

MATTHEW HARDY, PH.D.
PROGRAM DIRECTOR FOR PLANNING AND POLICY
& AASHTO STAFF LIAISON
MHARDY@AASHTO.ORG | PHONE: (202) 624-3625

TRANSPORTATION PERFORMANCE MANAGEMENT

Sponsored by AASHTO CPBM and the TPM Pooled Fund with support from FHWA



Welcome to the Fall 2022 edition of the *Transportation Performance Management (TPM) Newsletter*, sponsored by the American Association of State Highway and Transportation Officials (AASHTO) Committee on Performance-Based Management (CPBM) in collaboration with the TPM Pooled Fund. The TPM Pooled Fund is supported by AASHTO and the Federal Highway Administration (FHWA).

CONTENTS

- Welcome from the AASHTO CPBM Chair Cover
- Next Generation of Performance Management: New Task Force on Emerging Performance Areas..... 2
- MassDOT Destination Accessibility Measurement and Application..... 5
- Advancing Transportation Equity In Minnesota 7
- AASHTO Updates 9
- Writing a 'Good' Risk Statement10
- Featured Transportation Research.....11
- Save the Date12
- Get Involved in a CPBM Subcommittee or Work Group Back Cover

Welcome from the AASHTO CPBM Chair



Happy autumn! As the new Chair of the American Association of State Highway and Transportation Officials (AASHTO) Committee on Performance-Based Management (CPBM), I am pleased to present the Fall 2022 TPM Newsletter.

I invite you to take a few minutes to read the TPM Newsletter with a focus this quarter on **Emerging Performance Areas**. The articles, resources, and events featured in this edition provide perspectives on agency practices in accessibility, resiliency, and equity. This edition also features an introduction to the new CPBM Task Force on Emerging Performance Areas. The task force will serve as a forum to advance ideas and examples of transportation agencies that are implementing new and emerging performance areas within their organizations. Please take a moment to respond to the survey at: <https://www.surveymonkey.com/r/B6WRF5B> to help the Task Force focus on areas of greatest importance to the TPM Community.

The content featured in the Fall 2022 TPM Newsletter includes updates on upcoming events, new resources, and tools of interest to the performance management community. In particular, look for information on the upcoming AASHTO 2022 Conference on Performance-Based Management, Planning, and Data. For more information and registration information, please go to: <https://www.tpm-portal.com/2022conference>. The theme of this event - **Re-Connecting the DOTs for an Adaptable, Agile, and Equitable Future** - is particularly relevant to the topic of this newsletter.

If you are a TPM Pooled Fund member, look for information on the upcoming TPM Pooled Fund Workshop on December 5th at the Conference. The purpose of the workshop is to advance the state of TPM practice, including reflecting on the accomplishments of the TPM Pooled Fund and looking to the future of TPM and what is most needed to advance TPM practice. Participants will hear from TPM leaders and share their own experiences and needs. A dialogue about what the next generation TPM will look like will be on the agenda. Ideas for TPM advancement, partnering opportunities, and national research and implementation will be generated and prioritized.

I hope you enjoy the articles in this *Fall 2022 TPM Newsletter*. I look forward to your feedback on this edition and the topics you would like to see featured in upcoming quarters. Feel free to contact Matt Hardy at mhardy@ashto.org with any feedback or suggestions for future articles.

Christos Xenophontos
Assistant Director, Rhode Island DOT, Chair, AASHTO CPBM

Next Generation of Performance Management: New Task Force on Emerging Performance Areas



Deanna Belden
*Minnesota Department of
Transportation*
*Co-Chair, Task Force on
Emerging Performance Areas*



Kelly Travelbee
*Michigan Department of
Transportation*
*Co-Chair, Task Force on
Emerging Performance Areas*



Ting Ma
*District Department of
Transportation*

This year marks the completion of the first performance period of federal TPM reporting and the beginning of the second period. This is a milestone for performance management.

Besides work around the 16 performance measures on safety, infrastructure, and system performance that the Federal Highway Administration (FHWA) requires, State Department of Transportation (DOTs) have been practicing performance-based management for a long time and have additional performance areas that they are tracking.

Performance management has become one of the most important tools for setting priorities for State DOTs. Therefore, as the challenges and opportunities facing our society constantly change, State DOTs have a strong need to identify emerging performing areas. Below we list some of the critical issues that have been emerging:

COVID-19 PANDEMIC

In 2020, the COVID-19 pandemic hit the world. With shifts in public health policy and emerging COVID variants over nearly the past three years, people have continued to stay at home with part of the population returning to work and school. As a result, there have been dramatic changes and fluctuations in the country's transportation systems and usage. For example, public transportation ridership dropped significantly to a low level. But while there has been temporary relief with traffic congestion and reduced driving on highways, speeding and reckless driving behavior contributed to the highest number of traffic deaths since 2007 according to National Highway Traffic Safety Administration (NHTSA) data, <https://www.nhtsa.gov/press-releases/2020-fatality-data-show-increased-traffic-fatalities-during-pandemic>. COVID has exposed the vulnerabilities of current transportation infrastructures and reignited interest in safe road conditions.

Additionally, with teleworking and virtual learning affecting much of the population, people shifted to other modes of transportation, such as walking and biking in their neighborhoods. These shifts in lifestyle choices reflect a growing recognition that streets are not only for transportation purposes but can be reimagined to become spaces for public use. In addition to maintaining existing infrastructure to help meet demand, jurisdictions began to invest more in projects or policies that promote public space use, such as Slow Streets campaigns to temporarily block local or neighborhood streets from traffic so that residents can freely use the space for recreation, exercise, or gathering. Performance management can aid these efforts by using data to make these spaces safe, effective, and sustainable.

As jurisdictions are investing in a variety of transportation and public space projects, the uncertainty of the pandemic and its impact on transportation systems can make benchmarking, metric development, and data modeling difficult. Additionally, freight supply chains are facing disruptions, and transportation systems around the world are experiencing unanticipated stresses and demands. Supply chain issues can impact the availability of materials for operations, increase costs, and delay project timelines. Performance management will continue to play a role in developing more efficient processes, creating new or adjusting existing metrics, and helping manage expectations against the backdrop of public health uncertainty, a national call for safe roads, and supply chain issues.

CLIMATE CHANGE

Climate change is threatening our existence, but action has been nowhere swift enough. Many communities around the world suffer from more frequent and record-breaking heatwaves, wildfires, floods and storms. With transportation accounting for one-fourth of greenhouse gas emissions, it is incumbent upon transportation professionals to work toward mitigating climate impacts, expanding zero-emissions transportation systems, and building more resilient infrastructure immediately. In recent years, climate resiliency -- with transportation a key component -- has become a priority in many cities, regions, states, and nations across the globe.

The Moving Ahead for Progress in the 21st Century Act (MAP-21) required the U.S. Department of Transportation (USDOT) to establish a performance

measure for “on-road mobile source emissions” as part of the Congestion Mitigation and Air Quality Program. FHWA developed a Greenhouse Gas (GHG) measure as one of several performance measures that required State DOTs and metropolitan planning organizations (MPOs) to use to assess performance. FHWA repealed the GHG measure in 2018. Recently, FHWA rejuvenated the discussion of this measure. FHWA is currently soliciting public input in response to the notice of proposed rulemaking on the GHG performance measure.

Further, on January 27, 2021, President Biden signed Executive Order (EO) 14008, “Tackling the Climate Crisis at Home and Abroad” which created a government-wide “Justice40 Initiative.” This initiative is intended to deliver 40 percent of the overall benefits of relevant federal investments to disadvantaged communities. The U.S. Department of Transportation is currently developing its approach to Justice40.

Recently, FHWA is soliciting public input on the proposed rulemaking to bring back the GHG performance measure.

EQUITY

Moving forward, it is important to incorporate an equity lens when making decisions about transportation investments, as these decisions can disproportionately impact low-income and racial minorities. For example, low-income and people of color are more likely to suffer from poor air quality based on the locations of freeways and neighboring residential areas. Transportation has the potential to connect people with opportunities and increase their access to crucial services. As such, transportation professionals will need to coordinate with other aspects of planning, such as housing, education, and employment to help sustain people’s livelihoods, regardless of race, gender, and class. Building strong communities—with accessible and robust transportation as a key component—can help mitigate climate change impacts for all people.

On January 20, 2021, President Biden signed EO 13985, “Advancing Racial Equity and Support for Underserved Communities Through the Federal Government.” In May 2021, USDOT announced a Request for Information (RFI) to receive input from the public on the data and assessment tools available to assess transportation equity, as a response to EO 13985. More than 300 comments are received and summarized in this document. According to the summary, “commenters agreed that equity-related performance measures need to be adopted nationally and equity indicators need to drive local decision-making”.

Many transportation agencies and organizations have already or are currently performing geographic data analysis (such as tracking commute times and accessibility) to identify neighborhoods with the greatest transportation service needs and overlap the information with demographic layers to zoom onto the needs of different population groups of color, race, or ethnicity. While there is a significant focus on racial equity, transportation professionals and researchers have adopted a more broad and inclusive community equity concept, and holistically analyze neighborhoods’ access to jobs, education, and healthcare, based on geography (such as urban/rural/suburban).

As such, performance management can play a key role in helping to explore data with a critical racial equity lens, while working to develop methodologies and criteria to prioritize investments that advance equity—of which racial equity is a significant component. Such work will also require evaluating the strengths and weaknesses of current performance metrics and methods and devising more equity-based approaches. New approaches may include greater analysis of operational processes or funding allocations. However, any approach will still require performance management to assist in translating the abstract terms related to equity into measurable steps, targets, or outcomes, while clearly communicating to all stakeholders how equity is integrated into projects and outcomes are assessed.

THE NEW TASK FORCE

Some of these new objectives represent broad societal goals that necessarily result in measurement areas that are fundamentally different from a traditional transportation agency focus. They are often more holistic spanning across sectors including transportation, education, human services, land use, environment, and economy. For example, one emerging area getting attention is the creation of public value and the need for transportation and other public agencies to support societal goals beyond their direct charge.

To better understand and measure emerging areas, in late 2021, AASHTO CPBM established a new task force, Task Force on Emerging Performance Areas. The focus of this task force is to provide State DOTs with additional information and tools that support a robust performance management program by identifying emerging performance areas, making recommendations for future research, and creating a platform for knowledge exchange.

The CPBM Task Force on Emerging Performance Areas is an independent, volunteer panel of national experts in performance management and its related fields. The task force works to improve how State DOTs conduct performance management by identifying emerging performing areas, making recommendations for future research, and creating a platform for knowledge exchange. The task force works to shepherd the further development of performance measures that support bigger-picture goals and the integration of new or emerging performance measures into agency decision-making.

Emerging performance areas are cross-cutting, and the task force expects to work across CPBM subcommittees and other AASHTO committees as appropriate. Particular performance areas of interest include multimodal accessibility/destination access, equity, resilience, greenhouse gas and other measures of climate change impacts, and health.

The task force has four goals:

- Serve as the forum to advance ideas and examples of how state transportation agencies are implementing new and emerging performance measures.
- Work with the CBPM Professional Development and Technical Services Coordinating Subcommittee to develop and communicate guidance, training, and educational resources to assist with implementing and integrating new measures within a state transportation agency.
- Develop research proposals and problem statements for the development, implementation, and integration of new areas and measures in performance management and decision-making within a state transportation agency.
- Work collaboratively with the AASHTO and TRB communities and FHWA, USDOT, and other federal agencies to advance the practice of integrating new measures in performance management and decision-making.

The task force is led by co-chairs: Deanna Belden from the Minnesota DOT and Kelly Travelbee from the Michigan DOT. Currently, there are twelve task force members from both the public and private sectors, as well as AASHTO. We welcome new team members. If you are interested in joining us, please reach out to Deanna and/or Kelly.

The task force would like to get input from the broader community. We designed [this survey](#) and invite you to participate.

Ting Ma, District DOT

Deanna Belden, MnDOT, Co-Chair, Task Force on Emerging Performance Areas

Kelly Travelbee, MnDOT, Co-Chair, Task Force on Emerging Performance Areas

AASHTO CPBM Task Force on Emerging Performance Areas

Performance Management Community Survey

The Task Force on Emerging Performance Areas is governed by the AASHTO CPBM. The focus of the task force is to provide State DOTs with additional information and tools that support a robust performance management program by identifying emerging performance areas, making recommendations for future research, and creating a platform for knowledge exchange. The task force works to shepherd the further development of performance measures that support bigger picture goals and the integration of new or emerging performance measures into agency decision-making.

We invite you to this short, approximately 5-minute survey to share your experience and insights working on emerging performance areas. Your responses will help us better understand the progress our CBPM community has been making and will guide the task force with efforts such as developing research statements and organizing focused peer exchanges.

Survey Link: <https://www.surveymonkey.com/r/B6WRFSB>

MassDOT Destination Accessibility Measurement and Application



Liz Williams
Massachusetts Department of Transportation
Director of Data and Policy, Office of Transportation Planning



Derek Krevat
Massachusetts Department of Transportation
Manager of Metropolitan Planning Organization (MPO) Activities, Office of Transportation Planning



Casey Auch
Massachusetts Department of Transportation
Regional Planning Intern, Office of Transportation Planning

INTRODUCTION AND OVERVIEW OF ACCESSIBILITY PRACTICES

At the Massachusetts Department of Transportation (MassDOT), access to destinations has emerged as a key metric of operational success as well as a foundational element of transportation planning and design. Our agency recognizes that our transportation infrastructure and policies are important not for what they physically are, but for what they functionally do – allow people to reach and achieve a myriad of opportunities that can enhance their own quality of life, as well as that of their families, friends, and neighbors.

At this time, there are three primary avenues by which we integrate destination accessibility concepts and measures into our work.

First, we regularly develop data tools and resources to explore and evaluate the distribution of access to destinations for planning and design purposes. We have devoted time, money, and energy to learning about, acquiring, and developing datasets and data resources to better understand the distribution of destination accessibility across our state and metropolitan planning organization (MPO) regions. For example, we are participants in FHWA's [National Accessibility Evaluation Pooled-Fund Study](#), which provides access to statewide data reflecting job accessibility by various modes. This data is regularly shared with our regional planning agency partners, and the datasets that we have access to via our participation has led us to create a dynamic website called the [Access to Jobs Dashboard](#) that visualizes the number of jobs accessible from each block group within different travel time windows and by different modes.

We have also invested in Conveyal, a web-based platform that similarly determines and visualizes destination accessibility at various geographies. Conveyal allows users to evaluate accessibility conditions in a number of ways and by various modes, as well as adjust facility conditions to understand the impact of various design alternatives like dedicated bus lanes or bicycle and pedestrian infrastructure on accessibility outcomes. Conveyal is regularly used by our planning staff and consultant teams to evaluate design alternatives in the context of planning study goals, which now regularly include increased destination accessibility.

Second, we have developed metrics to prioritize accessibility in capital investment planning (CIP) decisions. To reflect our commitment to ensuring that people can access critical sites of economic, educational, civic, and other opportunities, we have started to incorporate measures reflecting destination accessibility into our [capital planning decision-making framework](#). We use data gathered from the Accessibility Observatory to score proposed capital projects, both vehicular and transit. In the case of vehicular projects, projects that are in areas that lose significant access to jobs because of congestion and travel delay and also reduce congestion receive higher scores. With regard to transit, projects that are anticipated to improve frequency and/or reliability and are in areas of low job accessibility by transit receive higher scores.

Third, we incorporate destination accessibility as a goal and evaluation criteria in our transportation planning work. Traditional corridor and multimodal planning studies that seek to update or enhance transportation facilities or policies often collect information about current and future conditions, and then evaluate various design alternatives in terms of project-specific values and goals. The acquisition of data tools and resources that speak to the distribution of accessibility have enabled us to include destination accessibility as goal that can be tracked and measured. Notably, Conveyal has been an important resource because of the ability to dynamically change different facility elements and visualize changes in the degree of destination accessibility. Paired with other 'big data' resources such as INRIX and Streetlight, we have been able to develop several resources that not only aggregate and visualize accessibility information, but also sociologically locate these outcomes in terms of the types of travelers and communities that are affected.

BEST PRACTICES AND LESSONS LEARNED

Although long overdue, we at MassDOT have just begun to incorporate destination accessibility concepts and metrics into our standard planning practices, and are the first to acknowledge that we have much more to do to expand the scope and utilization of our accessibility-related policies and tools. Given the prioritization of accessibility-related concepts in our work, developing these tools and strategies is a responsibility we do not take for granted. Luckily for us, there is a strong body of support for this work among our agency's leadership and our colleagues. Critically, we have been given time and space to learn and (in turn) teach these concepts and investigate data resources and applications. The following three best practices are lessons learned from our experiences.

First, it is important to gain buy-in for developing and incorporating accessibility tools and concepts from key leaders and colleagues. Establishing the rationale behind 'destination accessibility' and gaining the support from key leaders is perhaps the first major task of practitioners, especially at public-facing transportation agencies. In Massachusetts, the significance of destination accessibility has been long established and codified through several recent policies and initiatives, such as the Healthy Transportation Policy Directive (2013); the state economic development plan, *Opportunities for All*, (2015); and a report published by MassDOT titled "Congestion in the Commonwealth" (2019). These state-sponsored studies have each independently emphasized transportation's key role in connecting people to destinations such as jobs, education, and recreation statewide. These documents have directly or indirectly set the stage to embrace and activate accessibility planning at MassDOT. Such policy drivers are important levers to legitimize much of the re-orientation towards accessibility in state and local transportation plans and planning processes. With the legitimacy and backing of these studies, it became not only possible but expected that our agency would further prioritize and investigate the incorporation of accessibility concepts in our work.

Second, practitioners must be intentional and opportunistic about integrating accessibility into standard transportation policies and practices. The state's recently released bicycle and pedestrian plans (2019) each contain a series of initiatives and actions related to meeting the goals each plan establishes, as well as a series of measures for tracking progress towards meeting these goals. These plans focus on accessibility by explicitly on promoting walking and bicycling for everyday travel to destinations. The associated measures will evaluate the number of residents that have safe and comfortable infrastructure available to them to make short walking trips and bicycling trips under six miles. To operationalize these metrics, a variety of traditional and location-based data will be utilized with the eventual goal of identifying and closing gaps in the network that contribute to inaccessibility both to destinations overall and across modes. Many factors, such as people's abilities, the availability and quality of transportation options, land use patterns, and network connectivity, may affect access and create these network gaps. The growing portfolio of accessibility and destination data available to MassDOT, including the location-based services data, introduces possibilities for including access as an indicator of progress.

Beyond places to program in and consider accessibility, MassDOT will continue efforts to develop a portfolio of data, software, and analysis tools that explore and measure accessibility, accounting for both land use and transportation elements that feed into outcomes. With the availability of new data and software, State DOTs and regional planning agencies can begin the process of adopting and advancing accessibility concepts, goals, and measures in their transportation planning processes. When work on the state, regional, and local levels align to shift project prioritization and program evaluation away from mobility for the sake of mobility and toward accessibility, transportation systems that connect people to services and opportunities can maximize their full potential.

Finally, it is important to invest in technology, data resources, and staff support with respect to data and resources that aggregate and visualize destination accessibility. At MassDOT, much of the effort to jumpstart the development of accessibility metrics for evaluation and capital investment purposes has focused on acquiring software, data, and technical assistance to inform metrics development and analysis. Additionally, given how multi-layered the concept of accessibility is, dedicating sufficient staff resources to developing accessibility performance metrics is key. At MassDOT, the incorporation of accessibility metrics and data into planning studies has been a collaboration between the Data and Policy, MPO Activities, and GIS Services groups within the Office of Transportation Planning at MassDOT's Office of Performance Management and Innovation. Having this organizational structure and staff with expertise in the areas of web-based visualization, technical analysis, stakeholder outreach, and policy development has assisted with advancing accessibility initiatives at MassDOT.

Liz Williams,
Director of Data and Policy, Office of Transportation Planning, MassDOT

Derek Krevat,
Manager of Metropolitan Planning Organization (MPO) Activities, Office of Transportation Planning, MassDOT

Casey Auch,
Regional Planning Intern, Office of Transportation Planning, MassDOT

Advancing Transportation Equity In Minnesota



Abdullahi Abdulle
Minnesota Department of
Transportation
Transportation Equity
Planning Coordinator

The Minnesota Department of Transportation (MnDOT) has a long history of performance-based planning, using performance measures and targets to inform management and investment decisions. To help ensure that progress is made toward objectives in the Statewide Multimodal Transportation Plan (SMTP), MnDOT tracks the performance of measures identified in the SMTP on our performance dashboard and scorecard: <https://performance.minnesotago.org/>. The state performance measures are a mix of metrics MnDOT has authority over, and some MnDOT does not. Some of the measures influence annual decision-making processes; other measures help to understand how the transportation system is functioning over time but are beyond any one agency to influence directly. MnDOT strives to improve and expand our measures and incorporate additional factors in our decision-making processes to address the challenges facing Minnesota's transportation system and everyone who depends on it.

MnDOT has an important research project currently underway to establish transportation equity performance measures. On July 1, 2020, MnDOT contracted with Texas A&M Transportation Institute to initiate a transportation equity performance measures research project. Our goals for this research project were to:

- Establish a detailed understanding of current challenges and needs related to transportation equity assessment throughout the state of Minnesota.
- Identify or develop assessment methods and equity-focused strategic actions that will improve the ability for transportation equity in Minnesota to be assessed at the state level in a manner that achieves context-sensitive outcomes representative of the communities we serve.
- Facilitate the adoption of identified or developed equity assessment methods and complementary strategic actions through a training program designed specifically for MnDOT that will include information detailing the appropriate use cases, data requirements, and considerations.

Researchers identified five existing performance measures to improve transportation equity and proposed five new measures to track the agency's process toward transportation equity.

Researchers identified transit on-time performance, pedestrian ADA compliance, fatalities and serious injuries, job accessibility, and workforce as the five existing measures to improve transportation equity. To improve existing performance measures, researchers assumed that existing performance measurements have focused on tracking progress toward a goal from a generalized efficiency and effectiveness perspective. To improve on these measures for equity, additional contextual considerations have been made to investigate who is more likely to experience the benefits of the goals established and how to enhance these measures. Hence, they are inclusive, and the experience of the people previously missing out is also tracked and considered.

Researchers also proposed five new measures that include multi-modal access and impact, community and built environment, factors that impact ADA, user experience and local context, zero emissions vehicle access and use, and inclusion and representation. These new performance measures present an opportunity to focus on aspects of the transportation network that are not traditionally prioritized and on the needs of communities that have not historically had a voice in transportation decision-making.

As part of the research, MnDOT has asked the researchers to create a self-guided education manual. This resource for MnDOT staff to use for their self-directed professional development will help MnDOT institutionalize transportation equity considerations in the agency's performance measurement processes.

On a more general look at transportation equity, MnDOT's Advancing Transportation Equity Initiative covers various activities that aim to better incorporate equity considerations in transportation decision-making and support community livability by improving transportation access and opportunities, specifically for underserved communities. This initiative is rooted in community feedback from the [2017 Statewide Multimodal Transportation Plan](#), which identified reducing transportation disparities and incorporating equity into decision-making processes as high-priority needs. MnDOT launched this initiative in coordination with internally-focused, agency-wide diversity and inclusion efforts, including contracting and workforce collaborations.

MAJOR COMPONENTS OF THE INITIATIVE

The Advancing Transportation Equity Initiative includes the following activities:

- The [Community Conversations](#) Engagement Project is a Statewide effort to better understand the relationship between transportation and equity and identify strategies that reduce transportation burdens for underserved communities. MnDOT conducts interviews with community-based organizations in each of MnDOT's eight districts to better understand the transportation needs of underserved communities. For each district, the project team hosts three implementation meetings to discuss themes and findings from the interviews and create district-specific equity recommendations and action plans, which are shared on the Community Conversations website. To date, the project team has facilitated 30 interviews in six MnDOT districts.
- [Transportation Equity Labs](#) is a capacity-building effort to help MnDOT staff understand their role in advancing transportation equity through facilitated conversations with stakeholders on equity considerations specific to their work. In 2020, MnDOT hosted a Transportation Equity Lab for the [Minnesota Safe Routes to School \(SRTS\) Program](#). This lab convened MnDOT and external partners to review the ongoing strategic planning process for the program, which distributes State and Federal grants to communities. Following these conversations, MnDOT developed the [Student Transportation Equity for Priority Populations \(STEPP\)](#) tool. The STEPP tool integrates equity considerations into the review and scoring of SRTS grant applications. The tool identifies priority populations through a series of metrics at the census block group level and for specific schools, such as the percentage of students eligible for free and reduced-price lunch, the number of non-motorists killed or seriously injured in crashes, percent of students who are Black Indigenous and People of Color (BI-POC), and percent of English-learner students. Users can look up the information using an online map or by downloading the data.
- MnDOT also funds local agencies, universities, and other partners through [transportation equity research projects](#) to understand transportation disparities and mobility challenges across the State. [One research project](#) explores systemic transportation-related barriers that marginalized individuals confront, especially those constructed by Minnesota government agencies while studying the survival strategies individuals use to navigate these barriers. Another research project examines whether socially constructed gender roles lead to disparate travel patterns for Minnesotans. Researchers at the University of Minnesota are conducting a literature review to understand how gender can influence travel-related behaviors.

Figure 1. Group of students walking to school with adult crossing guards.



Source: MNDOT

INITIAL FINDINGS

While many of MnDOT's transportation equity initiatives are ongoing, several initial lessons inform the agency's decision-making to improve transportation outcomes for underserved communities.

Through Community Conversations, MnDOT learned that transportation challenges limit people's access to opportunities. Community-based organizations that work with and represent underserved communities are essential partners in filling transportation gaps. Some organizations provide bus passes, collect and redistribute donated cars, and operate volunteer driver programs. This effort underscores the importance of working with local experts to develop community-specific transportation solutions. Transportation Equity Labs are effective collaborative processes to build internal staff capacity to incorporate equity into State plans, programs, and policies. Finally, research projects help MnDOT stay current with the latest transportation equity metrics and gain a deeper understanding of community needs to help develop equitable policies, programs, and processes. MnDOT is currently updating its SMTP, which includes these lessons and additional strategies and actions to continue advancing transportation equity throughout the state. Some of the equity-centered strategies in the current draft SMTP include; involving people in the decision-making process, supporting a diverse and inclusive transportation workforce, protecting people from a changing climate, and providing equitable access to destinations.

Abdullahi Abdulle
Minnesota Department of Transportation
Transportation Equity Planning Coordinator

AASHTO Updates



Matthew H. Hardy, Ph.D.

**Program Director for
Planning and Performance
Management**

**American Association of State
Highway and Transportation
Officials**

WELCOME NEW AASHTO CPBM LEADERS!

AASHTO CPBM is fully supported by State DOT volunteers who share their time, talents, and expertise with their peers across the country. Congratulations and many thanks to new AASHTO CPBM leaders who have graciously stepped up to offer their leadership to these roles:

- AASHTO CPBM Chair Christos Xenophontos, Rhode Island DOT
- AASHTO CPBM Vice Chair Jean Wallace, Minnesota DOT
- AASHTO CPBM Task Force on Emerging Performance Areas Co-Chair Deanna Belden, Minnesota DOT and Kelly Travelbee, Michigan DOT
- AASHTO CPBM Transportation Asset Management Subcommittee Co-Chair Michael Johnson
- AASHTO CPBM Research Work Group Vice Chair Ed Block

AASHTO CPBM VACANCIES

The AASHTO CPBM is seeking leadership volunteers for the following positions within CPBM. If you would like to get involved in any of these opportunities, please contact Matt Hardy at mhardy@ashto.org:

- AASHTO CPBM Vice Chair for Policy and Rulemaking Work Group
- AASHTO CPBM Vice Chair for the Joint Subcommittee on System Mobility and Emerging Technologies
- AASHTO CPBM Vice Chair for the Subcommittee on Risk Management

AASHTO RISK AND RESILIENCE PLANNING WORKING GROUP

Working in partnership with the AASHTO Committee on Transportation System Security and Resilience (TSSR), the Subcommittee on Risk Management is standing up a Risk and Resilience Planning Working Group that will focus initially on implementation of the PROTECT program, development of the State DOT Resilience Improvement Plan (RIP), and integration with the existing state DOT transportation asset management plan. The R&R Planning Working Group will provide opportunities for members to discuss these various items with their peers through monthly virtual meeting, discussion portal, and the creation of resources. If you are interested in joining, please contact Matt Hardy (mhardy@ashto.org) or David Peters (dpeters@ashto.org).

GREENHOUSE GAS (GHG) EMISSIONS NOTICE OF PROPOSED RULEMAKING (NPRM) RESOURCES AVAILABLE ON THE TPM PORTAL

On July 13, 2022 FHWA announced a Notice of Proposed Rulemaking (NPRM) for states and municipalities to track and reduce greenhouse gas (GHG) emissions. The TPM Portal has a curated library of resources and information addressing the 2022 GHG NPRM.

Featured resources:

- [GHG Performance Calculator Tool](#)
- [GHG NRPM Member Webinar July 14, 2022](#)
- [TPM Webinar 13 - Greenhouse Gas & Environmental Measures](#)
- [Reducing Greenhouse Gas Emissions: A Guide for State DOTs](#)

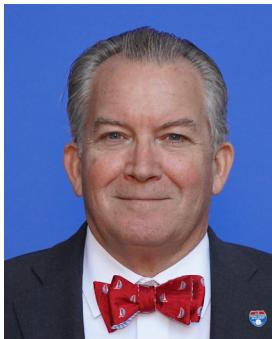
Matthew H. Hardy, Ph.D.

Program Director for Planning and Performance Management

American Association of State Highway and Transportation Officials

(202) 624-3625 | mhardy@ashto.org

Writing a 'Good' Risk Statement



Daniel Fodera

**Federal Highway
Administration, Office of
Infrastructure**

**Corporate Performance and
Risk Management Officer**

In FHWA, we integrate program risk management with our performance planning cycle. Every office prioritizes their top risks and develops response strategies to address. When the cycle comes around, I often hear the question, “what is a good risk statement?” The answer is simple. A risk statement is “good” if it communicates a threat or opportunity with sufficient detail so it can be prioritized and a decision made on how to respond. Our Risk Management User Manual says “A simple narrative statement should be developed to describe each risk that is identified. The statement should give some context to the issue and describe the perceived impact from the risk. It may be helpful to use the “if/then” format to identify the risk events and the resultant impacts.”

We’ve settled on that if/then format as the norm. This structure helps to assess the risk for likelihood and impact, which helps to compare and prioritize. Risk is about uncertainty and effect. Sometimes a sentence or two describing the risk is all you need. The important thing is that it communicates information your audience needs, without overload. We also use a short description to name or title the risk. Examples might be *utility compliance*, *workforce competence*, or *cost estimate reliability*. This provides an easy reference and is often written before the risk statement.

A good risk statement describes both the condition or event and the effect or impact of concern at the appropriate level - that is impact directly to the objective at hand. Sometimes a secondary or follow-on impact is included. A good risk statement should not merely state a negative or failure to act but should describe a condition that leads to that failure. Consider these examples of risks to funding programs:

- *If we don't monitor our progress, then we won't know the status of our plans.* (weak risk statement, there's little helpful here.)
- *If we don't monitor the effectiveness of our internal controls, then we may make misstatements as to the reliability of those controls.* (Not quite – misstatements is a clear effect/impact, but the event only says we're not doing something. The monitoring uncertainty may be closer to an event than an impact. Why would monitoring not occur?)
- *If procedures do not ensure sufficient and proper documentation to support transactions, then we may make improper payments based on unsupported items.* (This is an actionable risk statement. It describes both the cause or trigger: documentation procedures, and a clear effect or impact: improper payments.)

It is ok to describe risks that are outside or not under your control. If it could affect your office, program, or project it's still a risk. Even if you can't influence the event, you may be able to change the impact. A clear, well-written risk statement can lead directly to an effective response strategy. For example, when doing a risk assessment on implementing a new program, an office may identify a risk as “If xyz agencies are not aware of the new program and their eligibility for it, then otherwise eligible agencies may not apply and the program outcomes will be less than intended.” The response to this risk could be a focused communication effort to make agencies aware of the new program.

Some might see these as “stating the obvious.” But keep in mind the purpose of identifying risks is to understand them, so we can prioritize action and communicate those priorities. We can't do everything. Having a prioritized list of opportunities and threats allows us to focus limited resources. Don't underestimate the value of being able to demonstrate where and why you are taking certain actions.

Here's another illustrative example, *“If there is not adequate oversight of right of way clearance actions on projects administered by the xyz agency, then the agency may appraise, acquire properties, and/or perform business or residential displacements inadequately, resulting in Uniform Act compliance matters rendering projects ineligible for reimbursement, project cost increases, delays, overall diminished public confidence in government, and potential lawsuits.”*

The risk short description is “Oversight of xyz agency right of way clearance.” The short description is enough to convey the issue, whereas the full risk statement gives additional details on the risk event and impact (including both direct and secondary impacts). Not all risk statements need to be this comprehensive, but this one leaves no doubt about the threat event and its potential impact to the program.

If the risk statement has sufficient detail to allow for prioritization among other risks and a decision on how to respond, then it's good. If you think they communicate the risk, so it's understandable, and could inform a response, then they are “good.” I sometimes hear criticism of another office's risk statement, that it could be “better,” that it was too detailed or not detailed enough. My reply is that if it's sufficient to communicate the risk to relevant stakeholders and drive a response within that office's context, then it's served its purpose.

You can find more about risk management in the [AASHTO Guide for Enterprise Risk Management](#) or by hosting the [National Highway Institute Risk Management course \(FHWA-NHI-310065\)](#).

Daniel Fodera

Corporate Performance and Risk Management Officer

Federal Highway Administration, Office of Infrastructure

Featured Transportation Research

Below is a selection of active, and recently completed AASHTO, FHWA, and National Cooperative Highway Research (NCHRP) projects and NCHRP synthesis projects related to transportation asset management. Please note: Project descriptions shown in italics are directly from the National Academies of Sciences, Engineering and Medicine, Transportation Research Board (TRB), National Cooperative Highway Research (NCHRP) website, www.trb.org. Accessed August 2022.

Example Practices for Performance-Driven Programming [Completed]. 2022. Washington, DC: Federal Highway Administration. https://www.fhwa.dot.gov/planning/performance_based_planning/resources/fhwahep22018.pdf.

NCHRP 25-56 [Completed] Methods for State DOTs to Reduce Greenhouse Gas Emissions from the Transportation Sector. 2022. Washington, DC: The Transportation Research Board. <https://doi.org/10.17226/26523>. *Documents the research effort for an NCHRP project that focused on developing a guide for state DOTs on reducing GHG emissions. The result of this effort, NCHRP WebResource 1: Reducing Greenhouse Gas Emissions: A Guide for State DOTs <https://crp.trb.org/nchrpwebresource1/>, presents tools, methods, and data sources for state DOTs to use in reducing GHG emissions from the transportation sector.*

NCHRP 08-121 [Completed] Accessibility Measures in Practice: Guidance for Transportation Agencies. 2021. Washington, DC: AASHTO Standing Committee on Planning. [https://onlinepubs.trb.org/onlinepubs/nchrp/docs/NCHRP08-36\(121\)_FR.pdf](https://onlinepubs.trb.org/onlinepubs/nchrp/docs/NCHRP08-36(121)_FR.pdf). *This study was conducted for the AASHTO Standing Committee on Planning with funding provided through NCHRP. The objective of this research is to develop a practitioner-ready resource for transportation agencies on how to select and apply accessibility measures for different decision-making contexts.*

NCHRP 20-59(55) [Completed] Investing in Transportation Resilience: A Framework for Informed Choices. 2021. Washington, DC: The Transportation Research Board. <https://doi.org/10.17226/26195>. *Provides a quick grounding in resilience benefits, the CEO's role in resilience, and approaches taken in various states to increase the resilience of their transportation system. It also offers concepts and tools to lead agencies toward greater resilience.*

TCRP Project J-11/TASK 35 [Completed]. Resource Guide for Improving Diversity and Inclusion Programs for the Public Transportation Industry. 2021. Washington, DC: The Transit Cooperative Research Program. <https://doi.org/10.17226/26230>. *Builds on the snapshot of transit agency diversity initiatives provided nearly 20 years ago in TCRP Synthesis 46: Diversity Training Initiatives to understand how diversity programs at transit agencies have evolved, how inclusion has been incorporated, and what policies, plans, and practices have been successfully implemented within the industry.*

NCHRP 20-59(54) [Completed] Transportation System Resilience: Research Roadmap and White Papers. 2021. Washington, DC: The Transportation Research Board. <https://doi.org/10.17226/26160>. *Highlights significant knowledge gaps within AASHTO and state departments of transportation, presents a 5-year research plan that addresses these gaps, and discusses critical resilience-related issues facing senior transportation leaders today.*

NCHRP 08-105 [Completed] Measuring the Effectiveness of Public Involvement in Transportation Planning and Project Development. 2019. Washington, DC: Transportation Research Board. <https://doi.org/10.17226/25447>. *The toolkit is designed to collect feedback from the public on several indicators of effectiveness and to compare that feedback with the agency's own perceptions. The combined responses can then be used to calculate scores for each indicator and an overall effectiveness index. This allows for systematic comparison of the effectiveness of different public involvement strategies over time.*

NCHRP 08-136 [Active] Guidance on Using Performance-Based Management Approaches for Maintenance. *The objectives of this research are to develop guidance promoting the use of performance-based management strategies in maintenance and to present the resulting information in a format that is easily accessible to the maintenance community.*

NCHRP 08-168 [Active] Analysis and Assessment of the National Performance Management Data. *The objective of this research is to prepare an authoritative analysis and assessment of the national performance management data and, based upon the analysis and assessment, to provide recommendations on future state DOT capacity-building activities and possible new performance measures.*

Save the Date

CONFERENCES/WORKSHOPS

2022 AASHTO Annual Meeting

October 18-24, 2022, Orlando, FL

<https://policy.transportation.org/aashto-annual-meeting/>

10th TRB Symposium on Visualization in Transportation

November 3-4, 2022, Washington, D.C.

<https://trb.secure-platform.com/a/page/VisualizationSymposium>

AASHTO 2022 Conference on Performance-Based Management, Planning, and Data: Re-Connecting the DOTs for an Adaptable, Agile, and Equitable Future

December 5-8, 2022, Providence, Rhode Island

<https://www.tpm-portal.com/events/aashto-2022-conference-on-performance-based-management-planning-and-data/>

TPM Pooled Fund Workshop (by invitation only) at AASHTO Conference

December 5, 2022, Providence, Rhode Island

<https://www.tpm-portal.com/events/aashto-2022-conference-on-performance-based-management-planning-and-data/>

Transportation Research Board (TRB) 102nd Annual Meeting

January 8-12, 2023, Washington, D.C.

<https://www.trb.org/AnnualMeeting/AnnualMeeting.aspx>

MEETINGS

AASHTO CPBM/TPM TSP Quarterly Meeting - Feature Topic: System Mobility and Emerging Technologies

November 14, 2022, 2:00 PM - 4:00 PM EST

More information: <https://www.tpm-portal.com/events/aashto-cpbm-tpm-tsp-quarterly-meeting-3/>

WEBINARS

TAM Webinar 59 - Incorporating Maintenance Cost into a TAMP (NCHRP 23-08)

October 19, 2022, 2:00 - 3:30 PM EDT

<https://www.tam-portal.com/events/tam-webinar-59-incorporating-maintenance-cost-into-a-tamp-nchrp-23-08/>

TPM Webinar 14 - Highlighting Leaders in Agency Improvement Efforts

November 16, 2022, 2:00 PM - 3:30 PM EST

<https://www.tpm-portal.com/events/tpm-webinar-14/>

TAM Webinar 60 - TAM and Resiliency Building

December 21, 2022, 2:00 - 3:30 PM EDT

<https://www.tpm-portal.com/events/tam-webinar-61-tam-and-resiliency-building/>

AASHTO 2022 Conference on Performance-Based Management, Planning, and Data

Register Today

December 5–8, 2022 at the
Omni Hotel Providence, Rhode Island

AASHTO

*"Re-Connecting the DOTs for an Adaptable,
Agile, and Equitable Future"*



Committee on Performance-Based Management
Committee on Planning / Committee on Data Management and Analytics



- Workshops
- Plenary Sessions
- Technical Sessions
- Choose Your Own Conference Adventure
- Mobile Workshops and Training
- Business Meetings

Conference Contact: **Kyla Elzinga**

202-624-7797

kelzinga@ashto.org



<http://2022performanceconference.transportation.org>

Get Involved in a CPBM Subcommittee, Work Group, or Task Force

CPBM Subcommittee

Chair: Christos, Xenophontos, Rhode Island DOT
Vice-Chair: Jean Wallace, Minnesota DOT
AASHTO Liaison: Matt Hardy
Meetings: <https://www.tpm-portal.com/event-directory/>

Asset Management Subcommittee

Chair: Matt Haubrich, Iowa DOT
Vice-Chair: Mike Johnson, Caltrans
Membership Coordinator: Louis Feagans, Indiana DOT
AASHTO Liaison: Matt Hardy
FHWA Liaison: Tashia Clemons
Meetings: Monthly joint meetings with TRB AJE30, second Wednesday of each month, 1 PM – 2:30 PM EST
<https://www.tam-portal.com/event/>

Organizational Management Subcommittee

Chair: Deanna Belden, Minnesota DOT
AASHTO Liaison: Matt Hardy
FHWA Liaison: Nelson Hoffman
Meetings: Monthly joint meetings with TRB AJE15 Workforce Development and Organizational Excellence Committee, third Tuesday of each month from 12 PM – 1:30 PM EST
<https://www.tpm-portal.com/community/cpbm-om/>

Risk Management Subcommittee

Chair: Nathan Lee, Utah DOT
Vice-Chair: Vacant
AASHTO Liaison: Matt Hardy
FHWA Liaison: Daniel Fodera
Meetings: Second Monday of even-numbered months, 1-2 PM EST
<https://www.erm-portal.com/community/subcommittee-on-risk-management/>

Policy and Rulemaking Work Group

Co-Chairs: Paul Degges, Tennessee DOT
Vice-Chair: Vacant
Meetings: Second Tuesday, 1 PM – 2 PM EST
<https://www.tpm-portal.com/community/cpbm/policy/>

Joint Subcommittee on System Mobility and Emerging Technologies (SMET)

Chair: Daniela Bremmer, Washington State DOT
Vice-Chair: Vacant
AASHTO CTSO – Staff Liaison: Patrick Zelinski
AASHTO Liaison: Matt Hardy
FHWA Liaison: Rich Taylor
Meetings: Third Tuesday of the even-numbered months, 2:30 PM – 3:30 PM EST
<https://www.tpm-portal.com/community/cpbm/smet/>
Join the bimonthly meeting of the Joint Subcommittee on System Mobility and Emerging Technologies:
<https://www.tpm-portal.com/events/smet-subcommittee-meeting/>

Research Work Group

Chair: William Johnson
AASHTO Liaison: Matt Hardy
FHWA Liaison: Nelson Hoffman
Meetings: Monthly meetings, second Friday, 2 PM – 3 PM EST
<https://www.tpm-portal.com/community/research-work-group/>

Professional Development and Technical Services Coordinating Subcommittee

Chair: Ryan Huff, Nebraska DOT
Matt Hardy, AASHTO CPBM – Staff Liaison
FHWA Liaison: Chris Change
Meetings: As needed
<https://www.tpm-portal.com/community/subcommittee-on-professional-development/>

Task Force on Emerging Performance Areas

Co-Chair: Deanna Belden, Minnesota DOT
Co-Chair: Kelly Travelbee, Michigan DOT
Secretary: Kelly Travelbee, Michigan DOT
Matt Hardy, AASHTO CPBM – Staff Liaison
Meetings: Monthly meetings, first Wednesday, 2 PM – 3 PM EST
<https://www.tpm-portal.com/community/tfepa/>

AASHTO TPM Portal

The AASHTO TPM Portal connects you to a searchable database of transportation performance management resources: documents, presentations, events, tools, and more. The portal is designed to help transportation performance management practitioners search and access relevant information from multiple sources.

<https://www.tpm-portal.com>

AASHTO TPM Portal

