

# Active Transporation

# **ACTION PLAN**

New Ulm, MN





# Acknowledgement

### Coalition for Active, Safe, and Healthy Streets (CASHS)

- Jennifer Maurer, Heart of New Ulm
- Bob Beck, New Ulm Bicycle Group
- Jeff Bertrang, New Ulm Public Schools
- Dave Borchert, New Ulm Police Department
- Jaimee Brand, Brown County Public Health
- Dennis Frederickson, resident
- Melissa Hoffmann, Brown County Public Health
- Andrew Lang, Brown County

- Karen Moritz, Brown County Public Health (retired)
- Tom Schmitz, City of New Ulm
- Joseph Stadheim, City of New Ulm
- Wayne Stevens, Brown County
- Brie Taralson, Safe Routes to School Coordinator
- Eric Warmka, New Ulm City Council



This Action Plan was funded through the Minnesota Department of Transportation's (MnDOT) Active Transportation Program.

#### **Learn more:**

www.dot.state.mn.us/ active-transportation-program

### **Planning Assistance Team:**

Terra Soma, LLC

HDR, Inc.

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# **Executive Summary**

The Active Transportation Action Plan is the result of an eight-month collaboration from September 2022 to April 2023. New Ulm's Coalition for Active, Safe, and Healthy Streets (CASHS), a subgroup of the Heart of New Ulm, with representation from the City of New Ulm, Brown County, New Ulm Public Schools, Bike MN, Allina Health and area residents served as the local planning team. With support from the MnDOT planning assistance team, CASHS set direction, co-created strategy, and led a walking audit, city-wide tour and network planning workshop. The Plan builds on existing plans, conversations with residents, lessons learned from other cities and careful observation to establish recommendations that can help New Ulm continue to shift the culture toward an active, safe and healthy community.

The Action Plan serves as a living guide. It establishes clear, evidence-based and action-oriented priorities to guide future investments in making walking and bicycling safer and more accessible. The Plan identifies priority routes within New Ulm that are most in need of improvements.

Specific actions are recommended for consideration and implementation in the Action Plan, including creating a comfortable environment downtown and making strategic improvements to street infrastructure that connect places where people live, work, learn and recreate.









# Why an Active Transportation Action Plan

Walking and rolling\* are part of creating an accessible community for all ages and abilities, enabling people's independence, strengthening social ties, attracting visitors and new residents and improving mental and physical health in the community.

The vision of this Action Plan is to guide New Ulm towards becoming a healthy and accessible community for all ages and abilities to walk and roll.

\*'Rolling' includes people using a bicycle, scooter, wheelchair, stroller or other assistive mobility device

The Active Transportation Action Plan provides a blueprint for promoting a safe, healthy and lively experience for residents and visitors alike—however they choose to get around New Ulm.

"When we create roads and sidewalks in a way that accommodates **all** users, it makes our communities and neighborhoods more livable by ensuring all people can safely get to where they need to go - work, school, stores, parks and attractions." - CASHS







# Why Active Transportation

### Health



Active transportation is as effective as structured workouts for improving health. Only 52% of Minnesotans meet daily physical activity recommendations.

https://www.dot.state.mn.us/peds/documents/planni ng-research/minnesota-walks-2017-final.pdf https://www.apha.org/-/media/files/pdf/topics/transport/apha\_active\_transp ortation\_fact\_sheet\_2010.ashx)

# **Economy**



People walking and biking make more frequent trips than people driving, spending more money at local businesses.

Popvich, Natalie; Handy, Susan 'Bicyclists as Consumers' *Transportation Research Board* Badger, Emily 'Cyclists and Pedestrians Can End Up Spending More Each Month Than Drivers' https://www.triplepundit.com/story/2012/biking-walking-more-money-spent-local-businesses/61761

### **Environment**



Less driving means cleaner air.

Minnesota must reduce
transportation related greenhouse
gas emissions by 80% by 2050 and
vehicle miles traveled by 20% by
2050.

MnDOT Statewide Pedestrian System Plan

# Happiness



Research by the University of Minnesota found bicycling is the happiest form of transportation.

https://www.cbsnews.com/minnesota/news/biki ng-happiness-commute-study-university-ofminnesota/

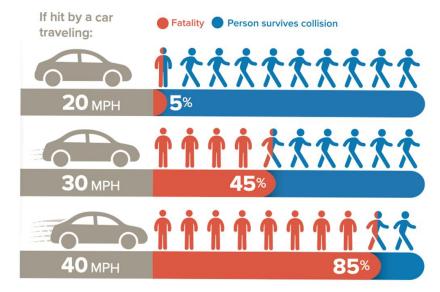
# Making Safety a Top Priority Over Speed

This Plan focuses on designing safer streets to increase transportation choices and ensure all people have safer, more comfortable options.

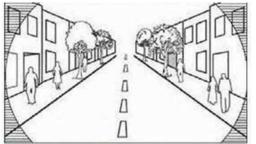
#### **Why Speed Matters**

The impact of motor vehicle travel speed on crashes that involve people walking and biking is well documented. For example, a person walking has a 95-percent chance of surviving the crash if struck by a person driving at 20 mph. The chances of survival decrease by almost 50 percent when the person driving is traveling only 10 mph faster. Traffic crashes that kill and injure people are a serious transportation and public health concern. More and more communities are joining the Toward Zero Traffic Deaths—eliminating all traffic fatalities and serious injuries—movement to ensure safe, healthy and equitable movement for all.

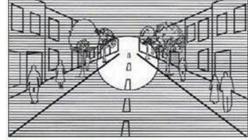
Speed also kills place. A driver's field of vision decreases as speed increases, seeing less on the periphery. Lower speed streets better support businesses. At lower speeds, drivers can see more of their surroundings and have more time to see, react, yield, and stop for others crossing or parking.



National Traffic Safety Board (2017) Reducing Speeding-Related Crashes Involving Passenger Vehicles. Available from: https://www.ntsb.gov/safety/safety-studies/Documents/SS1701.pdf



Field of vision at 15 MPH



Field of vision at 30 to 40 MPH

# Safe System Approach

Minnesota Department of Transportation (MnDOT) follows a Safe System approach to traffic safety, which aims to eliminate fatal and serious injuries for all road users, including people walking, bicycling and rolling.

The Safe System Approach focuses roadway safety efforts on ways to effectively:

- 1. Design for the people in the system;
- 2. Manage vehicle speeds by design;
- Employ proactive tools to manage risks across an entire roadway network, especially for the most vulnerable users; and
- 4. Foster integrated, collaborative, and coordinated action.

### Street Design Influences Behavior

Motorists tend to drive to match the "design speed" of the road, using cues such as lane width, street texture, the distance between buildings, trees and other edge features, as well as sight-line distances.

Streets should be designed for a "target" speed: the speed the community wants its drivers to travel. When practical, streets throughout New Ulm should be designed to achieve a target speed of 20 to 25 mph. A lower target speed is a key characteristic of streets in walkable, bikeable and mixed-use neighborhoods and main street areas.



MnDOT can prevent traumatic life-altering, costly crashes by focusing on creating low-speed environments in population centers and around other destinations where people are likely to walk [and bike]." - Statewide Pedestrian Systems Plan

# Safe System: When to Mix, When to Separate?

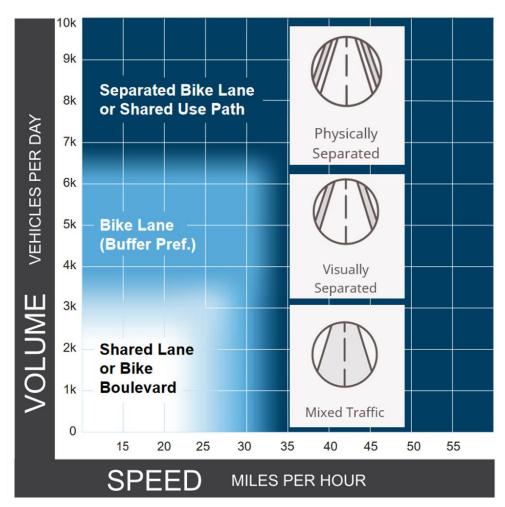


Chart adapted from *Federal Highway Administration Bicycle Selection Guide*. Note: Chart assumes operating speeds are similar to posted speeds. If they differ, operating speed should be used rather than posted speed.

The greater the vehicle speed, the greater the physical separation needed for people walking and biking.

A shared street environment, where users are mixed, can be created for people walking, biking and driving when target speeds are below 20 mph.

Separate and protect people when vehicle speeds are above 20 mph.

# Safe System Approach

Successful streets that are safe for people walking and biking reduce the frequency and severity of crashes and minimize conflicts between users.

How street space is allocated plays a large part in managing speeds and ensuring streets are safe for all users, especially the most vulnerable. For example, narrowing and/or removing travel lanes combined with adding curb extensions reduces the amount of time people walking are exposed to potential conflict while crossing the street. Narrower streets help slow motorists' speeds. Shorter crossings reduce the amount of time a motorist must stop while waiting for someone to cross. Narrowing and/or removing travel lanes also allows space to be reallocated for bike lanes, wider sidewalks, and/or for a larger buffer space between people walking and/or bicycling. More separation to active transportation users and vehicular traffic provides more safety and comfort. Installing intersection treatments like the modern roundabout or neighborhood mini circles help manage speed and have been proven to reduce crashes, and the severity of crashes.

Streets that are right-sized, putting people first, become community assets. They are places where people want to walk and bike, rather than places where people can walk and bike if they must. In turn, more people choose to walk and bike.







# Applying Active Transportation Principles

The approaches to network planning and applying Active Transportation Principles are founded in Safe Systems. As we consider how to make our built environment more conducive to walking and rolling, we apply the Active Transportation Principles. The significance of each principle may vary from route to route and from person to person. For example, we may prioritize directness the most when walking or biking to the grocery store. We may value attractiveness and comfort when out for a recreational bike ride. Safety is paramount for all users, especially when ensuring children have safe routes to school and parks.

**Safety** — Does the network provide routes that minimize risk of injury and danger (both traffic and personal security)?

**Comfort** — Does the network appeal to a broad range of age and ability levels and are there user amenities (e.g., places to sit, ways to be protected from the weather)?

**Coherent** — How easy is it to understand where to go, how to navigate through an intersection? How connected is the network?

**Directness** – Does the network provide direct and convenient access to destinations?

Attractive – Is the network green, well-maintained, quiet, and celebrate local art and culture?

# How the Plan Was Developed

## **INSIGHT**

Process of discovery

SEPTEMBER-NOVEMBER 2022

# Planning Assistance Team (PAT) Meeting 1 – September 22:

- Assess current policies and plans
- Co-develop engagement strategy

### **Meeting 2 – November 1:**

- Develop and refine vision and goals
- Identify target stakeholders/groups

#### **Local Team Led:**

- Identify key stakeholders and target groups
- Mini-Charrette Outreach and Coordination

**Curbside Coaching** 



# IDEATE 🔾

*Turning key insights into actions* 

**NOVEMBER-DECEMBER 2022** 

### PAT / Local Team – November 1:

 Mini-Charrette: Walk/bike/place audit (mobile workshop); neighborhood/community action workshop

#### **Local Team Led:**

 Deepen and/or broaden input: survey, targeted outreach

#### PAT:

 Synthesize: Draft action steps and priorities

**Curbside Coaching** 



# **ITERATE**

*Putting the plan together* 

JANUARY-APRIL 2023

### **Meeting 3 – January 26:**

 Refine actions and priorities, collaboratively

### Meeting 4 – March 23:

 Refine draft AT-focused Action Plan, collaboratively

#### **Local Team Led:**

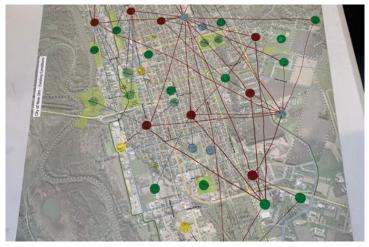
Final Plan (process of adoption)

**Curbside Coaching** 



# How the Plan Was Developed







CASHS members observe a busy intersection on the walking workshop; a map covered in dots and lines shows the product of the mapping workshop connecting origins and destinations; CASHS members discuss community destinations at the mapping workshop

CASHS met with the Planning Assistance Team to lay out a vision and goals for an Active Transportation Action Plan.

CASHS hosted several community representatives at a mapping workshop. Attendees illustrated the places where people are coming from and going to within New Ulm, revealing sites that will require focused efforts to make walking and rolling more comfortable and attractive.

An online survey solicited 101 responses, providing additional feedback for the planning team to consider as they developed this Action Plan.







# What Have We Planned?

#### **COMMUNITY SNAPSHOT**

New Ulm knows that many residents rely on walking and rolling to get where they need to go.

The City has several policies and plans already in place that encourage development of safe and attractive pedestrian and bicycling networks.

CASHS has been instrumental in the adoption and implementation of several of these plans and continues to use them to make New Ulm a better place to walk and roll.

#### **EXISTING PLANS & POLICIES**



### **Complete Streets Policy**

Requires that safety and accessibility for all street users be considered through the complete lifecycle of all transportation infrastructure, from design to maintenance.



#### Safe Routes to School Plan

The plan identifies barriers for children walking to all New Ulm schools and outlines strategies to overcome them.

# What Have We Planned?

#### **EXISTING PLANS & POLICIES, CONTINUED**



# Comprehensive Plan – Parks and Trails

Identifies a robust, usable, and welcoming trail system as an asset for all residents. Offers a vision for expansion of New Ulm's recreational areas.



# Comprehensive Plan – Land Use

Establishes guidelines and standards for construction and renovation of streets, buildings, and neighborhoods.



### **Capital Improvement Plan**

Prioritizes ADA compliance in all pedestrian facilities.



### **Physical Enhancements**

- 8 miles of shared lane markings
- 22 bike racks installed
- Mid-block crossings and pedestrian refuges near schools

# Walking and Rolling by the Numbers

#### **FACILITIES**

Facility Type	Existing Mileage
Sidewalks	111 mi.
Trails/Paths	6.5 mi.
Street Bike Routes	24 mi.
Total	141.5 mi.
Total % of Walk & Roll Facilities Compared to Total Miles of Streets	75%

#### LIVABILITY INDEX

Category	Measurement
Avg. transit frequency	60 min.
AARP Livability Index	64/100
Walk Score	54/100
Bike Score	64/100

Factors of livability in New Ulm. AARP.org, Walkscore.com

An increase of one Walk Score point correlates with a \$3,250 increase in home sale price across American cities. Redfin.com



#### **TRAVEL TIMES**

Distance	Avg. Walk	Avg. Bike
¼ mi	5 min.	1.25 min.
½ mi	10 min.	2.5 min.
1 mi.	20 min.	5 min.
3 mi.	60 min.	15 min.

The average time it takes to walk or bike places within a ¼ mile to 3-mile distance. Healthline, 2019

The average person walking will tolerate 3minutes of going out-of-direction before searching for a more direct route. This may lead to use of unprotected routes and

**Crossings.** National Association of City Transportation Officials (NACTO) Urban Street Design Guide



# How Are We Moving Today?

### 2.5% Walk

In New Ulm, 2.5 percent of commuters walk to work compared to 2.4 percent statewide. ACS, 2020

# 0.4% Bike

In New Ulm, 0.4 percent of commuters bike to work compared to 1.5 percent statewide. ACS, 2020

## 0.4% Transit

In New Ulm, 0.4 percent of commuters take transit to work compared to 3.1 percent statewide. ACS, 2020

### 7.2% Below poverty level

7.2 percent of New Ulm residents are living in poverty, compared to 9.3 percent statewide. ACS, 2020

### 4% No car

4 percent of households do not own a car, compared to 6.6 percent statewide. ACS, 2020

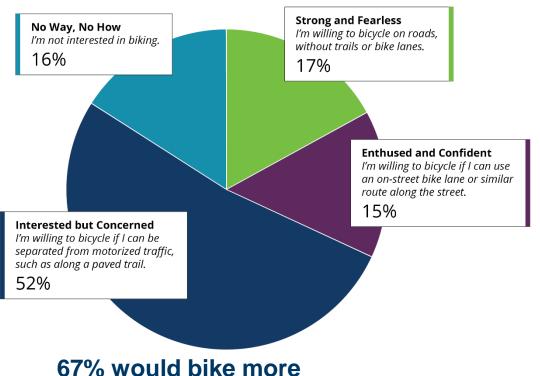
### 7.0% People of color

7 percent of residents are people of color, compared to 23.7 percent statewide. ACS, 2020

### 12.2% Have a disability

12.2 percent of residents live with a disability, compared to 11 percent statewide, ACS, 2020

### What type of bicyclist are you?



Approximately 15 percent of residents want to bike if on-street facilities exist, and 52 percent would bike if off-street facilities exist. Online survey, 2023

# What Have We Learned from the Community?

#### **COMMUNITY SURVEY**

- 40% of respondents walk weekly
- 55% of respondents bike at least a few times a year
- Vast majority of walking or biking trips are for recreation or fitness
- Safety and Comfort were ranked as the two most important Active
   Transportation Principles

Priority destinations for walking and biking were ranked as follows:

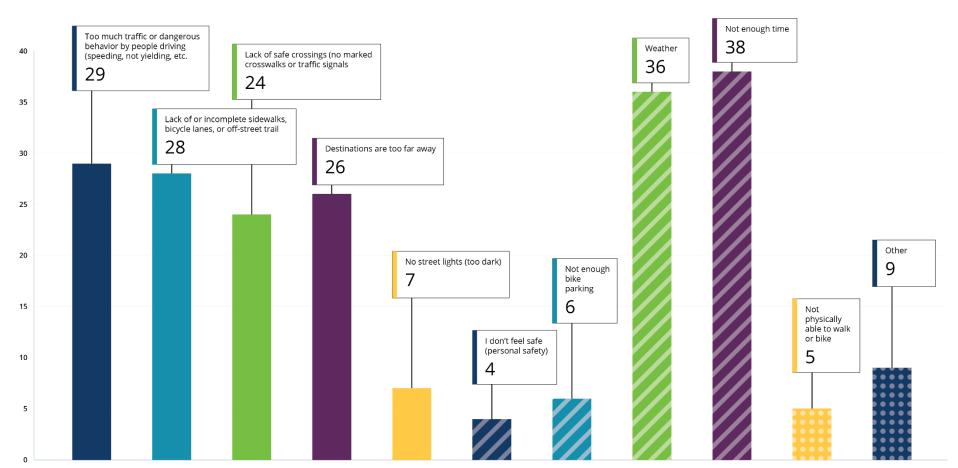
- Schools
- Downtown
- Parks
- Library/Community Center/Recreation Center
- Dining/Entertainment
- Work
- Residential Neighborhoods

(Question and answers from the 2022 Comprehensive Plan process.)

# What Have We Learned from the Community?

#### **COMMUNITY SURVEY**

What deters you from walking or riding your bike more often?



Weather and time are two biggest barriers to walking and rolling, followed by a sense of not feeling comfortable or safe when mixing with traffic.

By applying the Active Transportation Principles to the City's transportation network, we can improve conditions for walking and rolling.

# What Are Our Active Transportation Challenges?

#### **COMMUNITY SNAPSHOT**

New Ulm has an existing bicycle network and a passionate community of riders. Sidewalks and mixed land uses make the city walkable for some residents.

Still, there are several major barriers to walking and rolling for many New Ulm residents. The challenges presented on the next three pages were gathered from walk and bike audits conducted by the Planning Assistance Team, the community survey administered in December and January, Comprehensive Plan outreach, and the firsthand experience of CASHS members and their neighbors.

#### **COMMUNITY CHALLENGES**



# Oakwood Estates and Dacotah West Addition Neighborhoods

Residents living here are disconnected from the main street grid by major roads without sidewalks.



### **Gaps in Bike Circle Trail**

The bike network that circles much of New Ulm has a few gaps that make navigating the entire circle difficult for unfamiliar riders. At 20<sup>th</sup> S. Street bicycles and pedestrians must share narrow sidewalks and crossings.

# What Are Our Active Transportation Challenges?

#### **COMMUNITY CHALLENGES, CONTINUED**



### **Center Street & Garden Street**

Children walk to the three schools on Garden Street. Despite marked crosswalks, the right-turn slip lanes encourage fast motorist speeds. The issue of who has right-of-way is confusing to all users, especially children who are less skilled at identifying a suitable gap in traffic to cross this overbuilt intersection.



### **Lack of East-West Routes**

Only a few streets traverse the steep bluff, providing access to the high school and Martin Luther College. The lack of marked bicycle lanes and speed differences between motorists (exacerbated by wide travel lanes) and people bicycling reduce the sense of comfort for bicyclists.

# What Are Our Active Transportation Challenges?

#### **COMMUNITY CHALLENGES, CONTINUED**



### **Broadway & Center St**

Traffic speeds and volume on these two main roads make pedestrian crossings challenging and provide no dedicated facility for people biking.



### **Safe Routes to School**

New Ulm identified a network of routes that are best for students walking and rolling to school. Enhancements are needed to further promote active transportation on these routes.



### **Rules of the Road**

Residents expressed a need for education and enforcement effort around traffic laws: motorists must stop for pedestrians in crosswalks and intersections, bicycles having a right to use the road.



### **Better Visibility**

Head-in angled parking downtown makes is difficult for motorists to see people biking when backing out of the parking space.

# Existing Conditions Issues Map





# Our Vision and Goals

The CASHS team completed a series of exercises during the first two committee meetings to identify a vision and goals for the Active Transportation Action Plan.



#### **COMMUNITY VISION**

New Ulm is a healthy and accessible community for all ages and abilities to walk and roll.

'Rolling' includes people using a bicycle, scooter, wheelchair, stroller or other assistive mobility device.





### **COMMUNITY GOALS**

**Health:** Create active transportation opportunities and infrastructure to promote physical and social health of the whole community.

**Safety:** Continue to make safety improvements to benefit all people walking and rolling.

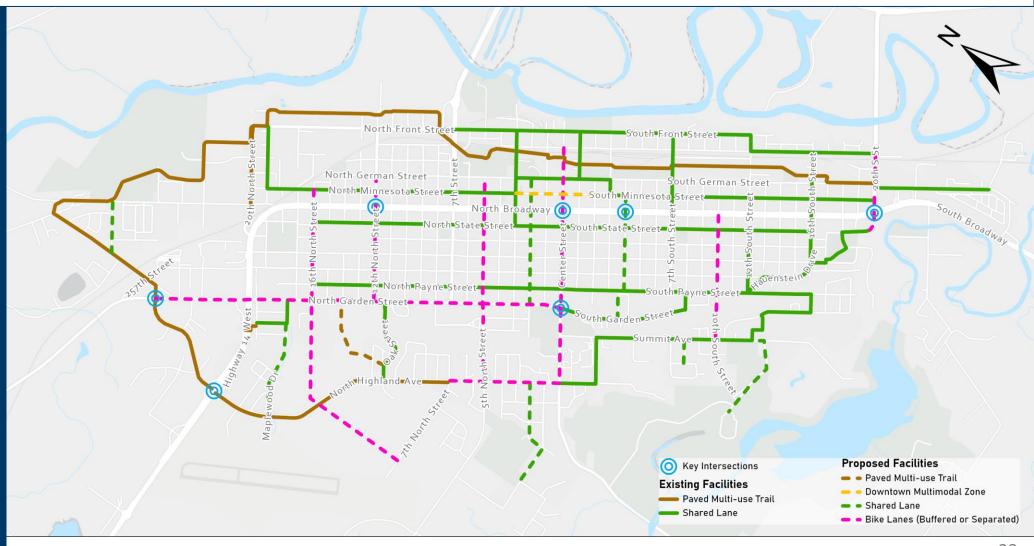
**Guidance:** Continue to follow and update guidance and policies to create and maintain user-friendly streets and crossings.

**Lively:** Encourage downtown activity through attractive street and sidewalk design, programming and policies.

**Engagement:** Support educational programming to encourage active transportation, teach safety skills and spread awareness of the benefits.

# Our Possible Future

A future network of bicycle and pedestrian facilities that connect people to priority destinations. People biking and walking are separated from people driving when vehicular speeds are over 20 mph. Generally, all users can share space when traffic volumes are low and vehicular speeds are 20 mph or less. Traffic calming can help achieve the slower target speeds.



# How We Set Priorities for Implementation

The CASHS team set the priorities for short-, medium- or long-term implementation of identified projects. There are several factors that can influence the priority of a street construction project. Prioritization can be complicated by projects in which characteristics conflict on priority, such as a safety issue that is difficult and costly to resolve. Characteristics to consider in prioritization may include:

#### Safety

If the existing conditions pose a threat to user safety during normal and compliant operations, then the project should increase in priority (e.g., non-functional signals). Interim measures may be necessary to mitigate the risk while a longer term or more complicated solution are developed (e.g., converting a signalized intersection to a roundabout may be temporarily improved by additional signage or pavement markings).

#### **Significance**

Projects that make a significant positive impact to the neighborhood, City, or regional active transportation network may be considered as a priority that has a lesser impact. The potential economic impact and consequence of delaying the connection should also be evaluated.

#### **Equity and ADA**

A higher priority should be assigned to projects that alleviate or resolve a transportation equity issue or noncompliance with the Americans with Disabilities Act.

#### **Difficulty and Cost**

Relatively easy and inexpensive projects may rise to the top of the priority list since they may be considered "low-hanging fruit" and can build momentum and support for additional projects. For more difficult and costly projects, an interim measure may be considered.

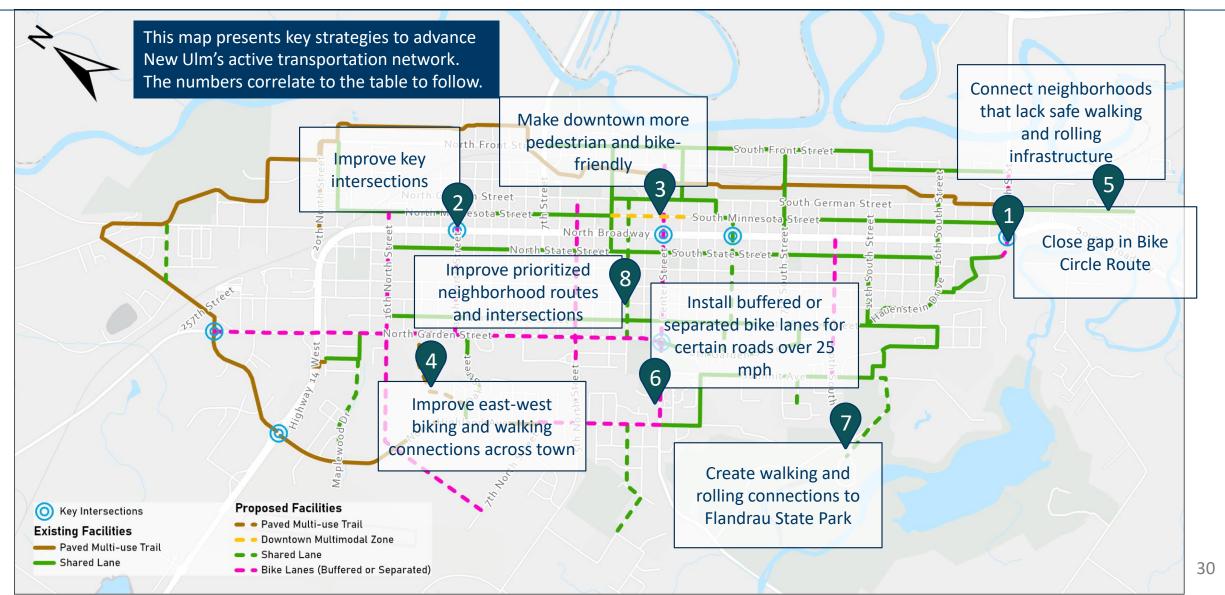
#### **Outside Funding**

If there are grant or other outside fundings source dedicated to a project, it should be a priority to be completed per the funding agreement.

### **Related Construction Project**

If the project is related to another construction project or other funds are being applied as a cost-sharing measure (e.g., levee reconstruction with a trail, road reconstruction/widening with sidewalks or bike lanes), then the priority may be based upon the related construction project.

# Priority Routes and Projects



# Short Term Priority Routes and Projects

Projects identified in the following tables are the result of a planning process involving CASHS members and the Planning Assistance Team. In order to move towards implementation, each project will need additional public engagement and engineering analysis.

What are we working to achieve?	What are we going to investigate?	Who is involved?
1) Close gaps in Bike Circle Route	<ul> <li>Develop a safer intersection for trail users at Broadway &amp; 20th Street South</li> <li>Improve underpass access to Cash Wise Grocery</li> </ul>	<ul> <li>MnDOT and state funds</li> <li>Local Businesses at intersection</li> </ul>
Improve intersections along collector (distributer) and arterial (through) streets	<ul> <li>Evaluate potential intersection improvements along</li> <li>Garden Street at N. Highland Avenue and Center Streets</li> <li>Broadway at 12th N, Center, 4th S, and 20th S Streets</li> <li>Highland Avenue at US 14</li> <li>Consider roundabouts, curb extensions, median/pedestrian refuge islands.</li> </ul>	City, County,     State transportation     agencies depending on     roadway jurisdiction
3) Make downtown more pedestrian and bicyclist friendly	<ul> <li>Evaluate the need for mid-block crossings</li> <li>Consider street concepts for Minnesota Street that:         <ul> <li>designate space for bicycle traffic</li> <li>reconfigure parking to head-out angled (back-in angle) or parallel</li> <li>change one-way to two-way traffic flow</li> </ul> </li> <li>Consider concepts for the intersection of Minnesota Street and Center Street to be a pedestrian and bicycle friendly gateway with a mini circle, intersection mural or raised crosswalks or intersection</li> </ul>	• City

# Medium Term Priority Routes and Projects

What are we working to achieve?	What are we going to investigate?	Who is involved?
4) Improve east-west biking and walking connections across town	<ul> <li>Create neighborways (bike boulevards) to connect up the bluff.</li> <li>Consider Oak Street and Maplewood Drive as neighborway connections.</li> <li>Investigate feasibility of a trail connection from N. Garden Street to the high school through currently undeveloped land</li> </ul>	• City
5) Equitably invest and better connect neighborhoods that lack safe walking and rolling infrastructure	<ul> <li>Connect neighborhoods to the existing biking and walking network, particularly Cottonwood Street/Dacotah West Addition and Oakwood Estates neighborhoods</li> </ul>	• City

# Long Term Priority Routes and Projects

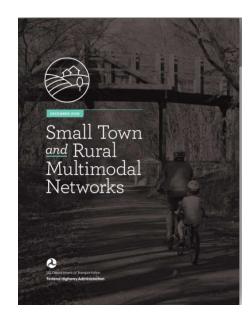
What are we working to achieve?	What are we going to investigate?	Who is involved?
6) Install buffered or separated bike lanes for roads over 25 mph where right-of-way and road width allow	• Evaluate feasibility for adding bike lanes along Center St, State St, Minnesota St, Highland Ave, 10th S St and Bridge St.	County and State
7) Create walking and biking connections to Flandrau State Park	<ul> <li>Make space for bikes on CSAH 26</li> <li>Install wayfinding to the State Park on bike routes and trails</li> </ul>	County and State
8) Improve local street (neighborhood) intersections and routes with a priority on bicycle and pedestrian treatments	<ul> <li>Identify local routes along which to prioritize walking and rolling and neighborhood intersection improvements, such as safe routes to school</li> <li>Consider designation as a "neighborway" and implement pavement markings, signage, and traffic calming and diversion if needed</li> <li>Consider intersection improvements such as marked crosswalks (paint/signage/RRFB), mini circles, curb extensions, raised crosswalks, raised intersections and intersection chicanes</li> </ul>	<ul> <li>City</li> <li>Neighborhood resident support</li> </ul>





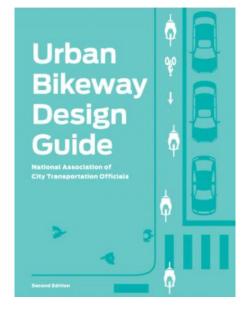
Quick Reference Design Toolbox SECTION 4

# Bicycle Facility Design Guidance



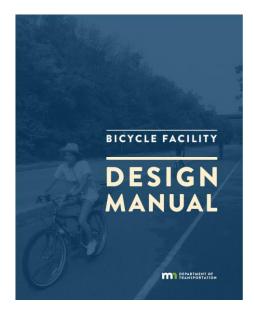
Small Town and Rural Design Guide

Federal Highway Administration (FHWA), 2016



**Urban Bikeway Design Guide** 

National Association of City Transportation Officials (NACTO), 2014



Bicycle Facility Design
Manual

Minnesota Department of Transportation (MnDOT), 2020



Minneapolis Street Design
Guide

City of Minneapolis, 2021

This plan identified a "Guidance" goal to "Continue to follow and update guidance and policies to create and maintain user-friendly streets and crossings." There are several excellent national design resources available. A little closer to home, the City of Minneapolis and MnDOT have developed their own design guides which can also serve as a resource for New Ulm with the benefit of the same winter maintenance concerns.

#### **ILLUSTRATING CORE CONCEPTS**

# Traffic Calming Measures

#### **SLOWING TRAFFIC BY DESIGN**

In areas where people biking and walking are sharing space with people driving, such as along neighborways, traffic speed should be slowed to 20 mph or less. Posted speed limits alone are insufficient to ensure compliance. Street design can slow traffic by requiring motorists to either move up and down (e.g., over a speed table or speed cushion) or move left and right (e.g., chicane, medians, roundabout).

Visually narrowing the roadway (striping, landscaping, buildings closer to the street) can have a positive effect on lowering traffic speeds.





Citywide 20 mph Speed Limit



# Neighborways

#### **BICYCLE-FRIENDLY SHARED ROUTES**

Local streets with low volumes and low speeds can be used as bicycle and pedestrian-friendly routes. Signage and pavement markings indicate the street is a preferred route for people biking. If speeds are greater than 20 mph, traffic calming measures may be implemented to slow traffic. If traffic volumes are greater than desired (up to about 3,000 AADT), then traffic diversion measures may be implemented.

Traffic Diversion: To reduce traffic volume, diverters can prevent motorists from continuing on a prioritized neighborway, while allowing people biking and walking to continue through. Diverters may be used for neighborhood beatification and stormwater management as well.







**Shared Lane Markings:** mark the bicycle-friendly routes and should be accompanied by the "Bikes May Use Full Lane" sign.



# Buffered and Separated Bike Lanes

#### **DEDICATED BIKE LANES**

**ILLUSTRATING CORE CONCEPTS** 

The standard 5-feet-wide bike lane has evolved to better meet the needs of all types of bicyclists. Increasing separation and protection of people biking improves comfort and safety for riders. It also improves coherence since the preferred place for people riding is clearly marked on the pavement and with signage.



Buffered Bike Lanes: provide a painted buffer between the bike lane and the travel lane to increase the separation between the two modes. A buffer may be provided between the parking lane, if present, and the bike lane as well, to help reduce 'dooring' of bicyclists. Green paint can be added either behind the bike symbol (as shown) or within the full width of the lane to call attention to the bike lane.



Separated Bike Lanes: provide a vertical barrier between the bike lane and the motorized travel lane. This may be in the form of flexible bollards, a row of parked cars, a raised curb, concrete barriers, landscaped planters and more! (Separated bike lanes are also known as protected bike lanes or cycle tracks.)

# Paved Trails / Shared Use Paths

#### **FULLY SEPARATED PATHS**

Paved trails (also known as shared use paths) are completely separated from motorized traffic and are shared by people walking and rolling and traveling in both directions. They are generally 10 to 14 feet wide. In constrained circumstances, 8 feet wide is allowed.

Source: AASHTO (2012), Guide for the Development of Bicycle Facilities, 4th Edition





**Greenway or Rail Trails:** routed on independent alignments to go places that roads can't.



**Sidepath trails:** bidirectional shared use paths that run parallel to the roadway. Roadway intersections and driveway crossings require consideration to protect trail users

### Intersections Toolbox

#### **CONFLICT RESOLUTION**

Intersections present the most conflict points between motorists and people biking and walking. To reduce risk of a crash, intersections should be designed to slow motorists and provide coherent signage and pavement markings (and signals when warranted) that indicate when and where pedestrians and bicyclists should cross.



**Intersection Gateways:** Roundabouts and mini-circles can be designed with features which transform the intersection into a gateway. The intersection of Minnesota Street and Center Street could be envisioned as a welcoming announcement of arriving downtown with public art and landscaping.

**Roundabouts:** slow traffic to the design speed and require motorists to pay attention to their movements. A single lane can handle up to 25,000 vehicles per day





**Mini-circle:** provides a traffic calming effects similar to a roundabout with a smaller footprint. This may be appropriate for neighborhood streets in lieu of STOP signs.

## Intersections Toolbox

**Raised Intersection:** A raised intersection is another way to create a gateway, slow speeds, and promote a sense of arrival.

**Curb Extensions:** Curb extensions or 'bulb outs' reduce crossing distances for people on foot; promote better motorist yielding behavior; and improve sight lines for all users. They help to create a safer and more walkable environment. The ideal crossing distance for a person on foot in a downtown environment is 22-24 feet for a two-way street and 12-14 feet for a one-way street.

**Painted Curb Extensions:** Using paint is a great way to test curb extensions and improve intersection geometry.







# Mid-Block Crossings

#### PEDESTRIAN PRIORITY

Mid-block crossings should include pavement markings and signage along with sufficient lighting for improved visibility. The crossing design should make is clear to motorists to expect people in the roadway.



**Raised Crosswalk:** serves double duty as a traffic calming measure and a pedestrian facility. The raised crosswalk elevates pedestrians to improve visibility and indicate their priority for crossing the street. The taper of the raised table can be designed for snow removal.



**Continental Marked Crosswalk:** are high-visibility pavement markings recommended for safe routes to school and other pedestrian priority areas (also note pedestrian refuges).



RRFB (Rectangular Rapid Flashing Beacons): illuminate uses standard bicycle and pedestrian warning signs coupled with brightly flashing rectangles, which may be passively activated or upon someone pushing a button.



Pedestrian Hybrid Beacon (also known as HAWK - High-Intensity Activated Crosswalk): remains blanked out until activated, then turns yellow to slow traffic before tuning red to allow pedestrians to cross higher volume and higher speed roadways.

# Head-out Angled Parking



**Peer Community Successes:** Muscatine, Iowa has converted sections of their downtown to include head-out angled parking for improved safety.

#### IT'S REALLY EASY!

Head-out angled (or back-in angled) parking provides improved visibility of people biking and other users along the roadway. Since drivers do not need to look behind them and back into oncoming traffic, they can more confidently exit their parking space to enter the roadway.

Parents of young children appreciate that the opening of car doors directs the children toward the sidewalk rather than the street. Many drivers declare this parking to be easier than parallel parking! In fact, it is just the first two steps of parallel parking: pull forward of spot and back in!

## Amenities



Amenities help support a viable active transportation system while also establishing community character and sense of place.

- Water Fountains
- Bike Parking
- Bike Pump/Bike Repair Stations
- Wayfinding signage
- Art
- Restrooms
- Showers

















## How Do We Create a Culture of Walking and Rolling?

Our plan goals acknowledge that more than safe infrastructure is needed to achieve the vision of a healthy and accessible community for all ages and abilities to walk and roll. Other factors that influence a culture that supports active transportation include the City's maintenance policies, educational programming, marketing and celebrating and encouraging walking and rolling.

The Heart of New Ulm and the CASHS have already completed several efforts to establish a culture of wellness through active transportation. Remember to celebrate your successes and let others know how these efforts benefit the community!



New Ulm is proud to be designated as a Bicycle Friendly Community!



### What Do We Maintain?

People biking and walking are susceptible to the negative impacts of delayed maintenance. Riding over a pothole on a bicycle can cause a rider to lose control and crash, whereas a motorist may simply feel a bump. People walking or using a mobility aid device are often discouraged from venturing outdoors when snow and ice can impede their ability to safely access their destination. Year-round maintenance of walking and rolling surfaces, pavement markings, and signage are necessary to ensure equitable mobility for all. A City maintenance plan should address the timeline and responsible party for each activity.

- Bikeway and 
   walkway inspections •
- Snow and ice removal
- Sweeping/blowing
- Drainage
- Graffiti removal
- Litter removal
- Landscaping

- Pavement markings
- Gutter to pavement transitions
- Drainage grates and culverts
- Signage
- Closures and detours







# How Do We Encourage Use of the AT Network?

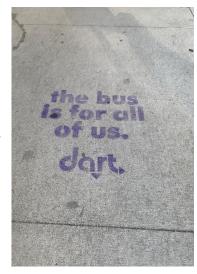
Part of the success of an active transportation network is ensuring the residents and visitors can see, understand and be excited about it!

Mapping – A map is essential for navigating an AT network. The Heart of New Ulm and New Ulm's Chamber of Commerce provide an excellent map of the bike circle loop and points of interest and preferred biking and walking routes. Additionally, newcomers often use an online tool such as Google or Apple maps to find a good route. Wayfinding signage and maps within the systems are helpful for a more coherent experiences.

Marketing Campaigns – Creating a brand for a trail, bikeway or an entire active transportation system can help people recognize the local opportunities for walking and rolling. Campaigns that focus on the benefits of active transportation, while indicating that the system is designed for people of all ages and abilities can help the "interested but concerned" people envision themselves as users of the network.









### How Do We Make it Fun?

**Special Events** – Hosting special events for education and encouragement purposes can encourage new riders to get out and explore. These types of events may be hosted by the City, a non-profit organization or a neighborhood group.

- National Bike Month
- Bike Rodeos (with helmet or bike give aways)
- Cyclovia! Open Streets
- Organized Rides
- Group Rides
- Bike Commute Challenges
- Bike Repair Classes

**Recognition Program** – Businesses can benefit from more people biking and walking. A "Bicycle Friendly Business" designation indicates where active transportation users might find water, food, restroom or even bike repair tools and supplies. Even a hair salon could offer a warm, wet towel to wash your face after a ride.







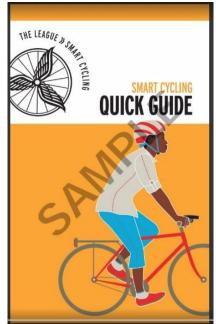


### How Do We Educate People on Using the AT Network?

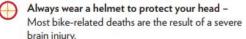
**Education** – Both riders and motorists need to understand the rights and responsibilities of all users of the transportation system. Heart of New Ulm's Smart Bicycling Tips are a great start to this effort. Educational efforts with students can be embedded into existing programs, such as through P.E. and health classes or before/after school programs. Walk! Bike! Fun! is one such program offered through the Bicycle Alliance of Minnesota. Empowering youth to bike safely and confidently ensures that the next generation sees biking as a both a fun activity and an important mode of transportation.

Existing Resources – For all education and encouragement efforts, make use of existing resources! There are national organizations, such as the League of American Bicyclists and AARP, that provide resources for advocacy, education, and encouragement. There are state resources, such as Explore Minnesota that can boost marketing. Of course, the Bike Alliance of Minnesota can serve as a first stop for your resource needs. You don't need to start from scratch.



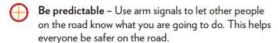


### Heart of New Ulm's Smart Bicycling Tips









Obey all traffic laws - This makes the road safer for

'Drive' your bike - Ride in the right 1/3 of the traffic lane when you can.

Be alert - Be a defensive 'driver' and do not listen to music or use your cell phone.

Practice bike readiness - Make sure your bicycle is in good working order every time you ride.

#### What's this?



It's a sharrow or shared lane marking on the street that helps position bicyclists within the travel lane. It also is used to alert motorists of bicycle traffic and encourages bicyclists to ride in a straight line so their movements are predictable to motorists.





# State and Federal Funding for Active Transportation

Source	Grants	Purpose
FHWA	Safe Streets and Roads for All (SS4A)	Planning and infrastructure that improves transportation safety for all modes
MnDOT	Active Transportation	Infrastructure, planning assistance, quick-build/demonstration projects and technical assistance.
MnDOT	Safe Routes to School - Boost grant	Support current SRTS plans and programs
MnDOT	Safe Routes to School - Infrastructure	Construct sidewalks; improve crossings
MnDOT	Transportation Alternatives (TAP) – Federal funding	Pedestrian and bike facilities
MnDOT	State Aid for Local Transportation (SALT)	Highway projects
MnDNR	Regional Trail Grant	Motorized, non-motorized, and joint trail usage
MnDNR	Bus grant	Up to \$5,000 for bus service to state parks to attend programming
MnDNR	Federal Recreational Trail Program – Federal funding	Trails and trailhead construction
GMRPTC	Parks and Trails Legacy Grant Program	"Regionally Designated" parks and trails can be funded
LCCMR	Environment and Natural Resources Trust Fund (ENRTF)	Activities that protect, conserve, preserve and enhances Minnesota's air, water, land, fish, wildlife, and other natural resources

In addition to local Capital Improvement Program funds, local jurisdictions may seek state and federal funding to assist with development of the active transportation network. Most programs involve applying through one of these agencies:

- Federal Highway Administration (FHWA)
- Minnesota Department of Transportation (MnDOT)
- Minnesota Department of Natural Resources (MNDNR)
- Greater Minnesota Regional Parks and Trails Commission (GMRPTC)
- Legislative-Citizen Commission on Minnesota Resources (LCCMR)

Grants are sometimes also available through organizations that support economic development and tourism, public health, and conservation and the natural environment. Private donations are popular for projects that support community recreation and well-being.

### What Comes Next?

### **Next Steps**

CASHS will continue to advocate and implement priorities of the Action Plan by:

- City Safety Commission Recommendation
- City Council Adoption
- County Commission Receive and File Coordination
- MnDOT District Coordination
- Region 9 Development Commission Coordination
- Ongoing Public Engagement
  - Businesses
  - Schools
  - Residents All Ages and Abilities

The planning process ends, but the plan continues to help the City of New Ulm take steps toward expanding the active transportation system.

As CASHS and the City of New Ulm move forward with implementing the priorities identified in this plan, coordination will be an integral theme. Intergovernmental coordination is needed for projects along or across highways that are under the County or State jurisdiction. Additional coordination with the public is needed as the ideas in this plan are developed into concepts and progress through engineering design and into construction.

### A Call to Action

#### **COMMUNITY CHARGE**

- Get out and make use of the designated bicycle and walking paths, and all of the other wonderful walking and bicycling opportunities available in New Ulm and surrounding areas.
- Join a local volunteer group working to promote safer roads for all users, such as:
  - the Coalition for Active, Safe and Healthy Streets,
  - the Safe Routes to School Action Team, or
  - the New Ulm Bike Group.
- Talk to neighbors, friends and co-workers and share why focusing on transportation safety in our community is a priority: When we create roads and sidewalks in a way that accommodates all users, it makes our communities and neighborhoods more livable by ensuring all people can safely get to where they need to go work, school, stores, parks and attractions.

