

Jennifer S. Shane, PhD	
W.A. Klinger Teaching Professorship, Associate Professor, Department of Civil, Construction and Environmental Engineering Director, Construction Management and Technology Institute for Transportation Iowa State University 2711 South Loop Dr. Suite 4700 Ames, IA 50010	(515) 294-1703 jsshane@iastate.edu IOWA STATE UNIVERSITY Institute for Transportation

BACKGROUND

In Dr. Shane’s dual role as both associate professor and director of the CMAT Program at the Institute for Transportation, she can work with academics and industry through her research and teaching responsibilities. Dr. Shane has engaged industry, through owners and contractors, in multiple research projects to develop guides on project management, nighttime construction activities, and project delivery, including guides for the National Cooperative Highway Research Program and the Second Strategic Highway Research Program. Dr. Shane has also worked with the Minnesota Department of Transportation (MnDOT) on multiple projects. One project involved cost estimation process improvement and organizational integration, which resulted in a cost estimation and cost management technical reference manual. This was followed by work on risk-based engineers estimate practices and identification of issues for implementing the construction manager/general contractor (CM/GC) process on MnDOT projects. Dr. Shane is currently working with the Iowa Department of Transportation on projects involving providing supportive services for disadvantaged business enterprises, information sharing workflow, and rapid bridge deck joint repair.

EDUCATION

- PhD, Civil Engineering-Construction Engineering and Management, University of Colorado, Boulder
- MS, Civil Engineering- Construction Engineering and Management, University of Colorado, Boulder
- BS, Engineering- Civil Specialty, Colorado School of Mines, Golden, CO

PROFESSIONAL EXPERIENCE

Iowa State University (ISU), Department of Civil, Construction, and Environmental Engineering

- W.A. Klinger Teaching Professorship, 2020–present
- Associate Professor, 2012–present
- Assistant Professor, 2006–2012

Institute for Transportation, Iowa State University

- Director, Construction Management and Technology (CMAT), 2010–present

Kansas Department of Transportation

- Engineering Associate I and II, 2000–2001

SELECTED RESEARCH PROJECTS

- Expanded Guides to Managing the Design Phase of Design-Build Projects, Charles Pankow Foundation
- Project Delivery Methods Peer Exchange, Iowa DOT
- Disadvantaged Business Enterprises Supportive Services, Iowa DOT
- Optimizing Maintenance Equipment Life Cycle for Local Agencies, Iowa DOT
- 2016 Work Zone Safety Grant, FHWA
- Guide to Life-Cycle Data and Information Sharing Workflow for Transportation Assets, Iowa DOT
- Draft Project Management Update to the Iowa DOT Project Development Manual, Iowa DOT
- Project Management Peer Exchange, Iowa DOT
- Minnesota Department of Transportation Alternative Contracting General Engineering Consultant: Construction Manager/General Contractor Work Order, MnDOT (Parsons Brinkerhoff)
- Modernizing Road Construction Plans and Documentation, Minnesota LRRB
- Risk Based Engineers Estimate, MnDOT
- Procedures, Process, and Contracts for Future Construction Manager at Risk, MnDOT
- Risk Mitigation Strategies for Operations and Maintenance Activities, Iowa DOT
- Project Management Strategies for Complex Projects, SHRP 2
- Nighttime Construction Impacts on Safety, Quality, and Productivity, NCHRP
- MnDOT Cost Estimation Process Improvement and Organizational Integration, University of Minnesota Center for Transportation Studies

SELECTED PUBLICATIONS

- H. Dang, and J. S. Shane. 2020. Fraud and Abuse Schemes in the Disadvantaged Business Enterprise Program. *Journal of Legal Affairs and Dispute Resolution*, Vol. 12, No. 3.
- H. Dang, and J. Shane. 2020. Diversity and Inclusion of Business Enterprises: A Comparative Analysis of Programs Used by Disadvantaged Business Enterprises. *Proc., Construction Research Congress 2020*, ASCE, Tempe, AZ.
- A. Sinha, K. Strong, M. Ozbek, and J. Shane. 2018. A Decision Support Framework for Assessing the Contextual Factors for Complex Projects. *Transportation Research Record: Journal of the Transportation Research Board*. Also presented at Transportation Research Board 2018.
- J. S. Shane, A. Katoski, and H. Dang 2018. Improving the Effectiveness and Quality of Supportive Services for the Iowa Department of Transportation Disadvantaged Business Enterprise Program. *Proc., Transportation Research Board 2018*, Washington, DC.

PROFESSIONAL AFFILIATIONS, HONORS, AND SERVICE

- Transportation Research Board (TRB)
 - Chair, TRB Committee AKC10 – Construction Management (Member for 12 years)
 - Member, TRB Committee AJE60 – Contracting Equity (2018–present)
- American Society of Civil Engineers (ASCE)
 - Chair, ASCE Management Practices in Construction Committee
 - Member, ASCE Construction Research Council