

# 2019 Iowa Transportation Conference

Prairie Meadows Racetrack Casino Hotel | Altoona, Iowa

## Morning Educational Sessions

**8:45 – 9:15 am**

**Opening remarks from Iowa DOT, FHWA and ACEC– Iowa**

*Presenters: Iowa DOT – Mark Lowe, FHWA Assistant Division Administrator – Mark Johnson, Partnering Council ACEC Representative – Dave Moeller*

### CONCURRENT SESSION A

**9:20 – 10:00 am**

**Iowa DOT Design Bureau Update**

*Presenter: Mike Kennerly – Iowa DOT*

**10:05 – 10:40 am**

**MAASTO Regional Truck Parking Information and Management System**

Access to safe and convenient parking areas for trucks is essential for a robust freight transportation network. But truck drivers consistently have difficulty finding areas to safely rest. In response, a partnership was developed with Iowa, Indiana, Kansas, Kentucky, Michigan, Minnesota, Ohio and Wisconsin to develop a multi-state Regional Truck Parking Information and Management System (TPIMS) across the MAASTO region. The project is funded through a \$31 million TIGER grant and state funds. The project went live on January 4, 2019.

*Presenters: Phil Mescher – Iowa DOT and Chuck Miller – HNTB*

**11:00 – 11:20 am**

**2019 Floods**

This session will provide an overview of the response, recovery, and repairs associated with the Missouri river flooding in southwest Iowa.

*Presenter: Charlie Purcell – Iowa DOT*

**11:25 am – 12:05 pm**

**Building Information Modeling (BIM) for Transportation**

The national vision is to move to a mature BIM program from 2D design plan sets. The future of transportation asset planning, design, construction, and management lies in the power of BIM. This presentation will provide an overview of Iowa DOT's progress with 3D modeling and BIM, and AASHTO's BIM program with leadership from the AASHTO Design Committee's Subcommittee for Electronic Engineering Data.

*Presenters: Mike Kennerly – Iowa DOT, Andy Wilson – FHWA, and Tony Bower – Stanley*

### CONCURRENT SESSION B

**9:20 – 10:00 am**

**Iowa DOT Bridges and Structures Bureau Update**

*Presenter: Michael Nop – Iowa DOT*

**10:05 – 10:40 am**

**I-80/I-380 3D Visualization Project**

The Iowa DOT is embarking on a rigorous design and construction schedule for the reconstruction of the I-80/380 interchange. A series of videos were developed to enhance the public involvement process by showing what it will be like to drive through the interchange movements that will be changing. To create the videos, a complete digital model was needed to bring together design files from multiple bridge consultants, in-house DOT design files for the roadway improvements, bridge aesthetic treatments, major signage, plus main design details. The videos communicate the improvements in the ultimate layman's terms – through personal experience.

*Presenters: Wade Greiman and Ariel Rauk – Snyder & Associates*

**11:00 – 11:20 am**

**University Avenue Reconstruction**

University Avenue is a high profile and strategically significant commercial corridor to the City of Cedar Falls and the surrounding region. Due to the high profile nature of this project location, technical challenges, and fast-track schedule, the project leveraged multiple public engagement strategies, innovative design practices, and sound project management.

*Presenters: Aaron Moniza and Molly Long – Foth*

**11:25 am – 12:05 pm**

**A Four-to-Three Lane Story**

The IDOT is looking at converting several roads across Iowa from four to three lanes. This conversion in an urban core can be quite controversial. Bolton & Menk has worked with Perry and the IDOT through a flexible process that encourages conversation and promotes learning issues from a city's and IDOT's perspective to determine the best approach to building consensus with project stakeholders. This helps create a project that addresses residents' concerns and provides a safe roadway for all users.

*Presenters: Wes Mayberry – Iowa DOT, Sven Peterson – Perry, and Jennifer McCoy – Bolton & Menk*

# Afternoon Educational Sessions

CONFERENCE  
MATERIALS BY:



## CONCURRENT SESSION A

**1:00 – 1:40 pm**

### Interstate Plan

A two-day workshop was held to develop a plan for the interstate system within Iowa. The workshop included people from a wide range of disciplines. During this session, you'll learn more about the plan that was developed following the workshop.

*Presenter: Deanna Maifield – Iowa DOT*

**1:45 – 2:20 pm**

### The Power of Visual Storytelling and Social Media Reach

This session will discuss the Iowa DOT's tested video production process, the power of visual storytelling in infrastructure projects, what platforms work best to convey these stories. It will also highlight project success stories from the Iowa DOT's library of video tools.

*Presenters: Katie Hatfield Edstrom and Shea Saladee – HDR*

**2:25 – 3:00 pm**

### Public Involvement Management Application (PIMA) Software Tool

PIMA leverages GIS, schedule, and project management data and allows project decision makers the ability to collaborate on planning, communicating and measuring the effectiveness of their responses to stakeholder questions and concerns. It transforms how we engage with stakeholders and improves customer satisfaction with how they can interact with the Iowa DOT. Stakeholders can provide their feedback via smart phones, tablets, computers and browsers using different operating systems. It has strengthened our ability to undertake complex and difficult projects with citizen concurrence and support.

*Presenters: Brad Hofer, Valerie Brewer, and Jon Rees – Iowa DOT*

**3:20 – 4:00 pm**

### Resiliency Planning and Design for Transportation Systems

This presentation will share experiences from delivering over 1000 resiliency projects worldwide and include climate science reviews, problem definition evaluations, vulnerability assessments, risk based asset management, adaptation strategy development and prioritization, project life-cycle and benefit-cost analysis, design of green/sustainable solutions, maintenance and operations, emergency management, and program delivery. They will share how these experiences translate to roadway and bridge studies and how these techniques can be used by agencies to de-risk their infrastructure and incorporate resiliency into their design projects.

*Tammy Nicholson – Iowa DOT and Jason Bird – Jacobs*

**4:05 – 4:45 pm**

### Forecast and Future Trends to Expect from the Iowa DOT Project Delivery Bureau

*Presenters: Charlie Purcell – Iowa DOT and Deanna Maifield – Iowa DOT*

## CONCURRENT SESSION B

**1:00 – 1:40 pm**

### Council Bluffs Dual Divided Freeway

The Iowa DOT and HDR worked closely on the concept, design, construction and operation of a dual, divided freeway which is the first of its kind in that region. The presentation will discuss design alternatives, highlight innovative methods of design, contracting and construction to keep the projects on time and under budget.

*Presenter: Mark Pohlmann – HDR*

**1:45 – 2:20 pm**

### I-74 Corridor Project Overview

This session will provide an overview of the I-74 Corridor Project, Iowa DOT's largest ever construction contract, including state of the art design features, and unique construction challenges.

*Presenter: Jim Schnoebelen – Iowa DOT*

**2:25 – 3:00 pm**

### NPDES I-80/I-380/US 218 Systems Interchange

The early phases of the I-80/I-380/US 218 Systems Interchange project are currently under construction, with future phases under design. This is one of the first major Iowa DOT projects to implement new erosion and sedimentation controls to prevent silt-laden runoff from leaving the construction site. This session will describe how the design team included these measures in the construction plans and how the field representatives implemented them on site. Additionally, the presentation will include a discussion of the forthcoming permanent storm water Best Management Practices (BMPs) to be installed at the interchange, in order to be in compliance with the City of Coralville's storm water ordinances.

*Presenters: Hugh Holak, James Bultman, and Seana Godbold – Iowa DOT and Aaron Granquist – HR Green*

**3:20 – 4:00 pm**

### Accessibility, Drainage, Structures – Three Challenges in One Project

Iowa City received federal funding to complete improvements on the Dubuque Street and Park Road corridors adjacent to and crossing the Iowa River near the north edge of the city. The project included roadway reconstruction and bridge replacement work, along with utility improvements, drainage improvements and other related work for all infrastructure elements within the project limits. The presentation will discuss the bridge design and construction, as well as accommodation for multiple modes of transportation both during and after construction.

*Presenters: Jeff Hillegonds – Stanley and Natalie McCombs – HNTB*