# **Pedestrian and Bicycle**



MnDOT estimates \$30-33 billion in available funding for the state highway system over the next 20 years. A minimum of \$23.5 billion is needed to manage highest risks and meet legal requirements. This folio provides information on potential Pedestrian and Bicycle investment strategies, funding levels, and outcomes for the estimated \$7-9 billion of remaining investment.

# 1 | WHAT IS PEDESTRIAN AND BICYCLE?

Pedestrian and Bicycle investments provide infrastructure for people to walk and bicycle safely along and across state highways. Examples of MnDOT investments include sidewalks, accessible curb ramps, accessible pedestrian signals at intersections, shared use paths or separated trails, bicycle lanes, and separated facilities.

### **GOAL AND OBJECTIVES OF INVESTMENT**

The goal for pedestrian investments is to ensure safe, accessible, and convenient pedestrian travel across and along the state highway system. In addition, the pedestrian objectives are to provide context-appropriate, accessible pedestrian facilities; reduce fatalities and serious injuries of people walking and bicycling; implement and support the ADA Transition Plan, complete streets policy, and Statewide Multimodal Transportation Plan.

Bicycle investments aim to improve network connections, quality of life and the environment by providing a safe, convenient, connected, and context appropriate bicycling network. In addition, the bicycle objectives aim to routinely consider bicycle trips on highways early in the planning process; maintain quality non-motorized infrastructure; facilitate bicycle travel on priority networks, and eliminate fatalities and serious injuries statewide.

### TYPES OF IMPROVEMENTS

The pedestrian and bicycle investment category includes investments to keep existing pedestrian infrastructure compliant with the Americans with Disabilities Act, build new curb ramps and sidewalks where needed, improve intersections with accessible pedestrian signals, and build new pedestrian bridges. The category also includes investments to complete pedestrian and bicycle networks, shared use paths and bicycle lanes on state highways.

# HOW DOES MNDOT CURRENTLY SELECT PEDESTRIAN AND BICYCLE IMPROVEMENTS?

Most improvements for people walking and bicycling on the state highway system are constructed as part of pavement and bridge projects.

Following the <u>complete streets</u> approach, MnDOT evaluates options to improve the safety, efficiency, and functionality of the highway system for people walking and bicycling on every project. Standalone pedestrian and bicycle projects are also occasionally funded, often in coordination with local agencies.



# WHY IS INVESTING IN PEDESTRIAN AND BICYCLE IMPORTANT?

Everyone is a pedestrian – whether your main form of transport is a motor vehicle, bus, train, van, or bicycle, and whether you travel using your feet or an assistive device. ADA requires MnDOT to provide accessible transportation for those using a wheelchair or other assistive devices. It is also a state transportation goal "To promote and increase bicycling and walking as a percentage of all trips as energy-efficient, nonpolluting, and healthy forms of transportation." Some key reasons for investing in bicycle and pedestrian Infrastructure are:

- Pedestrian investments help people walk across and along existing roadways safely, not just by adding walking-focused crossing treatments to a roadway, but by changing how space is allocated within the roadway.
- Investing in improvements that make walking comfortable and safe can reduce greenhouse gas emissions from transportation and lessen the impact of extreme heat and precipitation on the most vulnerable users of the transportation system.
- Facilities for walking and bicycling connect people to schools, jobs, recreation, goods, and services.

# **HOW DO PEDESTRIAN AND BICYCLE INVESTMENTS SUPPORT EQUITABLE OUTCOMES?**

While all communities offer transportation options, not everyone has equal access to convenient, safe, and affordable means of transportation. Improving pedestrian and bicycle infrastructure on state highways will benefit everyone but particularly those who cannot drive, choose not to drive, or do not have access to a car. Investing in pedestrian and bicycle transportation networks where they have been disrupted by state highways, especially in historically under-engaged communities, may help rebuild trust and mitigate past harms.

# **HOW DOES MNDOT MEASURE** PERFORMANCE, CONDITION, OR **OUTCOMES?**

MnDOT measures the condition of curb ramps and sidewalk (miles) and tracks the percentage that is compliant with ADA standards. ADA compliance is a federal standard that ensures accessibility for people with disabilities. The state also uses various performance measures such as the number of people walking, the percent and number of schools with a Safe Routes to School plan, and the total number of walking trips between 1/8 and 1 mile.



#### **OPTIONS FOR INVESTING OVER THE NEXT 20 YEARS** 3

# **Non-Compliant Pedestrian** Infrastructure

The minimum level MnDOT would invest in non-compliant pedestrian infrastructure is \$204 million. At the minimum level. sidewalk miles would be less than 60% substantially compliant. APS signals would be less than 50% substantially compliant, and curb ramps would be 100% substantially compliant.

# LEVEL 1

\$315M

### Outcomes:

100% of curb ramps, 80% of sidewalks and <50% of APS would be compliant

# LEVEL 2

\$442M

### Outcomes:

Sidewalk miles, curb ramps, and APS signals would be 100% compliant. 5 additional asset classes would be compliant

# LEVEL 3

\$559M

### Outcomes:

Sidewalk miles, curb ramps, and APS signals would be 100% compliant. More complete 5 additional asset classes would be compliant

# LEVEL 4

\$704M

### **Outcomes:**

Sidewalk miles, curb ramps, and APS signals would be 100% compliant. More complete pedestrian upgrades. pedestrian upgrades. 10 additional asset classes would be compliant

### **Sidewalk System Completion** The minimum level MnDOT would invest in sidewalk system completion is \$133 million. At the minimum level, there would

be a 10% cut tied to pavement

#### LEVEL 1 LEVEL 2 LEVEL 3

\$144M \$355M \$751M

# **Outcomes:**

100-150 miles and 200-250 intersections with pedestrian improvements

# Outcomes:

200-250 miles and 400-500 intersection with pedestrian improvements

# Outcomes:

400-500 miles and 900-1000 intersections with pedestrian improvements

# **Pedestrian Bridges**

projects.

The minimum level MnDOT would invest in Pedestrian Bridges is **\$29 million**. At the minimum level, MnDOT would bring 10 non-ADA compliant bridges into compliance.

# LEVEL 1

LEVEL 2

LEVEL 3

\$150M

\$415M

\$596M

### **Outcomes:**

20 non-ADA compliant bridges brought into compliance

# Outcomes:

46 non-ADA compliant bridges brought into compliance

### Outcomes:

46 non-ADA compliant bridges brought into compliance; 10-15 new or replaced pedestrian bridges

# **Implement District Bike Plans**

The minimum level MnDOT would invest in implementation of District bike plans is \$85 **million**. At the minimum level. MnDOT would add up to 50 miles of bicycle lanes and 5-10 miles of separate bicycle facilities in urban areas, and up to 5 miles of improvements along and across US bicvcle routes in rural areas.

# LEVEL 1

\$200M

\$709M

LEVEL 2

LEVEL 3

\$1.3B

\$1.8B

LEVEL 4

\$2.3B

LEVEL 5

### **Outcomes:**

150 miles of bicycle lanes and 20 miles of separated areas and 10-15 miles in rural areas

### **Outcomes:**

350 miles of bicycle lanes and 40 miles of separated areas and 20-25 miles in rural areas

### **Outcomes:**

500 miles of bicycle lanes and 60 miles of separated facilities in urban facilities in urban facilities in urban facilities in urban areas and 30-35 miles in rural areas

### **Outcomes:**

650 miles of bicycle lanes and 80 miles of separated areas and 40-50 miles in rural areas

### **Outcomes:**

1.000 miles of bicycle lanes and 120 miles of separated facilities in urban areas and 65-70 miles in rural areas

# **Shared Use Path**

The current/minimum level MnDOT would invest in share use path maintenance and ADA compliance is \$0 million.

# LEVEL 1

LEVEL 2

\$91M

\$182M

### **Outcomes:**

Maintain existing known separated bicycle facilities and ramp connections

### **Outcomes:**

Maintain existing known separated bicycle facilities and ramp connections as well as new separated facilities

### **SX.X** Total cost of investment level

- Portion of remaining \$4 billion investment for level
- Remaining investment available for other priorities



# 4 | PEDESTRIAN AND BICYCLE RISKS

# WHAT ARE THE RISKS OF **UNDERINVESTING?**

Below are the risks to underinvesting in pedestrian and bicycle improvements. Each risk was rated at the minimum level of investment by whether it is a high, medium or low risk. As MnDOT provides additional investment in Pedestrian and Bicycle, the lower the likelihood of the risk occurring.

### PEDESTRIAN RISKS

### **HIGH RISKS**

**Risk:** The state highway system presents a barrier to people who want to cross or travel along it

**Impact:** Increases potential fatalities and serious injuries, isolates communities, and limits access for pedestrians **Shift from High to Medium Risk:** Investment Level 2 **Shift from Medium to Low Risk:** Investment Level 4

### MEDIUM RISKS

Risk: Limited investment in increased mobility options and increased system connections

**Impact:** Fails to meet public expectations and address inequities related to transportation

**Shift from Medium to Low Risk:** Investment Level 3

Risk: Poor planning, design and/or construction of pedestrian assets

**Impact:** Sub-par or out of compliance assets, which brings

added costs to MnDOT

Shift from Medium to Low Risk: Investment Level 4

# To find out more details about Pedestrian and Bicycle planning and projects, go to:

**Project Selection:** www.dot.state.mn.us/projectselection/

### **MnDOT ADA Transition Plan:**

www.dot.state.mn.us/ada/transitionplan.html

### **Statewide Pedestrian System Plan:**

www.minnesotawalks.org/

### **MnDOT Statewide and District Bicycle Plans:**

www.dot.state.mn.us/bike/planning-research.html

**Risk:** Not meeting federal compliance or the intent of ADA. **Impact:** Legal liability for MnDOT and inaccessible system for users

**Shift from Medium to Low Risk:** Investment Level 3

### **BICYCLE RISKS**

### **HIGH RISKS**

**Risk:** The state highway system presents a barrier to people who need to cross or travel along it

**Impact:** Increases potential fatalities and serious injuries, isolates communities, and limits access for bicyclists Shift from High to Medium Risk: Investment Level 3 Shift from Medium to Low Risk: Investment Level 4

### **MEDIUM RISKS**

**Risk:** Inability to maintain the system in good repair **Impact:** Increased bicycle crashes and fatalities, decreased actual and perceived safety, and decreased comfort and

Shift from Medium to Low Risk: Investment Level 3

**Risk:** Ad hoc investment based on pavement and bridge

**Impact:** An unreliable, inconsistent bicycle network with network gaps and a lack of uniformity

**Shift from Medium to Low Risk:** Investment Level 3

**Risk:** Inability to invest in separated bicycle facilities and the recommended, context-appropriate facility as identified in the Statewide Bicycle System Plan

**Impact:** Creates public distrust especially among people who bicycle and non-motorized transportation advocates Shift from Medium to Low Risk: Investment Level 4

### For more information, contact:

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