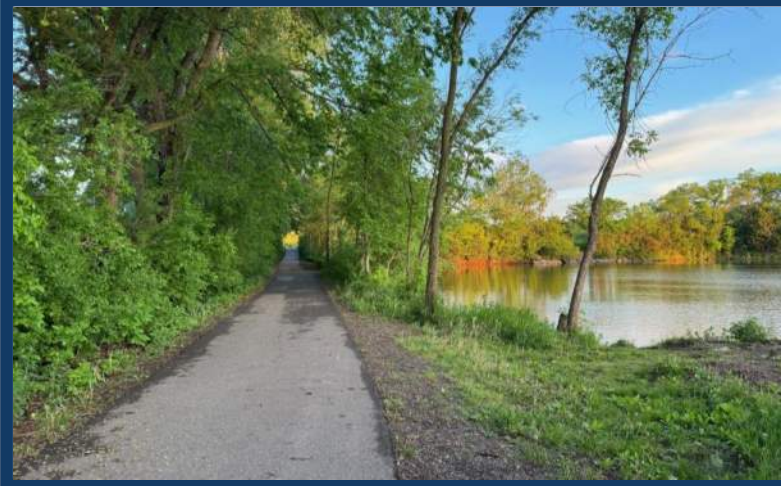
Active Transportation
ACTION PLAN

Saint Peter

CITY OF SAINT PETER

December 2024



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DEPARTMENT OF TRANSPORTATION

The 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

terra soma
WISE MOVES.

HDR

Contents

Executive Summary

The Active Transportation Action Plan is the result of a ten-month collaboration from February 2024 to December 2024. A local Active Transportation Committee came together to set direction, co-create strategy and lead an Active Transportation Summit, which included a walking audits, bicycle audit and network planning workshop. An interactive map and survey collected broader community input.

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 Saint Peter that are most in need of improvements.

Taking the steps towards a more walkable and bikeable Saint Peter takes more than simply building sidewalks, trails and marked crosswalks. Building trust and fostering a culture of change among residents, along with implementing changes in programs, policies and procedures related to education, encouragement and evaluation, are essential to enabling more people to walk and bike. This makes it safer and more accessible for people of all ages and abilities to reach their destinations.

What's in the Plan?

An overarching action step identified in this Plan is to:

- ❑ Establish a City Active Transportation Advisory Committee to help guide and coordinate efforts related to plan implementation.

Key action steps noted in the Plan that seek to advance Plan goals include:

Goal 1: **Establish a city-led commitment to safe and viable active transportation**, as a result, elements of the Active Transportation Action Plan are included in the City Transportation Plan and Comprehensive Plan.

Actions:

- ❑ Council adopts this Plan.
- ❑ Review winter maintenance practices and city ordinances to identify areas to strengthen sidewalk and trail snow and ice removal citywide and in partnership with residents and businesses.

Goal 2: **Develop a shared understanding of Complete Streets** to adopt a Complete Streets policy that fosters ongoing commitment.

Actions:

- ❑ Assign the Public Works and Planning working group to draft a Complete Streets Policy and Checklist based on Smart Growth America and the National Complete Streets Coalition guidance: *The Complete Streets Policy Framework*.
- ❑ Encourage elected officials to apply to the Smart Growth America's Champions Institute: 2025 Champions Institute - Smart Growth America.
- ❑ Review and adopt or endorse design guide(s) to be used by city staff and consultants on street projects.

What's in the Plan?

Goal 3: **Foster community and policy makers' buy-in**, as a result, active transportation projects are incorporated into the City's Capital Improvement Plan (CIP).

Actions:

- ❑ Program and advance infrastructure projects like those listed in this Plan:
  - ❑ **Sunrise Drive**, W Traverse Rd to Stratford Blvd: Add a shared use path along the side of the road to complete connections to existing paths.
  - ❑ **N/S Washington Avenue**, Hwy 169 to Dodd Rd: Add painted buffered or physically separated bike lanes on both sides of the road.
  - ❑ **3rd Street**, College Ave to Union St: Use traffic calming and shared lane markings to create a bike boulevard.
  - ❑ **Broadway Avenue**, Front St to Sunrise Dr: Add painted buffered or physically separated bike lanes on each side of the roadway.
  - ❑ **Front Street**, Hwy 22 to W Skaro St: Use traffic calming and shared lane markings to create a bike boulevard.
- ❑ Complete a condition inventory of sidewalks, shared use paths and ADA compliance to prioritize locations for improvements, particularly near parks, schools and other public destinations.
- ❑ Support biking as a viable transportation option by facilitating high-quality bike parking at destinations throughout the city.
- ❑ Build community support through public education, encouragement, special events and recognition programs by working with state and local partners (e.g., Bike MN, Chamber of Commerce, Gustavus, County Health Department).
- ❑ Collaborate with schools, businesses and residents to pilot projects, such as School Streets, to make waking and biking to school, parks or downtown safe and enjoyable.
- ❑ Identify and seek other funding opportunities, such as MnDOT Active Transportation Infrastructure and Safe Routes to School grants.

What's in the Plan?

Goal 4: **Improve the safety of streets for all users** to ensure there are no transportation related fatalities or serious injuries.

Actions:

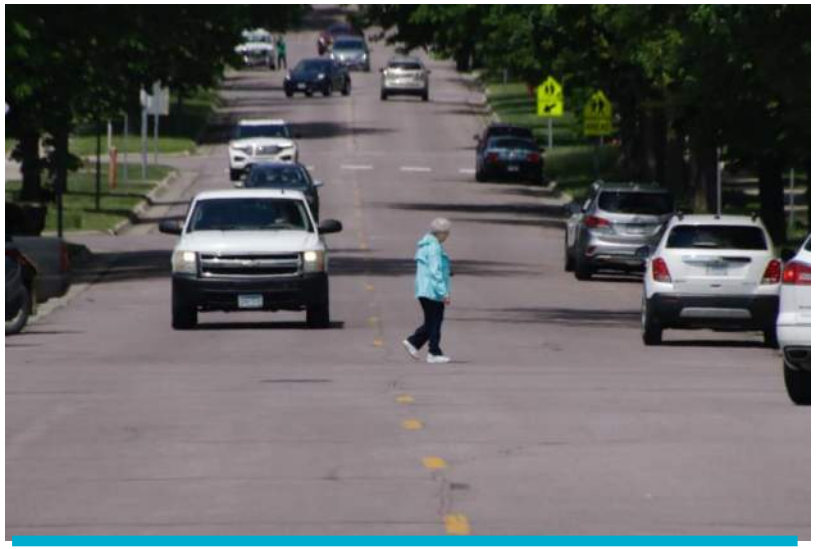
- ❑ Educate and advance a Toward Zero Deaths goal for all road users within a set timeframe with the mayor, city council and city manager.
- ❑ Attend a South Central Minnesota Toward Zero Deaths Workshop.

Goal 5: **Implement a traffic calming program** to reduce the 85th percentile traffic speed in areas where the program is implemented.

Actions:

- ❑ Partner with law enforcement to analyze speed data to evaluate and prepare a recommendation to council using the National Association of City Transportation Officials (NACTO) guide: *City Limits Setting Safe Speed Limits on Urban Streets*.
- ❑ Assign staff to review other communities' traffic calming programs and draft program recommendations.

The Plan builds on existing plans, conversations with residents, lessons learned from a quick build demonstration project, best practices in street design and careful observation to establish recommendations and action steps that can help Saint Peter shift the culture toward Complete Streets – safer, more inviting streets for all.



Introduction

SECTION 1

Why an Active Transportation Action Plan?

WALK . BIKE . ROLL .

The City of Saint Peter Active Transportation Action Plan serves as a roadmap for implementing the City's role in creating a safe and convenient network for people walking and biking.

The Plan uses the term ***walking*** and ***pedestrian*** broadly to include people of all ages and abilities walking or rolling, including people who travel by foot, or use a wheelchair, stroller or other assisted mobility device. The term ***bicycling, biking*** and ***bicyclist*** broadly refer to people of all ages and abilities riding bicycles both human-powered and electric-assisted, including devices adapted for use by people with disabilities.

By centering active transportation users – the most vulnerable road users – in street design it ensures streets provide safe options for everyone, regardless of transportation choice. **A connected, safe and comfortable active transportation network means all people have equitable access and opportunity to contribute to a vibrant, age-friendly and healthy city.**

Why Active Transportation Matters?

EQUITY

Owning a new car costs roughly **$12, 182 per year** (AAA, 2023). This is a sharp increase from 2022 when the average yearly cost was $10,728. Car ownership should not be a requirement for getting around safely and efficiently.

AAA Newsroom. (2023, August 30). *Annual new car ownership costs boil over $12K*. AAA. https://newsroom.aaa.com/2023/08/annual-new-car-ownership-costs-boil-over-12k/

ENVIRONMENT

Minnesota must **reduce** transportation related greenhouse gas emissions by **80%** and vehicle miles travelled by **20%** by 2050 to reach its climate goals.

Cycling networks reduce dependence on driving to get around. Less driving provides a two-fold benefit – cleaner air and reduced impact on our global climate.

Minnesota Department of Transportation. (n.d.). *Minnesota Walks: Statewide Pedestrian System Plan*. https://www.dot.state.mn.us/minnesotawalks/index.html

ECONOMY

Active transportation means business; it stimulates local economies through job creation, tourism and economic development.

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

Cortright, J. (2009). *Walking the walk: How walkability raises home values in U.S. cities*. CEOs for Cities. https://nacto.org/docs/usdg/walking_the_walk_cortright.pdf

Schmitt, A. (2012, December 5). *Cyclists and pedestrians can end up spending more each month than drivers*. Bloomberg. https://www.bloomberg.com/news/articles/2012-12-05/cyclists-and-pedestrians-can-end-up-spending-more-each-month-than-drivers

Why Active Transportation Matters?

HEALTH & WELLBEING

Active transportation **as part of everyday travel** is as effective as structured workouts for improving health. Active commuting is associated with a **11% reduction** in cardiovascular risk.

American Public Health Association. (2010). *The hidden health costs of transportation*. https://www.apha.org/-/media/files/pdf/topics/transport/apha_active_transportation_fact_sheet_2010.pdf

SOCIAL CONNECTION

"**Humans are social creatures**—we live in community. Individual health and wellbeing is intricately tied to the health of our communities and our interactions with others."

Active transportation provides us more opportunity to interact with our neighbours and community.

Taking Charge of Your Health & Wellbeing. (n.d.). *How do our social networks affect wellbeing?* University of Minnesota. https://www.takingcharge.csh.umn.edu/how-do-our-social-networks-affect-wellbeing

HAPPINESS

Researchers at the University of Minnesota have found **bicycling** to be the **happiest form of transportation.**

University of Minnesota. (2018, August 20). *The happiest mode of transportation? That would be cycling*. University of Minnesota. https://twin-cities.umn.edu/news-events/happiest-mode-transportation-would-be-cycling

How the Plan was Developed

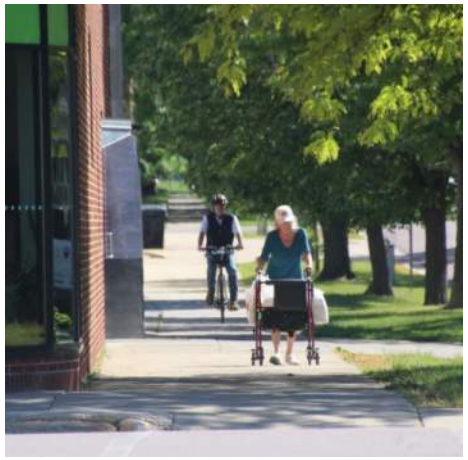
The Active Transportation Action is the result of a collaborative process led by Saint Peter Active Transportation Committee. The committee came together to host and participate in:

- **Walking and bicycle audits to assess existing conditions**
- **Network mapping workshop to define active transportation routes and connections**
- **Online engagement through virtual meetings and use of interactive mapping tools and survey to collect community input**

The Plan builds on existing plans and policies, community and committee participation and evidence-based state and national best practices to identify an active transportation network and action steps to guide future investments in making walking and bicycling safer and more accessible for all.

The City of Saint Peter received planning assistance to develop this Plan, which was funded by the Minnesota Department of Transportation (MnDOT) Active Transportation Program. The Active Transportation Program aims to increase the number of people walking and biking to destinations.

Plan Guiding Concepts



Foundational to the Plan are several interrelated concepts and approaches:

- **Complete Streets:** A guiding policy and approach to planning, designing, implementing and maintaining streets so they are safe, comfortable and inviting for all transportation users, especially the most vulnerable – people who walk or bike for any reason, including people with disabilities or low incomes, children, older adults and people of color.
- **Safe System Approach:** Traffic-related serious injuries and deaths can be reduced and eliminated. A Safe System Approach focuses on efforts to effectively design for all people and manage vehicle speeds by design through proactive and proven street safety treatments.
- **Active Transportation Principles:** The principals of safety, comfort, coherence, directness and attractiveness and the unique needs of active transportation users informs approaches to network and street design.
- **Transportation Equity:** Policy, design and practices in the built environment and transportation system have led to inequities for underserved communities, especially low-income, people with disabilities and those who are Black, Indigenous and People of Color. Advancing transportation equity requires having a better understanding of how the transportation system, services and decision-making processes help or hinder the lives of people in underserved communities. It also requires underserved communities share in the power of decision-making through engagement and design processes

Complete Streets

Complete Streets is an approach that integrates people and place in the planning, design, construction, operation and maintenance of streets. A Complete Streets policy helps ensure a comprehensive and connected multimodal transportation system that prioritizes safety over speed, more equitably balances the needs of different modes and supports local land uses, economies, cultures and natural environments.

Complete Streets look different from street to street, place to place. There is no "standard," rather a holistic and context sensitive approach is taken to address the unique needs of users and characteristics of place. For example, to make biking safer, more accessible and inviting, a "collector" or "arterial" street might include buffered or separated bike lanes to account for higher traffic speeds and volumes. While on a neighborhood residential street people biking and driving might share the lane and mix due to the low traffic speeds and volumes. Over 40 cities and counties in Minnesota have adopted Complete Streets policies as of 2023.

MnDOT's Complete Streets Handbook addresses the benefits and principles of Complete Streets along with a transportation hierarchy and documentation recommendations (Complete Streets – MnDOT).

MnDOT's Complete Streets Policy

"MnDOT must follow a complete streets approach in all phases of planning, project development, operation and maintenance activities."

One of the four policy goals is to **"increase bicycling and walking as a percentage of all trips."**

The policy states districts should give higher priority to opportunities to address identified user needs on projects that meet the following criteria:

- **Equity:** Have a higher proportion of people with disabilities, people of color, older adults, children or low-income
- **Mode Shift:** Have a higher probability of increasing the number of people walking, biking or taking transit
- **Safety**: Addresses a significant safety issue for vulnerable users
- **Connectivity:** Addresses a gap or barrier created by prior transportation investments
- **Plan Alignment:** Are identified in a local or regional plan

Transportation Users and Vulnerability

Transportation user's risk level, or vulnerability, for serious injury or death when involved in a motor-vehicle related collision.

User	Description	Relative Vulnerability
	**Pedestrian.** People of all ages and abilities who walk or use assisted mobility devices like wheelchairs, scooters, skateboards or strollers.	**High.** Due to the speed and mass of vehicles, people walking are the most vulnerable road user. Safety of the most vulnerable users must be a priority as they are most at risk.
	**Bicyclist.** People of all ages and abilities who ride bicycles or tricycles both human-powered and electric-assisted, including devices adapted for use by people with disabilities.	**Medium-High.** Less vulnerable than people walking, but more vulnerable than people driving. There is a broad range of age, comfort, experience and speed among bicyclists, which affects the needs and designs for projects.
	**Transit.** People who ride transit. Transit users often walk or bike to/from transit stops.	**High.** People taking transit have a similar level of vulnerability as people walking or biking.
	**Drivers.** People who drive personal vehicles, inclusive of all drivers and trip types.	**Low.** People driving are less vulnerable than people walking and biking because of the relative safety provided by a vehicle (e.g., seatbelts, airbags).
	**Freight.** People who drive freight/delivery vehicles.	**Low.** People driving freight vehicles are less vulnerable than people walking and biking because of the relative safety provided by a vehicle.

Table adapted from *MnDOT Complete Streets Handbook*

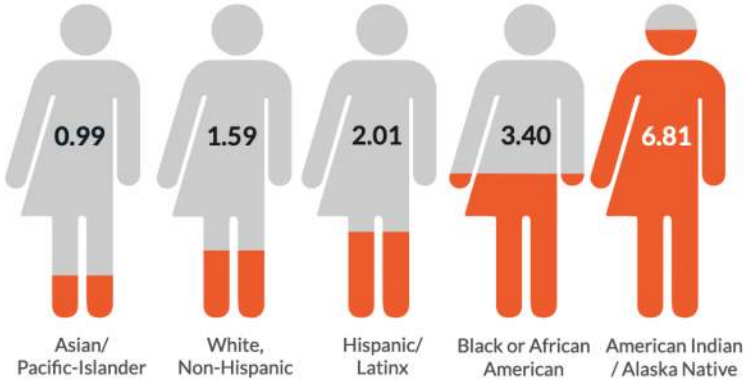
Safety is Not Shared Equally

Traffic-related crashes that kill and injure people are a serious transportation equity and public health concern. Minnesota is seeing a rising share of crashes involving people walking and biking that result in fatal and serious injuries. Nationwide, the number of people struck and killed by drivers while walking increased 45% over the last decade (2010-2019) (MnDOT 2020 Sustainability and Public Health Report).

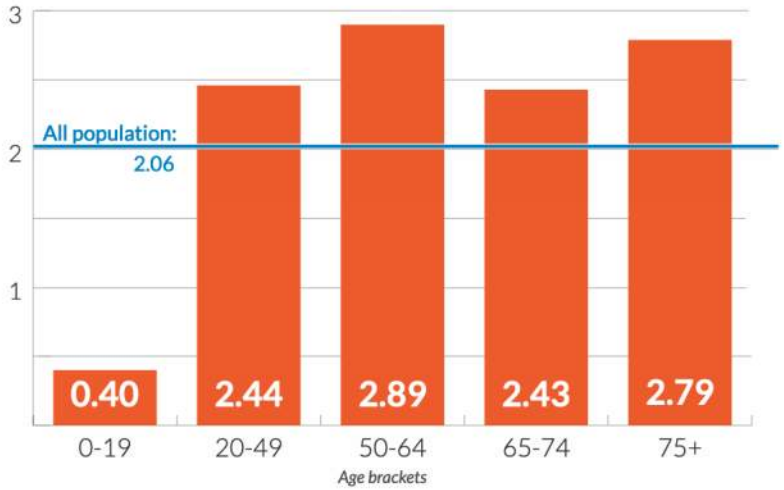
State and national trends show that speed-related crashes have increased. There are differences in equitable access and safety outcomes for all users of the transportation system. Active transportation users are the most vulnerable, specifically older adults, people walking in low-income communities, and American Indian/Alaskan Native, Black/African American, and Hispanic people are at greater risk of being severely injured or killed due to a motor vehicle while walking.

Complete Streets and the Safe System Approach can help calm traffic, reduce speeds and improve predictability of movement of all transportation users, especially at crossings and intersections. As a result, streets become safer for all.

U.S. Pedestrian deaths per 100,000 by race & ethnicity (2018-2022)



U.S. Pedestrian fatalities per 100,000 by age (2018-2022)



Source: Dangerous by Design, Smart Growth America, 2024

Safe System Approach

More communities and agencies, including Minnesota Department of Transportation (MnDOT) and U.S. Department of Transportation/Federal Highway Administration (USDOT/FHWA), are following the Safe System Approach to traffic safety, which aims to eliminate fatal and serious injuries for all road users, including the most vulnerable users – 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**
3. **Employ proactive tools to manage risks across an entire roadway network, especially for the most vulnerable users**
4. **Foster integrated, collaborative and coordinated action**

> "[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 System Plan

Learn more about the Safe System Approach:
https://www.transportation.gov/NRSS/SafeSystem

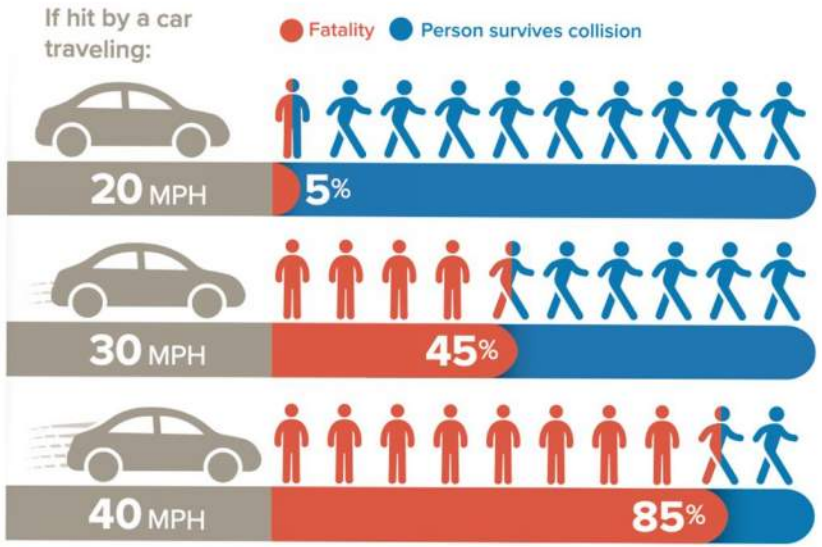
Making Safety a Priority Over Speed

Active transportation users are the most vulnerable transportation user. Reducing driver speeds directly improves the safety of streets and sense of place.

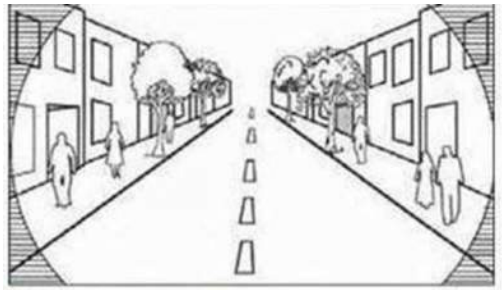
Why Speed Matters

The negative 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 miles per hour (mph). The chances of survival decrease by almost 50 percent when the person driving is traveling only 10 mph faster at 30 mph. **Communities throughout Minnesota are working Toward Zero Deaths as part of the statewide initiative to achieve zero traffic-related serious injuries and deaths, believing they are unacceptable and preventable.**

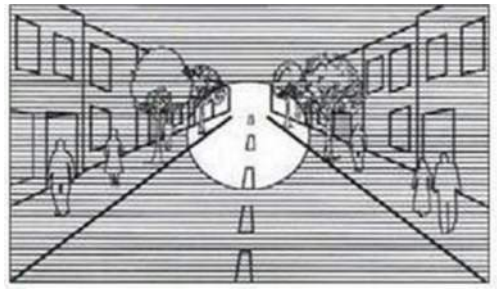
Lower speed streets better support businesses by increasing visibility. At lower speeds, drivers can see more of their surroundings and have more time to react, stop for people crossing, yield to people parking and unparking and to avoid potentially fatal crashes.



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

Designing for Safe Speeds

Street Design Influences Behavior

The design of streets directly influences behavior. Most motorists drive to match the "design speed" of the road, using cues such as lane width, street texture, the distance between buildings, street trees, other edge features and sight-line distances rather than solely relying on the posted speed limit. In turn, **streets should be designed to promote safety by taking a proactive design approach to ensure lower "target" speeds—the speed drivers *should* be going.**

Historically, roadways have been designed by observing the operating speed of the majority of drivers and designing the street for that speed. This has resulted in design speeds that are often higher than the posted speed due to wide turn radii, wider travel lanes, clear zones and more.

Today, more communities are using "target speed," a proactive approach to multimodal street design, by first identifying the speed they would like drivers to go and then implementing street design treatments to ensure the operating speeds of motorists is the target speed. This convention **helps ensure vulnerable users like people walking and biking are considered equitably in the design of the roadway**.

Conventional Street/Highway Design

Operating Speed = Design Speed = Posted Speed

Proactive Multimodal Street Design

Target Speed = Design Speed = Posted Speed

Adapted from NACTO.org

A lower target speed, and thus posted speed, is a key characteristic of streets in walkable, bikeable, mixed use, neighborhoods and commercial areas.

This Action Plan provides starter recommendations on how to start to bring the design speed more in line with safer target speeds of 20-25 mph through narrower lane widths, streetside landscaping, modern roundabouts and other traffic calming tools to create a safer and higher quality environment for all.

Read more on target speed: https://nacto.org/publication/urban-street-design-guide/design-controls/design-speed/.

Level of Quality

In the past, streets were designed to meet a certain level of service for people driving, often prioritizing higher traffic speeds. It's time to focus on a different value: level of quality.

Streets designed to support the safety and comfort of people walking and biking, not only create places where people want to be, they also more safely and efficiently manage vehicle traffic. The pictures (on right) are all the same by functional classification, arterials.

A people and place focused street design that supports all transportation users are a win-win for all.

AUTO FOCUSED

PEOPLE & PLACE FOCUSED

Active Transportation Principles

To provide transportation choice, equity and encourage active trips, routes must be:

SAFE
Does the route minimize risk of injury and danger (both traffic and personal safety)?

COMFORTABLE
Does the route appeal to a broad range of age and ability levels and are there user amenities (e.g., places to sit, protection from the weather)?

COHERENT
How easy is it to understand where to go? How to navigate a crossing or an intersection? How connected is the network?

DIRECT
Does the route provide direct and convenient access to destinations?

ATTRACTIVE
Is the route green, well-maintained and celebrate local identity?

These Active Transportation Principles are founded in a Safe System Approach. The significance of each principle may vary from route to route and from person to person. For example, people walking or biking to the grocery store often prioritize directness whereas people out for a recreational bike ride value attractiveness and comfort more than a direct route. Regardless of trip type, safety is critical for all users, especially when ensuring children and elders have safe routes to school, parks and other places they want to go.

Who Are We Designing For?

People walking and biking have unique needs. This Plan seeks to center active transportations users and their needs in future street improvements to ensure all people have safe and reliable access to the places they want and need to go.

People Walking: Everyone is a pedestrian at some point in their day because every trip begins and ends with walking. Walking is a key component of successful public transit, supports vibrant business districts and healthy people, reduces carbon footprint and contributes to safer neighborhoods by putting more eyes on the street.

An average of **22% of all trips** taken within communities are **less than one mile** – a distance that takes the typical person 15 to 20 minutes walking (National Housing Travel Survey, 2017). To encourage more walking trips, it is critical that pedestrians are prioritized in transportation projects and streets are made more welcoming, accessible and safer.

Basic Movement: People in motion require 3-4 feet for strolling width. This accounts for movement such as arm or baggage swing, swaying, pushing a stroller or using a walker. It does not account for people passing one another, moving around or over obstacles.

Who Are We Designing For?

Social Movement: Two people in motion require more strolling width for walking with others and socializing (6 feet).

A 6-foot sidewalk provides minimum space for children to walk in a group.

The landscape boulevard or strip (grass) provides added comfort by creating greater separation between children walking and people driving. The added benefit: kids can be kids, spilling over into a protected space.

Graphic by Terra Soma, LLC

Who Are We Designing For?

People Biking: Biking also is a key component of successful business districts, healthy people, carbon reduction, economic vitality and safer neighborhoods.

An average of **46% of all trips** taken within communities are **less than three miles** – a distance that takes the typical person 18 to 20 minutes biking (National Housing Travel Survey, 2017). According to the 2022 American Community Survey, approximately 0.4% of Saint Peter residents ride a bicycle to work and 9.6% walk to work. The community survey showed that 54.5% of respondents say they are "interested but concerned" about biking.

Lack of bike lanes and physical separation from motor vehicles, challenging intersection crossings and snow and ice are just some of the reasons why people do not feel comfortable biking today. Today, most of the city's bike network caters to the "highly confident" bicyclist who will ride regardless of roadway conditions and bicycle facility. Highly confident riders represent the smallest category of people willing to bike. To make biking, in all its forms, a real option for more people, the Plan establishes the need, and incremental steps, to prioritize the "interested but concerned" type of bicyclist to create a low stress, all ages and abilities network.

Many improvements that prioritize bicyclists also do the same for people walking. The strategies and actions in this Plan often support or are linked to each other.

Low volume, low speed residential streets become nice shared walking and biking streets with traffic calming tools such as neighborhood traffic circles.

INTERESTED BUT CONCERNED BICYCLIST

"This is the bicyclist user profile that MnDOT typically considers when selecting a bicycle facility type."

- Minnesota Bicycle Facility Design Guide

Comfort Types of Bicyclists in Minnesota

Low Stress Tolerance → High Stress Tolerance

NO WAY NO HOW	INTERESTED BUT CONCERNED	ENTHUSED & SOMEWHAT CONFIDENT	HIGHLY CONFIDENT
33%	**51-56%**	**5-9%**	**4-7%**
People will not bike out of disinterest or inability to do so.	People in this group would like to bike more, but do not feel safe on busy streets with fast moving traffic nearby. Biking on streets with fewer and slower-moving cars, or a space separated from vehicles, would help them feel more comfortable. National research and local survey data (page 55) confirm **over half of the population are interested in bicycling more often** but are **concerned about having to share the road with motor vehicles. They would like lower stress street environments to bike.**	People who have been biking for transportation for some time. They are sometimes comfortable sharing the street with drivers but would prefer to ride on streets with bike lanes or separated paths.	People who will ride regardless of roadway conditions and bicycle facility. Highly confident riders represent the smallest category of people willing to bike.

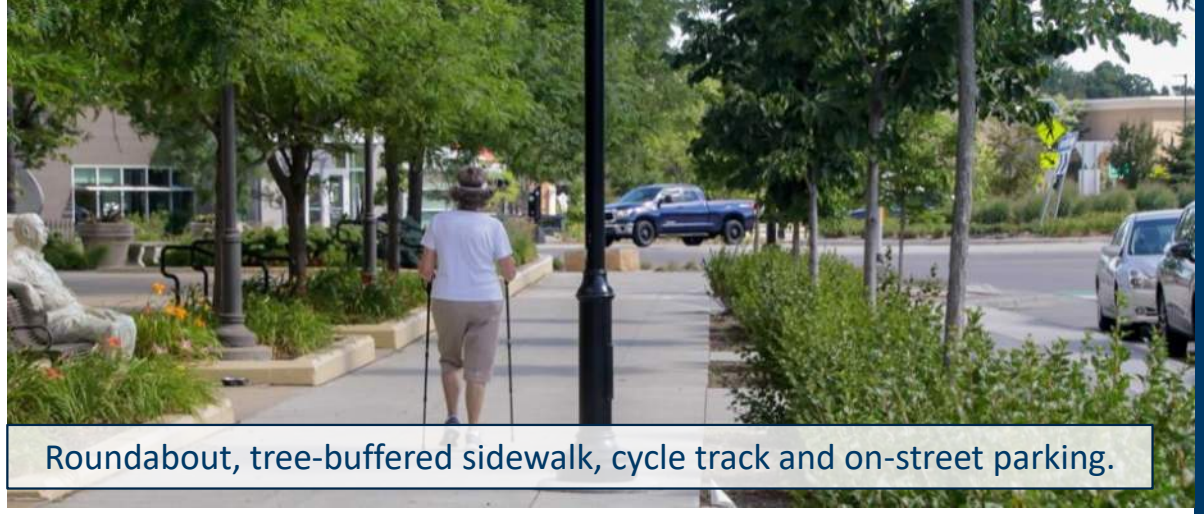
Graphic adapted from *AASHTO Guide for the Development of Bicycle Facilities*

Putting It Together

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, removing travel lanes and/or adding curb extensions reduces the amount of time people walking are exposed to potential conflict while crossing the street. Minimizing the crossing distance reduces 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, buffered bike lanes, fully separated paths or wider sidewalks. Installing intersection treatments like modern roundabouts or neighborhood traffic circles help manage speeds and are proven safety countermeasures, reducing the occurrence and severity of crashes.

Streets that are complete put people first and become even greater 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.



Roundabout, tree-buffered sidewalk, cycle track and on-street parking.

Chicanes provide traffic calming and space for native vegetation.

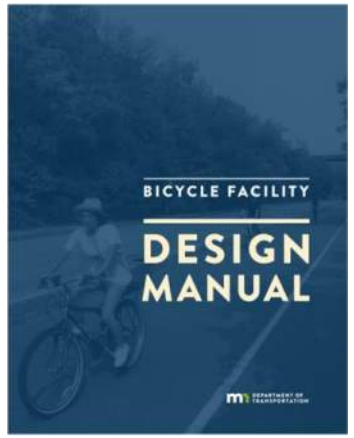
Neighborhood traffic circle in winter.

Core Concept Toolbox

SECTION 2

Best Practices

The recommendations presented in this Plan are based on state and national evidence-based best practices in active transportation design. The Core Concepts (following pages) start to illustrate key concepts, tools and treatments discussed in this Plan. Consider this a starting point. Use, adopt or endorse design guides such as:

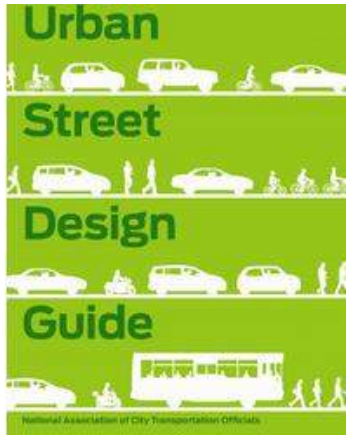


Bicycle Facility Design Manual

Minnesota Depart of Transportation (MnDOT), 2020

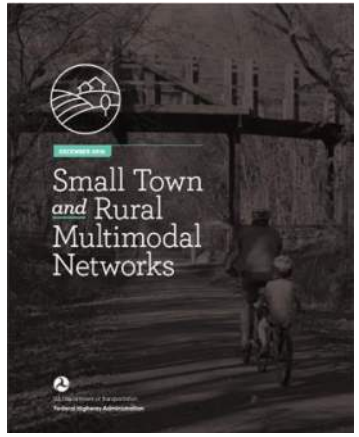
Minnesota's Best Practices for Pedestrian and Bicycle Safety

MnDOT, 2021



Urban Street Design Guide

National Association of City Transportation Officials (NACTO)



Small Town and Rural Multimodal Networks

FHWA, 2016

Designers should also refer to the Federal Highway Administration's Manual on Uniform Traffic Control Devices (MUTCD), which provides guidance on pavement markings, signage, and signals, which all play a significant role in the operation of biking and walking facilities.

Safe System: When to Mix, When to Separate?

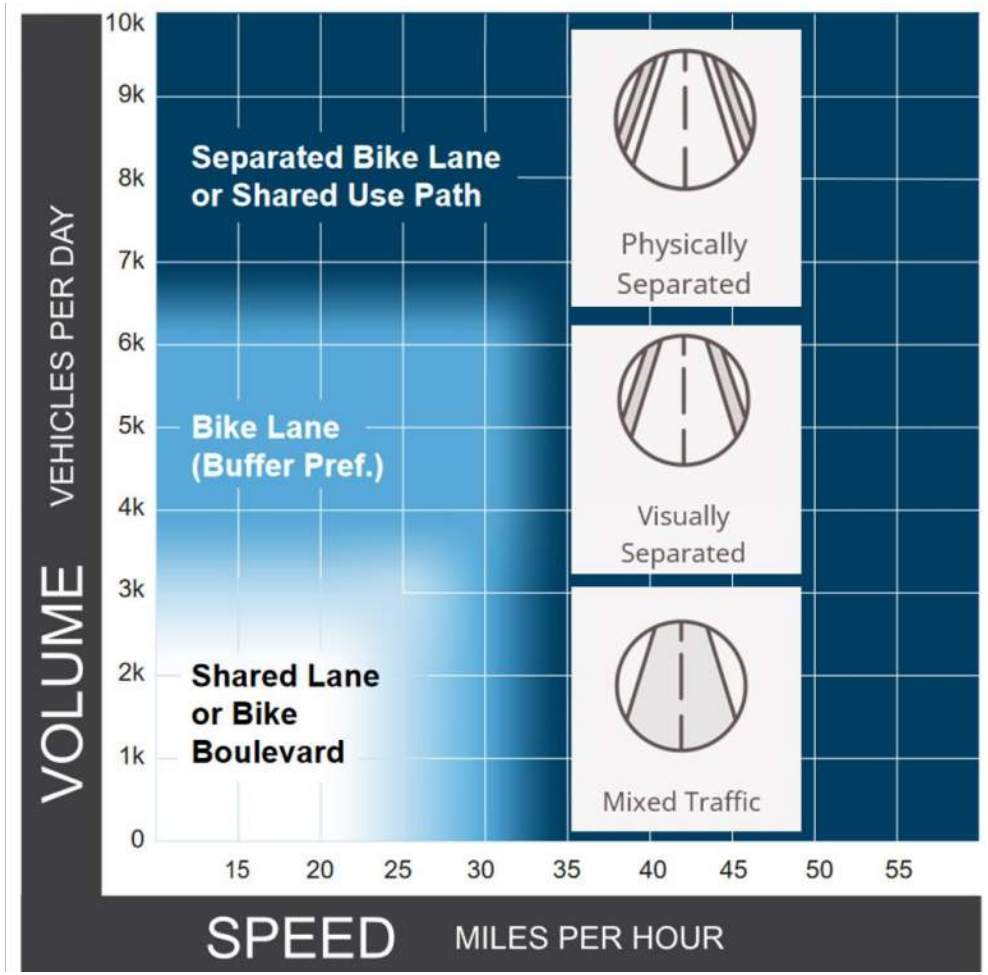


Chart adapted from Federal Highway Administration's *Bicycle Selection Guide (2019)*.
Note: Chart assumes operating speeds are similar to posted speeds. If they differ, operating speed should be used rather than posted speed.

SELECTING BIKEWAY FACILITIES

A key aspect to ensure safer roads by design is **separating users in the street space**.

The **greater the vehicle speed** and the **higher the vehicle traffic,** the **greater the physical separation** needs to be between people driving and people biking (and walking).

Separate and **protect people** from moving traffic when **vehicle speeds are above 20 mph**. This can be done visually with painted bike lanes or buffered bike lanes or physically with bikeways fully separated by curbs, street trees, on-street parking and more.

A **shared street environment**, where users are mixed, can be created for **people biking and driving** when **target speeds are at or below 20 mph and vehicle volumes are relatively low**. This can be true for people walking, especially in smaller cities or rural communities. This is a common environment on neighborhood residential streets.

Types of Bike Facilities

Bicycle Boulevard (traffic-calmed primarily residential street that prioritizes bicycle travel)

Conventional Bike Lane

Painted Buffered Bike Lane (buffer can be on parked car side, travel lane side or both)

Two-Way Cycle Track (also called protected bike lane or separated bikeway)

One-Way Cycle Track

Shared Use Path (also called a paved multiuse trail, some may also be a sidepath)

Core Concepts

BICYCLE BOULEVARD

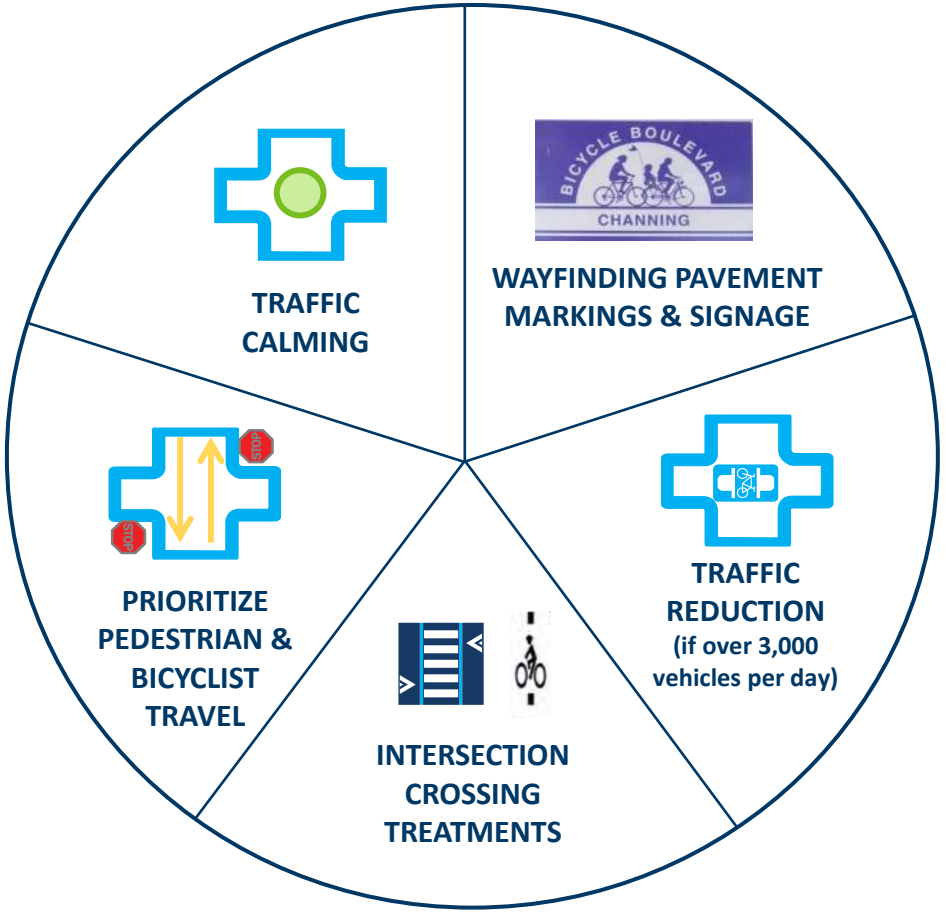
PRIORITIZE NEIGHBORHOOD ROUTES FOR PEOPLE BIKING

Bicycle boulevards (also called neighborways or neighborhood greenways) are low-volume and **low-speed primarily residential streets** that **prioritize people walking** and **bicycling** and discourage motor vehicle through traffic. Street design elements are mixed and matched along the corridor to:

- Reduce or maintain low motor vehicle volumes, preferably under 3,000 vehicles per day
- Reduce or maintain low motor vehicle speeds, preferably under 20 mph
- Create a direct, coherent (logical) and continuous route (STOP signs, if present, are oriented toward cross streets)
- Create access to key community destinations
- Create comfortable and safe intersection crossings
- Give priority to people walking and biking, reducing delay (STOP signs, if present, are oriented toward cross streets)

Combined, these treatments create an **attractive, convenient and comfortable shared street environment** that is welcoming to people of all ages and abilities.

A MIX OF DESIGN ELEMENTS



Adapted from Portland Bicycle Boulevard Guide: PortlandBicycleBoulevardGuidebook.pdf

MUTCD Tools: Shared Lane Markings (bicycle and chevron) on pavement and Bikes Allowed Use of Full Lane R9-20 sign. See Chapter 9A, MUTCD.

R9-20

Core Concepts

CONVENTIONAL OR BUFFERED BIKE LANES

SAFER STREETS FOR ALL

Cities investing in bicycling infrastructure—from bike lanes to fully separated or protected bike lanes (or cycle tracks)– achieve environmental and safety advantages through the increase of bicycle use. Bike lanes are one of FHWA's **Proven Safety Countermeasures.** Conventional (or painted) bike lanes designate an exclusive space for people biking, typically 5 to 7 feet wide, with pavement markings and signage. Painted buffers of 2 to 3 feet provide additional comfort between the people in the bike lane and the travel lane and/or parked cars to reduce "dooring" of bicyclists. Many benefits of bike lanes go beyond the bicyclist:

- Increases bicyclist comfort
- Creates visual separation between people biking and driving
- Increases predictability of bicyclist and motorist positioning and interaction
- Visually reminds motorists of bicyclists' right to the street
- Improves comfort for pedestrians by providing additional buffer space to the sidewalk
- Improves emergency response by providing space for motorists to pull over
- Supports more compact intersections as bike lanes provide an effective turning radius for large vehicles, allowing for other tools such as curb extensions to support people on foot

BIKE LANE SAFETY BENEFITS

49% ↓ in total crashes decreased on 4-lane undivided collectors and local roads due to marked space and lane reduction.

30% ↓ in total crashes decreased on 2-lane undivided collectors and local roads due to marked space.

Buffered bike lanes are almost always higher comfort than conventional bike lanes. Fully separated bicycle lanes provide further safety benefits and are more comfortable to people of all ages and abilities due to the greater separation between people biking and driving.

Sources:
https://highways.dot.gov/safety/proven-safety-countermeasures/bicycle-lanes
https://nacto.org/publication/urban-bikeway-design-guide/bike-lanes/
https://www.aarp.org/content/dam/aarp/livable-communities/livable-documents/documents-2014/Livability%20Fact%20Sheets/Bicycling-Fact-Sheet.pdf

MUTCD Tools: Bike Lane symbols (bicycle and arrow) and optional buffer (diagonal or chevron) on pavement and Bikes Lane R3-17 sign.

R3-17

Core Concepts

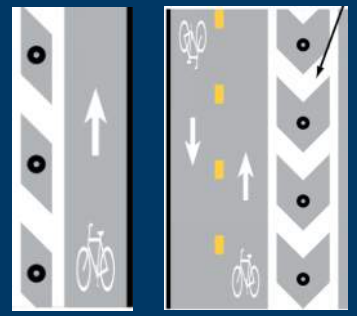
PROTECTED BIKE LANES OR CYCLE TRACKS

ALL AGES & ABILITIES BICYCLE FACILITY

Protected bike lanes (also known as separated bike lanes or cycle tracks) use a combination of horizontal separation (buffer) and vertical separation (e.g., delineators or flex posts, parked cars, or curbs) to separate and protect people bicycling from motor vehicle traffic. The combination of buffer distance and vertical separation can significantly improve and reduce the stressors of on-street bicycling, creating inviting space for all ages and abilities.

Protected bike lanes should be considered where motor vehicle speeds consistently exceed 25 mph, where daily motor vehicle traffic volume is higher than approximately 6,000 vehicles per day, where there is higher complexity and risk of conflicts at intersections and along curbsides (e.g., transit), or wherever there is more than one motor vehicle lane per direction.

MUTCD Tools: Bike Lane symbols (bicycle and arrow) and buffer (diagonal or chevron) on pavement (vertical element is placed in the buffer area), may be one-way or two-way, and Bikes Lane R3-17 sign.



▲ Two-way protected bike lane using a painted buffer space and flex posts to create vertical separation. (Minneapolis, MN)

▲ Curb separated directional (one way) cycle track adjacent to sidewalk. (Richfield, MN) When placed adjacent to the sidewalk, a detectable surface should be placed at the edge of the bike lane for people with vision impairments.

▲ Curb separated cycle track with landscaped buffer space between the protected bike lane and sidewalk. (Richfield, MN)

▲ Curb separated cycle track along a downtown Main Street. (Missoula, MT)

Core Concepts

SHARED USE PATHS

A SHARED FACILITY FOR PEOPLE WALKING AND BIKING

Shared use paths (also known as paved multiuse trails) are completely separated from motorized traffic and are shared by people walking and biking, traveling in both directions. They are generally 10 to 14 feet wide. In constrained circumstances, 8 feet wide is allowed. Shared use paths can be broken into two main categories:

- **Greenway or Rail-Trails** are shared use paths on independent alignments that might follow former railroads, waterways, utility corridors or other types of greenway corridors.

- **Sidepaths** are bidirectional shared use paths that run parallel to the roadway. Roadway intersections and driveway crossings require extra consideration to protect and prioritize trail users, such as raised table crossings at driveways.

Children play along a shared use path that connects two housing developments.

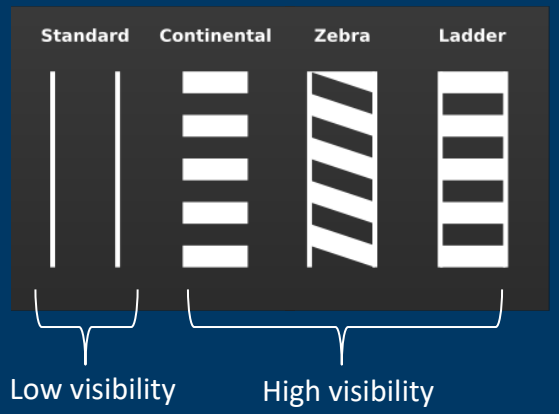
Photos (top left and right): People enjoying a shared use path along a former rail corridor. A young child learns to bike on a sidepath.

Core Concepts

CROSSINGS

CLEARLY MARK CROSSWALKS

High-visibility marked crossings are needed to help mark potential conflict zones and ensure all users understand how to safely yield and stop for each other. There are different levels of treatments depending on the crossing context and complexity (e.g., motorist speeds, volume of traffic, number of lanes, signal control). See more crossing guidance: Minnesota's Best Practices for Pedestrian and Bicycle Safety



High-visibility crosswalks should be marked using the continental pattern of crosswalk striping, which consists of a series of wide stripes parallel to the curb for the length of the crossing as they are the most visible and easiest to maintain. The white bars can be spaced to minimize wear from vehicle wheels.

A **z-median crossing** breaks complex crossings midblock into two crossings segments. An angle in the island positions people to face oncoming traffic before crossing. It also provides storage space for bikes.

Raised table crosswalks work well at side streets or driveways to give people walking or biking priority, reinforce motorist stop location, slow motorist turning speeds and increase motorist yielding behavior.

Core Concepts

CROSSINGS

CONSIDER OTHER CROSSING TOOLS

Rectangular Rapid Flashing Beacons (RRFBs) use standard bicycle and pedestrian warning signs coupled with brightly flashing rectangles, which may be passively activated or upon someone pushing a button. This is a proven safety countermeasure which improves motorists' compliance with yielding to pedestrians in the crosswalk. Other considerations:

- Enhance visibility with an overhead sign option
- Double sign pedestrian signposts on both sides of the street
- Paint an advance stop bar to indicate to motorists where to stop on multi-lane roads

Pedestrian Hybrid Beacons (also known as HAWK - High-Intensity Activated Crosswalk) are a proven safety countermeasure suitable for crossing higher speed (35 mph or more) and higher volume (9,000 annual average daily traffic or more) roadways. The signal remains dark until activated, then turns yellow to slow traffic before tuning red to allow pedestrians to cross while motorists wait behind the stop bar. The crossing must also include a marked crosswalk and pedestrian countdown signals.

Pedestrian Hybrid Beacons are proven to reduce pedestrian crashes by 55 percent, total crashes by 29 percent, and serious injury and fatal crashes by 15 percent.

Source: https://highways.dot.gov/safety/proven-safety-countermeasures/pedestrian-hybrid-beacons

Core Concepts

CURB EXTENSIONS

SHORTEN CROSSING DISTANCES, IMPROVE SIGHTLINES FOR ALL

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. Curb extensions (or bump-outs) are a proven safety treatment by:

- reducing the crossing distance and exposure (potential threat to vehicle traffic) for people walking;
- promoting slower motorist turning speeds and thus stopping or yielding behavior by reducing the corner (or turning) radii;
- reducing motorist wait time; and
- improving sight lines for both drivers and walkers.

Temporary curb extensions with paint, planters and flexible delineators are a great way to test this tool and create a safer, more inviting walking environment.

Curb extensions inset on-street parking and provide space for trees, landscaping, rain gardens and other signage and street furniture. They can also be built so that they do not interrupt existing drainage, reducing construction costs.

Core Concepts

NEIGHBORHOOD TRAFFIC CIRCLE

20 MPH IS PLENTY ON RESIDENTIAL STREETS

Traffic circles (also called mini-circles) work to reduce vehicle speeds in a few ways.

First, they interrupt the "straightaway" feel of many residential streets that can signal to drivers to go a faster speed than the posted speed. Second, traffic circles narrow the intersection, slowing drivers' through and turning movements. Slower intersection speeds increases motorists' yielding behavior to people walking and biking.

Traffic circles are a proven safety treatment, reducing all types of intersection crashes by 90% and injury crashes by 97% (Seattle Department of Transportation). They are most effective when installed as a series at multiple intersections along a corridor. They are often suitable for replacing STOP-controlled intersections.

▲ Traffic circles help achieve neighborhood-friendly speeds of 15-20 mph by design. (Saint Paul, MN)

▲ Traffic circles can be tested using low-cost materials. They keep people safely in motion, which is beneficial to people biking. (Edgewater, CO)

▲ Street trees in traffic circles adds to the traffic calming effect while also helping to better manage stormwater. (Seattle, WA)

▲ Traffic circles can be designed to create gateways into key neighborhoods or districts, like downtown, with features such as sculptures or artwork. (Holland, MI)

Core Concepts

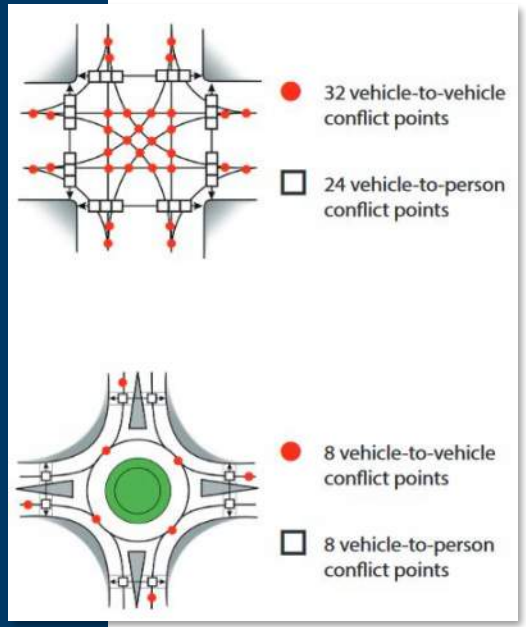
MODERN ROUNDABOUTS

A SAFER CHOICE BY DESIGN

Modern roundabouts, including mini or compact roundabouts, are a Federal Highway Administration (FHWA) **Proven Safety Countermeasure**, creating a safer intersection for all users:

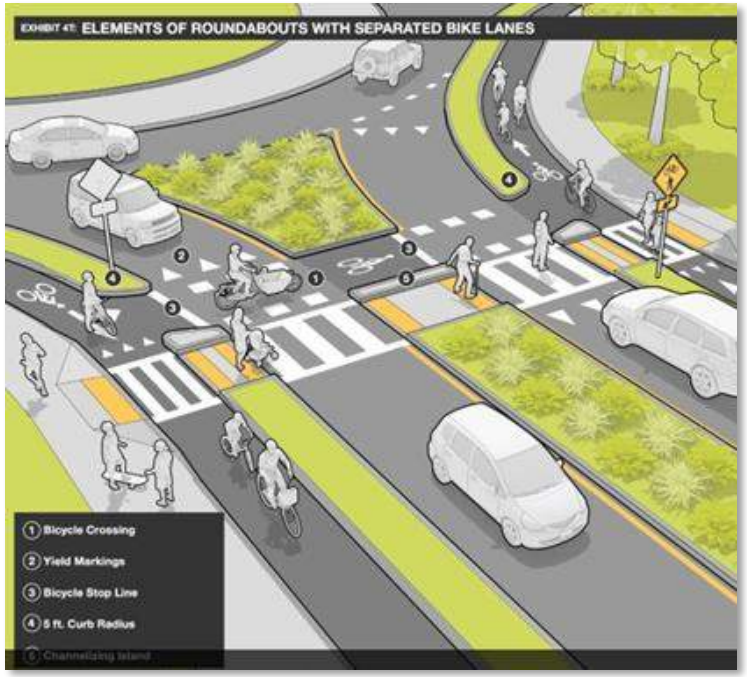
- 90% reduction in fatal crashes
- 75% reduction in injury crashes
- 30-40% reduction in pedestrian crashes
- 10% reduction in bicycle crashes
- 30-50% increase in traffic capacity

A single-lane modern roundabout can handle up to 25,000 vehicles per day (a compact roundabout slightly less); a double-lane roundabout can handle up to 43,000 vehicles per day. When designed properly, roundabouts ensure motorist speeds of 15-23 mph, which increases drivers' ability to judge and react to other people driving, walking and biking. Roundabouts also create gateway treatments, providing space for landscaping, local art and signage.



Photos (top to bottom right):

- Domed mini or compact roundabout with curb extensions in winter. (Detroit Lakes, MN)
- Compact roundabout with a painted rainbow creates a sense of arrival and welcome. (Richfield, MN)
- Single (and double) lane roundabouts have fewer vehicle-to-vehicle conflict points and vehicle-to-person conflict points than a signalized intersection.
- Massachusetts DOT diagram showing guidance for roundabouts with protected bike lanes and crossings.



Core Concepts

RIGHT-SIZING STREETS

More communities are prioritizing a people-first approach to street design. To make streets safer for people walking, biking and driving, street space is being reallocated by reducing vehicle lane widths and removing lanes altogether. The gained space is reallocated towards wider sidewalks, bike lanes, separated bike lanes (also known as protected bike lanes or cycle tracks), street trees, on-street parking and more.

Right-sizing 5- or 4-lane streets to 3- or 2-lane streets works best on streets that have daily traffic volumes of 8,000 to 20,000 vehicles. As streets reach the higher traffic volumes additional intersection treatments, such as the modern roundabout, might be needed to more effectively manage vehicle traffic.

Photo (above): Main Street in Hamburg, NY is a major state truck route carrying 12,000 vehicles per day. The town of Hamburg and NYDOT replaced four intersections with single-lane modern roundabouts, removed two travel lanes and narrowed the remaining lanes to 10-feet wide, allowing wider sidewalks, park assist lanes and additional street trees.

Core Concepts

RIGHT-SIZING STREETS

> Travel lanes could be as narrow as 10 feet. Narrower lanes and narrower street width are associated with fewer crashes."
>
> *MnDOT Technical Memorandum No. 17-12-TS-05 and No. 18-09-TS-06*

"Ten-foot lanes do not result in an increase in crashes or reduce vehicle capacity on roads with speeds of 45 mph or less. Narrower lane widths can contribute to lower vehicle operating speeds, which can increase safety for all roadway users."

FHWA Bicycle Selection Guide, 2019

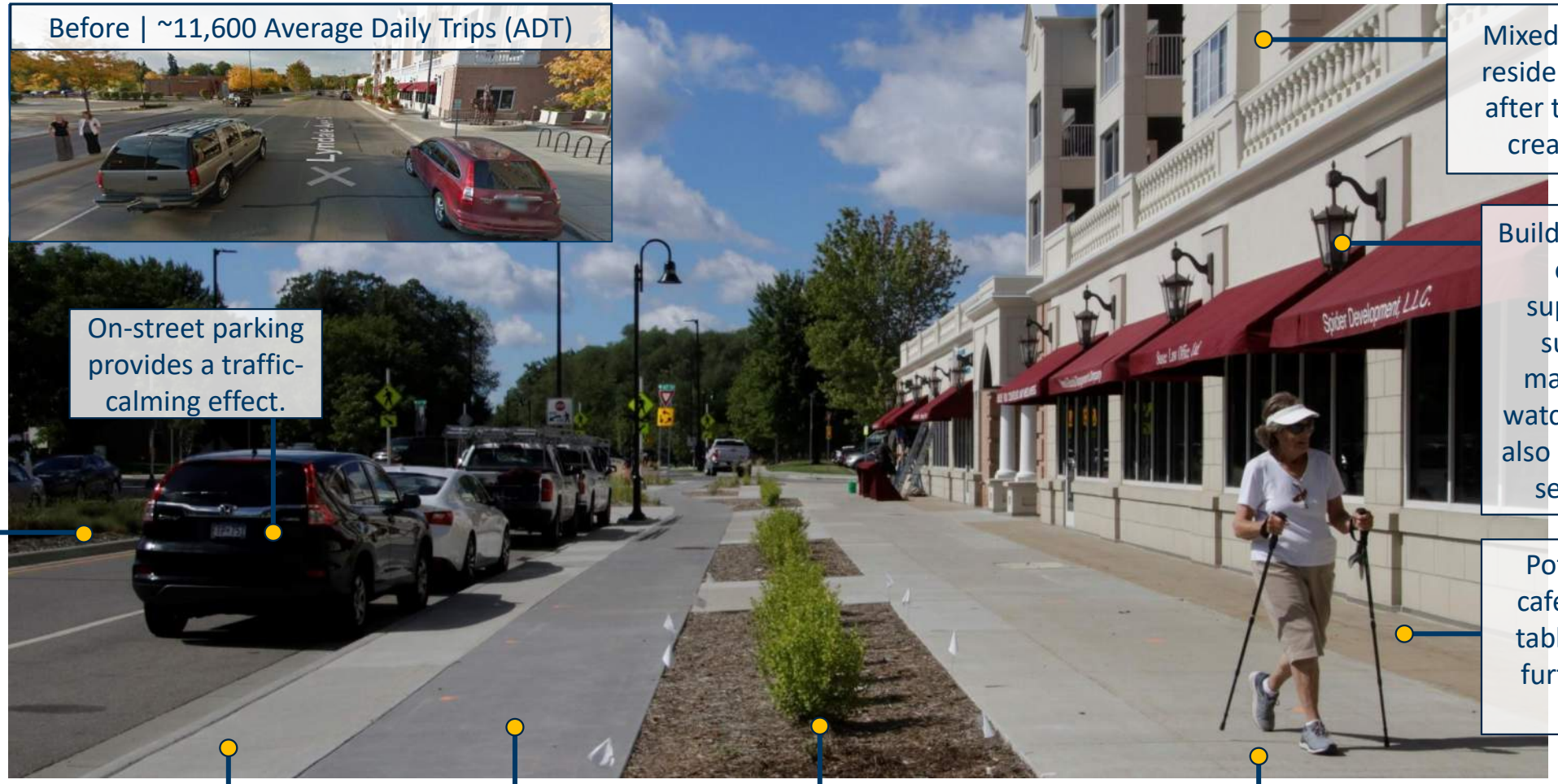
Travel Lane Width: Narrowing lanes can reduce the operating speed of traffic while also providing the additional space needed for bikeways. Ten-foot-wide lanes have a positive impact on a street's safety without impacting traffic operations. To support vulnerable users like pedestrians and bicyclists, streets should maximize buffer space and work to manage safe speeds for all by design.

National Association of Transportation Officials (NACTO): https://nacto.org/publication/urban-street-design-guide/street-design-elements/lane-width/

Context Sensitive: AASHTO's *A Policy on Geometric Design of Highways and Streets,* commonly referred to as the "Green Book," provides flexibility to use 10-foot-wide travel lanes in a variety of situations depending on operating speeds, volumes, traffic mix, design vehicle, horizontal curvature, use of on-street parking and land use context.

Minnesota State Aid Standards (Part 8820.9941) note minimum lane width of 10 feet may be allowed on streets with bike lanes when design speeds are less than 35 mph and when all street factors are considered (e.g., bus route, traffic mix, land use). It also notes engineering judgment should be used.

Putting It Together: High Quality Streets for All



Our Streets Today

SECTION 3

What is it Like to Walk and Bike? | **Planning Framework**

COMMUNITY SNAPSHOT

Walking and biking in Saint Peter today presents both opportunities and challenges. Most of the city benefits from sidewalks that have been maintained in good condition. However, there are a few areas, particularly outside the downtown core, in which there are no sidewalks or there are gaps in the network.

The city has made progress in developing shared use paths (aka, “trails”) and grade-separated crossings where needed, but much of the existing infrastructure is located on the outskirts, away from Saint Peter’s core.

Since many of the streets are low volume, there is opportunity to use traffic calming to make existing streets more friendly to people biking and sharing space with people driving. Higher volume and higher speed streets would benefit from dedicated facilities for people to bike.

This plan provides guidance on planning safer and more comfortable walking and biking routes for people of all ages and abilities to travel between neighborhoods, parks, schools and commercial areas.

EXISTING PLANS

The **Active Transportation Action Plan** supports and is informed by the following existing plans:

- Trail Master Plan (2016): a map of existing and proposed trails in Saint Peter.
- Sidewalk Master Plan (2016): an inventory of existing and proposed sidewalks in Saint Peter.
- Parks Master Plan (2024): The plan identifies a goal to improve trail (shared use path) connectivity by creating a “loop” route and “western greenway” route.
- Saint Peter Comprehensive Plan (2016): The plan featured a trail section outlining the future regional connection to the Sakatah Singing Hills State Trail, as well as a Sidewalk Master Plan focused on filling sidewalk gaps, with top priority given to creating safe routes to schools.

How Are We Moving Today? | Census Data

9.6% Walk

In Saint Peter, 9.6 percent of commuters walk to work compared to 2.6 percent statewide. ACS, 2022

0.4% Bike

In Saint Peter, 0.4 percent of commuters bike to work compared to 0.5 percent statewide. ACS, 2022

0.2% Transit

In Saint Peter, 0.2 percent of commuters take transit to work compared to 2.5 percent statewide. ACS, 2022

16.8% Disabled

Approximately 16.8 percent of people living in Saint Peter have a disability. ACS, 2022

18.5% Poverty

Approximately 18.5 percent of people living in Saint Peter are living in poverty. ACS, 2022

17% Minority Population

Approximately 17 percent of people living in Saint Peter are of minority populations. ACS, 2022

2.0% No car

Approximately 2.0 percent of people who live in Saint Peter do not own a car. ACS, 2022

16.3 Minute Commute

Of those in Saint Peter who commuted to work, it took them on average 16.3 minutes to get to work. ACS, 2022

20% Physically Inactive

Approximately 20 percent of people living in Nicollet County reported performing no physical activity outside of work. County Health Rankings, 2024

How Are We Moving Today? | **Strava Data**

STRAVA HEAT MAP

Strava is a mobile application that people can use to track their biking and walking trips. Strava uses GPS to track the active transportation trips and aggregates them into a heat map available for public viewing.

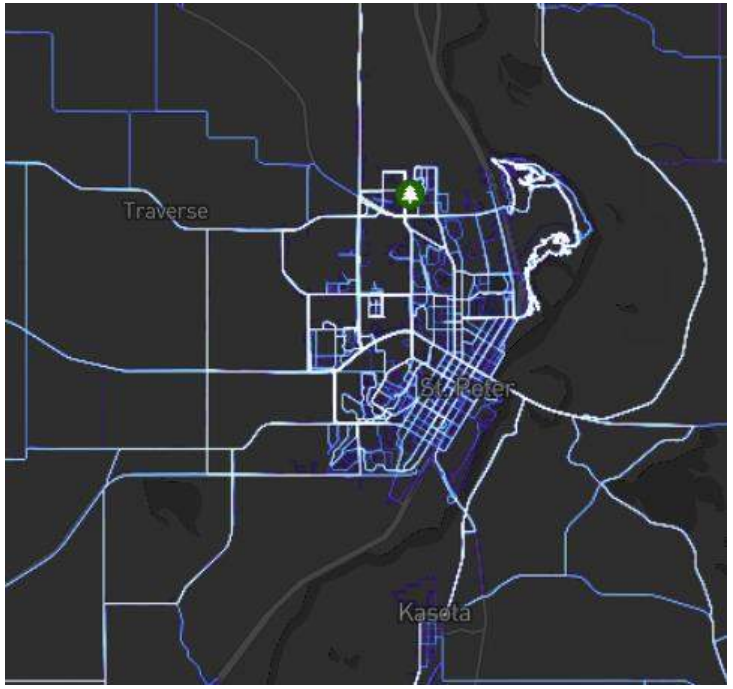
Many people are walking and biking throughout the city per the Strava data (data is from the last two-years; heat maps are updated monthly and include the prior 24 months).

Source: Strava Global Heatmap

WALKING HEAT MAP

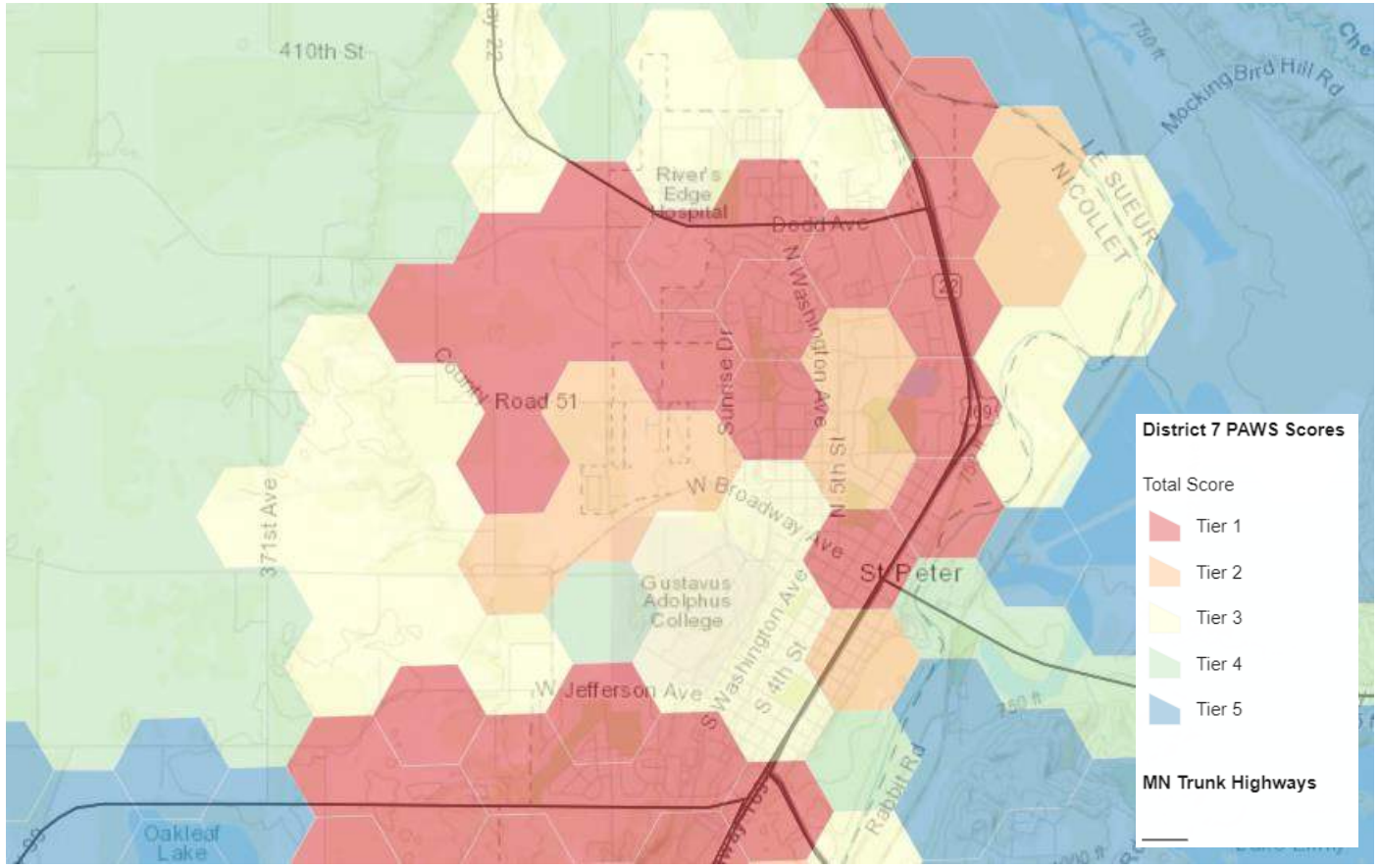
The walking heatmap shows more trips within the city, including both local streets and along state roads. There is a lot of walking activity on the Gustavus Adolphus College campus.

BIKING HEAT MAP



The biking heat map shows high usage of state roads through town and extending to the rest of the region, particularly Broadway Avenue and Nicollet Avenue.

Where Are Priority Areas?| **MnDOT Priority Areas for Walking**



The Priority Areas for Walking (PAWS) is meant as a starting point for considering walking in decision-making. The analysis highlights areas that are important for walking but does not recommend specific treatments.

The PAWS tool scores half-mile hexagons based on equity, safety, health, infrastructure and land use factors. The maximum possible score is 19. Tier 1 and Tier 2 include areas that received higher scores. In Saint Peter, Tier 1 and 2 surround TH-169, Broadway Avenue and neighborhoods surrounding downtown.

City, regional and state planners and designers are encouraged to use this tool in identifying areas to invest in walking. While all projects should consider the needs of people walking, projects in higher ranked areas should prioritize comfort and safety for people walking over convenience for people using other modes of transportation. For individual projects, planners should look at the details of the data to confirm the score.

Source: Priority Areas for Walking (PAWS) (arcgis.com)

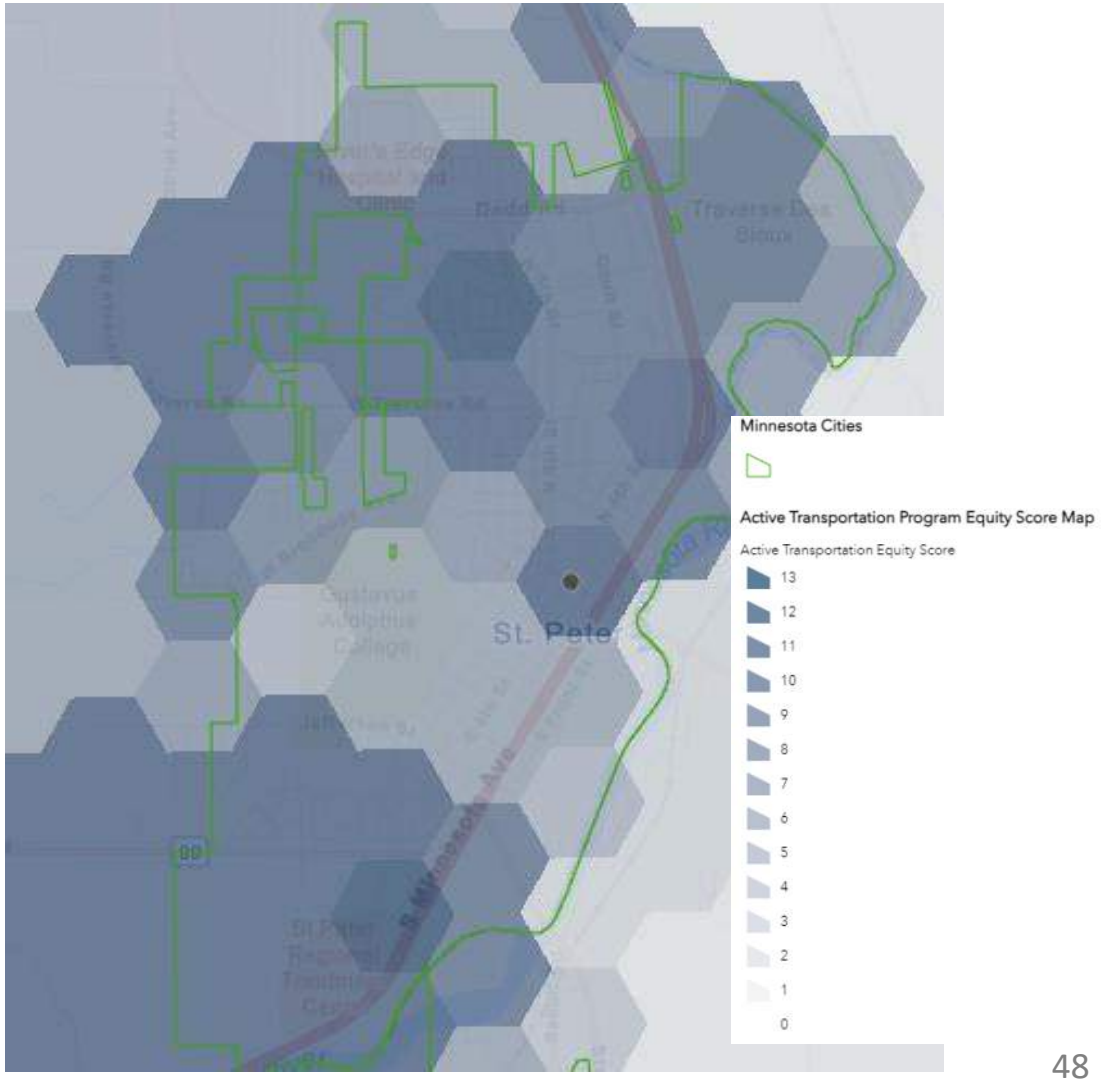
Where Are Priority Areas?| MnDOT Active Transportation Program Equity Score

Active Transportation Program Equity Score

The Active Transportation Equity Score uses 15 indicators to determine locations in Minnesota that are in greater need of Active Transportation investment. Indicators reflect demographics, location of jobs and schools, presence of transit and pedestrian crash history.

Higher scores (darker blue color) will result in more points awarded for Active Transportation Program applications. The highest scores occur on the northwest and southwest sides of Saint Peter. The lowest scores (lightest shades) occur close to Gustavus Adolphus College.

Source: [MnDOT Active Transportation Program Equity App (arcgis.com)]

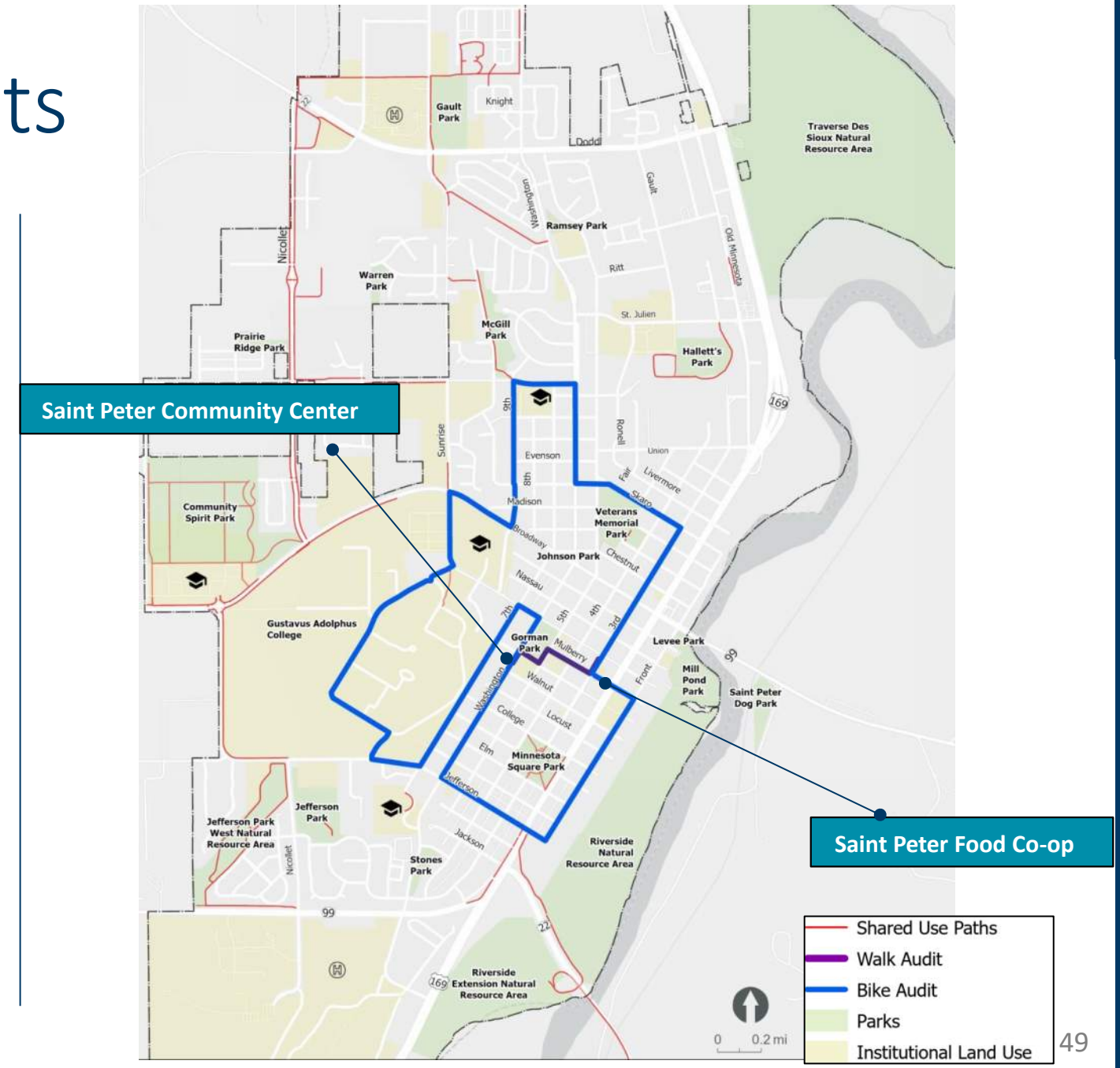


Walk, Bike, Roll Audits

City of Saint Peter community members completed walk and bike audits. Both audits were on May 22. The bike audit began and finished at the Saint Peter Food Co-op. The Walk Audit began at the Community Center and ended on 3rd Street.

A powerful tool for engagement, bringing together people with diverse perspectives and experiences—from city staff and elected leaders to community members—to:

- Observe and deepen understanding of how active transportation users experience a street
- Tap into people's knowledge of place
- Learn from the physical built environment
- Engage in meaningful dialogue



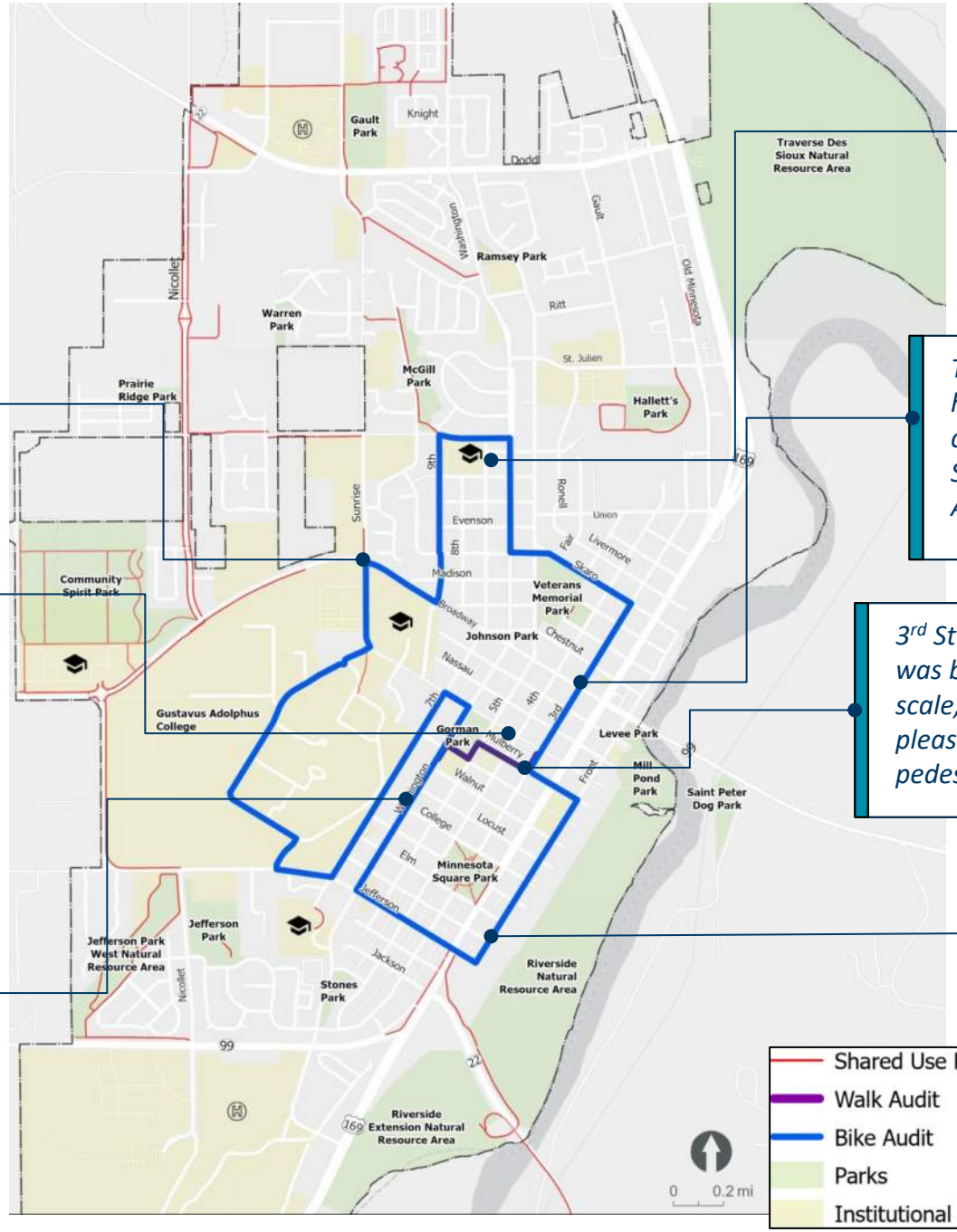
What We Observed and Discussed|

Walk and Bike Audits

The improved traffic flow and pedestrian amenities at the Broadway Avenue roundabout

The potential addition of a neighborhood traffic circle at 4th Street and Mulberry Street

Fast traffic on Washington Avenue poses challenges for pedestrians and lack of bike lanes makes biking uncomfortable for many people



Full bike racks at North Elementary School

The wide street and heavy traffic creates poor crossing conditions at 3rd Street and Broadway Avenue

3rd Street Streetscape was built at the human scale, creating a pleasant experience for pedestrians

Wide Front Street allows vehicles to travel at higher than posted speeds

Key Observations: Walking Audit

WALKING AUDIT

The walking audit began at the Community Center and traversed its way to South 3rd Street. The audit included watching children bike along and across South Washington Avenue near Gorman Park as they ventured home from school. Throughout the walk, community members learned about the different types of crosswalk markings and treatments, how street design influences motorists' speed, why 20 mph is plenty on neighborhood streets and traffic calming tools, such as the neighborhood traffic circle.

The walking audit paused at business-lined South 3rd Street to discuss the distinctions between a strong commercial street built to the human scale with trees and storefronts along the sidewalk, and a more automobile-oriented environment characterized by parking lots and businesses set back from the street.

The tour concluded with a group reflection on what aspects of the walk were most surprising to participants.

KEY FINDINGS

Fast Traffic on Washington Avenue

The high traffic speeds along Washington Avenue pose several challenges for people walking and biking, including a higher crash risk, noise pollution and an overall uncomfortable environment.

Building at the Human Scale

Buildings on one side of 3rd Street were built at the human scale with storefronts stopping at the sidewalk, creating a pleasant and welcoming experience for pedestrians.

Key Observations: Walking Audit

WALKING AUDIT KEY FINDINGS, CONTINUED

Strategies to Calm Traffic

One strategy identified during the audit to reduce speeding motorists is the neighborhood traffic circle. This design compels drivers to slow down and yield, much like a roundabout.

Crossings Along 5th Street

5th Street had signed and painted pedestrian crossings for children to safely access Gorman Park and the Community Center.

Automobile Focused Design

The east side of South 3rd Street is not designed for the human scale, instead built for automobiles with large parking lots and setback structures, creating an unpleasant environment for people walking.

Interior Paths in Gorman Park

Gorman Park contains wide and well-maintained interior paths to help people walk or bike throughout the park while enjoying the beauty of the landscape.

Key Observations: Biking Audit

BIKING AUDIT

The bike audit journeyed through six miles of town, focusing on the heart of the community and how people biking navigate the wide thoroughfares like Washington Avenue, Front Street and Jefferson Avenue. Several concerns became apparent during the ride: extended wait times at the signalized crossing of TH-169, lines of cars building up behind people biking on the incline of Jefferson Avenue, speeding motorists along Washington Avenue and limited visibility and lack of traffic control when crossing Broadway Avenue and 3rd Street.

However, amidst these challenges, the audit also highlighted the positives of biking in Saint Peter. This included recent enhancements such as the addition of roundabouts on Broadway Avenue, trails encircling the town, a network of neighborhood connector paths, a rectangular rapid flashing beacon near the Arboretum at Gustavus College, the abundance of bikes parked at North Elementary School and the picturesque, tree-lined charm of 3rd Street.

KEY FINDINGS

Long signalized wait times to cross TH-169

Long wait times when crossing TH-169 can encourage people to cross against the signal if they see a gap in traffic.

Wide Front Street

Wide streets cater to automobiles and allow people to drive faster than appropriate for the street, creating an unpleasant space for people who are biking along the street.

Key Observations: Biking Audit

BIKING AUDIT KEY FINDINGS, CONTINUED

Broadway Roundabout

The roundabout is a valuable enhancement to Saint Peter's road network, offering improved safety for all modes, better traffic flow and dedicated pedestrian crossings.

7th Street, Jefferson Avenue & Grace Street

S 7th Street has no sidewalks and contains parking restrictions. Without sidewalks, people are forced into the street.

Bike Parking at North Elementary School

Bike racks at North Elementary School were full due to bike education for students and neighborhood connections providing comfortable access to school.

Broadway and 3rd Street Intersection

The wide street with heavy traffic creates a challenge for people to walk across the street—also, the parked cars along Broadway results in low visibility.

Community Mapping Workshop

Mapping Workshop

The network mapping workshop offered a fresh perspective on enhancing the city's active transportation (AT) network, pinpointing areas for improvement and expansion. The workshop provided education on AT infrastructure, exploring diverse strategies to integrate AT into the existing street network. The consultant team provided many examples of how AT has positively transformed communities.

Participants identified key routes that would enable them to walk or bike to key community destinations. In small groups, people discussed how the active transportation principles were working (or not) along the identified routes and started to share ideas and potential solutions to strengthen routes for active transportation users.

The workshop concluded with a group discussion of the emerging network needs.

KEY FINDINGS

Create a buffer along TH-169

Create a buffer between the vehicular travel lanes and the sidewalks along TH-169 to improve community character and sense of comfort for people walking. The existing parking lanes are insufficient for buffering.

20 mph speeds on local streets

Reduce speeds to 20 mph on local streets, using traffic calming treatments, to create a safer and welcoming environment for people of all ages on foot and bike.

Key Findings: Mapping Workshop

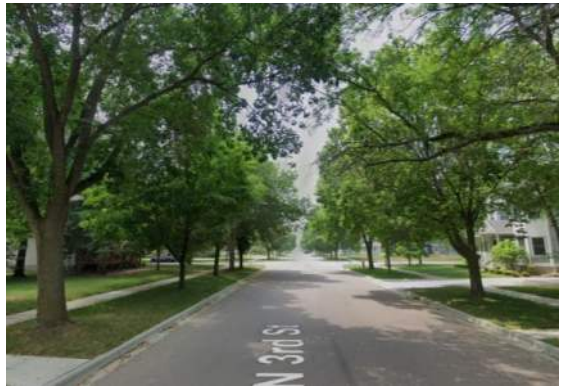
MAPPING WORKSHOP KEY FINDINGS, CONTINUED

Gustavus to Downtown

Create a bike boulevard along College Avenue to connect between Gustavus Adolphus College and downtown to encourage students to visit shops and restaurants.

Washington Avenue

Provide dedicated space for people to bike and slow speeds through traffic calming techniques.



3rd Street Bike Boulevard

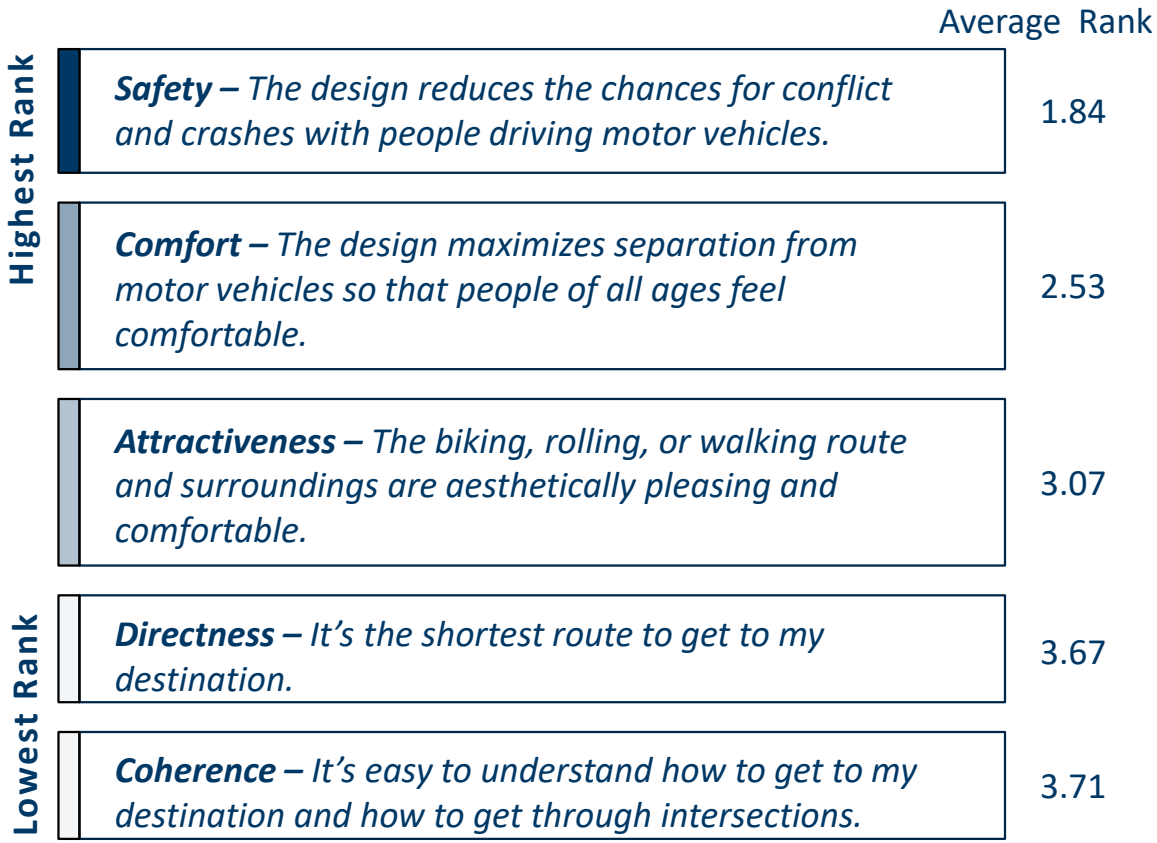
Prioritize 3rd Street as a bike-friendly route between the north and south sides of town. Use curb extensions and traffic calming to slow vehicular traffic.

5th Street Connection

Develop a biking and walking route connecting Veterans Memorial Park and Ramsey Park along 5th Street, which lacks sidewalks.

What Qualities are Most Important? | **Survey**

What qualities are most important for the active transportation system?

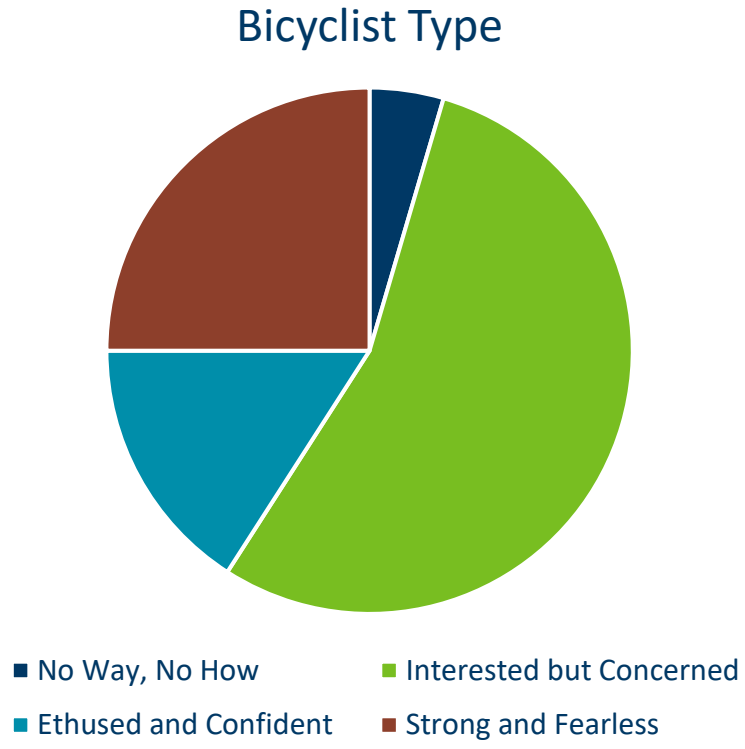


These rankings suggest that while safety and comfort are the highest valued, factors such as attractiveness, directness and coherence also significantly influence users' perceptions of biking, rolling or walking.

People may be willing to go slightly out of their way to enjoy a safer or more attractive route while walking or biking.

Forty-four people answered the online survey, which was open between January 26, 2024 to July 21, 2024.

What Type of Cyclist are You? | **Survey**



What type of bicyclist are you?

***4.5%* No Way, No How:** *I'm not interested in biking (28 - 40% statewide)*

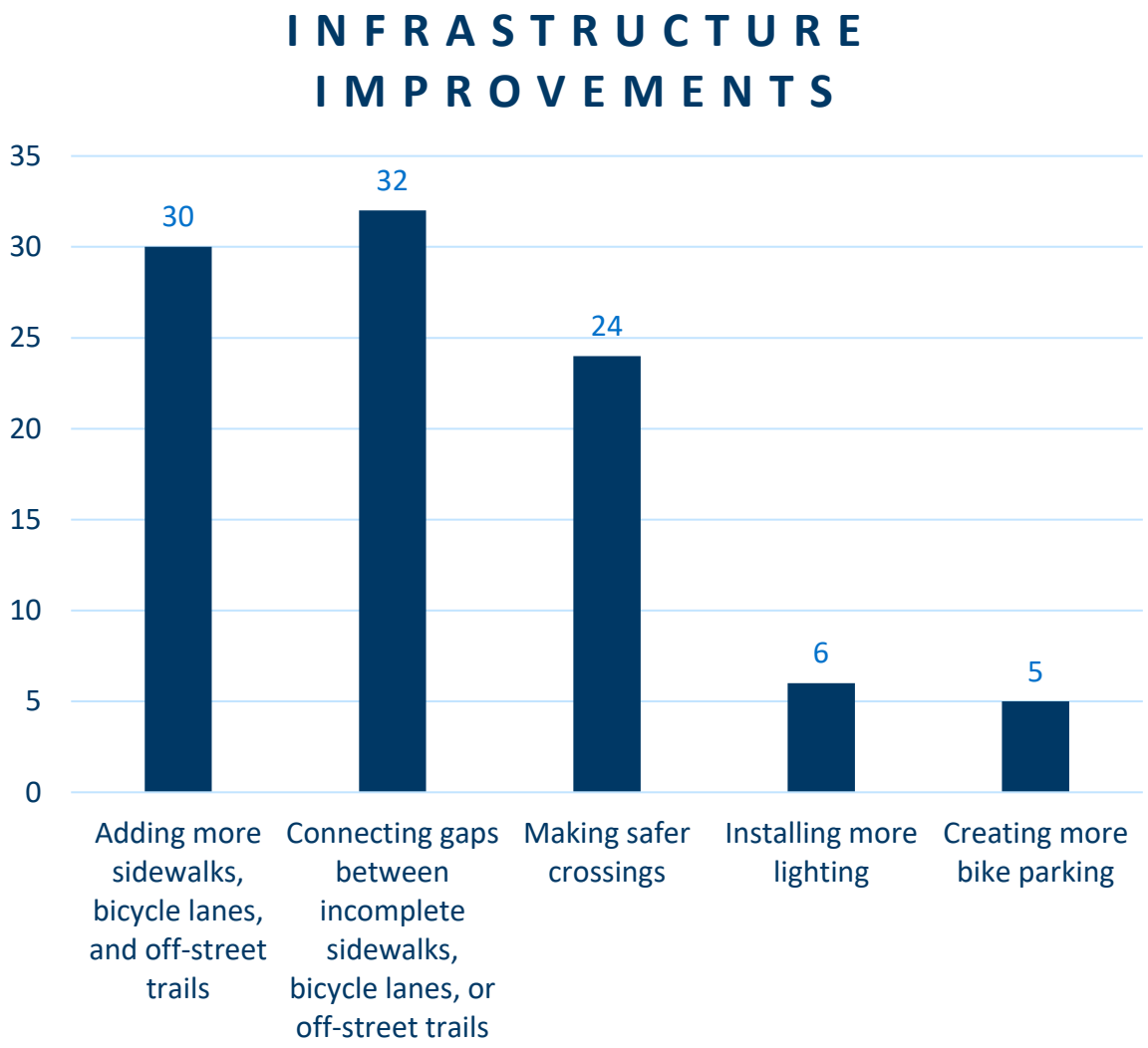
***54.5%* Interested but Concerned:** *I'm willing to bicycle if I can be separated from motorized traffic, such as along a paved trail (51-56% statewide)*

***15.9%* Enthused and Somewhat Confident:** *I'm willing to bicycle if I can use an on-street bike lane or similar route along the street (5-9% statewide)*

***25%* Highly Confident:** *I'm willing to bicycle on roads, without trails or bike lanes (4-7% statewide)*

Survey highlights 95.5 percent ***are*** interested in biking! Of whom, 70 percent would bike if conditions for biking were improved. This represents a potential increase in people biking once new routes are developed and crossings are improved. The high percentage of people identifying as "Highly Confident" cyclists suggests that the respondents to the survey may have been skewed toward more avid cyclists.

What Improvements? | **survey**

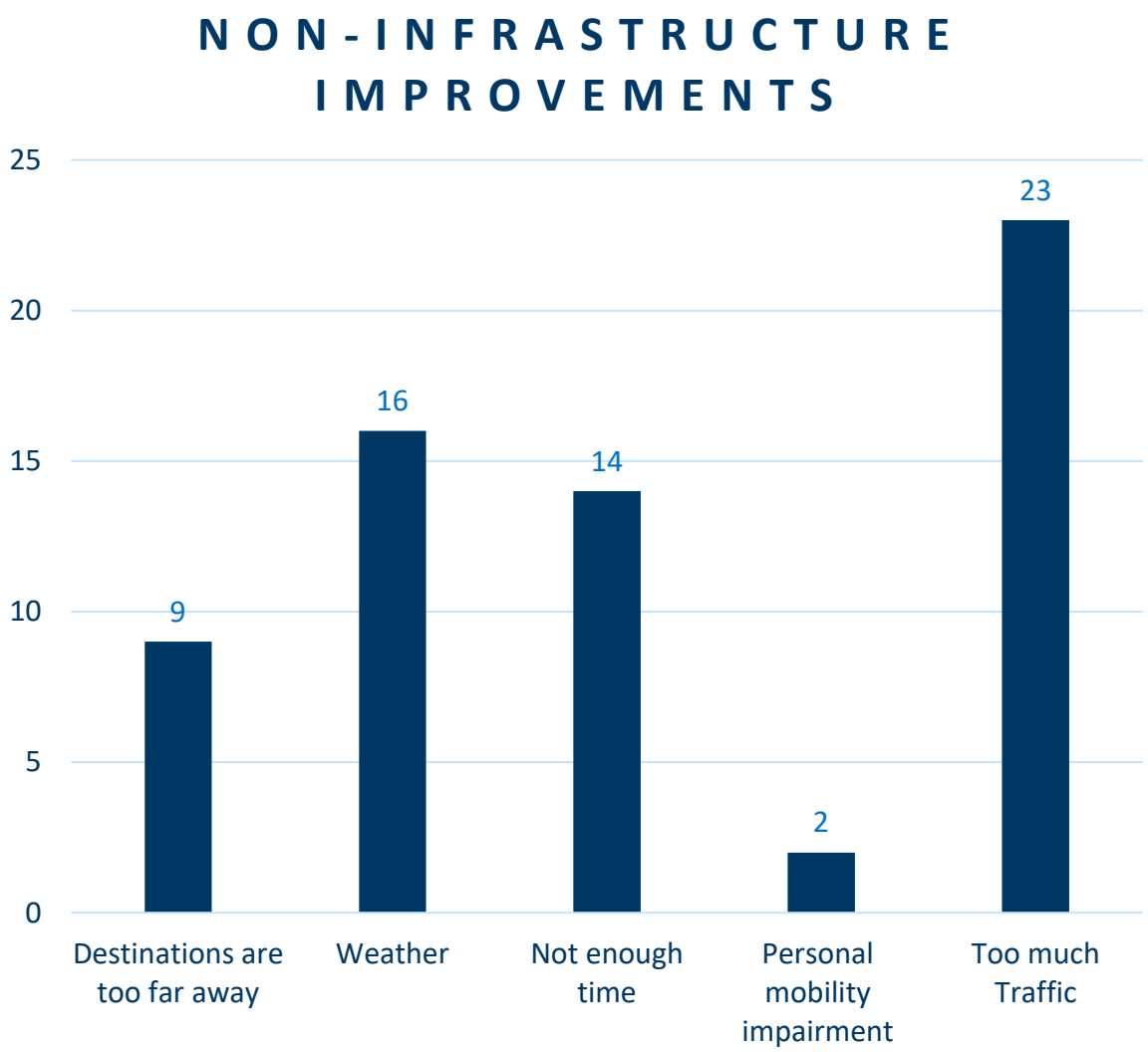


30.5%

Of respondents would like to see gaps between incomplete sidewalks, bicycle lanes or off-street trails filled to encourage them to bike, walk or roll more often.

Community members are advocating for expanded active transportation infrastructure including enhanced connectivity of current networks. In addition to the enhanced active transportation infrastructure, community members want to feel safe while using the network, especially at crossings.

What Improvements? | Survey

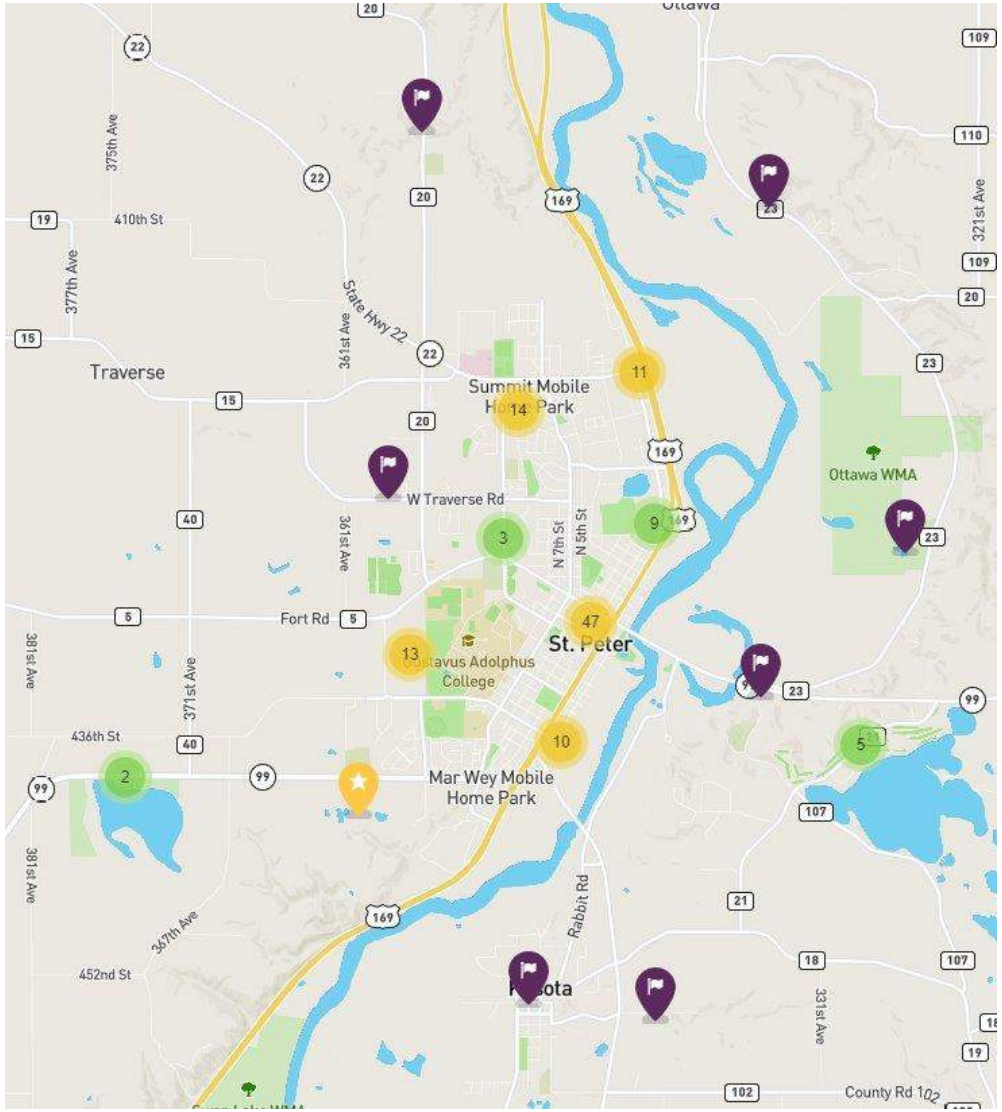


32%

Of respondents are deterred from biking, walking or rolling because of too much traffic.

Without designated lanes for biking, walking or rolling, mixing with traffic, especially on higher volume streets, creates an unsafe and unpleasant environment that deters people from using active modes of travel.

What We Heard | **Interactive Map**



Let's Talk Saint Peter Interactive Comment Map:

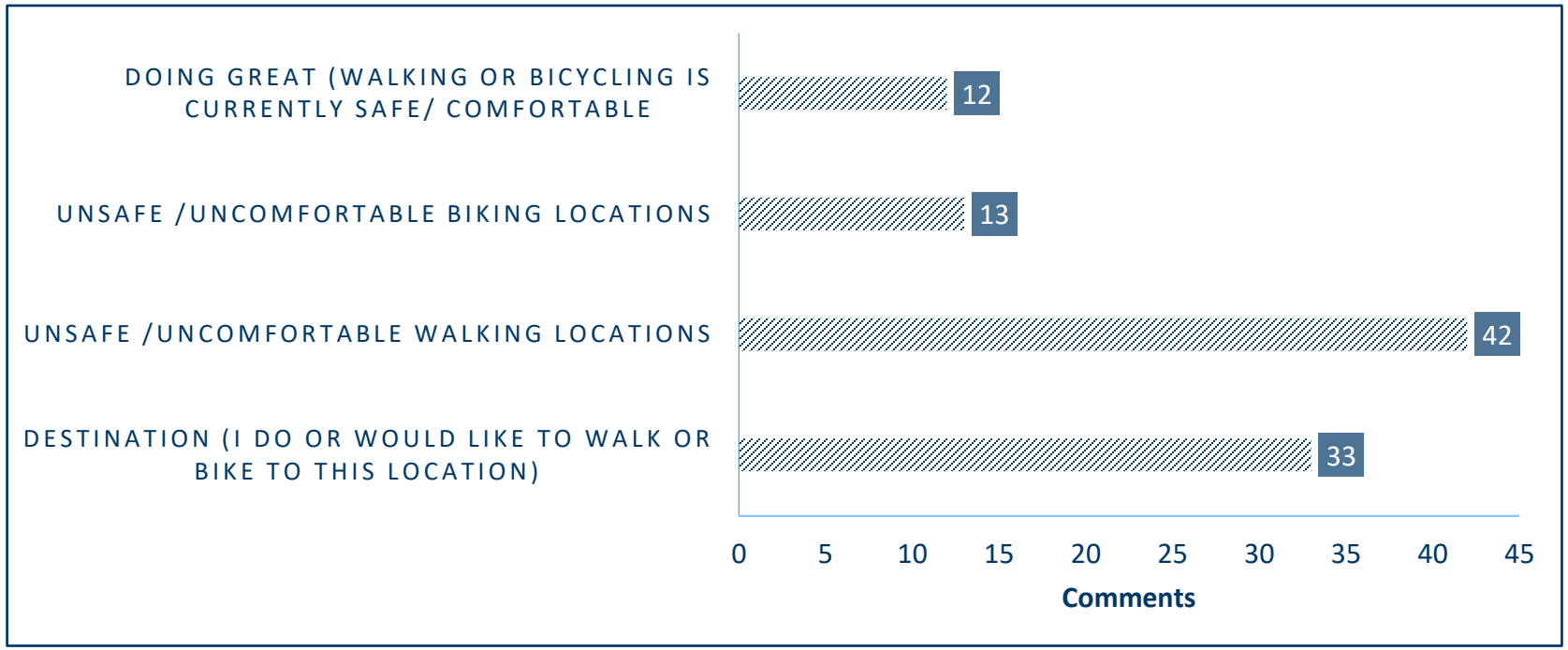
- Open: 4/09/2024 – 7/04/2024
- 123+ Comments (27 unique commentors)

"Uncontrolled crosswalks [make you] run for your life."

– Community Member

What We Heard | **Interactive Map**

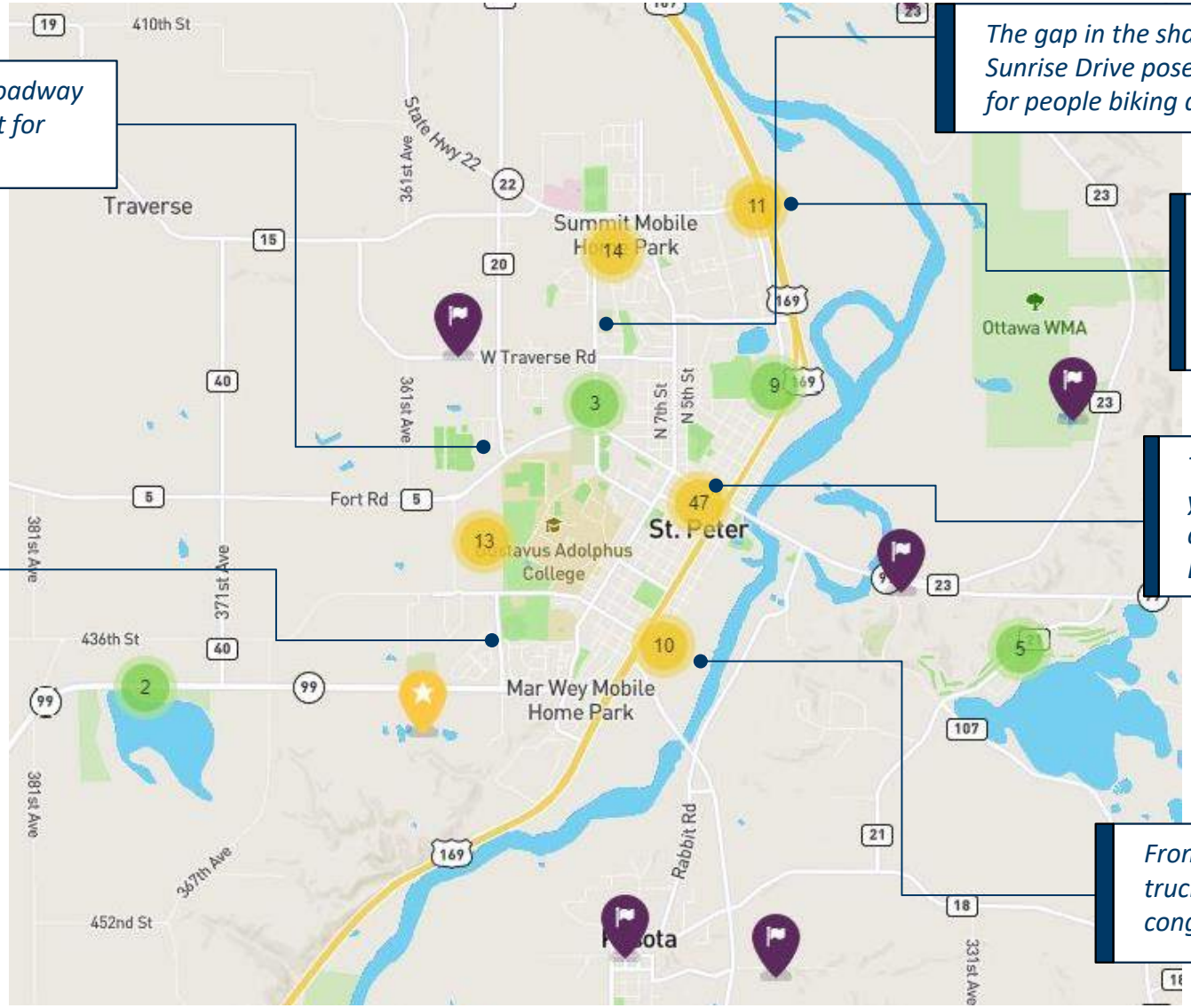
- Most of the comments were related to feeling unsafe/uncomfortable walking or biking
- High concentration of comments in the downtown area, Gustavus College and Gault Park
- Respondents noted unsafe walking locations focused on TH-169/ Minnesota Ave, Broadway Ave, 3rd St, Dodd Ave and N Washington Ave
- Respondents wanted downtown activated spaces for events and festivals



What We Heard | Barrier Intersections, Network Gaps and More

The new roundabouts on Broadway are easier and more efficient for pedestrians than before.

The underpass on Nicollet Ave is doing great.



The gap in the shared use path along Sunrise Drive poses a safety concern for people biking and walking.

Difficult for pedestrians to safely cross TH-169 to reach Traverse Des Sioux natural surface trails.

There is a lack of drivers yielding and poor sightlines at intersections such as Broadway Ave & 3rd Street.

Front Street is heavily trafficked by trucks to avoid stop lights and congestion of TH-169.

Building the Network

SECTION 4

Plan Vision

VISION

Saint Peter's transportation system is comfortable for children who are learning to walk, bike and roll, as well as for their parents and grandparents.

Plan Goals

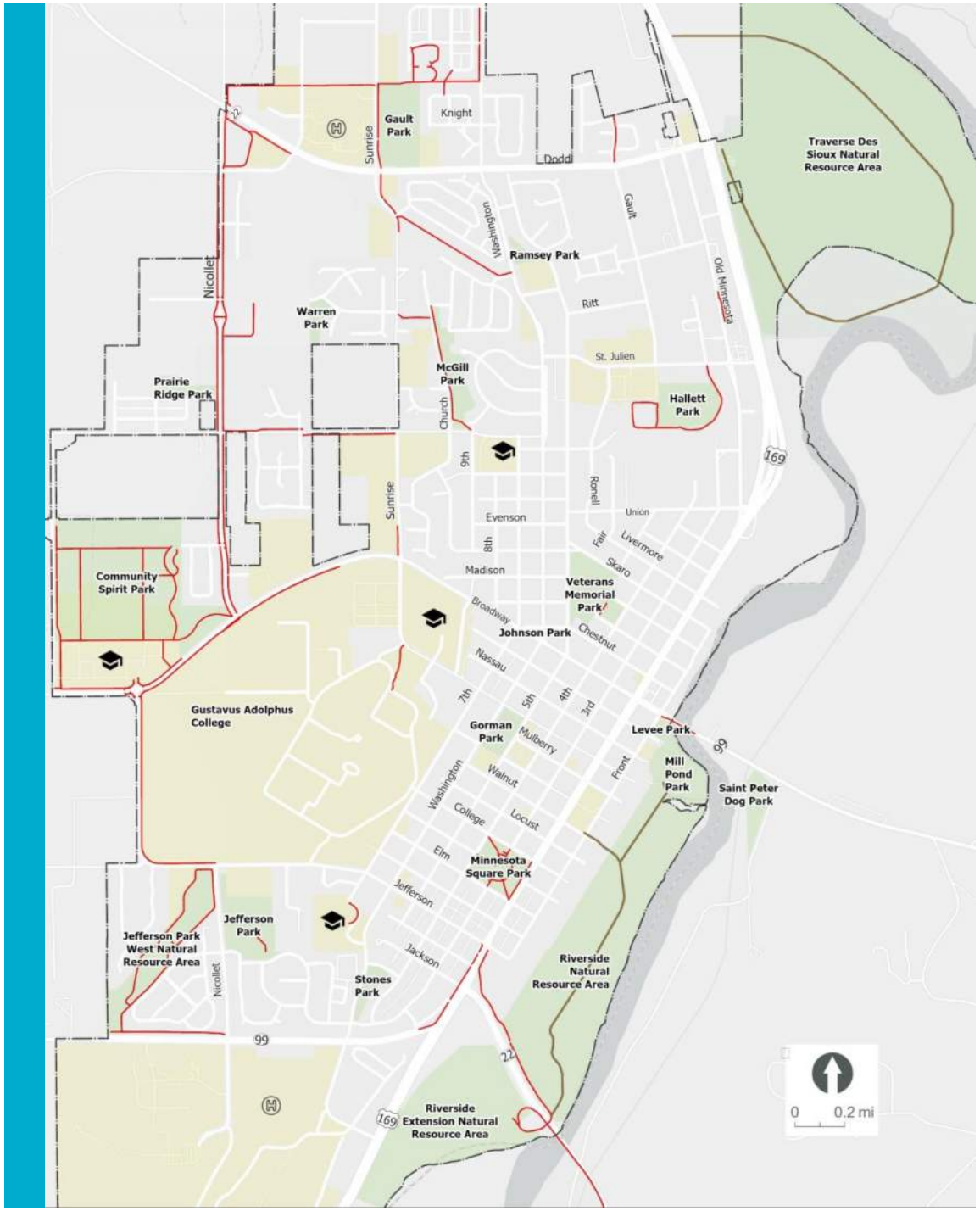
GOALS

- **Establish a city-led commitment to safe and viable active transportation;**
  - elements of the Active Transportation Action Plan are included in the City Transportation Plan and Comprehensive Plan.
- **Develop a shared understanding of Complete Streets;**
  - adopt a Complete Streets policy that fosters ongoing commitment.
- **Foster community and policy makers' buy-in;**
  - active transportation projects are incorporated into the City's Capital Improvement Plan (CIP).
- **Improve the safety of streets for all users;**
  - there are no transportation related fatalities or serious injuries.
- **Implement a traffic calming program;**
  - the 85th percentile traffic speed decreases in areas where the program is implemented.

Existing Bikeway Network

The map to the right shows the existing bikeway network in Saint Peter. The two types of existing bikeway infrastructure are shared use paths and natural surface trails. Both types of facilities are also used by people walking or hiking. There are no bicycle lanes in the existing network; however, people may choose to ride on the streets or sidewalks.

The existing network is concentrated on the edges of town and at local parks.



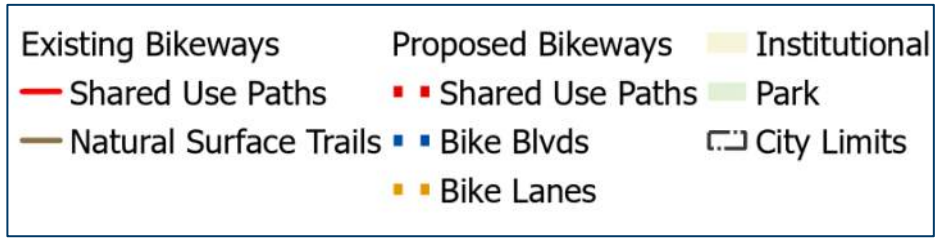
Future Network |

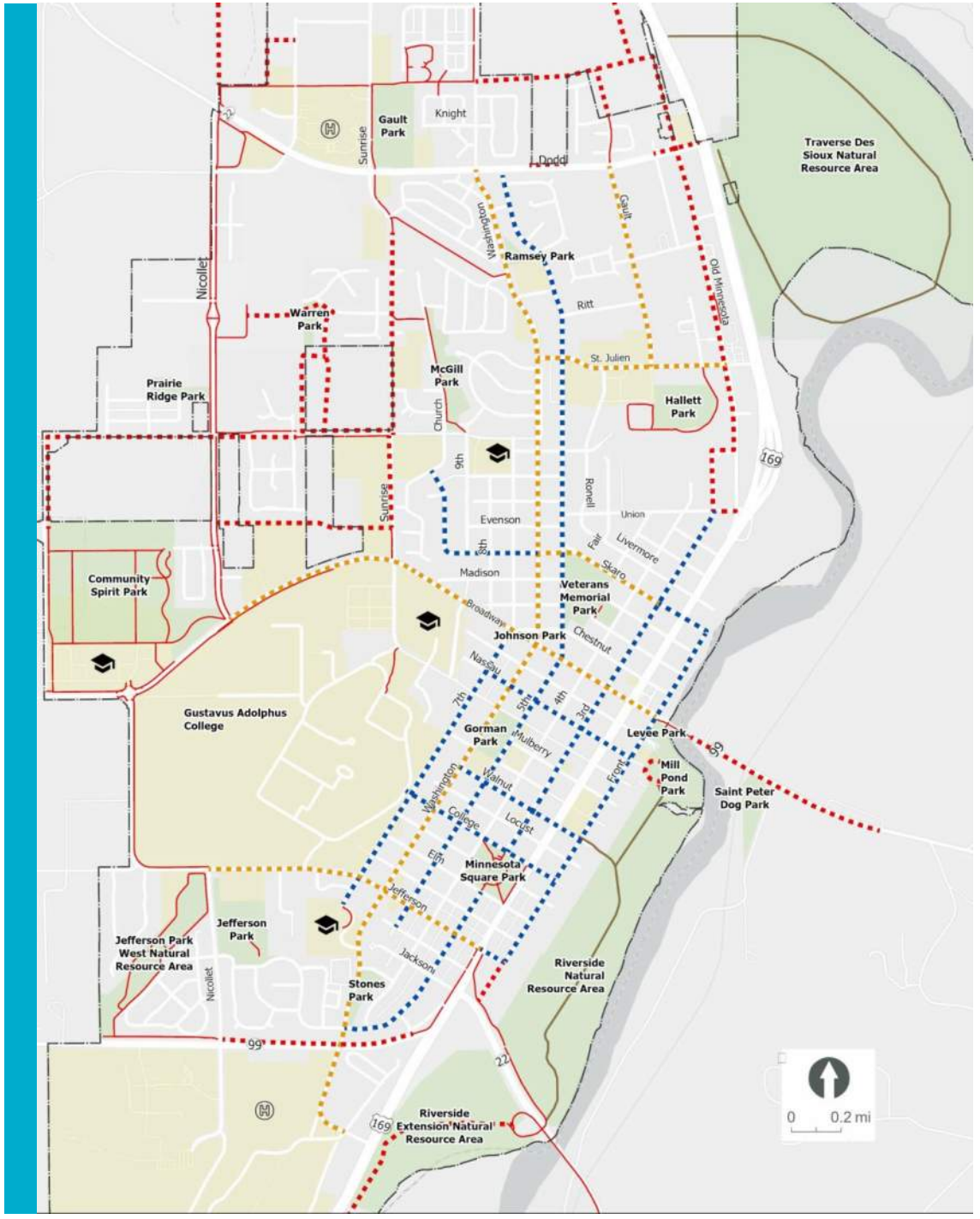
Existing and Proposed Bikeways

The map to the right illustrates the existing and proposed bikeway network in Saint Peter. The proposed enhancements aim to create a bikeway network by dedicating space or calming motorized traffic to enable people to bike along key corridors like Washington Avenue, Broadway Avenue and 3rd Street, connecting retail, schools and parks.

The proposed “Bike Lanes” in this map could take the form of a conventional bike lane, buffered bike lane or separated bike lane, depending upon the characteristics of the street and surrounding context. Bike Boulevards are bike-friendly streets due to low volume and low speed traffic which may be enhanced with shared lane markings, signage and traffic calming. The active transportation Core Concepts Toolbox provides more details on when to apply each type of facility. Additionally, some intersections and crossings may need to be improved to facilitate safer bicycle and pedestrian crossings. The Core Concepts Toolbox provides some examples.

The proposed network also emphasizes developing more shared use paths to establish a connected network for recreational trips, including future connections to regional routes.



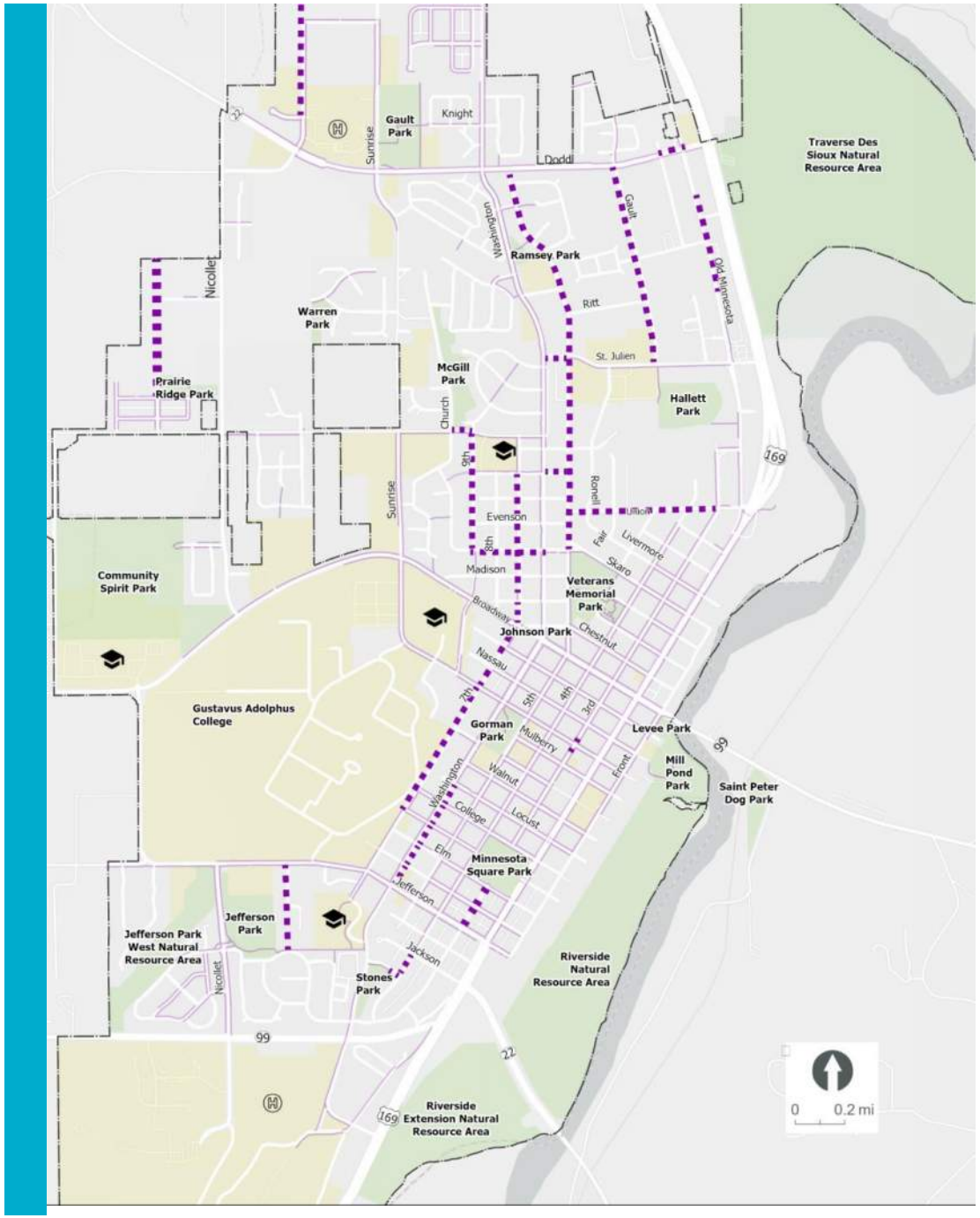


Future Network |

Existing and Proposed Sidewalk

The map to the right highlights the existing and proposed sidewalk improvements for Saint Peter. These improvements aim to address gaps in the current system, particularly the absence of sidewalks on both sides of Washington Avenue and the long stretch without sidewalks on 7th Street near Gustavus Adolphus College.

Key sidewalk additions are also identified for Union Street and 5th Street. 9th Street and Church Street currently lack sidewalks; the proposed sidewalks will connect residents from surrounding neighborhoods to North Elementary School and McGill Park, enhancing accessibility and safety.



Existing & Future Network | **Mileage**

Active Transportation Facility	Existing Mileage	Proposed Mileage	Total Future Network	Percent of Network
Bikeways and Paths	**22.2**	**28**	**50.2**	**100%**
Bike Lanes	0	6.8	6.8	13.6%
Bike Boulevards	0	8.2	8.2	16.3%
Shared Use Paths	22.2	13	35.2	70.1%
Natural Surface Trails	**3.4**	**0**	**3.4**	**100%**
Sidewalks	**44.6**	**24.3**	**68.9**	**100%**

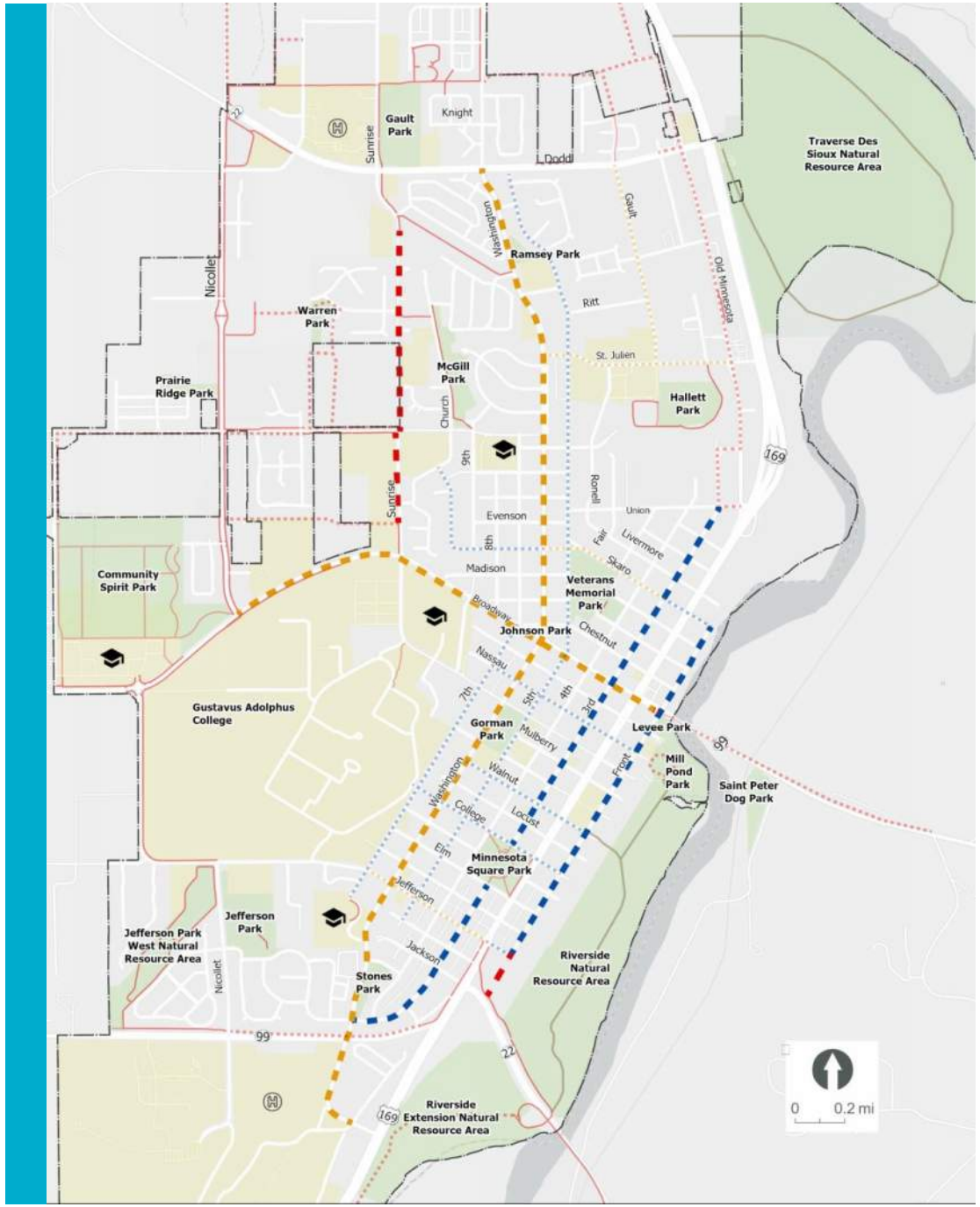
Catalyst Projects|

Priority Bikeways

The map to the right highlights the priority bikeway improvements for Saint Peter which will greatly improve the ability to bike throughout the community. Key corridors identified for improvements include:

- Sunrise Drive
- Washington Avenue
- 3rd Street
- Front Steet
- Broadway Avenue

Each of these projects is described on the following pages.



Existing Bikeways	Proposed Bikeways	
Shared Use Paths	Shared Use Paths	Institutional
Natural Surface Trails	Bike Blvds	Park
	Bike Lanes	City Limits

Catalyst Projects

Using feedback from the interactive web map, walking and biking audits and network workshop, five potential Catalyst Projects in Saint Peter were identified and refined through discussions with City staff and the Active Transportation Committee. These projects are high priorities for early action and funding opportunities because of their potential to significantly improve active transportation and multi-modal connectivity in Saint Peter.

The recommendations included are starter ideas, developed through preliminary discussions and analysis and are subject to change. Each of the Catalyst Projects will require additional engagement and analysis to successfully design and implement.

Sunrise Drive, W Traverse Rd to Stratford Blvd:

Add a shared use path along the side of the road to complete connections to existing paths.

Front Street, Hwy 22 to W Skaro St:

Use traffic calming and shared lane markings to create a bike boulevard.

N/S Washington Avenue, Hwy 169 to Dodd Rd:

Add buffered or separated bike lanes on both sides of the road.

Broadway Avenue, Front St to Sunrise Dr:

Add buffered or separated bike lanes on each side of the roadway.

3rd Street, College Ave to Union St:

Use traffic calming and shared lane markings to create a bike boulevard.

Sunrise Drive/County Road 74

Existing Conditions

Segment: W Traverse Rd to Stratford Blvd

- 2023 AADT
  - 2,831 (Traverse Rd to Lloyd Ln)
  - 1,971 (Lloyd Ln to Stratford Blvd)
- Speed Limit: 40 mph
- Paved Width: 34 feet
- Right-of-Way Width: 80 feet

Sunrise Drive is a rural cross section with paved shoulders. There are no sidewalks. This segment serves as part of a north/south route through town and connects residential subdivisions and Greenhill Cemetery. There are few intersecting streets and driveways.

There are existing paved trails at the north and south ends of this segment.

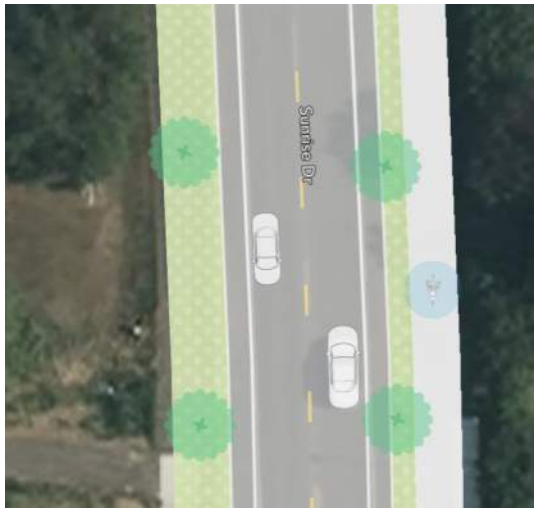
Recommendation: Add a shared use path and enhance crossings.

A child bikes along the paved shoulder of Sunrise Drive. Photo Source: Google Streetview.

Pedestrians walk along Sunrise Drive. The marked crosswalk lacks crosswalk signage and high visibility markings. Photo Source: Google Streetview.

Sunrise Drive

Starter Recommendations



Shared Use Path

Construct a shared use path with at least 5 feet of separation from the roadway. There appears to be sufficient right-of-way available to construct the shared use path on the east side; however, some landscaping may be impacted. The concept uses the east side due to the connection to the existing shared use path at the north end; however, the path could be switched to the west side if preferred.

Sunrise Drive is a county road and any changes will require coordination with Nicollet County.

Crossing Sunrise Drive

At the intersection with Sunrise Meadows, add a crosswalk across Sunrise Drive with continental style pavement markings and bicycle/pedestrian crosswalk signage. Rectangular Rapid Flashing Beacons may be added to enhance the crossing. The crossing shall use ADA-complainant ramps and detectable warnings.

Enhance the existing crosswalk at the intersection with Stratford Boulevard with these tools as well.

Crossing Intersecting Streets

At the crossing with Willow Drive, add a marked crosswalk at the existing STOP sign. The crossing shall use ADA-complainant ramps and detectable warnings.

Washington Avenue

Existing Conditions

Segment: Freeman Dr to Dodd Rd

- 2023 AADT
  - 1,513 (Freeman Dr to Jefferson Ave)
  - 2,375 (Jefferson St to Grace St)
  - 3,184 (Grace St to Broadway Ave)
  - 5,148 (Broadway Ave to Saint Julien St)
  - 2,525 (Saint Julien St to Dodd Rd)
- Speed Limit: 30 mph
- Paved Width: 40 - 50 feet
- Right-of-Way Width: 80 - 120 feet

Washington Avenue is an urban cross-section with two travel lanes ranging from 20 to 25 feet wide each. Most sections of Washington Avenue only has sidewalk on the west side. Washington Avenue is main north-south thoroughfare connecting many parks and schools. Most of the surrounding land use is residential.

Recommendation: Add buffered or separated bike lanes and fill sidewalk gaps.

Sidewalks are only present on one side of Washington Avenue. Photo Source: Google Streetview.

The excess width of Washington Avenue is shown through the scale of the singular car in a travel lane. Photo Source: Google Streetview.

S/N Washington Avenue

Starter Recommendations

Typical Section – Jefferson Avenue to Sumner Street – 48’ Curb-to-Curb

varies

Option 1 - Buffered Bike Lanes

varies

Option 2 - Parking-Separated Bike Lanes

Note: A physical vertical barrier in the buffer between the parking lane and the bike lane can help to discourage drivers from parking in the bike lane.

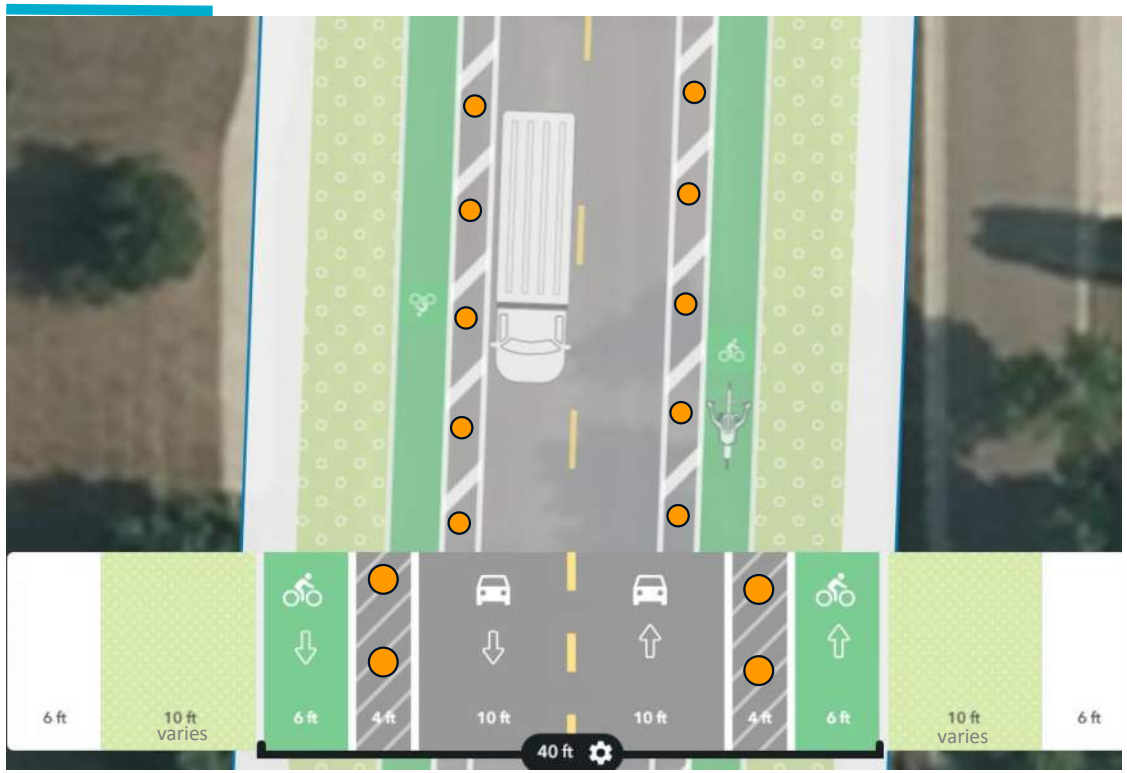
N Washington Avenue

Starter Recommendations

Typical Section - Sumner Street to Dodd Avenue - 40’ Curb-to-Curb

Typical Section Option 1 - Buffered Bike Lanes

Photo credit: www.pedbikeimages.org/ BrandonWhyte



Typical Section Option 2 - Separated Bike Lanes

Note: Separated bike lanes may use flexible delineators, a concrete curb or planters to establish the vertical separation. Vendors are supplying various curb-like products for this purpose as well.

South 3rd Street

Existing Conditions

Segment 1: College Avenue to Broadway Avenue

- Speed Limit: 30 mph
- 2023 AADT
  - 2,372 (College Ave to Mulberry St)
  - 3,076 (Mulberry St to Grace St)
  - 3,154 (Grace St to Broadway Ave)
- Paved Width: 55 feet
- Right-of-Way Width: 80 feet

This segment of 3rd Street is a two lanes with parallel parking on each side and a sidewalk at the back of the curb. 3rd Street is an important corridor in downtown with popular restaurants and services. Some storefronts are built up to the sidewalk, while others are setback from the street with a large parking lot along the frontage. There is minimal landscaping along this segment.

Recommendation: Add traffic calming and shared lane markings to create a bike boulevard OR add conventional bike lanes (refer to demonstration project chapter). Consider adding tree-wells every 3-4 parking spots to add a downtown tree canopy.

3rd Street has businesses on both sides of the street. Photo Source: Google Streetview.

Parking lots are adjacent to sidewalks on some blocks along 3rd Street. There is no tree canopy. Photo Source: Google Streetview.

North 3rd Street

Existing Conditions

Segment 2: Broadway Avenue to Union Street

- Speed Limit: 30 mph
- AADT: Not available
- Paved Width: 38 feet
- Right-of-Way Width: 80 feet

3rd Street from Broadway Avenue to Union Street is a two-lane road that is primarily surrounded by single family homes. On-street parking is allowed on both sides, but only sporadically used. This section of 3rd Street serves as a main connecter to the downtown area from the north side of town. This portion of 3rd Street has sidewalks set back from the street and large mature trees lining the right-of-way, creating a pleasant aesthetic environment for people to bike and walk.

Recommendation: Add traffic calming and shared lane markings to create a bike boulevard and improve crossings for people on foot and bike.

3rd Street is a pleasant, residential street with mature trees lining both sides. Photo Source: Google Streetview.

3rd Street has large intersections creating long crossing distances for people walking. Photo Source: Google Streetview.

North 3rd Street

Typical Section – Broadway Avenue to Union Street – 38’ Curb-to-Curb

Option – Shared Lane Markings

Note: In addition to shared lane markings and “Bikes Allowed Use of Full Lane” signage, traffic calming treatments may be added as needed. This may include neighborhood traffic circles in lieu of STOP controlled intersections, curb extensions, raised crosswalks, chicanes or mid-block medians. Many of these features can also be used for stormwater management and neighborhood beautification.

Front Street

Existing Conditions

Segment: Jefferson Ave to Skaro St

- Speed Limit: 30 mph
- 2023 AADT
  - 2,266 (Jefferson St to Walnut St)
  - 2,827 (Walnut St to Broadway Ave)
  - n/a (Broadway Ave to Skaro St)
- Paved Width: 36 - 52 feet
- Right-of-Way Width: 80 feet

Front Street is one block south of TH-169 with limited traffic control, a range of land uses (industrial, single-family residential, civic and retail), and provides access to parks and natural surface trails along the Minnesota River.

There is on-street parking allowed on both side, although it is only sporadically used. There is sidewalk on one side from Locust Street to east of Walnut Street. There is sidewalk on both sides from Walnut to Broadway. There is a marked crosswalk with a rectangular rapid flashing beacon at the Nicollet County Administration building. Front Street is highly trafficked by trucks avoiding TH-169 congestion.

Recommendation: Add traffic calming and shared lane markings to create a bike boulevard and fill sidewalk gaps. May use buffered bike lanes in wider section.

This portion of Front Street has no sidewalks or lane markings. Photo Source: Google Streetview.

Front Street passes past City Hall and Nicollet County Government buildings. Photo Source: Google Streetview.

Front Street

Typical Section - Jefferson Avenue to the north of Walnut and Broadway to Skaro – 36’ Curb-to-Curb

Option – Shared Lane Markings

Front Street

Typical Section – North of Walnut to Broadway Avenue – 52’ Curb-to-Curb

Option – Buffered Bike Lanes

Broadway Avenue

Existing Conditions

Segment: Sunrise Drive to Front Street

- Speed Limit: 30 mph
- 2023 AADT
  - 4,131 (Sunrise Dr to 8th St)
  - 4,577 (8th St to Washington Ave)
  - 6,122 (Washington Ave to 3rd St
  - 6,300 (3rd St to TH-169)
  - 5,548 (TH-169 to Front St)
- Paved Width: 50 - 64 feet
- Right-of-Way Width: 120 feet

Broadway Avenue is a wide, two-lane arterial that serves as a key connection from TH-169, running through the middle of Saint Peter, linking local traffic to important destinations such as the Saint Peter Middle School.

Broadway Avenue is prioritized for thorough traffic, which inhibits the ability for cross traffic, including people biking and walking, to connect between the north and south parts of town. There is no controlled north/south crossing between TH-169 and the four-way stop at Washington Avenue, approximately 1,600 feet, or between Washington Avenue and Sunrise Drive, approximately 2,350 feet. There are two marked and signed crosswalks to access the middle school; however, they lack any type of beacon to enhance visibility. This stretch without improved crossings poses a challenge for people biking and walking.

Recommendation: Add buffered or separated bike lanes and crossing enhancements.

A family approaches the 3rd Street and Broadway Ave intersection on bicycles. Photo Source: Google Streetview.

There are two marked and signed crosswalks near the middle school; however, they lack any type of beacons or median crossing island to enhance visibility. Photo Source: Google Streetview.

Broadway Avenue

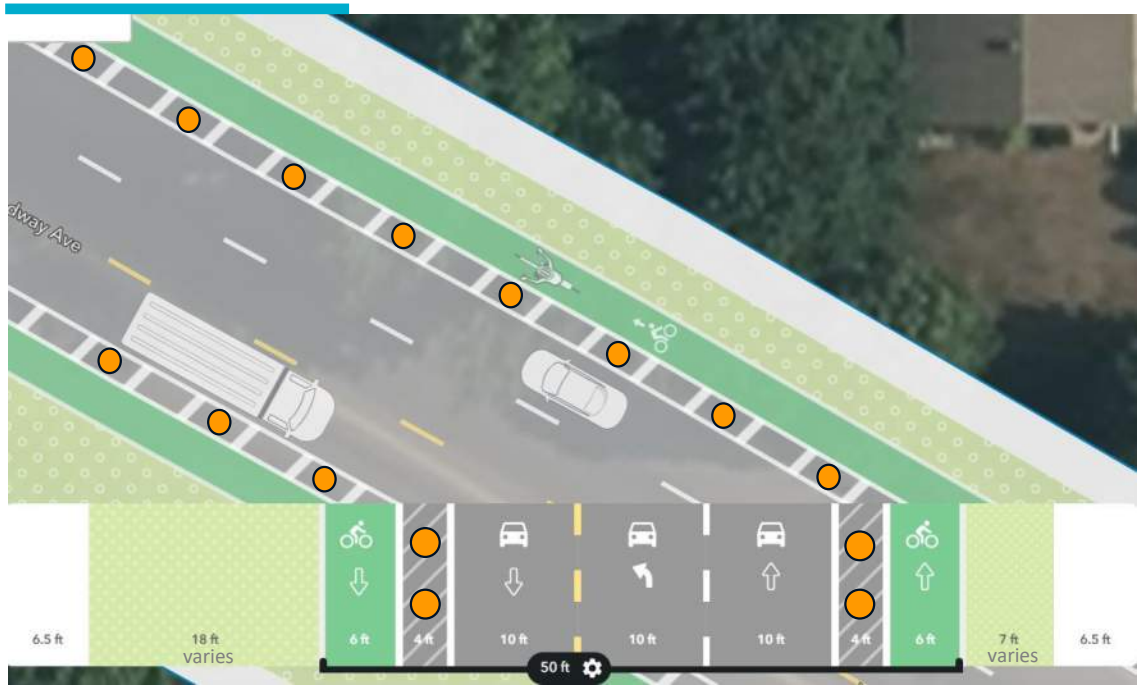
Starter Recommendations

Typical Section – Sunrise Drive to Washington Avenue – 50’ Curb-to-Curb

Option 1 - Buffered Bike Lanes

Note: The three existing marked crosswalks between Sunrise Drive and 7th Street should be enhanced with Rectangular Rapid Flashing Beacons. The crossing at 7th Street should also have crosswalk signage.

Photo credit: www.pedbikeimages.org/BrandonWhyte



Option 2 - Separated Bike Lanes

Broadway Avenue

Starter Recommendations

Typical Section - Washington Avenue to 3rd Street - 54’ Curb-to-Curb

Option 1 - Buffered Bike Lanes

Photo credit: www.pedbikeimages.org/ BrandonWhyte

Option 2 - Separated Bike Lanes

Broadway Avenue

Starter Recommendations

Typical Section - Washington Avenue to 3rd Street – 54’ Curb-to-Curb

Option 3 - Buffered Bike Lanes with Parking

Note: The existing marked crosswalks between Washington Avenue and 3rd Street could be enhanced with crosswalk signage and Rectangular Rapid Flashing Beacons. Other options for consideration include Pedestrian Hybrid Beacons or conversion to roundabouts.

Broadway Avenue

Starter Recommendations

Typical Section – 3rd Street to Hwy 169 – 64’ Curb-to-Curb

Option - Buffered Bike Lanes with Parking

Broadway Avenue

Typical Section Hwy 169 to Front Street – ~73’ Curb-to-Curb (varies)

Option - Buffered Bike Lanes with Parking

Note: Existing curb extensions at the intersections of Broadway Avenue with Hwy 169 and Front Street inhibit the ability to create parking-separated bike lanes in this segment. These intersections would need to be reconstructed to accommodate that type of facility.

Shifting the Culture

SECTION 5

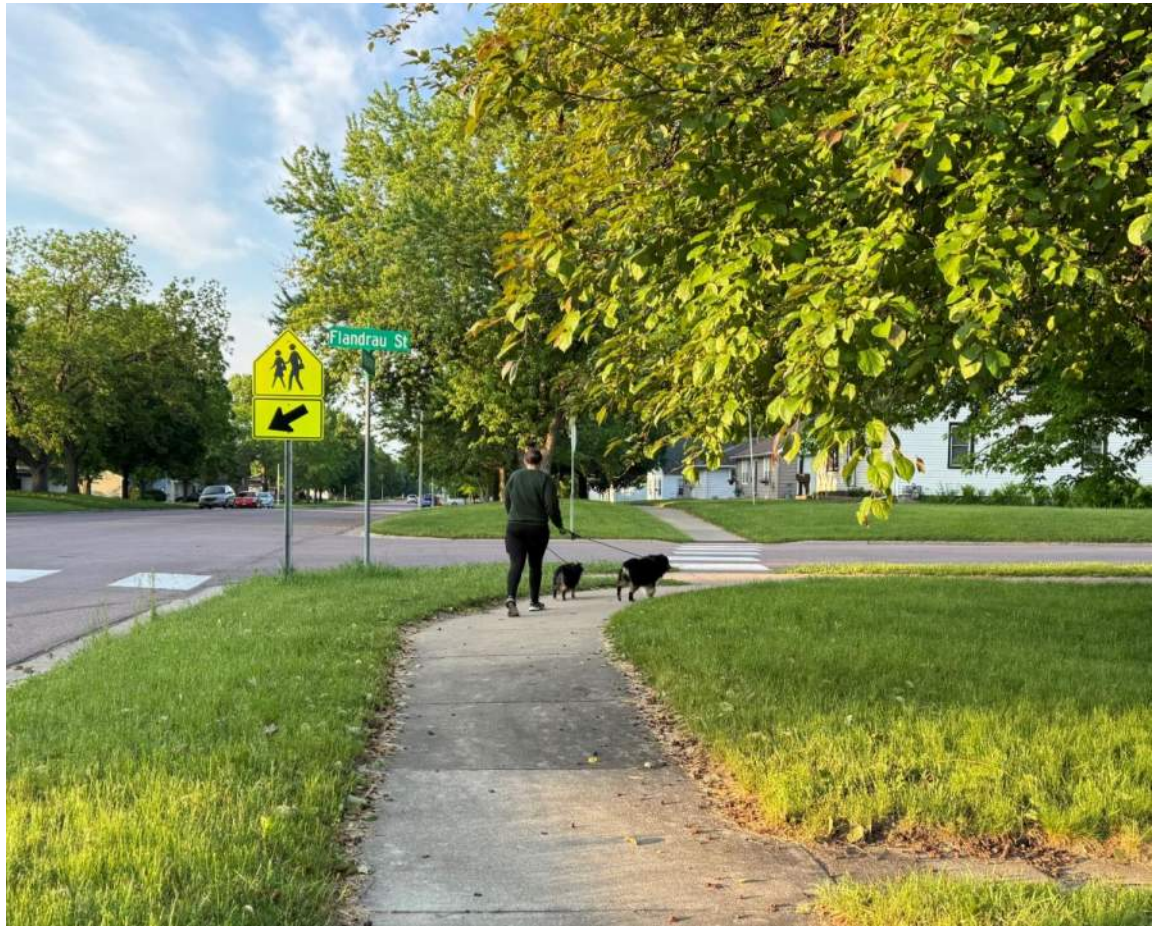
Shifting the Culture - Administrative

Administrative Functions Support Active Transportation Engineering

While infrastructure changes provide visual cues that a community supports active transportation, these changes can only be achieved and sustained when the city's policies and practices also change to allow implementation, maintenance and operation in a safe manner. This requires city council and departments to collaborate on planning, funding, design and maintenance needs. Several departments are likely to be involved including City Administration, Community Development, Public Works/Engineering and even Recreation.

This plan recommends forming an Active Transportation Advisory Committee to advise city staff and the City Council on implementation of this plan. This committee should consist of community members that represent the varied demographics, abilities, and interests in Saint Peter.

Administrative recommendations can be found on the following pages.



Traffic Safety Recommendations

Initiative	Recommendation: What is being suggested?	Description: What is the policy?	Action Step: What is a next step(s) to take?
Toward Zero Deaths	Make an official and public commitment to a Toward Zero Deaths goal to achieve zero traffic fatalities or severe injuries among all road users within a set timeframe.	Toward Zero Deaths (also called Vision Zero) is a strategy to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all. A local policy lays out goals, timeline, stakeholders and a commitment to multi-disciplinary cooperation and collaboration, community engagement, transparency and equitable outcomes. Establishing a Toward Zero Deaths goal can help justify other changes in how streets are designed, maintained and operated which improves safety for all. Minnesota Toward Zero Deaths (TZD) is a program and network to support local and statewide traffic fatalities or severe injury reduction goals. *Learn more and join the Minnesota TZD network.*	❑ Educate and advance a Toward Zero Deaths goal for all road users within a set timeframe with the mayor, city council and city manager. ❑ Attend the South Central Minnesota Toward Zero Deaths Workshop.

Complete Streets Recommendations

Initiative	Recommendation: What is being suggested?	Description: What is the policy?	Action Step: What is a next step(s) to take?
Complete Streets Policy	Adopt a Complete Streets policy.	Complete Streets policies are an approach that integrates people and place in the planning, design, construction, operation and maintenance of streets. This helps to ensure streets put safety over speed, balance the needs of different modes and support local land uses, economies, cultures and natural environments. Complete Streets are most often achieved by passing binding ordinances, laws or resolutions, and then putting it into practice by implementing plans like an Active Transportation Plan or during annual re-striping projects.	❑ Assign the Public Works and Planning working group to draft a Complete Streets Policy based on Smart Growth America and the National Complete Streets Coalition guidance: *The Complete Streets Policy Framework*. ❑ Encourage elected officials to apply to the Smart Growth America's Champions Institute: 2025 Champions Institute - Smart Growth America
Complete Streets Checklist	Develop a Complete Streets checklist to be used by public works and planning.	Complete Streets checklists are used to help put Complete Streets policies into practice. Checklists are used at the start of any project to summarize data and information about the street and surrounding land use, record details of the project and identify specific improvements that can be incorporated. See an example of a Complete Streets Checklist.	❑ Draft a Complete Streets Checklist to use in support of Complete Streets Policy.

Design Guidance Recommendations

Initiative	Recommendation: What is being suggested?	Description: What is the practice?	Action Step: What is a next step(s) to take?
Design Guidance	Adopt or endorse national or state street design guides.	Rewriting street design guides can be time intensive and cost prohibitive for many communities. To support implementation of Complete Streets and this Action Plan, adopt or endorse state and national design guides to enable the use of best practices and design flexibility. Such as: • National Association of City Transportation Officials (NACTO) Urban Street Design Guide • NACTO Urban Bikeway Design Guide and Designing for Small Things with Wheels (guidance on e-bikes) • Federal Highway Administration (FHWA) Small Town and Rural Multimodal Networks • MnDOT Bicycle Facility Design Manual	❑ Review and adopt or endorse design guide(s) to be used by city staff and consultants on street projects.

Speed Limit Recommendations

Initiative	Recommendation: What is being suggested?	Description: What is the policy?	Action Step: What is a next step(s) to take?
Safer Speed Limits	Set citywide default speed limits at 25 mph. If desired or more politically feasible, set default speed limits by category of street (e.g., 25 mph on city arterials, 20 mph on local neighborhood and downtown streets).	Research continues to concluded that vehicle speed is one of the most significant causes of both crashes and fatalities on U.S. roadways. A safe systems approach provides a consistent, rational and scalable approach to how speed is managed, including the way speed limits are set based on recommendations from the National Transportation Safety Board. Minnesota Statute (Section 169.14, Subd. 5h- Speed limits on city streets) allows cities to set speed limits on city streets in a consistent and understandable manner as identified by the city's safety, engineering and traffic analysis.	❑ Partner with law enforcement to analyze speed data to evaluate and prepare a recommendation to council using the National Association of City Transportation Officials (NACTO) guide: *City Limits Setting Safe Speed Limits on Urban Streets*.

Traffic Calming Recommendations

Initiative	Recommendation: What is being suggested?	Description: What is the program?	Action Step: What is a next step(s) to take?
Neighborhood Traffic Calming Program	Create a traffic calming program, including an implementation budget for Public Works.	Cities of all sizes are creating neighborhood traffic calming programs to ensure a more fair, equitable, transparent and efficient process to support neighborhood safety, citywide speed limit reductions, Toward Zero Deaths traffic safety goals, Complete Streets and/or active transportation plans. Programs typically include: (1) clear guidance on how residents can apply, often with 60% or greater block support; (2) criteria that guides Public Works data collection, design recommendation and project ranking; (3) annual funding to allocate funds based on project ranking; (4) process for public works to implement and keep the neighborhood involved in all the steps; and (5) post-installation data collection and evaluation process.	❑ Assign staff to review other communities' traffic calming programs and draft program recommendations.

Safe Routes to School Recommendations

Initiative	Recommendation: What is being suggested?	Description: What is the program?	Action Step: What is a next step(s) to take?
Safe Routes to School (SRTS)	Continue to support local Safe Routes to School program efforts.	Safe Routes to School programs improve safety, reduce traffic and improve air quality near schools through a multidisciplinary approach that is structured around the "6 Es." These are evaluation, education, encouragement, equity, engagement and engineering. Cities can continue to support by leading engineering efforts by prioritizing active transportation investments along key routes to school. Related to education, in 2023 state legislation was passed that requires all public-school students receive instruction in safe walking and bicycling skills at the beginning of the school year. *Resource: Walk and Bike Safety Education for K-8 Students, MnDOT*	❑ Work with school partners to apply for MnDOT planning, boost or infrastructure grants to enact this Action Plan and a SRTS Plan. *See MnDOT's Safe Routes to School Grant Funding page for opportunities.*
School Streets and Park & Walk Programs	Pilot School Streets and/or Park & Walk in partnership with neighborhood schools.	School Streets are temporary car-free zones adjacent to or leading up to a school. School Streets help manage traffic and improve safety during school arrival and dismissal by eliminating vehicle congestion in front of schools. This creates an environment that encourages children and caregivers to walk, bike, roll, paly and learn before, during and after school. Often School Streets are paired with Park & Walk zones where school buses and/or caregivers drop students at an established location(s) a few blocks from school. School staff, parents and other volunteers walk the kids to/from school.	❑ Collaborate with school partners and neighborhood residents on a School Street pilot. *See Minnesota Safe Routes to School Guide on School Streets and Park & Walk.*

Bike Parking Recommendations

Initiative	Recommendation: What is being suggested?	Description: What is the policy, program and practice?	Action Step: What is a next step(s) to take?
Bike Parking Policy	Update parking ordinances to ensure bike parking is required in future street and land use projects.	Secure, well located and highly accessible bike parking is necessary for biking to be a viable transportation option. It is a relatively compact and cost-effective parking strategy. Many cities have minimum ordinances for bike parking and bike racks. These requirements can include the number of spaces needed, where to locate them, availability of short- and long-term options and how to install. *Resource: Essentials of Bike Parking, Association of Pedestrian and Bicycle Professionals*	❑ Review current parking and development ordinances to evaluate bike parking requirements and develop recommendations to increase bike parking.
Bicycle Rack and Corral Cost Share Program	Develop a bike rack and corral cost share program.	Cities are instituting bike rack programs that allows businesses and other eligible organizations to request bike racks for the public right-of-way in front of their property. This includes bike corrals that can store 10-12 bikes, including covered, placed in an on-street parking stall. Minneapolis allows eligible businesses to be reimbursed up to 50% of the bicycle rack or corral cost and 50% of the installation cost. Schools, libraries, parks and other eligible public facilities can request to receive racks at no cost.	❑ Assess current bike parking availability and develop recommendations to increase bike parking through a cost share bike rack and corral program.
Bike Parking Practice	Expand bicycle racks in the right-of-way to accommodate the diversity of bike types (e.g., adaptive and cargo bikes, e-bikes, scooters).	Cities have been providing on-street parking, often for free, for vehicles for decades. To help encourage and achieve local mode shift goals and ensure biking is a viable transportation option, future capital street projects should include an approach to reserving curbside or the furnishing zone of sidewalks for bike racks. These spaces should include covered, weather protected options, support electric charging needs and accommodate larger bikes such as cargo or adaptive bicycles. Prioritize downtown streets and mixed-use blocks. Bike racks can be customized to reflect the character of the community and serve as a public art element.	❑ Complete a citywide evaluation of bike rack installations and develop a process to identify locations to add bike racks across the city. ❑ Install bicycle parking with all capital street projects.

Maintenance Recommendations

Practice	Recommendation: What is being suggested?	Description: What is the practice?	Action Step: What is a next step(s) to take?
Maintenance Procedures	Ensure annual budget provides for regular maintenance and minor repairs of active transportation facilities.	Shared use paths, on-street bicycle facilities and sidewalks require regular maintenance. People walking and biking are more susceptible than motor vehicles to pavement irregularities such as cracks, potholes, broken glass and gravel. Establishing an annual process for assessing conditions and determining where repairs are needed, including addressing ADA compliance is an important practice to maintaining active transportation network.	❑ Complete a condition inventory of sidewalks, shared use paths and ADA compliance. ❑ Establish and prioritize repair locations based on inventory data. ❑ Confirm location of and fill gaps in the sidewalk network, prioritizing gaps near parks, schools and other public destinations.
Winter Maintenance	Ensure that bikeways and walkways are cleared from snow in a timely manner.	Maintaining winter access for people walking and biking in the city is critically important. Winter maintenance often requires many people and institutions throughout the city help ensure paths are kept clear and passable. Currently, city ordinance requires property owners to clear the public sidewalk abutting their property within 24 hours of snow ending. If snow remains on a property owner's sidewalk after 24 hours, it is considered a public nuisance, leaving the property owner responsible for any additional removal costs determined by the City.	❑ Expand education for residents and businesses on the city's sidewalk snow and ice removal ordinance, related standards and responsibilities. ❑ Evaluate need for snow clearing assistance for residents who are unable to perform this task.

Shifting the Culture - Public

Public Education and Encouragement

Education programs and special events can also show that a community supports active transportation. From maps and marketing to bike rides and celebrations, these elements of a bike- and walk-friendly community can be led by the city as well as private groups such as non-profit organizations or community activists. Education and encouragement recommendations can be found on the following pages. A strong active transportation culture fosters community support for more projects to build physical infrastructure, which in turn allows more people to walk and bike and participate in and expand the culture. Such a feedback loop makes active transportation a part of everyday life in a community.

For education and encouragement efforts, make use of existing resources. There are national organizations, such as the League of American Bicyclists and American Association of Retired People (AARP), and America Walks 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.

Photo Credit: Blackduck Public Schools, Minnesota Walk! Bike! Fun!

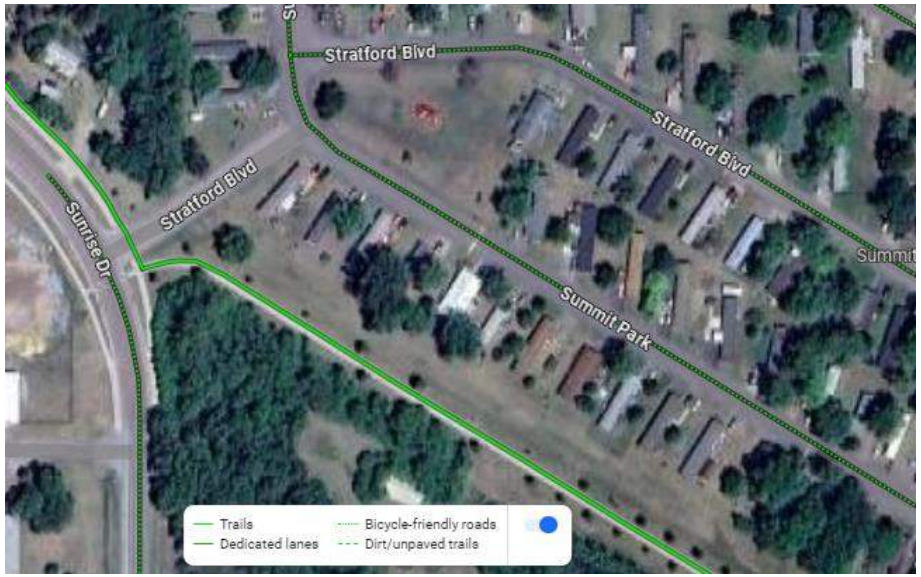
Spread the Word

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

Creating a brand can help people, especially tourists, recognize the local opportunities for walking and biking. The branding can help establish an identify by reflecting local culture, history or character.

Photo credit: John Neitz

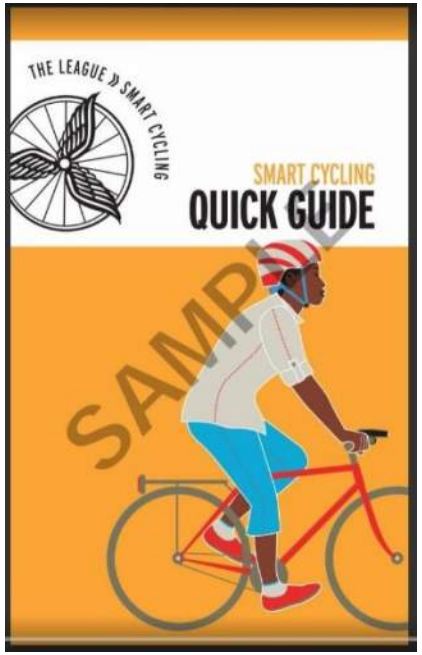
Mapping – A map is essential to bring new users to experience a trail. The map should include points of interest, amenities such as parking, restrooms and water. Additionally, newcomers often use an online tool such as Google or Apple maps to find a good route, so online resources should be kept up-to-date through coordination with those platforms. Wayfinding signage and physical maps along routes are helpful for a more coherent experience.



Educate about New Facilities

Education – Both riders and motorists need to understand the rights and responsibilities of all users of the transportation system. When new facilities are installed, such as a Pedestrian Hybrid Beacon, the city should provide information to the public on how that device functions and the benefits that it provides.

Pursue educational efforts with students through physical education and health classes or through programs like Walk! Bike! Fun! offered through the Bicycle Alliance of Minnesota. Empowering youth to bike safely and confidently aids a group that is often dependent on active transportation and ensures that the next generation sees biking as a both a fun activity and an important mode of transportation.



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 can indicate 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.

Photo credit: Lyndale Neighborhood Association, Nicollet Open Streets

Demonstration Project

SECTION 6

What is a Quick Build Demonstration Project?

Test . Evaluate . Refine

QUICK BUILD DEMONSTRATION PROJECTS

Active transportation demonstration projects are temporary street projects that use low-cost materials to pilot and evaluate design changes to improve walking, bicycling and rolling before potentially investing in more long-term solutions. They are:

- **Fast** – Projects go from idea to installation in months, not years.
- **Temporary** – All projects have a beginning, middle and end. They are installed, evaluated, adjusted, maintained and un-installed on a defined, transparent timeline.
- **Cost-Effective** – Projects use low-cost materials to test street treatments.
- **Iterative** – Given the use of temporary and flexible materials quick adjustments can be made real time, if needed. Data and feedback are collected both formally and informally at several points of the project.

Defining the Project

PROJECT CONTEXT

S. Third Street runs parallel to Saint Peter's Main Street (Highway 169) and is the location of several restaurants, a boutique hotel, food co-op and Post Office. It also provides access to businesses located on Main Street.

The street is overbuilt for one mode – vehicles. Travel lanes measure 18-feet wide and on-street parking is 9-feet. The wide street creates longer crossing distances for people walking and induces higher vehicle speeds.

Downtown is the heart-center of Saint Peter. It is the place where people come together to shop, dine, hang-out and enjoy each other. Downtowns are the 100-percent people places of towns. This demonstration project provides the opportunity to ensure all transportation users have safe, comfortable and enjoyable access.

PROJECT GOALS

- **Slow motorists' speeds** by right-sizing travel lanes and adding bike lane
- **Improve walkability** by shortening crossing distance at intersections
- **Create a gateway**, welcoming people to downtown Saint Peter
- **Test ideas** to inform S. Third Street redesign

S. Third Street before demonstration project installation.

What Treatments | **Curb Extensions (or Bump Outs)**

Painted curb extensions at Third and Grace Street intersection.

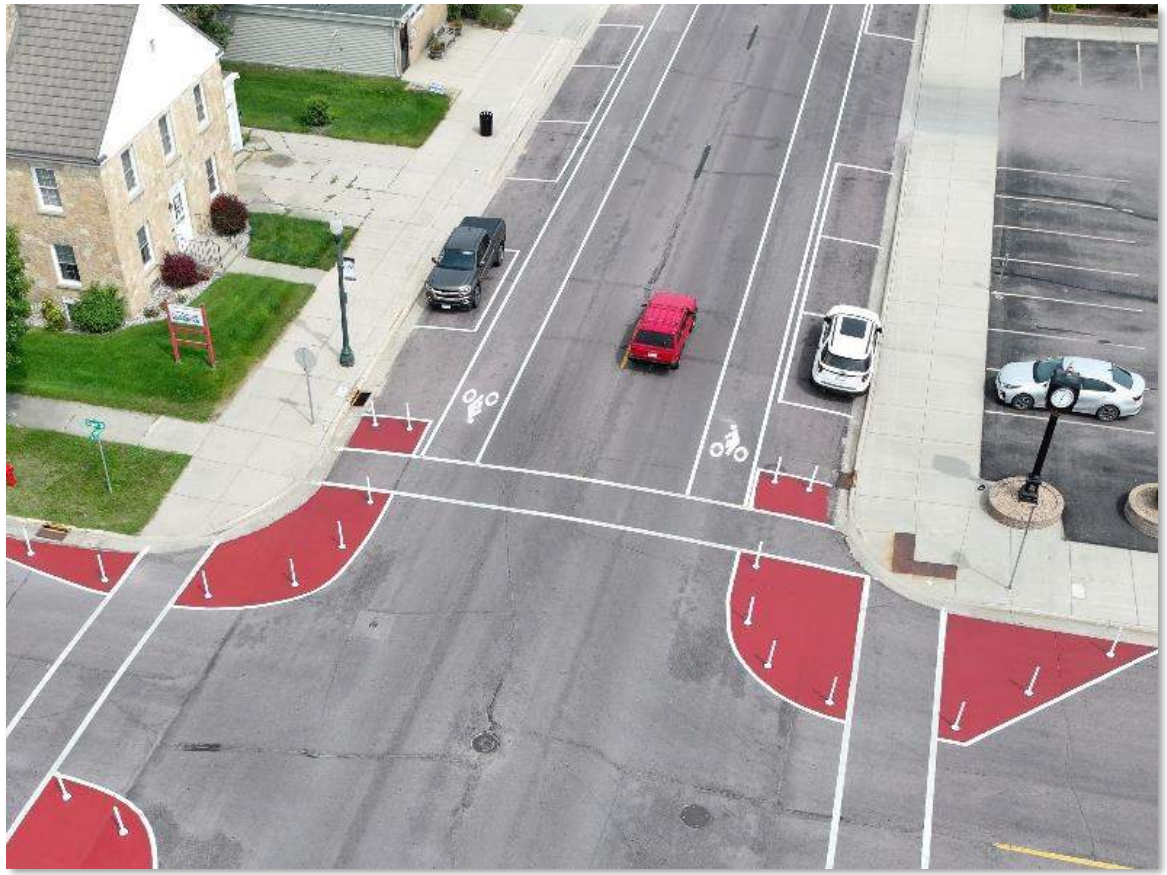
IMPROVE WALKABILITY

Curb extensions (or bump-outs) are a proven safety treatment. They:

- **Reduce the crossing distance** and exposure (potential threat to vehicle traffic) for people walking and motorists' wait time
- **Promote slower motorist turning speeds** and thus stopping or yielding behavior by reducing the corner (or turning) radii
- **Improve sightlines** for both drivers and walkers by insetting on-street parking

Pedestrian environments, like downtown, should have slow speeds. Where significant numbers of trucks or buses turn, curb extensions need to be designed to accommodate them. However, it is important to take into consideration that these vehicles should not be going at high speeds, and most can make a tight turn at slow speeds. Additionally, vehicles can encroach into adjacent lanes safely where vehicle volumes are low and/or speeds are slow.

What Treatments | **Bike Lanes**



Painted bike lanes with buffer space to the door zone of parked vehicles.

SLOW MOTORISTS' SPEEDS

Bike lanes are recognized by Federal Highway Administration (FHWA) as a "Proven Safety Countermeasure." Providing bike lanes (and other bike facilities) can mitigate and prevent interactions, conflicts and crashes between people biking and driving. Bike lanes align with the Safe System Approach principle of recognizing human vulnerability – where separating users in space can enhance safety for all road users.

Bike lanes:

- Provide a clearly marked space for people to bicycle
- Add to the comfort of people parking and unparking
- Improve the effective turn radius, especially when paired with curb extensions
- Help slow motorists' speeds, especially when combined with narrower travel lanes (in this case lanes were reduced from 18 feet to 11 feet)

What Treatments | Neighborhood Traffic Circle (or Mini Circle)

Painted neighborhood traffic circle at the intersection of Third Street and Park Row.

SLOW MOTORISTS' SPEEDS, CREATE GATEWAY

Traffic circles (also called mini-circles) work to reduce vehicle speeds in a few ways:

- Interrupt the "straightaway" feel of many streets that can signal to drivers to go a faster speed than the posted speed
- Narrow the intersection, slowing drivers' through and turning movements

Slower intersection speeds increases motorists' yielding behavior to people walking and biking. Like roundabouts, traffic circles are a proven intersection safety treatment, reducing all types of intersection crashes by 90% and serious injury crashes by 97%. They can also create a gateway effect, welcoming people into neighborhoods or districts, like downtown.

Example of a traffic circle as a gateway treatment.

What Treatments | High Visibility Crosswalk Markings

High visibility crosswalk treatments at the intersection of Third Street and Broadway.

IMPROVE WALKABILITY

Prior to the demonstration project people walking had little to no crossing support at this intersection.

The demonstration project sought to improve walkability and pedestrian safety by using:

- Curb extensions to reduce crossing distance, improve sightlines and slow motorist turn speeds
- Median crossing island (or refuge) to further calm traffic and break the crossing distance into two segments
- Ladder-style crosswalk markings for higher crosswalk visibility, especially in low light times of day
- Narrow travel lanes to help slow motorists' speeds, while still providing the needed operational space for large vehicles

Project Process | Steps for Creating Demonstration Project

Workshop
May 23, 2024: Walk Audit & Concept Visioning Workshop

Local Road Team Review (#1)
July 10, 2024: review design details

Local Road Team Review (#2)
Finalize design, materials and installation approach

Observe & Measure
Community perception survey

Designing the Concept
Taking design from idea to options for realization

City Council
July 16, 2024: Inform and get input from councilmembers

Installation
August 19, 2024: Demonstration project installed

Project Installation Period
August 19 – November 20, 2024

Project Process | How Did We Measure?

- Community perception survey open from August 19 – October 2, 2024
- 279 survey respondents
- Survey respondents shared perspectives based on what mode of travel (walk, bike, drive) they experienced the demonstration project. Over half of respondents only drove (54%). A few survey respondents experienced the project using multiple modes – 30% walked and drove, 12% walked, biked and drove and 2% biked and drove. Very few survey respondents experienced the project only walking (2%) or biking (1 person).

Evaluate | What Did We Learn?

Slower Motorists' Speeds

Almost half of drivers who responded felt their driving speed decreased (48%). Half of drivers (50%) felt there was no change to their driving speed.

Slowing motorists' speeds was a key project goal, highlighting that the combined treatments of narrower travel lanes, bike lanes and traffic calming features like curb extensions and median crossing islands positively contributed to the perception of slower speeds.

Future projects should include before and after speed data.

Increased Bike Safety, Comfort and Awareness

Of the survey respondents who biked:

- 71% felt safety stayed the same (14%) or improved (57%)
- 72% perceived drivers' awareness of them stayed the same (29%) or improved (43%)
- 29% said their more likely to bike with the addition of bike lanes; 57% said they'd bike the same amount

This highlights that the bike lane treatments had a positive effect on people's biking experience.

Respondents who biked were a minority group in the survey response. Future projects should include intercept on-street surveys to better learn from people who bike. In addition, bicycle counts should be collected to better understand how mode use might change.

Evaluate | What Did We Learn?

Improved Walkability

While survey respondents who walked were mixed on how the demonstration project improved their walking experience, a subset of people shared in the survey comments that crossings felt safer, especially at Broadway.

Curb extensions and median crossing islands are evidence-based treatments that shorten the crossing distance for pedestrians and positively improve the walkability of an area.

Aesthetics of Low-Cost, Temporary Materials

Flexible delineator posts were described as unattractive and cluttering the area. Some drivers found the new street layout – narrow lanes, reflective delineators and painted areas – visually distracting.

Ensure future redesign efforts of S. Third Street incorporate community aesthetic preferences, such as curb extensions with street trees, rain gardens and benches.

Ongoing Education & Engagement with the Community is Critical

Continue to educate the community on the benefits of street treatments to help inform people of the changes and reach greater acceptance. Future projects will benefit from ongoing community education and engagement.

Data Collection is Key!

Consider other data and evaluation measures such as intercept surveys of people walking and biking or focus group conversations to understand how community perception to change might evolve over time. Include quantitative data collection, such as bike counts, to understand how treatments might shift local trip patterns.

Community Quotes | Open-ended Feedback

The bike lanes are the best! *I particularly like them because they prove to drivers and riders how much space there is between lanes. There is room for all modes of transport and it doesn't have to impede other drivers, riders, or pedestrians."*

"It is ***very distracting to the driver.*** *Too much to look at when driving."*

"These ***demonstrations force drivers to slow down and make safe turns****. I try my best to be a safe driver.* ***At first, they were annoying but after getting used to them I feel they make our community safer****."*

*"****The concept is in the right place*** *of inducing better* ***safe walking/biking/driving practices****, but the* ***cones/markers themselves*** *are also* ***quite distracting as a driver****."*

"In decreasing order of approval, I think this is a ***fantastic low-cost method of modelling proposed changes and getting public opinion, so I'd love more ideas like it. I generally support bike lanes****, though I'm not sure how they interact legally with cars parking on the sides of roads. It feels like the plotted roundabouts are too small to be comfortable, especially for vehicles with a wide turn radius. And lastly, I cannot fathom how extended curbs are meant to help other than making drivers yield to oncoming traffic for fear of collisions at intersections. Is it about making crosswalks shorter? I guess I need an explanation of what benefits could warrant the downsides."*

Moving Forward

SECTION 7

State and Federal Funding for Active Transportation

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 (MN DNR)
- Greater Minnesota Regional Parks and Trails Commission (GMRPTC)
- Legislative-Citizen Commission on Minnesota Resources (LCCMR)

Grants are sometimes 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.

Source	Funding Program	Purpose
FHWA	Safe Streets and Roads for All (SS4A)	Develop Comprehensive Safety Action Plans (and demo projects) and infrastructure projects that are recommended because of that plan
FHWA Reconnecting Communities Pilot	Reconnecting Communities Pilot (RCP)	Creating connections across highways that disconnected neighborhoods upon construction
MnDOT Active Transportation Program	Infrastructure Grants, Planning Assistance, Quick Build/Demonstration Projects	Support active transportation capacity building and facilities infrastructure implementation
MnDOT Safe Routes to School (SRTS)	Planning Assistance and Boost grants	Support current SRTS plans and programs
MnDOT Safe Routes to School (SRTS)	Infrastructure Funds	Infrastructure improvements (e.g., sidewalk construction, crossing treatments) on and along routes to school
MnDOT (Federal funding)	Transportation Alternatives (TAP)	New pedestrian and bike facilities
MnDOT	State Aid for Local Transportation (SALT)	Highway projects

State and Federal Funding for Active Transportation

Source	Funding Program	Purpose
MN DNR	Regional Trail Grant	Motorized, non-motorized and joint trail usage
MN DNR	Outdoor Recreation Grant Program	Matching grant for the cost of acquisition, development and/or redevelopment of local parks and recreation areas and trails internal to a park
MN DNR	Local Trail Connections Program	Supports acquisition and development of small trail linkages that are not regional trails.
MN DNR (Federal funding)	Federal Recreational Trail Program	New trails, trail maintenance and restoration and trailhead construction
Greater Minnesota Regional Parks and Trails Commission	Parks and Trails Legacy Grant Program	Funds “Regionally Designated” parks and trails
Legislative-Citizen Commission on Minnesota Resources (LCCMR)	Environment and Natural Resources Trust Fund (ENRTF)	Activities that protect, conserve, preserve and enhance Minnesota's air, water, land, fish, wildlife and other natural resources

Next Steps

1) Build momentum and participation by doing low-cost, quick build projects or events to raise awareness.

Taking incremental steps to demonstrate change helps projects get realized much faster than the typical street design process allows. This saves money and time in the long run and builds momentum and public appetite for permanent change.

- Use paint or temporary devices! When and where possible test curb extensions to tighten curb radii to slow turning motorists and shorten crossing distances. Or test narrower travel lanes (10-feet) in order to paint a buffer to bike lanes, providing more visual separation between people biking and driving.
- Use paint, signage and pavement markings to mark on-street bike lanes and routes.
- Identify key takeaways from 3rd Street and Front Street demonstration projects and make refinements to keep testing treatments to help inform the long-term redesign.

2) Continue to organize and advocate for this plan.

- Adopt the Plan.
- Share it with partners.
- Continue to coordinate with MnDOT, Nicollet County and other agencies to further corridor and street design in support of active transportation.

3) Put the plan into action!

Actively use this plan as a living guide and start to program studies (e.g., Front Street, Broadway Avenue and 3rd Street), update practices and implement other low-cost action items to advance Saint Peter's active transportation network for all ages and abilities.

A Call to Action

COMMUNITY CHARGE

The City of Saint Peter continues to look for ways to bring people together. As a community that encourages citizens to live, work and play in Saint Peter we also are mindful of the multiple ways to improve means and methods of transportation. Walking, biking or rolling, we encourage to go outdoors and join your fellow community members and enjoy the active transportation opportunities that Saint Peter presents.

Saint Peter is a vibrant community which provides opportunistic investments for the betterment of the community. Safer streets for pedestrians and drivers alike require changes to transportation methods; alternatives drive change, change drives interest and interest motivates community. Help us set and implement action ordered priorities that make Saint Peter more sustainable, more walkable, more rideable, and safer.