David Veneziano, PhD

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IOWA STATE UNIVERSITY Institute for Transportation

EDUCATION

- PhD, Civil Engineering (Transportation Engineering), August 2006
- MS, Transportation Planning, Iowa State University, August 2002
- BS, Management, St. Joseph's College, May 2000

PROFESSIONAL EXPERIENCE

- Safety Circuit Rider, Iowa LTAP, InTrans, Iowa State University, 2015–present
- Research Scientist, Western Transportation Institute, Montana State University, 2006–2015

SELECTED RESEARCH PROJECTS

- Severe Weather Index (Maryland DOT). 2018–2020. Project developed SWI for storm events using RWIS data.
- **Preparing Local Agencies for the Future of Connected and Autonomous Vehicles** (Minnesota DOT). 2018–2019. Project developed toolbox of information for local agencies to be aware of in preparing for connected and autonomous vehicles.
- Investigating the Necessity and Prioritizing Pavement Markings on Low Volume Roads (Minnesota DOT). 2016–2018. Project developed a prioritization approach and tool to assist local agencies in pavement marking prioritization.
- **Sign Effectiveness Guide** (Iowa DOT). 2015–2016. Summarized existing literature pertaining to the safety and operational effectiveness of various roadway signs.
- **Evaluation of Pavement Markings on Low Volume Rural Roadways in Iowa** (Iowa DOT). 2015. Project documented maintenance practices and needs for pavement markings on low-volume roads.
- **Cost-Benefit of Various Winter Maintenance Strategies** (Clear Roads Pooled Fund). 2013–2015. Project documented the quantified and non-quantified costs and benefits of maintenance strategies.
- *Benefit-Cost Analysis of CDOT Fixed Automated Spray Technology (FAST) Systems* (Colorado DOT). 2012–2014. Conducted safety and financial evaluation of FAST systems in Colorado.
- *Highway User Expectations for ITD Winter Maintenance* (Idaho Transportation Department). 2013–2014. Project documented public expectations regarding winter maintenance operations.
- Evaluating the Effectiveness of Winter Chemicals on Reducing Crashes in Idaho (Idaho Transportation Department). 2011–2013. Project evaluated the impact on crashes of winter maintenance treatments.

- **Cost Benefit Toolkit Phase 2** (Clear Roads Pooled Fund). 2012–2013. Expanded web-based tool for benefit-cost analysis of winter maintenance equipment and practices.
- NCHRP Project 20-07/Task 300: Methods for Estimating the Benefits for Winter Maintenance Operations (National Research Council). 2011–2012. Investigated the safety effects of winter maintenance and financial implications of different maintenance scenarios.
- Development of a Toolkit for Cost-Benefit Analysis of Specific Winter Maintenance Practices, Equipment and Operations (Clear Roads Pooled Fund). 2008–2010. Developed web-based tool for benefit-cost analysis of winter maintenance practices, equipment, and operations.

SELECTED PUBLICATIONS

- Hallmark, Shauna, David Veneziano, and Theresa Litteral. 2018. *Investigating the Necessity and Prioritizing Pavement Markings on Low-Volume Roads*, MN/RC 2018-21. Minnesota Department of Transportation, St. Paul, MN.
- Veneziano, David and Omar Smadi. 2019. Preparing Local Agencies for the Future of Connected and Autonomous Vehicles, MN/RC 2019-18. Minnesota Department of Transportation, St. Paul, MN.
- Veneziano, David, Anburaj Muthumani, and Xianming Shi. 2015. Safety Effects of Fixed Automated Spray Technology Systems. *Transportation Research Record: Journal of the Transportation Research Board*, No. 2482, pp. 102–109.
- Veneziano, David, Laura Fay, Xianming Shi, Barbara Foltz, Monica Reyna, and J. D. Wulfhorst. 2014. *Highway User Expectations for ITD Winter Maintenance*, FHWA-ID-14-232. Idaho Transportation Department, Boise, ID.
- Veneziano, David and Leann Koon. 2014. *Survey of Western State Safety Warning Devices*. Western Transportation Institute, Bozeman, MT.
- Veneziano, David, Xianming Shi, Lisa Ballard, Zhirui Ye, and Laura Fay. 2014. A Benefit-Cost Analysis Toolkit: Assessing Road Weather Management Technologies and Enabling Winter Maintenance Best Practices. ASCE Special Publication: Climatic Effects on Pavement and Geotechnical Infrastructure, pp. 217–230.
- Ye, Zhirui, David Veneziano, and Xianming Shi. Estimating Statewide Benefits of Winter Maintenance Operations. 2013. *Transportation Research Record: Journal of the Transportation Research Board*, No. 2329, pp. 17–23.
- Ewan, Levi, Ahmed Al-Kaisy, and David Veneziano. 2013. Remote Sensing of Weather and Road Surface Conditions: Is Technology Mature for Reliable ITS Applications? *Transportation Research Record: Journal of the Transportation Research Board*, No. 2329, pp. 8–16.
- Ye, Zhirui, David Veneziano, and Ian Turnbull. 2012. Safety Effects of Icy Curve Warning Systems. *Transportation Research Record: Journal of the Transportation Research Board*, No. 2318, pp. 83–89.
- Fay, Laura, David Veneziano, Zhirui Ye, Dan Williams, and Xianming Shi. 2010. Cost-Benefits of Winter Road Maintenance Tools: A Renewed Perspective Based on Recent Research. *Transportation Research Record: Journal of the Transportation Research Board*, No. 2169, pp. 174–186.