AASHTO 2010 Bridge Meeting
Sacramento, California
May 23 - 27, 2010

National Transportation Safety Board Report
HAR-09/02
Tim Keller, T-7 Chair
NTSB Report HAR-09/02 on the Motorcoach Run Off Bridge and Rollover
Sherman, Texas
August 8, 2008

Full report available at: www.ntsb.gov
On Aug. 8, 2009, a 56 passenger motorcoach was traveling NB on US Route 75 near Sherman, Texas.

It’s right steer axle tire failed.

Motorcoach went through the bridge railing and over the side of the Post Oak Creek bridge.

Accident resulted in 17 fatalities.
Area of displaced bridge railing
8 feet to the earthen median

Orientation and final rest position of motorcoach
Front of motorcoach

Bridge railing

Source: Sherman, Texas Police Department
• Post Oak Creek bridge rail was in compliance with the applicable standards when constructed in 1958.
• Railing on Post Oak Creek bridge had never been crash tested.
• Post Oak Creek bridge had not undergone a resurfacing or rehabilitation, so railing was not required to meet current standards.
In 2005 NTSB issued Safety Recommendation H-05-31 to AASHTO as a result of an accident in Fairfield, Connecticut which recommended:

Establish warrants in the Roadside Design Guide regarding the selection and use of high-performance barriers, including 42 and 50 inch high concrete barriers that are capable of redirecting heavy trucks.
• 2007 LRFD Bridge Design Specifications and the 2006 Roadside Design Guide advise bridge owners to develop their own bridge railing warrants.
• Currently, no mandatory warrants indicate when a higher performance bridge railing should be used.
Conclusions

- A higher performance bridge railing such as a TL-4 or TL-5 at the accident location might have prevented the motorcoach’s departure from the bridge.

- Bridge owners lack warrants to guide them in making bridge railing selections.
Recommendations:

• *(H-09-25)* Work with the Federal Highway Administration to establish performance and selection guidelines for bridge owners to use to develop objective warrants for high-performance Test Level Four, Five, and Six bridge railings applicable to new construction and rehabilitation projects where railing replacement is determined to be appropriate, and include the guidelines in the *Load and Resistance Factor Design (LRFD) Bridge Design Specifications*. 
Recommendations

(H-09-26) Revise Section 13 of the Load and Resistance Factor Design (LRFD) Bridge Design Specifications to state that bridge owners shall develop objective warrants for the selection and use of high-performance Test Level Four, Five, and Six bridge railings applicable to new construction and rehabilitation projects where railing replacement is determined to be appropriate.
AASHTO Response

• In process of submitting a letter to NTSB responding to recommendations H-09-25 and H-09-26.

• NCHRP 22-12(3) will provide guidance to bridge owners on the use of the appropriate bridge barriers.
  – Contractor has been selected
  – Contract should be signed by June 1, 2010
  – Project completion is 24 months with an interim report due December, 2010
Questions?

Thank You