New Jersey Department of Transportation Technical Advisory

CONSTRUCTION LOADS ON BRIDGES

The NTSB Report and FHWA Technical Advisory both dated January 15, 2008 have been published as a result of the I-35 bridge collapse in Minneapolis. The NTSB Report provides a thorough evaluation of the causes of the collapse and the FHWA Technical Advisory makes certain recommendations to reduce the possibility that future similar collapses could occur. Copies of these documents are provided as attachments to the Technical Advisory.

As noted in the FHWA Advisory, roadway construction was occurring on the deck truss portion of the bridge, and four of the eight lanes were closed for re-paving when the bridge collapsed. Machinery and paving materials were being parked and stockpiled on the center span.

While construction activities and construction loadings have not yet been indicated as a contributing factor, the recent failure of the I-35 bridge in Minneapolis has served as a reminder that it is important to monitor the storing of equipment and material on bridges by construction Contractors. Agencies should ensure that load restrictions are not exceeded and that Load Restrictions and Truck Weight Enforcement should be discussed at the project's Preconstruction Meeting. Particular attention should be made in monitoring the weight of Material Transport Vehicles (MTVs) when in use on or when crossing bridge structures. When constructing new bridge decks, agencies should always monitor adherence to concrete pouring sequences, and should monitor that concrete strengths or cure times are obtained before removing forms. Additionally, when onsite storage of materials is permitted, combustible or corrosive materials should not be stored on or near bridge structures.

Issued by: Brian J. Strizki P.E. State Transportation Engineer 1/17/08