

**2018 Transportation Conference**  
**Hosted by: ACEC-IA, Iowa DOT, FHWA**  
**September 12, 2018**  
**Prairie Meadows– Altoona, Iowa**

**Educational Sessions**

**GENERAL SESSION**

**9:00-9:40**

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

*Presenters: Mark Lowe, Iowa DOT; Mark Johnson, Iowa FHWA Assistant Division Director; and David Dougherty, Partnering Council ACEC Representative*

**CONCURRENT SESSIONS**

**9:45-10:40**

**Concurrent Session A 1**

**Iowa DOT Office of Design Update**

*Presenter: Mike Kennerly, Iowa DOT Office of Design*

**Concurrent Session B 1**

**Iowa DOT Bridge Office Update**

*Presenters: Mike Nop and Stuart Nielson, Iowa DOT*

**11:00-11:25**

**Concurrent session A 2**

**The I90 Fox River Bridge – Built from Below**

See how a pioneering approach to bridge design development overcame daunting site constraints and complex and confusing maintenance of traffic and reconstruction plans and provided an opportunity for innovative solutions encouraging further contractor creativity and incentive for enhanced quality.

*Presenter: Scott Eshleman, Stanley Consultants*

**Concurrent session B 2**

**Signed and Sealed 3D Engineering Models**

An overview of the status and challenges of providing consultant signed and sealed deliverables for roadway and bridge design projects. Several projects either underway or recently completed with the Utah DOT and the Iowa DOT will be highlighted. Review key challenges and proposed solutions to providing consultant signed and sealed 3d deliverables, including 3d data formats, QA/QC of 3d models. Review a process to sign and seal 3d data, standard of care 3d deliverables, including proposed additional information to include in contractual plans. Included will be a summary of lessons learned from HDR's National Civil Integrated Management initiatives over the past four years.

*Presenters: Will Sharp and Bill Wegner, HDR Engineers*

**11:25-11:50**

**Concurrent Session A 3**

**Renewing Urban Renewal – West 7<sup>th</sup> Street Improvements, Sioux City, IA**

The West 7<sup>th</sup> Street corridor in Sioux City is providing needed infrastructure updates, while supporting the existing community and celebrating its rich history. The project has included in-depth coordination with key stakeholders to ensure updates are provided to support the businesses and people who rely on the corridor for transportation and commerce

*Presenters: Jonathan Marburger and Justin Vogel, JEO Consulting Group*

**Concurrent Session B 3**

**GIS Data Collection for Asset Management**

Provides an innovative method for collecting and maintaining asset information. The presentation will define GIS, discuss typical GIS solution for the transportation industry, and illustrate how to integrate GIS with typical reporting applications to automate the data collection, asset management and presentation process.

*Presenters: Tyler Wiles and Mike Liska, HR Green*

**1:00-1:40**

**Concurrent Session A4**

**Performance-based Practical Design in Iowa**

We have all heard the terms PBPD, CSS, and flexibility in design. Learn how the Iowa DOT is utilizing the flexibilities available to designers to implement PBPD. This provides an Iowa perspective on how design flexibilities can be used to improve highway projects and the expectations on how design decisions should be documented. In rare instances a proposed design goes beyond the flexibilities described in the AASHTO Greenbook, we will also cover the design variance/exception process addressing what information should be included in a justification. PBPD allows designers to use their education and expertise to move away from “cookie-cutter designs” and tailor designs to fit their environment.

*Presenter: Mike Kennerly, Iowa DOT Office of Design and Andrew Wilson, FHWA-Iowa Division*

#### **Concurrent Session B 4**

##### **Integration of Bluebeam – Case Study + Interactive Experience**

A panel discussion on the latest in A/E software. There will be an introduction to Bluebeam – a file conversion software for design and construction workflows. We will look at the differences from Adobe, while also identifying how many tools and benefits it provides. A case study will show how one firm incorporated Bluebeam and the advantages and challenges of using this software to manage and collaborate projects. Participants will see how to make real-time comments and notes. Easy access to project sessions - without purchasing the software – allows input and comments throughout the project from both public and private clients.

*Presenters: Joel Goodenough, Alex Berlick and Nick Frederickson, ISG*

**1:40-2:10**

#### **Concurrent Session A 5**

##### **I-35/I-80/IA141 Interchange IJR and NEPA**

This presentation looks at a performance-based, practical design approach to solving decades old traffic operations challenge. Multiple alternatives were studied to improve traffic operations and safety on the I-35/I-80 and highway 141 interchange. HR Green and the Iowa DOT applied a performance-based, practical design approach to solve the most critical traffic operations challenge first, and then determine the best combinations of access and operations improvements to support the base alternative. We will discuss the traffic operations, highway design and bridge design elements that led to approval of the Interchange Justification Report (IJR) and National Environmental Policy Act documents and status of final design and construction phases.

*Presenters: David Dougherty and Ryan Simbro, HR Green and Tony Gustafson, Iowa DOT District 1*

#### **Concurrent Session B 5**

##### **Hubbell Avenue Safety Improvements, Des Moines, IA. Moving Toward Vision Zero Today**

Two fatal crashes within 12 months, deteriorated pavement, significant crash rates, safety deficiencies, minimal pedestrian or bicycle accommodations, skewed intersections, blind spots, inefficient traffic operations - that's what engineers were seeing at this intersection. Learn how the story of the safety audit, traffic study, public engagement process, data collection, roadway design and safety improvements addressed the concerns of all the stakeholders. Although the project did not start out with Vision Zero in mind, the Foth solution fits the Vision Zero goals and ultimately will make needed changes to the corridor to ensure safety for all users.

*Presenters: Molly Long, Jody Buddke and Patrick Kueter, Foth Engineering*

**2:10-2:40**

#### **Concurrent Session A 6**

##### **Moving Forward together: Using Non-Traditional Engagement Strategies to Engage Community Leaders and Project Skeptics.**

See how one firm met the challenge of engaging the community by using pipe cleaners, hair curlers and popsicle sticks to solve an intersection capacity problem that's been lingering for more than a decade. Using these unique tools, a kick-off event was held aimed at making everyone equally "uncomfortable" and to level the playing field. Stakeholders were invited to build models of miscellaneous objects to sell their stories, break down barriers and start moving forward. Years of mistrust and conflicting values had divided this Minnesota community, but these challenges were overcome. Learn how flexibility in engagement strategies, project process and possible solutions can overcome a project history, mistrust and misinformation.

*Presenters: Chris Chromy, Bolton and Menk*

#### **Concurrent Session B 6**

##### **Keeping your Project Between the Guardrails – Identifying and Mitigating Wasted Time, Money and Effort from your Design and Construction Projects**

It is vitally important to intelligently address the growing need for transportation infrastructure improvements while managing the available funding. All aspects of projects can be negatively impacted by wasted, time, money and effort. Significant project benefits are realized when we can identify and remove process waste and improve the value-add components of project deliverables to our clients.

*Presenter: Marlon Vogt, Ulteig Engineers*

#### **GENERAL SESSION**

**3:00-3:45**

##### **AGC/IOWA DOT/ACEC- Iowa Consultant Panel- Construction Administration Inspection**

An ACEC Iowa Partnering Team comprised of representatives from the Iowa DOT and AGC have been meeting over the past year to discuss how to best transition and implement consultant led construction inspection.

*AGC: Cork Peterson, PCI & Robert Cramer, Cramer & Associates*

*IDOT: Ron Loecher, Iowa DOT – Dist. 2 & Hugh Holak, Iowa DOT – Dist. 6*

*ACEC: Jeff Koenig, HR Green & Patrick Kueter, Foth*

*Moderator: André Gallet, Terracon*

**3:45-4:30**

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

Everyone wants to know what to expect and how to prepare for what's in the pipeline in the coming months.

*Presenter: Charlie Purcell, Iowa DOT, Director Office of Local Systems*