



## 3D Engineered Models for Stringless Paving Workshop

*Hosted by the Missouri Department Transportation and FHWA Missouri Division*

### Day 1: Presentation Session

- 7:00a Registration/continental breakfast
- 8:00 Welcome – Tom Cackler, National Concrete Pavement Technology Center
- Welcome & Desired Goals - Dave Ahlvers, Missouri DOT State Construction & Materials Engineer
  - Kevin Ward - FHWA Missouri Division Administrator
- 8:30 Overview of 3D Engineered Models for Highway Construction – Gabe Nelson, Snyder and Associates
- State of Practice and Why Implement this Technology
  - Level of Details in 3D Models
  - How to Get Started
- 9:30 **BREAK**
- 10:00 Capturing Existing Conditions in 3D Engineered Models – Joe Bruno, ESP Associates
- Overview of survey methods & technology to meet desired level of accuracy
  - Deliverables from 3D Surveys (LIDAR)
  - Managing large data sets
- 10:45 Working with 3D Models in **Design** and Construction, Part 1 – Alexa Mitchell, MoDOT
- Creating 3D Design Model – Level of detail, calculating quantities & visualization
  - 3D Model – Level of detail matrix
  - Deliverables for bidding – alignments, profiles, surfaces, components, formats, and method of delivery to contractor
  - Contractors' needs to support 3D models for AMG and stringless paving – Joel Richardson/Mathew Poston, Millstone Weber
- 11:45 **LUNCH**
- 12:45p Electronic Data and the Law - John Koenig, Regional Counsel MoDOT; Gabe Nelson, Snyder & Associates
- 1:30 Working with 3D Models in Design and **Construction**, Part 2
- Project example: I35 Unbonded Concrete Overlay – John Donahue, MoDOT
  - Modern Survey Technology for Quality Assurance- John Lobbestael, Michigan DOT
  - Using 3D Models in the Field – What is useful to the contractor? – Robbie Pope, Gomaco
  - Quality Process – Eric Kopinski, MoDOT
- 4:00 Creating a Plan to Implement 3D Engineered Models for Construction – Jason Littleton, Kentucky DOT
- Identifying and establishing vision, goals, roles, responsibilities and accountability measures
  - Identifying baseline challenges
  - Share success stories and learned lessons
- 4:30 Q & A Speakers Panel – Tony Babcock, National CP Tech Center moderator
- 5:00 Adjourn for the Day



### Day 2: Project Example & Demonstration of Technology

- 7:00a Continental breakfast
- 8:00 Project Overview - Eric Kopinski, MoDOT
- 9:00 Board buses and travel to project site  
*Project tour/Quality procedures (Paving, MIT scan, etc.)*
- 11:30 Board buses and return to hotel
- Noon Adjourn

