#### PERSONNEL QUALIFICATIONS



# Adam Werntz | Senior Associate



## **EDUCATION**

- University of Illinois at Urbana-Champaign
  - Bachelor of Science,
    Civil Engineering, 2017
  - Master of Science, Civil Engineering, 2019

#### **PRACTICE AREAS**

- Bridges and Civil Infrastructure
- Structural Analysis/ Computer Modeling
- Repair and Rehabilitation Design
- Failure/Damage Investigations

# REGISTRATIONS

- NHI Course 130055 Safety Inspection of In-Service Bridges
- NHI Course 130078 Fracture
  Critical Inspection Techniques for
  Steel Bridges
- Professional Engineer in ID, IL and IN
- Structural Engineer in IL

# **PROFESSIONAL AFFILIATIONS**

- American Institute of Steel Construction
- Structural Engineering Institute

# **TECHNICAL COMMITTEES**

■ TRB AKB30 - Standing Committee on Concrete Bridges

# CONTACT

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#### **EXPERIENCE**

Adam Werntz joined WJE in 2019 and has gained specialized experience through his involvement with the inspection, load rating, and retrofit of various steel, concrete, and timber bridge structures. To support these efforts, he has performed nondestructive testing in the laboratory and on in-service bridges. Mr. Werntz has participated in bridge inspections involving many different types across several U.S. states. His recent projects have included analyses and load ratings of several simple and complex bridge structures. Mr. Werntz also has participated in several retrofit projects that required investigation, analysis, design, retrofit fabrication, and installation of supplemental components for bridge structures.

Prior to joining WJE, Mr. Werntz worked as a graduate teaching assistant specializing in materials testing, including steel, concrete, timber, and polymer specimens.

# **REPRESENTATIVE PROJECTS**

## **Bridges and Civil Infrastructure**

- I-64 Sherman Minton Bridge New Albany,
  IN: In-depth and fracture critical inspection of tied arch bridge
- Indiana SR-46 Columbus, IN: In-depth and fracture critical inspection of cable-stayed bridge
- I-74 Bridge over the Mississippi River -Davenport, IA: In-depth and fracture critical inspection of the original twin suspension bridges and the twin arch bridges constructed in 2021
- US-34 Bridge over the Missouri River Mills County, IA: Routine and in-depth inspections of steel plate girder bridge
- US-34 Bridge over the Mississippi River -Burlington, IA: In-depth inspection of concrete pylons and tie-down pier utilizing rope access methods
- O'Hare International Airport Chicago, IL: Pedestrian canopy inspection, repair design, and compilation of retrofit drawings and construction specifications
- I-40 Hernando de Soto Bridge Memphis, TN: Instrumentation to monitor retrofit installation and in-service performance of tie girder fracture repair

# **Structural Analysis/Computer Modeling**

- Bridge Girder Erection and Jacking Procedures - Various Locations, U.S.: Stability analysis and review of curved steel, straight steel, tied arch, and PPC bridge beam erection and jacking procedures
- South Dakota Department of Transportation Bridge Load Ratings - Pierre: Load ratings of multiple concrete frames and PPC girder bridges
- ODOT Bridge Load Ratings Salem, OR: Load ratings of multiple concrete, steel, and timber bridges

# Repair and Rehabilitation Design

- The Mile-Long Bridge Chicago, IL: Development of a patch repair scheme for damaged PPC girder
- Chicago Skyway Bridge Repairs Chicago, IL: Load rating and development of in-service repair schemes for steel members and gusset plates for several piers supporting the Chicago Skyway approach and main spans
- New Harmony Bridge New Harmony, IN: Load rating, inspection, and development of restoration plan
- SR-49 over SR-2 Valparaiso, IN:
  Development of construction drawings and project specifications for splice repairs

#### **Failure/Damage Investigations**

 Perrine Bridge - Twin Falls, ID: Inspection, documentation, and repair of deteriorated gusset plates along the end spandrel columns as part of the end post evaluation

