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**TRB** TRANSPORTATION RESEARCH BOARD

# TRB Webinar: Enhancing Public Health Equity Through Transportation

*June 8, 2022*

*2:00 – 3:30 PM*

NOVEMBER 2022 UPDATE



# Learning Objectives

- Use health equity as a means to frame community livability issues
- Develop policy-relevant and policy-sensitive health equity indicators
- Prioritize projects using health equity evaluation criteria

# PDH Certification Information

1.5 Professional Development Hours (PDH) – see follow-up email

You must attend the entire webinar.

Questions? Contact Beth Ewoldsen at [Bewoldsen@nas.edu](mailto:Bewoldsen@nas.edu)

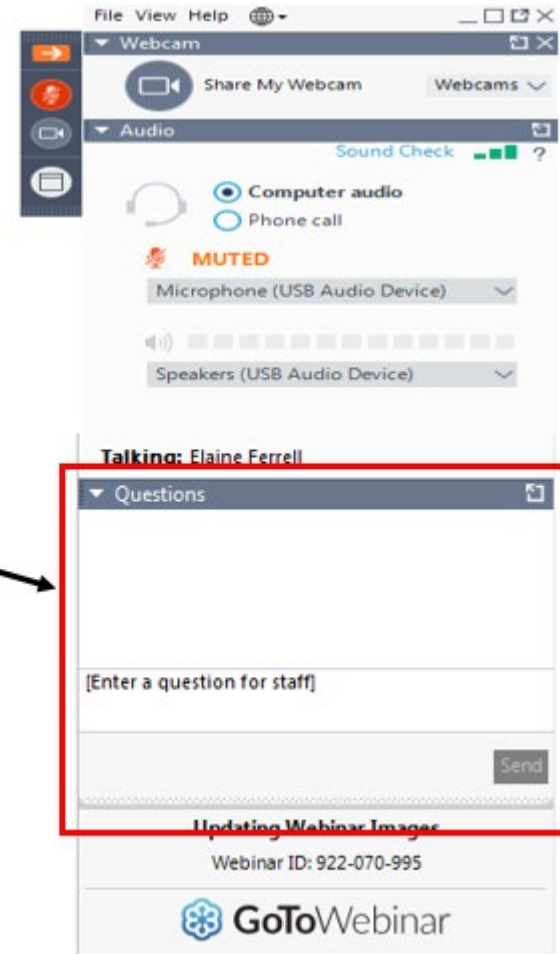
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REGISTERED CONTINUING EDUCATION PROGRAM

# Questions and Answers

- Please type your questions into your webinar control panel
- We will read your questions out loud, and answer as many as time allows



# Today's presenters



**Kelly Rodgers**

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**Nissa Tupper**

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**Betsy Harvey**

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**Taylor Phillips**

[taylor.phillips@denvergov.org](mailto:taylor.phillips@denvergov.org)



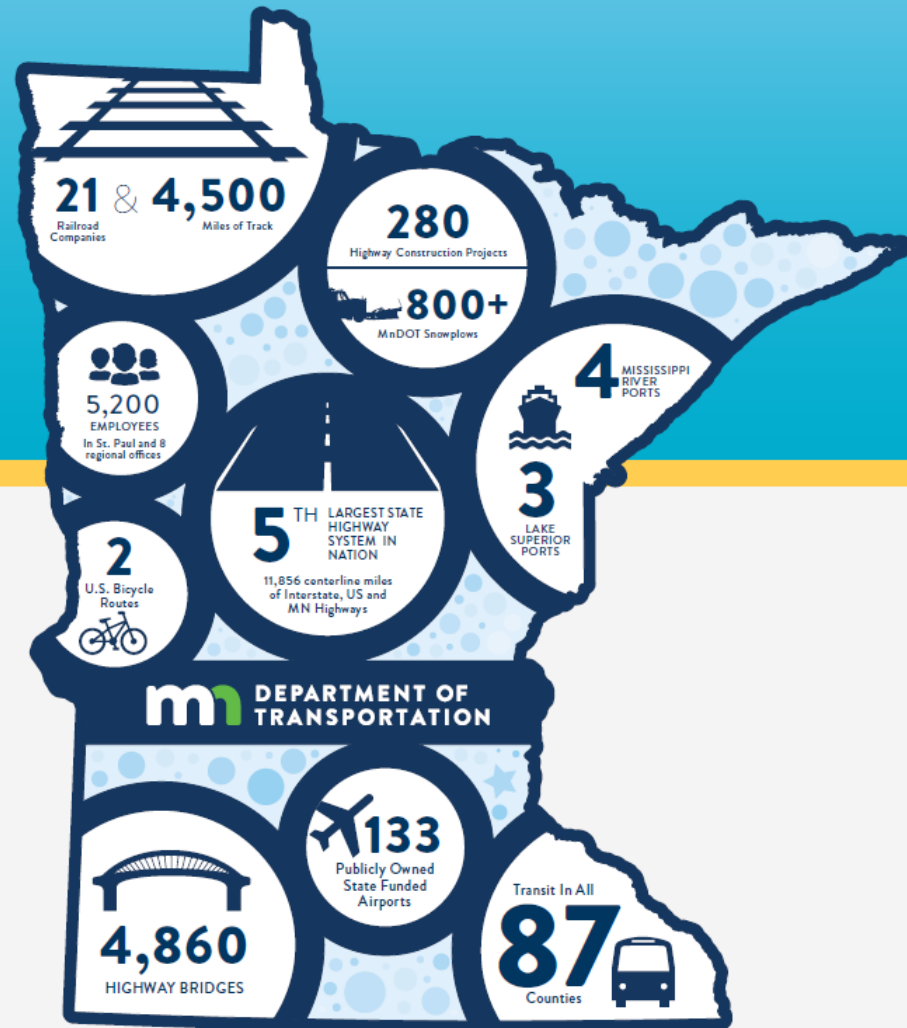
# Equity Health Assessment

**Nissa Tupper**, Transportation and Public Health Planner  
Sustainability and Public Health Division, MnDOT

TRB Webinar — Enhancing Public Health Equity through Transportation  
June 8, 2022

# MNDOT VISION

Minnesota's multimodal transportation system maximizes the health of people, the environment, and our economy.

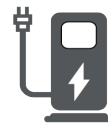


**m** DEPARTMENT OF TRANSPORTATION

# MnDOT Sustainability & Public Health Division

[www.dot.state.mn.us/sustainability/](http://www.dot.state.mn.us/sustainability/)

Embed public health and equity into MnDOT decision making



Reduce emissions from all transportation modes

Support Transportation that Improves Public Health

Reduce Transportation Carbon Pollution

Identify and factor climate risks into decision making



Improve Resilience of the Transportation System

Lead by



Reduce MnDOT emissions and empower staff

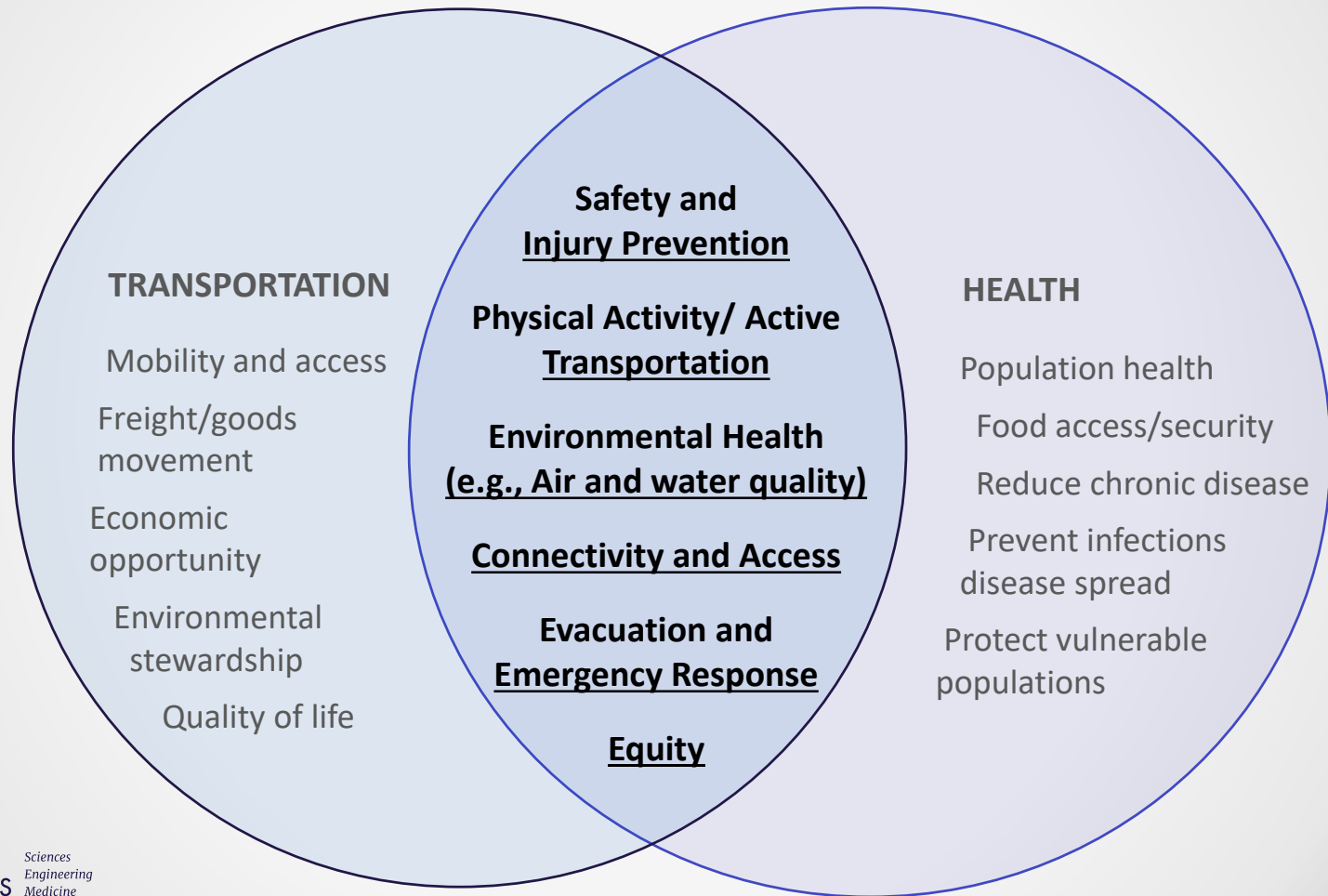
Sustainability Efforts



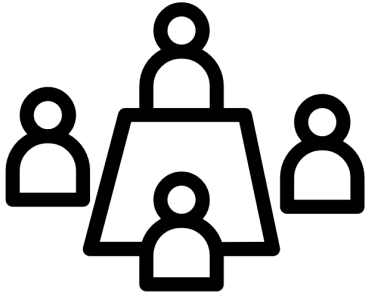


Good health starts long before the doctor's office.  
Health is created where we live, learn, work, and play.  
**Healthy communities make healthy people.**

# Transportation and Public Health Context



# Health Evaluation Processes



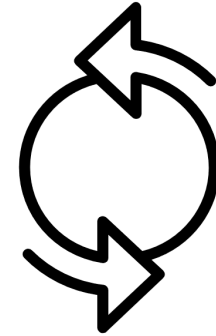
## Health Equity Lens Tools

Considering equity in specific policies, processes and decision-making processes



## Health Impact Assessment (HIA)

Conducting a parallel assessment, integrating feedback into final decision



## Community Impact Assessment (CIA)

Integrated process to evaluate and address health throughout project process

# Hwy 252/I-94 Equity and Health Assessment (EHA)

## WHY?

The Hwy 252/I-94 EHA seeks to enhance MnDOT's understanding of equity and health along the corridor and elevate the role of equity and health considerations in Hwy 252/I-94 decisions.

## HOW?

The EHA consists of equity and health analysis guided by targeted, intentional engagement of historically underserved and overburdened communities.

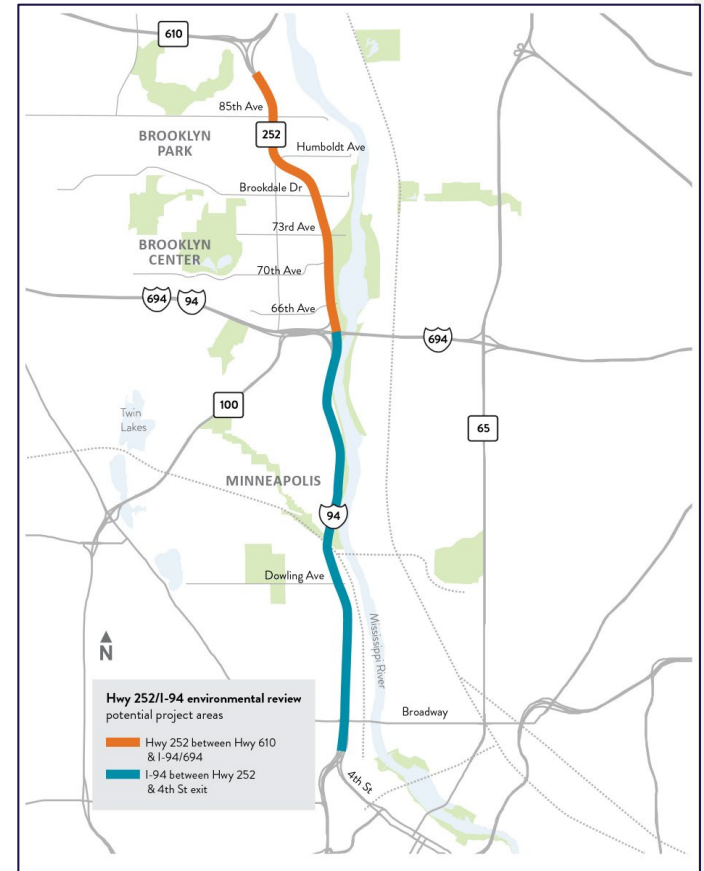
# Hwy 252/I-94 Project Background

## Project Purpose Statement:

The purpose of the Highway 252/I-94 Project is to improve the safe and reliable movement of people and goods across multiple modes on and across Highway 252 and I-94 between Highway 610 in Brooklyn Park and North 4th Street in Minneapolis.

## Summary of Needs:

- Vehicle safety
- Vehicle mobility
- Walkability and bikeability



# Hwy 252/I-94 Project Schedule

## OVERALL PROJECT SCHEDULE



## ENVIRONMENTAL IMPACT STATEMENT PHASES



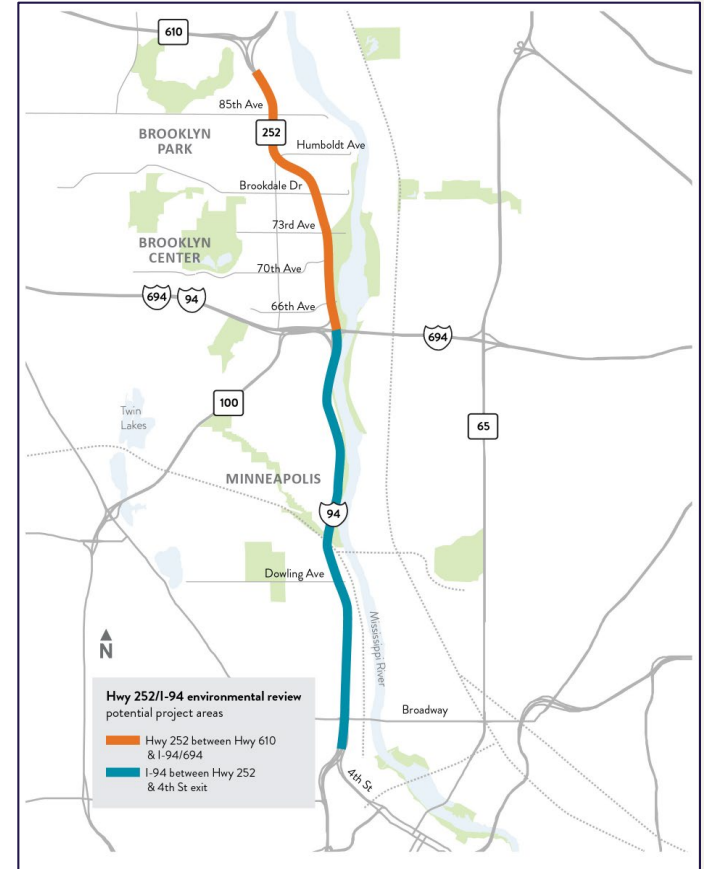
Schedule subject to change

# Who conducts the EHA?

- The EHA is administered by **MnDOT's Sustainability and Public Health Division** with support of an **interagency workgroup**.
- Equity and **Health Neighborhood Advisors (EHNA)** group provides input on assessment of equity and health conditions, engagement activities, and potential transportation improvements to Hwy 252/  
I-94 project elements and alternatives.
- EHA reports are submitted to the **Hwy 252/I-94 project leadership team** and the **Project Advisory Committee (PAC)**.

# Equity and Health Neighborhood Advisors (EHNA)

- 12-15 residents of neighborhoods along the Highway 252/I-94 corridor
- Application-based selection process
- Community organizations asked to identify and encourage applicants
- Considers applicant community connections, interest in equity and health
- Intent for balanced representation of Highway 252/I-94 corridor communities





# EHA during the Hwy 252/I-94 Scoping Decision Document (SDD)

## Report 1: Equity & Health Baseline Conditions

- Document health conditions and disparities in corridor communities
- Data analysis agency workgroup, a
- EHNA input

Spring  
2022

## Report 2: Equity & Health Priorities

- Document health and equity priorities of corridor communities
- Data analysis EHNA input, target
- Engagement

Summer  
2022

## Report 3: Equity & Health Assessment Hwy 252/I-94

- Community-driven and equity assessment of alternative
- Recommendations for as part of and/or the project

Fall  
2022

# Report 1: Equity and Health Baseline Conditions

- Describes 30+ equity and health baseline conditions along the Hwy 252/I-94 corridor.
- Data and analysis vetted through interagency working group and MN Department of Health.
- Identifies six focus areas based on input from the EHA interagency working group and the EHNA. <sup>18</sup> These focus areas will be validated/adjusted through community engagement.

# EHA Equity and Health Focus Areas



Environmental and human health



Sense of community



Property impacts



Transportation safety



Transportation choice



Access to jobs, healthy food options, and greenspace

Focus areas will be reviewed, prioritized and expanded through EHA targeted engagement

# EHA Engagement – Spring 2022

## GOALS

1. Identify the most critical and urgent equity and health priorities of historically underserved and overburdened communities
2. Focus on equity and health conditions that are directly affected by transportation decisions

## METHODS

Targeted outreach:

- Questionnaire (online, print)
- Neighborhood door-knocks
- Community pop-ups and meetings with community organizations

# EHA during the Hwy 252/I-94 Scoping Decision Document (SDD)



# Evaluating Health Equity in Transportation Projects

Betsy Harvey  
Transportation Equity Program Manager

Boston Region Metropolitan Planning Organization

# Equity at the Boston Region MPO

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## Equity in All Policies

**Integral** to every policy, process, and decision

---

**Inclusive**, through public engagement and collaboration

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**Strategic**, through developing processes for data collection, analyses, and planning

---

# Health Equity at an MPO



Access to destinations

Access to the outdoors, healthcare, friends, and family



Housing

Access to housing near active transportation options



Air quality

Clean air



Land use

Walkable neighborhoods



Safety

Safe streets

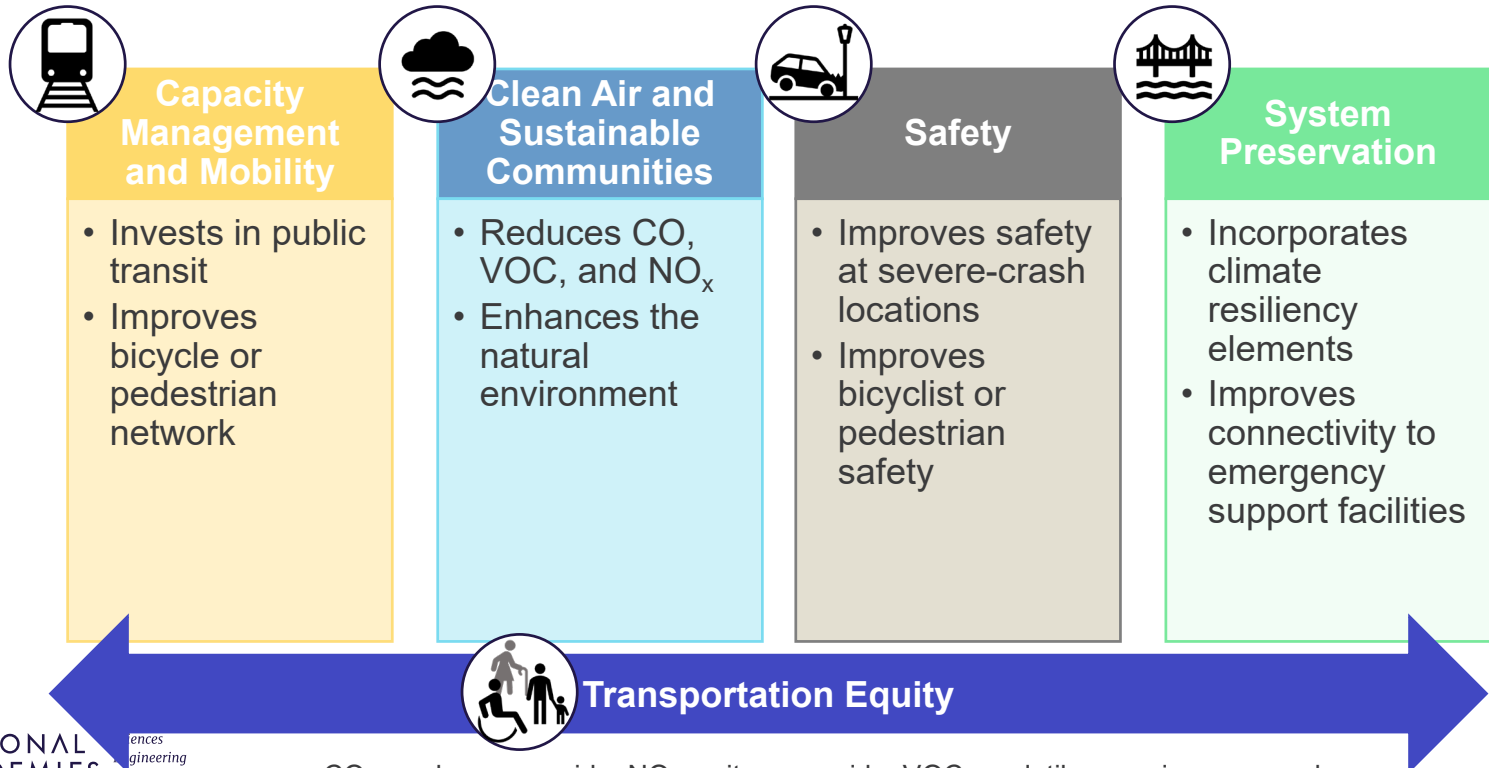


**What does this look  
like in practice?**

# Setting MPO Goal Areas



# Health-related Project Evaluation Criteria



# Determining Equity Scores

## Identify Equity Populations in Project Area



Compare share of each equity population to the region's average



Equity multiplier

## Evaluate Criteria



- Invests in public transit
- Improves bicycle or pedestrian network



- Reduces NO<sub>x</sub>, CO, and VOC
- Enhances the natural environment



- Incorporates climate resiliency
- Improves connectivity to emergency support facilities



- Improves safety at severe-crash locations
- Improves bicyclist or pedestrian safety

Equity multiplier

X

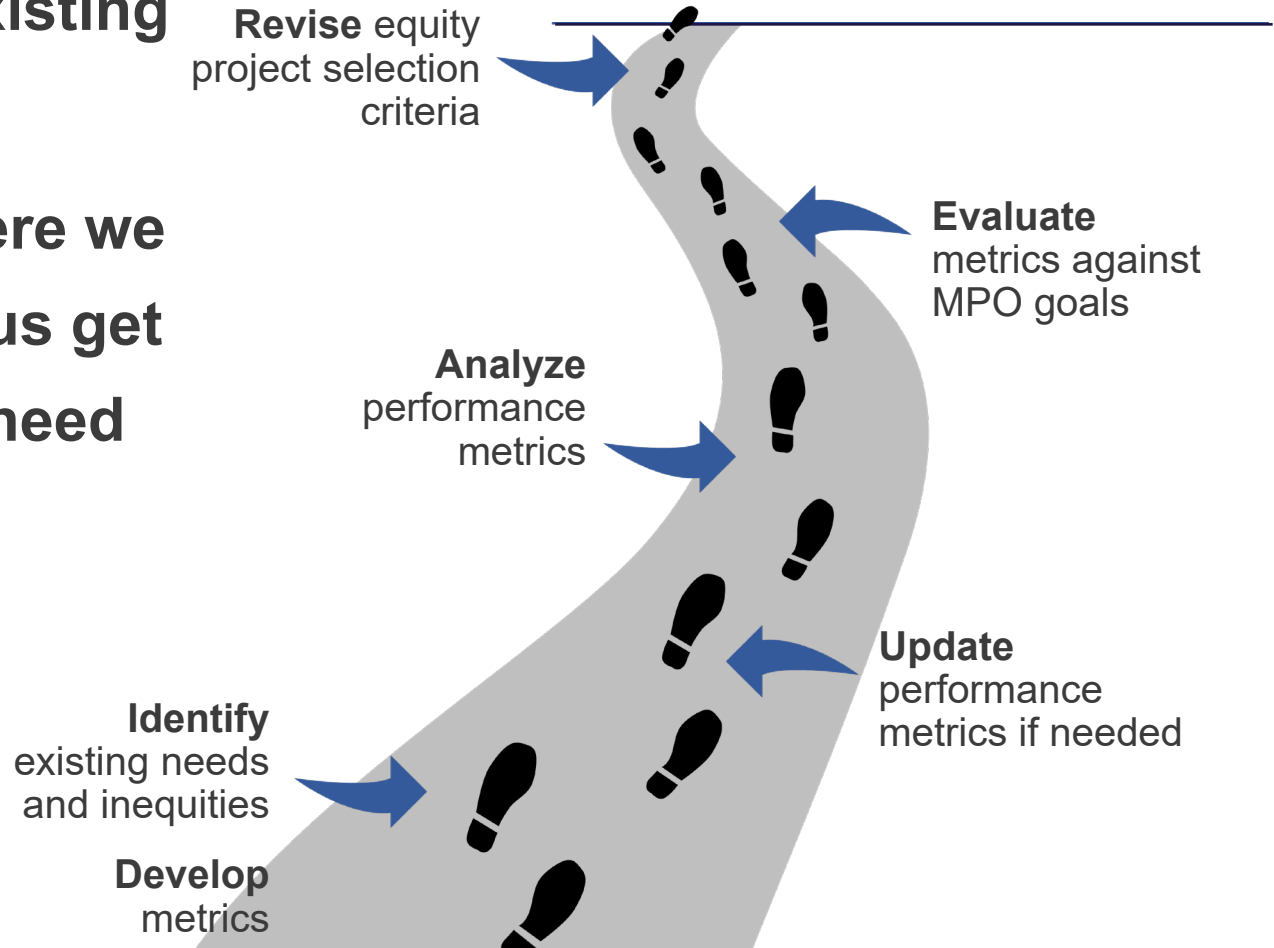
Base score (for each criteria)

= Final Score (for each criteria)

**Where are we going?**

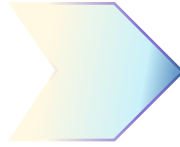
# Measuring existing inequities:

Knowing where we are will help us get to where we need to be.

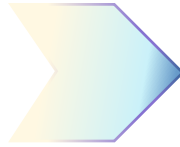


# Challenges

Consistent data that cover the entire Boston region



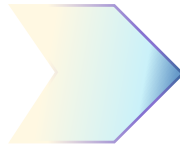
Data that is available at the neighborhood level



Measuring cumulative health effects



Availability of analysis tools



# Opportunities

New partnerships with academic institutions, government agencies, and community groups

Leveraging new and emerging climate, environmental, and health data

Recognition that transportation plays a critical role in addressing health inequities

Expanding suite of analysis tools

**Thank you!**

Betsy Harvey  
eharvey@ctps.org



# Health Equity in Transportation

## Denver Moves Everyone

June 8, 2022



# Agenda

1

**DME Overview**

2

**Defining the Issues –  
Health Equity in  
Transportation**

3

**Moving  
Towards  
Transportation  
Equity**



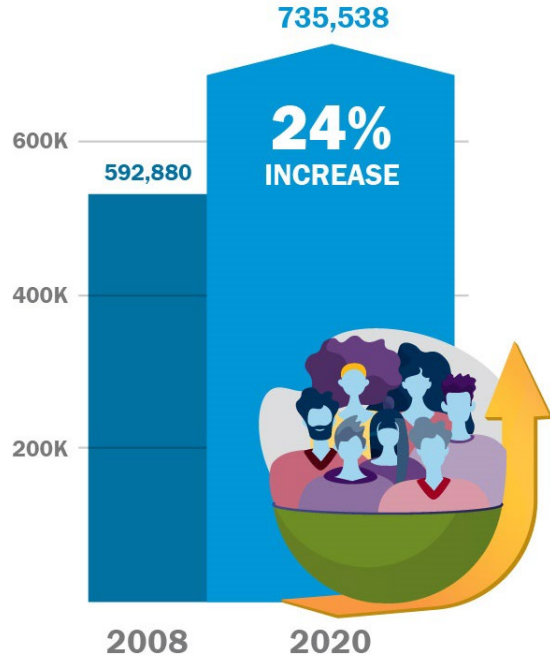
**DENVER MOVES**  
**EVERYONE** 20  
50

Our Vision to  
Move People,  
Goods & Services

# DME Overview

# Why Plan Now?

## POPULATION



Denver was the **5<sup>th</sup> fastest** growing city in the US over past decade\*

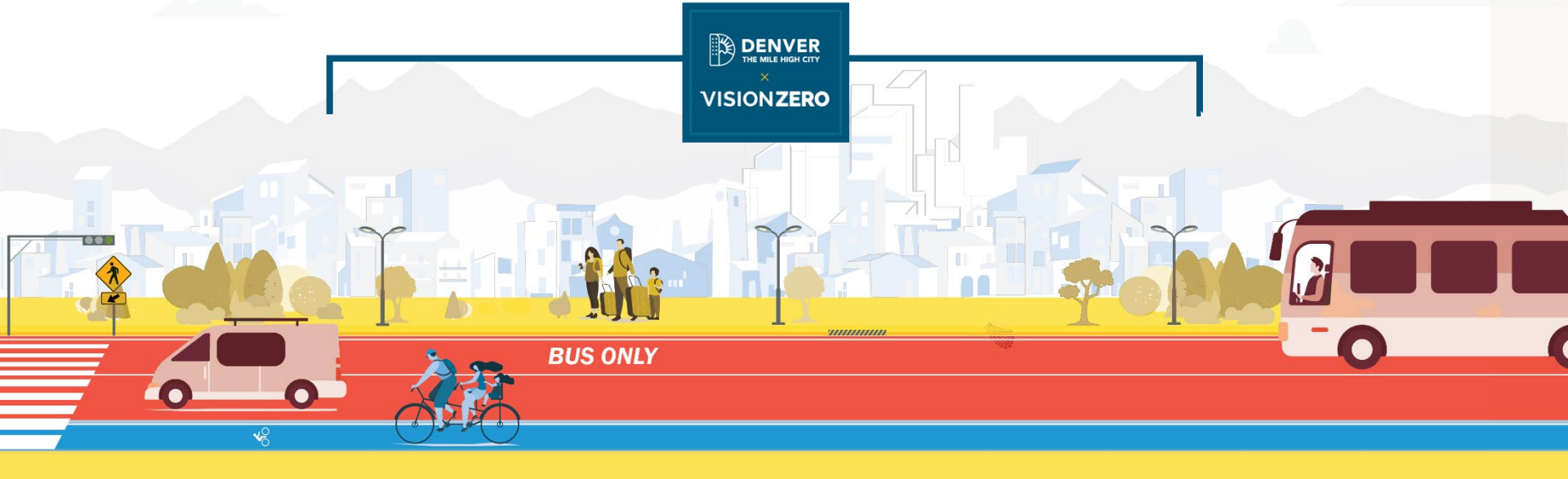
\*

In 2020, listed as **2<sup>nd</sup> most** gentrified city in the nation\*\*

\*Source: 2020 US Census. US cities with population greater than 500,000 people.

\*\*National Community Reinvestment Coalition, 2020.

# Denver Moves Everyone – Planning the System



# Denver Moves Everyone – Schedule





**DENVER MOVES**  
**EVERYONE** 2050

Our Vision to  
Move People,  
Goods & Services

# Defining the Health Equity Issues

# RACIAL EQUITY AND THE CLIMATE CHALLENGE

- Climate Challenge funded grant and DOTI staff person
- Developing process to center equity in transportation climate planning
- Piloting Racial Equity Toolkit within [Denver Moves Everyone](#)
- Integrating lessons learned into final Toolkit

American Cities  
Climate Challenge





# Diverse and Inclusive Voices

DIVO approach successful in increasing reach to people of all backgrounds



**Diverse and Inclusive Voices Committee**



**Targeted Grassroots Events**



**Creative Input Sessions**



# LET'S GET MOVING.

Denver Moves Everyone 2050

State of the System

March 2022

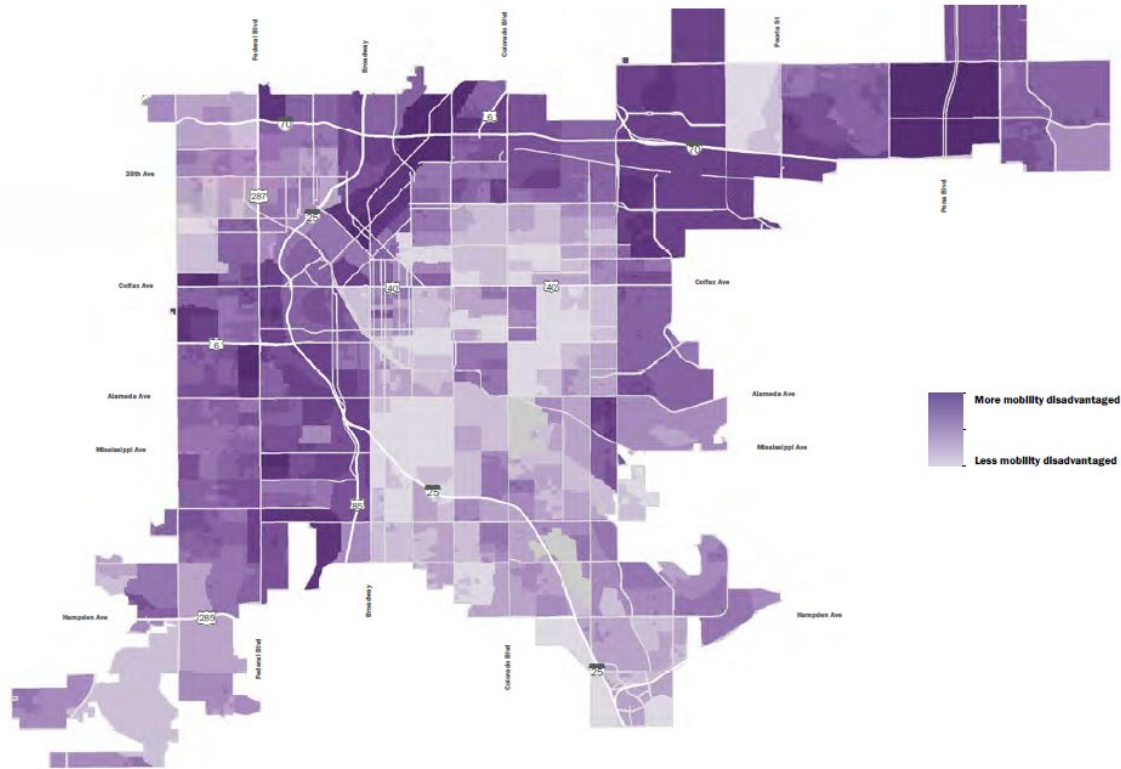


**DENVER MOVES**  
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# Understanding Inequities

MAP 1.1: Denver Priority Areas for Equity



## DOTI'S 2020 EQUITY INDEX FACTORS

- + Race and ethnicity
- + Older adults and persons with disabilities
- + Households with a single female caregiver
- + Poverty levels and employment status levels
- + Educational attainment and language spoken at home
- + Households without vehicle access and household transportation costs
- + Traffic safety outcomes
- + Proximity of youth to schools and recreation centers
- + Public health indicators of obesity and asthma

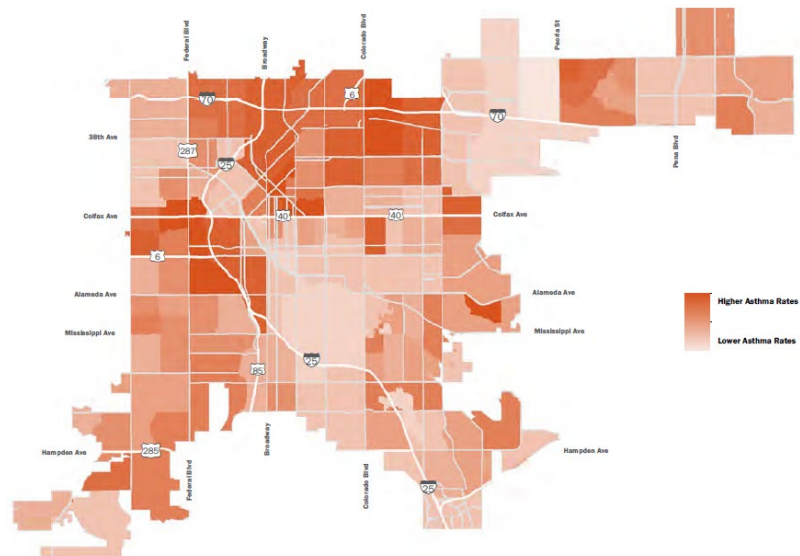
# HEALTH AND EQUITY

## Denver Neighborhoods Impacted by Air Pollution



SOURCE: EPA AirNow, 2021

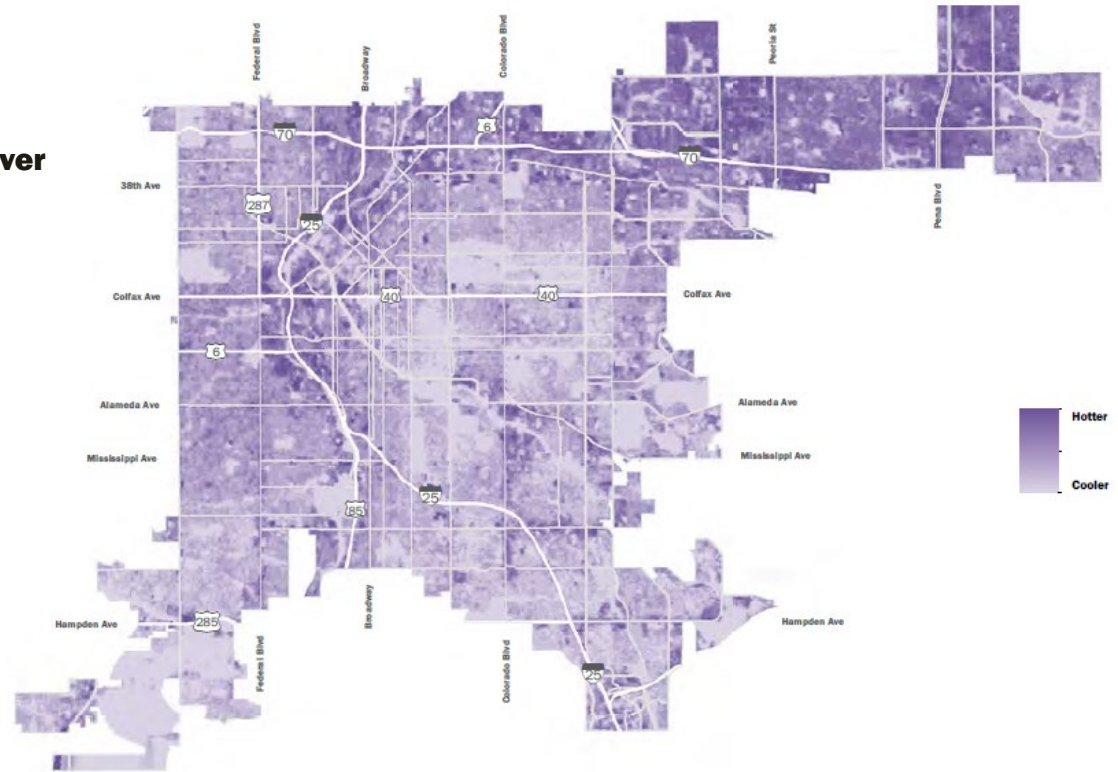
## Age-Adjusted Asthma Hospitalization Rate Per 100,000 Persons



SOURCE: Colorado Department of Public Health and Environment, 2017

# CLIMATE VULNERABILITY

## Urban Heat Islands in Denver



SOURCE: City and County of Denver, Office of Climate Action, Sustainability, and Resiliency, 2021

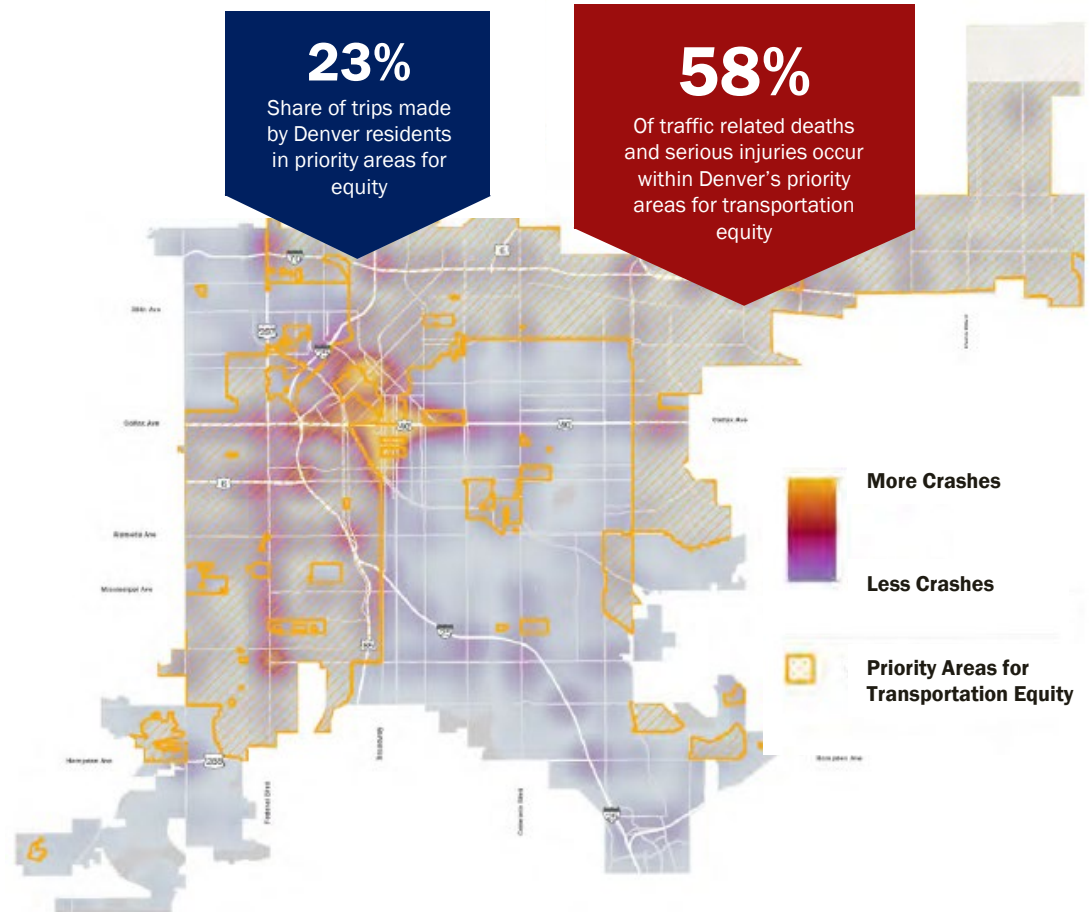
# SAFETY AND EQUITY

**23%**

Share of trips made by Denver residents in priority areas for equity

**58%**

Of traffic related deaths and serious injuries occur within Denver's priority areas for transportation equity



SOURCE: Denver Police Department, Sept 2016 to Sept 2021.



**DENVER MOVES**  
**EVERYONE** 20  
50

Our Vision to  
Move People,  
Goods & Services

# Moving Towards Transportation Equity

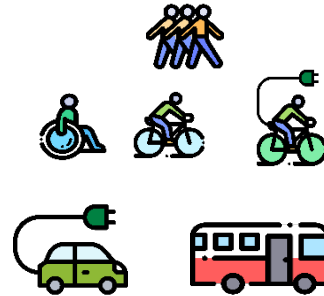
# Outcome-Based Measures

$$\textit{Project Needs} \times \textit{Project Benefit} = \textit{Score}$$

- Data representing existing conditions
- GIS-based analysis

- Data-based assessment of potential project benefits
- Factors based on project type

- Final scoring value





# Public Priority Input

**7,500 + Denverites**  
co-created vision and goals.



## Public and Partner Priorities

Thousands told us what to prioritize to achieve our goals.

- |               |              |                |                          |                                  |
|---------------|--------------|----------------|--------------------------|----------------------------------|
| Reliability   | Slow Streets | Climate Change | Connectivity             | Targeted Repair in Areas of Need |
| Choices       | Comfort      | Air Quality    | Reimagine Streets        | Well-Maintained Infrastructure   |
| Affordability | Security     | Public Health  | Communities and Cultures |                                  |

## Informed Measures

Projects scored on measures within each DME goal. Equity measures (designated with 'E') to emphasize and weight elimination of inequities.



# Scoring Recommendations



Goal Based Measures

Affordability and Access	Comfort and Security	Environmental Justice	Access to Opportunity	Equitable Investment
Travel Time and Reliability	Risk Reduction	Climate	Connectivity	State of Good Repair

Cross Cutting Measures

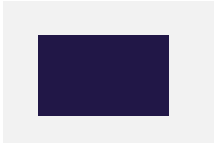
Community Priorities	Leverage Potential	DOTI Goals
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# Tracking Equitable Outcomes



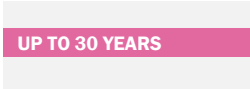
## VISION

Set Our Future  
Transportation  
Vision



## OUTCOMES

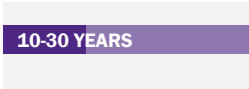
Communicate to  
Residents What We  
Will Achieve



*20% Walk & Bike  
Mode Share*

## GOALS

Elevate Public,  
DOTI, CCD, and  
Partner Priorities



*Mobility*

## OBJECTIVES

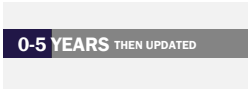
Support Critical  
Actions For Every  
Goal - SMART



*200 Bikeway  
Miles by 2030*

## METRICS

Define Success  
and Track Progress



*30 Miles Annually*

**DENVER MOVES**  
**EVERYONE** <sup>20</sup><sub>50</sub>

# Thank You

Taylor Phillips | Associate City Planner

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# Today's presenters



**Kelly Rodgers**

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**Betsy Harvey**

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**Taylor Phillips**

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# Update Events for you

**May 21 – June 2, 2022**

[Conference on Sustainability and  
Emerging Transportation  
Technology](#)

**August 29-31, 2022**

[TRB's Tools of the Trade  
Conference](#)

<https://www.nationalacademies.org/trb/events>

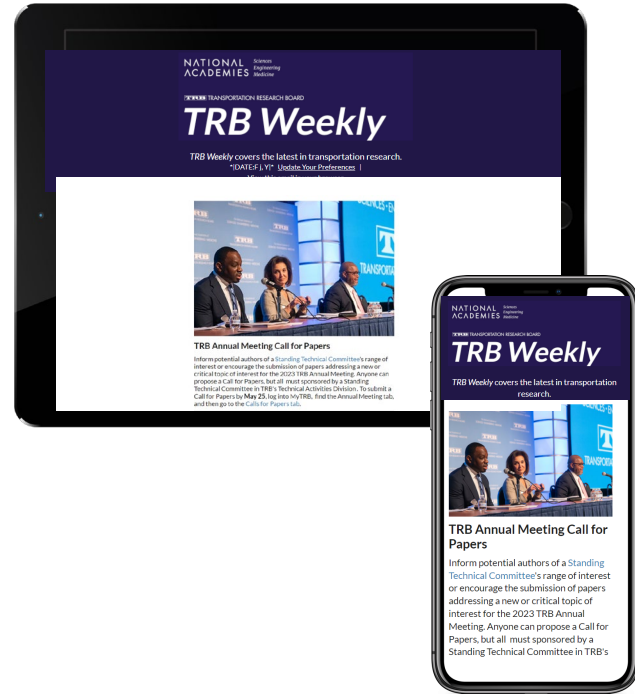


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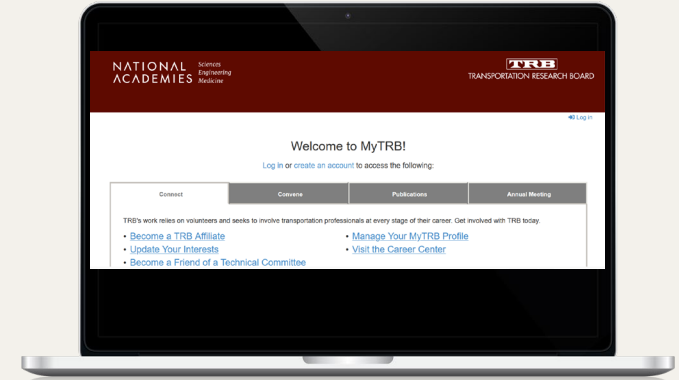
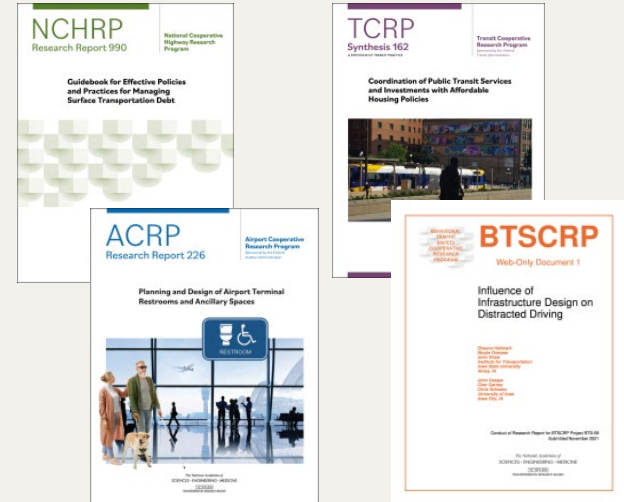


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