Chapter 3: Implementation

This Pedestrian Plan, which has been put together by the Metropolitan Interstate Council (MIC), is the Duluth-Superior region's Pedestrian Plan and is intended to guide planning, decision-making and collaboration for residents, agencies, organizations, policy-makers, and public and private entities across the Twin Ports.

This Plan looks out 25 years and sets a realistic implementable action plan that can be accomplished in that 25-year timeframe, based on existing revenues and the expected life-cycle repair and replacement of the existing infrastructure. While pedestrian infrastructure does not get as much wear and tear as roadways do, and therefore, can stay in reasonably good condition for decades, all roadways, particularly the collector and arterial roads have resurfacing and/or reconstruction work over a 25 year timeframe. With roadways and the motor vehicle traffic conditions having the biggest impact to a pedestrian's ease, safety, and comfort with walking along and across streets. The key improvement opportunity to make an improved pedestrian network arises with each resurfacing and reconstruction project.

The current pedestrian network is extensive, but not cohesive, seamless or reliably accessible. In order to overcome these issues, all sectors of society are needed. The sectors directly involved in street and community design of course are the transportation, land use and community design sectors are the focus of this Pedestrian Plan. However, the other sectors have just as an important role as well to creating a truly walkable community. The school, colleges and universities, the worksites and businesses, the volunteer and non-profit organizations, the media, and the health care and public health sectors all have a role to play. However, this Plan is primary focused on the transportation related pedestrian improvement recommendations, as well as key land use and community design recommendations.

Overview

- Will take many sectors of society to make communities more walkable.
- This Pedestrian Plan is one piece in this effort to improve walkability.
- Current pedestrian network is extensive but not fully connected, lots of gaps.
- Plan has a long range view and is intended to be implemented over the next 25 years, as all major roadways will either have some level of resurfacing, recondition or reconstruction work in that timeframe, which is an opportune time to make pedestrian improvements.

Recommendation #1—Conduct studies to improve the pedestrian network.

While the current pedestrian network is extensive, gaps do exist. However, the vast majority of gaps in the network do not need to be further studied. However, there are a number of gaps that are more complex in nature and/or are not clear what the best solution is. The timing on when each of the following recommended studies will be conducted will be determined in coordination with key stakeholders. Note, these studies are not listed in order of importance.

Bay Walk—Portion of this multi-use path exist, however there is a need to create a continuous path from the Lakewalk through Canal Park, DECC and Bayfront to connect directly to the Cross City Trail. A study would identify final alignments and design of this multi-use path.

Blatnik Crossing—there is a missing pedestrian network connection between Rice's Point in Duluth and Connor's Point in Superior. This study is needed to determine the type of pedestrian facility and the connections that would need to be made on both sides, including the pedestrian way to connect to Garfield Avenue in Duluth.

Bong Bridge Pedestrian Connections—on both ends of the Bong Bridge there are missing pedestrian network connections. With this bridge providing the only pedestrian connection between Duluth and Superior, improving the connections to this bridge is needed. The study would determine the improvements, including alignment and design alternatives, including the feasibility of a direct pedestrian connection to the Cross City Trail, the pedestrian way improvements necessary to provide a direct connection between Grand Avenue and 43rd Avenue West on the Duluth side as well as the route alignment from the end of the Bong Bridge multi-use path at Susquehanna Avenue to Belknap Street in Superior. This study should analyze the options and feasibility of improving the separated pedestrian path along the Bong Bridge to meet minimum multi-use path standards.

Recommendation #1:
These are the 14 pedestrian network connection studies recommended to be undertaken in this Plan:

- Bay Walk Connections
- Blatnik Crossing
- Bong Bridge Connections
- Campus Connector to Mall
- Central Hillside—Up the Hill
- Hermantown-Marketplace
- Joshua Ave Connections
- Lake Superior College
- Matterhorn Connections
- Miller Trunk Ped Network
- Morgan Park to Gary/New Duluth
- Skyline Parkway
- Superior Railroad Crossings
- Wade, Wheeler & LP Middle

Campus Connector Trail to Miller Hill Mall Area Connection — this multi-use path is planned to be connected from the Lakewalk to Rice Lake Road. A study to determine the need, alignment alternatives and design for a pedestrian connection from Rice Lake Road to the Miller Hill Mall area.

Central Hillside—Up the Hill Pedestrian Connection—The steep slopes in the Central Hillside make it challenging for walking up and down the hill for people of all ages and abilities. The study would be to identify the best path forward to improving the pedestrian accessibility up and down the hill. This study should analyze the feasibility a variety of possible solutions, including a pedestrian-only up and down the hill corridor and motorized systems, including but not limited to outdoor escalators, funiculars, and gondolas.

Hermantown Trail to Marketplace—study multi-use path connections between the planned Hermantown Trail to the Marketplace, including studying alignment connections, including to Walmart between Stebner Road and Loberg Drive.

Joshua Avenue Multi-use Trail Corridor—the long planned Joshua Avenue providing a direct connection between the Miller Hill Mall area and Arrowhead Road has been differed indefinitely. However, a study has been discussed to look at a multi-use trail connection along this corridor. Study multi-use path connections between Arrowhead Road and Miler Trunk Highway (US Hwy 53).

Lake Superior College (LSC) Connector—while Piedmont Neighborhood is adjacent to the LSC, Miller Creek and its' steep ravine physically separate the two. There are a few hiking/walking trail connections, but this study would be undertaken to find a corridor for a paved, ADA compliant multi-use path, between the heart of the Piedmont Neighborhood at Piedmont Avenue and Chambersburg Road to the center of the LSC campus and Arlington Avenue.

Matterhorn Connection—as new higher density residential housing cluster has developed between near Matterhorn Drive. With limited direct east-west street or pedestrian connection in this area, a study is recommended to determine an alignment for a pedestrian connection between Haines Road, Decker Road and to the Miller Hill Mall.

Miller Trunk Highway (US Hwy 53) Pedestrian Corridor - identify an interconnected pedestrian network routing on both side of the trunk highway. Looking at routing alternatives and design.

Morgan Park to Gary Connection—studying the need and alignment alternatives of provide a direct pedestrian connection between the Morgan Park and the Gary/New Duluth.

Skyline Parkway—study the multimodal transportation needs for this corridor and the options for improving the pedestrian-friendliness of the corridor. Focus on the areas of high pedestrian use and in areas where gaps in pedestrian infrastructure exist.

Superior Railroad Crossings—The City of Superior is divided by railroad crossings, creating islands of neighborhoods with only a few places to cross the rail tracks, particularly for those with mobility challenges and are in use of a wheelchairs. This study would examine these railroad crossing and identify solutions to improve them for people of all ages and abilities.

Wade, Wheeler and Lincoln Park Middle School Connection— study a multi-use path connection from the Cross City Trail, to Wade Stadium, the Wheeler Athletic Complex, and creating a direct connection between the Denfeld Neighborhood to the Lincoln Park Middle School.

General Pedestrian Planning Efforts

Consider undertaking planning efforts to identify:

a. Shared Streets—identify the local/residential streets as the best ones to serve a shared street role in the pedestrian network. These streets are shared by all users of the roadway with no separated facilities for any particular mode. The key and defining features are that these streets have an access to property role, but not a through motor vehicle traffic one in the overall network. These streets have a low volume of motor vehicle traffic and most importantly a low motor vehicle traffic operating speed. Shared streets have traffic calming features on these streets to ensure that travel speeds are less than 15 miles per hour.

b. Open Streets—identify which streets would be best for either permanently or temporarily be closed to motor vehicle traffic and enhanced for pedestrians.

c. Alleys—identify the alleys and the improvements needed to activate these pedestrian-scaled corridors as a pedestrian-friendly and welcoming space. Alleys that are ideal for this are located in business districts, where high volumes of pedestrian activity already exists. A few examples of alleys that should be further considered include but not limited to the alley between Superior Street and First Street in Downtown Duluth, the alley between Canal Park Drive and Lake Avenue in Canal Park, and the alley between Tower Avenue and Ogden Avenue in Superior.

Specific streets to consider being "shared" or "open"

Shared Streets

- 19th St—Hammond Ave to UWS
- Chester Parkway—4th St to Skyline Pkwy
- Fisher Ave—Faxon Ave to UWS
- Skyline Pkwy (various segments)
- Snelling Ave—9th St to UMD

Open Streets

- Lincoln Park Drive
- Seven Bridges Rd
- Skyline Pkwy (Enger Tower segment)

Recommendation #2—Improve the collection, evaluation, and sharing of pedestrian data and findings.

Decision-makers need data on walking and walkability to help them plan, implement, and evaluate pedestrian improvements. The following data is recommended to be gathered and disseminated:

a. Make data user friendly and easily available, include providing web access to the data findings.
b. Conduct level of use counts for pedestrian volumes utilizing automated technologies and supplement with manual counts where necessary and to verify data, including before and after counts where projects with pedestrian improvements are taking place, where gaps in data exist, and along corridors with high volumes of pedestrians.
c. Collect and analyze data on pedestrian exposure and pedestrian injuries, including analyzing the serious and fatal crashes where a pedestrian is involved to better understand and prevent these crashes in the future.
d. Evaluate motorist yield rates to pedestrians at locations with high levels of pedestrian crossings and areas identified as difficult to cross for pedestrians. Evaluate yield rates before and after pedestrian crossing improvements have been installed as well.
e. Count sidewalk riding by micro-mobility devices in areas where level of use by the various modes creates conflicts, noting the percentage of bicycles, scooters and other faster moving electronic devises utilizing pedestrian ways, including sidewalks.
f. Maintain the sidewalk condition database, including updating the sidewalk network annually where new sidewalks have been constructed and corrections made to the database as discovered.
g. Provide an annual progress report on the pedestrian related improvements made each year. This annual report will be compiled into the "Measuring Progress" section of the Long Range.

Measuring Progress:

The annual report on pedestrian network improvements include, should include, but not be limited to, the following:

- Miles of new sidewalk and pedestrian pathways repaired and/or replaced.
- Sidewalk condition rating percentages
- # of ADA curb ramps brought forward to compliance, out of the total number that do not meet ADA guidelines.
- Number and type of pedestrian crossing improvements.
- Level of use counts
- Discuss any innovative or new to the MIC area pedestrian infrastructure installed on the network.

Recommendation #3—Focus on improving the Priority Pedestrian Improvement Corridors.

The pedestrian corridors have been prioritized by their level of need for improvement. The corridors prioritized as "Critical" and "Major" are primarily located within the urbanized area of Duluth-Superior region and are to be the focus for improving over the life of this Plan. The best-practice pedestrian improvement solutions are recommended. However, the Plan realizes that each situation is unique to find the most effective solutions. Therefore, the Plan recommends an iterative approach, to try, evaluate, and try again and pedestrian design guides that are available.

a. "Critical" corridors—pro-actively undertake projects to improve the pedestrian environment along these priority corridors through the use of local sidewalk funds, transportation alternative grants, and other funding sources.
b. "Major" corridors—at the time of work, even if relatively minor, improve the pedestrian environment.
c. Enhance both the "Critical and Major" pedestrian pathways along as well as crossing the streets.
d. Utilize interim design strategies on these "critical and major" corridors—techniques to deliver pedestrian improvements more quickly. They include low-cost, interim materials, new public amenities, and creative partnerships with local stakeholders, which together enable faster project delivery, and more flexible and responsive design. An interim design can serve as a bridge to the community, helping to build support for a project and test its functionality before going into construction.

Pedestrian Infrastructure Design Guidance:

Urban Street Design Guide

NACTO—National Association of City Transportation Officials

Designing Walkable Urban Thoroughfares: A Context Sensitive Approach

ITE—Institute for Transportation Engineers

"Critical" Pedestrian Improvement Corridors - List:

These are corridors that received a composite ranking of "critical" based on a number of factors, including the importance of the connections, especially if the corridor is near a school, the existing level of motor vehicle traffic, sidewalks gap, a barrier exists, and whether or not an alternative/ parallel routes is available. Here is the list:

City of Duluth

- Arrowhead Rd—Kenwood Ave to Triggs Ave
- Chambersburg Rd—Morris Thomas Rd to Leonard St
- Glenwood St—Snively Rd to 43rd Ave E
- Joshua Ave—Miller Trunk Hwy to Maple Grove Rd
- Kenwood Ave—11th Ave E to Arrowhead Rd
- Mike Colallilo Dr/1st St/Superior St—Wadena St to 40th Ave W.
- Skyline Pkwy—7th Ave W to 8th St
- Skyline Pkwy—Chester Pkwy to Chester Park Dr
- 11th Ave E—10th St to Kenwood Ave
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City of Proctor

- 9th St—1st to 4th St

City of Superior

- 5th St—Catlin to Main St
- Susquehanna Ave—Belknap to US Hwy 2

"Critical" Pedestrian Improvement Corridors - List:
(Continued)

St. Louis County

- Arlington Rd—Trinity Rd/US 53 to Central Ent
- Arlington Rd—Willow St to Arrowhead Rd
- Calvary Rd to Howard Gnesen Rd to 1st Ave S
- Howard Gnesen Rd—Ridgeview Rd to Calvary Rd
- Morris Thomas Rd—Haines Rd to Piedmont Ave

MnDOT

- MN Hwy 23—Morgan Park gap
- MN 194—Anderson Rd to Trinity Rd
- US Hwy 2—1st St to Boundary Ave
- US Hwy 53—Trinity Rd to Lavaque Rd
- US Hwy 53—Mall Dr to Miller Trunk Hwy

MnDOT/WISDOT

- Blatnik Bridge—Hammond Ave to Garfield Ave

Recommendation #4—Design the pedestrian network so that walking is easy, safe, and comfortable.

Streets, sidewalks, and crosswalks should be designed to encourage walking by people of all ages and abilities. Applying effective pedestrian design measures to make it easier, safer and more comfortable through can be found through national and state guidance as well as locally by what others in the region has tried. Trying, evaluating, and improving based on lessons learned is recommended approach.

a. Improve the walking environment along streets, providing separated space on collector and arterials streets, and utilizing shared street strategies on local streets.
b. Coordinate providing direct pedestrian connections to adjacent properties and buildings. Pay attention to where major building entrances are located, and where worn paths have formed based on pedestrian desire lines.
c. Add curb ramps where they currently do not exist to major pedestrian facilities at cross streets.
d. Improve pedestrian street crossings—Reduce pedestrian crossing distances as much as possible, which creates less delay for motorists and makes it safer for pedestrians and add crosswalk improvements where pedestrians are crossing frequently, longer crossing times, more responsive pedestrian button feedback loop, midblock crossings in business districts and where the urban form and street role is appropriate.
e. On blocks with steep hills, add handrails, flat resting areas and benches.
f. Preserve pedestrian access when rights-of-way, abandoned rail corridors, and easements are vacated.
g. Install barriers between motor vehicles and pedestrians along collector and arterial roadway bridges when they are reconstructed or undergo significant rehabilitation.
h. Provide lighting along pedestrian ways, particularly in areas where there is limited surrounding ambient lighting, especially in tunnels.

The appeal of pedestrian ways can be improved by:

- Adding buffer space between pedestrians and motor vehicle traffic.
- Planting street trees and vegetation.
- Installing benches and sitting areas.
- Orientating street lighting to pedestrian scale and appropriate brightness levels.
- Incorporating creative placemaking and art into street, transit and pedestrian projects.

Local Examples of applying new (to this region) pedestrian friendly designs:

- The new terminal at the Duluth International Airport has well design separated pedestrian ways, traffic calming features, including a raised table crosswalk at the terminal.
- The City of Superior has been applying a variety of different color paints to help make the crosswalks stand out more to motorists.
- Around the region, the dynamic pedestrian activated crossing signage, the Rectangular Rapid-Flashing Beacon (RRFB) have been installed to help people crossing by providing alert to motorists.

Recommendation #5—Design communities that support safe, easy, and comfortable place for people to walk.

Walkable environments can be created through community design principles and supportive policies. Well-connected pedestrian networks, including shorter blocks that are not too long and a range of buildings and uses in close proximity that make it easy for people to walk for transportation purposes. The following recommendations work to this goal:

a. Work with community partners to conduct a development and zoning code audit on pedestrian-friendliness of existing policies, specifically looking building direct and oriented connections to the pedestrian-way system, pathways to sidewalks, building entrances oriented.
b. Consider the special needs of the anticipated users, children near schools, people with mobility challenges, and people who are more vulnerable to harassment.
c. Add pedestrian walkways along all transit routes and improve transit hubs and stops to be more appealing, through art work, landscaping, lighting, and placing them directly in the activity nodes.
d. Incorporate green stormwater infrastructure as part of pedestrian and street projects.

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Recommendation #6—Maintain pedestrian network to that walking is safe, easy and reliable mode of transportation.

Regular maintenance of pedestrian walkways reduces safety issues and increases use. Keeping sidewalks free from hazards is an important long-term commitment for the safety of those who use them. The Plan recommends to keep existing pedestrian walkways free from hazards.

a. Ensure that sidewalks and crosswalks are rapidly cleared of hazards to ensure ease of system use by all residents.
b. View snow management from a system viewpoint. Establish a winter prioritization network for clearing pedestrian facilities that ensures that the best access is provided to the greatest number of people possible following a heavy storm event.
c. Leverage opportunities through private development, public utilities projects, and major street projects to construct or reconstruct sidewalks and provide improved pedestrian crossings.
d. Provide education to the following on the key role the pedestrian network plays for all and that it must be reliably available to public roadway snow management, private snow management operators, and private property owners.
e. Regularly maintain lighting along pedestrian ways, especially in areas that are dark, such as tunnels and areas away from street lights and also in areas where there are safety concerns.

Recommendation #7—Evaluate and update Pedestrian Plan every 5 years.

As is the case with all planning documents, this Plan will require updates from time to time to remain useful and relevant. It is likely that over the coming years, new and/or revised priorities and strategies will emerge and new iniitiatives and programed will be desired. Therefore, it is recommended that a full review with updates take place every 5 years.

a. Continue to develop, improve, implement and evaluate the pedestrian related plans and programs, including the Safe Routes to School Plans.
b. Monitor autonomous vehicle technology and the possible impacts to pedestrians.
c. Evaluate/education best practice designs for pedestrian safety and comfort.