# **Tentative Program**

## Wednesday, August 23, 2017

11:00 - 12:15 pm Registration (Foyer)

Lunch on your own

11:00 - 6:00 pm Trade Show / Refreshments (Ballroom IV and Foyer)

## Ballroom I, II and III

Welcome & Kick-Off 12:15 pm

Many thanks to the conference committee for their assistance in providing the presentations

contained in this program.

Scott Coleman, PE, PS, Logan County Engineer, CEAO Bridge Committee Co-Chair

Warren Schlatter, PE, PS, Defiance County Engineer, CEAO Bridge Committee Co-Chair

12:20pm - 1:10pm A New Bridge over Big Darby Creek - Balancing Environmental Impacts with Long-Term Cost

Effectiveness (Pickaway-CR22-6.95 Scioto-Darby Road)\*

Anthony Neff, Pickaway County Engineer's Office Brooks Vogel, Korda/Nemeth Engineering, Inc.

1:10pm - 2:00pm Bridge Rehabilitation and Cost Effective Methods for Addressing Bridge Deterioration\*

Siva Venugopalan, Siva Corrosion Services, Inc.

2:00pm - 2:15pm **Statewide Historic Bridge Preservation Awards** 

Matt Shamis, Chief Bridge Engineer, Federal Highway Administration, Ohio Division

Mary Ogle, Project Reviews Manager, State Historic Preservation Office

Diana Welling, Department Head, Resource Protection & Review, State Historic Preservation

Erica Schneider, Assistant Administrator, ODOT's Office of Environmental Services

Susan Gasbarro, Team Leader, Cultural Resources, Office of Environmental Services, ODOT Tom Barrett, Historic Bridge Program Manager, Scenic Byways Coordinator, Office of

Environmental Services, ODOT

Monica Bruns, Staff Historian Office of Environmental Services, ODOT

Heidi Harendza, Staff Historian, Office of Environmental Services, ODOT

The Ohio Department of Transportation, FHWA, and the State Historic Preservation Office will present the annual Historic Bridge Preservation Awards. The agencies will honor recent efforts that rehabilitate historic bridges, keep historic structures in service, or reuse and preserve them at a new location. Context-sensitive bridge designs and sustainable practices which incorporate aesthetic elements and components of older bridge types are also eligible for the award.

The Historic Bridge Awards are part of the Section 106 Programmatic Agreement which streamlines the environmental process for all types of common federal transportation projects. It also incorporates identification, and protection of historically significant resources, including the preservation of historic bridges.

<sup>\*</sup>All technical sessions (excluding Historic Bridge Preservation Awards) have been recommended for CPD credit for a maximum of 7.25 CPD hours. Please note that the final determination of what qualifies for CPD credit ultimately lies between the license holder and the State Board of Registration for Professional Engineers & Surveyors.

# **Tentative Program**

2:15pm – 2:50pm Break – Trade Show (Ballroom IV and Foyers)

2:50pm – 3:40pm Credit Bridge Program Success Stories\*

Nichole Wade, Program Manager, Office of Local Program, ODOT Ronald Meyer, II, PE, PS, Deputy Engineer, Allen County Engineer's Office

James Wiechart, PE, PS, Mercer County Engineer

3:45pm – 4:15pm Licking County 5-Year Bridge Program: Managing and Replacing 158 Deteriorated Structure

Assets\*

Michael Bline, PE, Bridge Engineer, Licking County Engineer's Office

Daniel Kent, Jr., PE, Senior Structural Engineer, Gannett Fleming Engineers and Architects, P.C.

As our nation's infrastructure ages, emphasis is placed on inspection and remediation of bridges. How do engineers and county officials work together to ensure the safety of the public? This presentation describes the 5-year bridge program that the Licking County Engineer developed to manage, repair and replace aging county owned structures. This session highlights the findings of the program, including successful repair and replacement of a large number of

Licking County owned bridges.

4:15pm – 6:00pm Trade Show and Reception (Ballroom IV and Foyers)

We encourage you to visit our exhibitors and thank them for their support of our conference.

Refreshments will be served.

#### Thursday, August 24, 2017

7:30am – 8:30am Continental Breakfast – Foyer

8:30am – 8:45am Bridge QA/QC Updates\*

Mark Stockman, Bridge QA/QC Engineer, CEAO

8:45am – 9:45am ODOT Office of Structural Engineering Hot Topics\*

Tim Keller, PE, Administrator, Office of Structural Engineering, ODOT

9:45am-10:00am Break

10:00am-10:30am ORIL Project – Evaluation and Design of a TL3 Bridge Guardrail System Mounted to Steel Fascia

Beams\*

10:30am-11:00am ORIL Project – Load Capacity of Concrete Slabs without Plans\*

Richard Miler, PE, FPCI, Professor, Department of Civil and Architectural Engineering and

Construction Management, University of Cincinnati

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11:00am-11:30am

## Load Rating Concrete Arches with Graphic Statics\*

Bill Vermes, Senior Bridge Engineer, Pennoni Associates

Before 1940, concrete arch bridges were designed using graphic statics and hand-calculated tables. Recent load ratings using finite element analysis and spreadsheets show that these structures have high rating factors despite heavier truck loads. Load ratings for several older concrete arches using a regeneration of the original design methods with contemporary trucks will be compared to that of current practices, leading to a better understanding of the original design and performance of concrete arch bridges.

11:30am-12:00pm

# TUS-36-12.05 Bridge over the Tuscarawas River – The Replacement of a Deficient Historic Bridge Becomes an Opportunity for Innovation\*

Matthew O'Donnell, PE, Project Manager and Senior Bridge Engineer, Gannett Fleming Engineers and Architects, P.C.

Waseem Khalifa, PhD, PE, District Bridge Engineer/Program Manager, ODOT District 11

Built in 1949 by the American Bridge Co. as one of ODOT's last through-truss structures, the original TUS-36-1205 Bridge used a very large amount of steel, emblematic of the material's availability after World War II. These characteristics had placed it on Ohio's Historic Bridge Inventory, so efforts to address its deficiencies began with an extensive study of rehabilitation vs. replacement options. Once rehabilitation was found unfeasible, the replacement project became part of ODOT's strategic initiative to implement new technologies.

After extensive coordination with various government and community agencies, the new 5-span steel plate girder bridge was built in one construction season. It includes a shared-use path and sufficient clearance for a future shared-use trail underneath.

The presentation will explore the successful solutions that resolved the numerous project constraints and challenges, and allowed construction to be completed in a demanding timeframe.

12:00pm

Lunch - Pavilion

12:15pm-12:45pm

Luncheon Key Note: Ironton Russell Cable Stay Bridge\*
David Bame, PE, Transportation Engineer 4, ODOT District 9
Tom Hesmond, PE, Project Manager, Brayman Construction

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