



Increasing Transportation Options & Reducing VMT

Regional Council of Mayors

Nissa Tupper, MnDOT Transportation and Public Health Planner

Ash Narayanan & Emma Struss, Co-chairs, STAC Reduce VMT & Improve Transportation Options Workgroup

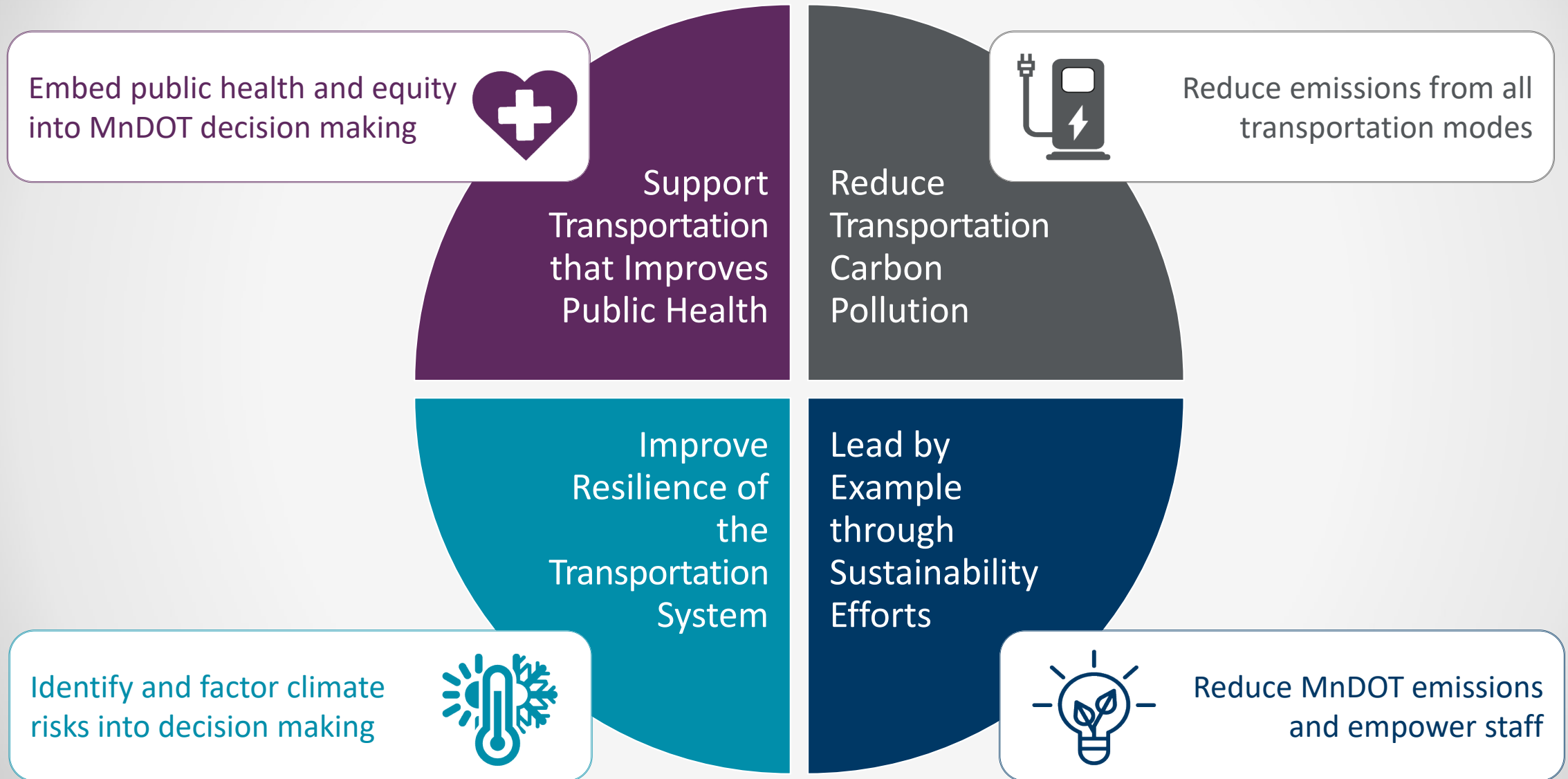
Oct. 18, 2021

Focus of Today

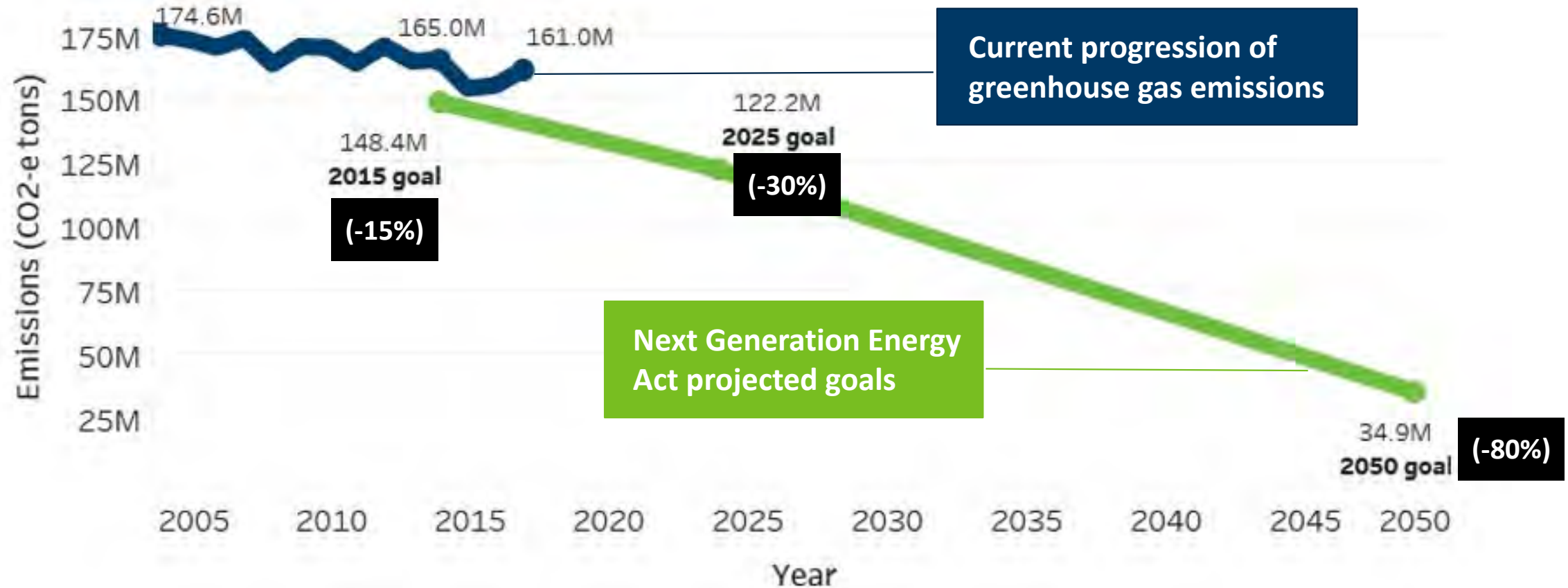
- MnDOT Commissioner Welcome
- Why MnDOT is prioritizing transportation-related emissions reduction efforts
- Considerations for better transportation options and VMT reduction
- Update on MnDOT activities
- Discussion

MnDOT Sustainability and Public Health Division

www.dot.state.mn.us/sustainability/



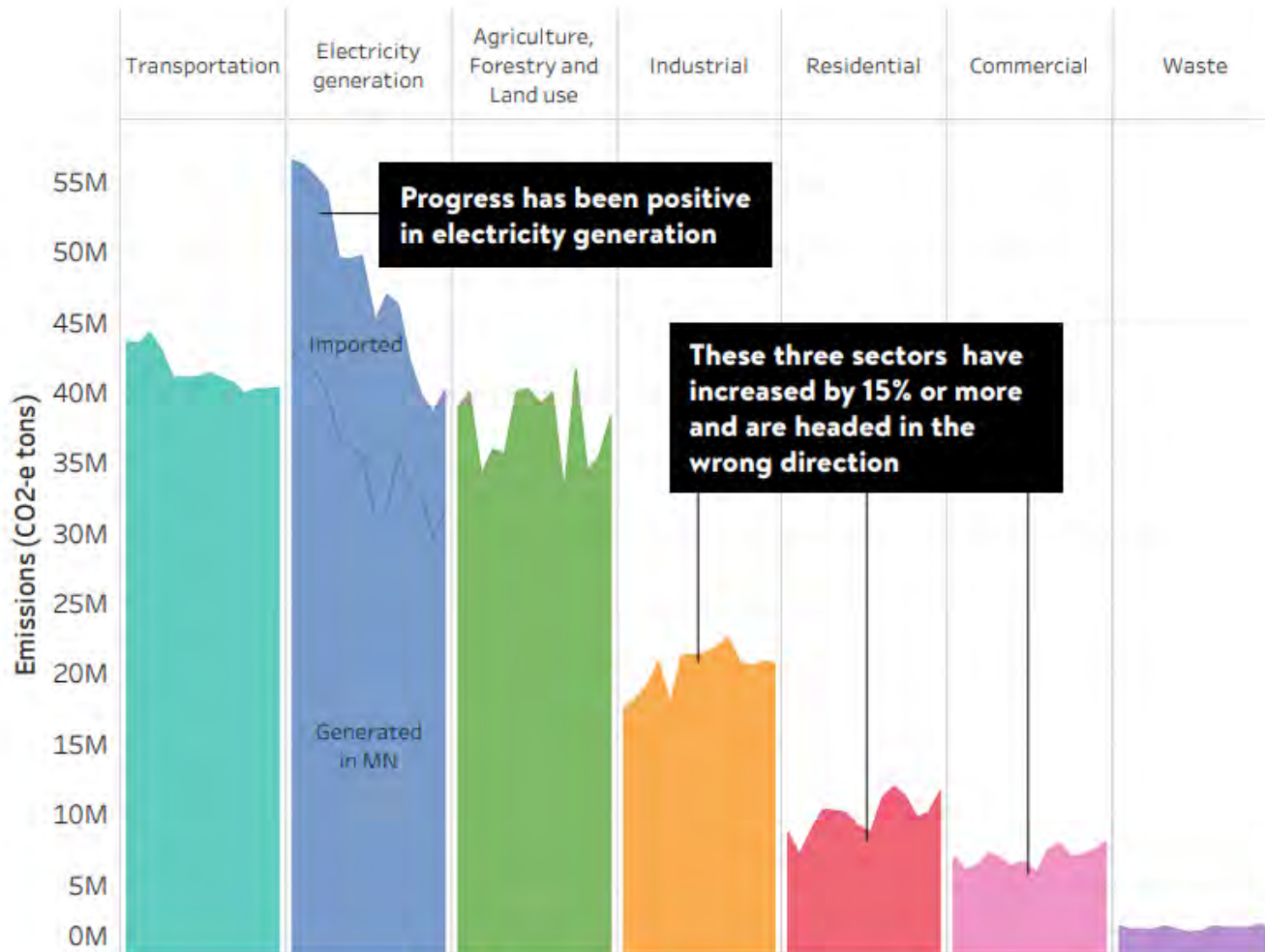
Limited progress on Next Generation Energy Act (NGEA)



Does your city prioritize
sustainability/climate change?

Can you share an example of how?

Transportation is the leading source of GHG emissions



Source: Greenhouse gas emissions inventory, 2018, MPCA

Cars and light-duty trucks
(passenger vehicles)
account for
60%
of transportation
emissions in Minnesota.

2020–2021 Sustainable Transportation Advisory Council (STAC)

Members

- **Margaret Anderson Kelliher, Co-Chair** — Commissioner, MnDOT
- **Chris Clark, Co-Chair** — President, Excel Energy, Inc.
- **Katie Bell** — Cummins
- **Katie Frye** — Minnesota Power
- **Dorian Grilley** — Bicycle Alliance of MN
- **Greg Ilka** — Steele County
- **Katie Jones** — The Center for Energy and Environment
- **Ashwat Narayanan** — Our Streets Minneapolis
- **Michael Noble** — Fresh Energy
- **Rolf Nordstrom** — Great Plains Institute
- **Daniel Schellhammer** — Midstate Reclamation, Inc.
- **Patrick Seeb** — Destination Medical Center
- **LaShella Sims** — Minnesota Pollution Control Agency
Environmental Justice Advisory Group
- **Russ Stark** — City of St. Paul
- **Emma Struss** — City of Bloomington
- **Vishnu Laalitha Surapaneni** — University of MN
- **Lisa Thurstin** — American Lung Association
- **Peter Wagenius** — Sierra Club North Start Chapter
- **Tara Wetzel** — Mathy Construction Company



Ex-Officio Members

- **Sen. Scott Dibble** — Minnesota State Senate
- **Rep. Frank Hornstein** — Minnesota House of Representatives
- **Sen. Scott Newman** — Minnesota State Senate
- **Amy Vennewitz** — Metro Transit

STAC Process and Timing

Spring 2020

Develop charter and process

Decide to address equity in each recommended action

Summer 2020

Form work groups:

1. VMT & Transportation Options
2. Fueling & Powering
3. Resilience

Fall 2020

STAC members develop recommended action

Dec 2020

STAC members vote on final recommended actions

Note: MnDOT did not vote

Mar 2021

MnDOT responds to recommended actions

Mar – Dec 2021

MnDOT engages partners and implements actions from response

STAC members develop 2021 recommended actions

Multiple strategies are needed to achieve GHG goals



Vehicles

- Electric vehicle (EV) incentives, EV charging infrastructure

Fuels

- Low carbon fuels, fuel efficiency

System Operations

- E-Z Pass, transit advantages

Vehicle Miles Traveled (VMT)

- Less time in personal vehicles, biking, walking and transit infrastructure, statewide broadband

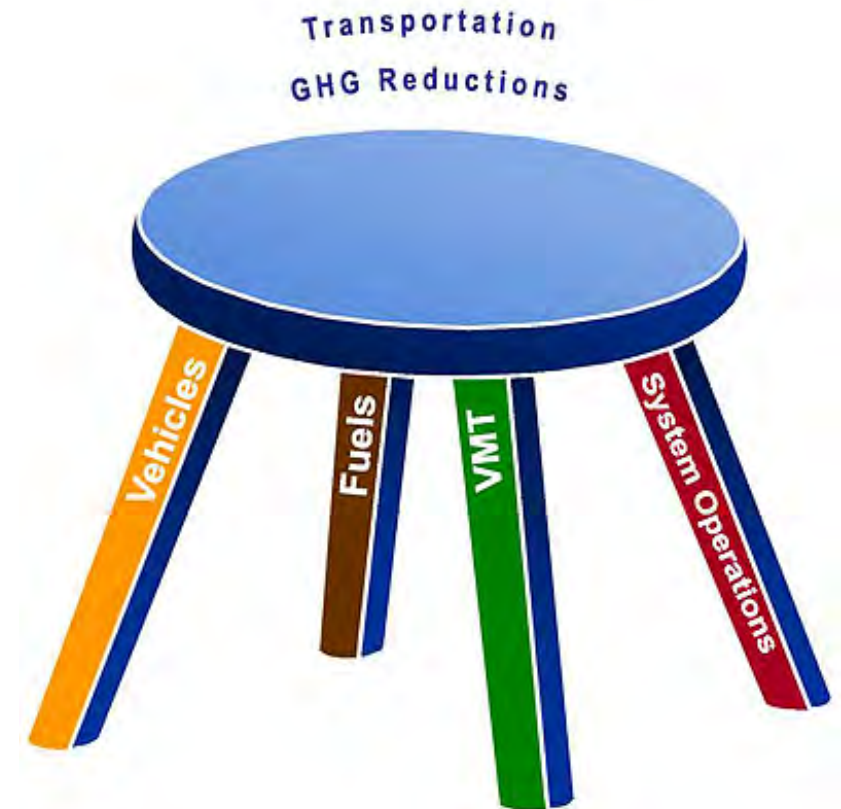
VMT Reduction and Transportation Options

STAC Recommendation #1: Adopt a statewide goal of reducing VMT by 20% by 2050

MnDOT Response: Support, agree to a preliminary statewide and per capita goal that will be finalized after engagement.

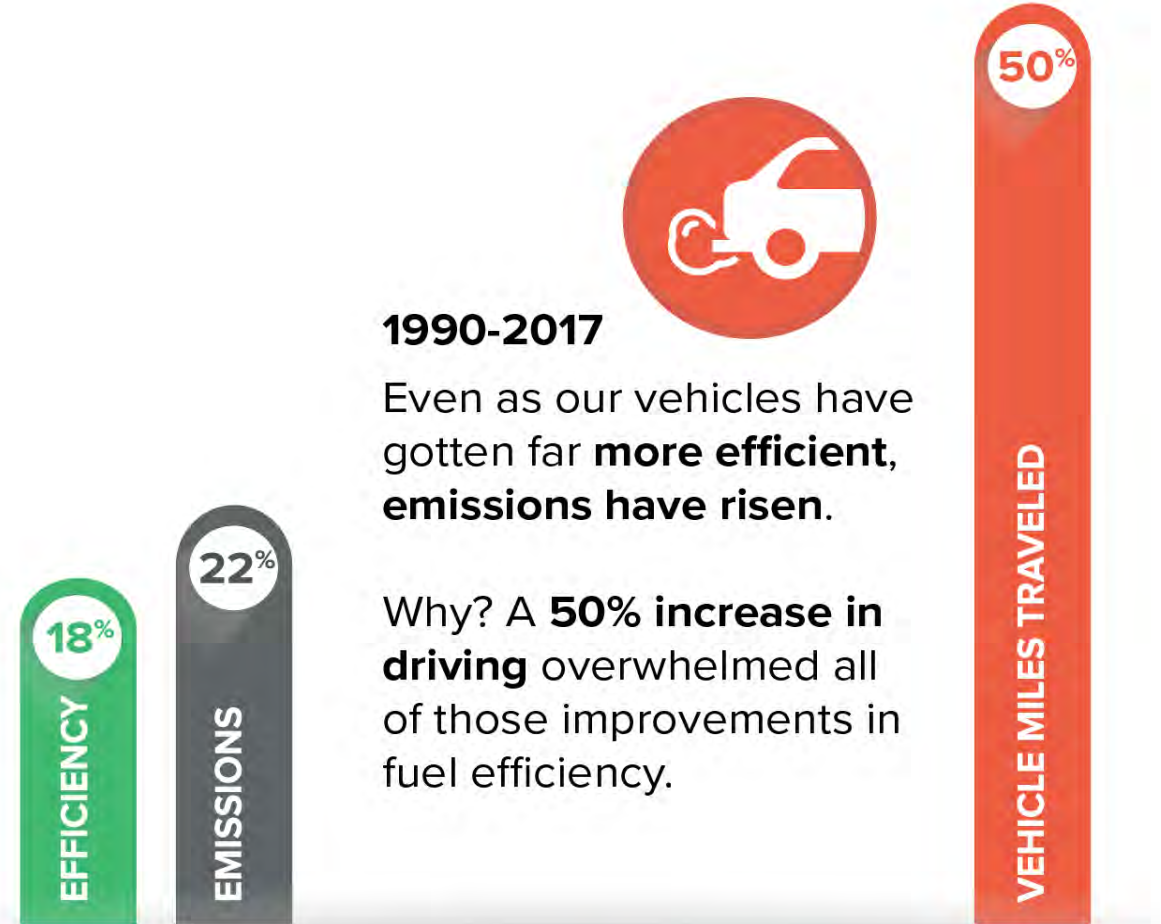


www.dot.state.mn.us/sustainability/advisory-council.html



Why is reducing VMT important?

Both electric vehicles and increasing low-carbon transportation options to reduce VMT are needed



20% VMT
reduction
could mean
driving ~1
hour less
per week



WALKING



TELEWORK



BIKING



BUS



COMBINING TRIPS



LIGHTRAIL



**Why transportation
options and VMT
reduction is important
for the health of our
communities**

STAC VMT Reduction and
Transportation Options Workgroup
co-chairs:

ASH NARAYANAN

Executive Director with
Our Streets Minneapolis

EMMA STRUSS

Sustainability Coordinator with the
City of Bloomington

Transportation is the largest source of GHG emissions in Minnesota

- Transportation emissions increased by 30.5% since 1990
- VMT in Minnesota in 2018 was 60.4 billion, but over 44% since 1992 while population grew only at 26%

Figure 1. Statewide Annual Growth Trends:1992-2018

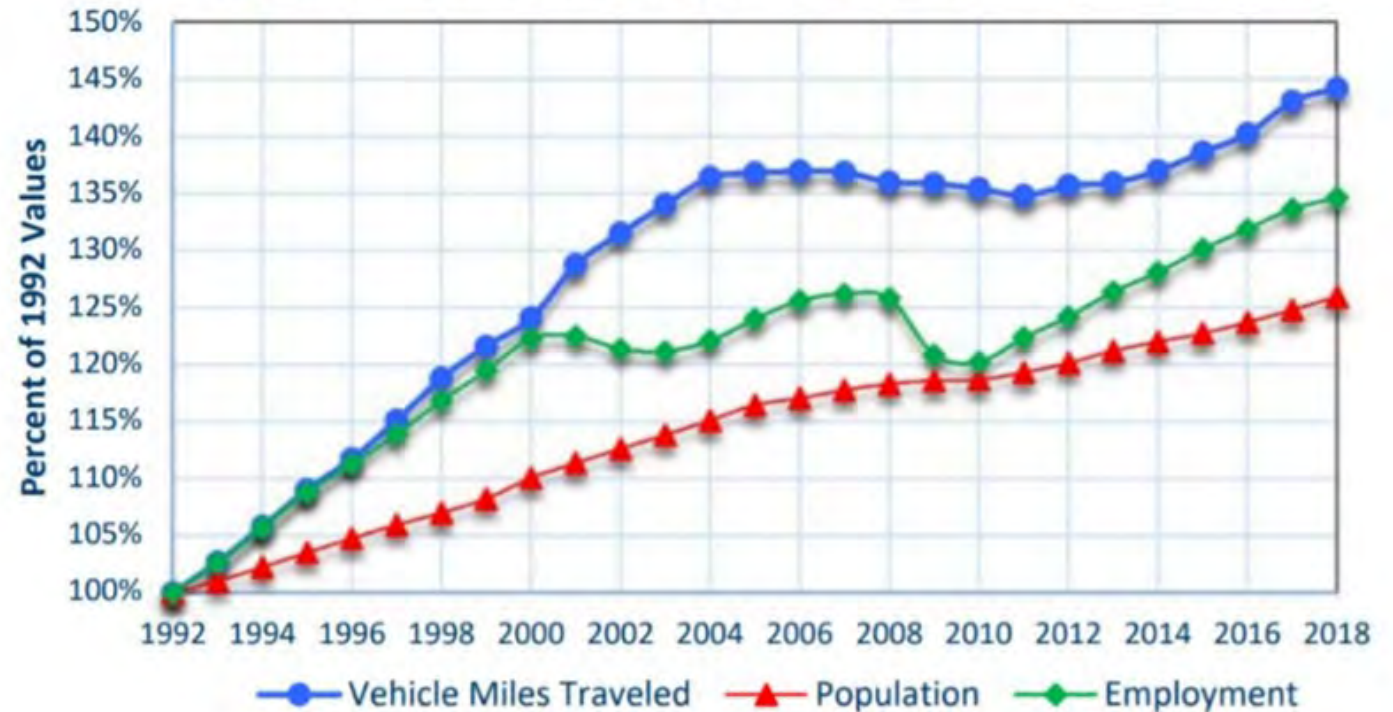


Figure 7. VMT trends, 1992-2018 (MnDOT)

Our Approach

First Do No Harm

- Our transportation system is mostly design to move and store vehicles.
- Driving is the largest and fastest growing source of carbon emissions in America today.
- Communities of color breathe worst air.
- People who contribute the least to climate change will face its worst impacts.

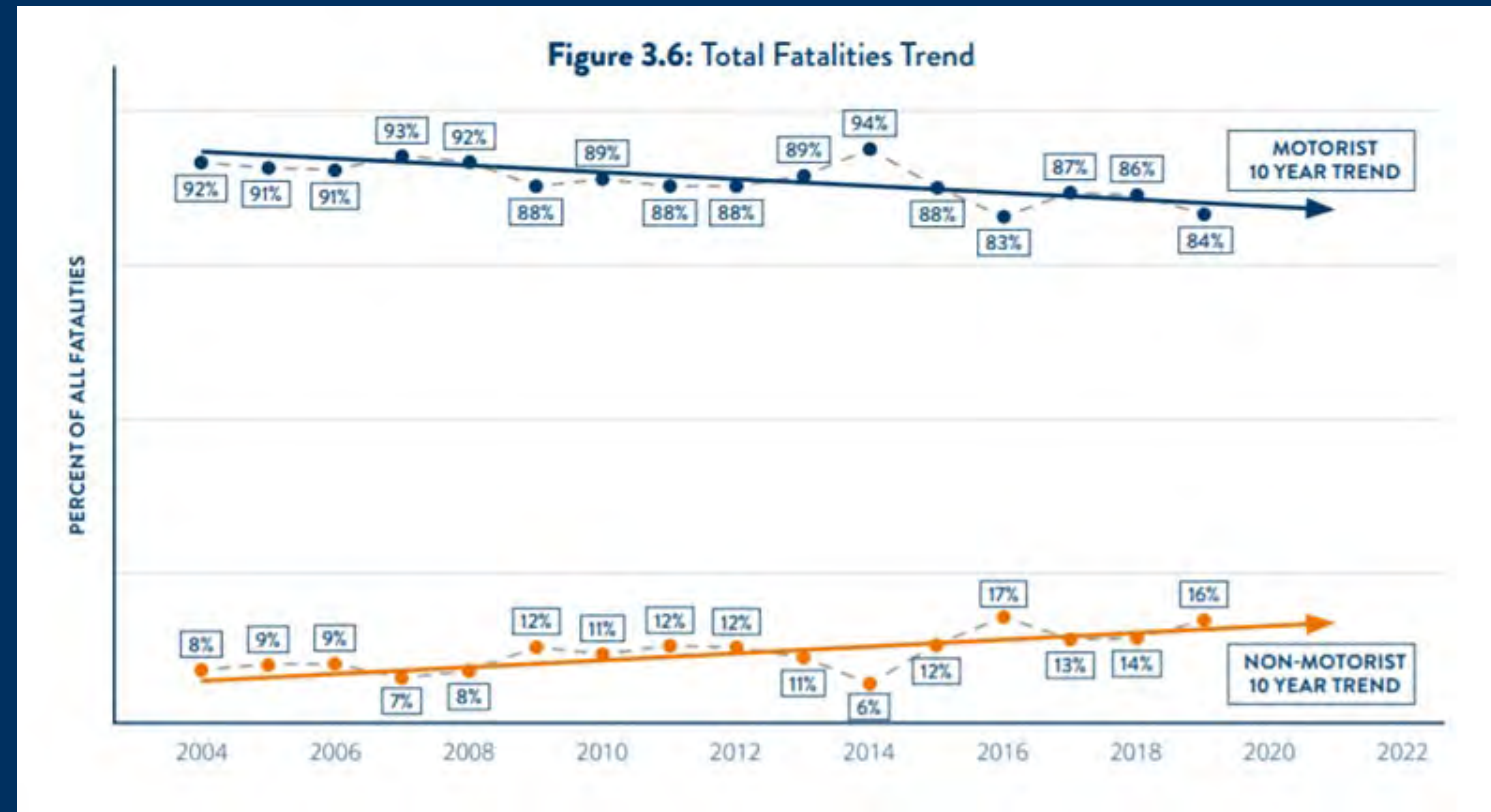




SAFETY

Unequal Burden of fatalities

The share of motorist traffic fatalities is trending down, while the share of non-motorist traffic fatalities is trending up

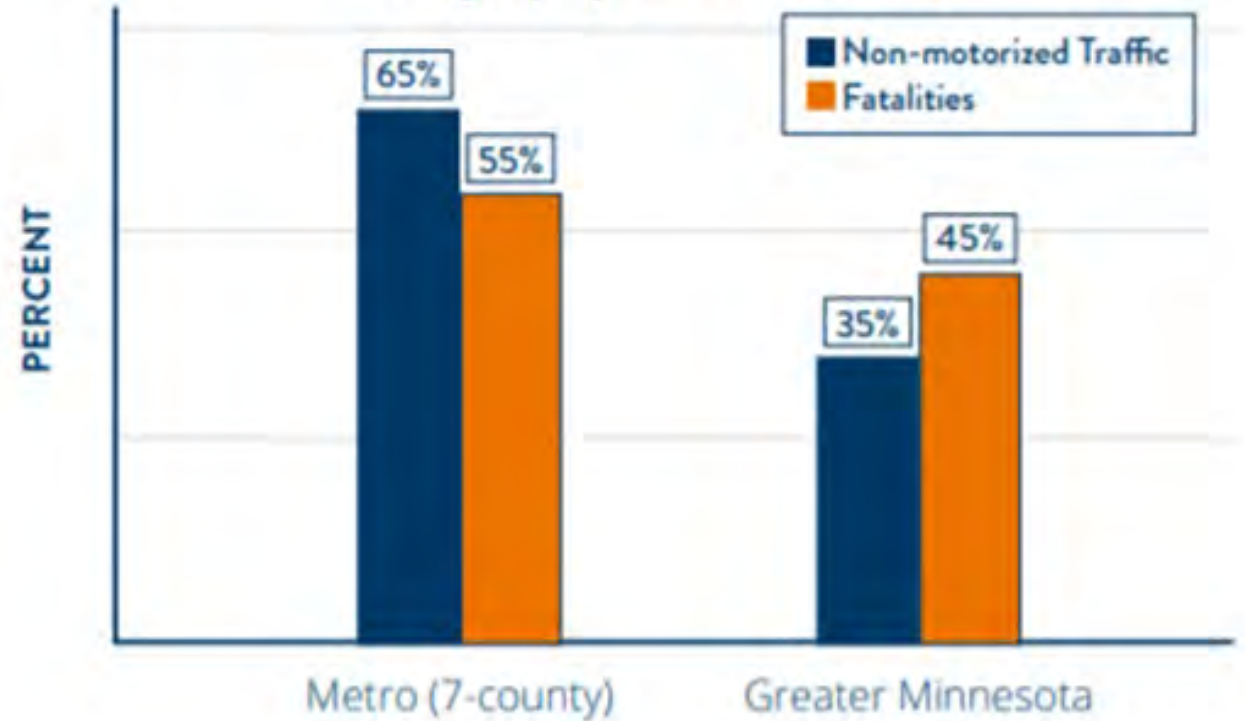


Source: www.dot.state.mn.us/sustainability/docs/2020-sustainability-report.pdf

Unequal Burden of fatalities

People walking and biking in rural Minnesota communities are more likely to be struck and killed by drivers than in Minnesota metro communities.

Figure 3.7: Non-Motorist Fatalities by Geography (2015–2019)¹

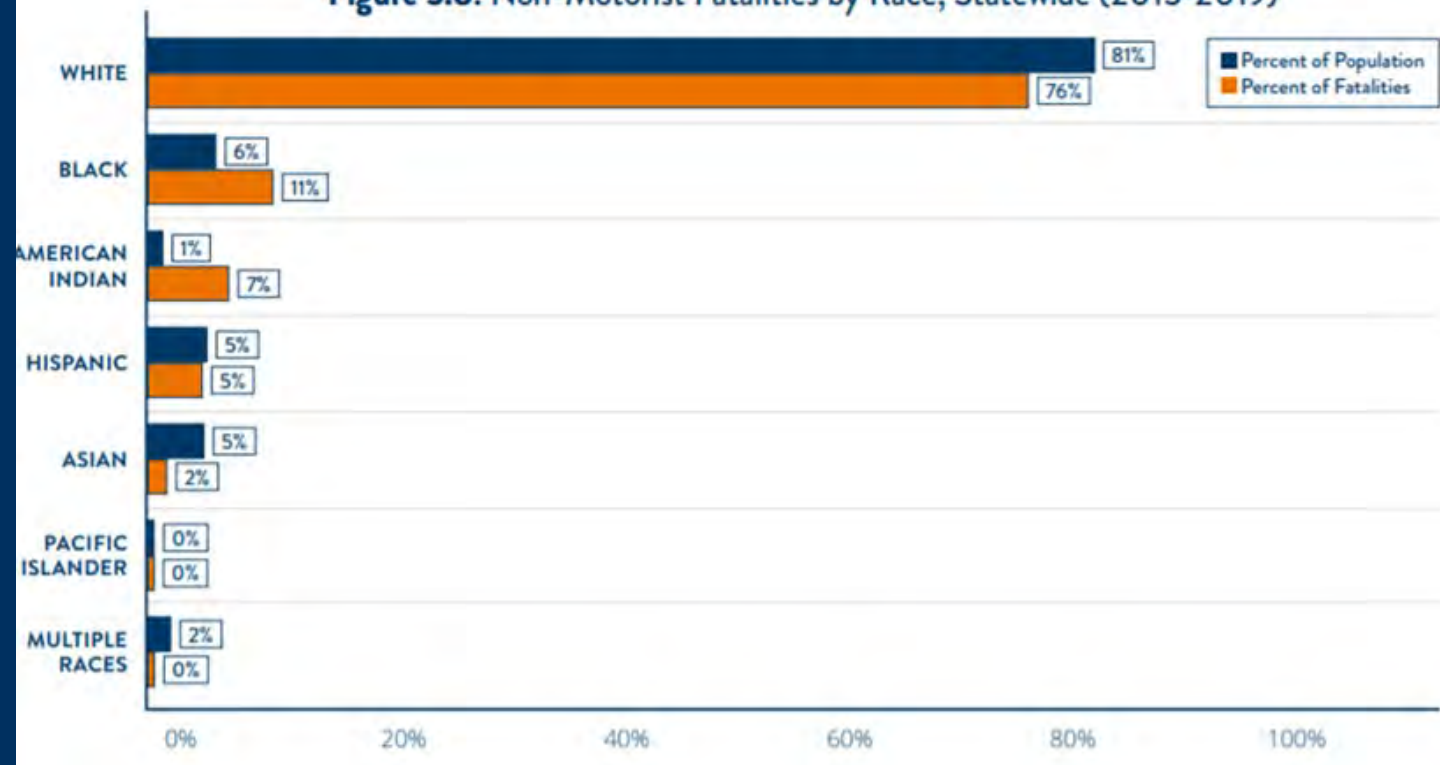


Source: Minnesota Motor Vehicle Crashes, MnDOT Office of Traffic Engineering, Pedestrian and Bicyclist Data Program, MnDOT Office of Transit and Active Transportation. May 2021.

Unequal Burden of fatalities

- Native Americans 5x more likely to be killed while walking than white Americans
- Black Americans 2x more likely

Figure 3.8: Non-Motorist Fatalities by Race, Statewide (2015-2019)

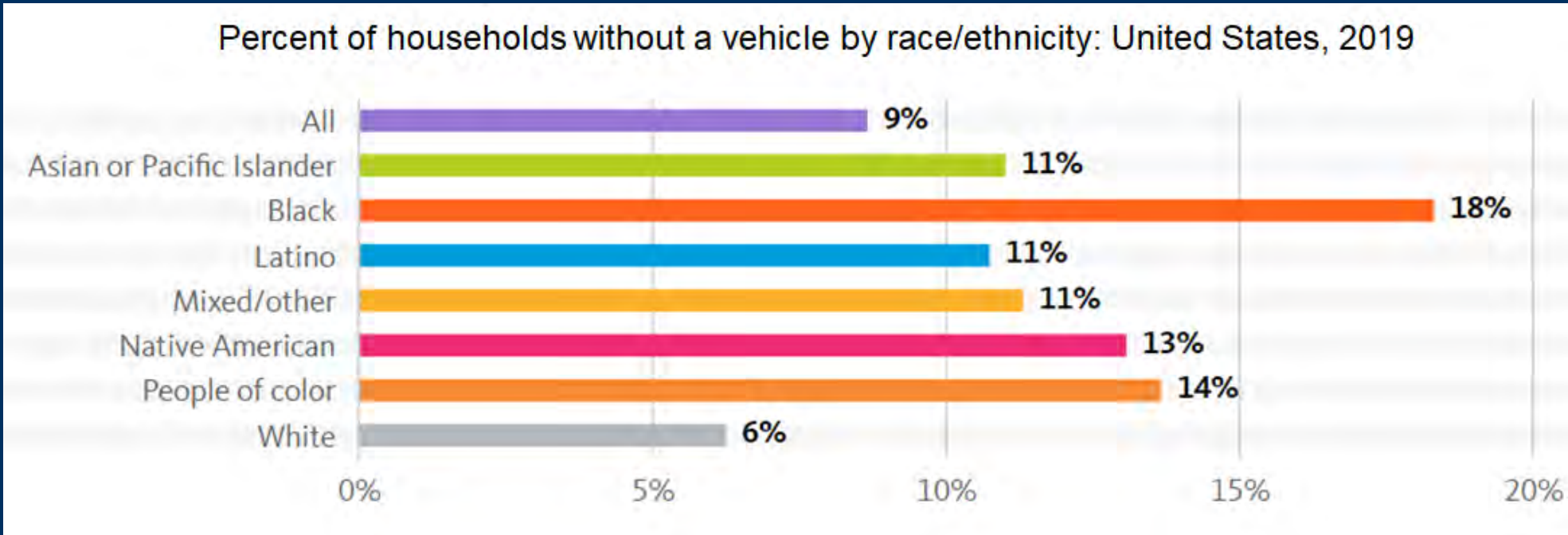


Source: www.dot.state.mn.us/sustainability/docs/2020-sustainability-report.pdf

The background is an aerial photograph of a complex highway interchange with multiple lanes and overpasses. A semi-transparent blue filter is applied over the entire image. Scattered across the background are numerous circular icons representing various aspects of transportation and technology, including a cloud, a satellite, a traffic light, a car, a bus, a location pin, a smartphone, a battery, a Wi-Fi signal, and a road sign. These icons are interconnected by a network of thin white lines, suggesting a connected or smart transportation system.

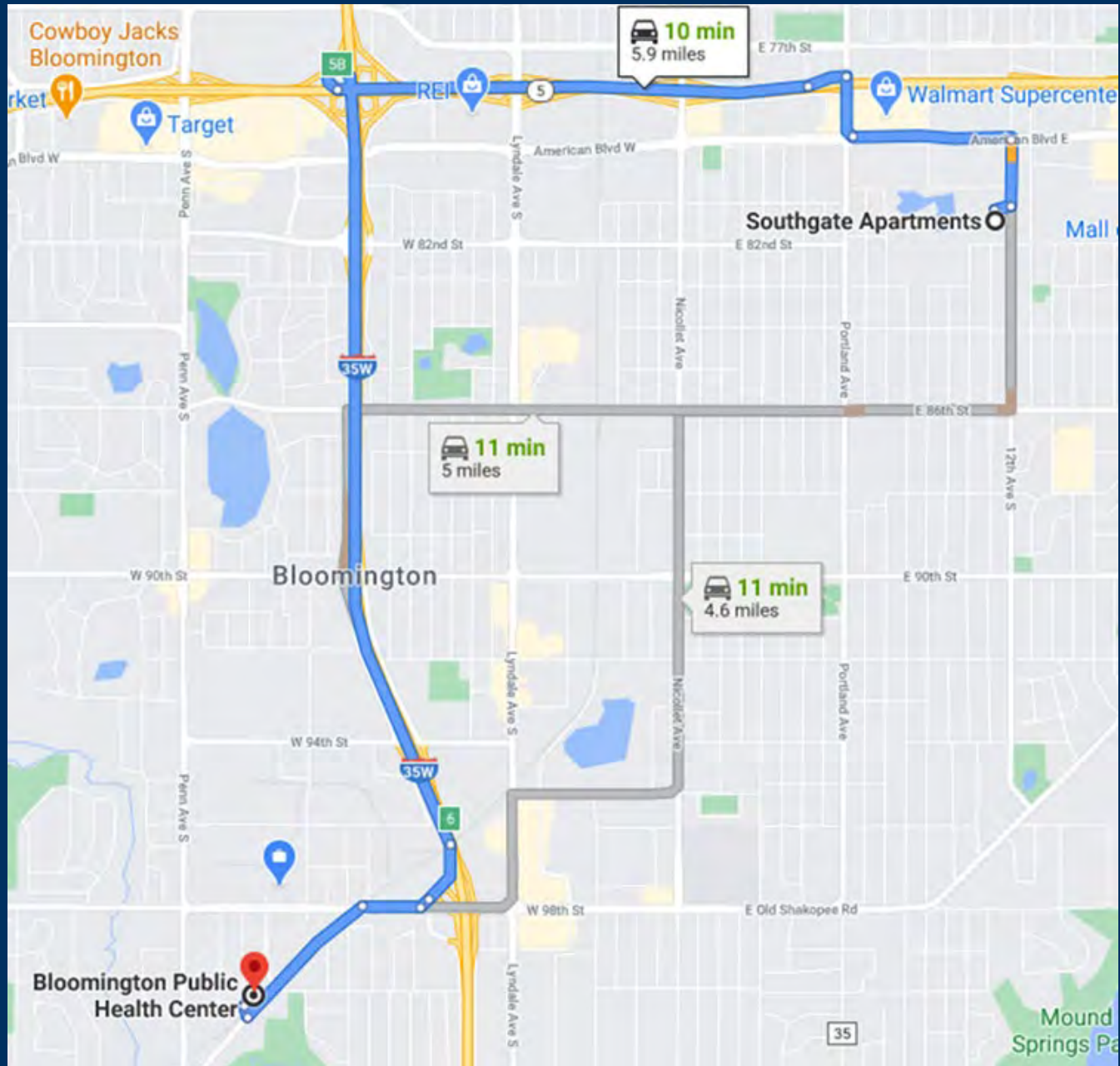
TRANSPORTATION ACCESS

Reliable Access

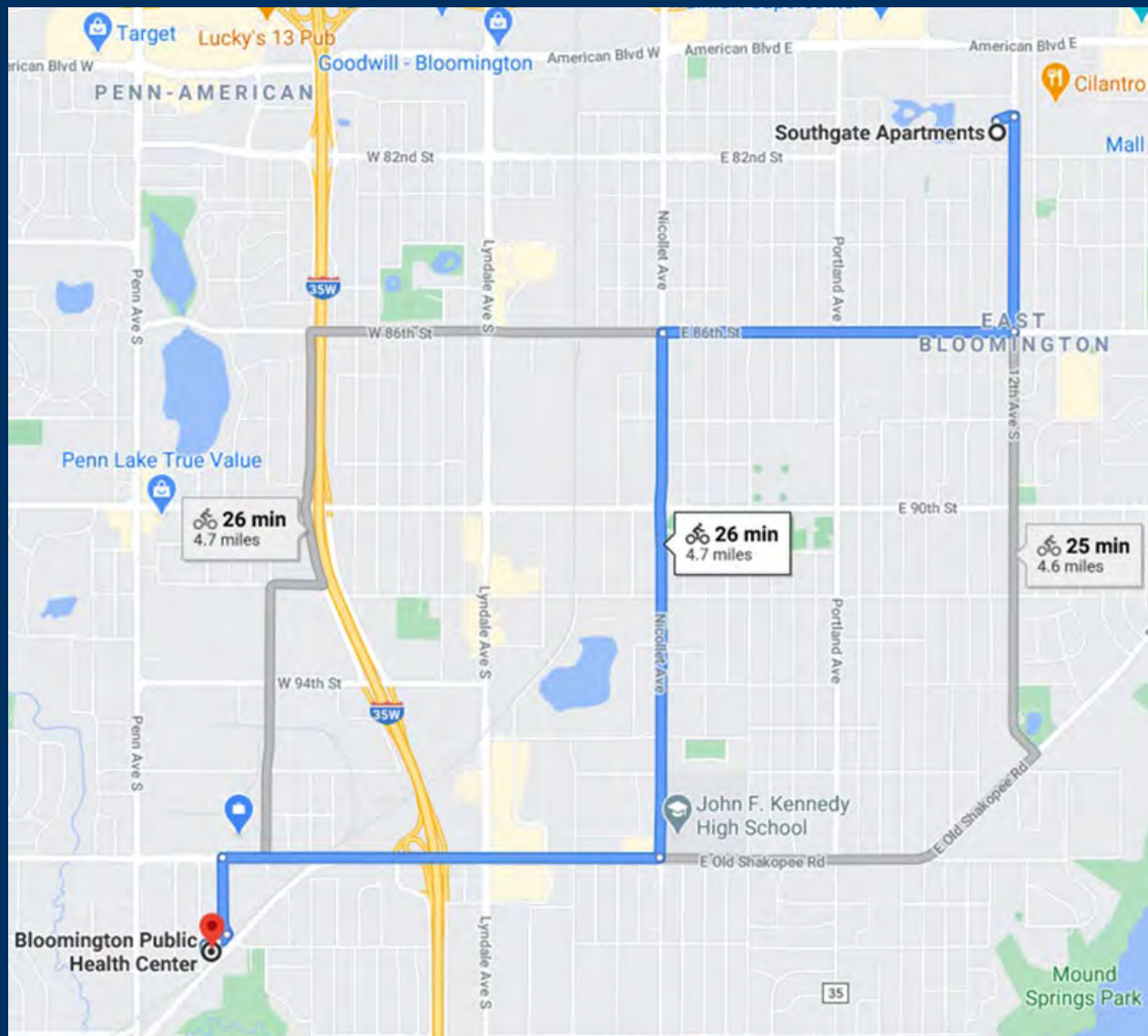


In most communities, convenient and reliable transportation access requires a vehicle

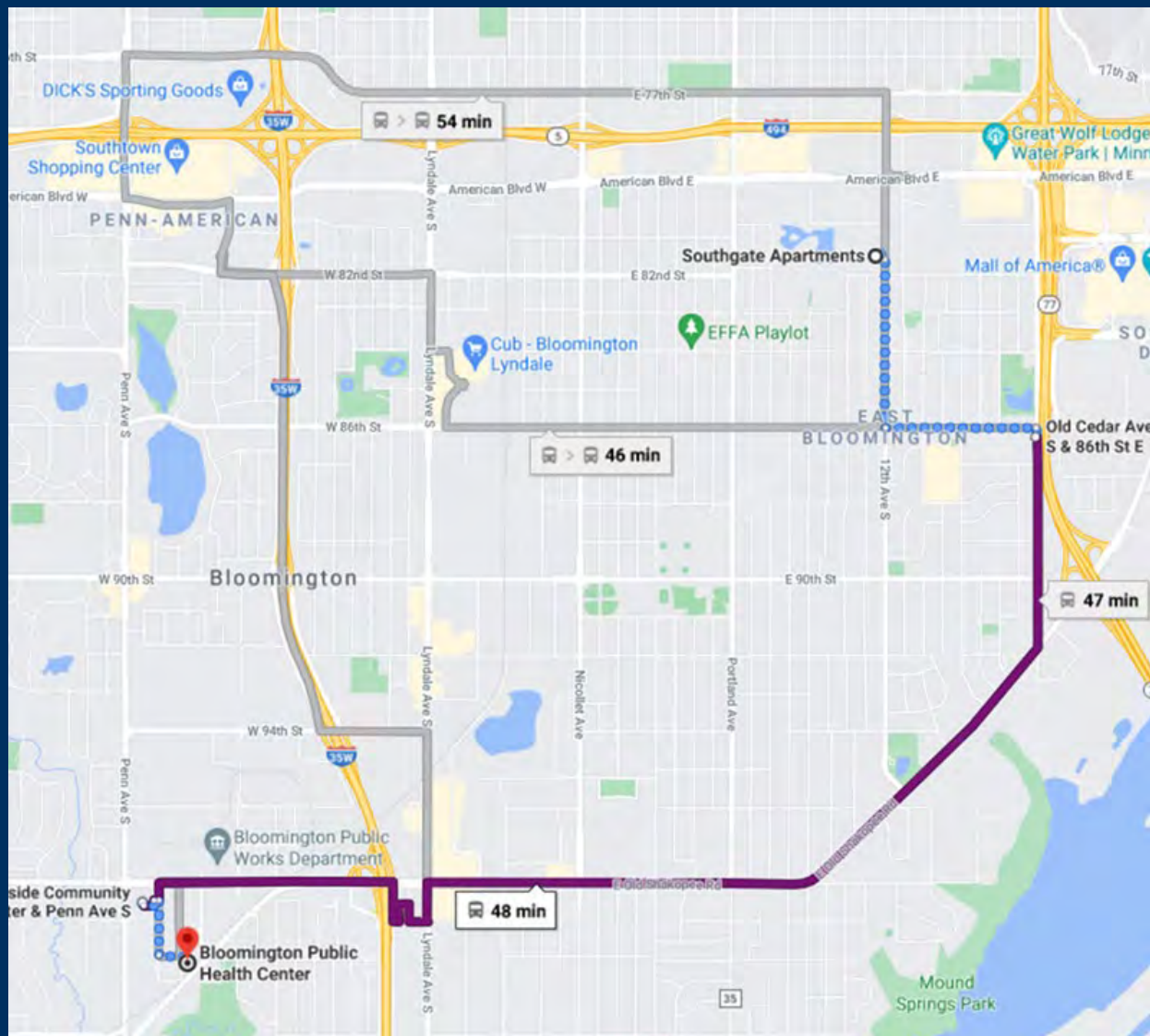
Black households are least likely to have access to a vehicles



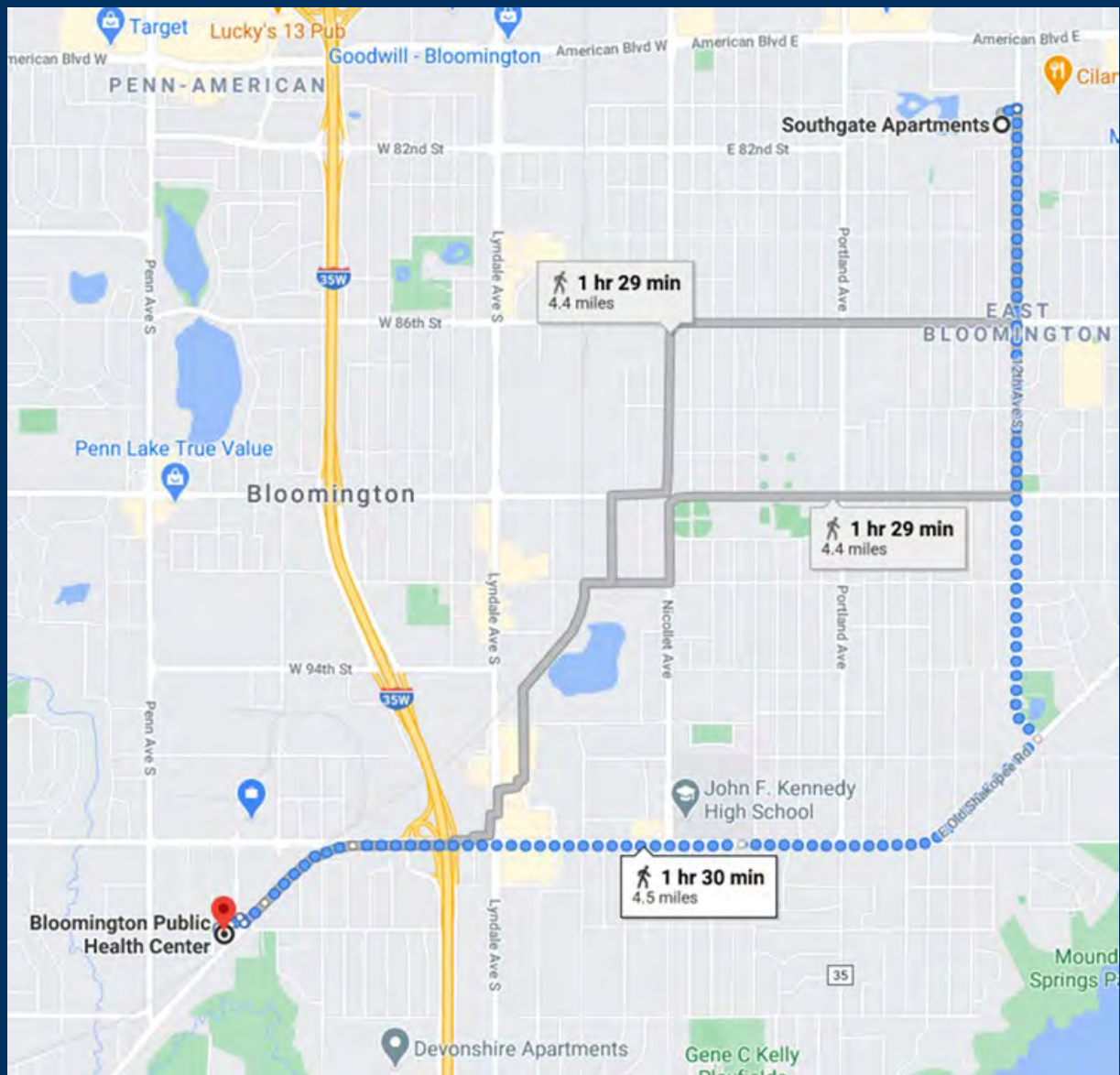
~10 MINUTES



~25 MINUTES



~50 MINUTES



~90 MINUTES

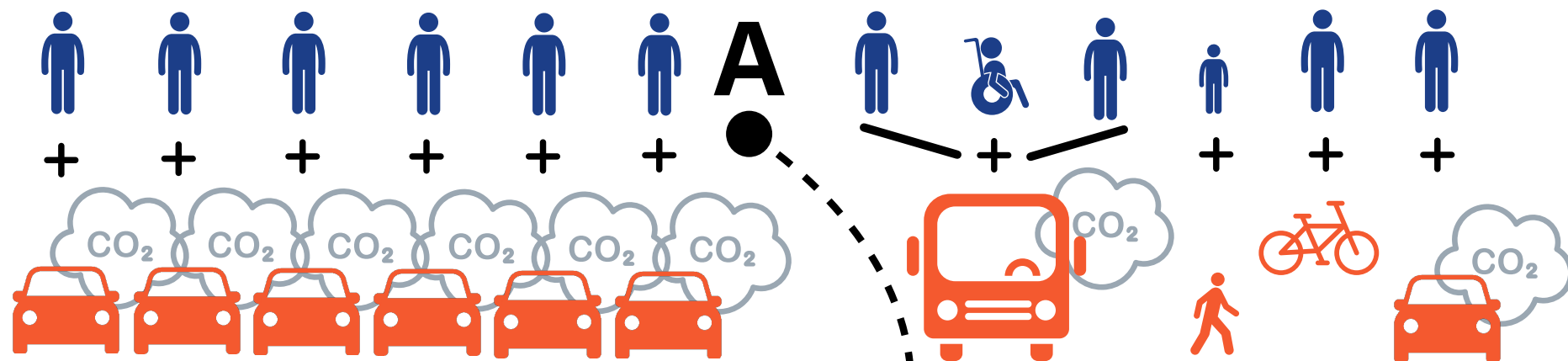
A person is walking through a deep layer of snow, leaving a trail of footprints. The person is wearing dark clothing and is partially visible in the upper right corner of the frame. The background is a vast, white, snow-covered area.

"I LIVE ON THE BOTTOM FLOOR AND I SEE PEOPLE WALKING THROUGH SNOW
COMING FROM THE STORES.

IF THE BUS WOULD COME CLOSE TO THE APARTMENTS THEN PEOPLE
WOULDN'T HAVE TO DO THAT.

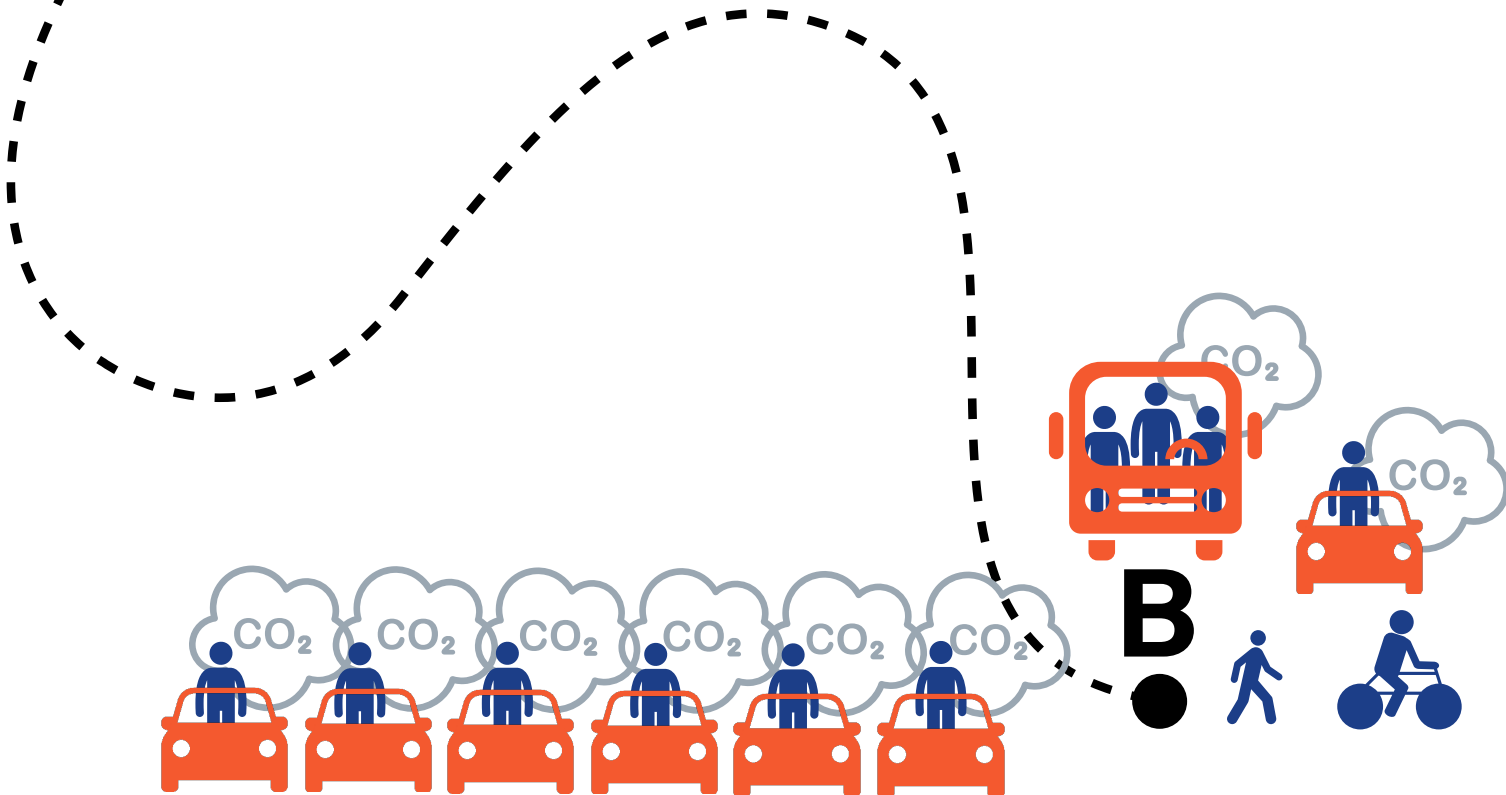
I THOUGHT MANY TIMES, IF I COULD STILL DRIVE I WOULD PUT A NOTE IN THE
BUILDING AND SAY, 'DO YOU NEED A RIDE?' \$0.50 A RIDE OR SOMETHING LIKE
THAT."

BLOOMINGTON RESIDENT AT
TRANSPORTATION LISTENING SESSION
SUMMER 2021



Reducing vehicle miles traveled, not people miles traveled.

- ☒ Increase mobility options & accessibility
- ☒ Reduce GHG emissions
- ☒ Improve community health



VMT reduction goal – MnDOT's timeline

STAC Recommendation #1: Adopt a statewide goal of reducing VMT by 20% by 2050

MnDOT supports preliminary statewide and per capita goal, finalized after engagement

March-May '21

- Support preliminary goal
- Organize MnDOT work group

June-Dec. '21

- Staff education
- I.D. strategies, tools
- Goal scenarios

Jan.-March '22

- Public engagement
- Finalize guidance and tools

Considerations – Key principles

- Promote, not restrict, transportation options
- Support, not hinder, economic activity (e.g., tourism, freight)
- Refine goals for urban and rural community types
- Avoid shifting time burdens to Communities of Color and people with lower-incomes
- Tools and guidance for applying the goal to MnDOT plans and projects

Considerations – What drives VMT

1. Population growth (↗)
2. Other external factors: economy, culture, technology, etc. (↗ ↘)
3. Multimodal travel options (↘)
4. Transportation demand management (↘)
5. Road capacity (↗)
6. Land use patterns (↗ ↘)

Considerations – Alignment with other VMT efforts

NATIONAL

California: -15% by 2050

Colorado: -10% by 2030

Delaware: -20.4% from 2010

Maine: -10% by 2025, -20% by 2030

Washington: -30% by 2035, -50% by 2050

LOCAL

Eden Prairie: -7% by 2030, 10% by 2040, 14% by 2050

Hennepin County: -20% by 2050

Minneapolis: -1.8% VMT per year to 2030 (total -21%)

St. Paul: -40% by 2040

Considerations – MnDOT's role

LEAD



For issues related to MnDOT owned/operated highways or MnDOT-led policies and/or programs, MnDOT is the leader. This is the agency's primary and traditional mission. Examples include building out the state trunk highway bicycle network and addressing congestion issues on the freeway.

PARTNER



Where MnDOT policies, plans, programs, and funding impacts local governments but MnDOT may not be the lead agency, MnDOT is a partner with communities and other agencies. Examples include partnering to advance statewide broadband access or park-and-ride facilities.

SUPPORT



Where MnDOT does not have decision-making authority or investments to contribute, MnDOT can support. While MnDOT's primary mission and lever of influence is focused on transportation infrastructure, the agency can support partners in aligned efforts, like land use planning.

What opportunities do you see?

What questions do you have?

Thank you!

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MnDOT

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<https://www.dot.state.mn.us/sustainability/advisory-council.html>