



National Transportation Safety Board

Washington, DC 20594

Safety Recommendation

Date: December 19, 2016

In reply refer to: H-16-16

Ms. Tanya Buckingham
Executive Director
North American Cartographic Information Society
c/o American Geographical Society Library
2311 East Hartford Ave.
Milwaukee, WI 53211

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant accidents in other modes of transportation—railroad, highway, marine, and pipeline. The NTSB determines the probable cause of the accidents and issues safety recommendations aimed at preventing future accidents. In addition, we carry out special studies concerning transportation safety and coordinate the resources of the federal government and other organizations to provide assistance to victims and their family members affected by major transportation disasters. We are providing the following information to urge the North American Cartographic Information Society to take action on the safety recommendation being issued in this letter.

On February 24, 2015, in the predawn hours, Metrolink commuter train 102, operated by Amtrak, was en route from Oxnard, California, to Los Angeles. As the train approached the South Rice Avenue grade crossing in Oxnard, it collided with a 2005 Ford F450 service truck towing a utility trailer.¹ The truck driver had inadvertently turned from South Rice Avenue onto the Union Pacific Railroad track, and the truck became lodged on the track. The train was occupied by three crew members and 51 passengers. After striking the truck and trailer, the train continued through the grade crossing, where all four coach cars subsequently derailed. The truck was pushed along the track and came to rest about 130 feet east of the grade crossing. A postcrash fire consumed the trailer. As a result of the crash, the train engineer died, and 32 passengers and crew members were injured. The truck driver sustained minor injuries. Additional information about this crash and the resulting recommendations may be found at our website, www.nts.gov, under report number NTSB/HAB-16/07.

¹ See *Train and Truck Crash on Railroad Right-of-Way and Subsequent Fire, Oxnard, California, February 24, 2015*, Highway Accident Brief NTSB/HAB-16/07 (Washington, DC: NTSB, 2016).

The truck driver used an application on his cell phone to navigate to his intended destination in Oxnard, in addition to handwritten directions provided by his employer. The crash occurred at 5:44 a.m., and the driver was fatigued and unfamiliar with the area. It is possible that he relied on the application to find his destination and subsequently misinterpreted the visual and audible cues available to him. At the time of the crash, the application did not include grade crossing data; thus, it provided no specific information on the grade crossing located parallel to, and just 57 feet from, East Fifth Street, the driver's intended route. We concluded that had the driver's navigation application included information on the upcoming grade crossing, he would have been less likely to misinterpret the visual cues and mistakenly turn onto the railroad tracks on his approach to the East Fifth Street intersection.

As a result of this investigation, we issued two new recommendations, including one to 14 companies and the following recommendation to the North American Cartographic Information Society:

H-16-16

Use existing newsletters and other routine forms of communication with your members to highlight the importance of creating navigation applications that incorporate grade crossing-related geographic data, such as those currently being prepared by the Federal Railroad Administration, to provide road users with additional safety cues and to reduce the likelihood of crashes at or near public or private grade crossings.

This safety recommendation is derived from the NTSB's investigation and is consistent with the evidence we found and the analysis we performed. Chairman HART, Vice Chairman DINH-ZARR, and Members SUMWALT and WEENER concurred in this recommendation.

The NTSB is vitally interested in this recommendation because it is designed to prevent accidents and save lives. We would appreciate receiving a response from you within 90 days detailing the actions you have taken or intend to take to implement it. When replying, please refer to the safety recommendation by number. We encourage you to submit your response electronically to correspondence@ntsb.gov.

[Original Signed]

By: Christopher A. Hart,
Chairman