

# Accessible Pedestrian Infrastructure

## A CRITICAL CONNECTIONS INVESTMENT

**Accessible Pedestrian Infrastructure** is one of the 14 investment categories of MnSHIP, a fiscally constrained plan MnDOT uses to balance the needs and risks of Minnesota's state highway network. Folios for each investment category describe potential levels of investment and associated outcomes. Through MnSHIP, MnDOT will create an investment direction that guides state highway capital investments for the next 20 years.

### INVESTMENT CATEGORY DETAILS

#### What is Accessible Pedestrian Infrastructure?

Accessible Pedestrian Infrastructure investments provide infrastructure for people to travel along and across state highways, both on foot or on wheels.

Examples of MnDOT pedestrian investments includes: sidewalks along state highways, accessible curb ramps, accessible pedestrian signals (APS) at intersections, and separated trails.

#### Why is Accessible Pedestrian Infrastructure important?

Everyone is a pedestrian – whether your main form of transport is a motor vehicle, bus, train, van or bicycle, and whether you travel on your feet or use an assistive device. The requirements laid out in the 1990 Americans with Disabilities Act (ADA) requires MnDOT provide accessible alternatives for those using a wheelchair or other assistive devices. It is not only the law, but it is also the right thing to do.

Providing pedestrian infrastructure is an important and growing part of the state's multimodal network. As outlined in Minnesota Walks ([www.minnesotawalks.org](http://www.minnesotawalks.org)), Accessible Pedestrian Infrastructure can provide numerous and diverse benefits for Minnesotans:

- **Walking is good for your health** - Improving the walkability of Minnesota's state highway system can also improve the health of Minnesotans. Providing walking options gives quality of life and access improvements to those unable or not wanting to drive private automobiles. Living in more walkable neighborhoods can create opportunities to be more active, potentially improving physical and mental health.
- **Walking is good for business** - More walkable place can also have economic benefits. Commercial businesses in mixed-use and high density locations benefit from pedestrian infrastructure.
- **Walking connects the social, economic and physical environments** - Pedestrian facilities connect people to schools,

jobs, recreation, goods and services. Transportation networks can have large impacts on the health of communities, along with the physical environment.



*Pedestrian infrastructure also improves access and comfort for transit riders.*

#### How does Accessible Pedestrian Infrastructure support the Minnesota GO Vision and Statewide Multimodal Transportation Plan (SMTP)?

Investing in Accessible Pedestrian Infrastructure supports the guiding principles laid out in the 50-year vision for the state's transportation system, Minnesota GO. Among those are:

- Leveraging public investments to achieve multiple purposes;
- Emphasizing reliable and predictable options; and
- Ensuring accessibility to users of all abilities and incomes.

Building upon these principles, investment in Accessible Pedestrian Infrastructure strengthens multiple strategies identified in the SMTP, notably:

- Work together to improve accessibility and safety for everyone traveling on, along, and across roads;
- Apply multimodal strategies that ensure a high return-on-investment, given constrained resources, and that complement

- the unique social, natural and economic features of Minnesota; and
- Support and develop multimodal connections for all Minnesotans regardless of socioeconomic status or individual ability.

Tips for using this table

Performance Levels

- **Performance Level 0 (PL 0)** represents a strategy which corresponds to the most extreme risk level MnDOT would consider for investing in Accessible Pedestrian Infrastructure.
- MnDOT’s current spending in Accessible Pedestrian Infrastructure approximately corresponds to **PL 0**.
- Cost + benefits increase and risks decrease from left to right.
- PLs for Accessible Pedestrian Infrastructure are independent of other performance categories.

Investment Approach

- See **MnSHIP Investment Approaches** folio

Investment Levels

- The **pie charts** represent MnSHIP’s total planning investment for years 2022-2037 (\$17.1 billion) and the portion of it which will be dedicated to Accessible Pedestrian Infrastructure investment at each PL.
- **Base investment for other categories** is the amount required to invest at PL 0 in every other category.
- **Remaining revenue available** is the additional investment beyond the base investment for all categories in MnSHIP.

Outcomes

- Highlights key outcomes associated with each PL. For Accessible Pedestrian Infrastructure, outcomes correspond with key performance measures.

Risks

- Identified as **high**, **medium**, or **low** in each PL; each risk decreases in severity from left to right.

Risk Managment Strategies

- Details the steps MnDOT would make to mitigate risk at each PL.

How has the planning context for Accessible Pedestrian Infrastructure changed since 2013 MnSHIP?

Completed in 2016, Minnesota Walks is roadmap for how all Minnesotans can have safe, desirable and convenient places to walk and roll where they live, work, learn and play. An upcoming

pedestrian plan will provide direction on how to support walking along and across Minnesota state highways through investments, collaboration with local governments, and the prioritization of facilities in certain areas.

MnDOT has also recently committed additional funding in order to

increase the opportunities for Accessible Pedestrian Infrastructure in conjunction with bridge and pavement projects as part of the increased visibility and oversight of MnDOT’s ADA Transition Plan.

In 2013, MnDOT completed a survey of the state’s sidewalk facilities, cataloging their condition and location. This helped

Accessible Pedestrian Infrastructure		
Overarching Goal: Ensure safe, accessible and convenient pedestrian travel across or alongside the state highway system. Maintain quality of life for all system users.		
	Performance Level 0 <i>Lowest cost, greatest risk</i>	Performance Level 1 <i>Lower cost, higher risk</i>
Investment Approach <i>(See Approach folio)</i>	Approximately corresponds with current investment	Does not correspond with an approach
Investment Level <i>Total</i>	<div><div>Years5-10 (2022-2027) Years 11-20 (2028-2037)</div><div><div>\$298 M</div><div>\$15.2 M \$21.1 M</div><div><div>Remaining revenue available</div><div>Accessible Pedestrian 1.8%</div><div>Base investment for other categories</div></div></div></div>	<div><div>\$375 M</div><div>\$18.6 M \$26.4 M</div><div><div>Remaining revenue available</div><div>Accessible Pedestrian 2.3%</div><div>Base investment for other categories</div></div></div>
Investment Description	Current level of investment	Invest to implement Olmstead Plan by 2025
Outcomes <i>To what extent would MnDOT meet Accessible Pedestrian Infrastructure goals and objectives?</i>	<ul style="list-style-type: none"><li>• 2 miles of sidewalks/driveways per year (50% compliant)</li><li>• 1,200 curb ramps per year (90% compliant)</li><li>• 50 accessible pedestrian signals (APS) intersections per year (50% compliant)</li><li>• Reduced investment in pedestrian network gaps and complete streets</li><li>• Reduced investment through bridge and pavement projects</li></ul>	<ul style="list-style-type: none"><li>• 8 miles of sidewalks/driveways per year (71% compliant)</li><li>• 840 curb ramps per year (74% compliant)</li><li>• 50 accessible pedestrian signals (APS) intersections per year (90% compliant)</li><li>• Investment in pedestrian network gaps and complete streets</li><li>• Continued investment through bridge and pavement projects</li></ul>
Risks	<div><div>High</div><ul style="list-style-type: none"><li>• Not achieving Federal/ADA compliance</li><li>• Not meeting needs of pedestrians</li></ul><div>Medium</div><ul style="list-style-type: none"><li>• Added costs through poor planning/design/construction</li><li>• Reduced investment in system connections</li><li>• Lack of operational oversight for system</li><li>• Pedestrian barriers decrease safety and access</li></ul></div>	<div><div>High</div><ul style="list-style-type: none"><li>• Not achieving Federal/ADA compliance</li><li>• Not meeting needs of pedestrians</li></ul><div>Medium</div><ul style="list-style-type: none"><li>• Added costs through poor planning/design/construction</li><li>• Reduced investment in system connections</li><li>• Pedestrian barriers decrease safety and access</li></ul><div>Low</div><ul style="list-style-type: none"><li>• Lack of operational oversight for system</li></ul></div>
System Investment Strategies <i>What strategies would MnDOT use to manage risk?</i>	<ul style="list-style-type: none"><li>• Invest at current rate and at current level between sidewalks, curb ramps, and APS projects</li></ul>	<ul style="list-style-type: none"><li>• Focus more investment in sidewalks projects</li><li>• Focus non-ADA investments in complete street and network gap projects</li></ul>

Performance Objectives: Provide accessible pedestrian facilities along and across the state highway system where appropriate; reduce non-motorized fatalities and serious injuries; implement and support ADA Transition Plan, complete streets policy.		
Performance Level 2 <i>Greater cost, lower risk</i>	Performance Level 3 <i>Greater cost, lower risk</i>	Performance Level 4 <i>Greatest cost, lowest risk</i>
Approach A, B, C	Does not correspond with an approach	Does not correspond with an approach
<div><div>\$466 M</div><div><div>\$23.1 M</div><div>\$32.8 M</div></div><div><div>Remaining revenue available</div><div>Accessible Pedestrian 2.8%</div><div>Base investment for other categories</div></div></div>	<div><div>\$523 M</div><div><div>\$25.9 M</div><div>\$36.7 M</div></div><div><div>Remaining revenue available</div><div>Accessible Pedestrian 3.1%</div><div>Base investment for other categories</div></div></div>	<div><div>\$614 M</div><div><div>\$30.4 M</div><div>\$43.2 M</div></div><div><div>Remaining revenue available</div><div>Accessible Pedestrian 3.7%</div><div>Base investment for other categories</div></div></div>
Invest to meet substantial compliance of the pedestrian network by 2037	Invest to meet total compliance of the pedestrian network by 2037	Invest to meet total compliance of the pedestrian network by 2037; double non-ADA investment
<ul style="list-style-type: none"><li>• 10 miles of sidewalks/driveways per year (78% compliant)</li><li>• 1,200 curb ramps per year (94% compliant)</li><li>• 60 accessible pedestrian signals (APS) intersections per year (98% compliant)</li><li>• Investment in pedestrian network gaps and complete streets</li><li>• Continued investment through bridge and pavement projects</li></ul>	<ul style="list-style-type: none"><li>• 15 miles of sidewalks/driveways per year (95% compliant)</li><li>• 1,200 curb ramps per year (94% compliant)</li><li>• 50 accessible pedestrian signals (APS) intersections per year (98% compliant)</li><li>• Investment in pedestrian network gaps and complete streets</li><li>• Continued investment through bridge and pavement projects</li></ul>	<ul style="list-style-type: none"><li>• 15 miles of sidewalks/driveways per year (95% compliant)</li><li>• 1,200 curb ramps per year (94% compliant)</li><li>• 50 accessible pedestrian signals (APS) intersections per year (98% compliant)</li><li>• Doubled investment in pedestrian network gaps and complete streets (PL3)</li><li>• Continued investment through bridge and pavement projects</li></ul>
<div><div>Medium</div><ul style="list-style-type: none"><li>• Not meeting needs of pedestrians</li><li>• Pedestrian barriers decrease safety and access</li></ul><div>Low</div><ul style="list-style-type: none"><li>• Not achieving federal/ADA compliance</li><li>• Added costs through poor planning/design/construction</li><li>• Reduced investment in system connections</li><li>• Lack of operational oversight for system</li></ul></div>	<div><div>Medium</div><ul style="list-style-type: none"><li>• Not meeting needs of pedestrians</li></ul><div>Low</div><ul style="list-style-type: none"><li>• Not achieving federal/ADA compliance</li><li>• Added costs through poor planning/design/construction</li><li>• Reduced investment in system connections</li><li>• Lack of operational oversight for system</li><li>• Pedestrian barriers decrease safety and access</li></ul></div>	<div><div>Low</div><ul style="list-style-type: none"><li>• Not achieving federal/ADA compliance</li><li>• Not meeting needs of pedestrians</li><li>• Added costs through poor planning/design/construction</li><li>• Reduced investment in system connections</li><li>• Lack of operational oversight for system</li><li>• Pedestrian barriers decrease safety and access</li></ul></div>
<ul style="list-style-type: none"><li>• Focus more investment in sidewalks, curb ramps, and APS projects</li><li>• Focus non-ADA investments in complete street and network gap projects</li></ul>	<ul style="list-style-type: none"><li>• Focus more investment in sidewalk projects</li><li>• Focus non-ADA investments in complete street and network gap projects</li></ul>	<ul style="list-style-type: none"><li>• Focus more investment in sidewalk projects</li><li>• Focus non-ADA investments in complete street and network gap projects</li></ul>

to set a base to measure future progress and set performance targets.

### How did MnDOT create the investment levels?

The performance levels outlined in the table represent plausible investment levels for Accessible Pedestrian Infrastructure. A risk- and performance-based analysis was undertaken in the summer of 2015 to illustrate potential future scenarios. Performance levels reflect investments between 2022 and 2037 (2018-2021 funding levels influenced by 2013 MnSHIP). PL 0 through PL 4 represent a range of options to help stakeholders and decision-makers understand outcomes, risks, and system investment strategies for Accessible Pedestrian Infrastructure.



*Investments in pedestrian infrastructure can help improve the livability of communities and create opportunities for Minnesotans to live healthier lives.*

### How does MnDOT typically invest in Accessible Pedestrian Infrastructure?

Most pedestrian investments are made concurrently with pavement and bridge projects, however sometimes intersection or shared-use paths/trails are done as standalone pedestrian projects.

### What risks are addressed through increased Accessible Pedestrian Infrastructure?

Generally, the more MnDOT invests in Accessible Pedestrian Infrastructure the more quickly substantial compliance of the

pedestrian network is achieved, and MnDOT is able to reduce these key risks:

- Not meeting federal compliance or the intent of ADA results in a pedestrian system that is unsafe and not in compliance, resulting in increased legal liability for MnDOT.
- Not meeting the existing needs of system users, including the disabled community, results in an inadequate system, loss of trust, and decreased mobility of the user.
- The state highways present a physical barrier to pedestrian traffic that wishes to cross; increasing safety issues, isolating communities and limiting access.
- Poor planning, design and/or construction results in sub-par or out of compliance assets, which brings added costs to MnDOT.
- Failure to plan for and invest in increased mobility options and increase system connections results in not meeting public expectations.
- Not receiving local consent/agreement results in a lack of operations/maintenance and oversight of the system causing premature deterioration and potential unsafe conditions for users.

### How is MnDOT enhancing financial effectiveness through Accessible Pedestrian Infrastructure?

MnDOT is reducing the liability to the agency by increasing the ADA-compliance of the state's pedestrian network. As projects are typically done in conjunction with pavement and bridge projects, increased investments would allow MnDOT to realize most if not all opportunities for installing Accessible Pedestrian Infrastructure.

Expanding the pedestrian network and increasing accessibility also supports increased walking and transit use. More walking can reduce the number of trips people make driving - lessening the amount of vehicles on the road and any associated congestion. This benefits other users of the state's transportation systems and puts less wear and tear on road networks.

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### Find more information with these additional folios!

#### System Stewardship

- Pavement Condition
- Bridge Condition
- Roadside Infrastructure Condition
- Jurisdictional Transfer
- Facilities

#### Transportation Safety

- Traveler Safety

#### Critical Connections

- Twin Cities Mobility

#### Greater Minnesota Mobility

#### Bicycle Infrastructure

#### Healthy Communities

- Regional + Community Improvement Priorities

#### Other

- Project Delivery
- Small Programs

