



National Transportation Safety Board

Washington, DC 20594

Safety Recommendation

Date: August 4, 2014

In reply refer to: H-14-8 through -12

The Honorable Victor M. Mendez
Administrator
Federal Highway Administration
1200 New Jersey Ave., SE
Washington, DC 20590

On July 15, 2014, the National Transportation Safety Board (NTSB) adopted its report concerning the May 23, 2013, accident in which a span of the Interstate 5 bridge over the Skagit River near Mount Vernon in Washington State collapsed after being struck by an oversize combination vehicle.¹ Additional information about this accident and the resulting recommendations may be found in the report of the investigation, which can be accessed at our website, <http://www.nts.gov>, under report number HAR-14/01.

As a result of this investigation, the NTSB issued 18 new recommendations, including 1 to the 50 states, the District of Columbia, and the Commonwealth of Puerto Rico; 4 to the Washington State Department of Transportation; 2 to the American Association of State Highway and Transportation Officials (AASHTO); 3 to the American Association of Motor Vehicle Administrators; 1 to AASHTO and the Commercial Vehicle Safety Alliance (CVSA); 1 to the CVSA and the Specialized Carriers & Rigging Association (SC&RA); 1 to Nokia HERE, Google Inc., and Rand McNally; and the following 5 recommendations to the Federal Highway Administration:

¹ *Collapse of the Interstate 5 Skagit River Bridge, Following a Strike by an Oversize Combination Vehicle, Mount Vernon, Washington, May 23, 2013, HAR-14/01* (Washington, DC: NTSB, 2014).

H-14-8

Develop a best practices guide that the states can use to prevent bridge strikes by overheight vehicles. At a minimum, the guide should include (1) a framework for collecting bridge strike data and for ensuring communication of these data among the state agencies responsible for conducting bridge inspections and those responsible for issuing oversize load permits, to support the development of countermeasures; (2) practices for using the data to develop operational changes; (3) methods for evaluating bridge strike countermeasures; and (4) a review of countermeasures that have proven effective in reducing the number of bridge strikes by overheight vehicles in the states and in other countries.

H-14-9

Work with the American Association of State Highway and Transportation Officials to amend the *Manual on Uniform Traffic Control Devices for Streets and Highways*, in accordance with *A Policy on Geometric Design of Highways and Streets* and the *Load and Resistance Factor Design Bridge Design Specifications*, to include a requirement for low-clearance signage for highway structures that cross over a roadway. The requirement should provide a uniform minimum clearance height between the roadway and the bottom of the structure which, if not met, necessitates the installation of low-clearance signage.

H-14-10

Notify the state departments of transportation of the circumstances of the collapse of the Skagit River Bridge span, and create a timetable for those states that need to change their low-clearance signage requirements to conform to the uniform minimum clearance requirement proposed in Safety Recommendation H-14-9.

H-14-11

Include in the *Manual on Uniform Traffic Control Devices for Streets and Highways* a requirement for signage indicating the proper lane of travel for overheight vehicles traveling under an arched structure.

H-14-12²

Work together with the Specialized Carriers & Rigging Association and the Commercial Vehicle Safety Alliance to revise the *Pilot Car Escort Best Practices Guidelines* and related training materials to ensure that they contain updated recommended practices for pilot/escort vehicle operations, and disseminate the revised documents to groups that provide pilot/escort vehicle driver training.

² Safety Recommendation H-14-12 is also being issued to the SC&RA and the CVSA.

These safety recommendations are derived from the NTSB's investigation and are consistent with the evidence we found and the analysis we performed. Acting Chairman HART and Members SUMWALT, ROSEKIND, and WEENER concurred in these recommendations.

The NTSB is vitally interested in these recommendations because they are 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 them. When replying, please refer to the safety recommendations by number. We encourage you to submit your response electronically to correspondence@ntsb.gov.

[Original Signed]

By: Christopher A. Hart,
Acting Chairman



National Transportation Safety Board

Washington, DC 20594

Safety Recommendation

Date: August 4, 2014

In reply refer to: H-14-12 and H-14-24

Mr. Joel M. Dandrea
Executive Vice President
Specialized Carriers & Rigging Association
5870 Trinity Parkway
Suite 200
Centreville, VA 20120

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, the NTSB carries out special studies concerning transportation safety and coordinates 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 Specialized Carriers & Rigging Association to take action on the safety recommendations being issued in this letter.

On July 15, 2014, the NTSB adopted its report concerning the May 23, 2013, accident in which a span of the Interstate 5 bridge over the Skagit River near Mount Vernon in Washington State collapsed after being struck by an oversize combination vehicle.¹ Additional information about this accident and the resulting recommendations may be found in the report of the investigation, which can be accessed at our website, <http://www.nts.gov>, under report number HAR-14/01.

As a result of this investigation, the NTSB issued 18 new recommendations, including 4 to the Federal Highway Administration (FHWA); 1 to the 50 states, the District of Columbia, and the Commonwealth of Puerto Rico; 4 to the Washington State Department of Transportation; 2 to the American Association of State Highway and Transportation Officials (AASHTO); 3 to the American Association of Motor Vehicle Administrators; 1 to AASHTO and the Commercial

¹ *Collapse of the Interstate 5 Skagit River Bridge, Following a Strike by an Oversize Combination Vehicle, Mount Vernon, Washington, May 23, 2013, HAR-14/01* (Washington, DC: NTSB, 2014).

Vehicle Safety Alliance (CVSA); 1 to Nokia HERE, Google Inc., and Rand McNally; and the following 2 recommendations to the Specialized Carriers & Rigging Association:

H-14-12²

Work together with the Federal Highway Administration and the Commercial Vehicle Safety Alliance to revise the *Pilot Car Escort Best Practices Guidelines* and related training materials to ensure that they contain updated recommended practices for pilot/escort vehicle operations, and disseminate the revised documents to groups that provide pilot/escort vehicle driver training.

H-14-24³

Assist the American Association of Motor Vehicle Administrators in developing training and testing materials that address the challenges and unique operating characteristics of the transportation of oversize loads, and distribute the developed information to state licensing agencies to institute a commercial driver's license endorsement for oversize loads.

These safety recommendations are derived from the NTSB's investigation and are consistent with the evidence we found and the analysis we performed. Acting Chairman HART and Members SUMWALT, ROSEKIND, and WEENER concurred in these recommendations.

The NTSB is vitally interested in these recommendations because they are 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 them. When replying, please refer to the safety recommendations by number. We encourage you to submit your response electronically to correspondence@ntsb.gov. If it exceeds 10 megabytes, including attachments, please e-mail us at the same address for instructions. Please do not submit both an electronic copy and a hard copy of the same response.

[Original Signed]

By: Christopher A. Hart
Acting Chairman

² Safety Recommendation H-14-12 is also being issued to the FHWA and the CVSA.

³ Safety Recommendation H-14-24 is also being issued to the CVSA.



National Transportation Safety Board

Washington, DC 20594

Safety Recommendation

Date: August 4, 2014

In reply refer to: H-14-12, H-14-23, and
H-14-24

Mr. Stephen A. Keppler
Executive Director
Commercial Vehicle Safety Alliance
6303 Ivy Lane
Suite 310
Greenbelt, MD 20770-6319

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, the NTSB carries out special studies concerning transportation safety and coordinates 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 Commercial Vehicle Safety Alliance to take action on the safety recommendations being issued in this letter.

On July 15, 2014, the NTSB adopted its report concerning the May 23, 2013, accident in which a span of the Interstate 5 bridge over the Skagit River near Mount Vernon in Washington State collapsed after being struck by an oversized combination vehicle.¹ Additional information about this accident and the resulting recommendations may be found in the report of the investigation, which can be accessed at our website, <http://www.nts.gov>, under report number HAR-14/01.

¹ *Collapse of the Interstate 5 Skagit River Bridge, Following a Strike by an Oversize Combination Vehicle, Mount Vernon, Washington, May 23, 2013, HAR-14/01* (Washington, DC: NTSB, 2014).

As a result of this investigation, the NTSB issued 18 new recommendations, including 4 to the Federal Highway Administration (FHWA); 1 to the 50 states, the District of Columbia, and the Commonwealth of Puerto Rico; 4 to the Washington State Department of Transportation; 2 to the American Association of State Highway and Transportation Officials (AASHTO); 3 to the American Association of Motor Vehicle Administrators; 1 to Nokia HERE, Google Inc., and Rand McNally; and the following 3 recommendations to the Commercial Vehicle Safety Alliance:

H-14-12²

Work together with the Federal Highway Administration and the Specialized Carriers & Rigging Association to revise the *Pilot Car Escort Best Practices Guidelines* and related training materials to ensure that they contain updated recommended practices for pilot/escort vehicle operations, and disseminate the revised documents to groups that provide pilot/escort vehicle driver training.

H-14-23³

Assist the American Association of Motor Vehicle Administrators in instituting a model training and certification process that includes reciprocity of certification in all 50 states, the District of Columbia, and the Commonwealth of Puerto Rico for drivers of pilot/escort vehicles, based on the *Pilot Car Escort Best Practices Guidelines*.

H-14-24⁴

Assist the American Association of Motor Vehicle Administrators in developing training and testing materials that address the challenges and unique operating characteristics of the transportation of oversize loads, and distribute the developed information to state licensing agencies to institute a commercial driver's license endorsement for oversize loads.

These safety recommendations are derived from the NTSB's investigation and are consistent with the evidence we found and the analysis we performed. Acting Chairman HART and Members SUMWALT, ROSEKIND, and WEENER concurred in these recommendations.

² Safety Recommendation H-14-12 is also being issued to the FHWA and the Specialized Carriers & Rigging Association.

³ Safety Recommendation H-14-23 is also being issued to AASHTO.

⁴ Safety Recommendation H-14-24 is also being issued to the Specialized Carriers & Rigging Association.

The NTSB is vitally interested in these recommendations because they are 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 them. When replying, please refer to the safety recommendations by number. We encourage you to submit your response electronically to correspondence@ntsb.gov. If it exceeds 10 megabytes, including attachments, please e-mail us at the same address for instructions. Please do not submit both an electronic copy and a hard copy of the same response.

[Original Signed]

By: Christopher A. Hart
Acting Chairman