

Adopted 10/24/96

Log. H. 589B



## National Transportation Safety Board

Washington, D.C. 20594

### Safety Recommendation

54-1

Date: NOV 14 1996

In Reply Refer To: H-96-45

Honorable Jim Edgar  
Governor of Illinois  
207 State Capitol Bldg.  
Springfield, Illinois 62706

On October 25, 1995, at 7:10 a.m., the Northeast Illinois Regional Commuter Railroad Corporation (d/b/a Metropolitan Rail) express commuter train 624 struck the rear left side of a stopped Transportation Joint Agreement School District 47/155 school bus at a railroad/highway grade crossing in Fox River Grove, Illinois.<sup>1</sup> After the school bus crossed the railroad tracks and stopped for a red traffic signal, its rear extended about 3 feet into the path of the train. Of the 35 school bus passengers, 7, 24, and 4 passengers sustained fatal, serious to minor, and no injuries, respectively; the busdriver received minor injuries. The 120 passengers and 3 crewmembers aboard the commuter train were uninjured.

The National Transportation Safety Board investigation of the accident revealed that the school busdriver was unfamiliar with the route that included the queuing area and the traffic light sequence at the intersection of Algonquin Road and U.S. Route 14. She stated that she stopped the bus on the south side of the tracks, did not see any trains or the crossing warning devices activated, and then slowly crossed the railroad tracks. She added that the traffic light for Algonquin Road was displaying a red indication and she believed that she would need to proceed across the tracks to trip a sensor that would trigger the traffic light to display a green indication. The busdriver said that she drove over the stop line to wait for the light to change.

The distance between the crossing gate and stop line on the north side of Algonquin Road was about 20 feet. However, the school bus was 38 feet 4 inches long and the overhang of the train was about 3 feet on each side; therefore, at least 3 feet of the school bus was in the path of the train. The right and left side of the bus were, respectively, overlapping the tracks and in the path of the train because the bus was at a 75-degree angle to the tracks. No evidence indicates that the school busdriver ever attempted to determine whether her bus had adequate space. She stated that, "It never entered my mind that there wasn't enough room for the bus to fit," and that

<sup>1</sup>For more information, see Highway/Railroad Accident Report—*Collision of Northeast Illinois Regional Commuter Railroad Corporation (METRA) Train and Transportation Joint Agreement School District 47/155 School Bus at Railroad/Highway Grade Crossing in Fox River Grove, Illinois, on October 25, 1995* (NTSB/HAR-96/02).

she did not know the rear of her bus was in the train path. The other school busdrivers who had traversed this crossing knew from their experience that the space was too short for a school bus, and they would stop on the south side of the railroad crossing.

The Safety Board investigation of a 1993 collision<sup>2</sup> in Fort Lauderdale, Florida, involving a gasoline tank truck and a train underscores the necessity that motorists recognize where their vehicle is positioned when they are stopped at a railroad crossing. In this case, the truckdriver was stopped in congested traffic at a work zone at a railroad crossing when the crossing gate came down and struck his truck hood. As described by witnesses, he was positioned such that the clearance between the truck and the train was about 5 feet. However, he proceeded to try and drive across the tracks and was struck by a passenger train. A fire subsequently erupted that killed the truckdriver and five motorists in the queue of vehicles at the crossing. Had the truckdriver remained in the position under the crossing gate, he would have avoided the collision. As a result of postaccident sight tests, the Safety Board concluded that the truckdriver probably had not been able to see the track and may have thought that he had encroached on it and needed to move forward.

The Illinois school busdriver training curriculum addresses the importance of recognizing the position of the school bus in relation to other vehicles and objects. No specific or practical instruction (except the road test administered when a driver first obtains a school busdriver permit) is provided to ensure that a busdriver understands positioning on the road. The school busdriver in this accident was trained and experienced, but she did not accurately judge the position of her vehicle and acknowledged that she did not know where the rear of her bus was in relation to the railroad tracks. Other drivers familiar with this route were aware of vehicle positioning, but not as a result of training. Therefore, the Safety Board concludes that the guidance provided in the Illinois school busdriver training curriculum about vehicle positioning in relation to the roadway is ineffective.

Based on the foregoing, the National Transportation Safety Board makes the following safety recommendation to the State of Illinois:

Advise school busdrivers of the circumstances of this accident and provide the busdrivers with practical training about vehicle positioning on the road, especially at railroad/highway grade crossings. (H-96-45)

The National Transportation Safety Board is also making safety recommendations to the U.S. Secretary of Transportation, the Federal Highway Administration, the Federal Railroad Administration, the National Highway Traffic Safety Administration, the Illinois Department of Transportation, the Transportation Joint Agreement School District 47/155, the National Association of State Directors of Pupil Transportation Services, the American Association of State Highway and Transportation Officials, the National Association of County Engineers, the

---

<sup>2</sup>Highway Accident Report--*Gasoline Tank Truck/Amtrak Train Collision and Fire in Fort Lauderdale, Florida, March 17, 1993* (NTSB/HAR-94/01).

American Public Works Association, the Institute of Transportation Engineers, the Association of American Railroads, the American Short Line Railroad Association, the American Public Transit Association, and Operation Lifesaver, Inc. (The Safety Board issued urgent action recommendations following this accident to Federal Highway Administration, the Federal Railroad Administration, and the State Directors of Transportation.)

The National Transportation Safety Board is an independent Federal agency with the statutory responsibility "to promote transportation safety by conducting independent accident investigations and by formulating safety improvement recommendations" (Public Law 93-633). The Safety Board is interested in any action taken as a result of its safety recommendations. Therefore, it would appreciate a response from you regarding action taken or contemplated with respect to the recommendation in this letter. Please refer to Safety Recommendation H-96-45. If you have any questions, you may call (202) 314-6448.

Chairman HALL, Vice Chairman FRANCIS, and Members HAMMERSCHMIDT, GOGLIA, and BLACK concurred in this recommendation.

By:   
Jim Hall  
Chairman