

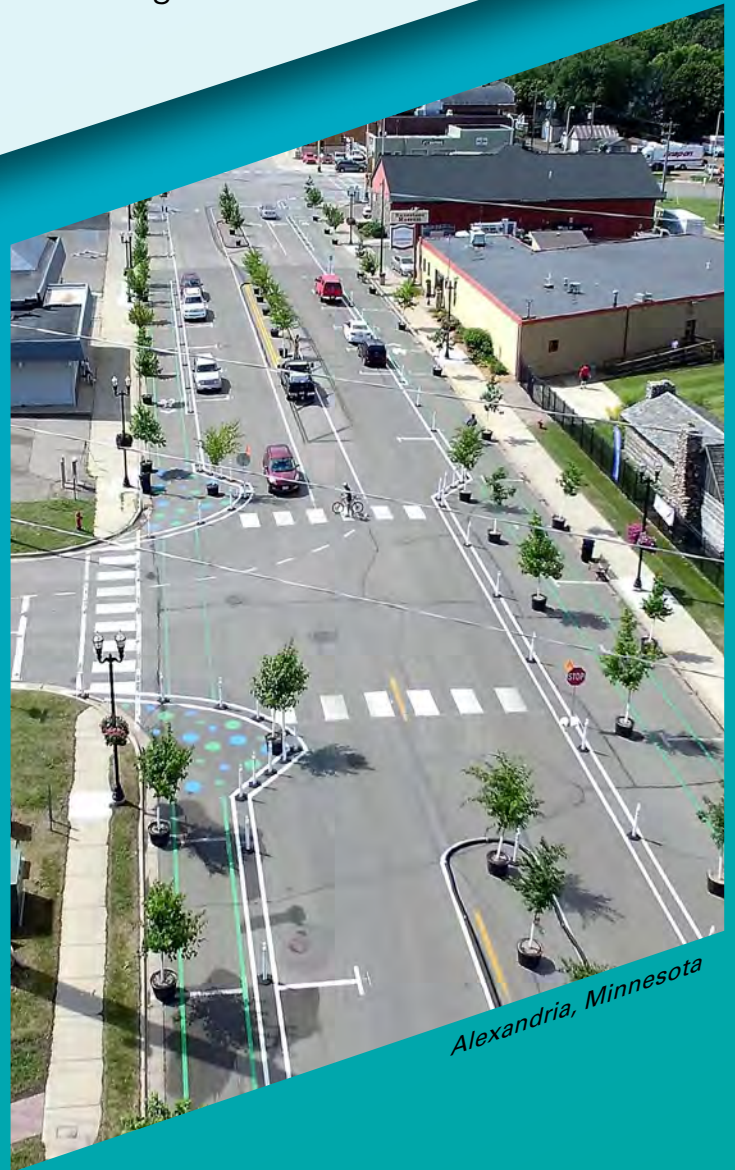
MINNESOTA WALKS

December 2016



A framework for action for creating safe,
convenient and desirable walking and rolling for all.

Minneapolis, Minnesota



Alexandria, Minnesota



*Minnesota Walks is a tool to
create walkable communities
that are safe, convenient
and desirable for all.*

St. Paul, Minnesota

WHAT'S INSIDE

CHAPTER 1 SETTING THE STAGE FOR MINNESOTA WALKS

- 5 WHAT IS WALKING & WHAT DOES WALKING MEAN TO YOU
- 6 WHAT IS MINNESOTA WALKS DEVELOPING MINNESOTA WALKS
- 10 WHO IS MINNESOTA WALKS FOR
- 12 WHY DO WE NEED MINNESOTA WALKS WALKING IS IMPORTANT
- 13 WALKING COULD BE EASIER
- 14 IT'S HARDER FOR SOME PEOPLE TO WALK
- 16 MINNESOTA IS ON TRACK TO IMPROVE WALKING CALL TO ACTION: STEP IT UP! WE CAN DO IT TOGETHER

CHAPTER 2 DESIGN FOR ALL: STRATEGIES FOR A WALKABLE MINNESOTA

- 21 OVERARCHING THEME: DESIGN FOR ALL
 - 22 ROADWAY AND STREET DESIGN
 - 26 LAND USE AND THE BUILT ENVIRONMENT
 - 28 FOSTERING CREATIVITY AND PARTNERSHIPS
 - 30 LISTENING AND PLANNING
 - 34 MINNESOTA WINTER AND YEAR ROUND UPKEEP
 - 36 BUILDING A CULTURE OF WALKING
- 40 WHAT DOES SUCCESS LOOK LIKE
- 47 CASE STUDIES: PEDESTRIAN ENVIRONMENT IMPROVEMENTS

CHAPTER 3 NEXT STEPS FOR MINNESOTA WALKS

- 61 WHAT'S NEXT

READING MINNESOTA WALKS

From a local advocacy organization to a state agency, Minnesota Walks offers concrete ways to build, design and plan walkable communities through policies, programs, projects, processes, partnerships and placemaking at all scales.

- Each theme defines a key part of the overarching theme: Design for all.
- Challenges heard from community engagement are listed on each theme's left page.
- Strategies for addressing challenges heard from community engagement and for creating walkable communities are listed on each section's right-hand page.
- Next to each strategy there is a table that identifies if the strategy could be implemented by local, regional or statewide agencies and organizations.

Challenges and strategies were identified through an extensive community engagement process, a variety of sources, expert advice, research review, and related literature. While not necessarily an exhaustive list, these strategies offer a first look at the physical, social and cultural environment for walking and first steps to be taken as an avenue for change, according to the thousands of people in Minnesota who provided feedback.



December 2016

Minnesotans want and need safe places to walk and roll, whether to get to everyday destinations or for leisure in our state's vibrant communities. Walking is an essential part of our transportation system and an important contributor to the health of our residents.

That's why the Minnesota Department of Transportation and Minnesota Department of Health have enthusiastically collaborated over the past three years to bring you Minnesota Walks, a framework for making walking and rolling safe, convenient and desirable in Minnesota.

An active and robust engagement process informed this framework. We thank the participants of the Pedestrian Advisory Committee for helping shepherd this project forward. We are also grateful for the 6,000 plus unique voices who provided feedback to ensure Minnesota Walks addresses the needs of every person in the state whether they walk or roll in rural, urban or tribal lands.

This framework presents a vision shared by only a handful of states in the country. Minnesota Walks provides a pathway and goals that align with MnDOT's Minnesota GO 50-year vision for transportation, MDH's Obesity Plan and goals set forth in the Advancing Health Equity Report.

Minnesota Walks will serve as a tool for our local, regional and state partners to address the barriers that make walking challenging across the state. We are committed at MnDOT and MDH to ensure that our agencies are removing barriers and supporting strategies identified in this plan.

We expect that our agencies will literally and figuratively "walk the talk" for the rest of the state.

We look forward to continuing this work and engaging with residents to make it easier to walk in Minnesota to benefit the health of everyone and our transportation systems.

Sincerely,



Charles A. Zelle
Commissioner
Minnesota Department of Transportation



Edward P. Ehlinger, MD, MSPH
Commissioner
Minnesota Department of Health



WHAT IS MINNESOTA WALKS

Minnesota Walks was co-led by the Minnesota departments of health and transportation and is the first statewide pedestrian planning framework in the country that includes health as a priority by recognizing the role community transportation designs play in creating health.

It is a statewide framework for creating safe, desirable and convenient places to walk and roll. Minnesota's state departments of health and transportation support the framework's vision of creating a transportation system that meets the needs of all Minnesotans and improves health and well-being by promoting walking and rolling. This framework is intended to guide planning, decision-making and collaboration for government agencies, organizations, policy-makers, and public and private entities across the state.

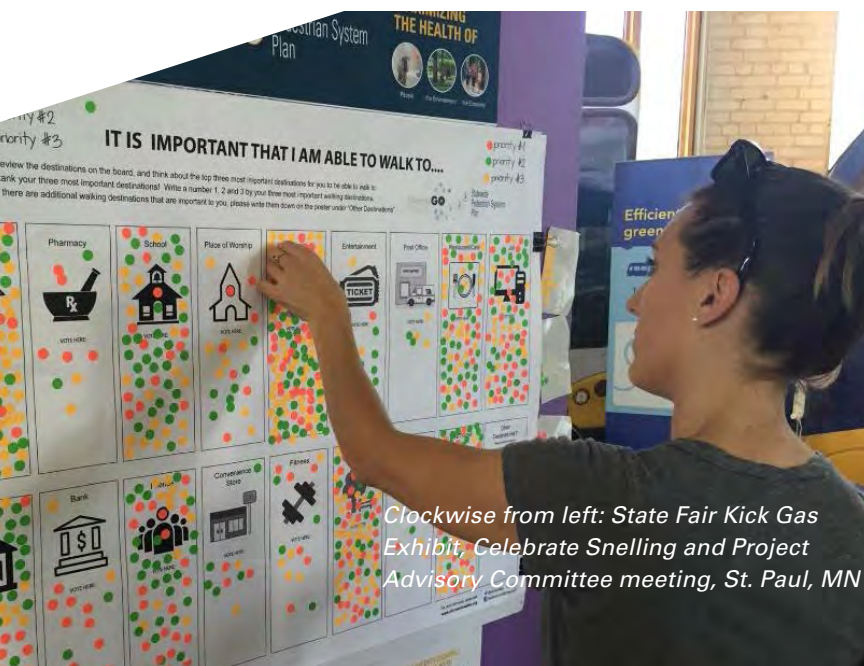
DEVELOPING MINNESOTA WALKS

Thousands of people from communities and organizations all across Minnesota helped develop Minnesota Walks. Minnesotans attended events and meeting. They contributed ideas online and provided leadership by identifying challenges and solutions related to

walking. This framework represents their vision for a walkable Minnesota.

A project advisory committee also spent a year meeting and working on the framework. This committee consisted of 25 members representing various perspectives and fields of interest such as engineering, planning, public health, public safety and design along with community stakeholders (including those experiencing health inequities). A [toolkit](#) was developed to help guide a community input process. This made it easier for community members to voice their desires to improve opportunities for walking. In addition, the framework includes the U.S. Surgeon General's call to action to implement effective strategies for overcoming barriers to safe, convenient and desirable walking.

The result is that Minnesota Walks offers a shared roadmap for how all Minnesotans can have safe, desirable and convenient places to walk and roll. The contents within describe the many challenges and barriers to walking discovered during community engagement, as well as opportunities to enhance walking by implementing strategies at the state, regional and local levels.





PARK(ing) Day
what is it?
9 MPLS nodes

Have
a picnic
with
a view

Falling Up
Chocolate
Candy

WHAT IS MINNESOTA WALKS

WHOM DID WE ENGAGE

- ✓ **People with disabilities**
- ✓ **Communities of color**
- ✓ **Native Americans**
- ✓ **Children and youth**
- ✓ **Older adults**
- ✓ **Small rural communities**
- ✓ **People with low income in urban communities**
- ✓ **Transportation professionals**
- ✓ **Minnesota Walks advisory committee**

1,573

Online Survey Responses

6,000+

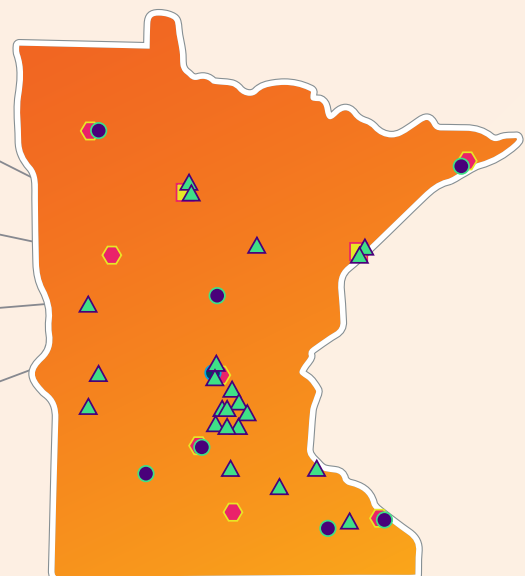
People Engaged

33 Community Gatherings

14 Focus Groups

8 Walking Workshops

2 Teen Workshops



**TOP FIVE
ELEMENTS THAT
CONTRIBUTE TO A
POSITIVE WALKING
EXPERIENCE**

- Other people present**
- Quiet street & low traffic volume**
- Good snow & ice removal**
- Good sidewalks or trails**
- Shade**

**TOP FIVE WALKING
DESTINATIONS**

-  **Grocery**
-  **Bus/Transit**
-  **Home**
-  **Park**
-  **School**

“This information and toolkit are very helpful for some of our local plans within the region. It was a great and fun way to engage community members who would possibly not participate in other traditional outreach settings.”

Jarrett Valdez, Associate Planner, Arrowhead Regional Development Commission

WHO IS MINNESOTA WALKS FOR

There have been many efforts to improve walking conditions in Minnesota, but this document represents the first comprehensive statewide effort to address the needs and challenges of people who walk and roll. The document provides a foundation for future actions and strategies to address walking needs throughout all parts of the state, with a focus on the priority populations identified in [Minnesota Walks: Current & Future Steps Towards a Walkable Minnesota](#).

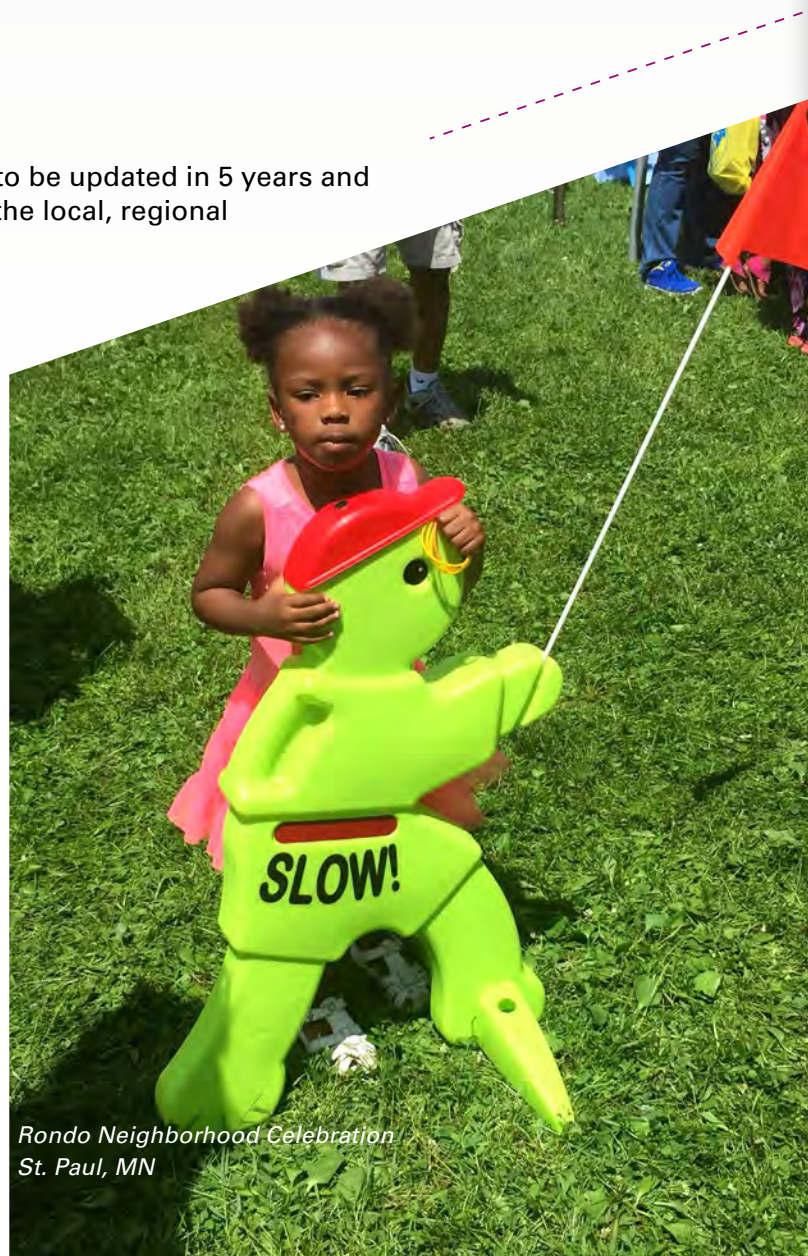
This document will help:

- Engage all of Minnesota on a journey to improve walking for all purposes
- Describe the current perceptions of walking
- Define common language
- Sort out opportunities
- Address walking beyond project need

Minnesota Walks is a framework that is intended to be updated in 5 years and strategies in this document are meant to work at the local, regional and state levels.

Many groups have a role to play in making Minnesota a safe, convenient and desirable state to walk and roll. **We are all pedestrians.** By working together across sectors of society at local, regional and state levels, we can achieve the goals of:

- More people walking
- Improving walking for all purposes
- Healthier people
- Improving accessibility and encouraging connections
- Improving safety
- Stronger communities



*Rondo Neighborhood Celebration
St. Paul, MN*

What partners are needed to help implement Minnesota Walks:

Information is taken from [Step It Up! The U.S. Surgeon General's Call to Action on Walking and Walkable Communities \(PDF\)](#). The data reflects national trends.



Transportation, Land Use and Community Design

This sector includes transportation engineers, transportation and community planners, architects, and other design professionals, as well as members of planning commissions and planning boards.



Parks and Recreational and Fitness Facilities

Evidence shows that people who have more access to green environments, such as parks, tend to walk more than those with limited access.



Volunteer and Nonprofit Organizations

Because of their reach and trusted relationships, these organizations can serve as messengers to share information about the benefits of walking, walking programs and ways to improve walkability.



Schools

There are 54.8 million U.S. students who travel to K-12 schools each day. As community hubs, schools should encourage walking by promoting Safe Routes to School programs and other efforts that contribute to increases in children walking to and from school.



Colleges and Universities

Colleges and universities can promote a walking culture by creating pedestrian-friendly campuses, adopting and implementing policies that support walking, and promoting walking clubs and group events.



Worksites

Almost 150 million U.S. adults participate in the labor force. Many spend a significant amount of the day at their workplace—an average of 7.6 hours on a workday in 2013. Employers can encourage physical activity and walking through many different approaches.



Health Care

Health care professionals include people working in medicine, nursing, chiropractic, social work, mental health, nutrition, occupational therapy, and physical therapy, as well as allied health personnel, such as community health workers. They have a role to play in counseling their patients about physical activity.



Media

Media outlets include mass media (e.g., television, radio, outdoor advertising), small media (e.g., brochures, posters), and social media (e.g., Facebook, Twitter, Pinterest, blogs). Each month 287 million people watch television and 204 million use a computer to access the internet. The media can be effective in influencing attitudes and changing behaviors, including health behaviors.



Public Health

Public health focuses on protecting the health of entire populations and population sectors in locations ranging from local neighborhoods to entire countries and regions of the world.

WHY DO WE NEED MINNESOTA WALKS

Walking is essential for transportation



2.9%

In Minnesota, 2.9 percent of commuters reported walking to work. *ACS, 2014*



7.0%

reported walking combined with biking and taking transit to work. *Bikewalkalliance.org, 2016*



8%

who commute to work reported using transit, walking and other means, according to the 2013 American Community Survey compared to 5 percent nationally.

Walking is good for health

52%

52 percent of Minnesotans meet physical activity recommendations.

62%

Of Minnesota adults that meet aerobic physical activity guidelines, 62 percent do so by including walking as part of their regular physical activity.



Duluth, MN

Walking is good for business

People who live in walkable neighborhoods tend to be familiar with their surroundings, engaged in their community and walk more for day-to-day activities such as trips to the local store and to complete errands.

Walking connects the social, economic and physical environments

Research indicates that 40 percent of community health outcomes are related to features in the local environment. Pedestrian facilities connect people to schools, jobs, recreation, goods and services.

Ross C.E., Mirowsky, J., 2008

WALKING COULD BE EASIER

Several factors affect how easy it is for people to walk in Minnesota, including individual opportunity, what is socially or culturally normal, as well as public policy and the built environment.

1. Demographic trends:

- a) Older adults tend to have more challenges in keeping physically active and populations of color are more likely to be burdened by poverty, which limits their transportation options and necessitates walking as a viable mode of transportation.
 - o The number of Minnesotans who are 65 and older are expected to double from 12 percent to 24 percent between 2000 and 2030.
 - o From 1970 to 2030, the 65 and older group is projected to increase by 220 percent, which is a general population increase of 63 percent.
 - o The percentage of Minnesota's population that is African-American or Latino is projected to rise from 14 percent in 2005 to 25 percent in 2035.
 - o Minnesota has approximately 5.2 million residents. U.S. Census data show an estimated 10 percent of the population identifies as having a disability.
 - o 2015 Biennial Report on Long-Term Services and Supports for People with Disabilities See P.12 <https://www.leg.state.mn.us/docs/2015/mandated/150243.pdf>
 - o Demographic trends are relevant to Minnesota Walks because they identify potential priority areas. For example, older adults often find it more difficult to be physically active. Populations of color are also less likely to be regularly physically active and more likely to have lower household incomes, which may limit transportation options. The changing demographics of Minnesota are important factors to consider when developing goals and strategies for a more walkable Minnesota.

The following factors discuss how walking could be easier:

1. Individual Health and Opportunity

- a) Proximity to places and walking an option, or the only option
When destinations are within one mile, 40 percent of people walk to work, school, shopping and other destinations.
- b) Health status and able to walk
Poor health makes walking to these destinations harder. Generally, obesity and diabetes prevalence increased between 2004 and 2011. Nearly half of Minnesota adults do

not meet physical activity recommendations. The prevalence of inactivity is highest in rural areas, among people of color, older adults, persons with disabilities, those with less education, women and lower-income groups. The decision to walk a feasible distance depends on an individual's health, a identified route and transportation options.

c) Perceived personal safety

Safety concerns can be a barrier to walking. Nationally, pedestrian crashes accounted for 13 percent of fatal crashes between 2008 and 2012. During the same period in Minnesota, pedestrians accounted for approximately 9 percent of fatal crashes. In 2015, there were 911 crashes where at least one pedestrian was injured or killed by a motor vehicle in Minnesota. 41 pedestrians were killed total. In addition, 904 pedestrians were injured. Streets designed and maintained for safe and easy pedestrian travel can decrease safety concerns and crashes.

2. Public Policy and Built Environment (social customs, people walking encourage others to walk and comfortable places to walk)

a) Land use and transportation and connection to street design

b) Auto-oriented places and corridors

Land use and transportation policy impact the built environment. Beginning in the 1950s, federal policies influenced land use patterns and a travel mode shift away from walking and mass transit to an automobile-oriented street design and highway system. Like many other states, Minnesota began to build its highway transportation network during the post-World War II era following the enactment of the Federal Highway Act. The highway system made it feasible for people to move from urban areas into suburban communities. This migration out of cities resulted in a major increase in vehicle miles traveled and changed the character of downtown urban streets with more one-way streets and configurations to allow for quick and efficient movement of people driving motor vehicles in and out of cities. Development patterns influenced by these policies have hindered walking in communities through a lack of sidewalks, comfortable places to walk, meandering/lengthy street patterns, as well as buildings oriented to accommodate people driving such as drive-thru businesses. It has now become a social norm for many people to complete errands solely utilizing their vehicle which has led to the decline of people walking and the decrease in comfortable places to walk and the attributes that create walkable communities.

Public input received during Minnesota Walks community engagement process expressed it was desirable in their community to see the presence of other people walking.

IT'S HARDER FOR SOME PEOPLE TO WALK

Imagine standing in the middle of a four-lane roadway over a solid double yellow line waiting to cross as cars whiz by. The existing transportation system has created an unequal burden of negative impacts on walking. As a result, the ones who suffer most are the disadvantaged populations and communities that rely on walking for everyday needs. Ensuring equal share of the costs and benefits of transportation investments among all populations has been and still is a challenge for transportation planning. *Karner and Niemeier, 2013*

The background document to this tool, [Minnesota Walks: Current & Future Steps Towards a Walkable Minnesota](#), identified priority populations for pedestrian improvements because they are more likely to rely on pedestrian infrastructure. They are: small rural communities, children and youth, Native American populations, people with low-income living in urban communities, older adults, people with disabilities.

SMALL RURAL COMMUNITY POPULATIONS

In rural areas, residents with low-incomes and older adults depend on walking 58-80 percent more than urban residents because they lack alternatives that urban areas may have such as bikeways, transit, taxis or otherwise. *Puncher, 2005*
In addition, communities in rural areas frequently lack land use policies that support the needs of older adults and those with low incomes.

CHILDREN AND YOUTH

Safety while walking to and from school is cited as the highest concern for parents and their children. *Timperio, 2004* This is because of barriers such as high speed roads and a lack of pedestrian infrastructure to guarantee safety. In many places there are no sidewalks or shared use paths connecting homes to schools. Even where crosswalks or other pedestrian infrastructure may exist, they often occur in illogical places, making a trip longer, and children will create their own, more direct "desire paths".
Safe Routes to School, 2015

NATIVE AMERICAN POPULATIONS

Minnesota is home to 11 Tribal Nations. Seven of them are Anishinaabe (Chippewa, Ojibwe) Reservations and four are Dakota (Sioux) Reservations. Ho-Chunk nation also owns lands in Minnesota. Native Americans experience a higher pedestrian fatality rate on reservations compared to other Minnesota rural populations. This is likely because there is little, if any, dedicated pedestrian infrastructure within reservations. People must walk along the roadways and may not have obvious or safe road crossings.

PEOPLE WITH LOW INCOME LIVING IN URBAN COMMUNITIES

Traffic safety, crime and lack of available resources are factors that create barriers for communities of color and low income populations to access street networks. *Cutts, et. all, 2009* In urban networks, low-income and communities of color populations face the consequences of decisions that route highways and other high-traffic roads through their neighborhoods. These choices have created unsafe conditions for walking due to high speeds, limited crossings and dense traffic.

Low-income communities and communities of color are more likely to use public transit, and use walking as their first/last mile connections. However, a lack of safe street crossings or sidewalk access at every bus stop makes the first/last mile hazardous, uncomfortable or difficult for these communities. *Transit for Livable Communities, 2015* Lighting is another important safety factor in low-income urban areas due to a higher likelihood for crime.

OLDER ADULTS

Older adults are faced with many safety concerns when walking in their communities.

Crosswalk signal timing can be too short for the elderly to cross safely at their slower speeds and high traffic speeds pose a greater risk to older adults with slow reaction times to respond in a conflict. *Susman, 2011*

Seniors are also restricted by distance. Traveling and walking may not be a viable option if destinations are not within reasonable walking distance. *Rosenberg, et. all, 2012* Sidewalk clearance and winter maintenance affect senior walkability throughout the year. Seniors are injured 20 percent more in winter due to falls. *Mondor et. all, 2014*

PEOPLE WITH DISABILITIES

Many environmental factors play into a place's walkability for people living with disabilities. Narrow sidewalks and sidewalks that are in disrepair create dangerous situations for people with assisted mobility devices and for people with visual impairments. Curb ramp availability and condition are critical for people in wheelchairs to be able to cross streets.

Rosenberg, et. all, 2012

When roadside snow builds up blocking the crosswalks, people in wheel chairs are forced to travel in the road, creating a hazard for the pedestrians and drivers. Poorly aligned crosswalk ramps makes it hard for blind people to independently cross. *Barlow, Bentzen and Bond, 2005* People who are blind may not be able to find the pedestrian push button and have to wait long periods to cross. Leading pedestrian intervals, which gives pedestrians a head start when entering an intersection, may also pose a risk to blind people because they use the sound of traffic as an indicator, and may start to walk when traffic is not expecting it.

Barlow, Bentzen and Bond, 2005

MINNESOTA IS ON TRACK TO IMPROVE WALKING

CALL TO ACTION: ***STEP IT UP! WE CAN DO IT TOGETHER***

Minnesota Walks was created to support Step It Up! the U.S. Surgeon General's call to action to promote walking and walkable communities

In 2015, Step It Up! the U.S. Surgeon General's call to action to promote walking and walkable communities, recognizes the importance of physical activity for people of all ages and abilities. It calls on Americans to be more physically active through walking and asks the nation to better support walking and walkability. The purpose of the call to action is to increase walking across the United States through improved access to safe and convenient places to walk and wheelchair-roll and by creating a culture that supports these activities for people of all ages and abilities.

The Call to Action includes five strategic goals to promote walking and walkable communities in the United States:

- Make walking a national priority;
- Design communities to make it safe and easy for people of all ages and abilities to walk and roll;
- Promote programs and policies to support walking where people live, learn, work and play;
- Provide information to encourage walking and improve walkability;
- Fill surveillance, research, and evaluation gaps related to walking and walkability.

Multiple sectors of society, as well as families and individuals must act to achieve these goals.

The Minnesota Department of Transportation and Minnesota Department of Health entered an interagency agreement to promote health and are releasing this first statewide document for walking.



Duluth, MN

Minnesota Walks was created to guide people to work together to advance walking and walkable communities. Our health, social and economic well-being depend on it! Here's what you can do to become a Minnesota Walks champion:

READ & SHARE

Go to www.minnesotawalks.org for a copy of Minnesota Walks.

TAKE ACTION

- Join with others to implement Minnesota Walks strategies identified in the following section.
- Contact your local, regional and state elected officials to share the strategies from this resource.
- Walk more!

LISTEN & LEARN

Stay informed about Minnesota Walks by following the hashtag [#mnwalks](https://twitter.com/mnwalks) on social media. Learn about the benefits of walking and take small steps to ensure your own well-being.

MINNESOTA IS ALREADY TAKING ACTION.

Here is what some communities around the state have already done:

ASHBY DEMONSTRATION PILOT PROJECT

Ashby is a city in Grant County, Minnesota with a population of 450. The City and County engineer have partnered to run a two week demonstration on Asby's Main Street. The project area is about four blocks and features bump outs and a mid-block pedestrian crossing.



Ashby, MN

Photo: Horizon SHIP

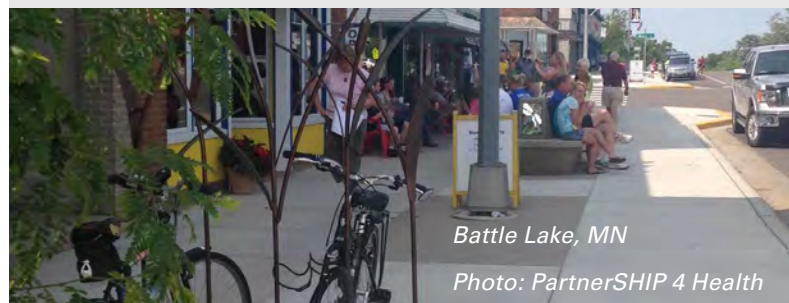
COMPLETE STREET POLICY

These are only a few of many recent communities to adopt Complete Streets policies.

In 2009, Rochester was the first city in Minnesota to pass a Complete Streets policy.

Big Lake passed a Complete Streets policy in 2010 to create transportation corridors that are safe, functional and aesthetically attractive.

Northfield established a Complete Streets policy recognizing that walkable neighborhoods lead more interactions, increased community pride and improved quality of life.



Battle Lake, MN

Photo: PartnerSHIP 4 Health



*University of Minnesota - Twin Cities
Photo Courtesy of Katherine O'Neil*

OVERARCHING THEME: DESIGN FOR ALL

Plan and design streets so that all people are able to safely and comfortably walk or roll to their desired destinations.

Minnesota Walks strategies are divided into the following themes, with Design for All being the overarching goal

- Roadway & street design
- Land use & the built environment
- Fostering creativity & partnerships
- Listening & planning
- Minnesota winter and year round upkeep
- Building a culture of walking

The strategies listed within each of the themes are broken into policies, projects, programs, processes, placemaking, partnerships and building skills. Each strategy is also marked for local, regional or state level action.

- The local level includes individuals, city staff and elected officials, local businesses and organizations, and other entities that operate on a similar local scale.
- The regional level includes county staff and elected officials, metropolitan planning organizations, regional development commissions, community health boards and other entities that operate on a regional scale.
- The state level includes state agencies, statewide businesses and organizations, state elected officials and other entities that operate statewide.

1 Roadway and Street Design

GOALS

Designing walkways is the first priority when planning roadways and streets.

Design roadways and streets to encourage people driving cars to slow down.

CHALLENGES

- Lack of compliance with American Disabilities Act (ADA) guidelines.
- Need for increased training for construction inspectors to ensure ADA compliance.
- Street and roadway designs are not always accessible for people with limited physical mobility and other disabilities such as blindness or vision impairment.
- It is difficult to cross multiple lanes of traffic, especially busy road crossings.
- Busy highway crossings are barriers to walking.
- Highways that pass through town are difficult and potentially dangerous to cross. Specific barriers are short signal crossing times, not enough signalized crossings, fast car speeds and lack of benches.
- Long crossing distances and short signal timing to get across intersections are major barriers for people, especially those who use wheelchairs, other mobility devices, and for seniors.
- Lack of buffer zones between sidewalks and fast moving street traffic.
- Fast vehicle speeds.
- Obstructions along walkways such as light posts and utility poles.
- Lack of public seating on sidewalks and walking paths.
- Many destinations are frequently inaccessible or unfriendly for walking.
- Gaps in sidewalk networks and sidewalks constructed only on one side of the street.



Photo Courtesy of Transit for Livable Communities

STRATEGIES

Projects	Local	Regional	State
1. Design intersections, sidewalks, shared-use paths and crossings to maximize accessibility, safety and comfort for people who walk and roll.	◆	◆	◆
2. Establish specific design standards that go beyond ADA compliance for consistency in signal timing, crosswalk design, wayfinding, signage, connectivity and comfort.	◆	◆	◆
3. The standard for any future development should include sidewalks. Professionals involved in planning and design efforts should have to justify not including sidewalks, instead of the other way around.	◆	◆	◆
Policies	Local	Regional	State
4. Establish a hierarchy of modal planning that prioritizes people walking.	◆	◆	◆
5. Increase and prioritize funding for roadway features such as sidewalk buffers, trees, lighting, benches and other elements that enhance pedestrian safety and comfort.	◆	◆	◆
6. Re-evaluate road design to identify and accommodate lower speeds in areas where current and planned land use is conducive to walking.	◆	◆	◆
7. Prioritize pedestrian improvements in projects where priority populations are present. (See page 14 for description of priority populations)	◆	◆	◆
8. Identify priority networks for walking based on everyday destinations, prevalence of people who rely on walking for transportation and network connectivity.	◆	◆	◆
9. Review the implications of right on red turns and pork chops.			◆
Building Skills	Local	Regional	State
10. Provide technical resources and training around the importance of meeting or surpassing ADA guidelines and provide case studies and visual examples.	◆	◆	◆
11. Integrate best practices for walking infrastructure into established design manuals.			◆
12. Review whether road design standards are supportive of or conflicting with safety needs of people walking.			◆

Roadway and Street Design

(continued)



St. Paul, MN

CHALLENGES cont.

- Concern about children walking safely to school, the park or to a friend's house because they are forced into roadways where there are no sidewalks.
- Discrepancies between design speed and desired speed.
- People are unable to reach push buttons to trigger crosswalk signals due to disability or winter conditions.
- Absence of trees and shade, especially along high speed roadways.
- Transportation professionals may not have the technical knowledge needed to improve the walkability.
- Lack of guidance on the design of crosswalks and crossing islands.
- Lack of statewide direction for prioritizing use of funding for walking infrastructure.

STRATEGIES cont.

Building Skills	Local	Regional	State
13. Develop and adopt level of service ratings for pedestrian infrastructure that incorporate safety, mobility, demand, equity and cost, among other things, into ratings.	◆	◆	◆
14. Enhance the role of enforcement in addressing ADA violations.	◆	◆	◆
15. Continue to provide technical assistance to communities by offering local workshops for engineers, law enforcement, planners, public health practitioners, school administrators, elected officials and advocates around planning and implementing walk friendly designs.	◆	◆	◆
16. Develop an understanding of how highways and county roads can be barriers for walking and strategies to address this issue.	◆	◆	◆

2

Land Use and The Built Environment

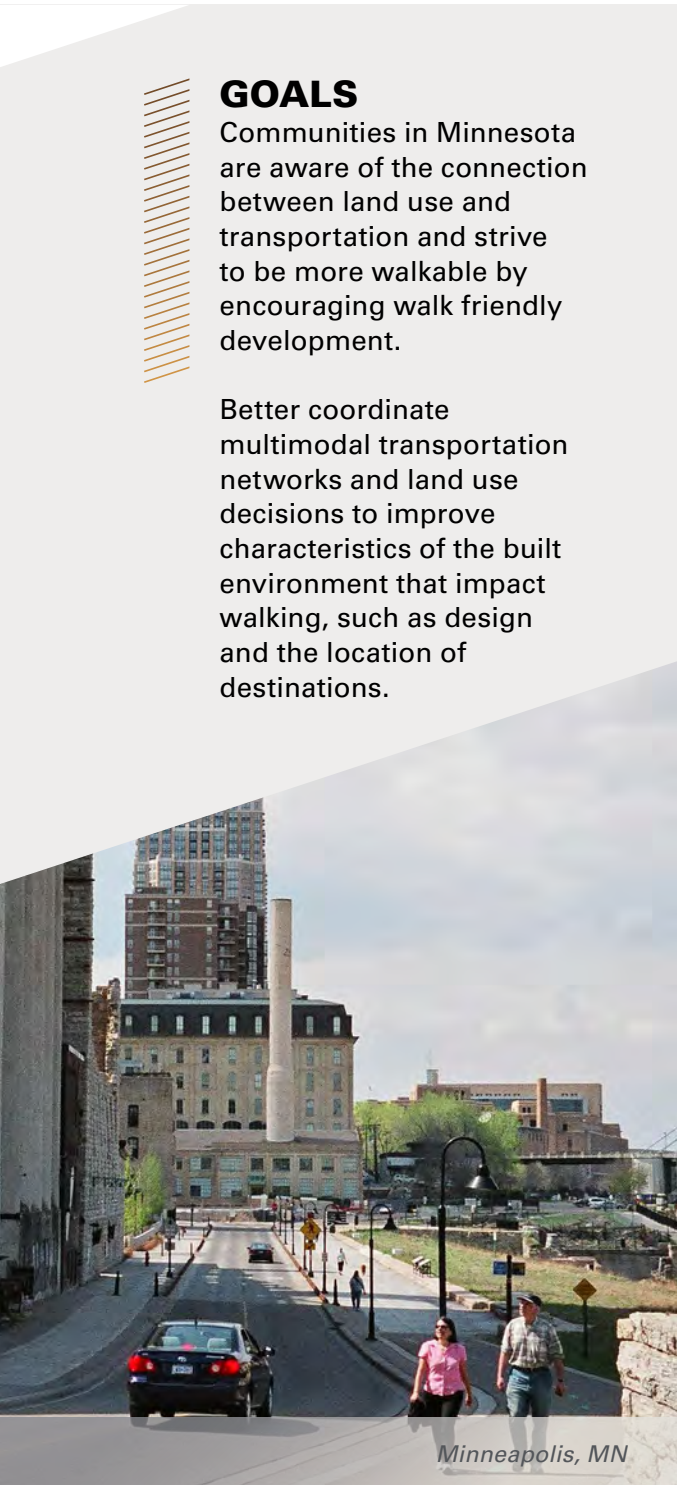
GOALS

Communities in Minnesota are aware of the connection between land use and transportation and strive to be more walkable by encouraging walk friendly development.

Better coordinate multimodal transportation networks and land use decisions to improve characteristics of the built environment that impact walking, such as design and the location of destinations.

CHALLENGES

- Long distances between destinations.
- Schools, worksites and grocery stores located far from residential neighborhoods limits the ability to walk there.
- Inconvenience and unpleasantness of walking from a bus stop to a storefront through and along large parking lots. Parking lots that are in front of buildings give the impression that a space is meant for cars, not for people.
- Transit stops are often at the edge of a parking lot, requiring people to cross through a large asphalt parking lot with no sidewalk to get to the front door of a business.
- Transportation professionals and agencies do not always have a voice in land use matters, even though the two are closely linked.
- Developments near the outside of towns lack connections for people who want to walk along or across the road to reach their destinations.
- Business owners do not always see pedestrian improvements as advantageous to their business interests.
- Students are sometimes required to take the bus to school even when they live within a walkable distance.
- Transit stops are not always located in walkable locations or they are hard or impossible to access for people with disabilities.
- Seniors are forced to move out of their homes when they can no longer drive because their neighborhoods are not conducive to walking.
- People who rely on walking for transportation are often left out of community planning and development processes. Many destinations are frequently inaccessible or unfriendly for walking.



Minneapolis, MN

STRATEGIES

Projects	Local	Regional	State
1. Design development that locates schools, grocery stores, businesses, parks, and other places that people regularly use within walkable distance of each other.	◆	◆	◆
2. Consider how students will be able to walk and bike safely and conveniently to school when siting a new building and address who will pay for construction and maintenance of pedestrian infrastructure.	◆	◆	◆
3. Revise school siting policies so that distances between residential areas and schools are walkable for more students.			◆
4. Adopt community planning, land use, development, and zoning policies and plans that support walking for people of all ages and abilities.	◆	◆	◆
5. Encourage policies that limit busing of students that live within a walkable distance of their school.	◆	◆	◆
6. Consider walkability and access to public transit when selecting new worksite locations.	◆	◆	◆
7. Employers should use policies and incentives to encourage walking and should provide access to facilities, locations and programs to support walking.	◆	◆	◆
8. Encourage local communities with commercial districts to locate parking behind the building to encourage walking between shops.	◆	◆	

Policies	Local	Regional	State
9. Create further restrictions on drive-through establishments, as well as expanded zoning districts that encourage walkable design.	◆		
10. Develop and adopt parking lot standards that account for pedestrian and transit access.	◆	◆	
11. Develop guidelines for access to transit, including bus stop siting, crossings, connecting sidewalks to bus stops, providing the proper amount of sidewalk space at bus shelters and coordinating transit improvements.		◆	◆
12. Support aging-in-place by identifying locations with high senior populations and develop best practices for design and land use patterns.	◆	◆	◆
13. Support safe, efficient, and easy-to-use public transit systems and transit-oriented development.	◆	◆	◆
14. Research land use and urban design guidelines that encourage walkable development in both siting and design.	◆	◆	◆
15. Eliminate minimum parking requirements.	◆	◆	

Process	Local	Regional	State
16. Invest resources in pedestrian environments near frequent destinations that people walk to, such as schools, grocery stores, parks, residential areas, transit stations, restaurants and other entertainment.	◆	◆	◆
17. Invest resources in pedestrian environments in priority population areas where people are more likely to rely on walking for transportation and areas where people experience the greatest health inequities and disparities.	◆	◆	◆

3 Fostering Creativity and Partnerships

GOALS

Develop streets that are vital public spaces that not only serve travel but also foster social and economic activity.

Partners work together across agencies, geographic boundaries and professional fields to find unique, effective and efficient ways to overcome barriers to walking.

CHALLENGES

- Some walking environments are not attractive or inviting.
- There are not always other people walking, which potentially makes spaces feel unsafe or uninviting for walking.
- Discouraging driving is rarely considered for the betterment of the walking environment.
- The walking environment needs to be attractive to draw people out of their cars but improvements to lighting, vegetation and other design elements are often the first to be removed when funding is tight.
- Transportation professionals do not always have the design expertise to include place-making features in walking projects.
- Highways that run through neighborhoods encourage people to go through these areas quickly instead of stopping, lessening the sense of place.
- It can be hard to find Minnesota-specific resources for improving walking.
- Research around walking and transportation is sometimes conducted in silos.
- There are a number of potential partners that are not typically involved in transportation planning discussions, such as law enforcement, local businesses and tourism agencies.



Duluth, MN

STRATEGIES

Placemaking*	Local	Regional	State
1. Implement, support, provide training and encourage place-making for future transportation projects.	◆	◆	◆
2. Implement place-making strategies in neighborhoods that have been negatively impacted by highway development.	◆	◆	◆
3. Explore use of temporary pop-up installations to engage communities around specific projects.	◆	◆	◆
4. Use traffic calming methods and context-sensitive roadway design to reduce speeding.	◆	◆	◆
5. Provide transportation grants for street placemaking.		◆	◆
Projects	Local	Regional	State
6. Investigate and research the viability and potential health, economic and social benefits of capping parts of the highway system around the state wherever a barrier exists.	◆	◆	◆
Building Skills	Local	Regional	State
7. Research and consider creative funding mechanisms, such as cost-sharing between agencies or public-private partnerships, to address pedestrian improvements in public and private projects.	◆	◆	◆
8. Expand educational opportunities around place-making to include state, regional and local agencies and consider holding regional training sessions across the state.	◆	◆	◆
9. Create a resource and knowledge sharing portal for practitioners, professionals and advocates, similar to the Minnesota Safe Routes to School Resource Center.			◆
10. Develop a collaborative research agenda with partners across sectors.	◆	◆	◆
Process	Local	Regional	State
11. Partner with agencies and organizations who are involved in improving personal safety, such as community police models like Bike Cops for Kids.	◆	◆	◆
12. Recreate the model for Safe Routes to School to include other every day destinations such as parks and transit stops.	◆	◆	◆
13. Partner with law enforcement agencies to educate drivers when administering citations for traffic violations.	◆	◆	◆
14. Work with local and regional level partners such as chambers of commerce and tourism organizations to provide funding for programs that address walkability.	◆	◆	

*Placemaking is a hands-on approach for improving a neighborhood, city or region by inspiring community members to reimagine and reinvent public spaces as the heart of every community. pps.org

4 | Listening and Planning

GOALS

Everyone is given opportunities to engage in planning processes, so planning efforts accurately reflect the needs and desires of the community residents.

Integrate walking needs into comprehensive and land use planning, transit planning, safe routes to school, social services, etc. at the local, regional and state levels.

CHALLENGES

- Lack of clarity and communication about how and when to get involved in transportation planning processes.
- Public meetings and online surveys don't reach the people who have limited access to the internet, lack of time, or no knowledge about opportunities to provide input.
- Every community has unique characteristics and values that need to be addressed in all planning processes.
- Poor sidewalk connections for walking and rolling to transit stops.
- Many cities and counties do not have pedestrian plans or other planning efforts that specifically consider walking.
- Data collection systems at local, regional and state levels collect data in different ways, making comparisons difficult.
- Transportation decisions are typically made separately from decisions about community health.
- Transportation efforts are not always coordinated on a regional scale.
- Priority populations often do not have a say in planning efforts that impact their communities.
- People feel like they need to be experts to get involved with planning efforts.
- Lack of guidance and resources for effectively engaging all members of a community in planning efforts.
- Good data are not always available for elected officials and other decision makers.
- People cross streets mid-block if it is convenient, regardless of whether or not there are crosswalks.
- Effective community engagement is time and resource intensive.



Granite Falls, MN

STRATEGIES

Policies and Plans	Local	Regional	State
1. Cities and counties should develop and adopt local pedestrian plans or incorporate pedestrian recommendations within master plans, comprehensive plans or other planning processes.	◆	◆	
2. Implement a “Health in All Policies” approach where health is incorporated into all aspects of decision-making and planning across all sectors, especially transportation.	◆	◆	◆
3. Include access to healthy foods as an important component of local governments’ overall infrastructure and transportation planning.	◆	◆	◆
4. Cities and counties should adopt Complete Streets policies.	◆	◆	
5. Good connected networks where people can choose to make short community trips as referred to in Minnesota’s Olmstead Plan .			◆
Community engagement tools and Partnerships	Local	Regional	State
6. Coordinate regional meetings to look at upcoming projects and potential alignment of projects between local, regional and state entities.		◆	◆
7. Continue to engage and build relationships with priority populations and partners in meaningful conversations about the transportation system, built environment and health of communities.	◆	◆	◆
8. Provide meals, child care, interpreters and other services at public meetings and open houses.	◆	◆	◆
9. Use plain language when engaging communities.	◆	◆	◆
10. Improve transparency in project and planning processes at the state, regional and local levels and encourage community partners and individuals to engage early in the process.	◆	◆	◆
11. Transportation planners and project managers should bring the meeting to the people, host open houses at community gatherings, use other innovative community engagement strategies to educate people about the long timeline of projects and when to get involved.	◆	◆	◆
12. Use walking audits to engage community members and practitioners.	◆	◆	◆
13. Modify the engagement toolkit used for Minnesota Walks and make it available for local use.			◆
14. Use a wide range of community engagement techniques and strategies to increase project visibility and expand engagement opportunities.			◆

Listening and Planning

(continued)



STRATEGIES cont.

Technical Assistance	Local	Regional	State
14. Provide guidance and recommendations on the development and implementation of local pedestrian plans.		◆	◆
15. Provide funding to communities to develop pedestrian plans.		◆	◆
16. Establish a main street revitalization program that focuses on creating walkable downtowns in communities where main streets are highways.			◆
Building Skills	Local	Regional	State
17. Expand and standardize data collection capacity involving crash data, sidewalk inventories and pedestrian count programs.	◆	◆	◆
18. Expand awareness of ongoing data collection efforts for local, regional and state organizations. Provide training around these efforts for the purpose of coordinating with local and regional partners.	◆	◆	◆
19. Research regional and local partnerships in Minnesota that are successful in community engagement, planning and design and provide these as best practices examples.			◆
20. Develop and use feasible surveillance tools and methods to measure support for walking in various settings, such as the community, worksites, and schools and expand their use in health, transportation and other relevant surveillance systems.	◆	◆	◆
21. Make user-friendly data easily available to decision makers.	◆	◆	◆
22. Develop, improve, and use tools, such as audit tools, health impact assessments and economic assessments to enhance planning and evaluation processes.	◆	◆	◆
23. When planning streets, look for areas where people are consistently crossing mid-block and use that information to design crossings to accommodate the need.	◆	◆	

5

Minnesota Winter and Year Round Upkeep

GOALS

Maintain year round walking infrastructures by ensuring necessary repairs and clearing snow and ice in a timely fashion.

People of all ages and abilities are able to walk in their communities year round without suffering mobility limitations from weather conditions or degraded infrastructure.

CHALLENGES

- Sidewalks and pathways that are not properly cleared of snow and ice in winter months.
- Clear sidewalks receive lower priority compared to roads, even though many people do not drive.
- Sidewalks and pathways are not maintained in timely schedule, leading to cracks, uneven ground and other issues.
- Inconsistent snow removal practices make it harder to report issues to the responsible party.
- Sidewalks are part of the right of way, yet it is the only part of the transportation system that adjacent property owners typically need to fund and regularly maintain.
- Cost of installation and replacement, and responsibility of sidewalk maintenance often falls on adjacent property owners.
- Adopting maintenance plan to decide who will pay for maintaining infrastructure can be a barrier to building sidewalks in the first place.
- Some people are unable to clear their own sidewalks of snow and ice or do not have the time for reasons such as being a single parent, working multiple jobs or other constraints.
- Many communities do not enforce snow removal policies.
- Around many construction sites, signs and other barriers on the sidewalk limit walking access and temporary ADA compliant alternatives are often lacking.
- Snow is often piled around crosswalk buttons and transit stops.
- It can be difficult to alert public officials of unclear walkways and uneven pavement conditions.



Highway 61, MN

STRATEGIES

Policies	Local	Regional	State
1. Consider an approach to sidewalk maintenance that requires towns and cities to clear snow and ice from roads, bridges and sidewalks and also requires sidewalks and public roads to be maintained by municipalities at no additional cost to adjacent land owners.	◆		
2. Allocate funding for sidewalk snow plowing equipment, labor and training opportunities.	◆	◆	◆
3. Have a maintenance plan in place that identifies who is responsible for maintenance and accounts for cost, timing and partners before a project is completed.	◆	◆	
4. Enact snow removal practices and policies that treats sidewalks and roads equally, allowing pedestrians full access to all sidewalks, crosswalks buttons, transit stops and destinations.	◆	◆	
5. Establish and enforce policies to maintain pedestrian access during construction projects.	◆	◆	
Programs	Local	Regional	State
6. Create a hotline for people to submit maintenance issues such as broken sidewalk panels, overgrown vegetation and snow and ice removal. Incorporate technology that allows people to submit photos of problem areas.	◆		
7. Establish a hierarchy of modal planning that prioritizes people walking.	◆	◆	◆
8. Provide alternative snow and ice clearance options, such as a volunteer service, for people who do not have the time, money or physical ability to do it themselves.	◆		
Process	Local	Regional	State
9. Investigate the effectiveness of local enforcement and communication around requiring adjacent property owners to clear snow and ice.	◆	◆	◆
10. Compile a list of best practices, policies and methodologies for prioritizing snow clearance on sidewalks.			◆
11. Develop priority walking routes to identify funding priorities for maintenance activities such as pavement preservation, snow and ice removal, and other activities that contribute to the accessibility of sidewalks.	◆	◆	

6

Building a Culture of Walking

GOALS

Walking for transportation and recreation is integrated into the culture of all Minnesota communities and people who walk are treated with respect and not seen as second class citizens.

Communities and elected officials understand and promote the many benefits of making walking safe, convenient and desirable for all.

CHALLENGES

- Laws requiring drivers to stop for people walking in crosswalks are not always understood, followed or enforced.
- Roadway design including large turning radii, channelized turn lanes, and more allow drivers to make turns at high speeds.
- Distracted driving.
- People walking often feel a sense of invisibility to drivers.
- Personal safety issues stemming from lack of lighting and areas with a lack of presence of other people.
- People who walk for necessity may experience poor conditions in areas where they regularly walk to jobs, grocery stores, transit stops or other places, but they still walk there because they have no other means of transportation.
- Lack of organized pedestrian advocacy on a statewide level and in individual communities to highlight desires for walkable communities.
- Lack of funding and resources allocated to pedestrian improvements and maintenance.
- Pedestrians are often thought of and treated as second class citizens.



Rondo Days, St. Paul, MN Photo
Courtesy of Toole Design Group

STRATEGIES

Partnerships and Coordination

	Local	Regional	State
1. Create a Pedestrian Task Force and provide necessary tools to carry out implementation of the strategies within this plan and to coordinate walking-related efforts across the state.			◆
2. Collaborate with driver education organizations and individuals to address driver behavior and pedestrian safety curriculum.	◆	◆	◆
3. Coordinate with local, regional and state tourism agencies and organizations to promote and highlight walk-friendly communities in Minnesota.	◆	◆	◆
4. Explore opportunities to better coordinate and leverage resources for walking.	◆	◆	◆
5. Explore partnerships with youth serving organizations and programs to address safety concerns about walking in a multi-generational way.	◆	◆	◆
6. Form pedestrian advocacy groups to encourage communities to be more walk friendly.	◆	◆	◆
7. Align state, regional and local efforts with national efforts that already support walking, physical activity, and improved places to walk and be active, including the National Physical Activity Plan, Designed to Move, Partnership for Active Transportation, Convergence Partnership, Every Body Walk!, and the Surgeon General’s Report: A Call to Action to Support Walking.	◆	◆	◆
8. Add measures of walkability to state and local surveillance systems.	◆	◆	◆

Programs

	Local	Regional	State
9. Increase awareness, visibility and effectiveness of “Toward Zero Deaths” with a stronger emphasis on people walking.			◆
10. Apply for a Walk Friendly Communities designation.	◆		
11. Provide technical assistance to communities to help them complete the Walk Friendly Community application.		◆	◆
12. Generate public education and awareness campaigns to promote walking and walkability and link these campaigns with other activities meant to increase walking.	◆	◆	◆
13. Create consistent statewide pedestrian safety messages for communities and organizations, targeted at people who walk and people who drive.			◆
14. Educate pedestrians about how to walk safely and the risks of alcohol-impaired and distracted walking.	◆	◆	
15. Encourage local law enforcement to patrol by foot in communities.	◆	◆	◆
16. Mobilize cleanup efforts to make places where people walk safe and attractive.	◆	◆	◆
17. Link organizations and programs to ensure that underserved groups and people with disabilities have opportunities to walk.	◆	◆	◆

Building a Culture of Walking

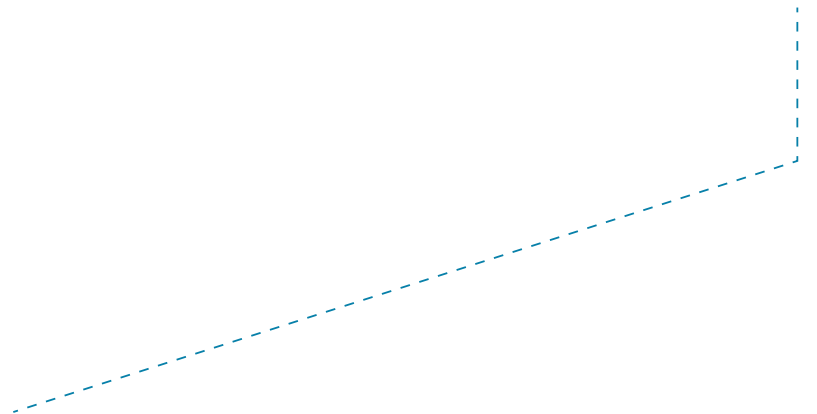
(continued)



Stillwater, MN

CHALLENGES cont.

- Lack of tools and resources that could be used for quantifying the benefits of investment in pedestrian infrastructure, identifying the top investment priorities (by type and location), and a summary and collection of research on effective walking treatments and amenities.
- Health care has a stronger focus on treatment rather than prevention through healthy community design.
- Walking mode share is not tracked as closely as automobile mode share.
- Transportation safety campaigns tend to focus on people who drive cars.
- There are not enough examples of communities in Minnesota that have benefited economically from becoming more walkable.



STRATEGIES cont.

Programs (continued)	Local	Regional	State
18. Support crime and violence prevention through environmental design and maintenance.	◆	◆	◆
19. Encourage walking opportunities for students and staff as part of the regular and extended day in schools.	◆		
20. Make gyms, fields, and tracks available before, during, and after school for students and staff and encourage their use through activities such as walking and fitness clubs or other school-related events.	◆	◆	
21. Offer evidence-based walking programs that are free or low cost.		◆	◆
22. Set up walking groups, buddy systems, and other forms of social support for walking that provide multiple opportunities to walk each week.	◆		
23. Provide signs and maps to help people find safe places to walk and provide information on accessibility for people with mobility or other limitations.	◆	◆	
Building Skills	Local	Regional	State
24. Research and provide materials with return on investment information to showcase the benefit of pedestrian-related projects in Minnesota.		◆	◆
25. Encourage partnerships across agencies and organizations to create road safety education that has a broader reach in terms of content and audience.	◆	◆	◆
26. Explore differences between Minnesota's Towards Zero Deaths campaign and other states, regions and cities with similar efforts, such as Vision Zero.	◆	◆	◆
27. Encourage health care professionals to offer physical activity counseling to their patients, with a focus on walking as the most accessible and popular form of exercise.		◆	◆
28. Provide training to administrators and classroom teachers on ways to incorporate walking throughout the school day.		◆	◆
29. Offer continuing education opportunities that promote walking and walkability for relevant professionals.			◆
30. Replicate the model of the ' Stop for Me ' campaign and provide educational opportunities to city attorney offices, hearing officers and judges on what the law says and include them in events that raise driver education and awareness.	◆	◆	
31. Use of Walk! Bike! Fun! and Safe Routes to School planning to educate and encourage students and parents about walking and biking to school.	◆		

WHAT DOES SUCCESS LOOK LIKE

Success can be measured at various levels - local, regional and state. This chapter offers a number of measures to help track progress towards reaching the goals outlined in Minnesota Walks.



More people walking

Walking is important to the everyday lives of people in Minnesota and has numerous benefits, from individual health to economic development for a community. Improved walkability can decrease the risk of injuries and health conditions and improve air quality.

Pedestrians on Shared-use Paths and Sidewalks

Measure: Annual average daily pedestrian (AADP) traffic volumes at permanent index monitoring sites statewide.

Current: The Minnesota Department of Transportation is establishing a network of permanent automated traffic monitoring sites on shared use paths in each MnDOT District. Although data from these sites will not be representative of pedestrians traffic on all sidewalks or paths in Minnesota, these data provide useful examples of pedestrian traffic volumes and patterns on shared use paths and how patterns and volumes change over time.

Walking commuters

Measure: Percent of commuters who primarily walk to work.

Current: 2.8% *American Community Survey*

Walking frequency

Measure: Percent of Minnesotans who walked outside in their community for more than 10 minutes at a time at least daily

Current: This is new to the 2016 MnDOT Omnibus Survey so baseline data is not yet available.

Adults who walk for transportation, fun or exercise went up 6 percent in 5 years.

<http://www.cdc.gov/vitalsigns/walking/>

Improving walking for all purposes

Walking, whether for leisure, recreation or transportation, improves health and our social, economic and built environment. Many people depend on modes of travel other than driving, whether due to age, disability, economic circumstances or personal preference. Providing adequate pedestrian facilities is essential to ensure people can walk safely and conveniently to their destinations.

Share of sidewalks meeting specified levels of service

Measure: Share of sidewalk system meeting levels of service A-D, E, and F via the 2010 Highway Capacity Manual's bicycle and pedestrian level of service evaluations, which quantify perceived safety and comfort based on geometric and traffic conditions.

Current: Data is not currently available for this indicator at a statewide level. However, in the northeast part of the state the Arrowhead Development Commission conducted a full sidewalk inventory of all the cities within their region. This model could be replicated across the state.

Number of municipalities and campuses designated as Walk Friendly Communities

Measure: Cities, businesses, and universities designated as Walk Friendly Communities by the Highway Safety Research Center.

Current:

- Minneapolis, Gold
- Rochester, Bronze
- Grand Marais, Honorable Mention
- Grand Rapids, Honorable Mention

“Over a ten-year period, the percent of trips in Minnesota made by walking increased by 44 percent, from 4.5 percent of trips in 2000 to 6.6 percent of trips in 2010.”

“We estimate about 12 million daily trips across the metro area, which means that on an average day people are making 190,000 bike trips and 735,000 walking trips.”

www.cts.umn.edu/publications/catalyst/2015/may/bikingandwalking

Healthier people

Walking is the most common and accessible form of physical activity. Improving the walkability of Minnesota's transportation system in communities also means improving the health of Minnesotans. Regular physical activity reduces the risk of many chronic diseases, including cardiovascular disease, diabetes and some cancers. Just 10 minutes of brisk walking has cardiovascular benefits. Walking has also been shown to lead to improved mental well-being and reductions in rates of depression and feelings of isolation.

Physical Inactivity-related chronic disease

Measure: Percentage of residents with physical inactivity-related chronic disease.

Current: 7.4 percent of adults in Minnesota have diabetes; 3.8 percent of adults in Minnesota reported having had a heart attack in their lifetime - more than 150,000 people (2014). More than 18 percent of all deaths in Minnesota are due to heart disease.

Physical activity from transportation

Measure: Percentage of all trips at least 10 minutes long that are made by foot or by bicycle.

Current: 12.11 percent

Walking is the most popular aerobic physical activity. About 6 in 10 adults reported walking for at least 10 minutes in the previous week.

<http://www.cdc.gov/vitalsigns/walking/>

According to the Center for Disease Control and Prevention (CDC), more than 2,600 Americans die every day from some form of cardiovascular disease, costing over \$300 billion in health expenditures and lost productivity. Cardiovascular disease is the leading cause of death in the U.S., with diabetes ranking 7th.

http://www.pedbikeinfo.org/data/factsheet_health.cfm

Improving accessibility and encouraging connections

Minnesota is working hard to make sure that the transportation system is compliant with ADA standards. This is important, but we also need to push beyond ADA compliance to identify and fill critical walking connections that are missing in local networks.

MnDOT and many city and county transportation agencies across Minnesota monitor their own ADA compliance rates, however, that data is not currently gathered into one place to provide statewide information. Here are some measures that would be helpful to track on a statewide basis:

Sidewalk ADA compliance

Measure: Percent of sidewalks meeting 2010 ADA Standard and Public Right of Way (PROW) guidance.

APS signal ADA compliance

Measure: Percent of eligible intersections with accessible pedestrian signals (APS) installed.

ADA remediation efforts

Measure: Percent of existing facilities brought into compliance with ADA requirements annually.

Percent of urban roadway miles with walking facilities

Measure: Percent of roadway miles with adjacent sidewalks or shared-use paths within urban context zones.

Percent reduction in sidewalk gaps along priority corridors

Measure: Percent reduction in sidewalk gaps along priority corridors.

Access to walking facilities near transit stops

Measure: Percent of streets within one-half mile of transit stop that have sidewalks.



St. Paul, MN

Improving safety

People who walk are the most vulnerable users of the transportation system. Many factors impact the possibility and severity of pedestrian crashes, including roadway design and surrounding environment, weather conditions, lighting, time of day and speed. To encourage more people walking we need to create safe places for people to walk along and across roadways.

Number of pedestrian-vehicle crashes, fatalities, and serious injuries

Measure: Annual number of pedestrian-vehicle crashes, fatalities and serious injuries.

Current: 911 pedestrian crashes, 41 pedestrians killed and 904 pedestrians injured, (2015).

Perception of pedestrian safety

Measure: Percent of Minnesotans who perceived their community as safe (somewhat safe or very safe) for pedestrians.

Current: 2016 MnDOT Omnibus Survey

A pedestrian struck by a vehicle traveling 40 mph has an 85 percent chance of being killed while a pedestrian struck by a vehicle traveling at 20 mph has only a 5 percent chance of being killed.

Stronger communities

The average household cost to own and operate one car in the U.S. is \$9,000 per year – walkable neighborhoods allow families to own fewer cars and save money. <http://americawalks.org/learning-center/benefits-of-walking-2/economy/>

Increase in retail sales at locally-based businesses

Measure: Sales tax receipts, commercial vacancies, number of visitors

Current: Although this measure is not feasible at a state level, it is encouraged for local entities

Walk Score

Measure: Walk Score rating at local and regional level. Decrease in percent of households owning less than 1 vehicle

**Additional performance measures can be found in the FHWA [Guidebook for Developing Pedestrian & Bicycle Performance Measures](#), March 2016.*

In 2013, 16.4 percent of adults had some type of disability, including cognitive, mobility, vision, self-care, or independent living disability.

<http://dhds.cdc.gov/profiles/profile?profileId=25&geoTypeId=1&geolds=27>



*Move and Make on Main!
Shakopee, MN*



CASE STUDIES:

PEDESTRIAN ENVIRONMENT IMPROVEMENTS

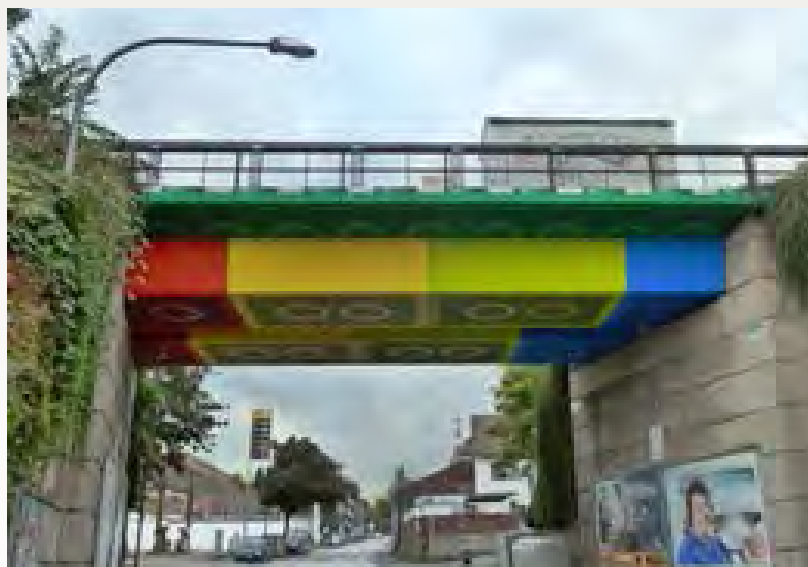
Many communities and organizations around Minnesota are already taking great strides toward creating walkable environments. This chapter offers some creative ideas on how to approach the strategies proposed showcasing both local and international examples.



ESTABLISH A HIERARCHY OF MODAL PLANNING THAT PRIORITIZES PEOPLE WALKING.

Minneapolis just passed complete streets policy

The City establishes a modal priority framework that prioritizes people as they walk, bicycle and take transit over people when they drive. The modal priority framework will inform city transportation related decision-making.



IMPLEMENT PLACEMAKING STRATEGIES IN NEIGHBORHOODS THAT HAVE BEEN IMPACTED BY HIGHWAY DEVELOPMENT.

Lego Bridge

In 2011, artist Martin Heuwold was inspired to paint one of the bridges along Germany's Wuppertal Northern Railway, which had been decommissioned in 1991.

EXPLORE USE OF TEMPORARY POP-UP INSTALLATIONS TO ENGAGE COMMUNITIES AROUND SPECIFIC PROJECTS.

Live Healthy Red Wing worked with the City of Red Wing staff to showcase a temporary crosswalk using:

- Reflective tape and planters with evergreens to create a sidewalk extension that helps pedestrians and drivers see each other more easily
- Increasing visibility and safety
- Chalkboard for instant comments – would you like something more permanent here in the future or not
- Information sign explaining pilot project





TEST/USE/IMPLEMENT CREATIVE TRAFFIC CALMING METHODS TO SLOW DOWN THE SPEED OF THE STREET.

Working with the City of Alexandria, Horizon Public Health created a demonstration project in an area known as the “Missing Link” to install temporary street markings for pedestrian-friendly bump-outs, bike lanes on both sides of the street, parking spaces and pedestrian sidewalks.

The demonstration project also included potted trees, other plants and temporary bollards to give a real-time view of the project and how it would function for vehicle and bicycle traffic coming from the Central Lakes Trail to the downtown area.

CONSIDER AN APPROACH TO SIDEWALK MAINTENANCE THAT REQUIRES TOWNS AND CITIES TO CLEAR SNOW AND ICE

FROM ROADS, BRIDGES AND SIDEWALKS
AND ALSO REQUIRES SIDEWALKS AND
PUBLIC ROADS TO BE MAINTAINED BY
MUNICIPALITIES AT NO ADDITIONAL
COST TO ADJACENT LAND OWNERS.

This is New Hampshire's policy. Similarly, the City of Richfield, Minnesota plows all city-owned sidewalks and parking lots. Roseville, Minnesota also has a similar policy to New Hampshire.

PROVIDE GUIDANCE AND RECOMMENDATIONS TO DEVELOP AND IMPLEMENT LOCAL PEDESTRIAN PLANS.

Kentucky created detailed [guidance](#) for communities to develop a pedestrian plan. The guidance includes a list of sound steps from engaging groups of beneficiaries, identifying potential projects in focus area, assessing feasibility, to obtaining approval by local officials.



SHOVEL DILWORTH

Let's keep our walkways clear this winter.

- Shovel a neighbor's sidewalk
- Sidewalks used by youth to get to school
- A MATBUS stop
- A fire hydrant
- Or any neglected sidewalk

The Dilworth Active Living Committee and PartnerSHIP 4 Health are looking for warm-hearted volunteers willing to adopt a sidewalk, shovel a neighbor's walkway, or offer assistance. Help shovel for:

- 1) A chance to win a cash prize
- 2) Community support
- 3) Good karma



We Serve

Care to volunteer? Want to adopt a sidewalk or help a neighbor? Call Will Mackaman at **218-299-7839** or register yourself through our Eventbrite link at <https://www.eventbrite.com/e/shovel-dilworth-tickets-14949751108> for a chance to win a \$25 gift card generously donated by the Dilworth Lions Club and the Dilworth Park Board.

ENCOURAGE COMMUNITIES TO PROVIDE SNOW AND ICE CLEARANCE OPTIONS, SUCH AS A VOLUNTEER SERVICE, FOR PEOPLE THAT DO NOT HAVE THE TIME, MONEY OR PHYSICAL ABILITY.

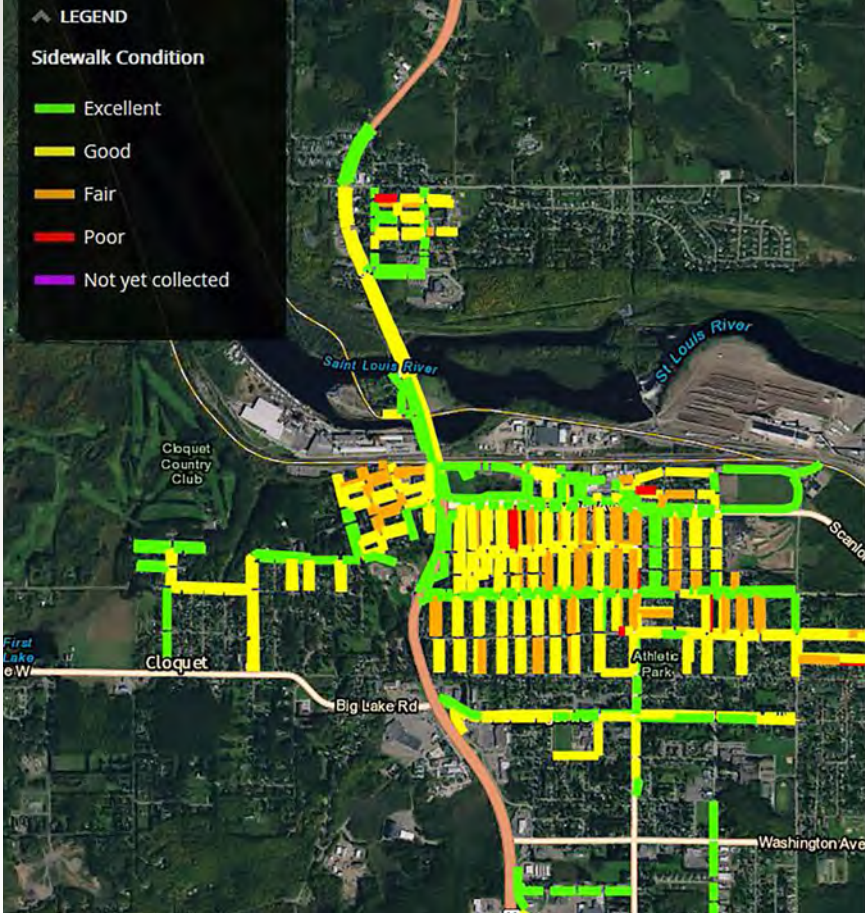
Shovel Dilworth is a campaign run by the City of Dilworth, Minnesota, GreenCorps, and PartnerSHIP 4 Health to encourage shoveling sidewalks, being physically active in the wintertime, and Good Samaritan behavior. In an interview with Fargo-Moorhead KVRR, Mayor of Dilworth Chad Olson said, "It is a way to not only help out your neighbor but help the greater community, in terms of allowing students a safer route to get to school." The Dilworth Glyndon Felton National Honor Society and Dilworth Boy Scouts produced youth group volunteers over the winter. Other Dilworth residents were encouraged to participate with the possibility of winning a \$25 gift card at the end of the campaign.

INCLUDE HEALTHY FOOD ACCESS AS AN IMPORTANT COMPONENT OF LOCAL GOVERNMENTS' OVERALL INFRASTRUCTURE AND TRANSPORTATION PLANNING.



Thousands of Minnesotans helped develop the Minnesota Food Charter. This publicly created document is a shared roadmap for how all Minnesotans can have reliable access to healthy, affordable and safe food in the places they work learn, live and play. Public input identified five priorities for improvement. Food accessibility is one priority. Minnesotans asked that healthy food be easy to obtain at a manageable distance from home or work, using affordable and convenient personal or public transportation. They identified several changes that are needed to make this a reality such as the “inclusion of food access as an important component of local governments overall infrastructure and transportation planning” and maintaining sidewalks and other pedestrian friendly resources to provide access to stores, hunger relief programs, farmers markets, community gardens and other food sources.

www.mnfoodcharter.com



Sidewalks in the Arrowhead Region

Cloquet Sidewalk Conditions

Totals:
205,663 feet of sidewalk (39 miles)

63,683 feet of **Excellent** sidewalk (31%)
105,793 feet of **Good** sidewalk (51%)
33,086 feet of **Fair** sidewalk (16%)
3,100 feet of **Poor** sidewalk (2%)

EXPAND AND STANDARDIZE DATA COLLECTION CAPACITY INVOLVING CRASH DATA, SIDEWALK INVENTORY AND COUNT PROGRAMS.

The Regional Sidewalk Inventory has been established to serve as a universal database of sidewalk information that is easily accessible and available for anyone to use that is curious about their community’s sidewalk conditions. ARDC has taken inventory of 19 cities and towns within NE Minnesota’s Arrowhead Region – including all major cities in Carlton County and Iron Range cities. The ARDC collected existing sidewalk conditions data to identify features including areas that require improvement and to close missing connections. This inventory will lend useful data for projects that concern sidewalk connectivity such as Safe Routes to School, public utilities work, comprehensive plans, and general sidewalk improvements.

PROVIDE PUBLIC EDUCATION AND AWARENESS CAMPAIGNS TO PROMOTE WALKING AND WALKABILITY AND LINK THESE CAMPAIGNS WITH OTHER ACTIVITIES MEANT TO INCREASE WALKING.



Use encouragement campaigns to increase walking, such as Walk and Bike to School Day. International Walk to School Day began in 1997 as a one day event intended to remind parents, children, community members and elected officials of the joys of walking in and around their neighborhoods. Most communities extend it beyond the one day, leveraging momentum to launch programs, advance infrastructure and create community through other Safe Routes to School improvements.

STOP FOR ME

EVERY CORNER • EVERY TIME

REPLICATE THE MODEL OF THE 'STOP FOR ME' CAMPAIGN AND PROVIDE EDUCATIONAL OPPORTUNITIES TO CITY ATTORNEY OFFICES, HEARING OFFICERS AND JUDGES ON WHAT THE LAW SAYS AND INCLUDE THEM IN EVENTS THAT RAISE DRIVER EDUCATION AND AWARENESS.

Stop For Me is a year-long campaign to improve safety for people who use St. Paul's sidewalks and cross our streets. The campaign is organized by St. Paul's 17 district councils, St. Paul Smart Trips and the St. Paul Police. Pedestrians are 10 times more likely to die in a collision with a car than drivers or passengers are likely to die in a collision between two cars. In 2015, 40 pedestrians died in Minnesota after being hit by a motor vehicle; 900 were injured. In January 2016 alone, police statistics show, 22 pedestrians were hit on St. Paul streets. To reverse this trend, Stop for Me intends to:

- Engage drivers and pedestrians to be more aware at intersections, crosswalks and parking lots
- Educate drivers that stopping for pedestrians is both common courtesy and the law
- Enforce the law when necessary

WHAT'S NEXT



FUTURE STEPS & IMPLEMENTATION

The Minnesota Department of Health and Minnesota Department of Transportation co-lead the process to create Minnesota Walks by conducting background research, assembling a project advisory committee of statewide partners, conducting extensive community engagement, and by producing this document. These two agencies will continue to lead this effort as we begin to implement the action items from Minnesota Walks. That said, throughout developing Minnesota Walks we relied heavily on partners and hope they are ready and willing to continue this effort with us. If we did our job correctly, then the general public and our partners throughout the state will recognize shared concerns and priorities for action within Minnesota Walks.

For the Minnesota Department of Transportation specifically, the next step is to create a MnDOT specific pedestrian plan. This process will begin in the summer of 2017 and build from the Minnesota Walks community engagement process. The plan will cover pedestrian planning on MnDOT-owned facilities, as opposed to Minnesota Walks, which identifies action items for all local, regional and state-level partners in Minnesota that are working to enhance the environment for people walking.

The Minnesota Department of Health is actively working to implement strategies from Minnesota Walks. Working with the Statewide Health Improvement Partnership (SHIP) grantees, we encourage local public health staff in all 87 counties to use Minnesota Walks as a framework to identify strategies that address issues in their local communities and will achieve the most impact with their grant funding.

Centers for Disease Control and Prevention (CDC) grants will advance the connection of pedestrian planning for people with mobility

limitations in pilot projects in southern Minnesota. Other CDC funding is being directed to northern Minnesota to create best practices for sidewalk inventories through partnerships with local worksites.

Minnesota's unique Walk! Bike! Fun! curriculum is being adapted to specifically create curriculum for students with physical or intellectual disabilities. Workshops and additional technical assistance are being planned throughout the state focusing on Safe Routes to School and Walk Friendly Communities. Lastly, MDH and MnDOT are proud to serve on the local host committee for the 2017 National Walk Summit to ensure that successes from across Minnesota will be shared, and skill building sessions will be provided for our local, regional and state partners across the state. MDH and MnDOT will continue to partner and invite other state agencies, such as PCA, DPS, etc. to use Minnesota Walks as a framework to make Minnesota a more walkable state.

MnDOT and MDH also recognize the need to involve and engage partners such as the private sector business, real estate and commercial developers, chambers of commerce, CEO's, HR managers and others who may have been missing from the table first time around and having them be the spokespeople for walkable communities and why they matter for business. We also look forward to establishing targets for measuring success to better track progress towards reaching the goals outlines in Minnesota Walks.

To continue moving this work forward the Minnesota Department of Transportation and Minnesota Department of Health plan to convene a coalition of partners in summer of 2017 that will refine and carry out the vision outlined within this document.

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Toole Design Group

Citizens League

COMMUNITY ENGAGEMENT PARTNERS AND CATALYSTS

Live Well Winona

Minneapolis Pedestrian Advisory Committee

Upper Minnesota Valley Regional Development Commission

Wright County Public Health

Minnesota Department of Health

Minnesota Department of Transportation

Arrowhead Regional Development Commission

Better Living: Exercise and Nutrition Daily (BLEND), CentraCare

Horizon Public Health

Headwaters Regional Development Commission

Transit for Livable Communities

West Central Initiative

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Open Streets Northeast Minneapolis, MN
Photo Courtesy of Toole Design Group

*Taking action together to
build a culture of walking
and rolling is our surest
path to a safe, convenient
and desirable future for all*

