Justin Dahlberg, PE	
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EDUCATION

- MS, Civil Engineering, Iowa State University, Ames, IA 2007
- BS, Civil Engineering, University of Wisconsin-Platteville, Platteville, WI, 2005

CERTIFICATIONS

- Professional Engineer (PE) License, State of Iowa (No. 21398)

PROFESSIONAL EXPERIENCE

- Director, Bridge Engineering Center (BEC), 2022–present
- Co-Director, National Center for Wood Transportation Structures (NCWTS), 2020–present
- Research Engineer, Bridge Engineering Center, Institute for Transportation, Iowa State University Ames, IA, 2010–2015, 2019–present
- Senior Structural Engineer, Saul Engineering, 2015–2018
- Structural Engineer, Saul Engineering, 2007–2010

SELECTED RESEARCH PROJECTS

In Progress

- *Deployment of Structural Health Monitoring of Bridge in the State of Iowa* (Iowa Department of Transportation)
- *Evaluation of Service Life Design of Bridges*
- *Performance Monitoring of Two-Course Bridge Deck Utilizing UHPC*
- *Observation, Documentation, and Performance Evaluation of Bridge Deck using Multi-Crystalline Intermixed Concrete Enhancer and Surface Sealer*
- *Timber Transportation Structures Research Needs Assessment*
- *Development and Evaluation of Robust Moisture Control Strategies to Enhance Long-Term Durability of Timber Highway Bridges*
- *Laboratory Investigation of Cross-Laminated Timber Decks for Bridge Applications*

Completed

- *Timber Abutment Piling and Back Wall Repair*
- *Iowa ABC Connections*
- *Development of Cost Effective Timber Bridge Repair Techniques for Minnesota*
- *Evaluation of Performance of Innovative Bridges in Wisconsin*

- *Development of Rural Road Bridge Weigh-in-Motion System*
- *Evaluation of Performance of A709 Grade QST 65 Steel*
- *Creation of a Guide for Orthotropic Steel Deck Level 1 Design*
- *Assessment, Repair, and Replacement of Bridges Exposed to Fire Damage*
- *Implementation of Wide Bridge Recommendations*
- *Multi-Span Lateral Slide Laboratory Investigation*
- *Helical Pile Foundation Implementation for Bridge Structures*
- *Evaluation of Galvanized and Painted-Galvanized Steel Piling*
- *Impact of Legalized 25-kip Axle Loads for Self-Propelled IoH on Iowa Bridges*
- *Lateral Slide of Multi-Span Bridges: Investigation of Connections and Other Details – Phase I*
- *Methods for Removing Concrete Decks from Bridge Girders*
- *Performance and Design of Approach Panels in Wisconsin*
- Implementation of a Pilot Continuous Monitoring System: Iowa Fall Arch Bridge (Iowa Department of Transportation)
- *Development and Integration of Advanced Timber Bridge Inspection Techniques for NBIS* (Minnesota Department of Transportation)
- *Debris Mitigation Methods for Bridge Piers*
- *Investigation and Evaluation of the Iowa DOT Bridge Deck Epoxy Injection Process*
- *Polymer Concrete Overlay Evaluation*
- *Performance of Existing ABC Projects*
- *Laboratory Investigation of Iowa ABC Connection*
- *Development of ABC Lateral Slide Training Materials*
- *Effect of Speed on Dynamic Impact Factor with Different Entrance Conditions*
- *Load Rating Program Technical Support Services* (Federal Highway Administration)

SELECTED PUBLICATIONS

- Dahlberg, J., Z. Liu, and B. Phares. 2024. *Advances in state bridge load rating processes and practices: A summary report of 2024 bridge load rating peer exchanges*, Report No. FHWA-HIF-24-113. Federal Highway Administration, Washington, DC.
- Dahlberg, J. M., Z. Liu, B. M. Phares, and B. Pospisil. 2024. *Impact of legalized 25-kip axle loads for self-propelled implements of husbandry on Iowa bridges*. Iowa Department of Transportation, Ames, IA.
- Dahlberg, J. M., and B. M. Phares. 2023. *Helical pile foundation guide for bridge structures*, IHRB Project TR-800. Iowa Department of Transportation, Ames, IA.
- Liu, Z., J. M. Dahlberg, B. M. Phares, and S. Mousavi. 2022. *Evaluation of galvanized and painted galvanized steel piling: Interim report*, IHRB Project TR-766. Iowa Department of Transportation, Ames, IA.
- Dahlberg, J. 2022. *Evaluation of the performance of A709 Grade 65 QST bridge steel*, IHRB Project TR-779. Iowa Department of Transportation, Ames, IA.

- Dahlberg, J., D. Paterson, T. Murphy, R. Medlock, T. Logan, R. Sougata, and F. Artmont. 2022. *Guide for orthotropic steel deck level 1 design*, Report No. FHWA-HIF-22-056. Federal Highway Administration, Washington, DC.
- Dahlberg, J. M., B. M. Phares, and R. Afzal. 2022. *Assessment, repair, and replacement of bridges subjected to fire*. Iowa Department of Transportation, Ames, IA.
- Dahlberg, J. M., Z. Liu, and B. Phares. 2022. *Implementation of recommendations for eliminating longitudinal median joints in wide bridges*, IHRB Project TR-752. Iowa Department of Transportation, Ames, IA.
- Dahlberg, J. M., Z. Liu, A. Alomari, and B. M. Phares. 2022. *Multi-span lateral slide laboratory investigation: Phase II*. Iowa Department of Transportation, Ames, IA.
- Liu, Z., K. S. Freeseman, J. M. Dahlberg, B. M. Phares, and M. LaViolette. 2021. *Lateral slide of multi-span bridges: Investigation of connections and other details – Phase I*. Iowa Department of Transportation, Ames, IA.
- Dahlberg, J., P. Lu, K. Freeseman, and B. Phares. 2018. *Development of rural road bridge weigh-in-motion system to assess weight and configuration of farm-to-market vehicles*. Midwest Transportation Center, Institute for Transportation, Iowa State University, Ames, IA.
- Dahlberg, J., and B. Phares. 2016. *Evaluation of performance of innovative bridges in Wisconsin*, WisDOT ID No. 0092-15-02. Wisconsin Department of Transportation, Milwaukee, WI.
- Deng, Y., B. Phares, H. Dang, and J. Dahlberg. 2015. Impact of concrete deck removal on horizontal shear capacity of shear connections. *Journal of Bridge Engineering*, Vol. 20, No. 11.
- Dahlberg, J., B. Phares, and W. Klaiber. 2015. *Development of cost-effective timber bridge repair techniques for Minnesota*, Report No. MN/RC 2015-45A. Minnesota Department of Transportation, St. Paul, MN.
- Phares, B. M., J. Dahlberg, and N. Burdine. 2015. *Implementation of a pilot continuous monitoring system: Iowa Falls Arch Bridge*. Iowa Department of Transportation, Ames, IA.
- Phares, B. M., J. Dahlberg, and T. J. Wipf. 2015. *Development and integration of advanced timber bridge inspection techniques for NBIS*. Iowa Department of Transportation, Ames, IA.
- Phares, B., and J. Dahlberg. 2015. *Performance and design of bridge approach panels in Wisconsin*, WisDOT ID No. 0092-14-04. Wisconsin Department of Transportation, Milwaukee, WI.
- Dahlberg, J., and B. Phares. 2015. *Iowa ABC connections*. Iowa Department of Transportation, Ames, IA.
- Phares, B., J. Shane, J. Dahlberg, and H. Dang. 2014. *Methods for removing concrete decks from bridge girders*, IHRB Project TR-647. Iowa Department of Transportation, Ames, IA.
- Dahlberg, J., B. Phares, J. Bigelow, and F. W. Klaiber. 2012. *Timber abutment piling and back wall rehabilitation and repair*, IHRB Project TR-616. Iowa Department of Transportation, Ames, IA.

OUTREACH AND COMMUNITY ENGAGEMENT

- Teaching in the Fast Lane – Transportation Summer Training Course for K-6 Educators
- Central Iowa's Bridge Building Competition: Ready, Set, Build!