

Transportation Asset Management Webinar Series

Webinar 68

Equity and Transportation Asset Management

Sponsored by FHWA and AASHTO



April 17, 2024

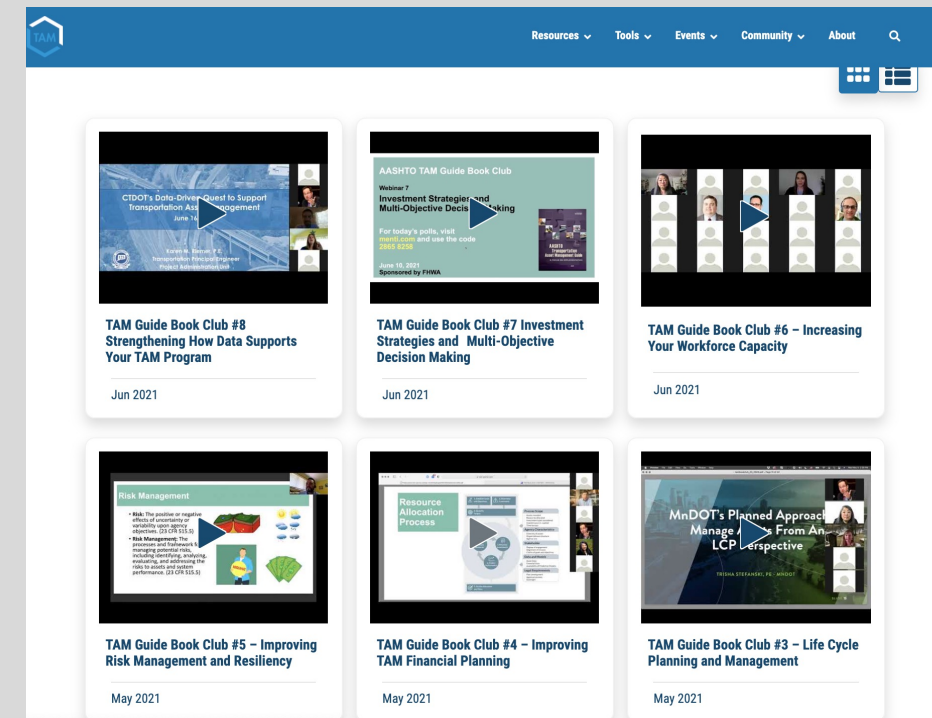
Welcome

FHWA and the AASHTO Sub-Committee on Asset Management are pleased to sponsor this webinar series

- Sharing knowledge is a critical component of advancing asset management practice
- FHWA Asset Management Hub: <https://www.fhwa.dot.gov/asset/pubs.cfm>

FHWA/AASHTO Asset Management Webinar Series

- This is the 68th in a webinar series that has been running since 2012
- Webinars are held every two months, on topics such as off-system assets, asset management plans, asset management and risk management, and more
 - 3rd Wednesdays, 2PM Eastern
- We welcome ideas for future webinar topics and presentations
- Submit your questions using Zoom’s chat feature



Webinar Objectives

- Raise awareness of the importance of equity as an emerging topic in transportation.
- Highlight practices that transportation agencies are using to incorporate equity into TAM decision making.
- Learn about resources that exist and are being developed to help transportation agencies consider equity in TAM decision making.

Webinar Agenda

2:00 Welcome, Overview, and Agenda

Anna McLaughlin, AASHTO
Tashia Clemons, FHWA
Diane Gurtner, Spy Pond Partners

2:10 Topic Overview / FHWA ETG Case Studies

William Johnson, Colorado DOT

2:30 City of Denver Presentation

Jason Smiley, City and County of Denver DOTI

3:00 Minnesota DOT Presentation

Shaker Rabban, Minnesota DOT

3:10 Q&A

Diane Gurtner, Spy Pond Partners

3:20 Discussion and Wrap-up

Diane Gurtner, Spy Pond Partners

Presentation Components:

- Overview of Topic
- Update on NCHRP 08-169
- TAM Expert Task Group - Equity Considerations in Asset Management: Case Studies

Presented by:

William Johnson

Performance and Asset Management Branch Manager

Colorado Department of Transportation

Transportation Asset Management - a strategic and systematic process of operating, maintaining, and improving physical assets, with a focus on engineering and economic analysis based upon quality information, to identify a structured sequence of maintenance, preservation, repair, rehabilitation, and replacement actions that will achieve and sustain a desired state of good repair over the lifecycle of the assets at minimum practicable cost. (FHWA)

USDOT Equity Action Plan - “Equity means the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment”

FHWA Transportation Equity in Planning - “Equity in transportation seeks fairness in mobility and accessibility to meet the needs of all community members. A central goal of transportation equity is to facilitate social and economic opportunities by providing equitable levels of access to affordable and reliable transportation options based on the needs of the populations being served, particularly populations that are traditionally underserved”

EPA EJ Screen Tool



FEMA National Risk Index



Planning and Equity Tool



CDC Social Vulnerability Index



Census American Community Survey



Screening Tool for Equity Analysis of Projects



Valuing Diversity, Equity, and Inclusion in Transportation Asset Management

Expected objectives:

- A common set of DEI definitions;
- A set of outcomes that articulate what an “equitable” outcome may consist of in a TAM context;
- A list of quantitative and qualitative performance measures for asset management that incorporate DEI factors in transportation investment decisions;
- A flexible analytical framework for applying DEI and related indicators in TAM decision-making that includes, but is not limited to:
 - Methods for community engagement in asset management;
 - Methods to quantify or otherwise integrate qualitative factors relative to accessibility, public health, and related transportation activities and purposes into TAM decision-making;
- A list of publicly available data sets that can be applied in a TAM context with direction on how to employ these data to inform TAM analysis and decisions;
- A set of three to five case study applications that demonstrate the integration of DEI into TAM analysis;
- Communication techniques or tools that describe the need and benefits of DEI analysis in TAM decision-making and outcomes targeting agency executives and members of the public.

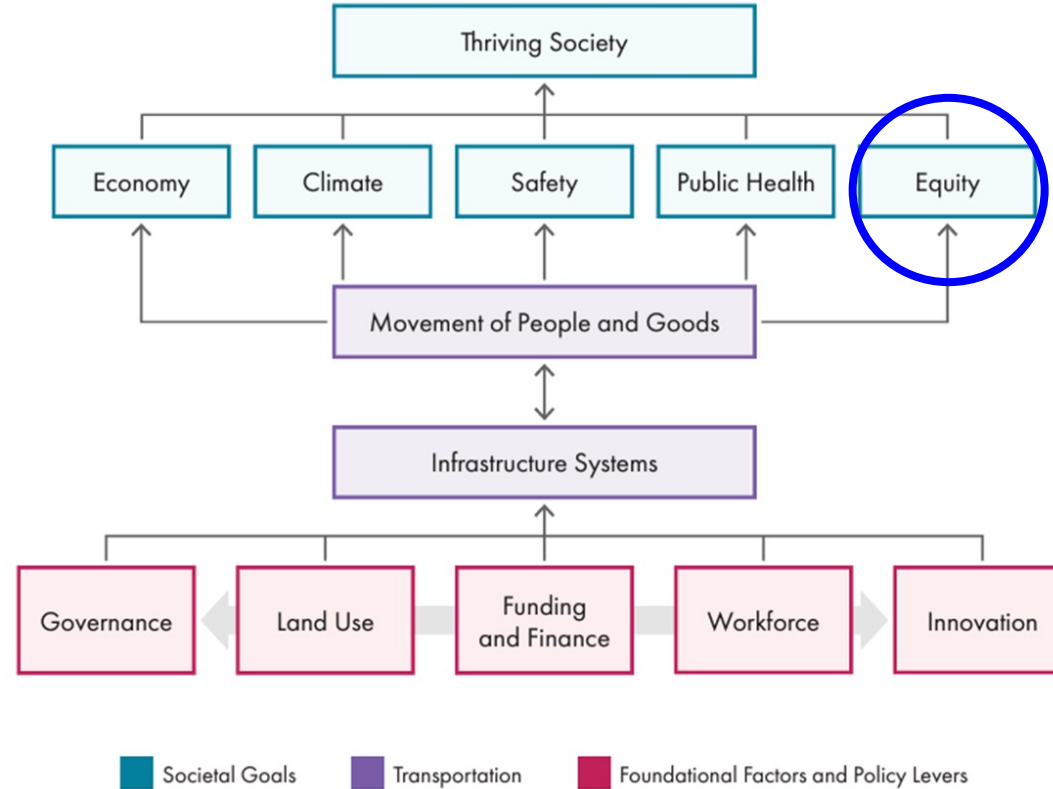
Budget - \$500,000

Status - (pending)



NCHRP Research Statement Dev

TRB Critical Issues In Transportation for 2024 and



Report link →





NCHRP Research Statement Dev

Equity and Public Value (Promoting Equity and Inclusion)

Monetizing equity performance measures and benefits

Alignment of transportation benefits to demographic and community categories

Guide on quantifying benefits for discretionary grants

Performance-based approach to connecting transportation services to need

Downscaling EJ analysis and assessment/capturing date-centric community input

Aligning Relationships Between TAM, Planning, and Programming: Define KPIs for Mobility, Equity, etc. and Balance Them with Traditional TAM Measures

Equity During Egress Events and the relationship to the risk management prioritization process

Help identify research needs at the AASHTO Research Symposium

May 23, 2024 12:00 pm eastern

[Register Here->](#)





Equity Considerations in Asset Management

Case Studies

FHWA TAM ETG: Presented by William Johnson, CDOT

November 8, 2023

“



Overview

01. Introduction

Emphasis on inclusion and diversity in transportation

03. Rethinking Policies and Practices

Case examples from multiple agencies

02. Defining and Advancing Transportation Equity

Definitions and frameworks from federal, state, and local agencies

04. Moving Forward

The USDOT's Request for Information on provides a framework for agencies to begin discussions

Link to document



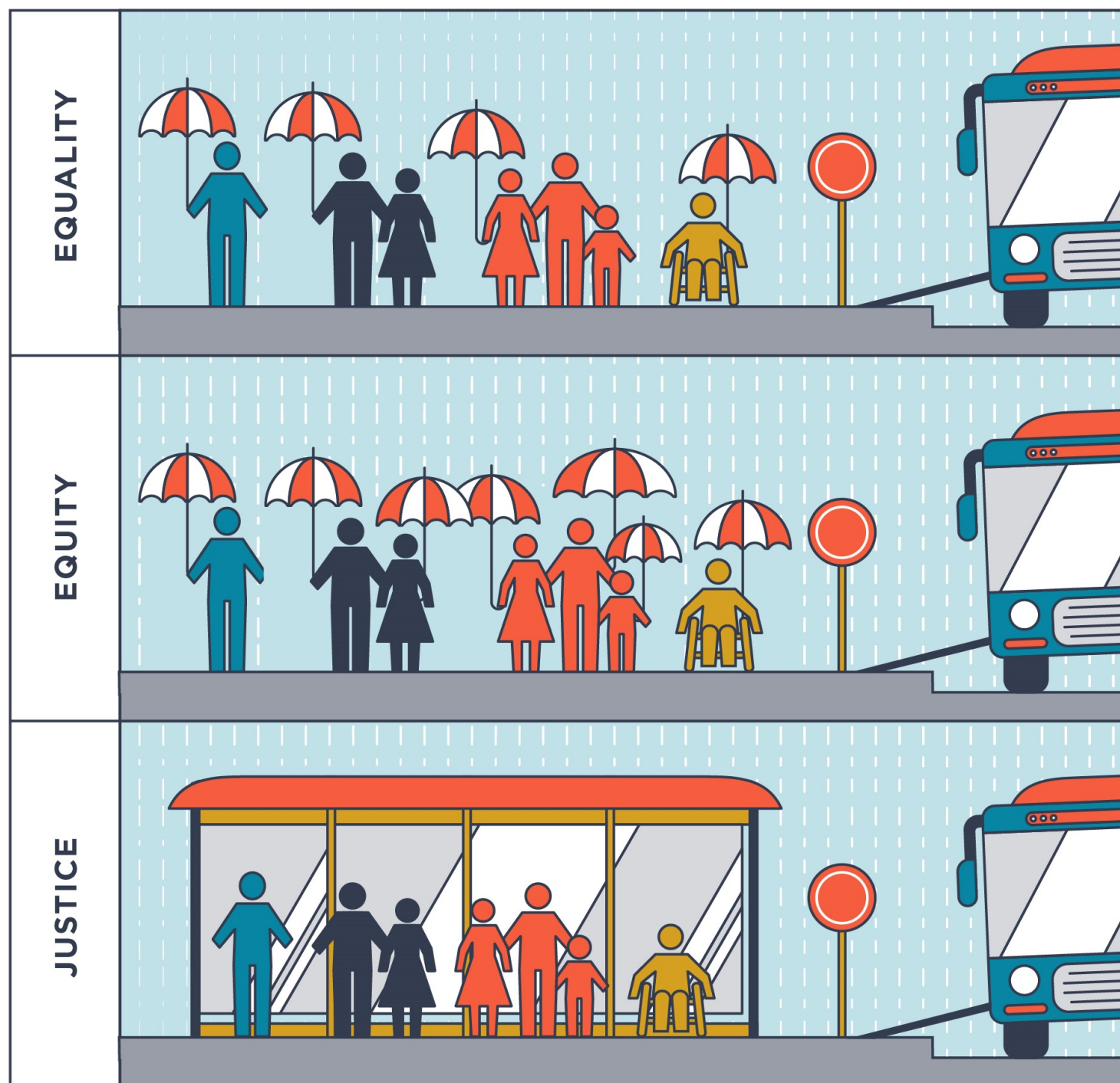
Introduction

- Agencies are recognizing planning and programming decisions can have negative impacts on underrepresented communities.
- Addressing equity is a federal priority.
- BIL includes funding to address equity-oriented approaches.
- Executive Order 13985
- USDOT RFI on Transportation Equity Data (May 25, 2021)

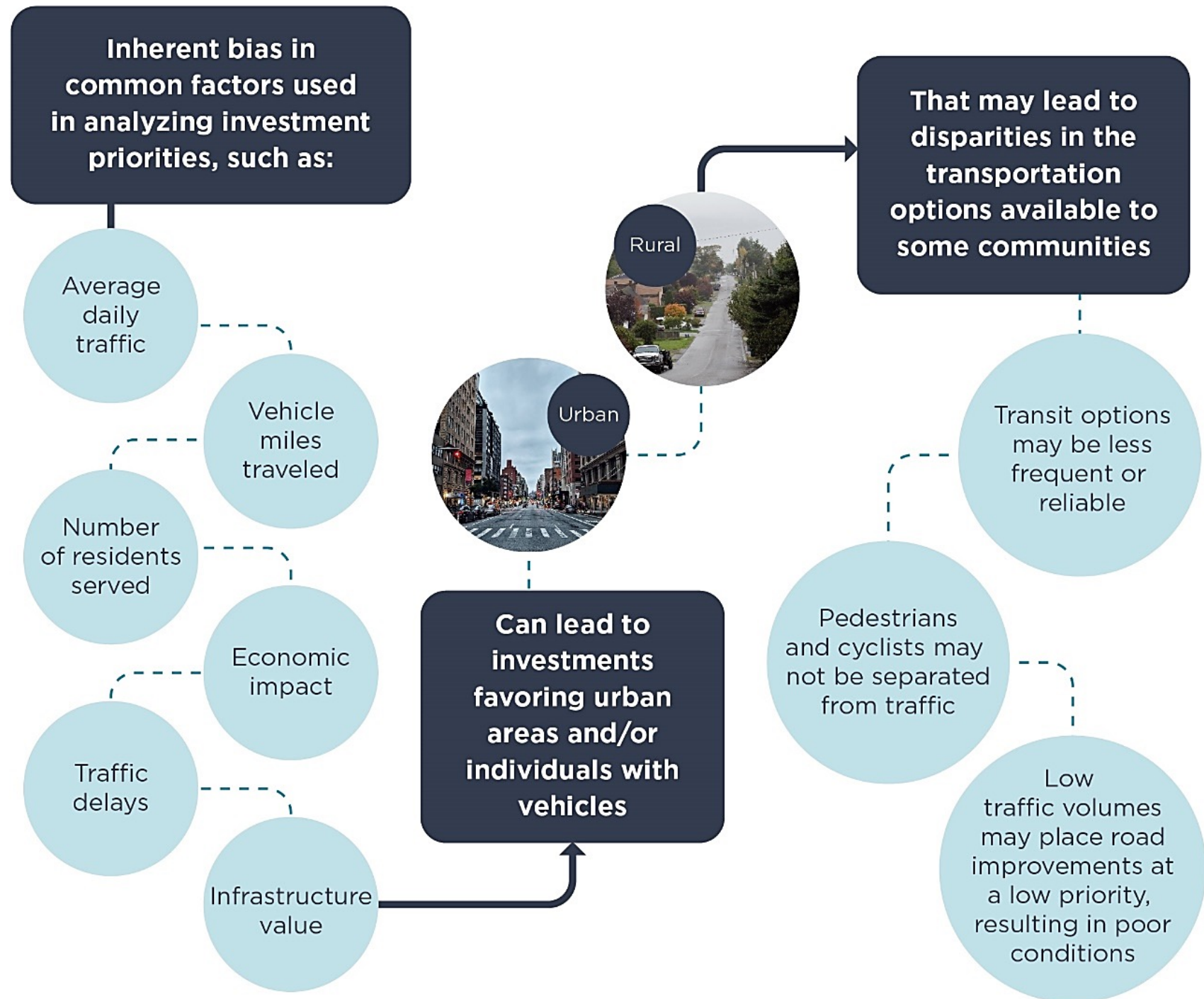


Defining Transportation Equity

- Federal Executive Order 12898, 1994
- FHWA Order 6640.23A, 2012
- USDOT Order DOT 5610.2C, 2021
- Colorado Senate Bill 21-260, Section 28



Potential Impacts of Inherent Bias



State & Regional Examples

California DOT

Several initiatives to address equity through enhancing public transportation, investing in rail, active transportation facilities, and enhancing operations

Massachusetts DOT


Better address equity considerations in its planning activities

Minnesota DOT

Rethinking the I-94 Corridor: health, environment, economics, sense of place, safety, connections, equity, and trust

North Front Range MPO

Provides several examples to illustrate the types of benefits and burdens that might be considered for roadway projects



“Listen to communities affected by inequity and implement change accordingly by altering the ways we evaluate and make investments in transportation”

Toks Omishakin, Director of Caltrans

Local Examples

Seattle DOT

Established a Race and Social Justice Initiative (RSJI) in 2004

Chicago, IL

Initiatives that improve the connectivity of transit options and efforts to help households with lower income

Oakland, CA

A self-organized, grassroots advocacy organization called Connect Oakland has established a vision to reconnect neighborhoods with the downtown area

Boston MPO

Assessments consider project proximity to seniors and underrepresented communities and air quality when evaluating TIP projects



5-Step Framework for Equity Analysis

1. Identify Populations for Analysis.
2. Identify Needs and Concerns.
3. Measure Impacts of Proposed Agency Activity.
4. Determine Disparity/DHAE.
5. Develop Strategies to Avoid or Mitigate Inequities.

Twaddell, H. and B. Zgoda. 2020a. Equity Analysis in Regional Transportation Planning Processes – Volume 1: Guide. Transit Cooperative Research Program (TCRP) Research Report 214. National Academies of Sciences. Transportation Research Board. Washington, DC.

Next Steps

1. Identify advancing research topics to advance the consideration of equity.
 - Developing a framework for considering equity in performance-based planning activities.
 - Establishing quantitative and qualitative performance measures
 - Summarizing examples of inherent inequities in asset management
 - Developing suggestions for transportation agencies to address equity-conscious outcomes
2. Seek opportunities to conduct asset management peer exchanges
How can the transportation workforce become more diverse and inclusive?



Thank you

“Any step toward equity is important. Where you see real action is when communities are listened to and lead, advocacy groups are at the table, and policy makers are making decisions based on all that.”

Stacy Thompson, Executive Director, Livable Streets
(Larson 2021)



Equity in Asset Management

Denver Department of Transportation and Infrastructure

Agenda

- What is Equity?
- Equity vs Equality
- City and County of Denver Equity Strategy
- DOTI Equity Strategy
- DOTI Strategic Priorities
- DOTI Asset Management Program Statement
- SERVICE Policy
- Asset Management Equity Approach (SAMP)
- Equity in Asset Lifecycle
- DOTI Equity Index
- DME Project Prioritization
- Tracking Equity in Operations Work

What is Equity?



Denver believes that equity is when race and other social identities can no longer be used to predict life outcomes



EQUALITY:

Everyone gets the same – regardless if it's needed or right for them.



EQUITY:

Everyone gets what they need – understanding the barriers, circumstances, and conditions.



Denver Mayor's Office Of Social Equity & Innovation

Mission

To cultivate an equitable and inclusive Denver by dismantling systemic barriers and creating targeted solutions for historically marginalized populations

Vision

To be a city where race and other social identities no longer predict life outcomes

DOTI Equity Strategy

DOTI's Mission

*Denver's Department of Transportation and Infrastructure, through its employees, enhances the quality of life in Denver by safely and efficiently delivering effective, high quality, sustainable and **equitable** public infrastructure and services.*

DOTI + Equity

*Denver will achieve **racial and social equity** in transportation when one's race and other social identities can no longer be used to predict life outcomes, such as transportation choices and access, travel times, and economic or health outcomes.*

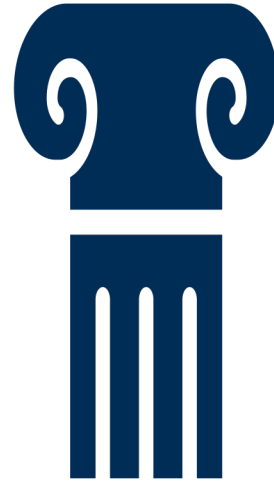
DOTI 3 Pillars of Equity

Workforce



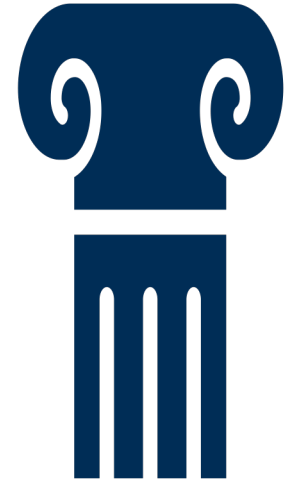
We will create equitable opportunities to develop our workforce and strive to recruit talent that reflects the people we serve in our communities.

Business



We incorporate equity by building inclusive business relationships and processes to maximize our success.

Community



We strive to produce equitable outcomes in the communities we serve with consideration for and elimination of historical and systemic barriers.

DOTI 2024 Strategic Priorities

Strategy

ASSET MANAGEMENT - Implement Asset Management Program.

EQUITY - Implement Equity Strategy.

ORGANIZATIONAL SUSTAINABILITY – Implement plan to maintain level of service and long-term organizational health.

CUSTOMER SERVICE – Implement a customer service improvement strategy.

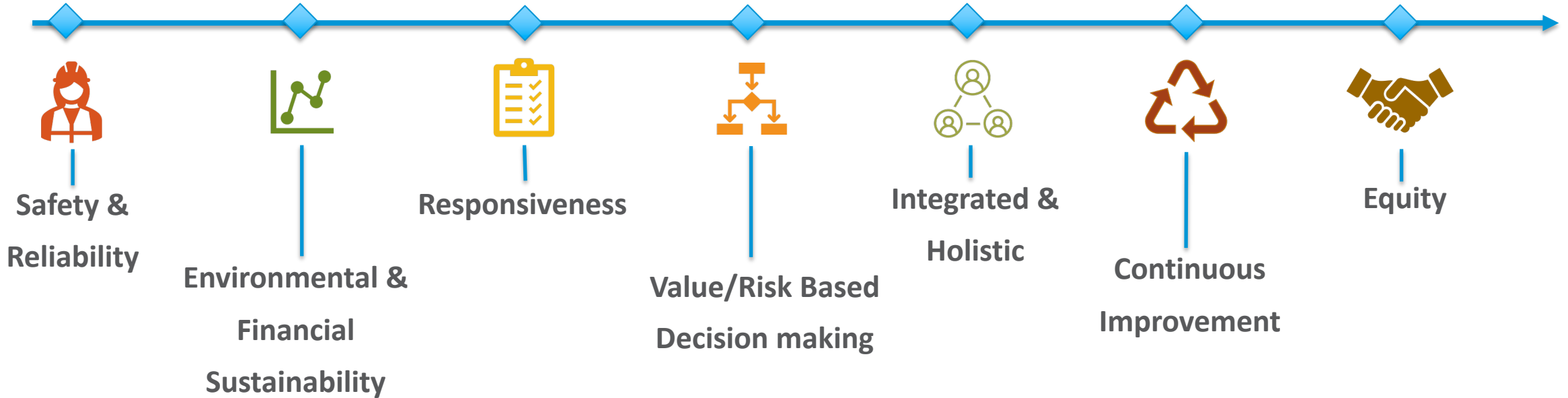
COMMUNITY ENGAGEMENT - Implement Community Engagement strategies.

FINANCIAL CONTROLS AND MANAGEMENT – Implement financial controls and management strategy.

DOTI Asset Management Program Statement

Build an adaptable asset management ecosystem driven by best practices that optimizes infrastructure performance through data-driven and objective decision making, while prioritizing stakeholder expectations and service levels that deliver safe, sustainable, reliable, and **equitable** infrastructure investments and lifecycle strategies.

SERVICE Policy



Asset Management Equity Approach



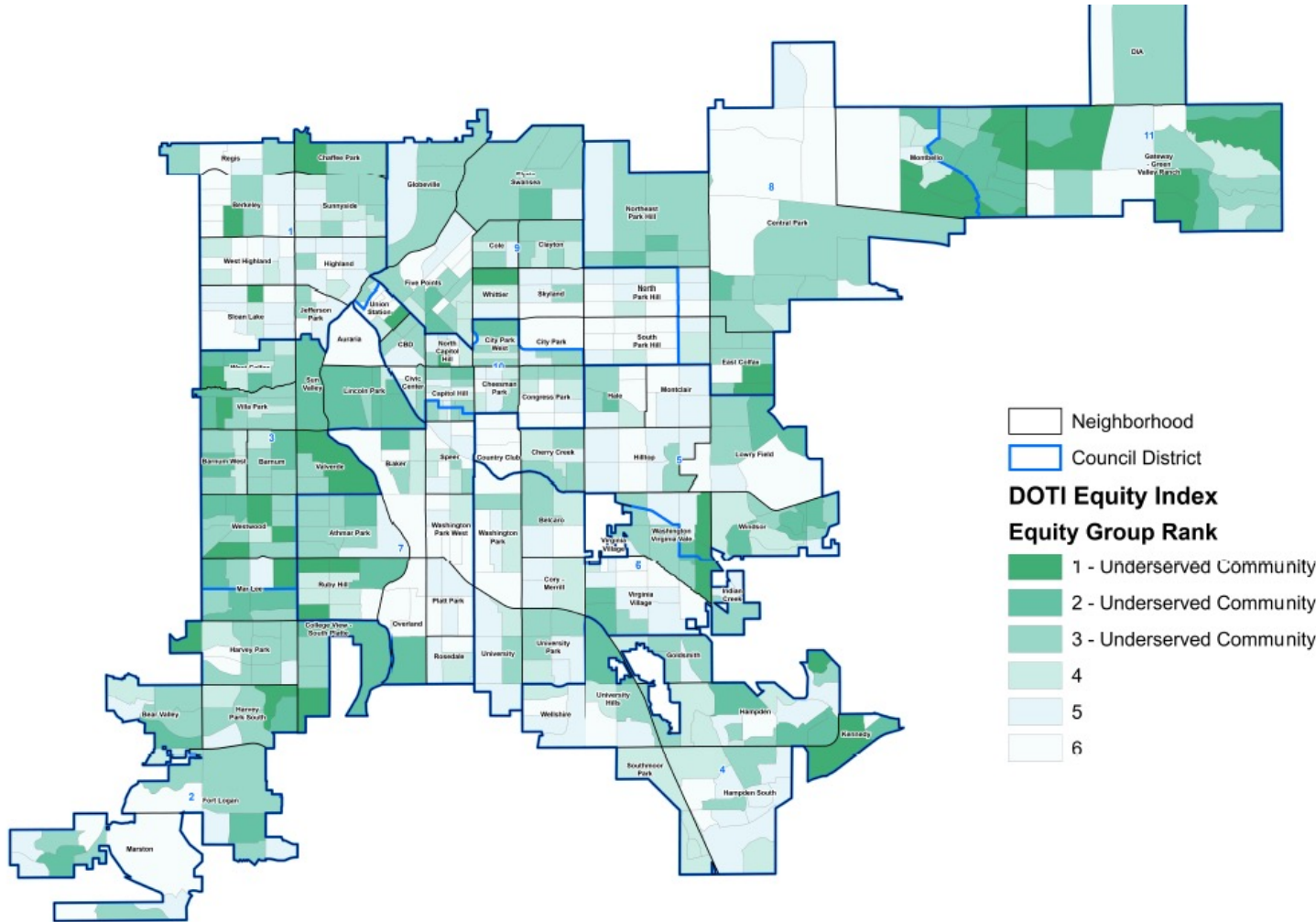
Equity in the Asset Lifecycle

Equity is evaluated through project prioritization processes during the planning phases by all divisions



Equity is evaluated throughout the life span of existing assets by comparing asset condition within communities to ensure underserved communities are not at a disadvantage







DOTI Equity Index



The Equity Index is comprised of the following seven demographic characteristics:

- Race & Ethnicity
- Income & Poverty
- Education Level
- Populations of Age 65+
- Households with No Vehicle
- Female Heads of Household
- People with Disabilities

Denver Moves Everyone Prioritization Process

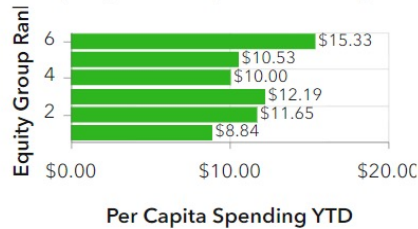
	EQUITY				EVERYONE			
	CRITERIA	AREA NEEDS	PROJECT BENEFITS		CRITERIA	AREA NEEDS	PROJECT BENEFITS	
 MOBILITY	Access and Affordability	+ Current household transportation costs	+ Projects that reduce travel costs	+	Travel Time and Reliability	+ Current household trip lengths and travel modes + Current origin and destinations of trips	+ Projects that serve major destinations and improve travel times	 DENVER'S HIGHEST PRIORITY TRANSPORTATION PROJECTS
 SAFETY	Comfort and Security	+ Existing street characteristics and comfortable assets	+ Projects that improve comfort and safety	+	Risk Reduction	+ Current fatality, serious injuries, and HIN crashes	+ Projects that reduce traffic crash risks and incidences	
 SUSTAINABILITY	Environmental Justice	+ Exposure to transportation-related air quality emissions + Existing urban heat exposure	+ Projects that cool streets and improve public health outcomes	+	Climate Action	+ Current vehicle-dependent households contributing to transportation GHG emissions	+ Projects that shift travel to sustainable modes	
 COMMUNITY	Access to Opportunity	+ Existing access to social, economic, and education destinations	+ Projects that increase multimodal access to destinations	+	Connectivity	+ Current origin and destinations of trips	+ Projects that provide multimodal travel choices to major destinations	
 QUALITY	Equitable Investment	+ Existing infrastructure access	+ Projects that complete gaps	+	State of Good Repair	+ Current quality and condition of infrastructure	+ Projects that improve or upgrade quality of infrastructure	

Tracking Equity in Operations Work

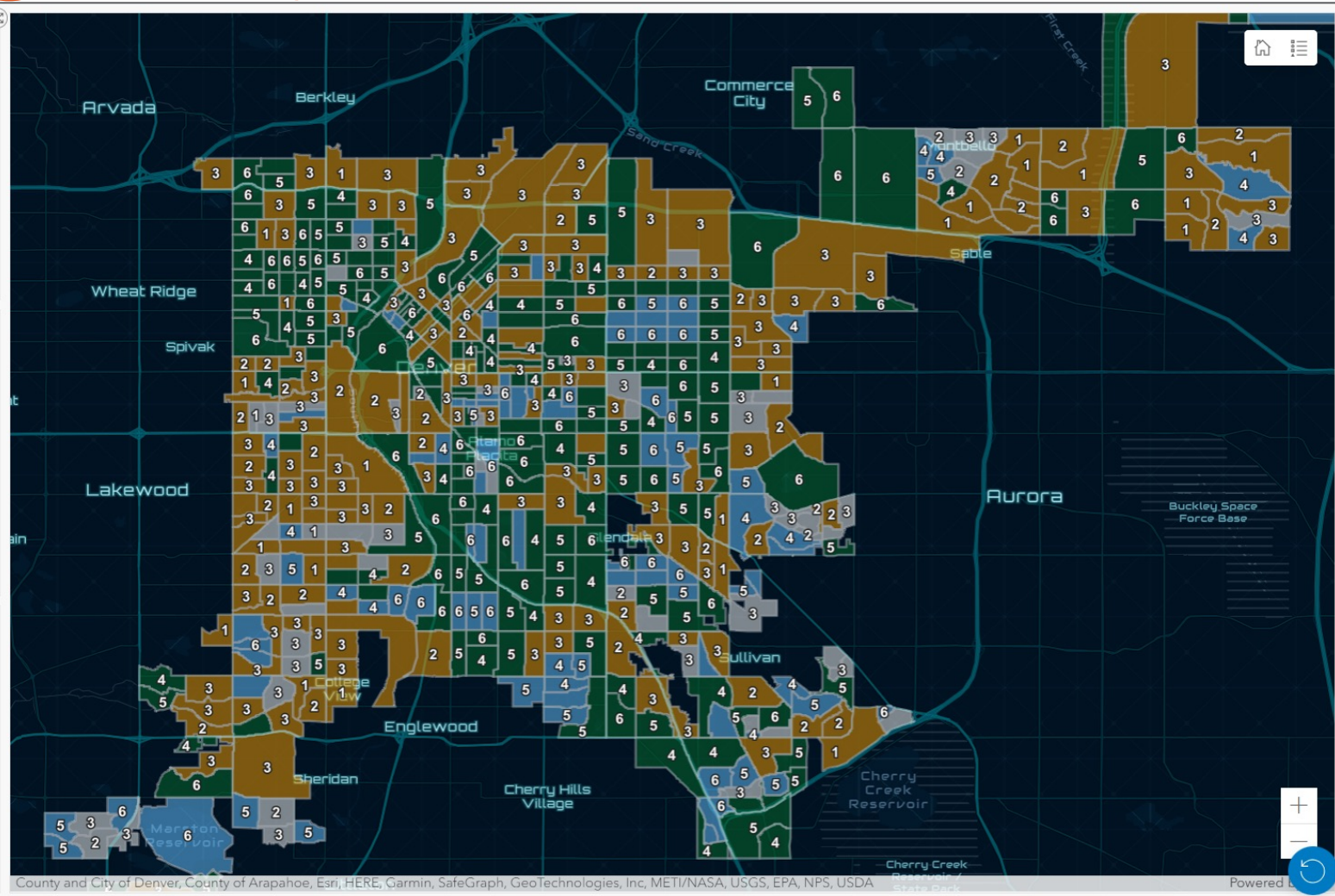
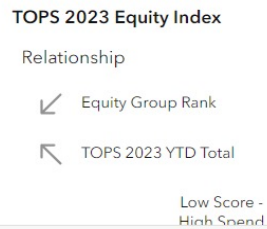
Investments in areas by Equity Group Ranking



Per Capita Spending by Equity Group Ranking



TOPS 2023 Work compared with the Equity



Questions?

Jason Smiley, GISP
DOTI Performance Office
GIS Data Administrator/
Asset Management Program Development Manager
Jason.Smiley@denvergov.org



Transportation Equity at MnDOT

Shaker Rabban

Asset Management Planning Director

Advancing Transportation Equity Initiative



Research
Roadmap



Community
Conversations



Equitable
contracting and
engagement



Programs and
Process Review



Research
Projects

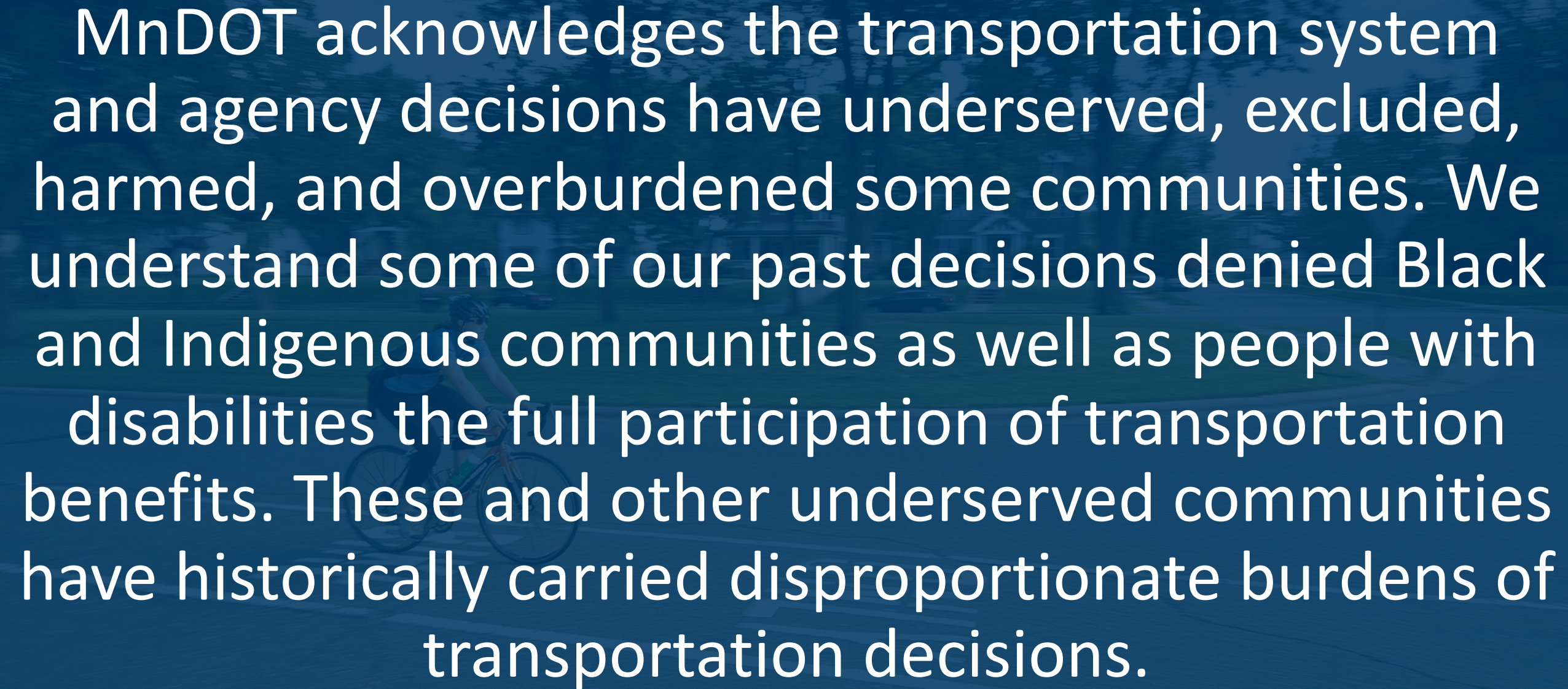


Updated
Plans

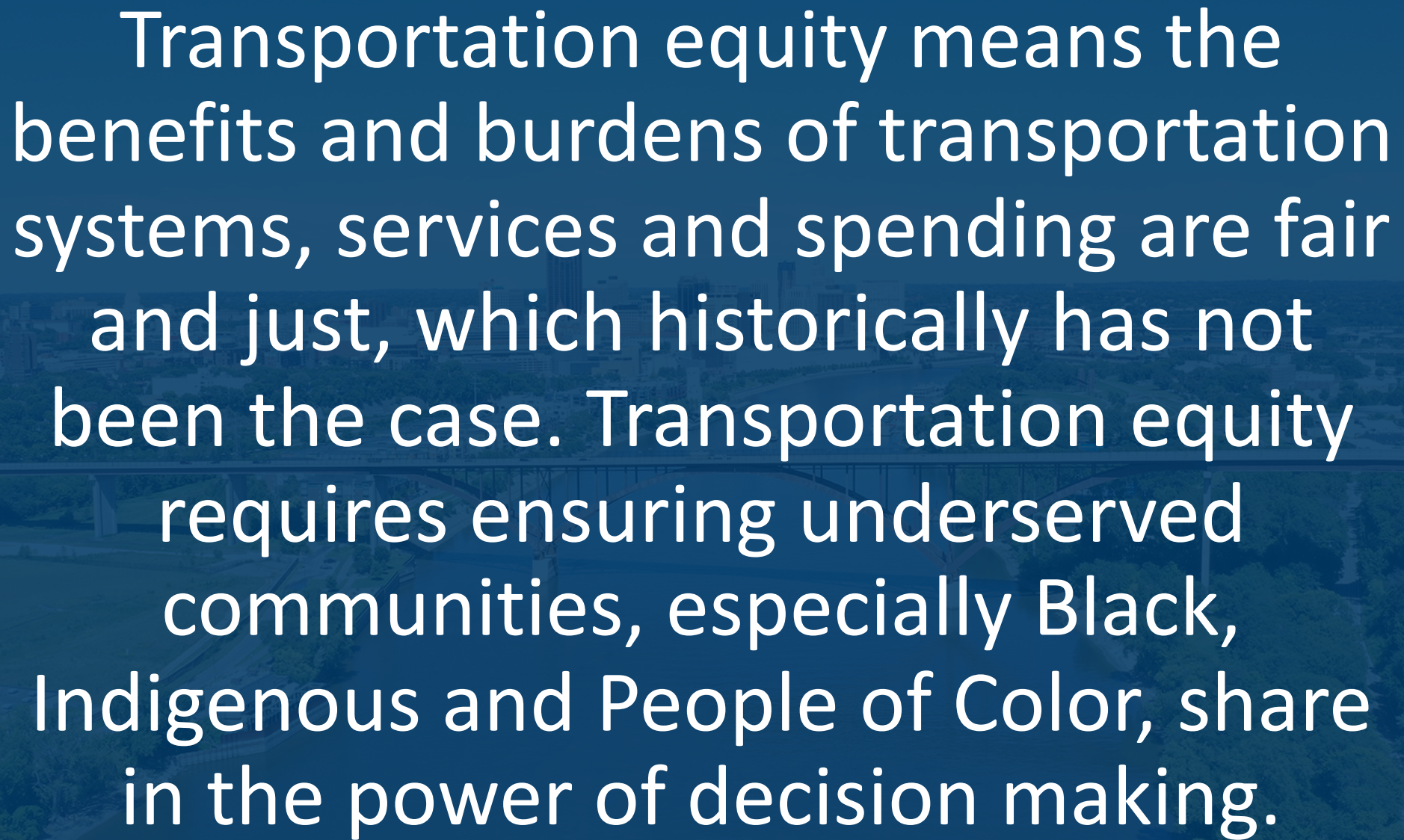
EQUITY

WHAT DOES IT MEAN?




A person is riding a bicycle on a paved path, which is visible in the background. The scene is overlaid on a dark blue background with white text. The text is a statement from MnDOT acknowledging past transportation decisions that have underserved, excluded, harmed, and overburdened some communities, specifically mentioning Black and Indigenous communities and people with disabilities.

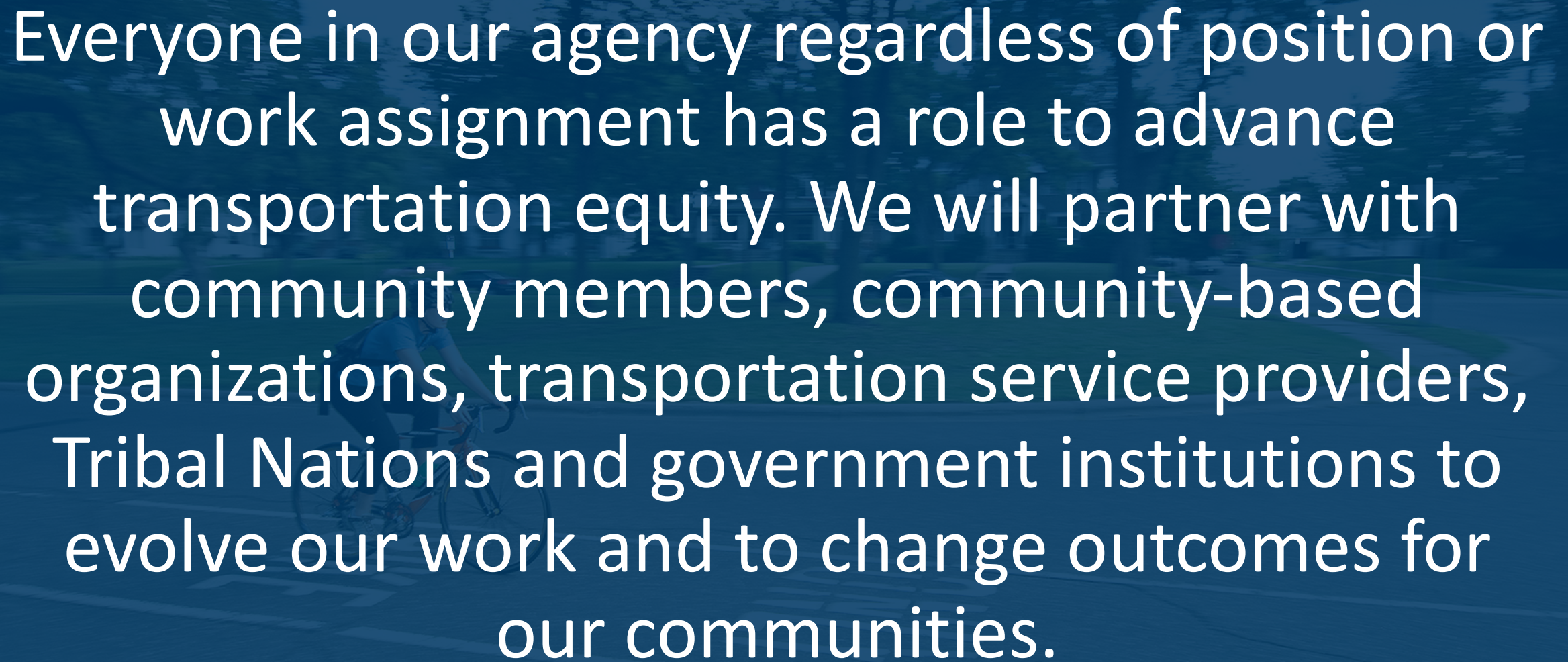
MnDOT acknowledges the transportation system and agency decisions have underserved, excluded, harmed, and overburdened some communities. We understand some of our past decisions denied Black and Indigenous communities as well as people with disabilities the full participation of transportation benefits. These and other underserved communities have historically carried disproportionate burdens of transportation decisions.

An aerial photograph of a city, likely Minneapolis, Minnesota, featuring a prominent red brick bridge over a river, a large green field, and a city skyline with a prominent dome-shaped building. A large, semi-transparent blue rectangle is overlaid on the center of the image, containing white text.

Transportation equity means the benefits and burdens of transportation systems, services and spending are fair and just, which historically has not been the case. Transportation equity requires ensuring underserved communities, especially Black, Indigenous and People of Color, share in the power of decision making.

A photograph of a road worker in a high-visibility yellow-green vest and dark shoes, holding a red octagonal stop sign on a wooden post. The worker is standing on a paved road with white and yellow lane markings. In the background, there is a concrete barrier and dense green foliage. A semi-transparent dark blue rectangular box is overlaid on the center of the image, containing white text.

The journey of transforming our transportation systems, services and decision-making processes will require ongoing listening, learning, changing, implementing and adapting.

A person is riding a bicycle on a paved path. The background shows green trees and a blue sky with some clouds. The text is overlaid on a dark blue semi-transparent rectangle.

Everyone in our agency regardless of position or work assignment has a role to advance transportation equity. We will partner with community members, community-based organizations, transportation service providers, Tribal Nations and government institutions to evolve our work and to change outcomes for our communities.



Community Conversations

Community Conversations

What: one-on-one conversations

Goal: Learn about experiences and struggles with transportation and engagement preferences for people

- Underrepresented in transportation processes
- Experience known inequities in access or outcomes
- Face unique transportation needs not well served by our business-as-usual approach



“**Transportation is one of the main obstacles holding people back in many ways.** Better transportation would allow more people to have access to our services. They’d also have an easier time getting to work, to doctor’s appointments, to get food, and to access county social services.”

Transportation as a Barrier

“ It’s not the same as equality. **We have to get to know people better to understand their needs**, so we can address them ...
Equity also means **helping people navigate systems.**”

Navigating Systems

Statewide Multimodal Transportation Plan



- Developed by MnDOT, covers all transportation partners
- Overarching objectives, performance measures and strategies for all modes
- Sets the stage for more detailed implementation and investment planning
- Last adopted in 2022



Implement equity in transportation decision making

- Build capacity to advance equity
- Develop transportation equity performance measures
- Implement commitment to transportation equity

Equity Work Group

- Advisory committee reviewed Statewide Multimodal Transportation Plan and Minnesota State Highway Investment Plan for equity considerations, including:
 - Engagement approach and focus
 - Strategy development
 - Investment scenarios
 - Draft investment direction

Transportation Asset Management Plan

- Equity was not a focus of the 2022 TAMP
- Next TAMP will be first since MnDOT adopted its commitment to equity
- Need to review investment decisions and management approaches through an equity lens
 - Some assets are more important from an equity perspective (e.g. ADA infrastructure)
 - Some assets are more or less equitable depending on where they are repaired/constructed and how those projects are developed
- Equity may influence what assets get included in the TAMP
- Next TAMP process is still being scoped
- GAO Report on Equitable Pavement Condition

<https://www.gao.gov/products/gao-22-104578>

Shaker Rabban

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Q&A and Discussion

Submit your questions using Zoom's chat feature

All webinars available online:

<https://www.tam-portal.com/event-directory/tam-webinars/>

Save the Dates!

A bimonthly webinar series, Wednesdays at 2:00 PM EST

Next Webinar

Wednesday, June 12, 2024– 2:00 PM EST

Topic: TAM Organizations and People

More to follow!



For more information or to register:
<https://www.tam-portal.com>