlocking		31a. Remotely Controlled Locomotive? 0 = Not a remotely controlled 1 = Remote control portable 2 = Remote control tower 3 = Remote control transmitter - more than one remote control transmitter 0	
30. Trailing Tons (gross tonnage, excluding power units) 1279		31. Method(s) of Operation (enter code(s) that apply) g. Automatic block h. Current of traffic i. Time table/train orders j. Track warrant control k. Direct traffic control l. Yard limits		31. Method(s) of Operation (enter code(s) that apply) m. Special instructions n. Other than main track o. Positive train control p. Other (Specify in narrative) Code(s) e N/A N/A N/A N/A	
32. Principal Car/Unit		a. Initial and Number (1) First involved (derailed, struck, etc) CSX 5289		b. Position in Train 1	
(2) Causing (if mechanical cause reported)		00		c. Loaded (yes/no) N/A	
				33. If railroad employee(s) tested for drug/alcohol use, enter the number that were positive in the appropriate box. Alcohol Drugs N/A N/A	
				34. Was this consist transporting passengers? (Y/N) N	
35. Locomotive Units		a. Head End		Mid Train	
(1) Total in Train		2		b. Manual c. Remote 0 0	
(2) Total Derailed		0		d. Manual c. Remote 0 0	
				36. Cars (1) Total in Equipment Consist 21	
				Loaded Empty a. Freight b. Pass. c. Freight d. Pass. e. Caboose 0 0 0 0 0	
37. Equipment Damage This Consist \$0.00		38. Track, Signal, Way, & Structure Damage \$0.00		39. Primary Cause Code M303	
				40. Contributing Cause Code N/A	
Number of Crew Members				Length of Time on Duty	
41. Engineer/Operators 1		42. Firemen 0		43. Conductors 1	
				44. Brakemen 0	
				45. Engineer/Operator Hrs 3 Mi 20	
46. Conductor Hrs 3 Mi 20					
Casualties to:		47. Railroad Employees		48. Train Passengers	
Fatal		0		49. Other 3	
Nonfatal		0		0	
				50. EOT Device? 1. Yes 2. No N/A	
				51. Was EOT Device Properly Armed? 1. Yes 2. No 1	
				52. Caboose Occupied by Crew? 1. Yes 2. No N/A	
OPERATING TRAIN #2					
53. Type of Equipment Consist (single entry)		1. Freight train		4. Work train	
2. Passenger train		5. Single car		7. Yard/switching	
3. Commuter train		6. Cut of cars		A. Spec. MoW Equip. Code	
		9. Maint./inspect.car		54. Was Equipment Attended? Code 1. Yes 2. No N/A	
56. Speed (recorded speed, if available) Code R - Recorded E - Estimated N/A MPH N/A		58. Method(s) of Operation (enter code(s) that apply) a. ATCS b. Auto train control		58a. Remotely Controlled Locomotive? 0 = Not a remotely controlled 1 = Remote control portable	
		g. Automatic block h. Current of traffic		m. Special instructions n. Other than main track	

57. Trailing Tons (gross tonnage, excluding power units)	N/A	c. Auto train stop d. Cab e. Traffic f. Interlocking	i. Time table/train orders j. Track warrant control k. Direct traffic control l. Yard limits	o. Positive train control p. Other (Specify in narrative) Code(s)	2 = Remote control tower 3 = Remote control transmitter - more than one remote control transmitter
				N/A N/A N/A N/A N/A	N/A

59. Principal Car/Unit	a. Initial and Number	b. Position in Train	c. Loaded(yes/no)	60. If railroad employee(s) tested for drug/alcohol use, enter the number that were positive in the appropriate box.	Alcohol N/A	Drugs N/A
(1) First involved (derailed, struck, etc)	N/A	N/A	N/A			
(2) Causing (if mechanical cause reported)	N/A	N/A	N/A	61. Was this consist transporting passengers? (Y/N)		N/A

62. Locomotive Units	a. Head End	Mid Train b. Manual c. Remote	Rear End d. Manual c. Remote	63. Cars	Loaded a. Freight b. Pass.	Empty c. Freight d. Pass.	e. Caboose
(1) Total in Train	N/A	N/A N/A	N/A N/A	(1) Total in Equipment Consist	N/A N/A	N/A N/A	N/A
(2) Total Derailed	N/A	N/A N/A	N/A N/A	(2) Total Derailed	N/A N/A	N/A N/A	N/A

64. Equipment Damage This Consist	N/A	65. Track, Signal, Way, & Structure Damage	N/A	66. Primary Cause Code	N/A	67. Contributing Cause Code	N/A
Number of Crew Members				Length of Time on Duty			

68. Engineer/Operators	69. Firemen	70. Conductors	71. Brakemen	72. Engineer/Operator	73. Conductor
N/A	N/A	N/A	N/A	Hrs N/A Mi N/A	Hrs N/A Mi N/A
Casualties to:	74. Railroad Employees	75. Train Passengers	76. Other	77. EOT Device?	78. Was EOT Device Properly Armed?
Fatal	N/A	N/A	N/A	1. Yes 2. No N/A	1. Yes 2. No N/A
Nonfatal	N/A	N/A	N/A	79. Caboose Occupied by Crew?	
				1. Yes 2. No	N/A

OPERATING TRAIN #3

80. Type of Equipment Consist (single entry)	1. Freight train	4. Work train	7. Yard/switching	A. Spec. MoW Equip.	Code	81. Was Equipment Attended?	Code	82. Train Number/Symbol
	2. Passenger train	5. Single car	8. Light loco(s).		N/A	1. Yes 2. No	N/A	N/A
	3. Commuter train	6. Cut of cars	9. Maint./inspect.car					

83. Speed (recorded speed, if available)	Code	85. Method(s) of Operation (enter code(s) that apply)	85a. Remotely Controlled Locomotive?
R - Recorded E - Estimated	N/A MPH N/A	a. ATCS b. Auto train control c. Auto train stop d. Cab e. Traffic f. Interlocking	0 = Not a remotely controlled 1 = Remote control portable 2 = Remote control tower 3 = Remote control transmitter - more than one remote control transmitter
84. Trailing Tons (gross tonnage, excluding power units)	N/A	g. Automatic block h. Current of traffic i. Time table/train orders j. Track warrant control k. Direct traffic control l. Yard limits	N/A
		m. Special instructions n. Other than main track o. Positive train control p. Other (Specify in narrative) Code(s)	
		N/A N/A N/A N/A N/A	

86. Principal Car/Unit	a. Initial and Number	b. Position in Train	c. Loaded(yes/no)	87. If railroad employee(s) tested for drug/alcohol use, enter the number that were positive in the appropriate box.	Alcohol N/A	Drugs N/A
(1) First involved (derailed, struck, etc)	N/A	N/A	N/A			
(2) Causing (if mechanical cause reported)	N/A	N/A	N/A	88. Was this consist transporting passengers? (Y/N)		N/A

89. Locomotive Units	a. Head End	Mid Train b. Manual c. Remote	Rear End d. Manual c. Remote	90. Cars	Loaded a. Freight b. Pass.	Empty c. Freight d. Pass.	e. Caboose
(1) Total in Train	N/A	N/A N/A	N/A N/A	(1) Total in Equipment Consist	N/A N/A	N/A N/A	N/A
(2) Total Derailed	N/A	N/A N/A	N/A N/A	(2) Total Derailed	N/A N/A	N/A N/A	N/A

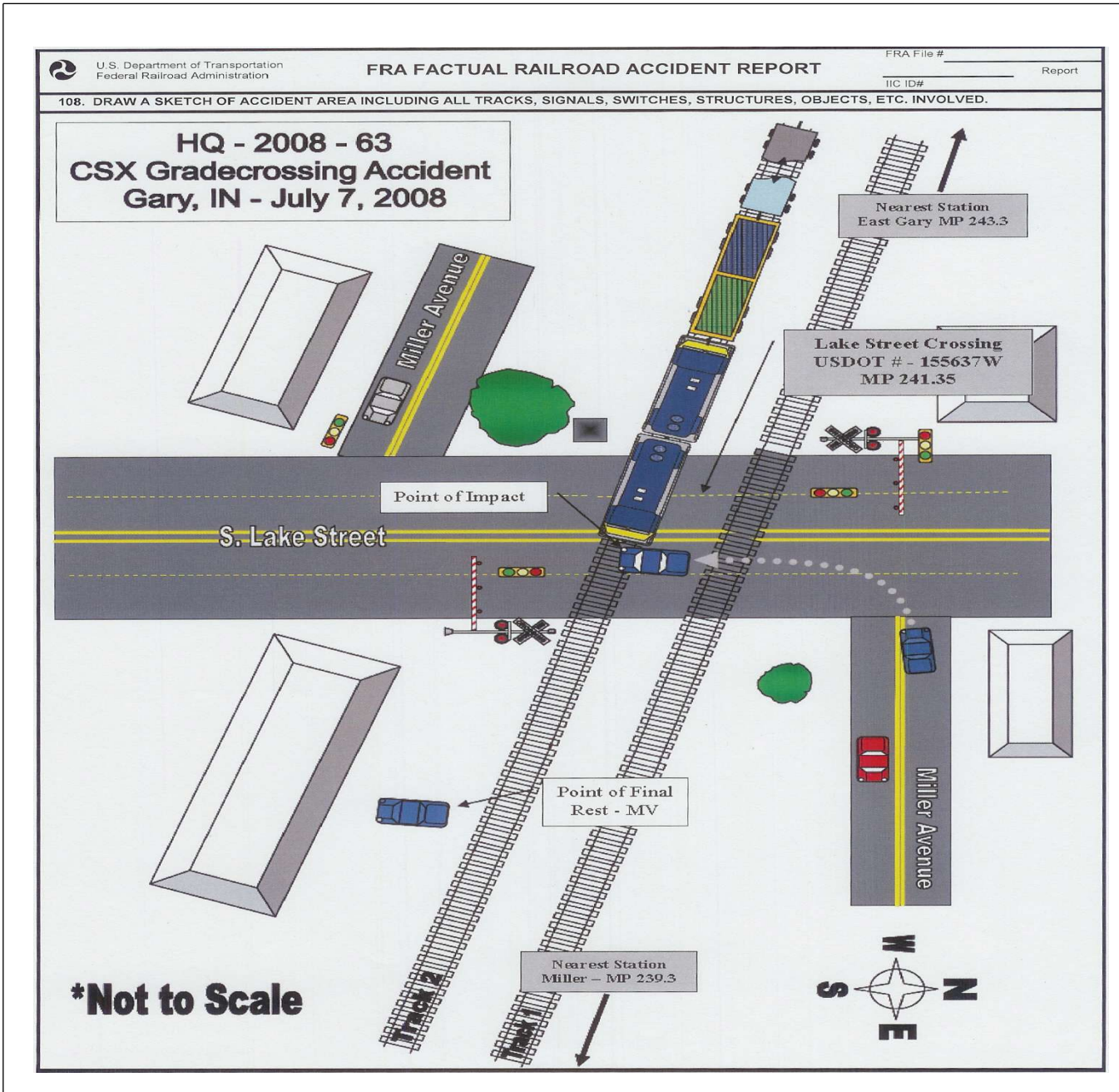
91. Equipment Damage This Consist	N/A	92. Track, Signal, Way, & Structure Damage	N/A	93. Primary Cause Code	N/A	94. Contributing Cause Code	N/A
Number of Crew Members				Length of Time on Duty			

95. Engineer/Operators	96. Firemen	97. Conductors	98. Brakemen	99. Engineer/Operator	100. Conductor
N/A	N/A	N/A	N/A	Hrs N/A Mi N/A	Hrs N/A Mi N/A
Casualties to:	101. Railroad Employees	102. Train	103. Other	104. EOT	105. Was EOT Device Properly
Fatal	N/A	N/A	N/A	1. Yes 2. No N/A	1. Yes 2. No N/A
Nonfatal	N/A	N/A	N/A	106. Caboose Occupied by Crew?	
				1. Yes 2. No	N/A

Highway User Involved				Rail Equipment Involved			
107. C. Truck-Trailer. F. Bus J. Other Motor Vehicle A. Auto D. Pick-Up Truck G. School Bus K. Pedestrian B. Truck E. Van H. Motorcycle M. Other (spec. in narrative)	Code	111. Equipment	Code	3. Train (standing)	6. Light Loco(s) (moving)	Code	
	A	1. Train(units pulling)	1	4. Car(s) (moving)	7. Light(s) (standing)		
		2. Train(units pushing)		5. Car(s) (standing)	8. Other (specify in narrative)		
108. Vehicle Speed (est. MPH at impact)	5	109. geographical	Code	112. Position of Car Unit in			
		1. North 2. South 3. East 4. West	2		1		

110. Position 1. Stalled on Crossing 2. Stopped on Crossing 3. Moving Over Crossing 4. Trapped				Code 3				113. Circumstance 1. Rail Equipment Struck Highway User 2. Rail Equipment Struck by Highway User				Code 1																							
114a. Was the highway user and/or rail equipment involved in the impact transporting hazardous materials?				Code 4				114b. Was there a hazardous materials release				Code 4																							
114c. State here the name and quantity of the hazardous materials released, if any. N/A																																			
115. Type Crossing Warning				1. Gates 2. Cantilever FLS 3. Standard FLS				4. Wig Wags 5. Hwy. traffic signals 6. Audible				7. Crossbucks 8. Stop signs 9. Watchman				10. Flagged by crew 11. Other (spec. in narr.) 12. None				116. Signaled Crossing (See instructions for codes)				Code 01				117. Whistle 1. Yes 2. No 3. Unknown				Code 2			
Code(s)				01				03				05				06				07				N/A				N/A							
118. Location of Warning 1. Both Sides 2. Side of Vehicle Approach 3. Opposite Side of Vehicle Approach				Code 1				119. Crossing Warning with Highway Signals 1. Yes 2. No 3. Unknown				Code 1				120. Crossing Illuminated by Street Lights or Special Lights 1. Yes 2. No 3. Unknown				Code 2															
121. Age 21				122. Driver's Gender 1. Male 2. Female				Code 2				123. Driver Drove Behind or in Front of and Struck or was Struck by Second Train 1. Yes 2. No 3. Unknown				Code 2				124. Driver 1. Drove around or thru the Gate 2. Stopped and then Proceeded 3. Did not Stop				Code 1											
125. Driver Passed Highway Vehicle 1. Yes 2. No 3. Unknown				Code 2				126. View of Track Obscured by (primary obstruction) 1. Permanent Structure 2. Standing Railroad Equipment				3. Passing Train 4. Topography				5. Vegetation 6. Highway Vehicle				7. Other (specify in narrative) 8. Not obstructed				Code 8											
Casualties to:				Killed				Injured				127. Driver 1. Killed 2. Injured 3. Uninjured				Code 1				128. Was Driver in the Vehicle? 1. Yes 2. No				Code 1											
129. Highway-Rail Crossing Users				3				0				130. Highway Vehicle Property Damage (est. dollar damage)				5000				131. Total Number of Highway-Rail Crossing Users (include driver)				3											
132. Locomotive Auxiliary Lights? 1. Yes 2. No				Code 1				133. Locomotive Auxiliary Lights Operational? 1. Yes 2. No				Code 1																							
134. Locomotive Headlight Illuminated? 1. Yes 2. No				Code 1				135. Locomotive Audible Warning Sounded? 1. Yes 2. No				Code 1																							

136. DRAW A SKETCH OF ACCIDENT AREA INCLUDING ALL TRACKS, SIGNALS, SWITCHES, STRUCTURES, OBJECTS, ETC., INVOLVED.



137. SYNOPSIS OF THE ACCIDENT

On July 7, 2008, at approximately 4:55 p.m. c.d.t., eastbound CSX Transportation (CSX) intermodal train Q14607 (Q14607), collided with an automobile at Lake Street highway-rail grade crossing, DOT 155637W, located in Gary, Indiana.

The accident occurred at milepost 241.35, on CSX's Barr Subdivision. The automobile driver and the two passengers were killed. There were no injuries to the train crew. There was no derailment, and no release of hazardous materials. The lead locomotive sustained minor damage. The automobile was destroyed; the damage was estimated at \$5,000.

At the time of the accident it was daylight, clear, and the temperature was 85 F.

According to the City of Gary Police Department Crash Report, the accident was the result of aggressive driving behavior. The driver operated the automobile left of center of the roadway, disregarding the highway-rail grade crossing signal.

A contributing factor may have been driver impairment.

138. NARRATIVE

CIRCUMSTANCES PRIOR TO THE ACCIDENT

The crew of CSX Q146-07 consisted of a locomotive engineer and a conductor. The train crew's home terminal is Garrett, Indiana. They first went on duty at 1:30 p.m., July 7, 2008, at CSX 59th Street Terminal in Chicago, Illinois. Prior to reporting for duty, both crew members received the required statutory off duty period as required. The engineer and conductor were both off duty thirteen hours and forty-five minutes.

CSX Train Q146-07 consisted of two locomotives, CSX 5289 (lead) and CSX 5394, with 9 articulated cars consisting of 21 platforms. The trailing weight of CSX Train Q146-07 was 1,279 tons and the length was 1,521 feet. A Class 1 air brake test was performed prior to the crew taking charge of the train. The crew, having the necessary air slips in their possession, departed 59th Street Terminal at 3:40 p.m. en route to Garrett.

The locomotive engineer was seated at the controls on the right side of the lead locomotive with the short nose forward. The conductor was seated on the left side of the locomotive. The railroad consists of two main tracks at the accident area. The method of operation is by signal indication of a Traffic Control System (TCS). CSX Train Q146-07 was operating eastbound on Main Track Number 2. At this location the maximum authorized timetable speed for freight trains on Main Track Number 2 is 60 mph, as designated in CSX's Timetable Number 2, dated April 1, 2008.

The railroad is tangent and level for more than 4,000 feet in advance of the accident area. The railroad extends in a northwest to southeast direction intersecting Lake Street at about a 20-degree angle. Lake Street is a paved four lane street extending in a north to south direction. The roadway has a slight incline to meet the grade of the railroad.

The railroad timetable direction of CSX Train Q146-07 is east. The geographic direction is southeast. Timetable directions will be used throughout this report.

THE ACCIDENT:

CSX Freight Train Q146-07 was being operated at a recorded speed of 60 mph approaching the accident area. The engineer began sounding the locomotive horn at the whistle post west of the Lake Street highway-rail grade crossing. The engineer said he observed an automobile fail to stop at the highway-rail grade crossing. The automobile traveled around the lowered gates into the path of CSX Train Q146-07. The lead locomotive struck the automobile at a recorded speed of 60 mph, at which time the engineer made a full service train air brake application. The engineer communicated the emergency by radio to the CSX RA train dispatcher in Calumet City, Illinois. The CSX dispatcher notified the Gary Fire Department Emergency Medical Services (EMS) and the Gary Police. CSX Train Q146-07 came to a stop about 3,700 feet east of the point of impact.

HIGHWAY VEHICLE:

The automobile was traveling westbound on Miller Avenue, which extends in an east to west direction on the north side of the railroad tracks and intersects as a "T" intersection with Lake Street. The posted speed limit on Lake Street is 25 mph. The CSX Train Q146-07 lead locomotive struck the center of the automobile on the passenger side. The automobile was pushed east about 173 feet coming to rest on the south side of Main Track Number 2. The two vehicle passengers were ejected from the automobile on impact; the driver was trapped inside.

After CSX Train Q146-07 stopped, the conductor inspected for damages to the train and awaited arrival of police and EMS. The engineer maintained communications with the CSX dispatcher. The Gary EMS arrived on the scene at approximately 5:03 p.m. The Gary Police Department arrived on the scene at approximately 5:07 p.m. The Lake County Coroner was summoned to the site where he pronounced the driver and the two passengers deceased.

Four witnesses told the Gary Police that the automobile was westbound on Miller Avenue, turned left onto Lake Street, drove around the lowered highway-rail crossing gates, and was struck by the train. Witnesses stated that the highway-rail grade crossing warning lights were flashing and the bell was ringing. One witness stated two other automobiles drove around the lowered highway-rail gates prior to the automobile that was impacted.

CSX officials were notified; a senior road foreman, a road foreman, and an assistant superintendent arrived on the scene. They evaluated the condition of the crew. The crew reported no injuries. There was no hazardous material involved and only minor damage to the CSX lead locomotive.

The conductor and engineer operating CSX Train Q146-07 at the time of the accident gave statements to CSX officials and the Gary Police Department, and were then released from duty. They were transported via van to their home terminal at Garrett. CSX Train Q146-07 was released from the scene at approximately 7:30 p.m. and continued with a relief crew to Garrett.

The operator of the automobile violated the following State of Indiana Motor Vehicle Codes:

9-21-8-8: Driving to the left of side of the roadway

(b) A vehicle may not be driven to the left side of the roadway under the following conditions

(2) When approaching within 100 feet of or traversing an intersection or railroad grade crossing.

9-21-8-39 Railroad grade crossings

Section 39 - Whenever a person who drives a vehicle approaches a railroad grade crossing; the person shall stop within fifty feet but not less than 15 feet from the nearest track of the railroad and may not proceed until the person can do so safely under the following circumstances:

(1) When a clearly visibly electric or mechanical signal device gives warning of the immediate approach of a train.

(2) When a crossing gate is lowered or when a human flagman gives or continues to give a signal of the approach or passage of a train.

ANALYSIS AND CONCLUSION

ANALYSIS - TOXICOLOGICAL TESTING:

The driver of the automobile was a 21 year old female. The two automobile passengers were an 18 year old female and a 20 year old male. The Lake County, Indiana, Coroner performed toxicological testing on the remains of the driver. The results were positive for Benzodiazepines and Hydracordone.

CONCLUSION:

Impairment may have been a factor.

ANALYSIS – HIGHWAY/RAIL GRADE CROSSING:

The highway-rail grade crossing warning devices consist of two gate mechanisms mounted on signal masts with back-to-back twelve inch flashing light units, cross-buck signs, and one electronic bell. On either side of the crossing, interconnected pre-empted highway traffic signals are installed at the intersection of Miller Avenue and Lake Street. Railroad advance warning signs are posted on Lake Street and Miller Avenue. Miller Avenue and Lake Street, at this location, are maintained by the City of Gary.

The railroad has a whistle post in place approximately 1,500 feet west of the crossing. The conductor said the locomotive engineer began sounding the locomotive horn when the train neared this post. This was validated by analysis of the event recorder data.

After the accident CSX signal personnel inspected and tested the Lake Street highway-rail grade crossing warning system and determined the warning system was working as intended at the time of the accident. On July 14, 2008, a representative from FRA observed CSX signal employees conduct a follow-up inspection of all the appropriate tests of the Lake Street highway-rail grade crossing warning system.

FRA collected CSX records of tests and inspection for Lake Street highway-rail grade crossing. The examination of the signal maintenance records did not identify any condition that would prevent the highway-rail grade crossing warning system from functioning as designed.

CONCLUSION:

The warning devices functioned as intended.

ANALYSIS - LOCOMOTIVE SAFETY DEVICES:

CSX Locomotive 5289 was equipped with a headlight, auxiliary lights, and an audible warning device required by Federal regulations. CSX personal operated the locomotive safety devices in the presence of the Gary Police who concluded that the safety devices functioned as intended.

CONCLUSION:

Locomotive safety devices were in compliance with Federal regulations.

ANALYSIS - LOCOMOTIVE ENGINEER OPERATING PERFORMANCE:

A review of the onboard locomotive camera data was conducted by FRA. It indicated that the engineer began sounding the locomotive horn at the whistle post located in advance of the crossing. This was later validated by the analysis of the event recorder data. The video also showed the automobile entering the crossing in front of the locomotive.

The locomotive was equipped with a speed indicator and event recorder as required. The event recorder data was downloaded by the CSX road foreman after the accident and analyzed at CSX Operations Command Center located in Calumet City; the CSX Road Foreman took no exception to the locomotive engineers operating performance. FRA reviewed the results of the analysis and concurred with the conclusion.

CONCLUSION:

The locomotive engineer was in compliance with all applicable railroad operating rules and train handling

requirements.

ANALYSIS:

FRA obtained fatigue related information, for the 10-day period preceding this incident including the 10-day work history (on duty/off duty cycles) for all of the employees involved.

CONCLUSION:

An analysis of that information FRA concluded that fatigue of the train crew was not probable for any of the CSX employees.

OVERALL CONCLUSIONS:

The locomotive engineer was in compliance with all applicable railroad operating and train handling requirements. The train crew and four witnesses stated to Gary Police that the driver operated the automobile around the lowered gates with warning lights flashing and the bell ringing.

PROBABLE CAUSE & CONTRIBUTING FACTORS:

The FRA determined that the accident was the result of aggressive driving behavior. The driver operated the automobile left of the center of the roadway disregarding the highway-railroad grade crossing warning signals.

A contributing factor may have been driver impairment.