2022 REGIONAL ACTIVE TRANSPORTATION PLAN

DRAFT

May 2022

SAINT CLOUD | AREA PLANNING ORGANIZATION

Approved by the APO Policy Board on

<<DATE>>

DISCLAIMER

The preparation of this document was funded in part by the United States Department of Transportation with funding administered through the Minnesota Department of Transportation, the Federal Highway Administration, and the Federal Transit Administration. Additional funding was provided locally by the member jurisdictions of the Saint Cloud Area Planning Organization: Benton County, Sherburne County, Stearns County, City of Sartell, City of Sauk Rapids, City of Saint Cloud, City of Saint Joseph, City of Waite Park, LeSauk Township, and Saint Cloud Metropolitan Transit Commission (Saint Cloud Metro Bus). The United States Government and the State of Minnesota assume no liability for the contents or use thereof.

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The Saint Cloud Area Planning Organization (APO) herby gives public notice that it is the policy of the APO to fully comply with the Americans with Disabilities Act of 1990 (ADA) and the Rehabilitation Act of 1973 (Rehabilitation Act) and related statutes and regulations in all programs and activities. Title II of the Americans with Disabilities Act (ADA) requires all state and local government agencies to take appropriate steps to ensure that communications with applicants, participants, and members of the public with disabilities are as effective as communications with others. Any person who believes they have been aggrieved by an unlawful discriminatory practice by the APO has a right to file a formal complaint with the APO, MnDOT, or the U.S. DOT. Any such complaint should be in writing and contain information about the alleged discrimination such as name, address, phone number of complainant, and location, date, and description of the problem. Alternative means of filing complaints, such as personal interviews or a tape recording of the complaint, will be made available as a reasonable modification for persons with disabilities upon request. Complaints should be submitted by the complainant and/or his/her/their designee as soon as possible but no later than sixty (60) calendar days after the alleged discriminatory occurrence and should be filed with the APO's Executive Director. For more information, or to obtain a Discrimination Complaint Form, please see the Saint Cloud APO website (www.stcloudapo.org) or you can view a copy at our offices at 1040 County Road 4, Saint Cloud, MN 56303.

CIWAANKA II EE XAQIIJINTA

Hay'adda Qorsheynta ee Saint Cloud Area Organisation (APO) waxay siisaa ogeysiis dadweyne inay tahay siyaasada APO inay si buuxda ugu hoggaansanto Sharciga Naafada Mareykanka ee 1990 (ADA) iyo Sharciga Baxnaaninta 1973 (Sharciga Baxnaaninta) iyo qawaaniinta iyo qawaaniinta la xiriira Dhammaan barnaamijyada iyo nashaadaadka. Qodobka II ee Sharciga Naafada Mareykanka (ADA) wuxuu u baahan yahay dhammaan

hay'adaha gobolka iyo kuwa maxalliga ah inay qaadaan tillaabooyinka ku habboon si loo hubiyo in xiriirka lala yeesho codsadayaasha, ka qeybgalayaasha, iyo xubnaha bulshada naafada ah ay u la mid yihiin sida xiriirka lala yeesho kuwa kale. Qof kasta oo aaminsan inuu ka xanaaqay fal sharci darro ah oo takooris ah oo ay sameysay APO wuxuu xaq u leeyahay inuu dacwad rasmi ah u gudbiyo APO, MnDOT, ama US DOT. Cabasho kasta oo noocan oo kale ahi waa inay ahaataa mid qoraal ah oo ay kujirto macluumaad ku saabsan takoorida la soo sheegay sida magaca, cinwaanka, taleefan lambarka cabashada, iyo goobta, taariikhda, iyo faahfaahinta dhibaatada. Hab kale oo lagu xareeyo cabashada, sida wareysiyada shaqsiyeed ama cajalad duuban cabashada, ayaa loo heli doonaa sidii wax looga badali karo macquul ahaan dadka naafada ah markii la codsado. Ashtakooyinka waa in ay soo gudbiyaan cabashada iyo / ama wakiilkiisa / wakiilkiisa sida ugu dhakhsaha badan ee suurtogalka ah laakiin aan ka dambayn lixdan (60) maalmood taariikhi ah ka dib dhacdada la xiriirta midab kala sooca waana in lagu fayl gareeyaa Agaasimaha Fulinta APO. Macluumaad dheeri ah, ama si aad u hesho Foomka Cabashada Kala-Takoorida, fadlan eeg bogga internetka ee 'Cloud Cloud APO' (www.stcloudapo.org) ama waxaad ka arki kartaa nuqul xafiiskayaga 1040 County Road 4, Saint Cloud, MN 56303.

GARANTÍA DEL TÍTULO II

La Organización de Planificación del Área de Saint Cloud (APO en inglés) da un aviso público con la presente de que es política de la APO el cumplir plenamente con la Ley sobre los Estadounidenses con Discapacidad de 1990 (ADA en inglés) y con la Ley de Rehabilitación de 1973 (Ley de Rehabilitación) y con los estatutos y reglamentos en todos los programas y actividades. El Título II de la Ley sobre los Estadounidenses con Discapacidad de 1990 (ADA en inglés) requiere que todas las agencias de gobierno estatales y locales tomen las medidas adecuadas para asegurar que la comunicación con los aplicantes, participantes y miembros del público con discapacidades sea tan efectiva como la comunicación con otros. Cualquier persona que cree que Cualquier persona que cree que ha sido perjudicada por una práctica discriminatoria ilegal por la APO tiene el derecho de presentar un reclamo formal con la APO MnDOT o U.S. DOT. Cualquiera de estos reclamos debe ser por escrito y debe contener información sobre la presunta discriminación tales como el nombre, la dirección, el número de teléfono del denunciante, y la ubicación, la fecha y la descripción del problema. Los medios alternativos de presentar un reclamo, tales como una entrevista personal o una grabación de audio del reclamo, estarán disponibles como una modificación razonable para las personas con discapacidades a petición. Los reclamos deben ser presentados por el denunciante y/o su persona designada tan pronto como sea posible pero no más tarde de sesenta (60) días naturales después de la presunta ocurrencia discriminatoria y deben ser presentados ante el Director Ejecutivo de la APO. Para obtener más información, o para obtener un Formulario de Reclamo por Discriminación, por favor, dirígete al Sitio web de la APO de Saint Cloud (www.stcloudapo.org) o puedes ver una copia en nuestra oficina e 1040 County Road 4, Saint Cloud, MN 56303.

TITLE VI ASSURANCE

The Saint Cloud Area Planning Organization (APO) hereby gives public notice that it is the policy of the APO to fully comply with Title VI of the Civil Rights Act of 1964 and the Civil Rights Restoration Act of 1987, Executive Order 12898 on Environmental Justice, and related statutes and regulations in all programs and activities. Title VI assures that no person shall, on the grounds of race, color, or national origin, be excluded from participation

in, be denied the benefits of, or otherwise subjected to discrimination under any program or activity for which the APO receives Federal financial assistance. Any person who believes they have been aggrieved by an unlawful discriminatory practice by the APO has a right to file a formal complaint with the APO, MnDOT, or the U.S. DOT. Any such complaint must be in writing and filed with the APO's Title VI Compliance Manager within one hundred eighty (180) days following the date of the alleged discriminatory occurrence. For more information, or to obtain a Title VI Discrimination Complaint Form, please see the St. Cloud APO website (www.stcloudapo.org), or you can view a copy at our offices at 1040 County Road 4, Saint Cloud, MN 56303.

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Ururka Qorsheynta Deegaanka ee Cloud Cloud (APO) wuxuu halkan ku siinayaa ogeysiis dadweyne in ay tahay sharciga APO in ay si buuxda u hoggaansanto Cinwaanka VI ee Xuquuqda Madaniga ee 1964 iyo Sharciga Soo-celinta Xuquuqda Madaniga ee 1987, Amarka Fulinta 12898 ee ku saabsan Cadaaladda Deegaanka, Iyo qaynuunada iyo qawaaniinta la xiriira barnaamijyada iyo nashaadaadka. Cinwaanka VI wuxuu xaqiijinayaa in qofna, sabab asal, midab, ama asal qaran ah, laga reebi doonin kaqeybgalka, loo diidi doonin faa'iidooyinka, ama haddii kale lagula takoorin barnaamij kasta ama waxqabad ee APO ay ku hesho kaalmada maaliyadeed ee Federaalka . Qof kasta oo aaminsan inuu ka xanaaqay fal sharci darro ah oo takoor ay ku sameysay APO wuxuu xaq u leeyahay inuu dacwad rasmi ah u gudbiyo APO, MnDOT ama US DOT. Cabasho kasta oo kale waa inay ahaataa mid qoraal ah lagana xaraystaa maareeyaha u hoggaansamida cinwaankeeda ee 'APO' VI VI waa boqol iyo siddeetan (180) maalmood gudahood taarikhda dhacday markii la sheegay in ay dhacday midabtakoor. Macluumaad dheeri ah, ama si aad u hesho Foomka Cabashada Kala-Takoorida Cinwaan ee 'VI kalasooc Foom', fadlan ka eeg bogga internetka ee 'Cloud Cloud APO' (www.stcloudapo.org) ama waxaad ka arki kartaa nuqul xafiiskayaga 1040 County Road 4, Saint Cloud, MN 56303.

GARANTÍA DEL TÍTULO VI

La Organización de Planificación del Área de Saint Cloud (APO en inglés) da un aviso público con la presente de que es política de la APO el cumplir plenamente con el Título VI de la Ley de Derechos Civiles de 1964 y de la Ley de Restauración de Derechos Civiles de 1987, de la Orden Ejecutiva 12898 sobre la Justicia Ambiental, y los estatutos y reglamentos relacionados en todos los programas y actividades. El Título VI asegura que ninguna persona, por motivos de raza, color o nacionalidad, podrá quedar excluida de la participación en, se le podrán negar los beneficios de, o de algún modo podrá ser objeto de discriminación en virtud de cualquier programa o actividad por la cual la APO recibe asistencia financiera Federal. Cualquier persona que cree que ha sido perjudicada por una práctica discriminatoria ilegal por la APO tiene el derecho de presentar un reclamo formal con la APO MnDOT o U.S. DOT. Cualquiera de estos reclamos debe ser por escrito y debe ser presentado ante el Gerente de Cumplimiento del Título VI de la APO dentro de los ciento ochenta (180) días naturales siguientes a la fecha en que la presunta ocurrencia discriminatoria. Para obtener más información, o para obtener un Formulario de Reclamo por Discriminación del Título VI, por favor, dirígete al Sitio web de la APO de Saint Cloud

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GLOSSARY OF TERMS

Accessible Formats: Formats that are alternative to standard print or online materials accessible to people with disabilities. This may include large print, recorded audio and other electronic formats, and Braille.

Active Transportation: Any human-powered mode of transportation, including bicycling, walking, and other means of self-propelled mobility.

Americans with Disabilities Act (ADA): Civil rights legislation passed in 1990 and effective July 1992 that sets design guidelines for accessibility to public facilities and public meetings for individuals with disabilities.

Active Transportation Advisory Committee (ATAC): The Active Transportation Advisory Committee consists of citizen volunteers from wihtin the APO planning area who have a special interest in bicycle and pedestrian issues. The ATAC reviews transportation studies, plans, and projects from a citizen's perspective.

Continuing, Comprehensive, and Cooperative (3-C): A Federal mandate in accordance with the Federal-Aid Highway Act of 1962 that requires transportation projects in urbanized areas of 50,000 or more in population be based on a continuing, comprehensive urban transportation planning process undertaken cooperatively by the states and local governments.

Federal Highway Administration (FHWA): A branch of the U.S. Department of Transportation that administers the Federal-Aid Highway Program, providing financial assistance to states to construct and improve highways, urban and rural roads, and bridges.

Federal Transit Administration (FTA): A branch of the U.S Department of Transportation that provides financial and technical assistance to local public transit systems and oversees safety measures for those systems.

Metropolitan Planning Organization (MPO): An organization designated by agreement between the governor of a state, unites of local governments of an urban area, and relevant agencies as being responsible for carrying out the terms of 23 USC Sec. 134. Any urban area of more than 50,000 residents must have an MPO. The Saint Cloud Area Planning Organization is the MPO for the Saint Cloud metropolitan area.

Metropolitan Transportation Plan (MTP): A transportation plan addressing no less than a 20-year planning horizon. The MTP includes both short-range and long-range strategies/actions that lead to the development of an integrated multimodal transportation system.

Minnesota Department of Transportation (MnDOT): The state department of transportation for Minnesota. MnDOT's mission is to plan, build, operate, and maintain a safe, accessible, efficient, and reliable multimodal transportation system that connects people to destinations and markets throughout the state, regionally, and worldwide.

Saint Cloud Area Planning Organization (APO): The APO is an organization designated by agreement between the governor of Minnesota, local units of government, and relevant agencies as being responsible for carrying out the terms of 23 USC Sec. 134. The APO is the Metropolitan Planning Organization (MPO) for the Saint Cloud urban area.

Saint Cloud Metropolitan Transit Commission (MTC): MTC, more commonly known as Saint Cloud Metro Bus (or simply "Metro Bus"), is the urban transit provider within the Saint Cloud Metropolitan Planning Area (MPA). Founded in 1969, Metro Bus provides fixed route, paratransit (Dial-a-Ride), and commuter bus services – via the Northstar Commuter Link to access the Northstar Commuter Rail train in the City of Big Lake – for the cities of Saint Cloud, Sartell, Sauk Rapids, and Waite Park.

Stakeholder: A stakeholder is any person or group affected by a transportation plan, program, or project, including those not aware they are affected. Stakeholders may also be any person or group that thinks they may be affected by a transportation plan, program, or project even if they are not affected. Examples of stakeholders include non-governmental organizations, traditionally underserved communities, residents of affected geographic areas, commuters and tourists, transportation professionals, and government agencies.

Stakeholder Engagement Plan (SEP): The public participation plan of the Saint Cloud Area Planning Organization. Public participation plans are required by 23 CFR § 450.316. The SEP is intended to fulfill the Saint Cloud APO's requirement for such a plan. In addition, the SEP includes the APO's Title VI and Limited English Proficiency (LEP) plans – both of which are also Federally required.

Technical Advisory Committee (TAC): The Technical Advisory Committee consists of voting representatives from each APO's member jurisdictions and representation from Saint Cloud Metro Bus and the Minnesota Department of Transportation (MnDOT). This committee – typically composed of planners and engineers – reviews plans and programs from a technical perspective and makes recommendations to the APO's decision-makers.

Title II: A portion of the Americans with Disabilities Act (ADA) of 1990 that prohibits the discrimination of a qualified individual with a disability, on the basis of said disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by any public entity.

Title VI: A portion of the Civil Rights Act of 1964 that prohibits discrimination on the basis of race, color, or national origin in any program or activity receiving Federal financial assistance.

Unified Planning Work Program (UPWP): The UPWP is a Federally required statement of work identifying the planning priorities and activities to be carried out by the APO staff. The UPWP includes the APO's annual budget, and it identifies any special studies and consultant contracts for the fiscal year.

AN ACTIVE FIRST STEP IN REGIONAL MULTIMODAL PLANNING

A SUMMARY OF THE SAINT CLOUD AREA PLANNING ORGANIZATION'S REGIONAL ACTIVE TRANSPORTATION PLAN

As the regional transportation planning entity for the Saint Cloud area, the Saint Cloud Area Planning Organization (APO) is responsible for developing an updating a region-wide multimodal surface transportation plan. Known as the Metropolitan Transportation Plan (MTP), this document spans a 25-year planning horizon and details the region's potential growth in terms of surface transportation (roadways, bridges, transit, and bicycle/pedestrian infrastructure). The APO's recent iteration of the MTP – MAPPING 2045 (https://bit.ly/3F0GOtn) – spent a significant amount of time discussing the roadway network but fell short on addressing the needs for a true multimodal system.

One of the recommendations found within MAPPING 2045 to address this known shortcoming was to develop a regional active transportation plan. This plan would conduct a thorough analysis of the region's active transportation network, identify existing gaps, and prioritize investment areas across jurisdictions.

It is the hope that this plan will serve two primary functions. The first is to inform the development of the APO's next MTP – Looking Ahead 2050. The second is to assist member jurisdictions in prioritizing active transportation projects both within their municipal boundaries and on an interjurisdictional level.

This plan is broken down into fives main sections.

Chapter 1's introduction serves as the starting point into exploring the world of active transportation. After a brief introduction on the APO, the chapter serves to define active transportation and justify its importance within the transportation planning field.

We can't begin planning for an active transportation network without first understanding what currently exists. Chapter 2 of this plan documents the current regional active transportation system. APO staff compiled information on the metropolitan planning area's (MPA's) existing on-road and off-road facilities along with a brief look at transit services. This chapter focuses on where each type of facility – be it bicycle lanes, shared use paths, unpaved trails, or transit stops -- is located throughout the region and its current condition. Chapter 2 concludes with a brief overview of various active transportation planning efforts conducted on a state and regional level.

Knowing where the facilities are (or will be) is just half the picture. To plan for a transportation system, it is vital to understand who is using the system and how. Chapter 3 dives into the demographics of the MPA. This section is also filled with count information (to better understand just how utilized the existing facilities are) along with information about where people are wanting to go. Rounding out this chapter is a discussion on how safe the current system is for people to use.

With a better understanding of the current regional active transportation network, Chapter 4 outlines the APO's vision for the future.

The Saint Cloud MPA strives to provide a regionally-coordinated and well-maintained active transportation network allowing for safe, efficient, convenient, and comfortable walking and bicycling access to local and regional destinations for all users of all abilities.

To accomplish this, five goals with various objectives were established. The goals are as follows:

1. Improve bicycle and pedestrian safety and comfort.
2. Improve active transportation connections to desired destinations.
3. Improve the condition of active transportation infrastructure.
4. Provide equitable access to active transportation facilities for all people of all abilities.
5. Promote an interconnected regional active transportation network.

From there, Chapter 4 dives into the methodology used to prioritize necessary improvements and/or additions to the current active transportation network. This three-phase needs assessment methodology details how APO staff utilized the goals, objectives, strategies, and performance measures to prioritize specific areas and ultimately make project recommendations.

Given the shorter nature of active transportation trips, APO staff did not just conduct the needs assessment methodology on a regional level. To understand the dynamics of each of the five APO member cities – Saint Cloud, Saint Joseph, Sartell, Sauk Rapids, and Waite Park – profiles were developed with a specific focus on each of the jurisdictions. More information on these can be found in appendices A-E.

Finally, Chapter 5 provides a set of resources for city and county staff as well as local elected officials to reference to assist in their efforts to improve their city's policies on walking and biking.

It is important to note that this regional active transportation plan is just a starting point for the MPA. Fostering an environment that is truly multimodal will take a significant amount of time and resources. But most of all, it will take a continued focus on ensuring the needs of all area residents – regardless of mode choice – are met and done so in an equal and equitable way. It is the hope that this and future iterations of this planning effort will bring much needed attention to this important form of transportation.

CHAPTER 1: INTRODUCTION

PURPOSE OF THE PLAN

This regional Active Transportation Plan (ATP) aims to provide a long-range planning framework to support non-motorized forms of transportation in the Saint Cloud Metropolitan Planning Area (MPA). This plan identifies needs, resources, and strategies to enhance the safe and convenient use of non-motorized modes of transportation and the facilities necessary to accommodate them.

The ATP is also one of the first regional plans to quantify active transportation system usage, including primary destinations and routes. This plan identifies primary issues and concerns for those who use the system by analyzing available data and information obtained from public engagement. This plan documents a regional vision and goals for active transportation. A set of objectives and strategies was developed to improve the regional network of walkways, bikeways, and related facilities from this vision. This plan also includes prioritization and ranking projects for funding consistent with those objectives.

Overall, the ATP provides the framework and means to increase active transportation opportunities and make it safer and more convenient for people to walk, bike, and use active modes in the Saint Cloud MPA.

THE SAINT CLOUD AREA PLANNING ORGANIZATION

The Saint Cloud Area Planning Organization (APO) is one of eight Metropolitan Planning Organizations (MPOs) within the State of Minnesota. Since its formal organization as a joint-powers entity in 1966, the APO has been responsible for facilitating a Continuing, Comprehensive, and Cooperative (3-C) planning process in accordance with Federal regulations. The primary outcomes of the 3-C planning process are 1) a multimodal Metropolitan Transportation Plan (MTP), which has a 20-year planning horizon and is updated every five years, 2) annually preparing and maintaining a four-year Transportation Improvement Program (TIP), and 3) annually preparing a rolling two-year Unified Planning Work Program (UPWP).

The APO does all this work in cooperation with its key planning partners, which include the Minnesota Department of Transportation (MnDOT), the Minnesota Pollution Control Agency (MPCA), the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), Saint Cloud Metropolitan Transit Commission (Saint Cloud Metro Bus), individual member jurisdictions, and the public.

APO member jurisdictions include Benton County, Sherburne County, Stearns County, City of Saint Cloud, City of Saint Joseph, City of Sartell, City of Sauk Rapids, City of Waite Park, and LeSauk Township. Saint Cloud Metro Bus is also a member.

Brockway, Haven, Minden, Saint Joseph, Saint Wendel, Sauk Rapids, and Watab townships, as well as the cities of Rockville, Saint Augusta, and Saint Stephen, are located within the APO's MPA but do not participate as voting members on the APO Policy Board. Instead, these jurisdictions are represented through their respective counties.

FIGURE 1.1 – THE APO'S METROPOLITAN PLANNING AREA (MPA)

The APO Policy Board is made up of elected officials and a senior-level management position from Saint Cloud Metro Bus. The Policy Board is the decision-making body of the APO and provides guidance and direction to staff. The Policy Board is advised by a Technical Advisory Committee (TAC) comprised of engineers, planners, and staff charged with making technical recommendations to board members and APO staff.

The APO's TAC has a subcommittee – the Active Transportation Advisory Committee (ATAC). The ATAC is comprised of interested citizens and staff from cities and counties who meet periodically to discuss active transportation goals, objectives, issues, and needs.

A temporary development committee for the Active Transportation Plan was formed as a working group and a resource for the ATAC to review and develop the APO's ATP. The approach to this document and other discussion items from the ATAC and Development Committee are reported to the TAC.

All meetings of the APO Policy Board and its advisory committees are open to the public.

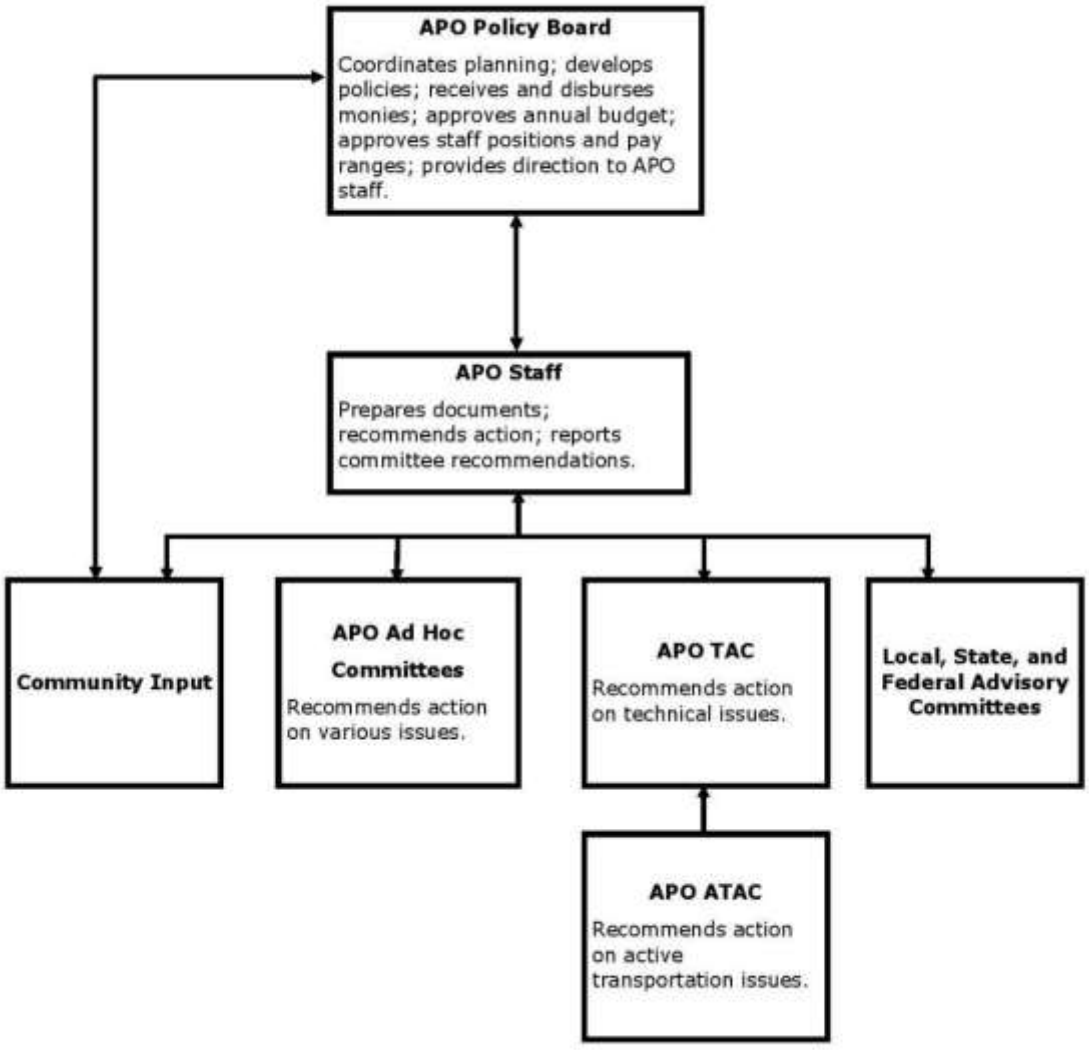


FIGURE 1.2 - THE APO ORGANIZATIONAL STRUCTURE.

APO MISSION STATEMENT

The APO is committed to coordinated planning – in a fair and mutually beneficial manner – on select issues transcending jurisdictional boundaries for the betterment of the entire Saint Cloud MPA. This mission is accomplished through professional planning initiatives, the provision of objective information, and building collaborative partnerships that foster consensus.

The APO strives to be:

- Public service oriented by providing accountability to constituents and exhibiting the highest standards of ethical conduct.
- Creative problem solvers by anticipating potential challenges and developing creative solutions based on professional knowledge, public involvement, and collaboration with our partners.
- Continuous learners who constantly seek new information, knowledge, and skills to better serve the Saint Cloud MPA.

In the transportation planning process, the APO's role includes:

- Maintaining a 3-C certified transportation planning process.
- Coordinating the planning and implementation activities of local, regional, and state transportation agencies.
- Undertaking an effective stakeholder engagement process which ensures meaningful public input is part of the decision-making process behind plans and programs.
- Providing leadership both in setting transportation policy and in metropolitan system planning.
- Lending technical support in planning and operations to local governments.
- Planning for an intermodal transportation system that is economically efficient, environmentally sound, provides the foundation to compete in the global economy, and will move people and goods in an energy-efficient manner.

WHAT IS ACTIVE TRANSPORTATION?

Active transportation refers to any human-powered form of transportation. This not only includes walking and bicycling. It also encompasses other means of self-propelled non-vehicular mobility, such as skateboarding, rollerblading, and mobility assistive devices like wheelchairs. Active transportation is also related to those who use transit services as every transit trip starts and ends by walking, bicycling, or rolling to and from bus stops and transit terminals.

The ATP is developed with all these users in mind.

WHY IS ACTIVE TRANSPORTATION IMPORTANT?

According to a 2017 survey by the National Association of Realtors (https://prn.to/3H8YX9N), 53% of Americans prefer to live within easy walking distance to shops, restaurants, and parks with nearby public transit. Younger generations, in particular,

expressed a preference for living in smaller homes with sidewalks where they can walk to find needed services.

Transportation planning and project development that includes designs and investments to meet the needs of cyclists, pedestrians, and other active transportation users leads to better health and safety for individuals and the community and is better for the economy and the environment. A complete approach to facilities and street design improves equal access for all users, including those who, in the past, may have been underserved.

An American Heart Association Study (https://bit.ly/3st4tzZ) demonstrates benefits from a transportation system that addresses issues and needs for the active transportation user. Better active transportation facilities improve safety and encourage more people to walk, bike, and roll. As more people walk and ride bicycles, the general state of areawide health care improves, the local and regional economy is enhanced, and there is a relief to growing roadway congestion. Providing better conditions for biking and walking improves the quality of life for individuals and the overall community.

BETTER HEALTH

Frequent use of active transportation modes promotes physical activity and healthy lifestyles. The Centers for Disease Control and Prevention (CDC) reports (http://bit.ly/2DESzJh) that being "physically inactive" can cause physical and mental health problems and is responsible for an estimated 200,000 deaths per year. Increasing physical activity significantly reduces the risk of chronic diseases and premature death. According to a 2015 report from the U.S. Surgeon General (https://bit.ly/3efbVEb), physically active people have a 30% lower risk of premature death than their inactive counterparts.

Locally, data gathered as part of the 2020-2022 Central MN Alliance Community Health Needs Assessment (https://bit.ly/3El7wg0) indicates approximately 40% of the tri-county population (Benton, Sherburne, and Stearns counties) does not get any vigorous physical activity. This same report revealed that 38% of residents within the three-county area are overweight.

A community with accessible walking and cycling facilities available can help people integrate physical activity into their lives.

IMPROVED SAFETY

Providing more complete and better active transportation facilities will improve safety and save lives. The Minnesota Department of Public Safety's Office of Traffic Safety (https://bit.ly/3plKukW) estimates that approximately 39 pedestrians and seven bicyclists are killed each year due to a collision with a motor vehicle. This accounts for about 12% of statewide traffic fatalities each year, with over two-thirds of these fatalities occurring in urban areas.

Between 2014 and 2018, the percent of all traffic-related fatalities and serious injuries within the MPA from people engaged in non-motorized transportation ranged from 20% to 38%.

A 2019 report from Smart Growth America (https://bit.ly/2Wk26Pt) reports that nationally a disproportionate impact of such crashes tends to fall on traditionally underserved populations.

Through the development of additional (and often grade-separated) active transportation facilities, the risk of crashes involving motor vehicles and active transportation users can be greatly diminished.

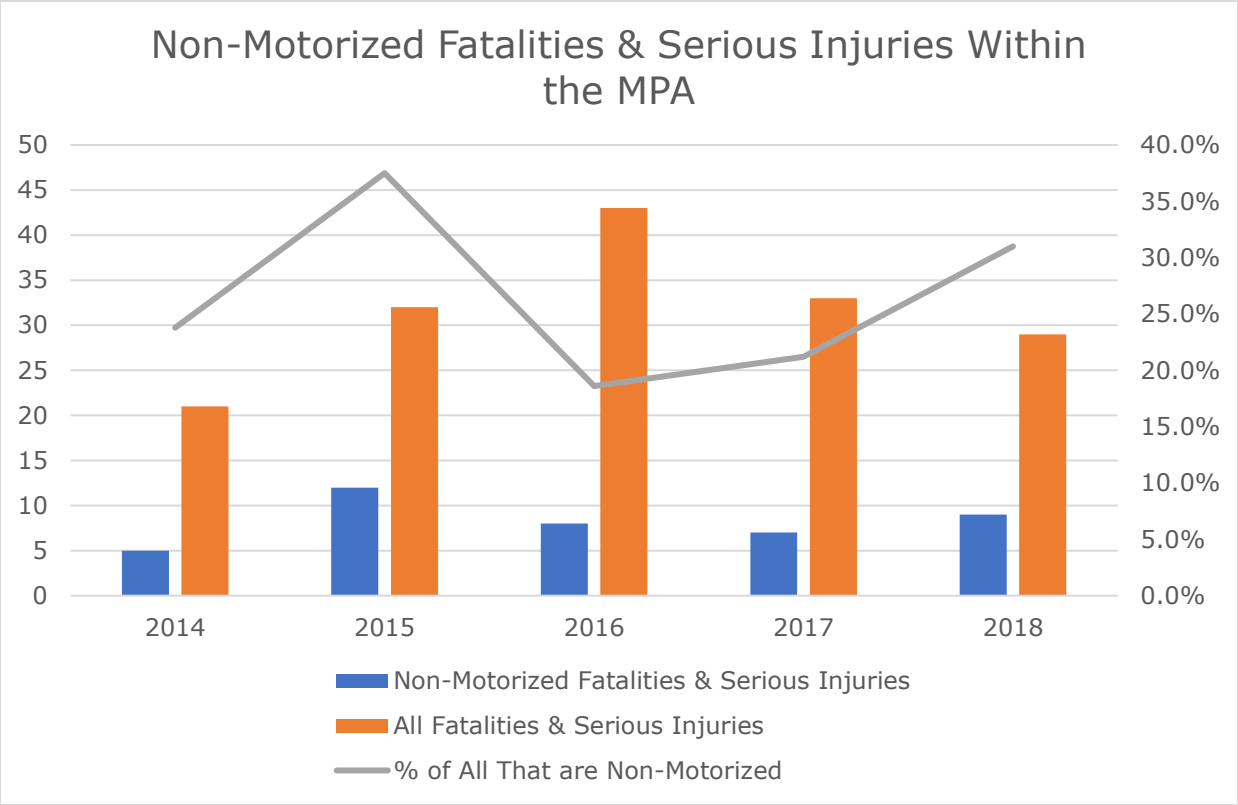


FIGURE 1.3 – NON-MOTORIZED FATALITIES AND SERIOUS INJURIES WITHIN THE MPA AS A PERCENTAGE OF ALL TRAFFIC-RELATED FATALITIES AND SERIOUS INJURIES.
DATA COURTESY OF THE APO'S TRANSPORTATION PERFORMANCE MONITORING REPORT – 2018.

STRONGER ECONOMY

According to a 2011 national study by the University of Massachusetts, Amherst (https://bit.ly/2NzBUcU) on pedestrian and bicycle infrastructure, the construction of active transportation infrastructure creates more jobs than road infrastructure construction.

Active transportation projects create direct, pre-project jobs such as engineering and planning. Indirect jobs are also created in products and service industries required in the construction phase, such as cement manufacturing, trucking, etc.

Once constructed, active transportation facilities can increase tourism and commercial business activity in affluent communities and communities facing economic hardship.

A 2020 study of six cities conducted by the National Institute for Transportation and Communities (https://bit.ly/3pilxXG) concluded that transportation corridors with street improvements designed to accommodate non-motorized modes positively impact business performance.

According to the Alliance for Biking and Walking (https://bit.ly/3eho9ik), including bike lanes in the urban transportation system has contributed to improved commercial activity and sales. Those who can bike and walk to their shopping destinations spend more per month than those who drive, benefiting businesses and the local economy.

Project Type	Total Jobs Created Per $1 Million Infrastructure Investment
Bicycle infrastructure only	11.41
Off-street multi-use trails (shared use paths)	9.57
On-street bicycle and pedestrian facilities (without road construction)	8.42
Pedestrian infrastructure only	9.91
Road infrastructure with bicycle and pedestrian facilities	8.53
Road infrastructure with pedestrian facilities	8.42
Road infrastructure only (no bike or pedestrian components)	7.75

FIGURE 1.4 – NATIONAL AVERAGE EMPLOYMENT IMPACTS BY PROJECT TYPE.
DATA COURTESY OF PEDESTRIAN AND BICYCLE INFRASTRUCTURE: A NATIONAL STUDY OF EMPLOYMENT IMPACTS FROM THE UNIVERSITY OF MASSACHUSETTS AMHERST.

This, in turn, creates a substantial return on investment, according to the 2011 study *BEAT The Path to Health* (https://bit.ly/2IzOx6J). This ROI continues to allow dollars to circulate within and stimulate the local economy.

In addition, real estate values also increase when active transportation infrastructure such as shared use paths and trails are constructed in neighborhoods. Homes that are located near trails are more likely to sell in a shorter period of time than homes not in close proximity to those types of facilities, according to a 2001 study by Texas A&M University (https://bit.ly/2C3GMnh).

BETTER ENVIRONMENT

Less vehicle usage is better for the environment. According to the United States Environmental Protection Agency (https://bit.ly/32c7lH7), the transportation sector, principally light-duty vehicles, are the most significant contributor to carbon dioxide emissions. According to the Minnesota Go Statewide Multimodal Transportation Plan (https://bit.ly/2FzbHbW), approximately 47% of air pollution in Minnesota is from on- and off-road vehicles and equipment.

"But even as cars get more fuel-efficient, they're getting bigger. As the economy has gotten better and gas has gotten cheaper, Minnesotans are choosing bigger vehicles again, contributing to growing emissions from light-duty trucks (that includes pickup trucks, SUVs, vans, and crossovers), which make up 38% of transportation emissions, up from 34% in 2005."

When more people choose to walk or cycle to their transportation destinations, this reduces the number who drive and lessens the amount of carbon dioxide emissions.

ACCESS AND EQUITY

The FHWA Guidebook (https://bit.ly/3mqSQWI) defines "equity" as a measure of fair distribution of costs and benefits among members of society. In every community, some cannot afford the cost of a vehicle and may depend upon connected active transportation infrastructure to get to work, school, the grocery store, or other services. Regardless of income, some cannot drive due to age or other circumstances such as a disability or limited English proficiency. Providing equitable access to safe active transportation infrastructure allows more people to get to work and access their daily needs.

ACTIVE TRANSPORTATION VS. TRADITIONAL VIEWS OF TRANSPORTATION

For nearly 50 years, transportation planning has been evolving from a motor vehicle-centered approach – emphasizing moving people primarily using roadways and interstates – to a multimodal focus that recognizes and plans for different modes of transportation, including active transportation.

At the Federal level, the passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 (https://bit.ly/3pjIhX6) began to shift transportation policy (and subsequently funding) from interstate expansion to incorporating transportation activities that enhanced the environment such as wetland banking, promoting transportation activities that contributed to meeting air quality standards, and dedicating highway funding for active transportation infrastructure.

Prior to this 1991 transportation legislation, few communities utilized Federal funding to invest in building or maintaining active transportation infrastructure.

As transportation planning as a field has evolved, more of a focus has been placed on creating transportation networks that ensure the needs of all users – both motorists and non-motorists. Complete Streets, as defined by Smart Growth America (https://bit.ly/3FrA6Ob), is a movement that directs transportation planners and engineers to consider the design and operation of right-of-way to enable safe access for all users, regardless of age, ability, or mode of transportation.

The Saint Cloud MPA has given attention to including active transportation infrastructure projects as part of the regional transportation network.

Between 2015 and 2019, 19.3 centerline miles of off-road and 3.4 lane miles of active transportation infrastructure projects have been completed across the MPA. Most notable additions include the completion of the Lake Wobegon Trail from Saint Joseph to Waite Park and the ROCORI Trail section constructed in Rockville. Other local projects contributing to the additional centerline miles include the reconstruction of 33rd Street S in Saint Cloud – which added a shared use path along the corridor – and new facilities in both Sartell and Sauk Rapids near high schools.

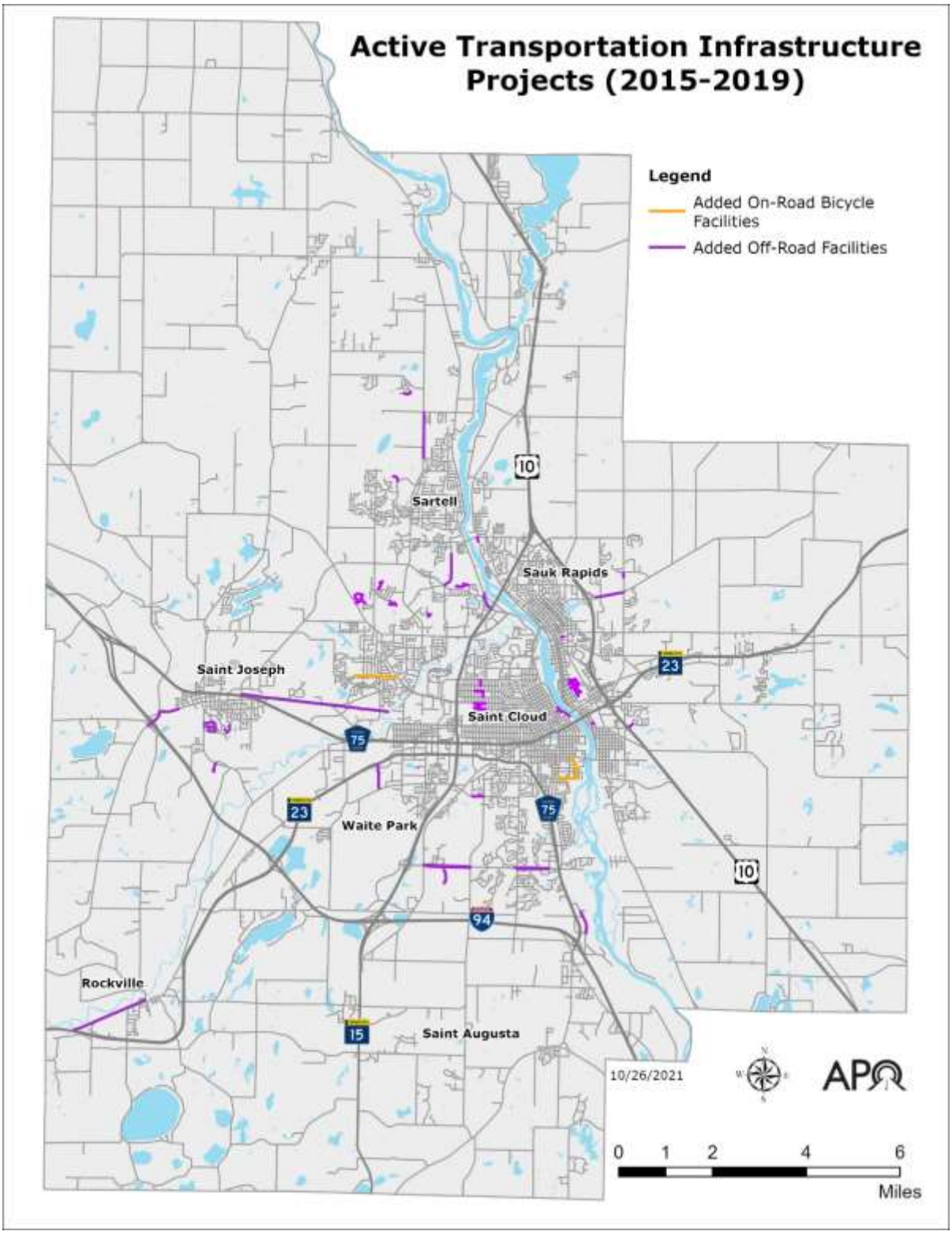


FIGURE 1.5 – A MAP OF THE ACTIVE TRANSPORTATION INFRASTRUCTURE PROJECTS BUILT WITHIN THE APO'S PLANNING AREA BETWEEN 2015 AND 2019.

At the regional level, the work completed as part of this ATP adds another layer to the APO's approach to regional transportation planning.

The APO's 2045 MTP is the region's multimodal long-range transportation planning document. While MAPPING 2045 (https://bit.ly/2BBKUxu) mentions active transportation modes throughout the region, it falls short in conducting a regional needs assessment on active transportation infrastructure and identification of possible projects to enhance system connectivity. This, in part, is due to the APO's regional travel demand model (used to help forecast future travel demands of the transportation network) not being able to consider the use of bicycles, pedestrians, and other active transportation modes.

The development of the APO's ATP will effectively pick up where the MTP left off in terms of active transportation. As stated earlier, this planning effort will do a deeper dive into active transportation using available data. It will inform future long-range planning efforts done by the APO, including the development of the next MTP.

IDENTIFYING STAKEHOLDERS & INVOLVING THE PUBLIC

The APO maintains a Stakeholder Engagement Plan (SEP) (https://bit.ly/2PaDcOb) that identifies compliance with Federal and State regulations and defines the public engagement process and strategies used in the development of all APO plans and studies, including the ATP. As identified in the SEP:

> *"At critical points in the development of these studies, input will be sought from the public and interested persons regarding existing conditions/operations, identified needs/deficiencies, proposed strategies/policies, and identified projects/improvements."*

Stakeholder participation began with the work of volunteers serving on the ATAC and the ATP Development Committee, who, along with APO staff, guided the planning process through regular meetings and presentations. Extensive outreach was conducted with local government officials and the public, including agencies, advocacy groups, organizations, citizens, and others with a vested interest in the regional active transportation system.

Through a variety of methods – committees, surveys, an online interactive mapping tool, and social media – the APO sought meaningful input and coordination with a broad body of stakeholders and interested parties to assist in identifying significant issues and opportunities for improving the regional active transportation system.

Creative methods were used to overcome challenges to the APO public engagement process due to the COVID-19 health emergency in spring 2020. With public events canceled, restrictions on gatherings, and social distancing requirements, APO staff and partners coordinated in a concerted effort to obtain widespread participation through online engagement. These efforts included specific outreach to underserved populations.

Presentations to the APO's ATAC, TAC, and Policy Board allowed for community members, local planners and engineers; and elected officials to view progress on the development of the plan. These meetings, and subsequent in-person discussions with city and county staff, assisted APO staff in the vetting process of projects proposed within this document.

FIGURE 1.6 - MEMBERS OF THE ACTIVE TRANSPORTATION DEVELOPMENT COMMITTEE DISCUSSING WORK ON THE ATP IN MARCH 2020 -- PRIOR TO THE ONSET OF COVID-19.

Once in draft form, APO staff solicited input from the community through INSERT MEANS prior to the adoption of this plan by the APO's Policy Board in INSERT MONTH YEAR ADOPTION.

Please see Appendix F for a complete report on the public engagement activities used and public participation in developing the Active Transportation Plan.

CHAPTER 2: REGIONAL ENVIRONMENT

Regional planning for future active transportation needs begins with a comprehensive overview of the existing network. This includes a detailed look at the types of facilities and design standards for active transportation infrastructure at the local level.

A review of existing facilities – their location and condition – can inform a discussion on regional needs and priorities. More information on this needs assessment can be found in Chapter 4.

Rounding out this chapter is a review and summary of state and regional plans detailing information pertaining to active transportation.

TYPES OF ACTIVE TRANSPORTATION INFRASTRUCTURE

Within the Saint Cloud MPA, there is a variety of infrastructure designed specifically for active transportation users that are both integrated into the roadway network (on-road facilities) or separated from the roadway network (off-road).

Also complementing the on- and off-road active transportation network is the transit network operated by the MPA's urban transit provider, Saint Cloud Metro Bus. In addition to vehicles – fixed route and Dial-a-Ride paratransit buses – Metro Bus owns and maintains infrastructure within their service area that caters to their riders. Active transportation infrastructure is an essential component of the overall regional transit network because each transit trip starts and ends with riders using active transportation (walking, biking, or rolling).

Transit services for a select portion of the MPA, including the City of Saint Joseph, are provided through rural transit provider Tri-CAP. Since Tri-CAP does not operate on a regular fixed-route schedule nor maintain any transit infrastructure such as bus stops, benches, shelters, and transit hubs, they are not included in this analysis.

Below is a list of on-road, off-road, and transit facilities found within the MPA.

ON-ROAD FACILITIES

Bike Lane: A bike lane is a portion of the roadway designated for exclusive or preferential use by people riding bicycles. Bike lanes are a minimum of 5-feet wide and must include pavement markings and signage. Wider bike lanes are recommended on streets with higher motor vehicle speeds and traffic volumes or where pedestrian traffic in the bike lane is anticipated.

FIGURE 2.1 – AN EXAMPLE OF A BIKE LANE.

FIGURE 2.2 – AN EXAMPLE OF BIKE ROUTE SIGNAGE.

Bike Route: There are two types of bike routes; a paved shoulder and a shared roadway. Paved shoulders are typically present on rural roadways and are separated from vehicles, much like a bike lane. Paved shoulders are marked by a bicycle route sign but do not have bicycle symbol pavement markings and can be used by pedestrians. A shared roadway is typically located on low-volume and low-speed streets. Signs and painted "sharrows" or shared lane markings assist with wayfinding and show the preferred location of the person cycling within the roadway.

Marked Crosswalk: Painted markings that span a roadway to indicate where pedestrians have the right of way. Crosswalks can be accompanied by traffic signals or stop signs.

FIGURE 2.3 – AN EXAMPLE OF A MARKED CROSSWALK.

FIGURE 2.4 –AN EXAMPLE OF A PEDESTRIAN HYBRID BEACON.

Pedestrian-Hybrid Beacon: Also known as a high-intensity activated crosswalk (HAWK) signal, a pedestrian hybrid beacon (PHB) is often suggested with mid-block crosswalks. The person about to cross the roadway activates a flashing red beacon, a signal which stops vehicles on the roadway, allowing the user to get across safely. PHBs are recommended to improve safety in areas with high vehicle traffic and pedestrian volumes.

FIGURE 2.5 –AN EXAMPLE OF AN RRFB.
PHOTO COURTESY OF AZDOT.GOV.

Pedestrian Rectangular Rapid Flashing Beacons (RRFB): Used at uncontrolled intersection crossings, pedestrians and bicyclists about to use the crosswalk activate the RRFBs. Yellow warning beacons begin flashing to alert motorists that they are approaching a crosswalk with users present. All components must meet Manual on Uniform Traffic Control Devices (MUTCD) and Americans with Disabilities Act (ADA) accessibility requirements.

OFF-ROAD FACILITIES

Shared Use Path: Shared use paths – sometimes referred to as trails, multi-use trails, or bike paths – are physically separated from motor vehicle traffic by an open space or barrier. Often paved, shared use paths are commonly designed for two-way travel and can accommodate bicycles, pedestrian, and other non-motorized user traffic. Path widths may range from 10 to 15 feet.

FIGURE 2.6 – AN EXAMPLE OF A SHARED USE PATH.

FIGURE 2.7 – AN EXAMPLE OF A SIDEWALK.

Sidewalk: Sidewalks should be at least 6 feet wide and offer pedestrians a separate way to travel along the street network. It is common and encouraged for young children to ride bicycles on sidewalks along busy streets in residential areas.

Other active transportation infrastructure supporting these facilities includes bike parking and wayfinding signage.

FIGURE 2.8 – AN EXAMPLE OF A BIKE RACK.

FIGURE 2.9 – A WAYFINDING SIGN FOR THE MISSISSIPPI RIVER TRAIL.

TRANSIT FACILITIES

Sign: The most common type of transit facility is a sign on a post. The signed-only stop is typically found in areas with low land use density and lower ridership areas such as neighborhoods. These transit facilities can be incorporated with existing off-road active transportation infrastructure (like sidewalks) or can be found outside of the active transportation infrastructure network.

FIGURE 2.10 – A TRANSIT STOP SIGN.

FIGURE 2.11 – A TRANSIT BENCH.

Benches: A transit stop with a bench is accompanied by a sign and sometimes a trash receptacle. Transit bench stops are often located on the sidewalk network and are supported by a cement or concrete pad within areas with low to medium ridership potential.

Shelters: A typical shelter transit stop includes a bus stop sign, at least one bench, a trash receptacle, interior lighting, and advertising panels. Some bus shelters can also be equipped with bike racks. Shelter bus stops are located on the sidewalk network in areas with medium to high ridership potential and are supported by a cement or concrete pad.

FIGURE 2.12 – A SHELTER AT A TRANSIT STOP.

FIGURE 2.13 – EXAMPLE OF A TRANSIT HUB.
PHOTO COURTESY OF SAINT CLOUD METRO BUS.

Transit Hub: A transit hub can be either a sheltered transit facility or a transit center. These facilities allow transit users the opportunity to transfer to different fixed routes on the transit system. Depending upon the facility, a transit hub can contain additional passenger amenities such as an indoor waiting area, restrooms, customer service, and vending machines.

On-road, off-road, and transit facilities can be utilized in multiple connected ways by various types of users to get to and from desired destinations such as businesses, restaurants, and homes. The type of infrastructure present – or not present – prescribes, in part, how people will choose to get to their destinations.

DESIGNING THE LOCAL SYSTEM

Design standards for specific active transportation facilities, such as sidewalks and shared use paths, are often defined at the local level within the MPA. A review of the MPA's county and municipal ordinances found that many cities require consideration of these facilities when designing a new development or undergoing street reconstruction.

It is common practice within the MPA to have sidewalks along at least one side of collector and/or minor arterial roadway. While maintenance (for example, fixing broken pavement) is the responsibility of the city or county that owns the facility, local ordinances prescribe that removing snow and ice from sidewalks is the owner's responsibility whose property abuts the sidewalk.

In terms of on-road facilities, with the passage of Minnesota Statute 169.14 Subd. 5h (https://www.revisor.mn.gov/statutes/cite/169.14#stat.169.14.5h), cities within the MPA

may consider lowering speed limits on roadways to protect cyclists and pedestrians. However, this statute does not include county- or state-owned roadways that may pass through a city. Local ordinances also discuss possible traffic safety and/or calming measures such as narrowing lanes that can be implemented to reduce motor vehicle traffic speeds.

A detailed look at these individual ordinances and policies for each jurisdiction can be found in the individual city profiles, Appendices A through E.

ACTIVE TRANSPORTATION INFRASTRUCTURE IN THE MPA

Based upon an understanding of the types of active transportation facilities found within the MPA, the following section details the location of these types of infrastructure in the Saint Cloud metro.

APO staff utilized two techniques to determine the extent (miles) of the existing active transportation infrastructure: lane miles and centerline miles.

Lane miles, used for on-road bicycle facilities, factor in bidirectional traffic movement. In other words, a one-mile stretch of roadway would have two-lane miles of bicycle facilities – one mile on each side of the roadway.

Centerline miles were used to determine the number of miles for sidewalk and shared use paths. This method accounts for the miles of one sidewalk and/or shared use path. If there were a sidewalk on both sides of the roadway, it would be counted as two miles. In other words, if the same one-mile stretch of roadway had a sidewalk on only one side, it would be counted as one mile of the sidewalk.

The Saint Cloud MPA has a combined total of 574 miles of on-road and off-road facilities.

Of note, the existing infrastructure shown herein only accounts for infrastructure that has been constructed prior to December 2019.

Active Transportation Infrastructure Facility Type	Mileage
Bike Lane	18.3
Shared Lane	40.7
Paved Shoulder	22.4
Paved Shared Use Paths	105.7
Unpaved Shared Use Paths	47.8
Sidewalks	339.2
Total	**574.0**

FIGURE 2.14 – MILEAGE BREAKDOWN OF ACTIVE TRANSPORTATION FACILITIES WITHIN THE MPA BY TYPE.

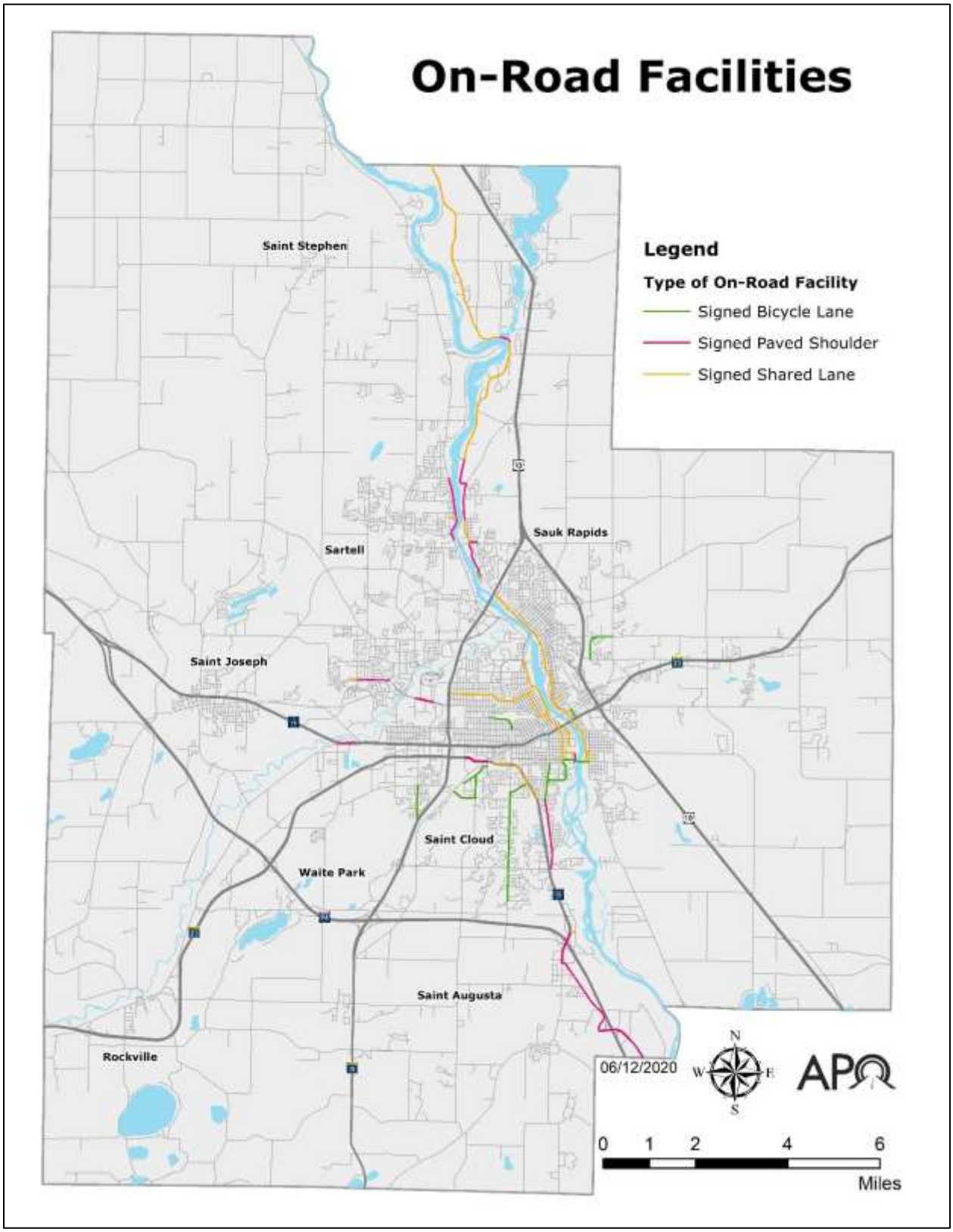


FIGURE 2.15 – MAP OF ON-ROAD ACTIVE TRANSPORTATION FACILITIES BY TYPE AND LOCATION.

ON-ROAD FACILITIES

The most common type of on-road facilities found in the region are shared lanes with a total of 40.7 lane miles – comprising one-half of the on-road facilities in the MPA.

Within the MPA, shared lanes and paved shoulders (the next largest percentage of on-road facilities) are generally found along the Mississippi River as part of U.S. Bicycle Route 45 – more commonly referred to as the Mississippi River Trail.

Mississippi River Trail (MRT)

The Mississippi River Trail (MRT) is a planned network of bicycle facilities that winds through 10 states to encompass the length of the Mississippi River. At a state level, MnDOT has designated this facility as a high-priority regional corridor with a high potential to connect to other bicycle route corridors across the state.

The portion of the MRT within the Saint Cloud MPA is primarily an on-road route.

Coming down from the north, the MRT enters the MPA along the Great River Road scenic byway – Stearns CSAH 1 (Riverside Avenue N)/Benton CSAH 33 (North Benton Drive) through the cities of Sartell and Sauk Rapids. The MRT splits at the intersection of North Benton Drive and Benton CSAH 3 (Second Street N). One section of the MRT crosses the Mississippi River and continues along Ninth Avenue N into Saint Cloud. In contrast, the other section follows the eastern portion of the river along River Avenue S in Sauk Rapids/Riverside Drive in Saint Cloud. The MRT reconnects around Saint Cloud State University and continues south along portions of the Beaver Island Trail shared use path and Stearns CSAH 75 as it winds its way south to the City of Clearwater.

FIGURE 2.16 – PICTURE OF THE MISSISSIPPI RIVER TRAIL IN SAUK RAPIDS.

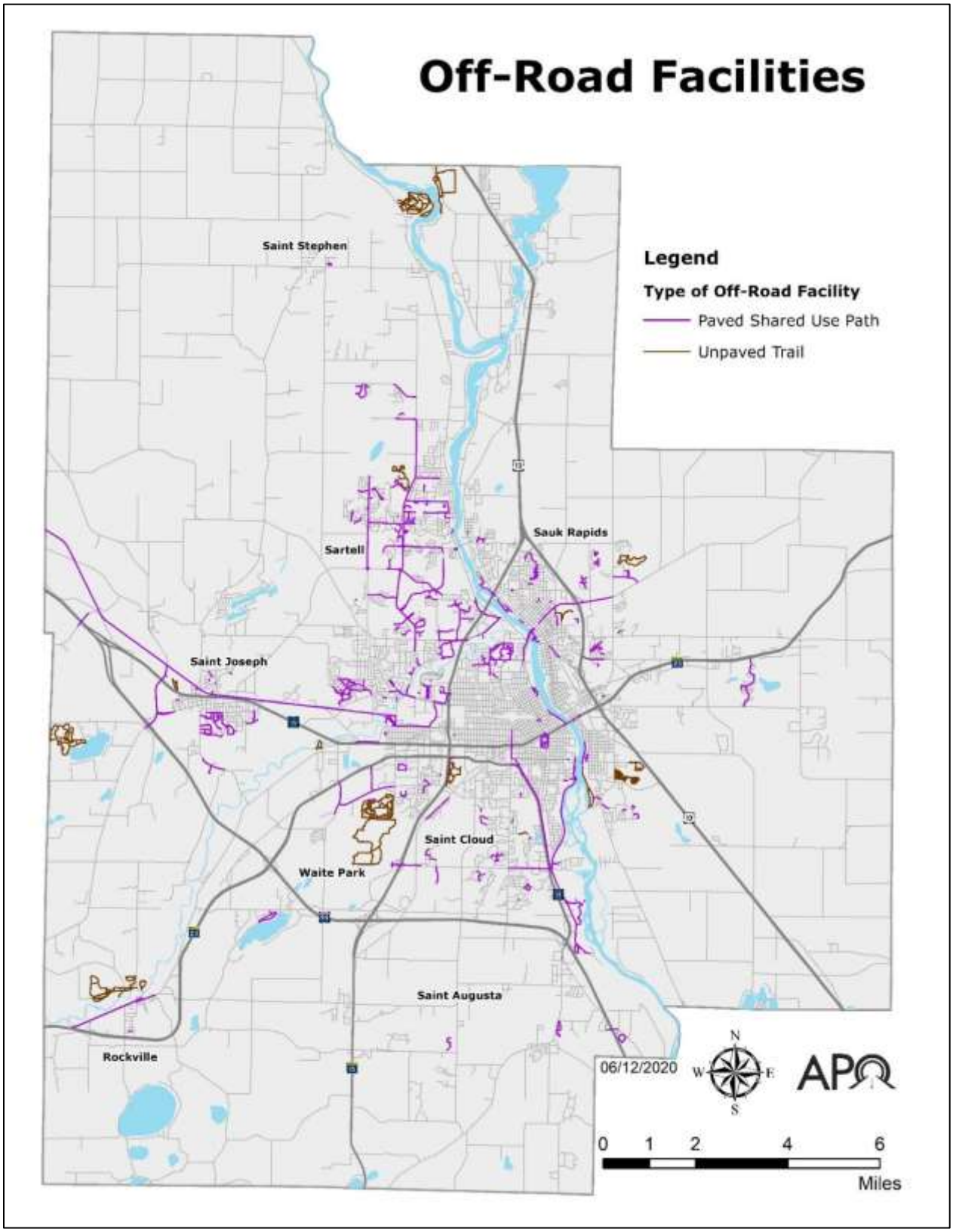


FIGURE 2.17 – MAP OF OFF-ROAD ACTIVE TRANSPORTATION FACILITIES BY TYPE AND LOCATION.

OFF-ROAD FACILITIES

Shared Use Paths and Trails

The most common form of off-road facilities, aside from sidewalks, are paved shared use paths totaling 105.7 miles within the MPA. On the local level, most paved shared use paths are located within the cities of Saint Cloud and Sartell, often connecting neighborhoods to recreational facilities.

At a regional level, paved shared use path connector routes such as the Beaver Island Trail, the Lake Wobegon Trail, and the eventual connection of the ROCORI Trail can be found below.

Other off-road facilities include 47.8 miles of unpaved trails, primarily within the county and municipal parks. Unpaved trails comprise about 8% of the total active transportation facility mileage.

Beaver Island Trail

Once an active rail corridor, the Beaver Island Trail today is a well-used shared use path and a critical regional linkage for the MRT. This shared use path begins south of the SCSU campus and proceeds south, mainly following the contours of the Mississippi River wherever possible.

The City of Saint Cloud and Stearns County plans to extend the Beaver Island Trail from its current southern termini to the City of Clearwater through two programmed construction projects slated to be completed by 2025.

Lake Wobegon Trail

Perhaps one of the most well-known shared use path facilities in the area, the Lake Wobegon Trail, starts in Osakis and primarily follows I-94 throughout most of western Stearns County. The Wobegon Trail enters the MPA northwest of Saint Joseph and continues to Waite Park. This facility also includes trailheads in both communities.

Once in Waite Park, the Lake Wobegon Trail hooks up with the Healthy Living Trail (along Third Street N) as it continues north to Apollo High School in Saint Cloud.

A connection is anticipated between the existing terminus in Saint Cloud to the Beaver Island Trail through a series of on-road bicycle lanes east of MN 15.

ROCORI Trail

The ROCORI Trail currently consists of disconnected segments.

The portion within the MPA contains a small segment from 235th Street and Broadway to Mill Street in Rockville. Another existing segment outside the MPA begins east of Richmond and extends to Cold Spring. The ROCORI Trail Construction Board is working to secure funding to connect these two existing segments and provide a continuous facility through the three communities. A planned connection is slated to be constructed on or around 2022.

The 2007 Feasibility Study for Stearns County Rails with Trails (https://bit.ly/3teEDAj) recommends the ROCORI Trail be extended – as funding becomes available – to align with County Road 138 right-of-way and preferably continue along CSAH 75 to Waite Park's

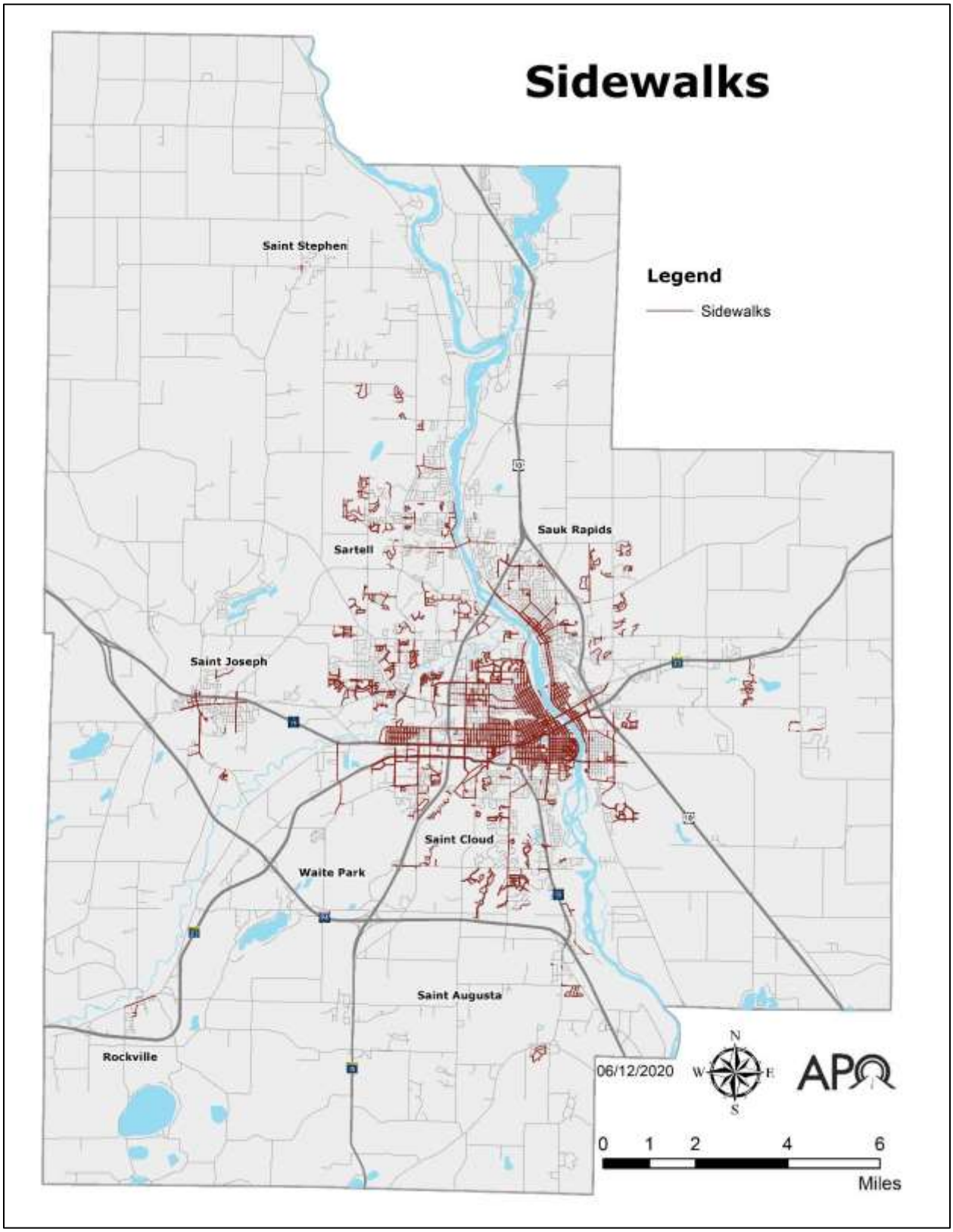


FIGURE 2.18 – A MAP OF SIDEWALKS WITHIN THE MPA.

Rivers Edge Park with an ultimate connection to the Lake Wobegon Trail. The ROCORI Trail is envisioned to eventually connect into the Saint Cloud urban area network of active transportation facilities. However, as of the writing of this document, it is not yet a regional connector route within the MPA.

Sidewalks

By far, the lengthiest facility type comprising the active transportation network is sidewalks, with a total of 339.2 miles found within the MPA. The presence of sidewalks is generally correlated with denser development and a grid roadway network – as demonstrated in the City of Saint Cloud along the Mississippi River. Sidewalks are usually built and maintained by cities; however, some sidewalks within the MPA are maintained at a county level. The longest network of sidewalks in the MPA is found in the City of Saint Cloud (236 miles), followed by the City of Sartell with 26.4 miles, most of which is located within newly developed areas of the city.

TRANSIT SERVICES AND INFRASTRUCTURE IN THE MPA

As the urban public transit provider, Saint Cloud Metro Bus is responsible for the daily management, operation, and maintenance of both Fixed Route (FR) and Dial-a-Ride (DAR) transit systems for the communities of Saint Cloud, Sartell, Sauk Rapids, and Waite Park.

The Metro Bus FR service operates seven days a week and includes 16 regular fixed routes throughout the metro and a curb-to-curb demand response route (ConneX) in the City of Sartell.

Metro Bus operates one main transit hub: The Downtown Transit Center (510 First St. S, Saint Cloud). The majority of the fixed route buses start and end their routes in downtown Saint Cloud. Four additional subsidiary hubs allow riders to transfer to different routes across the system. Those hubs are:

- James W. Miller Learning Resources Center at Saint Cloud State University: 400 Sixth St. S, Saint Cloud.
- Crossroads Center mall: 4101 W Division St., Saint Cloud.
- Walmart at the Epic Shopping Center: 21 County Road 120, Sartell.
- Encore Capital Group: 760 McLeland Road, Saint Cloud.

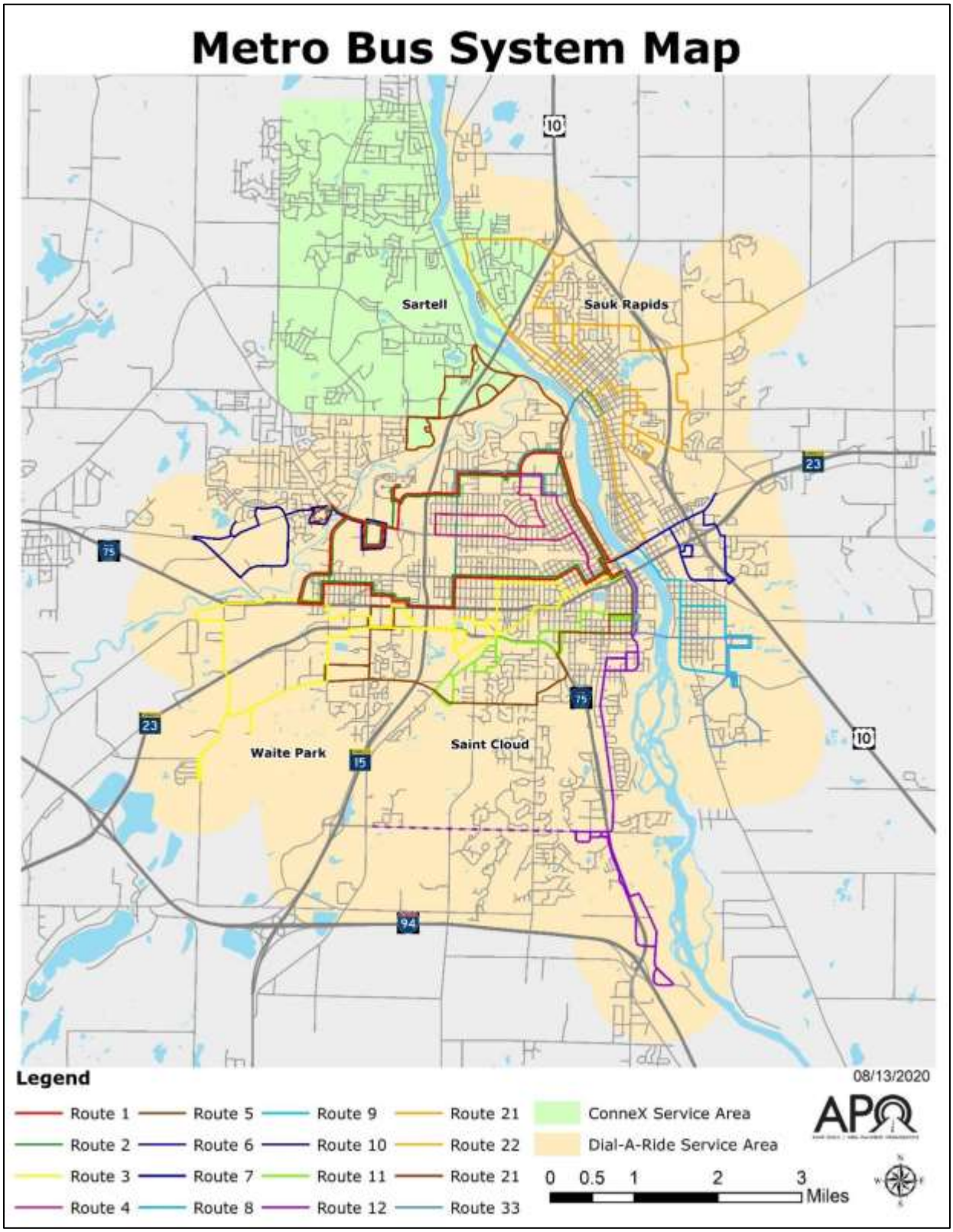


FIGURE 2.19 – A MAP OF THE METRO BUS SERVICE AREA INCLUDING FIXED ROUTES LOCATION.

The Metro Bus transit system contains over 850 signed bus stops throughout its network. Additional infrastructure includes bench and signed stops (approximately a dozen) and bus shelters (approximately 70).

About 60% of all bus stops are accessible by the existing sidewalk and/or shared use paths.

A closer look at the individual fixed routes shows riders on Route 10 in north Saint Cloud have the least amount of access to existing active transportation infrastructure – 70% of stops are not on a sidewalk and/or shared use path – this is followed by Route 21 in Sauk Rapids (55% of stops not accessible by existing facilities) and south Saint Cloud's Route 12 (52% of all stops are not on a sidewalk and/or shared use path).

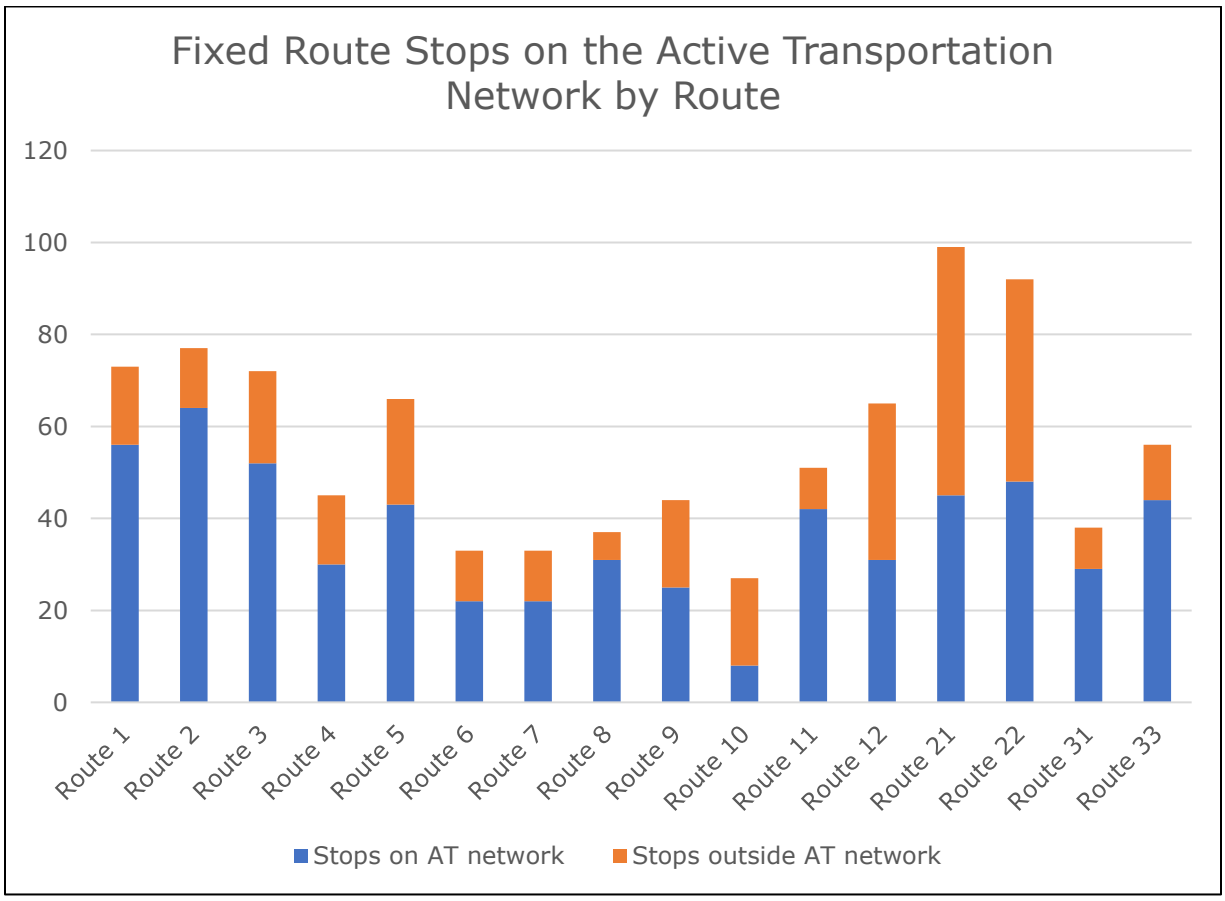


FIGURE 2.20 – NUMBER OF METRO BUS FIXED ROUTE STOPS LOCATED ON THE EXISTING ACTIVE TRANSPORTATION NETWORK BY ROUTE.

CONDITION OF ACTIVE TRANSPORTATION INFRASTRUCTURE

Having some form of active transportation infrastructure is a critical component in building an active transportation network. However, if the condition of that infrastructure is poor or ill-equipped for the end-user, utilizing active transportation can become unsafe or inconvenient.

In 2019 and 2020, the APO worked with two different consultants to conduct pavement condition reports for on-road and off-road active transportation facilities within the MPA.

GoodPointe Technology was tasked in 2019 with surveying the pavement condition of portions of the existing roadway network within the MPA not collected by MnDOT. In addition, GoodPointe Technology worked with the APO to collect pavement condition data on the existing on-road active transportation facilities. GoodPointe collected two sets of active transportation-specific data. Pavement condition was evaluated using a Digital Inspection Vehicle (DIV) – a specialized vehicle equipped with cameras and laser sensors to detect pavement distress and roughness. Striping condition of on-road facilities was done visually.

FIGURE 2.21 – EXAMPLE OF DIGITAL INSPECTION VEHICLE.

The Parks & Trails Council of Minnesota completed a pavement condition assessment of the off-road paved shared use paths in 2020. Using their road research bike – an electric bike equipped with sensors to measure the smoothness of the ride and cameras to photograph pavement condition – the Parks & Trails Council gathered data on 103.6 miles (98%) of the MPA's paved shared use paths.

FIGURE 2.22 – PHOTO OF BICYCLE USED BY THE PARKS & TRAILS COUNCIL OF MINNESOTA TO COLLECT PAVEMENT CONDITION DATA FOR SHARED USE PATHS WITHIN THE MPA.
PHOTO COURTESY OF THE PARKS & TRAILS COUNCIL OF MINNESOTA.

Conditions of unpaved shared use paths and sidewalks were not included in either consultant contract. Condition of these facilities – and their need for maintenance – is done on a complaint basis with the responsible jurisdiction/agency. No data basis exists that ranks and/or tracks the condition of these facilities over time.

In addition, as part of Federal regulations, Metro Bus must compile a report on the condition of their assets, including infrastructure such as the downtown transit center as part of their Transit Asset Management (TAM) plan filed with FTA. A look at the condition of these facilities is included in this section.

Similar to unpaved shared use paths and sidewalks, the condition of bus signs, benches, and shelters – and their need for attention – is reported to Metro Bus on a complaint basis.

ON-ROAD FACILITIES

Pavement Condition

In 2019, GoodPointe Technology collected most signed bike routes' pavement condition index (PCI). Three areas within the City of Saint Cloud were not surveyed:

- Rolling Ridge Road in Saint Cloud. This facility was under construction in 2019.
- Fourth Avenue S in Saint Cloud. This facility was under construction in 2019.
- 22nd Street S in Saint Cloud. This facility was inadvertently omitted from the pavement condition analysis.

During a PCI survey, visible signs of deterioration within a segment are recorded and given a score. Maintenance activities such as crack sealing and patching often provide benefits when the PCI is above 60 (fair condition). However, more complex and expensive treatments will be necessary as the pavement deteriorates. Pavements with a PCI between 40 and 60 (poor condition) are good candidates for major repairs ranging from overlays to reconstruction. Once the PCI drops below 40, reconstruction is typically the only viable alternative.

Most of the on-road facilities in the MPA are in good or satisfactory condition – 83.6%. Sections of the on-road network through Sauk Rapids (River Avenue S) and along 9th Avenue south of MN 23 to 5th Street S in Saint Cloud are some of the larger sections of the on-road network in fair or poor condition as of the completion of the 2019 study.

Pavement Condition Index	Lane Miles of On-Road Facilities	Percentage of On-Road Facilities
Good (85-100)	49.4	60.7%
Satisfactory (70-84)	18.6	22.9%
Fair (55-69)	5.4	6.6%
Poor (40-54)	3	3.7%
Not Surveyed	5	6.1%
Total	81.4	100%

FIGURE 2.23 – PAVEMENT CONDITION INDEX (PCI) OF ON-ROAD ACTIVE TRANSPORTATION FACILITIES IN THE MPA AS SURVEYED BY GOODPOINTE TECHNOLOGY IN 2019.

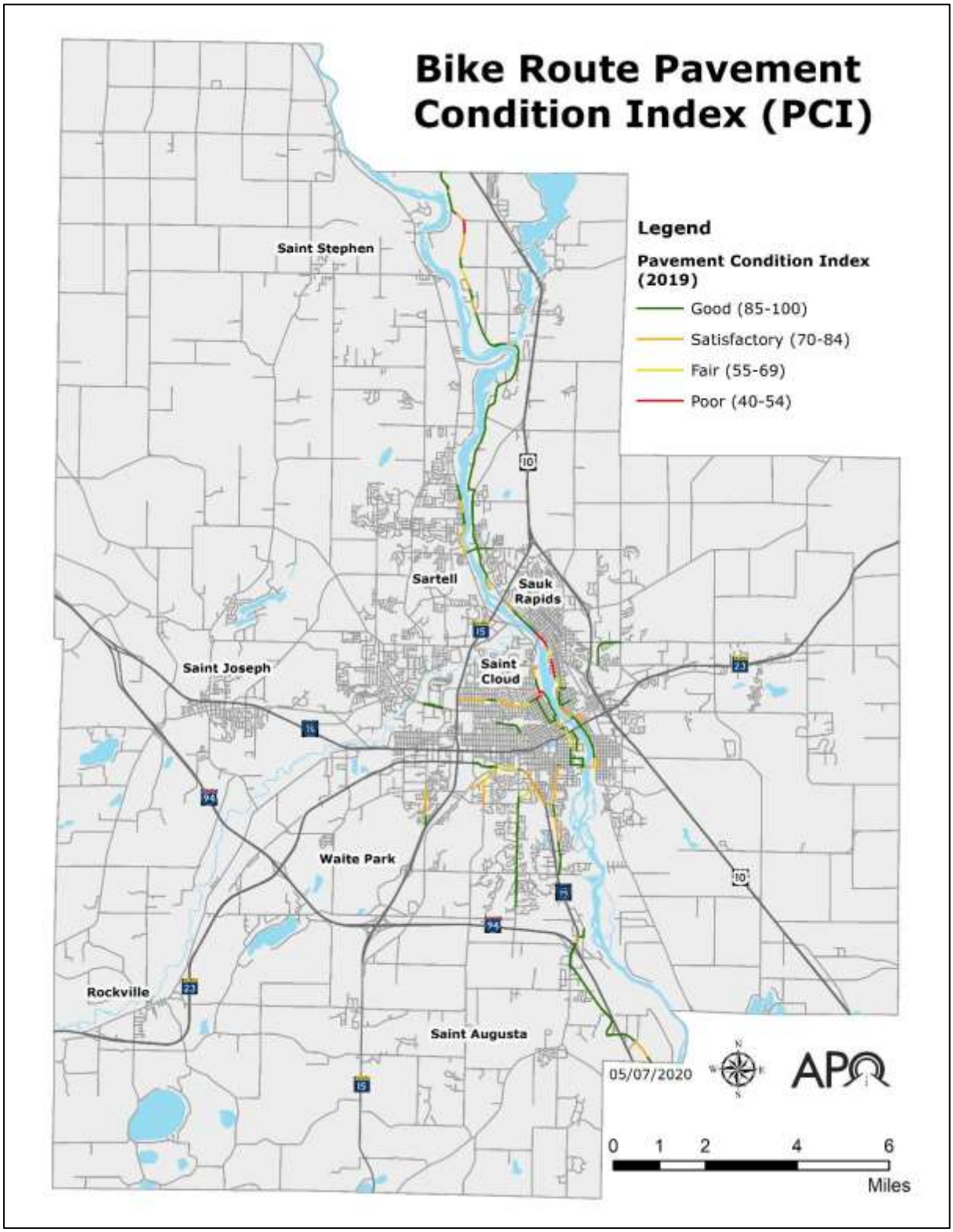


FIGURE 2.24 – A PAVEMENT CONDITION INDEX (PCI) MAP OF THE ON-ROAD BICYCLE FACILITIES WITHIN THE MPA AS COLLECTED BY GOODPOINTE TECHNOLOGY IN 2019.

Striping

In 2019, GoodPointe Technology visually surveyed the condition of all signed bike route pavement markings in the MPA. These bike routes include bike lanes, paved shoulders, and shared lanes. Some bike routes have no striping; thus, the none category was added. These routes are typically shared lanes where the person who cycles and the motorist share the same lane simultaneously.

Of the on-road facilities that had striping within the MPA, a majority of the striping present was visually assessed as being in "good" condition. Sections of the on-road network with "poor" striping as of the completion of this study can be found along the Great River Road (Stearns CSAH 1/Riverside Avenue N) both north of and through the City of Sartell.

Striping Condition	Lane Miles of On-Road Facilities	Percentage of On-Road Facilities
Good	23.8	29.2%
Fair	20.2	24.8%
Poor	9	11.1%
None	23.4	28.7%
Not Surveyed	5	6.1%
Total	81.4	100%

FIGURE 2.25 – STRIPING CONDITION OF ON-ROAD ACTIVE TRANSPORTATION FACILITIES IN THE MPA AS SURVEYED BY GOODPOINTE TECHNOLOGY IN 2019.

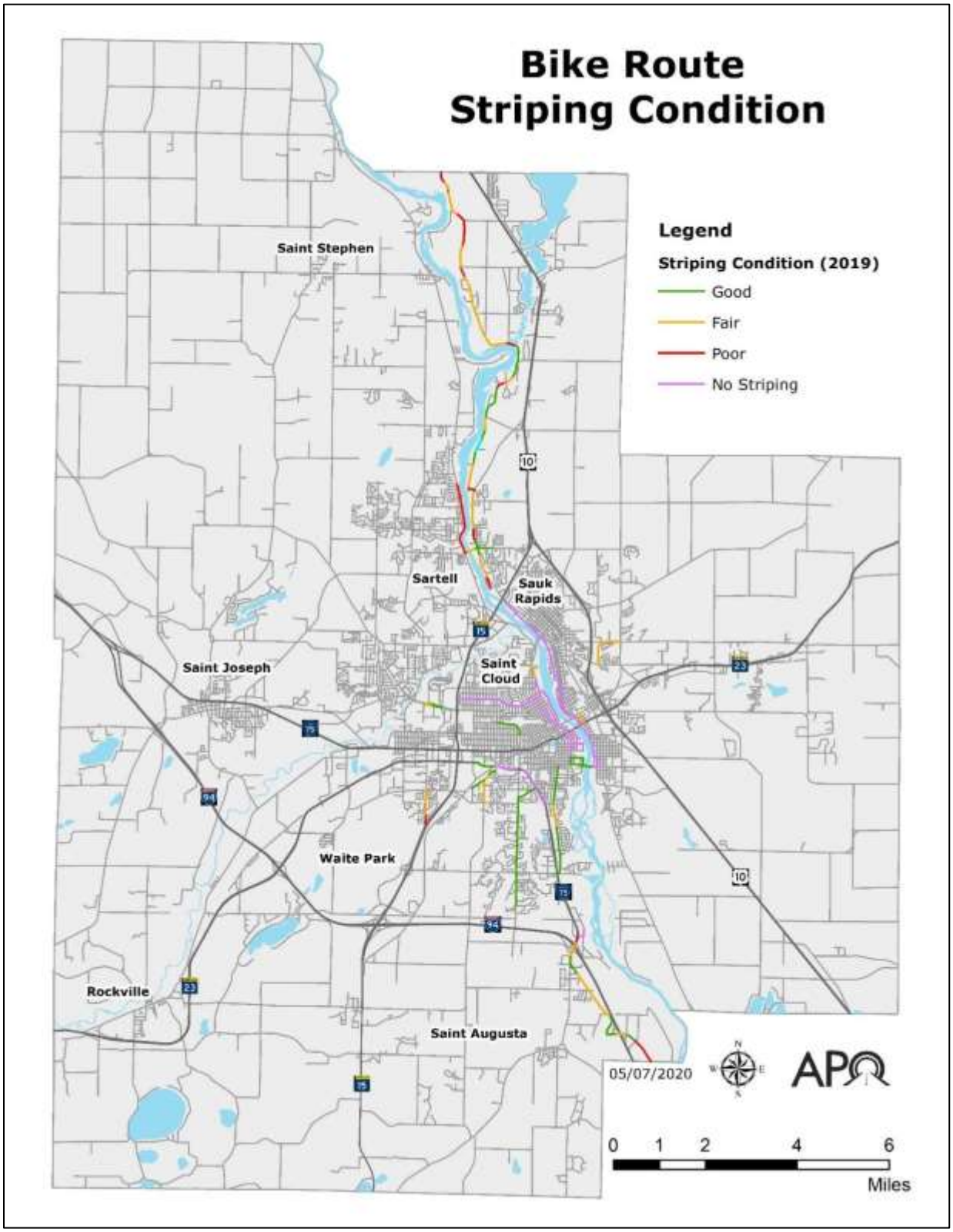


FIGURE 2.26 – MAP OF PAVEMENT STRIPING CONDITIONS FOR BICYCLE ROUTES WITHIN THE MPA.

OFF-ROAD FACILITIES

In 2020, the Parks & Trails Council of Minnesota conducted a survey of the paved shared use paths within the Saint Cloud MPA. All but 2.3 miles of the paved shared use path network were surveyed – some sections were inaccessible due to COVID-19 closures (a school-owned facility in Sartell) or other construction. The paving stone shared use path facilities around Lake George were intentionally omitted from this survey because the natural crevasses in the stones do not allow for a smooth ride regardless of condition.

The Parks & Trails Council's assessment concluded that while most of the surveyed shared use paths were in very smooth or smooth condition, almost one-fifth of shared use paths in the MPA was in rough or very rough condition. Most notable areas with rough or very rough pavement as of the completion of this study include facilities around the Whitney Senior Center in Saint Cloud, portions of the Beaver Island Trail, and portions of the shared use path along 19th Avenue N in Sartell.

More detailed maps of the shared use path condition ratings by municipality can be found in the city profiles, Appendices A through E.

Paved Shared Use Path Pavement Condition	Miles	Percentage of Shared Use Path
Very Smooth	38.3	36.2%
Smooth	26.0	24.6%
Fair	19.9	18.8%
Rough	8.1	7.7%
Very Rough	11.1	10.5%
Not Rated	2.3	2.2%
Total	105.7	100%

FIGURE 2.27 - PAVED SHARED USE PATH PAVEMENT CONDITION OF OFF-ROAD FACILITIES WITHIN THE MPA.

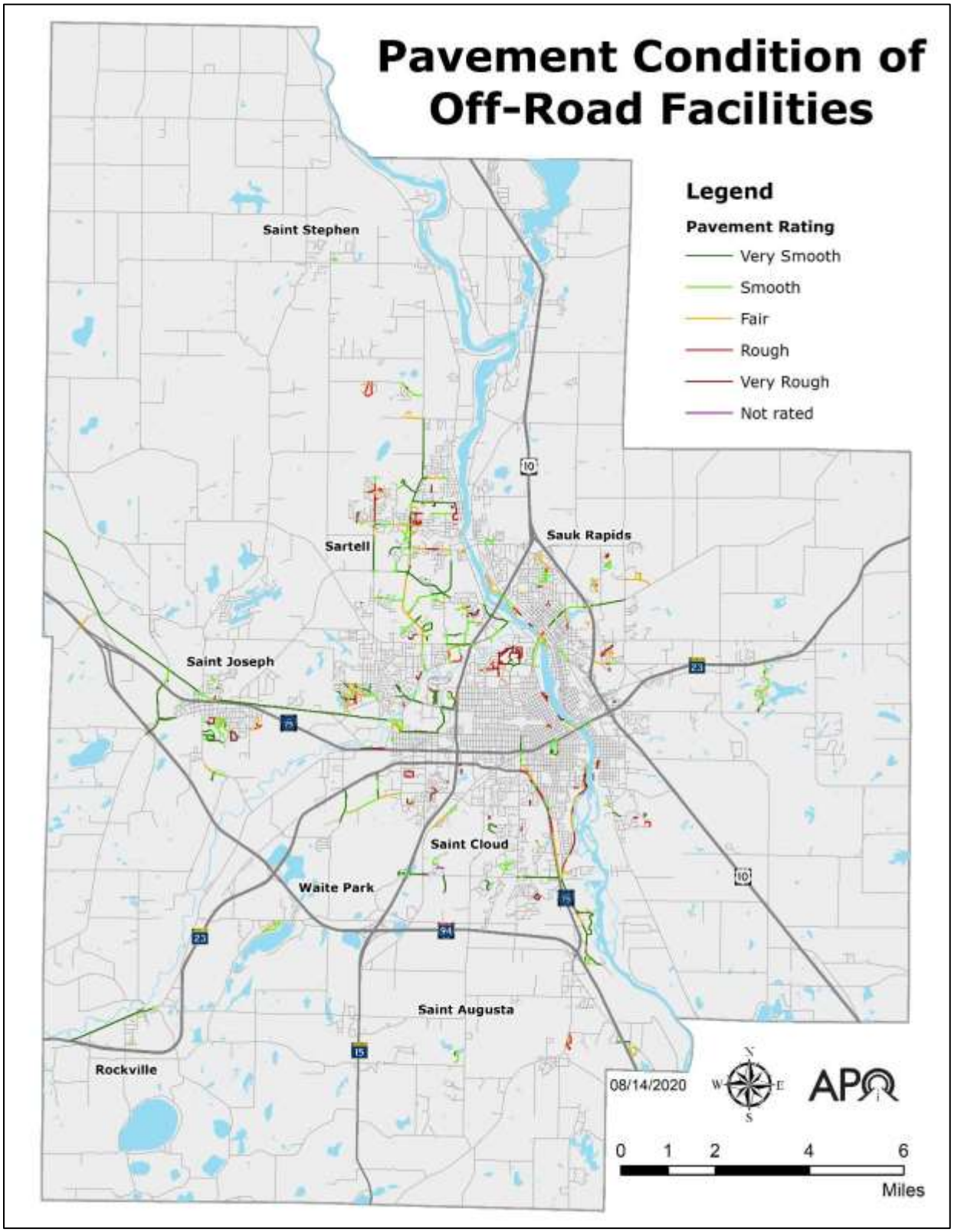


FIGURE 2.28 - PAVED SHARED USE PATH PAVEMENT CONDITION OF OFF-ROAD FACILITIES WITHIN THE MPA.

TRANSIT INFRASTRUCTURE

Transit Center

Per Federal requirements, Saint Cloud Metro Bus is required to evaluate the condition of its facilities (Operations Center, Mobility Training Center, and the Downtown Transit Center) every three years.

This condition report looks at various criteria such as roofing, heating, ventilation, and air conditioning (HVAC) systems; parking lots; landscaping; and administration spaces. Assessors of these facilities must rate these individual components on a five-point Transit Economic Requirement Model (TERM) scale – 5 meaning the factor is in excellent condition, and 1 meaning the factor requires a major repair.

For purposes of the ATP, APO staff have only considered the TERM scale ranking of the downtown transit center as this is the main public-facing facility and serves as a hub for a majority of the fixed route system.

As of 2017 (the most recent data available to APO staff), the downtown transit center received a rank of 3 on the TERM scale.

PLANS AND GUIDANCE FOR ACTIVE TRANSPORTATION

Understanding what currently exists for active transportation infrastructure in the MPA is important, but it is also essential to review and consider the planning efforts for future development. The following section discusses several statewide and regional planning documents pertaining to active transportation. This summary discussion does not encompass all planning efforts; instead, it provides some added context to regional and local active transportation planning activities.

STATEWIDE PLANNING EFFORTS

Statewide Multimodal Transportation Plan 2017-2036

The Statewide Multimodal Transportation Plan (SMTP) (https://bit.ly/3kfKzSG) provides overarching guidance and priorities for the entire transportation system, including active transportation.

The SMTP calls for a collaborative planning process to develop a transportation system that:

- Maximizes the health of communities.
- Completes multimodal transportation connections.
- Reduces fatalities and serious injuries across all modes of transportation.
- Responds to public expectations for developing and managing transportation assets.

From this overarching guidance, plans for defining priority networks for all modes of transportation emerged.

Statewide Bicycle System Plan (2016)

Developed in cooperation with state, regional, and local partners, the Statewide Bicycle System Plan envisions a bicycle network that is safe, comfortable, and convenient for all people.

To achieve this vision, the plan outlines four main goals:

- **Safety and comfort:** Build and maintain safe and comfortable bicycling facilities for people of all ages and abilities.
- **Local bicycle network connections:** Support regional and local bicycling needs.
- **State bicycle routes:** Develop a connected network of state bicycle routes with partners.
- **Ridership:** Increase ridership of people who already bicycle and people who don't.

Finding that people value more opportunities for bicycling, the 2016 Statewide Bicycle System Plan identified a series of state bicycle routes that connect communities and destinations. The Saint Cloud area was identified as a primary link and destination for many state bicycle routes. These routes – in order of importance – are as follows:

1. **High Priority:** The Mississippi River Trail (MRT) bicycle route, beginning at the Mississippi Headwaters and continuing south through Saint Cloud, the Twin Cities, and ultimately concluding at the Gulf of Mexico.
2. **High Priority:** A northwest route starting in Moorhead and continuing through Detroit Lakes, Fergus Falls, Alexandria, and Saint Cloud.
3. **Medium Priority:** A northeast route starting in Pipestone and continuing through Saint Cloud up to Hinkley.
4. **Low Priority:** An eastern route from Saint Cloud to Cambridge.
5. **Low Priority:** A southern route from Saint Cloud through Hutchinson to New Ulm.

Strategies to complete these and other state bicycle routes include but are not limited to encouraging and coordinating regional and local partner participation in MnDOT plans and projects.

Implementation of this plan outlined an investment strategy targeting 70% of all statewide funding allocated for bicycle infrastructure toward projects that support local and regional networks. The remaining 30% would be used to improve the state bicycle network.

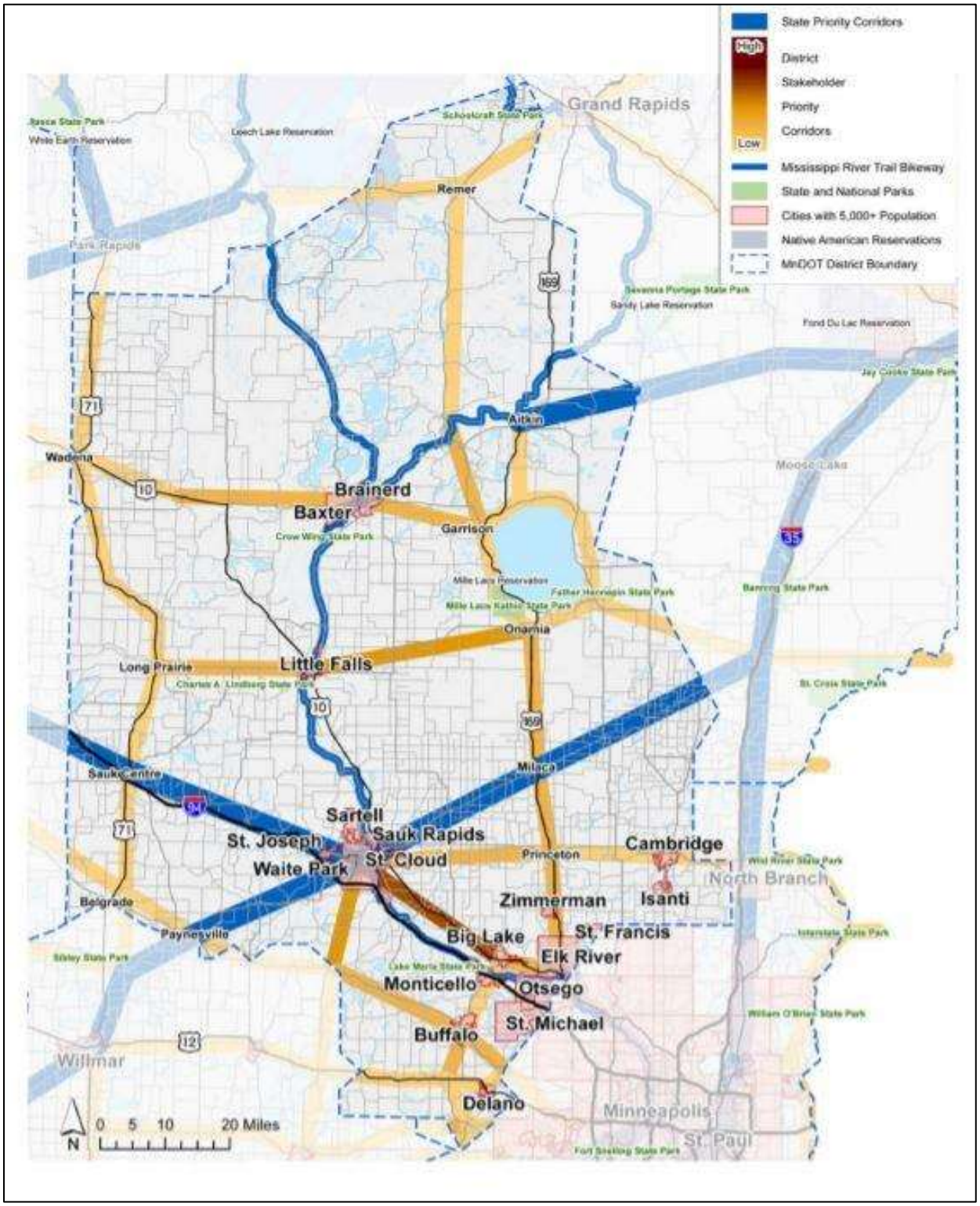


FIGURE 2.29 - MNDOT DISTRICT 3 REGIONAL PRIORITY CORRIDORS FOR BICYCLE NETWORKS IN AND AROUND THE SAINT CLOUD MPA.

GRAPHIC COURTESY OF MNDOT

MnDOT District 3 Bicycle Plan (2019)

The APO was a key participant in the preparation of the 2019 MnDOT District 3 Bicycle Plan (https://bit.ly/3foOjOG). The groundwork for the District Plan began with the state bicycle routes identified in the MnDOT Statewide Bicycle System Plan. The District plan includes further analysis relative to the prioritization of bicycle investment routes for regional priority corridors that follow MnDOT right-of-way. The plan consists of a guide to local investments in bicycle facilities along local or regional roadways or shared use paths that may be eligible for MnDOT funding.

In identifying district bicycle investment routes, MnDOT District 3 used a prioritization process that reviewed facility segments and ranked them according to the following factors:

- Segments that travel through one more urban areas.
- Segments that reach an underserved population such as areas with a larger population of children, Native Americans, older adults, people with disabilities, immigrants, low-income populations, and zero-vehicle households.
- Segments in an area that includes many destinations for bicyclists such as parks, community centers, or shopping centers.
- Segments that increase bicycle network connectivity including closing existing network gaps.
- Segments identified in a local plan or Capital Improvement Program (CIP).
- Segments identified in a District Safety Plan or in high crash areas.

The MnDOT Statewide Bicycle Plan and the District Plan recommend identifying local projects that complete regional connections for bicycle movements for high priority regional corridors and other investment routes as opportunities arise.

Regional and local facilities within the District 3 designation for high priority corridors include the north/south connections made by the MRT and the Beaver Island Trail, along with the northwest connection of the Lake Wobegon Trail and the southwest connection of the ROCORI Trail.

District 3 also used priority criteria to designate medium and lesser priority regional corridors for bicyclists. A medium priority corridor is shown south from Saint Cloud, generally following MN 15 toward Kimball. A lesser-priority bicycle route is indicated directly east of Saint Cloud.

MnDOT Bicycle Facilities Design Manual (2020)

Design elements for bicycle facilities from most to least separated and based on the different preferences for types of users are described in the 2020 Bicycle Facilities Design Manual (https://bit.ly/2ZPuFoL). The manual outlines various design guidelines primarily targeting MnDOT right-of-way along state highways.

The Bicycle Facilities Design Manual affirms FHWA studies which indicate people who cycle generally prefer grade-separated facilities. The manual encourages MnDOT planners and engineers to consider the feasibility of incorporating these types of facilities along state

highways as a way to further the statewide vision of a bicycling network that is safe, comfortable, and convenient for all.

Minnesota Walks (2016)

The 2016 Statewide Pedestrian System Plan Minnesota Walks (https://bit.ly/3fkwQXp) proposes design and policy strategies with the following vision: "All people should be able to walk safely and conveniently to their destinations."

Using a "design for all" approach, this plan calls for road and street designs at the state, regional, and local level to prioritize the pedestrian user and be compliant with the Americans with Disabilities Act (ADA).

This plan recommends that as communities grow, they should encourage spaces and connections that are pedestrian friendly, design streets and roadways that encourage drivers to slow down, and consider the needs and desires of the community.

REGIONAL PLANNING EFFORTS

APO 2045 Metropolitan Transportation Plan (2019)

The APO's 2045 Metropolitan Transportation Plan (MTP) (https://bit.ly/2XxSqBu) – adopted October 2019 – contains a plethora of information regarding the overall transportation network for the MPA. Included in this is a specific mention of active transportation and the existing active transportation infrastructure network.

In addition to data collection on the existing active transportation network (including the mapping of on- and off-road facilities), the MTP identifies several objectives, strategies, and performance measures pertaining to active transportation that would assist the APO in achieving its five long-term goals:

1) Maintain and Enhance Transportation Safety.
2) Increase System Accessibility, Mobility, and Connectivity.
3) Efficiently Manage Operations and Cost-Effectively Preserve the System.
4) Support Metropolitan Vitality and Economic Development.
5) Promote Energy and Environmental Conservation.

As identified in the MTP, the bulk of the work surrounding active transportation increases system accessibility, mobility, and connectivity by identifying and maintaining viable non-motorized transportation options. This includes strategies such as the development of the ATP.

Other focus areas for active transportation include the reduction of bicycle and pedestrian fatalities and serious injuries. This objective would support the APO's commitment to maintain and enhance transportation safety.

While the APO's MTP identifies these policy objectives, it does not identify priorities for network connections and other facility improvements, as noted in Chapter 1. However, it

has been identified that the work completed in this ATP will assist the APO in future updates of the MTP.

Metro Bus Long Range Transit Plan (2016)

The 2016 Long Range Transit Plan – as it pertains to our inclusion as part of the active transportation network – discusses the current conditions of the Metro Bus service area and provides a route-by-route analysis of performance metrics. The Metro Bus LRTP (https://bit.ly/3a0w2pn) includes plans for future modifications, restructuring, and expansion of the fixed route system service in areas such as Saint Joseph to meet future regional transit demands.

Three implementation phases were outlined with an anticipated result of a ridership increase of nearly 500,000 riders by year five after full plan implementation.

Phase I of this plan was rolled out in August 2016 with the integration of the SCSU-specific "Campus Clipper" routes into the regular Metro Bus system. Implementation of phases II and III were postponed due to staffing and budgetary concerns.

Metro Bus is proposing an update to this 2016 plan, with work anticipated to begin in 2024.

RALAG Plan (2015)

In 2015, the Regional Active Living Advisory Group (RALAG) – a group primarily led by public health officials from Benton, Sherburne, Stearns, and Wright counties – developed a five-year agenda for active transportation for the four-county area. The RALAG plan identified the Saint Cloud metropolitan area as the central hub for regional active transportation facilities. Participants in the RALAG study identified four key focus areas:

1. Increasing the number of walking and biking trips through education, information, and awareness.
2. Increasing the quality and quantity of active transportation infrastructure, bridging existing regional gaps through local collaboration.
3. Improving public health through a regional program offering more and better access to active transportation.
4. Improving the safety and comfort of active users with Safe Routes to School plans and road projects that include bicycle and pedestrian improvements.

The RALAG plan provides some consensus from public health toward plans and policies that help fulfill this set of planning objectives. However, the plan does not include specific facility analysis or identify project priorities.

OTHER PLANNING EFFORTS

Complete Streets

MnDOT, along with many Minnesota communities, has adopted a planning approach incorporating Complete Streets. This design aims to prioritize safety, comfort and access to destinations for all people. This can include sidewalks, bike lanes, special bus lanes, public

transportation stops, frequent and safe crossing opportunities, median islands, accessible pedestrian signals, curb extension, narrower travel lanes, roundabouts and more.

MnDOT adopted a policy statement in 2016, committing to including a Complete Streets approach in all phases of planning, project development, operation, and maintenance activities. MnDOT assesses user needs at several planning, project scoping, and design stages, including people who walk, bicycle, or use transit.

The APO abides by an adopted 2016 resolution in support of Complete Streets. Among the member jurisdictions of the APO, the City of Saint Cloud and the City of Sartell have also adopted Complete Streets resolutions.

Safe Routes to School

Safe Routes to School (SRTS) is an initiative that works to make it safe, convenient, and fun for students to walk and bike to and from school and in their daily lives. The through use of the six Es – engagement, equity, engineering, encouragement, education, and evaluation – the SRTS initiative "aims to equip young people with the transportation knowledge and skills to safely and confidently navigate their communities, access opportunities, and get where they need to go now and into adulthood."

The 2020 Minnesota Safe Routes to School Strategic Plan (https://bit.ly/3mwE2Tz) was developed to guide state, regional, and local partners in creating a "stronger, more equitable SRTS program."

To achieve this vision, the 2020 strategic plan outlines six goals:

1. Build local partners' capacity to implement SRTS.
2. Coordinate SRTS implementation statewide.
3. Increase awareness of SRTS.
4. Develop process, policy, and design guidance that supports SRTS.
5. Measure progress, evaluate impacts, and continually improve the program.
6. Innovate in program development and implementation.

The plan draws particular attention to the SRTS effort to achieve equitable outcomes – in developing and distributing tools, resources, and funding – through the prioritization of communities who are "more likely to rely on walking or biking for transportation, are more vulnerable to unsafe traffic conditions, or have experienced historic disinvestment."

Within the MPA, SRTS planning efforts have been undertaken, in some capacity, at the three publicly funded school districts: Saint Cloud Area School District 742, Sartell-Saint Stephen School District, and Sauk Rapids-Rice School District.

Since reviewing the above documents, updates have occurred. The Statewide Pedestrian System Plan (https://bit.ly/3GuiuC1) was completed in March of 2021 after the plan review stage was completed for the ATP.

CHAPTER THREE: SYSTEM USAGE

Information on available facilities must be supplemented with an understanding of bicycling and walking behavior in the MPA - where people need and want to go and how well current facilities respond to their needs. In addition, it is essential to listen to members of the public to gain insight into their experiences (both positive and negative) when it comes to active transportation facilities they use regularly or infrequently.

Chapter Three focuses on the user and their interaction with the system. Relying on various data sets and initial public input (as found in Appendix F), this chapter will complement the understanding of existing infrastructure. Taken together, this will aid in getting a better grasp of the regional active transportation network located within the MPA and how well it uis meeting the needs of users.

WHO LIVES HERE?

Jurisdiction	2000 Census Population	2010 Census Population	2014-2018 ACS Population Estimates	2000 - 2018% Population Change
City of Saint Cloud	59,107	65,842	67,513	14.2%
City of Sartell	9,641	15,876	17,076	77.1%
City of Sauk Rapids	10,213	12,773	13,528	32.5%
City of Waite Park	6,568	6,715	7,623	16.1%
City of Saint Joseph	4,681	6,534	6,938	48.2%
City of Saint Augusta	3,065	3,317	3,669	19.7%
City of Rockville	2,003	2,448	2,533	26.5%
City of Saint Stephen	860	851	916	6.5%
Rural Stearns County *(Townships of Brockway, LeSauk, Saint Joseph, and Saint Wendel)*	9,193	8,542	8,147	-11.4%
Rural Benton County *(Townships of Minden, Sauk Rapids, and Watab)*	5,433	5,341	5,350	-1.5%
Rural Sherburne County *(Township of Haven)*	2,024	1,986	2,148	6.1%
MPA Totals	**112,788**	**130,225**	**135,441**	**20.1%**

FIGURE 3.1 – A POPULATION BREAKDOWN BY JURISDICTION WITHIN THE APO'S PLANNING AREA.
SOURCE: U.S. CENSUS BUREAU, CENSUS 2000; U.S. CENSUS BUREAU, CENSUS 2010; US. CENSUS BUREAU, 2014-2018 AMERICAN COMMUNITY SURVEY FIVE-YEAR ESTIMATES.

According to the U.S. Census Bureau's 2014-2018 American Community Survey (ACS) Five-Year Estimates, the APO's MPA has an estimated population of 135,441, an increase of

roughly 20.1% from the 2000 U.S. Census. The MPA is becoming increasingly urbanized as area municipalities grow with increasing demands on transportation and other city services. Cities as a whole grew by nearly 5% from 2010 to 2018, with very little or no growth in the remaining area of the MPA.

PEOPLE-OF-COLOR

Within the APO's planning area, roughly 16.7% of the population has identified as being a person of color according to the 2014-2018 ACS Five Year Estimates. People-of-color as defined by ACS, includes individuals who identify as; Black/African American alone; American Indian and Alaska Native alone; Asian alone; Native Hawaiian and other Pacific Islander alone; some other race; or two or more races. For this analysis, APO staff have included individuals of Hispanic or Latino descent, regardless of race, under the people-of-color definition.

Between 2010 and 2018, the APO's MPA's people-of-color population has increased 4.9 percentage points or roughly 41.5%.

APO MPA	2010 Census Population	2014-2018 ACS Population Estimates	Percent Change
Total Population	130,225	135,441	4.0%
People-of-Color	15,358	22,563	46.9%
Percent of Population of People of Color	**11.8%**	**16.7%**	**41.5%**

FIGURE 3.2 COMPARES THE PEOPLE-OF-COLOR POPULATION WITHIN THE SAINT CLOUD MPA BETWEEN 2010 AND 2018.

DATA COURTESY OF U.S. CENSUS BUREAU, CENSUS 2010 AND US. CENSUS BUREAU, 2014-2018 AMERICAN COMMUNITY SURVEY FIVE-YEAR ESTIMATES.

People who identify as Black/African American make up the largest share of the people-of-color population within the MPA (approximately 8.3%). This is followed by Asian alone and Hispanic or Latino, both of which comprise 2.8% of the population.

Within the MPA, the areas with the largest concentrations of people-of-color are within the cities of Waite Park (32.9% of its population) and Saint Cloud (23.3% of its population). Within these two cities, there are specific areas – Census block groups – with a substantial concentration of this demographic subset, including:

- The area east of Talahi Community School in Saint Cloud.
- Around the US 10/MN 23 interchange in Saint Cloud.
- South of University Drive S near Saint Cloud State University.
- Downtown Saint Cloud.
- Saint Cloud's Pantown Neighborhood between Third Street N and the railroad tracks.
- Portions of Saint Cloud just west of MN 15 and south of CSAH 75.
- Portions of Waite Park surrounding Discovery Community School heading north to CSAH 75.

When it comes to the access these communities have to active transportation, several of these block groups have notable gaps in the network, especially in proximity to residential areas.

An example of this can be seen in the residential areas around the US 10/MN 23 interchange in Saint Cloud. Aside from visible desire lines crossing US 10, neighborhoods south of Benton CSAH 8 (Second Street SE) have limited access to active transportation facilities such as sidewalks. There is also limited transit access east of 15th Avenue SE.

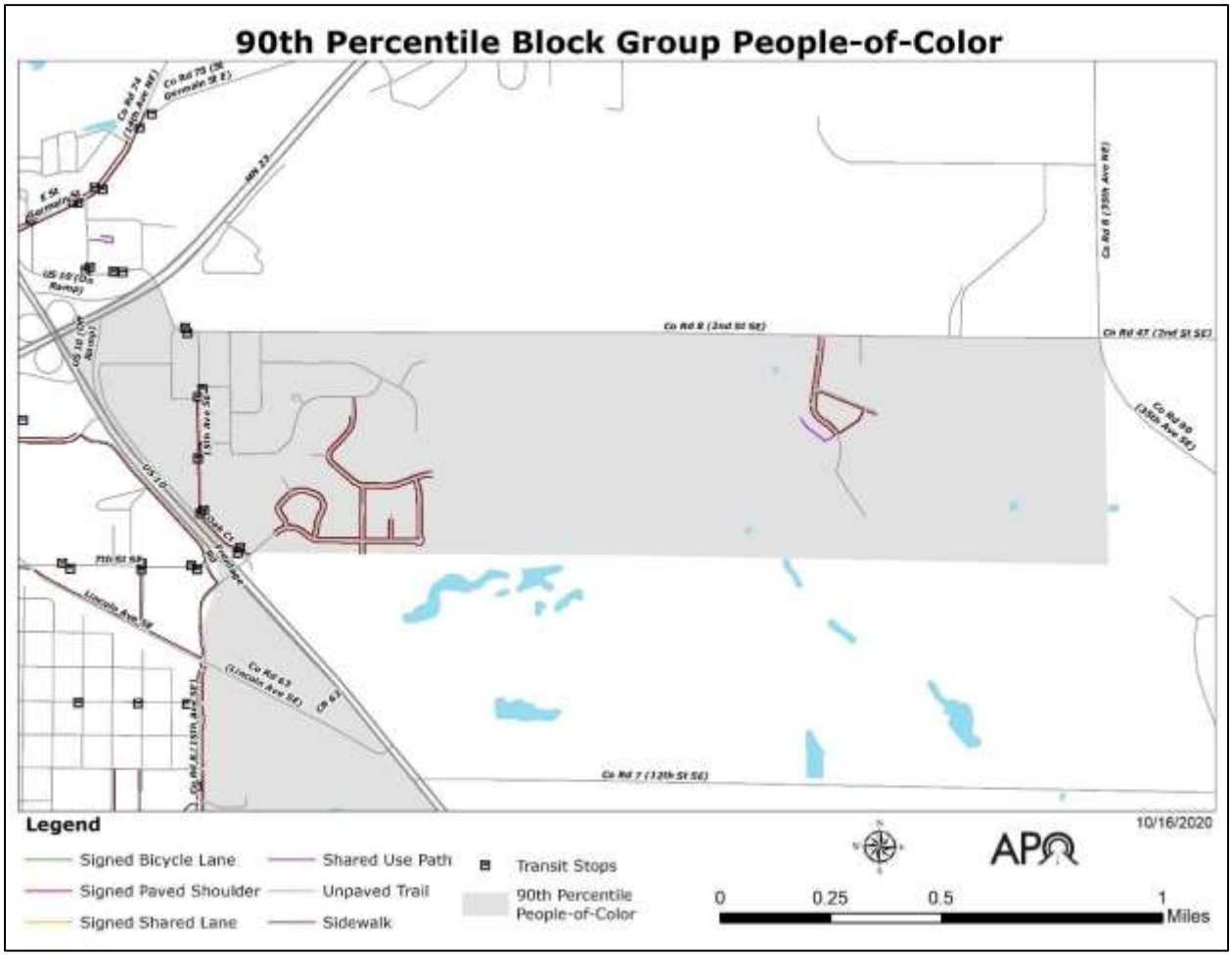


FIGURE 3.3 – MAP OF AN EAST SAINT CLOUD BLOCK GROUP WITH A LARGE CONCENTRATION OF PEOPLE-OF-COLOR AND THE LOCATION OF ACTIVE TRANSPORTATION FACILITIES.

In Waite Park, a lack of facilities is apparent along Sundial Drive – a roadway with several transit stops and employers. There is also a lack of active transportation facilities in the neighborhoods south of Discovery Community School (west of Second Avenue S). Residents in this area also have at least a half-mile trip to the nearest transit stops along County Road 137 (Seventh Street S), with Second Avenue S being the only north-south connector with active transportation facilities for this neighborhood.

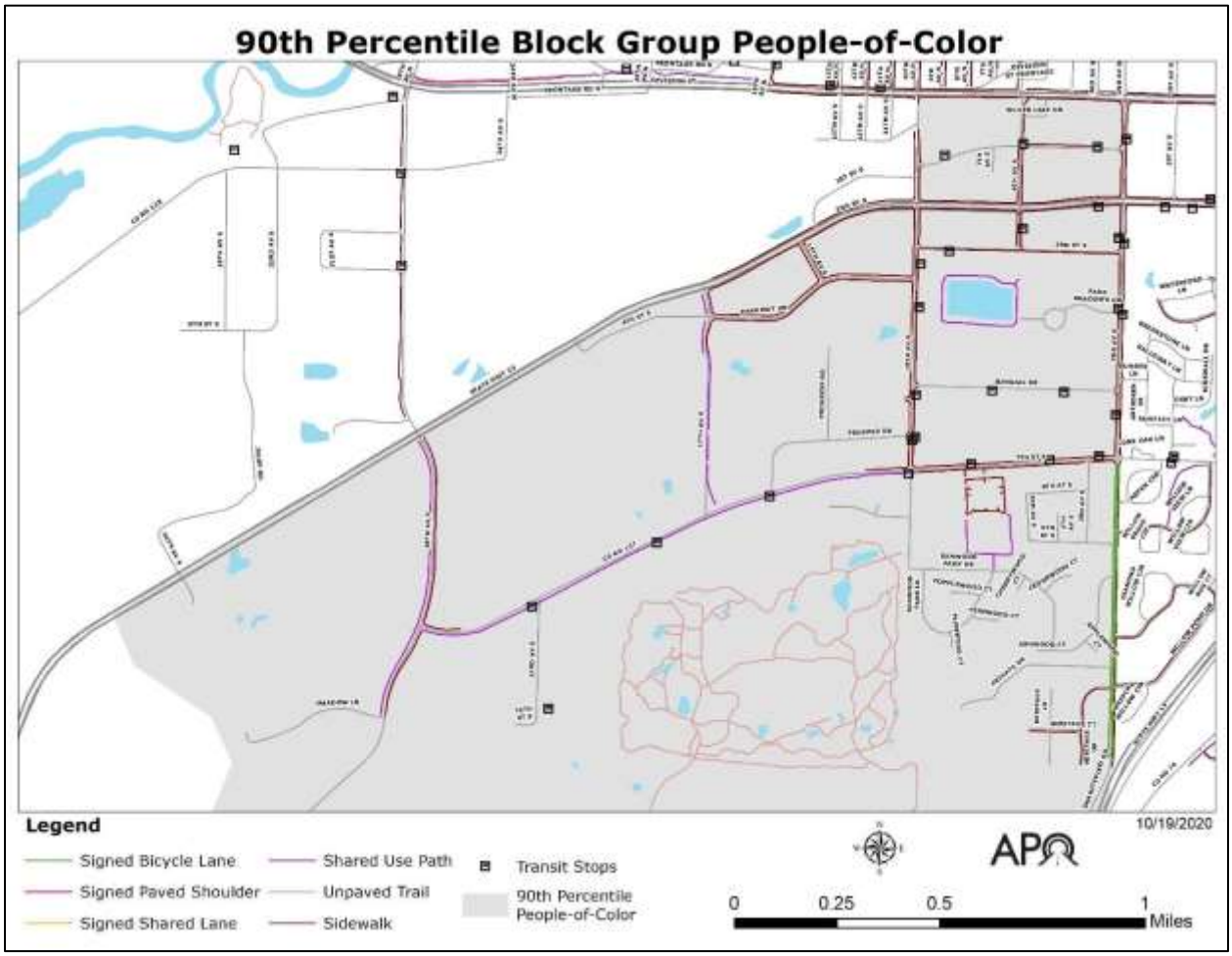


FIGURE 3.4 – MAP OF A WAITE PARK BLOCK GROUP WITH A LARGE CONCENTRATION OF PEOPLE-OF-COLOR AND THE LOCATION OF ACTIVE TRANSPORTATION FACILITIES.

LOW-INCOME POPULATIONS

According to the U.S. Census Bureau's 2014-2018 ACS Five Year Estimates, there are 52,390 households within the APO's MPA. Of that, approximately 14.8% of households are low-income.

In comparison to the 2006-2010 ACS Five Year Estimates, the number of households in poverty has dipped slightly in the MPA—down 0.9 percentage points or 5.7%.

APO MPA	2006-2010 ACS Population Estimates	2014-2018 ACS Population Estimates	Percent Change
Total Household Population	49,628	52,390	5.6%
Low-Income Households	7,807	7,756	-0.7%
Percent of Household Population with Low Income	**15.7%**	**14.8%**	**-5.7%**

FIGURE 3.5 – A COMPARISON OF HOUSEHOLDS WITH LOW INCOME WITHIN THE SAINT CLOUD MPA BETWEEN 2010 AND 2018.

DATA COURTESY OF U.S. CENSUS BUREAU, 2006-2010 ACS FIVE YEAR ESTIMATES AND U.S. CENSUS BUREAU, 2014-2018 ACS FIVE YEAR ESTIMATES.

In comparison to its respective total household population, the City of Saint Cloud has the highest percentage of low-income households (19.6% of all total households). Within the planning areas, block groups with a high percentage of low-income households are primarily concentrated around:

- Saint Cloud State University (south of MN 23) along the Mississippi River.
- Downtown Saint Cloud extending just north of Veterans Drive (Eighth Street N/Stearns CSAH 4).
- East Saint Cloud between 15th Avenue SE (Sherburne CSAH 8) and US 10 near Talahi Community School.

Generally, residential and commercial areas within these block groups are served by active transportation. However, it is noted that there is no active transportation facility access to the Northstar Park and Ride along Lincoln Avenue SE (Sherburne County Road 63). This Park and Ride serve as a connection between the Northstar Link Commuter Bus and the Northstar Commuter Rail service in Big Lake.

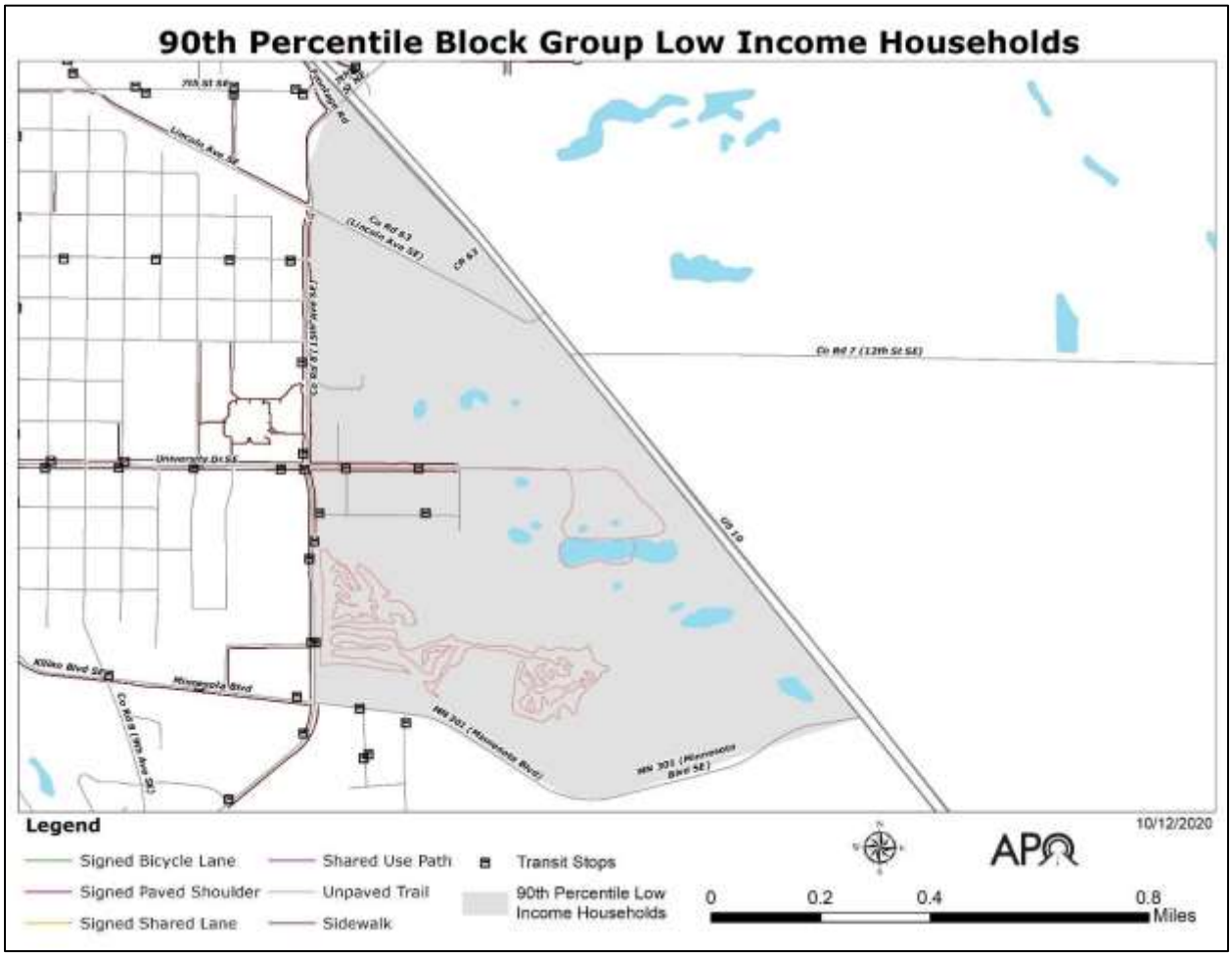


FIGURE 3.6 – MAP OF AN EAST SIDE SAINT CLOUD BLOCK GROUP WITH A LARGE CONCENTRATION OF LOW-INCOME HOUSEHOLDS AND THE LOCATION OF ACTIVE TRANSPORTATION FACILITIES.

PEOPLE WITH DISABILITIES

In determining the population of people with disabilities, the U.S. Census Bureau excludes what they have defined as "institutionalized" populations. The U.S. Census Bureau defines institutionalized populations as persons living in military installations, correctional and penal institutions, dormitories of schools and universities, religious institutions, and hospitals.

The Saint Cloud MPA has a non-institutionalized population of 133,102 according to the 2014-2018 ACS Five Year Estimates. Of that population, approximately 11.6% of individuals identified as having a disability. Due to a lack of 2010 Census information, a comparison cannot be made between the 2010 and 2018 populations.

Among jurisdictions within the APO's planning area, Haven Township reports the most significant percentage of its non-institutionalized population identifying as having a disability (14.2%). This is followed by the City of Waite Park (13.4%) and the City of Sauk Rapids (13.3%).

The data needed to map this population subset was not accessible to APO staff via the U.S. Census Bureau. Therefore, no map is available that reflects a block group location of people

with disabilities within the MPA within Haven Township and the cities of Waite Park and Sauk Rapids.

The 2013-2017 ACS Five Year Estimates is the most recent data set with mappable capabilities available to APO staff. This information, however, is mapped based upon Census Tract data which tends to cover a larger geographic area.

Based upon this information, areas with larger concentrations of people with disabilities include:

- Saint Cloud's Pantown Neighborhood.
- Portions of the City of Sauk Rapids south of CSAH 3 (Second Street N) between the Mississippi River and CSAH 1 (Mayhew Lake Road).
- In the residential areas between North Benton Drive (County Road 33) and CSAH 1 (Mayhew Lake Road) in Sartell/Sauk Rapids.

Notable active transportation system gaps are present in Saint Cloud's Pantown Neighborhood. Examples of this can be seen in the residential areas between Veterans Drive (CSAH 4/Eighth Street N) and 12th Street N, where no north/south connections are present. Connections are also missing in neighborhoods south of Madison Elementary School in the neighborhoods between 29th Avenue N and 25th Avenue N. West of MN 15 shows a lack of active transportation facilities surrounding bus stops throughout the industrial corridor just south of Veterans Drive (CSAH 4/Eighth Street N).

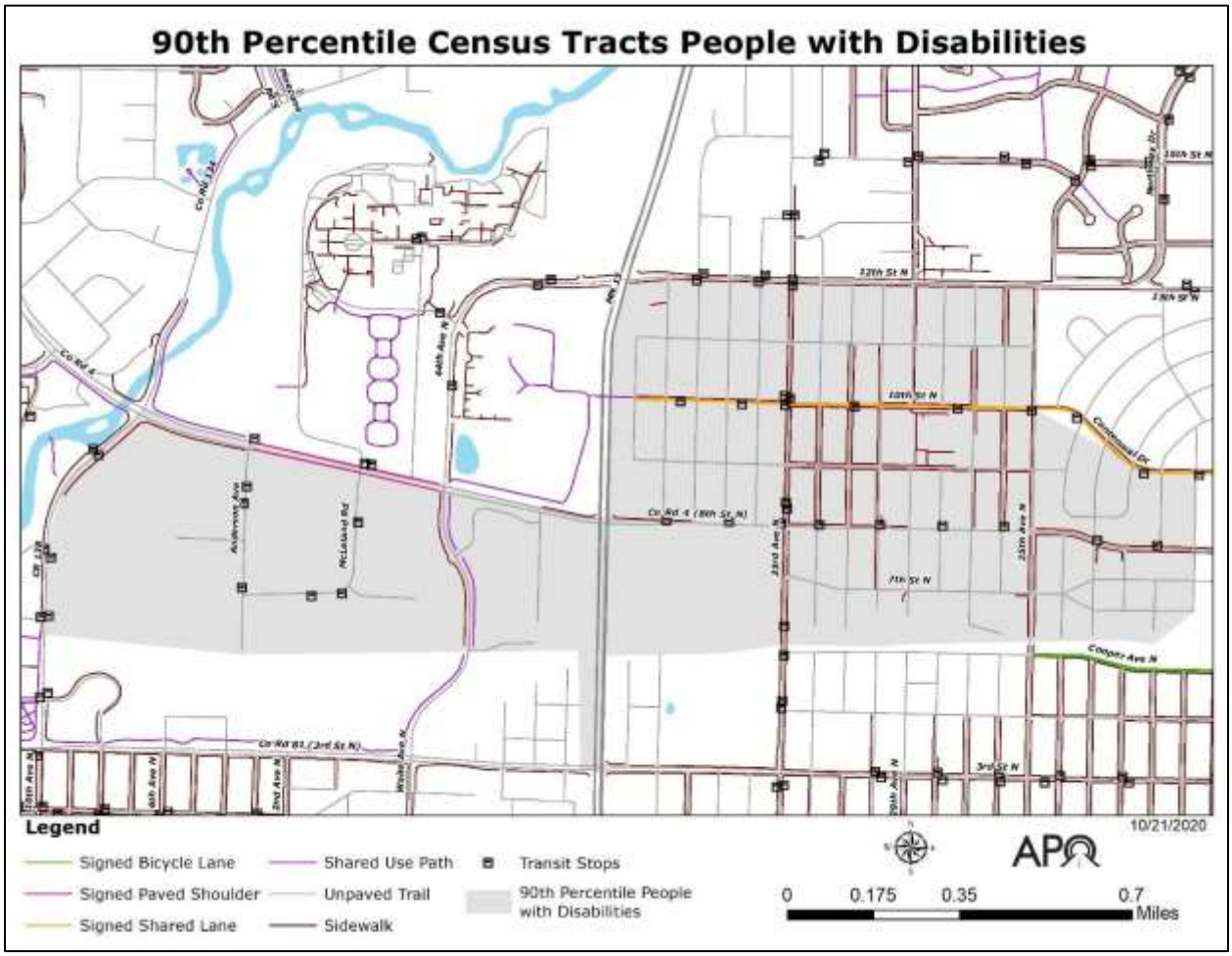


FIGURE 3.7 – MAP OF A SAINT CLOUD CENSUS TRACT WITH A LARGE CONCENTRATION OF PEOPLE WITH DISABILITIES AND THE LOCATION OF ACTIVE TRANSPORTATION FACILITIES.

Within the City of Sauk Rapids, while areas surrounding the downtown commercial centers are adequately served with active transportation infrastructure, residential areas west of US 10 lack sidewalks access, particularly in connections to three schools – Hillside Early Childhood Center, Sauk Rapids-Rice Middle School, and Mississippi Heights Elementary. North/south corridors like Summit Avenue (south of First Street S) and east/west corridors like Fifth Street S (which provides a connection across US 10) lack sidewalks and bicycle infrastructure but do have transit stops. East of US 10, a notable infrastructure gap includes Industrial Boulevard in which transit stops are present; however, there is a lack of other supporting active transportation infrastructure.

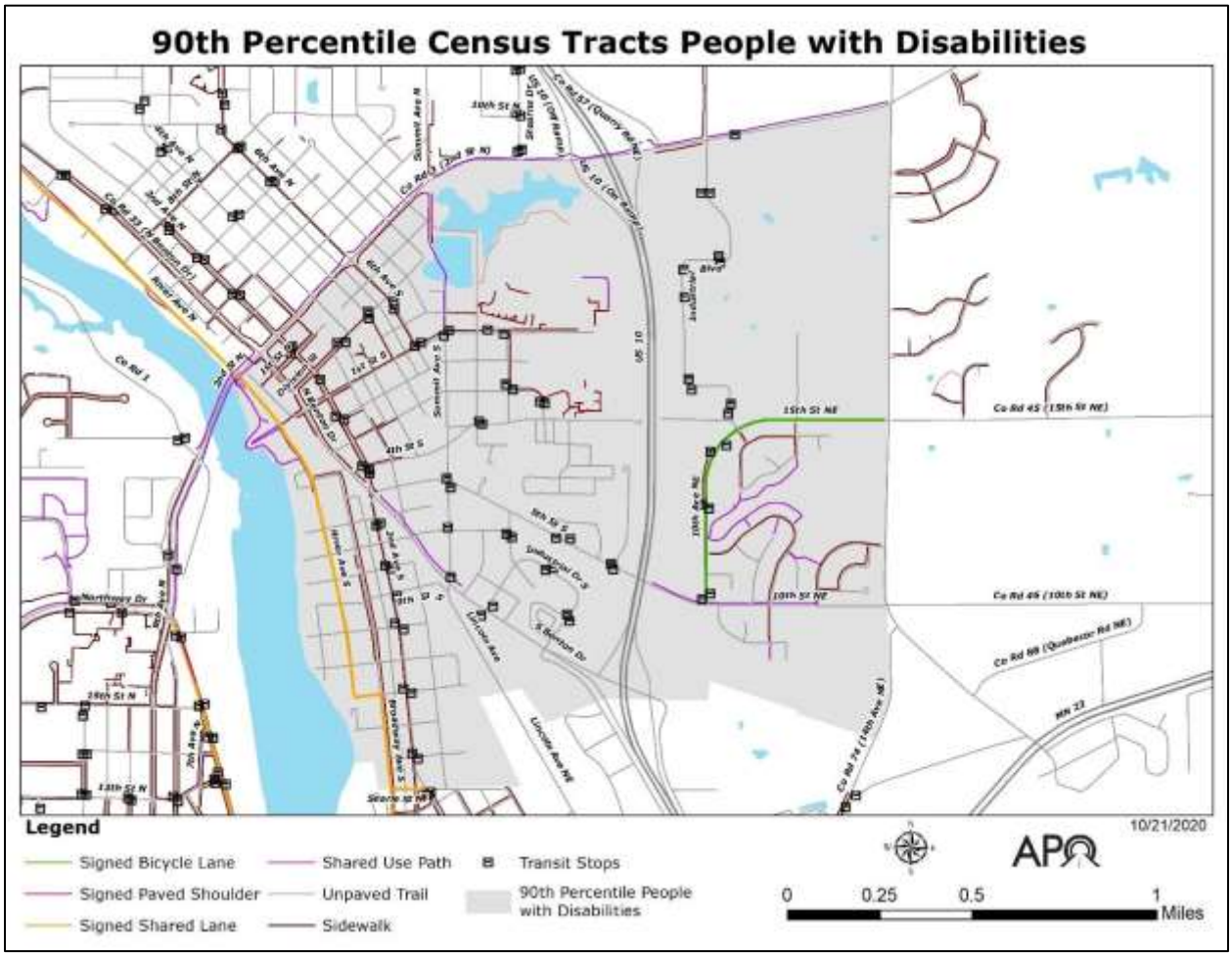


FIGURE 3.8 – MAP OF A SAUK RAPIDS CENSUS TRACT WITH A LARGE CONCENTRATION OF PEOPLE WITH DISABILITIES AND THE LOCATION OF ACTIVE TRANSPORTATION FACILITIES.

LANGUAGES SPOKEN

Out of the 52,390 households within the Saint Cloud MPA, approximately 89.1% are English-only speaking households. From the remaining 10.9% of households within the MPA that have languages other than English spoken in the home, approximately 2.8% are households that have limited English speaking skills according to the 2014-2018 ACS Five Year Estimates. Due to a lack of 2010 Census information, a comparison cannot be made between the 2010 and 2018 populations.

Among jurisdictions within the APO's planning area, the City of Saint Cloud reports the largest percentage of its households having limited English-speaking skills (4.6%). Block groups with larger concentrations of limited English-speaking households include:

- Areas around Saint Cloud State University.
- Along the MN 23 corridor between the Mississippi River and US 10.
- Portions of Saint Cloud just west of MN 15 and south of CSAH 75.
- Around Westwood Elementary School in north Saint Cloud.

While most of these residential areas with large concentrations of LEP households are serviced with active transportation facilities – primarily sidewalks on one or both sides of the roadway – certain areas, particularly in the Westwood neighborhood, lack direct access to school. This has resulted in visible footpaths – or desire lines – connecting people to this destination.

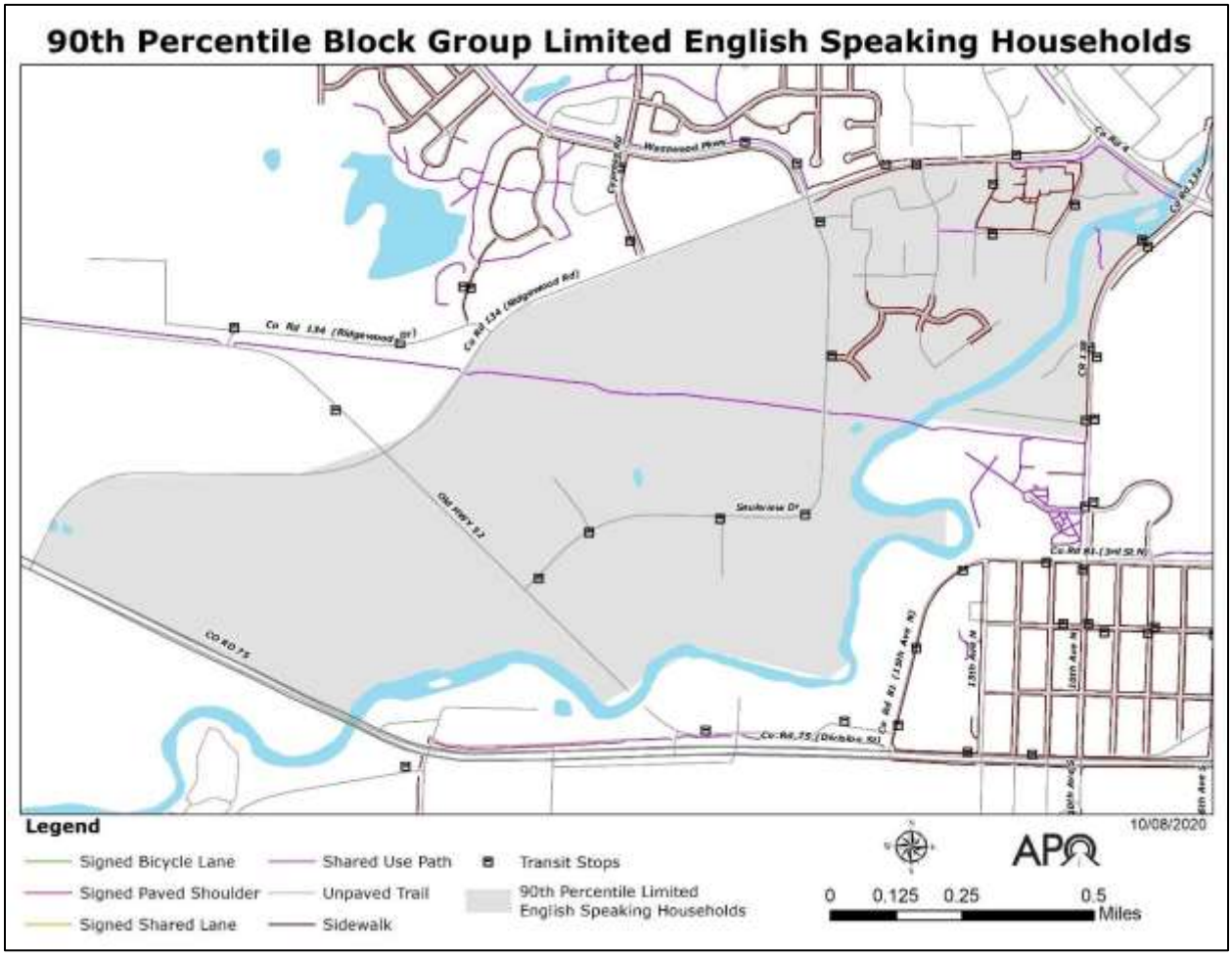


FIGURE 3.9 – MAP OF A NORTHSIDE SAINT CLOUD BLOCK GROUP WITH A LARGE CONCENTRATION OF LIMITED ENGLISH-SPEAKING HOUSEHOLDS AND THE LOCATION OF ACTIVE TRANSPORTATION FACILITIES.

In East Saint Cloud, active transportation facilities lack north of East Saint Germain Street between the railroad tracks and US 10. Much of this area includes industrial businesses, although some commercial businesses such as a gas station can be found along Franklin Avenue NE.

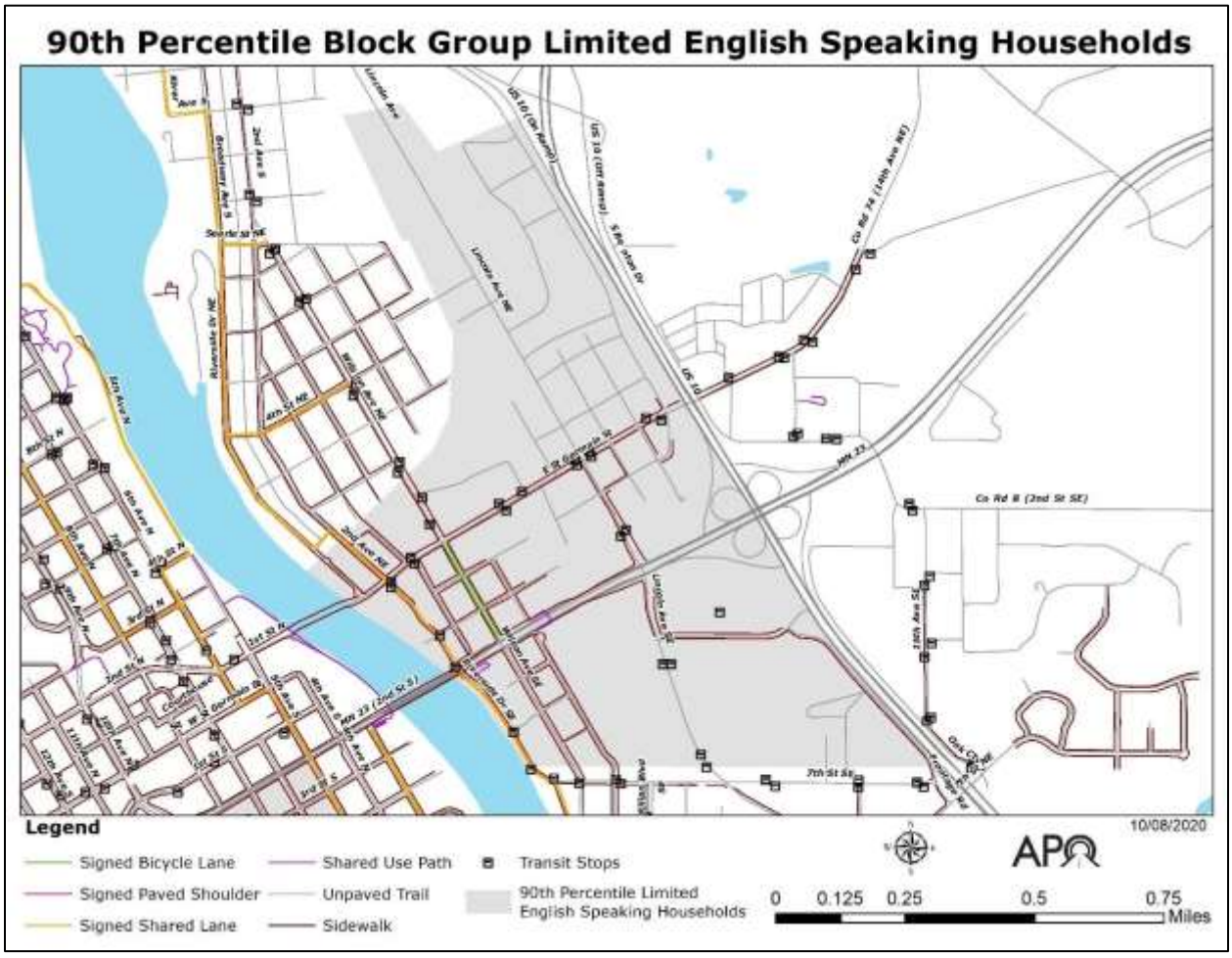


FIGURE 3.10 – MAP OF AN EAST SIDE SAINT CLOUD BLOCK GROUP WITH A LARGE CONCENTRATION OF LIMITED ENGLISH-SPEAKING HOUSEHOLDS AND THE LOCATION OF ACTIVE TRANSPORTATION FACILITIES.

ZERO VEHICLE HOUSEHOLDS

According to the 2014-2018 ACS Five Year Estimates, approximately 6.9% of households within the MPA do not have access to a personal vehicle. This percentage has remained constant since 2010 (according to the 2006-2010 ACS Five Year Estimates).

APO MPA	2006-2010 ACS Population Estimates	2014-2018 ACS Population Estimates	Percent Change
Total Household Population	49,628	52,390	5.6%
Zero Vehicle Households	3,446	3,621	5.1%
Percent of Zero Vehicle Household Population	**6.9%**	**6.9%**	**0.0%**

FIGURE 3.11 – A COMPARISON OF ZERO VEHICLE HOUSEHOLDS WITHIN THE SAINT CLOUD MPA BETWEEN 2010 AND 2018.

DATA COURTESY OF U.S. CENSUS BUREAU, 2006-2010 ACS FIVE YEAR ESTIMATES AND U.S. CENSUS BUREAU, 2014-2018 ACS FIVE YEAR ESTIMATES.

Block groups with larger concentrations of zero vehicle households can be found:

- Around Westwood Elementary School in north Saint Cloud.
- In Saint Cloud's Pantown Neighborhood between Third Street N and the railroad tracks.
- Around downtown Saint Cloud.
- In the neighborhoods surrounding Whitney Park and Saint Cloud Technical and Community College (SCTCC).
- In the residential areas of Saint Cloud south of Centennial Drive between 20th Avenue N and Ninth Avenue N.
- East Saint Cloud between 15th Avenue SE (Sherburne CSAH 8) and US 10 near Talahi Community School.

While each of these block groups has access to active transportation facilities, gaps in the network exist in certain residential areas.

For example, the residential area south of Centennial Drive is adequately served with north-south sidewalk connections throughout most of the block group. However, key east-west connections along Seventh Street N (providing service to several apartment complexes) and 10th Street N are missing.

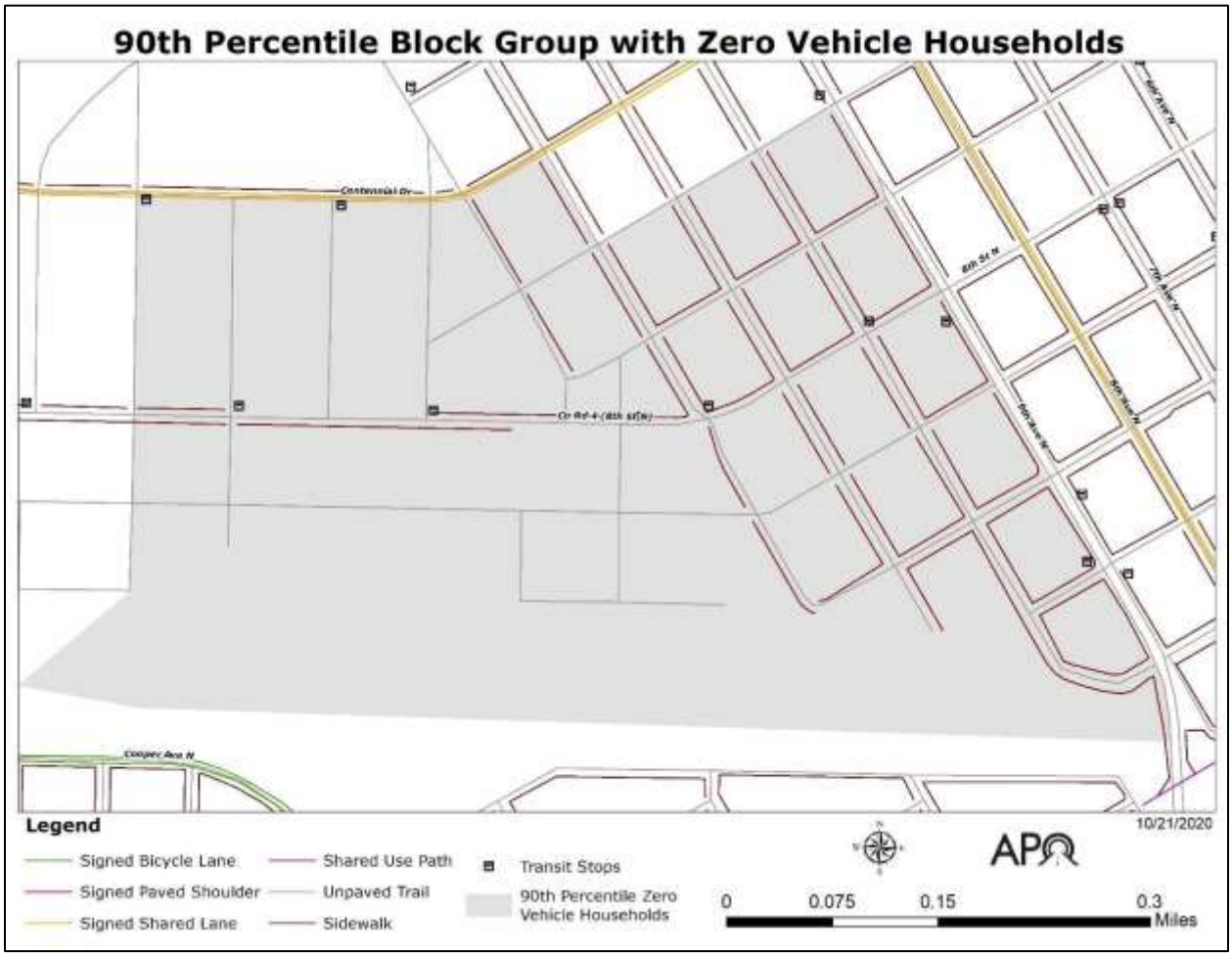


FIGURE 3.12 – MAP OF A NORTH SAINT CLOUD BLOCK GROUP WITH A LARGE CONCENTRATION OF ZERO VEHICLE HOUSEHOLDS AND THE LOCATION OF ACTIVE TRANSPORTATION FACILITIES.

And while areas surrounding SCTCC, Whitney Senior Center, and the Saint Cloud Area Family YMCA have active transportation infrastructure present, connections to areas like Catholic Charites of the Diocese of St. Cloud and St. Cloud Math and Science Academy are missing. In addition, several transit stops within the block group, including the transit stop on Stearns CR 120 near Shady Oaks Park and the stops near the intersection of CSAH 1 and 321st Street, do not have sidewalk access.

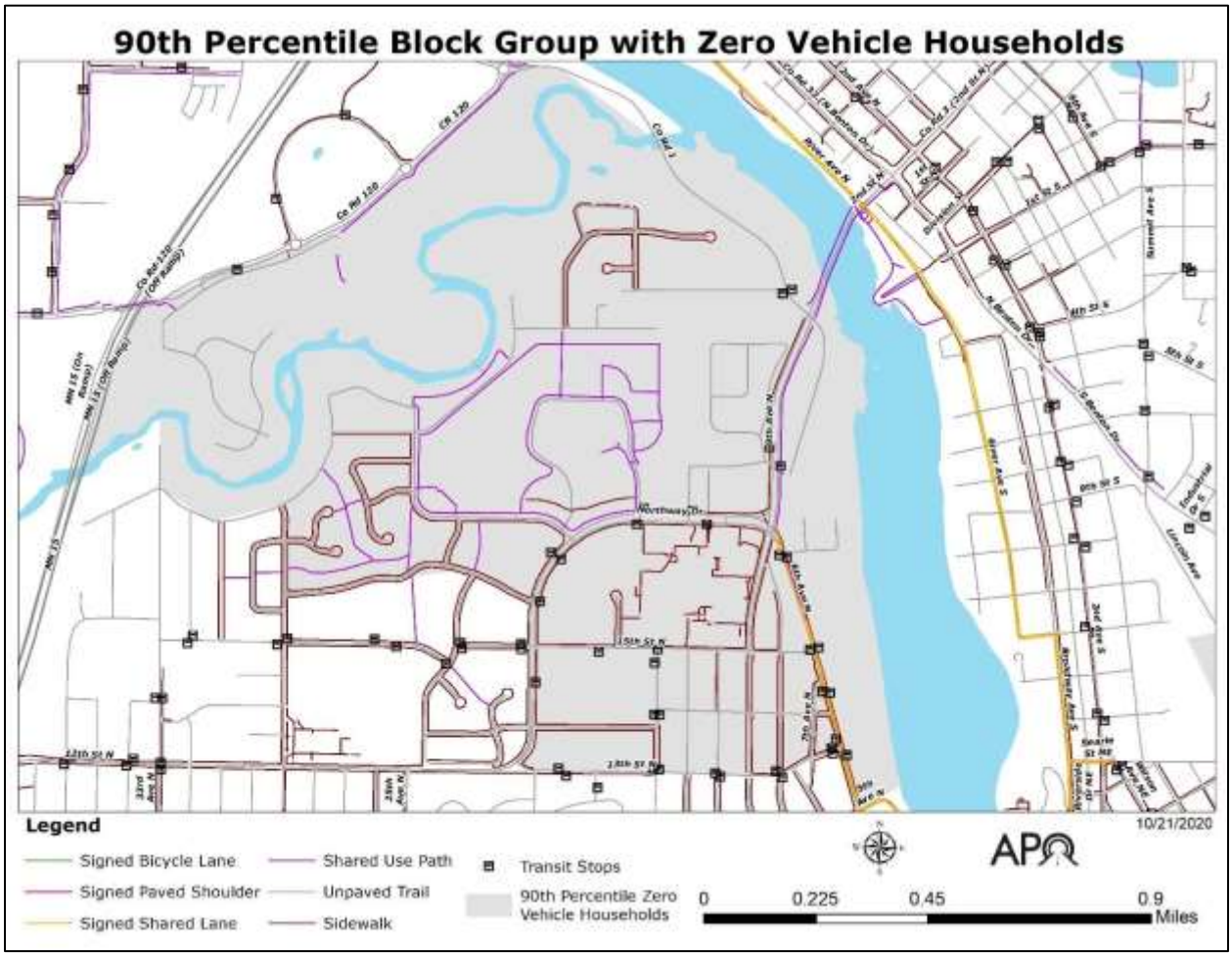


FIGURE 3.13 – MAP OF A NORTH SAINT CLOUD BLOCK GROUP WITH A LARGE CONCENTRATION OF ZERO VEHICLE HOUSEHOLDS AND THE LOCATION OF ACTIVE TRANSPORTATION FACILITIES.

PERSONS AGE 65 AND OLDER

According to the 2014-2018 ACS Five Year Estimates, approximately one in 10 people within the Saint Cloud MPA are age 65 and older (12.7%). This is an increase of 2 percentage points (18.7%) from the 2010 Census.

Block groups with larger concentrations of persons over the age of 65 can be found:

- Around Kraemer Lake south of the Stearns CSAH 2/I-94 interchange in Saint Joseph Township.
- Surrounding Crossroads Center and heading south between Second Avenue and MN 15 in Saint Cloud/Waite Park.
- Near the Saint Cloud Veterans Administration (VA) Health Care Center in Saint Cloud.
- In the neighborhoods surrounding Whitney Park and Saint Cloud Technical and Community College.
- In the residential area surrounding Centennial Park in Saint Cloud.

- South of Minnesota Boulevard/MN 301 near Saint Benedict's Community/Saint Scholastica Convent in Saint Cloud.
- In the residential areas between North Benton Drive (County Road 33) and US 10 in Sartell.

APO MPA	2010 Census Population	2014-2018 ACS Population Estimates	Percent Change
Total Population	130,225	135,441	4.0%
Persons Age 65 and Older	13,943	17,156	23.0%
Percent of Population Age 65 and Older	**10.7%**	**12.7%**	**18.7%**

FIGURE 3.14 – A COMPARISON OF THE PERSONS AGE 65 AND OLDER POPULATIONS WITHIN THE SAINT CLOUD MPA BETWEEN 2010 AND 2018.

DATA COURTESY OF U.S. CENSUS BUREAU, CENSUS 2010 AND US. CENSUS BUREAU, 2014-2018 AMERICAN COMMUNITY SURVEY FIVE-YEAR ESTIMATES.

A couple of these block groups – Kraemer Lake in Saint Joseph Township and Centennial Park in Saint Cloud – have virtually no active transportation facilities present.

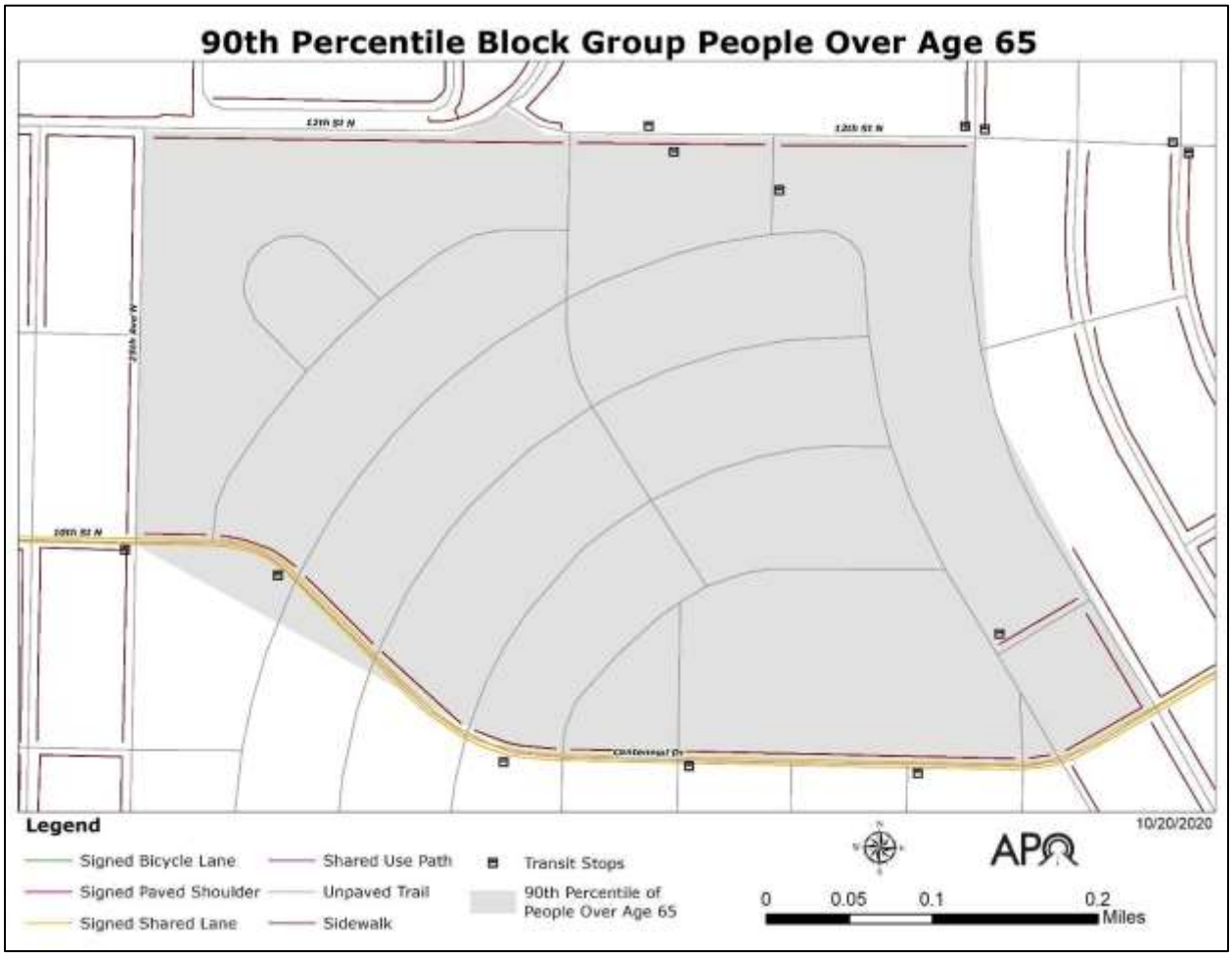


FIGURE 3.15 – MAP OF A NORTH SAINT CLOUD BLOCK GROUP WITH A LARGE CONCENTRATION OF PEOPLE OVER AGE 65 AND THE LOCATION OF ACTIVE TRANSPORTATION FACILITIES.

In Sartell, aside from active transportation facilities along First Street NE (Benton County Road 29), most residential areas in this block group lack access to facilities – including transit access north of Sixth Street NE.

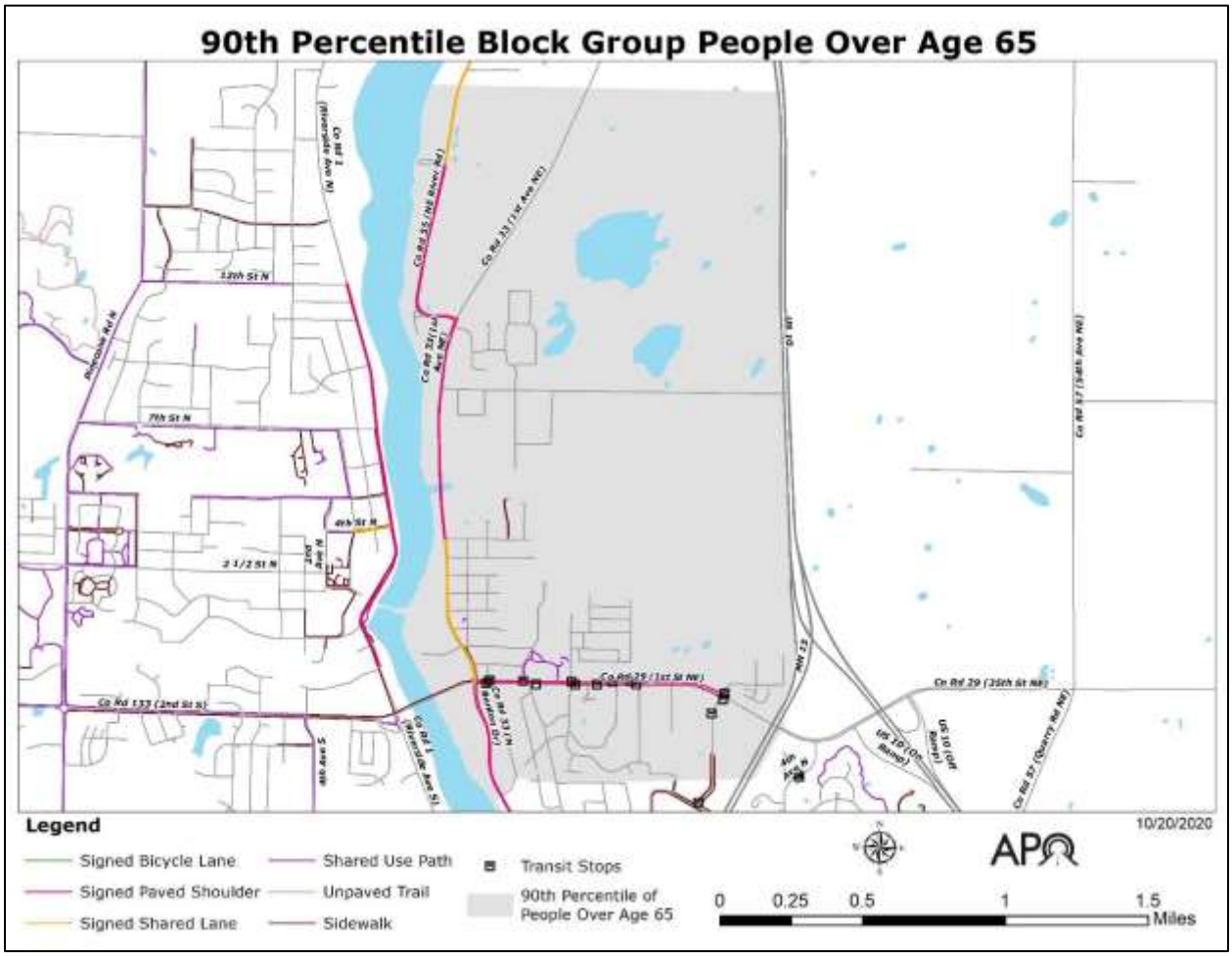


FIGURE 3.16 – MAP OF A SAUK RAPIDS BLOCK GROUP WITH A LARGE CONCENTRATION OF PEOPLE OVER AGE 65 AND THE LOCATION OF ACTIVE TRANSPORTATION FACILITIES.

PERSONS AGE 18 AND YOUNGER

According to the 2014-2018 ACS Five Year Estimates, approximately one in five (22.2%) people residing within the MPA are 18 and younger. This percentage has remained relatively consistent between 2010 and 2018.

Large concentrations of persons age 18 and younger can be found:

- In Saint Cloud's Pantown Neighborhood.
- Around Saint Cloud State University.
- Near Saint Cloud's Territory Golf Club south of MN 23 and east of 35th Avenue NE/Benton CSAH 8.
- In the neighborhoods along 10th Avenue NE in the City of Sauk Rapids.
- Along areas of Pinecone Road N in Sartell.
- In Saint Joseph, north of CSAH 75 and west of College Avenue S.

APO MPA	2010 Census Population	2014-2018 ACS Population Estimates	Percent Change
Total Population	130,225	135,441	4.0%
Persons Age 18 and Younger	28,536	30,027	5.2%
Percent of Population Age 18 and Younger	**21.9%**	**22.2%**	**1.4%**

FIGURE 3.17 – A COMPARISON OF THE PERSONS AGE 18 AND YOUNGER POPULATION WITHIN THE SAINT CLOUD MPA BETWEEN 2010 AND 2018.

DATA COURTESY OF U.S. CENSUS BUREAU, CENSUS 2010 AND US. CENSUS BUREAU, 2014-2018 AMERICAN COMMUNITY SURVEY FIVE-YEAR ESTIMATES.

Active transportation infrastructure is relatively common within newer developments such as those along 10th Avenue NE in Sauk Rapids and the community surrounding Saint Cloud's Territory Golf Club. However, access to transit is limited (in the case of Sauk Rapids) or non-existent (in the case of Territory Golf Club).

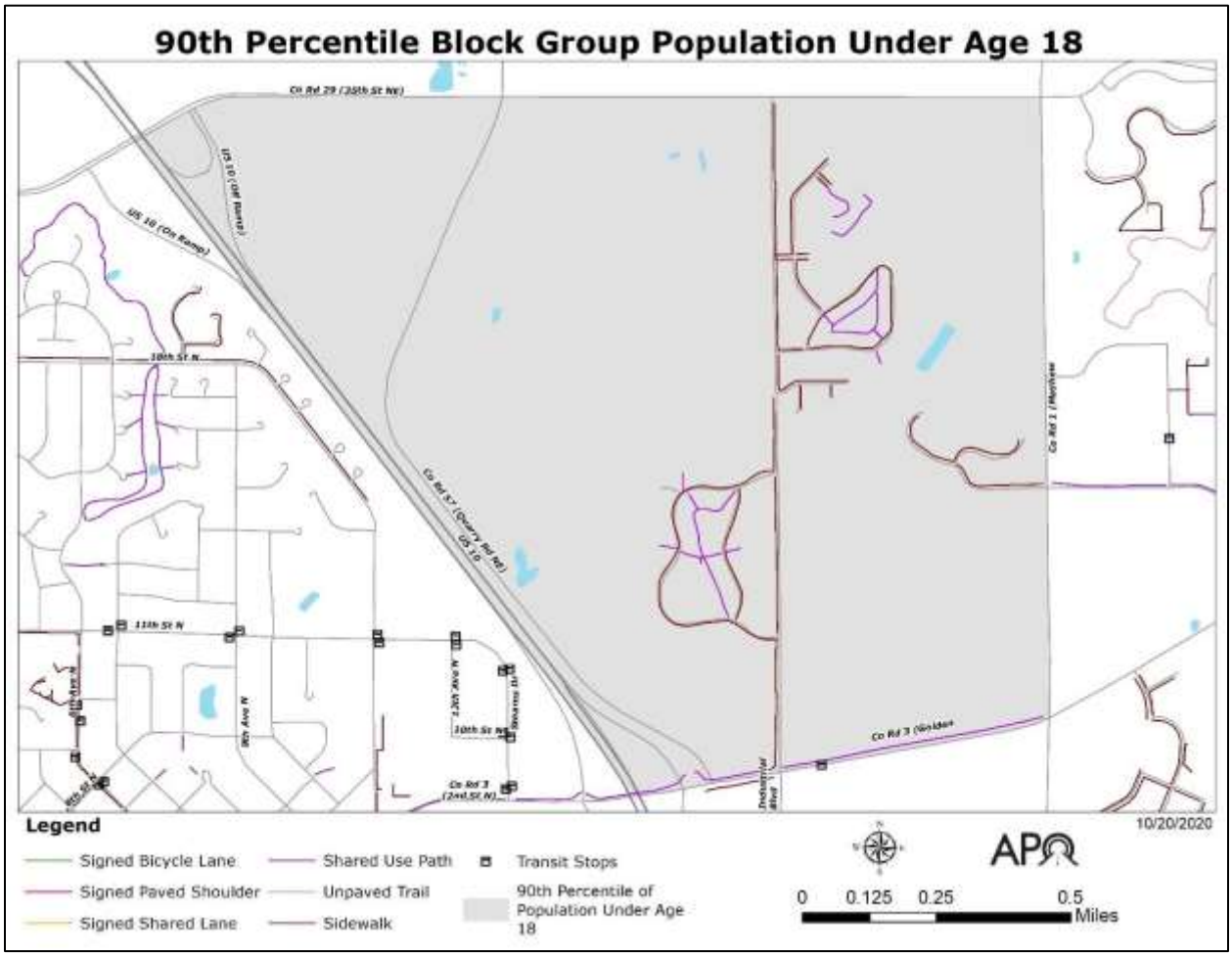


FIGURE 3.18 – MAP OF A SAUK RAPIDS BLOCK GROUP WITH A LARGE CONCENTRATION OF PEOPLE UNDER AGE 18 AND THE LOCATION OF ACTIVE TRANSPORTATION FACILITIES.

In Sartell, it is essential to note the lack of active transportation infrastructure to the Sartell-Saint Stephen High School along Pinecone Road N.

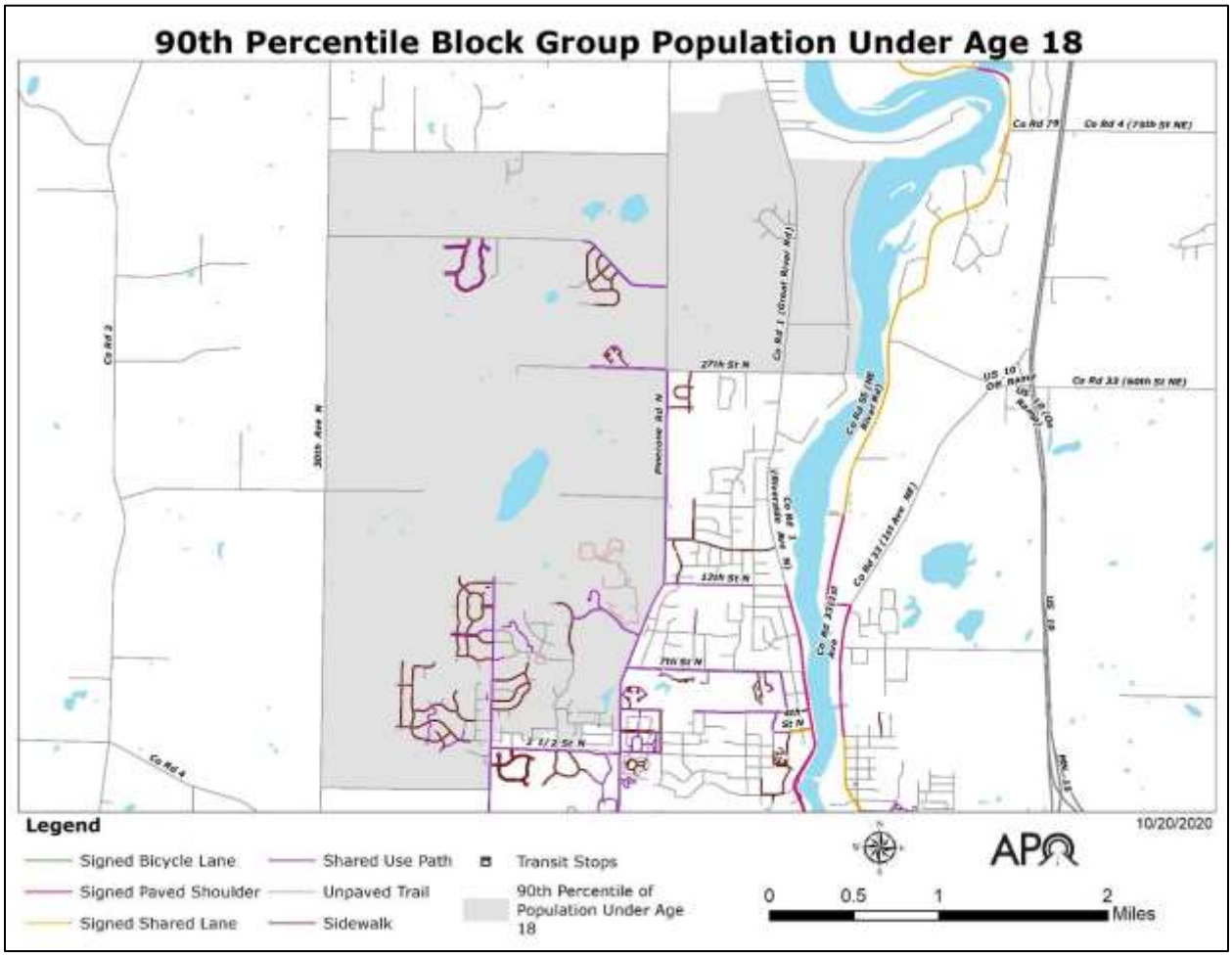


FIGURE 3.19 – MAP OF A SARTELL BLOCK GROUP WITH A LARGE CONCENTRATION OF PEOPLE UNDER AGE 18 AND THE LOCATION OF ACTIVE TRANSPORTATION FACILITIES.

For Saint Joseph, while the Lake Wobegon Trail does run through some residential areas of the city, residential access to this facility is lacking in neighborhoods to the north and south of CSAH 75.

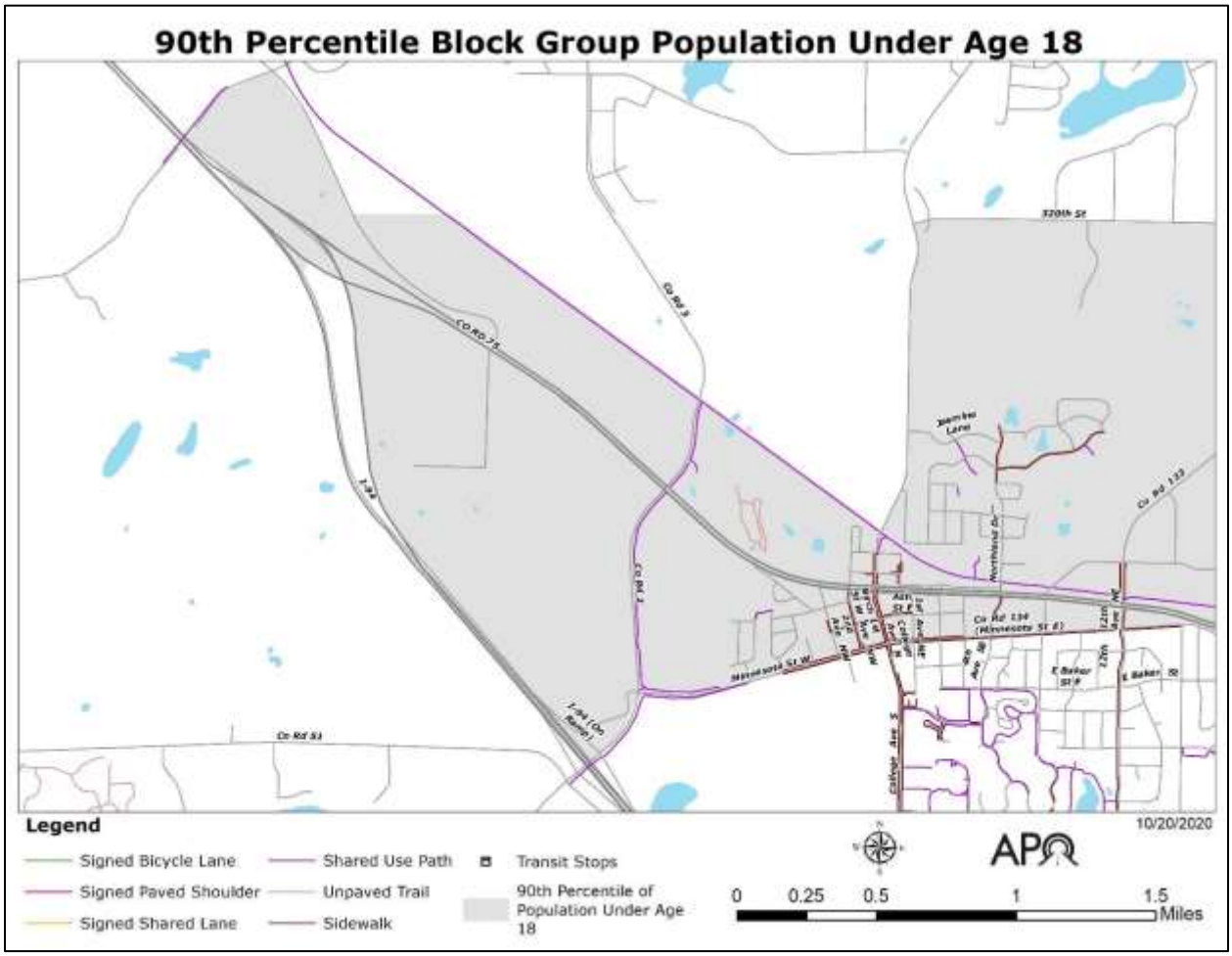


FIGURE 3.20 – MAP OF A SAINT JOSEPH BLOCK GROUP WITH A LARGE CONCENTRATION OF PEOPLE UNDER AGE 18 AND THE LOCATION OF ACTIVE TRANSPORTATION FACILITIES.

WHO IS AN ACTIVE TRANSPORTATION USER?

All people are, to some degree, users of the active transportation system. Whether it's walking to the nearest transit stop, biking for exercise, or even walking across a parking lot to a place of business, most people at some point rely on active transportation.

However, the extent to which people use non-motorized transportation varies. Some have a greater need for connected facilities to get from place to place. Others require a higher degree of comfort (i.e., safety) to use these facilities.

As stated in Chapter 1, the ATP intends to make using active transportation safer and more convenient for everyone.

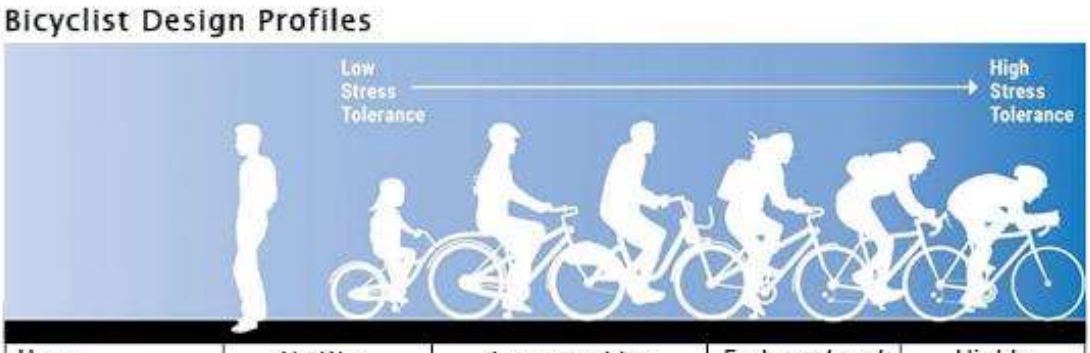
TYPES OF PEOPLE WHO RIDE BICYCLES

Generally, people's attitude toward cycling can be thought of as belonging to one of four categories: Strong and Fearless (Highly Confident); Enthused and Confident (Somewhat Confident); Interested but Concerned; and No Way, No How. Developed by Roger Geller

with the Portland Office of Transportation (https://bit.ly/3J9RyJf) and supported by research, these four attitudes are based on a person's comfort and willingness to bicycle. According to supporting research by the Minnesota Bicycle Facilities Design Manual (https://bit.ly/320vrR1), between one-quarter and one-third of the population has no interest in bicycling, regardless of the comfort level of a given facility (the No Way, No How user). Of the remaining portion of the population, most people who cycle fall into the interested but concerned category. Figure 3.21 further defines the remaining three types of cyclists and the percentage of the "interested in bicycling" population that falls into these categories.

Type of Person Who Bicycles	Definition	Percentage of the Interested in Bicycling Population
Strong and Fearless (Highly Confident)	This group is willing to ride a bicycle on any roadway regardless of traffic conditions. They are comfortable taking the lane and riding in a vehicular manner on major streets without designated bicycle facilities.	4-7%
Enthused and Confident (Somewhat Confident)	This group of bicyclists is willing to ride in most roadway situations but prefer to have a designated facility. They are comfortable bicycling on major streets with striped or separated bike lanes on low-volume residential streets. They are willing to tolerate moderate levels of stress for a short distance to complete trips or avoid out-of-direction travel.	5-9%
Interested but Concerned	This group is more cautious and has some inclination towards bicycling but is held back by concern over sharing the road with motor vehicles. They avoid bicycling except where they have access to bicycle facilities separated from motor vehicles or low-traffic neighborhood streets with safe roadway crossing.	51-56%

FIGURE 3.21 – THE THREE TYPES OF PEOPLE WHO CYCLE.
INFORMATION COURTESY OF MNDOT'S 2020 MINNESOTA BICYCLE FACILITIES DESIGN MANUAL.



User Profile	No Way, No How	Interested but Concerned	Enthused and Confident	Highly Confident
Percentage of General Public	28–40	51–56	5–9	4–7

FIGURE 3.22 – A GRAPHIC OF THE FOUR TYPES OF PEOPLE WHO CYCLE.

During the first round of public engagement for the ATP, APO staff had asked members of the public via an online survey on their bicycle level of confidence. This was not a random sample survey, so it is unclear the extent the comments received are representative of the APO's planning area.

That said, out of the 127 responses received, a majority (53.5%) fall into the "Enthused but Confident (Somewhat Confident)" category, indicating they prefer separated shared use paths but will ride on some roads where space is available and traffic is manageable. The remaining results indicate a preference for local streets and separated shared use paths with few crossings (23.6%), followed by confidence in riding with traffic on the roadway (17.3%). Approximately 5.5% of respondents are a "No Way, No How" type bicyclist.

PEDESTRIANS

A pedestrian is someone who either:

- Travels without assistance (such as walking).
- Needs and/or uses assistive devices to get around (i.e., a wheelchair, stroller, skateboards, rollerblades, scooters, etc.).

During the early public input period for the ATP, APO staff had asked members of the public during a typical week (weather permitting) how many days a week they walk one or more blocks. The results of this self-selected survey indicated that a majority of respondents (86.5%) walk more than three blocks a week.

HOW DO THEY TRAVEL?

With approximately 135,000 people living within the Saint Cloud MPA, it is vital to understand how those individuals get from one place to another. When it comes to commuting, MPA residents rely heavily on motor vehicles. According to the 2014-2018 ACS

Five Year Estimates, approximately 88.5% of the population over age 16 uses a car, truck, or van to get to and from work.

It should be noted that the ACS question when it comes to commuting by mode choice asks participants: "How did you usually get to work LAST WEEK?"

Even still, approximately 6.2% of the population age 16 and older rely on active transportation – biking, walking, or public transit – for work.

MPA	2006-2010 ACS Five Year Population Estimates	2014-2018 ACS Five Year Population Estimates	Percent Change
Bicycle Commute Trips	0.6%	0.7%	16.7%
Walking Commute Trips	3.6%	3.6%	0.0%
Public Transportation Commute Trips	1.7%	1.9%	11.8%
Total Commute Trips Using Active Transportation Modes	**5.9%**	**6.2%**	**5.1%**

FIGURE 3.23: THE PERCENTAGE OF WORK TRIPS IN THE MPA TAKEN USING ACTIVE TRANSPORTATION.
DATA COURTESY U.S. CENSUS 2006-2010 AMERICAN COMMUNITY SURVEY FIVE YEAR ESTIMATES AND 2014-2018 ACS FIVE YEAR ESTIMATES.

According to the respective ACS Five Year Estimates, active transportation modes for commuting have grown by 5.1% between 2010 and 2018. However, this affects a relatively small subsection of the population. In comparison to other modes over this timeframe, active transportation has seen the largest percentage growth.

MPA	2006-2010 ACS Five Year Population Estimates	2014-2018 ACS Five Year Population Estimates	Percent Change
Car, Truck, or Van Commute Trips	88.3%	88.5%	**0.2%**
Taxicab Commute Trips	0.0%	0.3%	**N/A**
Motorcycle Commute Trips	0.2%	0.1%	**-50.0%**
Other Means	0.6%	0.6%	**0.0%**
Worked at Home	5.0%	4.4%	**-12.0%**
Active Transportation Commute Trips	5.9%	6.2%	**5.1%**

FIGURE 3.24: THE PERCENTAGE OF WORK TRIPS IN THE MPA BY MODE.
DATA COURTESY U.S. CENSUS 2006-2010 AMERICAN COMMUNITY SURVEY FIVE YEAR ESTIMATES AND 2014-2018 ACS FIVE YEAR ESTIMATES.

During the early stages of public input for the ATP, survey participants were asked why they chose to bike and walk. A majority of people who cycle and/or walk do so for recreation or exercise. However, this self-selected survey found that 30.8% of participants run errands or do shopping using a bike and 26.2% do so by walking.

The survey found that people who cycle also use their bikes to commute to work (21.7%) and school (5.8%). Survey participants also walk to work (9.5%) and access transit (4.0%).

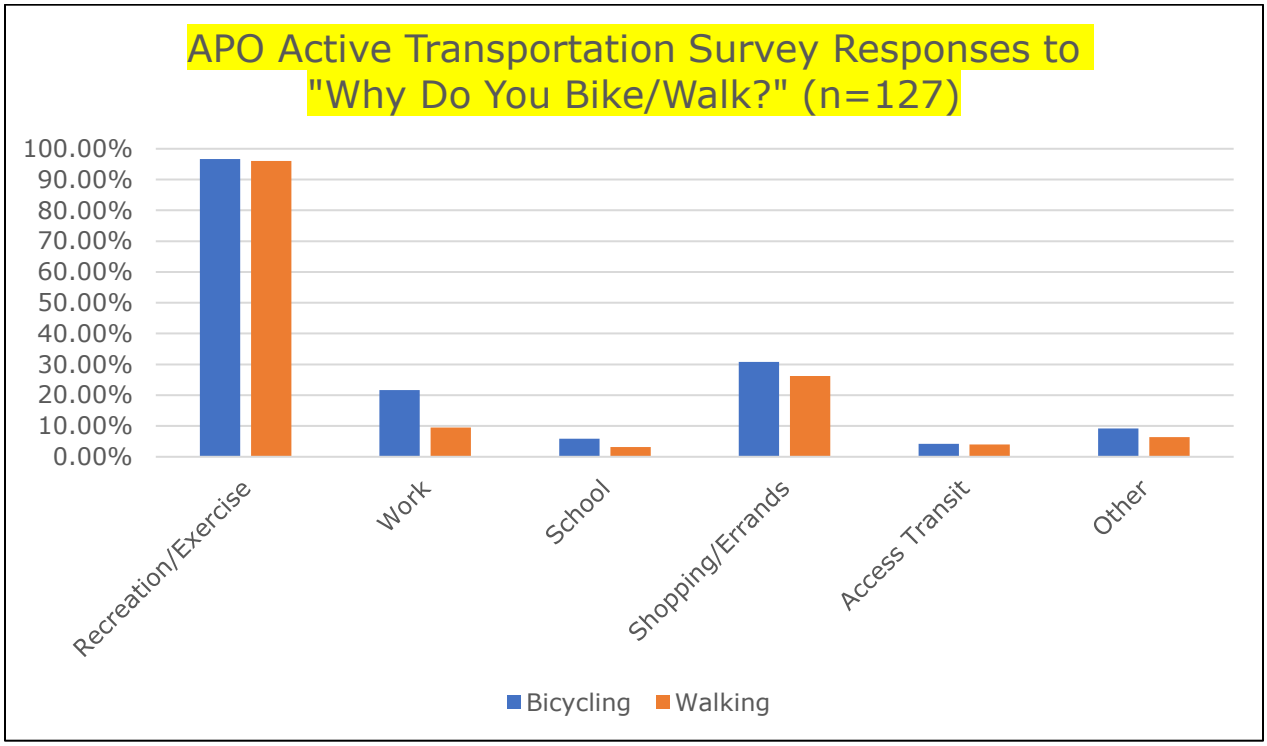


FIGURE 3.25 RESPONSES TO THE APO'S ACTIVE TRANSPORTATION SURVEY QUESTION ABOUT WHY PEOPLE BIKE/WALK FROM THE APO'S 2020 ACTIVE TRANSPORTATION SURVEY.

Overall, the average 2020 survey participant spends about one-fifth of their time biking or walking to complete a trip.

Likely, bicycling and walking are used more occasionally or as supplemental rather than as a primary mode.

Together the ACS data and the response from the survey suggest that there is a desire for area residents to be able to walk or bike for purposes other than recreation.

HOW MANY ARE USING THE SYSTEM?

Planning for active transportation facilities relies on an understanding of how many people are utilizing the existing network.

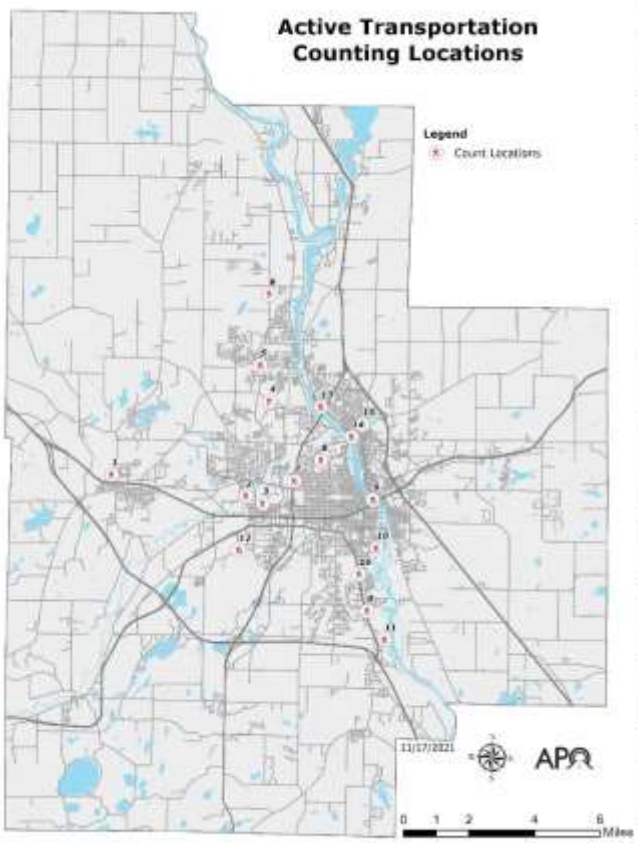
To measure this, APO staff regularly place two types of MnDOT-owned portable bicycle and pedestrian counters simultaneously in locations throughout the MPA. The Pneumatic TUBE counter uses two sets of tubes placed perpendicular to traffic. When a cyclist passes over the tubes, this counter can record that cyclist and determine which direction that person was heading. The PYRO-Box utilizes infrared technology to measure people's body heat who pass in front of its sensor. This counter, much like the TUBE counter, can identify travel directions. While the PYRO-Box can detect bicyclists and pedestrians, it cannot definitively distinguish between the two. APO staff can calculate pedestrian traffic from the PYRO-Box using the TUBE counter.

FIGURE 3.26: A PHOTO OF THE TUBE COUNTER AND THE PYRO-BOX COUNTER DEPLOYED AT THE GREENWAY TRAIL IN SAINT CLOUD.

While both counters have been regularly deployed throughout the MPA, the use of these counters is limited to shared use paths.

Two other types of counters have been placed within the MPA by MnDOT. The ReCycled Post and the ZELT Range are permanent bicycle and pedestrian counters placed along the Beaver Island Trail in 2016. More information on these permanent counters can be found in the next section.

Collectively, count data can shed light on when, where, and how often active transportation facilities are used.



Id	Jurisdiction	Location
0	Saint Cloud	Beaver Island Trail
1	Saint Joseph	Lake Wobegon Visitor Center
2	Waite Park	Lake Wobegon Trail Head
3	Waite Park	Healthy Living Trail (3rd Street North)
4	Sartell	Heritage Drive (West of 7th Avenue South)
5	Sartell	Pinecone Rd Trail #1 (Sartell City Hall)
6	Sartell	Pinecone Rd Trail #2 (27th Street North)
7	Saint Cloud	MN 15 Apollo Pedestrian Bridge
8	Saint Cloud	Greenway Trail by North Junior High School
9	Saint Cloud	Mississippi River Walk (Behind Convention Center)
10	Saint Cloud	Beaver Island Trail #1 (South of SCSU)
11	Saint Cloud	Beaver Island Trail #2 (Behind Toppan Merrill)
12	Waite Park	Co Rd 137 Trail (Discovery School and Quarry Park)
13	Sauk Rapids	Ox Cart Trail (Island View Park)
14	Sauk Rapids	Helix Spiral
15	Sauk Rapids	2nd Street North Trail (South 6th Avenue North)
16	Saint Cloud	CSAH 75/Roosevelt Road Trail

FIGURE 3.27: MAP OF ACTIVE TRANSPORTATION COUNTING LOCATIONS

PORTABLE COUNTING PROGRAM

In 2019 APO staff began work to establish a counting program by identifying 16 locations (18 once the ROCORI Trail and the facilities on 33rd Street S in Saint Cloud have been completed) throughout the MPA to set up the two portable counters to collect one weeks' worth of count data during the summer.

Map ID	Dates Counted	City	Location	Weekday Average Bike	Weekday Average Pedestrian	Weekend Average Bike	Weekend Average Pedestrian
1	05/06/2019 – 05/12/2019	Saint Joseph	Lake Wobegon Visitor Center	12	93	32	566
2	05/13/2019 – 05/19/2019	Waite Park	Lake Wobegon Trail Head	2	149	1	14
3	05/20/2019 – 05/26/2019	Waite Park	Healthy Living Trail	2	41	3	87
4	08/19/2019 – 08/25/2019	Sartell	Heritage Drive	2	73	1	53
5	08/12/2019 – 08/18/2019	Sartell	Pinecone Road Trail #1	10	227	14	209
6	08/05/2019 – 08/11/2019	Sartell	Pinecone Road Trail #2	11	104	6	99
7	07/01/2019 – 07/07/2019	Saint Cloud	Apollo Pedestrian Bridge	0	68	1	79
8	06/24/2019 – 06/30/2019	Saint Cloud	Greenway Trail	3	73	5	60
9	05/27/2019 – 06/02/2019	Saint Cloud	Mississippi River Walk	7	141	20	150
10	09/03/2019 – 09/09/2019	Saint Cloud	Beaver Island Trail #1	4	188	4	186
11	06/10/2019 – 06/16/2019	Saint Cloud	Beaver Island Trail #2	11	131	2	98

Map ID	Dates Counted	City	Location	Weekday Average Bike	Weekday Average Pedestrian	Weekend Average Bike	Weekend Average Pedestrian
12	06/17/2019 – 06/23/2019	Waite Park	County Road 137	2	57	1	33
13	07/08/2019 – 07/14/2019	Sauk Rapids	Ox Cart Trail	2	114	0	125
14	07/15/2019 – 07/21/2019	Sauk Rapids	Helix Spiral	3	81	3	104
15	07/22/2019 – 07/28/2019	Sauk Rapids	Second Street N	2	50	1	27
16	08/27/2019 – 09/02/2019	Saint Cloud	CSAH 75/Roosevelt Road	1	96	1	72

FIGURE 3.28: 2019 BICYCLE AND PEDESTRIAN COUNTS FROM VARIOUS LOCATIONS ACROSS THE MPA.

In addition, APO staff have started work on a seasonal counting program in which the PYRO-Box counter would be placed in five locations to collect usage data during the winter, spring, and fall months.

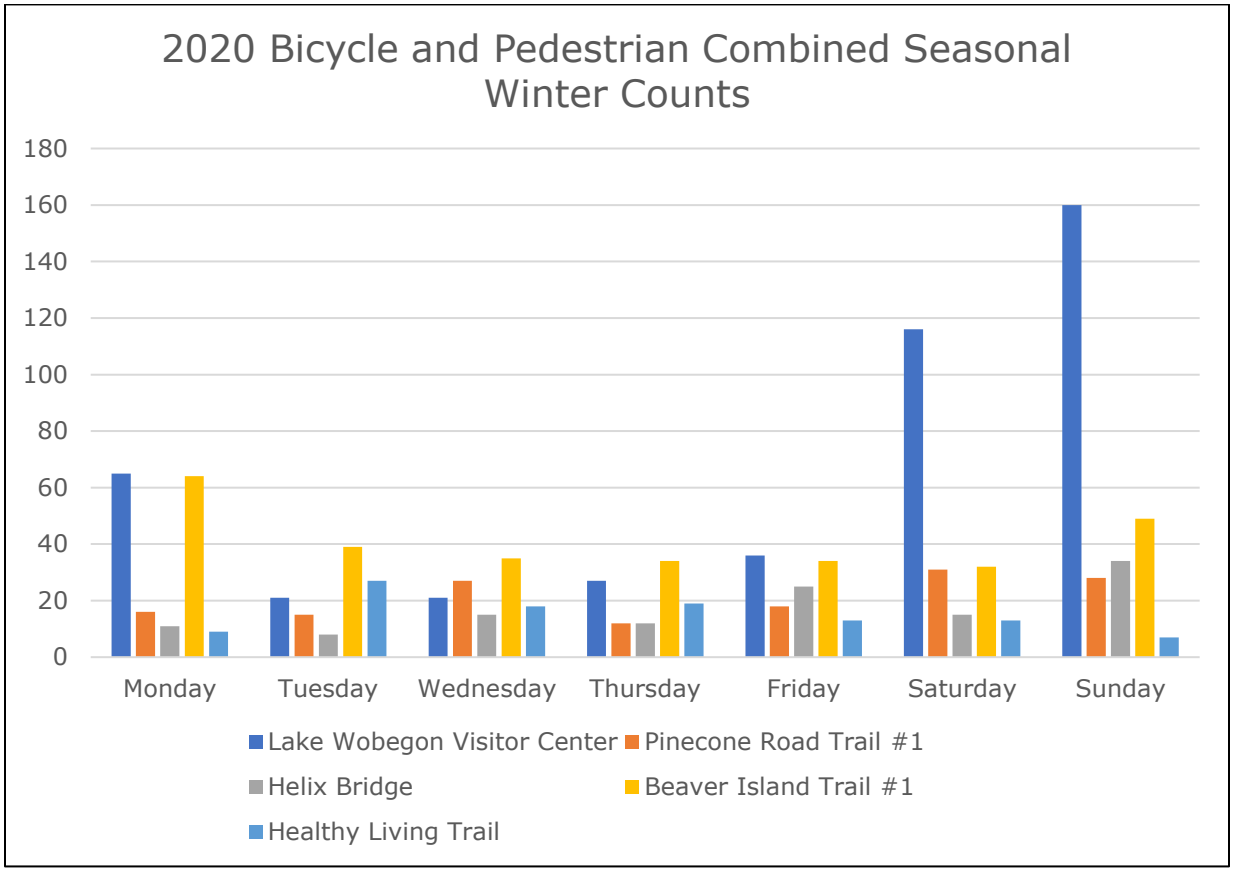


FIGURE 3.29: DAILY BICYCLE AND PEDESTRIAN 2020 WINTER COUNTS COLLECTED AT THE FIVE SEASONAL LOCATIONS WITHIN THE MPA.

Map ID	Dates Counted	City	Location	Weekday Average Bike	Weekday Average Ped	Weekend Average Bike	Weekend Average Ped
1	07/01/2020 – 07/07/2020	Saint Joseph	Lake Wobegon Visitor Center	13	267	21	307
3	07/15/2020 – 07/21/2020	Waite Park	Healthy Living Trail	7	119	4	137
4	06/16/2020 – 06/22/2020	Sartell	Heritage Drive	2	111	3	122
6	05/26/2020 – 06/01/2020	Sartell	Pinecone Road Trail #2	16	259	22	271
8	06/02/2020 – 06/08/2020	Saint Cloud	Greenway Trail	3	108	3	74
9*	07/29/2020 – 08/10/2020	Saint Cloud	Mississippi River Walk	N/A	172	N/A	157
10	06/09/2020 – 06/15/2020	Saint Cloud	Beaver Island Trail #1	8	413	20	575
11	07/22/2020 – 07/28/2020	Saint Cloud	Beaver Island Trail #2	N/A	199	N/A	152
12	06/24/2020 – 06/30/2020	Waite Park	County Road 137	1	88	1	140
16	07/08/2020 – 07/14/2020	Saint Cloud	CSAH 75/Roosevelt Road	14	85	28	103

*The Mississippi River Walk had the counter deployed for longer than one week. On days that were counted twice, APO staff calculated a daily average.

FIGURE 3.30: 2020 BICYCLE AND PEDESTRIAN COUNTS FROM VARIOUS LOCATIONS ACROSS THE MPA.

However, the portable counters are owned by MnDOT. As a result, various agencies and jurisdictions can (and have) utilized the counters throughout the year. Thus, there is some difficulty in collecting consistent data at all identified sites, as noted in the collection of 2020 bicycle and pedestrian count data.

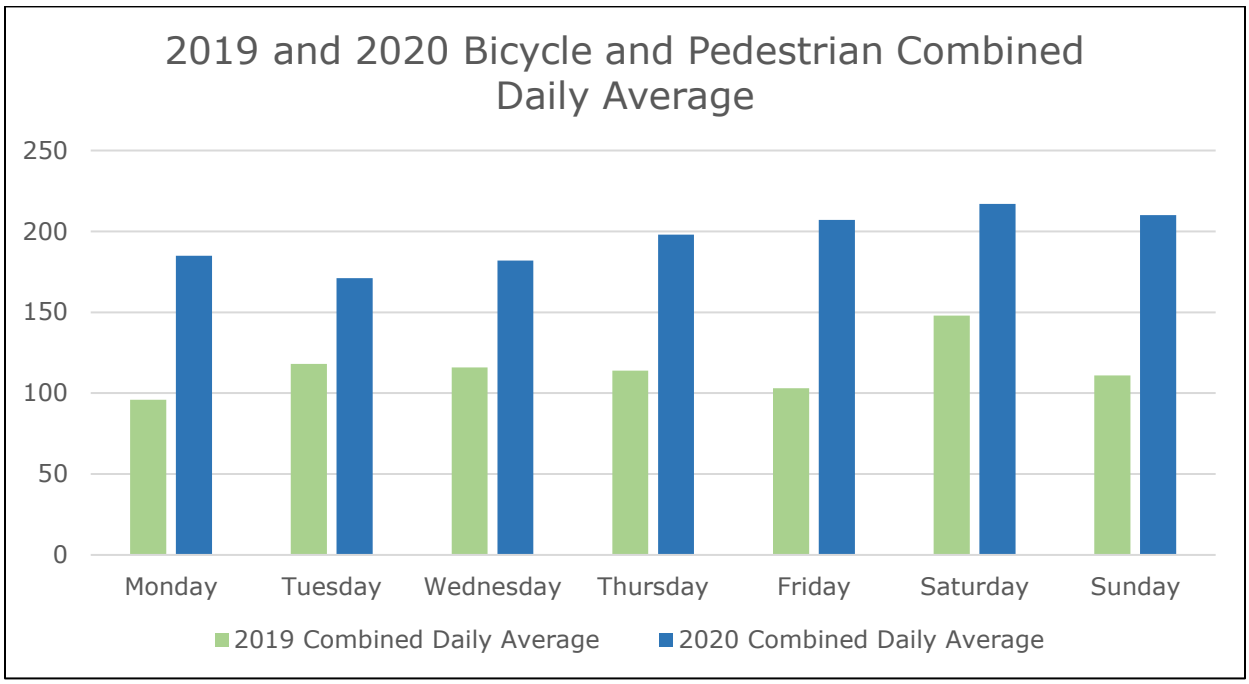


FIGURE 3.31: COMBINED BICYCLE AND PEDESTRIAN DAILY AVERAGES FROM ALL 2019 AND 2020 SUMMER COUNT LOCATIONS.

Beaver Island Trail Permanent Counter

In 2016, MnDOT installed two permanent counters on the Beaver Island Trail south of the Saint Cloud State University campus.

The ReCycled Post Counter – much like the PYRO-Box counter – utilizes infrared technology to measure the body heat of people who pass in front of its sensors.

The ZELT Range – like the TUBE counters – is designed to measure the number of bicyclists. However, this style of counter is incorporated into the pavement in a diamond zig-zag pattern.

Since these counters have been in place since 2016, they provide the best available data set to track active transportation trends.

Due to weather conditions and other factors, count data will fluctuate by time of day and time of year. Averaging monthly day of the week counts from four years of data provides a reasonable indication of how the Beaver Island Trail is utilized. This data can then be inferred to indicate how other shared use paths throughout the region are also used.

FIGURE 3.32: A PHOTO OF THE RECYCLED POST AND ZELT RANGE PERMANENT COUNTERS ALONG THE BEAVER ISLAND TRAIL.

Figure 3.33 compares average weekly counts of both bicycles and pedestrians by month from 2016 to 2019 and indicates seasonal variation throughout the year.

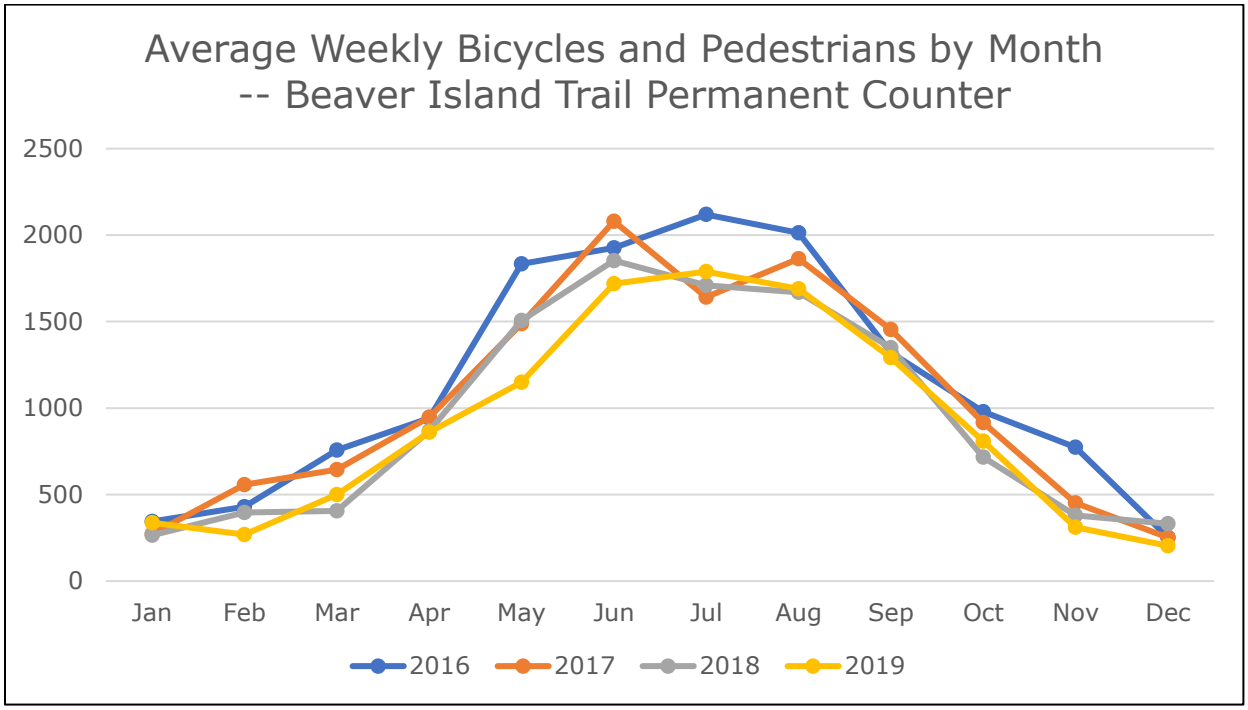


FIGURE 3.33: AVERAGE WEEKLY BICYCLES AND PEDESTRIANS BY MONTH AT THE BEAVER ISLAND TRAIL PERMANENT COUNT STATION.

As expected, a pronounced seasonal variation is consistently shown from year to year. Usage is relatively low in the winter months. Usage increases steadily as the weather improves in the spring, with peak usage in the summer from June through August. Average daily counts drop off in the cooler months of September and October.

Notably, this data shows no growth in counts over time. In fact, there are no months in which the 2019 count exceeds all the previous years.

Figure 3.34 shows annual average counts by day of the week for bicycles and pedestrians and indicates more activity on shared use paths on the weekends than during the week.

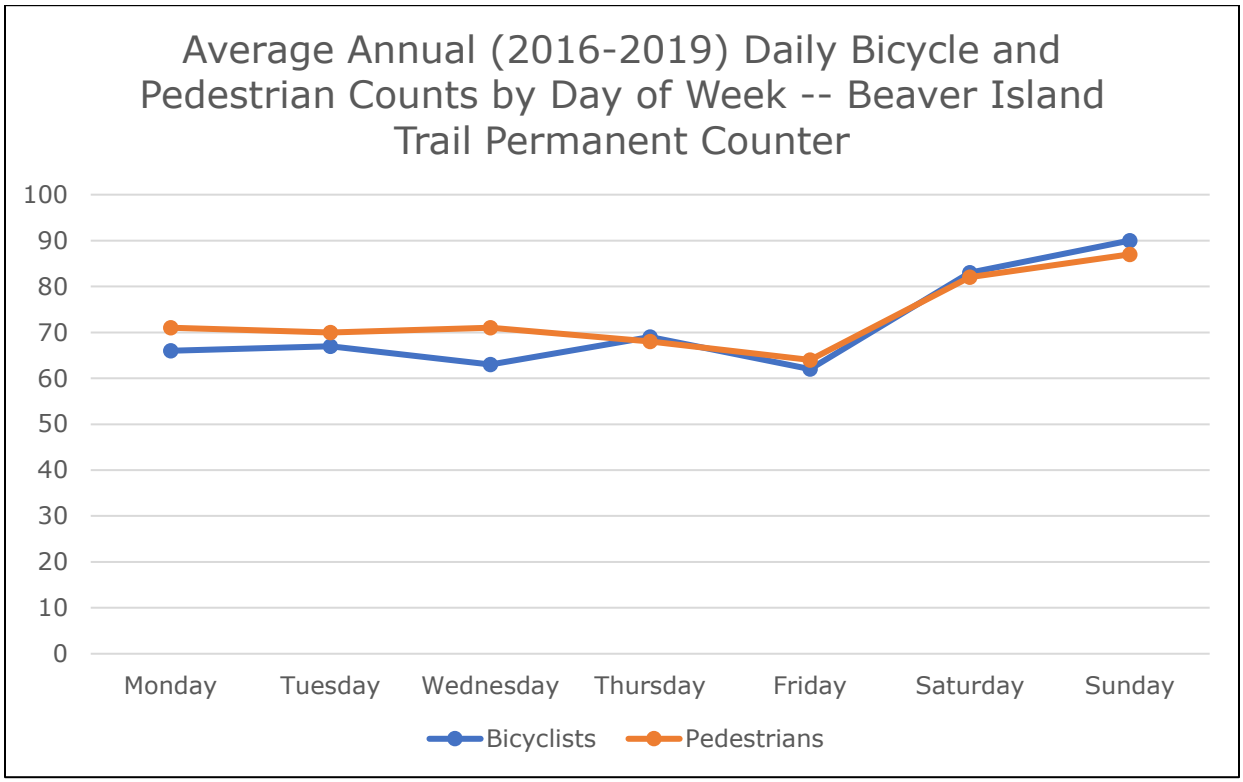


FIGURE 3.34 – AVERAGE (2016-2019) DAILY BICYCLE AND PEDESTRIAN COUNT BY DAY OF THE WEEK AT THE BEAVER ISLAND TRAIL PERMANENT COUNTING STATION

Adding the average daily counts shown above together results in a weekly average count of about 1,000 at this location. As shown in the previous figure, actual counts on the Beaver Island Trail can be double that number in the summer months, and they can be half that number or less in the winter months.

WHERE ARE THEY GOING?

Typically, all trips begin at a person's home. The mode selected to take that trip (driving, biking, walking, transit) depends on a multitude of factors such as weather, distance, and time.

During the initial round of public input for this plan, APO staff asked survey participants why they chose to bike or walk. And while most of the responses indicated the choice was for

recreation or exercise, about one-fifth of all trips taken by bike or on foot are to various destinations, including shopping, work, and school.

The 2020 public input survey asked participants to select three types of destinations they would like to be able to access using active modes. Again, this was not a random sample survey, so the extent to which the comments received are representative of the APO's planning area is unclear.

That said, of the 124 survey participants who responded to this question, approximately 89% want to be able to access parks or nature areas using active modes. This was followed by food or groceries (71%), entertainment (39%), and retail shopping (27%).

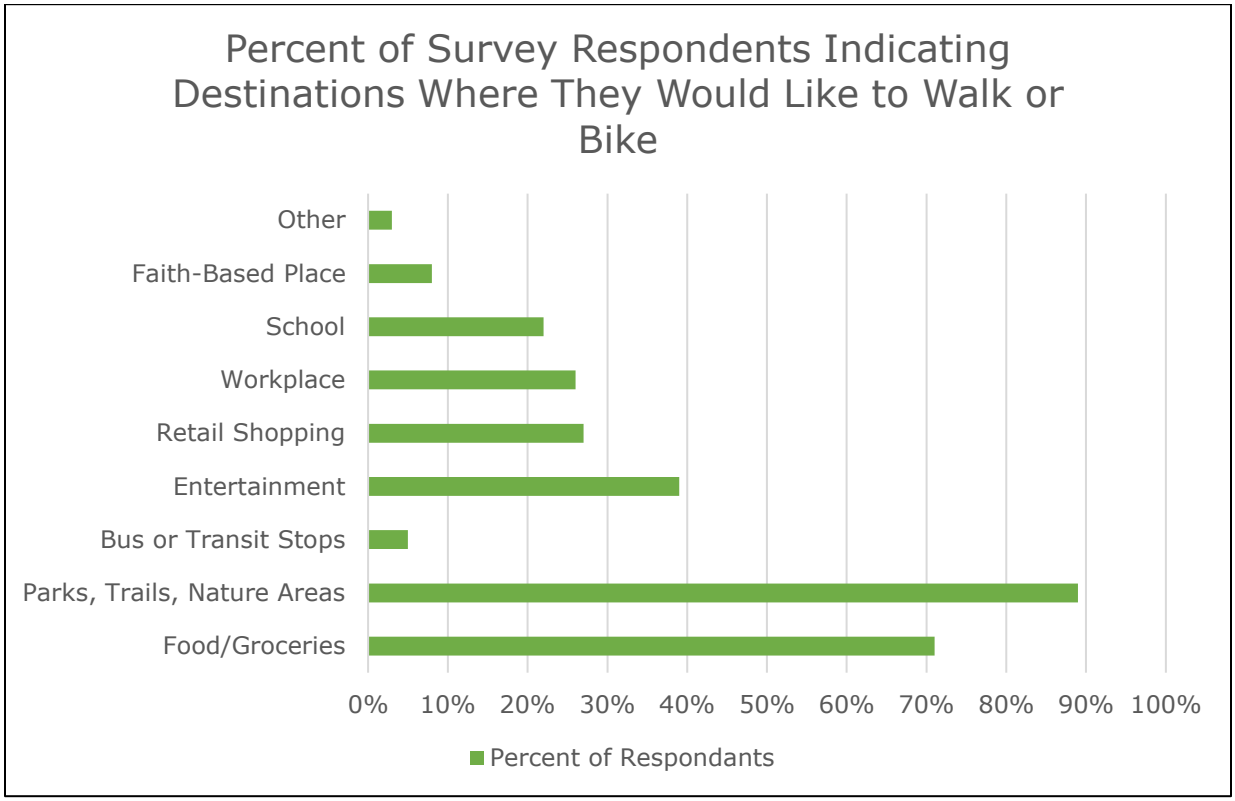


FIGURE 3.35: RESPONSES TO THE APO'S 2020 ACTIVE TRANSPORTATION SURVEY QUESTION "WHAT TYPE OF DESTINATION WOULD YOU LIKE TO BE ABLE TO WALK OR BIKE TO? CHECK YOUR TOP 3 PLACES."

Other responses included: Restaurants, socializing with friends, campground, and anywhere.

Coupled with the online survey, APO staff created an online interactive mapping tool during the first round of ATP public engagement. This wikimap allowed participants to map their current routes by mode (bicycling or walking), their desired destinations, and existing barriers. About 20 people utilized the wikimap.

Popular destinations identified by wikimap participants are consistent with the survey participants' destinations. In addition, the wikimap response, albeit small, did indicate regional medical centers such as Saint Cloud Hospital and other CentraCare facilities as destinations accessed by active modes.

FIGURE 3.36 –WIKIMAP ILLUSTRATION OF TRIP DESIRES.

HOW SAFE IS THE SYSTEM?

Based upon an understanding of who is using the active transportation system, where they are going, and how they are getting there, it is essential to consider if people can do so safely.

Use of the existing active transportation network – much like a roadway network – is governed by state law and local ordinances. Every jurisdiction has some enforcement authority.

Minnesota Statute 169.222 (https://www.revisor.mn.gov/statutes/cite/169.222) states people who cycle have the same rights and duties regarding traffic laws as vehicles. People who cycle must keep to a bicycle lane or shoulder of the roadway when at all possible. Anyone operating a bicycle on a sidewalk must abide by the rights and duties of a pedestrian.

Minnesota Statue 169.21 (https://www.revisor.mn.gov/statutes/cite/169.21) dictates the rights of pedestrians. Per the statute, pedestrians are to obey traffic controls and cross at intersections. In the absence of a signal, vehicles must yield to pedestrians, though pedestrians must be cautious in traffic.

A review of local ordinances indicates consistency with state law regarding people who cycle and pedestrians. Some municipalities do have specific ordinances restricting where – in particular bicycles and roller skates/blades – can travel. A detailed look at these individual ordinances and policies by jurisdiction can again be found in the city profiles, Appendices A through E.

One of the APO's 2045 long-range plan goals is to maintain and enhance transportation safety for all users across transportation modes. To aid in achieving this goal, the APO has made it an objective to reduce the regional fatality rates of bicyclists and pedestrians.

According to the Minnesota Department of Public Safety (DPS), crashes involving bicyclists and pedestrians are rising within the MPA.

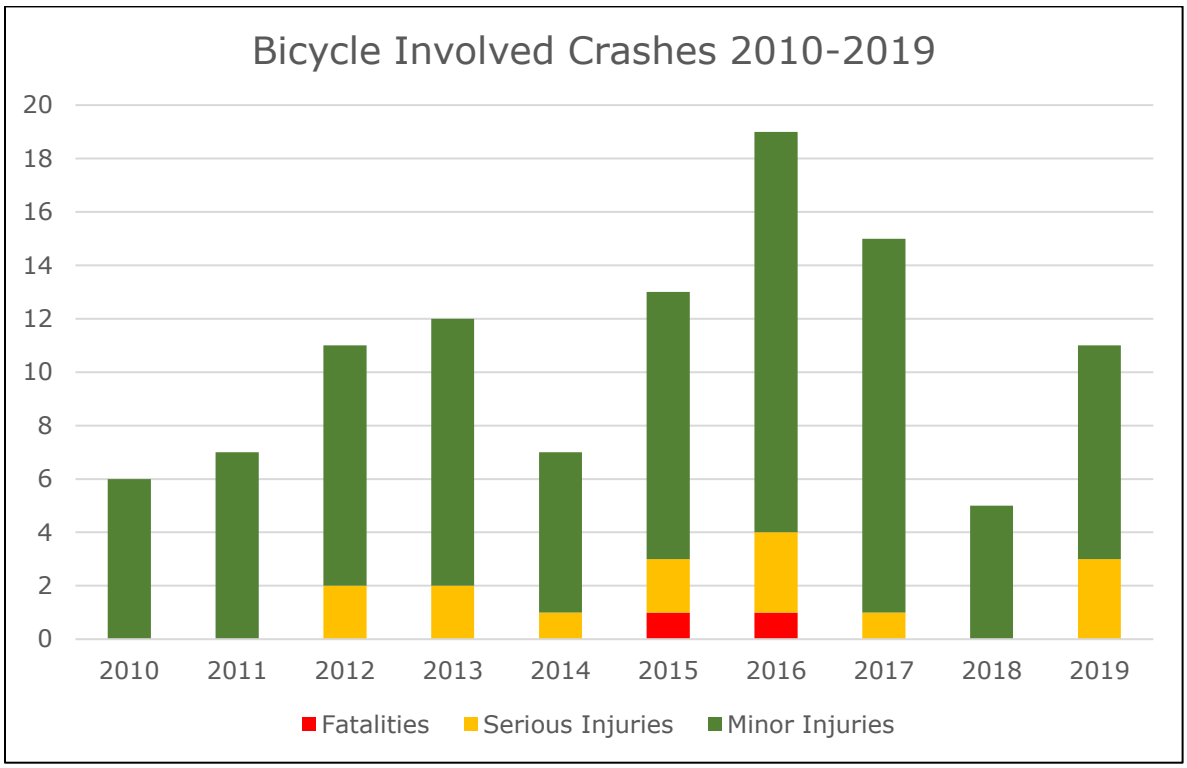


FIGURE 3.37: BICYCLE INVOLVED CRASH DATA WITHIN THE MPA BETWEEN 2010 AND 2019.
DATA COURTESY OF MINNESOTA DEPARTMENT OF PUBLIC SAFETY MINNESOTA CRASH MAPPING ANALYSIS TOOL (MNCMAT).

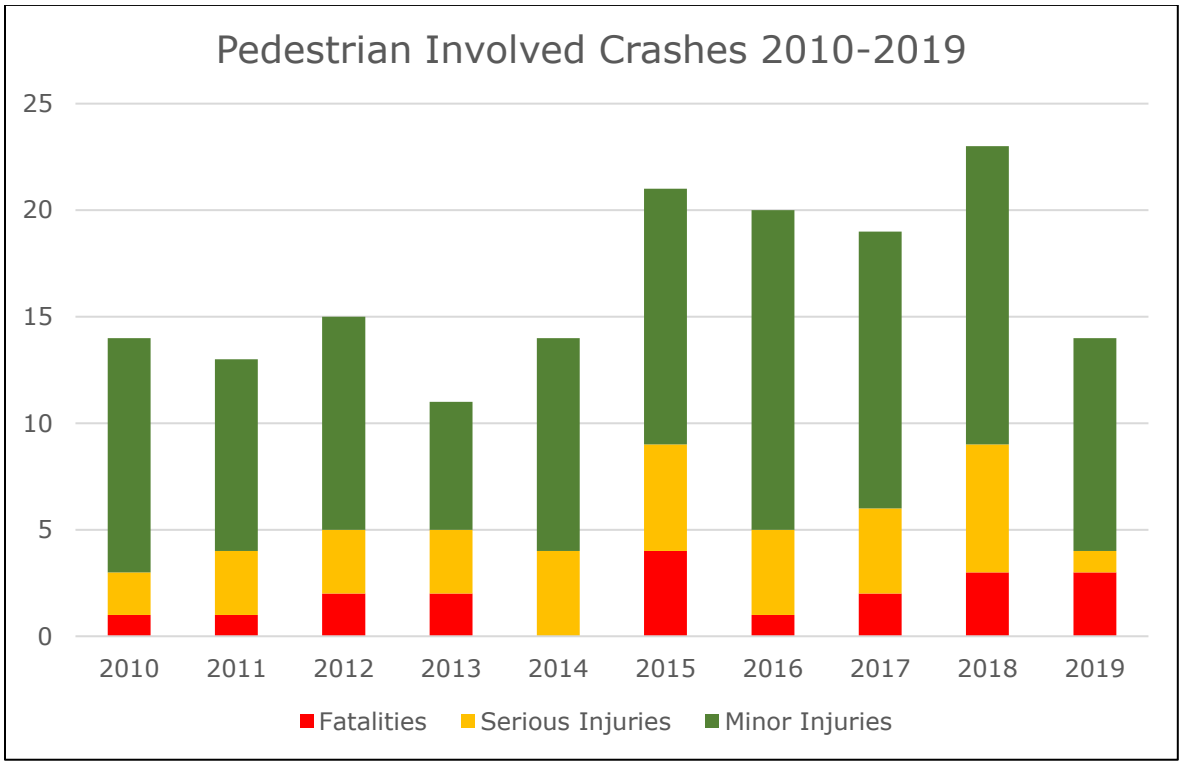


FIGURE 3.38: PEDESTRIAN INVOLVED CRASH DATA WITHIN THE MPA BETWEEN 2010 AND 2019.
DATA COURTESY OF MINNESOTA DEPARTMENT OF PUBLIC SAFETY MINNESOTA CRASH MAPPING ANALYSIS TOOL (MNCMAT).

Figures 3.37 and 3.38 look at where fatal and serious injury bicycle and pedestrian crashes have occurred within the MPA between 2015 and 2019. During this 10-year time frame, two bicyclists and 19 pedestrians were killed. Another 14 bicyclists and 35 pedestrians were seriously injured.

Bicycle crashes – both fatalities and serious injury crashes – are very spread out across the MPA. However, it appears crashes can be found along major roadway facilities such as Stearns CSAH 75, MN 23, MN 15, and US 10.

Pedestrian involved crashes within the MPA are primarily concentrated around downtown Saint Cloud including around SCSU and around the MN 23/US 10 interchange. Stearns CSAH 75/Division Street in Waite Park is also a notable area for pedestrian-involved crashes.

Early community input responses indicate safety is the top concern when it comes to why people do not bike. Approximately 62% of survey respondents stated that interaction with vehicle traffic made it difficult or prohibitive to cycle. Vehicle traffic and speed were also identified among survey participants who walk as a barrier (41%).

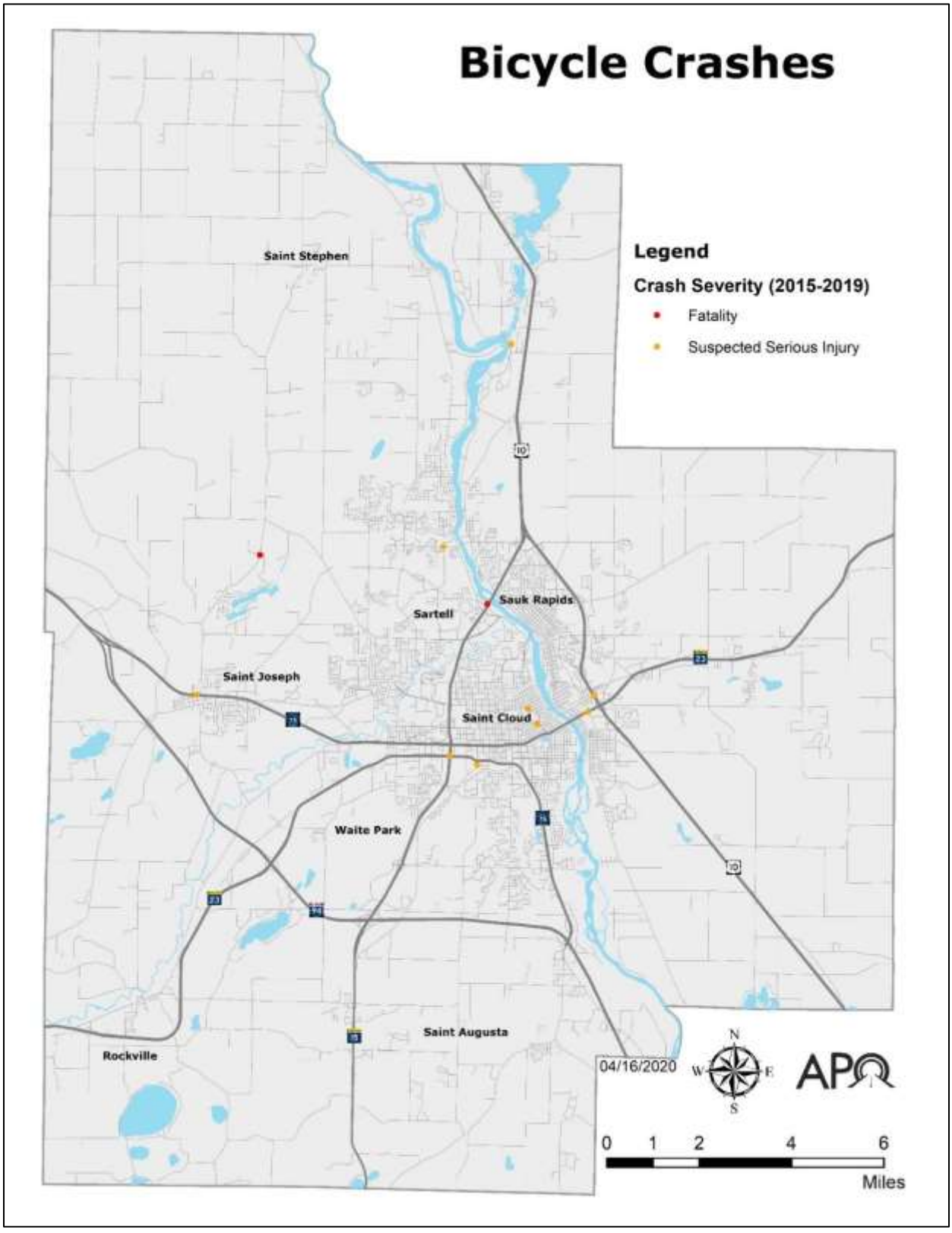


FIGURE 3.39 – BICYCLE CRASHES (2015-2019) BY LOCATION AND SEVERITY

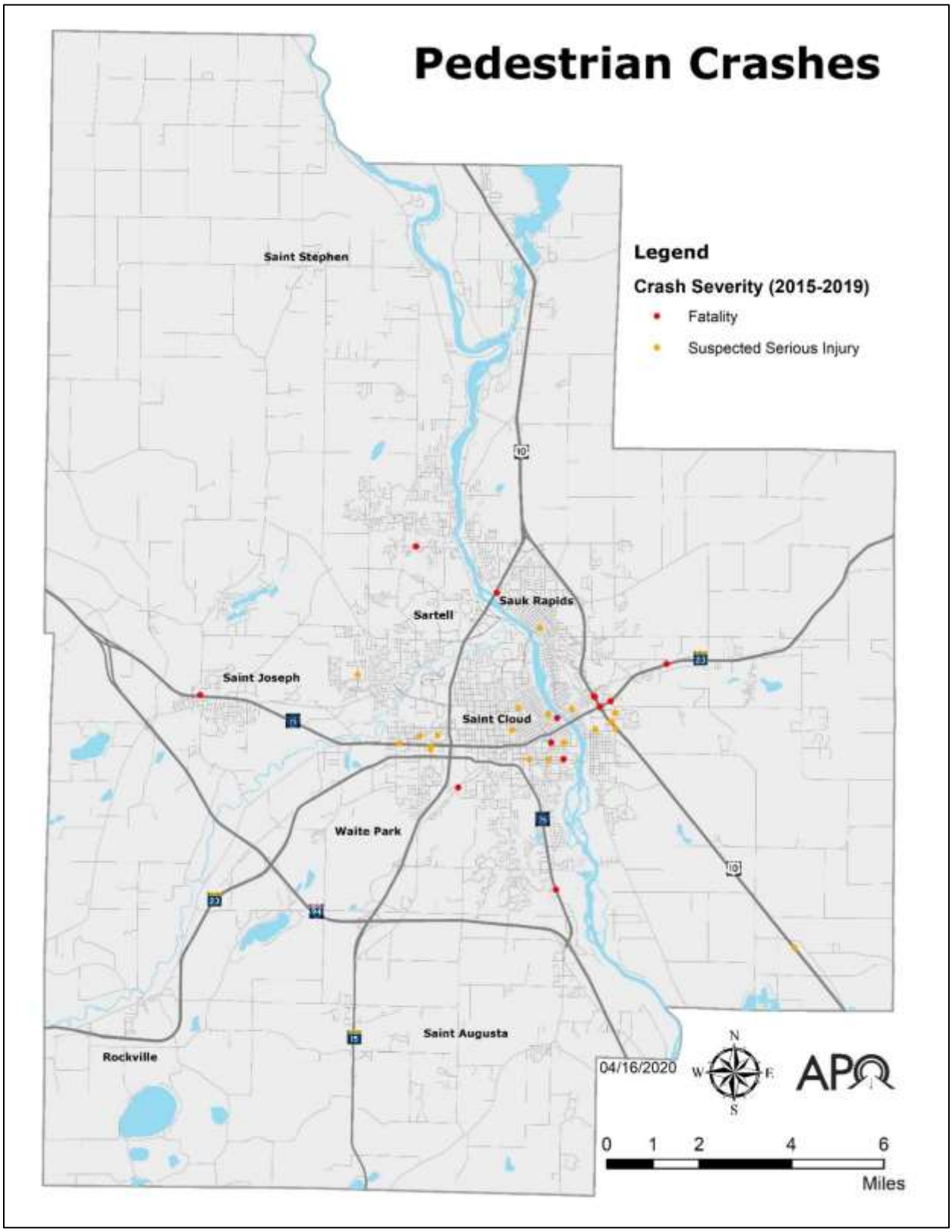


FIGURE 3.40: A MAP OF BICYCLE-INVOLVED FATALITIES AND SERIOUS INJURIES WITHIN THE MPA BETWEEN 2015-2019.

CHAPTER FOUR: GOALS, OBJECTIVES, AND EVALUATING NEEDS

VISION STATEMENT

The following vision for the area's active transportation network was developed through a comprehensive overview of the region's active transportation facilities and their usage, various regional planning documents, and public input.

> *The Saint Cloud MPA strives to provide a regionally-coordinated and well-maintained active transportation network allowing for safe, efficient, convenient, and comfortable walking and bicycling access to local and regional destinations for all users of all abilities.*

To accomplish this vision, a series of goals and objectives have been developed to direct and guide the ATP as well as future project development and implementation by APO member jurisdictions. Specific, measurable actions (i.e., objectives) were identified for each goal to help the region reach the desired goal. Various factors were analyzed to determine the degree to which objectives are being met.

Performance measures were also defined and will be used to track progress toward achieving the ATP's goals and objectives.

As a component of the APO's long-range planning document – MAPPING 2045 (https://bit.ly/3rAtNBj) – these goals and objectives are consistent with those outlined in the MTP.

GOALS, OBJECTIVES, EVALUATION FACTORS, AND PERFORMANCE MEASURES

GOAL 1: IMPROVE BICYCLE AND PEDESTRIAN SAFETY AND COMFORT

Public safety data shows a growing number of fatalities and serious injuries involving pedestrians and bicyclists across the MPA. According to early public input findings, residents who walk or bicycle often feel the available active transportation networks they use are unsafe or stressful due to vehicle traffic and speeds. Public feedback indicates a clear desire for facilities separated from the flow of vehicular traffic.

To assist in achieving this goal, the APO has established the following objectives.

Objective 1.1: *Reduce the number and severity of crashes involving pedestrians and people who cycle.*

An essential and identifiable measure of improved safety reduces the number of bicycle and pedestrian fatalities – especially in areas prone to crashes. Crashes that result in death or serious injury typically involve motor vehicles.

To evaluate this objective, the APO used the following process:

> *Mapped locations within the MPA with crashes involving a bicyclist and/or pedestrian with particular attention to areas where fatal and serious injury crashes occur and areas with multiple crashes.*

Objective 1.2: *Improve the comfort level of active transportation facilities where necessary.*

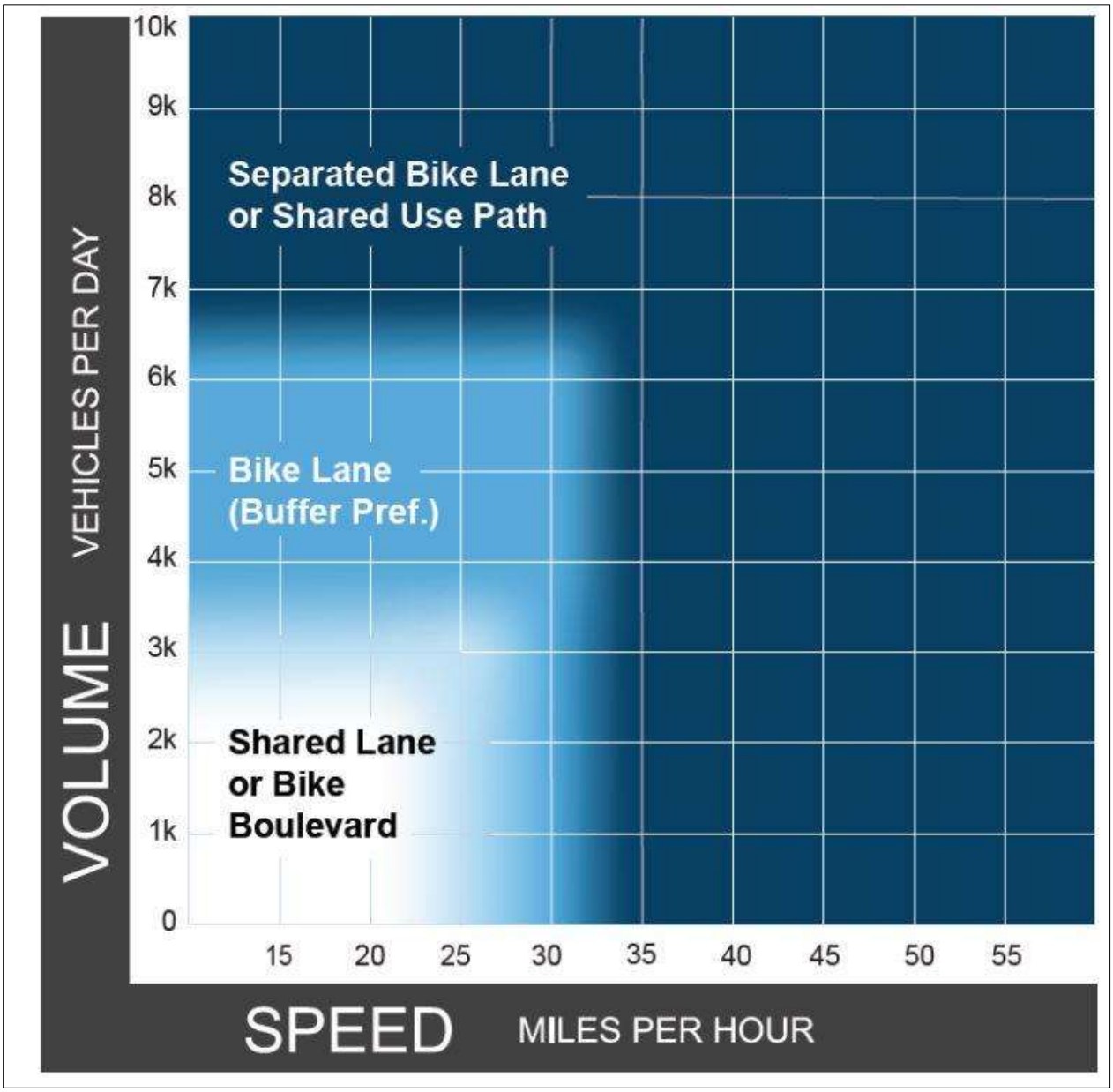


FIGURE 4.1 – MNDOT FACILITY SELECTION GUIDANCE BASED ON VEHICLE VOLUMES AND SPEED
CREDIT: FHWA BIKEWAY SELECTION GUIDE

The MnDOT Bicycle Facility Design Manual (https://bit.ly/3aSwSXu) identifies the preferred design for on-road bicycle facilities based upon the volume of vehicular traffic and posted speeds. On-road bicycle facilities which meet these design guidelines can create a more comfortable and safer setting for on-road bicycle users. (See Figure 4.1)

For off-road bicyclists and pedestrians, the presence of sidewalks and/or shared use paths can create a sense of comfort. This is especially true along corridors involving collector and arterial roadways because these roadways are designed for higher traffic volumes and speeds. Many cities within the MPA recognize this need by requiring active transportation facilities to be built on at least one side of the road as new development occurs. Many jurisdictions also seek opportunities to add (or retrofit) active transportation facilities along roadways as part of the road (re)construction process.

The following exercises were considered to address user comfort:

- *Mapped locations within the MPA where current on-road bicycle facility infrastructure does not meet the MnDOT design guidelines for the given traffic volume and speeds.*
- *Mapped locations along arterial and collector roadway corridors within the MPA that do not currently have a least one adjacent sidewalk and/or shared use path.*

Goal 1 Performance Measures

For measuring performance and attainment of this goal and its objectives, the following performance measures will be considered:

Performance Measure 1.1: *The regional five-year rolling average of non-motorized fatalities and suspected serious injuries.*

The Federal government requires all MPOs and States to report non-motorized fatalities and serious injuries as a five-year rolling average.

Performance Measure 1.2: *The percentage, by jurisdiction, of centerline miles of arterial and collector roadways that have a sidewalk or shared use path on at least one side.*

All cities in the MPA have established policies to require sidewalks on at least one side of all collector and arterial roadways. Using that policy goal as a performance measure is an achievable and efficient way to help APO's member jurisdictions understand how well they meet their own policy goal. We have expanded the performance measure to consider the presence of shared use paths since pedestrians can also use them.

GOAL 2: IMPROVE ACTIVE TRANSPORTATION CONNECTIONS TO DESIRED DESTINATIONS

While it is no secret that walking and biking serve as forms of exercise or recreation, many people rely on (or opt to use) active modes to meet many of their everyday transportation needs. Early public input findings indicate that users of the MPA's active transportation network want to be able to access places like jobs, schools, grocery stores, and transit. However, infrastructure gaps can discourage users or make completing those trips unsafe.

To monitor progress in achieving this goal, the APO has identified the following objectives.

Objective 2.1: *Improve connectivity to high-demand destinations for bicyclists and pedestrians.*

To address this objective, APO staff conducted the following analysis:

> *Mapped locations of high-demand destinations across the MPA such as parks, food assets, schools, and large employers.*

FIGURE 4.2 – EXAMPLE OF DESTINATIONS LOCATED NEAR A SHARED USE PATH IN SARTELL

Objective 2.2: *Improve bicycle and pedestrian connections to and from transit stops.*

As noted previously, all transit trips start and end with some form of active transportation. Ensuring access to existing fixed route transit stops helps connect the desired destinations listed above and facilitate regional travel within the Metro Bus service area.

To evaluate this objective, APO staff conducted the following task:

> *Mapped locations of fixed route transit stops across the MPA.*

Goal 2 Performance Measures

For measuring performance and attainment of this goal and its objectives, the following measure was established.

Performance Measure 2.1: *The percentage of high-demand destinations within a jurisdiction that fall within certain distance categories based on how far the destination is from an active transportation facility.*

High-demand destinations include schools, parks, large employers (i.e., over 100 employees), and food assets such as grocery stores. Given the sheer number of parks for this analysis, the APO focused on larger parks with more assets such as playground equipment, basketball courts, etc. Further, this performance measure is simplified by focusing on those destinations that have no connection to the active transportation network rather than attempting to evaluate and categorize the various qualities of all connections to all destinations.

Performance Measure 2.2: *The percentage of transit stops within a jurisdiction that fall within certain distance categories based on how far the stop is from an active transportation facility.*

Every transit trip starts and ends as a pedestrian or bicycle trip. Ensuring that transit stops have appropriate active transportation network connections can be important to facilitating the safety of riders to their destinations. Like with the high-demand destinations (above), it is far easier to focus on those transit stops that do not have any active transportation connection rather than measuring the quality of connection at all transit stops.

GOAL 3: IMPROVE THE CONDITION OF ACTIVE TRANSPORTATION INFRASTRUCTURE

Initial public outreach efforts indicated a desire to maintain the existing infrastructure in good condition. Pavement condition surveys conducted in 2019 and 2020 provide reliable data on the current condition of almost all on-road bicycle and off-road shared use path facilities.

While most on-road bicycle facilities (83.6%) are in good condition – as of 2019 – there are still areas in need of attention. Similarly, a good portion of shared use paths in the MPA are in good condition (60.8%) as of 2020. However, some areas still require corrective maintenance – approximately 37% of shared use paths in the metro are in fair to very rough condition.

As such, the following objective has been identified:

Objective 3.1: *Improve the state of good repair for active transportation facilities.*

To evaluate this objective, APO staff conducted the following analysis.

> *Mapped locations across the MPA where the existing pavement condition of active transportation facilities are rated in rough to very rough condition based on their respective report.*

Goal 3 Performance Measures

For measuring performance and attainment of this goal and its objective, the following measures were established:

Performance Measure 3.1: *The percentage, by jurisdiction, of on-road bicycle routes for which the pavement condition is rated as poor.*

In 2019, the APO evaluated the pavement condition of on-road bicycle facilities. Pavement quality ratings for on-road facilities are shown in Figure 2.24. It is well established that the pavement quality can significantly impact the ride comfort of bicyclists – more so than motorized vehicles because pavement roughness is felt much more acutely by bicycles than by motorized vehicles. Focusing the performance measure on the poorest pavement quality assists in directing limited funding to areas with the poorest pavement quality.

Performance Measure 3.2: *The percentage, by jurisdiction, of shared use paths for which the pavement condition is rated as poor.*

In 2020, the APO evaluated the pavement condition of most shared use paths within the MPA. Pavement quality for the shared use paths is shown in Figure 2.28. Focusing the

performance measure on the poorest pavement quality assists in directing limited funding to areas with the poorest pavement quality.

GOAL 4: PROVIDE EQUITABLE ACCESS TO ACTIVE TRANSPORTATION FACILITIES FOR ALL PEOPLE OF ALL ABILITIES

The APO and its member jurisdictions are committed to providing a transportation system that is available and accessible to people of all ages and abilities. This necessitates a holistic approach to transportation planning which factors in motorized and non-motorized users of the system.

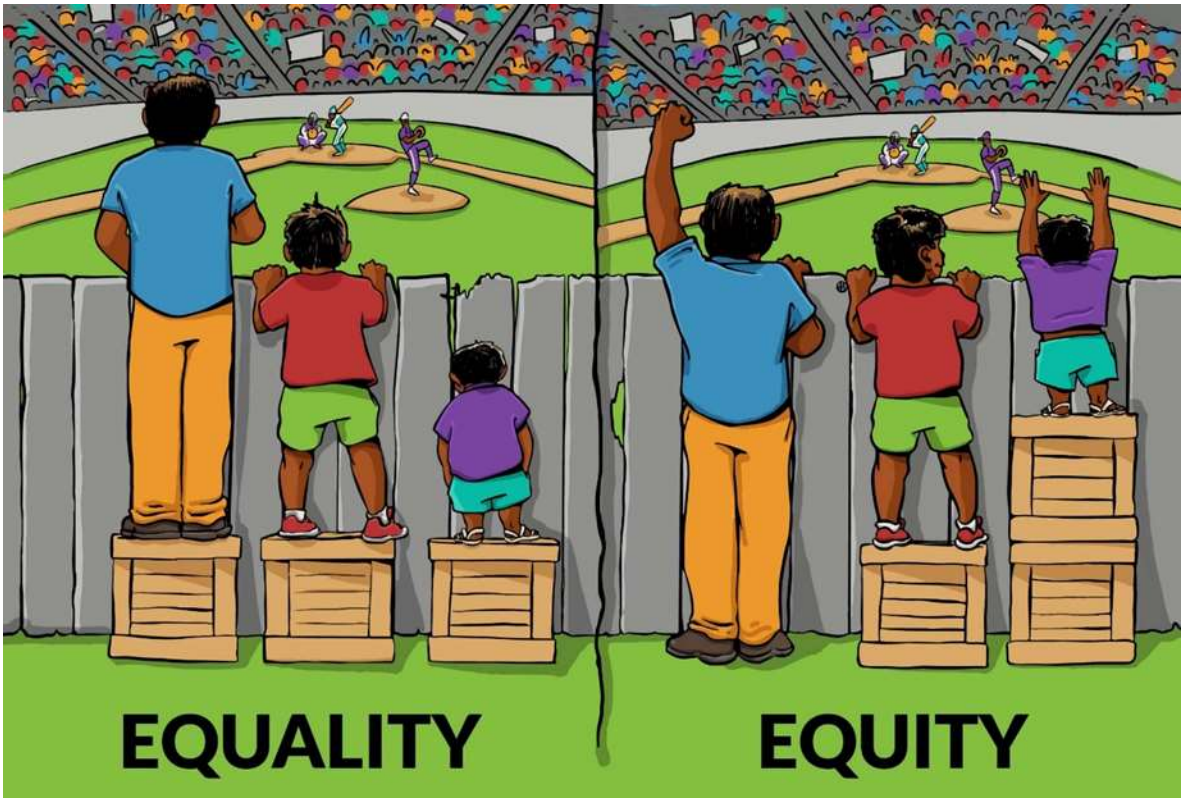


FIGURE 4.3 – CONCEPTULIZATION OF EQUALITY VS EQUITY

Rather than focusing strictly on equal access – that is, an even distribution of resources regardless of need – equitable access to transportation calls for customization of options to address inequalities so all people can reach their full potential. This could include additions like curb cuts and other accessible design standards. Or it may involve prioritizing areas where people are more likely to rely on walking or biking for transportation, are more vulnerable to unsafe traffic conditions, or have experienced historic disinvestment. An example could be areas with high concentrations of low-income households or households without vehicle access.

To accomplish this goal, the APO has developed the following objectives.

Objective 4.1: *Provide comfortable facilities and access for people of all ages and abilities.*

Each APO member jurisdiction has identified a desire to provide comfortable access to persons with disabilities in accordance with the ADA. Cities and counties within the planning area have either adopted or are in the process of preparing ADA Transition Plans.

While municipal plans focus more on city-owned buildings and other property, the county plans (Benton, Sherburne, and Stearns) have identified specific intersections needing improvement to guarantee ADA compliance.

To evaluate this objective, APO staff completed the following exercise:

> *Mapped existing facilities at intersections that are not yet ADA compliant as documented in ADA transition plans.*

County ADA Transition Plans classify intersections into three tiers, with Tier 3 being identified as intersections in most need of ADA compliance infrastructure upgrades. Tier 2 intersections, while "substantially compliant" and generally "work well," are likely not critical need areas for the ATP.

Objective 4.2: *Improve access to active transportation facilities in areas with high concentrations of vulnerable and underserved populations.*

Studies show that certain demographic groups may be more dependent upon access to active transportation. The presence of these demographic population segments, as identified in Chapter 3, is important when evaluating the region's existing network and planning for the future.

To evaluate this objective, APO staff conducted the following analysis:

> *Examined environmental justice sensitive area block groups rated at 4 or more (see Figure 4.5) within each city and observing the relative presence or absence of active transportation infrastructure within those block groups.*

Priority consideration is given to concentrations of households with low-income and concentrations of households without access to a vehicle as these groups may be more dependent upon active transportation modes.

Goal 4 Performance Measures

For measuring performance and attainment of this goals and its objectives, the following measures were established:

Performance Measure 4.1: *The percentage, by jurisdiction, of street pedestrian crossings (i.e., crosswalks, etc.) that do NOT meet ADA accessibility standards.*

ADA accessibility has been required since the early 1990s. For newly constructed streets, this usually is not a problem. However, many existing issues only get addressed when a road is repaved or reconstructed. These performance measures focus on legacy street crossings that need to be updated to meet ADA accessibility standards.

Performance Measure 4.2: *The number of miles of active transportation facilities per 1,000 residents in EJ/Title VI sensitive areas in comparison to non-sensitive areas.*

To help meet Federal requirements for Environmental Justice (EJ), Title VI, and the Americans with Disabilities Act, the APO collects data at the Census block group level regarding people of color, low income, and other traditionally underserved populations are concentrated.

This performance measure will focus on those sensitive areas that score four or higher. It will be calculated by adding up the miles of active transportation facilities within each sensitive area that scores four or higher and dividing it by the number of people who live in that block group, resulting in a per-capita estimate of active transportation facilities for each of the areas that score four or higher. This will provide a range of values for the most sensitive areas in the region and help focus attention on those areas most in need of additional investment.

Figure 4.10 summarizes findings relative to the objectives under goals 1-4 using the above-described performance measures.

FIGURE 4.4 – EXAMPLE OF AN ACCESSIBLE PARKING SPACE.

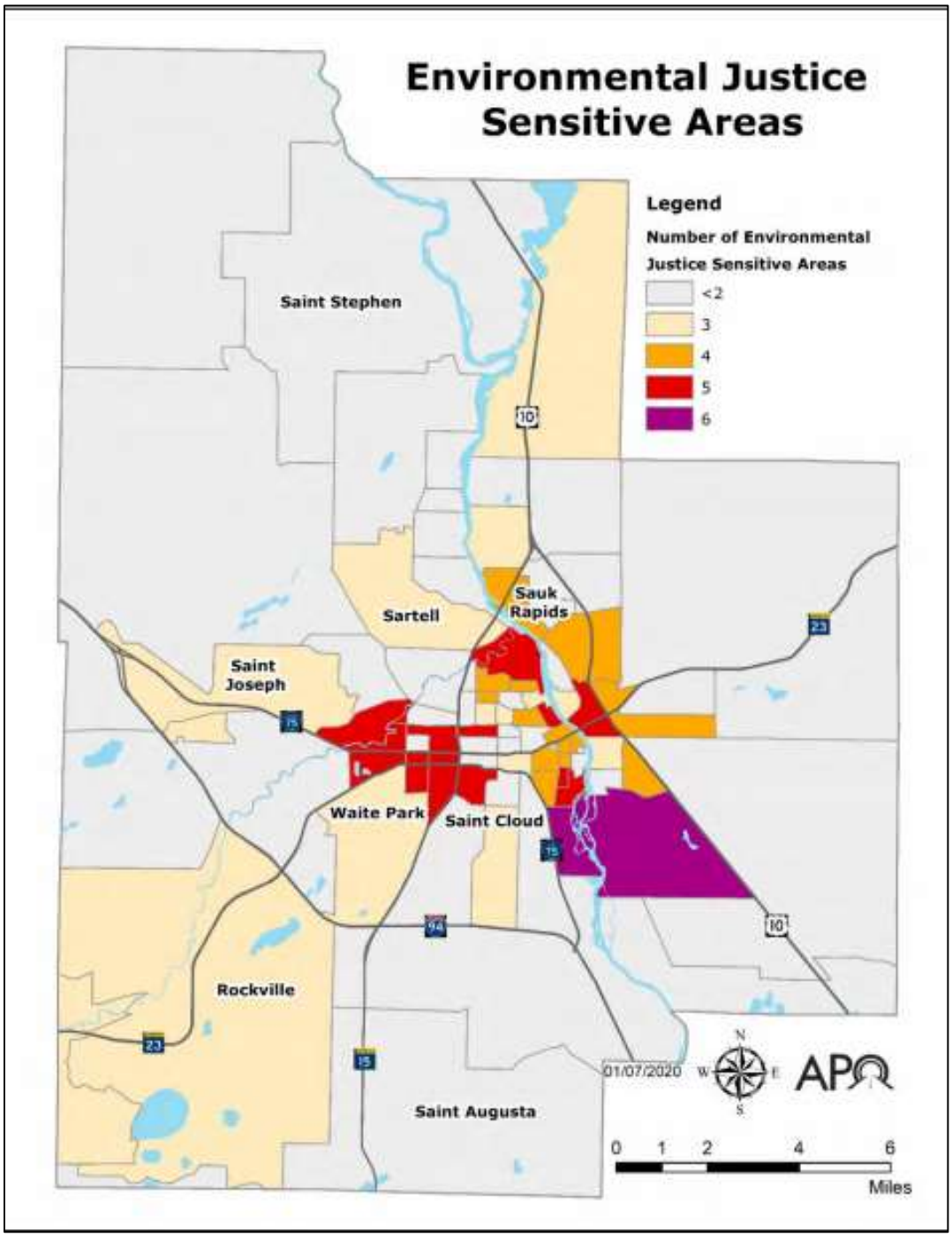


FIGURE 4.5 – APO EJ AND TITLE VI SENSITIVE AREAS MAP 2014-2018 ACS DATA ENCOMPASSING MINORITY POPULATIONS, LOW-INCOME HOUSEHOLDS, PEOPLE WITH DISABILITIES, LIMITED ENGLISH PROFICIENCY POPULATIONS, ZERO VEHICLE HOUSEHOLDS, PEOPLE OVER THE AGE OF 65, AND PEOPLE UNDER THE AGE OF 18.

DATA COURTESY OF U.S. CENSUS BUREAU

GOAL 5: PROMOTE AN INTERCONNECTED REGIONAL ACTIVE TRANSPORTATION NETWORK

This goal encompasses both regional facilities and improvement needs currently within the MPA and future expansion that would extend to neighboring regions.

In the same way that roadway and transit networks have expanded to serve the needs of the MPA's residents, a coordinated system of pedestrian and bicycle facilities will serve the needs of a growing region. Those who walk or use a bicycle often count on reliable access to local and regional travel destinations. In addition to filling these needs, every local jurisdiction derives shared economic benefits from an areawide network that connects communities within and beyond the MPA.

To aid in accomplishing this goal, the APO has identified the following objectives.

Objective 5.1: *Improve connectivity across the APO's planning area.*

Residents who use active transportation facilities often desire or need to reach destinations outside of their communities. When area residents were asked to identify their preferred routes for walking and bicycling during the ATP public engagement, it was revealed that bicycle routes often cross into other local jurisdictions. What was shown is that users are not confined to the city in which they may begin a trip and will often seek destinations and services throughout the region.

Objective 5.2: *Improve connectivity with communities outside of the MPA's boundaries.*

System connectivity for bicycling and other active transportation needs goes beyond the MPA area. The MnDOT District 3 Bicycle Plan indicates that the MPA will be the nexus for at least seven regional priority corridors. Bicycle facilities provided along these priority corridors are planned to reach other areas throughout the state. Filling gaps along these corridors will help address these interregional connectivity needs.

While providing access for short trips is essential for many, addressing the needs of bicyclists that may have longer commuting needs or recreational desires is important. Completing connections to transportation networks and services outside of the confines of the MPA will help address these needs. With better access comes more attention to our area and usage that has a proven benefit to local and regional economies.

To further evaluate this objective, APO staff conducted the following tasks:

- *Mapped locations for connections within and between two or more regional corridors.*
- *Mapped locations for connections between local facilities and regional corridors.*

Attention was given to the usage or function of each bicycle or pedestrian facility and whether it primarily serves regional or local travel desires. In addition, consideration was given not only to how facilities that serve a regional function may be improved or expanded but how access to the regional network from each community may be improved.

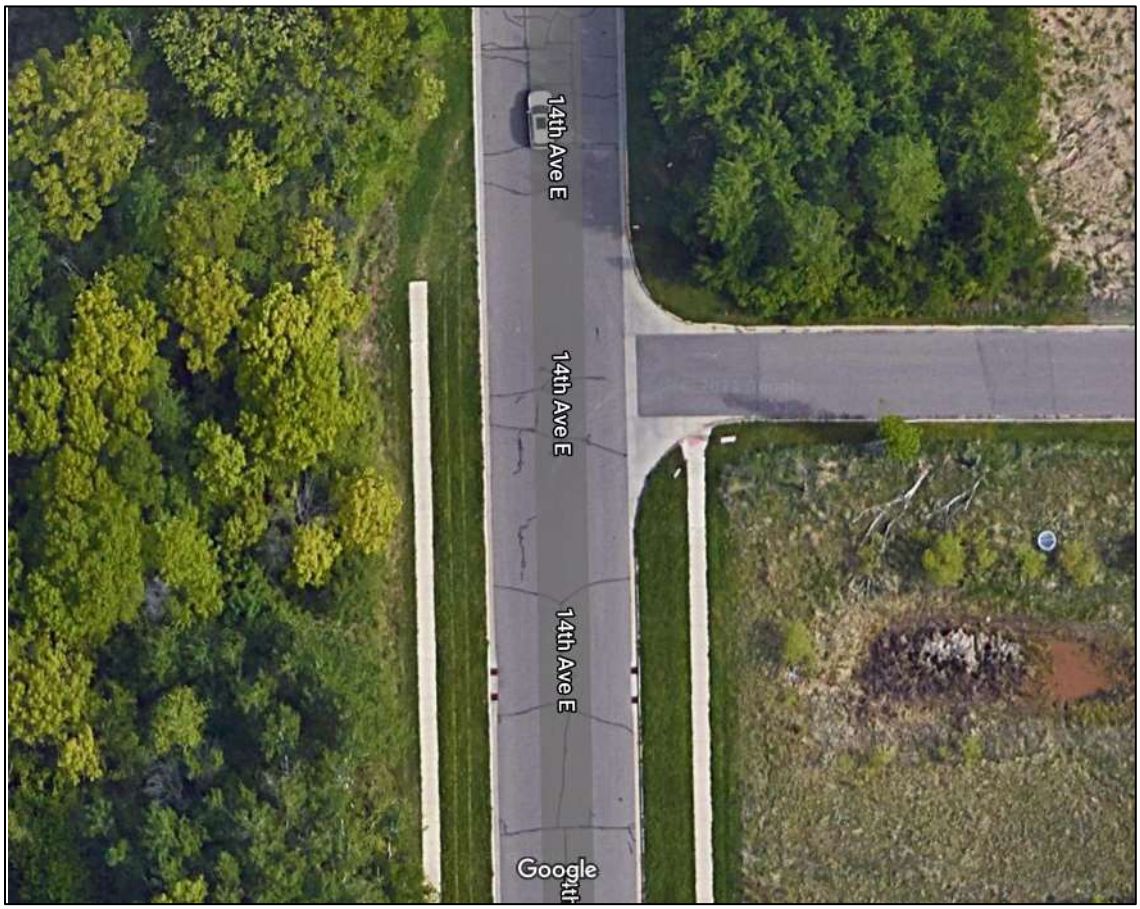


FIGURE 4.6 – SIDEWALK ENDING AT A CITY BOUNDARY.

Goal 5 Performance Measures

From a regional perspective, inter-jurisdictional coordination in constructing sidewalks is important. Often these inter-jurisdictional facilities connect residential areas with commercial areas, food assets, and jobs. A sidewalk that simply ends without making that connection does little good. This performance measure is intended to highlight specific areas lacking those connections.

Performance Measure 5.1: *The percentage, by jurisdiction, of the Regional Priority Bicycle Network centerline miles that do not exist.*

Later in this chapter, the process for designating regional bicycle facilities and connecting to the local network is discussed. The intent is to stitch together a network of shared use paths and on-road bicycle facilities to provide a regional network such that a person could safely and comfortably ride their bicycle from one side of the metro area to the other.

Below is a summary of goals 1-5 with each objective and performance measure.

Goal 1	Objectives	Performance Measures
•Improve Bicycle and Pedestrain Safety and Comfort	•**1.1:** Reduce the number and severity of crashes involving pedestrians and people who cycle. •**1.2:** Improve the comfort level of active transportation facilities where necessary.	•**1.1:** The regional five-year rolling average of non-motorized fatalities and suspected serious injuries. •**1.2:** The percentage, by jurisdiction, of centerline miles of arterial and collector roadways that have a sidewalk or shared use path on at least one side.

Goal 2	Objectives	Performance Measures
•Improve Active Transportation Connections to Desired Destinations	•**2.1:** Improve connectivity to high-demand destinations for bicyclists and pedestrians. •**2.2:** Improve bicycle and pedestrian connections to and from transit stops.	•**2.1:** The percentage of high-demand destinations within a jurisdiction that fall within certain distance categories based on how far the destination is from an active transportation facility. •**2.2:** The percentage of transit stops within a jurisdiction that fall within certain distance categories based on how far the stop is from an active transportation facility.

Goal 3	Objective	Performance Measures
•Improve the Condition of Active Transportation Infrastructure	•**3.1:** Improve the state of good repair for active transportation facilities.	•**3.1:** The percentage, by jurisdiction, of on-road bicycle routes for which the pavement condition is rated as poor. •**3.2:** The percentage, by jurisdiction, of shared use paths for which the pavement condition is rated as poor.

Goal 4	Objectives	Performance Measures
•Provide Equitable Access to Active Transportation Facilities for All People of All Abilities	•**4.1:** Provide comfortable facilities and access for people of all ages and abilities. •**4.2:** Improve access to active transportation facilities in areas with high concentrations of vulnerable and underserved populations.	•**4.1:** The percentage, by jurisdiction, of street pedestrian crossings (i.e., crosswalks, etc.) that do NOT meet ADA accessibility standards. •**4.2:** The number of miles of active transportation facilities per 1,000 residents in EJ/Title VI sensitive areas in comparison to non-sensitive areas.
Goal 5	**Objectives**	**Performance Measure**
•Promote an Interconnected Regional Active Transportation Network	•**5.1:** Improve connectivity across the APO's planning area. •**5.2:** Improve connectivity with communities outside of the MPA's boundaries.	•**5.1:** The percentage, by jurisdiction, of the Regional Priority Bicycle Network centerline miles that do not exist.

FIGURE 4.7 – SUMMARY OF GOALS, OBJECTIVES, AND PERFORMANCE MEASURES.

NEEDS ASSESSMENT METHODOLOGY

While there are a variety of constraints that may make it difficult to address many of the needs in the local active transportation network, it is nonetheless important to understand the limitations of the current system. The starting point for any planning process is knowing where the problem areas lie. Identifying and analyzing needs informs discussion of priorities and a systematic approach toward addressing critical infrastructure gaps.

In coordination with staff from member jurisdictions and community volunteers, APO staff have developed the following methodology to address critical gaps in the current active transportation system. It should be noted that this process does not account for every gap or need in the network. Instead, this methodology focuses on addressing higher-priority needs utilizing existing data relating to the goals and objectives previously outlined in this chapter.

The APO's active transportation needs assessment methodology was broken into three phases. Beginning with an in-depth analysis of transportation networks, APO staff identified issues and needs within individual communities across the region. This cursory review led to a more detailed analysis of active transportation needs for focus areas identified within each city and ultimately the identification of jurisdictional-level project recommendations – Phase 2. In the final phase, local and regional needs identified in the previous phases were prioritized according to the degree goals, and objectives would be addressed.

PHASE 1: JURISDICTIONAL EVALUATION OF CURRENT FACILITIES AND SERVICE NEEDS

To begin the regional needs assessment, APO staff started by identifying transportation infrastructure needs within each of the five cities in the planning area. Active transportation trips, by their nature, often tend to be short trips started and completed close to where people live. Beginning at this micro-level helped APO staff understand the make-up of the individual communities (and neighborhoods) and allowed staff to carefully look at critical gaps not necessarily evident at a larger geographic scale.

APO staff began with a cursory analysis of the existing infrastructure and how much service is being provided. Data was compiled for each municipality specific to each factor listed under goals 1-4. From there, staff developed physical maps of areas in each city with existing infrastructure and other features based on the outlined factors.

For example, staff developed a map of desired destinations throughout each city – schools, parks, food assets, large employers – and examined the existing active transportation infrastructure in the surrounding area (see Figure 4.8).

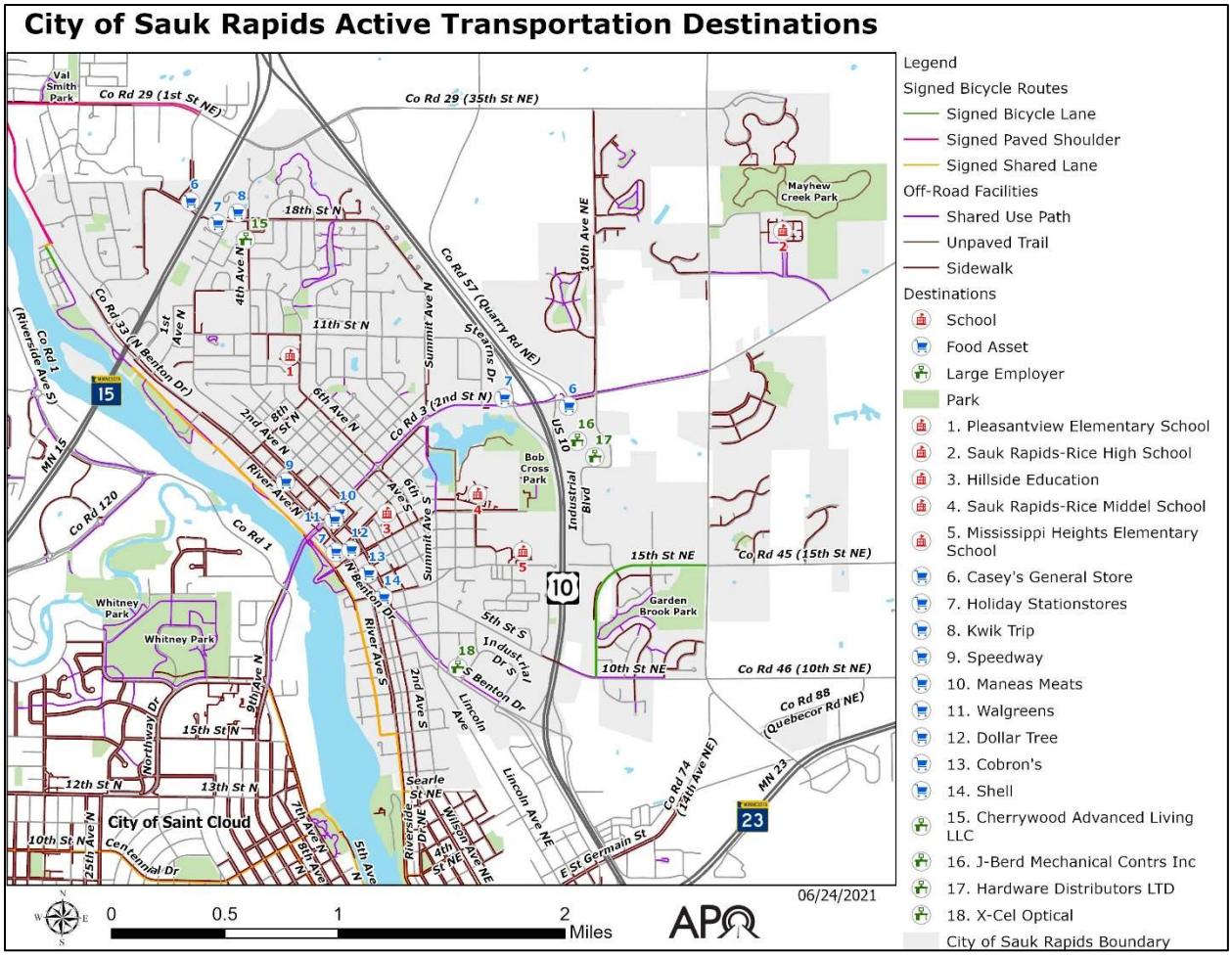


FIGURE 4.8 EXAMPLE MAP SHOWING FACILITIES WITHIN A QUARTER MILE BUFFER OF A DESTINATION TYPE

Comments that were documented through public engagement avenues for the ATP provided additional information on the functionality of the active transportation system.

From the individual mapping exercises performed for each factor, locations with multiple issues or concerns were identified. These areas of need rose to the top based upon the number of times they were explicitly identified as deficient or lacking from the review of maps and factors. Figure 4.9 identifies where these various hot spots were identified within the planning area.

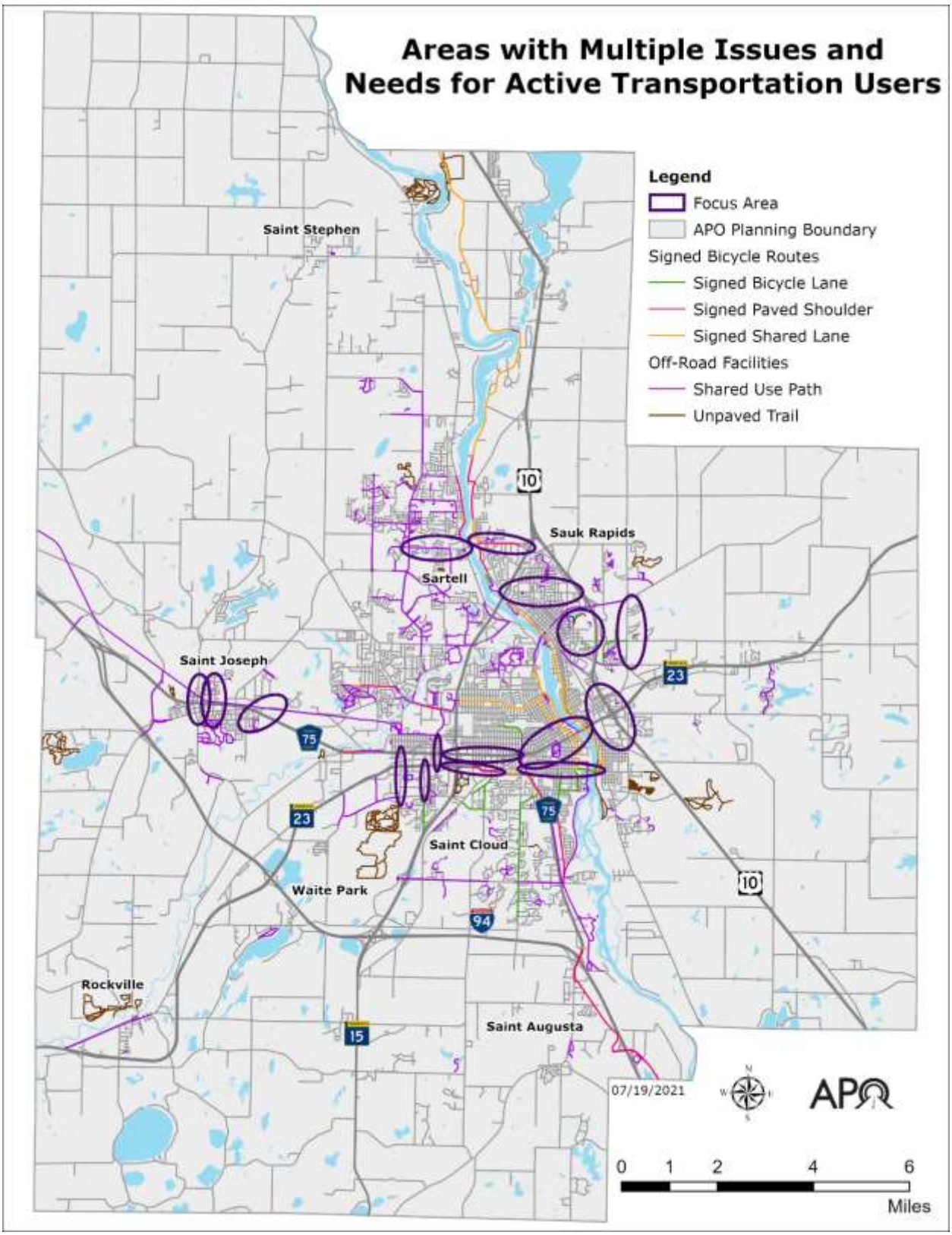


FIGURE 4.9 – FOCUS AREAS ACROSS THE METRO IDENTIFIED FOR FURTHER REVIEW IN RELATION TO ACTIVE TRANSPORTATION NEEDS.

After completing an initial review, APO staff began discussions with the respective city staff (planning, engineering, and law enforcement) to gain their perspectives and discover additional issues unique to the community that might not have been noticed with the initial analysis.

Summary Measures for All Five Cities			2019
Number of Non-Motorized Fatalities and Suspected Serious Injuries Five Year Rolling Average			*7.8*
Percentage miles of arterials & collectors that have a sidewalk or shared use path (SUP) on at least one side			*51.9%*
Percent of destinations that fall within distance categories	Schools	0 Ft (Asset Served by AT Facility)	*86.6%*
		1-310 ft (One block or less)	*2.9%*
		311-930 ft (Two to three blocks)	*8.6%*
		> 931 ft (Four or more blocks)	*0.0%*
	Food Assets	0 Ft (Asset Served by AT Facility)	*78.3%*
		1-310 ft (One block or less)	*9.2%*
		311-930 ft (Two to three blocks)	*8.3%*
		> 931 ft (Four or more blocks)	*4.2%*
	Large Employers	0 Ft (Asset Served by AT Facility)	*60.7%*
		1-310 ft (One block or less)	*7.9%*
		311-930 ft (Two to three blocks)	*13.5%*
		> 931 ft (Four or more blocks)	*18.0%*
	Parks	0 Ft (Asset Served by AT Facility)	*76.0%*
		1-310 ft (One block or less)	*4.8%*
		311-930 ft (Two to three blocks)	*7.7%*
		> 931 ft (Four or more blocks)	*11.5%*
	Transit Stops	0 Ft (Asset Served by AT Facility)	*59.4%*
		1-310 ft (One block or less)	*19.5%*
		311-930 ft (Two to three blocks)	*11.7%*
		> 931 ft (Four or more blocks)	*9.4%*
Percent of street crossings that do not meet full ADA standards			73.3%
Miles of Active Transportation facilities per 1,000 residents in EJ/Title VI Sensitive Areas in comparison to non-sensitive areas			*4:5*
Percent mileage of Regional Priority bicycle facilities that do NOT exist			*46.7%*
Percent of on-road bicycle facilities with poor pavement			*6.8%*
Percent of SUP with rough/very rough pavement			*20.3%*

FIGURE 4.10 – PERFORMANCE REPORT CARD FOR ALL FIVE CITIES (2019)

From the measures of performance identified earlier in this chapter, APO staff prepared "report cards" to quantify existing conditions within each city as they relate to ATP goals and objectives. Figure 4.10 summarizes the results from the five cities considered in combination.

PHASE 2: ANALYSIS OF JURISDICTIONAL FOCUS AREAS

Multiple areas of need were identified after examining each of the factors within the city. This lead APO staff to conduct a more detailed analysis of these "focus areas."

APO staff consulted additional data sources including traffic speeds and volume, crash locations, pedestrian crossings, signals, and existing right-of-way. This deeper analysis also considered land use and how neighborhoods and businesses were being served in these areas, providing a clearer picture of the respective issues within focus areas. Figure 4.11 provides an example of the additional data sources reviewed during this step.

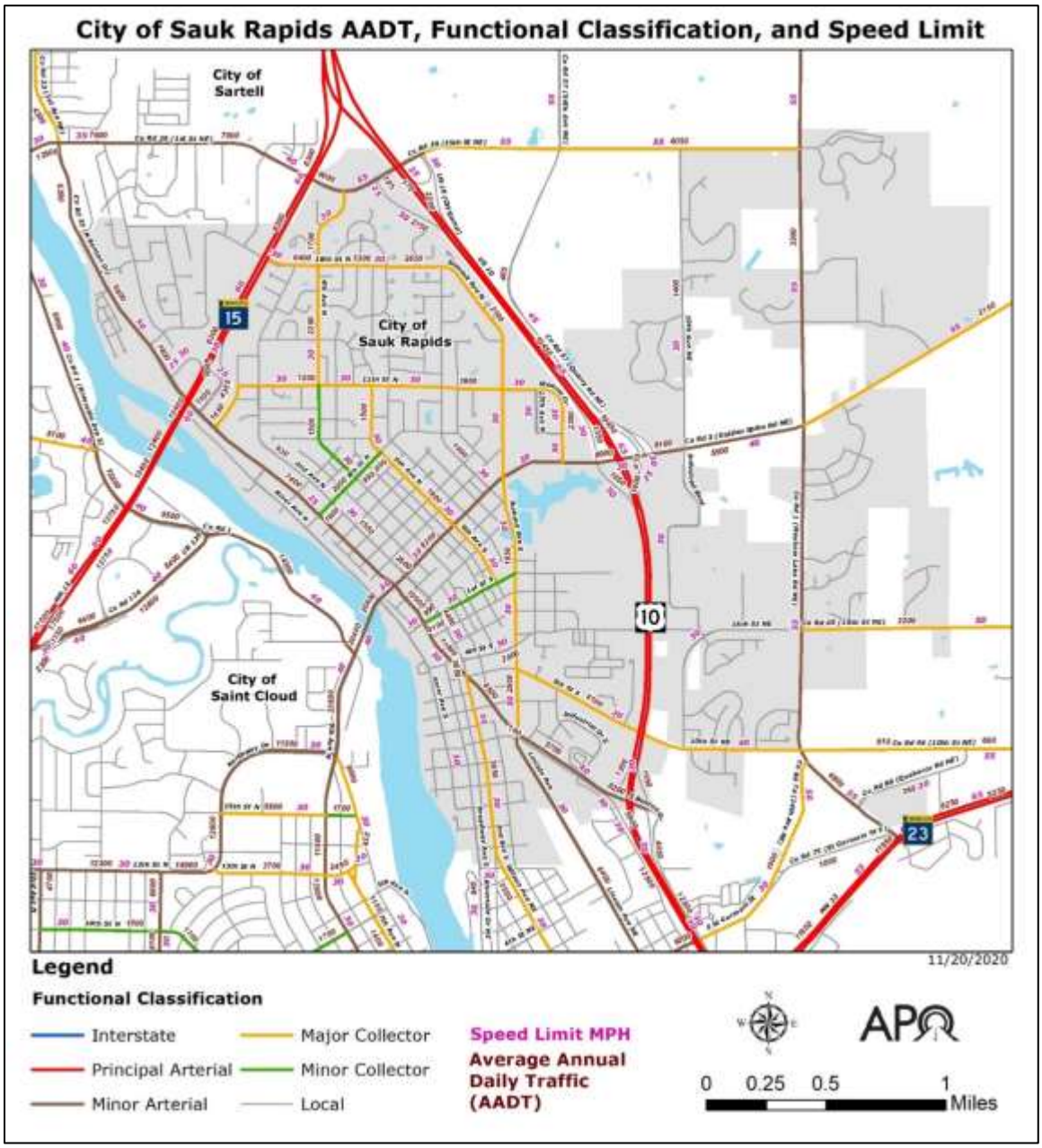


FIGURE 4.11 EXAMPLE OF ROADWAY FACILITY AND USAGE DATA CONSULTED IN FOCUS AREA ANALYSIS.

APO staff again consulted with jurisdictional staff to further vet these focus areas, identify any plans and projects that have begun to address issues within these areas, and jointly determine other possible remedies to confront these concerns.

As a result of this analysis and coordination with jurisdictional partners, APO staff were able to recommended projects to address these areas of concern. A municipality specific list of recommendations can be found within Appendices A-E.

Approximately 125 active transportation projects were recommended across the metro.

PHASE 3: THE REGIONAL NETWORK

After reviewing the local network, APO staff focused their attention on examining the connectivity needs on a regional level. This phase of analysis relates specifically to Goal 5. In addition to advancing the active transportation network within municipalities, this plan also sought to identify and advance projects that fulfilled the vision of a coordinated *regional* network of walkways, bikeways, and related facilities.

The first step in determining a proposed regional network was to map existing facilities. For identification of potential regional bicycle facilities, four basic guidelines were used:

1. Use currently existing facilities as much as possible.
2. Focus on longer, continuous facilities and corridors to help facilitate longer, regional trips.
3. Aim for an approximate two-mile distance between regional corridors to ensure a good geographic distribution of regional facilities.
4. Give preference to shared use paths whenever possible.

Pedestrian trips, by their nature, tend to be of shorter distance. Therefore, to assess important "regional" sidewalk connections, the analysis focused on seamlessly connecting existing sidewalks across city boundaries and existing residential neighborhoods with jobs and food assets within a half-mile but in another city.

Regional Connections Within the MPA

Active transportation users do not strictly confine their trips to their community. They often want to be able to reach destinations in neighboring cities. Just as vehicle travel depends upon roadways that cross jurisdictional lines, bicyclists and other active transportation users also rely on interjurisdictional facilities.

An initial review of facilities region-wide examined how effectively the current active transportation network satisfies travel connectivity needs between the Saint Cloud MPA core cities.

Logical connections and potential projects that would help complete network gaps were analyzed for feasibility and effectiveness with a focus on developing direct paths following collector or arterial roadways.

In addition, this analysis also considered how to extend pathways from existing local facilities to best reach these planned regional routes efficiently.

APO staff then developed a preliminary planning area map identifying the existing components of the "regional" network and possible solutions to further connect the existing gaps.

Connecting the MPA to Other Regions

By connecting the APO's regional network to communities outside the planning area, the APO will be able to attract visitors to the region, providing for additional economic benefits (including tourism) for the area.

According to the MnDOT District 3 Bicycle Plan, the Saint Cloud metro is destined to become an active transportation hub. This plan and the Statewide Bicycle System Plan illustrate desired corridors for active transportation networks from across the state that will have an impact on the Saint Cloud MPA. While MnDOT has identified priority facilities, the ultimate responsibly for efficiently connecting those routes lies with the APO and local planning partners.

In addition to connecting the cities within the MPA, APO staff took the priority corridors identified in the MnDOT District 3 Bicycle Plan and sought to provide possible connections from the MPA to those desired cities outside of the APO's planning area.

Initial concepts of this regional bicycle network were brought to city and county engineers and planners who then reviewed and further refined this proposed network. Input on this regional network was also received by members of the public, APO committees (ATAC and TAC) along with members of the APO's Policy Board.

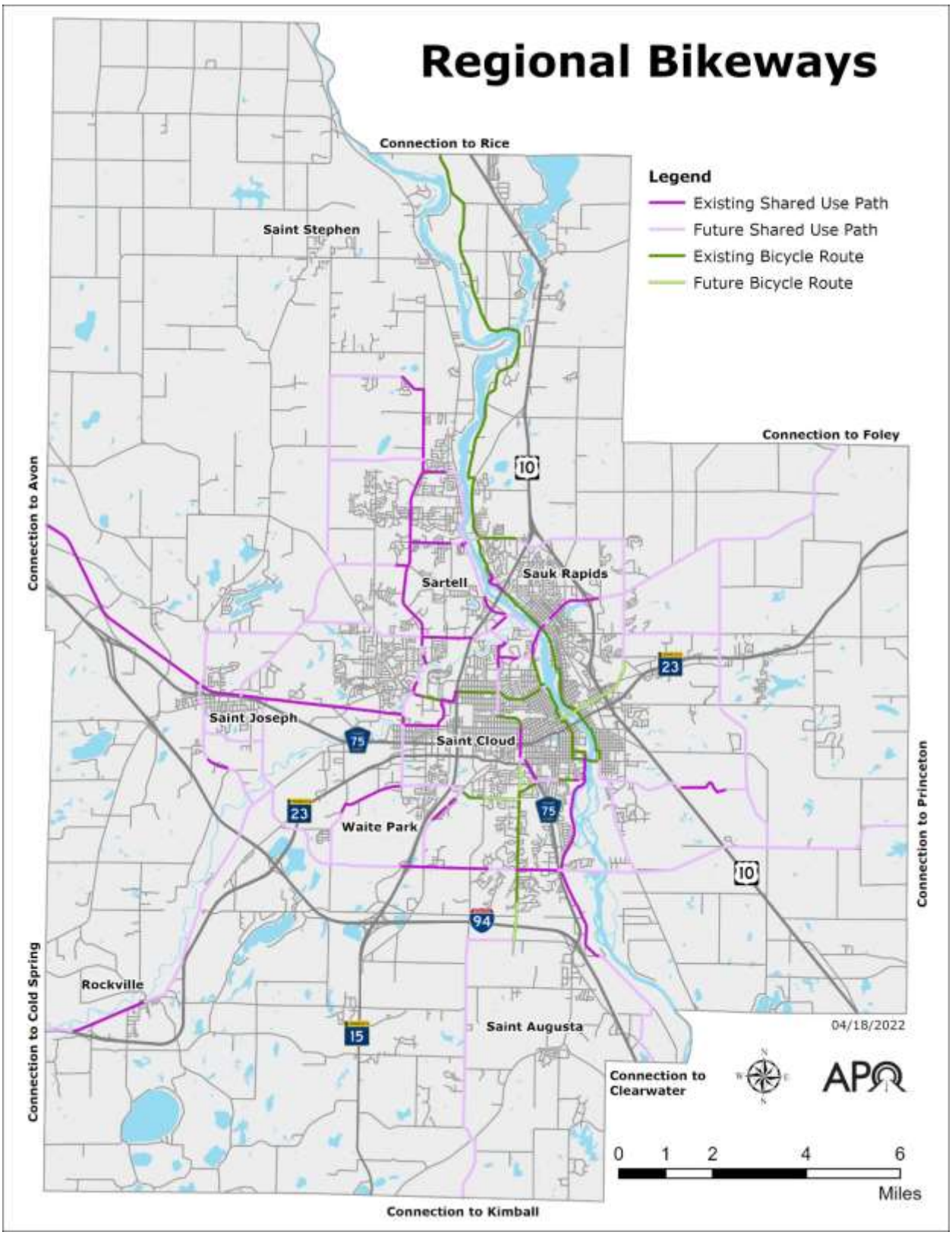


FIGURE 4.12 REGIONAL ACTIVE TRANSPORTATION FACILITY NETWORK

CHAPTER FIVE: TOOLBOX

INTRODUCTION

Becoming a bicycle and pedestrian-friendly city does not just happen through the addition of infrastructure. New sidewalks, safer bicycle lanes, and well-maintained shared use paths are just one component needed to create an inclusive, multimodal transportation network. Through laws and/or ordinances, public policies all help foster active transportation within a community and a region.

This chapter will discuss some of the many highly encouraged policies and procedures jurisdictions should consider adopting when trying to become more multimodal friendly. Also included in this chapter are resources and best practice approaches for city planners, engineers, and elected officials to reference when developing their own active transportation policies.

COMPLETE STREETS POLICY

As mentioned in Chapter Two, the Complete Streets concept aims to create a transportation network that meets the needs of both motorists and non-motorists. This is accomplished during the planning and designing of streets to include safety features such as lowering traffic speeds, bike lanes, sidewalks, and signal timing to help ensure that everyone is safe using the network regardless of travel mode. In 2005, only 35 communities in the U.S. had adopted the Complete Streets policy, according to Smart Growth America. That number had grown to 1,477 by 2018. The APO, the City of Saint Cloud, and the City of Sartell have adopted Complete Streets resolutions. This section gives examples of nationally recognized resolutions and a breakdown of a successful Complete Streets policy.

FIGURE 5.1 – EXAMPLE OF A COMPLETE STREET IN SARTELL

ELEMENTS OF A COMPLETE STREETS POLICY

Based on years of research from The National Complete Streets Coalition (NCSC), the group has produced 10 policy elements needed for a successful Complete Streets Policy found in greater detail in the 2018 version of The Elements of a Complete Streets Policy (https://bit.ly/3pHIcvD). Below is the list of elements the NCSC recommended to include in a successful Complete Streets policy.

1. **Vision and intent:** The vision should include why creating a complete connected network for walking and biking is essential to the community and how they intend to make an equitable transportation system for all users.
2. **Diverse users:** Who are the most underinvested and underserved community members, and how can complete streets benefit vulnerable users.
3. **Commitment in all projects and phases:** Will leaders and policymakers apply the policy to all new, retrofit/reconstruction, maintenance, and ongoing projects.
4. **Transparent, accountable exceptions:** Before granting any exceptions, a straightforward procedure should be in place so that any exceptions require high-level approval and public notice before exceptions.
5. **Jurisdiction:** Requires interagency coordination between government departments and partner agencies on Complete Streets.
6. **Design:** Consider the best design criteria and guidelines with a set time frame for implementation.
7. **Land use and context-sensitivity:** Considers the surrounding community's current and expected land use and transportation needs.
8. **Performance measures:** Establishes performance standards that are specific, equitable, and available to the public.
9. **Project selection criteria:** Provides specific criteria to encourage funding prioritization for Complete Streets implementation.
10. **Implementation steps:** Includes specific next steps for implementation of the policy

Resolution Example

The NCSC releases a report of the best Complete Streets Policies based on the scoring rubric listed in The Elements of a Complete Streets Policy. In 2018, the top-rated policy in the nation came from Cleveland Heights, Ohio, detailed in The Best Complete Streets Policies of 2018 (https://bit.ly/3EE9jxF) document. The Ohio city of approximately 45,000 developed a strong policy by taking advantage of available resources, such as reaching out to the NCSC for guidance while developing the policy. City staff researched Complete Streets practices in similar-sized cities and reviewed case studies around Complete Streets implementation. In addition, Cleveland Heights staff reached out to their local MPO for assistance in data gathering and with the overall planning process. Cleveland Heights Complete and Green Street Policy (https://bit.ly/3rNlSmI) included strong language and clear time frames that ensured that streets were designed for all users. This thorough process earned the trust and confidence of the city manager and the city council by easing concerns about the cost and implementation of such a policy.

ADDITIONAL RESOURCES

- Taking Action on Complete Streets: Implementing processes for safe, multimodal streets. (https://bit.ly/3EipsIl)
- Evaluating Complete Streets Projects: A guide for practitioners. (https://bit.ly/3yTpHs8)
- Complete Streets: local policy workbook. (https://bit.ly/3EoPmda)
- Complete Streets from Policy to Project: The Planning and Implementation of Complete Streets at Multiple Scales. (https://bit.ly/3emH633)

SAFE ROUTES TO SCHOOL

The Safe Routes to School (SRTS) program aims to allow students to walk, bike, and/or roll to school safely and conveniently. Through this initiative's multidisciplinary approach (evaluation, education, encouragement, equity, engagement, and engineering -- known as the 6 Es), SRTS seeks to improve safety, reduce traffic, and improve air quality around schools. In addition, SRTS efforts strive to provide more opportunities for students to be more physically active and thus help foster a better academic learning environment.

POLICY RECOMMENDATIONS

Policies that Work

The Safe Routes to School Local Policy Guide (https://bit.ly/3dx8GKp) states no single policy will make walking and bicycling entirely safe for children. Policies that work require comprehensive support across the political landscape and action from community organizations to address transportation demands. Policies must use powerful language that is clear and identifies goals leaving out vague language that allows for multiple interpretations. For a policy to be implemented, it is vital to work with those who make the decisions and uphold the policies put into place.

FIGURE 5.2 – SCHOOL SPEED LIMIT SIGN BY KENNEDY COMMUNITY SCHOOL IN SAINT JOSEPH

Community-Centered Schools

Building community-centered schools create multiple benefits for student learning, health, and the community. Policies at the local and state level need to be in place for a successful SRTS program to thrive. The National Trust for Historic Preservation released Helping Johnny Walk to School: Policy Recommendations for Removing Barriers to Community-Centered Schools (https://bit.ly/3dv3GG3), a document which outlines some barriers and actions steps around creating and maintaining a community-centered school.

- Minimum acreage standards lead to distant school locations too far for walking and biking. To help mitigate this problem, eliminate minimum acreage standards in city and state guidelines and funding formulas.
- School enrollment requirements make it challenging to maintain or build smaller schools that fit within neighborhoods. It is recommended to lower or eliminate minimum school enrollment requirements, which will allow more students to walk or bike to schools and reap the educational benefits of smaller schools. Schools should be located near the families they serve, accessible by active transportation modes and public transit.
- There is funding bias towards the new construction of schools at the state level versus the renovation of existing schools. Eliminate incentivizing building new schools and encourage school districts to take steps to ensure long-term retention of centrally located buildings.
- Assist in providing older schools to be upgraded with up-to-date technology. Modern technologies are essential learning tools for students and help them succeed and remain competitive for future job opportunities.
- New schools typically require new roads, sewers, and other infrastructure, which burden the community with extra costs.
- The community often does not utilize the sharing of school facilities. After school and during the summertime, many schools sit empty yet have the technology and space for many community activities and partnerships, such as the local YMCA, library, and sporting facilities.
- Deferred maintenance leads to the abandonment of existing schools, so funding regular maintenance and repairs are vital.

Comprehensive Plan

The Safe Routes to School Local Policy Guide (https://bit.ly/3dx8GKp) offers advice on comprehensive plans that can influence SRTS planning. Comprehensive plans are typically updated every five to 10 years and serve as the guiding plan for cities, establishing goals, purposes, zoning, and other planning-related activities. The comprehensive plan that most local governments develop consider housing, land use, transportation, environment, and other factors. Regarding SRTS, every comprehensive plan should include at least these four policies.

1. Adopt a goal for a bicycle and pedestrian mode-share for the jurisdiction.
2. Adopt by reference any SRTS or bicycle and pedestrian plans.
3. Adopt a Complete Streets Policy.
4. Ensure that new developments include requirements for bicycle racks and pedestrian and bicycle facilities to the site.

ADDITIONAL RESOURCES

- Safe Routes Partnership: Building Blocks. (https://bit.ly/3yS6AP4)
- Safe Routes to School and Health: Understanding the Physical Activity Benefits of Walking and Bicycling to School. (https://bit.ly/3ySGk7j)

FACILITY PRESERVATION AND MAINTENANCE

Like our roads and bridges, active transportation facilities' pavement and physical infrastructure need to be preserved and maintained over time.

FHWA defines preservation as work planned and performed to improve or sustain the condition of the transportation facility in a state of good repair. Preservation activities do not add capacity or structural value but restore the overall condition of the transportation facility.

Maintenance – however – is performed to maintain the transportation system's condition or respond to specific needs or events that restore the system to a functional operation state. Maintenance is separated into both routine and preventive maintenance. Routine maintenance is performed in reaction to an event, season, or overall deterioration of the assets. It requires regular reoccurring attention, such as sweeping the roadway, cutting the grass, or snow removal. Preventative maintenance is a cost-effective means of extending the useful life of an asset, such as crack treatments, fog seals, and chip seals.

Preserving and maintaining the current active transportation network benefits the system users. Applying the proper preservation treatment at the right time can expand the system's life cycle and help lower costs over time. It is vital to measure the system's current condition and invest in repairs that have the most significant impact. To help the system stay in good repair establishing measurable goals and targets to track progress over time is recommended.

ON-ROAD FACILITIES

On-road facilities that need preservation and maintenance practices include but are not limited to bike lanes and bike routes. As noted in Chapter Two, nearly 10% of the MPA’s on-road facilities are in fair to poor condition. Maintaining on-road bike facilities should be treated the same as the travel lanes for cars. This includes similar surface repairs such as asphalt patching, asphalt crack sealing and filling, fog sealing, chip sealing, and other preservation treatments in addition to addressing potholes and cracking pavement. Since most on-road facilities are on the edge of the roadway, this area tends to accumulate rocks, gravel, sand, snow, ice, glass, and other debris, making cycling dangerous to the user. It is recommended that other routine maintenance include clearing and sweeping, vegetation clearing, snow removal, signage updating, and striping repainting.

FIGURE 5.3 – EXAMPLE OF BIKE LANE IN POOR CONDITION IN SAINT CLOUD

OFF-ROAD FACILITIES

Off-road facilities include shared use paths and sidewalks. As noted in Chapter Two, one out of every five miles of shared use path in the MPA has pavement in rough to very rough condition. Like on-road facilities, pavement preservation treatments such as crack sealing, patching, fog sealing, and overlays are needed. Best Practices in Trail Maintenance (https://bit.ly/3pFvDRb) recommend seal coating shared use paths every five years, resurfacing these facilities every 10 years, and complete replacement or resurfacing every 20 years on condition.

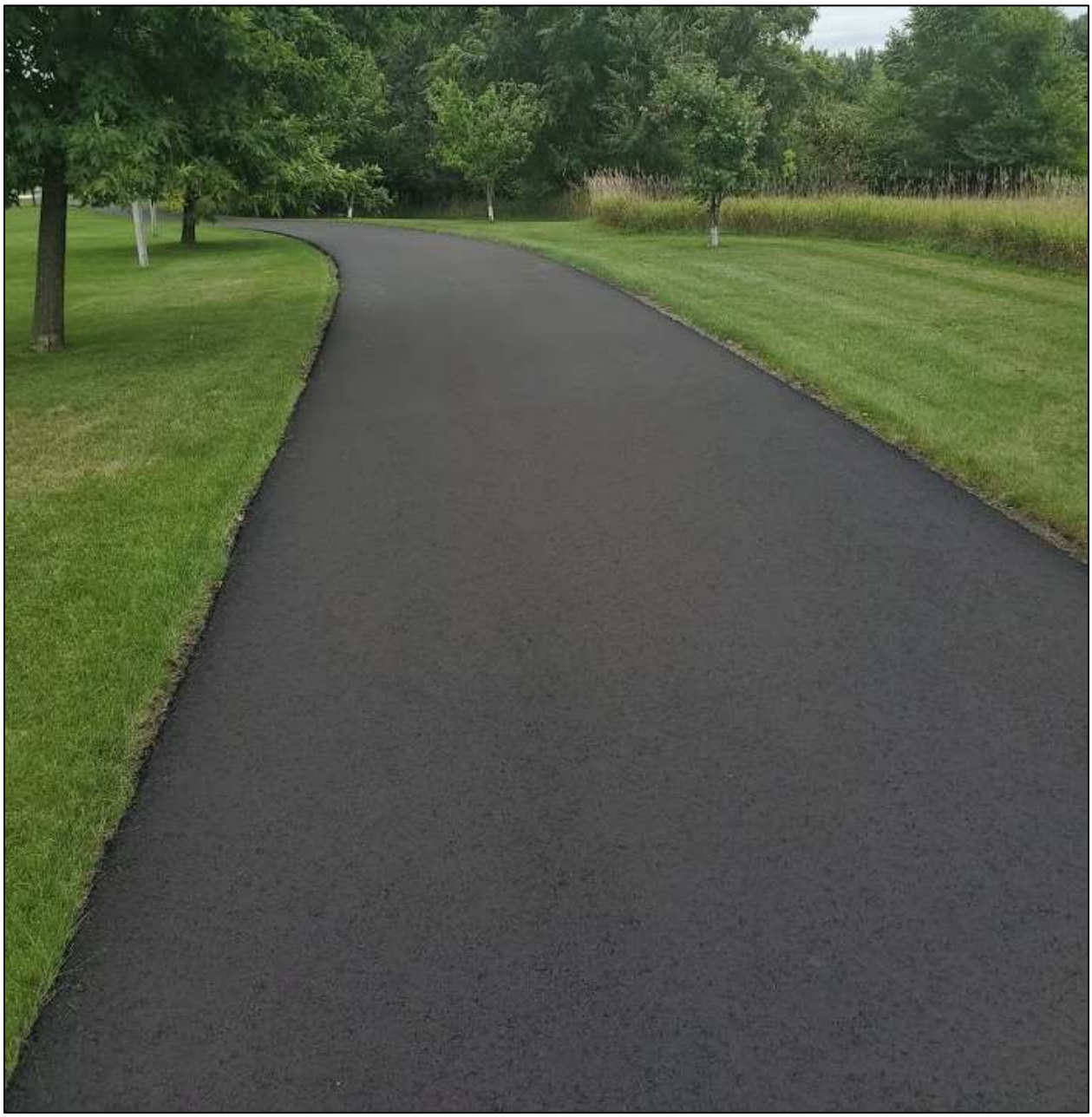


FIGURE 5.4 – EXAMPLE OF A NEWLY PAVED SHARED USE PATH IN SAINT CLOUD

As reference in the Sidewalk Repair Funding Guide (https://bit.ly/3rJstPf), sidewalks in despair create dangerous situations for people, especially those with disabilities and older adults. Funding policies for sidewalks fall upon the adjacent property owners to repair or replace sidewalks in the MPA's cities. This approach has led to numerous sidewalks left in disrepair. Cities such as Ithaca, New York, have created a sidewalk policy to address this issue that divides its city into Sidewalk Improvement Districts. Every property owner contributes to an annual sidewalk maintenance and preservation fee within each district. Each property owner is assessed yearly, depending on land use. For example, assessments of a one-family household will be less than an apartment building. This type of funding assures a steady flow of money readily available for needed repairs.

ADDITIONAL RESOURCES

- Bicycle Facility Design Manual: Chapter 6, Maintenance. (https://bit.ly/30RWYau)
- Roadway and Bikeway Maintenance Practices. (https://bit.ly/3JcXyB2)
- Bellingham Bicycle Master Plan: Chapter 4: Design and Maintenance Guidance. (https://bit.ly/3JbS2P3)

SNOW REMOVAL POLICIES

Lack of snow removal on both sidewalks and curb ramps is a problem known to users of the active transportation system. In the MPA, it is the property owner's responsibility, not the city, to clear sidewalks of snow and ice. The reason stated most often is that it would be prohibitively expensive for a city to clear every sidewalk after every snowfall. Cost is always a determination of action, but vulnerable users such as those who are physically or visually impaired need to be considered. Snow is often plowed in a timely fashion for motorized vehicles. Still, snow on sidewalks and curb ramps can pose a considerable obstacle forcing many of these users into the street, not making the trip, or calling for a ride from a private company or paratransit, which adds transportation costs to the user.

FIGURE 5.5 – EXAMPLE OF AN ICY SIDEWALK IN SAUK RAPIDS.

SNOW MANAGEMENT BASICS

Sidewalks, crosswalks, and curb ramps are not snow storage areas. Kostelec Planning (https://bit.ly/3EBG6mZ) references six lessons cities should consider during the winter.

1. **Plow with care:** When plow operators move slower, snow tends not to pile onto the sidewalk, leaving a clear pedestrian walkway.
2. **Define priority routes for people who walk:** Just as cities designate priority streets for snow plowing, it is more manageable and economically feasible to clear routes that will benefit the most people.

3. **Follow the plows with smaller machines:** Given the size of a standard plow, it is not always possible to remove snow in tight spaces. A smaller machine behind the main snowplow can clear barriers created by the larger plow, such as snow piles left at curb ramps and on crosswalks.
4. **Clear the pathway from bus stops to the street:** Having a clear path to the bus stop is essential for those who depend on transit as a means of transportation.
5. **Change policies to reflect reality:** Property owners can clear many snowfalls with just a shovel. What causes the need for heavier equipment, or a lack of compliance is when snowplows deposit large chunks of snow and ice back onto a recently cleared sidewalk. Policies could require property owners to remove the initial snowfall, but public agencies that plow snow back upon the sidewalk should be responsible for their actions.
6. **Dedicate a percentage of resources to ensuring pedestrian access:** There should be a set-aside portion of resources devoted to snow management for active transportation facilities.

SIDEWALK SNOW CLEARING POLICY EXAMPLES

The City of Burlington

The City of Burlington, Vermont's Public Works Department is responsible for removing snow and ice from city streets and sidewalks. The city's "Snowfighting Program" (https://bit.ly/3EAOR0Q) employs a right-of-way crew to control snow and ice. Due to unpredictable weather, the plan provides flexibility and aims to create geographic equity in snow clearing. The snow removal program includes temporary parking bans on a case-by-case basis per parking zone. Parking bans are posted on a city blog, and residents are alerted via email and by flashing lights that turn on by 3 p.m. Due to narrow street widths, the city has found that snow removal costs and hazards decrease when parking is removed from the streets to allow for street plowing.

The Halifax Regional Municipality (HRM)

The HRM in Nova Scotia, Canada (https://bit.ly/3ydK8zF) has an operating budget for sidewalk snow removal of $4.2 million per year. A performance-based contract was developed to make the cost of snow removal more predictable and requires contractors to provide expenses for snow removal based on performance standards rather than the number and intensity of snow events. Performance expectations are required for each contract to include final sidewalk conditions and time frames for snow and ice removal. Other tasks included in the contract are inspection, complaint tracking, and condition monitoring. The benefit of this strategy is consistent, competitive costs for snow removal no matter how many snow events occur over the contract length.

ADDITIONAL RESOURCES

- Snow Removal Policy Toolkit. (https://bit.ly/3mvO0rg)
- Winter Maintenance of Pedestrian Facilities in Delaware: A Guide for Local Governments. (https://bit.ly/32ehCCB)

WAYFINDING

Wayfinding on a regional level helps users safely find their way around more extensive geography. For example, there are wayfinding signs for the regional trails such as the Mississippi River Trail (MRT), Lake Wobegon Trail, and Beaver Island Trail. The signs can be as simple as arrows pointing in the direction of the trail or include more detailed information such as mileage to other trails, communities, or attractions.

TYPES OF SIGNAGE

Mile Markers

Mile markers are placed incrementally along a trail so users can track their distance traveled. Other benefits include accurate markers that can help determine the location in case of an accident or emergency and assist with reporting maintenance issues.

FIGURE 5.6 – EXAMPLE OF THE BEAVER ISLAND TRAIL HALF MILE MARKER IN SAINT CLOUD.

Trailhead

A trailhead sign provides information and a trail map of the facility. The sign can also have the following features:

- Posted rules and regulations.
- Warnings and information about plants, wild animals, and other hazards.
- A community bulletin board about noteworthy events happening on the trail.

- Historical information.
- A directory of attractions alongside or near the trail.
- A point of contact for trail maintenance issues.

FIGURE 5.7 – EXAMPLE OF THE LAKE WOBEGON TRAILHEAD IN SAINT JOSEPH.

NETWORK SIGNAGE AND BRANDING

Regional trails that cross jurisdictional boundaries should have consistent signage. Stakeholders involved with the trails should collaborate to develop cohesive signage to improve user experience. Consistent branding elevates the visibility and marketing of the trail allowing users within and outside the community can quickly identify the trail system. Effective network signage should strike a balance between establishing a consistent look and feel, promoting the system, and acknowledging the individual trails or the jurisdiction in which they are located.

POLICIES IN ACTION

In San Jose, California, signage guides across the city's trails are located in the Trail Signage Guidelines (https://bit.ly/3m78XbD) directory. Each trail is branded with a distinct icon and color combination at the trailhead while still demonstrating its association with the more extensive network. During the development of the signage standards, the City conducted an audit of the signs installed along existing trails to use the list to inform the replacement of any signs that do not conform with the new guidelines over time.

ADDITIONAL RESOURCES

- Minnesota Manual on Uniform Traffic Control Devices. (https://bit.ly/3svF9cW)
- Trail Wayfinding System: A Practical Guide. (https://bit.ly/3moCJsH)
- Wayfinding Design Guidelines: San Diego Regional Bike Network. (https://bit.ly/3qiuSy4)

BICYCLE PARKING AND STORAGE

Secure bicycle parking and storage is an essential element to encourage the use of bicycles. Users who live in apartments, college dormitories, or other dense living conditions need to know their bikes will be safe from theft or damage. It is not reasonable to expect anyone to ride to their place of employment, the grocery store, or any destination without the confidence that their bicycle will be there when they get back.

TYPES OF BICYCLE PARKING AND STORAGE

According to the Bicycle Parking Guidelines (https://bit.ly/3lRi6VM), a single type of bicycle parking or storage does not satisfy every need. There needs to be short-term and long-term bicycle parking.

Short-term parking is for quick trips to the store or other destinations and provides parking for two hours or less. These types of parking facilities are usually in the open and unsheltered. Bicycle racks are the most common type of short-term parking. Bicycle racks come in a range of styles such as U-rack, wave, grid, spiral, bollard, double-decker, innovative, and decorative. The best locations for bicycle racks are areas with high use and no further than 50 feet from a building entrance. They should also be visible from adjacent bicycle routes or shared use paths. All the bike racks should meet the following requirements:

- At least one wheel and the bike frame can be secured with a U-lock.
- The bike does not tip over and is supported in two places by its frame.
- The location of the rack is protected from motorized vehicles and does not block pedestrian traffic.
- The bike rack is accessible from the street.
- A range of bike shapes and sizes can be accommodated.

FIGURE 5.8 – EXAMPLE OF SHORT-TERM DECORATIVE BIKE PARKING AT THE SARTELL COMMUNITY CENTER.

Long-term parking is for a more extended time frame such as overnight or at the user's place of employment. This type of parking adds extra protection from theft and is preferably enclosed. Most common types of long-term bike parking options include bike parking stations and rooms. Bike parking stations are enclosed spaces where multiple bicycles can be housed and protected from the weather. A bike locker can hold one or two bicycles and protect against vandalism and the weather.

FIGURE 5.9 – EXAMPLE OF LONG-TERM BIKE PARKING AT RAIL STATION IN ENGLAND.

POLICIES IN ACTION

Davis, California has set standards under Municipal Code §§ 40.25A.040 (https://bit.ly/3yfoTh4) for bicycle parking for residential, commercial, industrial, and civic land uses based on a combination of spaces per room, square footage, or percentage of maximum occupancy. Ratios of long-term versus short-term parking are also stated, with residential and industrial land uses required to provide more long-term parking than commercial or civic land uses. For example, apartment buildings are required to have a minimum of one bicycle parking spot per bedroom, with 75% as long-term and 25% as short-term parking; commercial retail spaces are required to have a minimum of one spot per 1,000 square feet, with 75% as short-term and 25% as long-term parking.

RESOURCES

- Madison, WI Code of Ordinances § 28.141 (https://bit.ly/3JenDzS)
- Minneapolis, MN Code of Ordinances § 541.320 (https://bit.ly/3mryMmQ)
- The Essential Guide to Bike Parking (https://bit.ly/3Jeoikx)

TRAFFIC SIGNAL CONTROL AND TIMING

Signal control and timing help reduce conflict between different road users. These devices are typically located at intersections but can also be found at midblock crossings. Traffic signals for active transportation users create a gap in traffic long enough to cross a roadway safely.

When deciding what traffic signal control and timing will work best at an intersection, engineers should consider the volume of active transportation users at the crossing, the presence of a school zone, coordinated signal system, type of grade crossing, and the intersection's crash history.

CONTROLLED INTERSECTION ELEMENTS

In Minnesota's Best Practices for Pedestrian and Bicycle Safety (https://bit.ly/3m0UHRA) and the Pedestrian Safety Guide and Countermeasure Selection System (https://bit.ly/3yt8be0), traffic signals are often combined with one or more of the following treatments to create a safer environment for active transportation users:

- Countdown pedestrian timers reduce pedestrian-vehicle crashes up to 70% after installation and should be shorter cycle lengths (approximately 90 seconds).
- Leading pedestrian intervals (LPI) give pedestrians the WALK signal 3-7 seconds before the motorists are allowed to proceed through the intersection and can reduce up to 60% of pedestrian-vehicle crashes.
- Backplates on traffic lights with retroreflective borders improve the visibility of the signal face during daytime and nighttime conditions. Research shows that installing retroreflective backplates can reduce total crashes by up to 15% at intersections.
- Right-turn-on-red (RTOR) restricts motor vehicles from turning right at a red light. The restriction can be full time or just during certain times of the day.
- Exclusive pedestrian signal timings are most common in urban areas. These stop vehicles from all directions to allow pedestrians the right-of-way to cross the street in any direction (including diagonally).

- An advanced stop line improves the visibility of pedestrians and forces motorized vehicles to stop before the crosswalk.
- Automated pedestrian detection devices, also known as PUFFIN (pedestrian user-friendly intelligent) crossing, use infrared detectors or pressure-sensitive mats to sense when pedestrians are waiting for a crosswalk signal. The device will automatically signal to switch to a pedestrian WALK phase. Some can also determine whether a pedestrian needs more time to cross the roadway and will lengthen the crossing interval.

ADDITIONAL RESOURCES

FHWA Traffic Sign Timing Manual (https://bit.ly/33Y492l)

National Association of City Transportation Officials: Signal Cycle Lengths (https://bit.ly/3qohTL0)

BICYCLE FRIENDLY COMMUNITIES

Communities that adopt the policies and procedures like those listed above help create an environment where active transportation can flourish. When communities take that extra step, they can be nationally recognized by organizations such as the League of American Bicyclists.

The League has awarded communities, businesses, and universities with their bicycle friendly designation with the purpose of creating opportunities for these entities to become a vibrant destination for residents and visitors. Bicycle Friendly Communities (BFCs), businesses (BFBs), and universities (BFUs) are awarded on a four-tier scale (Bronze, Silver, Gold, and Platinum). According to the BFC website (https://bit.ly/3059bZ2), this program provides a roadmap to improving conditions for bicycling and guidance to help make the community's vision for a better, bikeable community a reality.

FIGURE 5.10 – EXAMPLE OF A BICYCLE FRIENDLY COMMUNITY SIGN.

A BFC welcomes bicyclists by providing safe accommodations for bicycling and encouraging people to bike for transportation and recreation. Making bicycling safe and convenient is key

to improving public health, reducing traffic congestion, improving air quality and quality of life.

Minnesota is ranked third in the nation as a bicycle friendly state. There are six universities, 105 businesses, and 33 communities within Minnesota designated as bicycle-friendly. The cities of Saint Cloud and Sartell are both certified in the bronze tier.

There are 10 Building Blocks that the League considers significant for BFC applicants. Each building block is associated with equity, diversity, and inclusion; engineering; education; encouragement; and evaluation and planning – more commonly known as the Five Es.

1. High-speed roads with bicycle facilities.
2. The total bicycle network mileage to total road network mileage.
3. Bicycle education in schools.
4. Share of transportation budget spent on bicycling.
5. Bike month and bike to work events.
6. Active bicycle advocacy group.
7. Active bicycle advisory committee.
8. Bicycle friendly laws and ordinances.
9. The bike plan is current and is implemented.
10. Bike program staff to population.

THE CITY OF DAVIS

Davis, California is well known for becoming the first Platinum Level designated BFC in the U.S. Davis has an extensive bike network, including 108 miles of bike lanes, 63 miles of shared use paths, and 29 grade-separated crossings. The city of just under 70,000 people estimates 20% of its transportation system users travel via bike. The city also prioritizes bike education programs with free online classes and partners with the community to host over 100 bike-themed events per year. A bike-friendly environment such as closed car traffic on the University of California, Davis campus helps create a bicycle friendly local culture. Additional details can be found in the City of Davis Bicycle Action Plan: Beyond Platinum (https://bit.ly/3y6DhI6).

ADDITIONAL RESOURCES

- Action Plan for Bicycle Friendly Communities. (https://bit.ly/3stqjn6)
- Breaking Away: Journey to Platinum. (https://bit.ly/3H97fi0)
- Grand Rapids Case Study – Community and Economic Benefits of Bicycling. (https://bit.ly/3srQri7)
- Active Transportation Transforms America: The Case for Increased Public Investment in Walking and Biking Connectivity. (https://bit.ly/3EnYEX7)

DRIVER EDUCATION

The public perception about transportation is changing from strictly auto-focused to multimodal. A community can lay the groundwork to assist in this; however, changes are needed among and between motorists and active transportation users to ensure a safe system. Education starts with when drivers are learning the rules of the road. Driver education in the U.S. prepares new drivers on how to safely and legally operate a motorized

vehicle. Drivers manuals, driver education curriculum, and driver licensing exams vary across states. As roadway designs, traffic laws, and technology are changing rapidly, updating driver education is critical, especially concerning active transportation.

STATE EDUCATION

The Driver Education: What States Teach About Biking (https://bit.ly/3dzGDtL) resource looked at driver education across the U.S. and how bicycling in the curriculum is addressed. Approximately one in four state driving manuals do not mention bicycle lanes or how drivers operate a vehicle near a bicycle lane. The danger of hitting a person biking when you open a car door – known as "dooring" – was minimally addressed in four out of five states. Newer concepts included in national standards such as crash warning systems were missing from 90% of curriculums.

In Minnesota, driving instruction does discuss bicycle lanes and driver interaction, however topics such as dooring and crash warning systems are lacking.

There are three things all U.S. states should do to improve driver education for non-motorized users.

1. **Update the state driver manual.** Regular updates to the curriculum should include the latest information about technologies, roadway designs, and laws around active transportation.
2. **Work with legislators and governors on education changes.** Adopting state and national laws that bicycle and pedestrian safety are mandatory topics in drivers' education will take legislature leadership.
3. **Focus on providing transportation education, not just driver education.** Transportation education in schools should include topics such as how to operate a vehicle around bicyclists properly, the rights to the road given to bicyclists, and how to ride a bike.

MINNESOTA STATUTES

To better understand what should be taught in driver education in Minnesota, it is vital to know the current statutes about active transportation.

- **Safe Passing Laws.** Under Minn. Stat. §169.18 subd. 3 (https://bit.ly/3pC7qLD) and Minn. Stat. §169.222(4)(e) (https://bit.ly/3dzaCCg), Minnesota requires that the operator of a motor vehicle overtaking a bicycle proceeding in the same direction on the roadway shall leave a safe distance, but in no case less than three feet clearance, when passing the bicycle and shall maintain clearance until safely past the overtaken bicycle. In addition, an individual operating a bicycle on a bikeway shall leave a safe distance when overtaking a bicycle or individual proceeding in the same direction on the bikeway and shall maintain clearance until safely past the overtaken bicycle or individual.
- **Distracted Driving Laws.** Under Minn. Stat. §§169.475 (https://bit.ly/3rIqA5k), no person operating a motor vehicle can use a handheld device.
- **Where to Ride.** Under Minn. Stat. §169.222 (https://bit.ly/3dzaCCg), Minnesota requires that bicyclists shall ride as close as practicable to the right-hand curb or edge of the roadway except under any of the following situations:

    - When overtaking and passing another vehicle proceeding in the same direction.
    - When preparing for a left turn at an intersection or into a private road or driveway.
    - When reasonably necessary to avoid conditions that make it unsafe to continue along the right-hand curb or edge, including narrow width lanes.
- **Sidewalk Riding.** Minn. Stat. §169.222(4)(d) & (f) (https://bit.ly/3dzaCCg) allows bicycles to operate on sidewalks subject to the following rules:
    - A person operating a bicycle upon a sidewalk, or on a crosswalk, shall yield the right-of-way to any pedestrian and shall give an audible signal, when necessary, before overtaking and passing any pedestrian;
    - No person shall ride a bicycle upon a sidewalk within a business district unless permitted by local authorities. Local authorities may prohibit the operation of bicycles on any sidewalk or crosswalk under their jurisdiction; and
    - A person lawfully operating a bicycle on a sidewalk, or on a crosswalk, shall have all the rights and duties applicable to a pedestrian under the same circumstances.
- **Mandatory Use of Separated Facilities.** Minnesota does not require that bicyclists use any lane or path other than a normal vehicular traffic lane.
- **Bicycling Under Influence.** Minn. Stat. §§169A.20; 169A.03 (https://bit.ly/3y5Jd4e) prohibits driving while under the influence of alcohol or other controlled substances. This statute is written in a way which does not include vehicles moved by human power, and therefore does not directly apply to bicyclists. Nevertheless, bicycles should not be operated while intoxicated.
- **"Idaho Stop" and Vehicle Detection Errors.** Minn. Stat. §169.06 subd. 9 (https://bit.ly/3dAH478) provides an affirmative defense to the charge of entering or crossing an intersection controlled by a traffic-control signal against a red light if a person establishes all the following conditions:
    - The bicycle has been brought to a complete stop.
    - The traffic-control signal continues to show a red light for an unreasonable time.
    - The traffic-control signal is apparently malfunctioning or, if programmed or engineered to change to a green light only after detecting the approach of a motor vehicle, the signal has apparently failed to detect the arrival of the bicycle.
    - No motor vehicle or person is approaching on the street or highway to be crossed or entered or is so far away from the intersection that it does not constitute an immediate hazard.
- **Authorization for Local Regulation of Bicycles.** Under Minn. Stat. §169.022 (https://bit.ly/3rPib04), Minnesota provides that local authorities may adopt traffic regulations that do not conflict with state traffic laws.
- **Dooring Law.** Minn. Stat. §169.315 (https://bit.ly/3dCVpQo) requires that no person open any door on a motor vehicle unless and until it is reasonably safe to do so and can be done without interfering with the movement of other traffic. In addition, no person shall allow any door on the side of a vehicle adjacent to moving traffic to remain open for a period of time longer than necessary to load or unload passengers.

- **Treatment as a Vehicle**: Minn. Stat. §§ 169.011(92); 169.222n (https://bit.ly/31GQifu) states bicycles are vehicles according to the statute that defines vehicles and a person riding a bicycle has all of the rights and duties of the driver of a vehicle.

STATUTORY CONSIDERATIONS

While Minnesota does have the included statues above, common statues from other states are included below.

- **Helmet Law.** Minnesota has no helmet law. It is legal for all persons of any age to operate a bicycle without wearing a helmet unless otherwise provided by a municipal regulation, though none in the Saint Cloud MPA do. There is no state with legislation that requires bicycle helmet use for adults.
- **Share the Road License Plates.** Minnesota does not offer Share the Road license plates. Share the Road license plates are specialty plates for cars that support the bicycling community. Specialty license plates are usually created after a legislative or administrative process that involves a certain number of guaranteed sales.
- **Vulnerable Road User Laws.** Minnesota does not have any vulnerable road user laws. A vulnerable road user is a person engaged in work along the road right-of-way, a person riding or leading an animal, or any active transportation user. There are currently no national standards for laws protecting vulnerable road users. An example of a Model Vulnerable Road User Law (https://bit.ly/3dArGaS) crafted by the League of American Bicyclists can help protect active transportation users.

ADDITIONAL RESOURCES

- League Cycling Instructor (https://bit.ly/3pma6hu)
- Minnesota Bike Law FAQ (https://bit.ly/3FkCS7Q)
- Active Transportation Alliance: Teacher Resources (https://bit.ly/3Esnkh4)

CHAPTER SIX: CONCLUSION

This Regional Active Transportation Plan (ATP) gave insight into multimodal transportation and future pedestrian and bicycle infrastructure planning. This was achieved by describing how active transportation is essential for better health, improved safety, a more robust economy, a better environment, and access and equity. After defining the benefits for a user, the types of infrastructure designed exclusively for active transportation were discussed for on-road and off-road. On-road facilities include bike lanes and routes, marked crosswalks, pedestrian-hybrid beacons, and RRFBs. Off-road facilities include shared use paths and sidewalks. Without these facilities, non-motorized travel becomes impossible for most users.

Transit facilities were also mentioned as part of the system, including signs, benches, shelters, and transit hubs. Users utilize active transportation facilities in multiple ways to get to and from desired destinations. Staff wanted to know where the existing infrastructure was located before determining how the system served desired destinations. When examining the network, critical regional facilities became apparent. On-road facilities such as the MRT and off-road facilities like the Beaver Island Trail, Lake Wobegon Trail, and ROCORI Trail play a key role in interjurisdictional and regional connections. Other infrastructures such as sidewalks provide shorter distance trips vital to the overall transportation network. To access transit services, a means to the transit stop requires an active transportation mode.

Though active transportation infrastructure may be in place, utilizing active transportation can become unsafe or inconvenient if the system is in poor condition. Therefore pavement conditions for the on-road and off-road facilities were measured—this data-informed APO staff where maintenance was required in the region.

Understanding what active transportation infrastructure currently exists in the MPA is essential, but the APO isn't the only agency with planning efforts. There are local, regional, and state planning efforts discussing and planning for active transportation. The APO reviewed relevant documents to help staff understand other stakeholder efforts and how they fit into our planning process.

The behavior of active transportation users, such as where people want to go and how many use the system, informs the planning process. Historically underrepresented communities have been left out of this process. One of the purposes of this plan was to figure out who lives in the MPA and how well the system is serving underrepresented communities. These communities include people-of-color, low-income populations, people with disabilities, limited English-speaking households, persons age 65 and older, and persons age 18 and younger. An analysis was completed using census block groups with a high concentration of underrepresented populations. Active transportation facilities were reviewed on how thoroughly they served or did not serve those populations.

There are different types of active transportation users, and understanding the type of facility that will best fit them is crucial. Not everyone who rides a bicycle is comfortable in the roadway. This is why different facility types are necessary to accommodate different levels of cyclists. Like cyclists' pedestrians have different abilities. Not every pedestrian has the same capacity due to a disability or need for an assistive device. Planning for all types of users ensures an equitable transportation system.

Annually the Saint Cloud APO deploys portable bicycle and pedestrian counters on trails to record the number of non-motorized users. The purpose of collecting this data is to measure the change in usage over time, prioritize the investment of new and existing infrastructure, and assist in planning and designing future facilities.

Based upon an understanding of who is using the active transportation system, where they are going, and how they are getting there, it is essential to consider if people can do so safely. Non-motorized crash location data was analyzed to find high concentrations of crashes.

To guide the ATP, a vision was developed along with goals, objectives, evaluation factors, and performance measures. The vision states, "*The Saint Cloud MPA strives to provide a regionally-coordinated and well-maintained active transportation network allowing for safe, efficient, convenient, and comfortable walking and bicycling access to local and regional destinations for all users of all abilities.*"

The five goals are as follows:

- Goal 1: Improve bicycle and pedestrian safety and comfort
- Goal 2: Improve active transportation connections to desired destinations
- Goal 3: Improve the condition of active transportation infrastructure
- Goal 4: Provide equitable access to active transportation facilities for all people of all abilities
- Goal 5: Promote an interconnected regional active transportation network

The vision, goals, objectives, evaluation factors, and performance measures together will help track the MPAs progress towards achieving the goals set in this plan.

The needs assessment methodology was developed to prioritize areas of need and their respective projects. This was done with a three-phase approach. First, APO staff began evaluating current facilities and service needs within the jurisdictions. They reviewed where existing facilities exist, the conditions of the facilities, desired destinations, and where underserved populations lived. Performance measures were calculated to give a deeper understanding of what is lacking in the MPA. This process developed focus areas to show where the greatest needs were. The second phase looked at the focus areas and the current environmental factors such as traffic speeds and volume, crash locations, pedestrian crossing, signals, and existing right-of-way—this informed staff on where and what type of facility would best fit every focus area. The last phase of the process looked at the regional network, which comprises shared use paths and on-road bicycle facilities. While connecting people with their desired destinations, such as a grocery store, is essential, long-distance inter-jurisdictional and regional travel require something.

Policies and procedures were evaluated for jurisdictions to consider adopting. These included a Complete Streets policy, Safe Routes to School, facility preservation and maintenance, snow removal, wayfinding, bicycle parking and storage, traffic signal control and timing, Bicycle Friendly Communities, and drivers education.

Appendix A-E dives deeper into the five cities (Sauk Rapids, Sartell, Saint Joseph, Waite Park, and Saint Cloud). Appendix F reviews the public input process.

APPENDIX A: SAUK RAPIDS CITY PROFILE

Located on the east bank of the Mississippi River, the City of Sauk Rapids takes pride in maintaining a "small town" flavor consistent with its historical roots. Keeping the relaxed, small-town feel has been a continuing objective for the city with new growth and redevelopment.

One of the City's most identifiable features is its downtown, serving as both a gateway to visitors and a convenience to city residents. Sauk Rapids is also distinguished by the many recreational amenities associated with the Mississippi River, an extensive regional and local parks system, and a network of highly rated schools. The City also has an expanding network of locally owned and maintained active transportation facilities to serve those living and working within the city and the many visitors from outside the community.

DEMOGRAPHICS

The City of Sauk Rapids is becoming an increasingly urbanized area, with plans for new residential development mainly east of US 10. According to the U.S. Census Bureau's 2014-2018 American Community Survey (ACS) Five-Year Estimates, Sauk Rapids' population has grown by 32.5% since 2000.

The City strives to provide equitable service to all segments of the community in its transportation planning investments. To assist with this effort, APO staff track specific population demographic subsets – known as traditionally underrepresented populations – at a regional level. This includes the following:

- People-of-Color (Black/African American alone; American Indian and Alaska Native alone; Asian alone; Native Hawaiian and other Pacific Islander alone; some other race; two or more races; Hispanic or Latino descent regardless of race).
- Persons with low income.
- People with disabilities.
- People with limited English-speaking capabilities.
- Households without access to a motor vehicle.
- Persons over the age of 65.
- Persons under the age of 18.

A look at these demographics in Sauk Rapids finds that approximately one-quarter of the city's population is under age 18. In addition, approximately one in 10 people within the city have a disability and almost one in five households are considered low-income. See Figure A.2 below for other details.

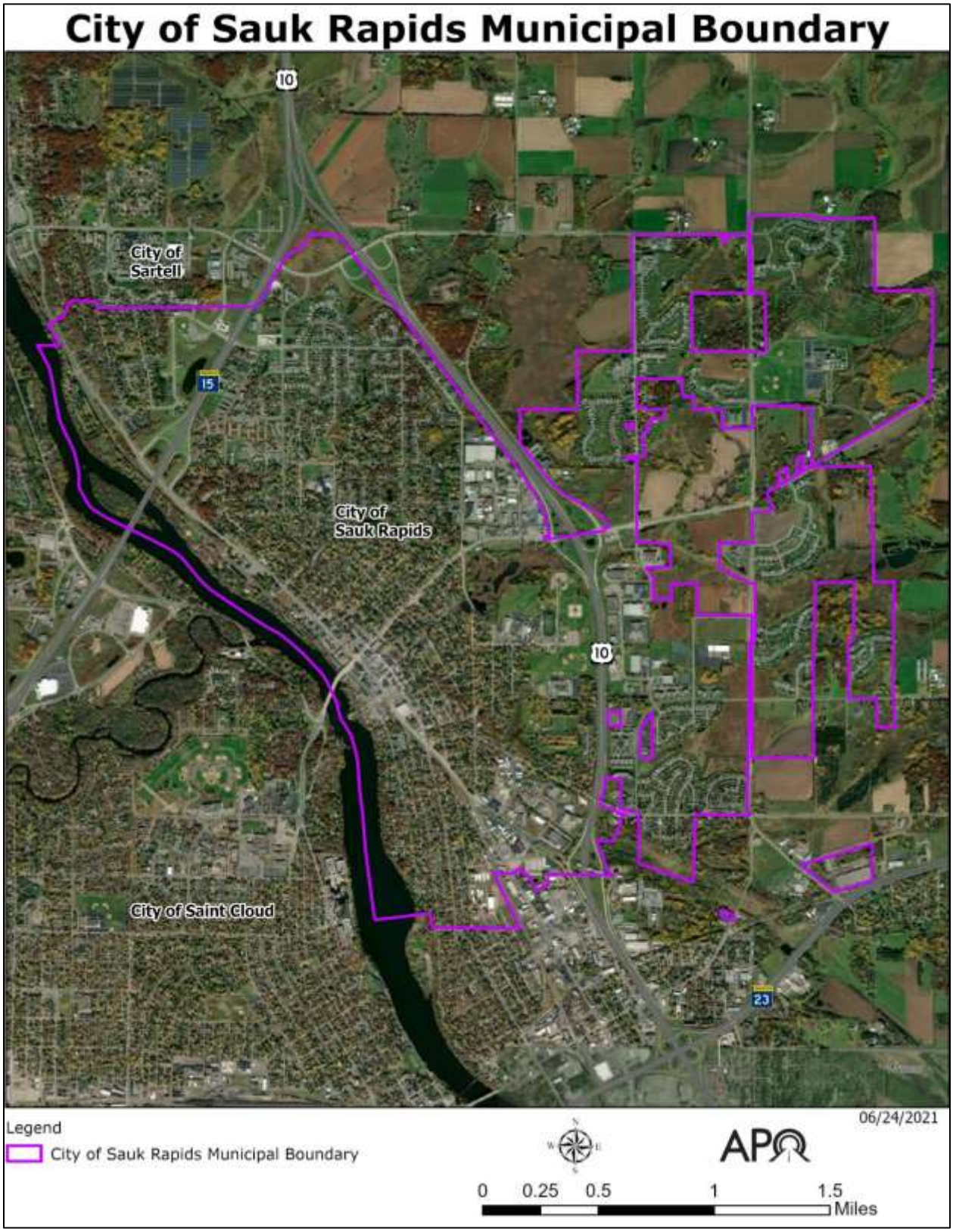


FIGURE A.1 – CITY OF SAUK RAPIDS.

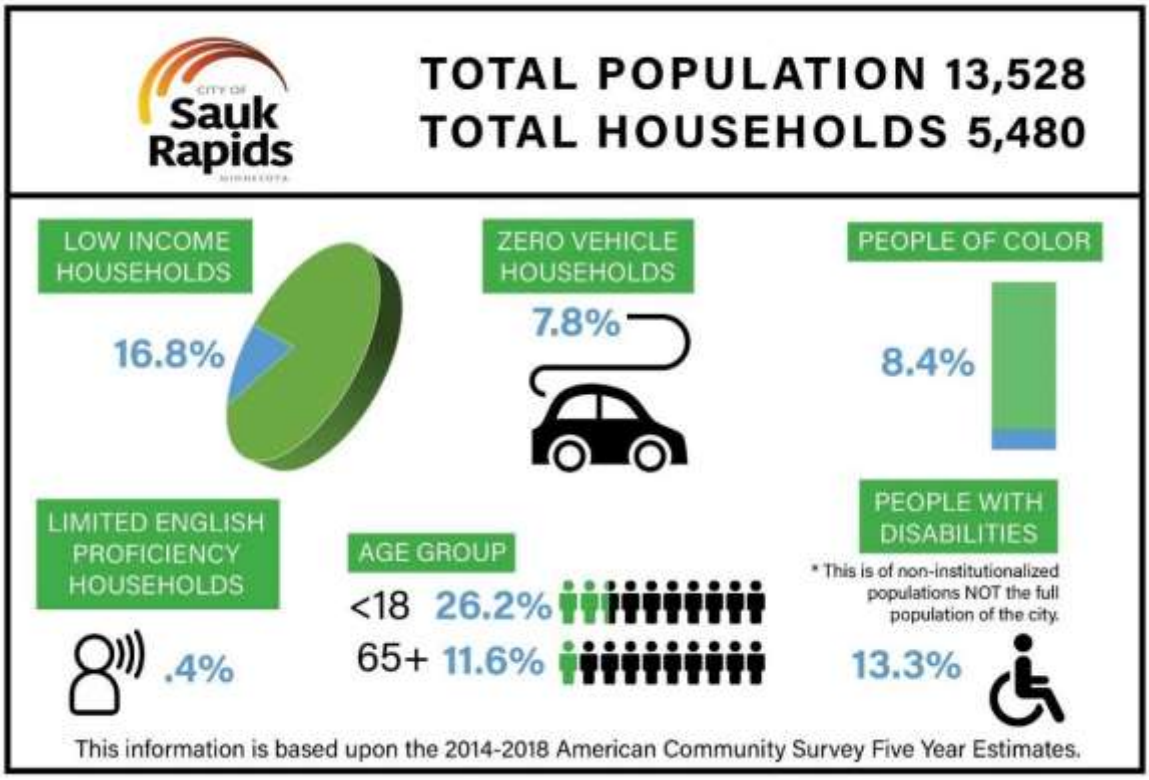


FIGURE A.2 – DEMOGRAPHIC PROFILE OF SAUK RAPIDS.

EXISTING LAND USES

How cities use the land within their boundaries (i.e., residential, commercial, industrial) impacts the transportation network and the modes of travel available or desirable to users. The relationship between existing land use and transportation often impacts communities. It can play a role in developing a transportation system that is mode-friendly to motorized and non-motorized users.

As a city situated on the Mississippi River and surrounded by two major roadways – MN 15 to the west and US 10 to the east – the City of Sauk Rapids contains various land uses.

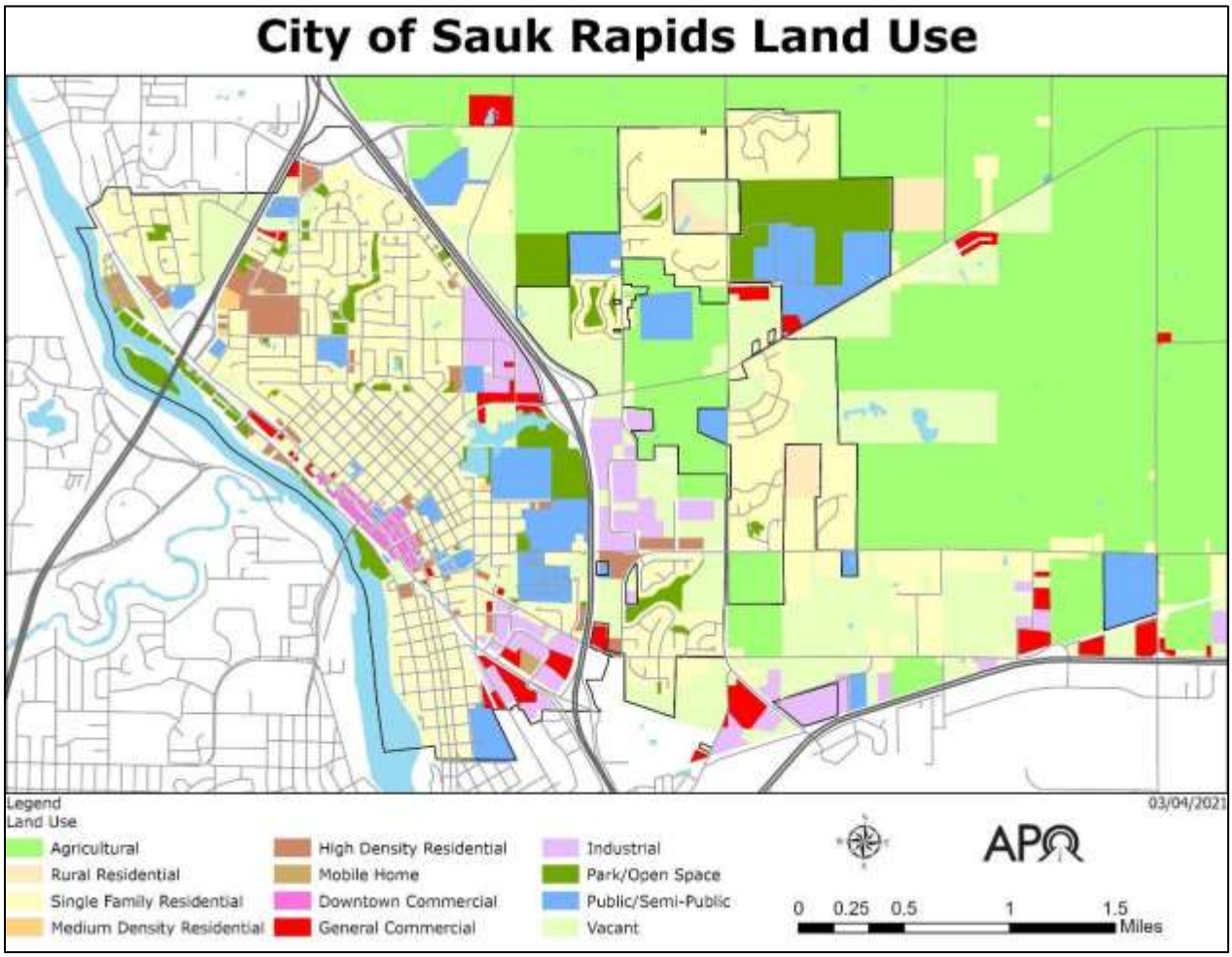


FIGURE A.3 – SAUK RAPIDS LAND USES.

As part of developing the Sauk Rapids 2005 Comprehensive Plan, the city conducted a land use inventory. This inventory was subsequently updated in 2008, as displayed in Figure A.3. Though somewhat dated, it remains relatively accurate, according to city staff. As shown, the majority of Sauk Rapids consists of residential areas, particularly single-family homes, though more multiple-family uses have been added in recent years. Concentrations of mixed-use and medium density residential use are located near MN 15 and US 10. In the nearly two decades since the comprehensive plan was adopted, the city has focused on infilling the underutilized areas to the east of US 10 with residential development.

The greatest concentration of commercial use is found in the downtown area along the Mississippi River, while most industrial use is clustered in regions around US 10. Several large Sauk Rapids industrial businesses are located on Industrial Boulevard east of US 10, such as J-Berd Mechanical and Hardware Distributors, LTD. Stearns Drive to the west of US 10 has several large manufactures and in the south part of the city along and near Benton Drive other large employers include Talon Innovations and C & L Distributing.

The downtown area is a major gateway to the City's commercial hub with many retail and service destinations. Other areas of commercial activity are along Benton Drive, the area near the Second Street North interchange with US 10, and along 18th Street NW near MN 15.

Several acres of park land and open space are located throughout the city, including neighborhood parks and major parks such as Bob Cross Nature Preserve, Mayhew Creek Park, Municipal Park, and Lions/Southside Park.

Understanding how the city plans to develop in the future will inform the type of transportation system needed. Residents and visitors will only reach these destinations through the transportation network that is available to them.

TYPES OF ACTIVE TRANSPORTATION INFRASTRUCTURE

Sauk Rapids has a variety of infrastructure designed specifically for active transportation users. Some are integrated into the roadway network, such as bike lanes (on-road facilities). Others are separated from the roadway network, such as sidewalks and shared use paths (off-road). Complementing the on- and off-road active transportation network is the transit network operated by Saint Cloud Metro Bus. Bicyclists and pedestrians can rely on both the on- and off-road network and the Metro Bus system to reach their destinations.

FIGURE A.4 – PEOPLE WALKING IN SOUTHSIDE PARK.

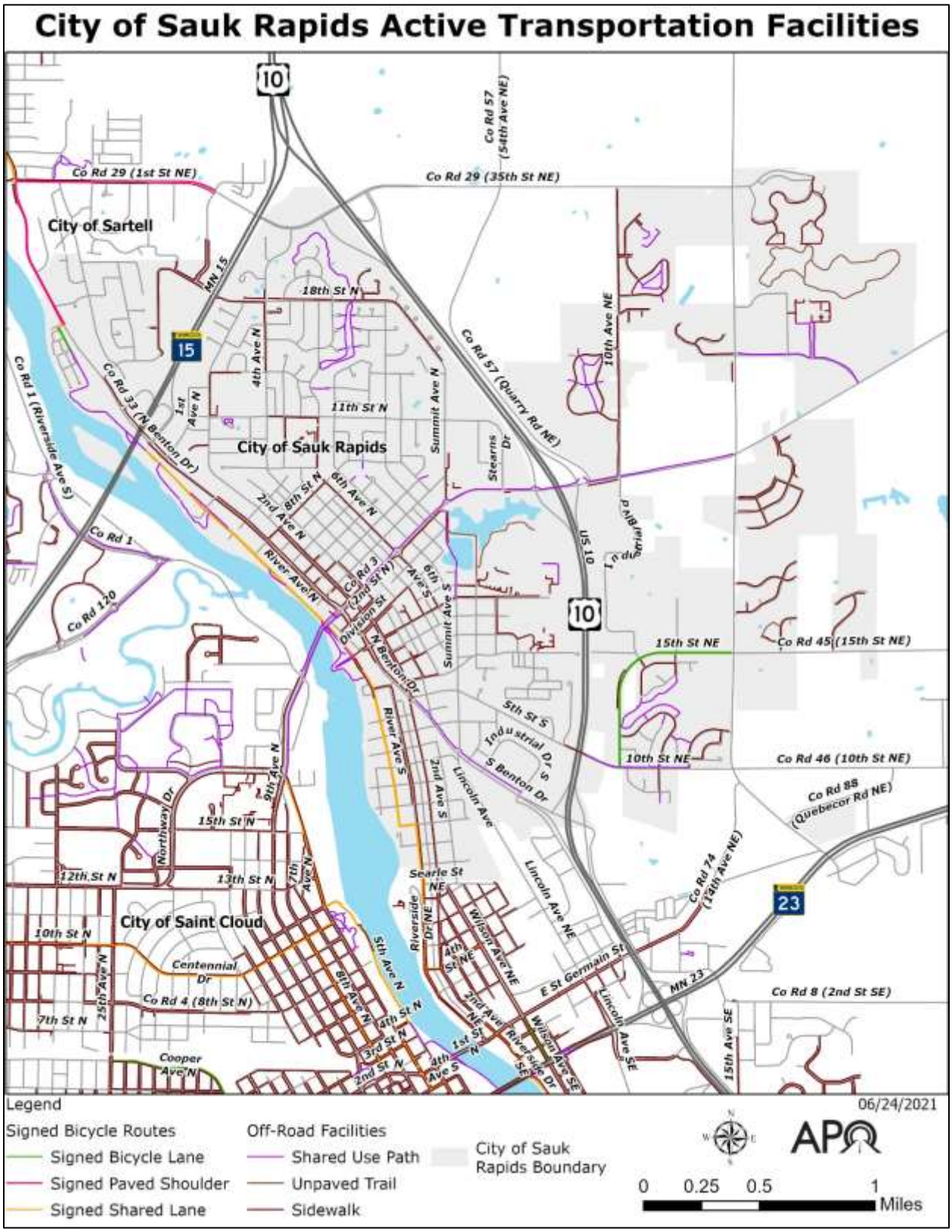


FIGURE A.5 – ON AND OFF-ROAD ACTIVE TRANSPORTATION FACILITIES IN SAUK RAPIDS BY TYPE AND LOCATION.

ON-ROAD FACILITIES

The City of Sauk Rapids has 7.5 lane miles of on-road bicycle facilities, including signed bicycle lanes, signed paved shoulders, and signed shared lanes to serve bicyclists. Over half of these on-road miles are part of the nationally recognized Mississippi River Trail (MRT).

The Mississippi River Trail (MRT)

The MRT is a planned network of bicycle facilities that winds its way along the Mississippi River through the City of Sauk Rapids. The MRT enters the city from the northwest along Benton Drive before following along Garden Avenue. At the Sauk Rapids Regional Bridge, the MRT splits. One route crosses the bridge and continues into the City of Saint Cloud, and another route follows Sauk Rapids' River Avenue. As a nationally recognized bicycle route and being close to the Great River Road Scenic Byway (which includes portions of Benton Drive), this facility is regionally significant to the city.

In addition, the MRT has been identified as one of the Minnesota Department of Transportation (MnDOT's) high priority corridors for bicycle routes due to its inter-jurisdictional nature – spanning from northern Minnesota to Louisiana – and high potential of connecting to other regional active transportation facilities.

OFF-ROAD FACILITIES

Shared Use Paths and Trails

There are 12.8 miles of shared use paths that provide neighborhoods access to many of the City's parks, recreational areas, and schools. This includes 10.2 miles of paved shared use paths and 2.6 miles of unpaved trails found within Bob Cross Park and Mayhew Creek Park.

One of the most notable paved shared use paths in Sauk Rapids is the facility along Second Street N/CSAH 3 from the Sauk Rapids Bridge to Mayhew Lake Road. This corridor provides the only east/west active transportation facility connection across US 10. The Ox Cart Trail is the off-road portion of the MRT. The trail is in four riverside parks (Lions, Southside, Municipal, and Island View).

Sidewalks

In Sauk Rapids, approximately 28 miles of sidewalks are located throughout the city. New developments east of US 10 contain sidewalks on at least one side of local streets, while many older neighborhoods in the city's core do not. A network of sidewalks services the downtown commercial district. Collector and arterial roadways that lead to critical destinations in the city, such as schools and parks, typically have sidewalks leading to them.

TRANSIT SERVICES AND INFRASTRUCTURE

As the urban public transit provider, Saint Cloud Metro Bus is responsible for the daily management, operation, and maintenance of Fixed Route (FR) and Dial-a-Ride (DAR) systems within Saint Cloud, Waite Park, Sartell, and Sauk Rapids.

FIGURE A.6 – METRO BUS FIXED ROUTE SERVICE WITHIN SAUK RAPIDS.

FIXED ROUTE SERVICE

Metro Bus provides fixed route transit service to the City of Sauk Rapids seven days a week through routes 21, 22, and 33.

Routes 21 and 22 provide service to roughly the same areas within Sauk Rapids; however, they operate in opposite directions. Route 21 operates Monday through Friday, while Route 22 provides seven-day service. Route 21 does deviate from its regular fixed route three times during the day to provide service to Sauk Rapids-Rice High School while school is in session. With this deviation, several areas including Industrial Boulevard and Pleasantview Elementary School, are not served by Route 21.

The Coborn's transit shelter in downtown Sauk Rapids serves as a transfer point for Route 33. This crosstown route connects downtown Sauk Rapids to Crossroads Center in Saint Cloud.

All fixed route transit stops for these three routes are signed. Several stops, particularly in the downtown area, include benches and shelters.

FIGURE A.7 – METRO BUS TRANSIT SIGN.

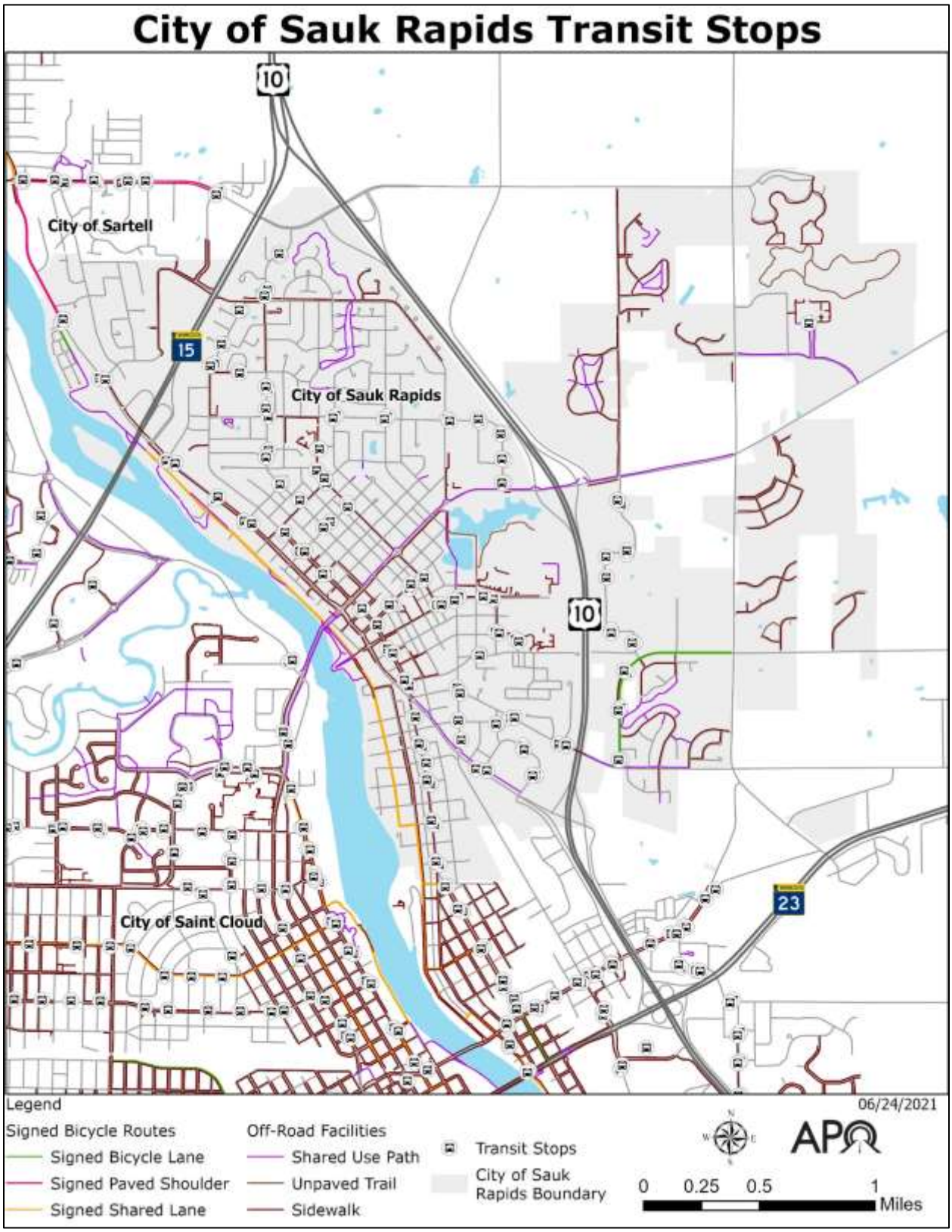


FIGURE A.8 – TRANSIT STOPS IN RELATION TO THE ACTIVE TRANSPORTATION SYSTEM WITHIN SAUK RAPIDS.

Figure A.8 shows the location of transit stops and how close they are to active transportation infrastructure. While active transportation facilities serve some transit stops, many lack on- or off-road facilities. For those who rely on transit service, a lack of active transportation facilities from their bus stop to their homes and destinations can create a barrier. Transit stops for destinations in the downtown area and near commercial businesses typically include sidewalk access. The fixed route system does not service newer housing development east of US 10. Industrial areas within the city usually have access to fixed route service but often lack sidewalk access.

OTHER TRANSIT SERVICES

Metro Bus also offers additional transit service for Sauk Rapids residents. Dial-a-Ride (DAR) is an operator-assisted paratransit service provided for those unable to use fixed routes. West of MN 15, Sauk Rapids residents may also use ConneX, a curb-to-curb and/or door-through-door on demand service, to access various destinations throughout the neighboring city of Sartell.

CONDITION OF ACTIVE TRANSPORTATION INFRASTRUCTURE

If the existing active transportation infrastructure is in poor condition, it may cause safety issues, inconvenience for the user, or result in the underutilization of the facility. Keeping the system in good condition assures safety and a comfortable experience.

Pavement conditions data for on-road and off-road active transportation facilities within the City of Sauk Rapids was collected from areawide surveys performed for the APO as discussed in Chapter 2 of the ATP.

ON-ROAD FACILITIES

Pavement Condition and Striping

In 2019 GoodPointe Technology collected pavement and striping condition data on the existing on-road bicycle routes in Sauk Rapids.

Pavement condition was evaluated using a Digital Inspection Vehicle (DIV) – a specialized vehicle equipped with cameras and laser sensors to detect pavement distress and roughness. As shown in Figure A.9, of the 7.5 total lane miles signed as bicycle facilities, 3.4 centerline miles are in "fair" or "poor" condition. This includes most of the MRT mileage that runs through the City along River Avenue. The remaining mileage was rated "good" or "satisfactory." *(Note: Some portions of River Avenue were reconstructed in 2020 after the pavement conditions shown below were measured.)*

Striping conditions of on-road facilities were rated from a visual inspection. In the City, only 2.5 lane miles are striped. Along 15th Street NE/10th Avenue NE and North Benton Drive, the striped lanes are rated "fair." The striping on Garden Avenue, part of the MRT corridor, is rated "poor."

FIGURE A.9 – CONDITION OF SIGNED SHARED BICYCLE ROUTES.

FIGURE A.10 - STRIPING CONDITION OF SIGNED SHARED USE BICYCLE ROUTES.

OFF-ROAD FACILITIES

Shared Use Path Pavement Condition

The Parks & Trails Council of Minnesota conducted a pavement condition assessment of most shared use paths within the APO in 2020. The Council used a specially equipped electronic bicycle with instruments aboard to record the "bumpiness" of the pavement throughout the MPA.

The study concluded that over 40% of Sauk Rapids's shared use paths are in "very smooth" to "smooth" condition. Several facilities, such as the shared use path along Second Street N/CSAH 3, are in "smooth" condition.

Approximately 15% of all shared use paths in the city were identified as being in "rough" to "very rough" condition. Facilities in the neighborhood on 10th Avenue NE east of US 10 require repair along with smaller neighborhood segments across the city. Nearly half of the City's trails were rated as "fair," much higher than the region's average.

Since the pavement condition assessment was conducted, the City has reconstructed River Avenue south of Second Street N with the addition of new shared use paths. As part of the 2020 reconstruction of Benton Drive, the city extended the shared use paths south of Summit Avenue to Franklin Avenue.

FIGURE A.11 - NEWLY PAVED SHARED USE PATH IN LIONS PARK.

FIGURE A.12 – SHARED USE PATH PAVEMENT CONDITION (2019).

SAUK RAPIDS PLANS FOR ACTIVE TRANSPORTATION

The 2005 Comprehensive Plan (https://bit.ly/2YvB3Rt) and the 2011 Transportation Plan (https://bit.ly/2YvPR2l) for the City of Sauk Rapids provide the current planning framework for transportation. Both recognize the significance of planning to accommodate non-motorized modes to relieve growing congestion on roadways. Each of the city's plans cites the need for new or improved roadway facilities, including infrastructure for bicycles and pedestrians and expanding the off-road system as the area grows.

As a guide to transportation and other investments, the city maintains a Capital Improvement Program (CIP) (https://bit.ly/3p8l9HV). The CIP includes projected short- and long-term projects based on anticipated future revenues and needs.

CITY OF SAUK RAPIDS' 2005 COMPREHENSIVE PLAN

Ensuring safe and convenient travel for non-motorized users is one of the leading transportation goals identified in the Sauk Rapids Comprehensive Plan. The plan includes promoting bicycling, walking, and transit opportunities to accomplish this goal. A discussion on expanding the existing network of trails and other infrastructure is included to achieve this vision. The plan suggests strategies to design and maintain roadways that accommodate all travel modes. The city seeks to balance the need to efficiently move traffic through the region and provide local access to homes and businesses while also addressing the needs of pedestrians.

Active Transportation Needs as Identified in Comprehensive Plan

Among issues cited in the 2005 Comprehensive Plan is the lack of transportation infrastructure (all kinds) to accommodate growth, especially for developing commercial and industrial areas. The Comprehensive Plan includes specific strategies to provide routes from residential to pedestrian-friendly commercial areas, focusing on improving the City's downtown pedestrian environment. Strategies call for a complete network of sidewalks and additional wayfinding signage to the city's river-facing parks. In addition, the plan states the importance of connecting neighborhoods with sidewalks and expanding the network of parks and trails/shared use paths.

CITY OF SAUK RAPIDS' 2011 TRANSPORTATION PLAN

As identified in the city's 2011 Transportation Plan, residents rely on active transportation for recreational and commuting needs. The city strives to develop an active transportation network that complements the roadway system by expanding the network of bike lanes, sidewalks, and shared use paths

Active Transportation Needs as Identified in the Transportation Plan

According to the city's Transportation Plan, the primary barrier to bicycle and pedestrian trips is the limited ability to cross primary arterials. With few roadway crossings and only one shared use path that crosses US 10, the highway remains a significant barrier for residents who rely on walking and biking to get to schools, jobs, or other destinations.

The Transportation Plan calls for additional shared use paths around the high school and developing neighborhoods along CSAH 1/Mayhew Lake Road. In addition, the plan

recommends expanding roadways shoulders and designating additional bike lanes to serve the needs of all users.

The plan also addresses the lack of active transportation infrastructure surrounding schools and local parks. It is suggested that sidewalks and shared use paths be provided where there is an adequate right-of-way. The city should reserve the right to increase minimum right-of-way requirements for future roadways to accommodate active transportation modes.

CITY ORDINANCES

Along with various citywide planning efforts, Sauk Rapids City Code (https://bit.ly/3tCM1TY) has established several ordinances pertaining to the active transportation system and its users.

City Code Section 12 outlines provisions for active transportation with new street construction or reconstruction. A sidewalk and trail network shall connect new and existing subdivisions. With new construction or reconstruction of urban collector and arterial streets, city ordinance calls for a minimum five-foot (unstriped) bicycle route or (striped) lane plus the addition of five-foot sidewalks (on both sides of the street) if possible. The reconstruction of rural collector and arterial roads shall include five-foot bicycle routes or lanes plus a five-foot sidewalk or an eight-12 foot wide trail (shared use path). As determined, the sidewalk and trail network may also be adjacent to local streets. The adjacent active transportation network may extend to residential, commercial, or industrial development. The city's Sidewalk/Trail Committee plans and makes recommendations to the Planning Commission and City Council for improving the network (City Code Section 12.06 subd. 8D).

Sidewalk maintenance, in particular snow and ice removal, is the responsibility of the landowner or tenant whose property is abutting the sidewalk. Snow removal must occur within 24 hours of the snowfall event. If the persons responsible do not comply, the city may assess removal costs. (City Code Section 8.04)

In addition, city ordinances also outline designated parking areas for nonmotorized vehicles and call for speeding restrictions of 5 mph within city parks.

SYSTEM USAGE

Understanding bicycling and walking behavior on the active transportation network within the City of Sauk Rapids can help in a couple of ways. The purpose of collecting system usage data is to measure the change in usage over time, prioritize the investment of new and existing infrastructure, and assist in planning and designing future facilities. It is essential to know how well current facilities address the user's needs.

BICYCLE AND PEDESTRIAN COUNTS

APO staff regularly place a MnDOT-owned portable bicycle and pedestrian counter along shared use path locations throughout the MPA, including three spots within the City of Sauk Rapids.

The MnDOT counter uses two different types of counters simultaneously. The Pneumatic TUBE counter uses two sets of tubes placed perpendicular to traffic. When a cyclist passes over the tubes, this counter can record that cyclist and determine which direction that person was heading. Meanwhile, the PYRO-Box utilizes infrared technology to measure people's body heat who pass in front of its sensor. This counter, much like the TUBE counter, can identify travel directions. While the PYRO-Box can detect bicyclists and pedestrians, it cannot definitively distinguish between the two. When used in conjunction with the TUBE counter, APO staff can calculate pedestrian traffic from the PYRO-Box by subtracting the bicyclists from the total count.

With these portable counters, APO staff monitors daily usage of shared use paths for one week intervals at specified locations. However, the portable counters are owned by MnDOT. As a result, various agencies and jurisdictions can (and have) utilized the counters throughout the year, impacting the consistency in obtaining data. As a result, no 2020 count data was collected in the City of Sauk Rapids.

As stated earlier, the APO regularly deploys the counter at three counting locations throughout the city:

1. The Ox Cart Trail in Island View Park.
2. The Helix Spiral at the Sauk Rapids bridge.
3. The shared use path along Second Street N/CSAH 3 just south of Seventh Avenue N.

The Helix Spiral location is one of a handful of sites throughout the MPA that has counts done seasonally – winter, spring, summer, and fall. Due to weather conditions, the TUBE counter is not deployed during winter. The year-round counting program is relatively new (beginning in 2020), so limited data is available.

Location	Dates Counted (2019)	Weekday Average Bike	Weekday Average Pedestrian	Weekend Average Bike	Weekend Average Pedestrian
Ox Cart Trail	07/08 – 07/14	2	114	0	125
Helix Spiral	07/15 – 07/21	3	81	3	104
Second Street N	07/22 – 07/28	2	50	1	27

FIGURE A.13 – 2019 BICYCLE AND PEDESTRIAN COUNTS FROM THE THREE SAUK RAPIDS LOCATIONS.

As found in Figure A.13, summer pedestrian usage of these three facilities is relatively high, with average weekday counts ranging between 50 and 114 users.

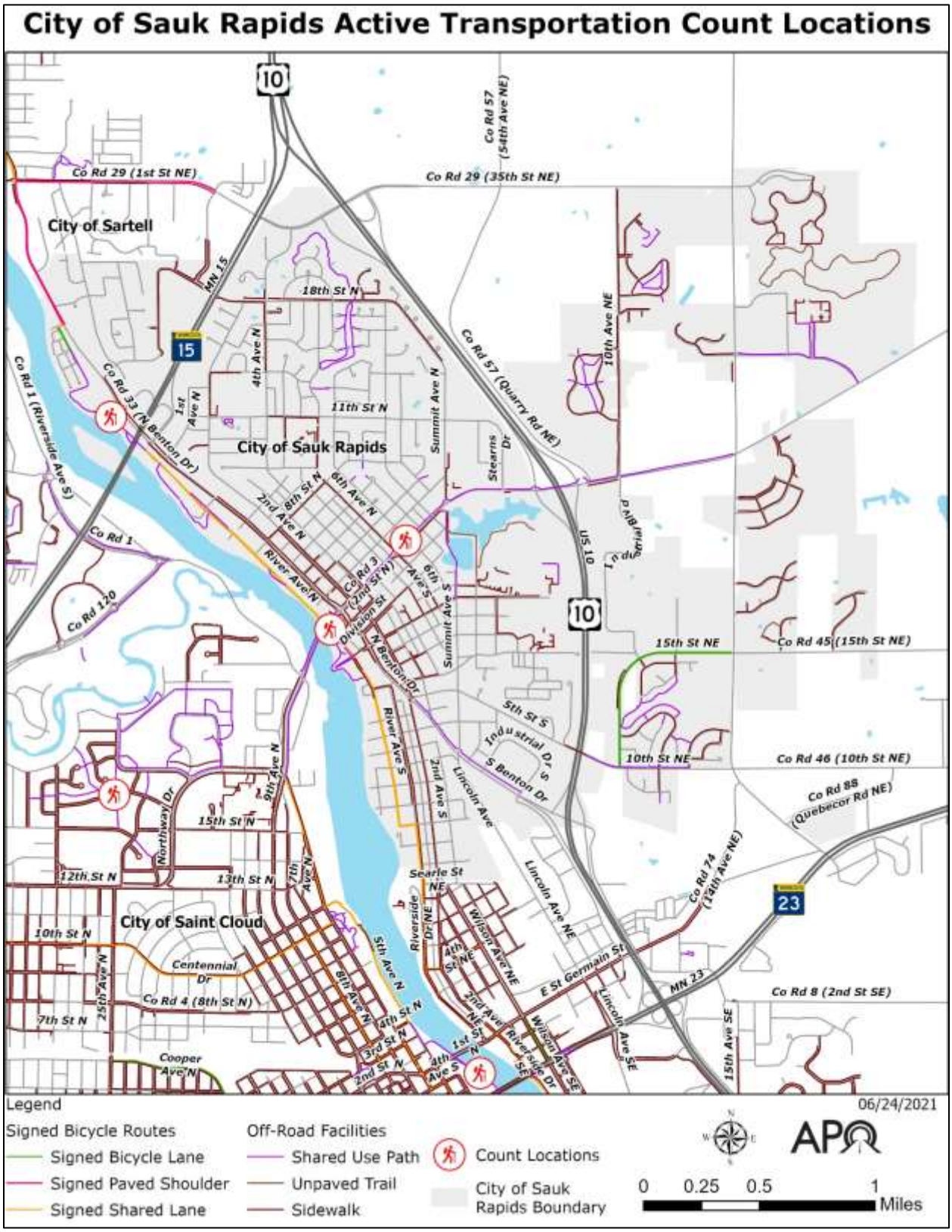


FIGURE A.14 – LOCATIONS WHERE THE APO REGULARLY DEPLOYS AUTOMATIC BICYCLE/PEDESTRIAN COUNTERS WITHIN SAUK RAPIDS.

Figure A.15 is the one-week winter seasonal count on the Helix Spiral in 2020. As seen below, usage of this facility in the winter can be correlated to outside temperatures.

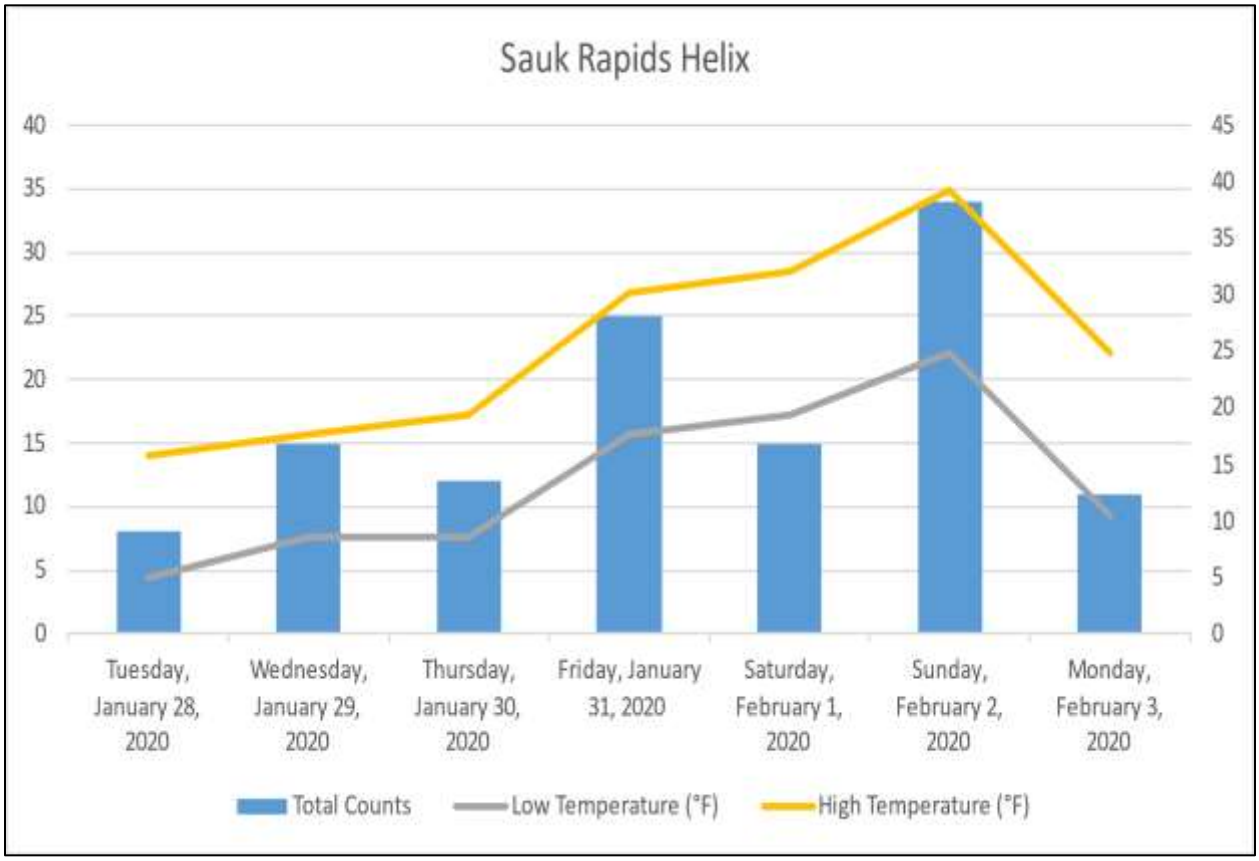


FIGURE A.15 – 2020 WINTER COUNT INFORMATION AT THE SAUK RAPIDS HELIX SPIRAL COMPARED TO DAILY HIGH AND LOW TEMPERATURES.

DESTINATIONS

Common destinations for active transportation users include schools, food assets, employers, and parks. These destinations are shown in Figure A.16. Food assets are grocery stores/supermarkets, specialty food stores, meat markets, convenience stores, and non-profit community food services. Employers listed have 100 or more full- and/or part-time employees.

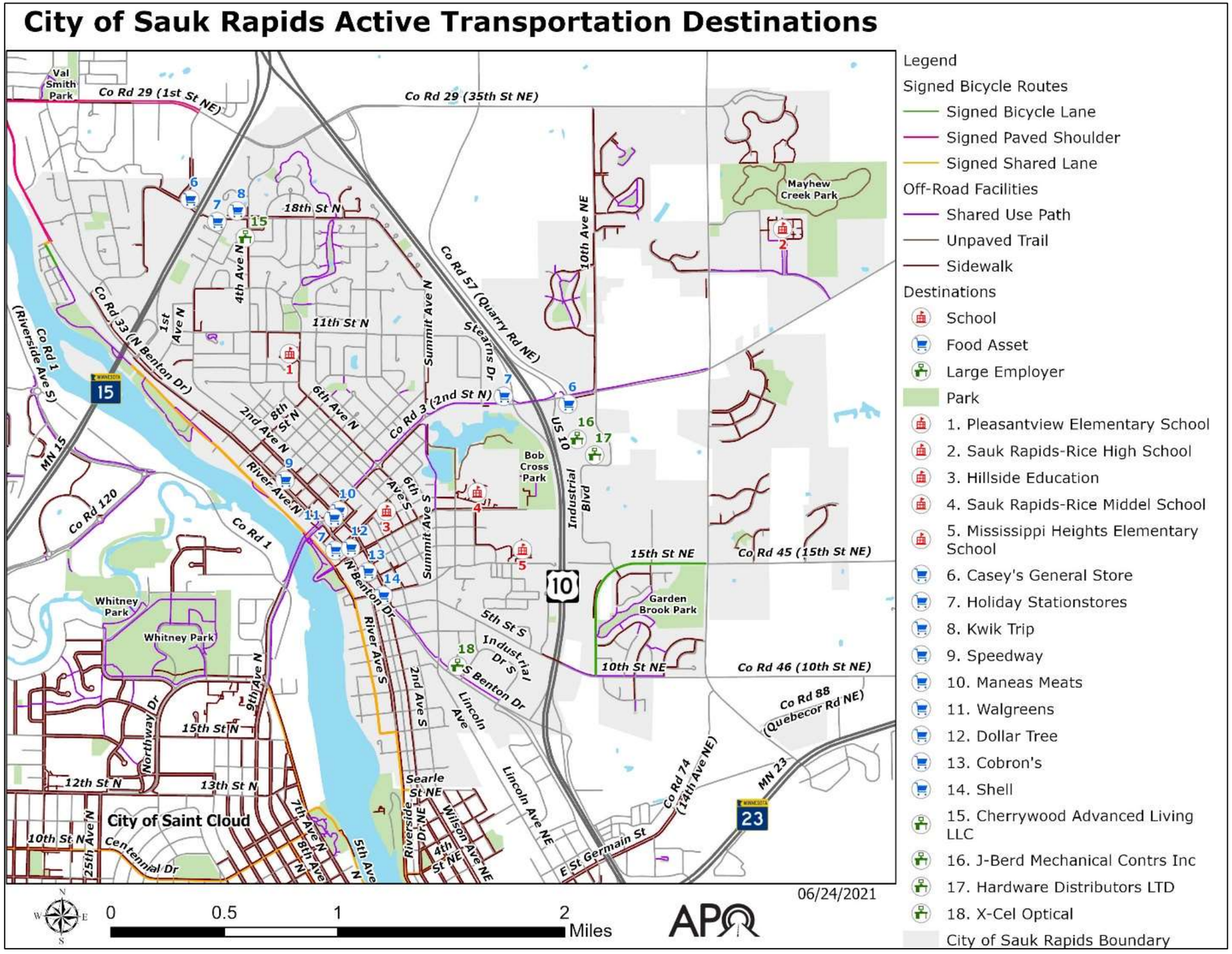


FIGURE A.16 – DESTINATIONS FOR ACTIVE TRANSPORTATION USERS WITHIN THE CITY OF SAUK RAPIDS.

Schools

Among the city's largest employers, the Sauk Rapids-Rice School District (SR-R District) operates five public schools within city limits. Rice Elementary School, located in Rice, is also part of the SR-R District.

The 2011 Transportation Plan cited safety concerns such as crossing and traffic speeds in many school areas. And while a mix of sidewalks and shared use paths has expanded over time to improve access and safety for students who bike or walk, gaps remain in some areas.

Name	Address	Grades Served	Approximate Number of Students Served
Hillside School	30 Fourth Ave. S	Early Childhood/Adult Basic Education	N/A
Pleasantview Elementary School	1009 Sixth Ave. N	K-5	800
Mississippi Heights Elementary School	1003 Fourth St. S	K-5	1,040
Sauk Rapids-Rice Middle School	901 First St. S	6-8	1,060
Sauk Rapids-Rice High School	1835 Osauka Road	9-12	1,300

FIGURE A.17 – THE FIVE PUBLIC SCHOOLS LOCATED WITHIN THE CITY OF SAUK RAPIDS.

Food Assets

Figure A.16 shows grocery stores and other food destinations are primarily found in the downtown commercial area. This includes Coborn's, Manea's Meats, Walgreens, Dollar Tree, and various small convenience stores. Other food asset hubs are located around the US 10/CSAH 3 interchange and locations along 18th Street N and 18th Street NW near the intersection of MN 15.

Food assets are typically along some sort of active transportation facility – either a sidewalk or a shared use path. In addition, food assets such as those in the downtown area are often located near transit stops.

Large Employers

Large employment centers within Sauk Rapids are located within the city's industrial areas. As shown in Figure A.16, two major employers (J-Berd and Hardware Distributors, LTD) can be found along Industrial Boulevard east of US 10. Other major employers are located along Industrial Drive S, and Benton Drive S. Good Shepherd Community is another major employer in the city's northern section.

Most large employers are located on a Metro Bus fixed route, though access to sidewalks and shared use paths vary. Again, it is worth noting that US 10 is a major barrier to active transportation facilities. Workers who live west of US 10 would need to travel miles out of their way to reach these employers by active transportation modes.

Parks

The City of Sauk Rapids has 24 parks within city limits. While most are small neighborhood parks, the city does define six regional parks – Island View Park, Municipal Park, Lions Park, Southside Park, Bob Cross Park, and Mayhew Creek Park.

These larger parks and several of the newer neighborhood parks in the city are generally well served with sidewalks or shared use paths. As a result, residential areas near these parks are more likely to have active transportation facilities. Older and smaller neighborhood parks tend to have limited or no sidewalk access.

In the park plan component of the 2005 Comprehensive Plan, the city identified the need to grow its park and recreation system. Strategies include integrating the city's parks with regional parks and trails plans. The city plans to expand and improve existing paved and unpaved trail systems between these parks. Park facilities along the Mississippi are planned to connect with the downtown area and other community parks and trail systems.

SAFETY

According to the Minnesota Department of Public Safety (DPS), fatalities, serious injuries, and minor injuries involving bicyclists and pedestrians are rising in the Saint Cloud MPA. Within the City of Sauk Rapids, DPS crash data has indicated that 27 crashes involving active transportation users and vehicles have occurred in the 10 years between 2010 and 2019. Of those crashes, 11 injury crashes (41%) occurred in the downtown area. See Figure A.18 for locations and severity.

While most of these crashes resulted in minor injuries, it is essential to note that during this time frame, two pedestrians were killed. A pedestrian death resulted from a crash on US 10 near CSAH 3 in 2013 and another on Benton Drive near MN 15 in 2016. Both crashes involved pedestrians on high-speed arterials struck by vehicles in the traffic lane.

Crash history is reviewed to determine locations where crashes appear to be more likely to occur and whether there may be an engineering solution or partial solution to help mitigate the crashes. It is unclear from the DPS crash reports whether physical conditions at the crash locations were a contributing factor or if physical changes to the facilities may help mitigate future crashes. DPS crash reports do not indicate a common theme or roadway infrastructure/design flaw as a contributing factor. Some reports cited careless behavior or inattention to traffic laws on the part of the bicyclist or pedestrian. The crashes may be due to the high number of vehicles and active transportation users in this area, increasing the likelihood of possible conflicts.

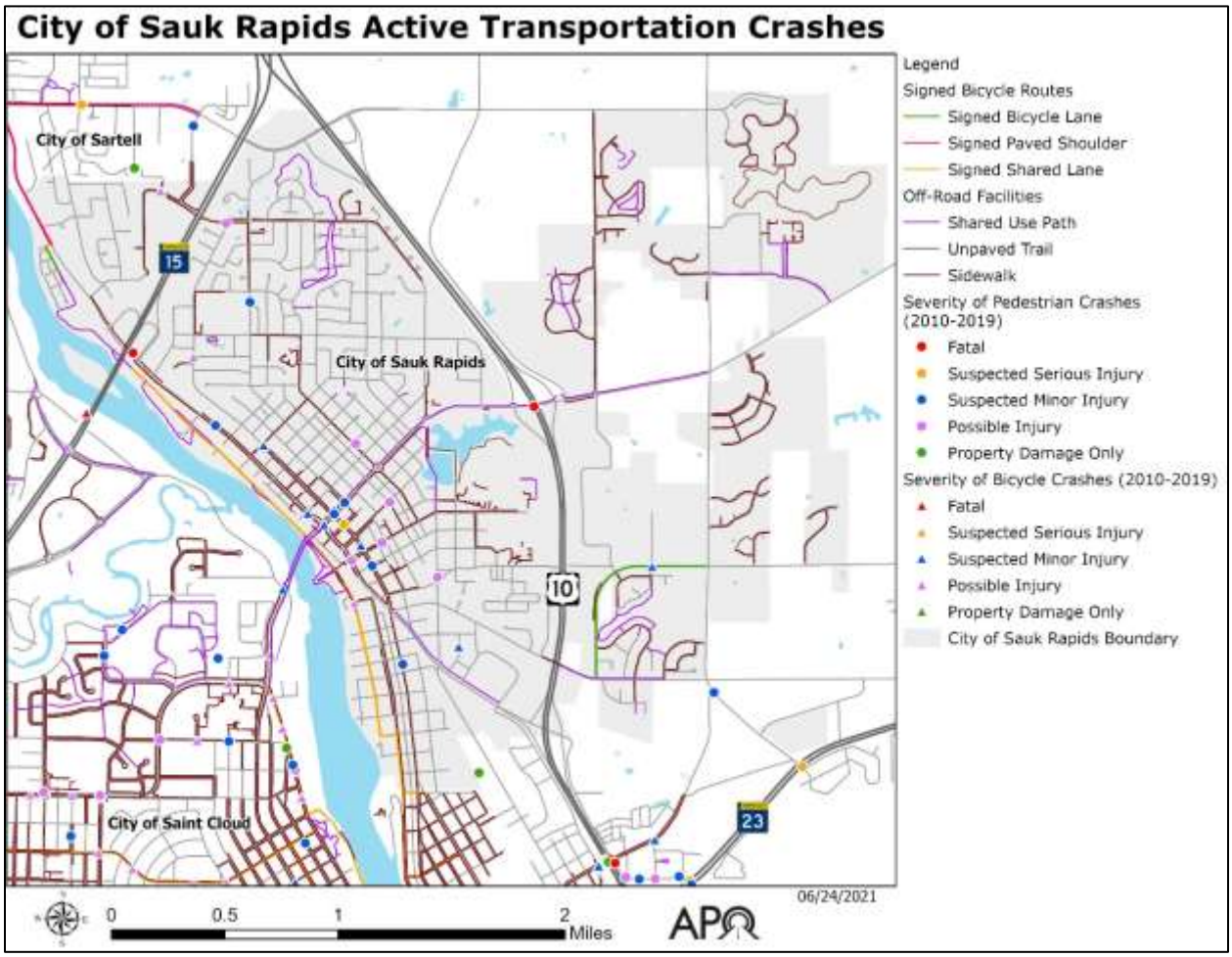


FIGURE A.18 - LOCATIONS WITH CRASHES INVOLVING BICYCLES AND PEDESTRIANS (2010-2019) WITHIN THE CITY OF SAUK RAPIDS.

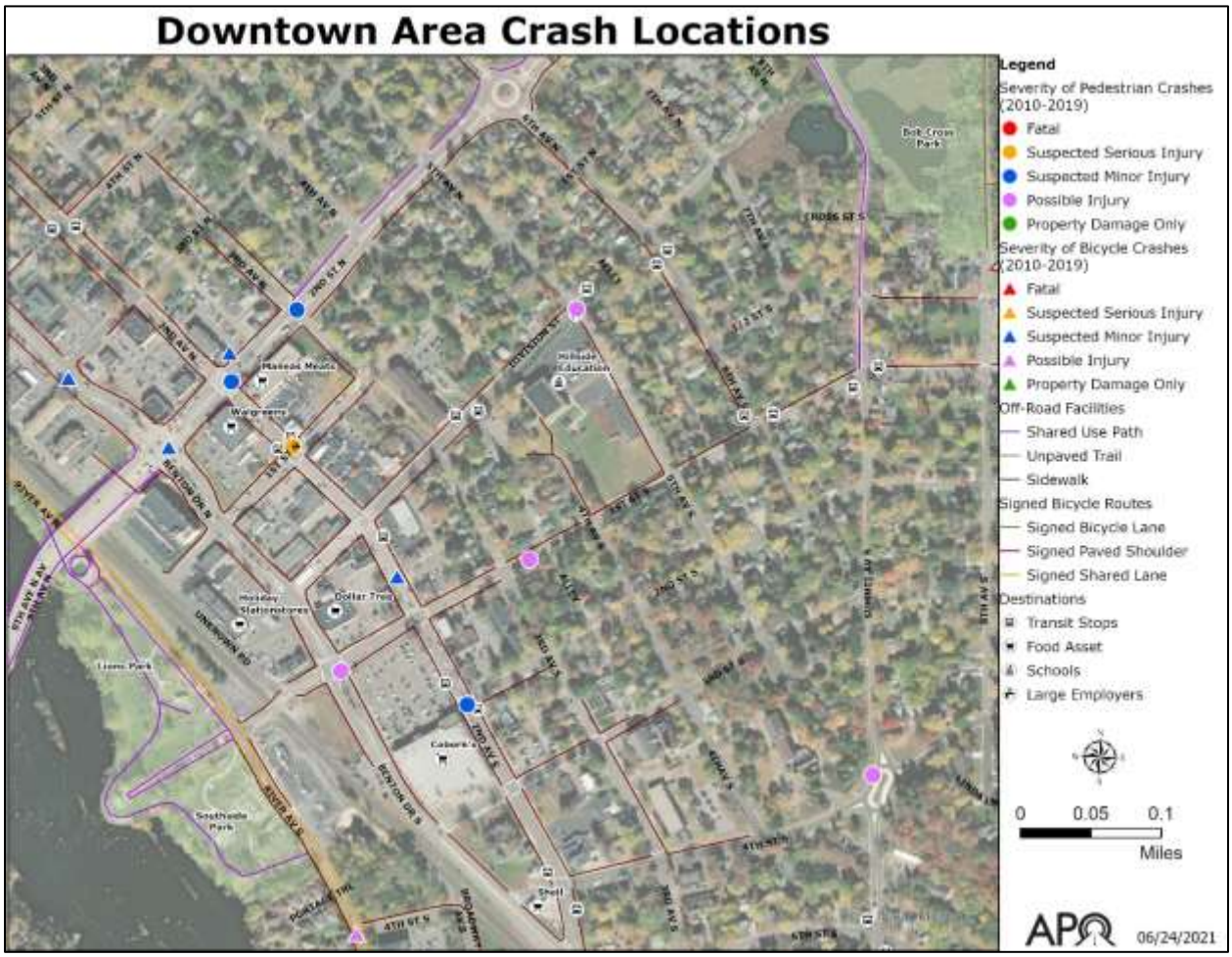


FIGURE A.19 – DOWNTOWN SAUK RAPIDS LOCATIONS WITH CRASHES INVOLVING BICYCLES AND PEDESTRIANS.

PROGRAMMED AND PLANNED IMPROVEMENTS

As referenced earlier, the City of Sauk Rapids maintains a Capital Improvement Program (CIP), which identifies short-term projects and long-range concepts designed to improve active transportation facilities. The CIP also indicates anticipated future revenues that may be available to implement such projects.

Two active transportation projects are identified in the CIP. In 2021 the city planned to construct a shared use path along Mayhew Lake Road (CSAH 1) from Golden Spike Road NE (CSAH 3) to Osauka Road NE. Around 2024, Second Avenue S from Benton Drive to 10th Street S is slated to be reconstructed and will possibly include the addition of sidewalks along with reconstruction work of existing active transportation infrastructure. The city includes the upgrade of shared use paths and sidewalks with its program of road reconstruction projects.

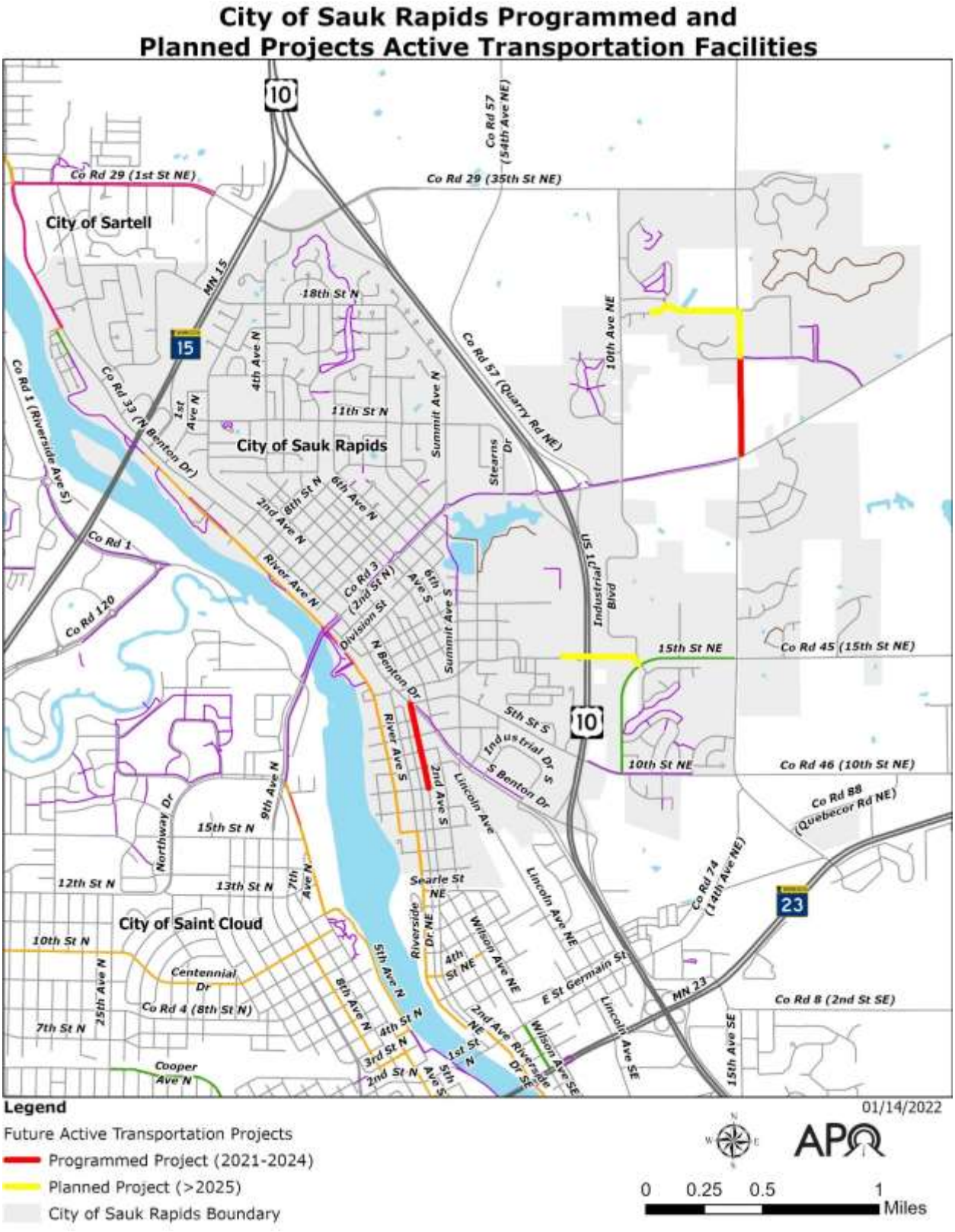


FIGURE A.20 – EXISTING NETWORK WITH PROGRAMMED AND PLANNED FACILITIES.

Long-term (though currently unfunded) goals for the city's active transportation network include the following:

- Extending the shared use path north from Osauka Rd NE to the city water tower, then west to 29th Street NE. This would connect to the existing and planned network of sidewalks serving neighborhoods in northeast Sauk Rapids.
- Constructing a grade-separated pedestrian bridge across US 10 connecting Fourth Street S to 10th Avenue NE. This would provide Mississippi Heights Elementary School access to the neighborhood east of US 10.

ACTIVE TRANSPORTATION NEEDS ASSESSMENT

APO staff performed a citywide analysis of facility and other needs for active transportation users to supplement and inform current city planning efforts. The intent of this assessment, conducted in coordination with city staff and representatives, was to identify active transportation needs within the city and assist in prioritizing those needs in the event funding becomes available.

GOALS AND OBJECTIVES FOR ACTIVE TRANSPORTATION

The regional goals and objectives for active transportation as adopted by the APO provide a starting point for the Sauk Rapids needs assessment.

Those goals were:

1. Improve bicycle and pedestrian safety and comfort.
2. Improve active transportation connections to desired destinations.
3. Improve the condition of active transportation infrastructure.
4. Provide equitable access to active transportation facilities for all people of all abilities.
5. Promote an interconnected regional active transportation network.

The evaluation factors were equally applied for assessing needs within each city and across the MPA. The goals, objectives, and factors used to evaluate services and needs relative to each objective are detailed in Chapter 4. Performance ratings from the evaluation of factors for Sauk Rapids are shown in Figure A.21.

NEEDS ASSESSMENT METHODOLOGY

From the goals and objectives framework, APO staff, in coordination with Sauk Rapids city staff and community volunteers, developed the following methodology to address critical gaps in the current active transportation system. It should be noted that while this process does not account for every gap or need in the network, it does focus on addressing gaps utilizing existing data as it relates to the region's active transportation goals and objectives.

The APO's active transportation needs assessment methodology was broken into three phases. Beginning with an in-depth analysis of transportation networks, APO staff identified issues and needs within individual communities across the region. This cursory review led to a more detailed analysis of active transportation needs for focus areas identified within each city and ultimately the identification of jurisdictional-level project recommendations – Phase 2. In the final phase, local and regional needs identified in the previous phases were prioritized according to the degree goals and objectives would be addressed.

Sauk Rapids		2019	
Number of Non-Motorized Fatalities and Suspected Serious Injuries Five Year Rolling Average		*0.6*	
Percentage miles of arterials & collectors that have a sidewalk or shared use path (SUP) on at least one side		*38.6%*	
Percent of destinations that fall within distance categories	Schools	0 Ft (Asset Served by AT Facility)	*100%*
		1-310 ft (One block or less)	*0.0%*
		311-930 ft (Two to three blocks)	*0.0%*
		> 931 ft (Four or more blocks)	*0.0%*
	Food Assets	0 Ft (Asset Served by AT Facility)	*100%*
		1-310 ft (One block or less)	*0.0%*
		311-930 ft (Two to three blocks)	*0.0%*
		> 931 ft (Four or more blocks)	*0.0%*
	Large Employers	0 Ft (Asset Served by AT Facility)	*25.0%*
		1-310 ft (One block or less)	*25.0%*
		311-930 ft (Two to three blocks)	*25.0%*
		> 931 ft (Four or more blocks)	*25.0%*
	Parks	0 Ft (Asset Served by AT Facility)	*92.9%*
		1-310 ft (One block or less)	*0.0%*
		311-930 ft (Two to three blocks)	*0.0%*
		> 931 ft (Four or more blocks)	*7.1%*
	Transit Stops	0 Ft (Asset Served by AT Facility)	*34.9%*
		1-310 ft (One block or less)	*23.3%*
		311-930 ft (Two to three blocks)	*23.3%*
		> 931 ft (Four or more blocks)	*18.6%*
Percent of street crossings that do not meet full ADA standards		*80.0%*	
Miles of Active Transportation facilities per 1,000 residents in EJ/Title VI Sensitive Areas in comparison to non-sensitive areas		*3.1:3.9*	
Percent mileage of Regional Priority bicycle facilities that do NOT exist		*46.3%*	
Percent of on-road bicycle facilities with poor pavement		*41.8%*	
Percent of SUP with rough/very rough pavement		*14.4%*	

FIGURE A.21 – SAUK RAPIDS PERFORMANCE REPORT CARD (2019)

Phase 1: Evaluating Needs for the City of Sauk Rapids

In order to begin this evaluation, APO staff reviewed needs and service area gaps relative to the factors listed under goals 1-4. APO staff compiled a series of maps and data that detailed the city's existing active transportation conditions. Utilizing the objectives and

applying factors (as identified in Chapter 4), staff began to dive into the existing conditions data to look for network gaps or areas of concern (i.e., high crash locations, locations of under-designed on-road/off-road facilities).

Figure A.22 summarizes the findings for the City of Sauk Rapids.

Areas of Need - City of Sauk Rapids

	Safety & Comfort Factors						Connectivity Factors			Facility Condition			Equity Factors			Issues	Potential Treatments
		1 High Number of Fatalities	2 High Number of Injuries	3 Under Design Guidelines	4 No Adjacent P/B Facilities	5 Cited as Safety Concern		1 Access to Destinations	2 Access to Transit		1 On Road Conditions	2 Off Road Conditions		1 Underserved Demographic	2 ADA Compliance		
CSAH 3 (2nd St N) - Benton Dr to 3rd Ave N			X												X	Downtown area - crashes with injuries, intersections not ADA compliant	Pedestrian and bicycle crossing improvements, traffic calming, bring intersections to ADA standards.
CSAH 33 (Benton Dr N) - TH 15 to CSAH 3			X												X	One fatality (TH 15), crashes with injuries (downtown), intersections not ADA compliant	Pedestrian and bicycle crossing improvements, traffic calming, bring intersections to ADA standards.
11th Street North					X	X		X	X							Major collector without adjacent facilities, serves school destination (Pleasantview), speed & safety concerns for students, lacks transit stops.	Construct sidewalks or shared use paths, crosswalks or crossing improvements, reduce speeds.
Summit Ave S - 1st St S to Benton Dr					X	X		X	X					X		Major collector without adjacent facilities, serves school destinations (elem, middle school), speed & safety concerns, high percentage of low income & zero vehicle households.	Construct sidewalks or shared use paths, crosswalks or crossing improvements, reduce speeds.
River Ave N				X							X	X				Signed shared lane with 30 mph speed (25 mph is the guideline). On road pavement condition (fair/poor). Oxcart Trail in rough condition.	Reduce speeds, add signage, striping bike lanes, improve pavements.
River Ave S				X	X						X					Signed shared lane with 30 mph speed (25 mph is the guideline). On road pavement condition (fair).	Reduce speeds, add signage, striping bike lanes, improve pavements.
Benton Dr S - Summit Ave to Hwy 10					X	X		X								Minor Arterial without adjacent facilities, serves major employers, speed & safety concerns in the overpass area.	Construct sidewalks or shared use paths, manage speeds.
Mayhew Lake Rd - North of CSAH 3					X			X						X		Minor arterial without adjacent facilities, neighborhoods not connected, serves high school, high percentage aged 18 or younger. Funded project completes gap from CSAH 3 to Osauka Rd NE.	Future project identified: connect from Osauka Rd NE to sidewalks at 29th St NE.
Mayhew Lake Rd - South of CSAH 3					X			X						X		Collector without adjacent facilities, neighborhood sidewalk facilities not connected, high percentage of low income & zero vehicle households.	Construct sidewalks or shared use paths to connect current facilities.
Industrial Boulevard								X	X					X		Serves large employers, transit stops with limited P/B facilities. High percentage of low income & zero vehicle households.	Construct sidewalks or shared use paths to serve current transit stops, businesses.
Industrial Drive S								X	X					X		Serves large employers, transit stops with limited P/B facilities. High percentage of low income & zero vehicle households.	Construct sidewalks or shared use paths to serve current transit stops, businesses.
5th St S - Summit Ave to Hwy 10					X			X	X					X		Major collector without adjacent facilities, transit stops with limited P/B facilities, service to large employers, high percentage of low income & zero vehicle households.	Construct sidewalks or shared use paths to serve current transit stops.
4th St S - 4th Ave S to Mississippi Heights Elementary School						X		X	X					X		Area with schools, transit stops with limited P/B facilities, high percentage of low income & zero vehicle households.	Construct sidewalks or shared use paths to serve current transit stops, neighborhoods and schools. Future project: Hwy 10 pedestrian crossing.

FIGURE A.22 – SAUK RAPIDS PHASE 1 NEEDS ANALYSIS.

Considered along with the factors were the comments from the APO's initial public input along with comments from city staff. Areas where multiple issues were revealed when the factors were applied became the focus of further review and analysis.

Phase 2: Analysis of Sauk Rapids Focus Areas

From the process described for the review of needs and gaps for the City of Sauk Rapids, the following areas were identified as priority areas for improvements.

- 11th Street N area.
- Sauk Rapids-Rice Middle School and Mississippi Heights Elementary area.
- Mayhew Lake Road (Benton CSAH 1) area.

APO staff working in conjunction with city staff for each focus area further analyzed needs and issues and worked to identify possible solutions.

11th Street N Area

The 11th Street N focus area spans the entirety of the roadway from 13th Avenue to First Avenue N as well as Stearns Drive from 13th Avenue N to Second Street N/Benton CSAH 3 as shown in Figure A.23. Due to traffic speed, safety concerns, limited facilities, and the location of Pleasantview Elementary School, this is included as a focus area.

NEEDS AND ISSUES

Eleventh Street N is one of only a few continuous east-west collector roadways in the City of Sauk Rapids and often sees relatively high vehicle traffic. A 2015 traffic count estimated 1,650 vehicles use 11th Street N daily. The posted speed is 30 mph.

The area surrounding 11th Street N is primarily residential, with an abundance of single-family homes. Many homes along this corridor have direct driveway access to the street. Given its proximity to Pleasantview Elementary School, a lot of young children use this roadway. Eleventh Street N also serves the Good Shepherd Community - a church plus care facilities and congregate housing for older adults. The eastern end of the corridor is light industrial, providing many jobs. The 11th Street N corridor, therefore, is a conduit facilitating the flow of workers to and from those jobs.

While there is a small section of sidewalk on this collector roadway – between Fourth Avenue N and Sixth Avenue N – the roadway is not outfitted with much active transportation infrastructure. There are also several transit stops along the corridor.

FIGURE A.23 – SAUK RAPIDS 11TH STREET N AREA OF FOCUS.

Local public safety officials report concerns with vehicle speeds and the safety of children walking and/or biking to Pleasantview Elementary. The city has noted concerns, especially with crossing the intersection of 11th Street N and Sixth Avenue N as part of the 2011 Transportation Plan.

City ordinance calls for a minimum five-foot (unstriped) bicycle route or (striped) lane plus the addition of five-foot sidewalks (on both sides of the street) with reconstructed urban streets where possible.

Recognizing the concern for safety in this school area, the city has made some improvements to active transportation facilities. A new sidewalk, additional crosswalks, and signage were added to the section of 11th Street between 4th Avenue N and 6th Avenue N with the implementation of a Safe Routes to School project in 2014. With the City's restriping of 11th Street N in 2021, the driving lanes were narrowed, and the shoulders widened to help calm vehicle traffic. On-street parking will remain along portions of this corridor.

RECOMMENDATIONS

To address needs for the 11th Street N area, it is suggested that investments be directed to improvements along this corridor as follows.

- The city's Transportation Plan called for additional crosswalks along the corridor, traffic control devices, and warning flashers to address safety needs. This plan reiterates these recommendations, especially near Pleasantview Elementary. Consider implementing crossing devices that assist pedestrians by increasing driver awareness, such as Rectangular Regular Flashing Beacons (RRFBs) or Pedestrian Hybrid Beacons (PHBs).
- Add additional sidewalk on at least one side of the roadway from Second Avenue N on the west end, across Summit Avenue N, into the industrial park and following Stearns Drive right-of-way connecting to the existing shared-use path on Second Street N/Benton CSAH 3. This will help provide a critical continuous active transportation connection across US 10. The sidewalk will also help provide needed access to existing transit stops.
- The posted speed limit and traffic volume on 11th Street N suggest that an on-road bicycle facility would be relatively safe and comfortable for most users. The existing pavement is 42 feet wide. This appears to be sufficient for two five-foot wide bicycle lanes (one in each direction), two 12-foot wide driving lanes, and one eight-foot wide parking lane. While parking is permitted on both sides of the roadway, a parking study should be conducted to reaffirm adequate amount of street parking is available. Painting the parking lane and the bike lanes on the pavement should also help control excess speeds on the corridor by visually tightening the drivable area.

Middle School/Mississippi Heights Area

The area surrounding Sauk Rapids-Rice Middle School and Mississippi Heights Elementary School was identified as a focus area due to excessive speeds, safety concerns, and limited facility access to the two public schools. This area of focus includes much of Summit Avenue South and the network of streets that provide access to the City's centrally located elementary and middle schools.

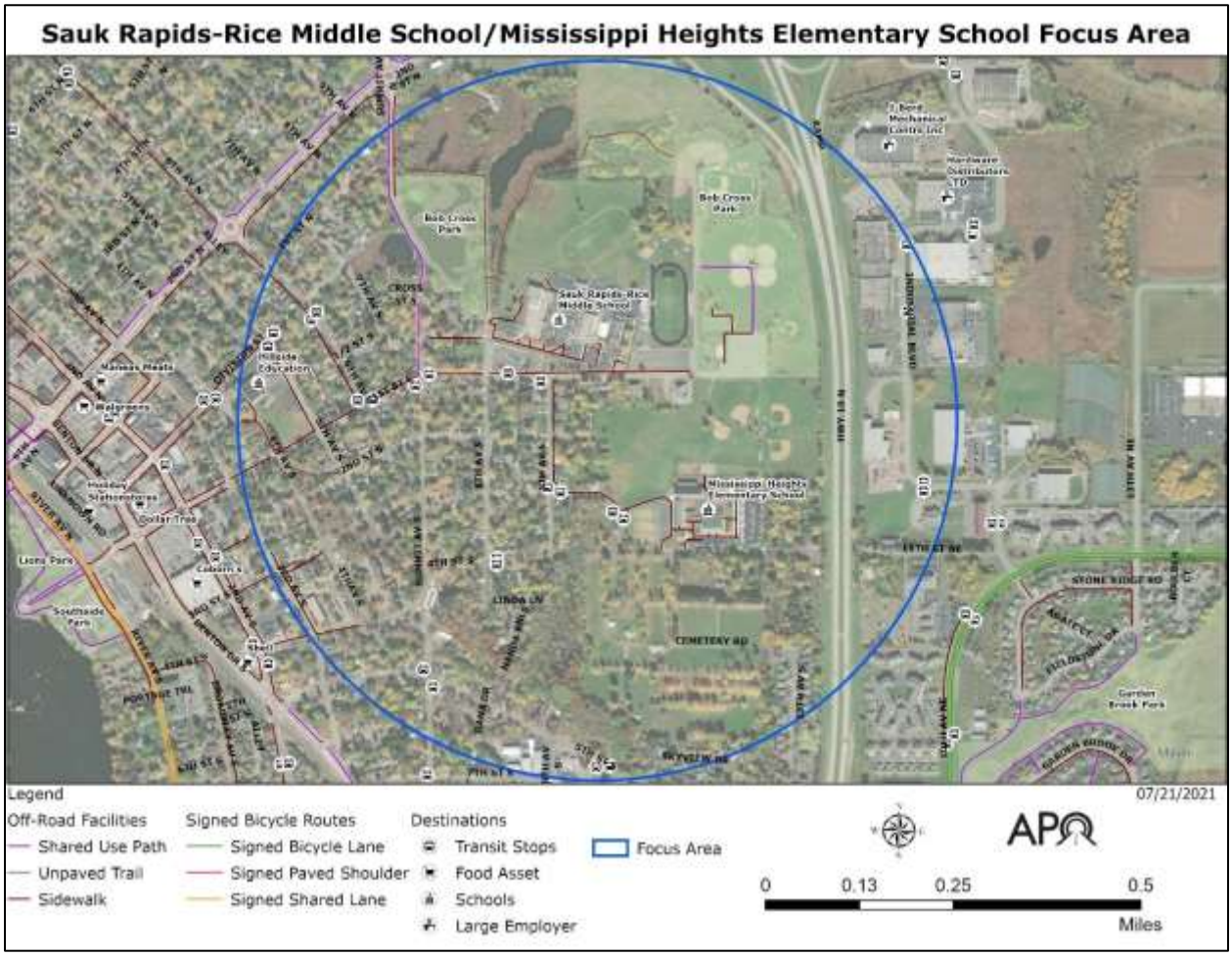


FIGURE A.24 – MIDDLE SCHOOL AND MISSISSIPPI HEIGHTS AREA OF FOCUS

NEEDS AND ISSUES

Vehicles often use Summit Avenue as one of the few crosstown north/south routes. Daily traffic on Summit Avenue was measured at about 1,850 vehicles in 2015. At the same time, Summit Avenue and other streets are used by those walking or biking to the nearby schools.

While a local street, Fourth Street S is the primary access to Mississippi Heights Elementary. At present, there are no active transportation facilities.

Within the focus area, the land use is primarily single-family residential. The residential area surrounding both the middle school and Mississippi Heights Elementary School has a higher number of low-income and zero vehicle households. These demographic groups have been known to rely more heavily on active transportation.

Aside from sidewalks along First Street S and Ninth Avenue S, this area predominately lacks active transportation infrastructure, including access to transit stops along Summit Avenue S and Fourth Street S.

As noted in the 2011 Transportation Plan, there are also concerns with the speed of vehicle traffic along the Fourth Street S corridor. Crossing Summit Avenue S and Sixth Avenue S

were identified as safety concerns in the Transportation Plan. Also noted was the difficulty for vehicles on Summit Avenue S and Fourth Street S to see bicycles and pedestrians.

Concerns from the public have been expressed with vehicle speeds approaching the roundabouts on Fourth Street S and Summit Avenue S and the safety of children who walk or bike on these streets.

The city has long-term plans for a new grade-separated shared use path under or over US 10, providing a direct connection between the elementary school and the residences on the east. However, funding has not yet been identified.

RECOMMENDATIONS

- This plan reiterates and reinforces the City's plan for a grade-separated shared use path at US 10, connecting Fourth Street S with 15th Street NE, allowing school-aged children to traverse the highway safely.
- Further, adding sidewalks or shared use paths along Fourth Street S is recommended to improve safe access to the schools and other nonmotorized users. If this is impractical, the city may consider the possibility of alternative routes for pedestrians and bicycles such as Third Street S. A continuous active transportation facility from US 10 to the existing sidewalks at the edge of downtown (i.e., Third Avenue S at Third Street or Fourth Street) would be ideal.
- East of US 10, it is recommended that a continuous sidewalk or shared-use path be constructed along 15th Street NE to the Pheasant Ridge Apartments and to Stone Ridge Road.
- Marked crosswalks on Summit Avenue (especially at Third Street S and Fourth Street S) will improve safety and serve as a visual reminder to drivers to expect pedestrians crossing their path of travel. They may also help address the speeding concern as expressed by the public.

Mayhew Lake Road Area

The focus area shown in Figure A.25, CSAH 1 (Mayhew Lake Road) from CSAH 3 to 10th Street NE, was identified due to the lack of connected facilities to residential neighborhoods. This is a growing part of the city with a high percentage of low-income and zero vehicle households.

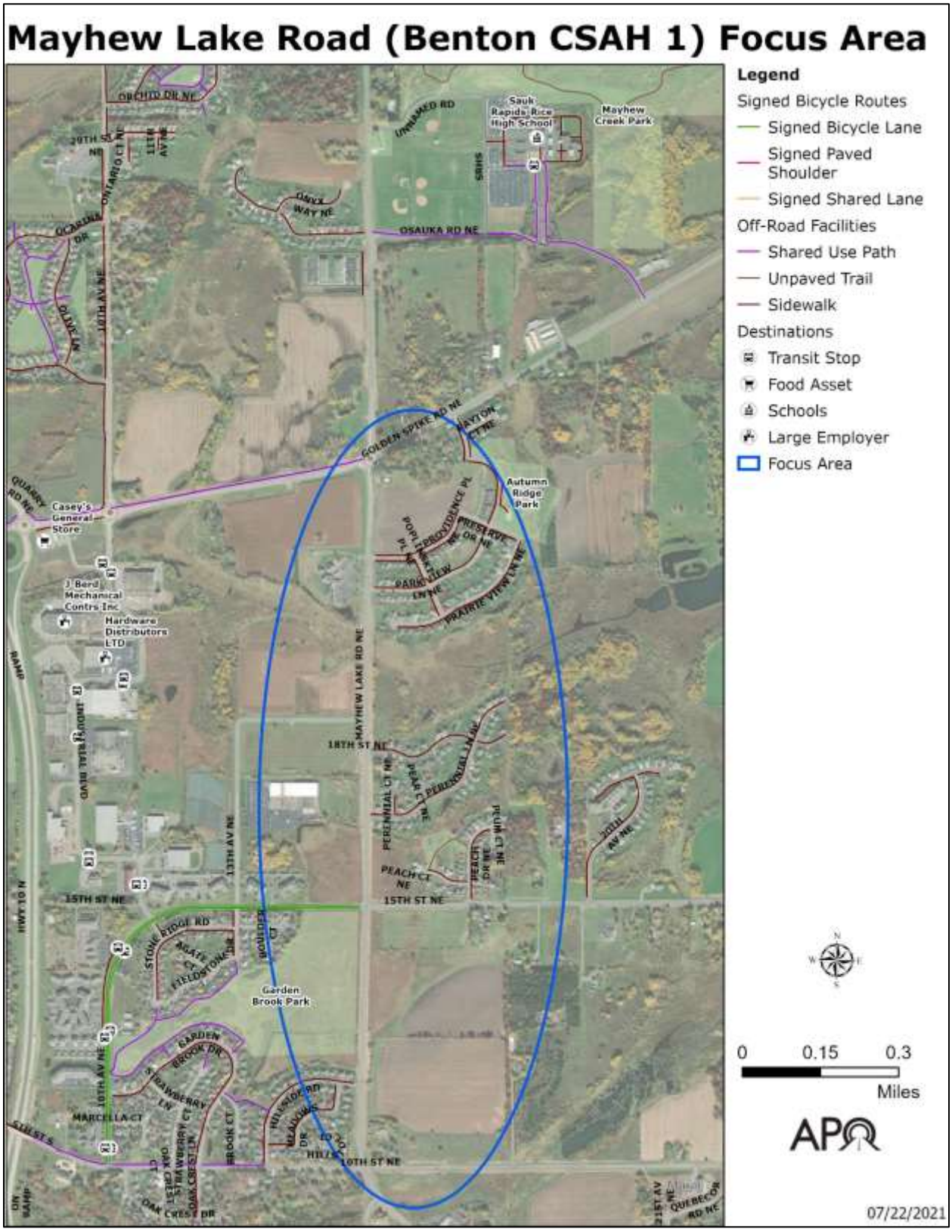


FIGURE A.25 – MAYHEW LAKE ROAD/BENTON CSAH 1 FOCUS AREA.

NEEDS AND ISSUES

The housing developments along Mayhew Lake Road NE south of CSAH 3/Golden Spike Road NE – which mostly contain sidewalks – are missing connections to the City's more extensive active transportation network. This includes access to the shared use path along CSAH 3, leading to the high school and connecting downtown. Residential subdivisions along 15th Street SE are also missing connections to the more extensive network. The relatively high volume of motor vehicles (3,300-4,800 vehicles per day) and posted speed (55 mph) along Mayhew Lake Road are significant safety concerns for bicycles and pedestrians.

Much of this area is undeveloped. Vacant land along these corridors offers areas with infill potential. New residential or other land use types in the Mayhew Lake Road area will also need connections.

RECOMMENDATIONS

- Construct a new shared use path along south Mayhew Lake Road from CSAH 3 (Golden Spike Road) to 10th Street NE. Mayhew Lake Road currently has a rural cross-section - which is to say; there are open drainage ditches on both sides of the roadway. But this corridor is destined to become a significant arterial roadway in this fast-growing part of Sauk Rapids. There should be sufficient right-of-way to add a shared-use path on at least one side of the corridor. Doing so would add a vital connection between all subdivisions and neighborhood sidewalks and trails.
- Strong consideration should be given to connecting a new shared use path along Mayhew Lake Road to the recommended shared use path grade-separated crossing of US 10 (see the previous section) via 15th Street NE, thus connecting many east-side neighborhoods with the central part of Sauk Rapids and the downtown area. Continuing the path south to 10th Street NE would allow the facility to link into the network on the south end.
- Consider a shared use path connection east of Mayhew Lake Road along First Street NE to 20th Street NE.

Phase 3: Evaluating Needs for the Region

The final phase of the needs analysis was to identify improvements to the regional facility network within the City of Sauk Rapids. These projects would assist in achieving an interconnected active transportation network that satisfies regional needs.

Regional bicycle facilities will logically connect cities and other parts of the planning area outside Sauk Rapids and include potential links to areas outside the planning region. Projects that connect the area regionally will provide an approximate spacing of two miles between facilities. In structuring a regional system, the preference is to complete gaps with shared use paths over on-road facilities.

Recommended regional facilities to extend the existing network within Sauk Rapids include shared use paths along 35th Street NE (existing County Road 29), north along Mayhew Lake Road (County Road 1), and east along 15th Street NE (County Road 45).

Map Number and Description	
1	Construct regional shared use path along Mayhew Lake Road (Benton CSAH 1) from Osauka Road NE to Golden Spike Road (Benton CSAH 3).
2	Reconstruct of Second Avenue S from North Benton Drive to 10th Street South with the inclusion of sidewalks.
3	Build a shared use path along future roadway extension of 29th Street NE traveling east of the water tower.
4	Construct a sidewalk on at least one side of 11th Street N/Stearns Drive.
5	Paint in a 5 foot wide bicycle lane on each side of 11th Street N.
6	Install additional crosswalks, traffic control devices, and warning flashers near Pleasantview Elementary.
7	Paint marked crosswalks along Summit Avenue.
8	Add sidewalks or shared use paths along 4th Street S connecting to Mississippi Heights Elementary School.
9	Construct a grade separated active transportation bridge crossing of US 10.
10	Build a shared use path from proposed bridge over US 10 along 15th S NE/Industrial Boulevard.
11	Construct a shared use path along 15th Street NE.
12	Build a regional shared use path along 35th Street NE (Benton CSAH 29).
13	Extend the regional shared use path along Mayhew Lake Road (Benton CSAH 1).
14	Construct a regional shared use path along Golden Spike Road (Benton CSAH 3).
15	Build a regional shared use path along Mayhew Lake Road (Benton CSAH 1).
16	Construct a regional shared use path connection along 15th Street NE (Benton County Road 45) east.

FIGURE A.26 – PROGRAMMED AND RECOMMENDED PROJECTS FOR THE CITY OF SAUK RAPIDS.

APPENDIX B: SARTELL CITY PROFILE

Straddling two shores of the Mississippi River, the City of Sartell has grown from a small town that supported a lumber and paper industry to become a major growth center within the MPA. The City's many recreational areas and parks are a popular draw locally and from the nearby region. Sartell has a large and expanding network of locally owned and maintained active transportation facilities to serve those living and working in the city and the many visitors from outside the community.

DEMOGRAPHICS

The City of Sartell is currently the most rapidly growing municipality in the APO's MPA. According to the U.S. Census Bureau's 2014-2018 American Community Survey (ACS) Five-Year Estimates, the City of Sartell's population has grown 77.1% since 2000.

The City strives to provide equitable service to all segments of the community in its transportation planning investments. The APO tracks specific population demographic subsets known as traditionally underrepresented populations at a regional level. This includes the following:

- People-of-Color (Black/African American alone; American Indian and Alaska Native alone; Asian alone; Native Hawaiian and other Pacific Islander alone; some other race; two or more races; Hispanic or Latino descent regardless of race).
- Persons with low income.
- People with disabilities.
- People with limited English-speaking capabilities.
- Households without access to a motor vehicle.
- Persons over the age of 65.
- Persons under the age of 18.

A look at these demographics in Sartell finds that close to 30% of the city's population is under age 18. Approximately one in 10 residents are people of color. One in 20 households are without a vehicle. See Figure B.2 below for other details.

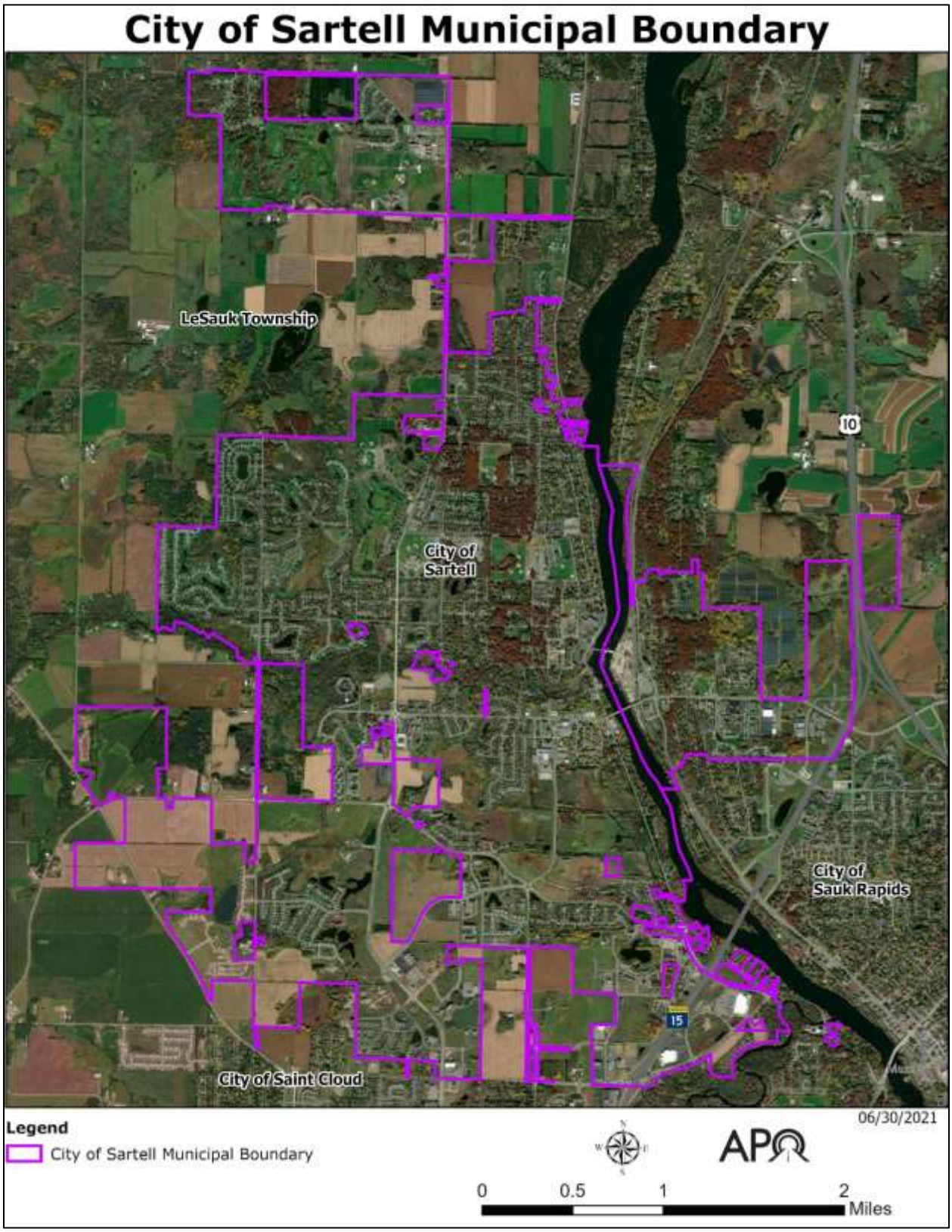


FIGURE B.1 – CITY OF SARTELL.

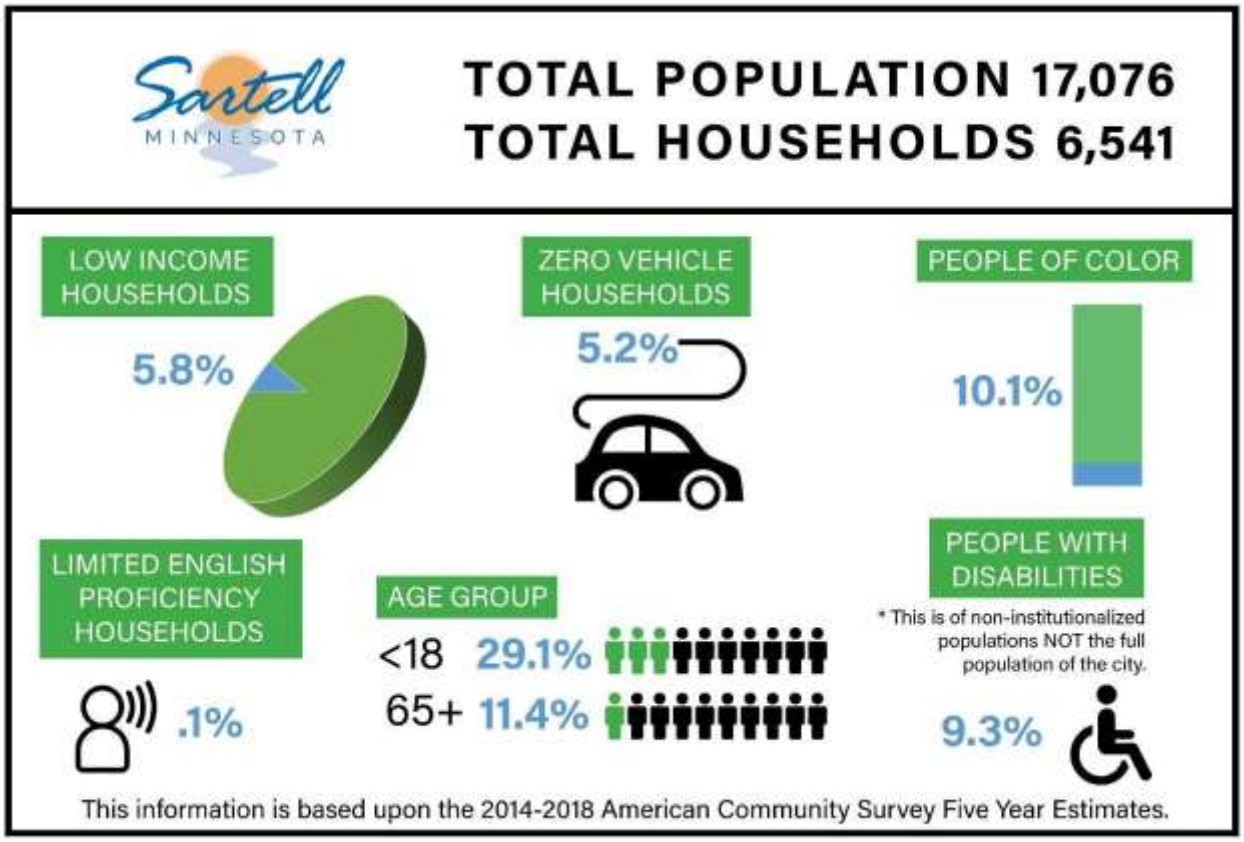


FIGURE B.2 – DEMOGRAPHIC PROFILE OF THE CITY OF SARTELL.

EXISTING LAND USES

How cities use the land within their boundaries (i.e., residential, commercial, industrial) impacts the transportation network and the modes of travel available or desirable to users. Land use can play a role in developing a transportation system that is mode-friendly to motorized and non-motorized users.

Due to its location relative to the rivers, major highways, and its unique development pattern over time, the City of Sartell lacks a centrally focused downtown area. Instead, several small commercial, office, and industrial centers serve the City's residents and visitors.

As described in the Comprehensive Plan, the city is working to respond to the needs and desires of a complex mix of urban and rural land uses. While many homes in Sartell are within easy access to services, other newly developing areas of the city are more distant and secluded. The current land use pattern within the city is shown in Figures B.3 and B.4.

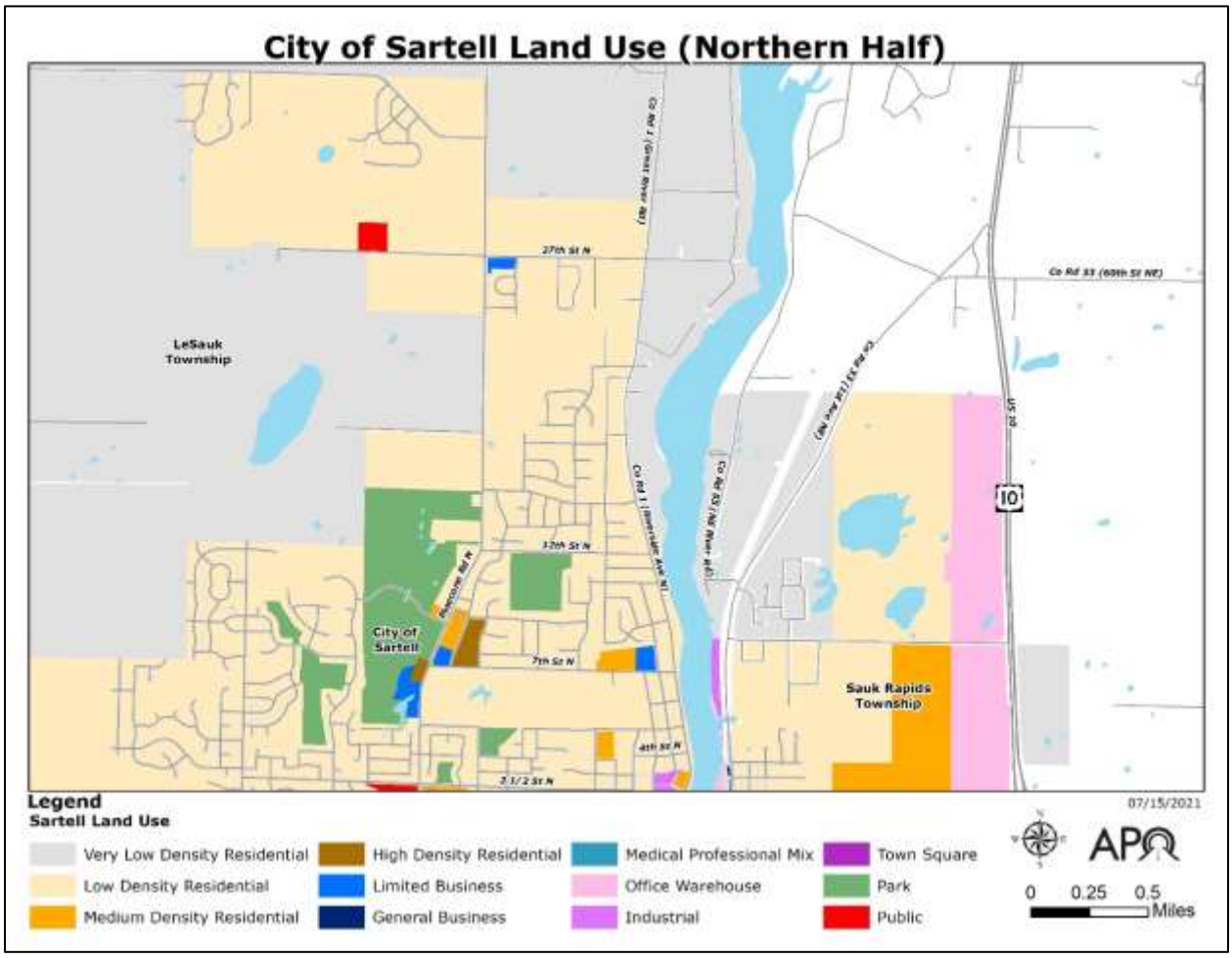


FIGURE B.3 – 2019 LAND USES IN NORTHERN SARTELL AS IDENTIFIED BY THE CITY.

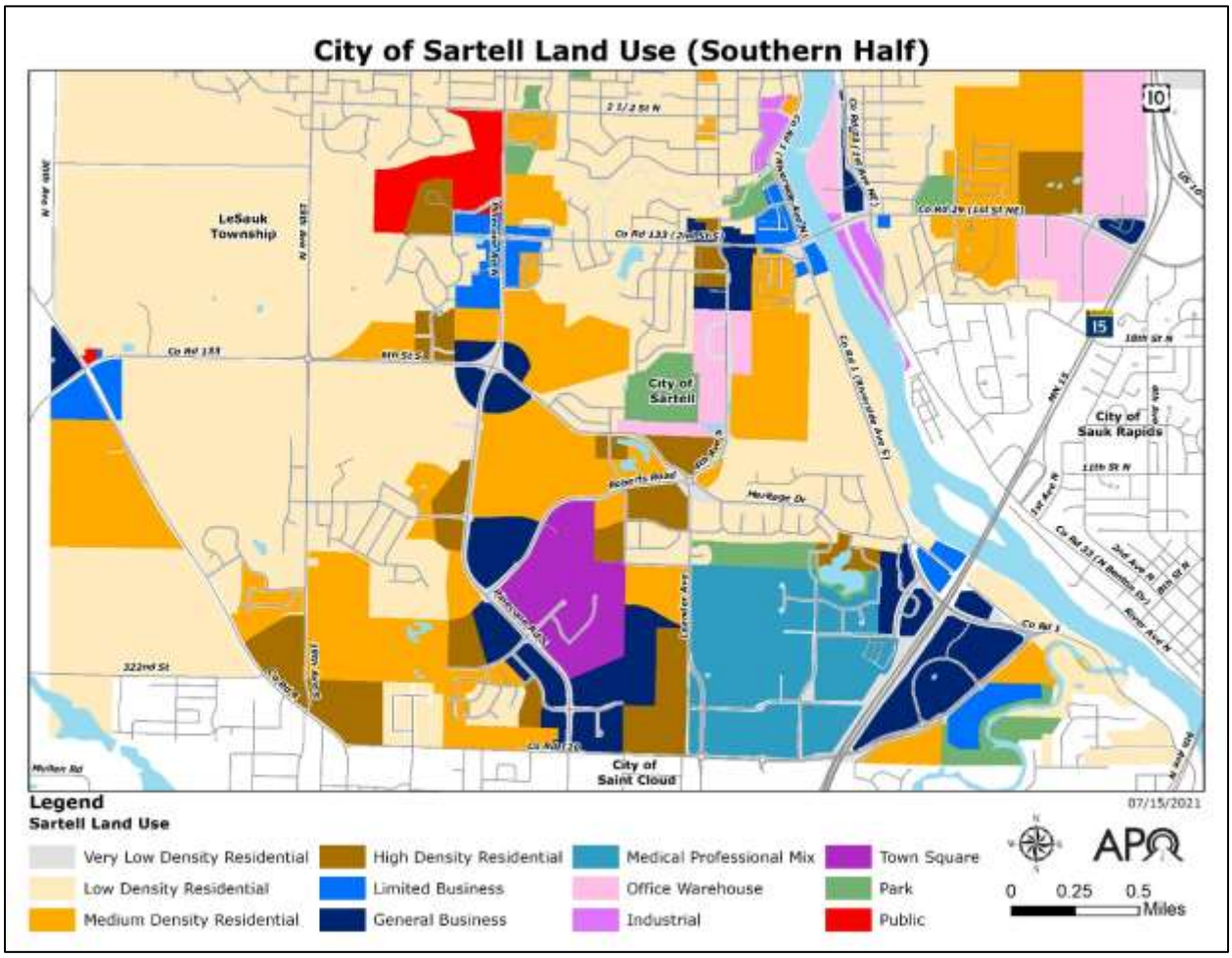


FIGURE B.4 – 2019 LAND USES IN SOUTHERN SARTELL AS IDENTIFIED BY THE CITY.

The many different areas of growth that have emerged throughout the City of Sartell have their distinctive land uses.

East Sartell generally refers to the part of the city east of the Mississippi River. Among various residential types and densities are assorted business and industrial uses. The city plans to further expand commercial development on the east side, particularly along US 10.

West of the Mississippi in the core area of Sartell is a mix of low and medium-density residential uses with pockets of retail and other commercial uses along Pinecone Road and Riverside Avenue. Between Fifth Street N and Seventh Street N is the campus area for three of Sartell's public schools. The DeZURIK manufacturing facility on Riverside Avenue is a long-established industrial site.

The MN 15 approach to the Sartell bridge has become a highly attractive commercial area with several large retailers for the city and region. West of MN 15 is a growing medical complex with various treatment centers.

Many acres of parkland, open space, and greenways are spread throughout the city. West of Pinecone Road is two of the city's large regional parks. West of Pinecone to County Road 4 and north to 35th Street N are patches of newly developing areas, primarily low-density residential use. The City's new high school is in north Sartell.

Understanding how the city plans to develop in the future will inform the type of transportation system needed. Residents and visitors will only reach these destinations through the transportation network that is available to them.

TYPES OF ACTIVE TRANSPORTATION INFRASTRUCTURE

Sartell has a variety of infrastructure designed specifically for active transportation users. Some are integrated into the roadway network, such as bike lanes (on-road facilities). Others are separated from the roadway network, such as sidewalks and shared use paths (off-road). Complementing the on- and off-road active transportation network is the transit network operated by Saint Cloud Metro Bus. Bicyclists and pedestrians can rely on both the on- and off-road network and the Metro Bus system to reach their destinations.

ON-ROAD FACILITIES

The City of Sartell has 6.7 lane miles of on-road bicycle facilities to serve bicyclists, including signed paved shoulders on portions of the Mississippi River Trail (MRT) and signed shared lanes along the Great River Road.

The Mississippi River Trail (MRT)

The MRT is a planned network of bicycle facilities that follows the river's east shore through the City of Sartell. The MRT follows the Northeast River Road and continues south to Sauk Rapids. This on-road facility is regionally significant to the city as a nationally recognized bicycle route.

In addition, the MRT has been identified as one of the Minnesota Department of Transportation (MnDOT's) high priority corridors for bicycle routes due to its inter-jurisdictional nature – spanning from northern Minnesota to Louisiana – and high potential of connecting to other regional active transportation facilities.

The Great River Road Scenic Byway

Riverside Avenue, sometimes referred to as the West River Road, is part of the Great River Road Scenic Byway, another route of regional significance. The Great River Road crosses to the east side of the Mississippi at the Sartell bridge, then continues south, joining the MRT into Sauk Rapids.

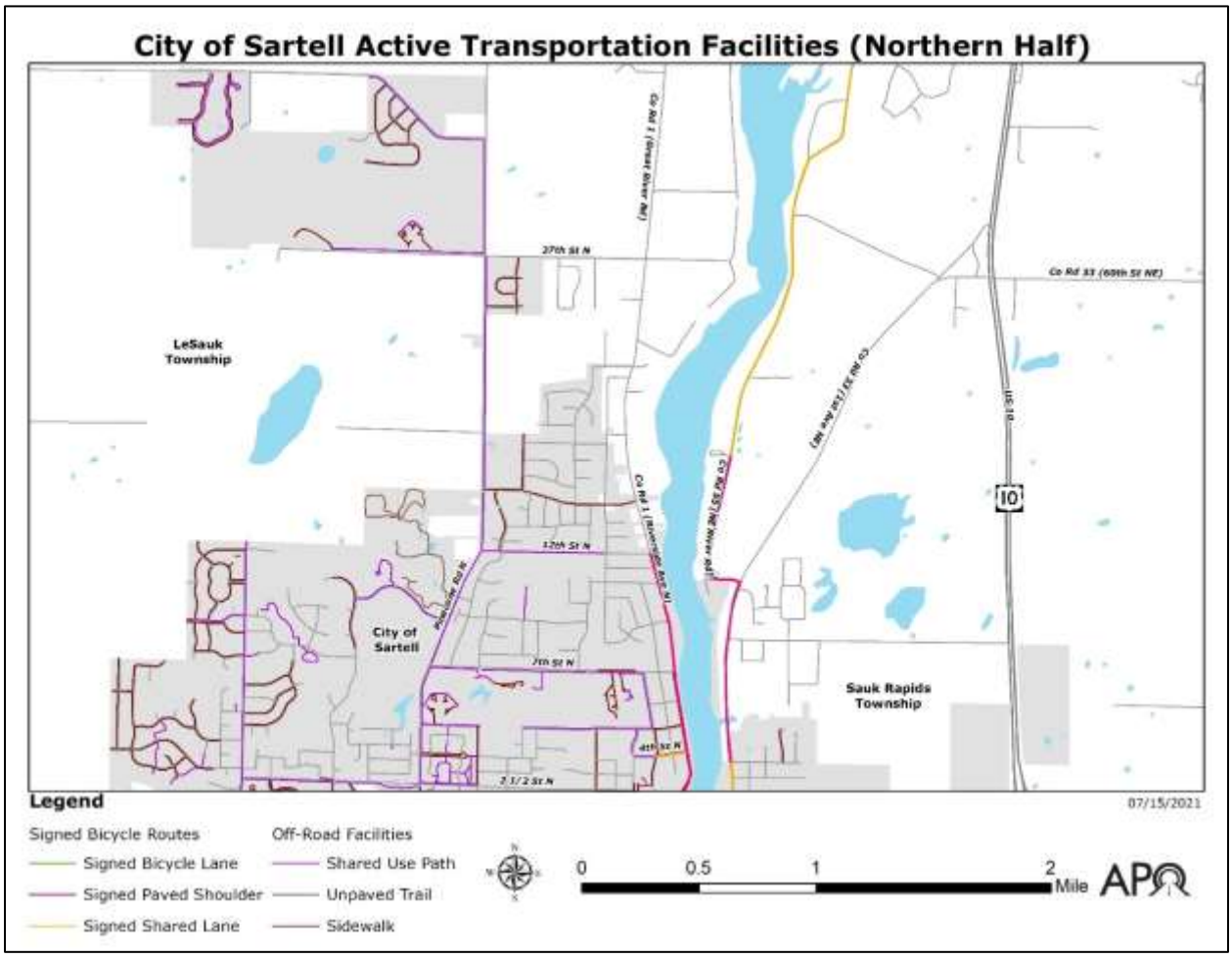


FIGURE B.5 – ON- AND OFF-ROAD ACTIVE TRANSPORTATION FACILITIES IN NORTH SARTELL BY TYPE AND LOCATION.

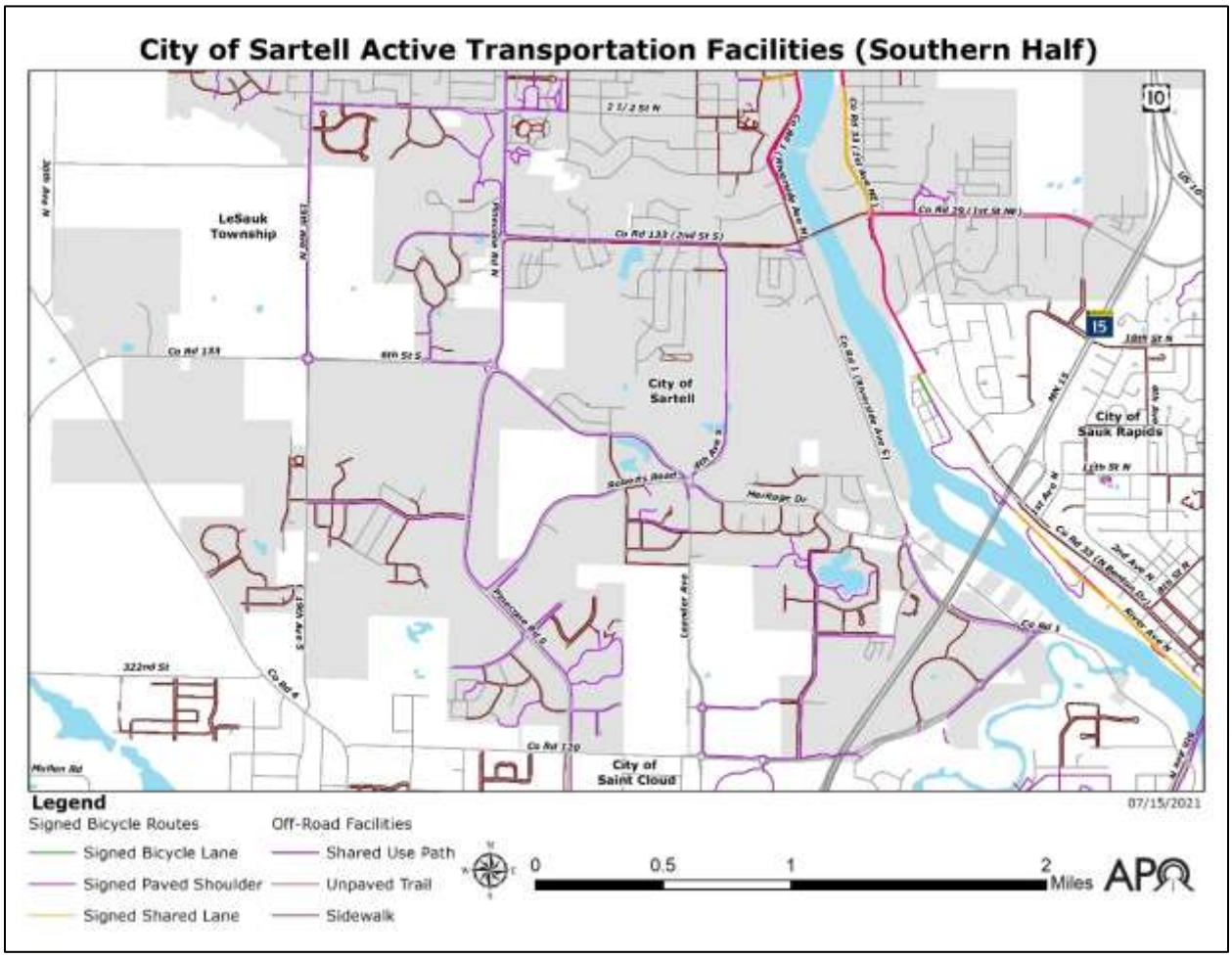


FIGURE B.6 – ON- AND OFF-ROAD ACTIVE TRANSPORTATION FACILITIES IN SOUTHERN SARTELL BY TYPE AND LOCATION.

OFF-ROAD FACILITIES

Shared Use Paths and Trails

The 32.3 miles of shared use paths provide Sartell neighborhoods access to the city's parks, recreational areas, and schools. Within Pinecone Central Park are 1.8 miles of unpaved trails.

A continuous shared use path follows along Pinecone Road from the Oak Ridge Elementary School to the southern city boundary. Throughout Sartell other shared use paths generally follow many north-south and east-west collector routes.

Sidewalks

There are 32.5 miles of sidewalks in the City of Sartell. Sidewalks provide access to the City's schools and parks and are prevalent in the newer neighborhoods to the west and north.

Figures B.5 and B.6 show the location of all active transportation infrastructure within the City of Sartell.

TRANSIT SERVICE AND INFRASTRUCTURE

As the urban public transit provider, Saint Cloud Metro Bus is responsible for the daily management, operation, and maintenance of Fixed Route (FR) and Dial-a-Ride (DAR) systems within Saint Cloud, Waite Park, Sartell, and Sauk Rapids.

Figure B.7 shows each Metro Bus fixed routes within the City of Sartell and the ConneX service area.

FIXED ROUTE SERVICE

Metro Bus provides fixed route transit service to the City of Sartell seven days a week through routes 21, 22, and 31. Currently, fixed route service is available to the eastern and southern Sartell portions.

In east Sartell, residents can access Routes 21 and 22, the primary service route for Sauk Rapids. While these routes provide service to the same areas within east Sartell, they operate in opposite directions. Route 21 operates according to a weekday schedule, and Route 22 offers a seven-day service. Route 21 and Route 22 transit infrastructure includes signed bus stops some with shelters and benches.

Route 31 connects provides service from the downtown transit center in Saint Cloud to the medical hub on MN 15 in southeastern Sartell. Stops within Sartell include CentraCare Plaza and Walmart/Sam's Club.

Figure B.8 provides a closer look at locations of transit stops in relation to active transportation infrastructure. Transit stops along the fixed route system typically include sidewalk access.

OTHER TRANSIT SERVICE

While fixed route service is limited to certain areas, nearly all Sartell residents can access the Metro Bus ConneX service. ConneX provides curb-to-curb and door-to-door on demand service seven days a week throughout the City of Sartell.

Dial-a-Ride, an operator-assisted paratransit service provided for those who cannot use fixed routes, is available to those who qualify.

FIGURE B.7 – METRO BUS FIXED ROUTE AND CONNEX SERVICE TO THE CITY OF SARTELL.

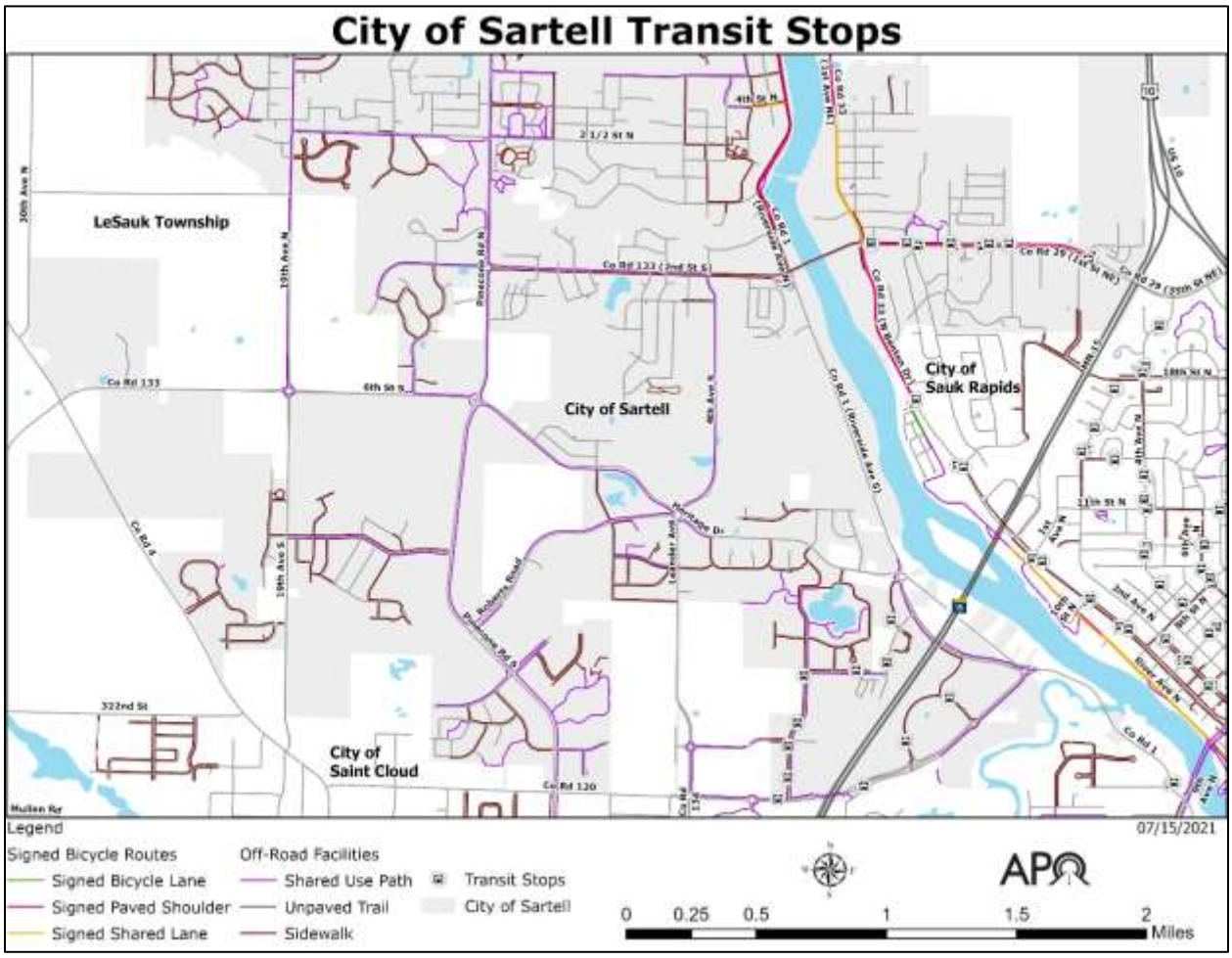


FIGURE B.8 – TRANSIT STOPS WITHIN THE CITY OF SARTELL RELATIVE TO THE ACTIVE TRANSPORTATION SYSTEM.

CONDITION OF ACTIVE TRANSPORTATION INFRASTRUCTURE

If the existing active transportation infrastructure is in poor condition, it may cause safety issues, inconvenience for the user, or result in the underutilization of the facility. Keeping the system in good condition assures safety and a comfortable experience.

Pavement conditions data for on-road and off-road active transportation facilities within the City of Sartell was collected from areawide surveys performed for the APO as discussed in Chapter 2 of the ATP.

ON-ROAD FACILITIES

Pavement Condition and Striping

In 2019 GoodPointe Technology collected pavement and striping condition data on the existing on-road bicycle routes in Sartell. This includes the bicycle lanes on First Avenue NE and the marked paved shoulders on Riverside Avenue and First Street NE.

Pavement condition was evaluated using a Digital Inspection Vehicle (DIV) – a specialized vehicle equipped with cameras and laser sensors to detect pavement distress and roughness. All lane miles within Sartell were rated as being in very good or good condition as shown in Figure B.9.

Striping conditions of on-road facilities were rated from a visual inspection. In the City of Sartell, 5.4 lane miles are striped. With an exception of a small section of First Avenue NE and First Street NE, the majority of on-road striping was rated in fair to poor condition as shown in Figure B.10.

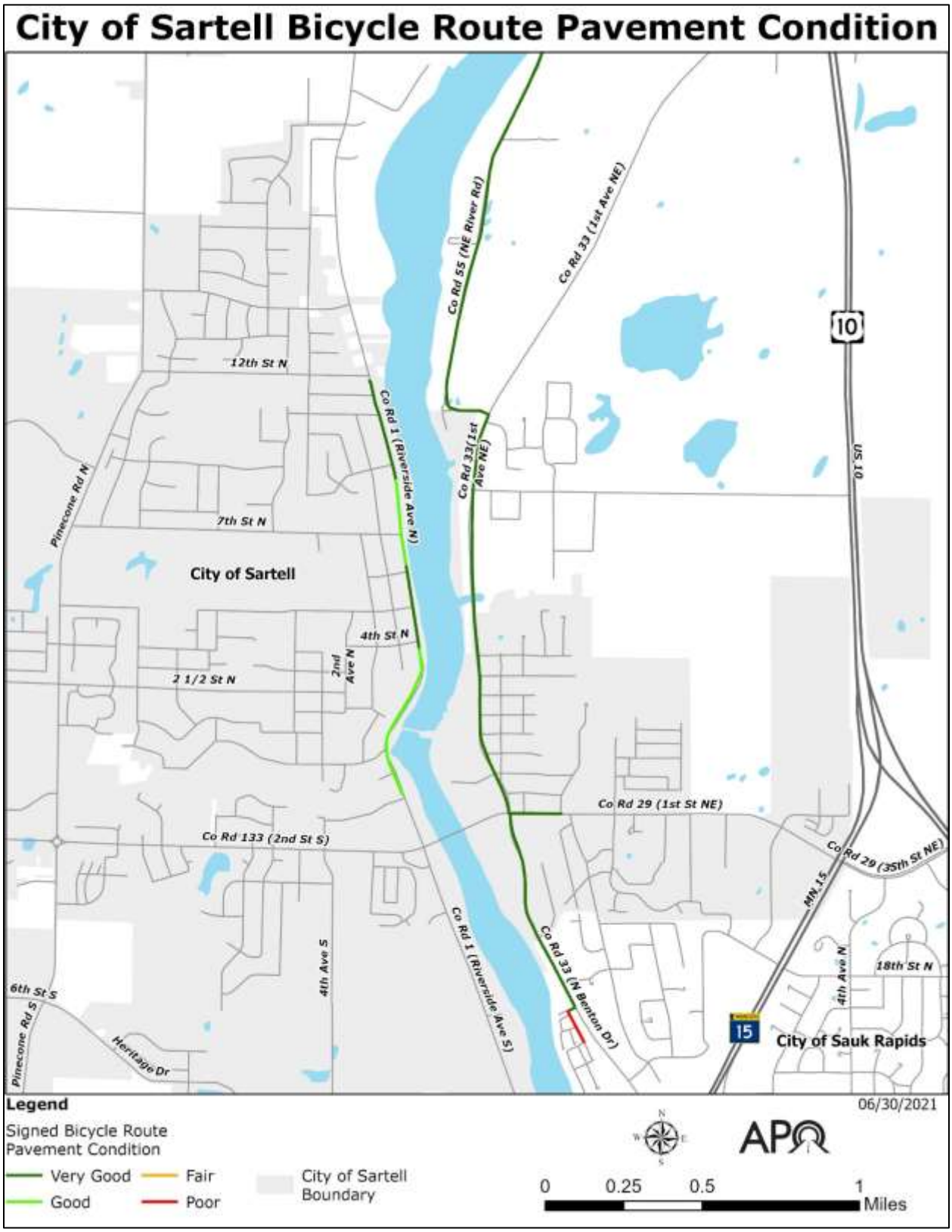
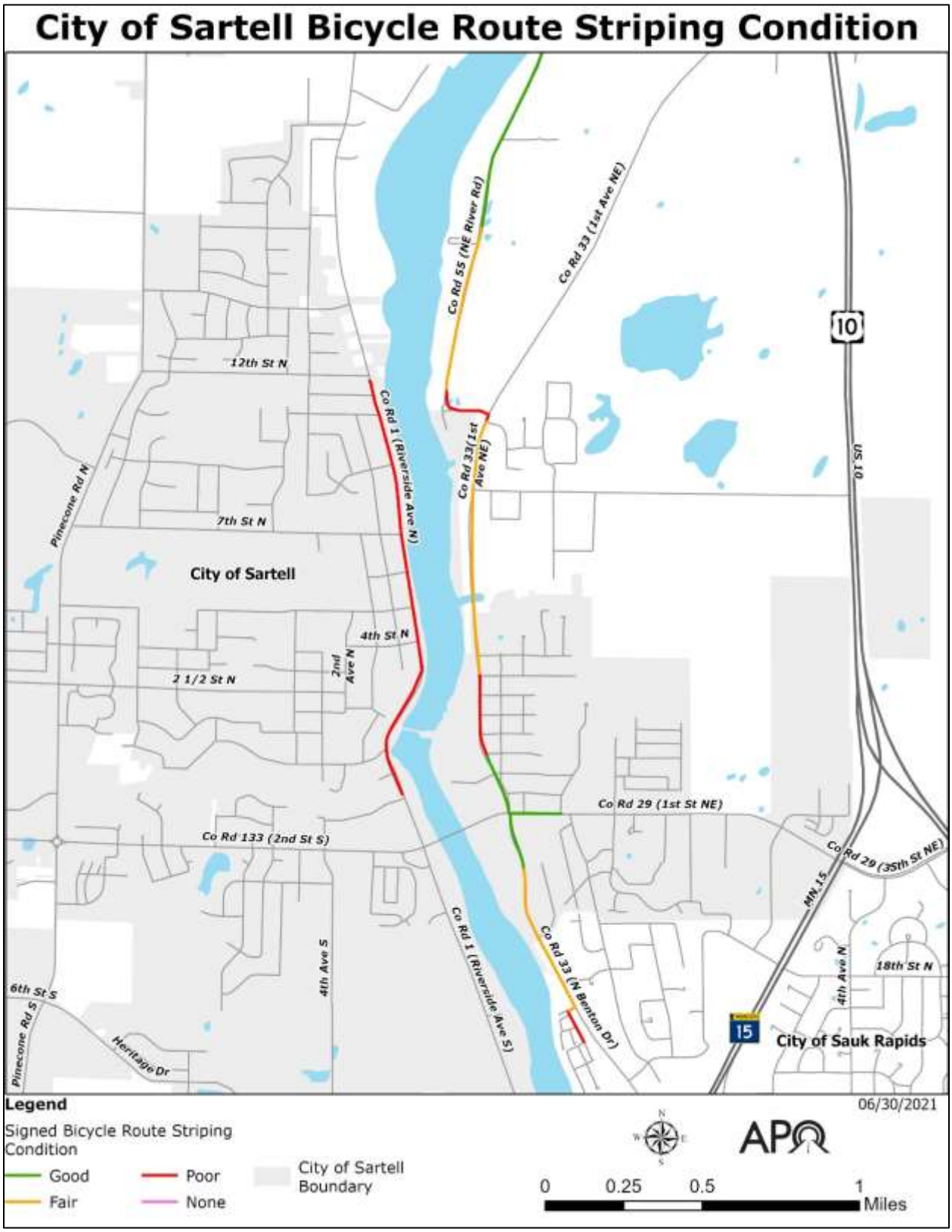


FIGURE B.9 – CONDITION OF PAVEMENTS SIGNED AS BICYCLE ROUTES IN NORTH SARTELL.



FIGURES B.10 – STRIPING CONDITION OF ON-ROAD BICYCLE FACILITIES IN NORTH SARTELL.

OFF-ROAD FACILITIES

Shared Use Path Pavement Condition

The Parks & Trails Council of Minnesota conducted a pavement condition assessment of most shared use paths within the APO in 2020. The Council used a specially equipped electronic bicycle with instruments aboard to record the "bumpiness" of the pavement throughout the metropolitan planning area.

Pavement conditions along shared-use paths in the City of Sartell are shown in Figures B.11 and B.12. While conditions are generally better in Sartell than across the rest of the MPA, about 16% of the city's paths were rated as "rough/very rough" and about 21% "fair." More than half of the shared use paths in Sartell received a rating of "smooth" or "very smooth."

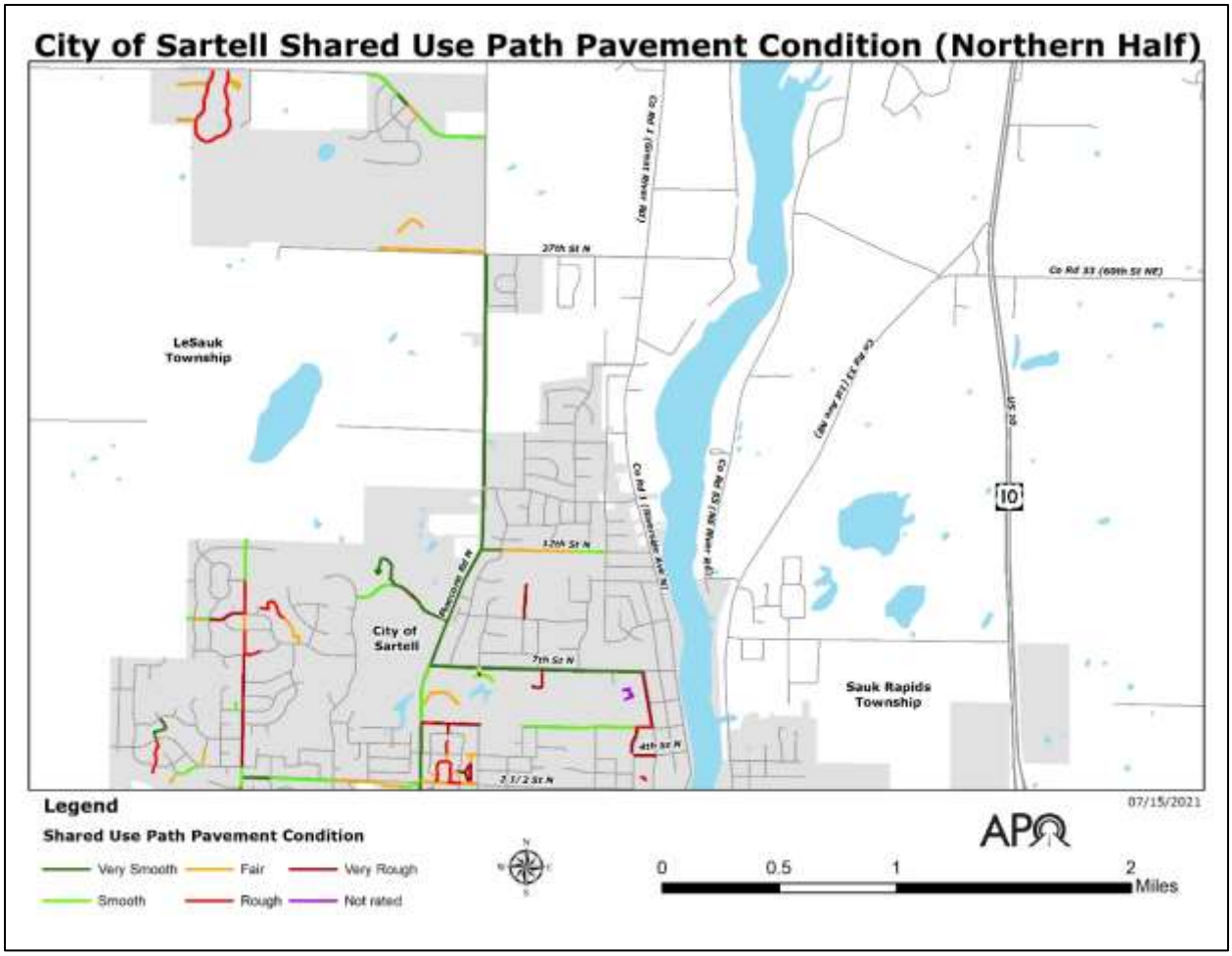


FIGURE B.11 – CONDITION OF PAVEMENTS ON SHARED USE PATHS IN NORTH SARTELL.

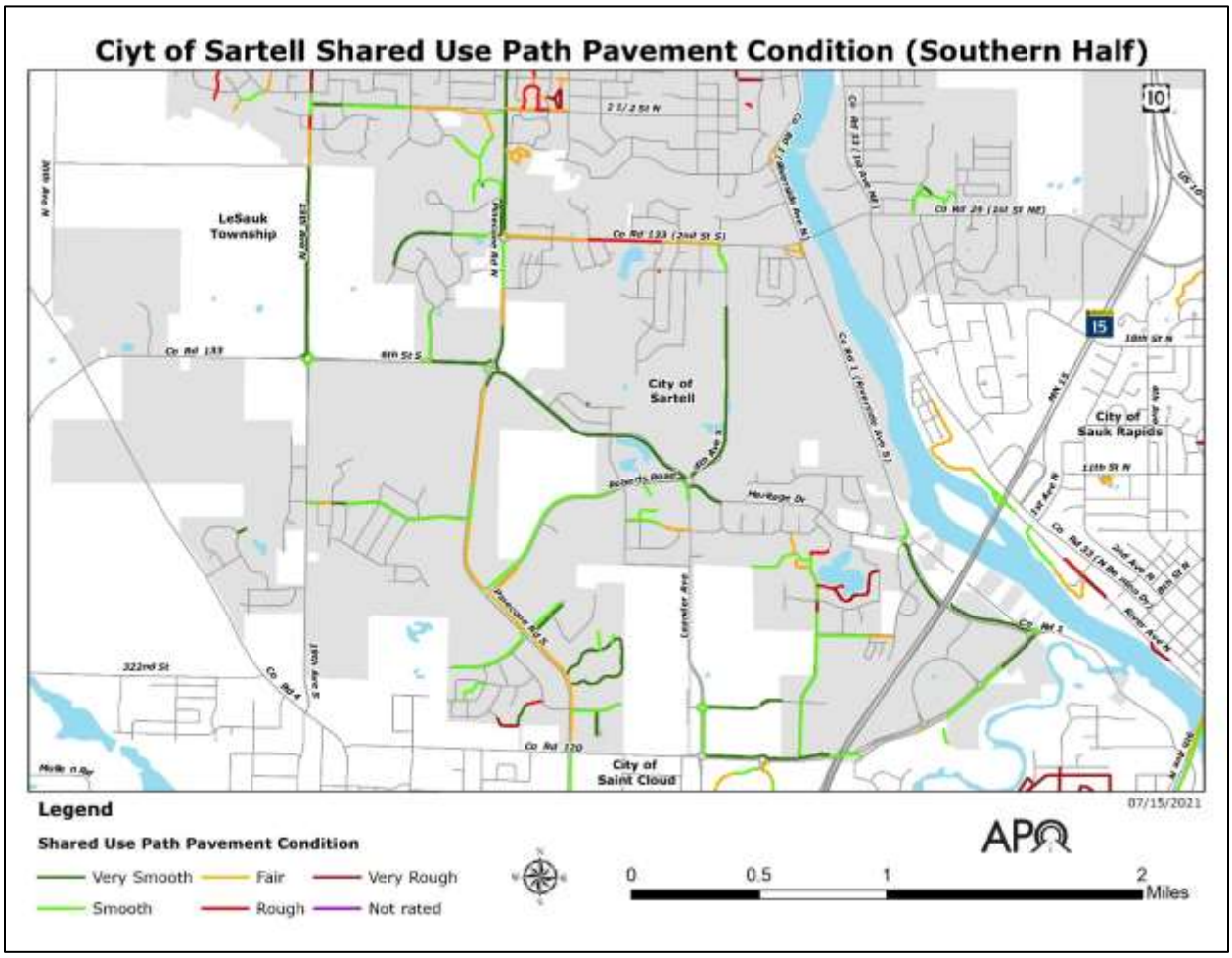


FIGURE B.12 – CONDITION OF PAVEMENTS ON SHARED USE PATHS IN SOUTHERN SARTELL.

SARTELL PLANS FOR ACTIVE TRANSPORTATION

2016 COMPREHENSIVE PLAN

The City of Sartell provides policy and decision-making guidance in the 2016 Comprehensive Plan (https://bit.ly/3jcD2UJ). The plan identifies goals and strategies that support an active and healthy community with services that enhance the quality of life for residents and families.

Active Transportation Needs as Identified in Comprehensive Plan

The transportation component of the comprehensive plan note the growing traffic volume on the city's roadways. As such, intersection crossing safety is among the most commonly cited concerns from residents. The City plans to improve traffic management and safety for all users in response. As stated in the plan, while there is a need for moving traffic through Sartell and lessen congestion, the city's efforts are focused on encouraging travel modes that will lessen the need for cars to get people to their destinations. The city plan promotes traffic calming -- road designs that reduce speed and volumes to enhance safety for

pedestrians and bicyclists – as a way to increase safety. In addition, the plan outlines the need to encourage narrow lane widths and the installation of roundabouts.

The 2016 comprehensive plan also outlines goals for the city's parks and open spaces. In terms of active transportation, the City is planning to expand its network of trails (shared use paths) and sidewalks – focusing on completing connections to neighborhoods and schools. Strategies to achieve this goal include a periodic review with plans and projects that add to and maintain the city's active transportation network that will encourage safe, unrestricted use of trails.

2018 COMPLETE STREETS

The City of Sartell adopted a Complete Streets Policy (https://bit.ly/3aGNJfo) in 2018. In implementing this policy, the City seeks to achieve equity for its transportation system, balancing the needs of all ages and abilities.

With this policy in place, the City is committed to considering the access needs for all users while planning and improving roadways networks. This entails incorporating road design elements to assist in closing existing gaps and addressing active transportation network deficiencies consistent with land use.

As the city develops projects, planning efforts will be made to anticipate and respond to future demands for walking, bicycling, and transit usage. All this in an effort to ensure safe travel for all users of the system.

2017 BICYCLE FRIENDLY COMMUNITY

Because of its efforts to promote active transportation, the City of Sartell was awarded a Bronze tier Bicycle Friendly Community from the League of American Bicyclists in 2017.

CITY ORDINANCES

Along with various citywide planning efforts, the Sartell City Code (https://bit.ly/3rIAzES) has established many ordinances pertaining to the active transportation system and its users.

City Code Section 11 outlines provisions for active transportation within new developments in the city. Sidewalks, trails, and pathways shall be in proximity to parks, schools, shopping centers, and other service areas of a similar nature. They must conform to city design standards and be compliant with the Americans with Disabilities Act (ADA). Trails and walkways are to continue from those existing surrounding areas. Every new subdivision must have a sidewalk or trail on at least one side of every public or private street. (City Code, 11-5-4). Sidewalks shall be built to a width of 6-feet or greater (City Code 11-6-9).

In Sartell, snow and ice must be removed from public sidewalks by the owner or occupant of the premises within 12 hours of a snow or weather event. Failure to do so is considered a nuisance (City Code 4-6-3). The city will recover its costs to eliminate the nuisance. (City Code 4-8-7).

The City's ordinances affirm Minnesota statutes in recognizing that bicyclists have the same rights and duties as a driver of a vehicle (City Code 6-3-1). Cyclists must respect pedestrian usage. Within a business district, bicyclists cannot ride on the sidewalk. Cyclists in Sartell

shall yield the right-of-way to pedestrians. (City Code, 6-3-3). If you are walking, legally, you must cross roadways only at intersections (City Code 6-1-12).

Sartell's city code is unique in defining and regulating self-propelled wheeled devices (SPWDs). SPWDs include inline skates, skateboards, roller-skates, roller skis, wagons, and strollers. Operators of these devices have the same rights and duties as a driver of a vehicle. (City Code, 6-5-2) As such, they may use city streets, though not more than two abreast, and they must always yield to pedestrians. (City Code 6-5-4).

SYSTEM USAGE

Understanding bicycling and walking behavior on the active transportation network within the City of Sartell can help in a couple of ways. The purpose of collecting system usage data is to measure the change in usage over time, prioritize the investment of new and existing infrastructure, and assist in planning and designing future facilities. It is essential to know how well current facilities address users' needs.

BICYCLE AND PEDESTRIAN COUNTS

APO staff regularly place a MnDOT-owned portable bicycle and pedestrian counter along shared use path locations throughout the MPA, including three spots within the City of Sartell.

The MnDOT counter uses two different types of counters simultaneously. The Pneumatic TUBE counter uses two sets of tubes placed perpendicular to traffic. When a cyclist passes over the tubes, this counter can record that cyclist and determine which direction that person was heading. Meanwhile, the PYRO-Box utilizes infrared technology to measure people's body heat who pass in front of its sensor. This counter, much like the TUBE counter, can identify travel directions. While the PYRO-Box can detect bicyclists and pedestrians, it cannot definitively distinguish between the two. When used in conjunction with the TUBE counter, APO staff can calculate pedestrian traffic from the PYRO-Box by subtracting the bicyclists from the total count.

With these portable counters, APO staff monitors daily usage of shared use paths for seven-day intervals at specified locations. However, the portable counters are owned by MnDOT. As a result, various agencies and jurisdictions can (and have) utilized the counters throughout the year, impacting the consistency in obtaining data. As a result, two of the three Sartell locations were counted in 2020.

As stated earlier, the City of Sartell has three counting locations throughout the city:

1. The shared use path along Heritage Drive west of Seventh Avenue S.
2. Pinecone Road Trail #1, across from Sartell City Hall.
3. Pinecone Road Trail #2, near 24th Street N.

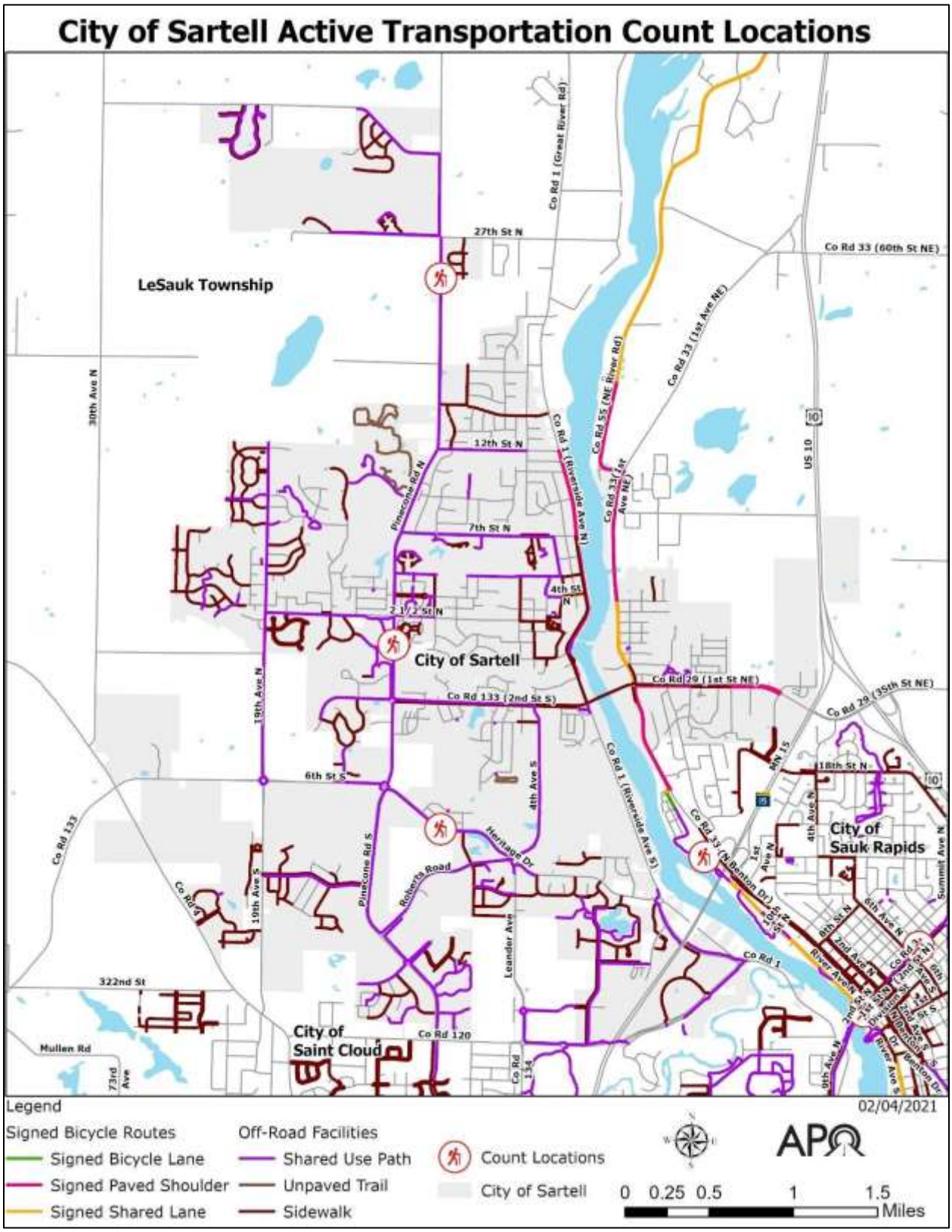


FIGURE B.13 – LOCATIONS OF AUTOMATIC COUNTERS OF BICYCLE AND PEDESTRIAN USAGE IN SARTELL.

All three of these locations are ideally counted each summer.

Location	Dates Counted (2019)	Weekday Average Bike	Weekday Average Pedestrian	Weekend Average Bike	Weekend Average Pedestrian
Heritage Drive	08/19 – 08/25	2	73	1	53
Pinecone Road Trail #1	08/12 – 08/18	10	227	14	209
Pinecone Road Trail #2	08/05 – 08/11	11	104	6	99

FIGURE B.14 – 2019 BICYCLE AND PEDESTRIAN COUNTS FROM THE THREE SARTELL LOCATIONS.

Location	Dates Counted (2020)	Weekday Average Bike	Weekday Average Pedestrian	Weekend Average Bike	Weekend Average Pedestrian
Heritage Drive	06/16 – 06/22	2	11	3	122
Pinecone Road Trail #2	05/26 – 06/01	16	259	22	271

FIGURE B.15 – 2020 BICYCLE AND PEDESTRIAN COUNTS FROM TWO OF THE THREE SARTELL LOCATIONS.

The APO's counts indicate that shared use paths receive significant usage, particularly from pedestrians. In particular, facilities along Pinecone Road seem to experience relatively high usage among pedestrians.

DESTINATIONS

Common destinations for active transportation users include schools, food assets, employers, and parks. For this plan, APO staff are primarily looking at public schools. Food assets are grocery stores/supermarkets, specialty food stores, meat markets, convenience stores, and non-profit community food services. Employers listed have 100 or more full- and/or part-time employees.

Figures B.16 and B.17 show these destination locations within the City of Sartell.

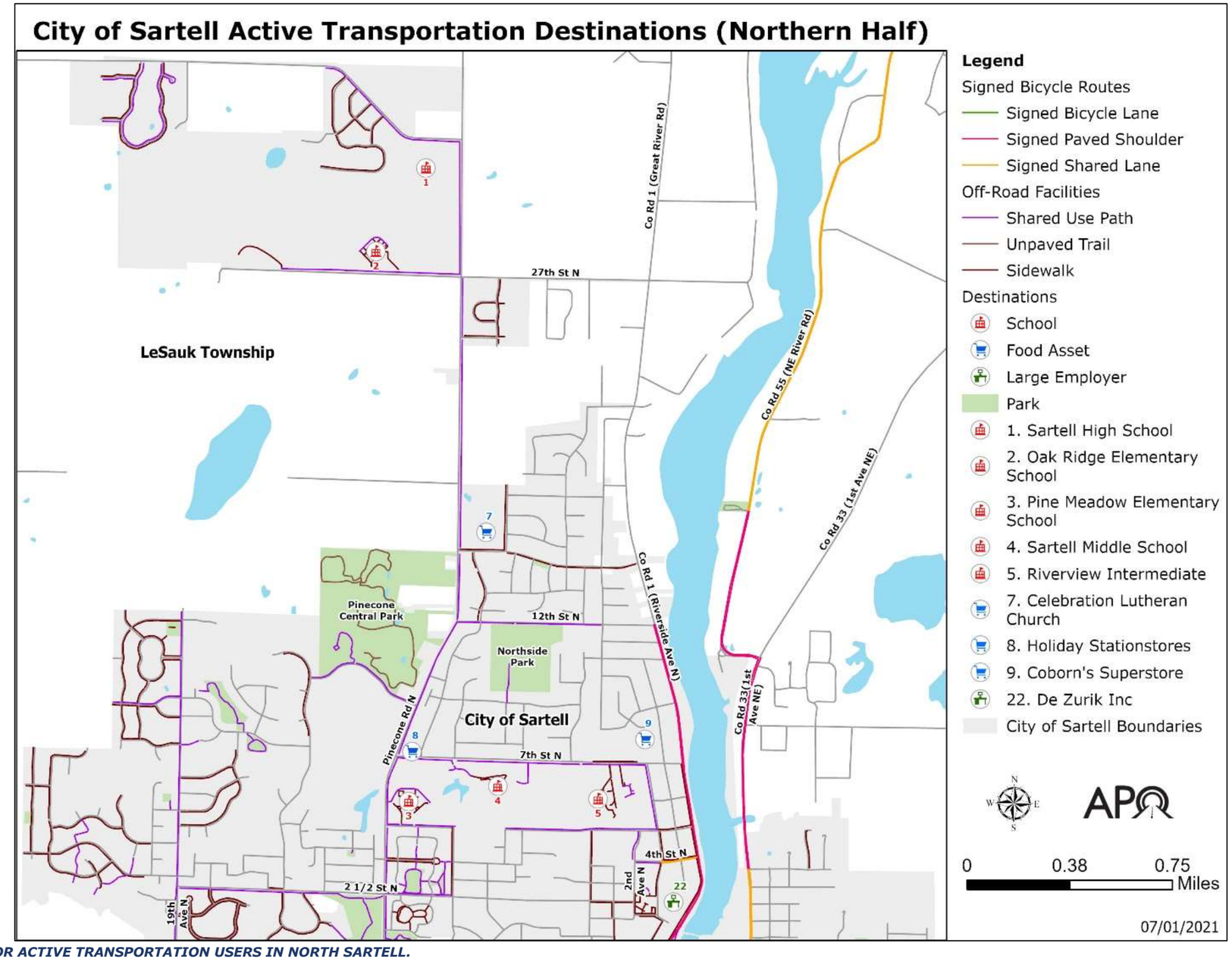


FIGURE B.16 – DESTINATIONS FOR ACTIVE TRANSPORTATION USERS IN NORTH SARTELL.

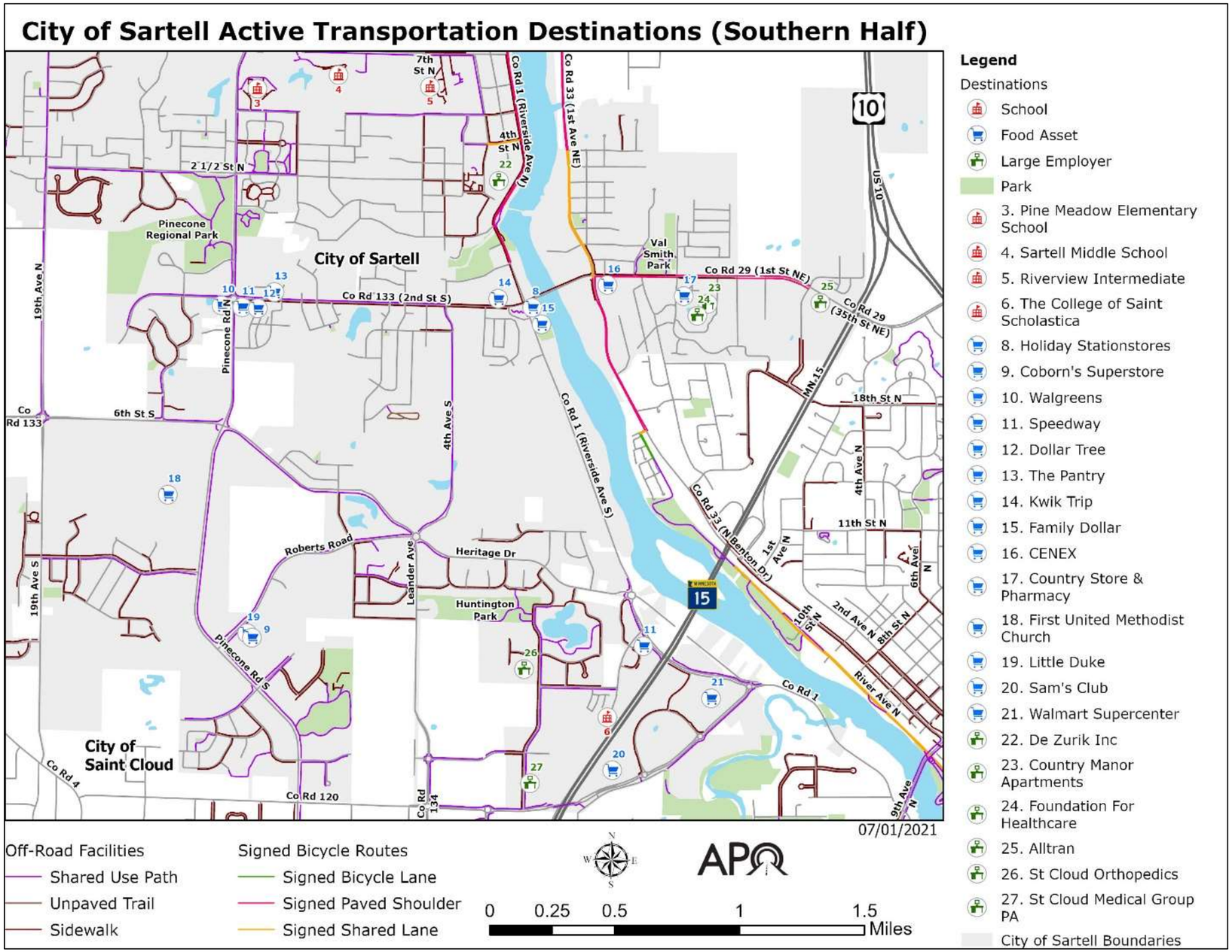


FIGURE B.17 - DESTINATIONS FOR ACTIVE TRANSPORTATION USERS IN SOUTHERN SARTELL.

Schools

While residents of Sartell have access to three different school districts, most of the students are enrolled in the five public schools operated within the city by the Sartell-St. Stephen School District (ISD #748).

These schools are also among the City's largest employers. And while a mix of sidewalks and shared use paths has expanded over time to improve access and safety for students who bike or walk, gaps remain in some areas.

ISD #748 encompasses most of the city though it should be noted that east Sartell is part of the Sauk Rapids-Rice School District (ISD #47), and portions of southwest Sartell are included in the Saint Cloud School District (ISD #742). Other schools within Sartell are St. Francis Xavier Catholic School on Second Street North and the College of St. Scholastica north of MN 15.

Name	Address	Grades Served	Approximate Number of Students Served
Oak Ridge Early Learning Center	1111 – 27th St North	Early Childhood	750
Pine Meadow Primary School	1029 5th St North	1-2	675
Riverview Intermediate School	627 Third Ave N	3-5	700
Sartell Middle School	748 7th St North	6-8	775
Sartell High School	3101 Pinecone Rd North	9-12	1200

FIGURE B.18 – THE FIVE PUBLIC SCHOOLS LOCATED WITHIN THE CITY OF SARTELL.

Food Assets

Figures B.16 and B.17 shows grocery stores and other food destinations are primarily found in the city's commercial hubs.

Walmart and Sam's Club, large shopping centers located in south Sartell between MN 15 and County Road 120, are also among the City's primary employment centers. Fast food and other food destinations are also in this area. Food assets in east Sartell include a variety of convenience stores. Along Pinecone Road is a commercial town square with a Coborn's superstore. Along Pinecone Road, another area with several food destinations is around the intersections with Second Street North. Two churches that serve as food distribution centers are also shown.

Large Employers

Many commute to their workplace using modes other than a vehicle. Some are dependent upon facilities that will enable them to walk, bike, or use public transit to get to their jobs.

The DeZURIK manufacturing site centrally located along the Mississippi River is the City's largest employer. The DeZURIK facility, which makes valves for municipal and industrial applications, began in 1925.

Largest employers are found among the growing complex of medical treatment facilities in south Sartell along Connecticut Avenue, including St. Cloud Orthopedics and Central Minnesota Health Partners. These health service centers are close to Metro Bus service routes.

Major employers in east Sartell are the Country Manor Apartments and the Foundation for Health Care.

These and other large employers within the City's commercial and industrial hubs are shown in Figures B.16 and B.17.

Parks

The City of Sartell has 28 public parks and public green spaces along the Mississippi and Watab Rivers. The city defines three regional or special use parks – Pinecone Central Park, Pinecone Regional Park, and the Sauk River Regional Park.

As part of the City's 2016 comprehensive plan, Sartell seeks to ensure that city residents are within a short walking distance of parks and recreational opportunities. Parks in Sartell are generally served with nearby sidewalks or shared use paths. Residential areas nearest the parks are more likely to have pathways to get to them. It should be noted that many of the city's smaller neighborhood parks have limited or no sidewalk access.

CRASH HISTORY

According to the Minnesota Department of Public Safety (DPS), fatalities, serious injuries, and minor injuries involving bicyclists and pedestrians are rising within the Saint Cloud MPA. Within the City of Sartell, DPS crash data shows 25 crashes involving active transportation users and vehicles have occurred between 2010 and 2019. See Figure B.19 and B.20 for locations and severity.

While most of these crashes resulted in minor injuries, it is essential to note that during this time frame, one pedestrian was killed, and two resulted in serious injuries. A pedestrian death resulted from a crash on Second Street S near Horizon Avenue in 2019. Dark and rainy conditions may have been contributing factors.

A serious injury crash during this 10-year reporting period occurred in 2012 when a pedestrian was struck on First Street NE.

Crash history is reviewed to determine locations where crashes appear to be more likely to occur and whether there may be an engineering solution or partial solution to help mitigate the crashes. It is unclear from the DPS crash reports whether physical conditions at the crash locations were a contributing factor or if physical changes to the facilities may help mitigate future crashes. DPS crash reports do not indicate a common theme or roadway

infrastructure/design flaw as a contributing factor. Some reports cited careless behavior or inattention to traffic laws on the part of the bicyclist or pedestrian. The crashes may also be due to the high number of vehicles and active transportation users in this area, increasing the likelihood of possible conflicts.

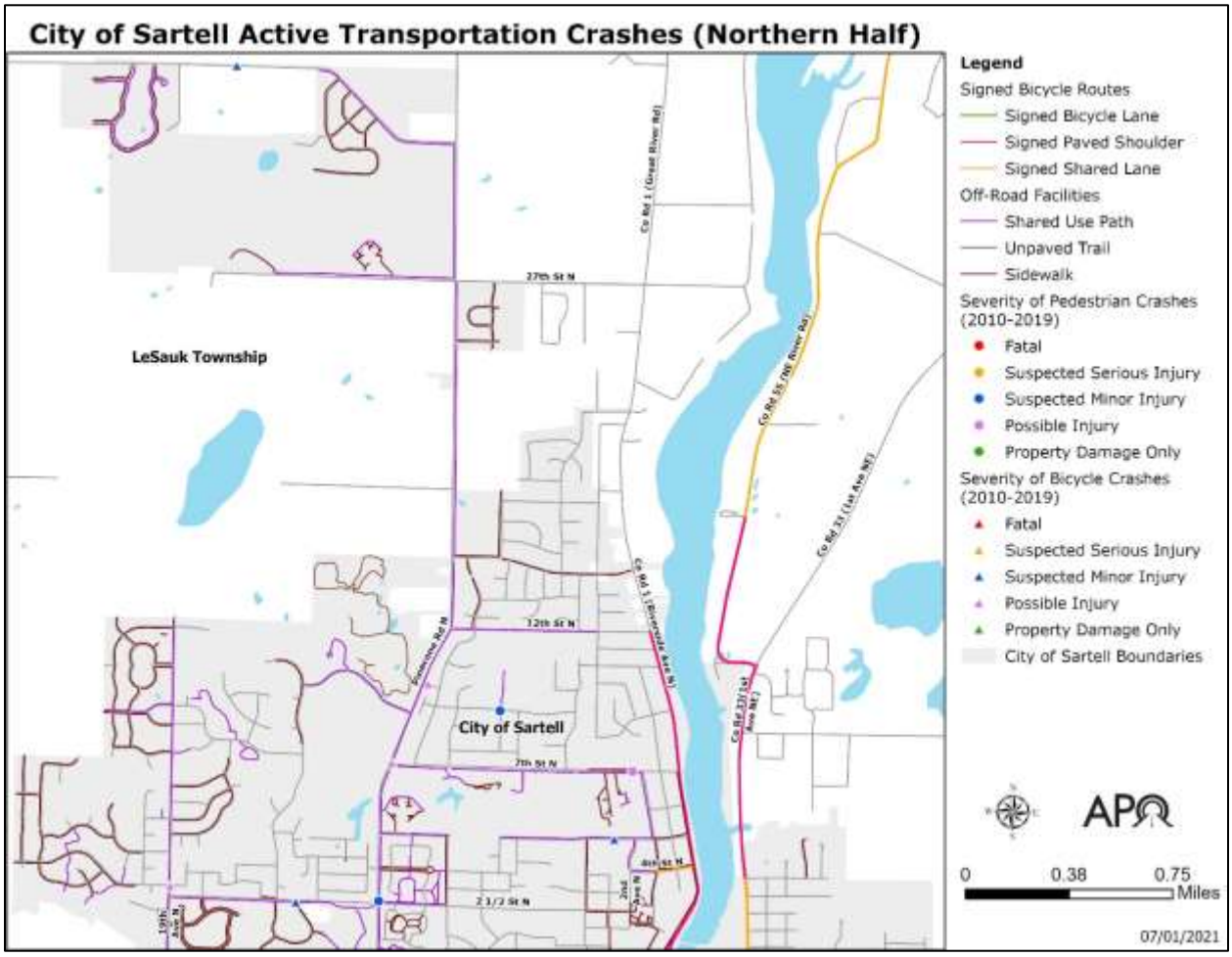


FIGURE B.19 - LOCATIONS WITH CRASHES INVOLVING BICYCLES AND PEDESTRIANS IN NORTH SARTELL.

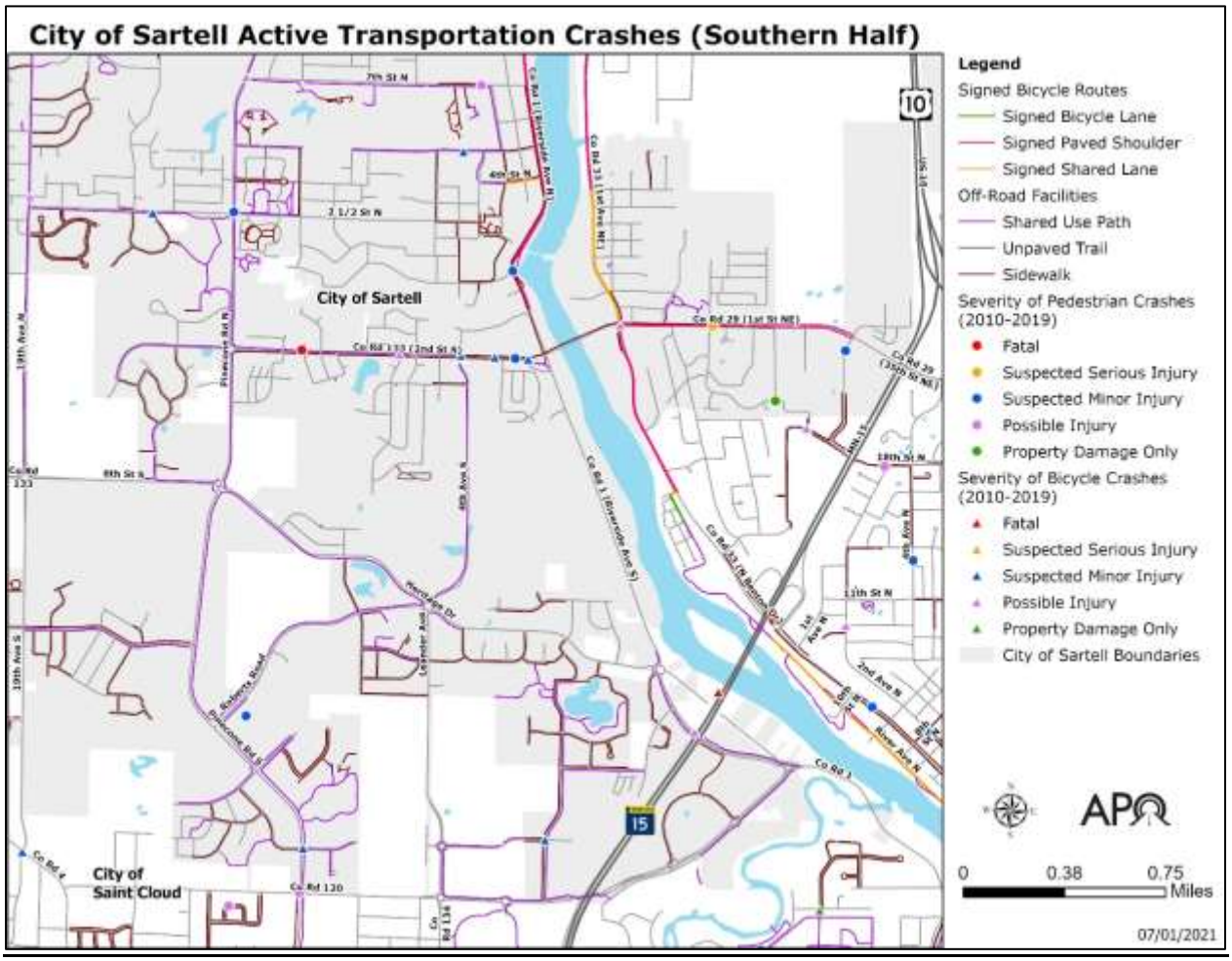


FIGURE B.20 - LOCATIONS WITH CRASHES INVOLVING BICYCLES AND PEDESTRIANS IN SOUTH SARTELL.

PROGRAMMED AND PLANNED IMPROVEMENTS

Following its policy on Complete Streets and consistent with its ADA Transition Plan, the City of Sartell has proactively identified and addressed issues and concerns for those who use the active transportation network.

In 2017 the city studied pedestrian crossing operations at 13 locations. The study examined pedestrian usage, speed, volume, and conditions at these intersections. New crossing treatments, possible additions, and other improvements were among the recommendations from the city's analyses. Nearly half of these locations have since been improved with city and county projects.

Sartell adopted an ADA Transition Plan in 2019. This includes evaluating and prioritizing additional improvement needs for ramps at pedestrian crossings.

The city is allocating funding annually to implement pedestrian crossing improvements systematically.

In response to Safe Routes to School (SRTS) plans, Sartell schools and the city implemented SRTS facility improvements in 2020, including upgraded sidewalks on Seventh Street N, 2 ½ Street N, Second Avenue N, and Fifth Avenue N. Improvements also included adding a marked crosswalk on Fifth Street N at the east entrance of Pine Meadow Elementary.

City planners and engineers prepared the Sidewalk and Trail Gap Plan in 2019 to identify planned connections and assign priorities for adding shared use paths and sidewalks to the current network. Based on the City's planning analysis and response from community residents, they have identified projects to close gaps consistent with priority needs. Many connections have been made, and others are soon to be completed.

The City of Sartell also maintains a Capital Improvement Program (CIP), which identifies short-term projects and long-range concepts designed to improve active transportation facilities. The CIP indicated anticipated future revenues that may be available to implement such projects.

Consistent with the City's evaluation through various studies and plans, Sartell has programmed financing to complete these active transportation projects:

- Reconstruct 19th Avenue from CSAH 4 to CSAH 133 (Sixth Street S) to include the addition of sidewalks.
- Extend the current shared use path on Heritage Drive from Huntington Drive S to Amber Avenue S. This will include the installation of two marked crosswalks at Seventh Avenue S and Connecticut Avenue S.
- Extend Scout Drive to Dehler Drive to include shared use paths.
- Added sidewalks with the Eagle Ridge and Arbor Ridge residential developments.
- With the Stearns County reconstruction of CSAH 1 (Riverside Avenue) from Sartell Street to 12th Street, the city plans to complete the shared use path along the Mississippi River.
- A shared use path along Seventh Street N to fill the gap from Second Avenue N to Riverside Avenue N.
- A shared use path along 12th Street N to fill the gap from Fourth Avenue N to Riverside Avenue N.
- Adding sidewalk to fill a gap along 13th Avenue N connecting Grizzly Lane.
- Adding sidewalk to fill a gap along Third Street N connecting 19th Avenue N.

The City's active transportation network's long-term (though currently unfunded) goals include completing the remaining network gaps with planned connections. Programmed and planned facilities to connect current routes to the more extensive regional network are shown in Figures B.21 and B.22.

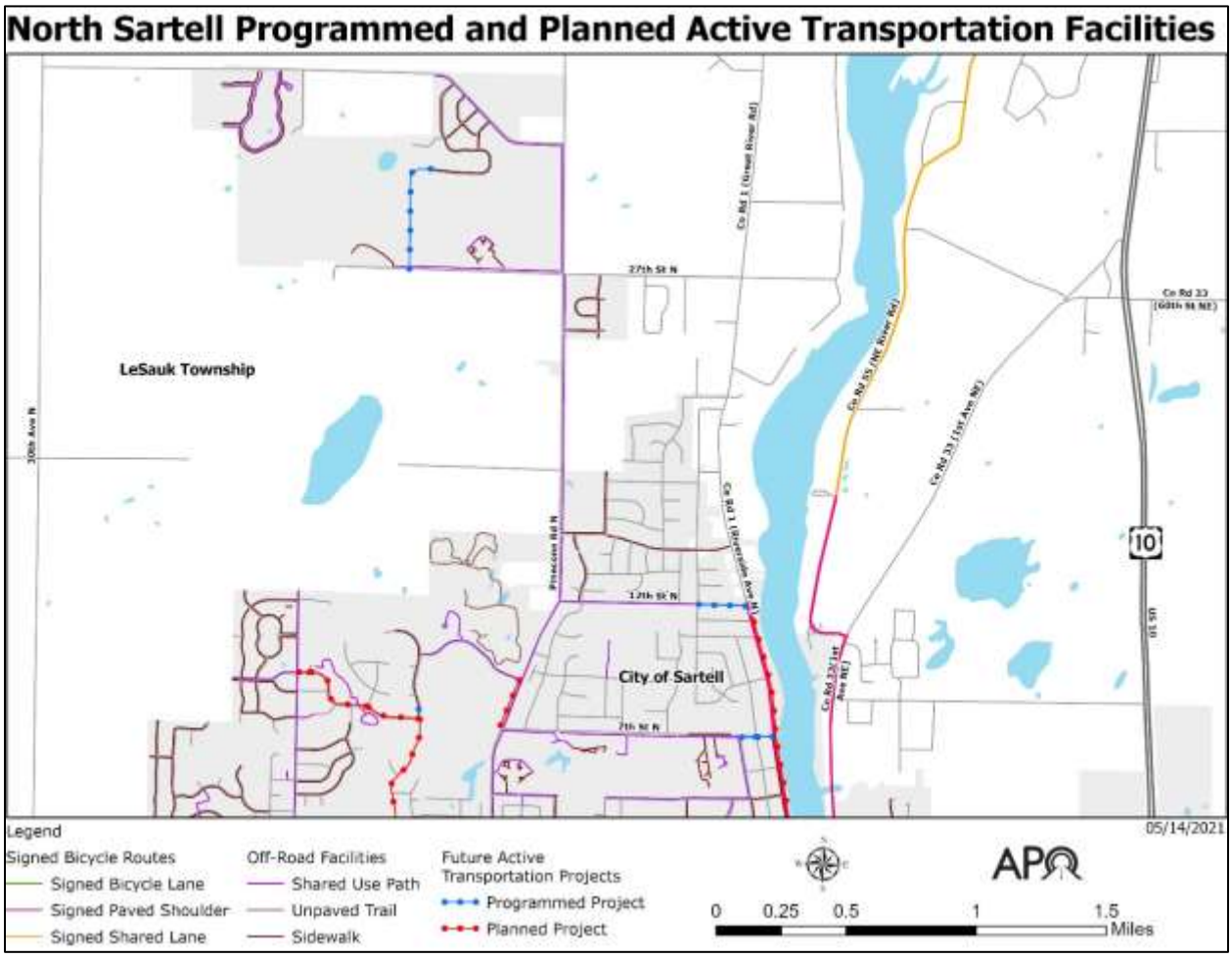


FIGURE B.21 – PROGRAMMED AND PLANNED FACILITIES IN NORTH SARTELL.

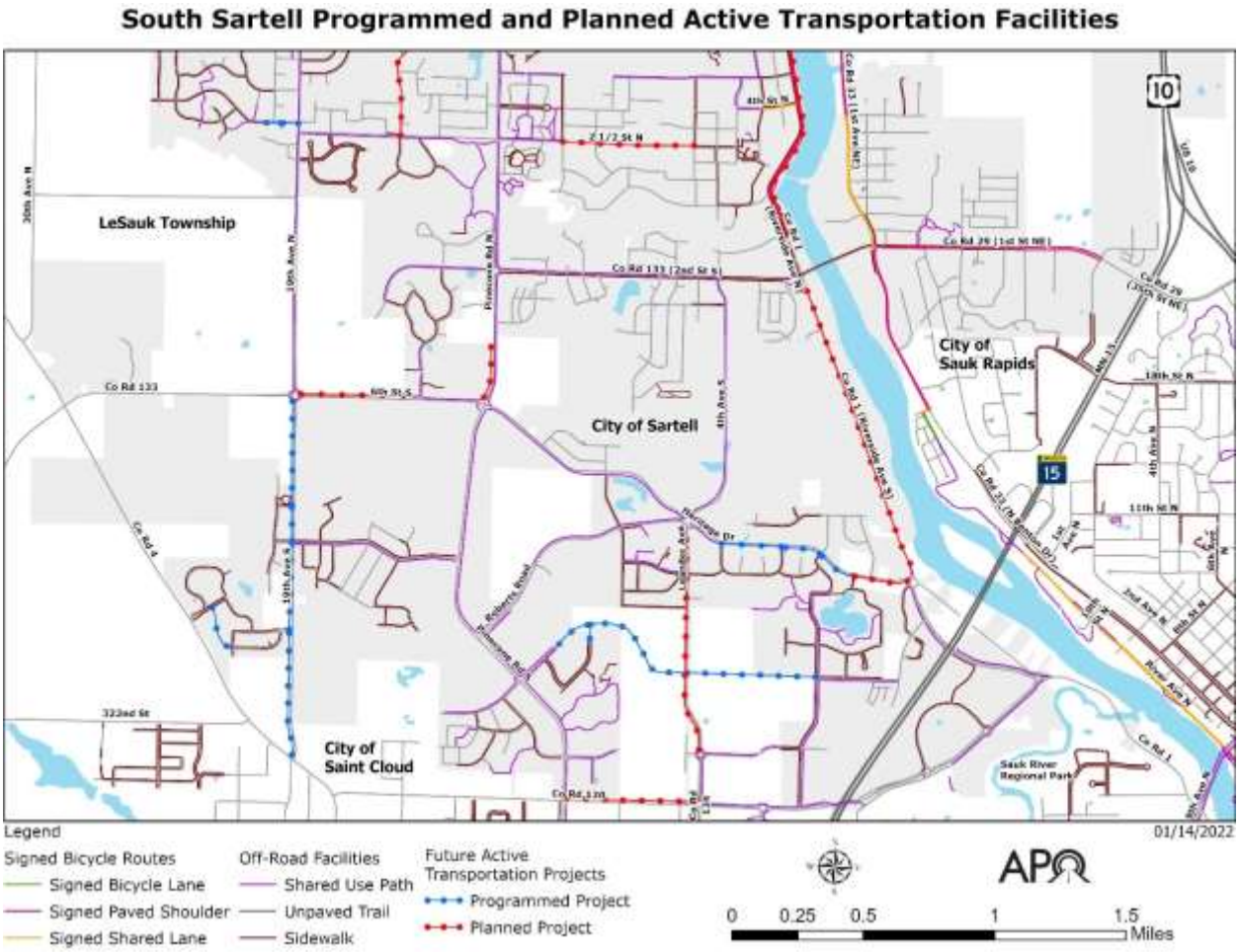


FIGURE B.22 – PROGRAMMED AND PLANNED FACILITIES IN SOUTH SARTELL.

ACTIVE TRANSPORTATION NEEDS ASSESSMENT

APO staff performed a citywide analysis of facility and other needs for active transportation users to supplement and inform current city planning efforts. The intent of this assessment, conducted in coordination with city staff and representatives, was to identify active transportation needs within the city and assist in prioritizing those needs in the event funding becomes available.

GOALS AND OBJECTIVES FOR ACTIVE TRANSPORTATION

The regional goals and objectives for active transportation as adopted by the APO provide a starting point for the Sartell needs assessment.

Those goals were:

1. Improve bicycle and pedestrian safety and comfort.
2. Improve active transportation connections to desired destinations.
3. Improve the condition of active transportation infrastructure.

4. Provide equitable access to active transportation facilities for all people of all abilities.
5. Promote an interconnected regional active transportation network.

The evaluation factors were equally applied for assessing needs within each city and across the MPA. The goals, objectives, and factors used to evaluate services and needs relative to each objective are detailed in Chapter 4. Performance ratings from the evaluation of factors for Sartell are shown in Figure B.23.

Sartell			2019
Number of Non-Motorized Fatalities and Suspected Serious Injuries Five Year Rolling Average			*0.4*
Percentage miles of arterials & collectors that have a sidewalk or shared use path (SUP) on at least one side			*60.2%*
Percent of destinations that fall within distance categories	Schools	0 Ft (Asset Served by AT Facility)	*83.3%*
		1-310 ft (One block or less)	*0.0%*
		311-930 ft (Two to three blocks)	*16.7%*
		> 931 ft (Four or more blocks)	*0.0%*
	Food Assets	0 Ft (Asset Served by AT Facility)	*88.9%*
		1-310 ft (One block or less)	*0.0%*
		311-930 ft (Two to three blocks)	*11.1%*
		> 931 ft (Four or more blocks)	*0.0%*
	Large Employers	0 Ft (Asset Served by AT Facility)	*85.7%*
		1-310 ft (One block or less)	*0.0%*
		311-930 ft (Two to three blocks)	*14.3%*
		> 931 ft (Four or more blocks)	*0.0%*
	Parks	0 Ft (Asset Served by AT Facility)	*93.8%*
		1-310 ft (One block or less)	*0.0%*
		311-930 ft (Two to three blocks)	*6.3%*
		> 931 ft (Four or more blocks)	*0.0%*
	Transit Stops	0 Ft (Asset Served by AT Facility)	*73.9%*
		1-310 ft (One block or less)	*8.7%*
		311-930 ft (Two to three blocks)	*8.7%*
		> 931 ft (Four or more blocks)	*8.7%*
Percent of street crossings that do not meet full ADA standards			*82.8%*
Miles of Active Transportation facilities per 1,000 residents in EJ/Title VI Sensitive Areas in comparison to non-sensitive areas			*0.0:4.2*
Percent mileage of Regional Priority bicycle facilities that do NOT exist			*30.6%*
Percent of on-road bicycle facilities with poor pavement			*0.0%*
Percent of SUP with rough/very rough pavement			*4.4%*

FIGURE B.23 – SARTELL PERFORMANCE REPORT CARD (2019)

NEEDS ASSESSMENT METHODOLOGY

From the goals and objectives framework, APO staff, in coordination with Sartell city staff and community volunteers, developed the following methodology to address critical gaps in the current active transportation system. It should be noted that while this process does not account for every gap or need in the network, it does focus on addressing gaps utilizing existing data as it relates to the region's active transportation goals and objectives.

The APO's active transportation needs assessment methodology was broken into three phases. Beginning with an in-depth analysis of transportation networks, APO staff identified issues and needs within individual communities across the region. This cursory review led to a more detailed analysis of active transportati0on needs for focus areas identified within each city and ultimately the identification of jurisdictional-level project recommendations – Phase 2. In the final phase, local and regional needs identified in the previous phases were prioritized according to the degree goals and objectives would be addressed.

Phase 1: Evaluating Needs for the City of Sartell

In order to begin this evaluation, APO staff reviewed needs and service area gaps relative to the factors listed under goals 1-4. APO staff compiled a series of maps and data that detailed the city's existing active transportation conditions. Utilizing the objectives and applying factors (as identified in Chapter 4), staff began to dive into the existing conditions data to look for network gaps or areas of concern (i.e., high crash locations, locations of under-designed on-road/off-road facilities).

Figure B.24 summarizes the findings for the City of Sartell.

Conisdered along with the factors were the comments from the APO's initial public input along with comments from city staff. Areas where multiple issues were revealed when the factors were applied became the focus of further review and analysis.

Analysis of Areas of Need - City of Sartell

	Safety & Comfort Factors	1 High Number of Fatalities	2 High Number of Injuries	3 Under Design Guidelines	4 No Adjacent P/B Facilities	5 Cited as Safety Concern	Connectivity Factors	1 Access to Destinations	2 Access to Transit	Facility Condition	1 On Road Conditions	2 Off Road Conditions	Equity Factors	1 Underserved Demographic	2 ADA Compliance	Issues	Potential Treatments
Stearns CR 133 (2nd St S)		x	x									x				Business/Residential area - crashes with injuries & one fatality, shared use path needs upgrades	Crossing improvements, upgrade shared use path. (City reviewed roundabout at Pine Cone Rd. in 2017 - recommended RRFB.)
Benton CR 29 (1st St NE)			x	x				x						x		Minor arterial - injury crashes, underdesigned for traffic volumes, area with many large employers, food assets, zero veh hhs, elderly.	Pedestrian and bicycle crossing improvements, facility design, improved access to large employers, multifamily development.
2 1/2 St N			x					x				x				Minor arterial - lacks east/west connectivity, serves large employer, neighborhood shared use paths rated "rough."	Look at feasibility of completing gap, upgrade shared use paths.
5th St N								x				x				School area - current gap, "rough" shared use paths.	Complete gap, upgrade shared use paths. (City shows a planned connection on 5th Street.)
7th St N					x			x				x				School area - current gap, "rough" shared use paths.	Complete gap, upgrade shared use paths. (City shows a planned connection on 7th St)

FIGURE B.24 – SARTELL NEEDS ANALYSIS.

Phase 2: Analysis of Sartell Focus Areas

From the process described for the review of needs and gaps for the City of Sartell, the following were identified as priority areas for improvement.

- Second Street S (Stearns CSAH 133) area.
- First Street NE (Benton CSAH 29) area.

APO staff working in conjunction with city staff for each focus area further analyzed needs and issues and worked to identify possible solutions.

Second Street S (Stearns CSAH 133) area

The Second Street S focus area includes the length of Second Street from Pinecone Road to the Mississippi River. The area of Second Street S was identified as a focus area for further study and analysis due to the number of crashes involving bicycles and pedestrians and the condition of the shared use paths along the roadway.

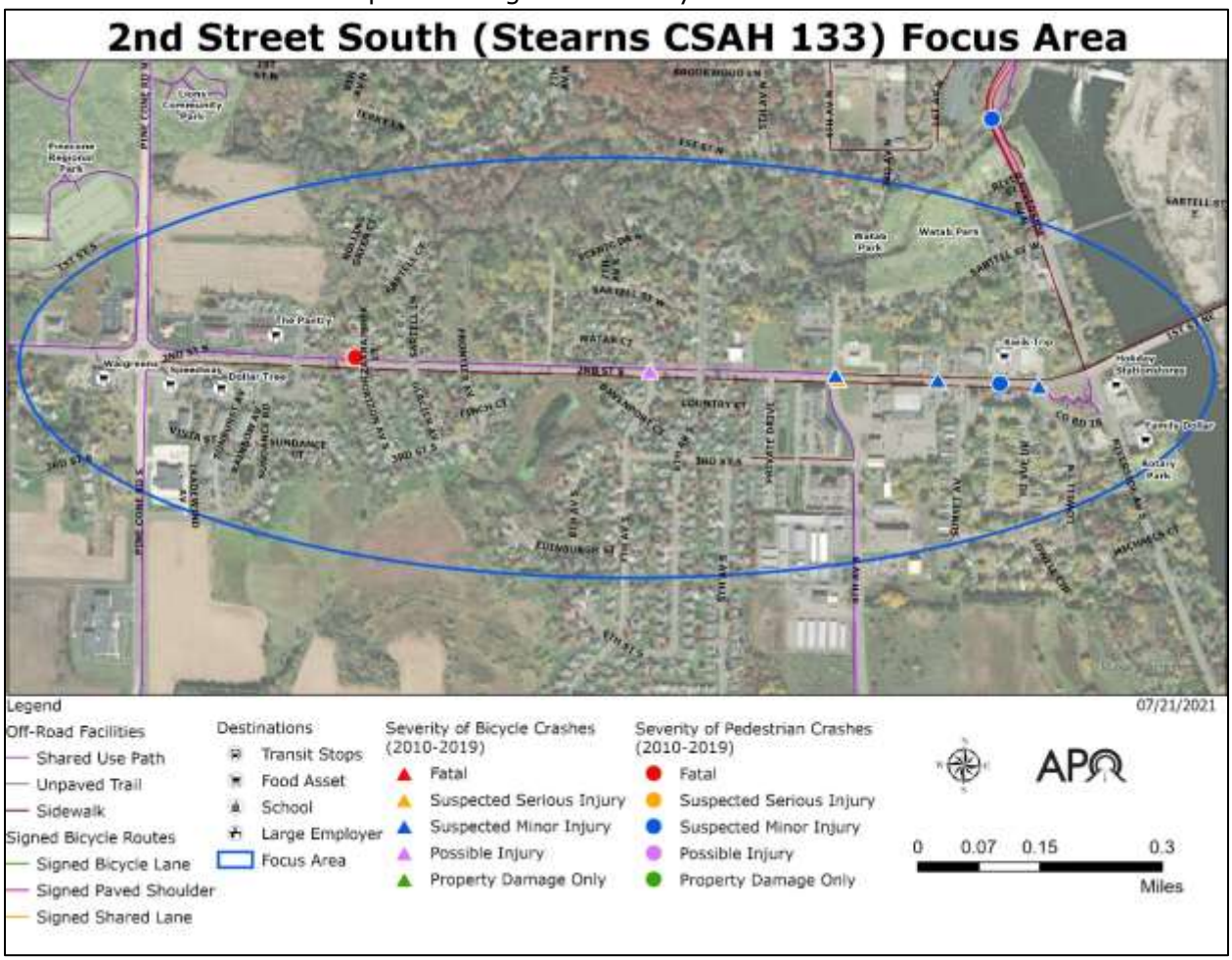


FIGURE B.25 – SECOND STREET S (STEARNS CSAH 133) FOCUS AREA.

NEEDS AND ISSUES

People in nearby neighborhoods use or cross Second Street S to reach several food destinations and other services. The average daily traffic on Second Street S is 11,700 vehicles with a posted speed of 35 mph. Of the 25 locations within Sartell with crashes involving pedestrians and bicyclists, seven crashes (28%), including a fatality and a serious injury, occurred within this area. A review of the crash reports reveals that in most instances the cyclist or pedestrian was properly crossing at the intersection but was not seen by the driver of the vehicle. Some reports also indicated drivers were seeking a gap to merge into heavy flowing traffic on Second Street S, failing to notice the active transportation user crossing the roadway.

The City's 2017 study of pedestrian crossings reviewed concerns for crossing safety with the volume of traffic at the roundabout with Pinecone Road and suggested potential improvements.

Figure B.26 provides a more detailed view of the area between Fourth Avenue S and the Sartell bridge to highlight the locations where crashes have occurred.

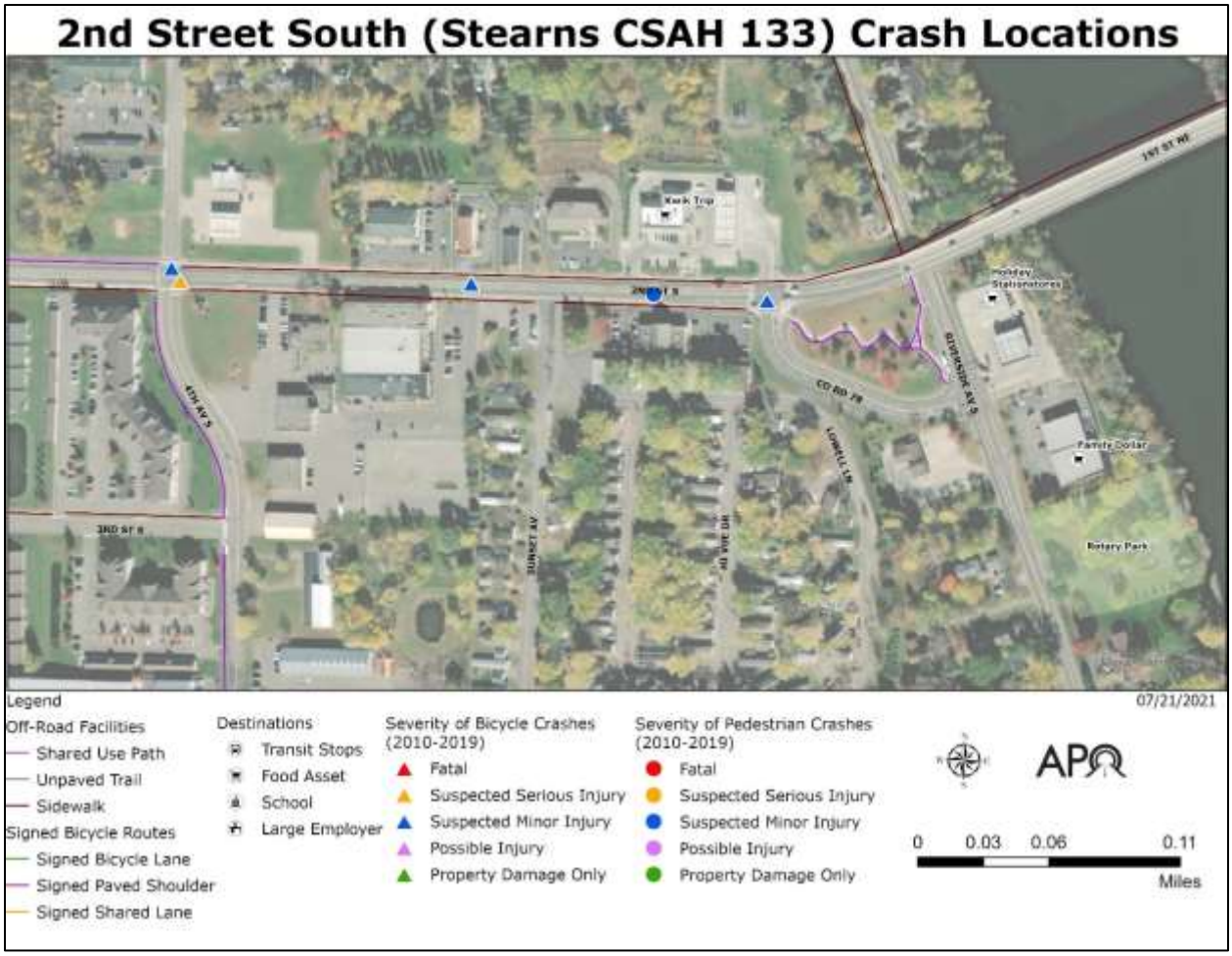


FIGURE B.26 – DETAILED LOCATIONS OF CRAHSES ALONG SECOND STREET S/CSAH 133 IN SARTELL.

A shared use path runs along the north side of the roadway from Pinecone Road as far east as Fourth Avenue S. Between Fourth Avenue S and the Mississippi River there is a sidewalk

on both the north and south side of the roadway. Much of the shared use path along the northside of Second Street is in either fair or rough condition.

RECOMMENDATIONS

A safety study of Second Street S – particularly between the areas of Fourth Avenue S and the Mississippi River – should be strongly considered. Crossing improvements that increase driver awareness may be warranted along Second Street S at the locations where crashes have occurred. There's a variety of potential safety improvements, including warning signs, marked crosswalks, and flashing beacons that could be utilized. However, some effort should be made to determine the most appropriate infrastructure solution, if there is one.

In addition, while the condition of Sartell's shared use paths is generally better than the regional average, that is partly because so much of the city's infrastructure is new. The city should consider designating funding specifically for maintaining existing active transportation infrastructure, including routine investments like crack filling and seal coating to extend the life of the pavement.

First Street NE (Benton CSAH 29) Area

This focus area includes much of east Sartell along First Street NE from the Mississippi River to MN 15. This was identified as an area of focus due to the potential safety issues with the volume of traffic, the number of injury crashes, its many destinations for walking and biking (major employers, food assets), and concentrations of residential use with a large number of zero vehicle households and persons aged 65 and older.

FIGURE B.27 - FIRST STREET NE (BENTON CSAH 29) FOCUS AREA.

NEEDS AND ISSUES

First Street NE (Benton CSAH 29) is the only direct east-west road connection from the Sartell bridge to MN 15. The roadway has signed bicycle lanes from Benton Drive to 14th Avenue. However, the corridor carries an average of 7,900 vehicles per day at a posted speed limit of 35 mph. In that context, MnDOT design guidelines recommend a grade separated shared use path.

There is a 6-foot wide sidewalk along the north side of First Street NE between the Sartell Bridge and Park Avenue. There is also a shared use path that leads into Val Smith Park. The sidewalk shifts over to the south side of First Street NE and runs as far as 11th Avenue E at Park Avenue.

Except for the existing facilities that follow First Street NE, single-family, multi-family, and manufactured housing neighborhoods in east Sartell are missing shared use paths or sidewalks. Also lacking facility access are two employment centers south of First Street NE (Alltran and Country Manor).

Much of this area's active transportation network has undergone reconstruction by both the city and county within the past few years. The sidewalks along First Street NE were rebuilt in 2018 by Benton County. The city reconstructed streets in the eastside neighborhood in 2019 and 2020. At that time, the city considered including new sidewalks but encountered strong opposition from neighborhood residents. As a result, sidewalks were not deemed a priority for inclusion.

Finally, according to ACS data, east Sartell south of this corridor is home to many traditionally underserved groups. A significant percentage of households in this area are low-income. A high proportion does not have access to a vehicle. Data indicates that this area of Sartell also has a high concentration of adults age 65 and over along with a high population of people with disabilities. For these groups in particular, the need for adequate active transportation infrastructure is high.

RECOMMENDATIONS

Given the population demographics surrounding this corridor, providing more continuous facilities and connections neighborhoods around First Street NE/Benton CSAH 29 seem like it may be necessary. The lack of access to homes and employment centers suggests the need for projects that would add sidewalks or shared use path connections to and from this roadway. It is recommended the city explore southern connections to First Street NE along Fifth Avenue E, 11th Avenue E, and 14th Avenue E.

North of First Street NE, a sidewalk along Park Avenue would provide access to the large manufactured housing complex.

While there is an on-road bike lane along this corridor, it does not meet MnDOT design guidance. The City should complete a small planning study to determine if a shared use path is feasible along the corridor. It bears noting that the existing sidewalk adjacent to First Street NE is 6-feet wide and the minimum width for a shared use path is eight feet.

Finally, between 2010 and 2019, there was one suspected serious injury crash involving a pedestrian along the corridor by Park Avenue. There is a marked crosswalk, however, the city should investigate and consider other potential safety measures at that intersection since that is where the northside sidewalk shifts to the southside.

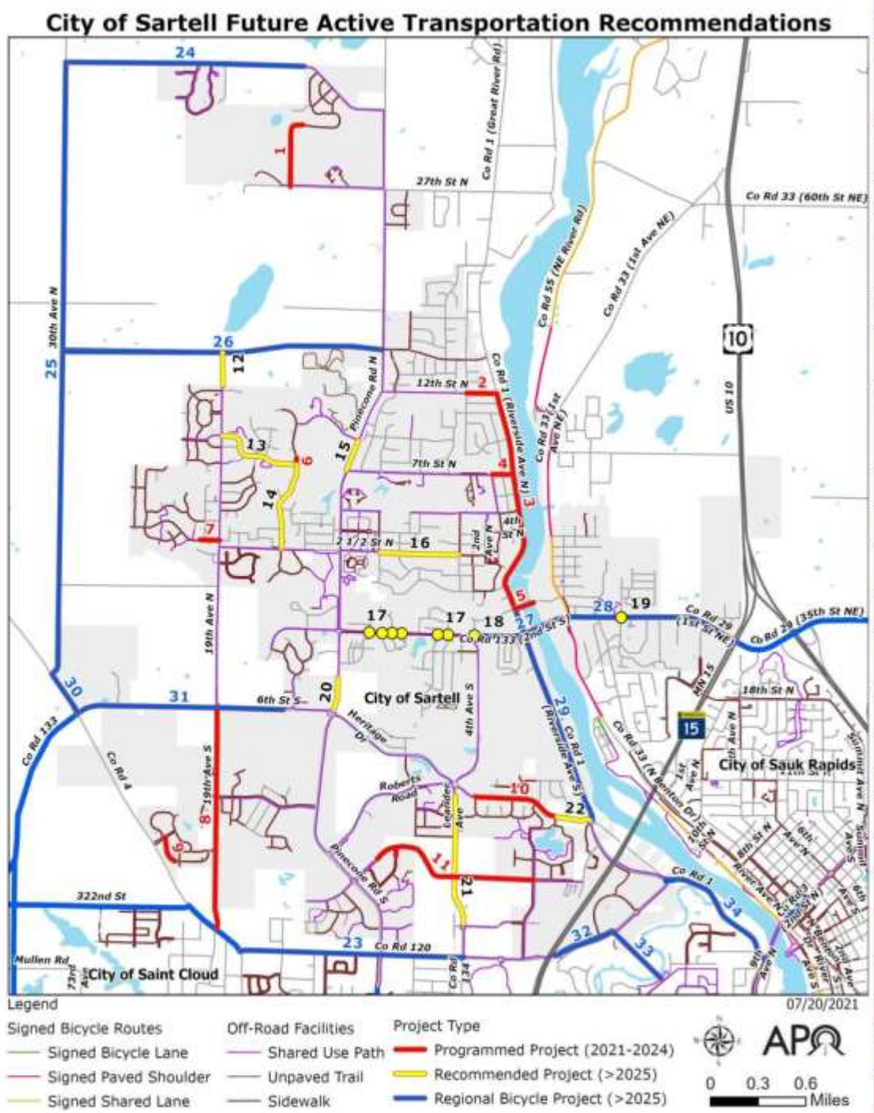
Phase 3: Evaluating Needs for the Region

The final phase of the needs analysis was to identify improvements to the regional facility network within the City of Sartell. These projects would assist in achieving an interconnected active transportation network that satisfies regional needs.

Regional bicycle facilities will logically connect cities and other parts of the planning area outside Sartell and include potential links to areas outside the planning region. Projects that connect the area regionally will provide an approximate spacing of two miles between facilities. In structuring a regional system, the preference is to complete gaps with shared use paths over on-road facilities.

Recommended regional facilities to extend the existing network within Sartell include continuous bicycle facilities along Riverside Avenue, Second Street South, and First Street NE. Also adding shared use paths along County Road 133, County Road 120, 15th Street N, and 35th Street N to the west as part of the regional network.

In addition, it is recommended the city consider adding additional sidewalk connections in coordination with the City of Sauk Rapids. The Sartell/Sauk Rapids boundary roughly follows the centerline of Highview Drive N – about one-third mile south of First Street NE. There are several instances of existing sidewalks in the Sauk Rapids half that stop at the Sartell boundary. Completing these connections (and perhaps adding more) would allow both Sartell and Sauk Rapids residents the ability to reach food assets and employers within Sartell.



Map Number and Description	
1	Install a sidewalk along 12th Avenue N.
2	Fill the gap along 12th Street N with a shared use path.
3	Construct a shared use path along Riverside Avenue N (Stearns CSAH 1).
4	Fill shared use path gap along 7th Street N.
5	Convert decommissioned Mississippi River bridge to pedestrian facility.
6	Complete sidewalk gap along 13th Avenue N.
7	Fill sidewalk gap along 3rd Street N.
8	Install a shared use path along 19th Avenue S.
9	Complete sidewalk connection along Sandstone Loop S to Arbor Parkway.
10	Construct a shared use path along Heritage Drive.
11	Install a shared use path along future Scout Drive.
12	Complete the 19th Avenue N shared use path connection.
13	Construct a shared use path on Grizzly Lane.
14	Construct a sidewalk along 13th Avenue N.
15	Install a shared use path on west side of Pinecone Road N.
16	Construct a shared use path connection along 2 1/2 Street N.
17	Add more crosswalks and signage along 2nd Street S (Stearns CSAH 133).
18	Install flashing beacons along 2nd Street S (Stearns CSAH 133).
19	Install a warning flasher at Park Avenue on 1st Street NE (Benton CSAH 29).
20	Construct a shared use path on west side of Pinecone Road S.
21	Install a shared use path along Leander Avenue
22	Complete shared use path gap along Heritage Drive.
23, 32	Construct a regional shared use path along Stearns CSAH 120.
24	Install a regional shared use path along 35th Street N.
25	Install a regional shared use path along 30th Avenue N.
26	Construct a regional shared use path along future 15th Street N corridor.
27	Construct a regional shared use path along 2nd Street S (Stearns CSAH 133).
28	Convert sidewalk on 1st Street NE (Benton CSAH 29) into a regional shared use path.
29, 34	Construct a regional shared path along Riverside Avenue S (Stearns CSAH 1).
30	Install a regional shared use path along Stearns CSAH 4.
31	Construct a regional shared use path along 6th Street S (Stearns CSAH 133).
33	Install a regional shared use path to connect path across Sauk River in Saint Cloud.

FIGURE B.28 – PROGRAMMED AND RECOMMENDED PROJECTS FOR THE CITY OF SARTELL.

APPENDIX C: SAINT JOSEPH CITY PROFILE

The City of Saint Joseph is a gateway community for visitors entering the MPA from the west and features the Lake Wobegon Trail, a popular facility for both residents who use active transportation and visitors from other areas. Saint Joseph proudly identifies itself as a small-town community with a rich history dating to the 1850s. The downtown area is much valued for its variety of locally owned businesses and pedestrian-friendly amenities. Saint Joseph is also a regional center for education, home to the College of Saint Benedict (CSB) and the Kennedy Community School.

DEMOGRAPHICS

According to the U.S. Census Bureau's 2014-2018 American Community Survey (ACS) Five-Year Estimates, the City of Saint Joseph has experienced a population growth of 48.2% since the year 2000.

The City strives to provide equitable service to all segments of the community in its transportation planning investments. The APO tracks specific population demographic subsets known as traditionally underrepresented populations at a regional level. This includes the following:

- People-of-Color (Black/African American alone; American Indian and Alaska Native alone; Asian alone; Native Hawaiian and other Pacific Islander alone; some other race; two or more races; Hispanic or Latino descent regardless of race).
- Persons with low-income
- People with disabilities.
- People with limited English-speaking capabilities.
- Households without access to a motor vehicle.
- Persons over the age of 65.
- Persons under the age of 18.

A look at these demographics in Saint Joseph finds that the largest of these groups is in the proportion of households with low incomes (16.6%). The City has a relatively large number of residents aged 65 and over (11.6%). In addition, approximately one in 10 people within the city have a disability.

The City of Saint Joseph has a low median age (21.7 in 2018), which is reflected by the large number of college-age students within the city. According to the City's Comprehensive Plan, students from the College of Saint Benedict (in Saint Joseph) and Saint John's University (located in Collegeville) make up 30% of the City's population.

See Figure C.2 below for other details.

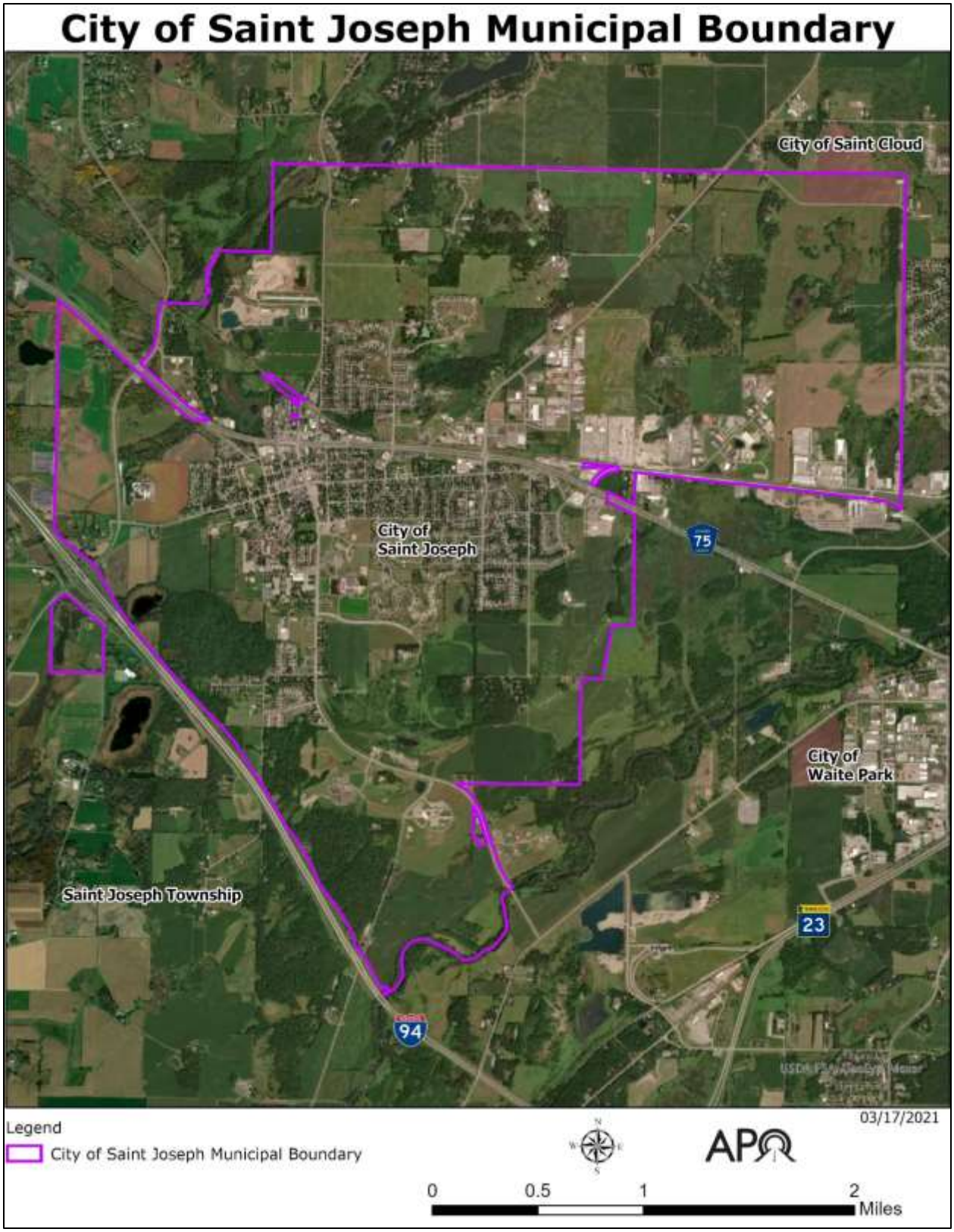


FIGURE C.1 – CITY OF SAINT JOSEPH.

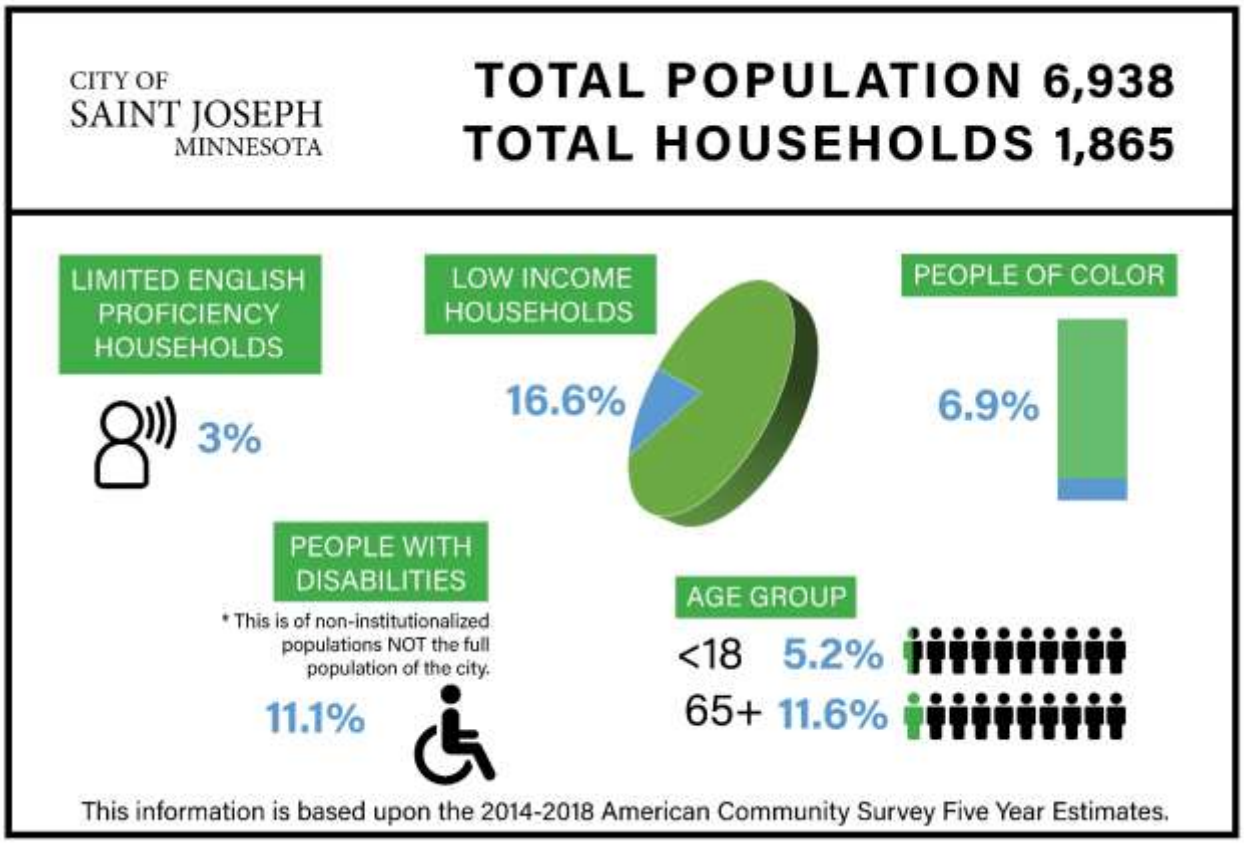


FIGURE C.2 – DEMOGRAPHIC PROFILE OF SAINT JOSEPH

EXISTING LAND USES

How cities use the land within their boundaries (i.e., residential, commercial, industrial, etc.) impacts the transportation network and the modes of travel available or desirable to users. Land use can play a role in developing a transportation system that is mode-friendly to motorized and non-motorized users.

Based on a land-use inventory developed with Saint Joseph's 2018 Comprehensive Plan, the city identified existing and proposed land uses as shown in Figure C.3. Most of the city consists of single-family residential uses with various areas of multiple-family use as identified. The city continues to experience new housing development growth primarily to the south along County Road 121 (College Avenue S).

Much of the City's retail and commercial activity is focused in the downtown area near the college. Various businesses are located along much of the CSAH 75 corridor. Light industrial uses are located along the County Road 133 and County Road 134 corridors on the City's north side.

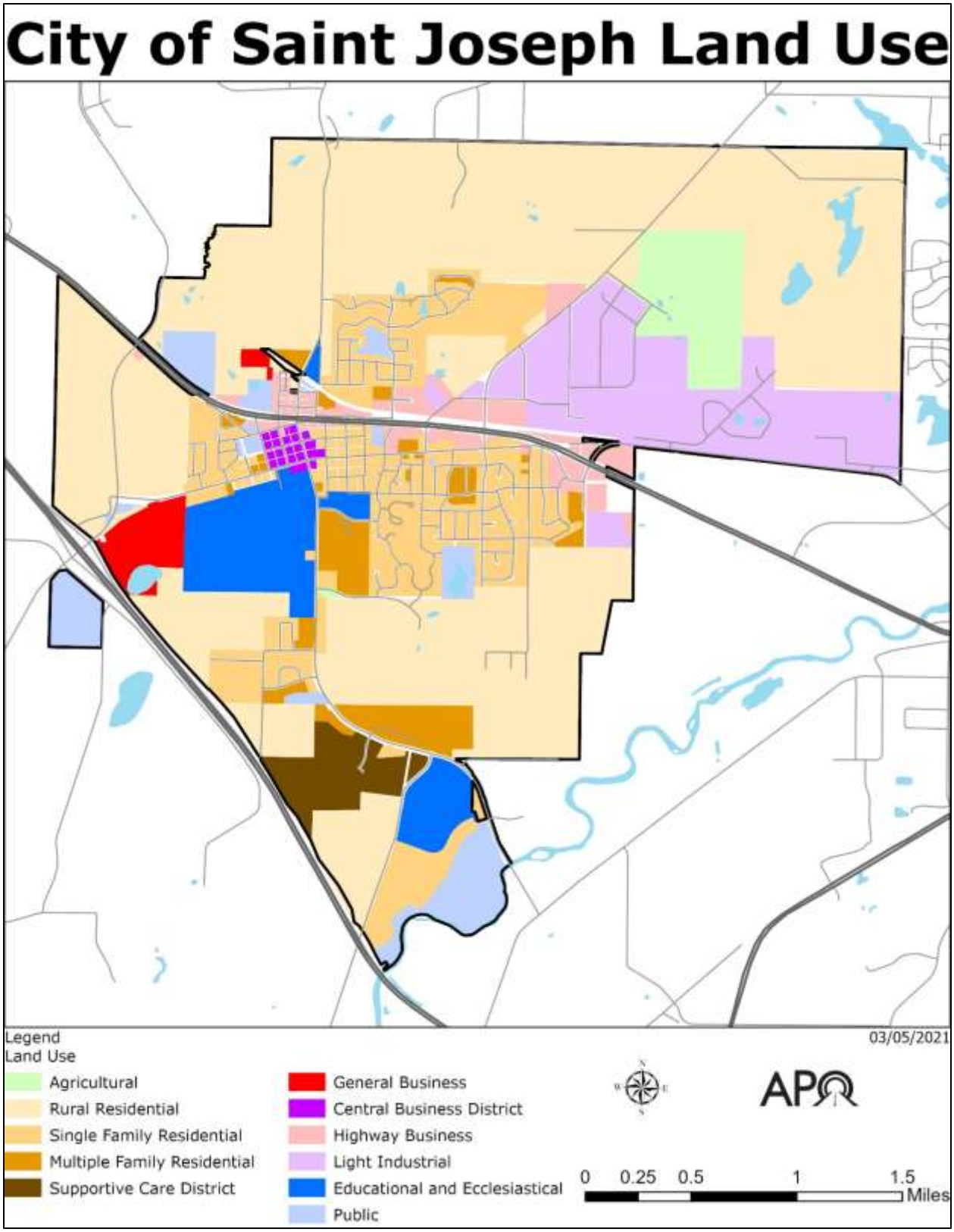


FIGURE C.3 – SAINT JOSEPH LAND USES.

Two large areas from the land use map are "educational and ecclesiastical." One is the CSB campus area which includes the college, student housing, and the St. Benedict's Monastery. Further south is the area that includes Kennedy Community School.

Located throughout the city are 78 acres of parkland. This includes various neighborhood parks, the Lake Wobegon Trail Visitors Center, and a public open space preserve along the Sauk River.

Understanding how the city plans to develop in the future will inform the type of transportation system needed. Residents and visitors will only reach these destinations through the transportation network that is available to them.

TYPES OF ACTIVE TRANSPORTATION INFRASTRUCTURE

Saint Joseph has a network of sidewalks and shared use paths specifically for active transportation users. These are off-road facilities separated from the roadway network. Bicyclists and pedestrians rely on the available off-road network to reach their destinations.

The roadway network within Saint Joseph does not include on-road facilities.

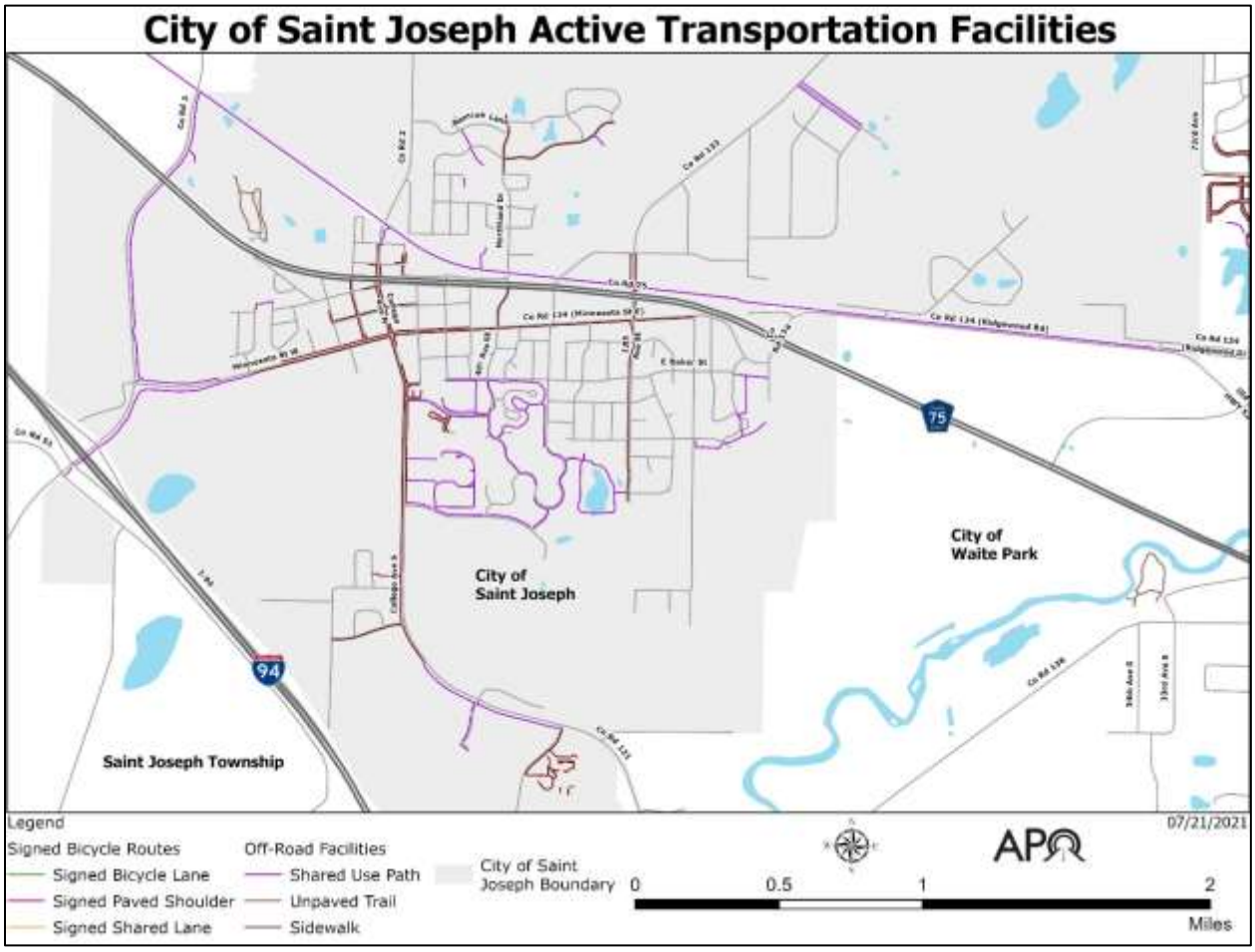


FIGURE C.4 – OFF-ROAD ACTIVE TRANSPORTATION FACILITIES IN SAINT JOSEPH BY TYPE AND LOCATION.

OFF-ROAD FACILITIES

Shared Use Paths and Trails

There are 13.1 miles of shared use paths within the city. This includes the Lake Wobegon Trail, a regionally significant facility connecting the MPA to cities to the west, such as Avon, Albany, and Osakis. Approximately 3.6 miles of the Lake Wobegon Trail falls within the city's boundaries and is maintained by Stearns County. The shared use path along County Road 3 and County Road 2 connects the Lake Wobegon Trail to Minnesota Street and areas of south Saint Joseph. Other shared use paths primarily serve southside neighborhood areas and Klinefelter Park.

Many of these paths provide neighborhoods access to the City's parks, recreational areas, and schools. There are 0.7 miles of unpaved trails, mostly walking paths within Millstream Park.

Sidewalks

Approximately 8.4 miles of sidewalks are located within the city. Much of the sidewalks are located along College Avenue, Minnesota Street, and other parts of the downtown and commercial area. There is also a continuous sidewalk along much of 12th Avenue SE.

TRANSIT SERVICES AND INFRASTRUCTURE

The Jefferson Lines College Connection and the Tri-CAP Transit Connection provide transit services to residents of Saint Joseph. The College Connection offers scheduled pickups and drop-offs at CSB with stops at SJU, Saint Cloud State University, south Saint Cloud on Clearwater Road, and the Metro Bus Transit Center in downtown Saint Cloud. Tri-CAP is a public transit service that provides a curb-to-curb dial-a-ride service from Saint Joseph to other parts of the MPA with call-ahead reservations.

The areawide transit network operated by Saint Cloud Metro Bus that provides Fixed Route (FR) and Dial-a-Ride (DAR) systems for much of the metropolitan area does not provide service to Saint Joseph.

CONDITION OF ACTIVE TRANSPORTATION INFRASTRUCTURE

If the existing active transportation infrastructure is in poor condition, it may cause safety issues, inconvenience for the user, or result in the underutilization of the facility. Keeping the system in good condition assures safety and a comfortable experience.

Pavement conditions data for off-road active transportation facilities within the City of Saint Joseph was collected from areawide surveys performed for the APO as discussed in Chapter 2 of the ATP.

OFF-ROAD FACILITIES

Condition of Off-Road Shared Use Paths

The Parks & Trails Council of Minnesota conducted a pavement condition assessment of most shared use paths within the APO in 2020. The Council used a specially equipped

electronic bicycle with instruments aboard to record the "bumpiness" of the pavement throughout the metropolitan planning area.

The study concluded that several facilities such as the shared use path along County Road 3 and the Lake Wobegon Trail are in good or 'smooth" conditions.

Approximately 11.4% of all shared use paths in Saint Joseph were identified as being in "rough" condition. This includes the path that loops within Klinefelter Park and some neighborhood areas. About 10% of the City's paths were rated as "fair." Locations and their condition ratings are shown in Figure C.5.

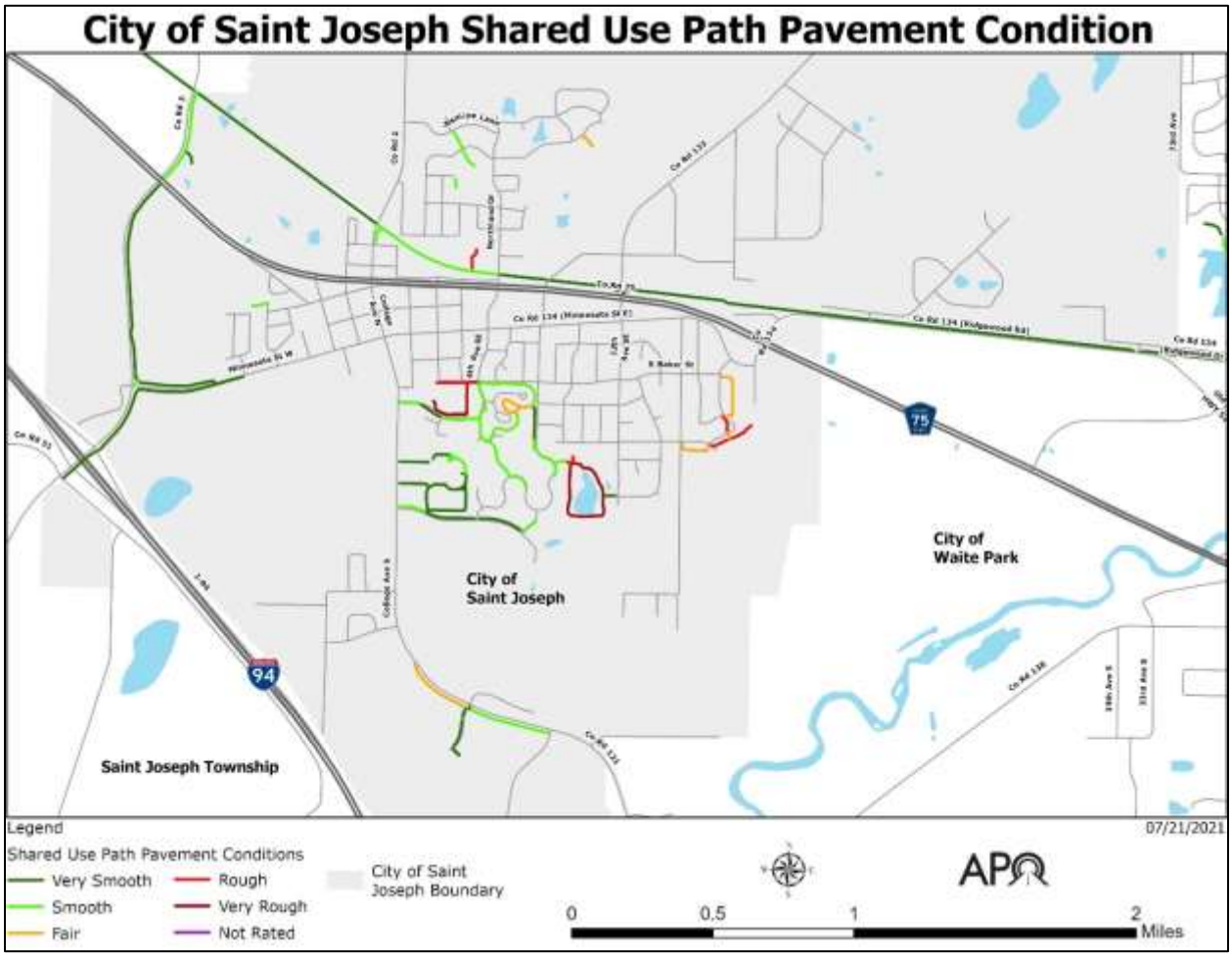


FIGURE C.5 – 2020 SHARED USE PATH PAVEMENT CONDITION FOR SAINT JOSEPH.

SAINT JOSEPH PLANS FOR ACTIVE TRANSPORTATION

The 2012 Transportation Plan Update (https://bit.ly/3zn4ib8), a 2017 CSAH 75 Pedestrian Crossing Study (https://bit.ly/3FTc2ny) and the 2018 Comprehensive Plan (https://bit.ly/3HxSF3L) provide the current planning framework for active transportation within Saint Joseph. These plans stress the importance of a usable and growing transportation network for the city that includes trails and sidewalks.

2012 TRANSPORTATION PLAN UPDATE

The City's 2012 Transportation Plan Update (an update to the 2006 document) included new design guidelines and an updated analysis of transportation facilities and needs. This update also discussed plans for improving and enhancing the transportation system which includes the pedestrian and bicycle network. The Transportation Plan Update recommends continuous trails and sidewalks that connect area businesses, parks, and schools.

Active Transportation Needs as Identified in the Transportation Plan

According to the City's Transportation Plan, given the importance of biking and walking as a means of practical transportation, the transportation system should continue to expand to accommodate pedestrian and bicycle needs. A non-motorized system responsive to the needs of pedestrians and bicyclists will include sidewalks, trails, bike lanes, and shared roadway facilities. Basic needs for system improvements are to provide continuous facilities that connect origins and destinations important to people who bike and walk. This includes removing physical barriers and providing continuity across political boundaries.

The Transportation Plan identifies CSAH 75 as a high volume, high-speed corridor with safety concerns for all modes of traffic that cross the highway. The plan notes growing traffic along the CSAH 75 corridor results in safety concerns for all modes that cross the highway. The Transportation Plan calls for full access signalized intersections and, should safety problems arise, the reduction of partial access intersection locations.

2017 CSAH 75 PEDESTRIAN CROSSING STUDY

The 2017 CSAH 75 Pedestrian Crossing Study analyzed current conditions and safety along the CSAH 75 corridor through Saint Joseph. Identifying a feasible location and other strategies to address safe crossing and connective needs were the chief purpose for this study. The study established the need for a grade-separated crossing for bicycles and pedestrians to travel between the Lake Wobegon Trail and areas south of the highway. A series of recommendations are included in the final report.

2018 COMPREHENSIVE PLAN

The 2018 Comprehensive Plan represents the City's vision for Saint Joseph. This vision includes providing all residents with walkable neighborhoods, a vibrant downtown, and many usable recreational spaces. One strategy to achieve this vision is a pedestrian-focused design for the downtown and CSB campus area. Elsewhere in the City, well-designed neighborhoods will include a network of connected, walkable, and safely accessible sidewalks, trails, and streets.

Active Transportation Needs as Identified in Comprehensive Plan

The Comprehensive Plan's primary goals are to plan, develop, and maintain a safe and accessible multimodal transportation system. Strategies include developing a pedestrian and bicycle plan, requiring off-street or on-street facilities where appropriate, and maintaining an interconnected system. The city will also focus on building new segments to close gaps in the network.

According to the Comprehensive Plan, there are limited opportunities for active transportation facilities, primarily through residential areas. However, the plan recommends developing a network of bicycle routes through the city to improve access to schools,

transit, employment, recreation, and other needs. Traffic calming measures will be introduced where necessary to improve bicycle safety. The plan also calls for further study and implementation of a safe crossing of CSAH 75 for pedestrians and bicyclists.

The 2018 Comprehensive Plan's park component establishes a goal to create and maintain an interconnected trail and sidewalk system tying together parks and open spaces with the urban and suburban areas of the city. Several strategies are presented to achieve this goal including guidance and solutions presented by the city for improving user safety, comfort, convenience, and connectivity. As the City grows, its shared use paths will be protected from the impact of vehicular traffic and development.

OTHER PLANNING EFFORTS

In 2017, CSB conducted a planning study to examine several pedestrian crossings along College Avenue. This study recommended the completion of sidewalks and crosswalks at intersections along College Avenue South on Minnesota Street to facilitate safe crossings for CSB students, staff, and faculty. This study included a concept for a shared use path to add connectivity across College Avenue from southside development, proposing an alignment that follows Field Street.

CITY ORDINANCES

Along with various citywide planning efforts, Saint Joseph City Code (https://bit.ly/2QvH3ZU) has established several ordinances pertaining to the active transportation system and its users.

City Code Chapter 5 outlines provisions for active transportation with new street construction or reconstruction. A sidewalk and trail network shall be in proximity to public service areas such as parks, schools, and shopping facilities. With the construction of streets, the city ordinance calls for a minimum of 6-foot sidewalks on at least one side of every street, though the city may require sidewalks on both sides of streets. Where called for, trails (shared use paths) shall have a minimum paved width of 8-feet. All facilities shall conform to design standards and Americans with Disabilities Act (ADA) guidelines. The City Council takes recommendations for improving the sidewalk and trail network from the Planning Commission (City Code 540.15).

Property owners have responsibility for sidewalk maintenance. Snow, ice, or other walkway obstructions are to be removed within 24 hours of when deposited. If the owner does not comply, the city may assess the costs of removal (City Code 303.03). The property owner is also responsible for sidewalk repairs. Upon receiving notice from the city that the sidewalk is defective, the owner has 60 days to make repairs or be assessed the cost of repair by the city (City Code 303.04).

Within restricted areas as specified by ordinance, the City of Saint Joseph prohibits certain types of usage on sidewalks. Riding a bicycle or a skateboard is prohibited on Minnesota Street and other sidewalks in the downtown area. Except for crossing a street, travel on roller skates is also prohibited within the restricted area (City Code 809). In addition, the city prohibits the operation of any self-propelled vehicle on any of its sidewalks (City Code 807). By Minnesota law (Sec 169.222), bicyclists have the same rights and responsibilities as the drivers of motor vehicles, and therefore have the right to use any public roadway.

SYSTEM USAGE

Understanding bicycling and walking behavior on the active transportation network within the City of Saint Joseph can help in a couple of ways. The purpose of collecting system usage data is to measure the change in usage over time, prioritize the investment of new and existing infrastructure, and assist in planning and designing future facilities. It is essential to know how well current facilities address the user's needs.

BICYCLE AND PEDESTRIAN COUNTS

APO staff regularly place a MnDOT-owned portable bicycle and pedestrian counter along shared use path locations throughout the MPA. This includes a location on the Lake Wobegon Trail near its intersection with College Avenue (County Road 2).

The MnDOT counter uses two different types of counters simultaneously. The Pneumatic TUBE counter uses two sets of tubes placed perpendicular to traffic. When a cyclist passes over the tubes, this counter can record that cyclist and determine which direction that person was heading. Meanwhile, the PYRO-Box utilizes infrared technology to measure people's body heat who pass in front of its sensor. This counter, much like the TUBE counter, can identify travel directions. While the PYRO-Box can detect bicyclists and pedestrians, it cannot definitively distinguish between the two. When used in conjunction with the TUBE counter, APO staff can calculate pedestrian traffic from the PYRO-Box by subtracting the bicyclists from the total count. With these portable counters, APO staff monitors daily usage of shared use paths for seven-day intervals at specified locations.

The Lake Wobegon Visitors Center is one of many locations throughout the MPA that has counts done seasonally – winter, spring, summer, and fall. Due to weather conditions, these seasonal counts are done using only the PYRO-Box counter. This counting program is relatively new (beginning in 2020), so limited data is available.

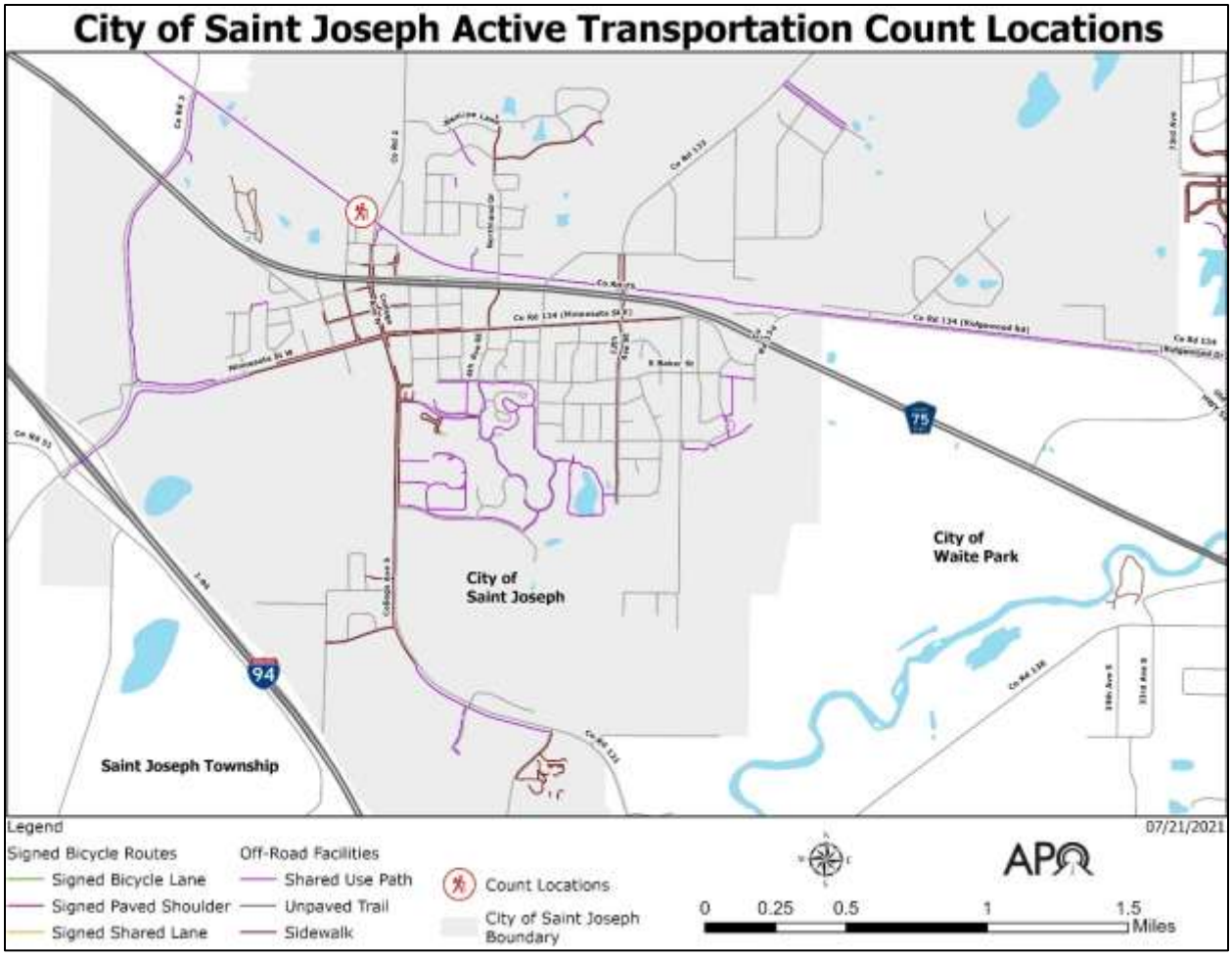


FIGURE C.6 – PORTABLE AUTOMATIC BICYCLE/PEDESTRIAN COUNT LOCATIONS WITHIN THE CITY OF SAINT JOSEPH.

The APO's counts indicate that the Lake Wobegon Trail at the Saint Joseph trailhead receives significant usage, mainly on weekends. Figure C.7 compares summer pedestrian usage in 2019 and 2020. When college is in session, average daily weekend counts tend to be significantly higher than when college is recessed.

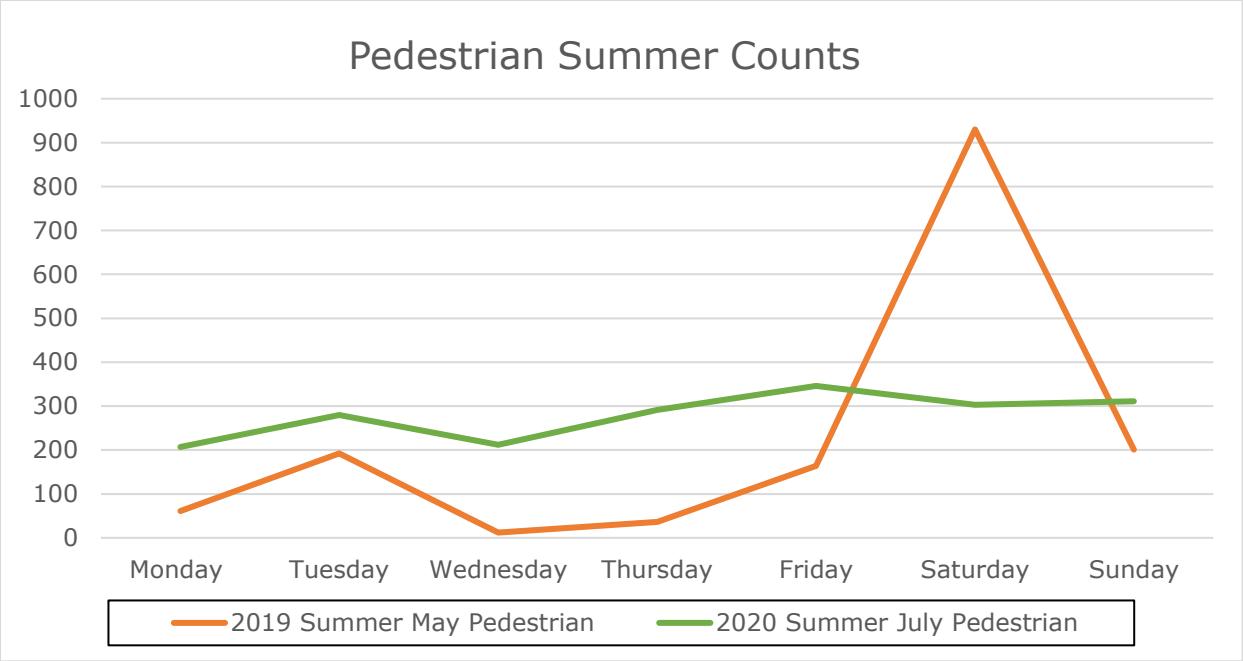


FIGURE C.7 – 2019 AND 2020 PEDESTRIAN COUNTS AT THE LAKE WOBEGON VISITORS CENTER IN SAINT JOSEPH.

Figure C.8 shows the most recent one-week winter seasonal counts on the Lake Wobegon Trail for pedestrians and bicycles. As the graph shows, the number of people using this facility in the winter can be correlated to outside temperatures.

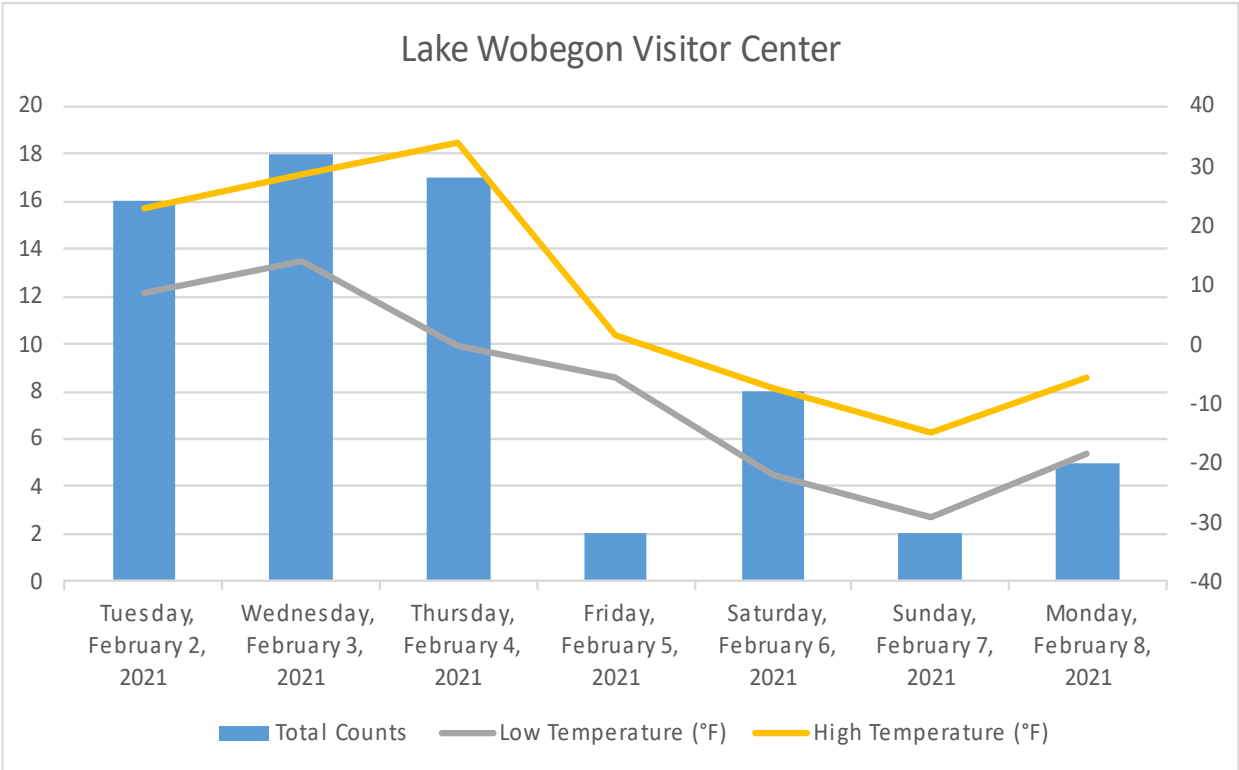


FIGURE C.8 – 2021 WINTER COUNTS AT THE LAKE WOBEGON TRAIL IN COMPARISON TO DAILY HIGH AND LOW TEMPERATURES.

DESTINATIONS

Common destinations for active transportation users include schools, food assets, employers, and parks. Figure C.9 shows the locations of these destinations within the City of Saint Joseph. Food assets are grocery stores/supermarkets, specialty food stores, meat markets, convenience stores, and non-profit community food services. Employers listed have 100 or more full- and/or part-time employees.

Schools

The City of Saint Joseph prides itself on the quality educational opportunities provided by the College of Saint Benedict and Kennedy Community School.

The CSB campus, a privately operated college for women, is located entirely within the City of Saint Joseph adjacent to the downtown area. CSB is closely associated with nearby Saint John's University, which offers higher education for men. Much of the SJU student population also lives within the City of Saint Joseph.

Kennedy Community School, part of St. Cloud Area School District 742, is in south Saint Joseph with access from Jade Road. This school of approximately 800 students provides education for students from preschool to eighth grade.

Food Assets

As shown in Figure C.9, grocery stores and other food destinations are primarily found in the downtown area and near intersecting streets along CSAH 75. There are several small grocery outlets, Saint Joseph Meat Market, and Gateway Church (a food distribution site) located within the downtown area. Various convenience stores and a Coborn's supermarket are located near roadways that cross CSAH 75.

Food assets are often along some sort of active transportation facility. Locations in the downtown area have a nearby sidewalk. Some food assets along CSAH 75 have access to the Lake Wobegon Trail.

Large Employers

Among the City's largest employers are CSB and Kennedy Community School. Asphalt Service Technologies facility located in the east industrial park along CR 134 is a major employer. Another is Woodcrest of County Manor, a senior living and health care facility along College Avenue S.

Parks

Eight city parks, the Lake Wobegon Trailhead and Visitors Center, and an archery range can be found within the City of Saint Joseph.

The larger parks generally have access to nearby sidewalks or shared use paths. As a result, residential areas near these parks are more likely to have active transportation facilities. It should be noted that many of the city's smaller neighborhood parks have limited or no sidewalk access.

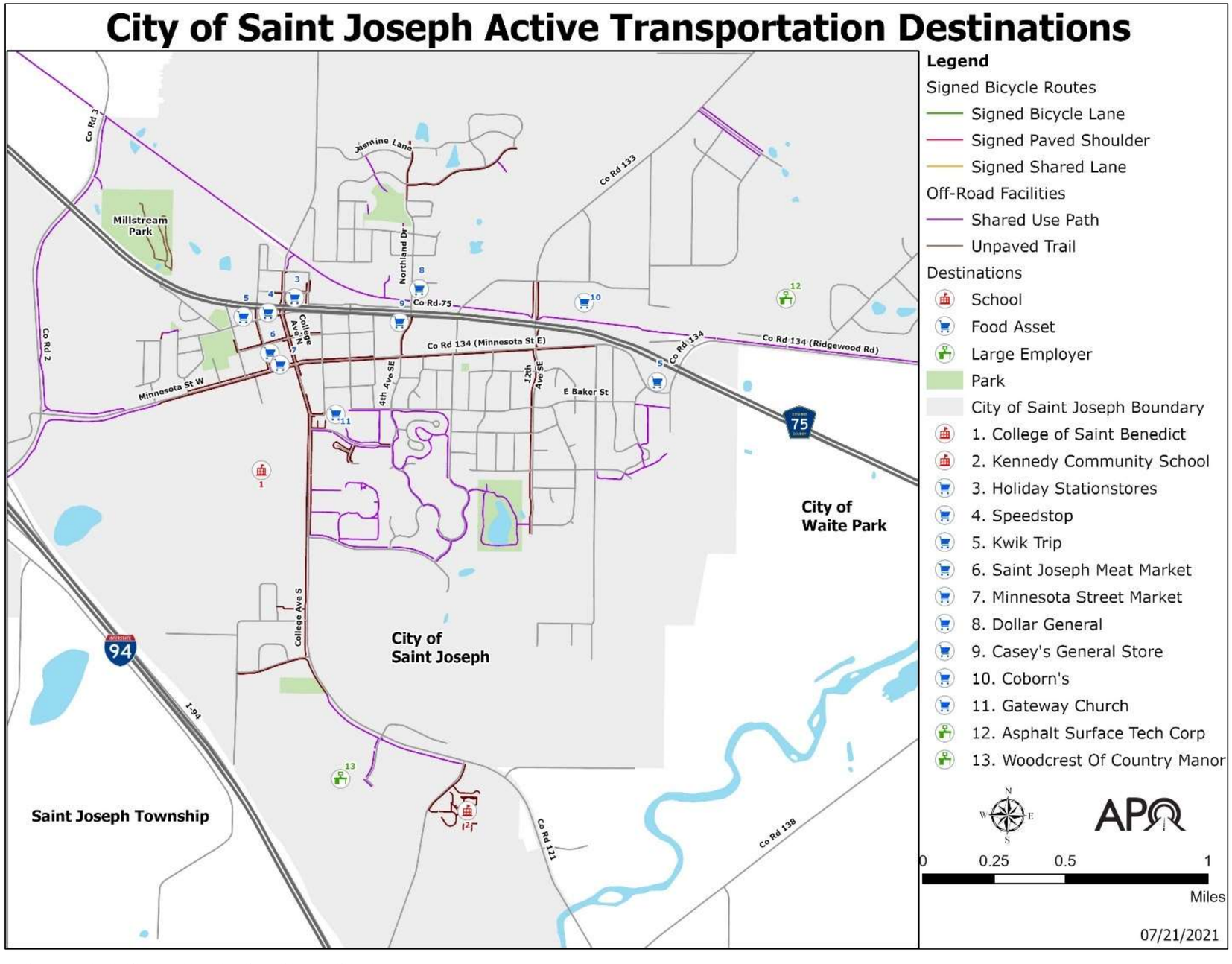


FIGURE C.9 – DESTINATIONS FOR ACTIVE TRANSPORTATION USERS IN SAINT JOSEPH.

SAFETY

According to the Minnesota Department of Public Safety (DPS), fatalities, serious injuries, and minor injuries involving bicyclists and pedestrians are rising within the Saint Cloud MPA.

Specifically, within the City of Saint Joseph, DPS crash data has indicated that nine crashes involving active transportation users and vehicles have occurred in the 10 years between 2010 and 2019. See Figure C.10 for locations and severity.

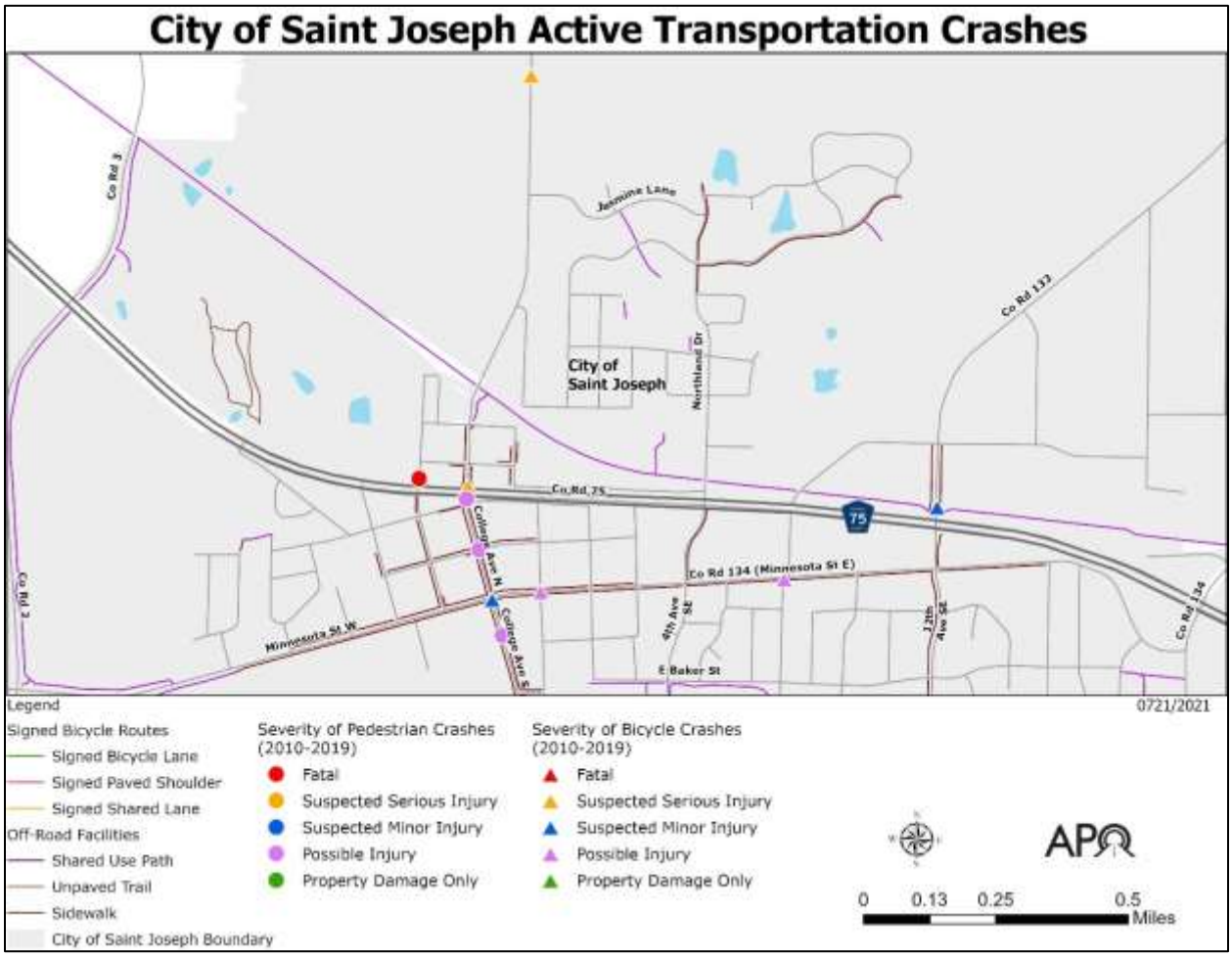


FIGURE C.10 - LOCATIONS WITH CRASHES INVOLVING BICYCLES AND PEDESTRIANS (2010-2019).

Most of the crashes occurred within or near the downtown area of Saint Joseph. While most resulted in minor injuries, a fatality and two serious injuries to pedestrians occurred. A crash at a location along the frontage road north of the First Avenue NE intersection with CSAH 75 resulted in the death of a child. A bicyclist was seriously injured in a crash at the intersection of College Avenue N and CSAH 75. According to the report, the cyclist was legally crossing but could not be seen by the driver. Another crash with a serious injury to a cyclist occurred further north on County Road 2. In this instance, the cyclist was impaired, and night conditions may have contributed.

Crash history is reviewed to determine locations where crashes appear to be more likely to occur and whether there may be an engineering solution or partial solution to help mitigate

the crashes. While most of the crashes involving pedestrians and bicyclists were in the downtown area along College Avenue and Minnesota Street, only one location, the CSAH 75/College Avenue intersection, had more than one crash in 10 years. Crash reports indicate that the driver did not see the pedestrian or cyclist of the vehicle in many cases. It is unclear from the DPS crash reports whether physical conditions at the crash locations were a contributing factor or if physical changes to the facilities may help mitigate future crashes.

PROGRAMMED AND PLANNED IMPROVEMENTS

As a guide to transportation and other investments, the City of Saint Joseph maintains a Capital Improvement Program (CIP). The CIP includes the projected five-year program of projects based on current needs and available revenues. The CIP contains short-term projects designed to improve active transportation facilities. The CIP also indicates anticipated future revenues that may be available to implement such projects.

One such project identified jointly by both Saint Joseph and Stearns County is the active transportation improvements to CSAH 133 to be completed as part of the programmed roadway reconstruction. In addition to the roadway expansion from CSAH 75 to 15th Avenue, this project will also include ADA compliant elements with a sidewalk and/or shared use path on at least one side of the roadway. Intersection improvement will also be made at the Elm Street intersection (a potential roundabout) address safety concerns.

Also identified in the CIP is a northern sidewalk connection along Northland Drive and a shared use path connection that would extend from 20th Avenue SE to existing neighborhood facilities.

Long-term (though currently unfunded) goals for the City's active transportation network include a grade-separated bicycle and pedestrian crossing of CSAH 75 as recommended in the 2017 CSAH 75 Pedestrian Crossing Study.

The city also has a long-term plan to acquire right-of-way and extend a new north roadway corridor from 73rd Avenue to CSAH 133. When built, the new north corridor may also include the addition of active transportation facilities, according to city staff.

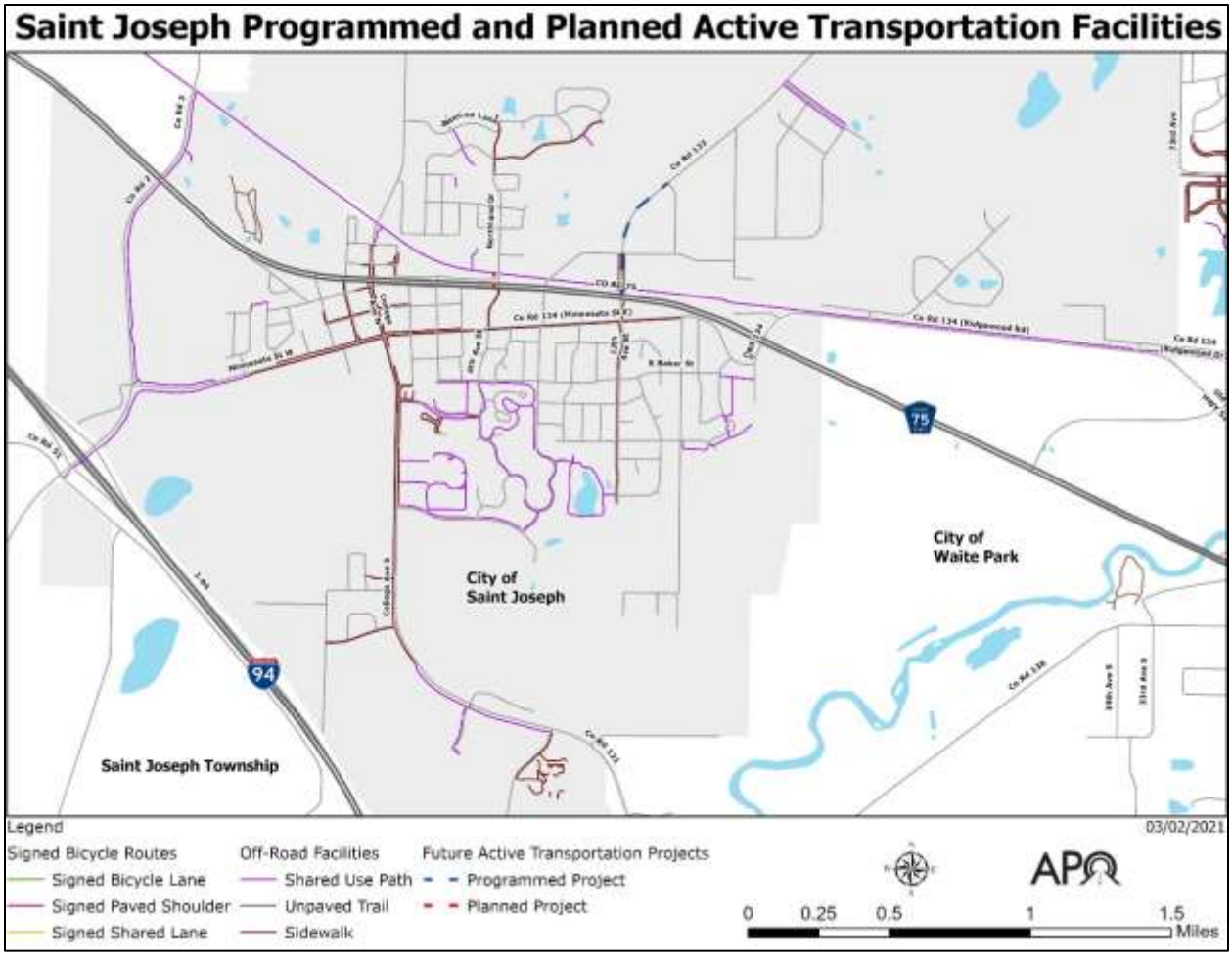


FIGURE C.11 – EXISTING NETWORK WITH PROGRAMMED AND PLANNED FACILITIES FOR THE CITY OF SAINT JOSEPH.

ACTIVE TRANSPORTATION NEEDS ASSESSMENT

APO staff performed a citywide analysis of facility and other needs for active transportation users to supplement and inform current city planning efforts. The intent of this assessment, conducted in coordination with city staff and representatives, was to identify active transportation needs within the city and assist in prioritizing those needs in the event funding becomes available.

GOALS AND OBJECTIVES FOR ACTIVE TRANSPORTATION

The regional goals and objectives for active transportation as adopted by the APO provide a starting point for the Saint Joseph needs assessment.

Those goals were:

1. Improve bicycle and pedestrian safety and comfort.
2. Improve active transportation connections to desired destinations.
3. Improve the condition of active transportation infrastructure.
4. Provide equitable access to active transportation facilities for all people of all abilities.
5. Promote an interconnected regional active transportation network.

The evaluation factors were equally applied for assessing needs within each city and across the MPA. The goals, objectives, and factors used to evaluate services and needs relative to each objective are detailed in Chapter 4. Performance ratings from the evaluation of factors for Saint Joseph are shown in Figure C.12.

Saint Joseph			2019
Number of Non-Motorized Fatalities and Suspected Serious Injuries Five Year Rolling Average			*0.4*
Percentage miles of arterials & collectors that have a sidewalk or shared use path (SUP) on at least one side			*49.7%*
Percent of destinations that fall within distance categories	Schools	0 Ft (Asset Served by AT Facility)	*100.0%*
		1-310 ft (One block or less)	*0.0%*
		311-930 ft (Two to three blocks)	*0.0%*
		> 931 ft (Four or more blocks)	*0.0%*
	Food Assets	0 Ft (Asset Served by AT Facility)	*30.0%*
		1-310 ft (One block or less)	*40.0%*
		311-930 ft (Two to three blocks)	*30.0%*
		> 931 ft (Four or more blocks)	*0.0%*
	Large Employers	0 Ft (Asset Served by AT Facility)	*50.0%*
		1-310 ft (One block or less)	*50.0%*
		311-930 ft (Two to three blocks)	*0.0%*
		> 931 ft (Four or more blocks)	*0.0%*
	Parks	0 Ft (Asset Served by AT Facility)	*83.3%*
		1-310 ft (One block or less)	*16.7%*
		311-930 ft (Two to three blocks)	*0.0%*
		> 931 ft (Four or more blocks)	*0.0%*
	Transit Stops	0 Ft (Asset Served by AT Facility)	*NA*
		1-310 ft (One block or less)	*NA*
		311-930 ft (Two to three blocks)	*NA*
		> 931 ft (Four or more blocks)	*NA*
Percent of street crossings that do not meet full ADA standards			*80.0%*
Miles of Active Transportation facilities per 1,000 residents in EJ/Title VI Sensitive Areas in comparison to non-sensitive areas			*0.0:3.1*
Percent mileage of Regional Priority bicycle facilities that do NOT exist			*62.2%*
Percent of on-road bicycle facilities with poor pavement			*NA*
Percent of SUP with rough/very rough pavement			*11.4%*

FIGURE C.12 – SAINT JOSEPH PERFORMANCE REPORT CARD (2019).

NEEDS ASSESSMENT METHODOLOGY

From the goals and objectives framework, APO staff, in coordination with Saint Joseph city staff and community volunteers, developed the following methodology to address critical gaps in the current active transportation system. It should be noted that while this process

does not account for every gap or need in the network, it does focus on addressing gaps utilizing existing data as it relates to the region's active transportation goals and objectives.

The APO's active transportation needs assessment methodology was broken into three phases. Beginning with an in-depth analysis of transportation networks, APO staff identified issues and needs within individual communities across the region. This cursory review led to a more detailed analysis of active transportation needs for focus areas identified within each city and ultimately the identification of jurisdictional-level project recommendations – Phase 2. In the final phase, local and regional needs identified in the previous phases were prioritized according to the degree goals and objectives would be addressed.

Phase 1: Evaluating Needs for the City of Saint Joseph

In order to begin this evaluation, APO staff reviewed needs and service area gaps relative to the factors listed under goals 1-4. APO staff compiled a series of maps and data that detailed the city's existing active transportation conditions. Utilizing the objectives and applying factors (as identified in Chapter 4), staff began to dive into the existing conditions data to look for network gaps or areas of concern (i.e., high crash locations, locations of under-designed on-road/off-road facilities).

Figure C.13 summarizes the findings for the City of Saint Joseph.

Considered along with the factors were the comments from the APO's initial public input along with comments from city staff. Areas where multiple issues were revealed when the factors were applied became the focus of further review and analysis.

Phase 2: Analysis of Saint Joseph Focus Areas

From the process described for the review of needs and gaps for the City of Saint Joseph, the following areas were identified as priority areas for improvements.

- College Avenue/Stearns CSAH 2 area.
- Fourth Avenue NE/Northland Drive area.
- Stearns County Road 134 area.

APO staff working in conjunction with city staff for each focus area further analyzed needs and issues and worked to identify possible solutions.

It is important to note that all three focus areas identified have one common feature: CSAH 75. Ensuring pedestrians and bicyclists can safely cross this roadway has been identified in the City's plans and APO studies as an ongoing challenge. Given the growing vehicle traffic on CSAH 75 and the popularity of the Lake Wobegon Trail, these issues have increased in significance. Current traffic counts show a daily average of 11,700 vehicles on CSAH 75, with much higher usage at peak times. Data from 2014 shows that approximately 35,000 people use the Lake Wobegon Trail annually. The potential for conflicts coupled with the need to provide access for active transportation users led to identifying these focus areas.

Analysis of Areas of Need - Saint Joseph

	Safety & Comfort Factors						Connectivity Factors			Facility Condition			Equity Factors			Issues	Potential Treatments
		1 High Number of Fatalities	2 High Number of Injuries	3 Under Design Guidelines	4 No Adjacent P/B Facilities	5 Cited as Safety Concern		1 Access to Destinations	2 Access to Transit		1 On Road Conditions	2 Off Road Conditions		1 Underserved Demographic	2 ADA Compliance		
College Avenue/CR 2 (Downtown Area)			x		x	x									x	Downtown area - crashes with injuries, one fatality, intersection not ADA compliant, no facilities north of Lake Wobegon Trail.	Pedestrian and bicycle crossing improvements, traffic calming, bring intersections to ADA standards, adding active transportation facilities and connections.
College Avenue/CR 121 (Kennedy School Area)					x	x		x								Vehicle speeds and safety concerns for students, serves destinations (school, major employer), no facilities on CR 121 south of Jade Road.	Pedestrian and bicycle crossing improvements, traffic calming, adding active transportation facilities and connections.
4th Avenue NE /Northland Drive						x		x								Vehicle speeds and safety concerns for crossing CSAH 75, intersection not ADA compliant, serves destinations (food assets, park).	Pedestrian and bicycle crossing improvements, traffic calming, bring intersections to ADA standards, adding active transportation facilities and connections.
12th Ave NE /CR 133					x	x		x								Vehicle speeds and safety concerns for crossing CSAH 75, no facilities north of Elm Street, serves destinations (food assets).	Stearns County and city funded project along CR 133 will improve crossings, bring intersections to ADA standards, and add active transportation facilities.
20th Ave SE /CR 134					x	x		x							x	Vehicle speeds and safety concerns for crossing CSAH 75, intersection not ADA compliant, serves destinations (food assets, large employer),	Adding active transportation facilities and connections, pedestrian and bicycle crossing improvements, bring intersections to ADA standards,

FIGURE C.13 – SAINT JOSEPH NEEDS ANALYSIS.

College Avenue/County Road 2 Area

As shown in Figure C.14, this focus area covers the length of College Avenue from Jasmine Lane to Calloway Street, its adjacent land use, and the connecting street network. Parts of the downtown are within this area as is the Lake Wobegon Trailhead and Visitors Center and residential areas and businesses north of CSAH 75.

This area was chosen due to a high level of activity from all transportation modes, the history of crashes, crossing concerns, and limited facilities.

NEEDS AND ISSUES

The core area of the City of Saint Joseph, where College Avenue intersects with CSAH 75, is the primary access to the City's many downtown attractions and CSB campus. Users of the Lake Wobegon Trail will typically cross CSAH 75 to reach the many food conveniences and other services in the downtown area. The high usage in this area increases the potential for conflicts.

The amount of traffic in this area and the safety of active transportation users are of primary concern. Vehicle traffic volumes along CSAH 75 in this area are very high, as is the vehicle traffic and turning movements north and south of the highway onto College Avenue and First Avenue NW. Of the intersections along CSAH 75 that were counted as part of the 2017 planning study, the highest usage from bicycles and pedestrians was the intersection at College Avenue. More crashes have occurred in the downtown area than elsewhere in the city. While speeds on collectors and arterials within this area are posted at 30-35 mph, speeds increase to 55 mph north of Jasmine Lane.

This area has a large number of active transportation users primarily due to the location of the Lake Wobegon Trailhead and Visitors Center. This destination includes a large parking area, a shelter, and bike share facilities. The Lake Wobegon Trail crosses College Avenue at a signed location marked with a crosswalk but without a signal. This crossing, which users must take to get to and from the trailhead facilities, has been identified by Stearns County as non-compliant with ADA standards.

While there are sidewalks south of the Wobegon that lead to downtown and the college area, there are no sidewalks or other active transportation facilities to the north. The gap in sidewalk connectivity to the north was identified in the 2017 planning study. Existing neighborhoods, mainly east of County Road 2, appear to lack adequate facilities for walking and bicycling.

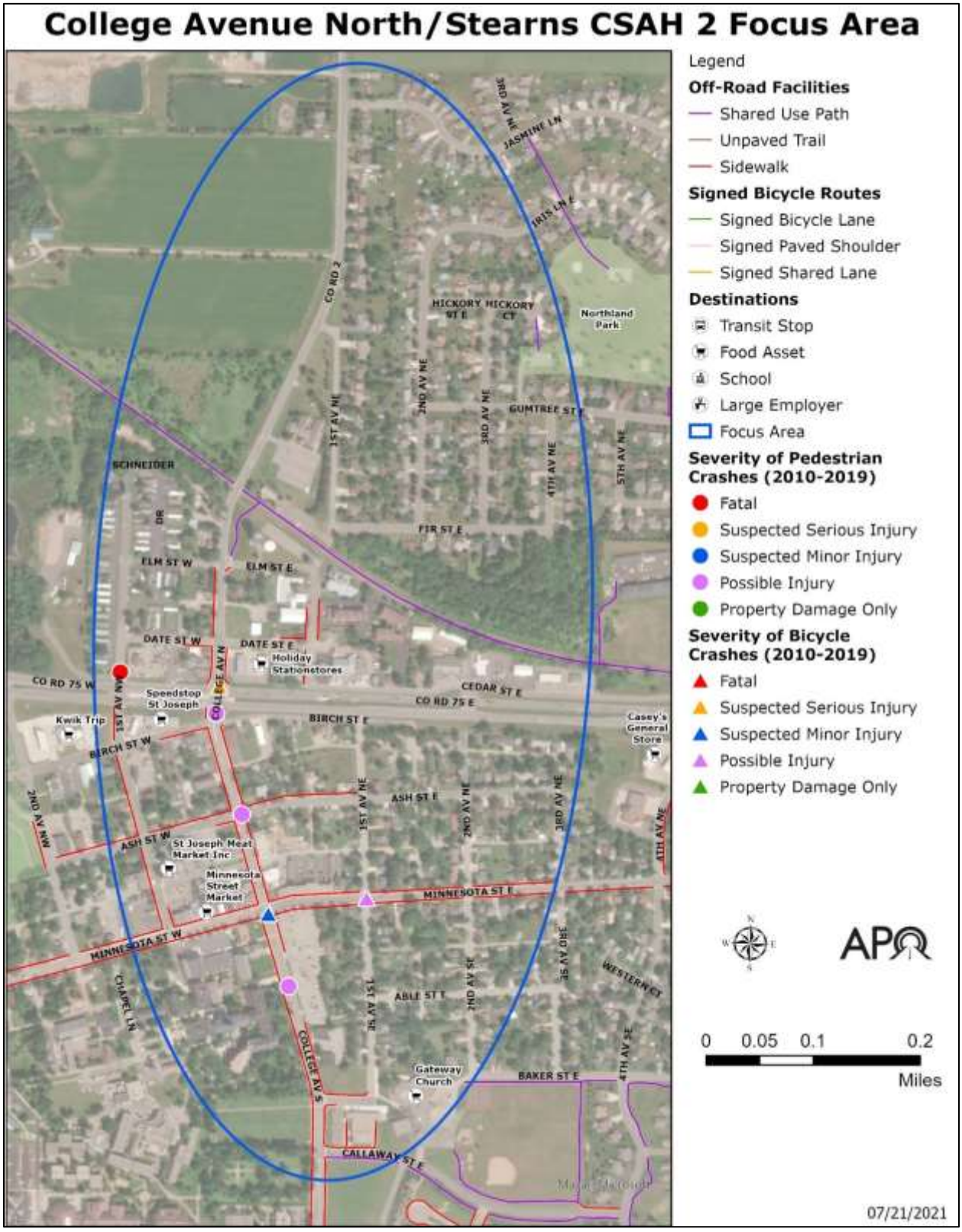


FIGURE C.14 – COLLEGE AVENUE/COUNTY ROAD 2 FOCUS AREA IN THE CITY OF SAINT JOSEPH.

RECOMMENDATIONS

- Add additional sidewalk or a shared use path along College Avenue N/County Road 2 north from the Lake Wobegon Trail to Jasmine Lane. Consideration should be given to additional connections from the northside neighborhoods.
- Further study of safety improvement needs at the First Avenue NW and College Avenue crossings of CSAH 75. The density of development in this area and growing traffic from all modes increases the potential for conflicts. The areas around these intersections should be monitored and studied, with safety improvements implemented as needed.
- Improve the Lake Wobegon Trail crossing of County Road 2 with a pedestrian-activated signal and otherwise upgrade to meet ADA compliance standards.

Fourth Avenue NE/Northland Drive Area

As shown in Figure C.15, this area extends from Jasmine Lane to Baker Street along Fourth Avenue NE and Northland Drive. The area includes Northland Park, the CSAH 75 signalized crossing, adjacent neighborhood areas, and the connecting street network.

This focus area was identified due to bicycle and pedestrian safety concerns in crossing the CSAH 75 and the lack of connecting facilities to destinations like the Lake Wobegon Trail, a city park, and northside neighborhoods.

NEEDS AND ISSUES

The Lake Wobegon Trail crosses Northland Drive near the Cedar Street E frontage road and CSAH 75. Currently there is no facility that connects to the Wobegon. However, it is known from the planning study that large numbers of pedestrians and bicyclists leave the trail and cross CSAH 75 at this intersection to reach south side destinations. Aside from the regional trail itself and a short stub connecting to Boulder Ridge Apartments, there are no sidewalks or other facilities that connect to the trail in this area. On the south side of CSAH 75, the only network connection is a sidewalk along one side of Fourth Avenue NE.

The 2017 planning study recommended a grade-separated underpass of CSAH 75 be constructed in this area. The study notes interim steps will need to be included to further connect the northern CSAH 75 and southern CSAH 75 portions of the active transportation network along with the existing signalized crossing at Fourth Avenue NE.

The short-term connectivity and safety recommendations from the 2017 study are new approaches to the east and south of the Fourth Avenue NE/Northland Drive intersection. The study recommends that marked crosswalks and pedestrian-activated signals be installed at the intersection, a south spur extension of the Lake Wobegon Trail, and a sidewalk to the north. The city will be adding sidewalks along the east of Northland Drive to Northland Park.

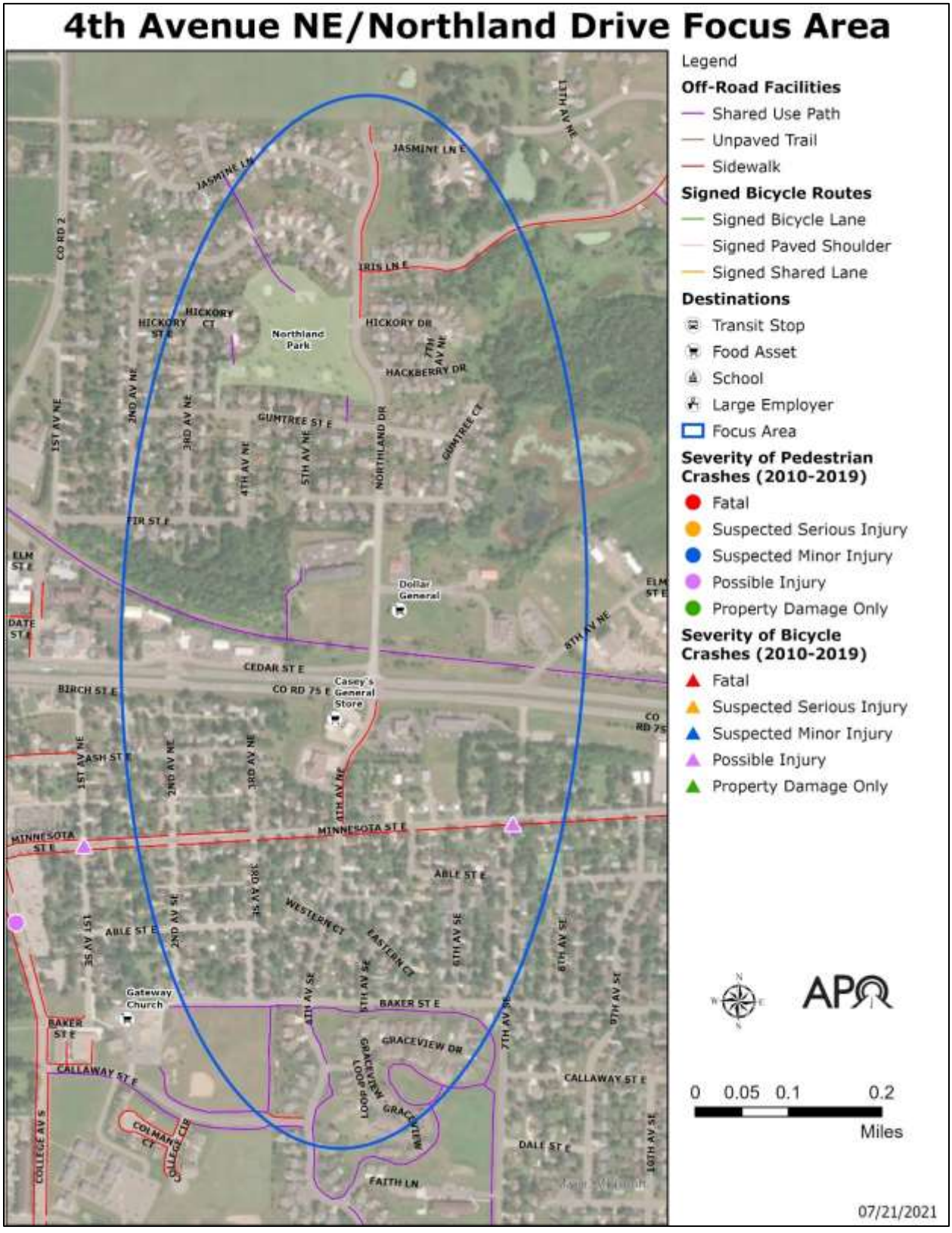


FIGURE C.15 – FOURTH AVENUE NE/NORTHLAND DRIVE AREA OF FOCUS.

RECOMMENDATIONS

- This plan reiterates the findings of the CSAH 75 Pedestrian Crossing Study to make a shared use path connection from the Lake Wobegon Trail to CSAH 75 east of the Northland Drive/Fourth Avenue NE intersection. With this connection, relocate the existing at-grade crossing of CSAH 75 with the suggested design for crosswalks and pedestrian-activated signals.
- Add a sidewalk from CSAH 75 to Hickory Drive to fill the sidewalk gap.
- Install a shared use path from CSAH 75 to Fifth Avenue NE so user of the Lake Wobegon Trail can bike from the trail to their neighborhood.
- Build a grade-separated crossing of CSAH 75 consistent with the CSAH 75 Pedestrian Crossing Study recommendations.

Stearns County Road 134 Focus Area

As shown in Figure C.16, the Stearns County Road 134 focus area extends from 16th Avenue NE to the east industrial park along Ridgewood Rd/CR 134. Included are businesses and the neighborhood area south of CSAH 75.

This area was chosen due to safety concerns, the lack of facility connections to the Lake Wobegon Trail, and the location of destinations attracting pedestrians and bicyclists.

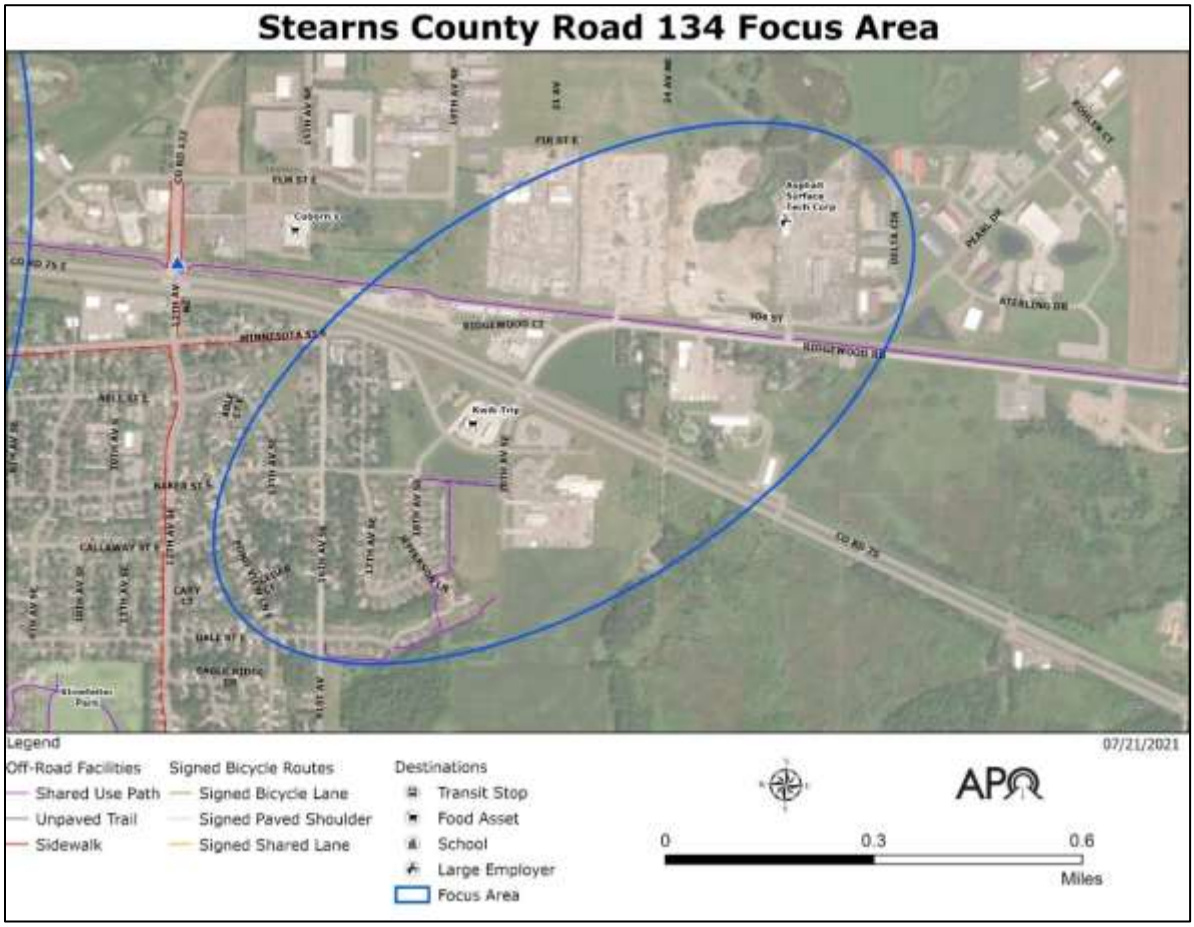


FIGURE C.16 – STEARNS COUNTY ROAD 134 AREA OF FOCUS IN SAINT JOSEPH.

NEEDS AND ISSUES

A portion of the Lake Wobegon Trail, the east industrial park, food destinations, and homes south of CSAH 75 lack connections for bicycles and pedestrians. The existing sidewalk on Minnesota Street from the west stops at 16th Avenue. The city is building a new shared use path along 20th Avenue SE connecting south with the shared use path on Dale Street. This improvement, though still missing, is connecting facilities to Minnesota Street and north and south of CSAH 75.

Projects that would complete facility gaps north and south of the intersection of CSAH 75 and County Road 134 would be consistent with the recommendations from the CSAH 75 Pedestrian Crossing Study. However, due to heavy truck usage on County Road 134, pedestrians and bicycles will be discouraged from crossing CSAH 75 at the County Road 134 intersection until separated off-road facility connections are in place. This was also recommended in the 2017 planning study.

RECOMMENDATIONS

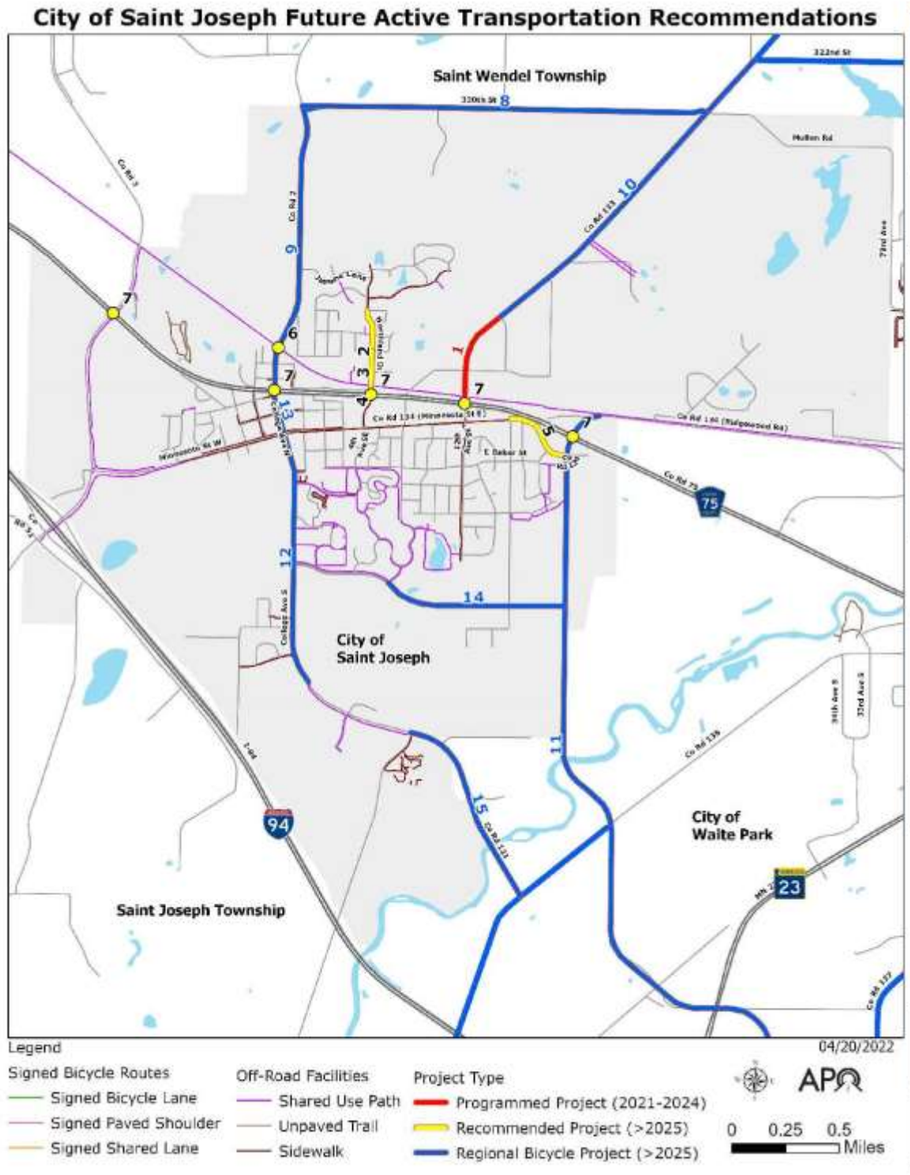
- Extend the sidewalk or add a shared use path from where the sidewalk ends on Minnesota Street east to 20th Avenue, then continue this facility north along County Road 134 to connect with the Lake Wobegon Trail.
- After adding the recommended separated facility connections, improve the intersection crossing of County Road 134 and CSAH 75 as recommended in the 2017 planning study.

Phase 3: Evaluating Needs for the Region

The final phase of the needs analysis was to identify improvements to the regional facility network within the City of Saint Joseph. These projects would assist in achieving an interconnected active transportation network that satisfies regional needs.

Regional bicycle facilities will logically connect cities and other parts of the planning area outside of Saint Joseph and include potential links to areas outside the planning region. Projects that connect the area regionally will provide an approximate spacing of two miles between facilities. In structuring a regional system, the preference is to complete gaps with shared use paths over on-road facilities.

Recommended regional facilities to extend the existing system within Saint Joseph include adding shared use paths along County Road 133 north to Saint Cloud and Sartell, along College Avenue (County Road 2/County Road 121), and along Field Street east through the city.



Map Number and Description	
1	Install sidewalks along Stearns CSAH 133 from 15th Avenue NE to Stearns CSAH 75.
2	Construct a sidewalk from CSAH 75 to Hickory Drive.
3	Install a shared use path from CSAH 75 to Fifth Avenue NE.
4	Build a grade separated crossing of Stearns CSAH 75 at the Northland Drive/4th Avenue SE crossing.
5	Construct a sidewalk or shared use path along Stearns CSAH 134 from end Minnesota Street sidewalk to 20th Avenue SE.
6	Improve the Stearns CSAH 2 crossing of the Lake Wobegon Trail.
7	Add a leading pedestrian interval (LPI) at signalized intersections on Stearns CSAH 75 as warranted.
8	Construct a regional shared use path along 320th Street.
9	Build a regional shared use path along Stearns CSAH 2.
10	Construct a regional shared use path along Stearns CSAH 133.
11	Build a regional shared use path along future beltway connection.
12	Construct a regional shared use path along College Avenue S (Stearns County Road 121) from Minnesota Steet to southern shared use path.
13	Install bicycle facilities along College Avenue between Minnesota Street to CSAH 75.
14	Build a regional shared use path along future Field Street that will connect to the future beltway.
15	Construct a regional shared use path along College Avenue S (Stearns County Road 121).

FIGURE C.17 – PROGRAMMED AND RECOMMENDED PROJECTS FOR THE CITY OF SAINT JOSEPH.

APPENDIX D: WAITE PARK CITY PROFILE

The City of Waite Park has grown from its historic roots as a railroad hub to become a primary center for retail and commercial activity within the MPA. Today, as the point at which MN 23 and CSAH 75 come together, Waite Park's significance to the region continues to grow along with the challenges of its position. While focused on responding to these demands, the "City with a Smile" retains its small-town values and strong neighborhood ties. The city strives to provide community facilities and services to support a good quality of life to be enjoyed by all.

DEMOGRAPHICS

According to the U.S. Census Bureau's 2014-2018 American Community Survey (ACS) Five-Year Estimates, the City of Waite Park has a population that has grown 16.1% since 2000.

The City of Waite Park strives to provide equitable service to all segments of the community in its transportation planning investments. The APO tracks specific population demographic subsets known as traditionally underrepresented populations at a regional level. This includes the following:

- People-of-Color (Black/African American alone; American Indian and Alaska Native alone; Asian alone; Native Hawaiian and other Pacific Islander alone; some other race; two or more races; Hispanic or Latino descent regardless of race).
- Persons with low-income.
- People with disabilities.
- People with limited English-speaking capabilities.
- Households without access to a motor vehicle.
- Persons over the age of 65.
- Persons under the age of 18.

A look at these demographics finds that within Waite Park, many of these groups make up a large share of the City's population, more so than other cities in the MPA. People-of-color comprise about a third of the city's population. A large proportion of households (over 15%) are low income, and about 8% of households are without access to a vehicle.

See Figure D.2 below for details.

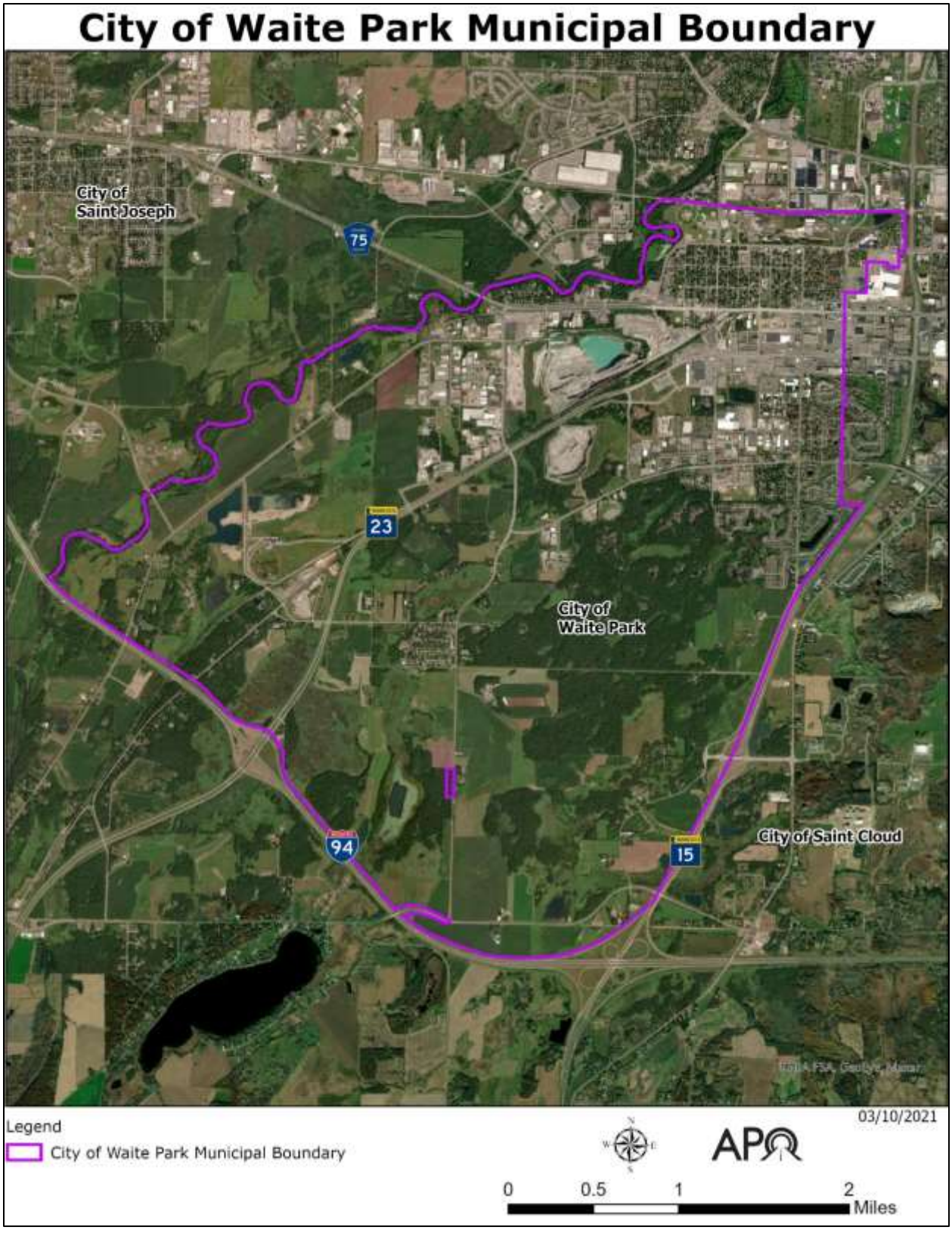


FIGURE D.1 – CITY OF WAITE PARK.

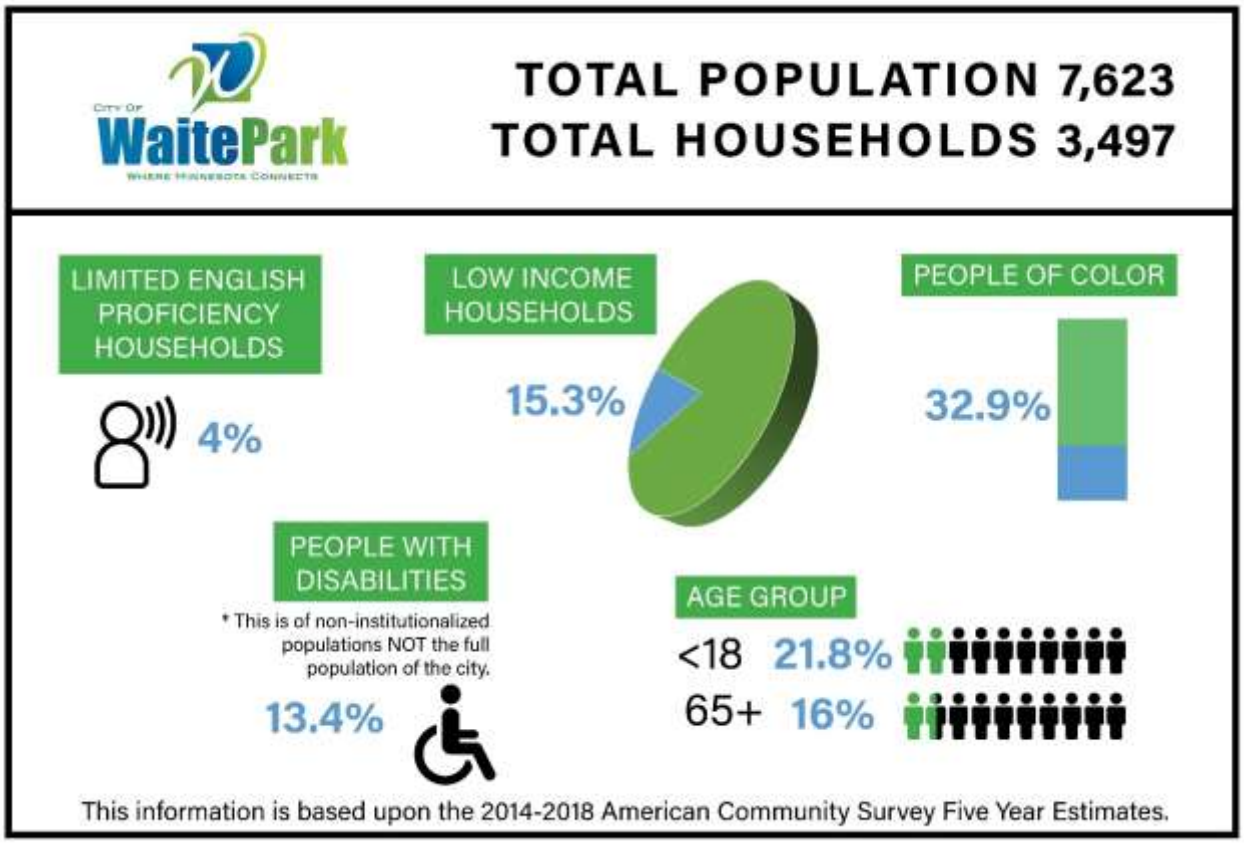


FIGURE D.2 – DEMOGRAPHIC PROFILE FOR THE CITY OF WAITE PARK.

EXISTING LAND USES

How cities use the land within their boundaries (i.e., residential, commercial, industrial, etc.) impacts the transportation network and the modes of travel available or desirable to users. Land use can play a role in developing a transportation system that is mode-friendly to both motorized and non-motorized users.

Based on the land use inventory developed with the City's 2005 Comprehensive Plan, updated to account for newly annexed areas, the city identified existing and proposed land uses as shown in Figure D.3.

The characteristic of Waite Park is a high concentration of commercial and light industrial uses along MN 23 and CSAH 75. Much of the remaining developed areas of the city are a mix of single-family (shown as suburban residential) and multiple-family residential uses.

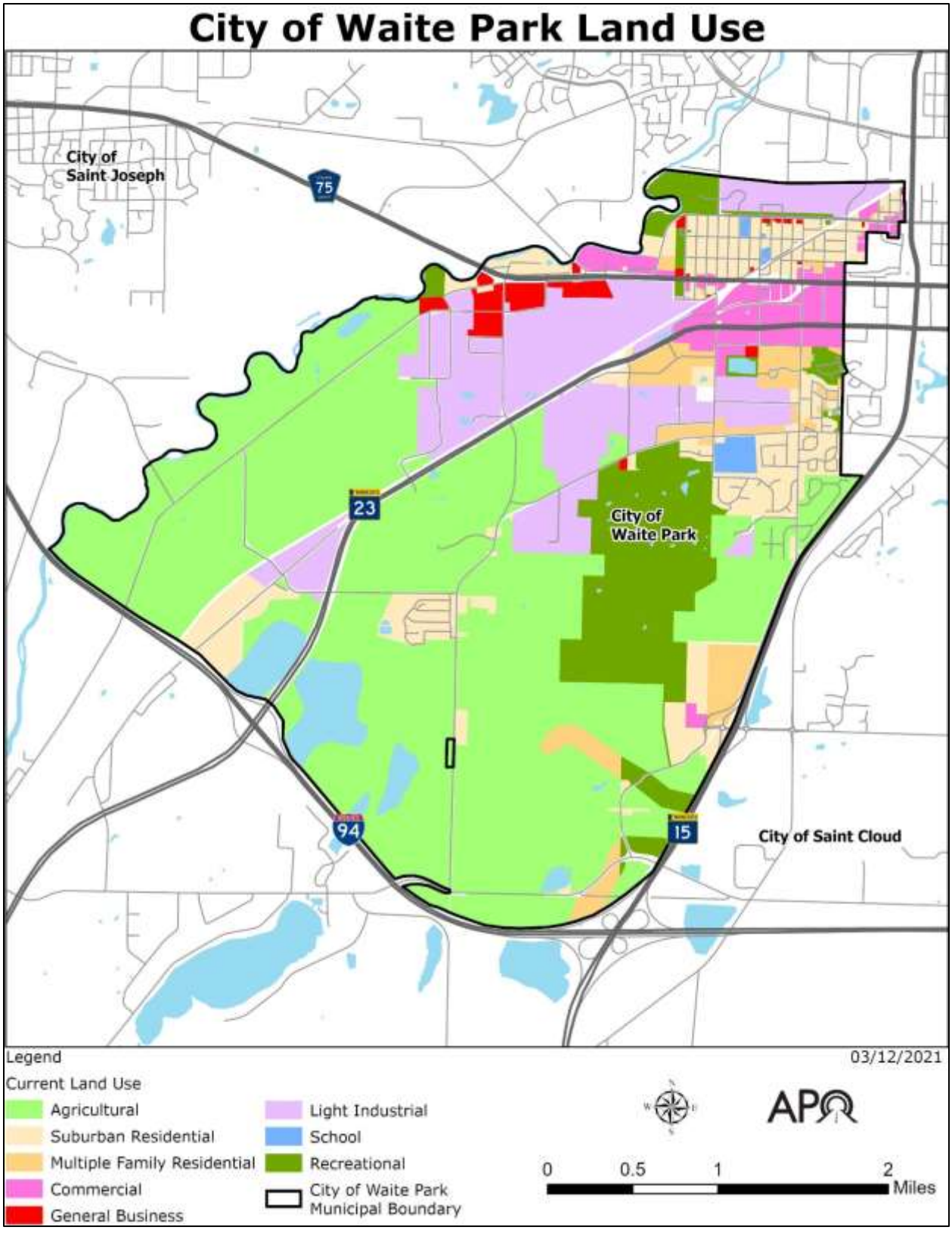


FIGURE D.3 – LAND USES WITHIN THE CITY OF WAITE PARK.

Understanding how the city plans to develop in the future will inform the type of transportation system needed. Residents and visitors will only reach these destinations through the transportation network that is available to them.

TYPES OF ACTIVE TRANSPORTATION INFRASTRUCTURE

Waite Park has a variety of infrastructure designed specifically for active transportation users. Some are integrated into the roadway network, such as bike lanes (on-road facilities). Others are separated from the roadway network, such as sidewalks and shared use paths (off-road). Complementing the on- and off-road active transportation network is the transit network operated by Saint Cloud Metro Bus. Bicyclists and pedestrians can rely on both the on- and off-road network and the Metro Bus system to reach their destinations.

ON-ROAD FACILITIES

The City of Waite Park has one on-road bicycle facility along Second Avenue S. This 1.8 mile signed bike lane starts south of Stearns County Road 137/Seventh Street S and ends when the roadway becomes Graniteview Road.

OFF-ROAD FACILITIES

Shared Use Paths and Trails

There are 19.5 centerline miles of shared use paths within the city (See Figure D.4). This includes the Lake Wobegon Trail, a regionally significant facility with connections to Saint Joseph, Saint Cloud, and cities west beyond the MPA. This facility was extended from Saint Joseph to Waite Park in 2018 and provides access to the Healthy Living Trail from Rivers Edge Park.

Many southside areas of the city are served with shared use paths, particularly those along Seventh Street South and 28th Avenue S. Nearby paths provide many neighborhoods access to the City's parks, recreational areas, and schools.

In addition to shared use paths, Stearns County's Quarry Park and Nature Preserve (located within Waite Park) is home to several unpaved trails.

Sidewalks

Approximately 29.2 miles of sidewalk are located throughout much of the developed core of Waite Park. A sidewalk grid between CSAH 75 and Third Street N serves older neighborhood areas and the McKinley School. Much of the remaining city sidewalks are along southside collector routes.

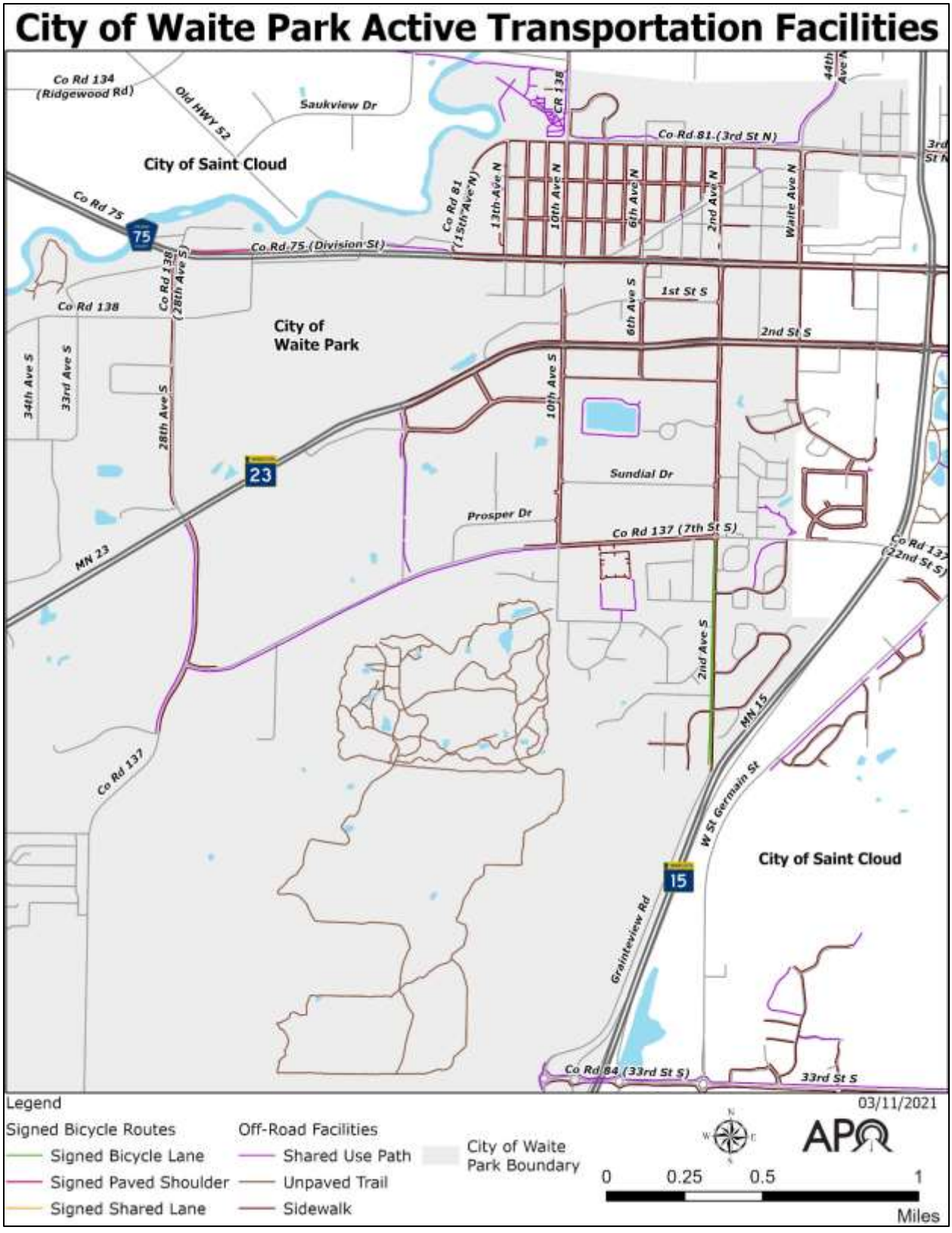


FIGURE D.4 – ON- AND OFF-ROAD ACTIVE TRANSPORTATION FACILITIES IN WAITE PARK BY TYPE AND LOCATION.

TRANSIT SERVICES AND INFRASTRUCTURE

As the urban public transit provider, Saint Cloud Metro Bus is responsible for the daily management, operation, and maintenance of Fixed Route (FR) and Dial-a-Ride (DAR) systems within Saint Cloud, Waite Park, Sartell, and Sauk Rapids.

FIXED ROUTE SERVICE

Metro Bus provides fixed route transit service to the City of Waite Park seven days a week through routes 1, 2, 3, and 5. Crossroads Center in Saint Cloud is a primary transfer site and connection point to other Metro Bus routes.

Routes 1 and 2 provide service to roughly the same area of north Waite Park; however, they operate from opposite directions. These are primarily east/west routes and include stops at McKinley School River's Edge Park.

Route 3 is a loop that circulates through much of the developed area of Waite Park. Route 3 connects southside neighborhoods to Waite Park's commercial district along with providing access to the Stearns County Service Center, Tri-CAP, and Quarry Park.

Route 5 provides access to the southern residential portion of the city and stops at destinations such as WACOSA, Goodwill, and Cash Wise Foods.

All fixed route transit stops on each Metro Bus route are signed. Many of these stops, particularly on the east side of Waite Park, include benches and shelters.

Figure D.5 shows how the Metro Bus routes are laid out and connected. Figure D.6 shows the location of transit stops and how close they are to active transportation infrastructure. While transit stops in Waite Park typically include sidewalk access, there are few bicycle facilities to continue trips from the bus stop to homes and various destinations.

FIGURE D.5. METRO BUS FIXED ROUTE SERVICE WITHIN THE CITY OF WAITE PARK.

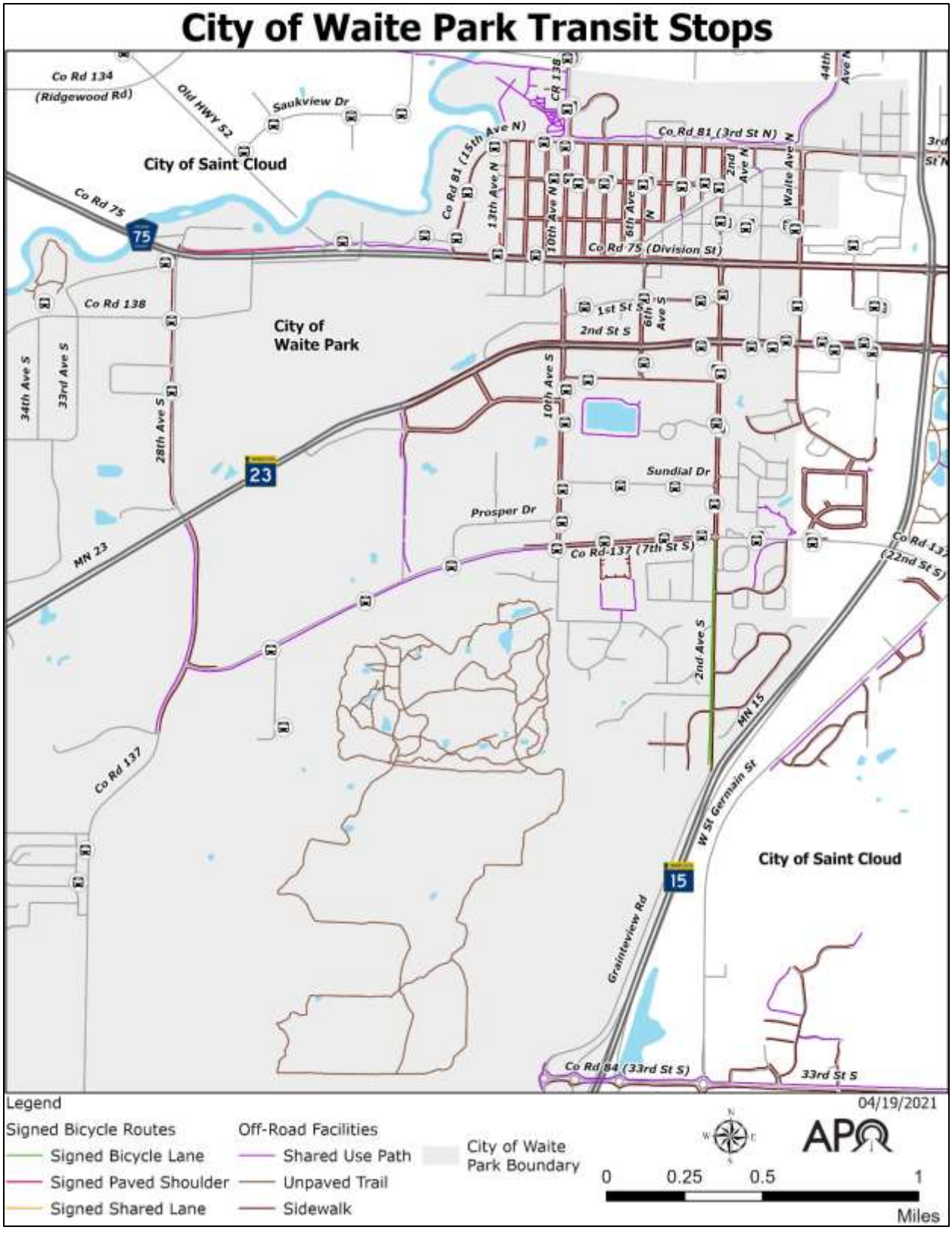


FIGURE D.6. TRANSIT STOPS IN RELATION TO THE ACTIVE TRANSPORTATION SYSTEM IN WAITE PARK.

OTHER TRANSIT SERVICES

Metro Bus also offers additional transit service for Waite Park residents. Dial-a-Ride (DAR) is an operator-assisted paratransit service provided for those unable to use fixed routes. The DAR service area has a three-quarter mile buffer around all four fixed bus routes.

CONDITION OF ACTIVE TRANSPORTATION INFRASTRUCTURE

If the existing active transportation infrastructure is in poor condition, it may cause safety issues, inconvenience for the user, or result in the underutilization of the facility. Keeping the system in good condition assures safety and a comfortable experience.

Data on the current pavement conditions for the on- and off-road active transportation facilities within the City of Waite Park was collected from areawide surveys performed for the APO as discussed in Chapter 2 of the ATP.

ON-ROAD FACILITIES

Pavement Condition and Striping

In 2019 GoodPointe Technology collected pavement and striping condition data for Second Avenue S, the only existing on-road facility in Waite Park.

Pavement condition was evaluated using a Digital Inspection Vehicle (DIV) – a specialized vehicle equipped with cameras and laser sensors to detect pavement distress and roughness. As shown in Figure D.7, the pavement on Second Avenue S was found to be in good to very good condition.

Striping conditions of on-road facilities were rated from a visual inspection. In contrast to the high marks for pavement quality, bike lane striping along Second Avenue S was noted as being in fair to poor condition. See Figure D.8 for a more detailed look.

OFF-ROAD FACILITIES

Condition of Off-Road Shared Use Paths

The Parks & Trails Council of Minnesota completed a pavement condition assessment of almost all shared uses paths within the APO in 2020. The Council used a specially equipped electronic bicycle with instruments aboard to record the "bumpiness" of the pavement throughout the MPA.

Approximately 20% of all shared use paths in Waite Park were rated as "rough" or "very rough" conditions. This includes the paths around Discovery Community School, those near several of the city's parks, and those within some neighborhood areas. About 19% of the pavement on the City's shared use paths was rated as "fair." Locations and their condition ratings are shown in Figure D.9.

FIGURE D.7 – 2019 ON-ROAD BIKE LANE PAVEMENT CONDITIONS IN WAITE PARK.

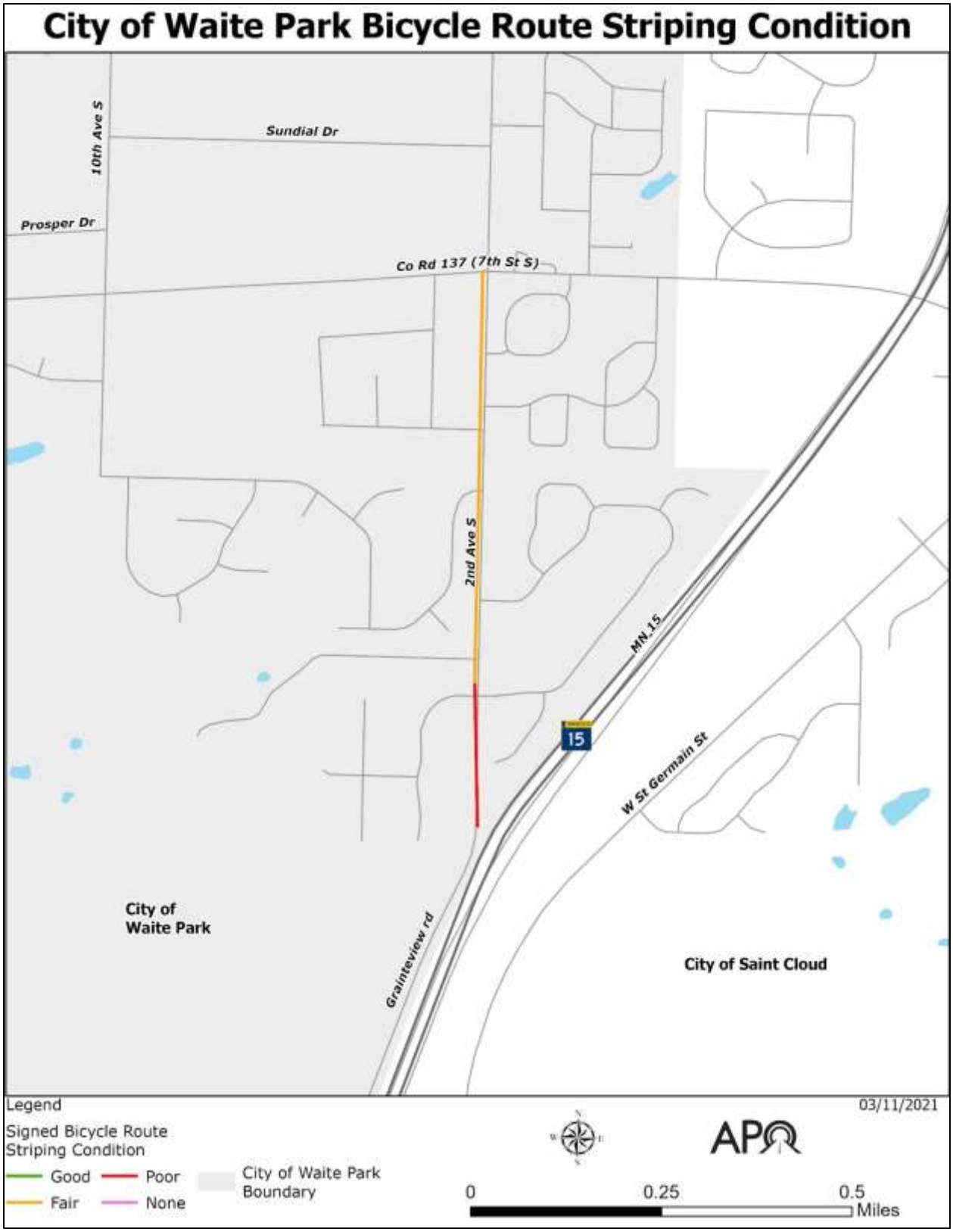


FIGURE D.8 – STRIPING CONDITION OF SIGNED BICYCLE ROUTES WITHIN WAITE PARK.

FIGURE D.9 – SHARED USE PATH PAVEMENT CONDITION BY LOCATION WITHIN THE CITY OF WAITE PARK.

WAITE PARK PLANS FOR ACTIVE TRANSPORTATION

The 2005 Comprehensive Plan (https://bit.ly/3qLLU7L) and the 2007 Transportation Plan (https://bit.ly/3ET4zDJ) for the City of Waite Park provide the current planning framework for transportation. These plans stress the importance of a usable and growing transportation network for the city, including trails and sidewalks.

Both plans emphasize sustaining a transportation system that appropriately balances access and mobility needs. In Waite Park, Division Street and Second Street S are heavily traveled commuting routes serving essential mobility needs while also providing access to Waite Park businesses and area residents. Ensuring pedestrian safety at busy intersection crossings from high volumes of vehicular traffic along these corridors is identified as a primary concern.

In addition to the two city specific plans, APO staff also reviewed the 2007 Feasibility Study for Stearns County Rails with Trails (https://bit.ly/3FXXLGa) document. This study outlined possible implications for Waite Park as the county seeks to expand the regional network.

2005 COMPREHENSIVE PLAN

The 2005 Comprehensive Plan represents Waite Park's goals and strategies for land use and orderly development. Implementation of these goals is a joint responsibility of members of the public, the City Council, its staff and advisory boards, and prospective developers. The Comprehensive Plan states that the APO, Stearns County, and MnDOT also have a role in the development and redevelopment of Waite Park.

Active Transportation Needs as Identified in Comprehensive Plan

While the Comprehensive Plan recognizes that Division Street (CSAH 75) serves a vital mobility need, steps are needed to minimize its impact as a fragmenting barrier within the community. Traffic congestion levels particularly on Division Street, 10th Avenue, and Second Street S (MN 23) are identified as pedestrian crossing safety issues.

Developing nonmotorized transportation alternatives to mitigate congestion was one of the many goals outlined in the city's comprehensive plan.

The plan goes on to state parks, trails, and other public facilities will be improved. This includes the development of trails and pathways to overcome highway barriers and connect neighborhoods, parks, and commercial areas throughout the city. Facilities used by bicycles and pedestrians are to be integrated into a system network that is usable and attractive.

The 2005 plan recommends greater system connectivity and a future grade-separated pedestrian crossing of CSAH 75. Given limited financial resources and other areas of need, a separated crossing is not considered a high priority by the city.

2007 TRANSPORTATION PLAN

Waite Park's 2007 Transportation Plan was developed to identify future transportation alternatives that would further serve the needs of Waite Park. The significance of MN 23 and CSAH 75 as high mobility corridors with growing impacts is noted. However, the focus is on developing the future roadway network, not on a plan to serve active transportation needs better. This plan was not intended to, nor does it present precise solutions that may alleviate traffic congestion or improve safety on existing arterials and collectors.

2007 STEARNS COUNTY RAILS WITH TRAILS FEASIBILITY STUDY

This study prepared for the Stearns County Parks Department in 2007 examined the feasibility of alignments through Waite Park to complete shared use path connections for the Lake Wobegon Trail and the ROCORI Trail. This study recommended the 2018 connection of the Lake Wobegon Trail from Saint Joseph to Waite Park. In addition, this study examined alternatives for connecting the ROCORI Trail through the City of Waite Park. A recommended alignment for the ROCORI Trail would follow County Road 138, 28th Avenue, and cross CSAH 75 to connect with the Lake Wobegon Trail at River's Edge Park. While the findings of the 2007 study are relevant, further analysis may be needed to determine if this alignment and crossing location remains the best alternative for a regional connection.

CITY ORDINANCES

Along with various citywide planning efforts, Waite Park City Code (https://bit.ly/3d9FWYH) has established several ordinances pertaining to the active transportation system and its users.

City Ordinance 58 outlines provisions for active transportation with new street construction or reconstruction. With the construction of streets, the subdivision code calls for a minimum of 6-foot sidewalks designed to city standards. The City Council takes its recommendations for platting and improvements to the transportation network from the Planning Commission (City Code 58.6). Typically, the city has asked for sidewalks or shared use paths on at least one side of collector and arterial routes in developing areas.

The occupants or owners of any building or lot have responsibility for maintaining abutting sidewalks. Sidewalks shall be kept clear of snow and ice, to be removed daily by noon. Failure to comply with snow and ice removal is considered a misdemeanor. (City Code 31).

The city's ordinance requires pedestrians to cross streets at signalized intersections where they are available. Vehicles are to yield to pedestrians at crosswalks, otherwise pedestrians shall yield the right-of-way to vehicles. (City Code 60.10).

By Minnesota law (Sec 169.222), bicyclists have the same rights and responsibilities as the drivers of motor vehicles, and therefore have the right to use any public roadway but must also obey all traffic laws.

SYSTEM USAGE

Understanding bicycling and walking behavior complement information on the available active transportation network within the City of Waite Park. It is essential to know how many people use the system, where they need and/or desire to go, and how well current facilities address those needs.

BICYCLE AND PEDESTRIAN COUNTS

APO staff regularly place a MnDOT-owned portable bicycle and pedestrian counter along shared use path locations throughout the MPA, including three spots within the City of Waite Park.

The MnDOT counter uses two different types of counters simultaneously. The Pneumatic TUBE counter uses two sets of tubes placed perpendicular to traffic. When a cyclist passes

over the tubes, this counter can record that cyclist and determine which direction that person was heading. Meanwhile, the PYRO-Box utilizes infrared technology to measure people's body heat who pass in front of its sensor. This counter, much like the TUBE counter, can identify travel directions. When used in conjunction with the TUBE counter, APO staff can calculate pedestrian traffic from the PYRO-Box by subtracting the bicyclists from the total count.

With these portable counters, APO staff monitors usage of shared use paths for one week intervals at specified locations:

1. The Lake Wobegon Trailhead at the Sauk River in River's Edge Park.
2. Healthy Living Trail north of Third Street N near Sixth Avenue N.
3. County Road 137 at 28th Avenue S.

All three of these locations are ideally counted each summer. However, the portable counters are owned by MnDOT. As a result, various agencies and jurisdictions can (and have) utilized the counters throughout the year, impacting the consistency in obtaining data. As a result, two of the three locations (as shown in Figure D.11) were counted in 2020.

Location	Dates Counted (2019)	Weekday Average Bike	Weekday Average Pedestrian	Weekend Average Bike	Weekend Average Pedestrian
Lake Wobegon Trail Head	05/13 – 05/19	2	149	2	14
Healthy Living Trail	05/20 – 05/26	5	41	3	87
County Road 137	06/17 – 06/23	2	57	1	33

FIGURE D.10 – 2019 BICYCLE AND PEDESTRIAN COUNTS FROM THE THREE WAITE PARK LOCATIONS.

Location	Dates Counted (2020)	Weekday Average Bike	Weekday Average Pedestrian	Weekend Average Bike	Weekend Average Pedestrian
Healthy Living Trail	07/15 – 07/21	7	119	4	137
County Road 137	06/24 – 06/30	1	88	1	140

FIGURE D.11 – 2020 BICYCLE AND PEDESTRIAN COUNTS FROM TWO OF THE THREE WAITE PARK LOCATIONS.

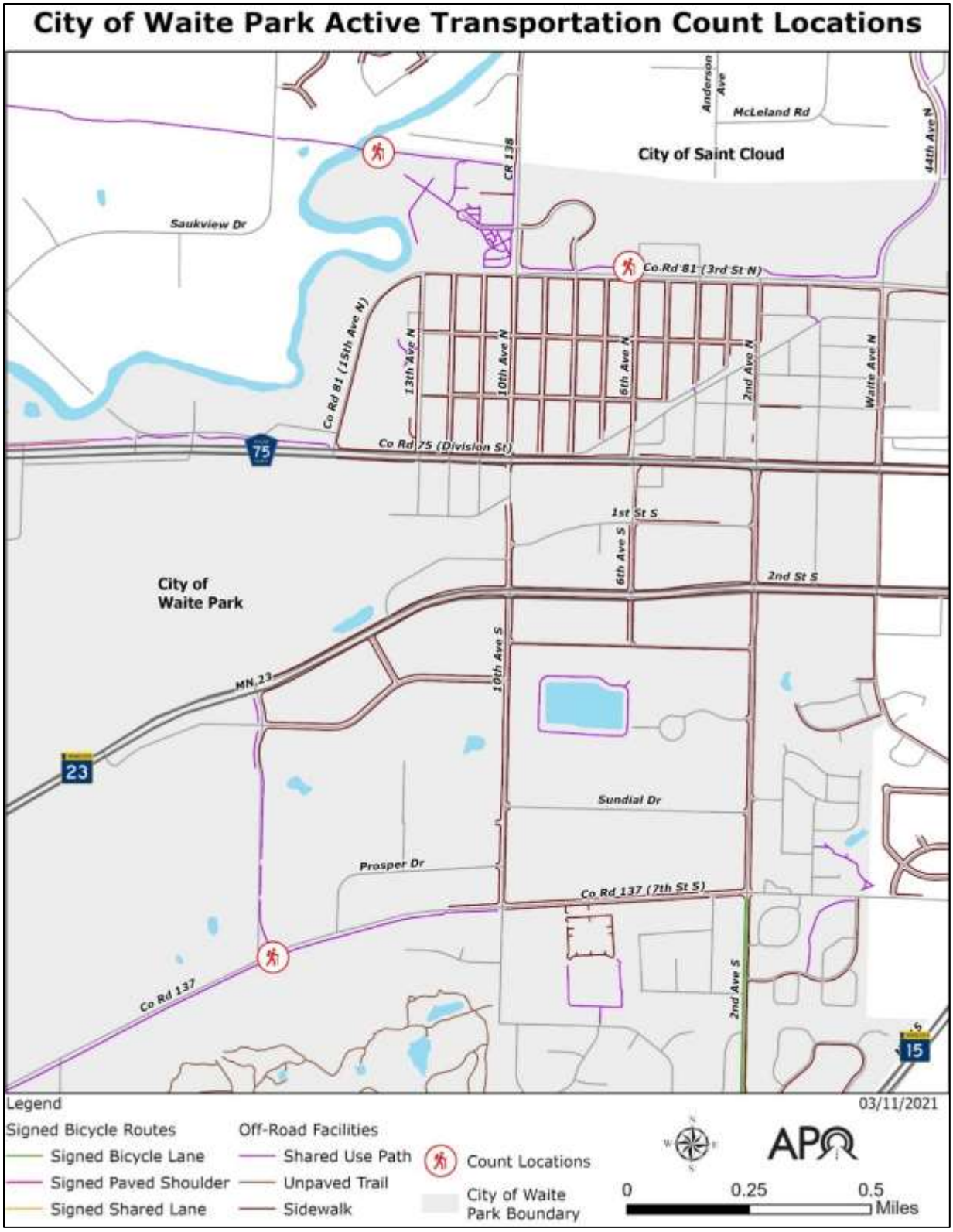


FIGURE D.12 – LOCATION WHERE THE APO REGULARLY DEPLOYS AUTOMATIC BICYCLE/PEDESTRIAN COUNTERS IN WAITE PARK.

The APO's counts indicate that shared use paths receive much usage, particularly from pedestrians. The counter on the Lake Wobegon Trail recorded the highest number of users in 2019, averaging over 110 pedestrians per day in the summer months.

Figure D.13 shows the most recent one-week winter seasonal counts on the Lake Wobegon Trail at River's Edge Park for pedestrians and bicycles. As the graph shows, the number of people using this facility in the winter can be correlated to outside temperatures.

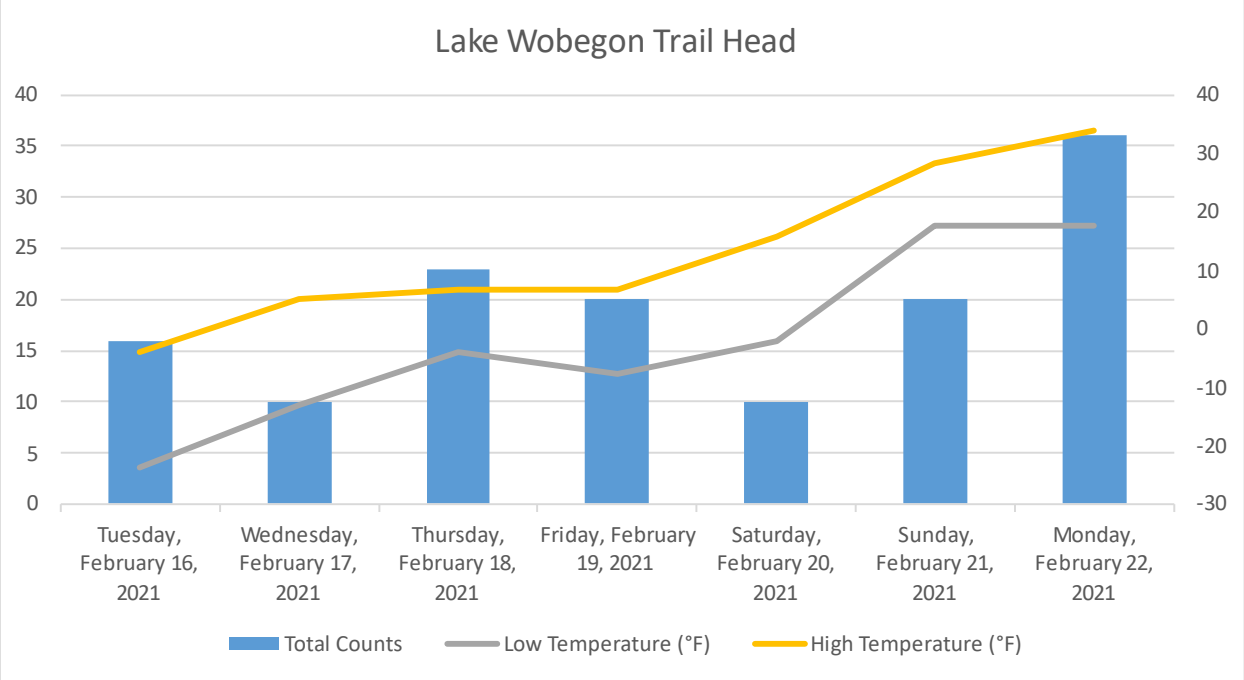


FIGURE D.13 – 2021 WINTER COUNTS AT THE LAKE WOBEGON TRAIL IN COMPARISON TO DAILY HIGH AND LOW TEMPERATURES.

DESTINATIONS

Common destinations for active transportation users include schools, food assets, employers, and parks. These destinations are shown in Figure D.14. Food assets are grocery stores/supermarkets, specialty food stores, meat markets, convenience stores, and non-profit community food services. Employers listed have 100 or more full- and/or part-time employees.

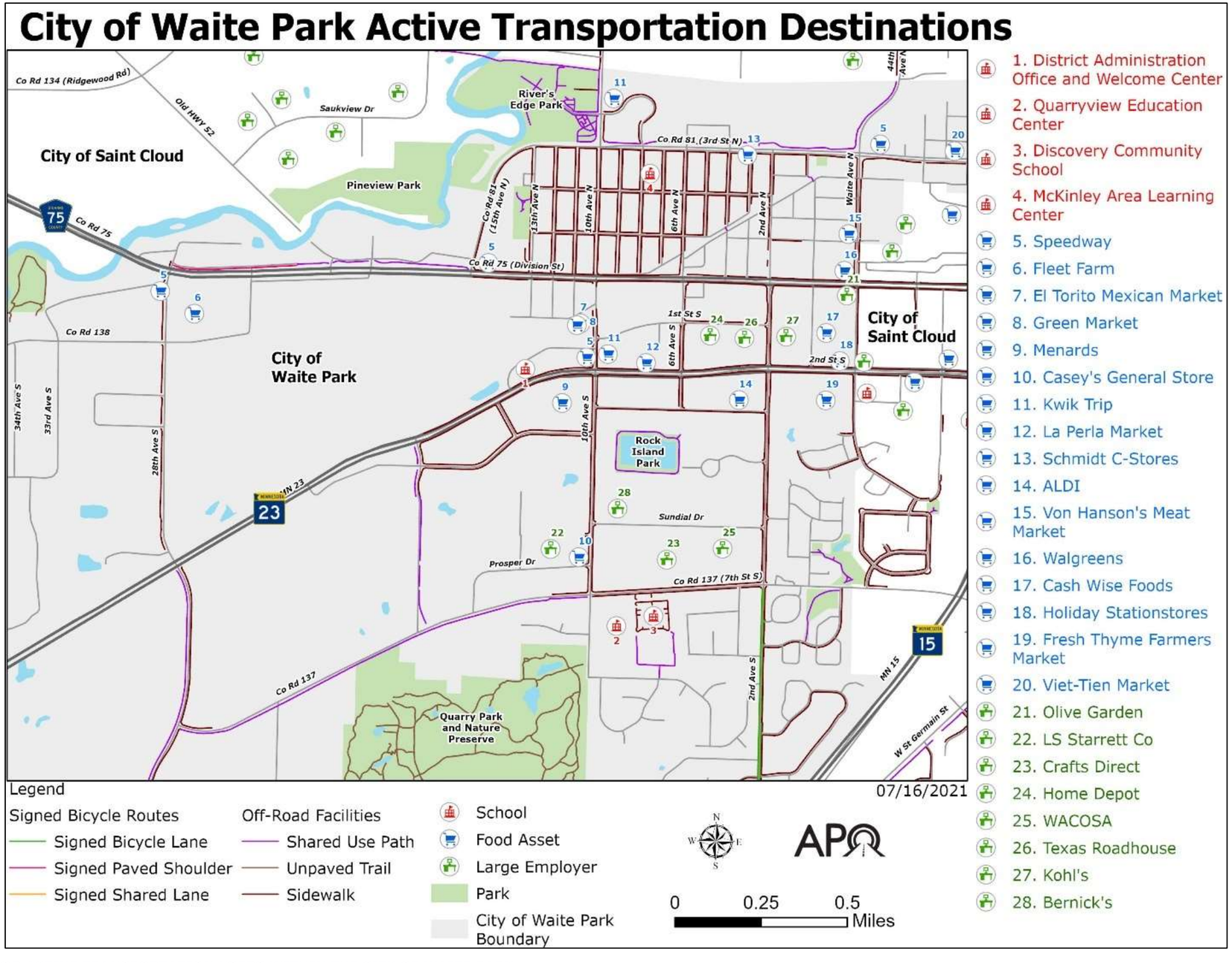


FIGURE D.14 – DESTINATIONS FOR ACTIVE TRANSPORTATION USERS WITHIN THE CITY OF WAITE PARK.

Schools

Included among Waite Park's largest employers, the St. Cloud Area School District 742 operates three public school facilities within Waite Park. Discovery Community School and Quarryview Education Center are located adjacent one another. Also within the Waite Park City limits is the main district office.

Name	Address	Grades Served	Approximate Number of Students Served
Discovery Community School	700 Seventh St. S	PK-5	524
Quarryview Education Center	800 Seventh St. S	Early Childhood/ Community Education	2,900
McKinley Alternative Learning Center	216 Eighth Ave. N	9-12	1,250

FIGURE D.15 – PUBLIC SCHOOLS LOCATED WITHIN THE CITY OF WAITE PARK.

According to city staff, residents of Waite Park have cited safety concerns with street crossings and traffic speeds in the Seventh Street S area near Discovery School and the Third Street N area near McKinley ALC. While a mix of sidewalks and shared use paths has expanded over time to improve access and safety for students who bike or walk to each school, gaps remain in some areas.

Food Assets

As shown in Figure D.14, grocery stores and other food providers, are prevalent through the CSAH 75 and MN 23 commercial district. Large market centers such as Cash Wise and ALDI's are among these food assets as are many specialty markets and convenience stores.

Waite Park's food assets are often along an active transportation facility, typically a sidewalk. However, pedestrians and cyclists often need to cross roadways with many fast-moving cars to get to these destinations.

Large Employers

Among the City's largest employers are the public schools and larger food stores such as Cash Wise. In addition, large employment centers include retail outlets along the Second Street S corridor, such as Kohl's, Home Depot, and Menards. Several large employers (Crafts Direct, the LS Starrett Co., and WACOSA) are in the commercial area around Sundial Drive.

Most of the City's large employers are located on or near Metro Bus fixed routes with access to nearby sidewalks or shared use paths.

Parks

The City of Waite has approximately 767 acres of parkland. Much of this acreage is found within Stearns County's Quarry Park and Nature Preserve. The city maintains Rivers Edge Park and several small neighborhood parks scattered throughout.

The larger parks within Waite Park generally have access to nearby sidewalks or shared use paths. Quarry Park receives much usage from pedestrians and bicyclists with its extensive network of natural surface trails. As a result, residential areas near these larger parks are more likely to have active transportation facilities.

The city's smaller neighborhood parks have a varying degree of sidewalk access.

SAFETY

According to the Minnesota Department of Public Safety (DPS), fatalities, serious injuries, and minor injuries involving bicyclists and pedestrians are rising within the Saint Cloud MPA.

Specifically, within the City of Waite Park, DPS crash data shows 34 crashes involving active transportation users and vehicles have occurred in the 10 years between 2010 and 2019. See Figure D.16 for locations and severity.

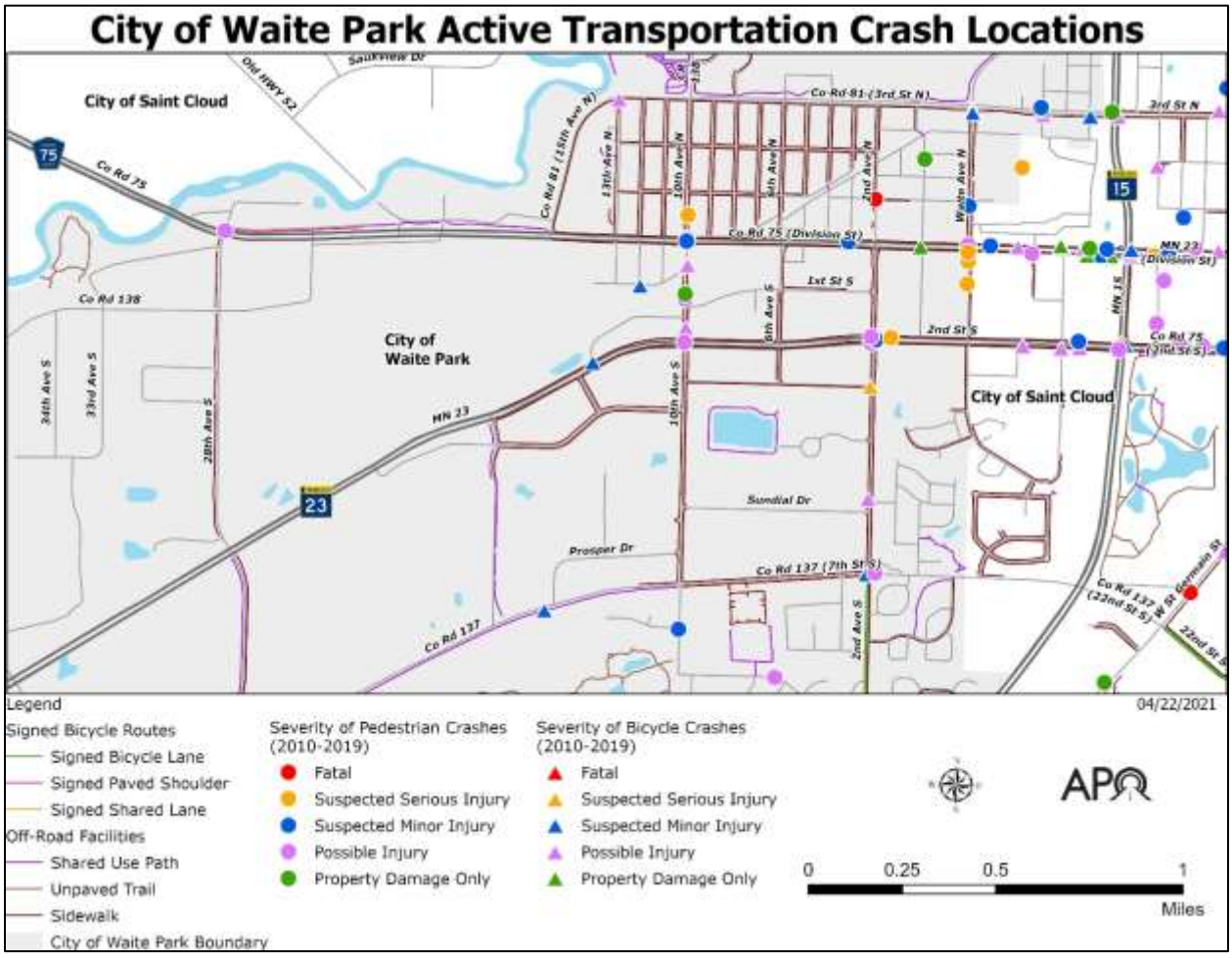


FIGURE D.16 - LOCATIONS WITH CRASHES INVOLVING BICYCLES AND PEDESTRIANS WITHIN THE CITY OF WAITE PARK (2010-2019).

High concentrations of crashes are found along Division Street and Second Street S. In addition, collector routes such as 10th Avenue S and Waite Avenue N have also experienced a number of crashes. While most resulted in minor injuries, it is essential to note that during this time frame, there was a pedestrian fatality on Second Avenue N and three crashes with

serious injuries to pedestrians on Waite Avenue S between Division Street and Second Street S.

Crash history was reviewed to determine locations where crashes appear to be more likely to occur and whether there may be an engineering solution or partial solution to help mitigate the crashes.

Crash reports indicate that the driver did not see the pedestrian or cyclist of the vehicle in many cases. In many of these crashes, the active transportation user was not using a crosswalk. It is unclear from the DPS crash reports whether physical conditions at the crash locations were a contributing factor or if physical changes to the facilities may help mitigate future crashes.

PROGRAMMED AND PLANNED IMPROVEMENTS

The City of Waite Park maintains a Capital Improvement Program (CIP), identifying short-term projects and long-range concepts designed to improve active transportation facilities. The CIP also indicates anticipated future revenues that may be available to implement such projects.

One such project identified in the city's CIP is the construction of a shared use path that extends west from Rivers Edge Park to the frontage road on Division Street.

Among long-term planning considerations for the city's active transportation network is a connection to the ROCORI Trail with a crossing of CSAH 75. Such a crossing was the recommendation of a study prepared for the APO. While the City and the County have not yet identified a preferred alignment, the shared use path west of Rivers Edge Park in the City's CIP may be part of this envisioned regional facility.

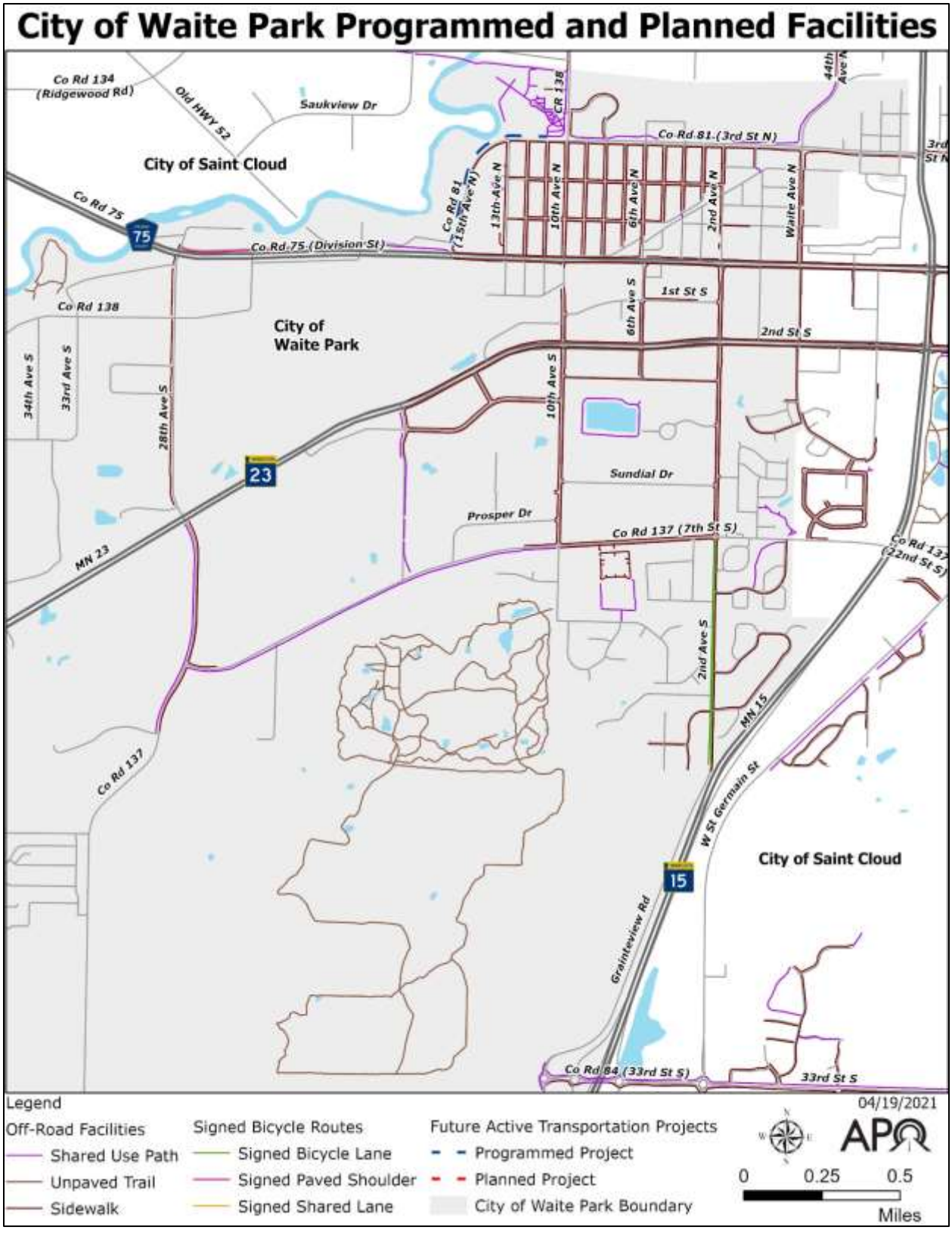


FIGURE D.17 – EXISTING NETWORK WITH PROGRAMMED AND PLANNED FACILITIES WITHIN THE CITY OF WAITE PARK.

ACTIVE TRANSPORTATION NEEDS ASSESSMENT

APO staff performed a citywide analysis of facility and other needs for active transportation users to supplement and inform current city planning efforts. The intent of this assessment, conducted in coordination with city staff and representatives, was to identify active transportation needs within the city and assist in prioritizing those needs in the event funding becomes available.

GOALS AND OBJECTIVES FOR ACTIVE TRANSPORTATION

The regional goals and objectives for active transportation as adopted by the APO provide a starting point for the Waite Park needs assessment.

Those goals were:

1. Improve bicycle and pedestrian safety and comfort.
2. Improve active transportation connections to desired destinations.
3. Improve the condition of active transportation infrastructure.
4. Provide equitable access to active transportation facilities for all people of all abilities.
5. Promote an interconnected regional active transportation network.

The evaluation factors were equally applied for assessing needs within each city and across the MPA. The goals, objectives, and factors used to evaluate services and needs relative to each objective are detailed in Chapter 4. Performance ratings from the evaluation of factors for Waite Park are shown in Figure D.18.

NEEDS ASSESSMENT METHODOLOGY

From the goals and objectives framework, APO staff, in coordination with Waite Park city staff and community volunteers, developed the following methodology to address critical gaps in the current active transportation system. It should be noted that while this process does not account for every gap or need in the network, it does focus on addressing gaps utilizing existing data as it relates to the region's active transportation goals and objectives.

The APO's active transportation needs assessment methodology was broken into three phases. Beginning with an in-depth analysis of transportation networks, APO staff identified issues and needs within individual communities across the region. This cursory review led to a more detailed analysis of active transportation needs for focus areas identified within each city and ultimately the identification of jurisdictional-level project recommendations – Phase 2. In the final phase, local and regional needs identified in the previous phases were prioritized according to the degree goals and objectives would be addressed.

Waite Park			2019
Number of Non-Motorized Fatalities and Suspected Serious Injuries Five Year Rolling Average			*0.6*
Percentage miles of arterials & collectors that have a sidewalk or shared use path (SUP) on at least one side			*48.6%*
Percent of destinations that fall within distance categories	Schools	0 Ft (Asset Served by AT Facility)	*100.0%*
		1-310 ft (One block or less)	*0.0%*
		311-930 ft (Two to three blocks)	*0.0%*
		> 931 ft (Four or more blocks)	*0.0%*
	Food Assets	0 Ft (Asset Served by AT Facility)	*88.9%*
		1-310 ft (One block or less)	*80.0%*
		311-930 ft (Two to three blocks)	*15.0%*
		> 931 ft (Four or more blocks)	*5.0%*
	Large Employers	0 Ft (Asset Served by AT Facility)	*62.5%*
		1-310 ft (One block or less)	*0.0%*
		311-930 ft (Two to three blocks)	*25.0%*
		> 931 ft (Four or more blocks)	*12.5%*
	Parks	0 Ft (Asset Served by AT Facility)	*60.0%*
		1-310 ft (One block or less)	*0.0%*
		311-930 ft (Two to three blocks)	*0.0%*
		> 931 ft (Four or more blocks)	*40.0%*
	Transit Stops	0 Ft (Asset Served by AT Facility)	*69.7%*
		1-310 ft (One block or less)	*12.1%*
		311-930 ft (Two to three blocks)	*10.6%*
		> 931 ft (Four or more blocks)	*7.6%*
Percent of street crossings that do not meet full ADA standards			*86.7%*
Miles of Active Transportation facilities per 1,000 residents in EJ/Title VI Sensitive Areas in comparison to non-sensitive areas			*5.2:8.5*
Percent mileage of Regional Priority bicycle facilities that do NOT exist			*73.3%*
Percent of on-road bicycle facilities with poor pavement			*0.0%*
Percent of SUP with rough/very rough pavement			*19.4%*

FIGURE D.18 – WAITE PARK PERFORMANCE REPORT CARD (2019).

Phase 1: Evaluating Needs for the City of Waite Park

Analysis of Areas of Need - Waite Park

	Safety & Comfort Factors						Connectivity Factors			Facility Condition			Equity Factors			Issues	Potential Treatments
		1 High Number of Fatalities	2 High Number of Injuries	3 Under Design Guidelines	4 No Adjacent P/B Facilities	5 Cited as Safety Concern		1 Access to Destinations	2 Access to Transit Needs		1 On Road Conditions	2 Off Road Conditions		1 Underserved Demographic	2 ADA Compliance		
10th Ave S/CR 138 (Division to 2nd St S)			x			x		x						x		High volume minor arterial corridor, concentration of crashes, crossing safety concerns, destinations (employers, food assets), vulnerable populations.	Pedestrian and bicycle crossing improvements, facility design options, add facilities, traffic calming.
Waite Ave (3rd St N to 2nd St S)			x			x		x						x		High usage, concentration of crashes, crossing safety concerns, destinations (employers, food assets), vulnerable populations.	Pedestrian and bicycle crossing improvements, facility design options, add facilities, traffic calming.
Division/CSAH 75 (Waite Ave to 10th Ave)			x			x		x						x	x	High volume arterial, concentration of crashes, crossing safety concerns, multiple destinations, vulnerable populations, ADA intersection standards.	Pedestrian and bicycle crossing improvements, traffic calming, bring intersections to ADA standards.
2nd St S/MN 23 (Waite Ave to 10th Ave)			x			x		x			x			x		Area with concentration of crashes, destinations (employers, food assets), crossing concerns, multifamily housing, vulnerable populationss.	Pedestrian and bicycle crossing improvements, facility design options, improved access to large employers, multifamily development.
3rd St N/CR 81 (East limits to Waite Ave N)			x			x		x						x		High concentration of crashes, crossing safety concerns, destinations (school, food assets), vulnerable populations.	Pedestrian and bicycle crossing improvements, facility design options, added facilities, traffic calming.
7th St S/CR 137 (2nd Ave S to 10th Ave S)						x		x			x					Speeds, crossing safety, destinations (school, employers, park), shared use path pavement conditions.	Pedestrian and bicycle crossing improvements, facility design, improved access to schools, large employers.
2nd Ave S (2nd St N to 7th St S)			x			x		x						x		Area with concentration of crashes, destinations (employers, food assets), crossing safety, multifamily housing, vulnerable populations.	Pedestrian and bicycle crossing improvements, facility design options, improved access to homes and destinations.

FIGURE D.19 – WAITE PARK NEEDS ANALYSIS.

Considered along with the factors were the comments from the APO's initial public input along with comments from city staff. Areas where multiple issues were revealed when the factors were applied became the focus of further review and analysis.

Phase 2: Analysis of Waite Park Focus Areas

From the process described for the review of needs and gaps for the City of Waite Park, the following areas were identified as priority areas for improvement.

- 10th Avenue S area.
- Waite Avenue area.
- Second Avenue S area.

These three focus areas all have very similar characteristics. All are high volume minor arterials or collectors which active transportation users often cross to reach their destinations. In addition, these focus areas intersect with at least one of the two arterials within Waite Park – Division Street/CSAH 75 and Second Street S/MN 23.

Being able to assure that pedestrians and bicyclists can safely cross CSAH 75, MN 23, and other heavily used routes in Waite Park has been identified in the City's plans and regional transportation studies as an ongoing challenge. Given the growing vehicle traffic in Waite Park, these safety issues have increased significantly. The history of crashes with the potential for more dangerous conflicts between vehicle and active transportation users, coupled with the need to improve access, led to identifying these focus areas.

These three focus areas have many destinations for active transportation users. While there is often a connecting facility network within these areas to get to these destinations, their ability to cross heavily used roads are the prevailing concern safely.

APO staff working in conjunction with city staff for each focus area further analyzed needs and issues and worked to identify possible solutions.

However, due to the unique challenges facing Waite Park, APO staff sought assistance from the Minnesota Department of Transportation's (MnDOT's) Bicycle and Pedestrian Safety Engineer. Based on current facilities and conditions, vehicle traffic speeds and volumes, destinations served, and other factors, MnDOT staff and their consultants offered their analysis relative to Federal Highway Administration (FHWA) and MnDOT guidelines.

Many of the suggested recommendations for these three focus areas were taken from the MnDOT analysis found at the end of this profile.

10th Avenue S Area

This focus area, as shown in Figure D.20, follows 10th Avenue S from Division Street to Seventh Street S (CR 137). Key cross street intersections within this area include Division Street, Second Street S, Sundial Drive, and Seventh Street S.

This area was chosen due to a high level of activity from all transportation modes, the history of crashes, and the number of destinations often sought by bicyclists and pedestrians.

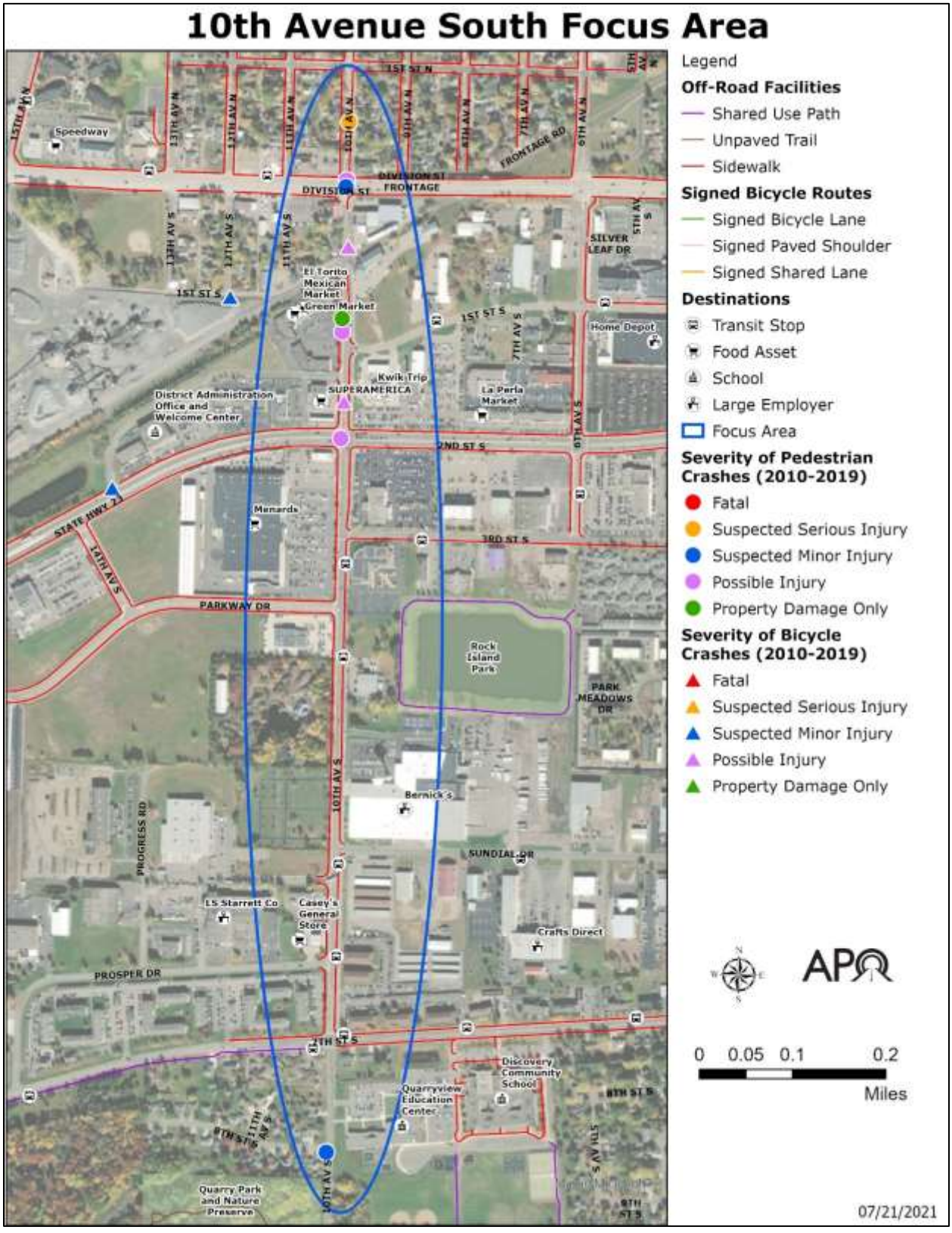


FIGURE D.20 – CITY OF WAITE PARK'S 10TH AVENUE S AREA OF FOCUS.

NEEDS AND ISSUES

The 10th Avenue S area has many destinations for active transportation users including many food assets along with Menards (retail) and Bernick's (warehouse). The main concern for this corridor is the high volume of traffic and the safety of active transportation users who travel along or across 10th Avenue S to reach these destinations.

Approximately 14,000 vehicles per day travel on 10th Avenue S between Division Street and Second Street S. The average daily volume drops to 5,700 vehicles south of Second Street S. The posted speed on 10th Avenue S north of Second Street S is 30 mph, increasing to 40 mph south of this roadway. About 10,000 vehicles per day utilize the cross streets (Division Street and Second Street S) with a large number of vehicles turning onto or off of 10th Avenue S.

Within the few blocks that separate Division Street and Second Street S, seven crashes have involved pedestrians and bicyclists between 2010 and 2019. A review of the crash reports for crashes within the focus area indicates that vehicle drivers often do not see pedestrians. Whether crashes are due to inattention or a facility flaw is difficult to determine, though the number of crashes suggests improvements are needed.

There are many Metro Bus transit stops between Second Street S and Seventh Street S. However, there are a limited number of crosswalks along the 10th Avenue S corridor. The only crossings with pedestrian-activated signals are at the Division Street and Second Street S intersections. Those who utilize transit services at these locations will often be crossing 10th Avenue in an area where there may be heavy vehicle traffic with no crosswalks.

While sidewalks are in place along most of 10th Avenue S, they are not designed or intended for use by bicyclists. There are gaps in the sidewalks north of the railroad tracks (10th Avenue N).

RECOMMENDATIONS

- In the near term, consider reconfiguring the four lanes on 10th Avenue S along the segment south of Second Street S to three lanes and add bicycle lanes with restriping. This could be incorporated with a mill and overlay or safety project. Bicycle lanes act as a buffer and improve comfort for pedestrians walking adjacent to higher-speed traffic.
- Consider filling the sidewalk gaps on 10th Avenue S between Division and Second Street S. Jog the sidewalk, so the new crossing is perpendicular to the railroad tracks.
- With street reconstruction, consider a three lane section with a 10-foot shared use path and buffer area with plantings, street lighting, or signage. With the three lane section, consider adding crosswalks with median pedestrian refuge islands at T-intersections.
- If the configuration on 10th Avenue is to remain a four lane, implement crossing devices that assist pedestrians by increasing driver awareness, such as Rectangular Regular Flashing Beacons (RRFBs) or Pedestrian Hybrid Beacons (PHBs).
- Consider adding a leading pedestrian interval (LPI) at signalized intersections to improve visibility and increase crossing time.

Waite Avenue Area

The Waite Avenue focus area (as found in Figure D.21) starts from the intersection with Third Street N and ends just south of Second Street S near Thielman Lane. Within this corridor are intersections with roadways garnering heavy vehicle traffic – Third Street N, Division Street, and Second Street S. In addition, entrances to major trip generators like Crossroads Center, Cash Wise, and Marketplace Shopping Center are located along this corridor.

This area was chosen due to the high level of vehicle traffic, the history of crashes, crossing safety, and the number of desired destinations.

NEEDS AND ISSUES

Waite Avenue experiences a high traffic volumes which poses safety risks to those who need to cross Waite Avenue and its cross streets to reach their destinations. The average daily traffic on Waite Avenue ranges from 7,700 to 8,400 vehicles. Vehicle traffic volumes approaching Waite Avenue from the east on Division and Second Street S average 14,000-15,000 per day. The volume of vehicle turning movements at each intersection is also very high.

There have been nine crashes along Waite Avenue involving pedestrians and bicyclists between 2010 and 2019. Three of these serious injury crashes occurred in just the one block between Division Street and Second Street S.

There are sidewalks along at least one side of Waite Avenue, but they are not designed to be shared with bicycles. Only a limited number of locations provide crosswalks for active transportation users. The only signal-controlled intersections are at Third Street N, Division Street, and Second Street S.

RECOMMENDATIONS

- Pedestrian safety would be improved on the north end of Waite Avenue with an additional crosswalk either at First Street N or Second Street N. Ideally, a crosswalk would be more beneficial at Second Street N due to the existing traffic signal and ADA curb cuts in place. However, First Street N could be considered due to existing transit stops.
- Consider reconfiguring the four lanes on Waite Avenue south of Second Street S to three lanes and add bicycle lanes with restriping. This could be incorporated with a mill and overlay or safety project. Bicycle lanes act as a buffer and improve comfort for pedestrians walking adjacent to higher-speed traffic.
- Consider completing sidewalks on both sides of Waite Avenue.
- With street reconstruction, consider a three lane section with a 10-foot shared use path and buffer area with plantings, street lighting, or signage.
- If the configuration remains a four lane, implement crossing devices that assist pedestrians by increasing driver awareness, such as Rectangular Regular Flashing Beacons (RRFBs) or Pedestrian Hybrid Beacons (PHBs).
- Consider adding a leading pedestrian interval (LPI) to improve visibility and increase crossing time at the signalized intersections.

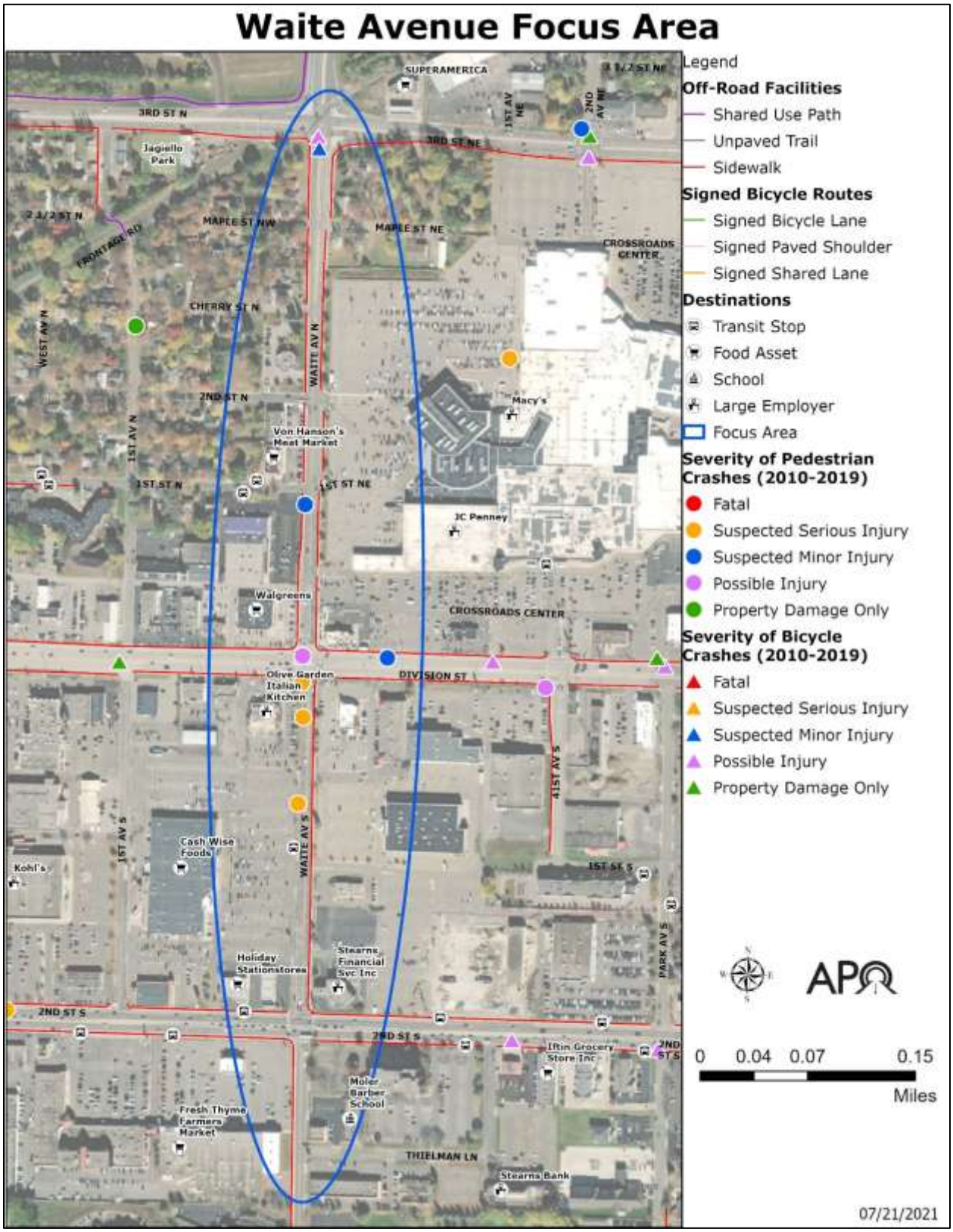


FIGURE D.21 – WAITE AVENUE AREA OF FOCUS IN THE CITY OF WAITE PARK.

Second Avenue S Area

The Second Avenue S focus area (see Figure D.22) spans the roadway from its intersection with First Street S to the intersection with Aspen Circle. Major cross streets along this corridor include Second Street S, Third Street S, Park Meadows Drive, Sundial Drive, and Seventh Street S.

Given the crash history and traffic volume on Second Avenue S, there is a concern for pedestrian and bicycle safety. This area was also chosen due to its larger residential area and proximity to many large employers.

NEEDS AND ISSUES

Roadway traffic volumes along Second Avenue S are highest near the intersection with Second Street S, averaging 9,500 vehicles per day. Vehicle traffic volumes diminish further south along Second Avenue S, averaging 6,400 vehicles per day. However, while traffic volumes are less along the southern section of this corridor, there are a large number of vehicles turning off at the Second Street S/Second Avenue S intersection to access various retail stores.

Several Metro Bus stops span this corridor. However, many who use the bus at these locations lack facilities and safe crossings. There are signed bicycle lanes south of Seventh Street S but only sidewalks to the north of Seventh Street S. Except for Third Street S, there are no active transportation facilities connecting streets along Second Avenue S. There are also a limited number of crosswalks with only the intersection at Second Street S providing a signal-controlled crossing.

Coupled with the high vehicle traffic, the Second Avenue S corridor – particularly south of Third Street S – is highly residential. Several apartment complexes can be found along this stretch of roadway. In addition, many of these residential areas have been identified by ACS data as having sizeable low-income household populations. Concerns have been raised about the safety of individuals living in the area crossing Second Avenue S or accessing some of the busier cross streets.

Safety issues along Second Avenue S have been documented through the history of active transportation related crashes. Between 2010 and 2019 three serious injury crashes have occurred at the intersection of Second Avenue S/Second Street S. During this time frame a cyclist was killed at the intersection of Second Avenue S/Third Street S.

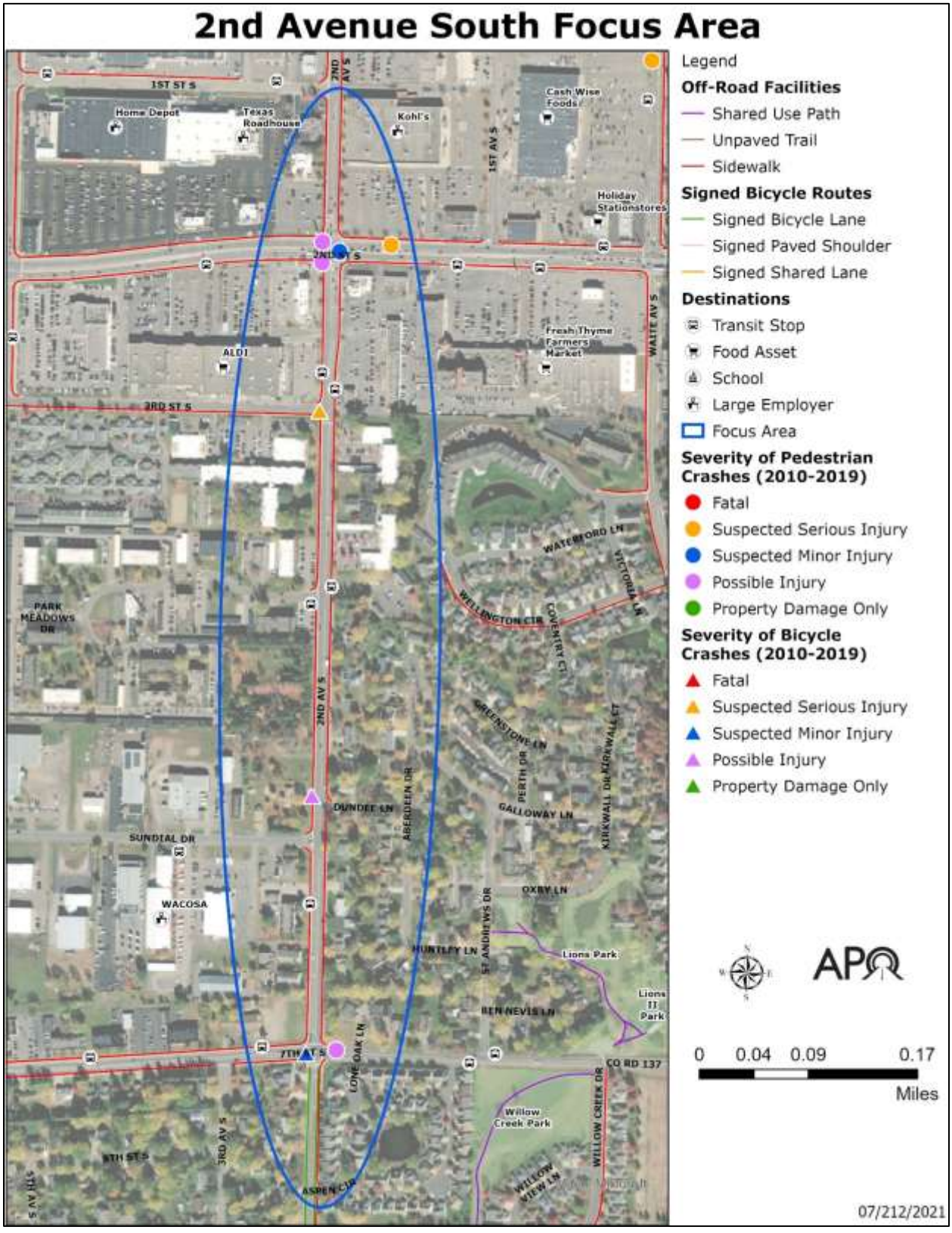


FIGURE D.22 – SECOND AVENUE SOUTH AREA OF FOCUS IN WAITE PARK.

RECOMMENDATIONS

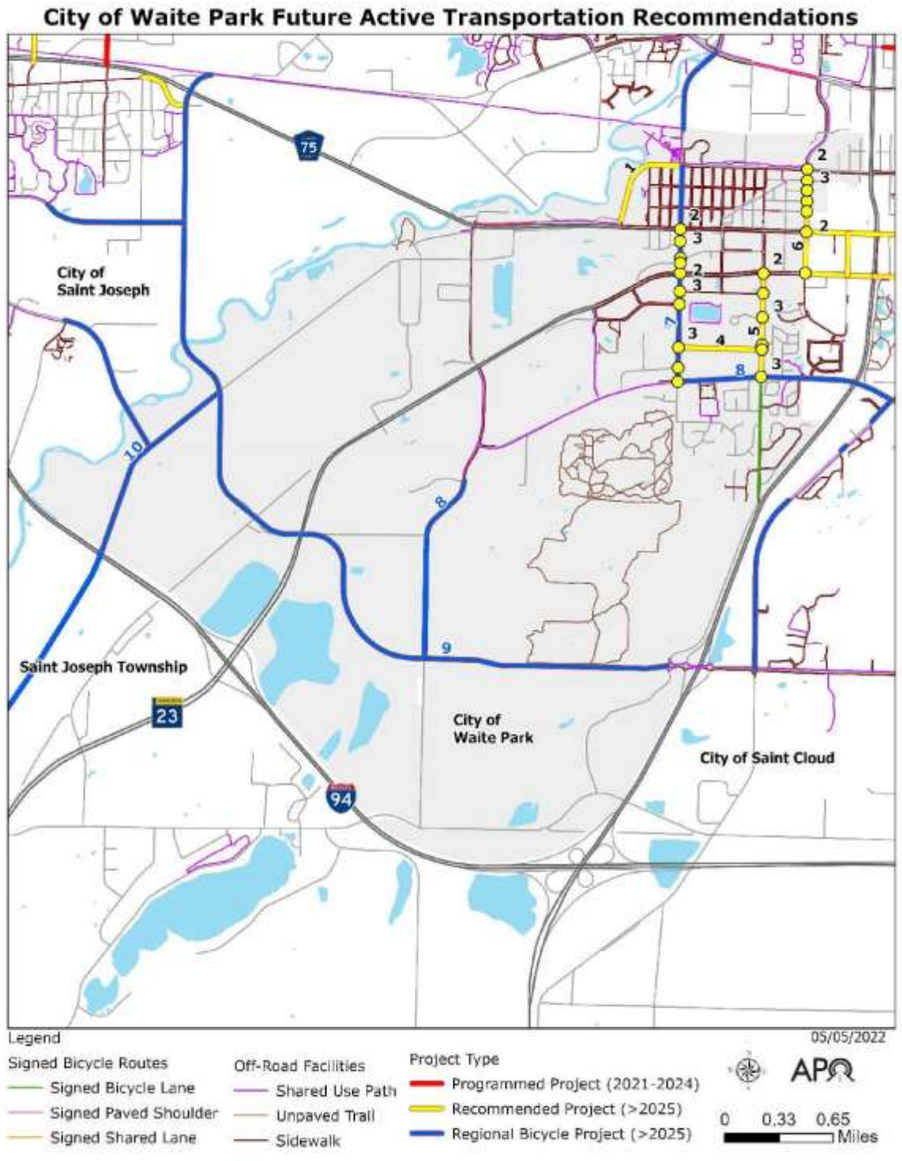
- Adding a sidewalk connection on the south side of Sundial Drive from 10th Avenue S to Second Avenue S would serve transit stops and provide needed pedestrian access to large employers and other businesses.
- Consider reconfiguring the four lanes on Second Avenue S to three lanes and add bicycle lanes with restriping. This could be incorporated with a mill and overlay or safety project. Bicycle lanes act as a buffer and improve comfort for pedestrians walking adjacent to higher-speed traffic.
- With street reconstruction, consider a three lane section with a 10-foot shared use path and buffer area with plantings, street lighting, or signage.
- If the configuration remains a four lane, implement crossing devices that assist pedestrians by increasing driver awareness, such as Rectangular Regular Flashing Beacons (RRFBs) or Pedestrian Hybrid Beacons (PHBs).
- At the signalized intersections on Second Street S, consider adding a leading pedestrian interval (LPI) to improve visibility and increase crossing time.

Phase 3: Evaluating Needs for the Region

The final phase of the needs analysis was to identify improvements to the regional facility network within the City of Waite Park. These projects would assist in achieving an interconnected active transportation network that satisfies regional needs.

Regional bicycle facilities will logically connect cities and other parts of the planning area outside Waite Park and include potential links to areas outside the planning region. Projects that connect the area regionally will provide an approximate spacing of two miles between facilities. In structuring a regional system, the preference is to complete gaps with shared use paths over on-road facilities.

Recommended regional facilities to extend the existing system within Waite Park include a future shared use path connection to the ROCORI and Glacier Lakes Trail that aligns with Seventh Street S (County Road 137). This path is proposed to continue north along 10th Avenue to connect with the Lake Wobegon Trail with the reconstruction and widening of 10th Avenue. The future regional bikeway network would also include the proposed alignment for the Southwest Beltway.



Map Number and Project Description	
1	Construct a shared use path along 15th Avenue N (Stearns CSAH 81).
2	At signalized intersections along 10th Avenue South, 2nd Street South, and Waite Avenue consider adding a leading pedestrian interval (LPI) to improve visibility and increase crossing time when appropriate.
3	Install Rectangular Regular Flashing Beacons (RRFBs) or Pedestrian Hybrid Beacons (PHBs) along 10th Avenue South, 2nd Avenue South, and Waite Avenue where appropriate.
4	Add sidewalks along Sundial Drive.
5	Construct a shared use path or bicycle lanes along 2nd Avenue South.
6	Build a shared use path or bicycle lanes along Waite Avenue.
7	Construct a regional shared use path along 10th Avenue.
8	Add a regional shared use path along 7th Street S (Stearns CSAH 137).
9	Construct a regional shared use path along future beltline.
10	Build a regional shared use path along Stearns CSAH 138.

FIGURE D.23 – PROGRAMMED AND RECOMMENDED PROJECTS FOR THE CITY OF WAITE PARK.

APPENDIX E: SAINT CLOUD CITY PROFILE

With portions located within Benton, Sherburne, and Stearns counties, the City of Saint Cloud is bounded by Sartell, Sauk Rapids, and Waite Park.

Known as "The Granite City," Saint Cloud's early growth and development were influenced by its location on a national rail line and the advantage of its position on the Mississippi River. Saint Cloud has become a significant regional retail and employment hub for central Minnesota. The City is also a major transportation hub with I-94, MN 23, MN 15, and US 10 connecting the region with the rest of the state. Bicycle routes of national and regional significance meet in Saint Cloud, such as the Lake Wobegon Trail and the Beaver Island Trail, a component of the Mississippi River Trail. The city continues to grow and is challenged to expand the transportation network to keep pace with the demands of a regional economic center.

DEMOGRAPHICS

According to the U.S. Census Bureau's 2014-2018 American Community Survey (ACS) Five-Year Estimates, the City of Saint Cloud has a population that has grown 14.2% since the year 2000.

The City of Saint Cloud strives to provide equitable service to all segments of the community in its transportation planning investments. The APO tracks specific population demographic subsets known as traditionally underrepresented populations at a regional level. This includes the following:

- People-of-Color (Black/African American alone; American Indian and Alaska Native alone; Asian along; Native Hawaiian and other Pacific Islander alone; some other race; two or more races; Hispanic or Latino descent regardless of race).
- Households with low-income.
- People with disabilities.
- People with limited English-speaking capabilities.
- Households without access to a motor vehicle.
- Persons over the age of 65.
- Persons under the age of 18.

In recent years Saint Cloud has attracted a large immigrant and ethnically diverse population. A look at the demographic makeup in Saint Cloud finds that people-of-color currently comprise nearly one-quarter of the City's population. Though incomes generally are rising, almost one in five households are considered low-income. Saint Cloud has a comparatively young population, with nearly 20% of its residents under the age of 18. See Figure E.2 below for other details.

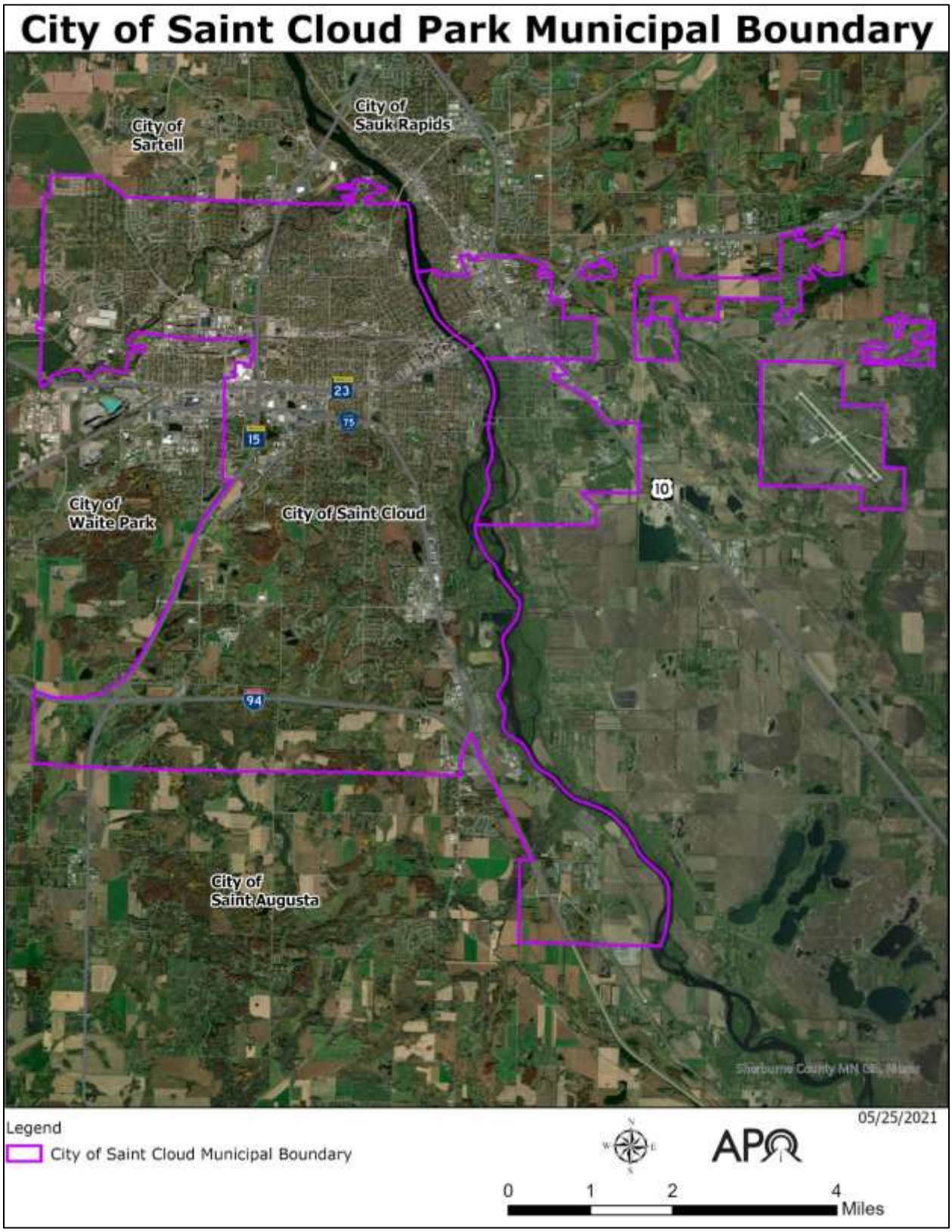


FIGURE E.1 – CITY OF SAINT CLOUD.

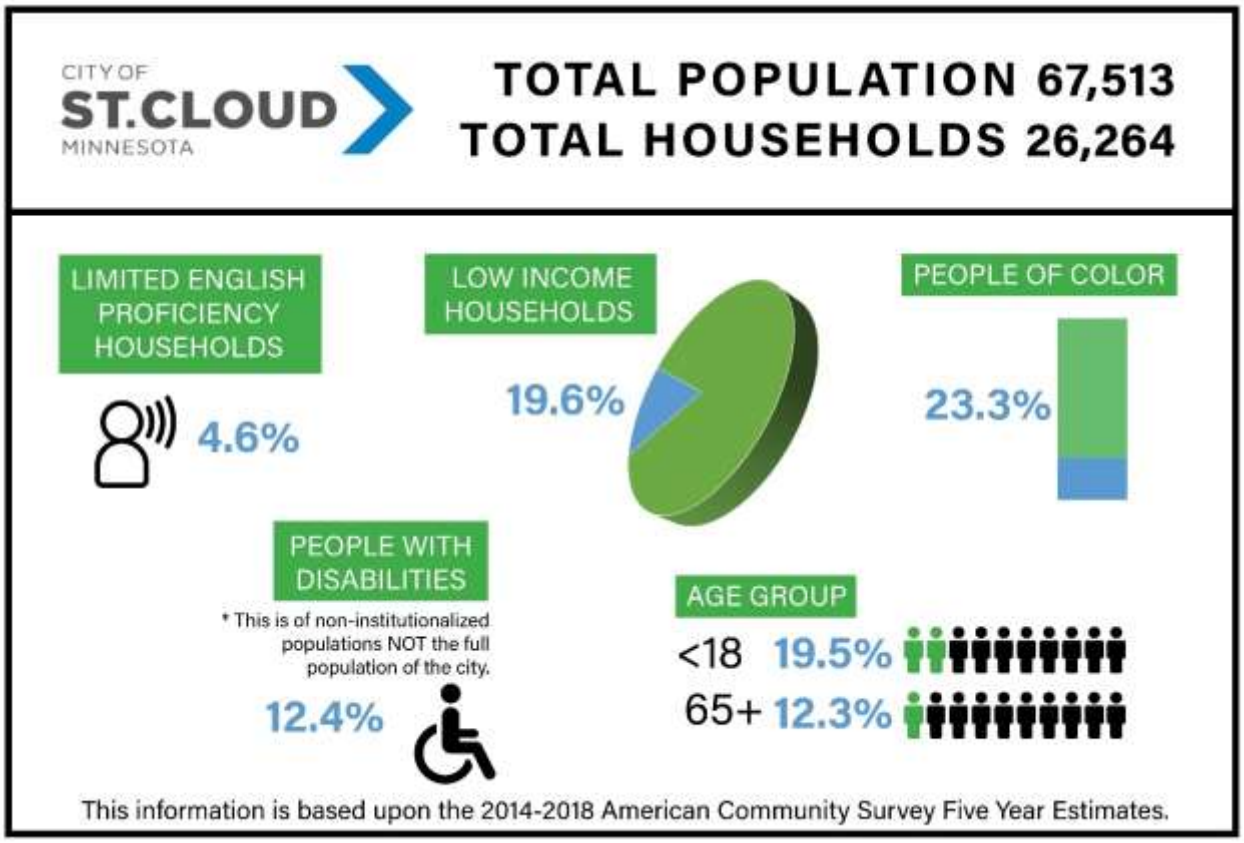


FIGURE E.2 – DEMOGRAPHIC PROFILE OF SAINT CLOUD.

EXISTING LAND USES

How cities use the land within their boundaries (i.e., residential, commercial, industrial) impacts the transportation network and the modes of travel available or desirable to users. Land use can play a role in developing a transportation system that is mode-friendly to motorized and non-motorized users. Understanding the city's land use types and how areas are intended to develop in the future is helpful in reviewing how the transportation system serves these uses.

As part of developing the City's 2015 Comprehensive Plan, the city conducted a land use inventory. The current land use pattern within the city is shown in Figures E.3 – E.5.

Each part of the City of Saint Cloud has distinctive characteristics and a widely varying range of land use and development. As noted in the Comprehensive Plan, the city is somewhat divided relative to natural features such as the Mississippi and the Sauk Rivers and transportation features such as its principal highways and rail alignments.

In giving a general overview of land uses and facilities for such a large city, the following discussion will review characteristics for the north, south, and east portions of Saint Cloud.

For purposes of this analysis:

- North Saint Cloud generally refers the area north of 22nd Street S and west of the Mississippi River.

- South Saint Cloud generally refers to area south of 22nd Street S and west of the Mississippi River.
- East Saint Cloud will generally refer to the portion of the city east of the Mississippi River.

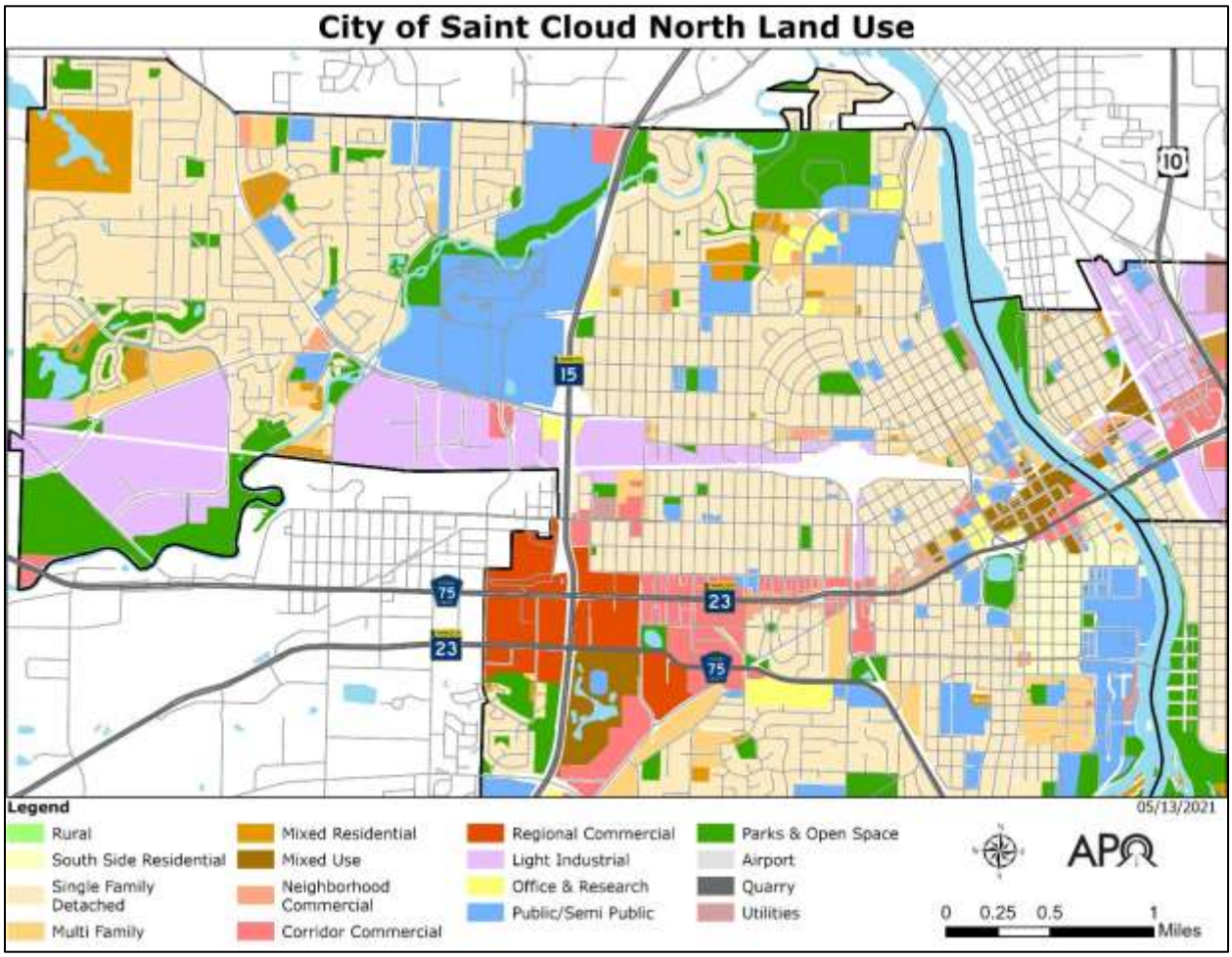


FIGURE E.3 – LAND USES WITHIN NORTH SAINT CLOUD.

NORTH SAINT CLOUD

North Saint Cloud includes areas of significant commercial use. This consists of the Crossroads Center, market squares, and shopping complexes along Division and Second Street S. Many retail and entertainment amenities are concentrated in the downtown area.

Much of north Saint Cloud is developed for residential use, with the many schools and parks available to northside residents. This area is the focus of the region's health care network and his home to Saint Cloud Hospital. In addition, this section of Saint Cloud includes Saint Cloud State University (SCSU) and many industrial parks located in close proximity to the BSNF rail line.

North Saint Cloud is home to many of the city's oldest neighborhoods. But, recent residential growth can also be found in this section of the city – particularly in the northwestern area.

The City's general goal from the land use plan is to provide infill and redevelopment on the north side. The city seeks to address service needs for neighborhoods and other current uses.

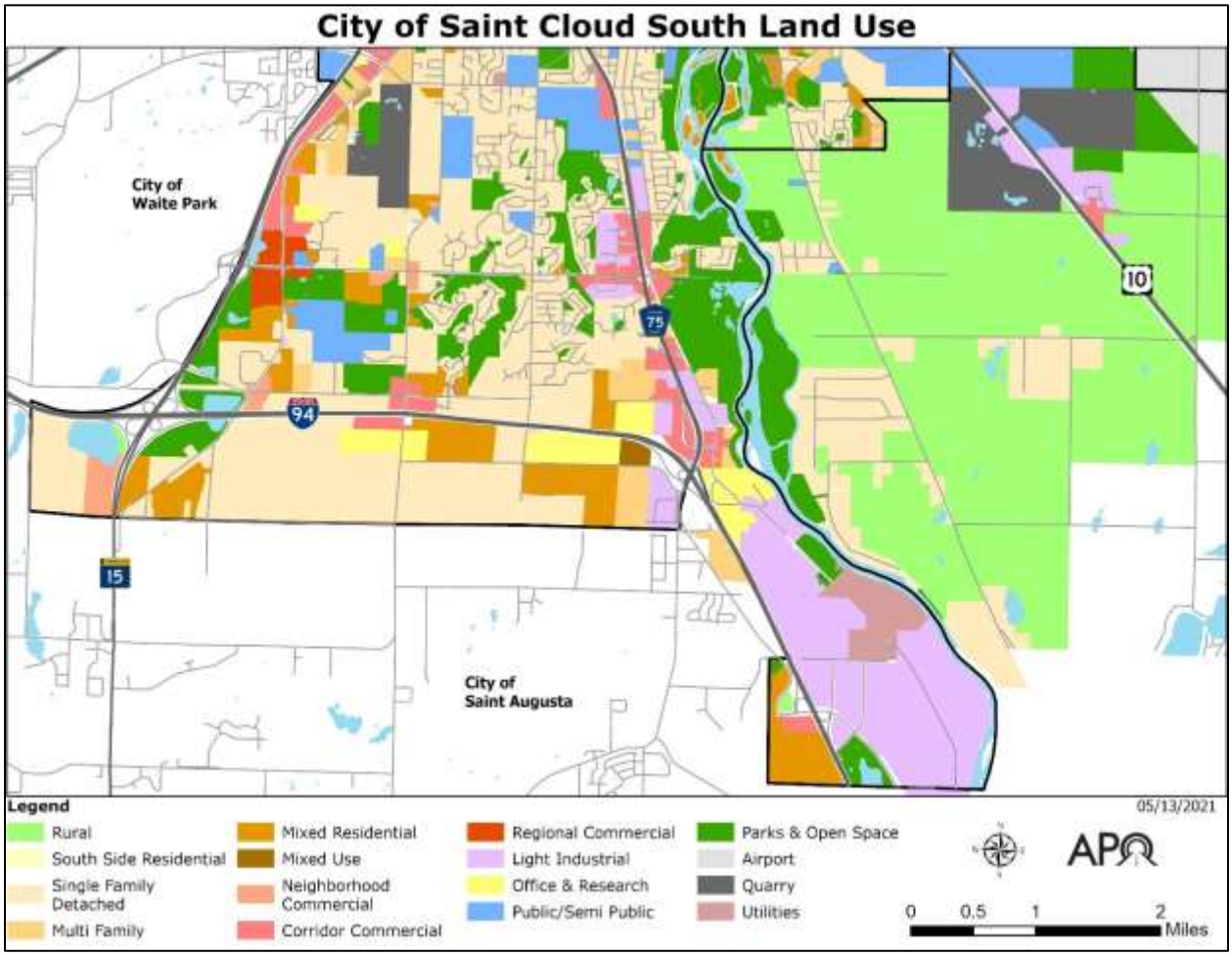


FIGURE E.4 – LAND USES WITHIN SOUTH SAINT CLOUD.

SOUTH SAINT CLOUD

South Saint Cloud can be defined by its areas of mixed-use, single family residential developments, and the parks and schools that serve them. Areas of commercial and industrial development follow Roosevelt Road and I-94.

The city regards south Saint Cloud as its primary growth area. The city is promoting development opportunities south of 33rd Street S and north of I-94. The city also sees growth potential along West Saint Germain Street, Oak Grove Road, and 40th Street S.

The City's goal is to complement services to the existing neighborhood and commercial areas of south Saint Cloud and expand services to support future growth and development.

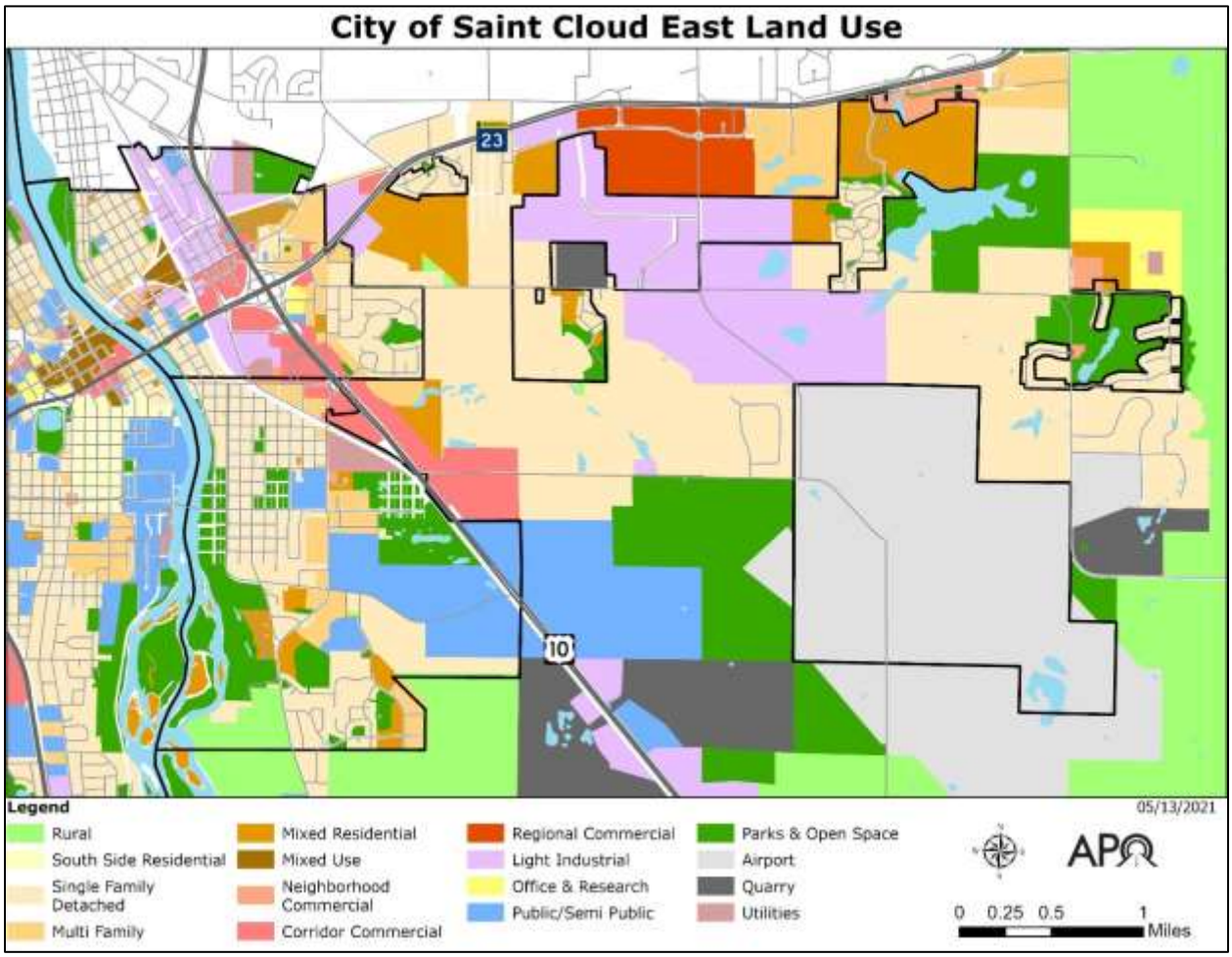


FIGURE E. 5 – LAND USES WITHIN EAST SAINT CLOUD LAND.

EAST SAINT CLOUD

Many established residential neighborhoods and public parks are east of the Mississippi River. Along and near US 10 and Lincoln Avenue is a mix of residential uses along with light industrial and commercial activity. New residential and industrial development can be found further east of US 10 and south of MN 23. This area is also home to the Saint Cloud Regional Airport.

The city seeks to focus on infilling vacant areas in east Saint Cloud as well as encouraging new development near the airport.

Understanding how the city plans to develop in the future will inform the type of transportation system needed. Residents and visitors will only reach these destinations through the transportation network that is available to them.

TYPES OF ACTIVE TRANSPORTATION INFRASTRUCTURE

Saint Cloud has a variety of infrastructure designed specifically for active transportation users. Some are integrated into the roadway network, such as bike lanes (on-road facilities). Others are separated from the roadway network, such as sidewalks and shared use paths (off-road).

Complementing the on- and off-road active transportation network is the transit network operated by Saint Cloud Metro Bus.

Bicyclists and pedestrians can rely on both the on- and off-road network and the Metro Bus system to reach their destinations.

ON-ROAD FACILITIES

The City of Saint Cloud has 46.2 lane miles of on-road bicycle facilities which include signed bicycle lanes, signed paved shoulders, and signed shared lanes.

FIGURE E.6 – BIKE LANE ON OAK GROVE ROAD IN SAINT CLOUD.

About one-third of this network are dedicated bicycle lanes found primarily south of SCSU and along Cooper Avenue. However, much of these on-road miles are part of the nationally recognized Mississippi River Trail (MRT).

Mississippi River Trail (MRT)

The MRT, a planned network of bicycle facilities encompassing the length of the Mississippi River, enters the City of Saint Cloud on both sides of the river having split at the Sauk Rapids bridge.

The western section of the MRT briefly follows Ninth Avenue N before making its way along Sixth Avenue N in front of Saint Cloud Hospital. From there, the MRT makes its way through downtown Saint Cloud along Fifth Avenue N before crossing MN 23 and continuing south near the SCSU campus. After a brief two block split near Eighth Street S, the facility reconnects with the eastern section near the intersection of University Drive S and First Avenue S. From there, the MRT follows the off-road Beaver Island Trail facility to 38th Street S where it once again becomes an on-road facility following Clearwater Road and ultimately CSAH 75 outside of the city limits.

The eastern section enters Saint Cloud from Sauk Rapids's River Avenue S. Following Saint Cloud's Riverside Drive NE, the MRT does a brief jog to Kilian Boulevard SE before connecting with University Drive S. The MRT then heads west across the University Bridge before reconnecting with its western counterpart.

The MRT has been identified as one of the Minnesota Department of Transportation's (MnDOT's) high priority corridors for bicycle routes due to its interjurisdictional nature – spanning from northern Minnesota to Louisiana – and high potential of connecting to other regional active transportation facilities.

OFF-ROAD FACILITIES

Shared Use Paths and Trails

There are 46.9 miles of shared use paths that provide neighborhoods access to many of the City's parks, recreational areas, and schools. Of the nearly 47 miles of shared use paths 9.5 miles are unpaved trails found primarily within city parks.

One of the most well-known shared use paths within the City of Saint Cloud is the Beaver Island Trail.

Beaver Island Trail

Named for a small cluster of islands within the Mississippi River south of SCSU, the Beaver Island Trail is a continuous shared use path starting at the university and running south along the river. North of the campus, portions of the facility have been piecemealed to include sidewalk and bike route sections along Fourth Street S and Third Avenue S. After the intersection of Division Street, the facility once again becomes a shared use path following the Mississippi River behind the Rivers Edge Convention Center before ending near Cathedral High School.

Sidewalks

Approximately 236 miles of sidewalks are located within Saint Cloud. A highly integrated network of sidewalks that follow a grid system is found within the City's core development

area. The presence of sidewalks in different parts of the City vary depending upon when the subdivision was built.

For a better description, the active transportation network for Saint Cloud has been identified within six areas of the city, shown in E.7 – E.12. South and East Saint Cloud (as defined in the previous section) have remained the same. North Saint Cloud, however, has been further subdivided to show the network in the core Central Business District (CBD) and SCSU area, the north-central area, west-central area, and the northwest area.

CBD AND SCSU AREA

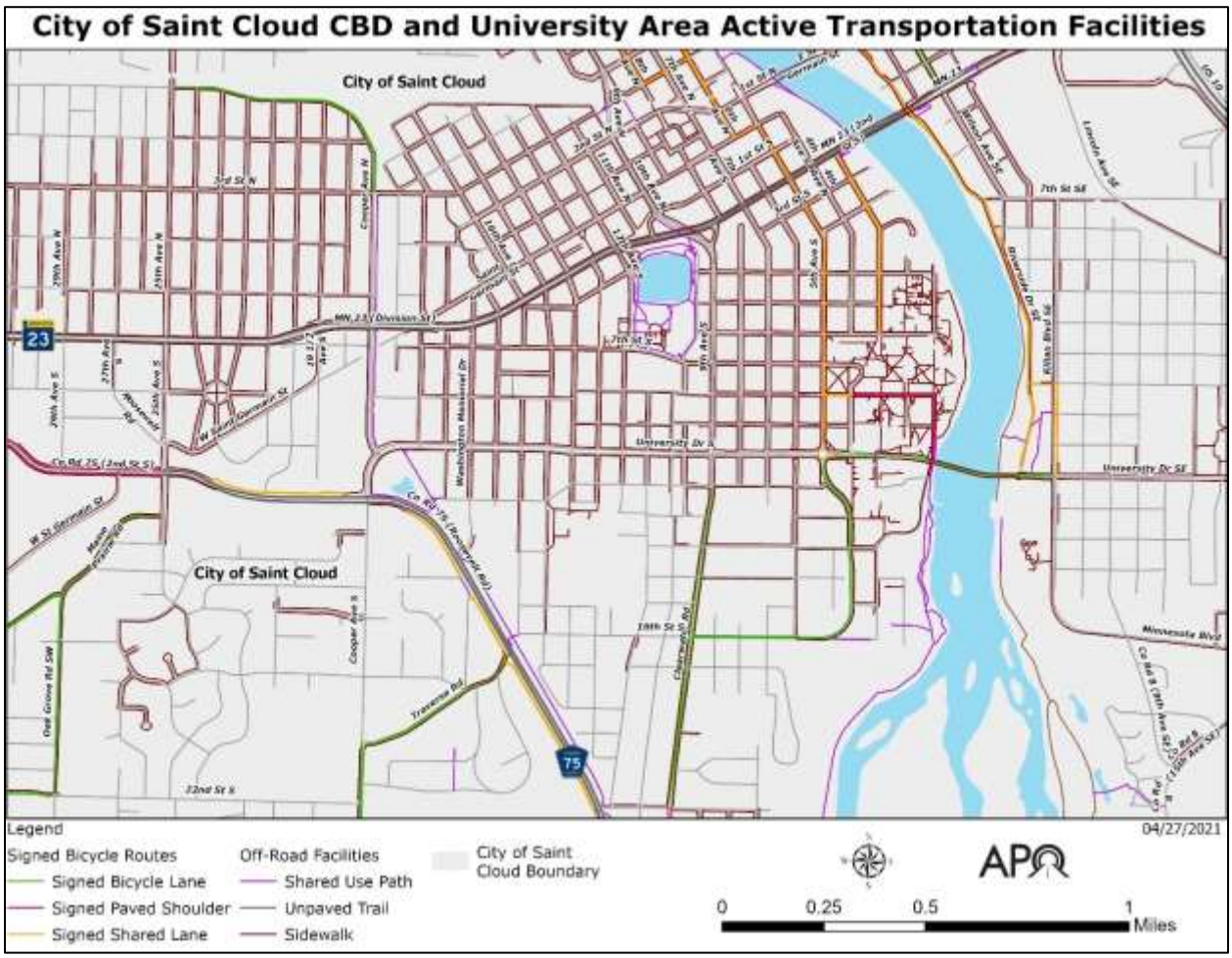


FIGURE E.7 – ON- AND OFF-ROAD ACTIVE TRANSPORTATION FACILITIES IN THE SAINT CLOUD CBD AND SCSU AREA BY TYPE AND LOCATION.

The CBD and SCSU area have several on-road active transportation facilities. Signed bicycle lanes can be found along Clearwater Road, Oak Grove Road, and Cooper Avenue N. Additional on-road facilities are also located along CSAH 75/Roosevelt Road and just north of the downtown area. It should be noted that many of the on-road bicycle facilities in this area of the city are below the MnDOT design guidelines for posted vehicle speeds and traffic volume.

The most notable off-road facility in this area is the Beaver Island Trail. However, off-road facilities can also be found around Lake George, Cooper Avenue, and CSAH 75/Roosevelt Road.

Much of this area is also served by sidewalks – which primarily follow the existing street grid network.

NORTH-CENTRAL SAINT CLOUD

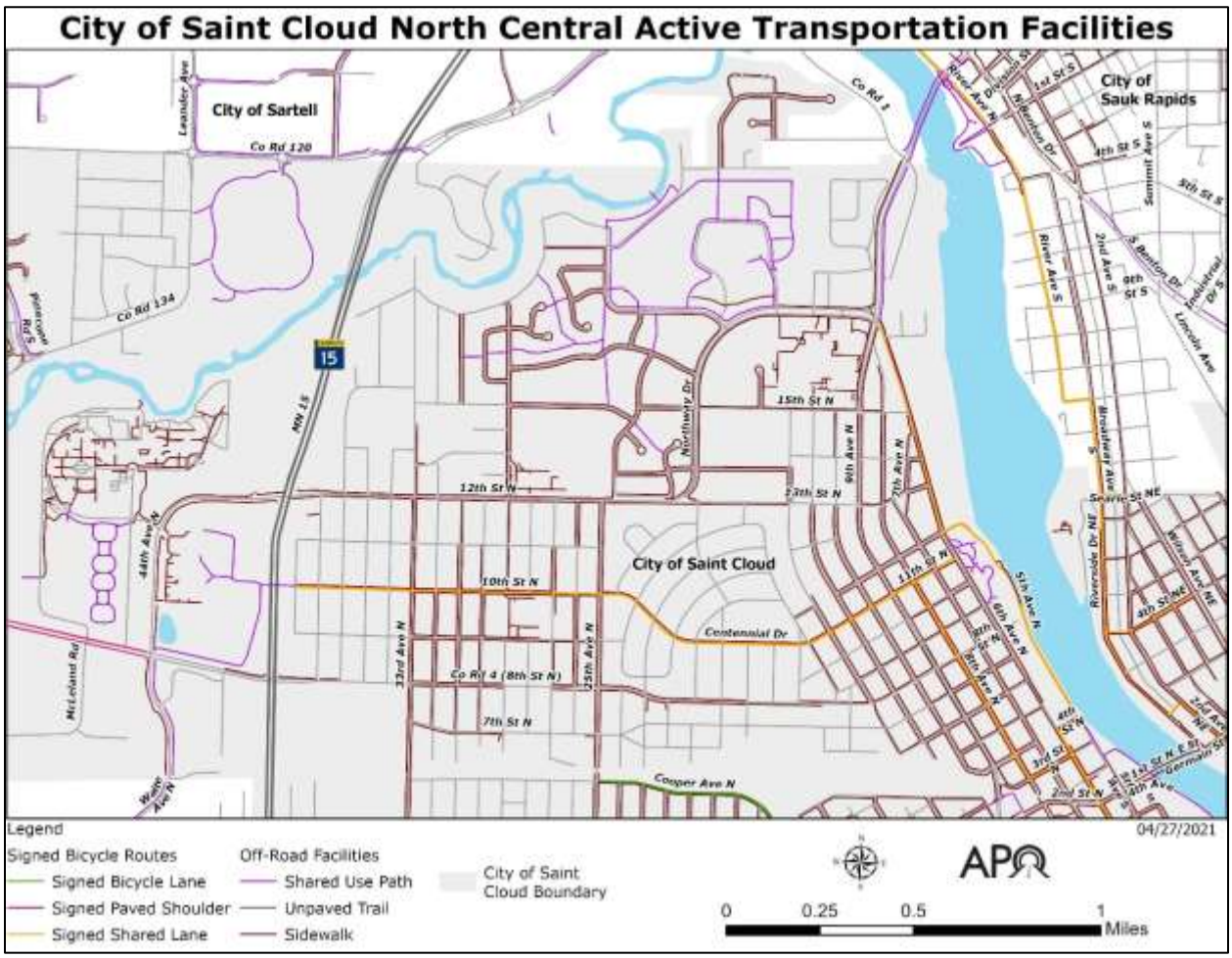


FIGURE E.8 – ON AND OFF-ROAD ACTIVE TRANSPORTATION FACILITIES IN THE NORTH CENTRAL AREA OF SAINT CLOUD BY TYPE AND LOCATION.

In contrast to the previous area, north-central Saint Cloud has very few on-road active transportation facilities. However, this area does have a signed shared lane along 10th Street N/Centennial Drive serving as an on-road connection between the Apollo High School pedestrian bridge and the downtown area.

The off-road network throughout this area (as seen in Figure E.8) is fairly inconsistent. A cluster of shared use paths can be found around the Whitney Park, the VA, CentraCare Health Plaza, and Hester Park areas. And while sidewalks are seen closer to the downtown and Saint Cloud Hospital area, several areas including near Madison Elementary School, are lacking a connected sidewalk network.

WEST-CENTRAL SAINT CLOUD

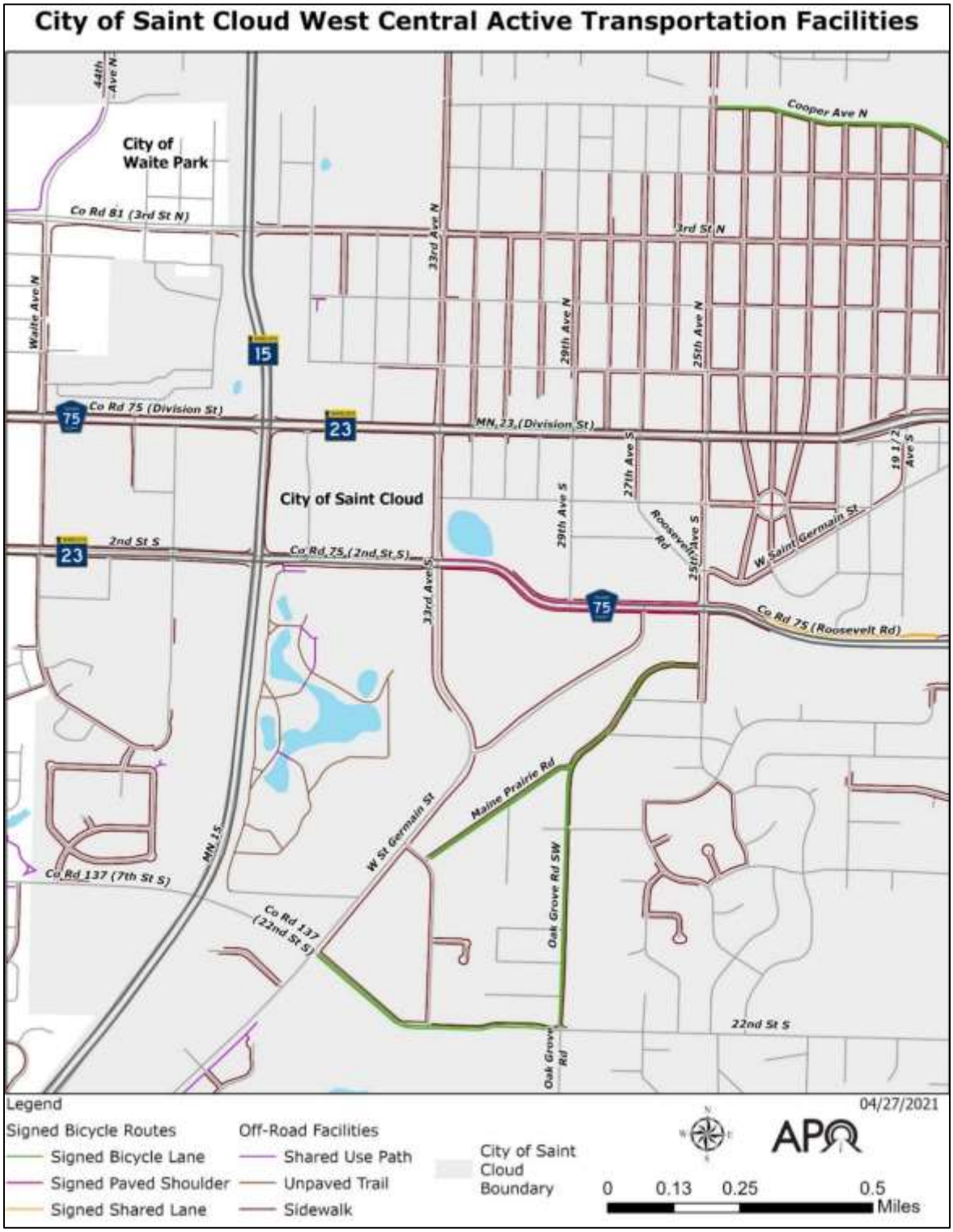


FIGURE E.9 – ON- AND OFF-ROAD ACTIVE TRANSPORTATION FACILITIES IN THE WEST CENTRAL AREA OF SAINT CLOUD BY TYPE AND LOCATION.

The west-central area of Saint Cloud faces many challenges for active transportation users due to the presence of the high vehicle traffic corridors of MN 23, MN 15, and CSAH 75. Several plans and studies have identified these roadways as major barriers for bicyclists and pedestrians.

Few on-road facilities are found within this section of Saint Cloud, primarily concentrated south of CSAH 75 along 22nd Street S, Maine Prairie Road, and Oak Grove Road SW. CSAH 75/Second Street S also has some on-road facilities (signed paved shoulders); however, these facilities do not meet design standards per MnDOT guidance.

Neighborhoods in the west central Saint Cloud area have mixed levels of off-road active transportation facilities. Where the street grid network is present, the sidewalk network is rather robust – though gaps do remain (particularly between Third Street N and Cooper Avenue N). In newer developed areas south of CSAH 75, there is a definite lack of sidewalks within many residential areas.

Rounding out the active transportation infrastructure within the west central region is a series of unpaved walking trails within Heritage Park near the Stearns History Museum and Costco.

NORTHWEST SAINT CLOUD

On-road facilities within the northwest Saint Cloud area found in two locations: Veterans Drive/Eighth Street N between 44th Avenue N and Anderson Avenue and along Rolling Ridge Road between CSAH 4 and just west of Cypress Road. A continuous connection between these two facilities is piecemealed together with a combination of shared use paths and sidewalks. But even still, gaps do remain.

The Lake Wobegon Trail passes through the southern portion of this area. Additional shared use paths and the majority of sidewalks within this region are concentrated in the neighborhood surrounding Westwood Parkway. Sporadic sidewalks are also located in residential areas between CSAH 4 and Pinecone Road S as well as just south of 322nd Street.

FIGURE E.10 – ON- AND OFF-ROAD ACTIVE TRANSPORTATION FACILITIES IN THE NORTHWEST AREA OF SAINT CLOUD BY TYPE AND LOCATION.

SOUTH SAINT CLOUD

Running through the southern portion of Saint Cloud, the MRT once again becomes an on-road facility – splitting from the Beaver Island Trail. This signed paved shoulder facility continues south outside of the city's municipal boundary. Other on-road facilities within this portion of Saint Cloud include signed bicycle lanes along Cooper Avenue S.

Major off-road facilities within the south Saint Cloud section include the Beaver Island Trail along the Mississippi River and the shared use path constructed along 33rd Street S. A slight gap in the latter remains but is planned to be added during the expansion of 33rd Street S within the next few years.

Some residential areas – clustered south of 33rd Street S between Cooper Avenue S and Oak Grove Road SW – do have sidewalks. Several residential areas within this section of Saint Cloud, however, do not have access to active transportation facilities.

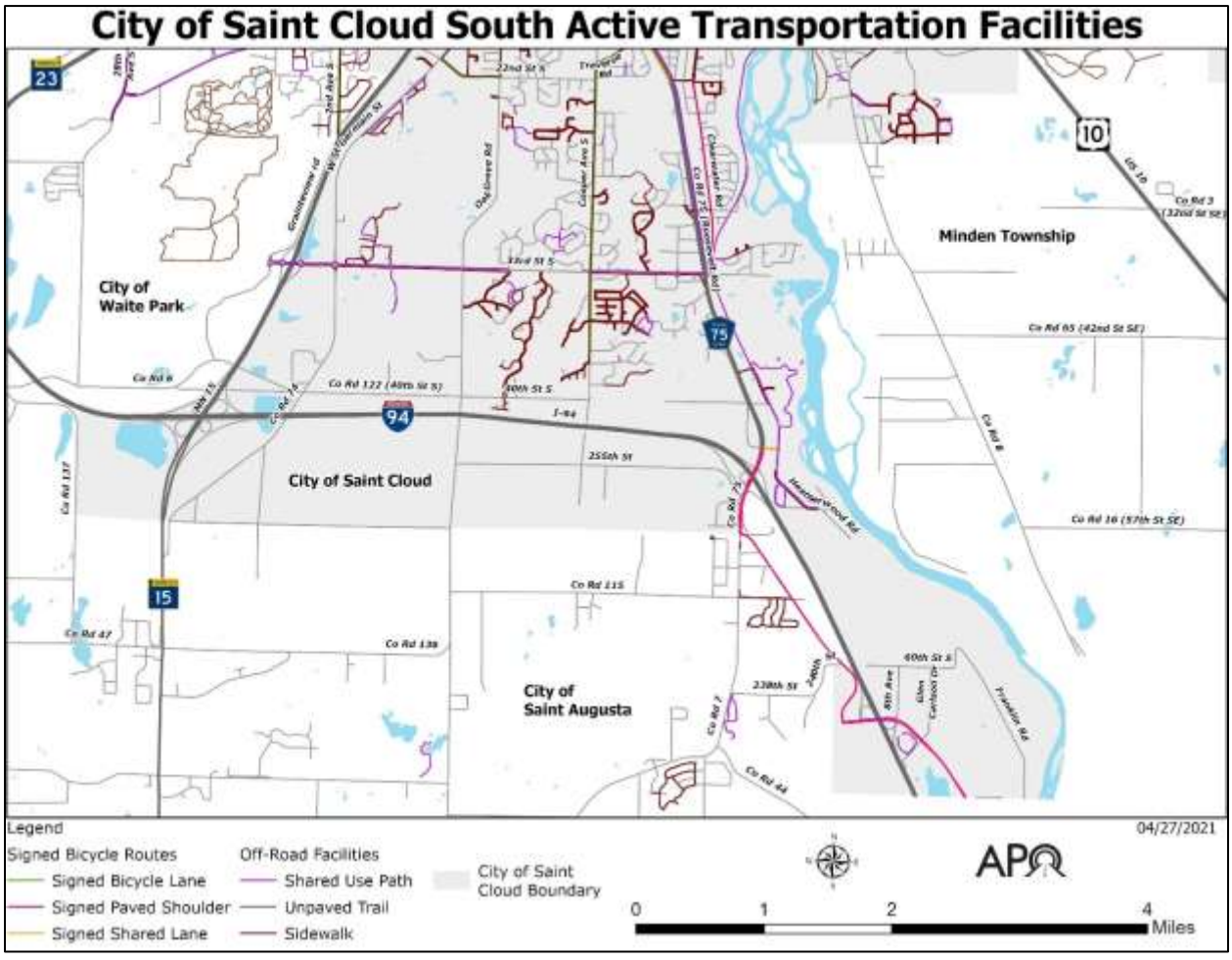


FIGURE E.11 – ON- AND OFF-ROAD ACTIVE TRANSPORTATION FACILITIES IN SOUTH SAINT CLOUD BY TYPE AND LOCATION.

EAST SAINT CLOUD

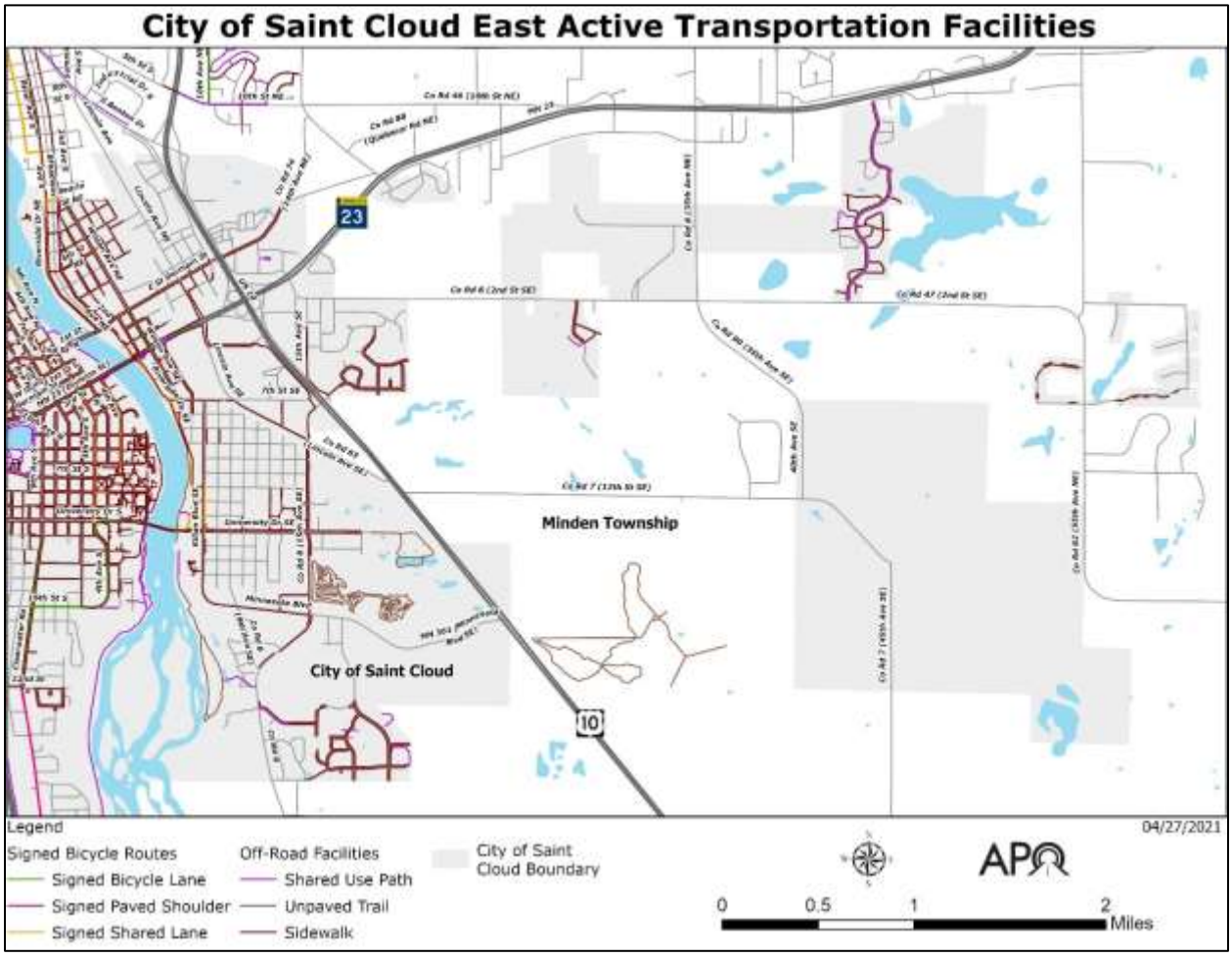


FIGURE E.12 – ON- AND OFF-ROAD ACTIVE TRANSPORTATION FACILITIES IN EAST SAINT CLOUD BY TYPE AND LOCATION.

In general, much of the east side of Saint Cloud lacks active transportation facilities. However, despite the lack of facilities, the east side's three Mississippi River crossings do allow for active transportation users to access the city's downtown CBD.

The MRT serves as this sections only on-road facility with the route following Riverside Drive NE, jogging slightly to Kilian Boulevard SE before crossing the Mississippi at University Bridge. It should be noted that facilities on University Bridge are under-designed for bicycles.

Off-road facilities (primarily sidewalks) are found in residential developments near Wilson Park along the Mississippi River. However, much of the area south of MN 23 and west of US 10 is lacking any active transportation facilities.

Unpaved trails are located in Riverside Park and George Friedrich Park. This section of the city also is home to the Jail Trail near the Saint Cloud Department of Corrections facility.

TRANSIT SERVICES AND INFRASTRUCTURE

As the urban public transit provider, Saint Cloud Metro Bus is responsible for the daily management, operation, and maintenance of Fixed Route (FR) and Dial-a-Ride (DAR) systems within Saint Cloud, Waite Park, Sartell, and Sauk Rapids.

FIXED ROUTE SERVICE

Metro Bus currently operates on a hub and spoke system. This means, for the most part, all FR buses start and end in the same location traveling in a circular type loop around the metro. Except for the ConneX on demand FR service in Sartell, all Metro Bus routes provide service to Saint Cloud. The majority of FR service hubs out of the downtown transit center (510 First Street S). Other hubs include the Crossroads Center (Route 33) and Encore Capital Group on McLeland Road (Route 10).

Routes 4, 6, 7, 8, 9, 10, 11, and 12 provide exclusive service to the City of Saint Cloud. Route 4 primarily serves north Saint Cloud via Veterans Drive/Eighth Street N and Ninth Avenue N. Routes 6 and 7 provide bi-directional service to east Saint Cloud neighborhoods both north and south of the MN 23/US 10 interchange. Routes 8 and 9 cover similar areas with service around the University Drive area. Route 10 (the only exclusive Saint Cloud route not based out of the transit center) primarily provides service to industrial areas of northwest Saint Cloud along CSAH 4 and Ridgewood Road. Portions of west central Saint Cloud are serviced by Route 11 following roadways such as University Drive, Roosevelt Road, and Maine Prairie Road. The Route 12 is the southernmost Metro Bus route providing along Clearwater Road to McStop near I-94. The route also deviates to Tech High School on 33rd Street S three times a day while school is in session.

Routes 1, 2, 3, and 5 provide varying degrees of service to the City of Waite Park. However, since these are based out of the transit center, several stops do occur within the City of Saint Cloud.

This is also like the services provided by routes 21, 22, and 33 (which provide transit access to Sauk Rapids) and the Route 31 (with access to Sartell).

It should be noted that the route patterns listed here were in place prior to the beginning of the COVID-19 global pandemic. Due to several changes (including the need to social distance on buses, decline in ridership, and staffing issues) Metro Bus has made several temporary changes to its service including suspending Route 7. It is anticipated that service will be returned to normal at some point in the future.

Figure E.13 shows the full location of each of these routes within the City of Saint Cloud.

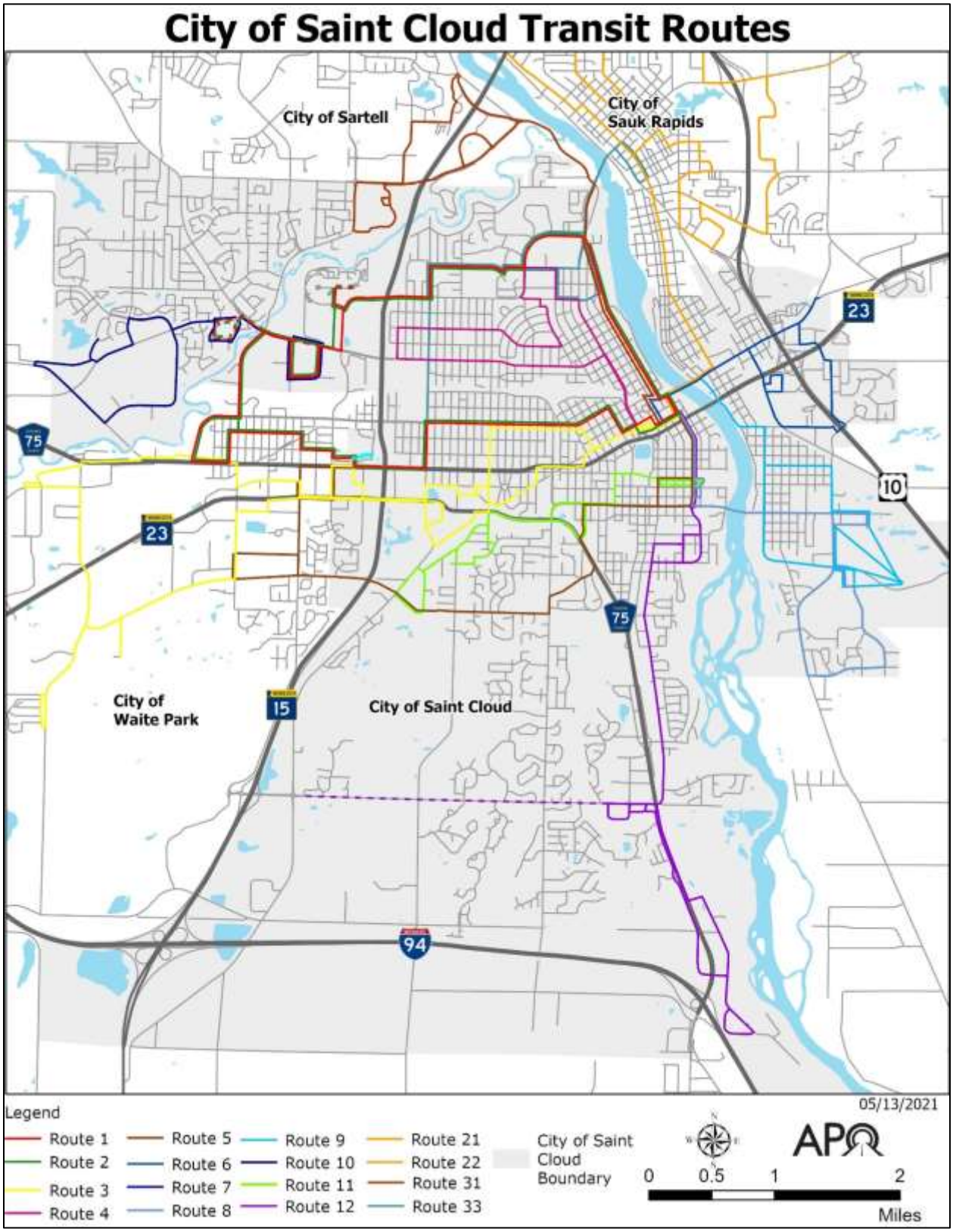


FIGURE E.13 – METRO BUS FIXED ROUTE SERVICE.

All fixed route transit stops within the Metro Bus system are signed. Several stops, particularly those with a large number of people boarding and alighting tend to have benches and shelters.

Figures E.14 – E.16 show the location of transit stops in north, south, and east Saint Cloud (respectively) and their proximity to active transportation infrastructure. shows the location of transit stops in north Saint Cloud and how close they are to active transportation infrastructure. For the most part, stops within north Saint Cloud particularly in the CBD and SCSU area, have some active transportation facility access. As routes move further away from the downtown, access to active transportation greatly diminishes.

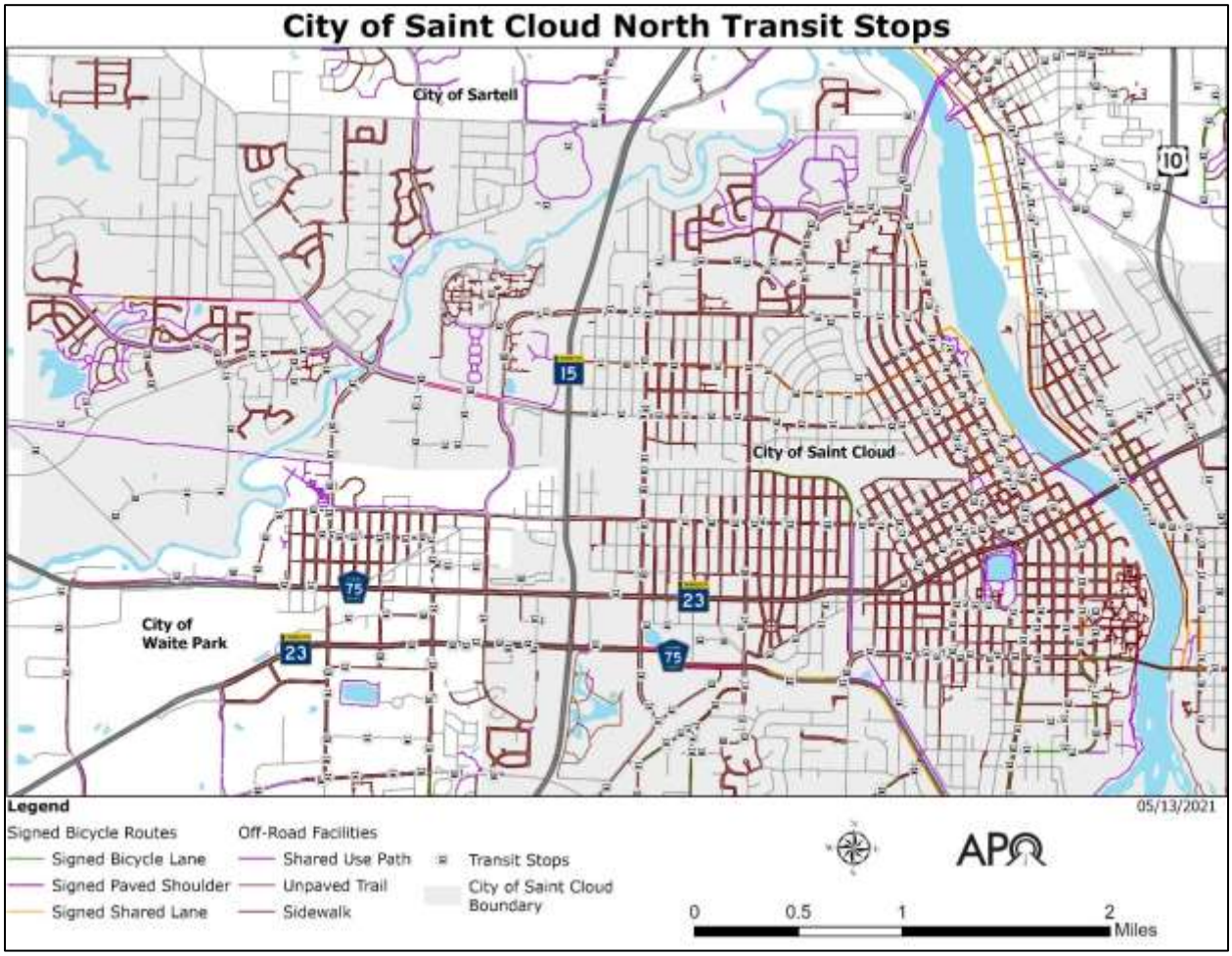


FIGURE E.14 – TRANSIT STOPS RELATIVE TO THE ACTIVE TRANSPORTATION SYSTEM IN NORTH SAINT CLOUD.

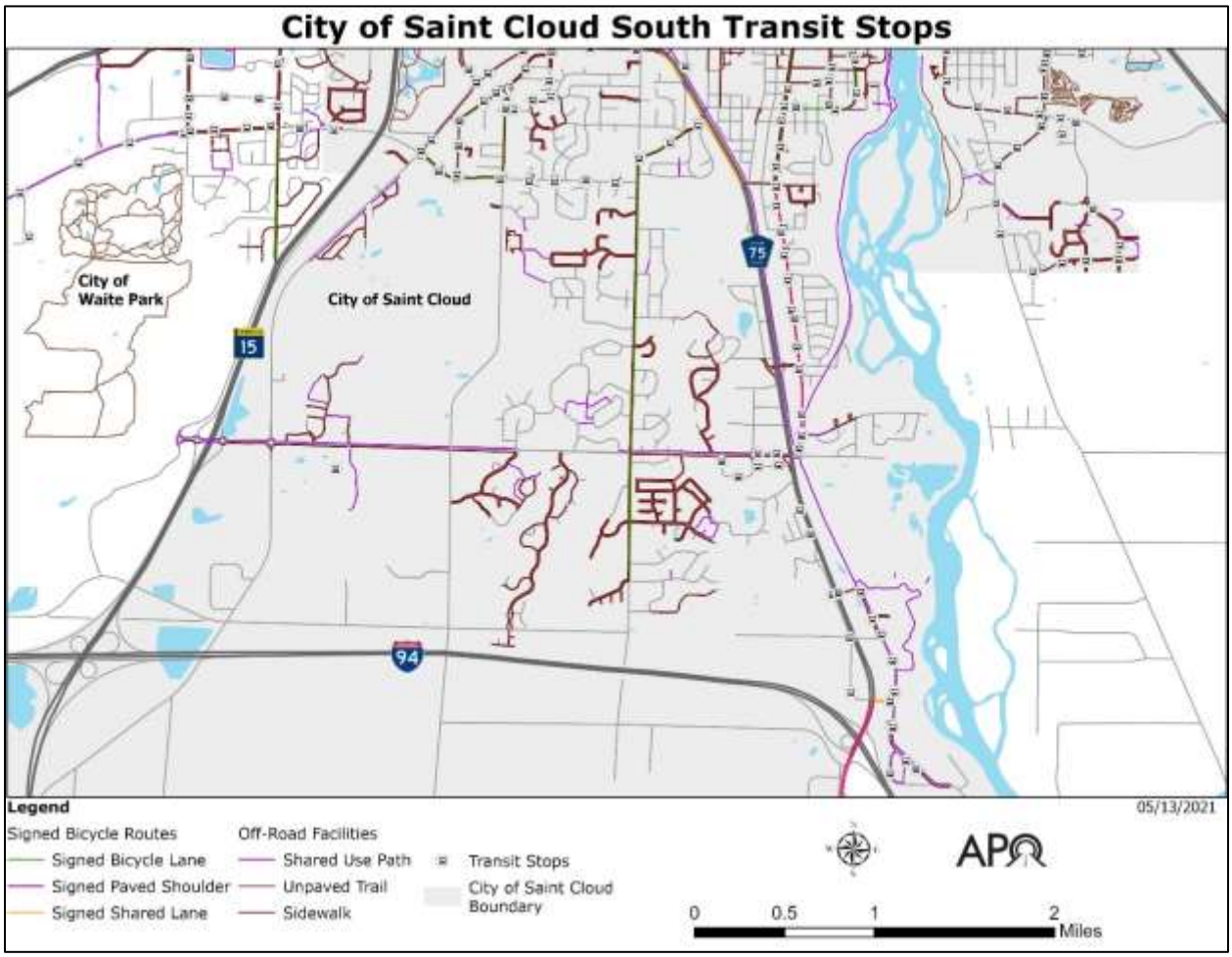


FIGURE E.15 – TRANSIT STOPS RELATIVE TO THE ACTIVE TRANSPORTATION SYSTEM IN SOUTH SAINT CLOUD.

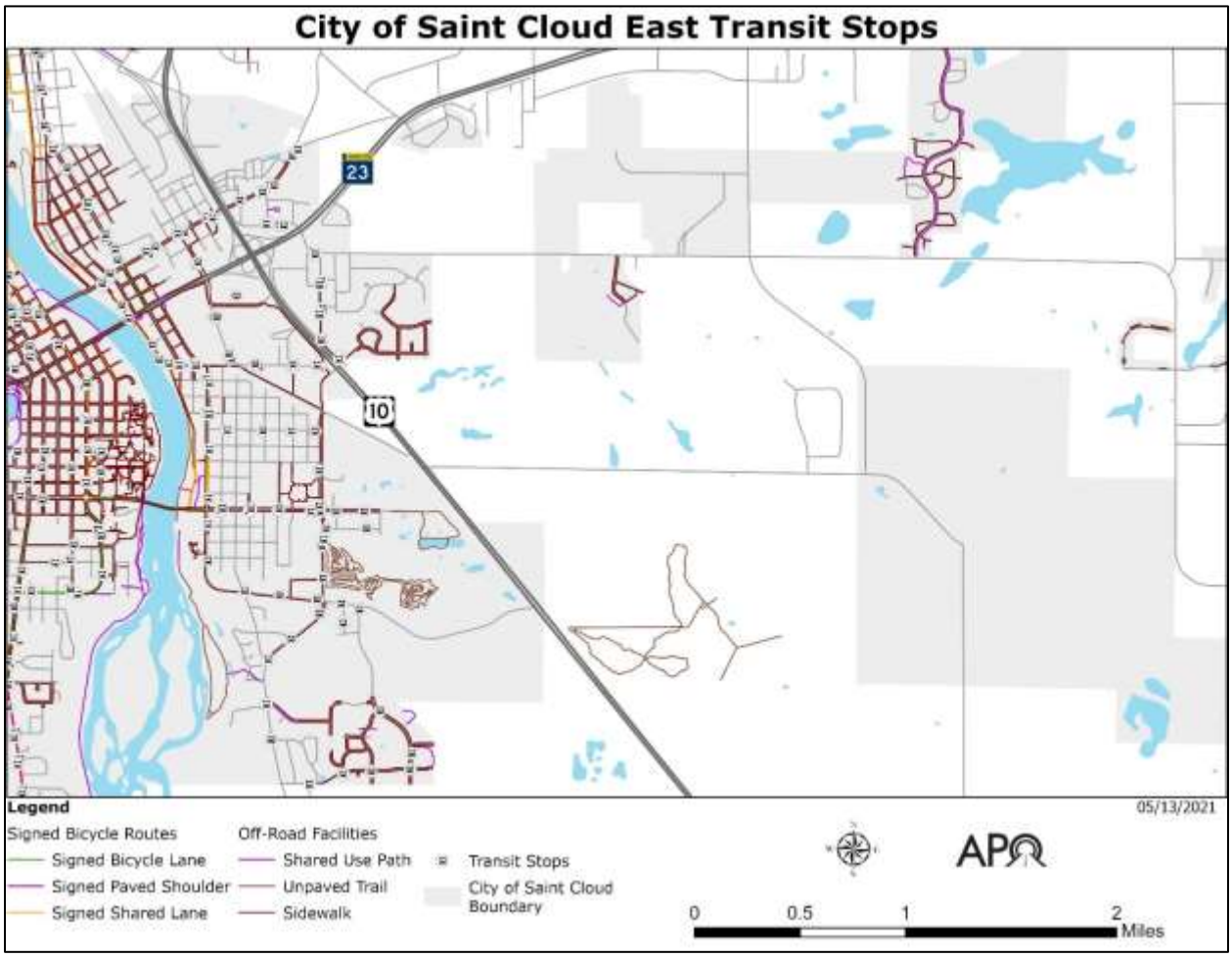


FIGURE E.16 – TRANSIT STOPS IN RELATION TO THE ACTIVE TRANSPORTATION SYSTEM IN EAST SAINT CLOUD.

OTHER TRANSIT SERVICES

In addition to its FR system, Metro Bus provides paratransit services to Saint Cloud residents. Dial-a-Ride (DAR) is an operator-assisted paratransit service provided for those unable to use fixed routes. The DAR service area is approximately a three-quarter mile buffer around the FR system.

CONDITION OF ACTIVE TRANSPORTATION INFRASTRUCTURE

If the existing active transportation infrastructure is in poor condition, it may cause safety issues, inconvenience for the user, or result in the underutilization of the facility. Keeping the system in good condition assures safety and a comfortable experience.

Data on the current pavement conditions for on-road and off-road active transportation facilities within the City of Saint Cloud was collected from areawide surveys performed for the APO, as discussed in Chapter 2.

ON-ROAD FACILITIES

Pavement Condition and Striping

In 2019 GoodPointe Technology collected pavement and striping condition data on the existing on-road bicycle routes in Saint Cloud.

Pavement condition was evaluated using a Digital Inspection Vehicle (DIV) – a specialized vehicle equipped with cameras and laser sensors to detect pavement distress and roughness. As shown in Figures E.17 and E.18, of the 20.9 total lane miles designated as signed shared bicycle facilities most are in good or satisfactory condition.

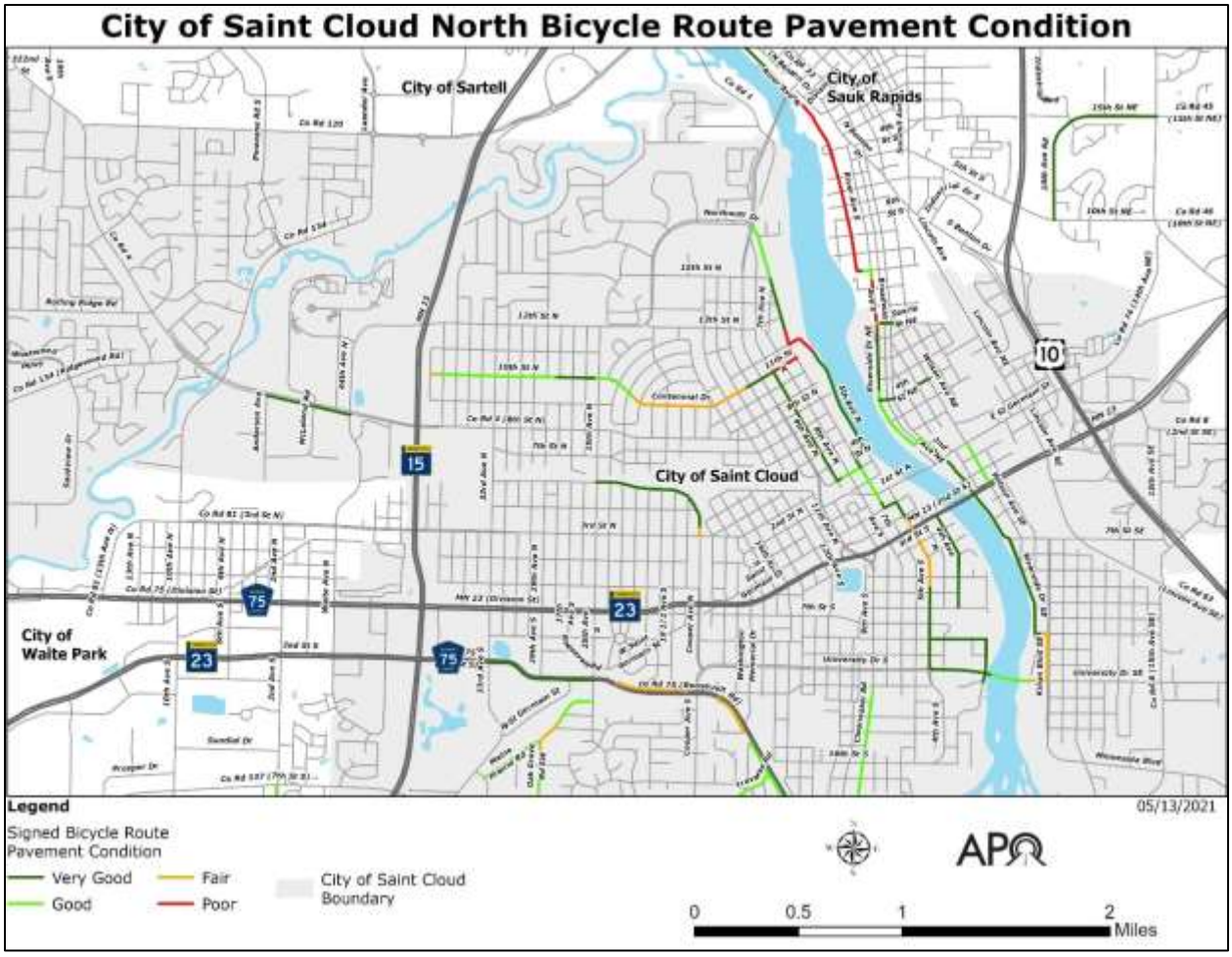


FIGURE E.17 – CONDITION OF PAVEMENTS SIGNED AS BICYCLE ROUTES IN NORTH AND EAST SAINT CLOUD.

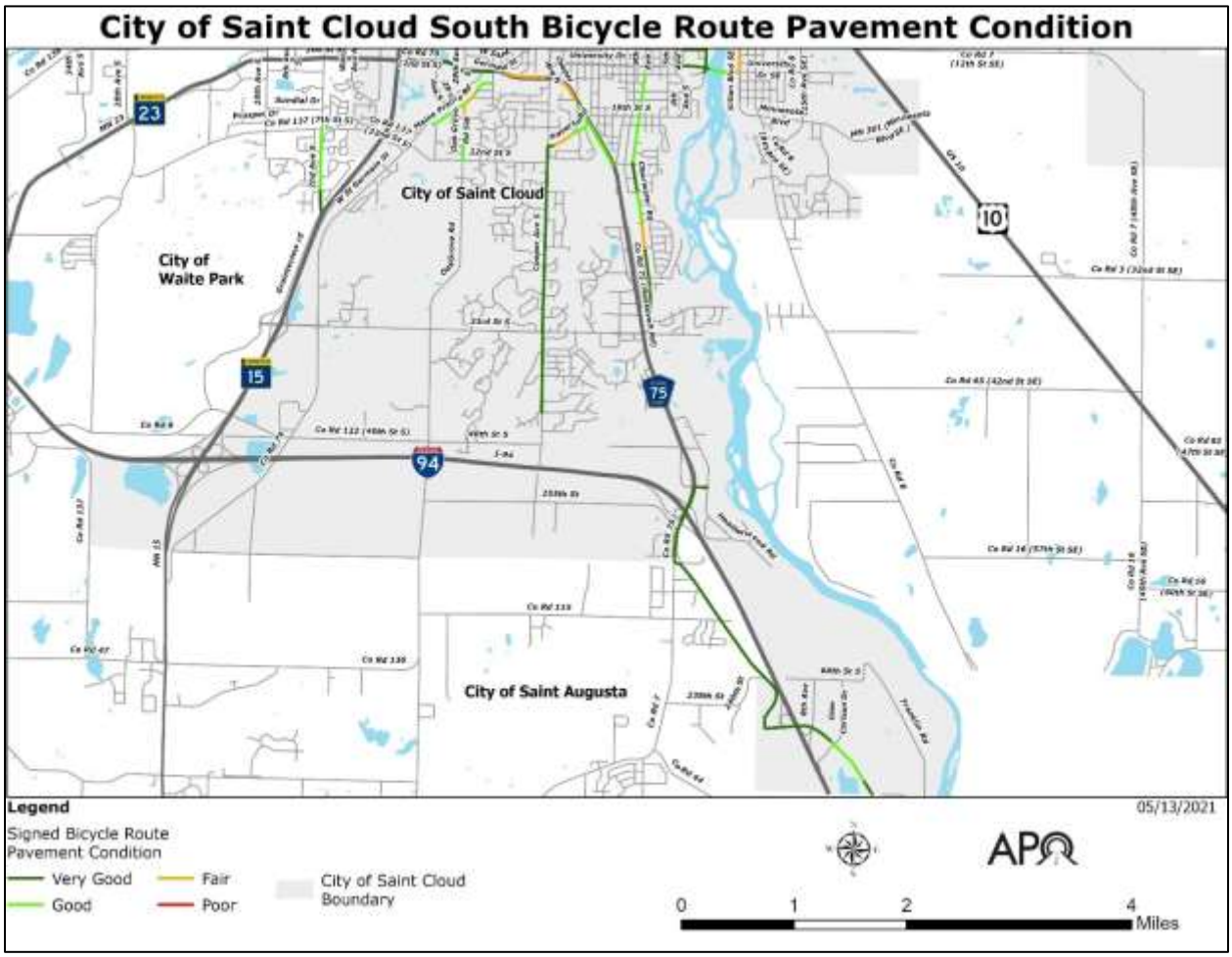


FIGURE E.18 – CONDITION OF PAVEMENTS SIGNED AS BICYCLE ROUTES IN SOUTH SAINT CLOUD.

Striping conditions of on-road facilities were rated from a visual inspection. A majority of on-road facilities are not designated by pavement markings. For those lane miles that were striped, a majority appear to be in good to fair condition. See Figures E.19 and E.21 for more details.

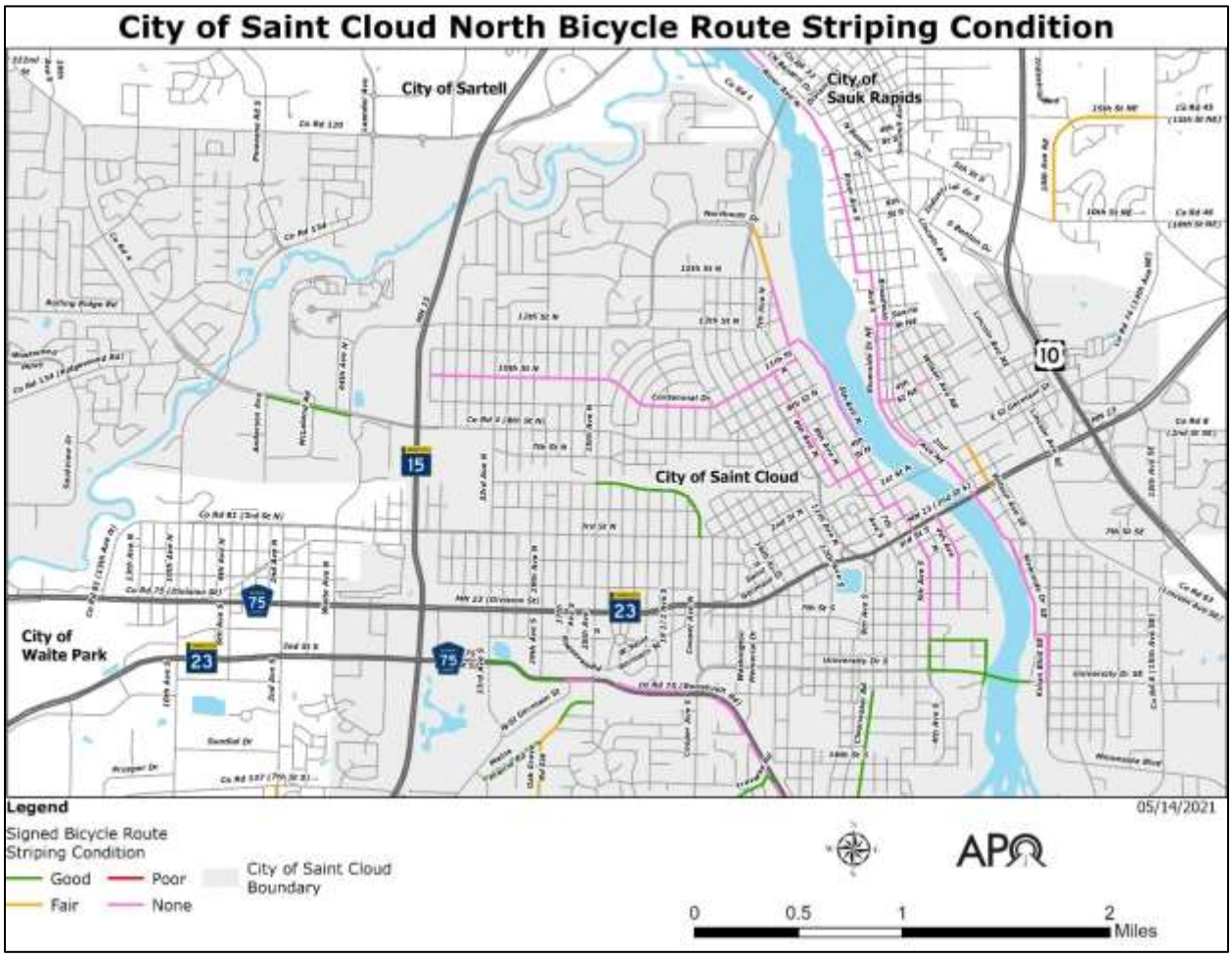


FIGURE E.19 - STRIPING CONDITION OF SIGNED BICYCLE ROUTES IN NORTH AND EAST SAINT CLOUD.

FIGURE E.20 – BUFFERED BIKE LANE ON OAK GROVE ROAD IN SAINT CLOUD.

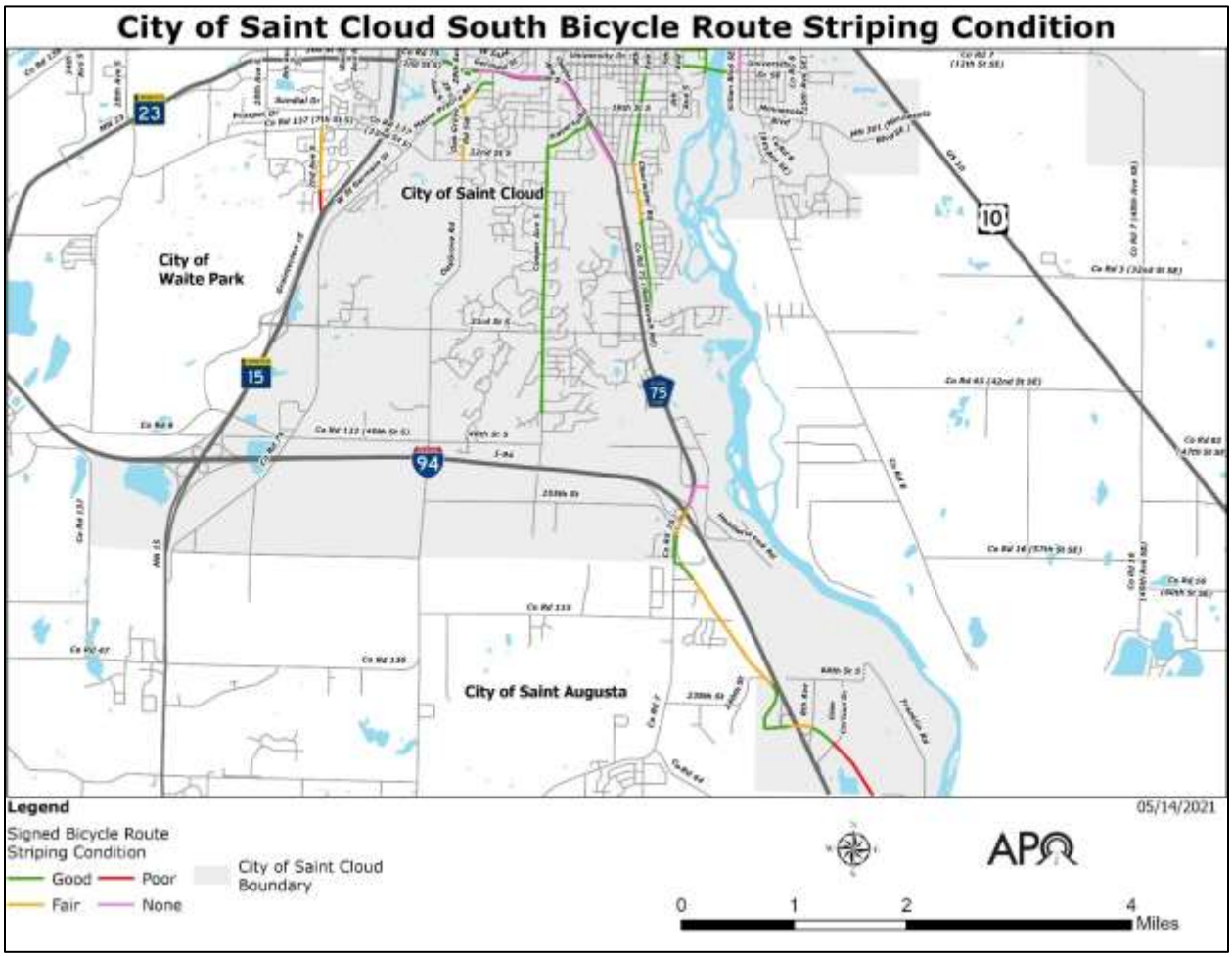


FIGURE E.21 - STRIPING CONDITION OF SIGNED BICYCLE ROUTES IN SOUTH SAINT CLOUD.

OFF-ROAD FACILITIES

Condition of Off-Road Shared Use Paths

The Parks & Trails Council of Minnesota conducted a pavement condition assessment of most shared use paths within the APO in 2020. The Council used a specially equipped electronic bicycle with instruments aboard to record the "bumpiness" of the pavement throughout the MPA.

The study concluded much of the City's facilities are in good or "smooth" condition, however, some areas in parks or neighborhoods need improvement. Approximately 28% of all shared use paths in Saint Cloud were identified as "rough" or "very rough" conditions. Examples of these can be found in the facilities around Whitney Park and along the Beaver Island Trail. See Figures E.22 – E.24 for more details.

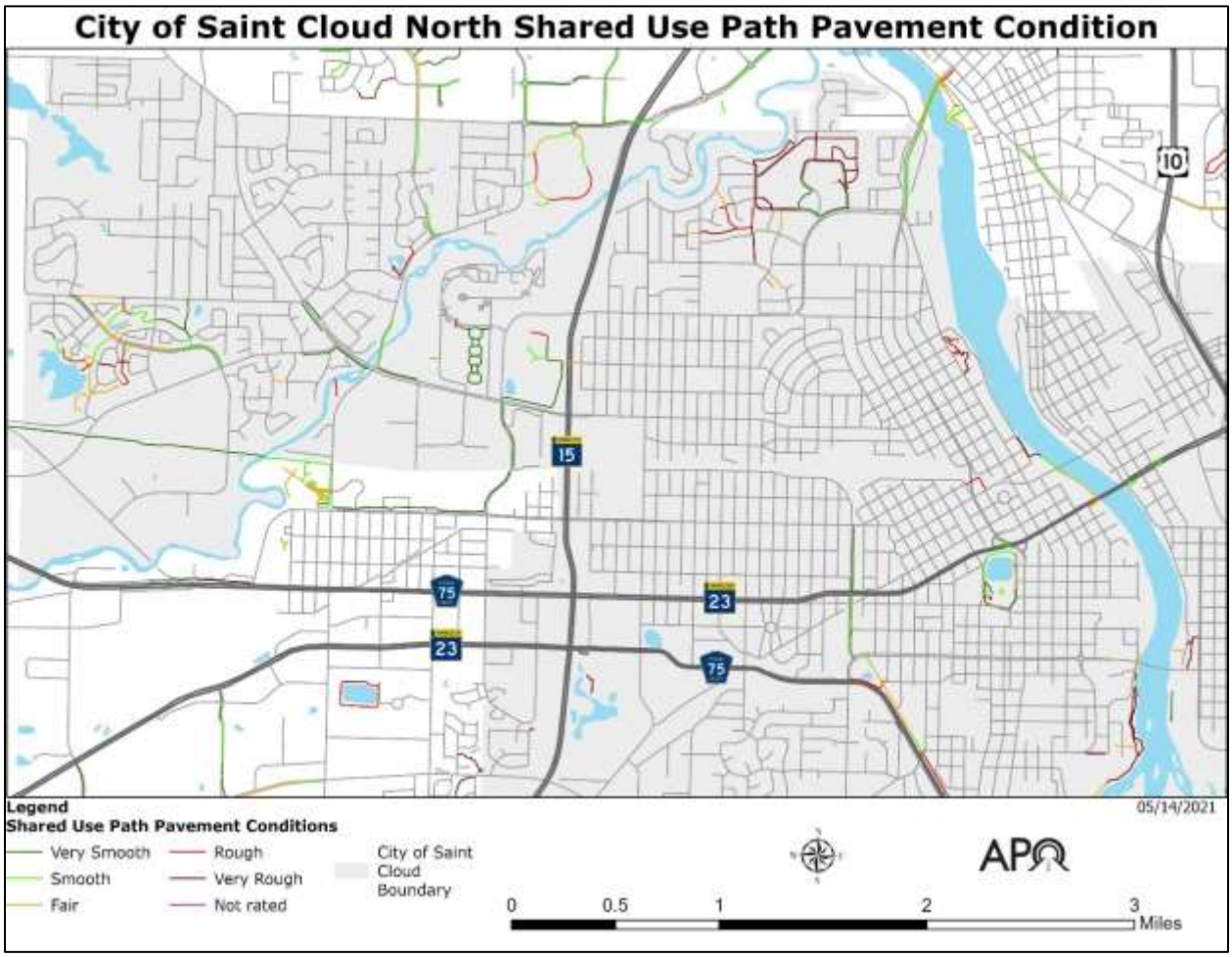


FIGURE E.22 – CONDITION OF PAVEMENTS ON SHARED USE PATHS IN NORTH SAINT CLOUD.

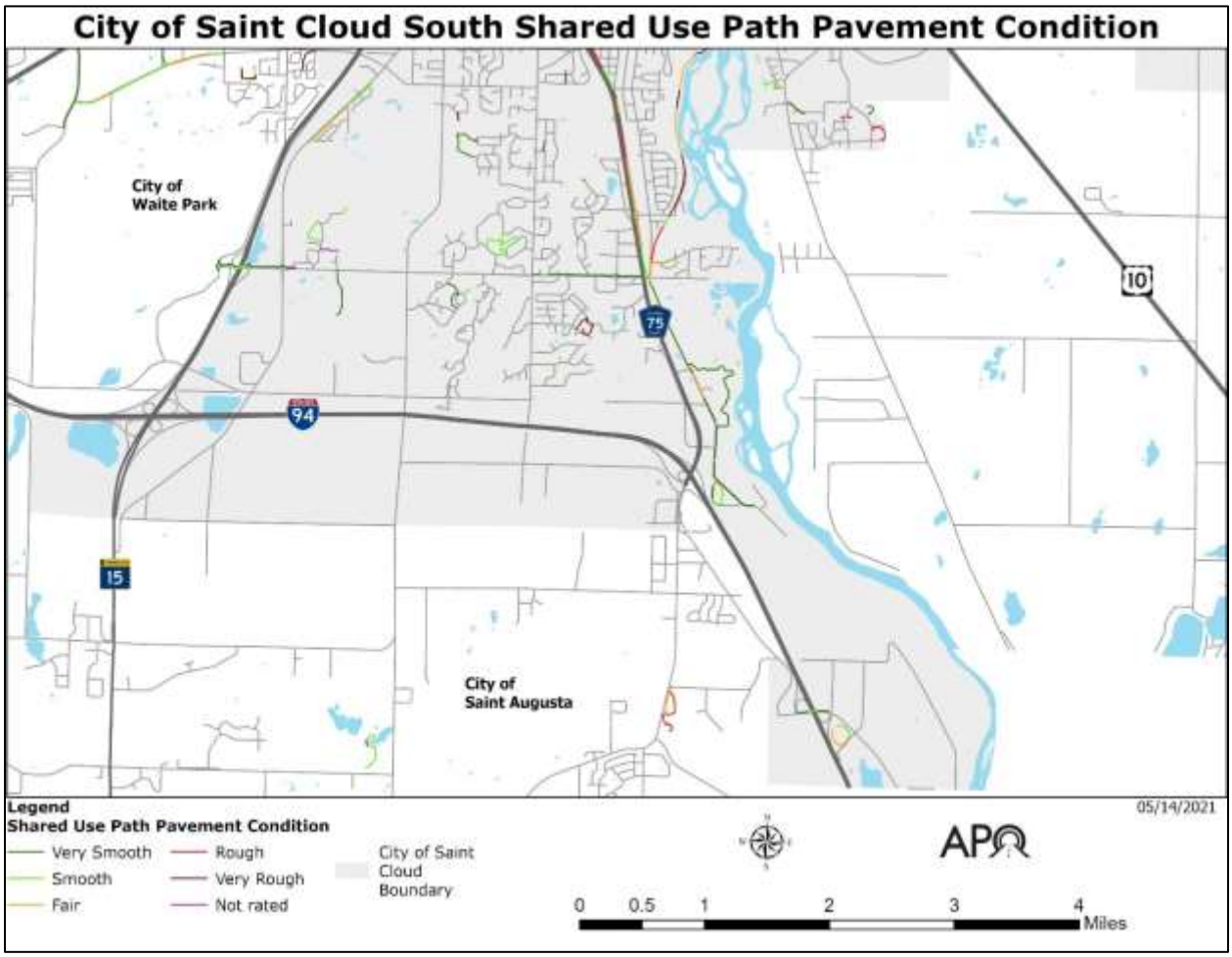


FIGURE E.23 – CONDITION OF PAVEMENTS ON SHARED USE PATHS IN SOUTH SAINT CLOUD.

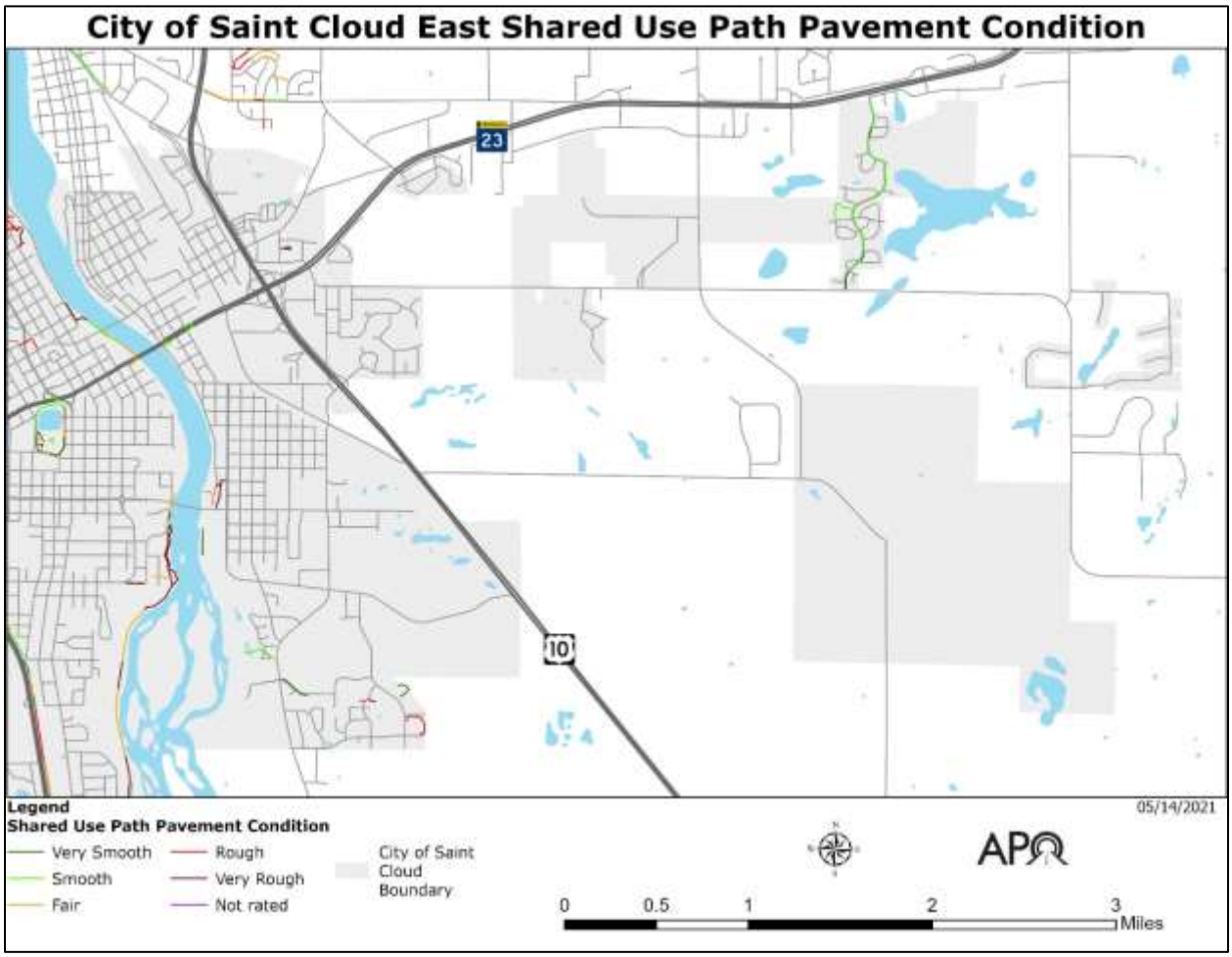


FIGURE E.24 – CONDITION OF PAVEMENTS ON SHARED USE PATHS IN EAST SAINT CLOUD.

SAINT CLOUD PLANS FOR ACTIVE TRANSPORTATION

The 2015 Comprehensive Plan (https://bit.ly/3h6dIR1), adopted in 2016 and the supplementary East End Vision Small Area Plan (https://bit.ly/3qNpVxa) approved in 2019, provide the current planning framework for transportation in Saint Cloud.

Saint Cloud has also made a commitment to improving active transportation within its boundaries. This has included the adoption of a Complete Streets policy and the city's recent designation as a Bicycle Friendly Community (BFC).

Finally, several of the city's major roadway networks (MN 23, MN 15, US 10, and CSAH 75) have been studied not only in terms of motor vehicle traffic, but for active transportation users as well.

2015 COMPREHENSIVE PLAN

As stated in the 2015 Comprehensive Plan, Saint Cloud seeks to create a highly connected transportation network that facilitates access and mobility to accommodate all users

regardless of age and ability. Saint Cloud's plan includes strategies to recognize and address bicycle and pedestrian barriers by investing in projects that improve connections. The city will improve and expand its transportation network with bicycle and pedestrian-friendly designs.

Active Transportation Needs as Identified in the Comprehensive Plan

In addressing the comprehensive plan's commitment to improving facility connections and addressing barriers, the city seeks an improved response to meeting the transportation access needs of underserved areas. Priority will be given to providing active transportation infrastructure in areas around schools and destinations often used by youth and senior citizens. The plan prioritizes improved connections between core neighborhoods and other districts. It also emphasizes that care should be given in the placement and design of facilities and crossings along major roadway corridors.

A primary objective from the 2015 Comprehensive Plan is to provide safe, non-motorized access to local and regional park facilities. Among the city's objectives are to maintain and improve the existing parks as well as expand both the park system and active transportation facilities serving them as opportunities arise. The city also seeks to improve usage and access to the Mississippi River.

Saint Cloud's 2019 East End Vision Plan outlines goals and strategies for redeveloping east Saint Cloud. This includes constructing transit-oriented development (TOD) features around the Amtrak station. The City's Vision Plan objective is to create a walkable urban environment with streetscape designs that address access and safety needs for active transportation users. The plan also calls for expansion of the bicycle network and additions to bus routes.

2011 COMPLETE STREETS

In 2011, the City of Saint Cloud became the first community in the region to adopt a Complete Streets Policy. In implementing this policy, the City seeks to achieve equity for its transportation system, balancing the needs of all ages and abilities. With its commitment to Complete Streets, the city aims to ensure safe travel for pedestrians, bicyclists, transit users, and others. The city considers the access needs for all users as it improves roadway networks to serve new development. Road designs will close gaps and address deficiencies consistent with the land use context. As it develops projects, the city will anticipate and respond to future demand for walking, bicycling, and transit usage.

2017 BICYCLE FRIENDLY COMMUNITY

For its work in promoting active modes, Saint Cloud received its designation as a Bronze level Bicycle Friendly Community (BFC) in 2017 from the League of American Bicyclists. The League cited the city's continued efforts to accommodate and encourage safe and convenient bicycling as the reason for its current designation.

TRANSPORTATION STUDIES

Recent studies of relevance in defining transportation issues and planning solutions for the City of Saint Cloud are the 2020 TH 15 Corridor Study (https://bit.ly/3t3Hf3K), the 2016 US-10 Pedestrian Crossing Report (https://bit.ly/3G5XaCC), and the 2007 TH 23 and CSAH

75 Corridor Study (https://bit.ly/3HB2GgG). These planning studies analyzed current and future traffic and facility conditions for critical corridors with reference to bicycle and pedestrian access needs.

CITY ORDINANCES

Along with various citywide planning efforts, Saint Cloud City Code (https://bit.ly/2Rx6cUu) has established several ordinances pertaining to the active transportation system and its users. The city also follows Minnesota Statutes (https://bit.ly/2QNegkf) regarding enforcing the operation of bicycles within the city.

Article 19 of the Land Development Code outlines provisions for active transportation with new street construction or reconstruction. With building or rebuilding urban collector and arterial streets, the city ordinance calls for the addition of 5-foot sidewalks on both sides of the street. Any missing segments shall be brought into compliance with current codes. At the time of reconstruction, sidewalks shall be built on at least one side of all other roadways. If there is already an existing off-road pedestrian facility (such as a shared use path), consideration may be given to foregoing the sidewalk on one side of the roadway. The minimum width of sidewalks adjacent to residential properties is 5-feet and 6-feet for commercial or industrial properties. Properties will be assessed for the full cost of installation (City Code Section 19.4). All construction is supervised by the city engineer and must meet the city engineer's standards (City Code Section 640).

Sidewalk maintenance is the responsibility of the owner or occupant of the property abutting the sidewalk. Snow and ice removal must occur within 24 hours of the snow or ice event. If the persons responsible do not comply, the city may assess the costs of removal (City Code Section 680). No one shall leave obstructions that would prevent the use of sidewalks or crossings (City Code Section 600). The city may provide notice to property owners that defective sidewalks must be repaired at the owner's expense. If the owner does not comply, the city may make repairs and assess the owner for costs (City Code Section 650).

The city ordinances place restrictions on the use of sidewalks within the Saint Cloud CBD. Sidewalk usage in the CBD is limited to pedestrians. Bicycles are not allowed, nor are skates or skateboards (City Ordinance 635).

In addition, city ordinances do not allow vehicle parking on a sidewalk or within 20 feet of a crosswalk (City Ordinance 700).

SYSTEM USAGE

Understanding bicycling and walking behavior on the active transportation network within the City of Saint Cloud can help in a couple of ways. The purpose of collecting system usage data is to measure the change in usage over time, prioritize the investment of new and existing infrastructure, and assist in planning and designing future facilities. It is essential to know how well current facilities address the user's needs.

BICYCLE AND PEDESTRIAN COUNTS

APO staff regularly place a MnDOT-owned portable bicycle and pedestrian counter along shared use path locations throughout the MPA, including several locations within the City of Saint Cloud. In addition, counts are taken at a location on the Beaver Island Trail where MnDOT has placed a permanent counter.

Portable Counting Program

The MnDOT counter uses two different types of counters simultaneously. The Pneumatic TUBE counter uses two sets of tubes placed perpendicular to traffic. When a cyclist passes over the tubes, this counter can record that cyclist and determine which direction that person was heading. Meanwhile, the PYRO-Box utilizes infrared technology to measure people's body heat who pass in front of its sensor. This counter, much like the TUBE counter, can identify travel directions. While the PYRO-Box can detect bicyclists and pedestrians, it cannot definitively distinguish between the two. When used in conjunction with the TUBE counter, APO staff can calculate pedestrian traffic from the PYRO-Box by subtracting the bicyclists from the total count.

The APO regularly deploys the counter at six counting locations throughout the city:

1. The pedestrian bridge over MN 15 at Apollo High School.
2. The Greenway Trail by North Junior High School.
3. The Mississippi River Walk behind the River's Edge Convention Center.
4. Beaver Island Trail #1 (south of SCSU).
5. Beaver Island Trail #2 (behind Toppan Merrill).
6. CSAH 75/Roosevelt Road trail (near Oak Ridge Lane).

After the completion of the 33rd Street S facility, APO staff plan on adding this location to the Saint Cloud active transportation count program.

Location	Dates Counted (2019)	*Weekday Total	*Weekday Average	*Weekend Total	*Weekend Average
Apollo Ped Bridge	07/01 – 07/07	338	68	157	79
Greenway Trail	06/24 – 06/30	365	73	120	60
Mississippi River Walk	05/27 – 06/02	706	141	300	150
Beaver Island Trail #1	09/03 – 09/09	940	188	371	186
Beaver Island Trail #2	06/10 – 06/16	657	131	196	98
CSAH 75/ Roosevelt Rd	08/27 – 09/02	481	96	144	72

FIGURE E.25 – 2019 PEDESTRIAN COUNTS FROM THE SAINT CLOUD LOCATIONS.

*DUE TO INACCURACIES WITH THE PORTABLE TUBE COUNTER DATA, APO STAFF WERE ONLY ABLE TO CALCULATE PEDESTRIAN USAGE.

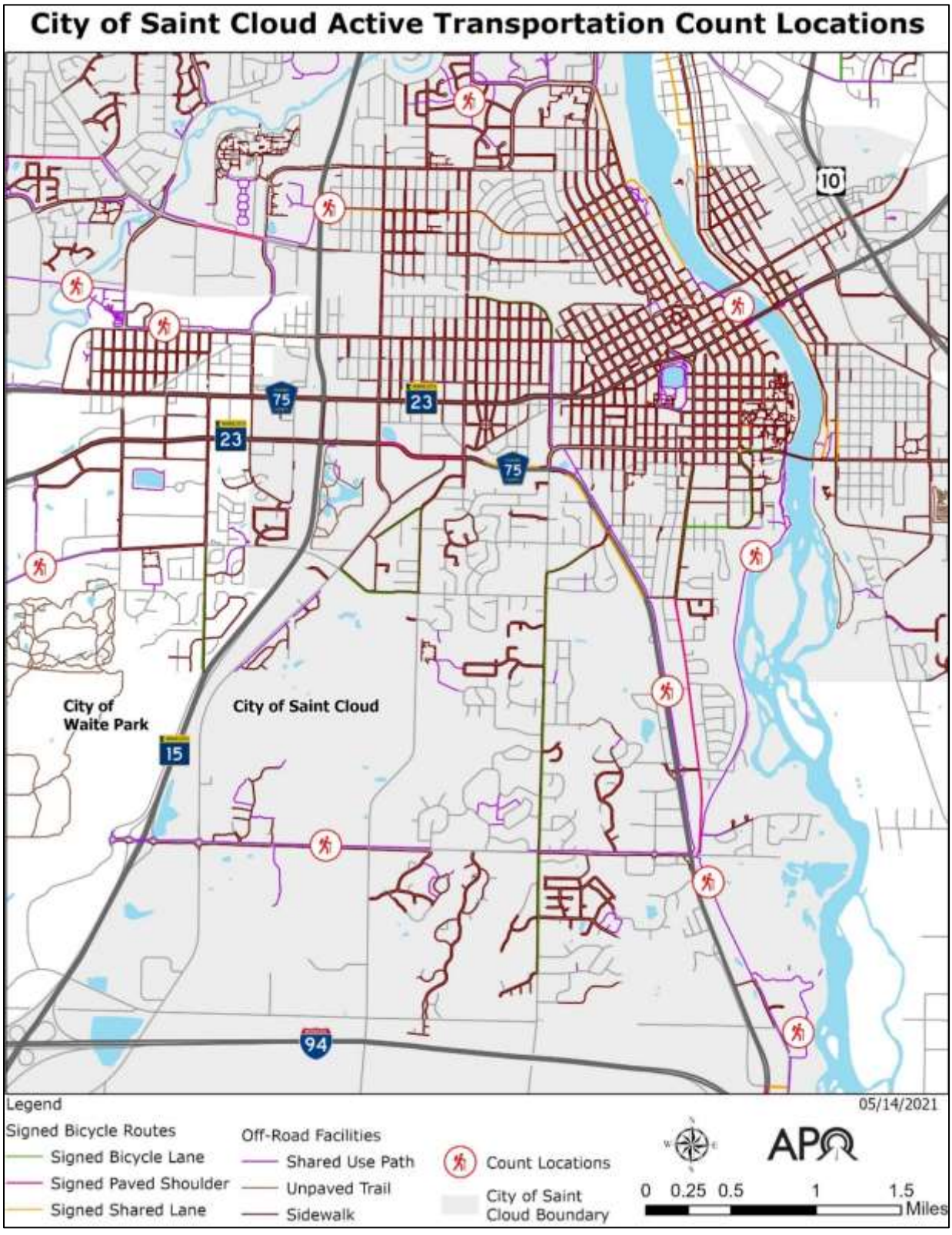


FIGURE E.26 – LOCATIONS WHERE THE APO REGULARLY DEPLOYS AUTOMATIC BICYCLE/PEDESTRIAN COUNTERS.

OF NOTE, 33RD STREET S WAS NOT ADDED TO THE APO'S COUNTING PROGRAM UNTIL 2021.

With these portable counters, APO staff monitors the daily usage of shared use paths for one-week intervals at these specific locations. However, the portable counters are owned by MnDOT. As a result, various agencies and jurisdictions can (and have) utilized the counters throughout the year, impacting the consistency in obtaining data. As a result, one of the six locations were not counted in 2020.

Location	Dates Counted (2020)	Weekday Average Bike	Weekday Average Pedestrian	Weekend Average Bike	Weekend Average Pedestrian
Greenway Trail	06/02 – 06/08	3	108	3	74
Mississippi River Walk*	07/29 – 08/10	N/A	172	N/A	157
Beaver Island Trail #1	06/09 – 06/15	8	413	20	575
Beaver Island Trail #2	07/22 – 07/28	N/A	199	N/A	152
CSAH 75/Roosevelt Road	07/08 – 07/14	14	85	28	103

FIGURE E.27: 2020 BICYCLE AND PEDESTRIAN COUNTS FROM THE SAINT CLOUD LOCATIONS.

*THE MISSISSIPPI RIVER WALK HAD THE COUNTER DEPLOYED FOR LONGER THAN ONE WEEK. ON DAYS THAT WERE COUNTED TWICE, APO STAFF CALCULATED A DAILY AVERAGE.

The Beaver Island Trail #1 location is one of a handful of sites throughout the MPA that has counts done seasonally – winter, spring, summer, and fall. Due to weather conditions, these seasonal counts are done using only the PYRO-Box counter. This counting program is relatively new (beginning in 2020), so limited data is available.

Figure E.28 shows counts at the Beaver Island Trail #1 taken at different times of the year. It is evident that usage of the facility varies depending on the seasons.

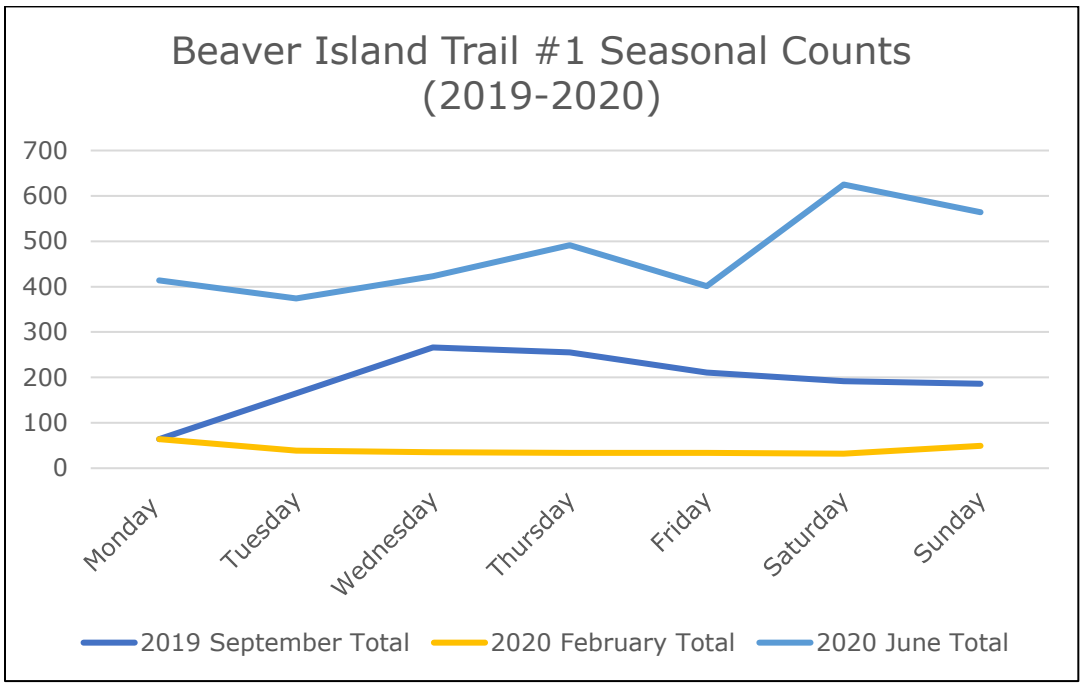


FIGURE E.28 – BEAVER ISLAND TRAIL #1 SEASONAL COUNT DATA BY DAY OF WEEK AND TIME OF YEAR.

Beaver Island Trail Permanent Counter

In 2016 MnDOT installed two permanent counters on the Beaver Island Trail south of SCSU.

The ReCycled Post Counter – much like the PYRO-Box counter – utilizes infrared technology to measure the body heat of people who pass in front of its sensors.

The ZELT Range – like the TUBE counters – is designed to measure the number of bicyclists. However, this style of counter is incorporated into the pavement in a diamond zig-zag pattern.

Since these counters have been in place since 2016, they provide the best available data set to track active transportation trends within the Saint Cloud MPA.

Due to weather conditions and other factors, count data will fluctuate by time of day and time of year. Averaging monthly day of week counts from four years of data provides a reasonable indication of how the Beaver Island Trail is utilized.

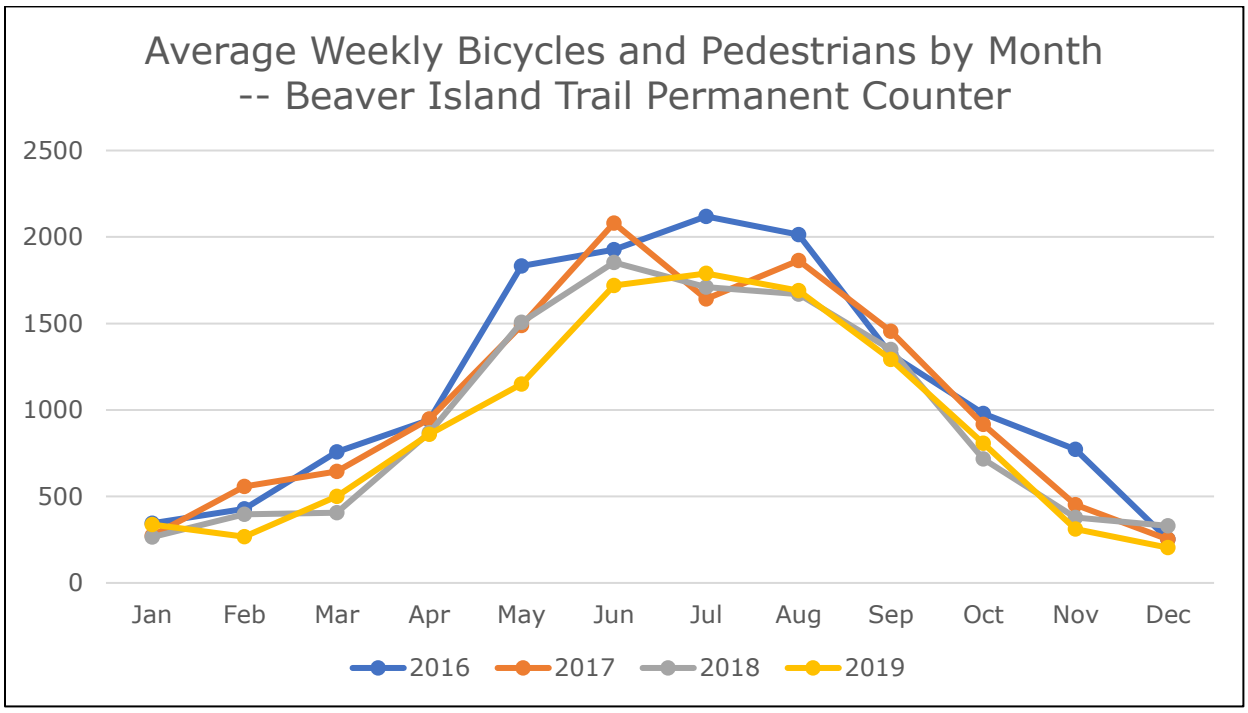


FIGURE E.29 – AVERAGE WEEKLY BICYCLES AND PEDESTRIANS BY MONTH AT THE BEAVER ISLAND TRAIL PERMANENT COUNT STATION.

As expected, a pronounced seasonal variation is consistently shown from year to year. Usage is relatively low in the winter months. It increases steadily as the weather improves in the spring, with peak usage in the summer from June through August. Average daily counts drop off in the cooler months of September and October.

Figure E.30 shows annual average counts by day of the week for bicycles and pedestrians. Adding the average daily counts shown below together results in a weekly average count of about 1,000. However, as Figure E.29 states, actual counts on the Beaver Island Trail can be double that number in the summer months, and in the winter months, they can be half that number or less.

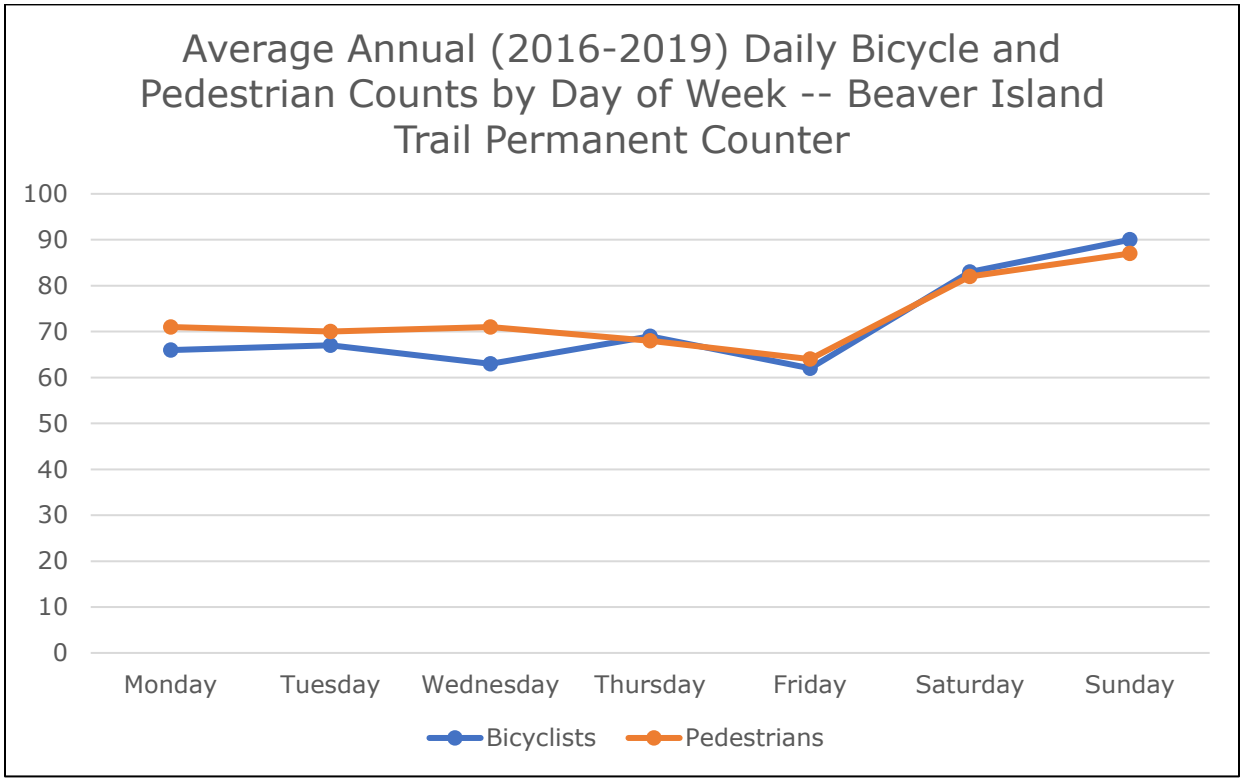


FIGURE E.30 – AVERAGE (2016-2019) DAILY BICYCLE AND PEDESTRIAN COUNT BY DAY OF THE WEEK AT THE BEAVER ISLAND TRAIL PERMANENT COUNTING STATION.

DESTINATIONS

Common destinations for active transportation users include schools, food assets, large employers, and parks. Food assets are grocery stores/supermarkets, specialty food stores, meat markets, convenience stores, and non-profit community food services. Employers listed have 100 or more full- and/or part-time employees. A closer look at these destinations are shown in Figures E.33 through E.38.

Schools

Schools and colleges within Saint Cloud are among the City's largest employers. Chief among the city's centers for higher learning is SCSU and Saint Cloud Technical and Community College (SCTCC). Saint Cloud District #742 operates nine public schools within the city limits. These schools, listed in Figure E.31, are scattered throughout the city.

Name	Address	Grades Served	Approximate Number of Students Served
Apollo High School	1000 44th Ave N	9-12	1,441
Lincoln Elementary	336 5th Ave SE	3-5	449
Madison Elementary	2805 9th St N	PK-5	710
North Junior High	1212 29th Ave N	6-8	904
Oak Hill Community School	2600 County Rd 136	PK-5	838
South Junior High	1120 15th Ave S	6-8	1,072
Talahi Community School	1321 University Dr SE	PK-2	554
Tech High School	4200 33rd St S	9-12	1,651
Westwood Elementary	5800 Ridgewood Rd	PK-5	415

FIGURE E.31 – THE NINE SAINT CLOUD SCHOOL DISTRICT PUBLIC SCHOOLS LOCATED WITHIN THE CITY OF SAINT CLOUD.

Each of the schools and colleges within Saint Cloud has some degree of access to active transportation facilities and is served by Metro Bus. A mix of sidewalks and shared use paths has expanded over time to improve access and safety for students who bike or walk to each school, though gaps remain in some areas. Safe Routes to School plans have been prepared or are in the process of being developed for many District 742 schools to address areas of need.

Food Assets

Grocery stores and other food destinations are found throughout Saint Cloud, though primarily found in the downtown CBD and along the city's primary commercial corridors – Division Street, Second Street S, and US 10. Because these corridors carry a high volume of vehicular traffic, access to these destinations can be difficult for active transportation users to reach.

While many food assets in Saint Cloud are typically along some active transportation facility – either a sidewalk, shared use path, or transit stop – people who walk or cycle often need to cross roadways with many fast-moving cars to get to these destinations.

Large Employers

Saint Cloud is home to many of the region's largest employers. Among the highest employers are the health care networks of CentraCare and the Saint Cloud Veteran's Administration (VA) Center. The State of Minnesota, which includes SCSU, SCTCC, the Department of Corrections, and other regional services, is a major employer.

As with food assets, large employers are often situated along high-volume vehicular routes that are often a barrier to access for many active transportation users. The Mississippi River and the BNSF Railroad can present barriers to employment centers and other destinations as well.

Most large employers in Saint Cloud are located on or near Metro Bus fixed routes through access to sidewalks, and shared use paths vary.

Parks

The City of Saint Cloud has over 95 parks of varying size and function within the city limits. This includes 11 regional and seven semi-regional parks. As noted in the Comprehensive Plan, the city intends to provide park access within a half-mile of all homes. The city seeks to meet this need by providing an extensive network of shared use paths and on-road bicycle facilities that are well-connected to parks and greenways.

The larger parks within Saint Cloud are generally served with sidewalks or shared use paths. Residential areas near the City's core are more likely to have active transportation facilities to access the city's parks. It should be noted that many of Saint Cloud's smaller neighborhood parks, especially in outlying areas, have limited or no sidewalk access.

FIGURE E.32 – CLEMENS/MUNSINGER GARDENS IN SAINT CLOUD.

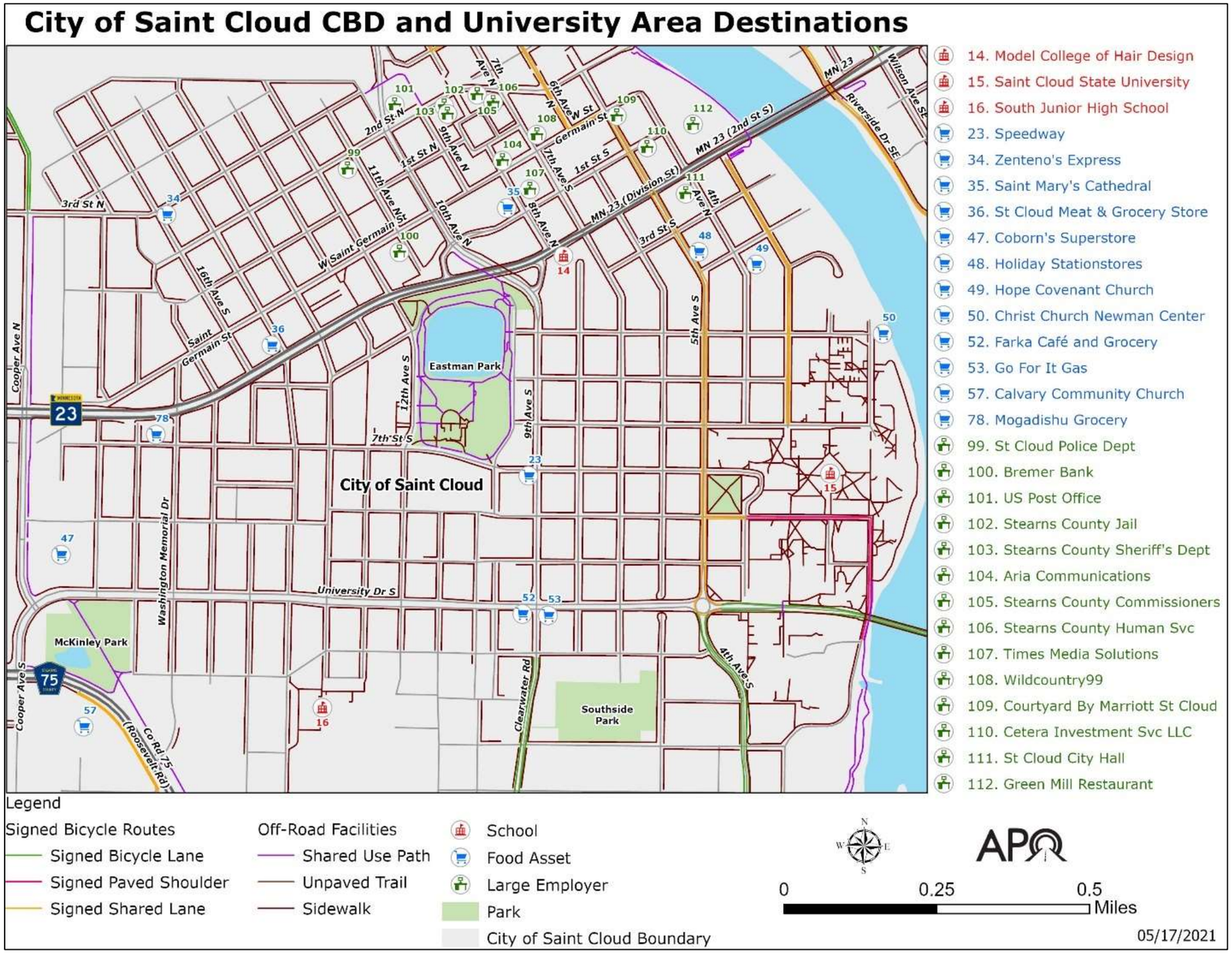


FIGURE E.33 - DESTINATIONS FOR ACTIVE TRANSPORTATION USERS IN THE CBD AND SCSU AREA.

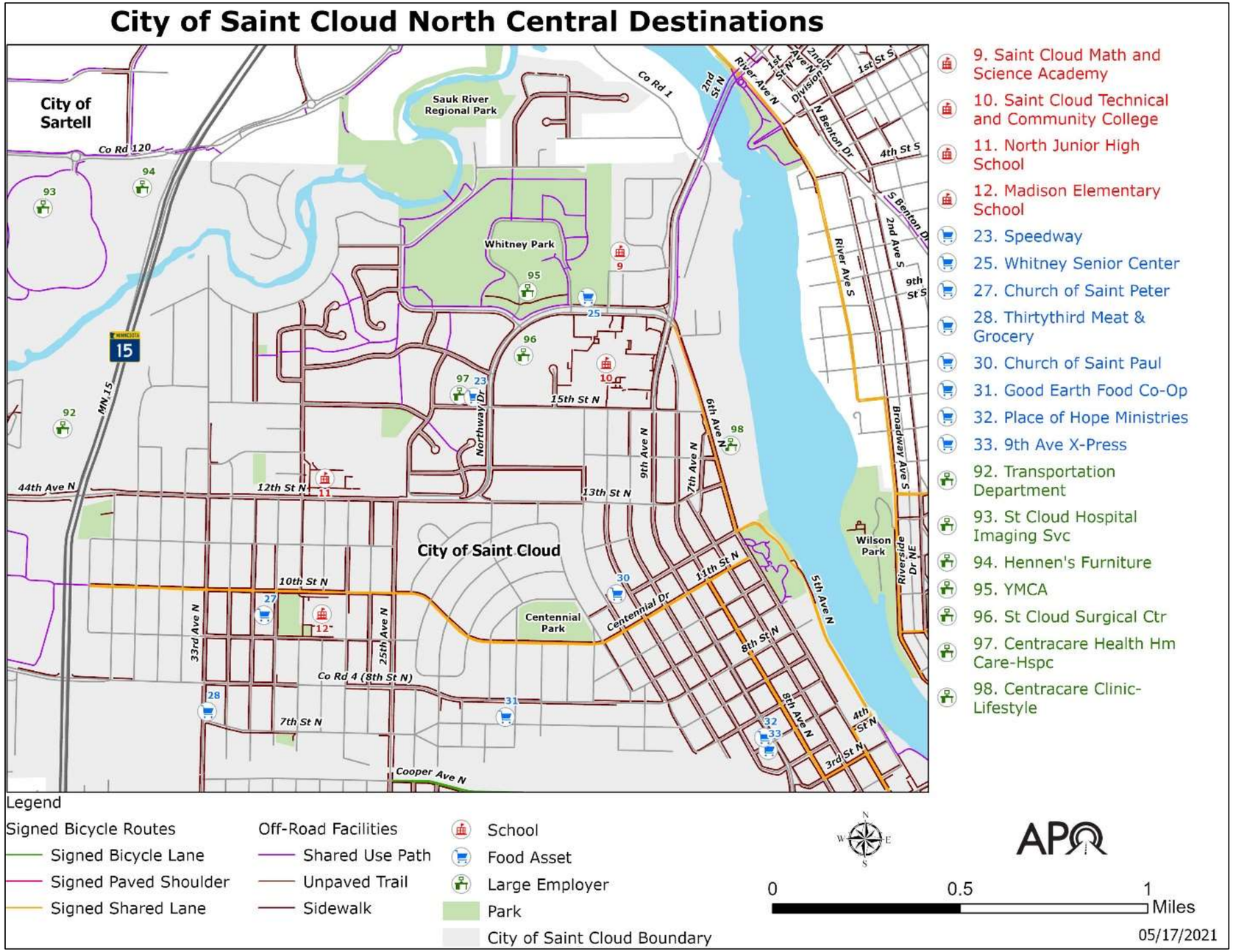


FIGURE E.34 - DESTINATIONS FOR ACTIVE TRANSPORTATION USERS IN THE NORTH CENTRAL AREA OF SAINT CLOUD.

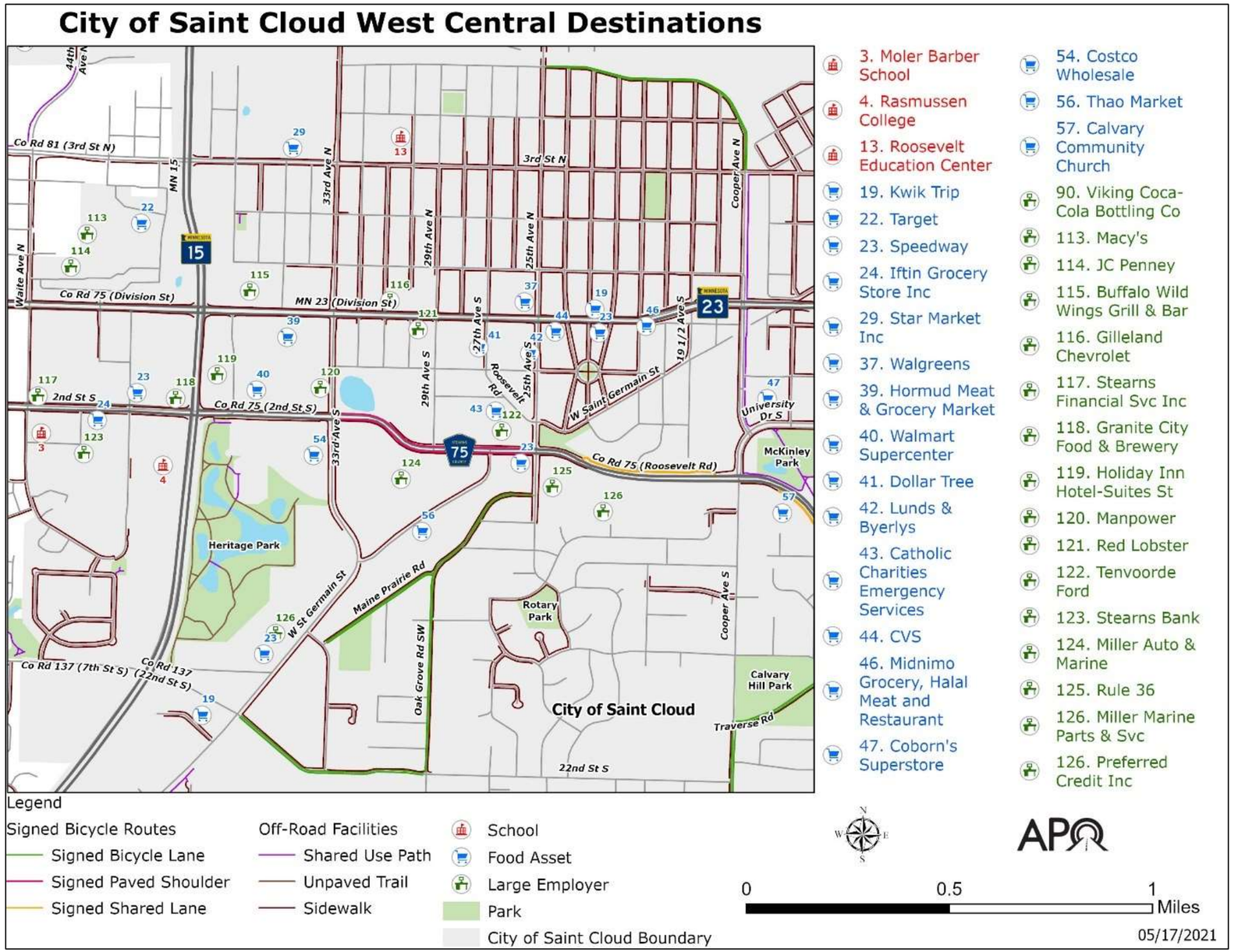


FIGURE E.35 - DESTINATIONS FOR ACTIVE TRANSPORTATION USERS IN THE WEST CENTRAL AREA OF SAINT CLOUD.

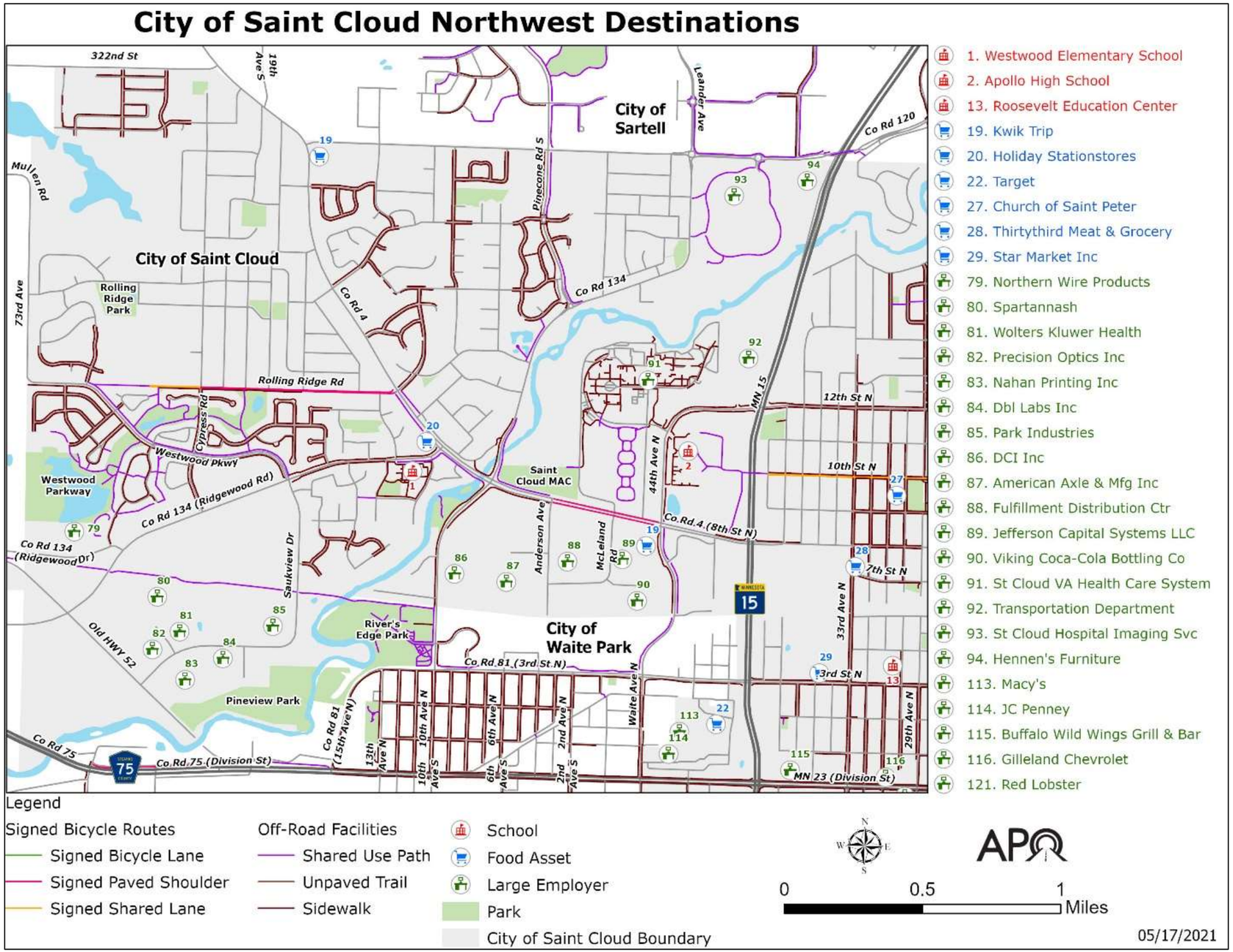


FIGURE E.36 - DESTINATIONS FOR ACTIVE TRANSPORTATION USERS IN THE NORTHWEST AREA OF SAINT CLOUD.

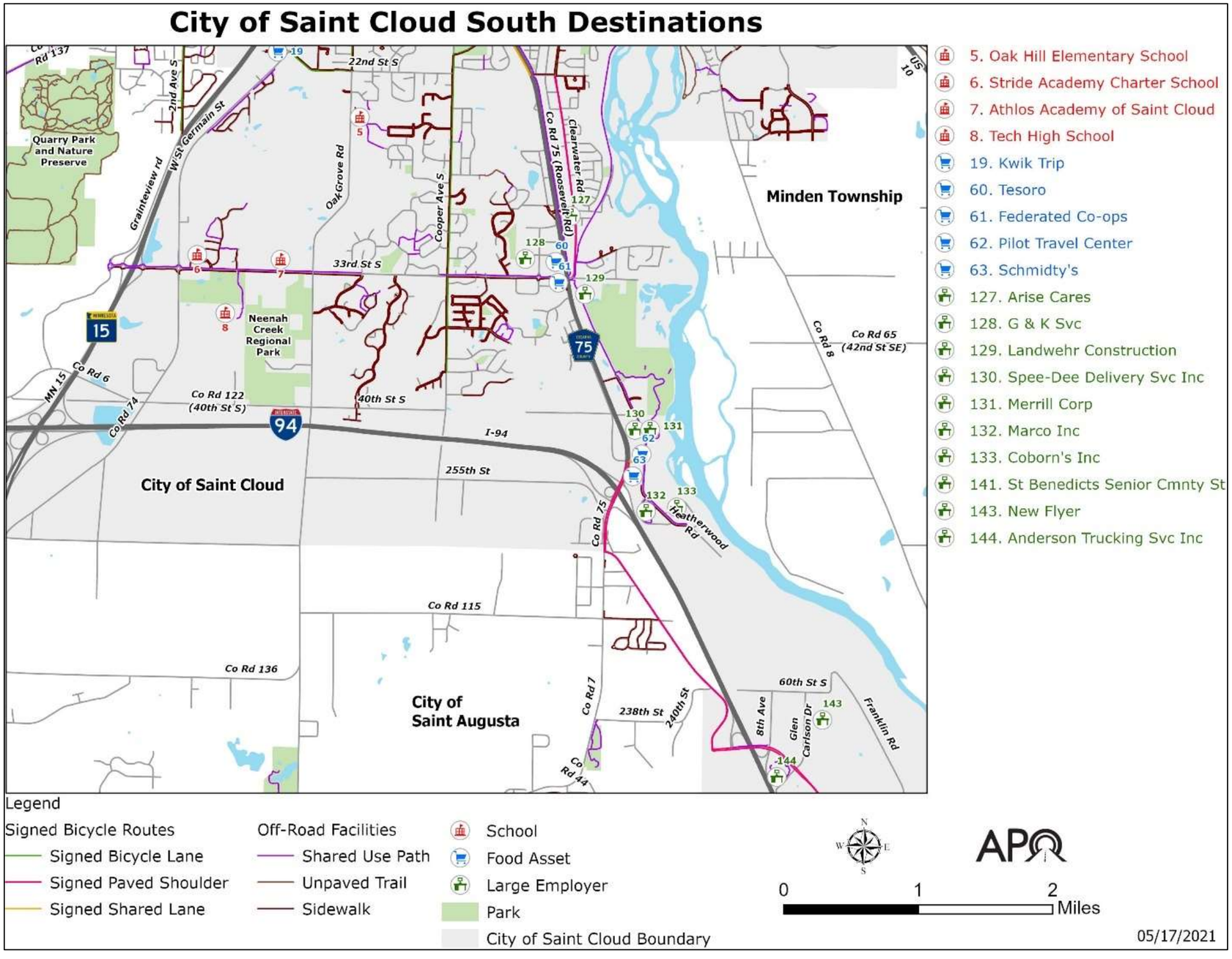


FIGURE E.37 - DESTINATIONS FOR ACTIVE TRANSPORTATION USERS IN SOUTH SAINT CLOUD.

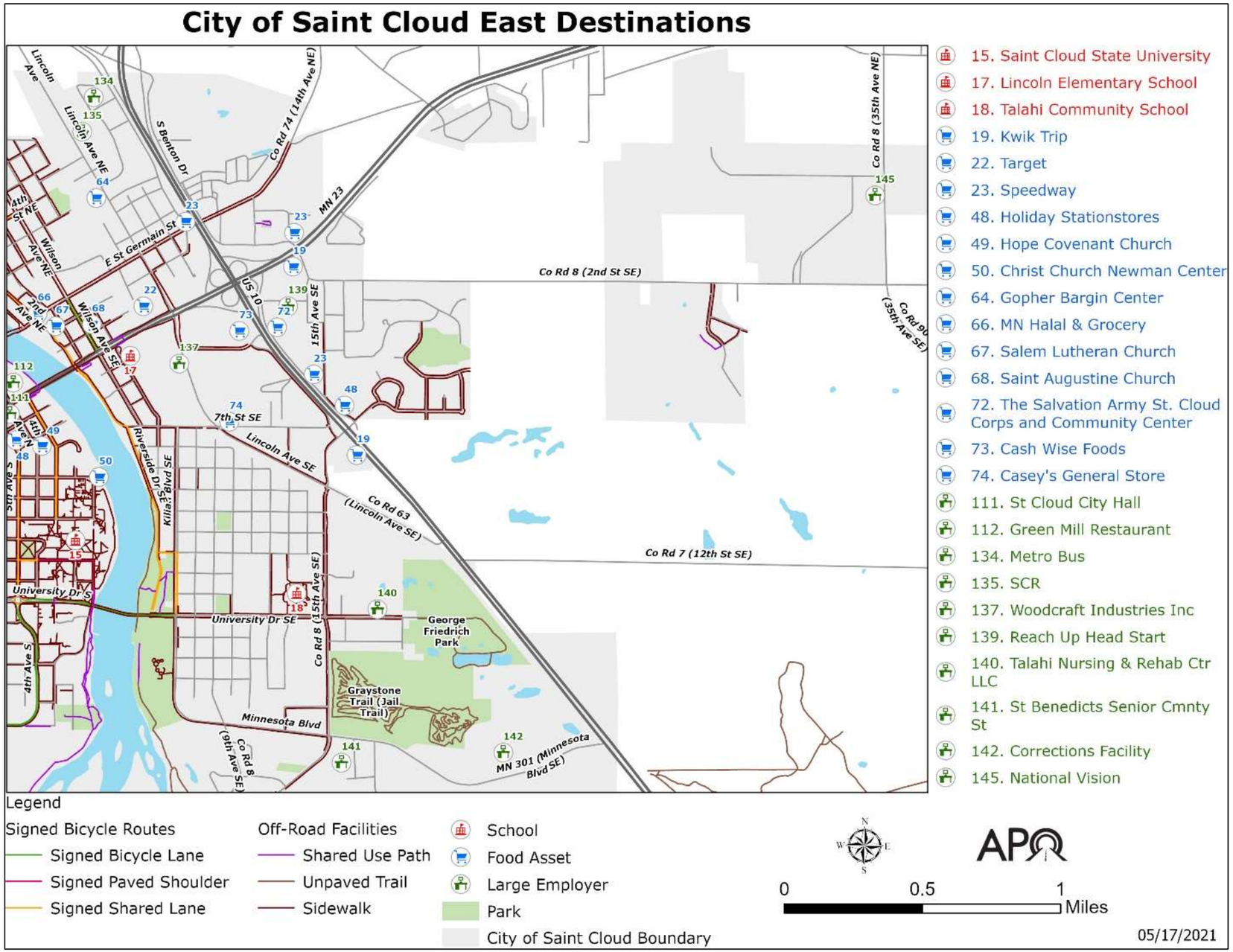


FIGURE E.38 - DESTINATIONS FOR ACTIVE TRANSPORTATION USERS IN EAST SAINT CLOUD.

SAFETY

According to the Minnesota Department of Public Safety (DPS), fatalities, serious injuries, and minor injuries involving bicyclists and pedestrians rose within the Saint Cloud MPA through 2019.

Within the City of Saint Cloud, DPS crash data shows 460 total crashes involving active transportation users and vehicles occurred in the 10 years between 2010 and 2019. Twelve of these crashes resulted in a pedestrian fatality – primarily located in the downtown and east side areas of the city.

City of Saint Cloud staff examined crashes within the city between 2010 and 2019 including those involving bicyclists and pedestrians. This review noted a high incidence of crashes on MN 23, US 10, Saint Germain Street, and Fifth Avenue, all corridors with high levels of active transportation users. The report identified possible deficiencies where these crashes occurred: limited visibility, poor lighting, crossings not within the proper signal interval, and inadequate walk and clearance times. The report concludes that crashes will tend to increase as traffic volumes increase.

Crash locations for the six subareas are indicated in Figures E.39 through E.44.

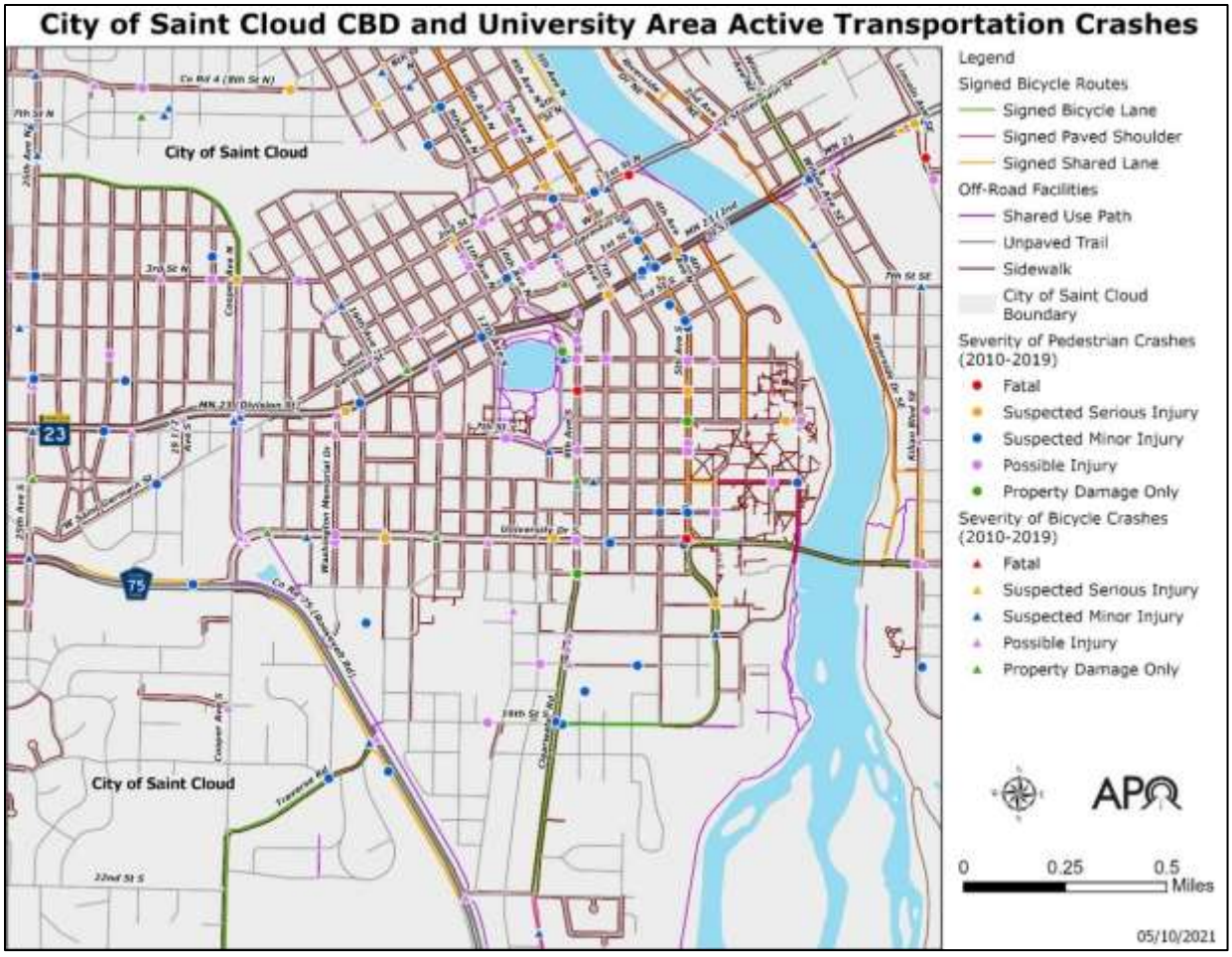


FIGURE E.39 - LOCATIONS WITH CRASHES INVOLVING BICYCLES AND PEDESTRIANS IN THE CBD AND SCSU AREA OF SAINT CLOUD.

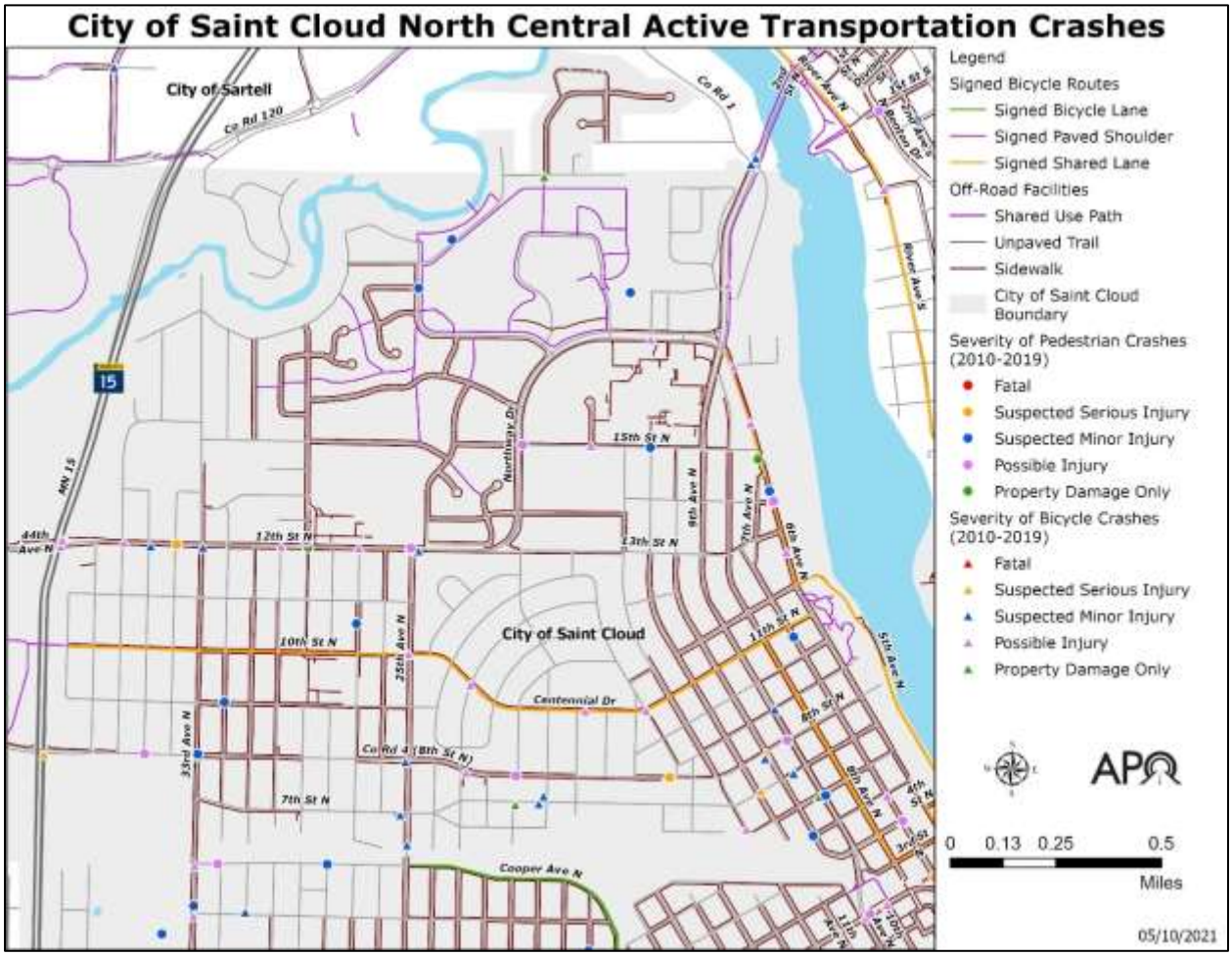


FIGURE E.40 - LOCATIONS WITH CRASHES INVOLVING BICYCLES AND PEDESTRIANS IN THE NORTH CENTRAL AREA OF THE CITY OF SAINT CLOUD.

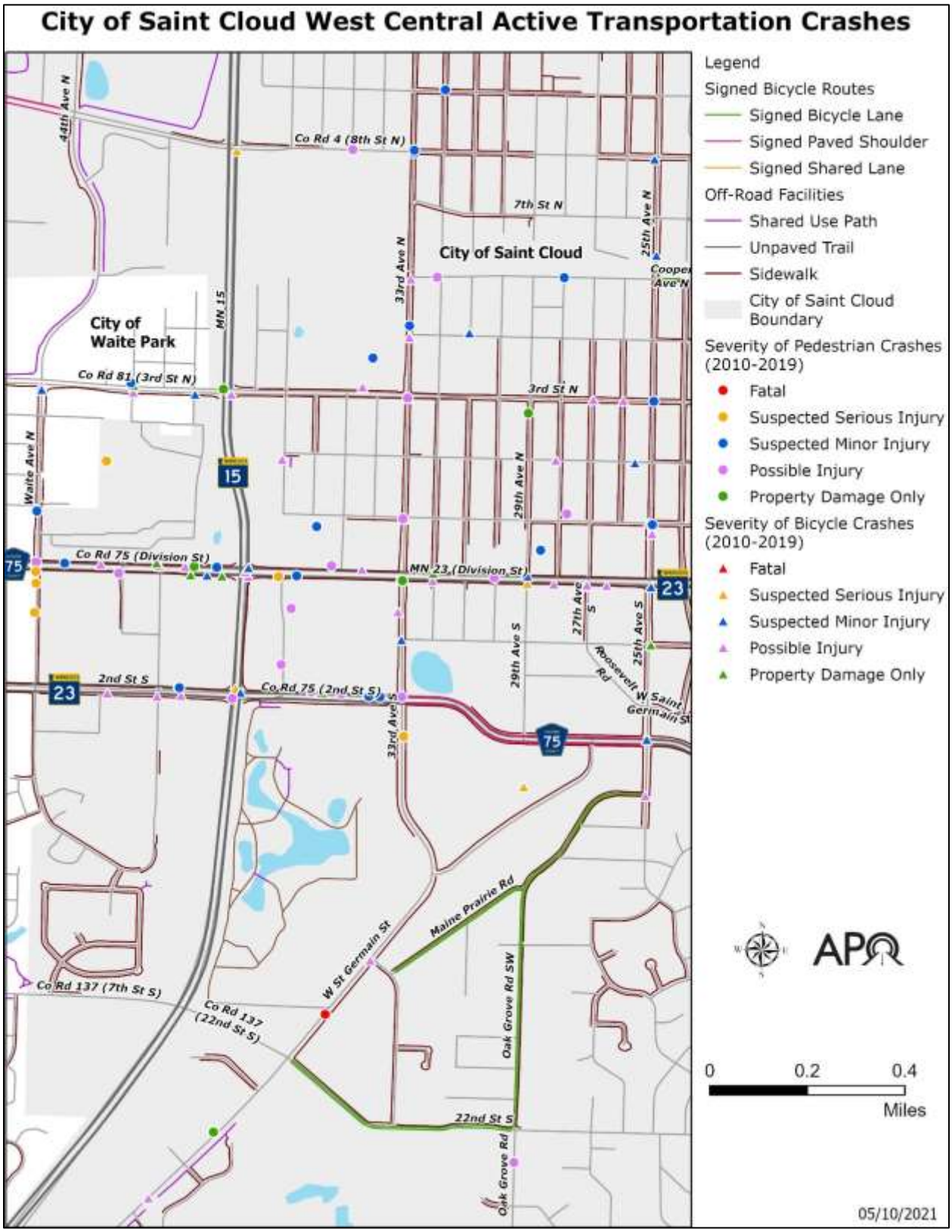


FIGURE E.41 - LOCATIONS WITH CRASHES INVOLVING BICYCLES AND PEDESTRIANS IN THE WEST CENTRAL AREA OF THE CITY OF SAINT CLOUD.

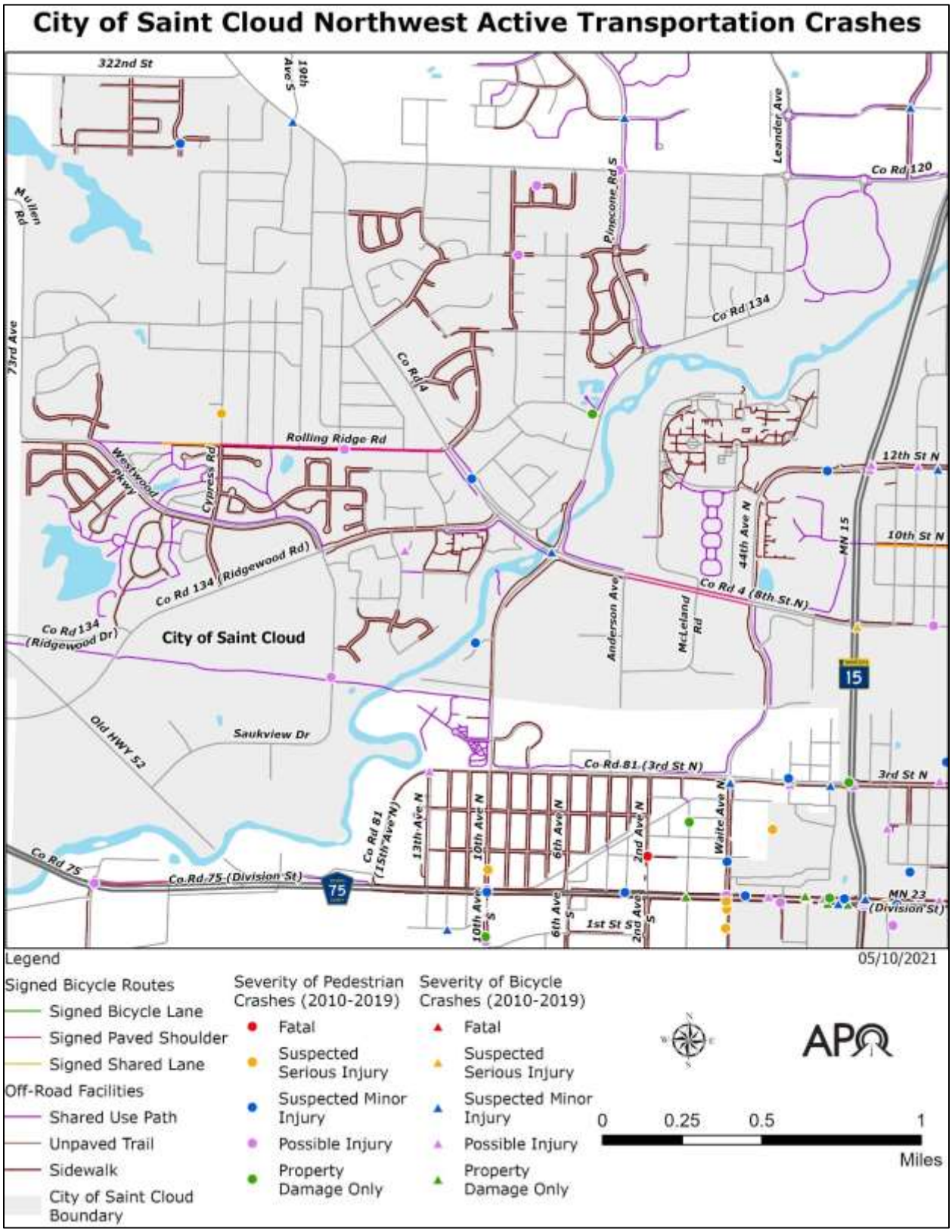


FIGURE E.42 - LOCATIONS WITH CRASHES INVOLVING BICYCLES AND PEDESTRIANS IN THE NORTHWEST AREA OF THE CITY OF SAINT CLOUD.

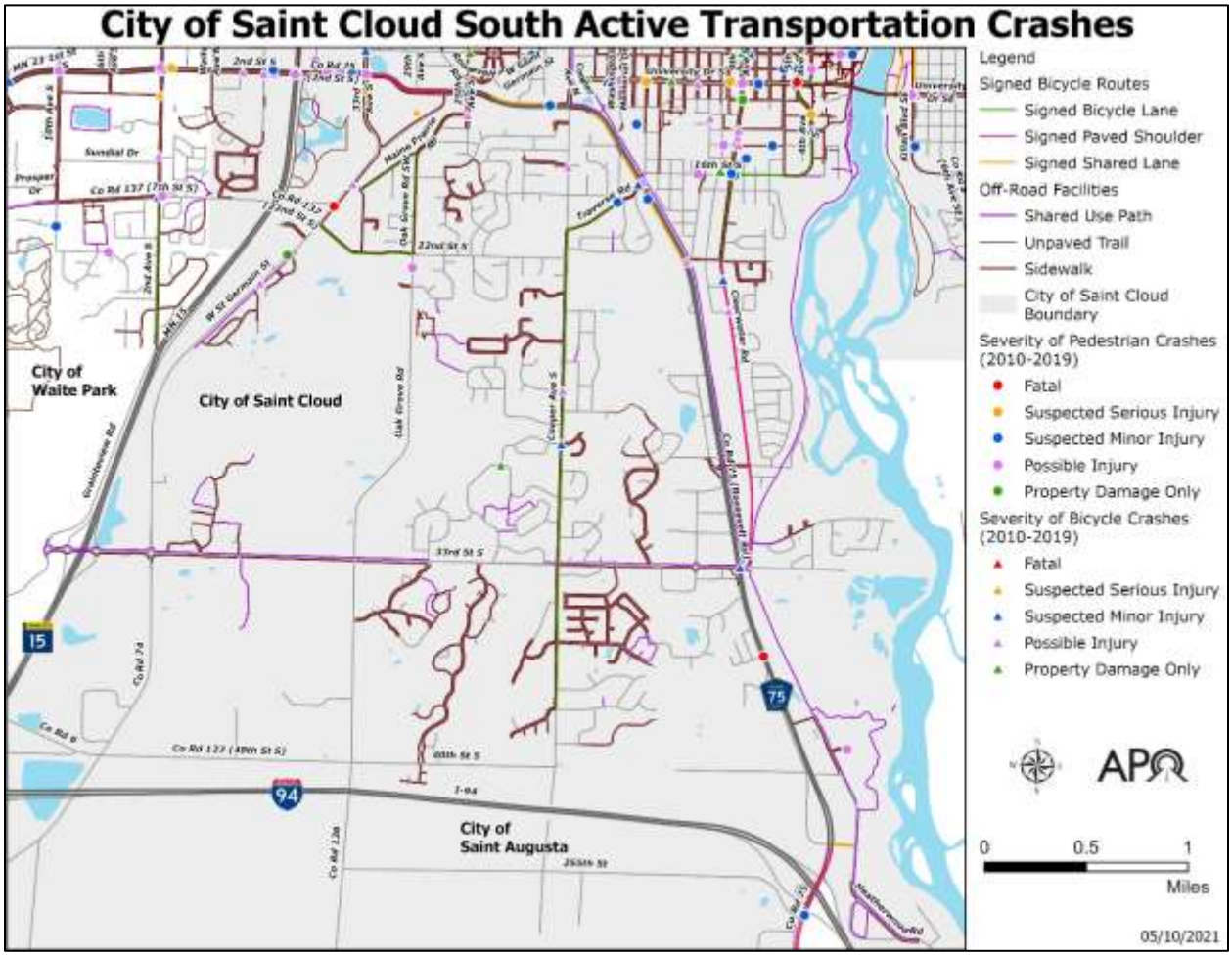


FIGURE E.43 - LOCATIONS WITH CRASHES INVOLVING BICYCLES AND PEDESTRIANS IN SOUTH SAINT CLOUD.

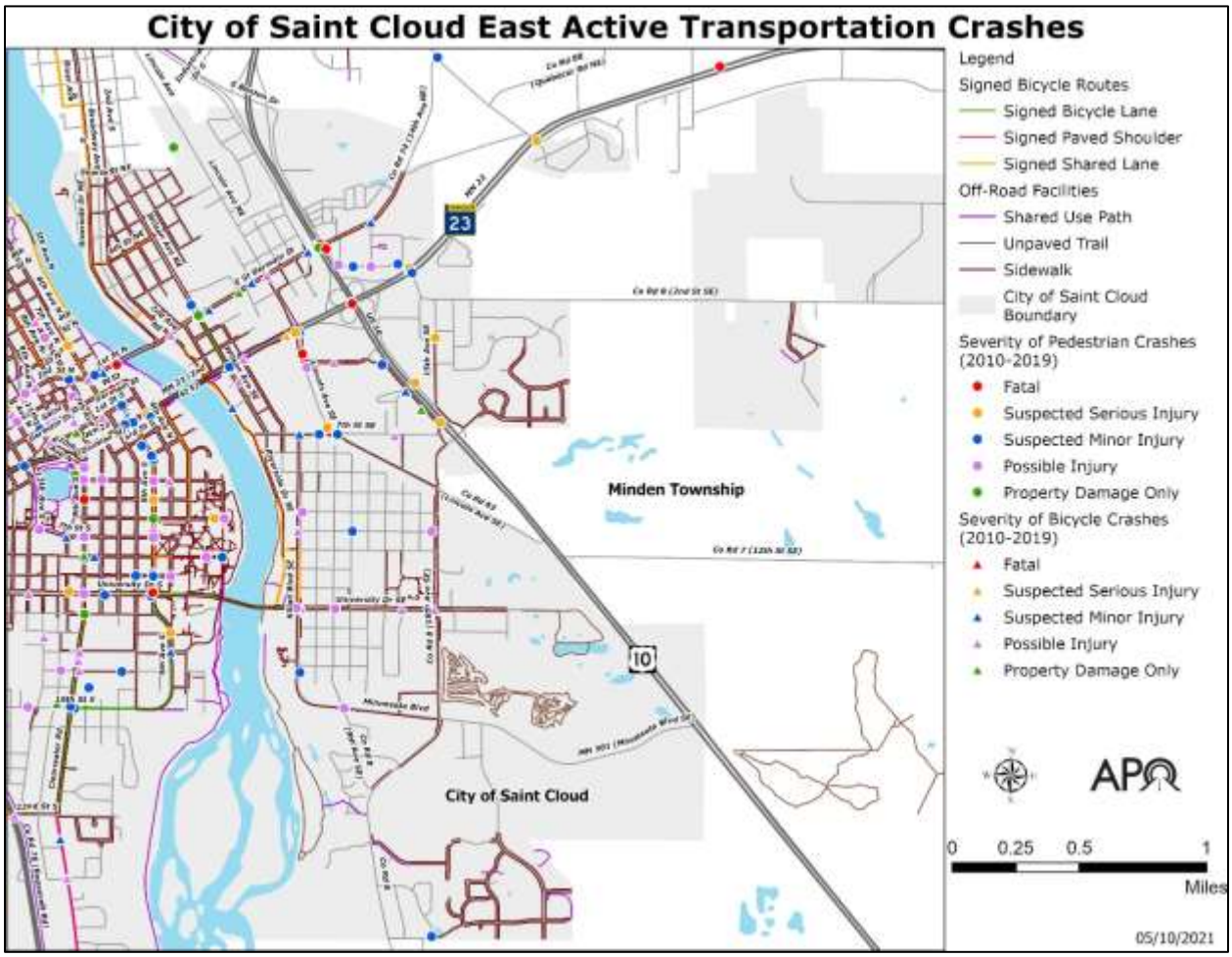


FIGURE E.44 – LOCATIONS WITH CRASHES INVOLVING BICYCLES AND PEDESTRIANS IN EAST SAINT CLOUD.

PROGRAMMED AND PLANNED IMPROVEMENTS

The City of Saint Cloud maintains a Capital Improvement Program (CIP), which identifies short-term projects and long-range concepts designed to improve active transportation facilities. The CIP also indicates anticipated future revenues that may be available to implement such projects.

Following its policy on Complete Streets and consistent with the City's Americans with Disabilities (ADA) Transition Plan, Saint Cloud has proactively identified and addressed issues and concerns for those who use the active transportation network.

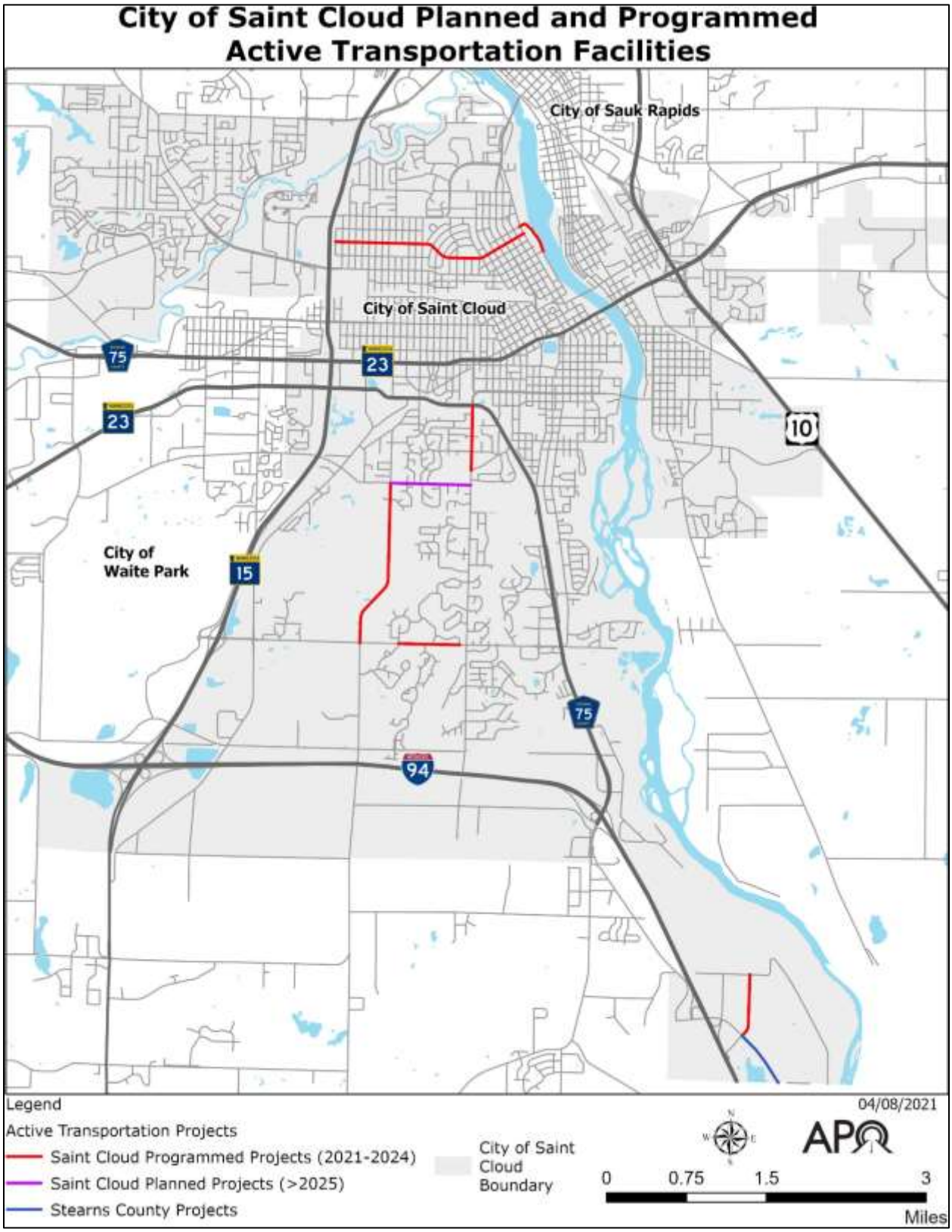


FIGURE E.45 – PLANNED AND PROGRAMMED ACTIVE TRANSPORTATION PROJECTS FOR THE CITY OF SAINT CLOUD.

The City of Saint Cloud has programmed funding to complete the following projects:

- Construct a new shared use path to follow Fifth Avenue N along the Mississippi River to connect the Beaver Island Trail.
- Reconstruct 33rd Street S from 26th Avenue S to Cooper Avenue S with a sidewalk on the south side and a paved shared use path on the north side.
- Reconstruct County Road 136 (Oak Grove Road) from 22nd Street S to 33rd Street S with the addition of bike lanes.
- Reconstruct Cooper Avenue S from CSAH 75 to Traverse Road to include new bicycle lanes and sidewalks.
- Construct the Beaver Island Trail connection from the existing trail at Saint Cloud's Wastewater Treatment Facility to the city's southern border.
- Extend the Lake Wobegon Trail with bicycle lanes along the 10th Street N/Centennial Drive/11th Street N corridor.

In addition to the projects above led by the city, MnDOT has programmed funding to reconstruct the MN 23 and US 10 interchange to include multimodal access improvements.

Longer-term (though currently unfunded) goals for the City's active transportation network include completing the remaining network gap along 22nd Street S with the planned connection from Oak Grove Road to Cooper Avenue.

Figure E.45 shows the locations for the City's programmed and planned projects.

ACTIVE TRANSPORTATION NEEDS ASSESSMENT

APO staff performed a citywide analysis of facility and other needs for active transportation users to supplement and inform current city planning efforts. The intent of this assessment, conducted in coordination with City staff and representatives, was to identify active transportation needs within the city and assist in prioritizing those needs in the event funding becomes available.

GOALS AND OBJECTIVES FOR ACTIVE TRANSPORTATION

The regional goals and objectives for active transportation as adopted by the APO provide a starting point for the Saint Cloud needs assessment.

Those goals were:

1. Improve bicycle and pedestrian safety and comfort.
2. Improve active transportation connections to desired destinations.
3. Improve the condition of active transportation infrastructure.
4. Provide equitable access to active transportation facilities for all people of all abilities.
5. Promote an interconnected regional active transportation network.

The evaluation factors were equally applied for assessing needs within each city and across the MPA. The goals, objectives, and factors used to evaluate services and needs relative to each objective are detailed in Chapter 4. Performance ratings from the evaluation of factors for Saint Cloud are shown in Figure E.46.

Saint Cloud			2019
Number of Non-Motorized Fatalities and Suspected Serious Injuries Five Year Rolling Average			*4.2*
Percentage miles of arterials & collectors that have a sidewalk or shared use path (SUP) on at least one side			*52.9%*
Percent of destinations that fall within distance categories	Schools	0 Ft (Asset Served by AT Facility)	*83.3%*
		1-310 ft (One block or less)	*5.6%*
		311-930 ft (Two to three blocks)	*11.1%*
		> 931 ft (Four or more blocks)	*0.0%*
	Food Assets	0 Ft (Asset Served by AT Facility)	*78.3%*
		1-310 ft (One block or less)	*6.7%*
		311-930 ft (Two to three blocks)	*6.7%*
		> 931 ft (Four or more blocks)	*8.3%*
	Large Employers	0 Ft (Asset Served by AT Facility)	*58.8%*
		1-310 ft (One block or less)	*8.8%*
		311-930 ft (Two to three blocks)	*10.3%*
		> 931 ft (Four or more blocks)	*22.1%*
	Parks	0 Ft (Asset Served by AT Facility)	*64.8%*
		1-310 ft (One block or less)	*7.4%*
		311-930 ft (Two to three blocks)	*13.0%*
		> 931 ft (Four or more blocks)	*14.8%*
	Transit Stops	0 Ft (Asset Served by AT Facility)	*64.3%*
		1-310 ft (One block or less)	*19.2%*
		311-930 ft (Two to three blocks)	*9.3%*
		> 931 ft (Four or more blocks)	*7.2%*
Percent of street crossings that do not meet full ADA standards			*58.6%*

Saint Cloud	2019
Miles of Active Transportation facilities per 1,000 residents in EJ/Title VI Sensitive Areas in comparison to non-sensitive areas	*12.3:2.5*
Percent mileage of Regional Priority bicycle facilities that do NOT exist	*44.7%*
Percent of on-road bicycle facilities with poor pavement	*1.9%*
Percent of SUP with rough/very rough pavement	*27.9%*

FIGURE E.46 – SAINT CLOUD PERFORMANCE REPORT CARD (2019).

NEEDS ASSESSMENT METHODOLOGY

From the goals and objectives framework, APO staff, in coordination with Saint Cloud city staff and community volunteers, developed the following methodology to address critical gaps in the current active transportation system. It should be noted that while this process does not account for every gap or need in the network, it does focus on addressing gaps utilizing existing data as it relates to the region's active transportation goals and objectives.

The APO's active transportation needs assessment methodology was broken into three phases. Beginning with an in-depth analysis of transportation networks, APO staff identified issues and needs within individual communities across the region. This cursory review led to a more detailed analysis of active transportation needs for focus areas identified within each city and ultimately the identification of jurisdictional-level project recommendations – Phase 2. In the final phase, local and regional needs identified in the previous phases were prioritized according to the degree goals and objectives would be addressed.

Phase 1: Evaluating Needs for the City of Saint Cloud

In order to begin this evaluation, APO staff reviewed needs and service area gaps relative to the factors listed under goals 1-4. APO staff compiled a series of maps and data that detailed the city's existing active transportation conditions. Utilizing the objectives and applying factors (as identified in Chapter 4), staff began to dive into the existing conditions data to look for network gaps or areas of concern (i.e., high crash locations, locations of under-designed on-road/off-road facilities).

Figures E.47 through E.49 summarize the findings for the north, south, and east areas of Saint Cloud.

Considered along with the factors were the comments from the APO's initial public input along with comments from city staff. Areas where multiple issues were revealed when the factors were applied became the focus of further review and analysis.

Analysis of Areas of Need - North Saint Cloud

	Safety & Comfort Factors						Connectivity Factors			Facility Condition			Equity Factors			Issues	Potential Treatments
		1 High Number of Fatalities	2 High Number of Injuries	3 Under Design Guidelines	4 No Adjacent P/B Facilities	5 Cited as Safety Concern		1 Access to Destinations	2 Access to Transit Needs		1 On Road Conditions	2 Off Road Conditions		1 Underserved Demographic	2 ADA Compliance		
5th Avenue North		x	x	x				x				x		x		High volume minor arterial, concentration of crashes, below standards (speed, volume, destinations (employers, food assets), poor sidewalk pavements, vulnerable populations.	Pedestrian and bicycle crossing improvements, facility design options, add facilities, traffic calming.
5th Avenue South		x	x	x		x		x			x			x		High usage collector, concentration of crashes, below standards (speed, volume), destinations (SCSU, food assets), poor bike lane pavements, vulnerable populations.	Pedestrian and bicycle crossing improvements, facility design options, add facilities, traffic calming.
University Drive		x	x	x		x		x						x		High volume collector, concentration of crashes, underdesigned for traffic volume, destinations (SCSU, food assets), vulnerable populations.	Pedestrian and bicycle crossing improvements, facility design options, add facilities, traffic calming.
9th Avenue South		x	x			x		x						x		Minor arterial, concentration of crashes, fatalities, destinations (park, food assets), vulnerable populations.	Pedestrian and bicycle crossing improvements, facility design options, add facilities, traffic calming.
East Division (Cooper Ave to 5th Ave N)		x	x			x		x						x		Principal arterial, concentration of crashes, crossing safety concerns, destinations (employers, food assets), vulnerable populations.	Pedestrian and bicycle crossing improvements, facility design options, add facilities, traffic calming.
2nd Street N/1st Street N		x	x			x		x						x		Minor arterial, concentration of crashes, crossing safety concerns, destinations (employers, food assets), vulnerable populations.	Pedestrian and bicycle crossing improvements, facility design options, add facilities, traffic calming.
MN 15 (3rd St N to 2nd St S)		x	x			x		x						x		Principal arterial, concentration of crashes, crossing safety concerns, destinations (employers, food assets), vulnerable populations.	Pedestrian and bicycle crossing improvements, facility design options, add facilities.
2nd Street South/CR 75 (Waite Ave to Cooper)		x	x	x		x		x						x	x	Principal arterial, concentration of crashes, crossing safety concerns, below design standards (speed, volume, shoulders), destinations (employers, food assets), vulnerable populations.	Pedestrian and bicycle crossing improvements, facility design, add facilities, bring intersections to ADA standards.
West Division (Waite Ave to Cooper)		x	x			x		x						x		Principal arterial, concentration of crashes, crossing safety concerns, destinations (employers, food assets), vulnerable populations.	Pedestrian and bicycle crossing improvements, facility design options, add facilities, traffic calming.
12th Street N/ Northway Drive			x					x						x		Minor arterial, concentration of crashes, destinations (schools, park, employers), vulnerable populations.	Pedestrian and bicycle crossing improvements, facility design options, add facilities, traffic calming.
6th Ave N			x					x				x		x		Major collector, concentration of crashes, destinations (schools, park, employers), vulnerable populations.	Pedestrian and bicycle crossing improvements, facility design options, add facilities, traffic calming.
CR 134/Ridgewood Rd					x			x						x		Major collector, lacks facilities, destinations (industrial park), vulnerable populations.	Pedestrian and bicycle crossing improvements, facility design options, add facilities, traffic calming.
Veterans Dr (CR 4)				x	x			x						x	x	Minor arterial, underdesigned for volume, lacks facilities, destinations (food assets, industrial park), vulnerable populations.	Pedestrian and bicycle crossing improvements, upgrade facility design, add facilities, bring intersections to ADA standards.

FIGURE E.47 – NORTH SAINT CLOUD NEEDS ANALYSIS.

Analysis of Areas of Need - South Saint Cloud

	Safety & Comfort Factors						Connectivity Factors			Facility Condition			Equity Factors			Issues	Potential Treatments
		1 High Number of Fatalities	2 High Number of Injuries	3 Under Design Guidelines	4 No Adjacent P/B Facilities	5 Cited as Safety Concern		1 Access to Destinations	2 Access to Transit Needs		1 On Road Conditions	2 Off Road Conditions		1 Underserved Demographic	2 ADA Compliance		
Roosevelt Rd (CR 75)				X								X		X	X	Principal arterial, below standards (speed, volume), poor path pavements, vulnerable populations, ADA intersection compliance.	Upgrade bicycle facilities, improve on and off-road pavement conditions, bring intersections to ADA standards.
Traverse Rd			X								X			X	X	Minor collector, crashes, poor bike lane pavements, vulnerable populations, ADA intersection compliance.	Pedestrian and bicycle crossing improvements, improve on-road pavement conditions, bring intersections to ADA standards.
Clearwater Rd			X	X							X			X		High volume minor arterial, concentration of crashes, below standards (volume), destinations (employers, food assets), poor bike lane pavements, vulnerable populations.	Pedestrian and bicycle crossing improvements, traffic calming, improve on-road pavement conditions.

FIGURE E.48 – SOUTH SAINT CLOUD NEEDS ANALYSIS.

Analysis of Areas of Need - East Saint Cloud

	Safety & Comfort Factors						Connectivity Factors			Facility Condition			Equity Factors			Issues	Potential Treatments
		1 High Number of Fatalities	2 High Number of Injuries	3 Under Design Guidelines	4 No Adjacent P/B Facilities	5 Cited as Safety Concern		1 Access to Destinations	2 Access to Transit Needs		1 On Road Conditions	2 Off Road Conditions		1 Underserved Demographic	2 ADA Compliance		
East St Germain		X	X			X		X						X		Minor arterial, concentration of crashes, crossing safety concerns, destinations (food assets), vulnerable populations.	Pedestrian and bicycle crossing improvements, facility design options, add facilities, traffic calming.
Division St E/14th Ave SE		X	X			X		X						X		Partial collector, concentration of crashes, crossing safety concerns, destinations (food assets), vulnerable populations.	Pedestrian and bicycle crossing improvements, facility design options, improved access for vulnerable and underserved groups.
MN 23 (East of Riverside Dr)			X			X		X						X		Principal arterial, concentration of crashes, crossing safety concerns, destinations (school, food assets), vulnerable populations.	Pedestrian and bicycle crossing improvements, facility design options, add facilities, traffic calming.
US 10 (S of E St Germain)			X			X		X			X			X		Principal arterial, concentration of crashes, crossing safety concerns, destinations (food assets), vulnerable populations.	Pedestrian and bicycle crossing improvements, facility design, improve pavements, access to destinations.
Lincoln Ave SE			X		X			X				X		X	X	Minor arterial, concentration of crashes, destinations (food assets, employers), vulnerable populations, ADA intersection compliance.	Pedestrian and bicycle crossing improvements, added facilities, traffic calming, bring intersections to ADA standards.
Killian Boulevard				X				X			X	X		X		Major collector, under design standards (speed, volume), destinations (schools, park), poor pavement conditions, vulnerable populations.	Upgrade bicycle facilities, improve on and off-road pavement conditions.

FIGURE E.49 –EAST SAINT CLOUD NEEDS ANALYSIS.

Phase 2: Analysis of Saint Cloud Focus Areas

From the process described for the review of needs and gaps for the City of Saint Cloud, the following areas have been identified as priority areas for improvements.

- West Division area.
- Second Street S area.
- University Drive area.
- East Division Street area.
- US 10/Lincoln Avenue area.

These focus areas have similar characteristics in common. All include high volume minor arterials or collectors, which active transportation users often cross. As a result, each of these four areas are high crash locations for bicyclists and pedestrians. In addition, each of these areas have several destinations of interest for active transportation users.

Being able to assure that pedestrians and bicyclists can safely cross roadways like CSAH 75, MN 23, MN 15, and US 10 (all with heavy vehicle traffic) have been identified in the City's plans and regional transportation studies as an ongoing challenge. Given the growing vehicle traffic in Saint Cloud, these safety issues have increased significantly. The history of crashes with the potential for more dangerous conflicts between vehicle traffic and active transportation users, coupled with the need to improve access, led to identifying these focus areas.

Each of these areas has many destinations active transportation users seek. While there may be connecting facilities within these areas to reach these destinations, people's ability to safely cross main thoroughfares within these focus areas has been an ongoing concern.

APO staff working in conjunction with city staff for each focus area further analyzed needs and issues and worked to identify possible solutions.

West Division Area

The West Division focus area includes the length of Division Street from 41st Avenue S to Cooper Avenue S, as shown in Figure E.50. In the City's Comprehensive Plan, this area is identified as a retail and employment hub and a gateway into Saint Cloud that transitions toward the Downtown Area.

West Division Street has been identified as a focus area due to its high level of activity from all transportation modes, the number of crashes involving pedestrians or bicyclists, crossing safety concerns, and the presence of several destinations.

NEEDS AND ISSUES

Division Street is the primary east/west transportation corridor for the Saint Cloud region. The high level of traffic congestion on roadway has often been cited in local and regional plans as a significant issue. This area of Saint Cloud, which includes Crossroads and other large retail centers, is also a primarily commercial area for the city and a regional attraction.

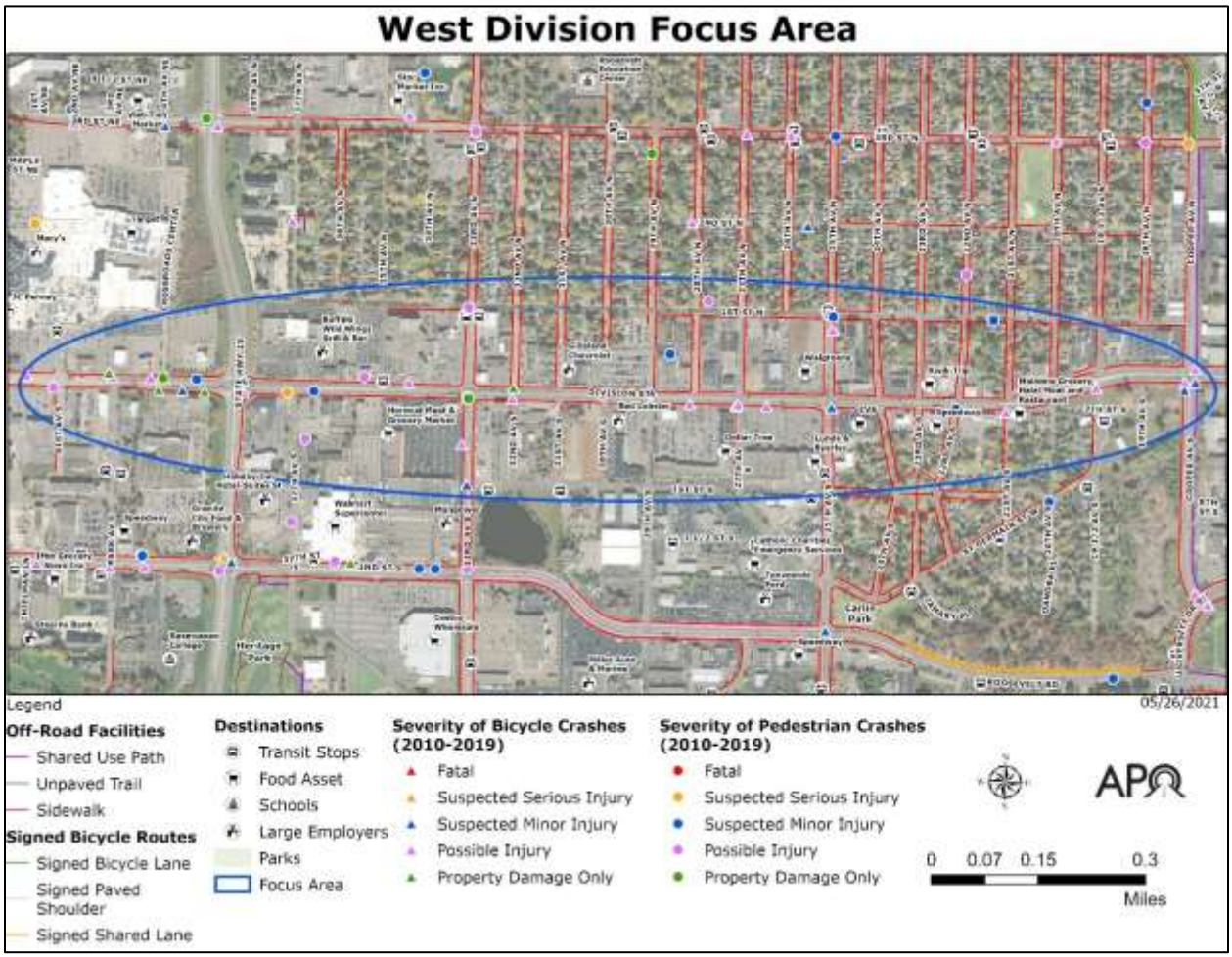


FIGURE E.50 – WEST DIVISION STREET FOCUS AREA IN SAINT CLOUD.

The average daily traffic on this section of Division Street ranges from 14,250 to 17,000 vehicles. The posted speed is 35 mph. The volume of vehicle turning movements at full access intersections is very high. The high traffic volume and the large number of active transportation users crossing Division Street to reach their destinations contribute to the high incidence of crashes.

Within the area along the West Division Street corridor shown in Figure E.50, there have been over 30 crashes reported involving pedestrians and bicyclists between 2010 and 2019. Many of these crashes occurred at signalized intersections, with multiple crashes at Cooper Avenue, 33rd Avenue, and MN 15. In addition, several crashes recorded were in mid-block areas of Division Street.

The City's Comprehensive Plan states Division Street is a prime mobility corridor. As such, priority must continue to be given to vehicle movements while safely accommodating other users. Along both sides of Division Street, there are sidewalks with signal-controlled intersections and crosswalks for active transportation users at regularly spaced intervals. The City's plan recommended eliminating many driveways or parking curb cuts along the corridor to reduce conflict points that may result in safety issues.

Long distances for pedestrians to cross Division were identified in the Comprehensive Plan as problematic for safe crossings. Extending medians, providing pedestrian refuge areas and

bump-outs to shorten crossing distances, and controlling vehicle speeds are recommendations from the Comprehensive Plan to improve crossing safety on west Division.

The APO's MN 15 corridor study also reviewed the performance of Division Street intersections within the area between 33rd Avenue and Waite Avenue in Waite Park relative to the comfort of pedestrians and bicyclists. While pedestrian volumes that cross at the intersection of Highway 15 and Division are minimal, the volume of vehicle traffic presents a significant safety issue for those who choose to do so. The MN 15 study notes that marked crosswalks used with other safety strategies such as refuge islands, curb extensions, and appropriate signage will improve pedestrian safety along Division Street.

While the Comprehensive Plan identifies the need to accommodate all modes, no signed bicycle routes are within the West Division area of focus. The City's plan does include a concept for a future bicycle route that would follow 33rd Avenue and cross Division Street.

RECOMMENDATIONS

This plan reiterates many of the recommendations from the Comprehensive Plan to make crossing Division Street safer. Recommended improvements are as follows:

- At the signalized intersections on Division Street, consider adding a leading pedestrian interval (LPI) to improve visibility and increase crossing time.
- Consider adding curb extensions (bump-outs) at intersections on Division Street to reduce the crossing distance for pedestrians.
- Consider fencing or barriers along Division Street to discourage mid-block crossings.
- Add a north/south bicycle facility connection to cross Division Street at 25th Avenue or 33rd Avenue.

Second Street S Area

The Second Street S focus area encompasses the roadway from Thielman Lane (abutting the City of Waite Park) to just east of 25th Avenue S. This focus area – as illustrated in Figure E.51 – includes several retail and office parks and serves as a significant retail and employment corridor for the City of Saint Cloud.

Crossing concerns, the presence of many destinations, facility designs below MnDOT guidelines, and the number of crashes involving pedestrians or bicyclists elevated this corridor to be a focus area.

NEEDS AND ISSUES

The 2020 MN 15 corridor study identified the intersections of Second Street S and both MN 15 and 33rd Avenue as hot spots for crashes. High traffic volumes and speeds from MN 15 along the Second Street S corridor often create conflicts that contribute to crashes – including those involving active transportation users.

The average daily traffic on Second Street S east of MN 15 ranges from 10,900 to 12,500. West of MN 15, traffic volumes increase to an average of 15,000 vehicles per day. The posted speed on Second Street S is 40 mph. In addition to the traffic volumes and speeds, this stretch of roadway experiences a high volume of turning movements at the intersections of MN 15, 33rd Avenue S, and 25th Avenue S. Vehicle traffic levels and desires of active transportation users to reach their destinations are likely factors in the high incidence of crashes.

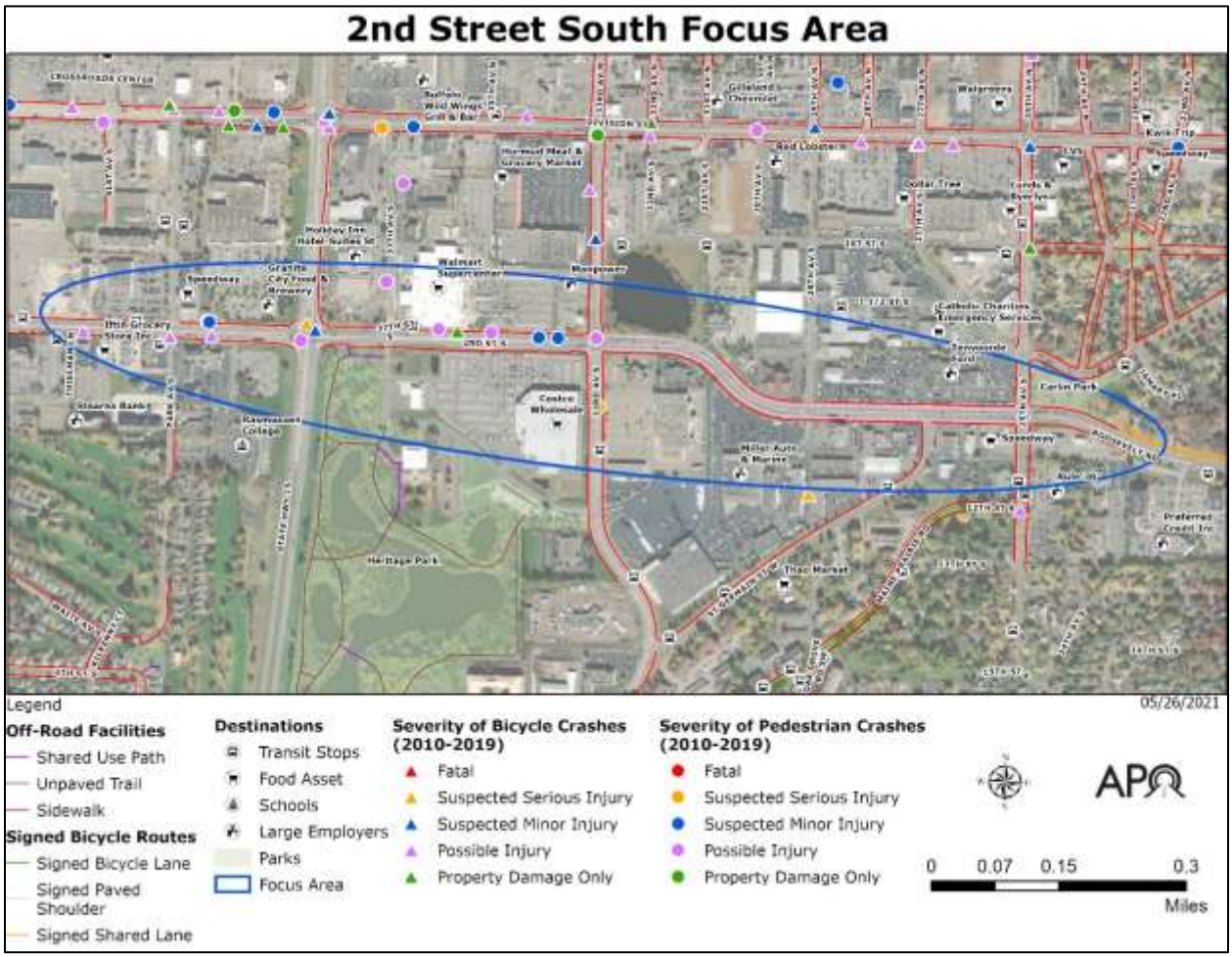


FIGURE E.51 – SECOND STREET S AREA OF FOCUS IN THE CITY OF SAINT CLOUD.

Between 2010 and 2019, 15 active transportation related crashes have occurred in this area mainly between Thielman Lane and 33rd Avenue S. Most of these crashes occur mid-block involving active transportation users who are not using the signalized crosswalks.

Second Street S does have an on-road bicycle facility within this focus area. A signed bicycle lane runs east of 33rd Avenue S and continues through the rest of the focus area. However, this facility does not meet current MnDOT design guidelines for vehicle traffic volume and shoulder width. The 2020 MN 15 study noted this area in particular due to the lack of appropriate dedicated bicycle facilities. The study notes the existing paved shoulders do not provide a comfortable bicycle experience except for the most confident users.

In addition, the MN 15 corridor study examined the crossing experience for pedestrians and bicycles based on levels of service scores. The study suggests measures could be implemented to improve the comfort level for pedestrians at signalized intersections. The MN 15 study recommends signals and marked crosswalks associated with other safety strategies such as refuge islands, curb extensions, and appropriate signage. New streetscape and crossing improvements ensure that sightlines are not obstructed. The corridor study also suggests adding more sidewalks and a separated shared use path along this focus area.

RECOMMENDATIONS

- Consider adding a leading pedestrian interval (LPI) to improve visibility and increase crossing time at the signalized intersections.
- To improve safety at pedestrian crossings, consider adding curb extensions (bump-outs) at intersections on Second Street S to reduce the crossing distance for pedestrians.
- Consider adding fencing or barriers along Second Street S to discourage mid-block crossings.
- To improve comfort and safety for cyclists, remove the bicycle lanes on Second Street S and replace them with a shared use path along the south side of Second Street S.
- Complete sidewalk gaps on Second Street S and add sidewalks along the Park Avenue and 29th Avenue S connections to Second Street S.

University Drive Area

The University Drive focus area encompasses University Drive from Cooper Avenue S to Killian Boulevard east of the Mississippi River. Several major cross streets such as Ninth Avenue S and Fifth Avenue S are also included in this area. This focus area provides access to SCSU and South Junior High School along with other destinations such as Coborn's, and several parks.

This area was selected due to usage from a variety of transportation modes, the number of crashes involving active transportation users, under-designed facilities, and the presence of a variety of destinations.

NEEDS AND ISSUES

As well as being the primary access for SCSU, University Drive is a high-volume east/west minor arterial. The traffic volume on University Drive ranges from 17,400 to 19,500 vehicles per day. The posted speed on this road is 30 mph. University Drive was designed primarily to provide for vehicle mobility – thus the current four lane roadway with a raised median.

However, given its proximity to SCSU and an abundance of multifamily dwellings, this corridor experiences a heavy amount of active transportation traffic. In particular, the intersection of University Drive and Fifth Avenue S is a major conflict point between vehicles and active transportation users.

Nearly a dozen crashes along this corridor between active transportation users and vehicles have been reported between 2010 and 2019. This includes one fatality.

In addition, the on-road bicycle lane facilities on University Drive – between Fifth Avenue S and Kilian Boulevard – do not meet MnDOT design guidelines given the amount of traffic on this corridor.

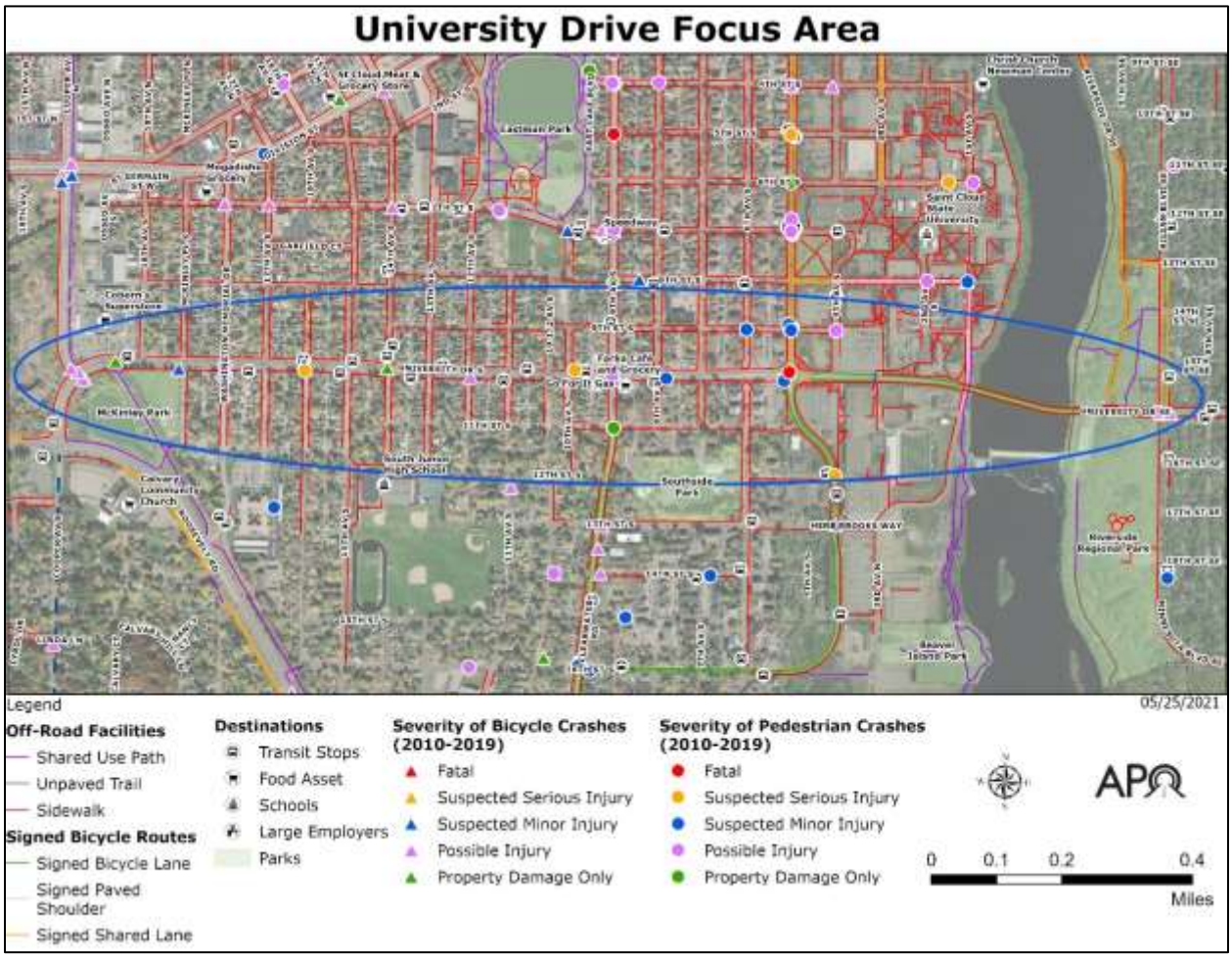


FIGURE E.52 – UNIVERSITY DRIVE FOCUS AREA IN SAINT CLOUD.

RECOMMENDATIONS

- To improve safety at pedestrian crossings, consider adding curb extensions (bump-outs) at intersections on Fifth Avenue S and University Drive to reduce the crossing distance for pedestrians.
- At appropriate locations, implement crossing devices that assist pedestrians by increasing driver awareness, such as Rectangular Regular Flashing Beacons (RRFBs) or Pedestrian Hybrid Beacons (PHBs).
- Consider adding a leading pedestrian interval (LPI) to improve visibility and increase crossing time at the signalized intersections.
- Along the northwest edge of McKinley Park, adjacent to University Drive/Cooper Avenue S, widen the sidewalk to create a 10-foot wide shared use path, closing a gap in the bicycle facility network.
- Add a high visibility marked crosswalk at the 12th Avenue S intersection with University Drive.
- Improve the University Drive intersection with Ninth Avenue S by modifying driveway curb cuts to adjacent businesses, providing more spacing and fewer conflict points.
- To improve comfort and safety for cyclists, add buffer separation or rumble strips to the bicycle lanes on University Drive.

- Consider adding a raised crosswalk or other safety improvements at the Fifth Avenue S roundabout.

East Division Street Area

The East Division Street focus area includes much of the Saint Cloud CBD along with two Mississippi River crossings. This corridor was selected for further analysis due to its multimodal usage, the number of active transportation related crashes, crossing concerns, under designed facilities, and the access this area provides to underrepresented populations.

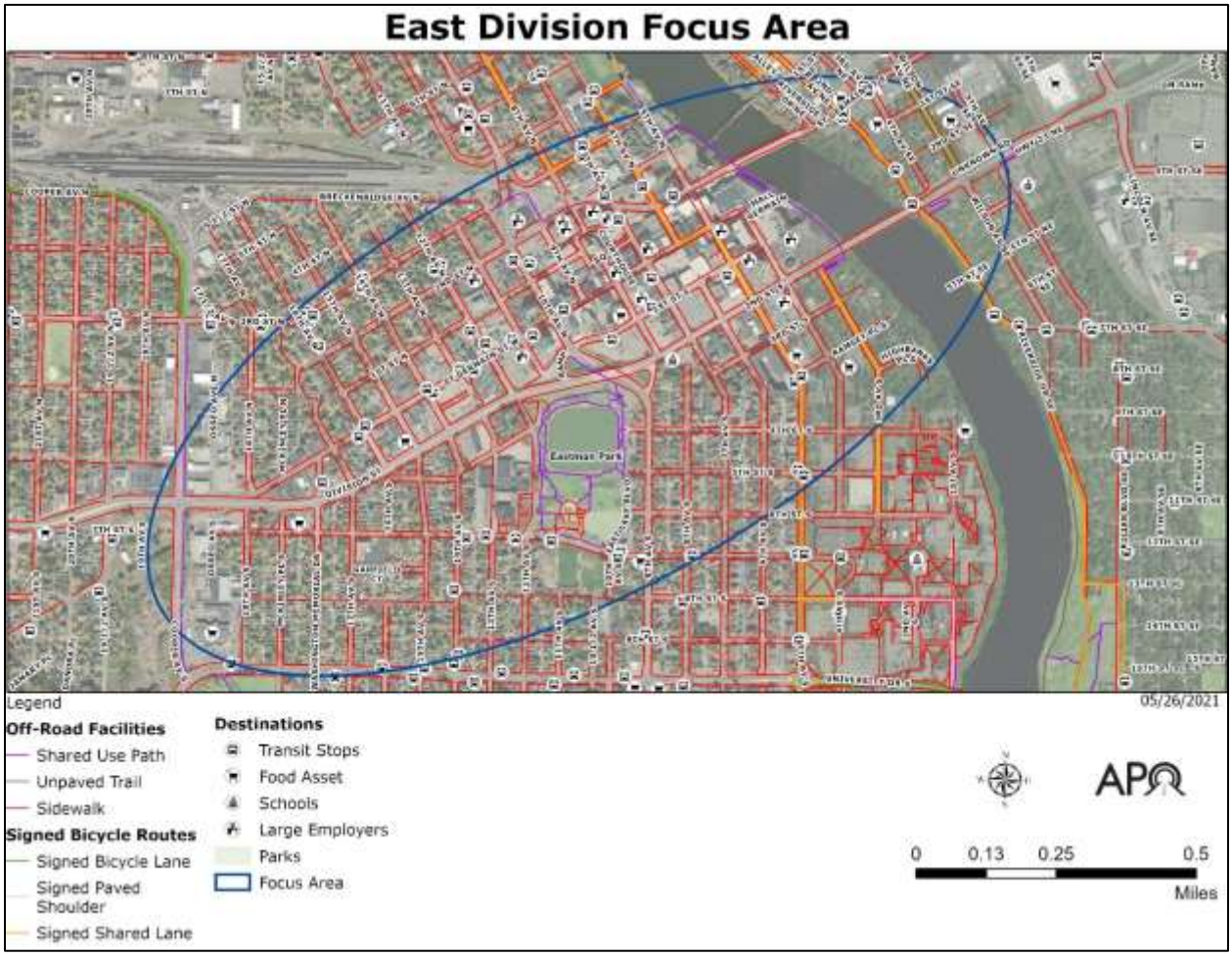


FIGURE E.53 – EAST DIVISION STREET FOCUS AREA AND DESTINATIONS WITHIN THIS CORRIDOR.

NEEDS AND ISSUES

As identified in the Comprehensive Plan, Saint Cloud's goal for the downtown area is to improve the comfort level for pedestrians. More public spaces and gathering areas should be available downtown as walking destinations. The Comprehensive Plan includes strategies to address barriers to pedestrian usage. Among the recommended facility safety improvements in the CBD are adding pedestrian refuge islands along Division Street, crossing enhancements such as signal timing improvements, and the use of safety technologies for pedestrians at signalized crosswalks.

The Comprehensive Plan seeks to make downtown Saint Cloud a "bike-friendly and bike accessible district." Other goals from the Comprehensive Plan are to provide greater connectivity for all transportation modes, improve transportation connections beyond the downtown area, and add facilities to underserved areas.

As earlier noted, Division Street, a four-lane divided highway with a raised median, is the City's primary retail and employment corridor area and a principal transportation route. The many retail, entertainment, and employment destinations within the downtown area attract all transportation modes.

The average daily traffic along East Division Street ranges from 15,000 to 17,000 vehicles. The posted speed is 35 mph. The Comprehensive Plan notes that the traffic volumes and speeds along Division are barriers to crossings. As with West Division Street, high traffic levels coupled with the number of active transportation users who cross Division Street to reach their destinations are likely factors in the frequency of crashes.

Over 20 crashes have been reported involving pedestrians and bicyclists from 2010 to 2019 along this corridor. Crashes also occur along high-volume routes leading into and through downtown Saint Cloud – Fifth Avenue, Ninth Avenue S/10th Avenue S, West Saint Germain Street, and Second Street N. Many of these crashes resulted in serious injuries and fatalities to pedestrians. These crashes occur both at intersections and mid-block locations. Crash locations within focus area and their severity are shown in Figure E.54.

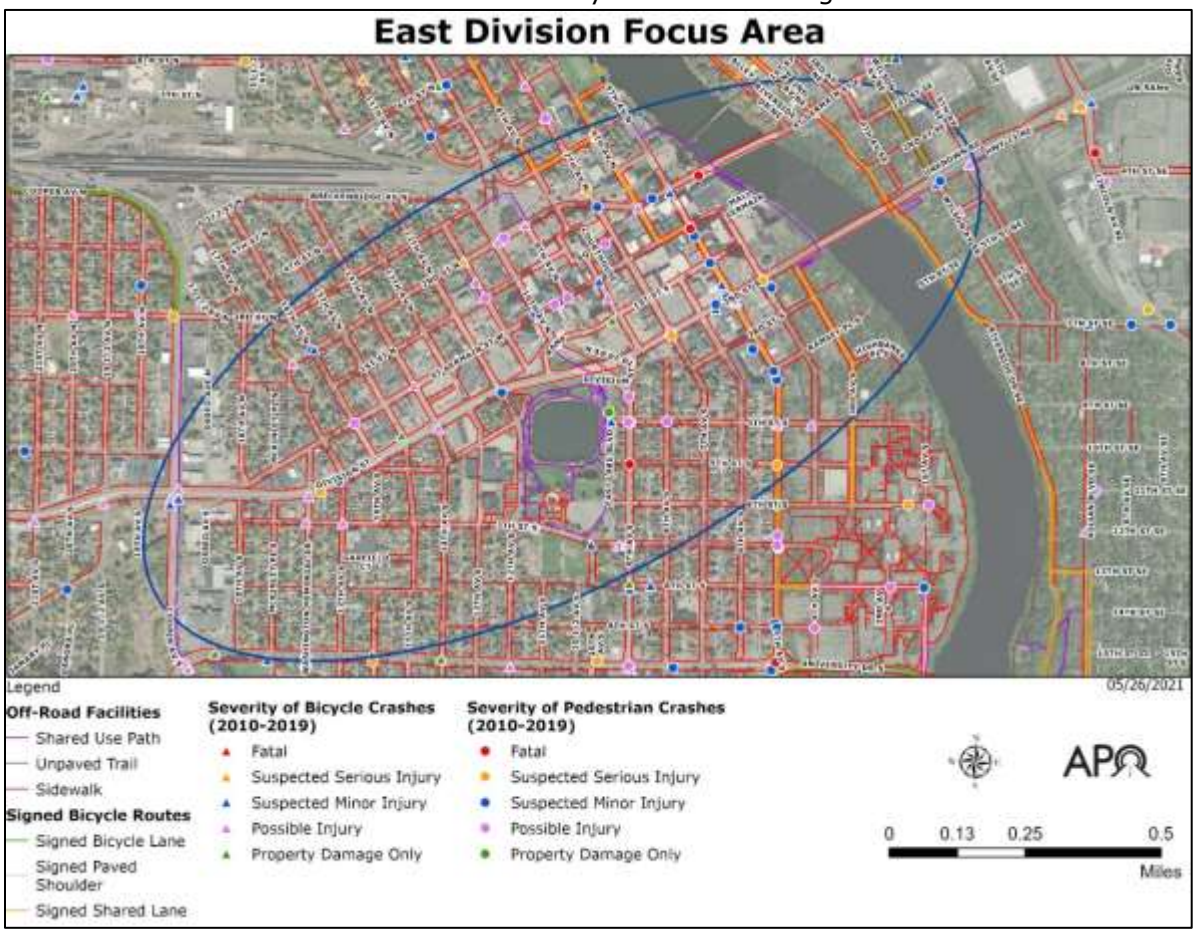


FIGURE E.54 – LOCATION OF CRASHES BY TYPE AND SEVERITY WITHIN THE EAST DIVISION FOCUS AREA.

RECOMMENDATIONS

- To improve safety at pedestrian crossings, consider adding curb extensions (bump-outs) at intersections on Fifth Avenue, Seventh Avenue, and 10th Avenue to control speeds and reduce the crossing distance for pedestrians.
- Implement crossing devices that assist pedestrians by increasing driver awareness, such as Rectangular Regular Flashing Beacons (RRFBs) or Pedestrian Hybrid Beacons (PHBs).
- Consider adding a leading pedestrian interval (LPI) to improve visibility and increase crossing time at the signalized intersections.
- To improve comfort and safety for cyclists, consider removing the bicycle lanes on Fifth Avenue and replace with a shared use path.
- Widen sidewalks and remove parking from the north side of West Saint Germain Street to provide more space for pedestrians.
- Add on-road bicycle facilities or a shared use path on Seventh Street S to connect the SCSU campus area to Lake George.

US 10/Lincoln Avenue Area

The US 10/Lincoln Avenue focus area encompasses several major roadways including MN 23 and East Saint Germain Street. This east-end gateway to Saint Cloud has several large retail and employment sites making it a very attractive area for multimodal users.

As such, further analysis was completed on this area due to several factors: high traffic volumes, its multimodal nature, crash history, crossing concerns, and its abundance of destinations.

NEEDS AND ISSUES

Several high vehicle traffic roadways converge in this focus area and have been identified in many local and regional plans as significant barriers to active transportation users.

Main north/south roadways in this area include US 10 and Lincoln Avenue. US 10 is a four-lane divided highway with a raised median. Average daily traffic along this stretch of US 10 ranges from 12,500 to 13,250 vehicles with a posted speed of 50 mph. Lincoln Avenue is classified as a minor arterial. North of East Saint Germain Street, this roadway has two-lanes and carries approximately 6,400 vehicles a day. South of East Saint Germain Street, Lincoln Avenue widens to a four-lane roadway which includes a center median and dedicated turn lanes. Traffic volumes increase in this section of Lincoln Avenue to between 6,200 and 8,000 vehicles per day. Lincoln Avenue then narrows to a three-lane roadway south of Fourth Street SE as vehicle traffic volumes decrease to 2,550 vehicles per day.

In addition to these two roadways, two large east/west roadways also traverse this area. MN 23 within the focus area has an average daily traffic reporting between 11,950 and 15,500 vehicles. East Saint Germain Street through the focus area currently carries between 9,200 and 9,600 vehicles per day.

The active transportation network is severely lacking within this focus area. There are no bicycle facilities and much of the area lacks sidewalks which prevent many active transportation users from safely reaching their destinations. The 2019 East End Vision Plan proposes additions and improvements to bicycle and pedestrian networks on the east side, which could occur with the proposed redevelopment of the east side commercial district.

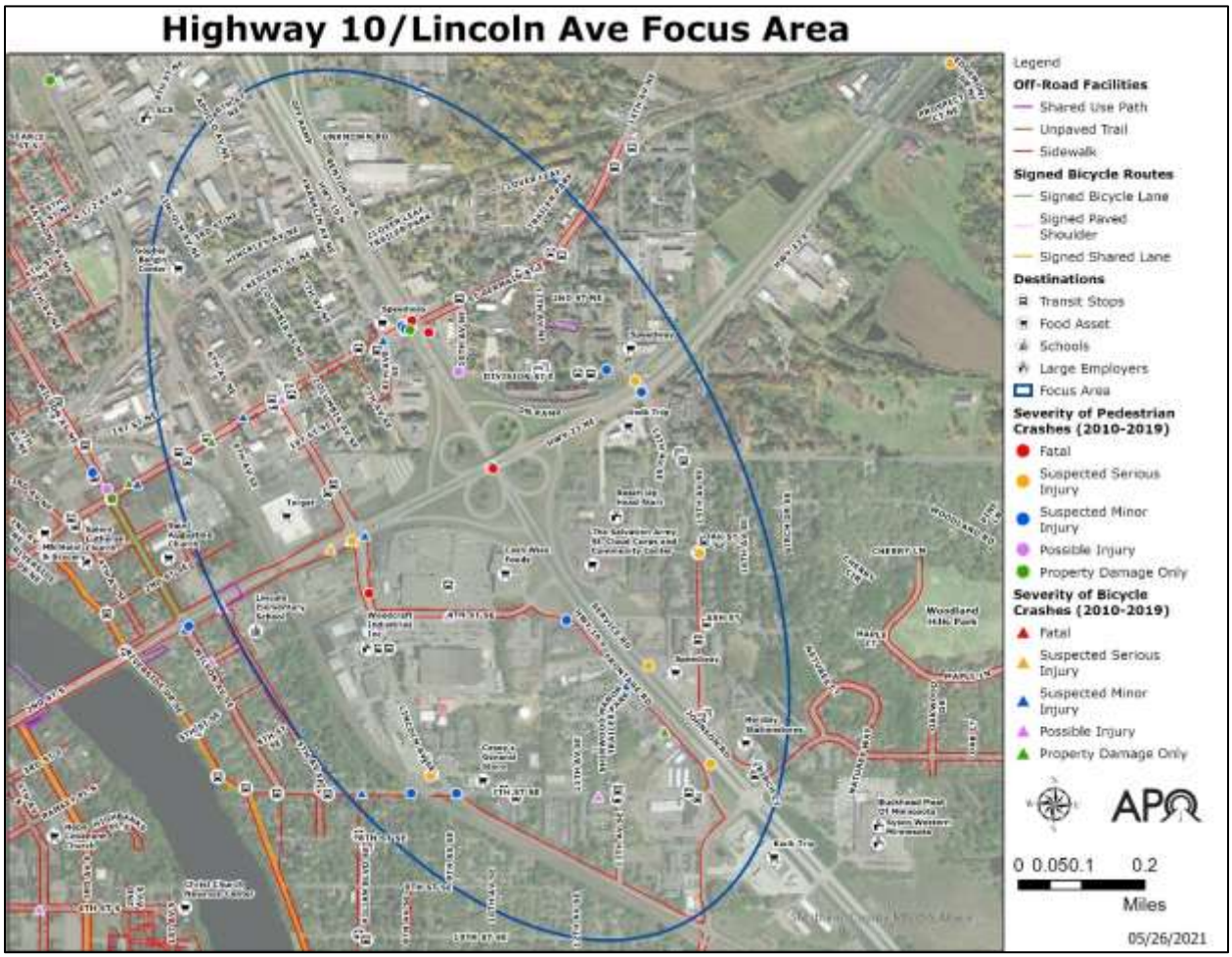


FIGURE E.55 – HIGHWAY 10/LINCOLN AVENUE FOCUS AREA IN SAINT CLOUD.

This focus area has a high number of fatal and serious crashes involving active transportation users. US 10's intersections with both MN 23 and East Saint Germain have reported pedestrian fatalities occurring between 2010 and 2019. Additionally, this area also has several crashes located at or near the intersection of Lincoln Avenue and MN 23.

Saint Cloud city staff's review of crashes during this time period described several deficiencies within east Saint Cloud. Staff's review recommended crosswalk improvements, advance warning devices, adjusted signal timings, and lowing of speed limits to try and mitigate crashes in this focus area.

To assist in addressing some of these conflict points, as part of the programmed MN 23/US 10 interchange reconstruction project, MnDOT, Benton County, and the City of Saint Cloud have planned to incorporate active transportation design elements into the project. This includes adding a shared use path along MN 23 between Lincoln Avenue and 14th Avenue SE as well as a new Fourth Street SE roadway overpass outfitted with active transportation facilities.

RECOMMENDATIONS

- Add a shared use path and other safety improvements for pedestrians and bicyclists with the reconstruction of the US 10/MN 23 interchange.

- Complete the proposed redesign of Lincoln Avenue N as identified in the 2019 East End Vision – Small Area Plan, adding a center turn lane and sidewalks.
- Reconfigure Lincoln Avenue S with a three-lane design and wider separated sidewalks or shared use paths.
- Reconfigure East Saint Germain Street as a three-lane roadway with center turn lanes and the addition of dedicated bicycle lanes.
- If four-lane configurations are retained, implement crossing devices such as Rectangular Regular Flashing Beacons (RRFBs) or Pedestrian Hybrid Beacons (PHBs).
- Consider adding a leading pedestrian interval (LPI) to improve visibility and increase crossing time at the signalized intersections.

Phase 3: Evaluating Needs for the Region

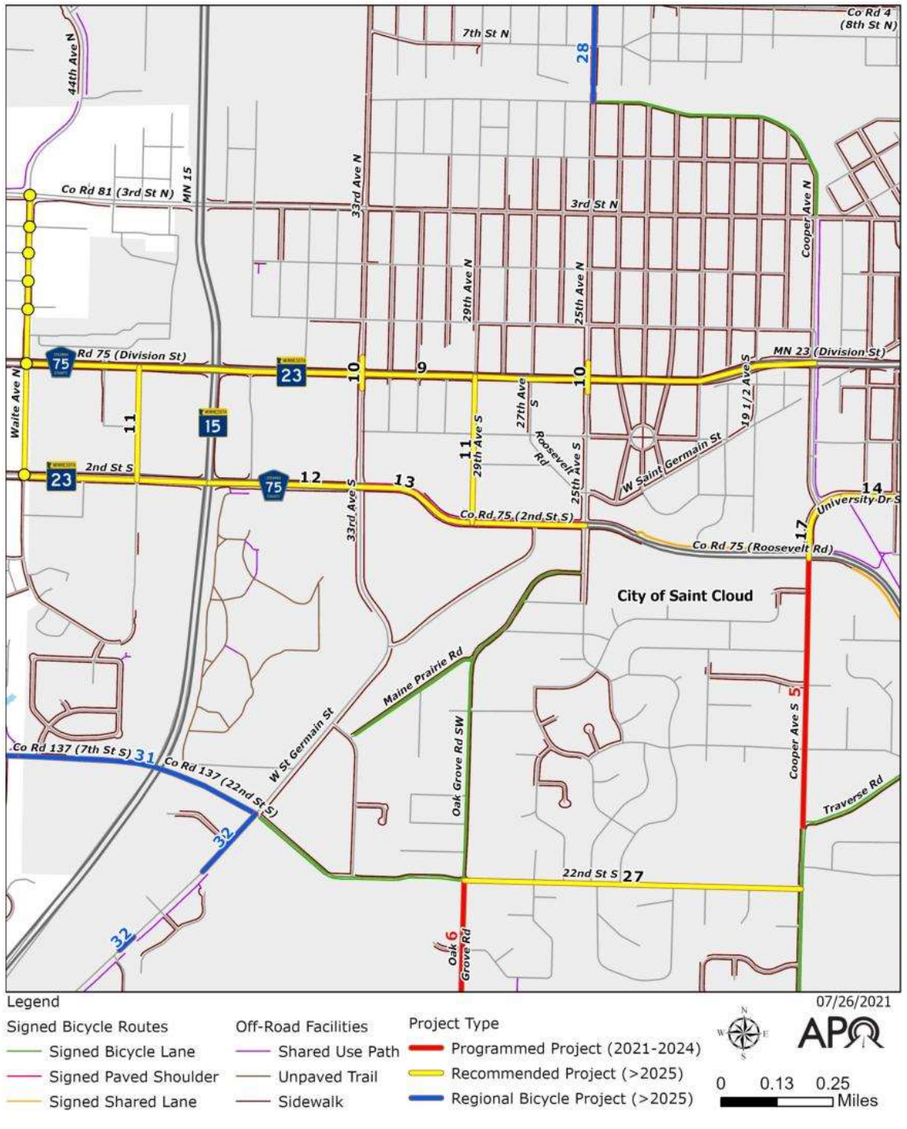
The final phase of the needs analysis was to identify improvements to the regional facility network within the City of Saint Cloud. These projects would assist in achieving an interconnected active transportation network that satisfies regional needs.

Regional bicycle facilities will logically connect cities and other parts of the planning area outside of Saint Cloud and include potential links to areas outside the planning region. Projects that connect the area regionally will provide an approximate spacing of two miles between facilities. In structuring a regional system, the preference is to complete gaps with shared use paths over on-road facilities.

Recommended regional facilities to extend the existing bicycle network within Saint Cloud and to other communities are as follows:

- In north Saint Cloud, build regional connections that follow 25th Avenue, Northway Drive, County Road 134, and County Road 120.
- Complete connections on 16th Street S, 22nd Street S/County Road 137, West Saint Germain Street /County Road 74, and Cooper Avenue in south Saint Cloud.
- In east Saint Cloud, connect Killian/Minnesota Boulevard to the east and County Road 8 to the south.
- Build connecting bicycle facilities along East Saint Germain Street and 14th Avenue SE.
- Add bicycle facilities that follow the proposed Southwest Beltway alignment.
- Add connecting links from local routes to regional bicycle facilities using shared use paths along Ridgewood Road/County Road 134 and along 40th Street S/County Road 122.

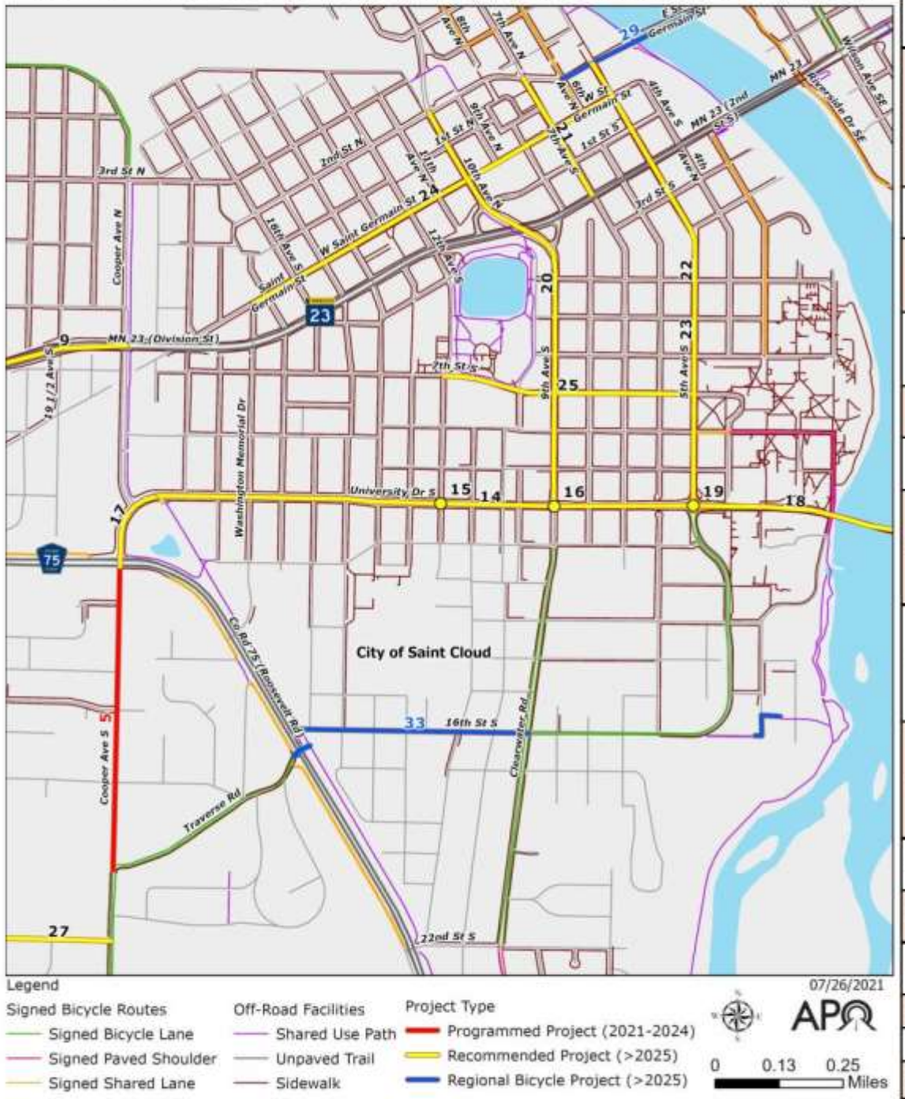
City of Saint Cloud Future Active Transportation Recommendations (East Division Area)



Map Number and Project Description	
5	Reconstruct Cooper Avenue S from Stearns CSAH 75 to Traverse Road to include new bicycle lanes and sidewalks.
6	Reconstruct Stearns County Road 136 (Oak Grove Road) from 22nd Street S to 33rd Street S with the addition of bike lanes.
9	At appropriate locations along MN 23/Stearns CSAH 75/ Division Street add a leading pedestrian interval (LPI) at signalized intersections, curb extensions (bumpouts) at intersections, Rectangular Regular Flashing Beacons (RRFBs), or Pedestrian Hybrid Beacons (PHB) as warranted. Consider adding fencing or barriers along route to discourage mid-block crossings.
10	Add a north/south bicycle facility connection to cross Division at 25th Avenue or 33rd Avenue.
11	Add sidewalks along the Park Avenue and 29th Avenue S connections to 2nd Street S.
12	At appropriate locations along MN 23/Stearns CSAH 75/2nd Street S add a leading pedestrian interval (LPI) at signalized intersections, curb extensions (bumpouts) at intersections, Rectangular Regular Flashing Beacons (RRFBs), or Pedestrian Hybrid Beacons (PHB) as warranted. Consider adding fencing or barriers along route to discourage mid-block crossings.
13	Remove the bicycle lanes on 2nd Street S (Stearns CSAH 75) and replace with a shared use path
14	At appropriate locations along University Drive add a leading pedestrian interval (LPI) at signalized intersections, curb extensions (bumpouts) at intersections, Rectangular Regular Flashing Beacons (RRFBs), or Pedestrian Hybrid Beacons (PHB) as warranted. Consider adding fencing or barriers along route to discourage mid-block crossings.
17	Along the northwest edge of McKinley Park adjacent to University Drive/Cooper Avenue widen sidewalk to create a 10 ft shared use path.
27	Add regional bicycle lanes along 22nd Street S.
28	Add a regional shared use path along 25th Avenue N.
31	Add regional bicycle lanes along 7th Street S/22nd St S (Stearns CSAH 137).
32	Add a regional shared use path along West Saint Germain Street (Stearns County Road 74).

FIGURE E.56 – PROGRAMMED AND RECOMMENDED PROJECTS FOR THE EAST DIVISION STREET AREA WITHIN THE CITY OF SAINT CLOUD.

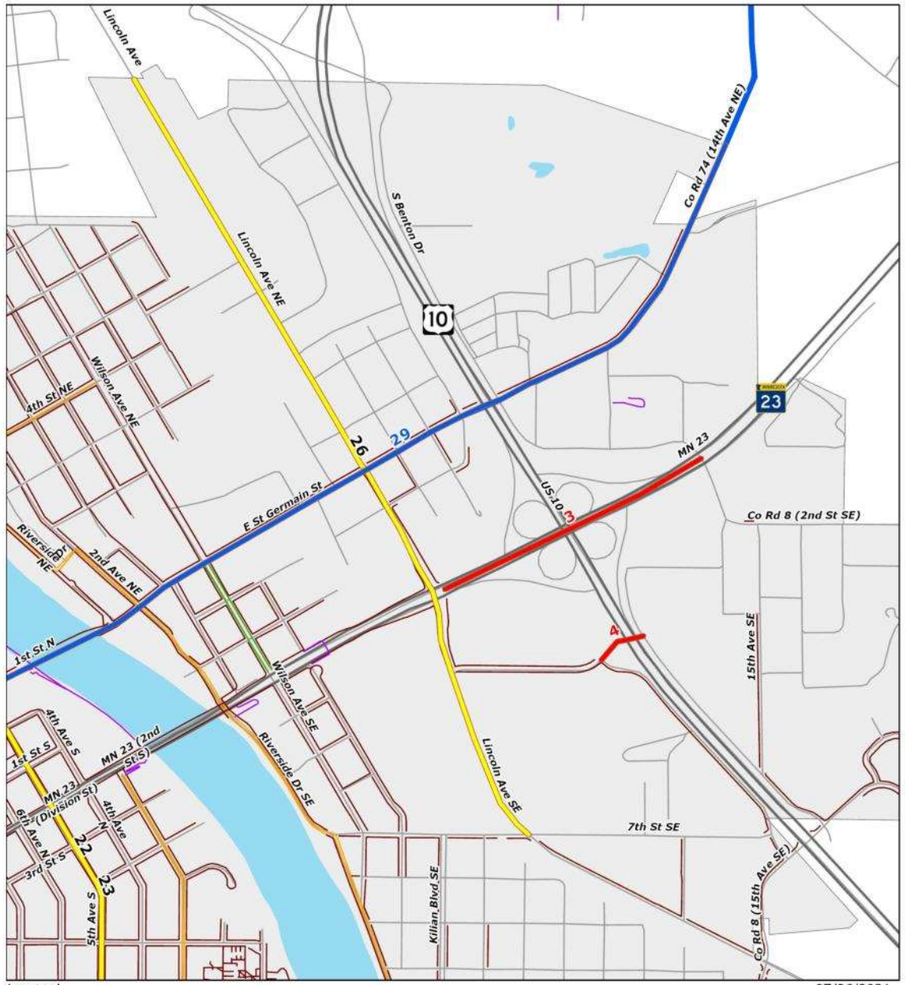
City of Saint Cloud Future Active Transportation Recommendations (CBD and University Area)



Map Number and Description	
5	Reconstruct Cooper Avenue S from Stearns CSAH 75 to Traverse Road to include new bicycle lanes and sidewalks.
14	At appropriate locations along University Drive add a leading pedestrian interval (LPI) at signalized intersections, curb extensions (bumpouts) at intersections, Rectangular Regular Flashing Beacons (RRFBs), or Pedestrian Hybrid Beacons (PHB) as warranted. Consider adding fencing or barriers along route to discourage mid-block crossings.
15	Add a high-visibility marked crosswalk at the 12th Avenue South intersection with University Avenue.
16	Improve the University Drive intersection with 9th Avenue South by modifying driveway curb cuts to adjacent businesses, providing more spacing and fewer conflict points.
17	Along the northwest edge of McKinley Park adjacent to University Drive/Cooper Avenue widen sidewalk to create a 10 ft shared use path.
18	Add buffer separation or rumble strips to the bicycle lanes on University Drive.
19	Adding a raised crosswalk or other safety improvements at the 5th Avenue South roundabout.
20	At appropriate locations along 9th Avenue S/10th Avenue S add a leading pedestrian interval (LPI) at signalized intersections, curb extensions (bumpouts) at intersections, Rectangular Regular Flashing Beacons (RRFBs), or Pedestrian Hybrid Beacons (PHB) as warranted.
21	At appropriate locations along 7th Avenue S add a leading pedestrian interval (LPI) at signalized intersections, curb extensions (bumpouts) at intersections, Rectangular Regular Flashing Beacons (RRFBs), or Pedestrian Hybrid Beacons (PHB) as warranted.
22	At appropriate locations along 5th Avenue S add a leading pedestrian interval (LPI) at signalized intersections, curb extensions (bumpouts) at intersections, Rectangular Regular Flashing Beacons (RRFBs), or Pedestrian Hybrid Beacons (PHB) as warranted.
23	Remove the signed shared bicycle lane on 5th Avenue and replace with a shared use path.
24	Widen sidewalks and remove parking from the north side of West St Germain to provide more space for pedestrians.
25	Add on-road bicycle facilities or a shared use path on 7th Street to connect the SCSU campus area to Lake George.
27	Add a regional bicycle lane along 22nd Street S.
29	Add regional bicycle lanes along Saint Germain Street.
33	Add a regional shared use path along 16th Street S.

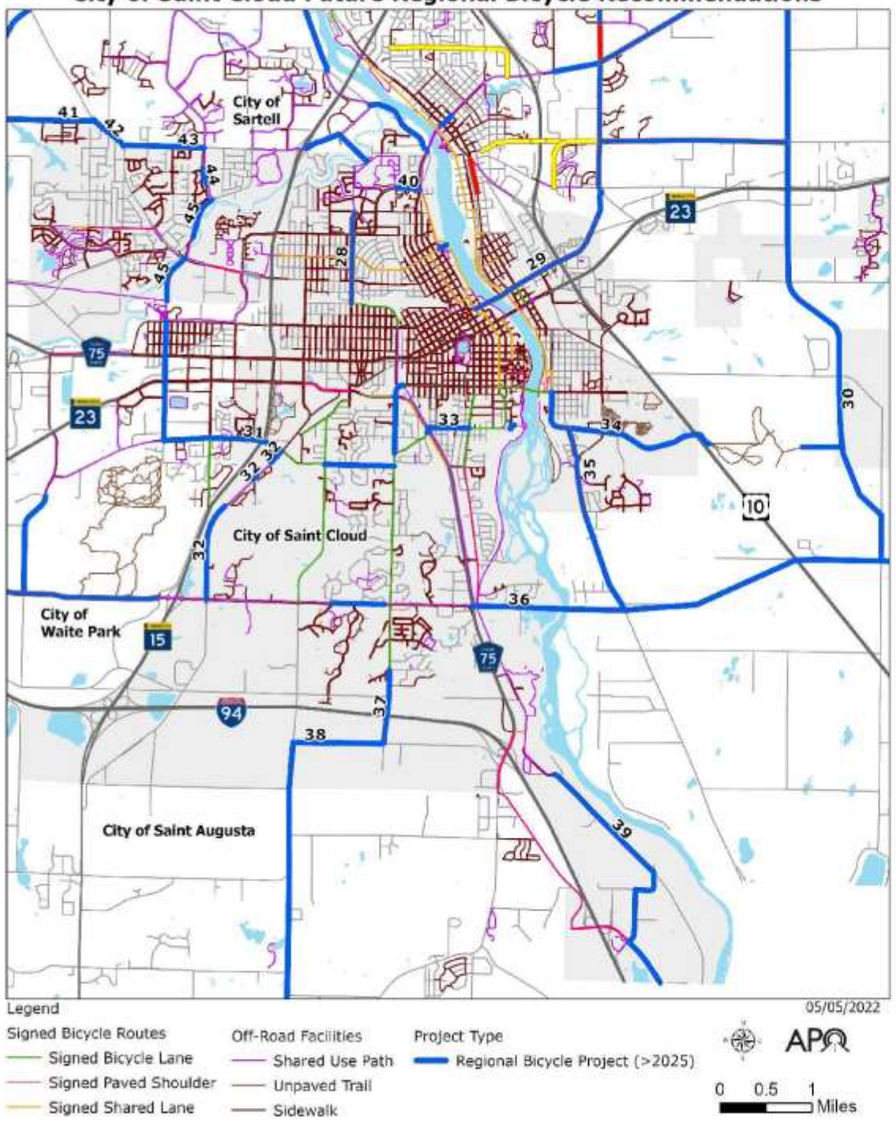
FIGURE E.57 – PROGRAMMED AND RECOMMENDED PROJECTS FOR THE CBD AND SCSU AREA OF THE CITY OF SAINT CLOUD.

City of Saint Cloud Future Active Transportation Recommendations (Lincoln Avenue NE Area)



Map Number and Description	
3	Build active transportation facilities around new US 10 and MN 23 interchange.
4	Construct active transportation facilities on new 4th Street SE bridge spanning US 10.
22	At appropriate locations along 5th Avenue add a leading pedestrian interval (LPI) at signalized intersections, curb extensions (bumpouts) at intersections, Rectangular Regular Flashing Beacons (RRFBs), or Pedestrian Hybrid Beacons (PHB) as warranted.
23	Remove the signed shared bicycle lane on 5th Avenue and replace with a shared use path.
26	At appropriate locations along Lincoln Avenue add a leading pedestrian interval (LPI) at signalized intersections, curb extensions (bumpouts) at intersections, Rectangular Regular Flashing Beacons (RRFBs), or Pedestrian Hybrid Beacons (PHB) as warranted.
29	Add regional bicycle lanes along Saint Germain Street.

FIGURE E.58 – PROGRAMMED AND RECOMMENDED PROJECTS FOR THE US 10/LINCOLN AVENUE AREA OF THE CITY OF SAINT CLOUD.



Map Number and Description	
28	Add a regional shared use path along 25th Avenue North.
29	Add regional bicycle lanes along Saint Germain Street.
30	Add a regional shared use path along future north/ south beltline.
31	Add regional bicycle lanes along 7th Street S (Stearns CSAH 137).
32	Add a regional shared use path along West Saint Germain Street (Stearns County Road 74).
33	Add a regional shared use path along 16th Street South.
34	Add a regional shared use path along Killian Boulevard/Minnesota Boulevard/MN 301.
35	Add a regional shared use path along Sherburne CSAH 8.
36	Add a regional shared use path along future west/ east beltline.
37	Add regional bicycle lanes along Cooper Avenue South.
38	Add a regional shared use path along 255th Street and Stearns CSAH 136.
39	Add a regional shared use path along future Heatherwood Road.
40	Add a regional shared use path along Northway Drive.
41	Add a regional shared use path along 322nd Street.
42	Add a regional shared use path along Stearns CSAH 4.
43	Add a regional shared use path along Stearns CSAH 120.
44	Add a regional shared use path along Pinecone Road S.
45	Add a regional shared use path along Stearns CSAH 134.

FIGURE E.59 – CITY OF SAINT CLOUD'S RECOMMENDED ACTIVE TRANSPORTATION PROJECTS TO ASSIST IN THE DEVELOPMENT OF A REGIONAL NETWORK.