

## Transforming the Safety Culture of State Departments of Transportation to Achieve Toward Zero Deaths Vision

### Background

A strong safety culture has been shown to be important for the success of organizations responsible for public safety. For example, a strong safety culture amongst public health organizations is a significant determinant of patient satisfaction with services provided by those organizations and patient safety resulting from those services. A similar relationship is expected for state agencies (e.g., DOT, DPS) responsible for the safety of road users. Indeed, a strong safety culture within traffic safety agencies is identified as a key factor for the success of the National Toward Zero Deaths (TZD) strategy: “From a professional or organizational perspective, changing the safety culture would ensure safety impacts are considered during decision making that affects any portion of the roadway transportation network and its operation.”<sup>1</sup> The creation of a strong safety culture within state transportation agencies is necessary to motivate the resources and planning needed to support the full range of innovative strategies that can sustain the TZD vision. However, there are currently no existing “tools” applicable to state transportation agencies to help them transform their safety cultures to align with the TZD vision.

### Goal

The goal of this project is to grow a strong safety culture among a cohort of state transportation agencies by providing tools and guidance to assess and transform the agency’s safety culture to support their safety plans and achieve their TZD vision.

### Opportunity

The Center for Health and Safety Culture (CHSC) at the Western Transportation Institute (Montana State University) is offering an opportunity to join a select cohort of state DOTs in a multi-year project to grow a strong and innovative organizational safety culture which encourages new resources and novel strategies to significantly reduce fatal and serious injury crashes. A cohort approach distributes costs and leverages shared learning so the project is more cost-effective for participating agencies.

### Resources and Tools Provided

- (1) a standard measurement tool to assess the safety culture of each participating state agency (to be implemented in partnership with the agency and analyzed by CHSC);
- (2) a set of relevant strategies and a process for transforming identified aspects of the safety culture in each participating state agency (based on the assessment);
- (3) a range of support services to help guide and support each participating state agency in the implementation of their transformation process; and
- (4) a complete evaluation of the effectiveness of the implemented transformation process.

The same set of tools and guidance will be provided to all participating state agency. However, the implementation of these will be unique for each state agency. CHSC will work individually with each agency to apply the tools in the specific operational context of that agency. Each agency will be provided with results and recommendations to transform their own culture with respect to their unique traffic safety goals. It is anticipated that each of the tools will take one year to develop and implement, resulting in a total project commitment of four years. Annual cost is \$35,000 per participating state agency.

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<sup>1</sup> [http://www.towardzerodeaths.org/wp-content/uploads/TZD\\_Strategy\\_12\\_1\\_2014.pdf](http://www.towardzerodeaths.org/wp-content/uploads/TZD_Strategy_12_1_2014.pdf) (page 4)

### Strategies for Funding

Potential funding sources include State Planning and Research (SP&R) funds, possibly NHTSA 402 funding (administered through the State Highway Safety Offices), or state funds. Another potential option is NHTSA's Road to Zero program.

### Qualifications

The CHSC has unique expertise in this domain to ensure success. CHSC has participated in the recent domestic scan to identify key success factors for transforming safety culture in transportation organizations<sup>2</sup> and is leading an ongoing research project to develop guidance for the transformation of the national traffic safety culture.<sup>3</sup> In addition, the CHSC faculty has expertise in transforming organizational culture, developing transformational leaders, and managing change in organizational settings.

### Next Steps

If you are interested in learning more or joining the cohort, please contact: Nicholas Ward (Director, Center for Health and Safety Culture) at [nward@ie.montana.edu](mailto:nward@ie.montana.edu) or 406-994-5942. Each cohort will be limited to four agencies.

### Project Team

**Dr. Nicholas Ward** (F. Erg. S) obtained his Ph.D. in Human Factors psychology from Queen's University (Canada). He is currently a Professor of Mechanical and Industrial Engineering at Montana State University and Director of the [Center for Health and Safety Culture](#) at the Western Transportation Institute. This center focuses on transforming culture related to health and safety culture including safe driving. This is achieved through community engagement (across the social ecology) in the measurement, analysis, and transformation of cultural cognitions including values, beliefs, attitudes, and norms. Dr. Ward was the Subject Matter Expert on the recent NCHRP scan to determine successful approaches for the development of an organization-wide safety culture in transportation agencies and is the Principle Investigator for the NCHRP project 17-69 to develop guidelines for transforming the national traffic safety culture. Professor Ward recently authored the traffic safety culture chapter for the national [Toward Zero Death strategy](#) and published a [primer on traffic safety culture](#) for traffic safety practitioners.

**Dr. Eric Austin** joined MSU's Political Science department in 2005 after three years with the School of Public Affairs and Administration at Western Michigan University. Since coming to MSU, he has served as the Coordinator of the Master of Public Administration program and in 2013 was appointed as the Executive Director of the [Burton K. Wheeler Center](#) for Public Policy. Eric's research focuses on the factors that affect organizational culture that influences policy making and decision making, especially in contentious environments. In addition to working on various environmental, educational and social services programs, Eric served and continues to work as a trainer and consultant providing technical support and capacity building programs for organizations ranging from large, federal agencies all the way down to small, volunteer based non-profits.

**Dr. William Schell** earned his Ph.D. in Industrial and Systems Engineering (Engineering Management) from the University of Alabama in Huntsville. He is currently an Assistant Professor of Mechanical and Industrial Engineering at Montana State University. Schell's research is focused on organizational development, specifically models of leadership development and the role of leadership in change management processes. His work in industry (American Express (Director – Global Business Transformation), Wells Fargo (VP – Operations Engineering) and PrintingforLess.com (VP – Strategy and Development)) has included development of organizational development tools (e.g. knowledge management systems, employee training programs, etc.) needed to support the creation and management of many programs to transform organizational culture and drive higher organizational performance.

**Jay Otto** received a bachelors and masters from the Massachusetts Institute of Technology in 1989. Most recently, he worked for West Park Hospital in Cody, WY where he managed a prevention and wellness office providing prevention services to the community addressing the issues of substance abuse, tobacco-free environments, child wellness, and cancer prevention. He works for the Center as a research scientist and assists with research design, research projects, and data analysis. His projects involve a variety of issues including traffic safety, substance abuse and violence prevention. He has developed, implemented and analyzed surveys addressing a wide variety of behaviors among youth, adults, parents, law enforcement, key leaders, healthcare providers and others.

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<sup>2</sup> <http://www.domesticscan.org/14-03-successful-approaches-for-the-development-of-an-organization-wide-safety-culture-in-transportation-agencies>

<sup>3</sup> <http://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=3662>