

JOHNS HOPKINS UNIVERSITY

The Department of Civil Engineering at
Johns Hopkins University announces
The 2008 Richard J. Carroll Lecture

Calibrating the Reliability of Bridges

*A technical session followed by social program
and after-dinner lecture*

The Safety of our Nation's Bridges

by Dennis R. Mertz, Ph.D., P.E.

Wednesday, April 9, 2008

5:00 p.m. Technical Session

6:00 p.m. Cocktails*

7:00 p.m. Dinner*

8:00 p.m. General Lecture

The Engineers Club
11 W. Mount Vernon Place
Baltimore, MD

Photo by Doug Baker

Abstract: With the recent catastrophic collapse of the Interstate 35W steel deck-truss bridge in Minneapolis the safety of our nation's patrimony of highway bridges is under public scrutiny. The safety of our bridges is discussed within the context of the design and evaluation specifications of the American Association of State Highway and Transportation Officials (AASHTO), the codes specified by the state departments of transportation and the Federal Highway Administration (FHWA) for applicability to our highway bridges. Therein, the scientific basis of these specifications is reviewed. The relationship between qualitative bridge inspection and quantitative bridge rating is explained and explored. Finally, the FHWA mandated term "structurally deficient" is dissected resulting in more comfort with the condition of our nation's highway bridges for the previously uninformed.

Professor Mertz is the Director of the University of Delaware's Center for Innovative Bridge Engineering (CIBrE) as well as a Professor of Civil Engineering. Prior to his appointment at the University of Delaware, he was an Associate of the bridge-design firm of Modjeski and Masters, Inc. As co-principal investigator of the National Cooperative Highway Research Program (NCHRP) Project 12-33, Professor Mertz was one of the original authors of the 1st edition of the AASHTO LRFD Bridge Design Specifications. As a consultant to AASHTO, he continues to author annual interim changes to the LRFD Specifications. In addition, Professor Mertz has written bridge-design manuals for Montana and South Carolina, and is completing bridge manuals for Nevada, Oklahoma and Alaska. Professor Mertz was the recipient of the inaugural AASHTO Bridge Subcommittee Chairman's Lecture Series Award in June 2000.

*Reservations are required for cocktails and dinner.

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