

3D Design and Modeling for Highway Structures Workshop Agenda

Iowa State Center Scheman Bldg, Ames, Iowa

April 14 – 15, 2015

Day 1 – Workshop

- 7:30 am - 8:00 am **Registration**
- 8:00 am - 8:20 am **Introduction and Welcome**
Iowa DOT Office of Bridges & Structures Director, Norm McDonald
FHWA Iowa Division Acting Division Administrator, Jeff McEwen
- 8:20 am - 9:00 am **National Perspective**
Iowa DOT Initiative – Iowa DOT OBS Automation Engineer, Annette Jeffers
AASHTO Vision – AASHTO SCOB T-19 Chair, Scot Becker
- 9:00 am - 9:15 am **Break**
- 9:15 am - 10:45 am **Session 1 - State DOT Experience and Perspective**
Use of 3D Modeling in ABC Projects - Iowa DOT, Jim Nelson
3D Highway Design - Iowa DOT, Tom Hamski and Brian Smith
Southeast Freeways (SEF) Implementation Concerning CIM Uses of 3D models -
Wisconsin DOT, Lance Parve
- 10:45 am - 11:45 am **Session 2 – Project Showcases**
4D Structural Analysis of Hastings Mississippi River Bridge for MnDOT and
I71/670 Bridge for Ohio DOT - CH2M Hill, Randy Thomas and Tony
Peterson
3D Modeling of Zoo Interchange for Wisconsin DOT - CH2M Hill, Chris Johnson
- 11:45 am - 12:45 pm **Lunch**
- 12:45pm – 2:30 pm **Session 3 – Project Showcases**
3D Modeling of kciCON Design-Build Project for Missouri DOT and Hastings
Bridge for Minnesota DOT – Parsons, Henri Varaneckas
An Evolution of Analyses for Complex Structures from 2D Through 4D Modeling
– HNTB, Hans Hutton
3D Modeling Applications for St. Croix River Crossing - HDR, Craig Lenning
- 2:30 pm - 2:45 pm **Break**
- 2:45 pm – 5:00 pm **Session 4 – Software Applications**
LEAP Bridge Steel – Bentley Systems, Shri Bhide
ProConcrete Overview - Bentley Systems, Alex Mabrich
PowerBridge Modeler - Bentley Systems, Sri Kanneganti
- 7:30 am – 5:30 pm **Vendors Exhibits open**

Day 2 – Workshop

8:00 am – 9:30 am

Session 5 – Industry Presentations

3D Modeling Capabilities Available in AASHTOWare Bridge Design and Rating –
Montana DOT, Jeff Olsen

3D Modelling – Contractor’s Constructability Review in Structures -
Walsh Construction, Karthik Ramkrishnan

3D Utility Surveying and Modeling - Utility Mapping Services, Philip J. Meis, P.E.

9:30 am - 9:45 am

Break

9:45 am - 11:15 am

Session 6 – Industry Presentations

LiDar Survey for 3D Design Modeling - Iowa DOT, Jonathan Miranda

BRIM in Structural Steel Fabrication- High Steel, Brad Dillman

Bridge Structural Condition Assessment Using 3D Modeling and 3D Imaging
Technologies - Iowa State University, Simon Laflamme and Yelda Turkan

11:15 am - 12:00 pm

General Discussion/Closing

Hands-on Training

8:00 am – 12:00 pm

Introduction to MicroStation 3D Tools- Bentley Systems, Tom Stogdill

1:00 pm – 5:00 pm

Bridge Modeling for Open Roads Users- Bentley Systems, Alex Mabrich

*Creation of 3D models using the LEAP Bridge Enterprise and LEAP
Bridge Steel applications.*



U.S. Department of Transportation
Federal Highway Administration

