

# Statewide Multimodal Transportation Plan

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MINNESOTA **GO**

# 20-Year State Highway Investment Plan

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## Update for the Association of Minnesota Counties Transportation & Infrastructure Policy Committee

September 2022

# Minnesota GO 50-year Vision

*What are we trying to achieve?*

## Statewide Multimodal Transportation Plan

*How are we going to achieve it?*

### Modal and System Plans

*What does that mean for each type of transportation?*

< Considered by the State Highway Investment Plan >



Greater  
Minnesota  
Transit  
Investment Plan



Pedestrian  
Plan



Bicycle  
Plan



State  
Highway  
Investment  
Plan



Freight  
System  
Plan



Aviation  
Plan



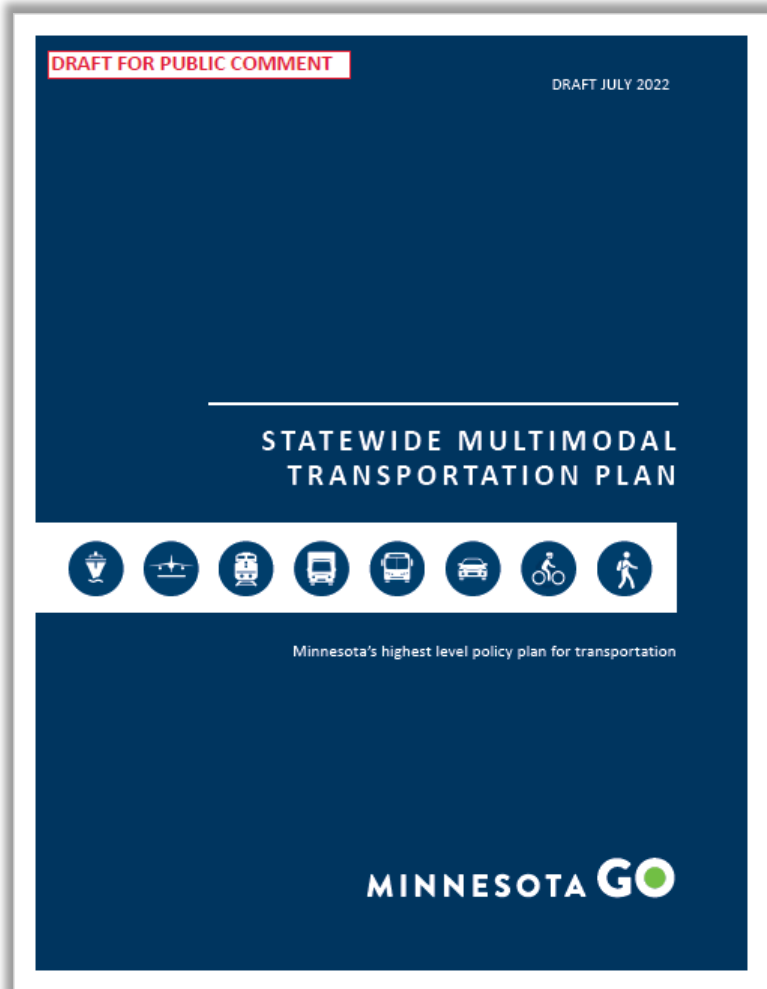
Rail  
Plan



Ports &  
Waterways  
Plan

< Considered by the Freight System Plan >

# Statewide Multimodal Transportation Plan (SMTP)



- Developed by MnDOT, but covers all transportation
- Overarching objectives, strategies and performance measures for all modes
- Updated every five years
- Draft currently out for public review and comment

# Objectives

- Open Decision Making
- Transportation Safety
- System Stewardship
- Climate Action
- Critical Connections
- Healthy Equitable Communities

# What Hasn't Changed

# What has stayed the same

- Ensuring inclusive and collaborative decision making
- Providing safe and convenient movement of people and goods
- Preserving the existing system while considering strategic improvements
- Leveraging transportation investments for economic vitality
- Considering social and environmental impacts

# What is New

# Climate



Shift to more climate-friendly transportation options

- Reduce greenhouse gas emissions
- Encourage use of zero emission vehicles
- Improve system resiliency



# Equity



## Implement equity in transportation decision making

- Commitment to transportation equity
- Develop transportation equity performance measures

# Health



Improve health outcomes and reduce disparities

- Evolve approach to transportation safety
- Support walking and bicycling
- Address urban heat islands



# Measuring Transportation Performance: VMT in Context



**Measure**  
Key measures where MnDOT has influence

**Outcome**  
Important outcomes to the agency and stakeholders

 **MnDOT Defined Target**  
Specific values to evaluate the measure

# 14% per capita VMT reduction by 2040 target aligns with local and national efforts

## Local

**Hennepin County:** -26% by 2050  
*(per capita from 2017 baseline)*

**Minneapolis:** -21% by 2030

**Eden Prairie:** -14% by 2050  
*(per capita from 2017 baseline)*

**St. Louis Park:** -12% by 2030  
*(per capita from 2014 baseline)*

**St. Paul:** -40% by 2040  
*(reduction of single occupancy vehicle travel demand)*

## National

**California:** -15% by 2050  
*(from 1990 baseline)*

**Colorado:** -10% by 2030

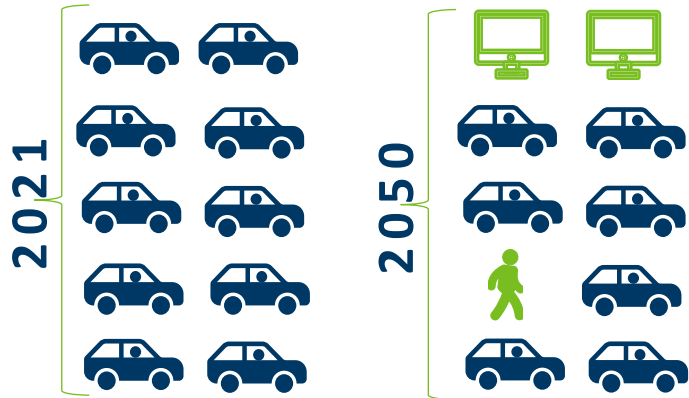
**Delaware:** -20.4% from 2010

**Maine:** -20% by 2030  
*(light-duty VMT)*

**Washington:** -50% by 2050  
*(light-duty VMT, per capita)*

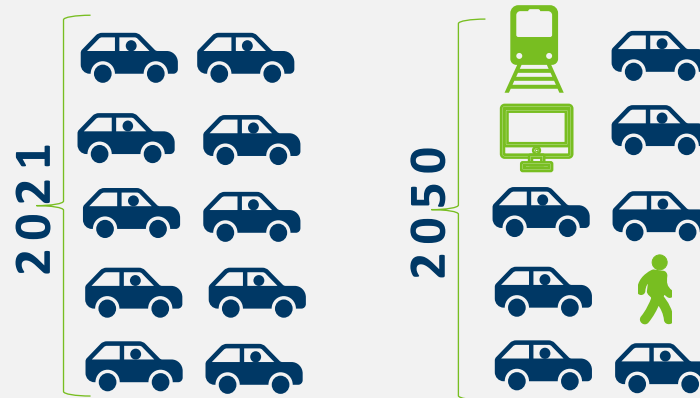
# How this can provide day-to-day options

## RURAL EXAMPLE



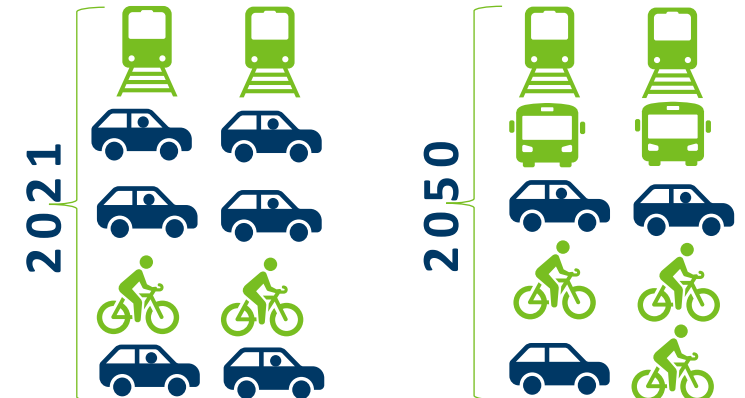
- Tom drives daily for work and school
- Broadband isn't reliable
- Safe walking options are limited
- Broadband improvements allow **teleworking**
- New sidewalks and safer crossings give **access to walk to school** most days

## SUBURBAN EXAMPLE



- Jennifer drives daily to work every day and to run errands
- Interested in commuting by transit sometimes and walking for errands, but doesn't see options
- **Improved transit** provides convenient commuting option
- Broadband allows **teleworking**
- **Safer crossings** give access to walk to the grocery store

## URBAN EXAMPLE



- Abby owns a car but prefers using public transit or biking to fit in exercise and save money
- Routes between work, home, and school require travel on busy streets, doesn't feel the safest
- New **BRT** provides a reliable home to school route
- New **protected bike lanes** offer a safe, convenient work commute option



# Draft Available for Public Comment

Submit comments by September 18  
via email, mail or at  
[www.MinnesotaGO.org](http://www.MinnesotaGO.org)

# What is MnSHIP?



Directs capital funding on the 11,703 miles of state highways



Budgets for estimated funding over 20 years



Identifies investments by categories but is not project specific



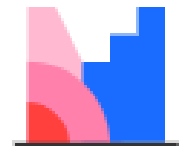
Part of the Minnesota GO Family of Plans



MINNESOTA GO

# How to provide feedback today

[www.menti.com](https://www.menti.com)



# Mentimeter





# Why does MnSHIP matter?

MnSHIP investment direction guides the planning of projects and improvements on the state highway system

## MINNESOTA GO 50-YEAR VISION

Statewide Multimodal  
Transportation Plan



20-Year State  
Highway Investment Plan



**10-YEAR CAPITAL HIGHWAY  
INVESTMENT PLAN (CHIP)**

Project planning and development  
Updated annually

**4-YEAR STATE  
TRANSPORTATION  
IMPROVEMENT PROGRAM  
(STIP)**

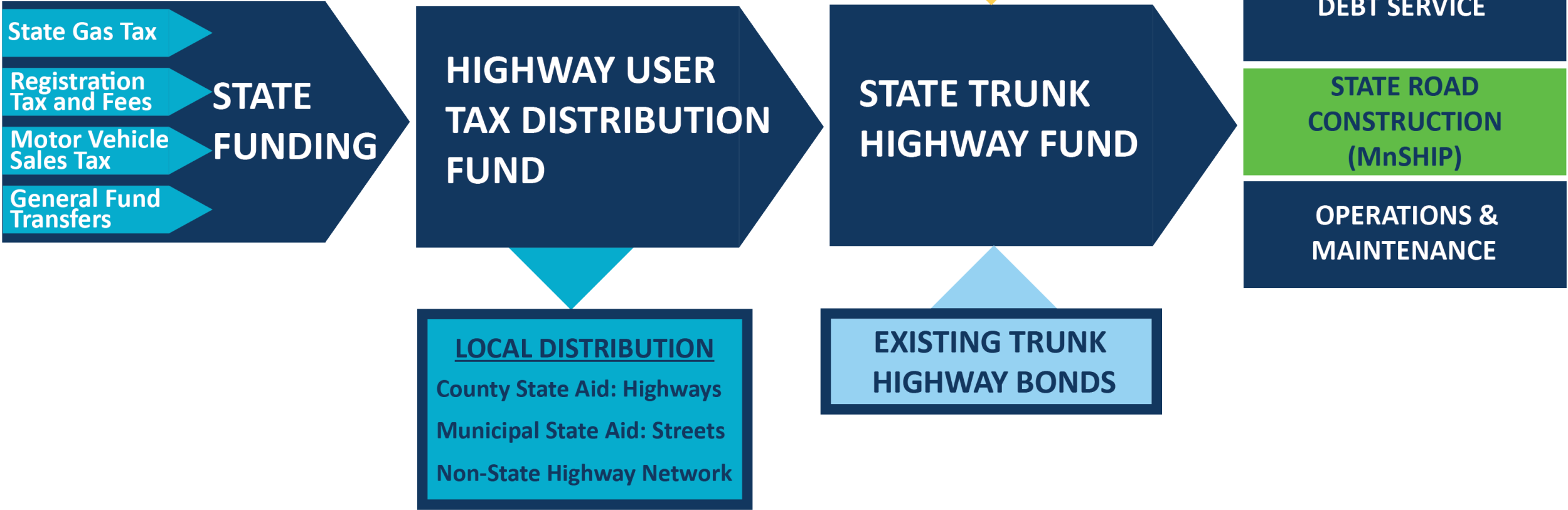
Project design and its program

**CONSTRUCTION**

# 100 Years of Highways

- Minnesota's state highway system recently turned 100!
- History of system is complex
- State highways improved access between cities and towns throughout the state – supporting economic growth and vitality
- Construction of state highways also divided, disconnected and destroyed some communities
- Vehicle emissions contribute to climate change
- Much has changed in 100 years and more will change in the future. We need to ensure the benefits and burdens of future transportation decisions are equitable and work towards reducing existing inequities.

# MnSHIP Revenues



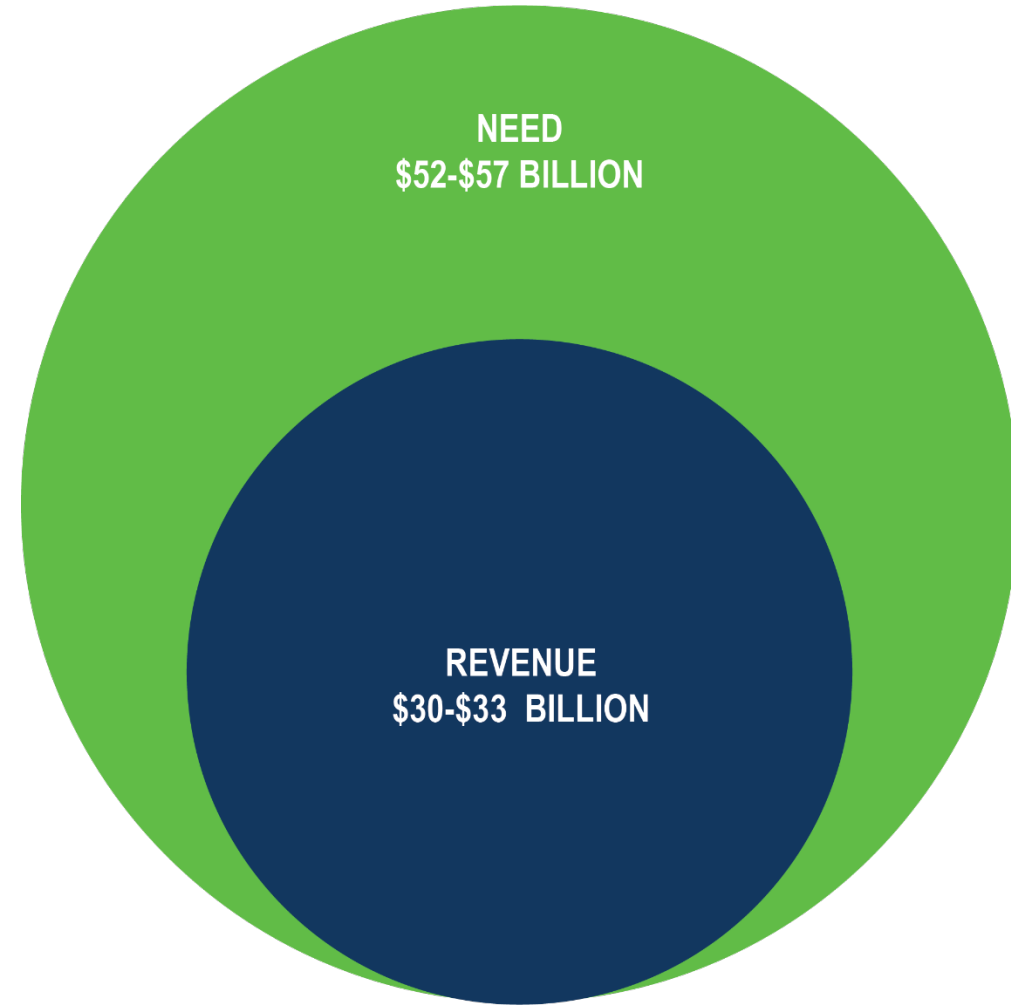


**How much revenue  
is estimated?**

**\$30-33 Billion**  
(2023-2042)

# Revenue vs. Need

- **MnDOT is projecting a funding gap of between \$19 – \$27 billion**
- Increase due to several factors
  - Projected costs of inflation
  - Refined and more thorough planning processes
  - New state goals in areas such as pedestrian and bicycle facilities and freight
- Low end of estimated need reflects Minnesota successfully achieving preliminary goals of reducing per capita Vehicle Miles Traveled (VMT)
- In addition to the needs identified by MnDOT, cities and counties have identified \$5-6 billion in priority investments on the state highway system





**What are the  
most important  
improvements  
to prioritize?**



# Provide feedback today



[www.menti.com](https://www.menti.com)

Code: 8066 0114



# What are the top five improvements you feel are most important?

- Improve readiness for changing transportation technology
- Improve condition of bridges through more repair and replacement projects
- Adapt infrastructure to resist damage from extreme weather events and improve resilience
- Add more freight mobility and safety improvements
- Focus on reducing unexpected travel delays through mobility and capacity improvements
- Partner with cities and counties to address quality of life and economic development
- Focus on addressing improvements in urban areas including small towns and main streets
- Maintain and expand pedestrian and bicycle infrastructure including making it accessible for all
- Maintain smooth driving surface through more repair and reconstruction projects
- Maintain rest areas for the safety and health of travelers and truck drivers
- Improve condition of other roadside infrastructure like signals, culverts, lighting, walls and guardrail
- Add new safety improvements

**[www.menti.com](https://www.menti.com) Code: 8066 0114**



**[Go to Mentimeter results]**

**Which approach  
best aligns with  
your vision for  
the state  
highway system?**



**“I'd like to see the existing system maintained first before expanding or adding to the system. A smooth road surface when driving is most important. Roads which become rough should not stay that way for long.”**

**Adapt to  
Changing  
Technology  
and Climate**

**Improve  
Mobility for All  
Highway Users**

**Prioritize  
Pavements**  
*(Current Approach)*

**Prioritize  
Bridges**

**Prioritize  
Highway Capacity  
Expansion**

**Focus on Safe  
and Equitable  
Communities**



**“Whatever additional resources are available should be put towards improving and maintaining bridges. MnDOT should not be in a position where it would need to close or limit traffic on bridges because they need repairs.”**



**“Highways should be safer for people to use, including for walking and bicycling. Improvements on highways should support strategies for reconnecting divided communities and other livability improvements.”**

**Adapt to  
Changing  
Technology  
and Climate**

**Improve  
Mobility for All  
Highway Users**

**Prioritize  
Bridges**

**Prioritize  
Pavements**  
*(Current Approach)*

**Prioritize  
Highway Capacity  
Expansion**

**Focus on Safe  
and Equitable  
Communities**

**“In the future, there needs to be fewer delays and less congestion. Population continues to grow and MnDOT should be planning for and accommodating the increase in vehicle traffic.”**

**“Minnesota is growing but we cannot build ourselves out of traffic congestion. In addition to addressing vehicle mobility, the highway system needs improvements for freight and for people walking, bicycling, and taking transit.”**







**“Highways should be made more resistant to the growing extreme weather events and support changing transportation technology. Highways also need to be designed to support more walking and bicycling.”**



**"I'd like to see the existing system maintained first before expanding or adding to the system. A smooth road surface when driving is most important. Roads which become rough should not stay that way for long."**

**"Minnesota is growing but we cannot build ourselves out of traffic congestion. In addition to addressing vehicle mobility, the highway system needs improvements for freight and for people walking, bicycling, and taking transit."**

**"In the future, there needs to be fewer delays and less congestion. Population continues to grow and MnDOT should be planning for and accommodating the increase in vehicle traffic."**



**"Highways should be made more resistant to the growing extreme weather events and support changing transportation technology. Highways also need to be designed to support more walking and bicycling."**

**"Whatever additional resources are available should be put towards improving and maintaining bridges. MnDOT should not be in a position where it would need to close or limit traffic on bridges because they need repairs."**

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**[www.menti.com](https://www.menti.com)**

**Code: 8066 0114**

**[Go to Mentimeter results]**

**What else  
would you like  
us to know?**



**Create your own  
approach!**

**Go to:**

**[www.minnesotago.org/investment/](http://www.minnesotago.org/investment/)**

# Highway Budget Tool

**mn** HIGHWAY BUDGET TOOL

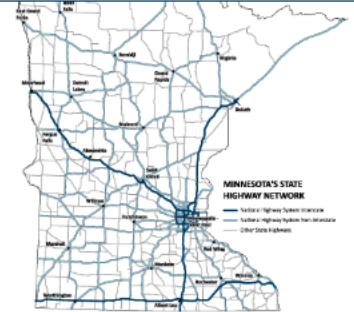
MnDOT

## Highway Budget Tool



### How do we come up with our budget?

Like you, MnDOT has a budget for its expenses. We all make responsible decisions to spend money on our basic needs—shelter, food, clothing. MnDOT makes responsible decisions to spend money to maintain the state highway system to a basic level of performance. We have to make tough decisions on how to spend resources in the most efficient and effective ways. Planning activities like the [Minnesota State Highway Investment Plan](#) help guide these decisions.



### Tell us about yourself!

Our goal is to get input from a wide range of people. We are collecting demographic information to identify who we're hearing from. Providing data is optional, however, by answering you will be helping MnDOT understand the needs and preferences of the diverse communities that MnDOT serves. Your responses will not be associated with you, personally.

Age

Are you of Hispanic descent?

What describes your racial/ethnic background?

What best describes how you think of yourself?

Zip Code

Get started →

# Highway Budget Tool – How to start?

[← Back](#)

## Choose how you want to start

Select a starter scenario



Take approximately 3 minutes to adjust the allocations for an established scenario



Prioritize Pavement / Current Approach



Prioritize Bridges



Adapt to Changing Technology and Climate



Prioritize Highway Capacity Expansion



Improve Mobility for All Highway Users



Focus on Safe and Equitable Communities

[Start with the minimum investment](#)



Take approximately 10 minutes to create a custom investment scenario from scratch

Add investments to see your baseline budget scenario.



AVAILABLE BUDGET

**\$30 - 33B**

Available Budget

**\$23.5B**  
MINIMUM  
INVESTMENT

**\$23.5B**

**\$0**

# Start from the minimum levels...

## Set your baseline budget

Pick and choose spending levels for different categories below. You can spend up to \$30-33 billion. This total is MnDOT's actual projected funding for the state highway system over the next 20 years.

[Choose another scenario ▼](#) or [Start with the minimum investment](#)

Add investments to see your baseline budget scenario.



### Advancing Technology

[Learn more](#)

MINIMUM



\$25M

\$53M

\$85M

\$112M

\$176M

\$219M

MAXIMUM

ITS expansion

Connected and automated vehicles (CAV) readiness

Fiber network



### Bridge Condition

[Learn more](#)

MINIMUM



\$2.8B

\$4.4B

\$4.8B

\$5.3B

\$6.2B

\$6.7B

MAXIMUM

On major highways

All other roadways

Bridge culverts



### Climate Resilience

[Learn more](#)

MINIMUM



\$166M

\$279M

\$341M

\$605M

\$848M

\$1.2B

MAXIMUM

Flood mitigation

Proactive resilient infrastructure

Snow fences

Green Infrastructure



### Freight

[Learn more](#)

MINIMUM



\$433M

\$587M

\$794M

\$944M

\$1.3B

MAXIMUM

Freight mobility

Weigh stations

Rail crossings

Truck parking

MINIMUM



MAXIMUM

AVAILABLE BUDGET

**\$30 - 33B**

Available Budget

**\$23.5B**  
MINIMUM  
INVESTMENT

**\$23.5B**

**\$0**

# ...or start from an approach

## Set your baseline budget

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[Choose another scenario ▼](#) or [Start with the minimum investment](#)

Your baseline budget scenario:  
**Prioritize Pavement / Current Approach**



[Learn more](#)

[Continue →](#)

AVAILABLE BUDGET

**\$30 - 33B**

Available Budget

**\$31.2B**

**\$23.5B**  
MINIMUM  
INVESTMENT

**\$0**

  
**Advancing  
Technology**  
[Learn more](#)

MINIMUM

**\$25M**

\$53M

\$85M

\$112M

\$176M

\$219M

MAXIMUM

ITS expansion

Connected and automated vehicles (CAV) readiness

Fiber network

  
**Bridge Condition**  
[Learn more](#)

MINIMUM

**\$2.8B**

**\$4.4B**

**\$4.8B**

**\$5.3B**

\$6.2B

\$6.7B

MAXIMUM

On major highways **Level 1**

All other roadways **Level 1.5**

Bridge culverts **Level 1**

  
**Climate  
Resilience**  
[Learn more](#)

MINIMUM

**\$166M**

\$279M

\$341M

\$605M

\$848M

\$1.2B

MAXIMUM

Flood mitigation

Proactive resilient infrastructure

Snow fences

Green Infrastructure

  
**Freight**  
[Learn more](#)

MINIMUM

**\$433M**

**\$587M**

\$794M

\$944M

\$1.3B

MAXIMUM

Freight mobility **Level 1**

Weigh stations **Level 1**

Rail crossings

Truck parking



# Looking more details?

## Set your baseline budget

Pick and choose spending levels for different categories below. You can spend up to \$30-33 billion. This total is MnDOT's actual projected funding for the state highway system over the next 20 years.

Choose another scenario ▼

 or [Start with the minimum investment](#)

Your baseline budget scenario:

Custom



Continue →

AVAILABLE BUDGET  
\$30 - 33B

Available Budget \$32.2B

\$23.5B  
MINIMUM INVESTMENT

\$0

Advancing Technology

Learn more

Advancing Technology focuses on implementing new technologies on the state highway system. Investments help prepare for transformative technology advancements such as connected and autonomous vehicles, traffic signal management, or advanced work zone safety. Improvements focus on expanding the MnDOT's fiber network along highways and ensure the state's intelligent transportation system infrastructure is maintained and expanded.

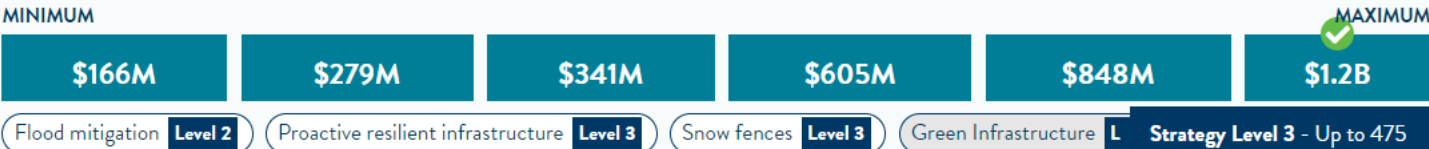
Bridge Condition

Learn more



Climate Resilience

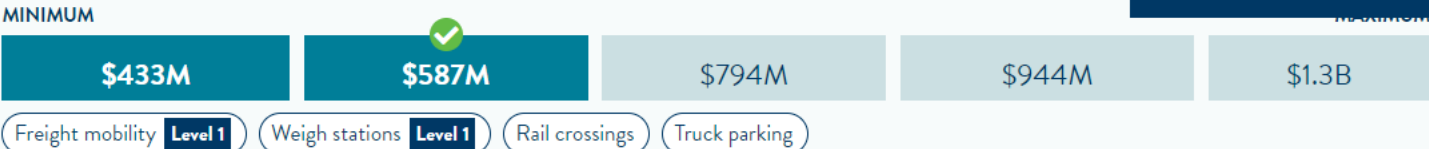
Learn more




Strategy Level 3 - Up to 475 miles of roadways with new/improved green infrastructure

Freight

Learn more



# Uh-oh, you went over!

 HIGHWAY BUDGET TOOL


[Comment](#) [Instructions](#)


## Set your baseline budget


Pick and choose spending levels for different categories below. You can spend up to \$30-33 billion. This total is MnDOT's actual projected funding for the state highway system over the next 20 years.


Choose another scenario ▼

 or [Start with the baseline scenario](#)

 **Advancing Technology**  
[Learn more](#)

 **Bridge Condition**  
[Learn more](#)

 **Climate Resilience**  
[Learn more](#)

 **Freight**  
[Learn more](#)

MINIMUM

\$25.1B

ITS expansion

MINIMUM

\$2.8B

On major highways **Level 2**

\$4.4B

All other roadways **Level 3**

\$4.8B

Bridge culverts **Level 2**

\$5.3B

\$6.2B

\$6.7B

MINIMUM

\$166M

Flood mitigation **Level 2**

\$279M

Proactive resilient infrastructure **Level 3**

\$341M

Snow fences **Level 3**

\$605M

Green Infrastructure **Level 3**

\$848M

MAXIMUM

\$1.2B

MINIMUM

\$433M

Freight mobility **Level 1**

✓

\$587M

Weigh stations **Level 1**

\$794M

Rail crossings

\$944M

Truck parking


\$1.3B

MINIMUM

✓

MAXIMUM

Your baseline budget scenario:  
**Custom**



!

**Budget Exceeded**  
You are \$0.6B over budget

AVAILABLE BUDGET

\$30 - 33B

\$33.6B

\$23.5B

MINIMUM INVESTMENT

\$0

×

!

**Budget Exceeded!**

You have exceeded your available budget!  
Please reduce an investment.

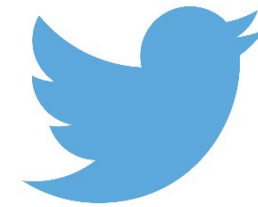
**Close**

MINNESOTA GO

[Translate This Site](#) ▼

# Help us spread the word!

- Share the link to the online investment budgeting tool  
[www.minnesotago.org/investment/](http://www.minnesotago.org/investment/)
- Follow MnDOT on social media and share MnSHIP posts
- Sign up for e-mail updates
- Request a presentation for your organization
- We're also traveling around the state attending community events



# MnSHIP Timeline

- **July - September** – 1<sup>st</sup> public engagement period
- **Fall 2022** – Compile a draft investment direction
- **Winter 2023** – 2<sup>nd</sup> public engagement period
  - Present and gather feedback on draft investment direction
  - Identify priorities for +\$2 B and +\$6 B increasing revenue investment directions
- **Spring/Summer 2023** – Compile draft plan and seek public comment
- **Late Summer 2023** – Adopt final plan

# [www.minnesotago.org](http://www.minnesotago.org)

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MINNESOTA The logo consists of the word "MINNESOTA" in a dark blue, sans-serif font, followed by the word "GO" in a larger, bold, dark blue font. The letter "O" in "GO" is replaced by a green circle with a dark blue outline.