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EDUCATION

- PhD, Transportation Engineering, Iowa State University, 2000
- MS, Transportation Engineering, Iowa State University, 1994
- BS, Civil Engineering, Yarmouk University, Jordan, 1987

PROFESSIONAL EXPERIENCE

Iowa State University, Department of Civil, Construction and Environmental Engineering

- Professor, 2023–present
- Associate Professor, 2014–2023
- Associate Chair for Research and International Collaboration, 2020–present

Institute for Transportation, Iowa State University

- Director, Center for Transportation Research and Education (CTRE), 2015–present
- Director, Roadway Infrastructure Management and Operations Systems (RIMOS) program, 2010–present
- Research Scientist, 1994–present

SELECTED RESEARCH PROJECTS

Dr. Smadi has served as a PI or Co-PI on over \$30.9M in external research funding from a multitude of national, state, and local agencies. Dr. Smadi has been PI of \$15.1M. Since joining the CCEE Department in 2014, Dr. Smadi participated in \$15.8M of external research funding as PI or Co-PI, with \$6.7M as just the PI.

- *Guidebook for Application of Polymer-modified Asphalt Overlays: from Decision-Making to Implementation* (Federal Highway Administration): PI, 2022–2023
- *Bridge Management Support* (Iowa Department of Transportation): PI, 2022
- *Pavement Management Support* (Iowa Department of Transportation): PI, 2022–2023
- *SHRP2 Safety Data Implementation and Oversight* (Federal Highway Administration/ Subcontract to Virginia Tech): PI, 2021–2023
- *Wet Reflective Pavement Marking Evaluation* (Ohio Department of Transportation/Subcontract to the University of Akron): Co-PI, 2021–2023
- *Applying the Transportation Asset Management Plan (TAMP) System Performance Requirements to Pavement and Bridge Conditions* (Federal Highway Administration): PI, 2021–2022

- *Developing Guidance Documents and Training Workshops to Support Enhancement of the State DOTs Transportation Asset Management Plans* (Federal Highway Administration): PI, 2020–2022

SELECTED PUBLICATIONS

Dr. Smadi has authored or co-authored a total of 48 peer-reviewed archival journal articles in impactful journals. Since joining the CCEE Department in 2014, Dr. Smadi published 36 journal articles, with the overwhelming majority being with his students, post-doctoral associates, and fellow research staff. In addition to journal articles, Dr. Smadi has authored 65 peer-reviewed conference proceedings and 39 technical reports.

- Abukhalil, Y., and O. Smadi. 2022. A Bootstrap-Based Integer Programming Algorithm for Budget Allocation in Pavement Management Systems. *Journal of Infrastructure Systems*, Vol. 28, No. 1.
- Chen, Y-A., H. Ceylan, I. Nlenanya, O. Kaya, O. Smadi, P. C. Taylor, S. Kim, K. Gopalakrishnan, and D. E. King. 2022. Long-term performance evaluation of Iowa concrete overlays. *International Journal of Pavement Engineering*, Vol. 23, No. 3.
- Nlenanya, I., and O. Smadi. 2021. A Risk Management Database Framework Implementation for Transportation Asset Management. *CivilEng*, Vol. 2, pp. 193–213.
- Sassani, A., O. Smadi, and N. Hawkins. 2021. Developing Pavement Marking Management Systems: A Theoretical Model Framework Based on the Experiences of the US Transportation Agencies. *Infrastructures*.
- Safaei, N., O. Smadi, A. Masoud, and B. Safaei. 2021. An Automatic Image Processing Algorithm Based on Crack Pixel Density for Pavement Crack Detection and Classification. *International Journal of Pavement Research and Technology*, Vol. 15, pp. 159–172.
- Alhasan, A., O. Smadi, R. Walton, and B. L. Schleppe. 2020. Pavement texture characterization using wavelets analysis in relation to pendulum skid tester. *International Journal of Pavement Engineering*.
- Hallmark, S., A. Goswamy, T. Litteral, N. Hawkins, O. Smadi, and S. Knickerbocker. 2020. Evaluation of sequential dynamic chevron warning systems on rural two-lane curves. *Transportation Research Record: Journal of the Transportation Research Board*, Vol. 2674, No. 10.

PROFESSIONAL AFFILIATIONS, HONORS, AND SERVICE

- American Society of Civil Engineers (ASCE)
 - Member, ASCE Infrastructure Management Committee (2008–present)
 - Member, ASCE Advanced Technology Committee (2010–present)
 - Member, ASCE Highway Pavement Committee (2010–present)
- International Road Federation (IRF)
 - Executive Board Member of the Washington Program Center (2012–present)
 - Executive Board Treasurer (2021–present)
 - Asset Management Committee (Chair for 4 years) (2013–2018)
- Transportation Research Board (TRB)
 - Member, TRB Committee AFD20 – Pavement Monitoring and Evaluation (Chair for 6 years) (2004–2016)
 - Member, TRB Committee AFD10 – Pavement Management (2005–2014)
 - Member, TRB Committee ABC40 – Asset Management (2007–2019)

- Institute of Transportation Engineers (ITE)
- Friend, AASHTO Asset Management Subcommittee
- World Road Association (PIARC): Infrastructure Asset Management Group