



Bike & Pedestrian Plan

MENDOTA HEIGHTS MN

*Accepted by the Mendota Heights City Council
November 1, 2022*



DRAFT

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INTRODUCTION

PROJECT PURPOSE



WHAT IS A BIKE & PEDESTRIAN PLAN?

A Bike and Pedestrian Master Plan looks at existing facilities, evaluates issues and opportunities within the system, and identifies plans for future investments in the system.

In early 2022, the city received a grant through the Statewide Health Improvement Partnership (SHIP) from the Minnesota Department of Health and Dakota County in order to develop a plan for bicycling and walking improvements in the community. The master plan will be used to guide decision-making regarding future investments in and prioritization of improvements to the bike and pedestrian system, will provide a foundation for seeking funding assistance for improvements, and aims to result in a more bikeable and walkable Mendota Heights.

PLAN PURPOSE AND GOALS

- Plan for development of an interconnected pedestrian and bicycle system city-wide
- Integrate County Greenways and trails along County Highways into the system
- Include the 6 E's: Evaluation, Education, Engineering, Encouragement, Engagement, and Equity in the plan



PLAN FOR DEVELOPMENT
OF AN INTERCONNECTED
PEDESTRIAN AND BICYCLE
SYSTEM CITY-WIDE



INTEGRATE COUNTY
GREENWAYS AND TRAILS
ALONG COUNTY HIGHWAYS
INTO THE SYSTEM



INCLUDE THE 6E'S:
EVALUATION, EDUCATION,
ENGINEERING,
ENCOURAGEMENT,
ENFORCEMENT, AND
EQUITY IN THE PLAN

IMPORTANCE AND VALUE OF A CONNECTED BICYCLE & PEDESTRIAN SYSTEM

In addition to providing necessary transportation infrastructure for multiple non-motorized modes of transportation, a connected bicycle and pedestrian system provides other supplemental benefits for the community.



ECONOMICS & COST

Bicycling and walking are less expensive than driving, take up less space on roads, and require less area to park at destinations.

Bikes and feet create less wear and tear on roads and trails than motor vehicles; long-term this costs taxpayers less money for maintenance and repair.



HEALTH & COMMUNITY EXPERIENCE

Walking, biking, and rolling allow people to experience the outdoors, see others' faces, promotes community engagement and connections, and encourages active living and healthy lifestyles.



SUSTAINABILITY

Walking, biking and rolling are simple, cost-effective ways of being active. Walking is an essential part of all journeys. It is accessible and affordable, and socially equitable. Cycling is among the most efficient and sustainable means of transportation. Together, walking, biking and rolling have economic, social, environmental and health benefits.

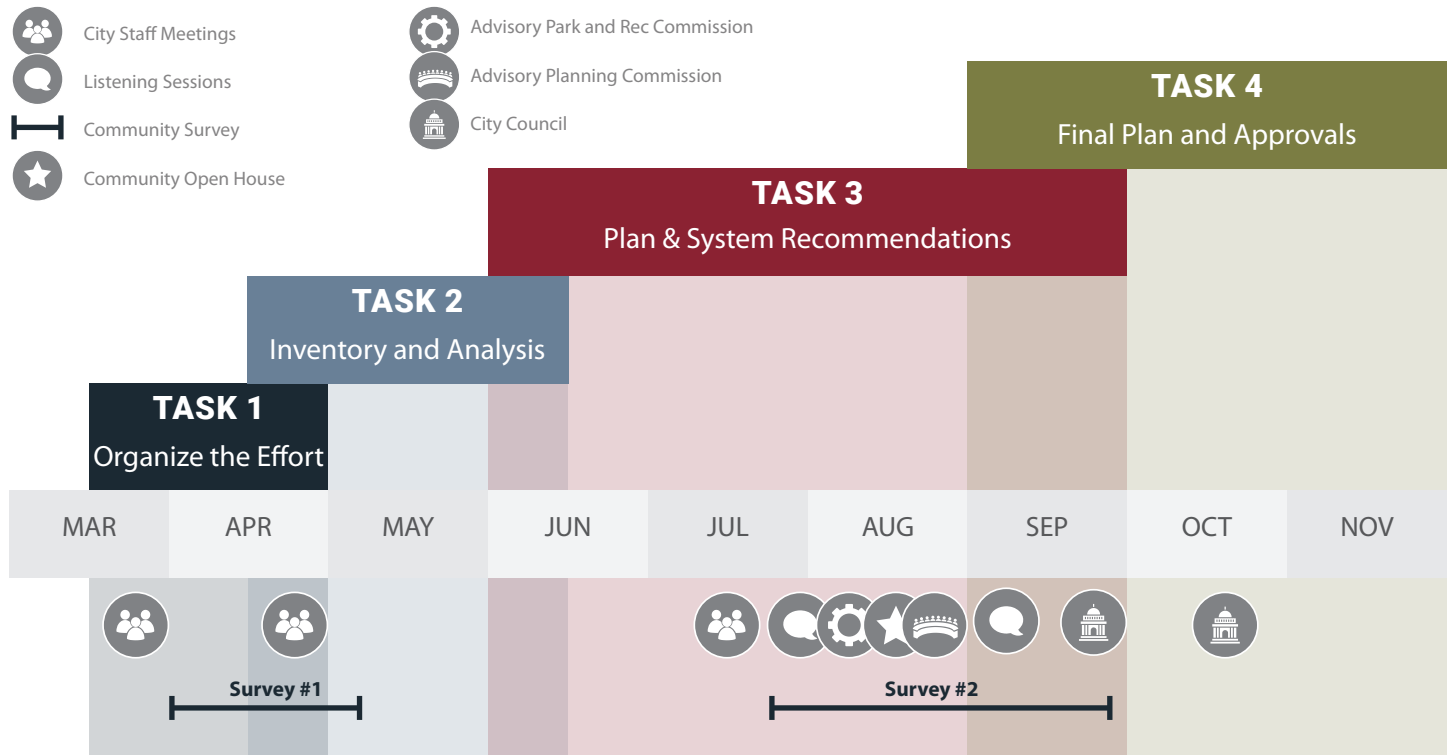


ECONOMIC DEVELOPMENT & RECREATION

Trails for walking, biking, and rolling offer access to a variety of urban and natural environments. Destination trails bring people into communities for leisure and recreation opportunities and enhance the local economy.

PROJECT PROCESS

The project kicked off in March, 2022, and held two phases of public engagement--one in the spring and one in the late summer. Stakeholder meetings were held in the fall of 2022, and meetings with the Advisory Park and Recreation Commission, Advisory Planning Commission, and the City Council were held in August, September, and October.



Existing crosswalk



Existing multi-use trail

PUBLIC ENGAGEMENT

At the onset of the project process, a Community Engagement Plan was developed to describe the goals, audiences, methods, and phases for community engagement during the project. The objectives of the engagement process included:

- Provide project information to the public, especially residents of Mendota Heights
- Solicit and obtain feedback from the public and stakeholders for potential improvements and additions to bike and pedestrian facilities in the city
- Engage the public and stakeholders to comment on issues and opportunities related to priorities for implementation
- Discover potential partners that may be involved with project implementation
- Reach out to and respond to the needs of SHIP priority populations: people 60 or older, children, and people with low incomes or others experiencing a health disparity

SHIP PRIORITY POPULATIONS

During the process, project team members used methods to reach out to SHIP priority populations: outreach to all schools in the city with a request for engagement in the process; project information posting in city newsletters and mailers; a meeting was held with the Thompson Park Activity Center Advisory Council; a booth was set up at the city's Community Open House.

The plan identifies the need for connected, off-road facilities throughout the entire community, especially in areas where there are schools and retail areas. These areas are most in need of safe, non-motorized access. Safe roadway crossings were a highly mentioned element throughout the engagement process and especially for those who identify as SHIP priority populations.

The public engagement process included two phases of outreach and engagement as described in the table below.

PHASE	PURPOSE/GOALS	OUTREACH METHODS	INPUT METHODS	RESULTS
Phase 1: April 2022	Inform residents of the project; Solicit broad input on how people bike and walk in the city today and what issues or desires they have for the system	City website info; social media; press release; postcard	Survey Monkey questionnaire; Social Pinpoint interactive map	297 survey responses
Phase 2: August-September, 2022	Seek input on draft opportunities	City website info; social media posts; Community Open House; Friday news; OneTen Cycles; Park Commission meeting; Planning Commission meeting; City Council work session	Social Pinpoint interactive map; Thompson Park Activity Center Advisory Council meeting; Visitation High School student meeting	105 map comments

PHASE 1 ENGAGEMENT SUMMARY





In the first phase of input, people were asked how they use existing bike and pedestrian facilities in the city and what improvements they would like to see in the system. People could respond to a survey questionnaire and also to an interactive mapping tool where they could list open-ended comments.

Almost 300 people responded to the survey and almost 70 people left 183 comments on the interactive map. Many people also "liked" or "disliked" the map comments, which provided a list of popular comments.

Most of the feedback received in the first phase of engagement related to safety of bicycle and pedestrian facilities. Many people identified a desire for multi-use trails separated from roads rather than on-street facilities, especially along Dodd Road. People also mentioned a desire to make trail connections and improve safe crossings of busy roadways.

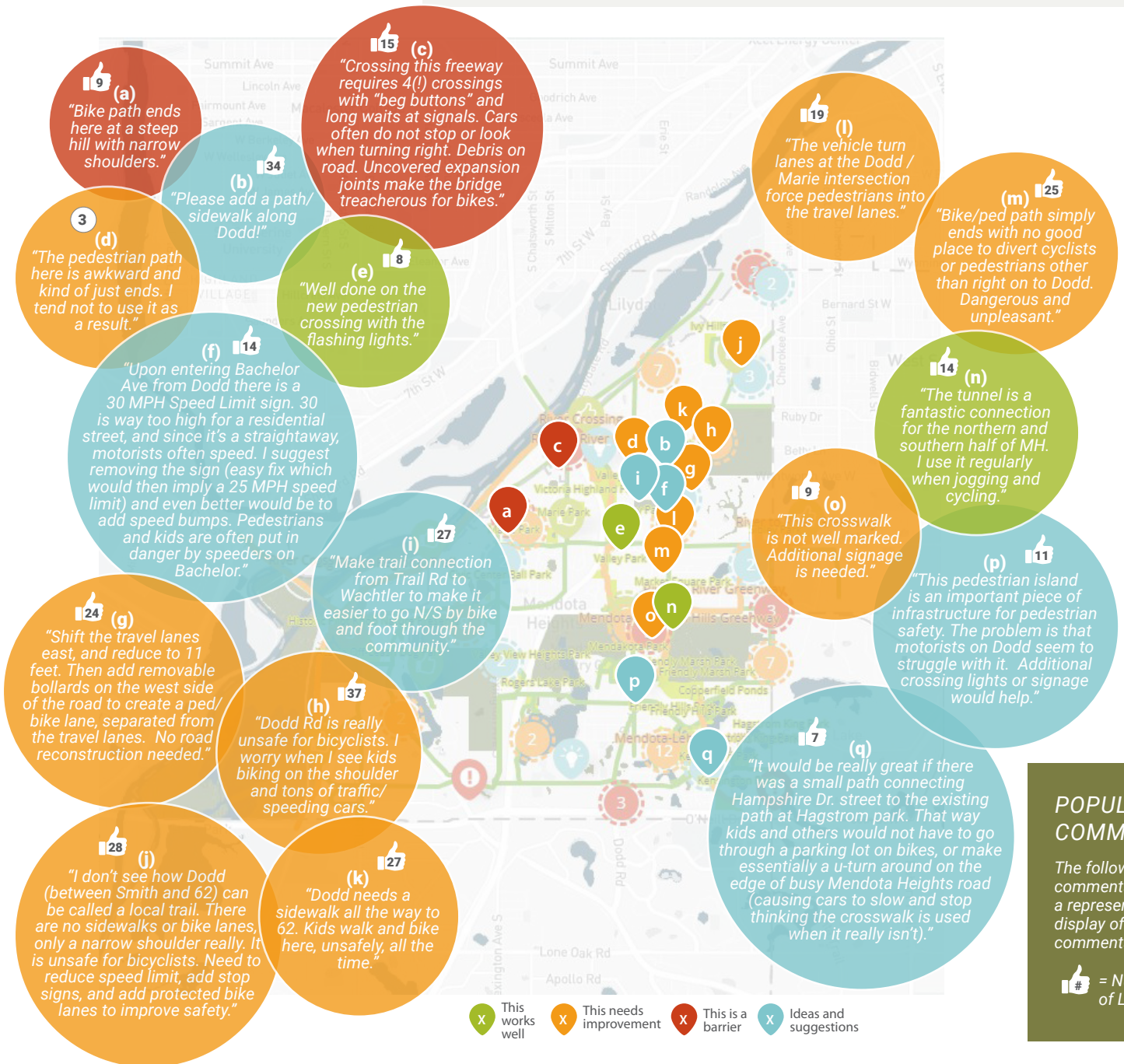
PHASE 1 SOCIAL PINPOINT MAP SUMMARY

PARTICIPATION

	879	TOTAL SITE VISITS
	305	UNIQUE USERS
	68	UNIQUE STAKEHOLDERS
	183	COMMENTS


COMMENT TRENDS

- Comments are at odds about bike and pedestrian facilities along Dodd Road. Many state it's too busy and dangerous of a road to add facilities and will inconvenience current residents and vehicles. Those in favor say Dodd could act as a great connection to surrounding trails and destinations if done safely.
- More safe connections needed for kids traveling to schools -add more lights and ped signage, address crosswalk gaps, traffic calming needed.
- Better trail maintenance - replace/fix poor pavement, be more conscientious about snow removal and placement.
- Wide shoulders are used by school athletic teams, bike clubs, runners, and families - need more infrastructure/design to make them safe.
- There are limited locations to safely cross the larger, higher-use roadways. These larger barriers discourage users from exploring surrounding parks and trails.
- More connections from neighborhoods to parks and outdoor recreation points like sledding hills and athletic fields for families and students.
- Users appreciate amenities like bike repair stations, trash cans, and seating. More wayfinding signage is desired.



POPULAR COMMENTS:

The following comments are a representative display of over 180 comments.

 = Number of Likes

-  This works well
-  This needs improvement
-  This is a barrier
-  Ideas and suggestions

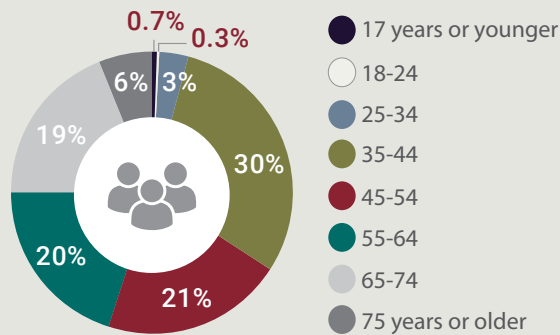
PHASE 1 SURVEY SUMMARY

The survey was open online during the month of April, 2022, and there were 297 responses submitted.

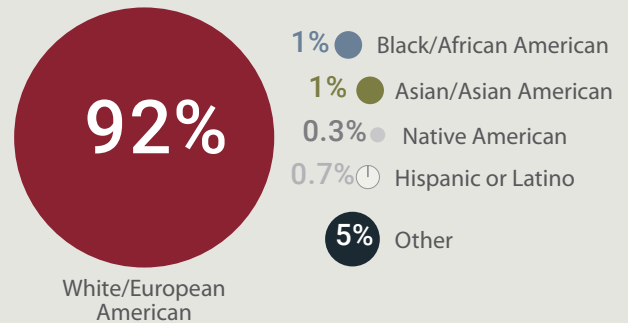


PARTICIPANT DEMOGRAPHICS

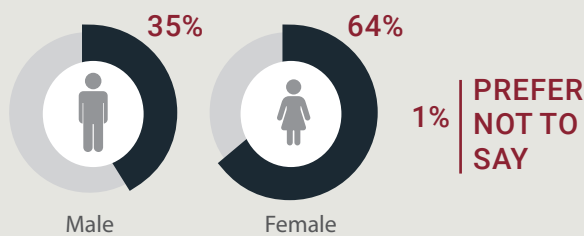
What is your age? (297 Responses)



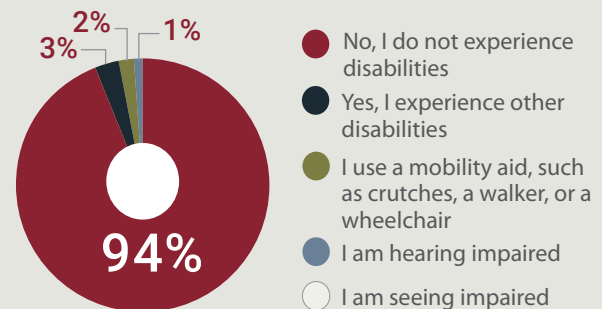
How do you describe your ethnic or cultural heritage? (297 Responses)



How do you identify your gender? (297 Responses)



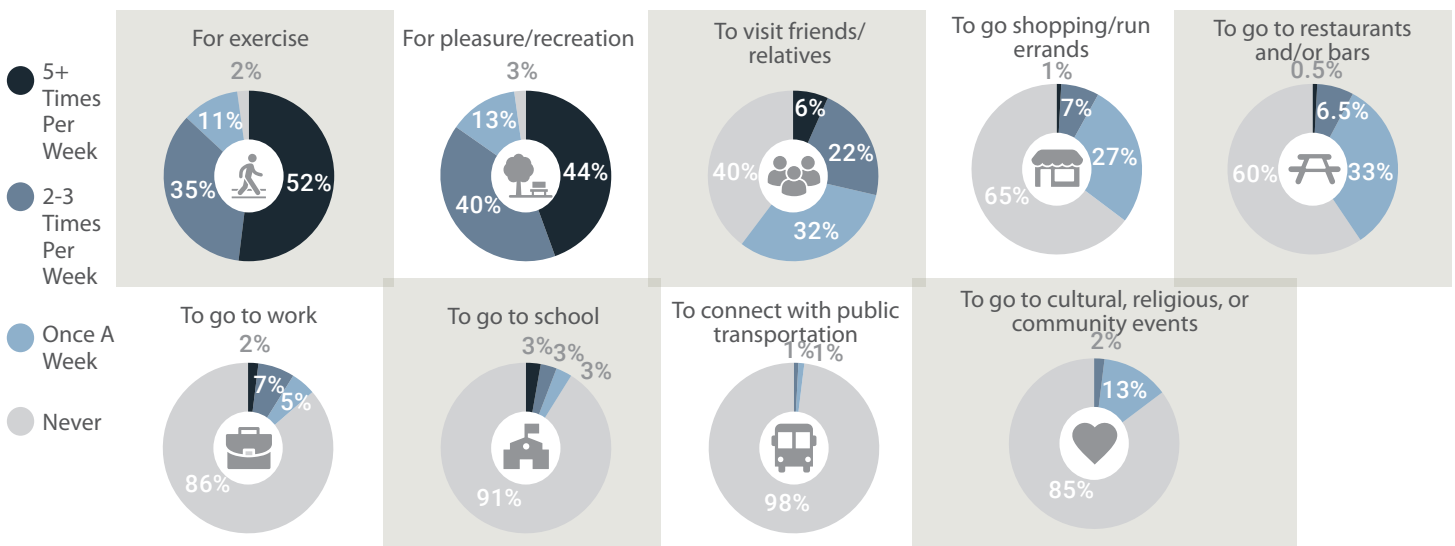
Do you experience disabilities that affect your comfort with walking or biking? (297 Responses)



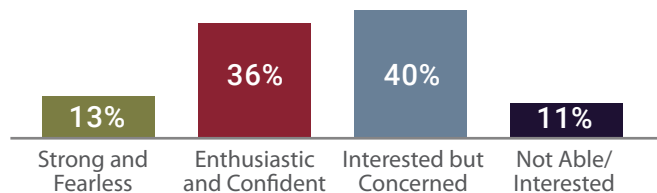
Which of the following best describes your association with Mendota Heights? (297 Responses)



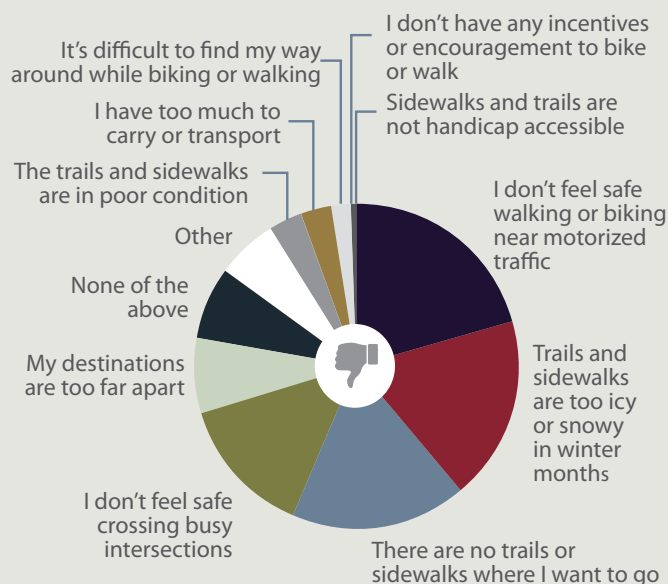
During the warmer months of the year, how often do you walk or bike for the following reasons? (297 Responses)



Based on the descriptions about how often you walk or bike during warmer months, how would you characterize your attitude towards biking? (297 Responses)



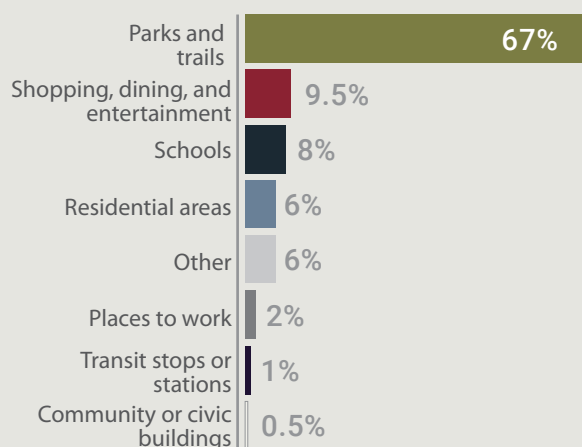
What keeps you from walking or biking in Mendota Heights? (258 Responses) (All that applied selected)



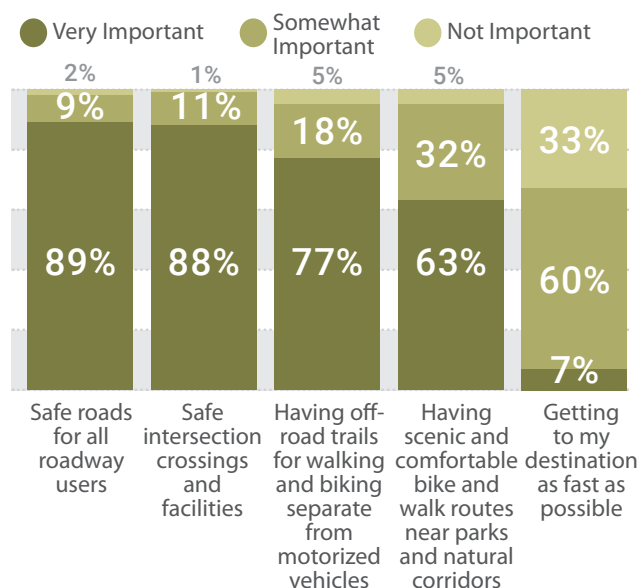
"Other" response themes included:

- Issues with trail or sidewalk maintenance
- Gaps in the trail, sidewalk, or bikeway network
- Safety concerns; coyotes, dogs, traveling with small children, poor lighting, paths close to vehicular traffic, unsafe crossings
- Lack of connections or inconvenient routes
- ADA accessibility for both adults and children

What are the most important destinations to walk or bike to? (297 Responses)



How important are each of the following to you when planning for the future bicycle and pedestrian network? (297 Responses)



Please share any ideas you have for improving conditions for biking and walking in Mendota Heights:

(207 Responses Received)

Top response themes included:

- Trail or sidewalks should be added to Delaware and Dodd
- Keep up maintenance of existing trails
- Make safety improvements, especially for young and old bicyclists
- Desire for sidewalks throughout the community
- Desire for better bike and ped connections around schools
- Connect sidewalks and trails that don't connect
- Improve wayfinding throughout the community
- Add lighting along trails and sidewalks for safety

"There are no trails or sidewalks where I want to go."

"I would love to see more bicycle friendly innovations."

"More connections!"

"Fix drainage for water and ice, enlarge paths for bike and pedestrian use, install trails where there are gaps."

"More bike lanes on roadways, especially on the roads directly connected to schools."

"Better bike access to the middle schools and TRHS for kids to use, especially as those high schoolers who live less than 2 miles from TRHS."

"Preserve the natural areas that the paved paths already go through...it is beautiful to walk and bike on those paths but the environment needs to be protected in these natural areas. We also have so few of these areas (Valley especially important) that we should really take care of them."

"Repair trail surfaces yearly. Clear and maintain surfaces year-round."

"Very concerned about people waking and biking on Dodd Road. It is not safe, especially large groups of students or people with strollers or dogs."



Thompson Park Activity Center Advisory Council



Visitation High School presentation

PHASE 2 ENGAGEMENT SUMMARY

During the second phase of engagement, a series of issues and opportunities for the bike and ped system were presented on an interactive map and people were asked to comment on which opportunities they see as the highest priorities.

STAKEHOLDER OUTREACH

The city also reached out to several local groups to hold stakeholder meetings to discuss potential improvements in the plan. Meetings were held with two organizations:

THOMPSON PARK ACTIVITY CENTER ADVISORY COUNCIL MEETING

A summary of the Issues and Opportunities was presented to the group along with a request for input on the bike/ped system. Attendees mentioned the desire for walking loops (one mile to three mile loops) and trail amenities (benches, shade, trash, signage). Members of an existing walking group like walking on off-street trails, like the River to River Greenway.

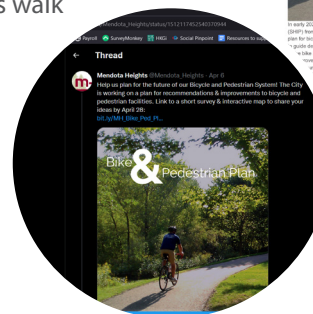
VISITATION HIGH SCHOOL STUDENT MEETINGS

Students were presented with a summary of the issues and opportunities and asked for input on recommendations. Many students mentioned the importance of safety for biking and walking and the desire for separated trails and sidewalks, rather than on-street bike or walk facilities. Students also expressed the feeling that the experience of a trail or bikeway is very important to the usability, and that a connected bike and ped system is important for families and kids in a community.

Students filled out a survey that asked about where they walk, why they walk, and top improvements for bike and pedestrian facilities. Many students indicated that they walk in their neighborhoods and on loop trails. The most common reasons the students walk are for fun/exercise and to meet up with friends. Top improvements that were listed include: Improve busy intersection crossings with wider crosswalks, more warning signage, and more vibrant paint or surface treatments; Build more off-road trails that are separated from vehicular traffic; and Build more sidewalks in neighborhoods and along city streets.





Project board at event



Social media and web posts

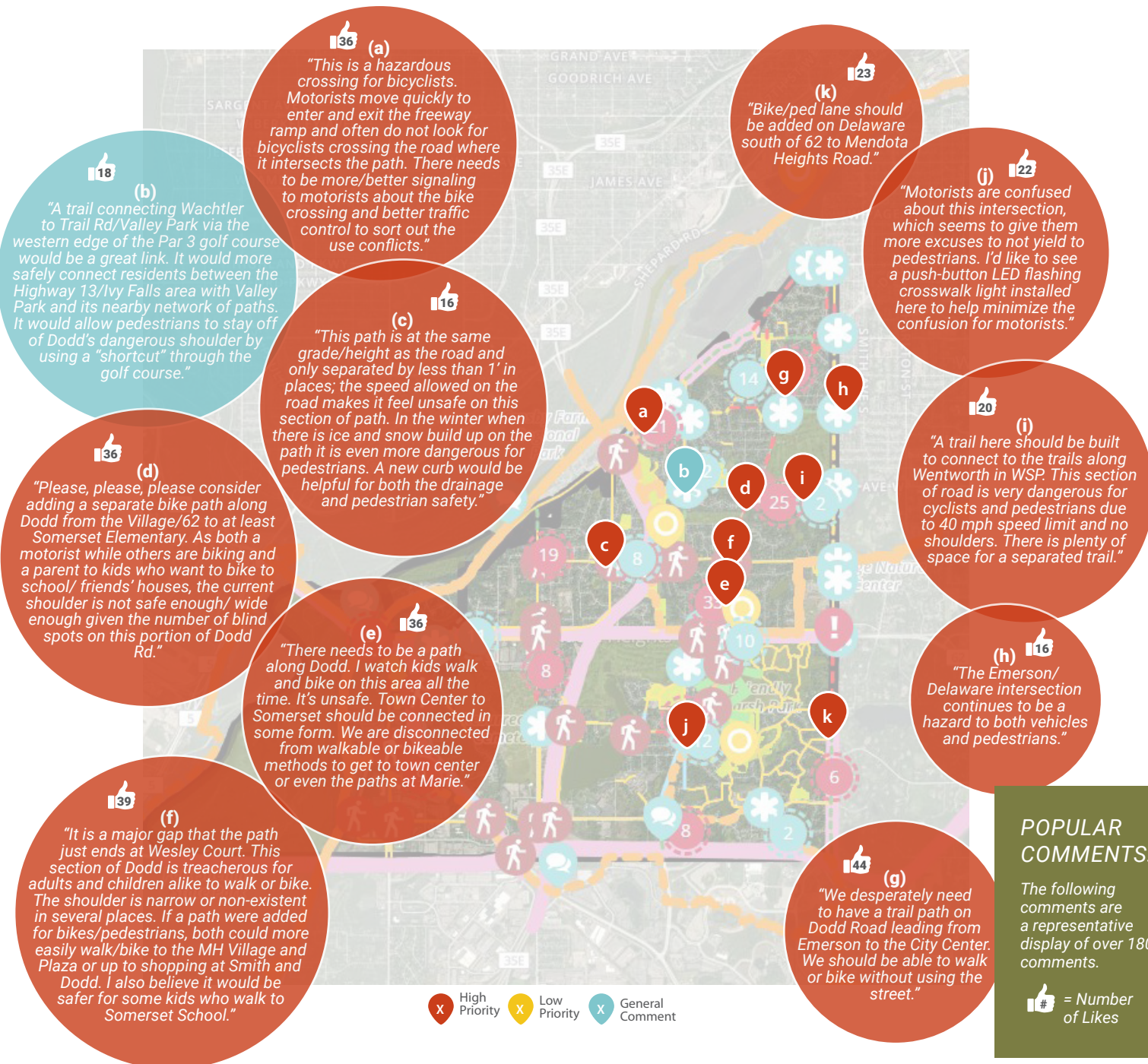
SOCIAL PINPOINT MAP SUMMARY

PARTICIPATION

	970	TOTAL SITE VISITS
	368	UNIQUE USERS
	54	UNIQUE STAKEHOLDERS
	105	COMMENTS

COMMENT TRENDS

- Narrowing the road and decreasing traffic speeds on Dodd to add pedestrian facilities. Trail needs to be along all of Dodd and connect to major interest points.
- Safer connections to schools, parks, and other POI for families needed.
- More signage - wayfinding, pedestrian crossings, speed limits, etc.
- Problems with vehicular traffic speeding, not looking for bikes and pedestrians, running lights and stop signs, or failing to yield. More design elements to keep bikes and peds safe from vehicles, more enforcement of the rules.
- Too much focus on making pedestrian facilities fit in with vehicular traffic, instead of designing trail routes the way bikes/ped would use them/desire them to be (avoiding steep hills, busy roads, scenic routes, etc.)
- Trails gaps and lack of safe connections to schools, neighborhoods, parks, athletic fields, and other trail networks need to be addressed to make everything work.
- More visibility for bikes and pedestrians.



ISSUES & OPPORTUNITIES

SUMMARY OF RELATED PLANNING



2040 COMPREHENSIVE PLAN

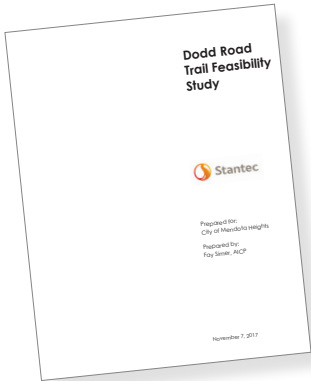
The Comprehensive Plan mentions the importance of multi-modal transportation planning at a high level and the value it has for attracting residents and families to the city. The plan includes a list and description of existing and planned regional trails in the city, but it does not include a detailed list of recommendations for bike and ped facilities.

VISION STATEMENT

Mendota Heights will be recognized as a high quality, family-oriented residential community, with a spacious, natural feel and the amenities of a city.

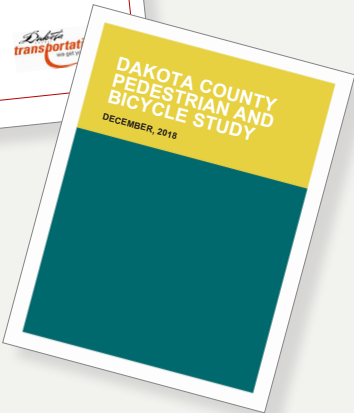
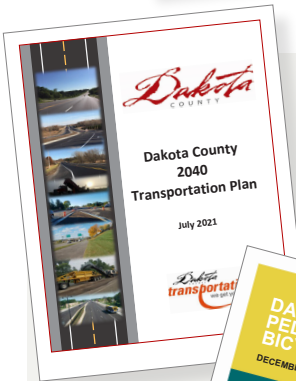
MISSION STATEMENT

Our mission is to preserve and enhance the quality of life in Mendota Heights by providing quality public safety, infrastructure, and planning for orderly and sustainable growth.



DODD ROAD CORRIDOR STUDY

This study was completed in 2017 and includes a recommendation for a shared-use path along the entire length of Dodd Road within the City of Mendota Heights. The path would need a 20-foot wide corridor, which would include buffer area between the road edge and the path, a 8-10 foot wide path, and additional width for utilities. As the Dodd Road right-of-way width varies throughout the city, easements and acquisition would be needed to achieve the 20 foot trail corridor. This is especially challenging in the northern part of the city.



DAKOTA COUNTY PLANNING

Pedestrian and bicycle safety are addressed in Dakota County plans:

DAKOTA COUNTY TRANSPORTATION PLAN

The county’s transportation plan identifies the goal of providing a multi-modal system for county residents. The plan lists gaps in the system related to the countywide greenway system, the RBTN, state highway trails, and state trails.

BIKE PED STUDY

This study identifies important pedestrian and bicycling gaps in the city. Delaware Ave and Lexington Ave are identified as pedestrian and bicycle gaps in Mendota Heights.

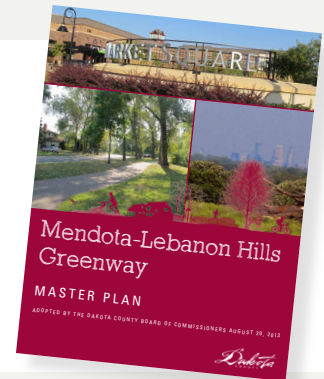


DAKOTA COUNTY RIVER TO RIVER GREENWAY MASTER PLAN

The River to River Greenway connects the Minnesota River to the Mississippi River through the communities of Lilydale, Mendota Heights, West St. Paul, and South St. Paul. The greenway has an urban character and follows several roads, except for the portions through Valley Park in Mendota Heights, and through Kaposia Park in South St. Paul.

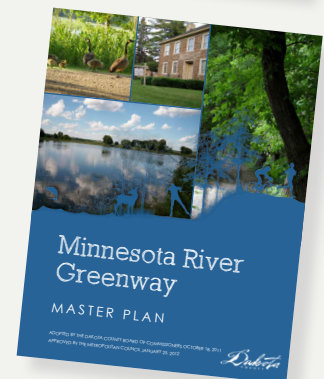
DAKOTA COUNTY MENDOTA-LEBANON HILLS GREENWAY MASTER PLAN

The Mendota Lebanon Hills Regional Greenway begins at the Village at Mendota Heights, where it intersects with the River to River Greenway. A short segment of the trail is built as an underpass of Hwy 62 and a trail to the south. The planned route would follow Dodd Rd south into Eagan. The southern end of the greenway corridor is at Lebanon Hills Regional Park.



DAKOTA COUNTY MINNESOTA RIVER GREENWAY MASTER PLAN

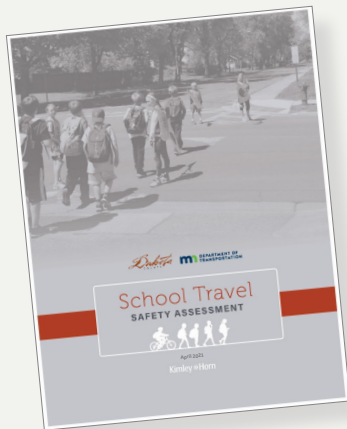
The Minnesota River Greenway Master Plan identifies a trail corridor that includes the Big River Regional Trail and continues south along the Minnesota River and is parallel to Hwy 13. The trail connects Lilydale, Mendota, Mendota Heights, Eagan, and Burnsville.



Source: Dakota County Office of Planning, 2018

DAKOTA COUNTY GREENWAYS

The Dakota County Greenway network includes 15 existing, planned, and proposed regional trail corridors. The trails connect parks, schools, civic destinations, and commercial areas. Greenways are designed to provide non-motorized transportation corridors, habitat restoration areas, water quality improvements, and passive recreation opportunities. The City of Mendota Heights is home to several existing and planned greenway segments: River to River Greenway, Minnesota River Greenway, and the Mendota-Lebanon Hills Greenway.



SAFE ROUTES TO SCHOOL PLANS

SCHOOL TRAVEL SAFETY ASSESSMENT FOR DAKOTA COUNTY (APRIL 2021)

School properties located immediately next to county or state right-of-way were included in the assessment, resulting in a total of 48 schools within Dakota County. Of these, the following (4) schools were assessed in Mendota Heights:

- Two Rivers (formerly Henry Sibley) High School (CR 63; High Speed, 2-3 Lanes)
- Visitation School – private (TH 149 – Dodd Road; High Speed, 2-3 Lanes)
- Somerset Elementary (TH 149 – Dodd Road; Low Speed)
- Heritage STEM Middle School (CR 4, Low Speed)

Recommendations are based on the type of county or state roadway adjacent to school.

Note that during the online engagement phase 1, Somerset Elementary School reported the second highest number of responses of all of the schools (56 responses).

SPECIFIC RECOMMENDATIONS BY SCHOOL IN MENDOTA HEIGHTS:

Two Rivers (formerly Henry Sibley) High School:

- Sidewalk and Trail Infrastructure:
 - Construct sidewalk or trail on east side of CR 63 (Delaware Ave) to connect to school crossing. Install street lighting on CR 63 near school. Connect school directly to CR 63 with sidewalk
- Major School Crossing:
 - Develop a walking and biking route plan that supports the need for a school crossing on CR 63. Construct a school crossing on CR 63 between Deer Run Trail and Preserve Path. Include high visibility crosswalk markings, median refuge, street lighting, pedestrian activated devices (RRFB recommended).
- Evaluate School Speed Zone:
 - Evaluate school speed zone after crossing improvements are made
- Enforcement:
 - Enforce school speed zone if implemented
- School and District Considerations:
 - Develop a SRTS Plan, provide walking and biking safety education.

Heritage STEM Middle School:

- Sidewalk and Trail Infrastructure:
 - Construct sidewalk on CR 4 between CR 63 and Smith Ave.
- Major School Crossing:
 - County to install crossing enhancements (advance stop bars, street lighting) at the existing school crossing on CR 4) at Heritage MS
- Evaluate School Speed Zone:
 - School and District to provide a current school route plan.
 - County to conduct a speed study to determine if a school speed zone is needed on CR 4.
- Enforcement: Enforce school speed zone if implemented
- School and District Considerations:
 - Develop a SRTS Plan, provide walking and biking safety education.

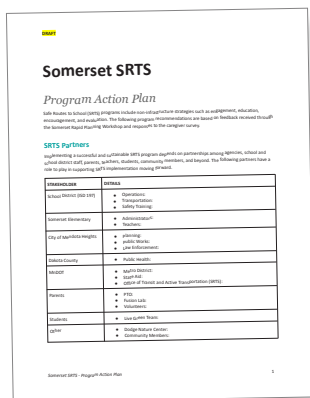
Somerset Elementary

- **Sidewalk and Trail Infrastructure:**
 - MnDOT construct sidewalk on TH 149 as opportunities arise (long-term recommendation)
- **School Crossings:**
 - Consider a school crossing guard at the school driveway.
 - Consider crossing guard at TH 149 and Emerson Ave intersection
- **Evaluate School Speed Zone:**
 - City and District to work with MnDOT to implement flashers on the school speed zone.

- **Enforcement:**
 - Periodically enforce school speed zone on TH 149
- **School District Considerations:**
 - Provide walking and biking safety education
 - Construct sidewalk on Emerson Ave between TH 149 and CR 63 if there is a project opportunity or if funding becomes available.

Visitation School

- **City Considerations:**
 - Request to MnDOT to update the left-turn indicators at the traffic signal at TH 149 and Mendota Heights Road to reduce delays during school drop-off and pick-up.



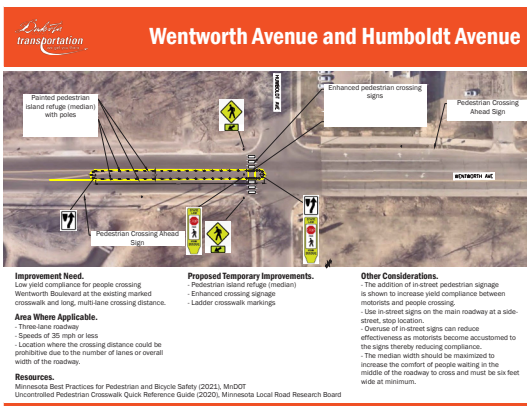
SOMERSET SRTS PROGRAM ACTION PLAN

Program recommendations primarily point to continuing or building from existing programs that are happening today at Somerset Elementary School, such as:

- Walk & Bike to School Day
- Remote Drop and Walk
- School Communications
- Crossing Guards
- Walking Field Trips
- Walk! Bike! Fun! Pedestrian and Bicycle Curriculum

FRIENDLY HILLS MIDDLE SCHOOL SRTS PLAN (2010)

Recommendations from the Friendly Hills SRTS Plan include enhancing and improving crosswalk markings, adding a speed zone, and constructing a new trail or sidewalk to provide better access. Some improvements have been made, but additional trail connections are still desired.



DAKOTA COUNTY PEDESTRIAN SAFETY ASSESSMENT

This assessment does not identify specific recommendations for locations in Mendota Heights, but it can be used as a guide for some of the challenging crossing locations noted in the plan. An outcome of the assessment was a diagram and list of needs, improvements, and considerations, for each studied intersection.

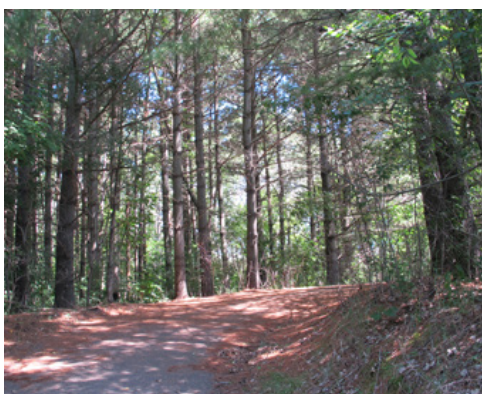
<https://www.co.dakota.mn.us/Transportation/TransportationStudies/Current/Pages/pedestrian-crossing-safety-assessment.aspx>



Existing marked crosswalk



Existing underpass of Marie Ave.



Valley Park trail



Wide shoulders and a multi-use trail along Dodd Rd.

EXISTING CONDITIONS

Currently, Mendota Heights has approximately 28 miles of paved trails and sidewalks and 5 miles of wide shoulders or on-street bicycle facilities. When combined with existing regional trails built and maintained by Dakota County, the City offers a mostly well-connected and accessible trail system. However, some areas of the community lack easy access to trails because highways and arterial roads act as barriers between neighborhoods and nearby trails.

Existing facilities in the city include:

BIKE AND PED SYSTEM

- **City or County Paved Trail**
 - Paved multi-use trails located along city or county roadways (typically 6-8' wide)
 - Located in Valley Park, along Marie Avenue, and along Mendota Heights Road
- **Wide Shoulders/On Street**
 - Shoulders along Dodd Road that are striped and identified for bicycling
 - Width of shoulders varies between 6' and 10'
 - There is no separation between vehicle traffic
- **Sidewalks**
 - Concrete walkways in neighborhoods meant for pedestrians only
 - Typically 4'-6' wide
 - Located in the far north and the southeast corners of the city. Most residential streets in the city do not have sidewalks along them.
- **Lilydale Pedestrian Trail**
 - Outside of Mendota Heights
 - Paved trail along Hwy 13
 - Meant exclusively for pedestrians

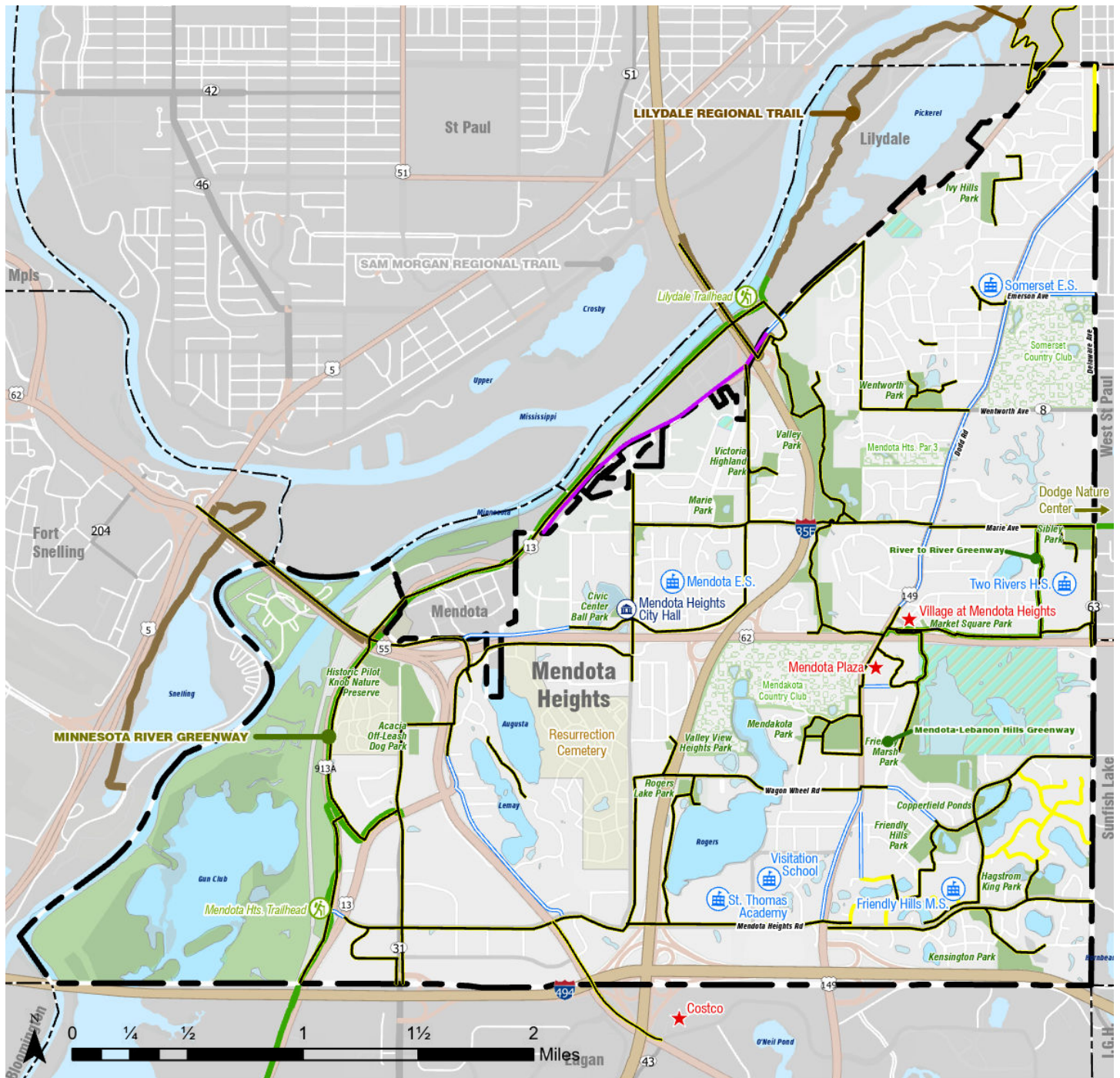
GREENWAYS

- **Dakota County Greenway**
 - Greenways are regional trail corridors planned and operated by Dakota County. Many of the greenways are built in segments, so the full routes are not fully constructed or connected.
 - The River to River Greenway is a regional trail that starts at the Lilydale Trailhead in the northwestern part of Mendota Heights, follows the trail through Valley Park, crosses Dodd Rd at the Village at Mendota Heights, and continues past Two River High School along Marie Ave. and into West St. Paul continuing on to Kaposia Landing and the Mississippi River Greenway in South St. Paul.
 - The Mendota-Lebanon Hills Greenway starts at the Village at Mendota Heights, travels under Hwy 62 and continues south. The trail is planned to follow Dodd Road south into Eagan.
 - The Minnesota River Greenway and Big Rivers Regional Trail start at the Lilydale Trailhead and follow Hwy 13 to the south. Most of the trail within Mendota Heights is constructed along this route.

STATE TRAIL

- A shared-use path is located on the Hwy 55 bridge over the Minnesota River. This trail connects to Fort Snelling State Park on the north/west side of the river.

EXISTING CONDITIONS MAP



- City or County Paved Trail
- Wide Shoulders/On Street
- Lilydale Pedestrian Trail (outside Mendota Hts)
- Sidewalk
- Dakota County Greenway
- State Trail

Parks and Open Space

- Cemetery
- Golf Course
- Nature Preserve
- State Property
- Water

ISSUES & OPPORTUNITIES

An analysis of the existing system includes planned bike and ped projects and potential opportunities for new facilities in the city.

BIKE AND PED SYSTEM

- **Planned Trail**
 - *Paved multi-use trails that are identified as planned projects*
 - *Located along Delaware Ave, Emerson Ave and Sylvandale Rd*
- **Trail Gaps**
 - *Gaps in the trail system that would help connectivity or have been asked for by citizens*
 - *May not be planned projects*
 - *Located along Dodd Rd, Wentworth Ave, Delaware Ave (south of Hwy 62), Lexington Ave, and Pilot Knob Road*
- **Desired Trail Connection (Feasibility Issues)**
 - *Trail gaps that are likely not able to be constructed due to significant cost because of physical, topographic, land use or land ownership issues*

GREENWAYS

- **Potential Future Greenway**
 - *Corridors or routes that have been identified by Dakota County for future greenway trails*
 - *The planned Mendota-Lebanon Hills Greenway is located along Dodd Road (south of Hwy 62)*
 - *The proposed Soo Line Greenway is a potential future greenway corridor. It is not designed or planned, but it is envisioned to be located along a rail corridor (southwest of Hwy 55). Development of this corridor would improve connectivity and walk, bike, roll options in the city.*
- **Existing City Trail (Future Greenway)**
 - *Dakota County has identified some existing city trails as ideal corridors for county greenway routes. The county would take over operations and maintenance or create an agreement with the city in order to improve these trails and identify them as part of the county's greenway system.*

MAJOR ROAD - BARRIER

Highways and arterial roads in the city are identified as barriers to pedestrian and bicycle movement. These facilities typically don't have ped or bike facilities along them, and they are difficult to cross as the traffic moves freely and there are many lanes of traffic to cross.

MNDOT highways lack pedestrian and bicycle paths throughout the city and act as barriers for bicycle and pedestrian crossing. These highways include:

- Hwy 149 – an RBTN corridor that provides a strategic connection to the high bridge and St. Paul
- Hwy 13 – a heavily traveled corridor that is surrounded by high density housing in Mendota Heights and Lilydale

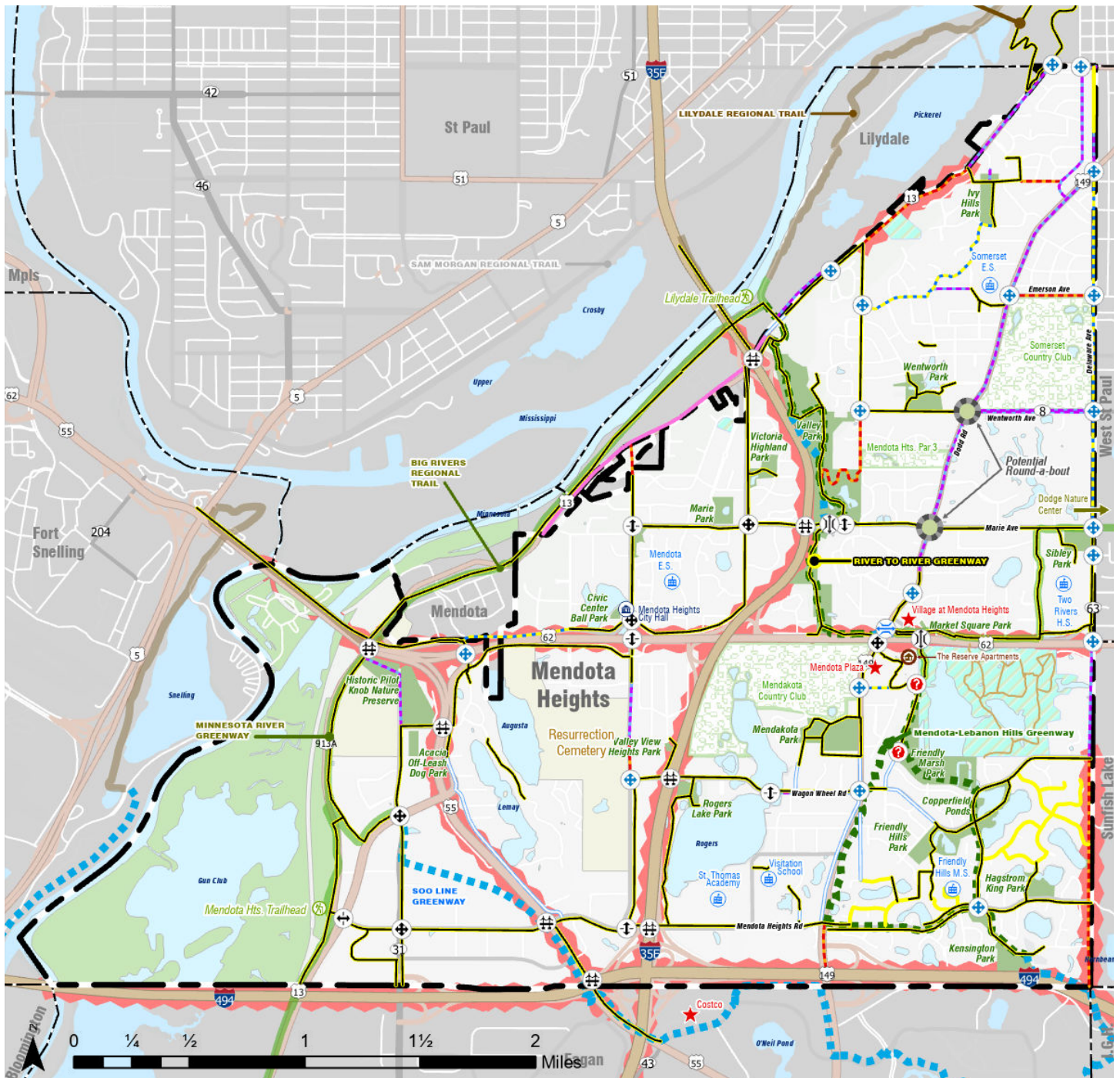
- Hwy 62 – a major barrier to pedestrian and bicycle travel, absent of trails and leading to the Mendota Bridge, MSP airport to the west and Robert Street commercial corridor to the east
- Hwy 55 which provides critical connections to major employers in southern Mendota Heights and in northern Eagan

Grade-separated crossings (tunnels or bridges) and highly marked crosswalks are recommended to improve mobility in the city. The type of improvement recommended is dependent on the surrounding context. Each site should be evaluated for the proper treatment.

CROSSINGS / IMPROVEMENTS

- **Existing Tunnel**
 - *A tunnel under a roadway meant for bicycle or pedestrian use*
 - *Two ped/bike tunnels are located in the city: under Marie Ave and under Hwy 62*
- **Existing At Grade Crossing**
 - *Crosswalks or other marked crossings at roadway intersections*
- **Existing Bridge Crossing**
 - *Locations where roadway bridges separate traffic and trails from busy roadways*
- **Proposed Dakota County Tunnel**
 - *Dakota County is planning to construct a ped/bike tunnel under Dodd Rd, just north of the intersection with Hwy 62. This is part of the River to River Greenway corridor.*
- **Proposed At Grade Crossing Enhancement**
 - *These are sites where improvements, such as enhanced crosswalk markings, warning signage, and flashing lights are recommended to improve crossing safety for pedestrians and bicyclists.*
- **New Wayfinding Sign**
 - *Wayfinding signs would include information about directions to trail connections and destinations, and could include trail maps. Several wayfinding signs are suggested around the Hwy 62 ped/bike tunnel to make walkers and bikers aware of the grade-separated crossing.*

ISSUES AND OPPORTUNITIES MAP



Parks and Open Space

- Cemetery
- Golf Course
- Dodge Nature Preserve
- State Property
- Water
- City Park

Bike Ped System

- City or County Paved Trail
- On Street Bikeway / Wide Shoulder
- Ex Sidewalk
- Planned Trail
- Trail Gaps
- Desired Trail Connections (Feasibility Issues)
- Lilydale Pedestrian Trail (outside Mendota Hts)
- Dodge Nature Center Trails

Greenways

- State Trail
- Existing Greenway
- Planned Greenway
- Potential Future Greenway
- Major Road - Barrier

Crossings / Improvements

- Existing Tunnel
- Existing At Grade Xing (East/West)
- Existing At Grade Xing (North/South)
- Existing Bridge Crossing
- Existing At Grade Xing (Both Ways)
- Proposed Dak Co. Tunnel
- Proposed At-Grade X-ing Enhancement
- New Wayfinding Sign

LAND USE

RETAIL AND EMPLOYMENT DESTINATIONS

Trails and other non-motorized facilities are located mainly in residential destinations in Mendota Heights. Existing retail and employment destinations in the city and in nearby cities lack sufficient walk, bike, and roll access to encourage residents to commute to work without a vehicle. Village at Mendota Heights, Mendota Plaza, and Two Rivers High School have the most trail access, as they are within the major residential context. Other office and industrial areas in the southwest part of the city lack trail access.

MULTIFAMILY HOUSING

Multifamily housing locations in the city indicate potential concentrations of SHIP priority populations. These areas are particularly important for providing safe and connected walking, biking, and rolling facilities. Multifamily housing are scattered throughout the community and in adjacent communities. Several sites are located along Hwy 13, Dodd Rd/TH 149, along 35E, and along Hwy 55. Improving crossings of barriers (major roadways) within the community will improve connectivity for multifamily housing sites.

ESSENTIAL CONNECTIONS

Pedestrian and bicycle access between multi family housing/senior housing, schools, grocery stores, and parks, are essential for addressing the needs of SHIP priority populations.

A trail facility along the entire length of Dodd Rd / TH 149 would greatly improve connectivity for many of those land uses listed above. Additional connectivity could be achieved by improving road crossings throughout the community as there are several barriers.

SCHOOLS IN MENDOTA HEIGHTS AND THEIR ENROLLMENT (from the City's 2040 Comprehensive Plan)

Table 1-1. Public School Enrollment for K-12 Schools within the City of Mendota Heights: 2007-08 vs. 2018-19 School Years

School	Grades	2007-08 Total Enrollment	2018-19 Total Enrollment	Percent Change 2007-08 to 2015-16
Mendota Elementary School	K - 4th	360	388	8%
Somerset Elementary School	K - 4th	318	419	32%
Friendly Hills Middle School	5th - 8th	597	727	22%
Henry Sibley High School	9th - 12th	1,462	1,477	1%

There are six public and private schools offering kindergarten through 12th grade located within the City of Mendota Heights: Mendota Elementary School, Somerset Elementary School, Friendly Hills Middle School, Henry Sibley High School, St. Thomas Academy, and Visitation School.

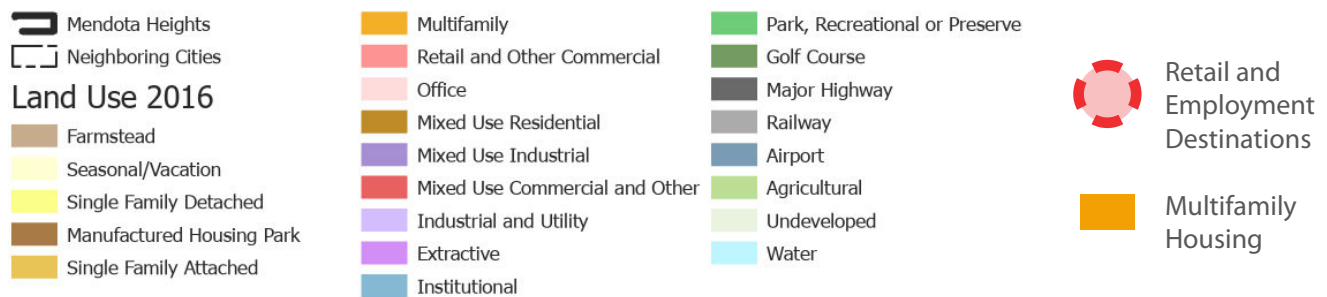
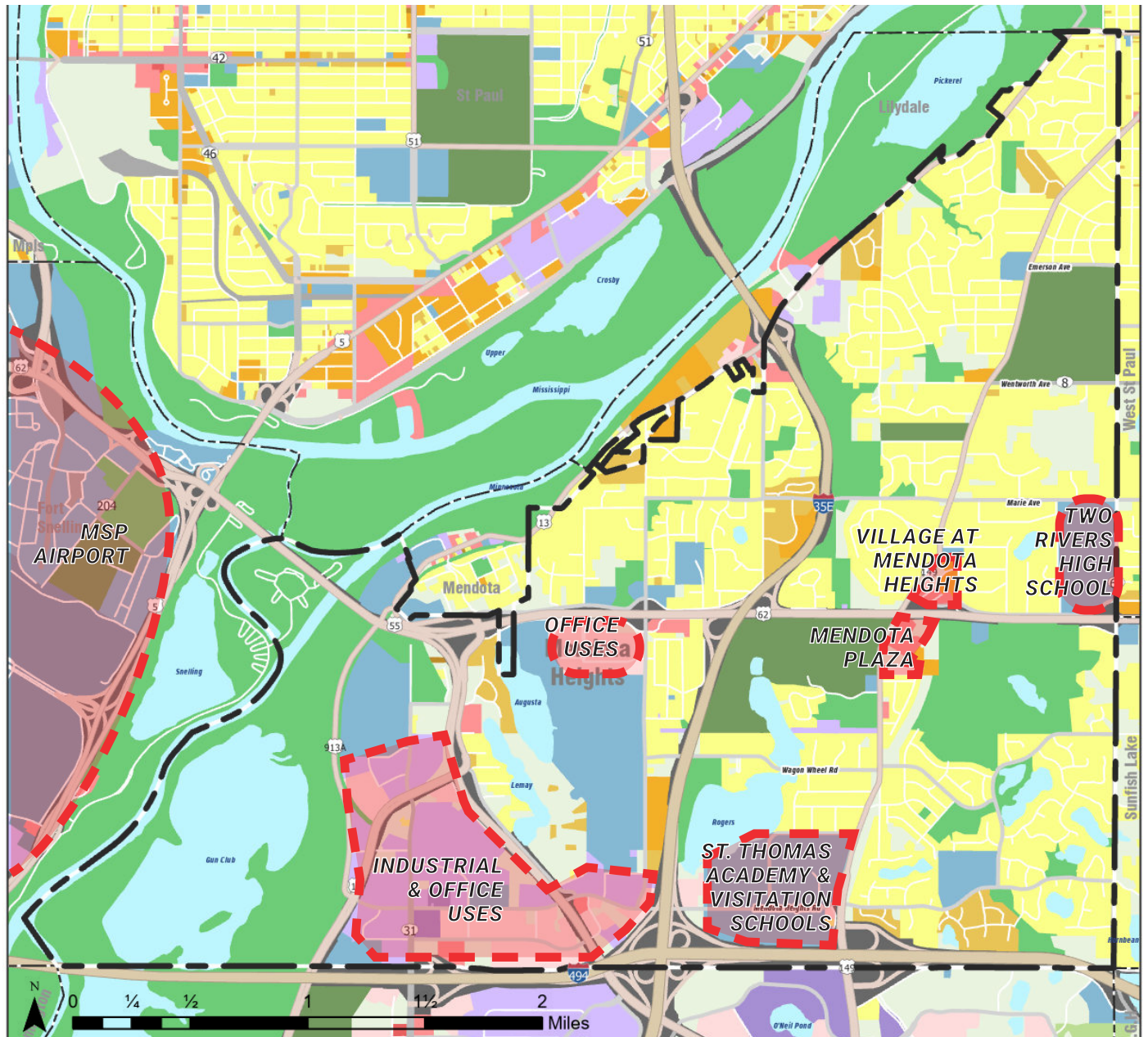
The previous table provides a breakdown of enrollment of the K-12 public schools located within the city at the start of the 2007 - 2008 school year compared with the 2015-2016 school year.

Table 1-2. Private School Enrollment for K-12 Schools within the City of Mendota Heights: 2007-08 vs. 2018-19 School Year

School	Grades	2007-08 Total Enrollment	2018-19 Total Enrollment	Percent Change 2007-08 to 2015-16
St. Thomas Academy	6th - 12th	695	632	-10%
Visitation School	Montessori - 12th	600	585	-2.5%

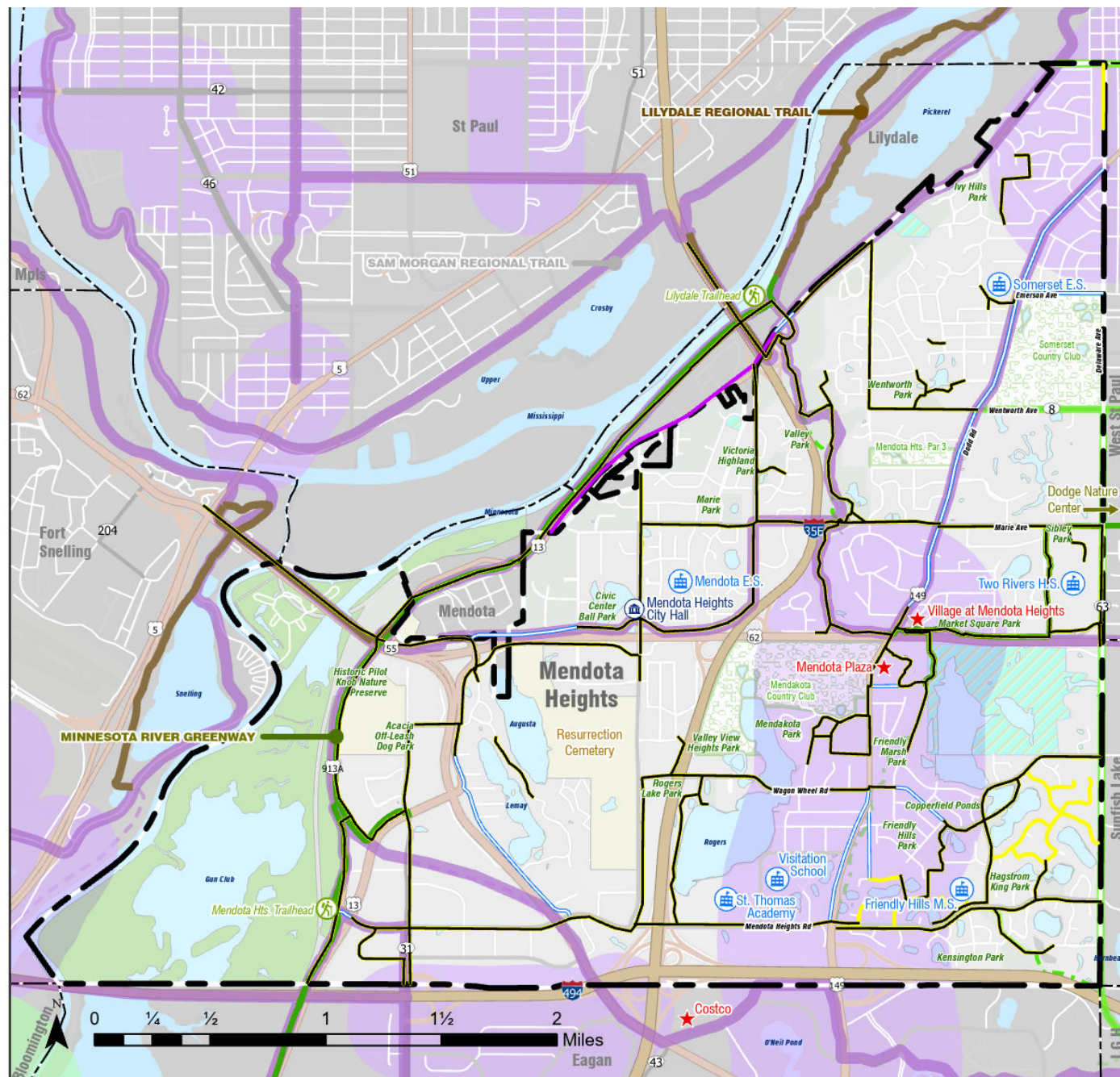
Source: St. Thomas Academy and Visitation School websites

CITY OF MENDOTA HEIGHTS LAND USE



REGIONAL BICYCLE TRANSPORTATION NETWORK (RBTN)

The Metropolitan Council has identified priority RBTN corridors throughout the metro area. In Mendota Heights, Dodd Rd, south of Hwy 62, identified as a Tier 1 Priority RBTN corridor.



Last Updated 10.24.2022 TDS

City Bike and Ped System

- Off Street Bituminous Trail (6'-8' wide)
- Wide Shoulders/On Street
- Lilydale Pedestrian Trail (outside Mendota Hts)
- Ex Sidewalk
- Metropolitan Council Tier 1 Priority Regional Bicycle Transportation Corridor

Metropolitan Council Tier 2 Regional Bicycle Transportation Corridor

- Metropolitan Council Tier 2 RBTN Alignments
- Metropolitan Council Tier 2 RBTN Alignments

Greenways

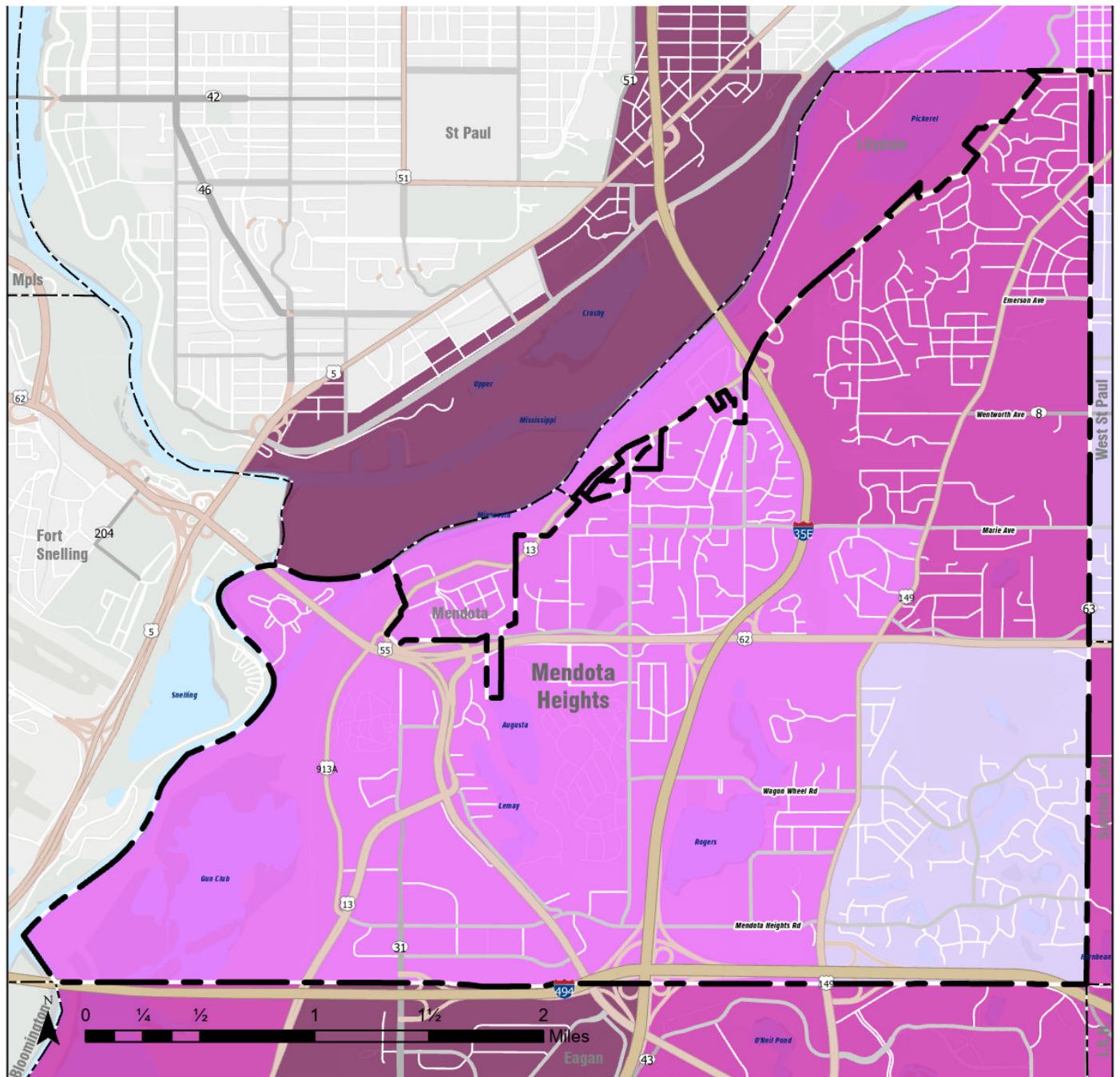
- Dak. Co. Greenway
- State Trail

Parks and Open Space

- Cemetery
- Golf Course
- Nature Preserve
- State Property
- Water

POPULATION IN POVERTY BY CENSUS TRACT

This map identifies areas of the city that have higher concentrations of people living in poverty. These areas include the northern area where there is older housing stock and a few sites of multifamily housing. More emphasis and priority should be placed on providing safe connections from this area of the city to destinations within the city.



- Mendota Heights
- Neighboring Cities









Percent in Poverty

- <3%
- 3%-5%
- 5%-8%
- 8%-13%

RECOMMENDATIONS

PLAN STRATEGIES & ORGANIZATION

The following “E” categories are used to identify various types of projects and programs that can be used to implement strategies in the Bike and Pedestrian Plan.

	DEFINITION	RECOMMENDATIONS
	EDUCATION Provide educational opportunity for people to learn to walk, bike, and roll safely; Provide opportunity for motorized movers to learn to watch for non-motorized movers; informing law enforcement; informing legislators of the importance and value of biking and walking	Wayfinding signage; Etiquette signage; Bike Rodeo; Safety Camp
	ENGINEERING Identification of physical barriers to walking and biking; infrastructure improvements to facilitate walking and biking, such as crossings, trails, sidewalks, on-street facilities, bike parking, etc.	Develop crossing improvements, new trails, and sidewalks throughout the community; Develop Safe Routes to School Plans within the city and implement them; Maintain the ped/bike system
	ENCOURAGEMENT Programs that get people excited about walking or biking, advertising and promotional campaigns, outreach, events, etc.	Develop an online map of ped/bike routes and loops; Provide information about destinations and distances by ped/bike; Folks on Spokes (city program, partnership with West St. Paul and South St. Paul)
	ENFORCEMENT Law enforcement support for both motorized and non-motorized users; appropriately enforce rules and laws to keep people safe	Work with law enforcement officers to ensure drivers and bicyclists follow the rules of the road or issue penalties; Dog walkers need to control their dogs while walking on trails and other facilities
	EQUITY Traffic codes and rules that treat non-motorized movers as equal users of the transportation system; equal access to facilities and destinations for all movement types	Review rules within the community and access to ensure that community members of all ages and abilities are able to access bike and ped facilities
	EXPERIENCE Making transportation an experience by design for both motor and non-motor vehicles. Focus on safety, views, destinations, etc.	Promotion of outdoor recreation; Greenway goals; Understand that Mendota Heights is a poorly lit community, which impacts safety (law enforcement recently made reflecting sashes for cyclists and walkers)
	ETHICS Values-based decision-making process that is centered on ethics, empathy, and equity	Elected officials should value biking and walking facilities on an equal level with motorized facilities
	EVALUATION Determine if the system is providing valuable and accessible facilities; evaluate the number of users of the ped/bike system	Currently evaluating the system with surveys/engagement; Metrics (do complaints go down?); Look at Strava numbers for usership of trails; Evaluate StreetLight data regarding biking and walking

EDUCATION

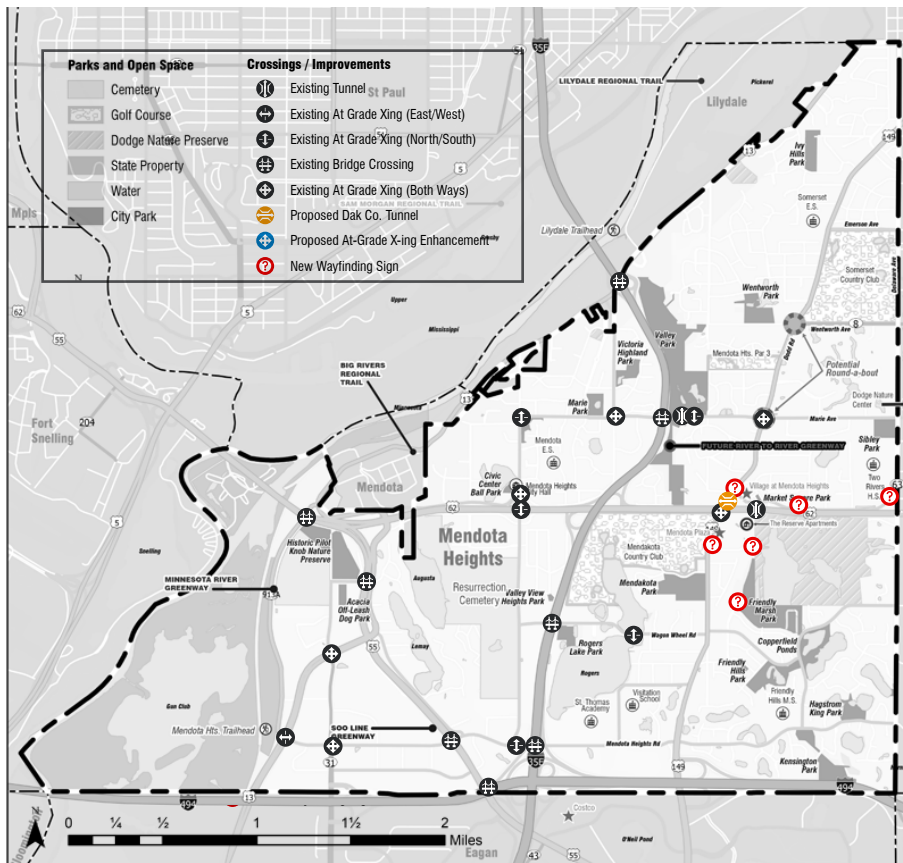
The city's bike and pedestrian system must include efforts to:

- Educated people to walk and bike safely
- Educate motorized movers to watch for non-motorized movers
- Inform law enforcement of new city laws and policies
- Inform legislators of the importance and value of biking and walking

RECOMMENDATIONS

- Collaborate with Dakota County to install Wayfinding Signage to direct bicyclists and pedestrians to Hwy 62 underpass (see map below). Public engagement indicated that many bikers and walkers are not aware of the tunnel under Hwy 62, just east of Dodd Rd. Signs should be placed at all potential locations, north/east/south/west of the tunnel to direct people to access the tunnel safely.
- Install Etiquette Signage along busy trail segments
 - Signs along trails that inform users to share the trail with multiple users, yield to pedestrians and those with disabilities, alert people on the trail when passing (on bikes), and to pick up after pets
- Bike Rodeo:
 - Bike safety fair or event to demonstrate safe riding to children, bike on a designated course or loop, and get free helmets and other bike gear
- Explore and utilize "Walk! Bike! Fun!"
 - MNDOT's curriculum targeted to youth walking and biking safety
- Safety Camp:
 - Many communities offer half day to full day safety camps for kids where they can learn about bike safety and helmet use, as well as general safety tips from police and

RECOMMENDED WAYFINDING SIGN LOCATIONS



Wayfinding



Etiquette signage



Bike classes



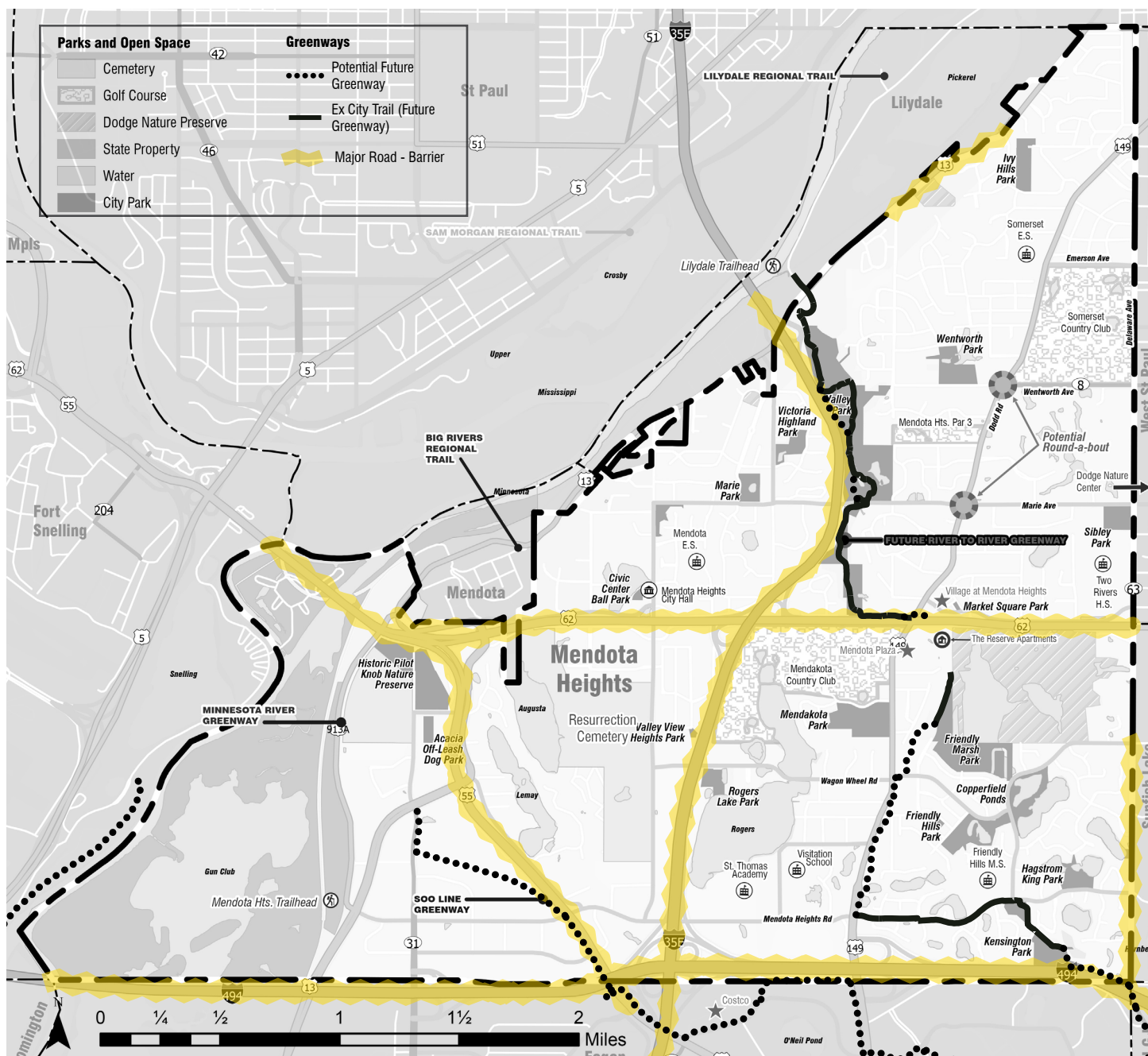
Safety camp



BARRIERS

- Interstates 35E and 494
- Hwy 62
- Hwy 55
- Segment of Hwy 13 where there is steep topography and there is no trail
- Segment of Delaware Ave. where there are steep shoulders and no trail facility

SYSTEM BARRIERS DIAGRAM



RECOMMENDATIONS & SYSTEM COMPONENTS

- Develop crossing improvements, including at-grade improvements, such as signage, signals, and surface treatments. Consider artistic crosswalk markings to slow traffic and call attention to bicyclists and pedestrians at crossings near schools and parks.
- Build new trails and sidewalks throughout the community
- Develop Safe Routes to School Plans and follow through on recommendations from existing plans
- Maintain the ped/bike system
- Urge MNDOT to follow through on trail on Dodd. Consider upcoming road projects that could be paired with trail development.
- Mendota Heights will consider adding sidewalks and trails to existing roadways at the time of re-construction or replacement.

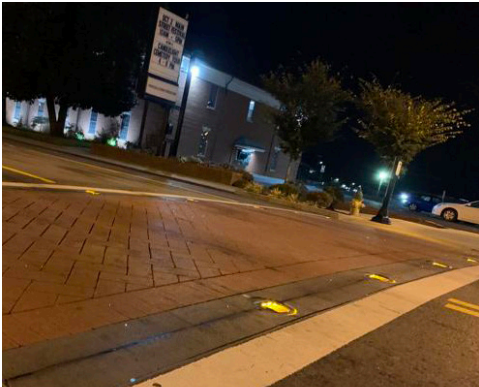
SYSTEM COMPONENTS

The physical infrastructure that makes up the bike and pedestrian system in Mendota Heights include the following types of facilities:

	COMPONENT	PED	BIKE	FACILITY EXAMPLES
 <i>Dakota County Greenways</i>	DAKOTA COUNTY GREENWAYS (off street, bituminous, 10' wide trail, destination trails)			<ul style="list-style-type: none"> • Mendota-Lebanon Hills Regional Greenway • Minnesota River Regional Greenway (incl. Big Rivers Regional Trail) • River to River Greenway
 <i>Off Street Bituminous Trail</i>	OFF STREET BITUMINOUS TRAIL (6'-8' wide paved trail)			<ul style="list-style-type: none"> • Trail along Mendota Heights Rd • Trail along Wagon Wheel Rd • Trail along portions of Lexington Ave
 <i>Wide Shoulders On-Street</i>	WIDE SHOULDERS ON-STREET			<ul style="list-style-type: none"> • Shoulders along Dodd Road • Shoulders along Hwy 55
 <i>Sidewalks</i>	SIDEWALKS (4-6' wide concrete walks)			<ul style="list-style-type: none"> • Sidewalks in front of business in The Village at Mendota Heights • Southeastern MH, along Field Stone Drive and Watersedge Terrace
 <i>Underpass</i>	GRADE-SEPARATED CROSSING			<ul style="list-style-type: none"> • Tunnel under Hwy 62, east of Dodd Rd
 <i>At-Grade crossing</i>	AT-GRADE CROSSING			<ul style="list-style-type: none"> • Painted markings on street, cross walk, yellow alert signage, flashing lights
 <i>Protected bike lane</i>	PROTECTED BIKE LANE			<ul style="list-style-type: none"> • On-street bike lanes that are separated by plastic bollards or concrete curb to provide visual separation from traffic



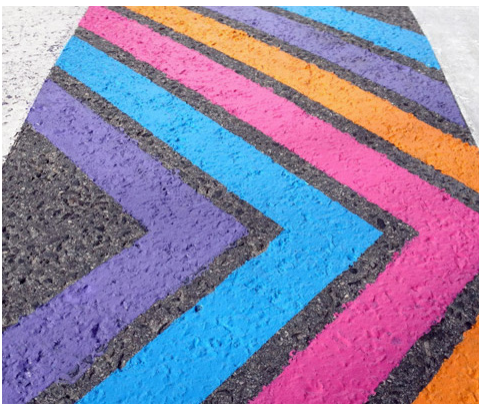
Pedestrian refuge island



Crosswalk reflectors



HAWK crossing system



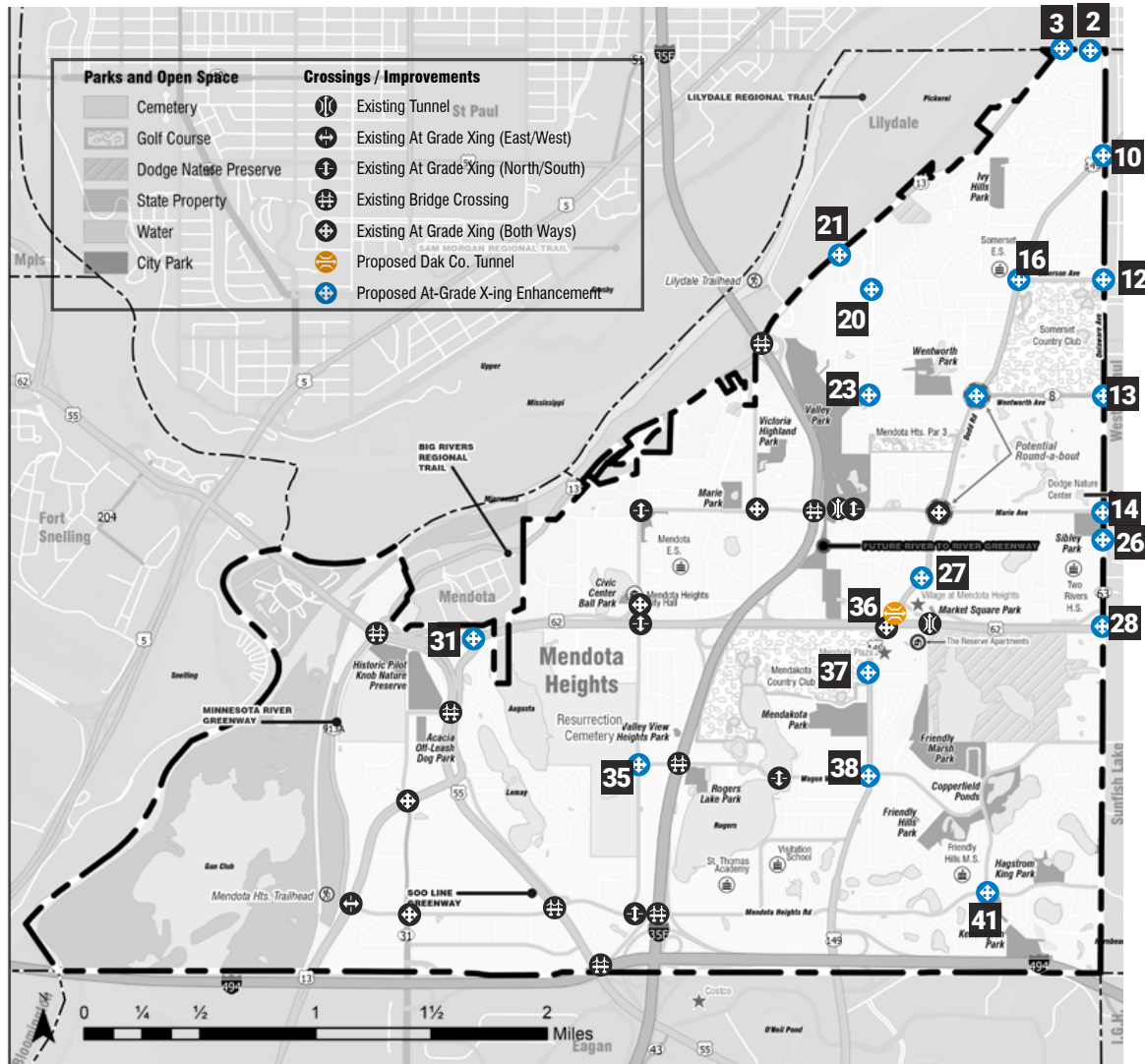
Artistic crosswalk design

RECOMMENDED CROSSING IMPROVEMENTS

Make improvements at the following recommended locations in order to improve safety throughout the city. Employ elements, such as: enhanced crosswalk markings and artistic crosswalks, pedestrian refuge islands, HAWK signals and lighting, warning signage, speed bumps to slow traffic ahead of crossings, and other surface treatments. A more detailed evaluation of each location is needed to identify the most effective improvement. The locations in the table below were identified by public input and city staff identification of proposed and planned projects.

ID	PROJECT	STATUS	PROJECT PARTNERS
2	Crossing improvement at intersection of Chippewa Ave and Annapolis St W	Planned	City
3	Crossing improvement at intersection of Highway 13 and Annapolis St W	Planned	MNDOT
10	Crossing improvement at intersection of Delaware Ave (CR63) and Dodd Rd	Planned	City / Dakota County
12	Crossing improvement at intersection of Delaware Ave (CR63) and Emerson Ave	Planned	City / Dakota County
13	Crossing improvement at intersection of Delaware Ave (CR63) and Wentworth Ave	Planned	City / Dakota County
14	Crossing improvement at intersection of Delaware Ave (CR63) and Marie Ave	Planned	City / Dakota County
16	Crossing improvement at intersection of Emerson Ave and Dodd Rd (Hwy 149)	Planned	MNDOT
20	Crossing improvement at intersection of Emerson Ave and Wachtler Ave	Proposed	City
21	Crossing improvement at intersection of Riverside Ln and Highway 13	Proposed	MNDOT
23	Crossing improvement at intersection of Wentworth Ave and Wachtler Ave	Completed	City
26	Crossing improvement at intersection of Delaware Ave (CR63) and Preserve Path	Planned	City / Dakota County
27	Crossing improvement at intersection of Hilltop Rd and Dodd Rd (Hwy 149)	Proposed	MNDOT
28	Crossing improvement at intersection of Delaware Ave (CR63) and Highway 62	Proposed	MNDOT
31	Crossing improvement at intersection of Victoria Curve and Highway 62	Proposed	MNDOT
35	Crossing improvement at intersection of Lexington Ave and Wagon Wheel	Proposed	City
36	Grade-separated crossing improvement at intersection of Dodd Rd (Hwy 149) at Highway 62, tunnel under TH 149 as part of River to River Greenway	Planned	City / MNDOT / Dakota County
37	Crossing improvement at intersection of S Plaza Dr and Dodd Rd (Hwy 149)	Proposed	MNDOT
38	Crossing improvement at intersection of Wagon Wheel Rd and Dodd Rd (Hwy 149)	Proposed	MNDOT
41	Crossing improvement at intersection of Mendota Hts Rd and Huber Dr	Proposed	City

CROSSING IMPROVEMENTS



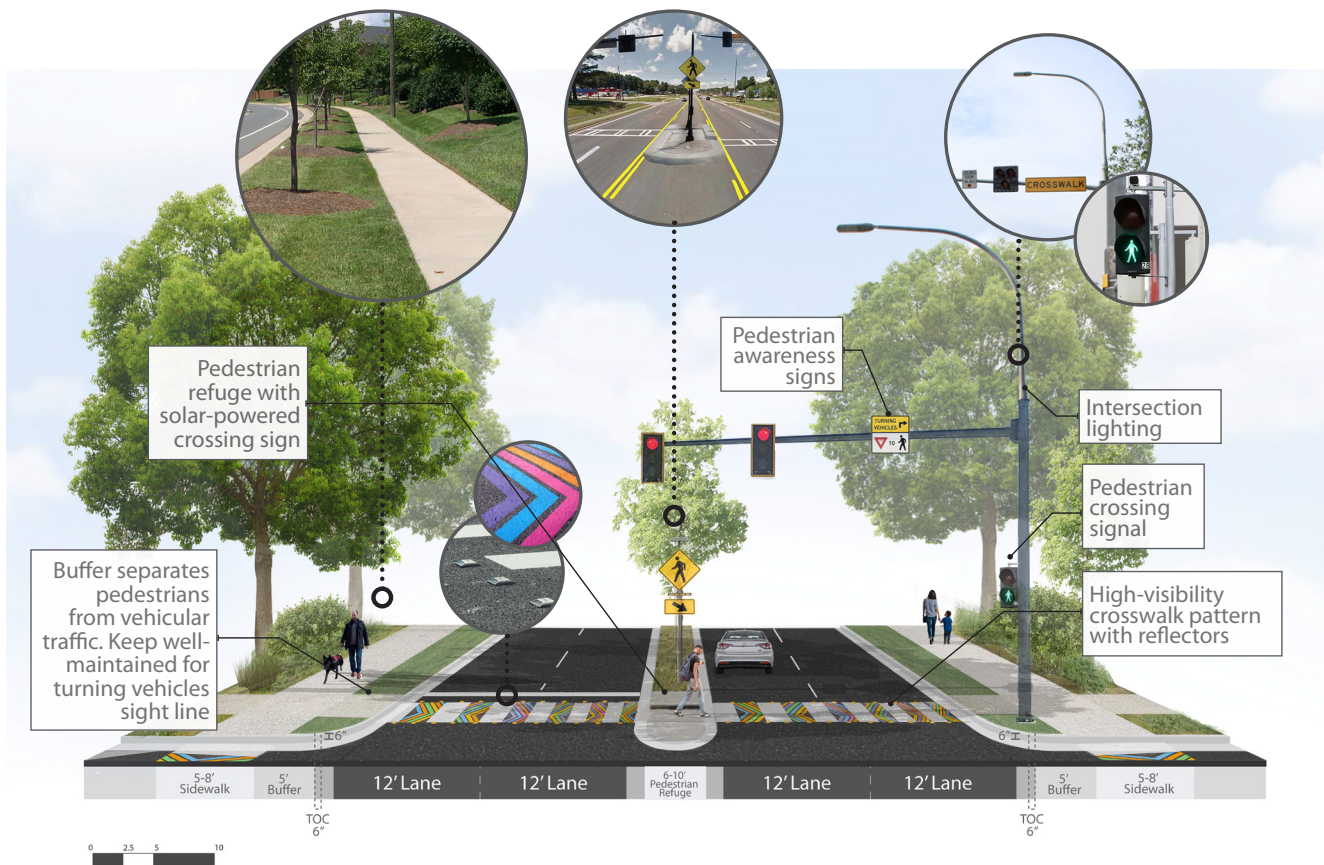
GRADE SEPARATED CROSSING

Tunnels and bridges can provide safe crossings for cyclists and pedestrians under or over busy roadways. This facility is used frequently along Dakota County greenways and provides a continuous trail experience.



AT GRADE CROSSING IMPROVEMENTS

Depending on the street configuration, street width, and whether or not the crossing is at an intersection or mid-block location, a variety of at grade crossing improvements may be utilized: highly visible crosswalk markings, pedestrian refuge/island, lighting and HAWK signals, among other improvements.



STREET LIGHTING

Adequate lighting is important to pedestrian and bicyclist safety. This is particularly true at intersections and road crossings that should be well lit to improve safe crossings and reduce crashes with motor vehicles. Lighting should be installed at all intersections and particularly at those intersections that have regular pedestrian and bicycle crossing activity.

RECOMMENDED TRAIL PROJECTS

The following projects are planned or proposed off-street trails that would enhance connectivity in the city. These projects will be completed by the city, or in partnership with Dakota County, or MNDOT as appropriate. Planned trails have been identified as an upcoming project, while proposed trails may fill trail gaps or be otherwise desired, but have not yet been identified as an upcoming project.

Protected bike lanes are not specifically recommended within this plan, but could be considered as a facility option where there is not space for a physically separated trail facility.

ID	PROJECT	STATUS	PROJECT PARTNER
1	Future sidewalk on east side of Delaware Ave (CR63) connecting ex sidewalk to Dodd Rd	Planned	City / Dakota County
4	Future sidewalk on south side of Annapolis St W between Chippewa Ave and Delaware Ave	Proposed	City
7	Future trail connection from Ivy Hills Park to Brompton Pl cul-de-sac	Challenging	City
8	Future trail connection along Highway 13 from Sylvandale Rd to Annapolis St W	Proposed	MNDOT
11	Future trail connection along Delaware Ave (CR63) between Dodd Rd and Marie Ave	Planned	City / Dakota County
15	Future trail connection along Dodd Rd (Hwy 149) between Delaware Ave and Wesley Ln	Proposed	City
18	Future trail connection between existing trail at Somerset Elementary and Sylvandale Rd	Proposed	City
22	Future trail connection along Highway 13 from Riverside Ln to Lilydaye Rd bridge	Proposed	MNDOT
24	Future trail connection along Wentworth Ave between Delaware Ave and Dodd Rd	Proposed	City / Dakota County
30	Future trail connection along Victoria Curve from Hunter Ln to Highway 62 intersection	Planned	City
32	Future trail connection along Pilot Knob Rd from Acacia Blvd to Sibley Memorial Highway	Proposed	City
34	Future trail connection along Lexington Ave from Cullen Ave to Highway 62	Proposed	City / Dakota County
39	Future trail connection along S Plaza Dr from Dodd Rd (Hwy 149) to N Plaza Dr	Planned	City
42	Future trail connection Delaware Ave (CR63) between Highway 62 and Huber Drive	Proposed	City / Dakota County

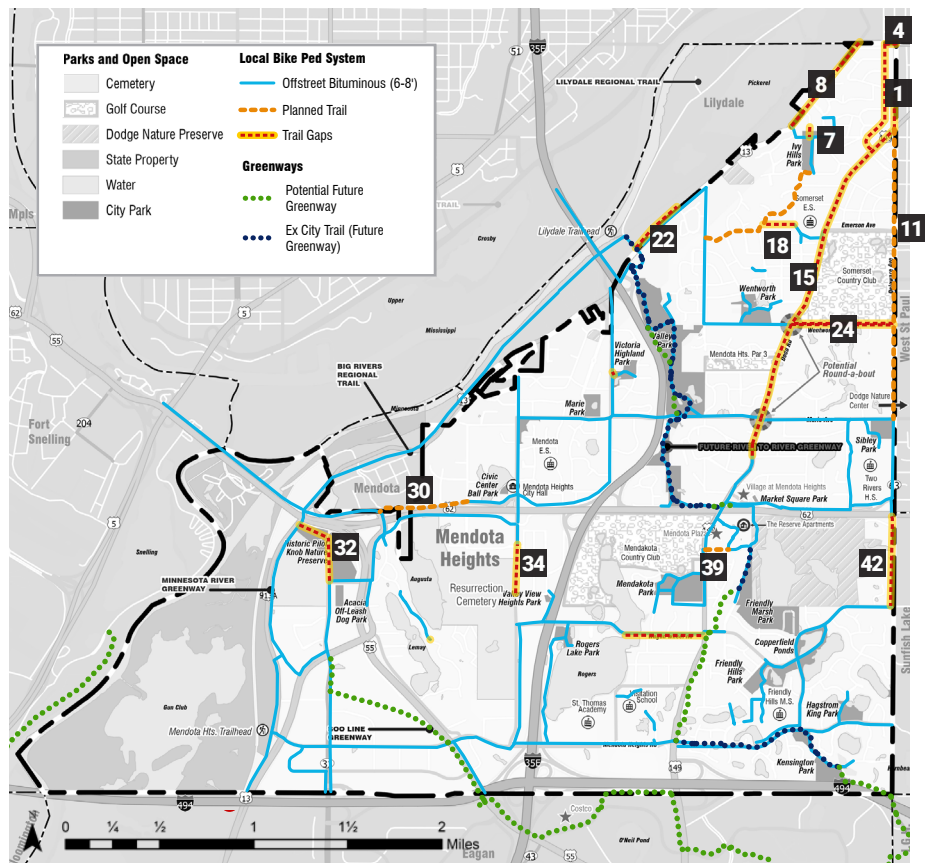


Multiuse paved trails



Striped paved shared use trails

RECOMMENDED TRAIL PROJECTS MAP



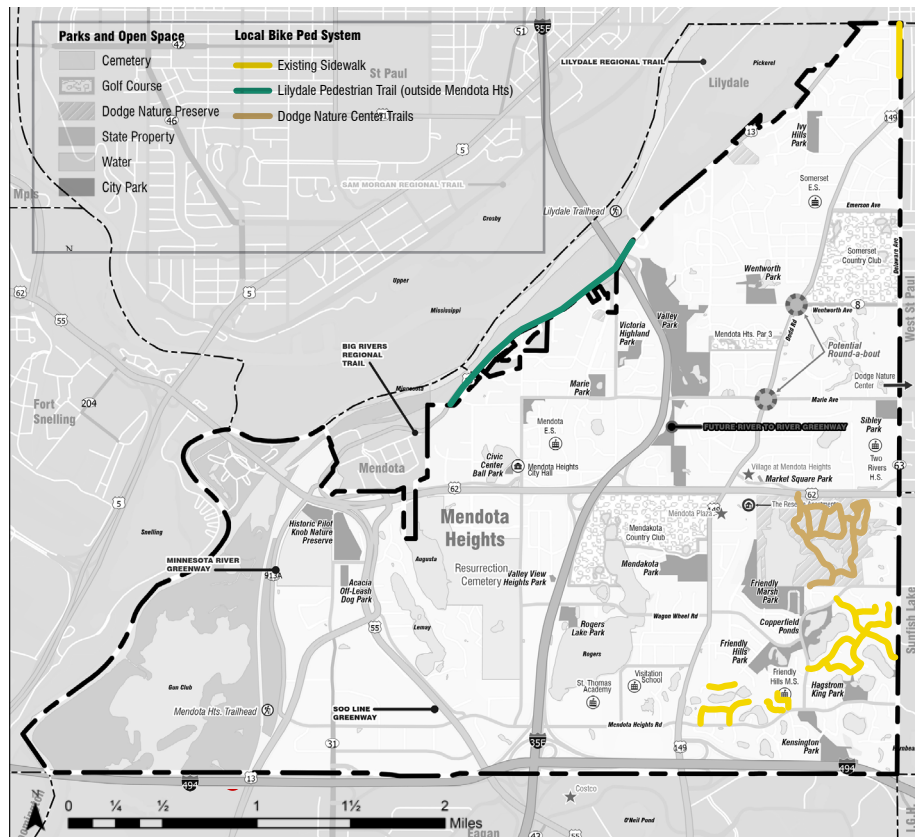
SIDEWALKS

Few sidewalks exist in the city today due to several housing developments having been constructed without them. New sidewalks are proposed at two locations in the northern, urban part of the city.

As sidewalks are meant to be used by pedestrians and not cyclists, recommended investments are focused on providing more multi-use trails in the community. In general, as redevelopment or new development occurs, the city should recommend sidewalks be installed to add connectivity to the city.

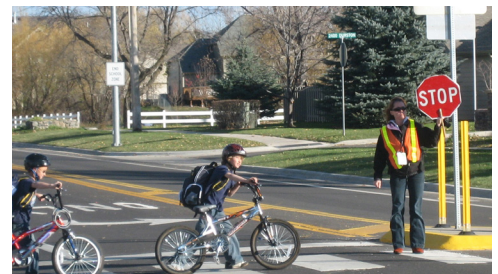
The Lilydale Pedestrian Trail is a City of Lilydale project.

SIDEWALKS



SAFE ROUTES TO SCHOOL

Recommendations from previous Safe Routes to School planning are listed on pages 12 and 13 of this report. Collaborate with school partners to continue implementing completed Safe Routes to School Plans.



School crossing with patrol



Crosswalk striping



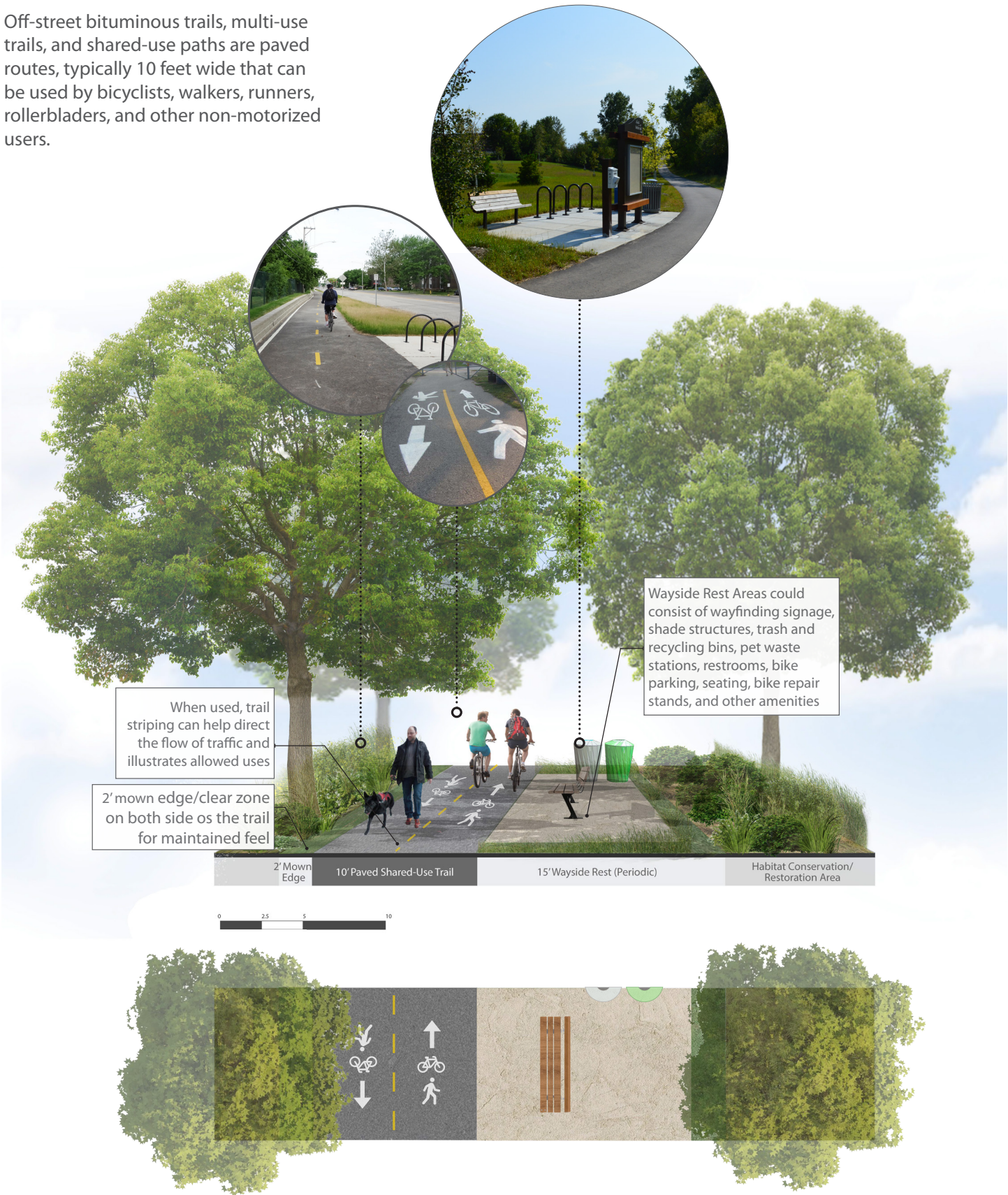
Winter trail and sidewalk care

BIKE AND PEDESTRIAN SYSTEM MAINTENANCE

Several comments from the public engagement process indicated a desire for better trail maintenance in the city. Throughout the spring, fall, and winter, weather may affect trail surfaces and impact the usability for some user groups, especially those who bike or roll. It is recommended that the city make it a priority to routinely evaluate trails, and other bike and ped facility conditions and make improvements where necessary.

DAKOTA COUNTY GREENWAYS

Off-street bituminous trails, multi-use trails, and shared-use paths are paved routes, typically 10 feet wide that can be used by bicyclists, walkers, runners, rollerbladers, and other non-motorized users.



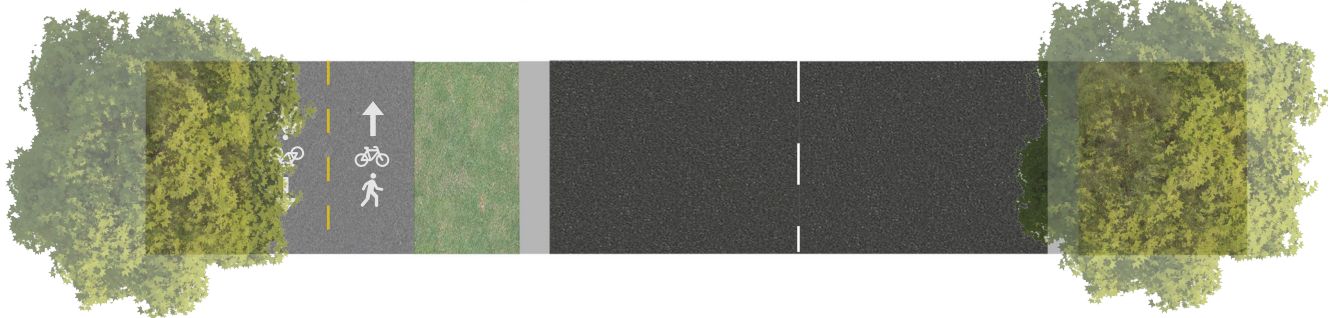
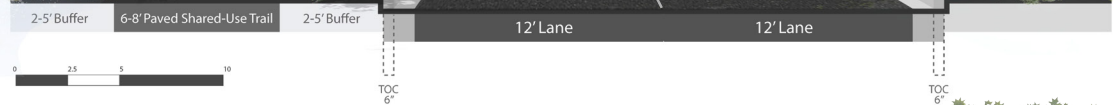
SHARED-USE PATHS

Off-street bituminous trails, multi-use trails, and shared-use paths are paved routes, typically 8-10 feet wide that can be used by bicyclists, walkers, runners, rollerbladers, and other non-motorized users.



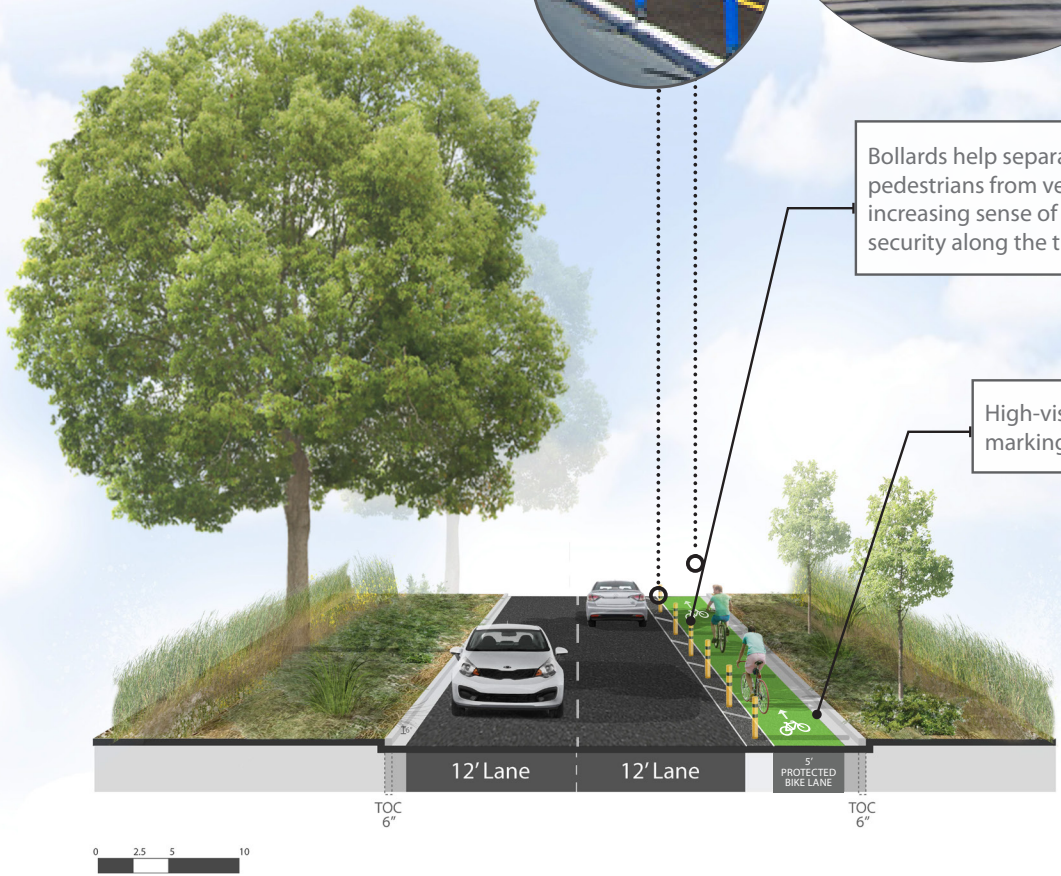
Vegetative trail buffer helps separate bikes and pedestrians from vehicular traffic, instilling a greater sense of safety while offering opportunities for landscaping, lighting, and signage

Pedestrian-scale lighting helps trail users feel secure any time of day



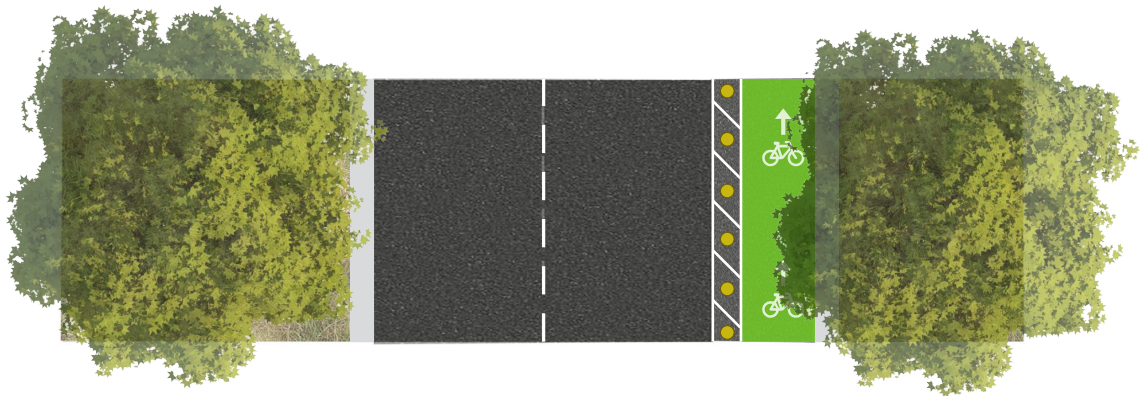
PROTECTED BIKE LANES

These facilities can be used in road corridors where there is not sufficient right-of-way to add a separate shared-use path.



Bollards help separate bikes and pedestrians from vehicle traffic, increasing sense of safety and security along the trail

High-visibility road markings

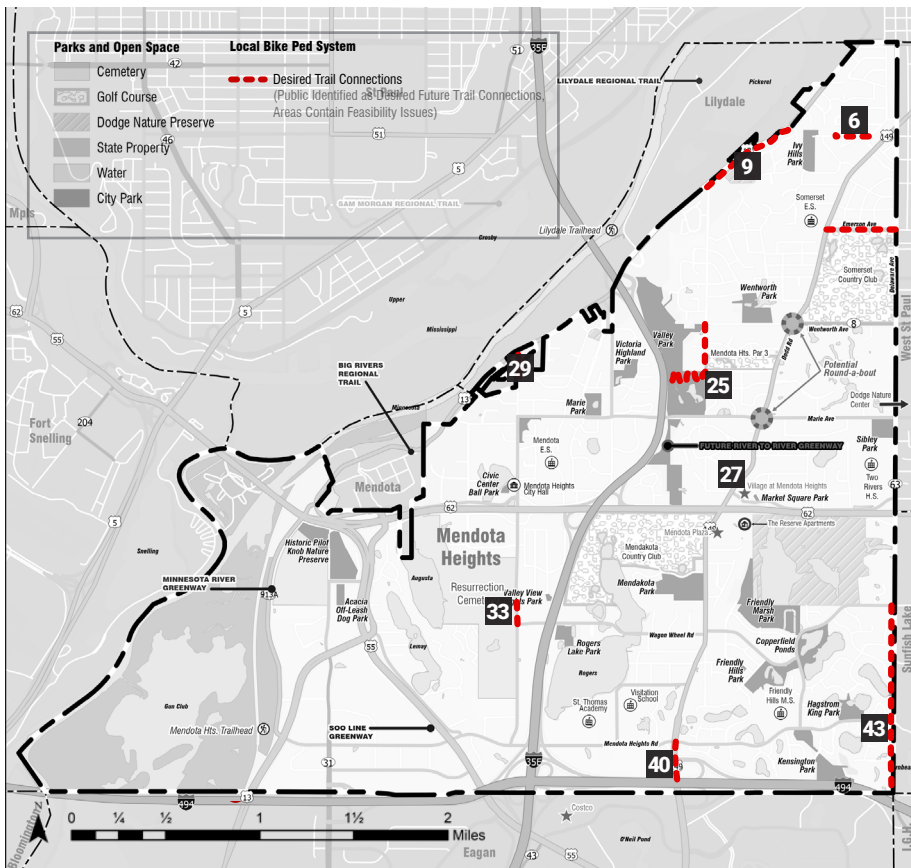


DESIRED TRAIL CONNECTIONS

Due to several potential physical challenges, such as topography, land ownership/narrow right-of-way, and others, the following projects are identified as desirable, but challenging to construct. This list is included in the plan as these trail connections were identified by community members during the public engagement process. If in the future, there is potential funding or other opportunities to construct these trails, they may shift to proposed or planned trails.

ID	PROJECT	PROJECT TYPE	STATUS
6	Future trail connection along Butler Ave W between Chippewa and Ivy Hills Park	New paved bike/ped connection, off-street	Challenging
9	Future trail connection along Highway 13 from Wachtler Ave to Sylvandale Rd	New paved bike/ped connection, off-street	Challenging
25	Future trail connection along Wachtler Ave from Wentworth Ave to existing Valley Park trail	New paved bike/ped connection, off-street	Challenging
27	Crossing improvement at intersection of Hilltop Rd and Dodd Rd (Hwy 149)	At-grade crossing enhancement	Challenging
29	Future trail connection along Lexington Ave from Douglas Rd to Highway 13	New paved bike/ped connection, off-street	Challenging
33	Future trail connection along Lexington Ave from Wagon Wheel Rd to Cullen Ave	New paved bike/ped connection, off-street	Challenging
40	Future trail connection along Dodd Rd (Hwy 149) between Mendota Hts Rd and Interstate 494	New paved bike/ped connection, off-street	Challenging
43	Future trail connection Delaware Ave (CR63) between Wagon Wheel Rd and Interstate 494	New paved bike/ped connection, off-street	Challenging

DESIRED TRAIL CONNECTIONS





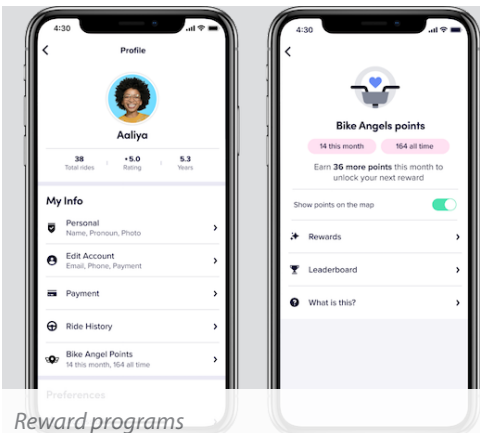
Bike to work days



Bike or walk to school days



Encouragement via marketing materials



Reward programs

ENCOURAGEMENT

Encourage community members and visitors of Mendota Heights to participate in walking, biking and rolling through advertising and promotional campaigns, outreach, programs and events.

RECOMMENDATIONS

- Develop an online map of ped/bike routes and loops: post the information at local bike shops, in the lobby of City Hall, and at local retail destinations
- Provide information about destinations and distances by foot and by bike throughout the city to encourage residents to make local trips without vehicles.
- Encourage community-wide Bike to Work or Bike to School days to encourage those who may not typically bike commute to give it a try and potentially continue the practice.
- Work with employers, schools, or retailers to offer incentives for those who bike or walk commute.
- Continue to organize and promote local bike events, such as Folks on Spokes, where community members gather to participate in a monthly bike ride. The rides are casual and social events with routes that range between seven and 15 miles.
- Partner with adjacent communities (Lilydale, Mendota, West St. Paul, South St. Paul, St. Paul, and Eagan) to provide and promote information and programs about biking and walking throughout the area.
- Continue ongoing communication with the Thompson Park Activity Center walking group to encourage walking in Mendota Heights and to respond to desires for facilities and amenities.



ENFORCEMENT

It is important that local law enforcement provide support for both motorized and non-motorized users and appropriately enforce rules and laws to keep people safe, while keeping in mind that enforcement can impact specific populations disproportionately.

RECOMMENDATIONS:

- Work with law enforcement officers to identify methods that will ensure drivers and bicyclists follow the rules of the road or issue penalties.
- Evaluate speed limits within the community to identify corridors where speed limits should be reduced to enhance bicycle and pedestrian safety.
- Promote the policy that dog walkers need to control their dogs while walking on trails and other facilities. Dogs should not be off-leash while walking on public trails.
- Post trail etiquette signs along trails that identify penalties for not following local laws.
- Develop a policy for E-bikes on trails.



Enforcing rules of the road



Pet control



Pet rules signage



Following ADA standards



Addressing language barriers



Public transportation access to facilities



Accessible design details

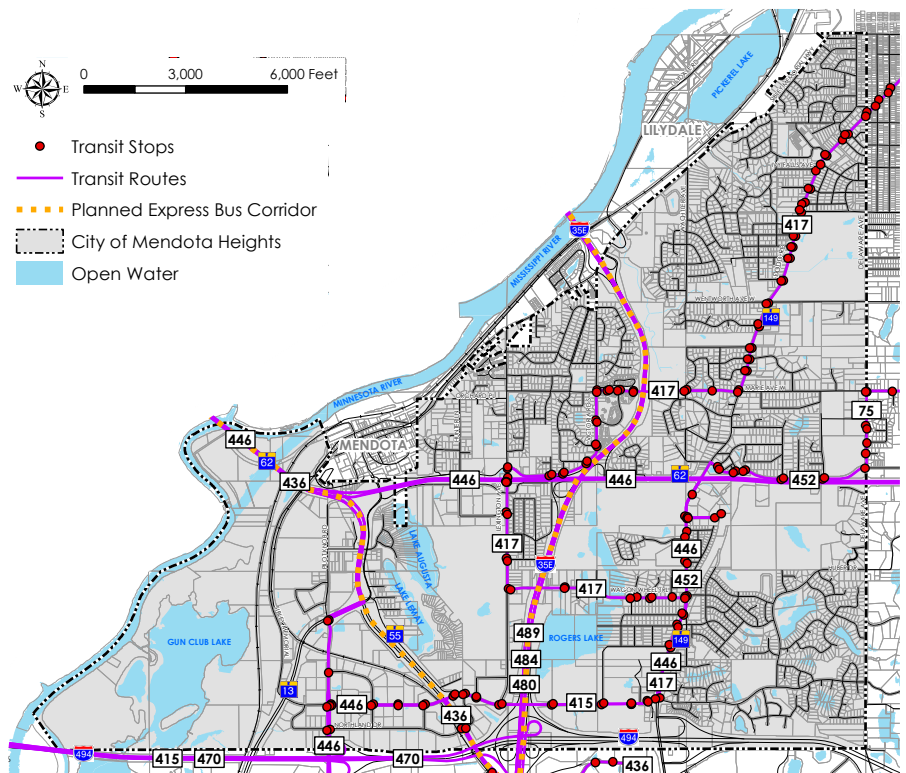
EQUITY

Communities must create traffic codes and rules that treat non-motorized movers as equal users of the transportation system to motorized vehicles. There should be equal access to facilities and destinations for all movement types and abilities.

RECOMMENDATIONS

- Review policies and practices within the community to ensure that community members of all ages and abilities are able to access bike and ped facilities.
- Evaluate access to non-motorized transportation facilities, including transit routes and stops (see map below from the city's Comprehensive Plan update), especially near senior housing and multi-family housing.
- Adopt a Complete Streets policy and follow it for all new locally constructed roads in the city.
- Follow the 8 to 80 rule. Design local roads to work for all members of society, from age 8 up to age 80 and everyone in between.
- Ensure all facilities are designed to meet ADA accessibility standards.
- Consider signage with symbology or multiple languages where appropriate.
- Prioritize areas around schools and high density residential housing when implementing bike and pedestrian facilities.

Map 3-3. Existing Transit System



Created: June 2019, Source: Metropolitan Council, 2016

Map of the Existing Transit System from the City's 2040 Comprehensive Plan Update

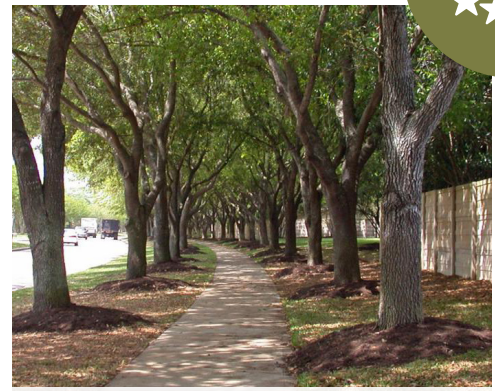


EXPERIENCE

The experience of walking or biking to destinations for transportation, exercise, or leisure, should be enjoyable. Making transportation an experience by design for both motor and non-motor vehicles is important to encouraging use of trails and bikeways. The design of bike and pedestrian facilities should include considerations of safety, views, destinations, shade, noise, and other factors, as appropriate.

RECOMMENDATIONS

- Promote outdoor recreation by designing high quality trail experiences within the community. Include amenities along trails to provide supportive experiences:
 - Shade trees that provide protection from the sun and buffer noise from traffic
 - Bench seating at trailheads, parks, and along the trail to support long walking and biking trips
 - Vegetative buffers and native plantings that provide habitat and stormwater management in urban and developed areas
 - In narrow street corridors, provide a physical barrier between bike lanes and traffic in order to create a safer experience
- Work with Dakota County to develop, enhance, and promote the greenway system:
 - The greenways are a connected network of off-road, multi-use trails.
 - Greenway trails connect to other local, regional, and state trails in order to provide loops of various distances for users of all ages and abilities.
 - Greenways connect schools, parks, civic locations, and commercial and retail destinations, in order to provide corridors for commuting and recreation.
 - Greenway corridors provide habitat restoration areas and water quality improvements that benefit the environment.
- Recognize that Mendota Heights is a poorly lit community, where there are few streetlights. The lack of night time lighting impacts early morning and evening walkers and cyclers in the spring and fall seasons. Consider the following:
 - Install additional safety measures, such as warning signage for vehicles to watch out for non-motorized users.
 - Encourage night time walkers and cyclers to have their own lights and wear reflective clothing.



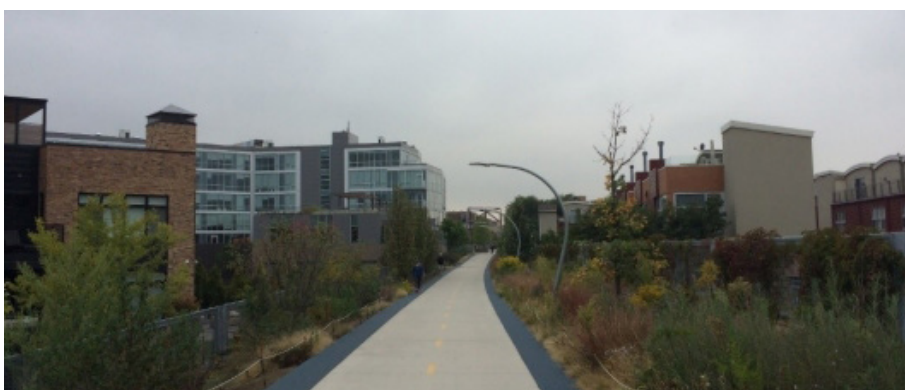
Shade trees



Bench seating



Vegetative buffer



Safe trails and sidewalks in all developments



Hardscape buffer



Making decisions



Campaigns



Sharing the road



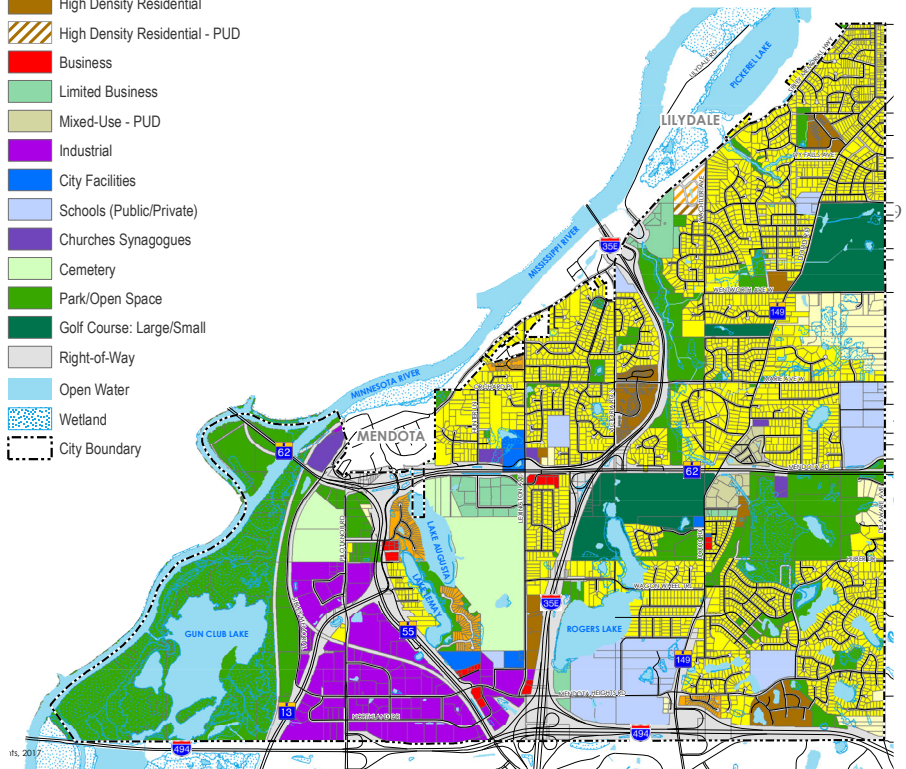
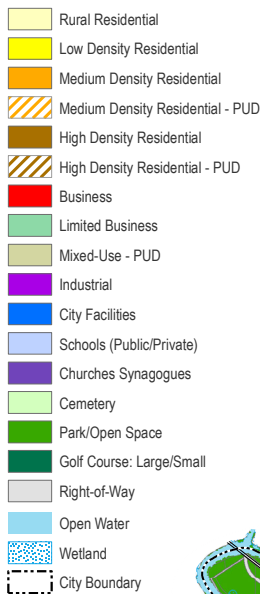
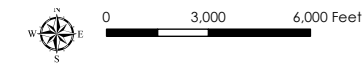
Complete Streets Policy

ETHICS

Community leaders and decision makers should prioritize all members of the community, all ages and abilities, all income levels, and all backgrounds – with special attention to historically marginalized communities – in order to provide comprehensive community services. Ethics includes a values-based decision-making process that is centered on ethics, empathy, and equity.

RECOMMENDATIONS:

- Transparent decision-making and public engagement will encourage community members to encourage public officials to value biking and walking facilities on an equal level with motorized facilities.
- When developing city budgets, give equal weight to developing, repairing, and maintaining bicycle and pedestrian facilities as to streets and roads.
- Develop and implement policies that support walking and bicycling in the city.
-



Created June 2019, Source: City of Mendota Heights, 2017

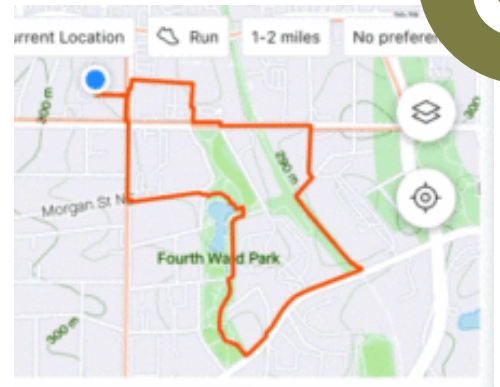
Map of the Existing Land Use, including High Density Residential areas and schools, from the City's 2040 Comprehensive Plan Update

EVALUATION

Evaluation can include measurement of physical infrastructure and how it is working, assessment of the community's thoughts and desires for improvements to existing facilities, and metrics related to use of facilities. This Bike and Pedestrian Plan is an example of an evaluation method.

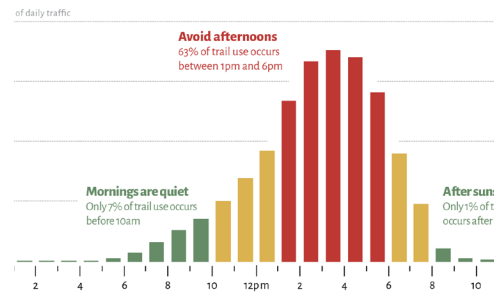
RECOMMENDATIONS:

- Continue to periodically survey the community and engage users to determine if there are issues and opportunities for the bike and ped system.
- Quarterly measurement of the number of complaints or requests to city staff regarding bike and trail facilities. Determine if complaints go up or down during certain times of year or if there are particular issues that rise to the top that are high priorities for investment.
- Consider utilizing digital tools, such as Strava or StreetLight, to determine usership of particular routes within the community. Use the data to make recommendations for improvements or follow up with surveys to understand the data.
- Conduct Walk Audits regularly to assess pedestrian safety, accessibility, and comfort in certain areas of the community. Choose different areas each season. Include public officials, city staff, and local community members of differing ages and abilities to attend and conduct the Walk Audit.
 - Utilize the tools and resources provided by the organization America Walks, including videos on how to conduct a Walk Audit: <https://americawalks.org>
- Determine if the system is providing valuable and accessible facilities; evaluate the number of users of the ped/bike system.



Strava map for personalized routes

What is the best time of day to social distance on Minnesota trails?



Trail use statistic tracking



User surveys



Northbound thru-hike permits	Southbound thru-hike permits	Section hike permits	Thru-ride permits
4,748	693	2,437	6
4500	491	2304	6
3490	438	2132	6
3159	334	2151	5
2486	322	1633	4
1367	94	1179	7
988	53	834	1

Trail use statistic tracking - statistics



Trail construction oversight

IMPLEMENTATION

PROJECT PRIORITIES

A number of physical infrastructure projects have been identified in this plan to create a connected bike and ped system in Mendota Heights. The projects are organized by the following priority levels:

- **High Priority projects** are easily implementable/feasible, or highly desired by the public and stakeholders, or already planned or funded by the city or other agencies.

An off-street trail facility within the Dodd Road/TH 149 corridor is a top priority for the city as it is a high-use, key movement route for walkers, bikers, and rollers. Safety for non-motorized users along the road is desired by many community members. As the road is under MNDOT jurisdiction, the city will continue to urge MNDOT to accept a facility that is not within the typical standards for bike and ped facilities. Consider such options as: (1) protected bike lanes or (2) narrow or no shoulders with a wide sidewalk or an off-road trail separated by a curb. (see images in the sidebar on the left)

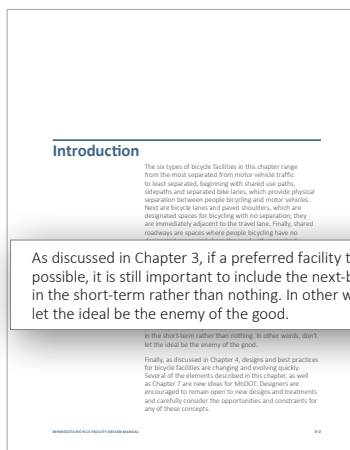
- **Medium Priority projects** may need more planning or aren't as highly desired by the community.
- **Low Priority projects** could include high cost infrastructure improvements or technically challenging projects to implement.

As opportunities arise, such as a road construction project that can include trails, or new funding, some projects may shift priority levels.

Within each project priority list, supplemental information is provided about the projects:

- **ID:** This number is used to locate the project on the Priority Projects Map on the following page.
- **Project:** Description of what and where the project is.
- **Project Type:** This correlates to the project types in the recommendations section (At-grade crossing enhancement; New paved ped/bike connection, off-street; New wayfinding signage, etc.)
- **Status:** This identifies how far along in the planning and implementation phases the project is.
 - Planned projects have been identified by the city or another agency as a project that will be implemented within a certain timeframe. Many of these projects have funding sources identified.
 - Proposed projects have been identified by staff, community members, or elected officials as projects that are desired, but they have not been officially funded or listed in a timeline for implementation.
 - Challenging projects are desired for community connectivity, but have challenges associated with physical constructability, high cost to implement, land use, or other issues.
- **Project Partners** indicates whether the City of Mendota Heights or another public agency or organization will be responsible for implementing the project. Many of these projects will require collaboration and partnership among agencies because they involve multiple ownership and jurisdiction of existing rights-of-way and public space.
 - City = City of Mendota Heights Public Works
 - County = Dakota County Physical Development Department
 - MNDOT = Minnesota Department of Transportation

Under constrained conditions, buffer widths between two and six feet can be considered. Depending on expected sidepath use and traffic volumes/speeds on the adjacent roadway, a wider buffer and narrower sidepath may be preferred. For example, if expected bicycle volumes are low, an eight-foot sidepath with a four-foot buffer may be preferable to a 10-foot sidepath with a two-foot buffer.



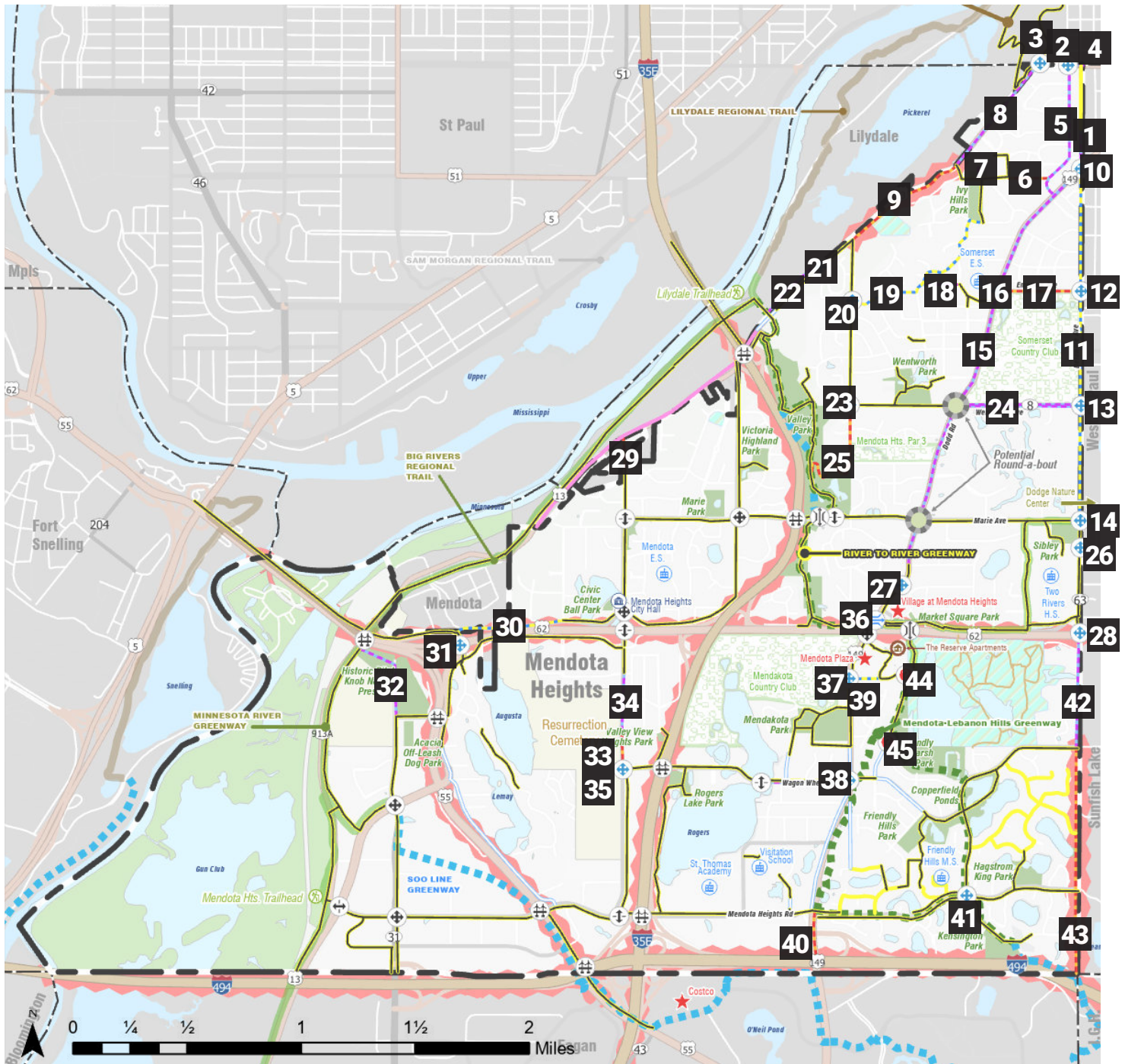
Images above include pages from the MNDOT Bicycle Facility Design Manual:

Page 5-23 (top) includes an image of a sidewalk/multi-use path adjacent to a road with no shoulder and a statement about constrained conditions allowing for a narrow buffer width between the road and sidepath.

Page 5-2 (bottom) includes a statement that says alternative solutions should be considered in areas where the preferred facility is not possible.

PRIORITY PROJECTS MAP

(SEE TABLES ON FOLLOWING PAGES FOR NUMBERED PROJECT DESCRIPTIONS)



Parks and Open Space

- Cemetery
- Golf Course
- Dodge Nature Preserve
- State Property
- Water
- City Park

Bike Ped System

- City or County Paved Trail
- On Street Bikeway / Wide Shoulder
- Ex Sidewalk
- Planned Trail
- Trail Gaps
- Desired Trail Connections (Feasibility Issues)
- Lilydale Pedestrian Trail (outside Mendota Hts)
- Dodge Nature Center Trails

Greenways

- State Trail
- Existing Greenway
- Planned Greenway
- Potential Future Greenway
- Major Road - Barrier

Crossings / Improvements

- Existing Tunnel
- Existing At Grade Xing (East/West)
- Existing At Grade Xing (North/South)
- Existing Bridge Crossing
- Existing At Grade Xing (Both Ways)
- Proposed Dak Co. Tunnel
- Proposed At-Grade X-ing Enhancement
- New Wayfinding Sign

HIGH PRIORITY PROJECTS LIST

High Priority projects are easily implementable/feasible, or highly desired by the public and stakeholders, or already planned or funded by the city or other agencies. Coordination and partnership will be needed to accomplish these projects.

In the public engagement process, safety of the trail system, especially safe road crossings, were a big concern for residents. Therefore, several road crossing enhancements are listed as high priority projects. For all proposed crossing improvements, the proposed project should be reviewed in the context of existing or proposed connection trails. Current Dakota County guidance recommends that crossing considerations should be part of any trail evaluation using. Depending on the pedestrian activity, enhancements may not be applicable at all locations noted.

ID	PROJECT	PROJECT TYPE	STATUS	PROJECT PARTNERS	PRIORITY LEVEL
10	Crossing improvement at intersection of Delaware Ave (CR63) and Dodd Rd	At-grade crossing enhancement	Planned	MNDOT / Dakota County	High
11	Future trail connection along Delaware Ave (CR63) between Dodd Rd and Marie Ave	New paved bike/ped connection, off-street	Planned	City / Dakota County	High
12	Crossing improvement at intersection of Delaware Ave (CR63) and Emerson Ave	At-grade crossing enhancement	Planned	City / Dakota County	High
13	Crossing improvement at intersection of Delaware Ave (CR63) and Wentworth Ave	At-grade crossing enhancement	Planned	City / Dakota County	High
14	Crossing improvement at intersection of Delaware Ave (CR63) and Marie Ave	At-grade crossing enhancement	Planned	City / Dakota County	High
15	Future trail connection along Dodd Rd (Hwy 149) between Delaware Ave and Wesley Ln	New paved bike/ped connection, off-street	Proposed	City	High
16	Crossing improvement at intersection of Emerson Ave and Dodd Rd (Hwy 149)	At-grade crossing enhancement	Planned	MNDOT	High
19	Future trail connection along Sylvandale Rd between Ivy Hills Park and Wachtler Ave	On-street trail markings / signage	Proposed	City	High
26	Crossing improvement at intersection of Delaware Ave (CR63) and Preserve Path	At-grade crossing enhancement	Planned	City / Dakota County	High
30	Future trail connection along Victoria Curve from Hunter Ln to Highway 62 intersection	New paved bike/ped connection, off-street	Planned	City	High
33	Future trail connection along Lexington Ave from Wagon Wheel Rd to Cullen Ave	New paved bike/ped connection, off-street	Challenging	City / Dakota County	High
36	Crossing improvement at intersection of Dodd Rd (Hwy 149) at Highway 62 / tunnel under TH 149 in coordination with River to River Greenway trail	Grade-separated crossing	Planned	City / MNDOT / Dakota County (greenway coordination)	High
37	Crossing improvement at intersection of S Plaza Dr and Dodd Rd (Hwy 149)	At-grade crossing enhancement	Planned	City	High
39	Future trail connection along S Plaza Dr from Dodd Rd (Hwy 149) to N Plaza Dr	New paved bike/ped connection, off-street	Planned	City	High
44	New wayfinding signage at intersection of S Plaza Dr and Dodd Rd (Hwy 149)	New wayfinding signage	Proposed	City	High
45	New wayfinding signage at Apache St cul-de-sac	New wayfinding signage	Proposed	City	High

MEDIUM PRIORITY PROJECTS LIST

Medium Priority projects may need more planning than high priority projects, they may cost more, or they aren't as highly desired by the community.

ID	PROJECT	PROJECT TYPE	STATUS	PROJECT PARTNERS	PRIORITY LEVEL
1	Future sidewalk on east side of Delaware Ave (CR63) connecting ex sidewalk to Dodd Rd	New paved bike/ped connection, off-street	Planned	City / Dakota County	Medium
2	Crossing improvement at intersection of Chippewa Ave and Annapolis St W	At-grade crossing enhancement	Proposed	MNDOT	Medium
3	Crossing improvement at intersection of Highway 13 and Annapolis St W	At-grade crossing enhancement	Proposed	MNDOT	Medium
4	Future sidewalk on south side of Annapolis St W between Chippewa Ave and Delaware Ave	New paved bike/ped connection, off-street	Proposed	City	Medium
8	Future trail connection along Highway 13 from Sylvandale Rd to Annapolis St W	New paved bike/ped connection, off-street	Proposed	MNDOT	Medium
18	Future trail connection between existing trail at Somerset Elementary and Sylvandale Rd	On-street trail markings / signage	Proposed	City	Medium
20	Crossing improvement at intersection of Emerson Ave and Wachtler Ave	At-grade crossing enhancement	Proposed	City	Medium
21	Crossing improvement at intersection of Riverside Ln and Highway 13	At-grade crossing enhancement	Proposed	MNDOT	Medium
22	Future trail connection along Highway 13 from Riverside Ln to Lilydaye Rd bridge	New paved bike/ped connection, off-street	Proposed	MNDOT	Medium
23	Crossing improvement at intersection of Wentworth Ave and Wachtler Ave	At-grade crossing enhancement	Completed	City / Dakota County	Medium
28	Crossing improvement at intersection of Delaware Ave (CR63) and Highway 62	At-grade crossing enhancement	Proposed	MNDOT / City / Dakota County	Medium
32	Future trail connection along Pilot Knob Rd from Acacia Blvd to Sibley Memorial Highway	Surface improvements to existing paved trail	Proposed	City	Medium
34	Future trail connection along Lexington Ave from Cullen Ave to Highway 62	Surface improvements to existing paved trail	Proposed	City / Dakota County	Medium
35	Crossing improvement at intersection of Lexington Ave and Wagon Wheel	At-grade crossing enhancement	Proposed	City	Medium
38	Crossing improvement at intersection of Wagon Wheel Rd and Dodd Rd (Hwy 149)	At-grade crossing enhancement	Proposed	City	Medium
41	Crossing improvement at intersection of Mendota Hts Rd and Huber Dr	At-grade crossing enhancement	Proposed	City	Medium
42	Future trail connection on Delaware Ave (CR63) between Highway 62 and Huber Dr	New paved bike/ped connection, off-street	Proposed	City / Dakota County	Medium

LOW PRIORITY PROJECTS LIST

Low Priority projects could include high cost infrastructure improvements or technically challenging projects to implement.

ID	PROJECT	PROJECT TYPE	STATUS	PROJECT PARTNERS	PRIORITY LEVEL
5	Future trail connection along Chippewa Ave between Annapolis St W and Dodd Rd	On-street trail markings / signage	Proposed	City	Low
6	Future trail connection along Butler Ave W between Chippewa and Ivy Hills Park	New paved bike/ped connection, off-street	Challenging	City	Low
7	Future trail connection from Ivy Hills Park to Brompton Pl cul-de-sac	New paved bike/ped connection, off-street	Challenging	City	Low
9	Future trail connection along Highway 13 from Wachtler Ave to Sylvandale Rd	New paved bike/ped connection, off-street	Challenging	MNDOT	Low
17	Future trail connection along Emerson Ave between Delaware Ave (CR 63) and Dodd Rd (Hwy 149)	New paved bike/ped connection, off-street	Proposed	City	Low
24	Future trail connection along Wentworth Ave between Delaware Ave and Dodd Rd	New paved bike/ped connection, off-street	Proposed	City / Dakota County	Low
25	Future trail connection along Wachtler Ave from Wentworth Ave to existing Valley Park trail	New paved bike/ped connection, off-street	Challenging	City	Low
27	Crossing improvement at intersection of Hilltop Rd and Dodd Rd (Hwy 149)	At-grade crossing enhancement	Challenging	MNDOT	Low
29	Future trail connection along Lexington Ave Douglas Rd to Highway 13	New paved bike/ped connection, off-street	Challenging	City / Dakota County	Low
31	Crossing improvement at intersection of Victoria Curve and Highway 62	At-grade crossing enhancement	Proposed	MNDOT	Low
40	Future trail connection along Dodd Rd (Hwy 149) between Mendota Hts Rd and Interstate 494	New paved bike/ped connection, off-street	Challenging	MNDOT	Low
43	Future trail connection Delaware Ave (CR63) between Wagon Wheel Rd and Interstate 494	New paved bike/ped connection, off-street	Challenging	City / Dakota County	Low

IMPLEMENTATION STRATEGIES & FUNDING SOURCES

In order to implement new programs and construct the recommendations that are identified in this plan, new funding will be needed. There are potential grant funding sources, listed below, along with investments by other agencies, namely Dakota County and MNDOT.

FUNDING SOURCES

Potential funding sources include existing city funds as well as outside grant funding.

FUNDING SOURCE	DESCRIPTION
General Funds	<ul style="list-style-type: none"> - Primary source for on-going maintenance, operations, and amenities for the bike and pedestrian system - Capital improvements can also be funded through general funds - Often used as a match for grant funding
Dedicated Tax Levy	<ul style="list-style-type: none"> - A city can hold a referendum for a dedicated tax levy with proceeds directed specifically for trails. - Can be used for capital projects as well as operations and maintenance - Proceeds may be in place of or supplement general funds - The advantage of a dedicated tax levy is that parks and recreation receives a more stable source of funding and does not have to compete with other city priorities for funding on an annual basis.
Bonding	<ul style="list-style-type: none"> - General Obligation Bonds and Revenue Bonds provide another source of implementation funding for new facilities, and in some cases, can provide funding for repairs and upgrades of existing facilities. - Residents can decide to raise revenue through a permanent or temporary tax increase dedicated for specific purposes such as park, trail, and bikeway improvements and maintenance. These funds are usually provided through bonds approved as part of a voter referendum.
State Aid Funds	<ul style="list-style-type: none"> - State aid funds are available for pedestrian and bicycle improvements on state aid roadways. This funding source is particularly useful at the time of street construction or reconstruction.
Partnerships	<ul style="list-style-type: none"> - Public and private partnerships can provide funding opportunities beyond the traditional municipal models. Partnerships with Dakota County have contributed to the existing trail network. Potential partnerships with the School District, Community Education, and local businesses can help with implementation of events and programming, and can support future grant writing efforts. - Organizations with partner funding can also provide assistance with design, outreach, or maintenance/stewardship of facilities. Partnerships and relationships with local businesses can result in easements, use agreements, or donated funds for future bike and ped facilities.
Donations	<ul style="list-style-type: none"> - Private donations may be from individuals or area corporations, or donations of labor from recreation clubs or use agreements. "Adopt-a-Trail" programs, memorial bench donations, and incentives for local businesses to provide bike racks are all examples of how organizations, businesses, and individuals could help with maintenance and funding, while raising awareness and enthusiasm of the bike/ped system.
Grants	<ul style="list-style-type: none"> • Safe Routes to School Grants (MnDOT) (see sidebar at right) • Regional Solicitation Grants for Bike/Ped Facilities (see sidebar at right) • Local Trail Connections (LTC): Administered through the MNDNR; funding prioritizes projects with significant connectivity, high expected use, and attractive integration of cultural and natural resources. https://www.dnr.state.mn.us/grants/recreation/trails_local.html • MN DNR Natural and Scenic Area Grants: Projects must align with the State Outdoor Recreation Plan (SCORP). This grant is typically available annually, with an application deadline in early spring. https://www.dnr.state.mn.us/grants/land/natural-scenic-app-cycle.html • MN DNR Outdoor Recreation Grants: Projects must align with the State Outdoor Recreation Plan (SCORP). Example projects include internal park trails and trail amenities. This grant is typically available annually, with an application deadline in early spring. https://www.dnr.state.mn.us/grants/recreation/outdoor_rec.html

SAFE ROUTES TO SCHOOL (SRTS) IMPLEMENTATION

It is highly recommended that the city applies for SRTS Planning Assistance through MnDOT to complete a District-wide plan or individual SRTS plans for those schools that don't currently have a SRTS Plan.

- Next round of grant applications are due **January 11, 2023**.
- Link to application:
<https://www.dot.state.mn.us/saferoutes/grants-funding.html>

Other MnDOT SRTS grant opportunities can fund programs (boost grants) or other infrastructure improvements (infrastructure grants). Note that Infrastructure Grant applications require more effort to complete and should be closer to 'shovel' ready projects. Generally, the improvements need to be identified through a SRTS planning process.

METROPOLITAN COUNCIL REGIONAL SOLICITATION GRANTS

The Metropolitan Council allocates federal funds through Regional Solicitation Grants. Funding priorities include RBTN priority corridors, multi-use trails, bicycle facilities, grade-separated crossings, filling network gaps, intersection/crossing treatments, sidewalks, streetscaping, ADA improvements, and Safe Routes to School infrastructure projects.

These grants are available on 2-year funding cycle, with the next solicitation for grant applications anticipated in early 2024.

<https://metro council.org/Transportation/Planning-2/Transportation-Funding/Regional-Solicitation-NEW.aspx>

Dodd Road and regional greenway trails qualify for regional solicitation and should be included in applications each year they are available.

“*Riding bicycles will not only benefit the individual doing it, but the world at large.*

”

- Udo E. Simonis

