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National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date:

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In Reply Refer To: H-96-48

Mr. Richard Bernotos Superintendent Community High School District 47 221 Liberty Road Crystal Lake, Illinois 60014

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. 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.

Although the National Transportation Safety Board considers that school bus routes should avoid crossing railroad tracks, a railroad grade crossing on the route where the accident took place could not be avoided because of the limited paths available to access the residential area that the school bus was serving. However, methods to identify railroad/highway grade crossings hazards can be employed, and the school district specified three procedures to identify hazards on its school bus routes. The Transportation Joint Agreement School District 47/155 transportation director described these three procedures as 1) planning and monitoring the routes and consulting a commuter train schedule for those that crossed railroad tracks, 2) driving the route in his car after a hazard had been reported, and 3) noting hazards or unusual conditions on the back of the busdrivers' route maps.

There are problems with these procedures. First, using a commuter train schedule to identify route hazards is an unreliable method because trains and buses do not always run on time, as evidenced in this accident. In addition, such schedules provide no information about

¹For 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).

freight train movements or the characteristics of trains and railroad grade crossings. Second, driving the routes can be an effective method of hazard evaluation if it is done routinely. The transportation director could cite only one occasion during his 15 years of experience in which he drove a school bus route in response to a hazard report. This information indicates that this method of hazard identification was infrequently employed by the Transportation Joint Agreement School District 47/155. Finally, no notations about hazards or unusual conditions were found on the back of the accident route map or any other route map. The busdrivers familiar with the accident route had adopted strategies to avoid remaining on the tracks at Algonquin Road and an adjacent railroad crossing. However, these practices had been neither formalized as written instructions for busdrivers nor discussed by the busdrivers familiar with the route with other school busdrivers or school officials.

Although all busdrivers should be encouraged to report perceived hazards to school authorities, the transportation director is responsible for periodically monitoring the school bus routes and the busdrivers. The Transportation Joint Agreement School District 47/155 transportation director stated that he monitored the school bus routes; however, he did not identify the Algonquin Road grade crossing as a hazard. The policy for drivers to share information on route hazards was not enforced and was, therefore, useless, as the regular and substitute drivers did not share their driving strategies with each other or school officials. Had a note with a special instruction about the short queuing area been provided, the accident busdriver might have stopped on the south side of the crossing to wait for a green signal indication and thus have avoided the accident. Therefore, the methods employed by the school district to identify and evaluate route hazards were ineffective. Furthermore, had the school district ensured that all school busdrivers exchanged information about any identified route hazards, such as the short queuing area, the accident busdriver might have avoided the collision.

The State of Illinois requires that school busdrivers be evaluated regularly, and the school transportation director is responsible for ensuring that school busdrivers are monitored and evaluated. The monitoring of substitute school busdrivers especially should be conducted because substitute drivers may not be familiar with the different bus routes, existing hazards, or bus equipment. Although the accident school busdriver had substituted frequently over the past years, her driving performance had not been monitored or evaluated. Had the regular and substitute school busdrivers been monitored during their morning routes, school officials might have been aware that the regular school busdrivers habitually stopped on the south side of the Algonquin Road grade crossing to wait for a green indication.

Based on the foregoing, the National Transportation Safety Board makes the following safety recommendation to the Community High School District 47:

Develop and implement a program for the identification of school bus route hazards and routinely monitor and evaluate all regular and substitute school busdrivers. (H-96-48)

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 State of Illinois, the Illinois Department of Transportation, the Transportation Joint Agreement School District 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 American Public Works Association, the Institute of Transportation Engineers, the American Public Transit Association, and Operation Lifesaver, Inc. (The Safety Board issued urgent action recommendations following this accident to the 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-96-48. 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.