7. TRANSPORTATION

Regional Context

The City of South St. Paul's transportation system consists of a combination of streets, highways, transit, and trails/sidewalks and must be considered within the regional context with which it is connected. This regional context includes both Dakota County and the Metropolitan Council. Both have established policies that affect South St. Paul's transportation goals and objectives. The City is active in the review of both of these agencies' policies as they affect the City and its transportation system.

As mentioned in the Policy Plan, the city believes that developing and preserving a complete and connected network of local streets is essential in accomplishing:

- Reduced trips through signalized intersections, reducing delay
- Reduced exposure to crashes in general
- Reduced need to access higher speed and higher volume roadways, thereby reducing the likelihood of injury crashes
- Reduced trip lengths, travel times, and fuel usage
- Reduced emergency response times by police, fire and ambulance
- Increased options for travelers as issues arise (such as construction, traffic congestions, and emergency street closures)
- Increased options for pedestrian and bicycle trips

Metropolitan Council Goals

The Metropolitan Council has established the following goals within the 2040 Transportation Policy Plan. Making progress towards these goals will address the challenges of the City's transportation system, as well as improve the overall quality of life.

1. Transportation System Stewardship: Sustainable investments in the transportation system are protected by strategically preserving, maintaining, and operating system assets.
2. Safety and Security: The regional transportation system is safe and secure for all users.
3. Access to Destinations: People and businesses prosper by using a reliable, affordable, and efficient multimodal transportation system that connects them to destinations throughout the region and beyond.
4. Competitive Economy: The regional transportation system supports the economic competitiveness, vitality, and prosperity of the region and state.
5. Healthy Environment: The regional transportation system advances equity and contributes to communities' livability and sustainability while protecting the natural, cultural, and developed environments.
6. Leveraging Transportation Investment to Guide Land Use: The region leverages transportation investments to guide land use and development patterns that advance the regional vision of stewardship, prosperity, livability, equity, and sustainability.

Table 7.1: Roadway Miles

Roadway	Miles
Interstate	8.44
US & State Highway	7.67
County Roads (CR)	3.08
County State Aid Highways (CSAH)	3.54
Local Roads	76.51
Alley (Local)	24.00
Total	**123.25**

Roadway System

The City's transportation system is comprised of 123 miles of roadway (see Table 7.1). This includes approximately 24 miles of alleys that contribute to the movement of vehicles and residents through the City. The City's street system includes local roads, County roads, and State Highways as illustrated in Figure 7.1. Each type of road contributing to the City's road system has its own unique character and function.

System Summaries

Local System Summary

The majority of the City streets in the City are classified as local roads. These streets are used to provide access to residential housing units and local businesses. The City has also identified several street segments as Municipal State Aid Roads. They serve as inter-community connectors that provide quick access to all parts of the City. Many of them also provide connections to the City's industrial park and to other communities.

The local roads are on a regular maintenance schedule for repairs (e.g., mill/overlay) and reconstruction. Local roads are typically controlled by traffic signals and stop signs. The City has an established policy on approving stop signs. This policy uses several factors in stop sign placement including the number and spacing of four-way stops in the City (Figure 7.2). The City has instituted a residential stop sign policy for all new placements.

County System Summary

There are two County State Aid Highways (CSAH), Southview Boulevard (CSAH 14), and Concord Street (CSAH 56), south of I-494, and four County Roads (CR): Thompson Avenue (CR 6), Butler Avenue (CR 4), South Concord Street, and Wentworth/15th Avenue (CR 8). Some of these County roads serve as minor arterials that connect the City to adjacent communities and the region. Thompson Avenue is a possible candidate to be a turnback from the County to the City. Concord Street (TH 156) from Grand Avenue to I-494 is a potential State to County jurisdictional transfer.

Figure 7.1: Road Aid System

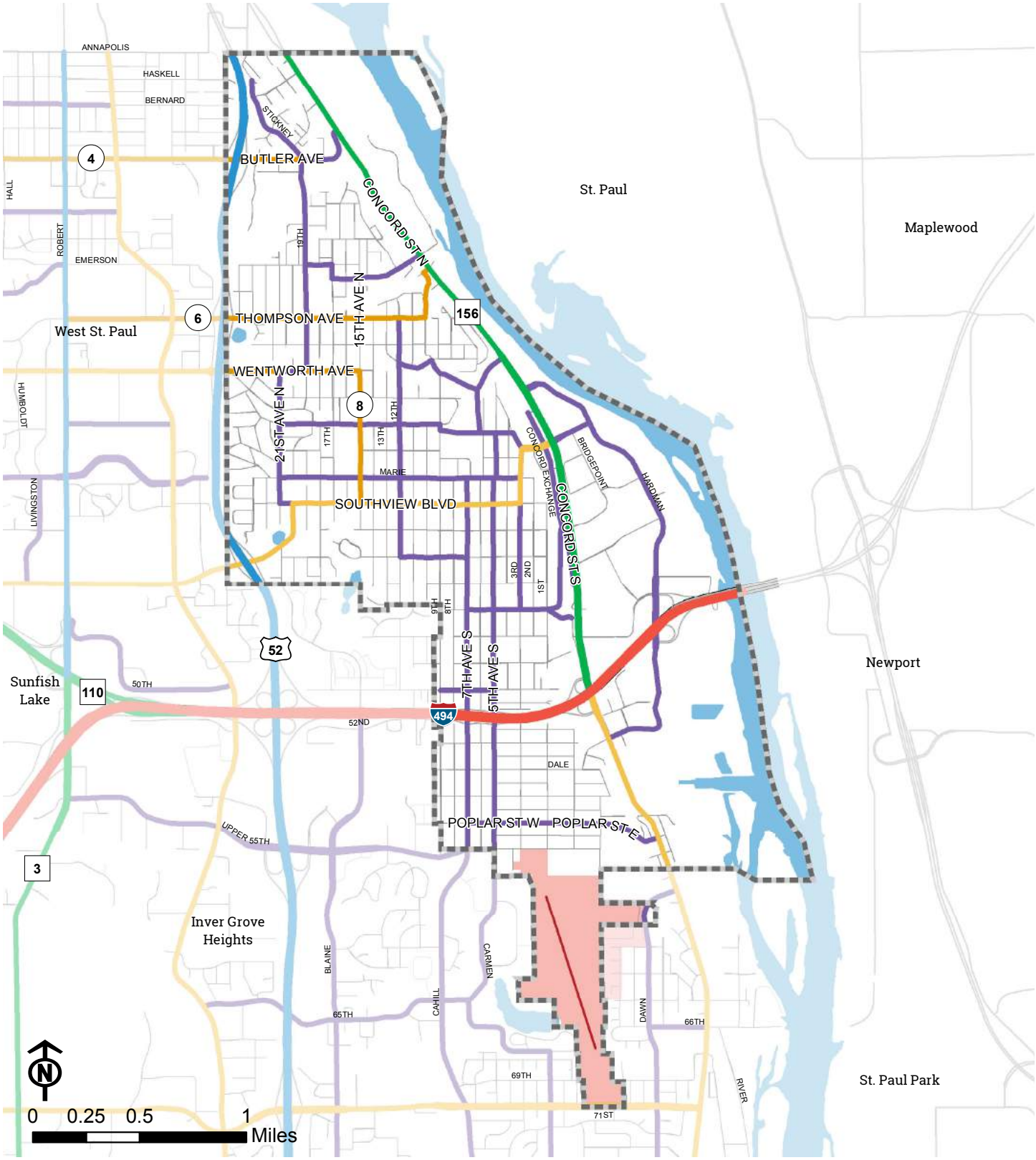
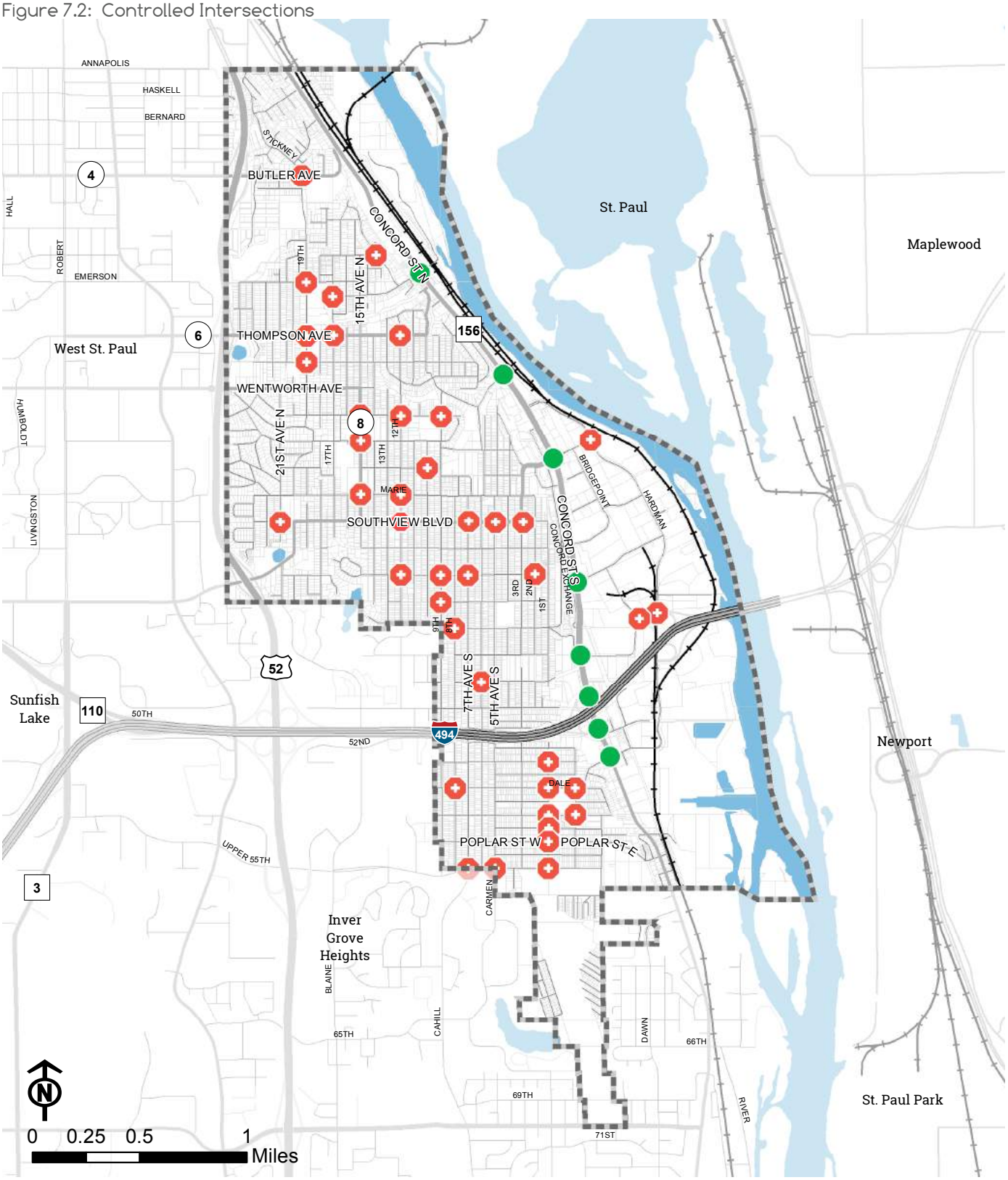


Figure 7.2: Controlled Intersections



State System Summary

The City has access to three State Highways: 156, 52, and Interstate 494. State Highway 156 (Concord Street) is in the turnback process from the State to the County (Grand Avenue to I-494) , with the segment south of I-494 already under the County's jurisdiction (CSAH 56). There is a potential jurisdictional transfer of Concord Street (TH 156) from the northern city limits to Grand Avenue from the State to the City.

The City has begun a process of redefining the Concord Street corridor. As part of the reconstruction of South Concord Street, the City has installed ornamental street lighting, special median treatments and pedestrian friendly trails and sidewalks. The City has also developed a comprehensive vision for the north section of Concord Street. Through planning/zoning changes, special districts have been created with specific design standards and acceptable uses. The standards are attempting to create a more pedestrian oriented street environment. An ultimate 'plan' has been created for North Concord Street, which includes streetscaping, sidewalks/trails, removal of billboards, underground utilities and buffering for railroad tracks.

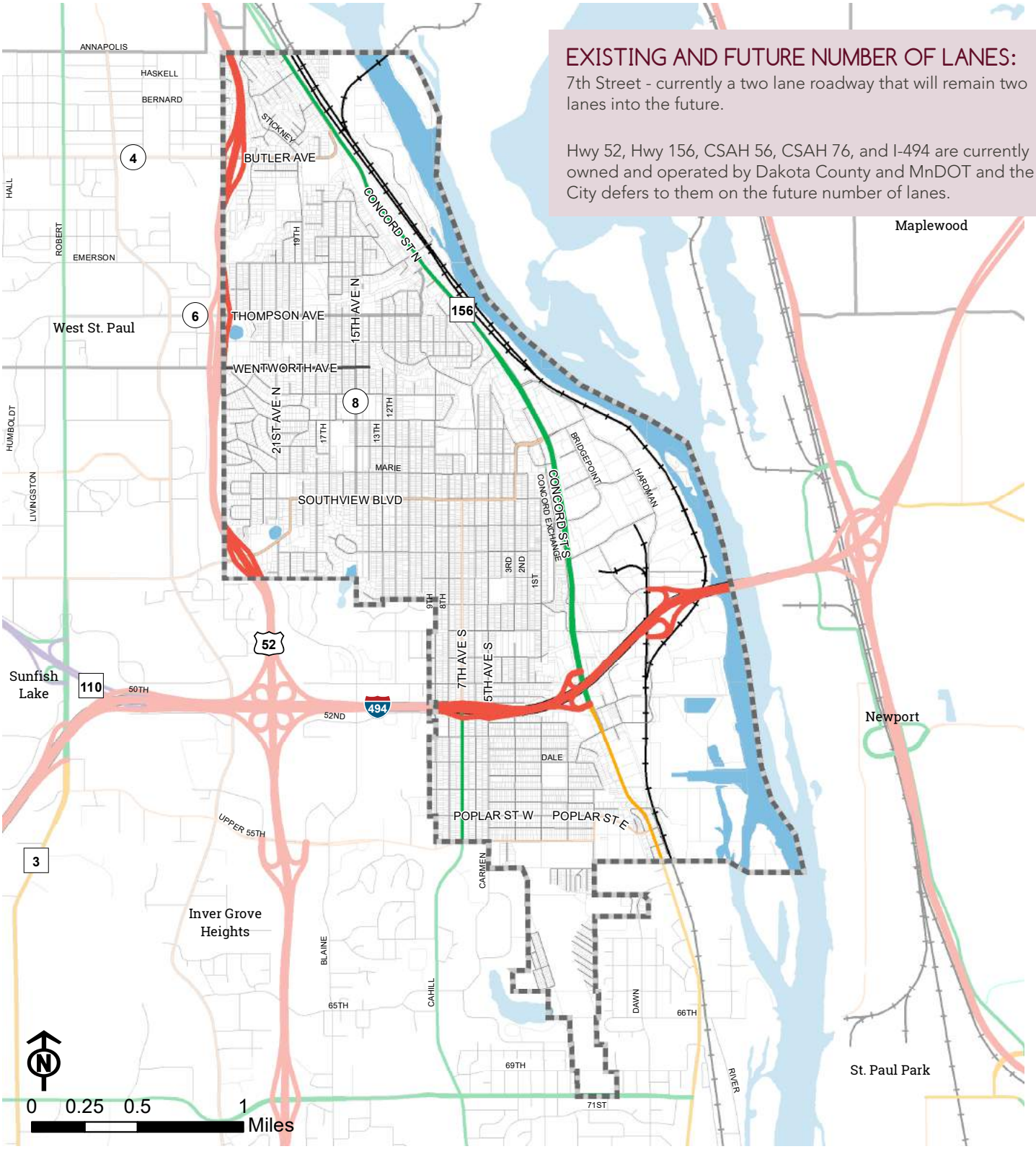
The Wakota Bridge on I-494 crosses the Mississippi River. A bridge expansion was completed in 2010 and provided added capacity. The Wakota Bridge has several elements in which the City has been a vital part. A bicycle/pedestrian trail with overlooks and decorative lighting on the north side, a connector trail to the Mississippi River Regional Trail (MRRT) and special aesthetic treatments brought forth by the I-494/TH-61 Aesthetic Design Committee, of which the City was a part.

Functional Classification

Roadway functional classification categories are defined by the role they play in serving the flow of trips through the overall roadway system. Within the Twin Cities metropolitan area, the Metropolitan Council has established detailed criteria for roadway functional classifications. The intent of the functional classification system is to create a hierarchy of roads that collect and distribute traffic from neighborhoods to the metropolitan highway system. Roadways with a higher functional classification (arterials) generally provide for longer trips, have more mobility, have limited access and connect larger centers. Roadways with a lower functional classification (collectors and local streets) generally provide for shorter trips, have lower mobility, have more access and provide connection to higher functioning roadways. A balance of all functions of roadways is important to any transportation network.

The existing functional classification (2018) of roadways in South Saint Paul is shown in Figure 7.3. The existing functional classification system represents the system that has been approved by the Metropolitan Council and is in place at the time this document was written.

Figure 7.3: Functional Classification of Roadways



EXISTING AND FUTURE NUMBER OF LANES:

7th Street - currently a two lane roadway that will remain two lanes into the future.

Hwy 52, Hwy 156, CSAH 56, CSAH 76, and I-494 are currently owned and operated by Dakota County and MnDOT and the City defers to them on the future number of lanes.

Principal Arterials

Principal arterials are part of the metropolitan highway system and provide high-speed mobility between the Twin Cities and important locations outside the metropolitan area. They are also intended to connect the central business districts of the two central cities with each other and with other regional business concentrations in the metropolitan area. Principal arterials are generally constructed as limited access freeways in the urban area, but may also be constructed as multiple-lane divided highways.

In South St. Paul there are two principal arterials:

» Interstate 494 (I-494)

» State Trunk Highway 52

A Minor Arterials

'A' minor arterials are roadways that are of regional importance because they relieve, expand or complement the principal arterial system. Minor arterials also emphasize mobility over land access, serving to connect cities with adjacent communities and the metropolitan highway system. Major business concentrations and other important traffic generators are located on minor arterial roadways. In urbanized areas, one to two mile spacing is considered appropriate. 'A' minor arterials are also categorized into four types, consistent with Metropolitan Council guidelines.

There are four 'A' Minor Arterials in South St. Paul:

» Concord Street (TH 156), north of I-494 (A-Minor Reliever)

» Concord Street (CSAH 56), south of I-494 (A-Minor Expander)

» 7th Avenue South, south of I-494 (A-Minor Reliever)

» Wentworth Avenue (Other Arterial), from TH52 to TH 156 (a part of which is proposed)

Collectors

Collectors are designed to serve shorter trips that occur within the city and to provide access from neighborhoods to other collector roadways and the arterial system. They are expected to carry less traffic than arterial roads and to provide access to some properties. Collectors are designated as either major or minor collectors. Major collectors supplement the arterial system by emphasizing mobility over land access. However, because of their location, they are lower-volume roads than arterial routes. Minor collectors emphasize land access over mobility and provide connections to major collector and minor arterial routes.

There are three Collectors located in South St. Paul:

» Southview Boulevard (Major Collector)

» 57th Street E. (Major Collector)

» Butler Avenue (Major Collector)

Local Streets

Local streets provide access to adjacent properties and neighborhoods. Local streets are generally low speed and designed to discourage through traffic. All of the remaining roadways in the City that were not listed under the previous functional classifications above fall under the local road designation.

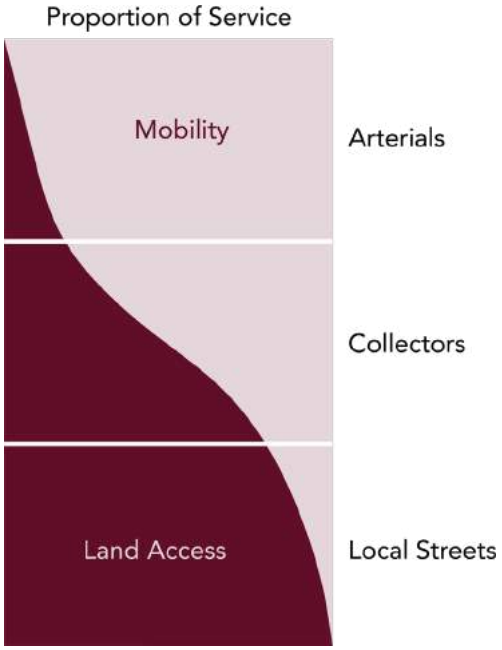
Planned Improvements

The Comprehensive Plan is consistent with the Current Revenue Scenario included in the 2040 Transportation Policy Plan (TPP). For example, there are two principal arterials located within South St. Paul: I-494 and TH 52. The TPP does not identify any specific regional mobility improvements on these highways, although maintenance and preservation investments will be made on I-494 and TH 52 (see Table 7.2). The Comprehensive Plan also recognizes transitway investments along Robert Street. The Land Use Chapter has recognized the potential land use impacts associated with transit stations.

Overall, the City's priorities are to manage and maintain the existing system, and enhance the multimodal system. Roadway improvements that have been programmed by the City, County or MnDOT are depicted in Table 7.2. Planned improvements to note include:

» The potential redevelopment of the Dawn Way Landfill will present an opportunity for a transportation link between South Street and Concord Street South. It is anticipated that this could be a main road connection for this portion of the City and would complete a direct route along Upper 55th Street/South Street from Trunk Highway 52 easterly to Concord Street (CSAH 56).

Figure 7.4: Mobility vs. Access



Existing and Future Number of Lanes

7th Street - currently a two lane roadway that will remain two lanes into the future. Hwy 52, Hwy 156, CSAH 56, CSAH 76, and I-494 are currently owned and operated by Dakota County and MnDOT and the City defers to them on the future number of lanes.

Access Management

Proper access management is a key component of providing a roadway system that effectively balances mobility and access needs (see Figure 7.4). Access management concerns the number of roadways and/or driveways that can directly access a given roadway, as well as facility design at the access points. Arterial roadways, which primarily serve a mobility function, can only have limited access to not disrupt the flow of traffic and not create safety concerns. At the other end of the spectrum, the primary function of local streets is to provide access to local land uses, so there are fewer access restrictions on these roadways. However, there are important considerations regarding access on local streets as well. Collector roadways are between arterials and local streets in terms of access allowed, since they serve a relatively even balance of the mobility and access functions.

Table 7.2: Programmed Improvements

Roadway	Project	Source	Time Frame
Marie Avenue	Marie Avenue is in need of pedestrian and bicycle mobility enhancements in accordance with the City's adopted Bicycle and Pedestrian Plan from 12th to 19th and 3rd Ave. to 12th Ave. and the current street lighting system on Marie Avenue from 4th Ave. to 8th Ave. is in need of replacement	South St. Paul 2018 – 2022 CIP	2020 & 2022
12th Avenue Reconstruction	Reconstruct the concrete portion of 12th Ave from Marie Ave to Thompson Ave. Either a new concrete surface or a concrete curb and gutter section with bituminous surfacing. A narrower roadway could be planned to facilitate multi-modal elements and speed reduction improvements. Proposed in 2020 due to MSA funding availability.	South St. Paul 2018 – 2022 CIP	2020
Concord Street Improvements	The City of South St. Paul, Dakota County, City of St. Paul, and the Minnesota Department of Transportation (MnDOT) jointly developed a planning study for the Concord Street Corridor from I-494 to Annapolis Street in South St. Paul to determine an overall vision for the corridor in advance of the proposed MnDOT pavement resurfacing, drainage upgrades, and pedestrian accommodations in 2020.	South St. Paul 2018 – 2022 CIP MnDOT 10-Year Capital Highway Investment Plan Dakota County 2018 – 2022 CIP	2021
Concord Exchange Extension	Construction of Concord Exchange from the current east/west roadway connection just north of the Post Office to the roadway just north of the liquor store that connects to Concord St. at the median opening. However, current development demands dictate moving the project to 2023.	South St. Paul 2018 – 2022 CIP	2023
5th Avenue South Improvements	Reconstruct the concrete portion of 5th Ave S from I-494 to Southview Blvd. A curb and gutter section with bituminous surfacing is planned for this segment. A narrower roadway is also being considered for this roadway. Watermain master plan includes upsizing the main in this segment to 16" watermain.	South St. Paul 2018 – 2022 CIP	2019
Hardman Avenue	Hardman Avenue Railroad Crossing Improvements.	South St. Paul 2018 – 2022 CIP	2018
I-494	Pavement preservation from Hardman Avenue in Saint Paul to Blaine Avenue in Inver Grove Heights. Other improvements include bridge rehabilitation, noise walls, drainage and lighting.	MnDOT 10-Year Capital Highway Investment Plan	2019
I-494	Pavement preservation from 3rd Avenue South in South St. Paul to end of MN River Bridge in Eagan.	MnDOT 10-Year Capital Highway Investment Plan	2020
I-494	Auxiliary lanes on westbound I-494 between Harman and west of 7th Avenue	MnDOT 10-Year Capital Highway Investment Plan	2019
I-494	Minor pavement preservation from Tamarack Boulevard to Hardman Bridge.	MnDOT 10-Year Capital Highway Investment Plan	2025
US 52	Pavement preservation from US 52/I-494 interchange in Inver Grove Heights to Plato Avenue in Saint Paul.	MnDOT 10-Year Capital Highway Investment Plan	2021

Numerous studies have demonstrated the safety and operational benefits of managing access in an appropriate manner. The government agency which has jurisdiction over a given roadway determines the applicable access management guidelines for that facility. MnDOT has access management guidelines (See Table 7.3 and Table 7.4) that apply to Highways, such as I-494, Hwy. 52, and State Hwy 156 (Concord St. north of I-494). Similarly, Dakota County's access management policies apply to County roadways within South St. Paul. County roadways make up a substantial portion of the arterial roadway network serving the City. Access management is also important for roadways under South St. Paul's jurisdiction. The City of South St. Paul does not have access management guidelines for city streets. The City evaluates new and modified accesses to its city streets through a permitting process on a case-by-case basis.

Table 7.3: MnDOT Recommended Street Spacing (Interregional Corridors)

Category	Area or Facility Type	Typical Functional Class	Public Street Spacing		Signal Spacing
			Primary Full-Movement Intersection	Secondary Intersection	
1	**High Priority Interregional Corridors & Interstate System (IRCs)**				
1F	Interstate Freeway	Principal Arterials	Interchange Access Only		
1AF	Non-Interstate Freeway		Interchange Access Only (see Section 3.2.7 for interim spacing)		See Section 3.2.5 for Signalization on Interregional Corridors
1A	Rural		1 mile	1/2 mile	
1B	Urban/ Urbanizing		1/2 mile	1/4 mile	
1C	Urban Core		300-660 feet dependent upon block length		
2	**Medium Priority Interregional Corridors**				
2AF	Non-Interstate Freeway	Principal Arterials	Interchange Access Only (See Section 3.2.7 for interim spacing)		See Section 3.2.5 for Signalization on Interregional Corridors
2A	Rural		1 mile	1/2 mile	
	Urban/ Urbanizing		1/2 mile	1/4 mile	
2C	Urban Core		300-660 feet, dependent upon block length		1/4 mile
3	**Regional Corridors**				
3AF	Non-Interstate Freeway	Principal and Minor Arterials	Interchange Access Only (see Section 3.2.7 for interim spacing)		Interim
3A	Rural		1 mile	1/2 mile	See Section 3.2.5
3B	Urban/ Urbanizing		1/2 mile	1/4 mile	1/2 mile
3C	Urban Core		300-660 feet, dependent upon block length		1/4 mile

Table 7.4: MnDOT Recommended Street Spacing (Non-Interregional Corridors)

Category	Area or Facility Type	Typical Functional Class	Public Street Spacing		Signal Spacing
			Primary Full-Movement Intersection	Secondary Intersection	
4	**Principal Arterials in the Twin Cities Metropolitan Area and Primary Regional Trade Centers (Non-IRCs)**				
4AF	Non-Interstate Freeway	Principal Arterials	Interchange Access Only (see Section 3.2.7 for interim spacing)		Interim
4A	Rural		1 mile	1/2 mile	See Section 3.2.5
4B	Urban/ Urbanizing		1/2 mile	1/4 mile	1/2 mile
4C	Urban Core		300-660 feet dependent upon block length		1/4 mile
5	**Minor Arterials**				
5A	Rural	Minor Arterials	1/2 mile	1/4 mile	See Section 3.2.5
5B	Urban/ Urbanizing		1/4 mile	1/8 mile	1/4 mile
5C	Urban Core		300-660 feet, dependent upon block length		1/4 mile
6	**Collectors**				
6A	Rural	Collectors	1/2 mile	1/4 mile	See Section 3.2.5
6B	Urban/ Urbanizing		1/8 mile	Not Applicable	1/4 mile
6C	Urban Core		300-660 feet, dependent upon block length		1/8 mile
7	**Specific Area Access Management Plans**				
7	**All**		**All**	**By Adopted Plan**	

Traffic Safety and Demand Management Program

Program elements which shall be undertaken in order to address existing and future concerns within the City's transportation roadway system are listed in Table 7.5.

Aspect of Sustainability:
» Energy

Table 7.5: Traffic Safety and Demand Management

Traffic Safety and Demand Management	
Interstate 494	Dakota County has classified this Roadway to be currently deficient in handling current traffic volumes. Therefore the City supports efforts to control and preserve reasonable traffic flows and measures. Also, the City is supportive of MnDOT efforts to add a third lane in each direction on I-494 from TH 61 to I-94, thus improving the access into South St. Paul from the east. In addition, the City continues to work with MnDOT to improve the overall safety of the corridor.
State Highway #156	As opportunities arise, the City will push to reduce, consolidate, and close driveways and other access points onto this corridor, thus improving traffic safety. A comprehensive vision for the upgrade of TH 156 north of Wentworth Avenue has been completed and will be implemented as opportunities arise. The City is entering into a five-year re-signalization plan for TH 156 from I-494 to Wentworth Avenue. The new signals should offer a more efficient traffic management, a safer pedestrian experience and fully ADA-compliant crossing systems.
State Highway #52	It is projected that at some time over the next twenty years, this corridor will be deficient in regard to usage and traffic volume/capacity levels. The City will continue to support access management, while preserving appropriate traffic flows. Further, the City will work to support and assist in the coordination of pedestrian overpasses, where feasible, between West St. Paul and South St. Paul.
Pedestrian Ways	A continued City priority is to make sidewalk and trail improvements and to insure their development is consistent with the Comprehensive Plan. The improvements noted earlier along South Concord Street, Wakota Bridge and North Concord Street will enhance the pedestrian ways. The City is working with St. Paul and Dakota County on other trail connections to access the regional trail. The Pedestrian Facilities map (Map T-4) shows the gaps and needs in our system. The City is committed to completing this system to best fit the needs of the community and users. The funding for this is through assessments, CIP, and park dedication funds.
Intersections	Continue to maintain and improve adequate and proper visibility and traffic controls at high volume and other critical intersections. By working with Dakota County and MnDOT, the City hopes to respond to needs as they are identified. The intersection controls proposed at I-494 and 5th/7th, TH 52 and Wentworth, and TH 52 and Thompson, and all along TH 156 demonstrate the City's responsiveness.
Reduce Travel Demand	Work to reduce travel demand within the community through the following policies: Support and assist in the coordination of transit line upgrades and improvement. Support high residential density and levels of activity, land use diversity, and transit-oriented design principles in close proximity to regional transit investments. Continue development of a pedestrian trail/bikeway system, with regional coordination as a priority.
Minimize Arterial Access	Work to eliminate driveway and roadway access onto arterial roadways.
Pavement Management	The City has a four-stage pavement management program: **Sealcoating (Stage 1) :** Every seven years the City sealcoats and crack-seals roadways in the City system. The sealcoating program is funded out of the general fund. There are no assessed costs. **Mill & Overlay (Stage 2):** After 15 – 20 years roadway are often ready to be milled and overlaid with a fresh layer of asphalt. Through a pavement inspection program, candidates are evaluated and ranked. All costs for the mill and overlay program are assessed. **Bituminous Removal & Replacement (Stage 3):** If roadways need more extensive repairs than a mill & overlay, but the curbing and underground infrastructure is stable. The driving surface will be completely removed and a new pavement section installed. These costs are also assessed back to the adjacent proper owners. **Street Reconstruction (Stage 4):** If a roadway has significant pavement distress, curbing failure, storm sewer needs, or other underground facilities that need to be upgraded, then a street would have to be reconstructed. The cost of street reconstruction is partially assessed and partially funded by the City's Capital Improvement Program (CIP). The City has committed over $500,000 annually to this program.

Traffic Analysis Zones

The City is divided into 20 Traffic Analysis Zones (TAZ's) (Figure 7.5). The purpose of these traffic analysis zones are to allocate levels of traffic to roadways based on land uses within each TAZ. Based on the amount of vacant developable land within each TAZ, portions of the household, population, and employment forecasts are also allocated to each TAZ.

Table 7.6: Socioeconomic Forecasts by Transportation Analysis Zones

	2016 (Est.)			2020			2030			2040		
TAZ	POP	HH	EMP	POP	HH	EMP	POP	HH	EMP	POP	HH	EMP
2,096	87	33	0	85	33	0	79	33	0	77	33	0
427	0	0	0	0	0	0	0	0	0	0	0	0
428	877	360	3	893	360	3	871	360	3	850	360	3
429	2,230	933	347	2,311	932	350	2,658	1,105	435	2,663	1,130	472
430	9	4	210	10	4	210	10	4	245	102	44	298
431	1,425	631	228	1,562	630	230	1,584	659	265	1,641	701	320
432	1,398	597	300	1,481	597	300	1,501	620	310	1,551	661	367
433	1,607	674	99	1,669	673	105	1,629	673	105	1,588	673	105
434	1,139	440	51	1,099	439	56	1,062	439	56	1,036	439	56
435	1,256	505	2	1,252	505	2	1,215	505	2	1,192	505	2
439	0	0	0	0	0	0	0	0	0	0	0	0
442	0	0	0	0	0	0	0	0	0	0	0	0
443	3,673	1,468	170	3,632	1,463	179	3,540	1,463	179	3,457	1,465	188
444	3,609	1,526	1,045	3,936	1,587	1,053	3,902	1,612	1,080	3,824	1,620	1,091
445	0	0	3,215	0	0	3,315	0	0	3,322	194	84	3,433
446	135	58	469	136	55	488	133	55	488	279	121	575
447	2,077	860	333	2,133	860	333	2,081	860	333	2,073	878	357
448	552	231	0	574	231	0	559	231	0	545	231	0
457	74	26	177	65	26	177	63	26	177	115	50	232
458	12	5	0	12	5	0	12	5	0	12	5	0
Total	**20,160**	**8,351**	**6,649**	**20,850**	**8,400**	**6,800**	**20,900**	**8,650**	**7,000**	**21,200**	**9,000**	**7,500**

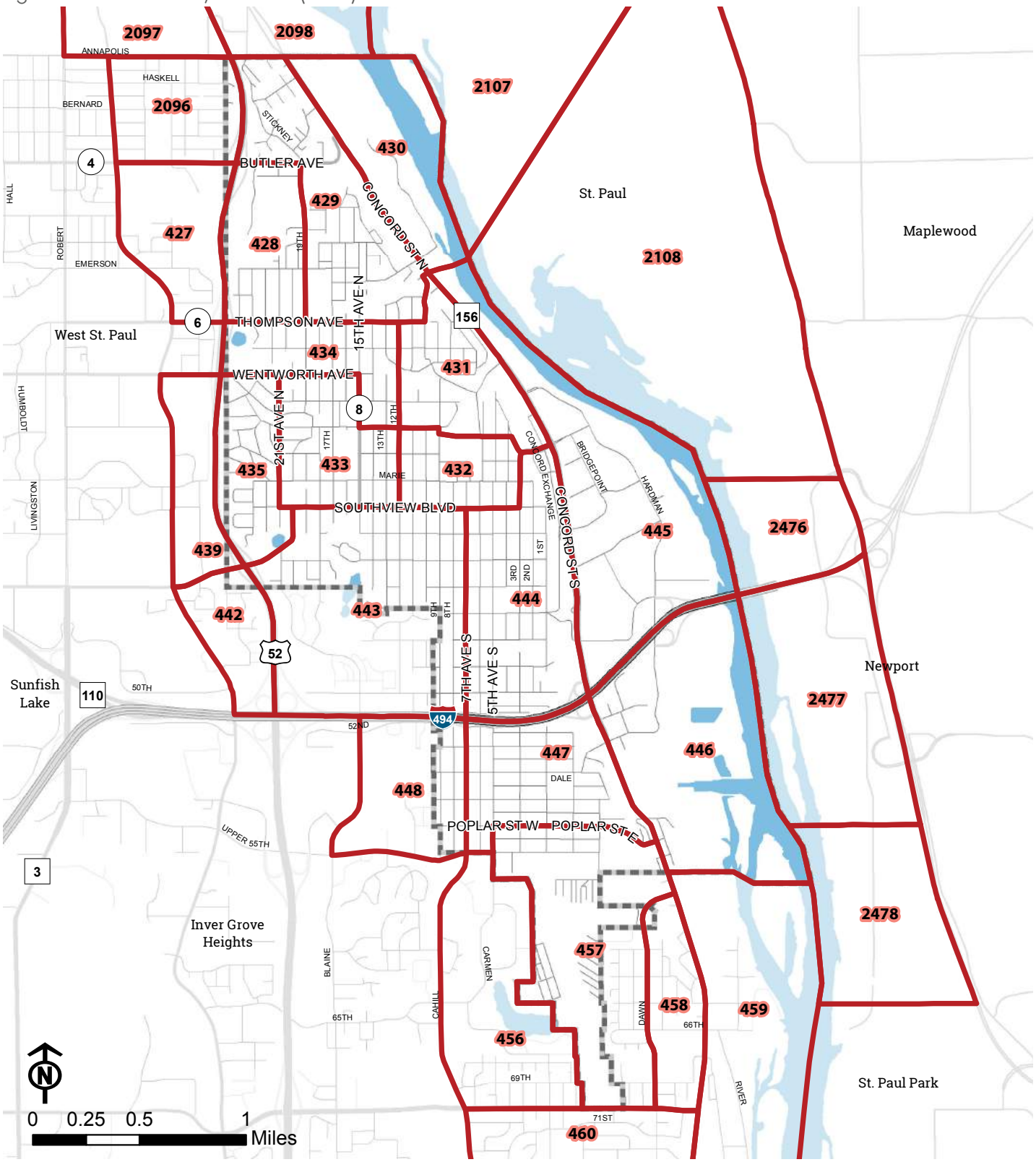
All of the City's 20 traffic analysis zones are projected to generally see equal increases in traffic by the year 2040. In general, traffic levels on the City local, county, and state roads are projected to increase by approximately 25% by the year 2040 (Figure 7.6 and Figure 7.7). These forecasts are based on data included in Dakota County's Comprehensive Transportation Plan as part of the 2040 Comprehensive Plan Update. The projected increase is a planning-level estimate, which can change over time.

Overall, the City contains only small, scattered areas of vacant land suitable for residential development. Additionally there are some areas of the city planned for mixed-use residential development. Limited impact will be felt on adjacent roadways from this proposed residential development.

Note: In 2022 the City's forecasts were revised due to the Grand/Exchange Mixed Use Area Comprehensive Plan Amendment. The following are the new projections. The TAZ forecasts have not been revised to reflect these adjustments.

	2020	2030	2040
Population	20,800	21,600	22,000
Households	8,400	8,850	9,100
Employment	5,900	7,000	7,500

Figure 7.5: Traffic Analysis Zones (TAZ's)



City

TAZ Boundaries

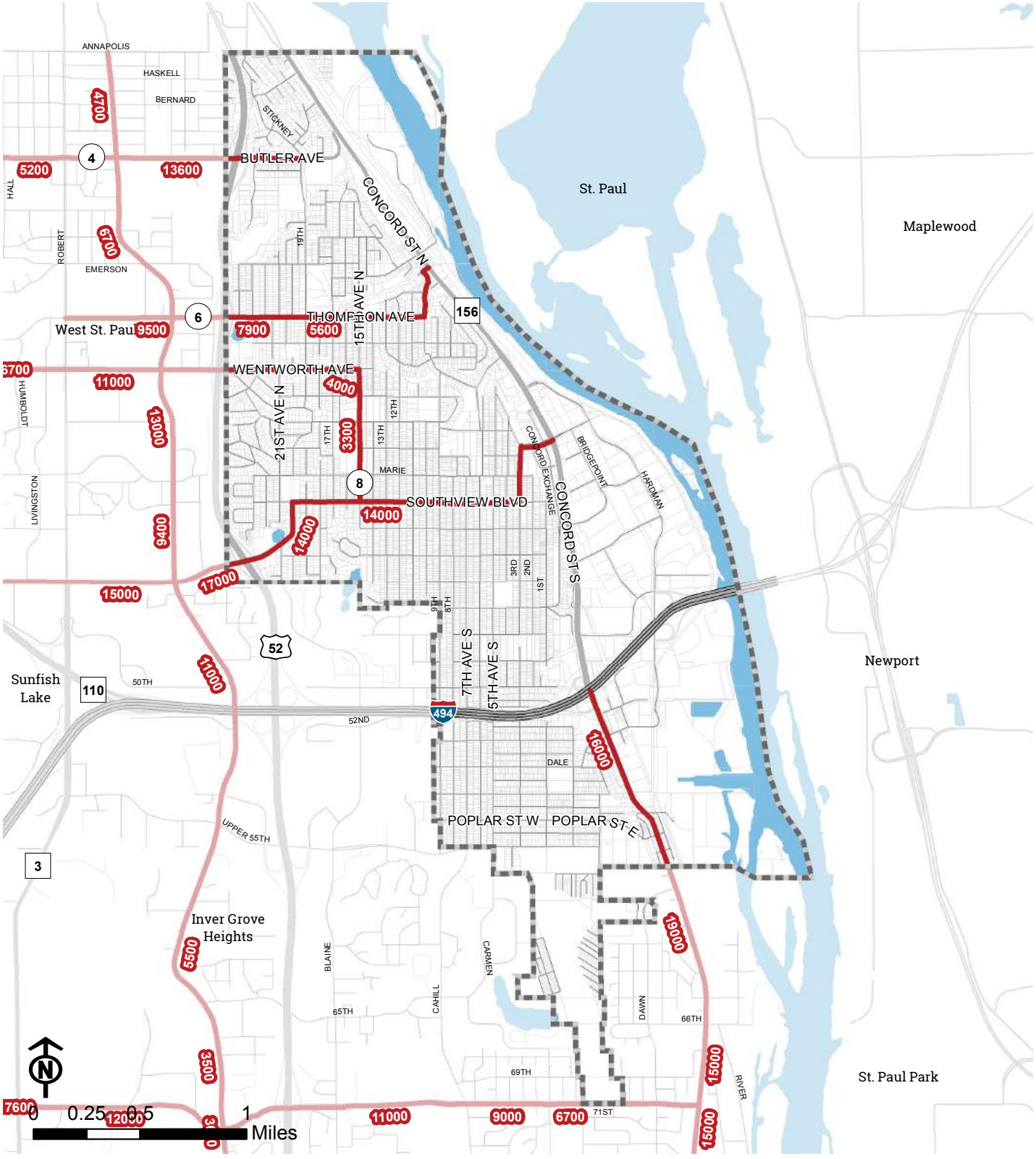
Figure 7.6: 2016 Traffic Volumes (AADT)

City

Official AADT (2016)

- > 25,000
- 5,000 - 24,999
- 1,000 - 4,999
- 300 - 999
- > 300

Figure 7.7: 2040 Projected Traffic Volumes (AADT)



A traffic impact will occur from commercial and industrial development. These areas encompass the BridgePoint Business Park area and the industrial area south of 494, including the Danner and former MCES site which are being prepared for redevelopment. The primary roads affected by mixed-use development will be Concord Street and Interstate 494, with a lesser impact on Hardman Avenue. With the improvements currently underway on TH 156, CSAH 56, and I-494 traffic demands should be met. One transit route serves this area, Route 71, with some limited service extension of the route along Armour Avenue, Hardman Avenue, and Grand Avenue (Figure 7.8). Mixed-Use redevelopment of Concord Exchange area in far eastern edge of TAZ's 444 and 431 would increase traffic in that area but the transportation infrastructure should be sufficient. As development continues to increase in these areas, the City should work with local businesses, the Chamber of Commerce, and Metropolitan Council to increase transit services and implement traffic demand management strategies.

Transit

The City is located in Transit Markets 2 and 3 (Figure 7.9)(as established by the Metropolitan Council) and is served by two fixed transit routes; Routes 68 and 71 (Figure 7.8). Both of the routes are regular service routes, and there is also the limited service branch off of Route 71. . South St. Paul residents have access to Transit Link which is a dial-a-ride service operated by the Metropolitan Council. Transit Link can be used for trips in areas that are not served by fixed transit routes. Residents can also use the DARTS service which is an on-call transit service administered by Dakota County that is designed primarily to meet the transportation needs of seniors. Two Metro Transit Park and Ride facilities exist just outside South St. Paul. The West St. Paul Sports Complex Park and Ride lot on Wentworth Ave is located just to the west of the City. This Park and Ride is served by the 452 Express Bus with service into Downtown Minneapolis. The Newport Transit Station is located in the southwest corner of Interstate 494 and Highway 61, just east of South St. Paul. This Park and Ride is served by the 364 Express Bus with service into Downtown St. Paul and the 365 with service into Downtown Minneapolis. Each of these express buses run three weekday trips during peak period. Currently, transit service within the City is adequate. As discussed earlier, transit may need to be increased in the Bridge Point Business Park, to provide extended regular route service as opposed to limited service.

The City of South St. Paul will continue to support the efforts of DARTS and Transit Link in their efforts to provide transit services. Also, the City of South St. Paul will continue to support the efforts and initiatives of Metro Mobility.

Table 7.7: Metro Transit Weekday Ridership

Transit Routes Operating in South St. Paul	2017 Avg. Passengers
Route #68	3,460 Persons
Route #71	1,931 Persons

*Ridership numbers are for all trips on these routes and are not specific to South St. Paul

Source: Metro Transit

WHAT WE HEARD:

When asked about the quality of public transportation provided within the community, 52.23 percent of community survey respondents rated these services as "good" while 33.12 percent rated them "fair."

Figure 7.8: Transit Routes

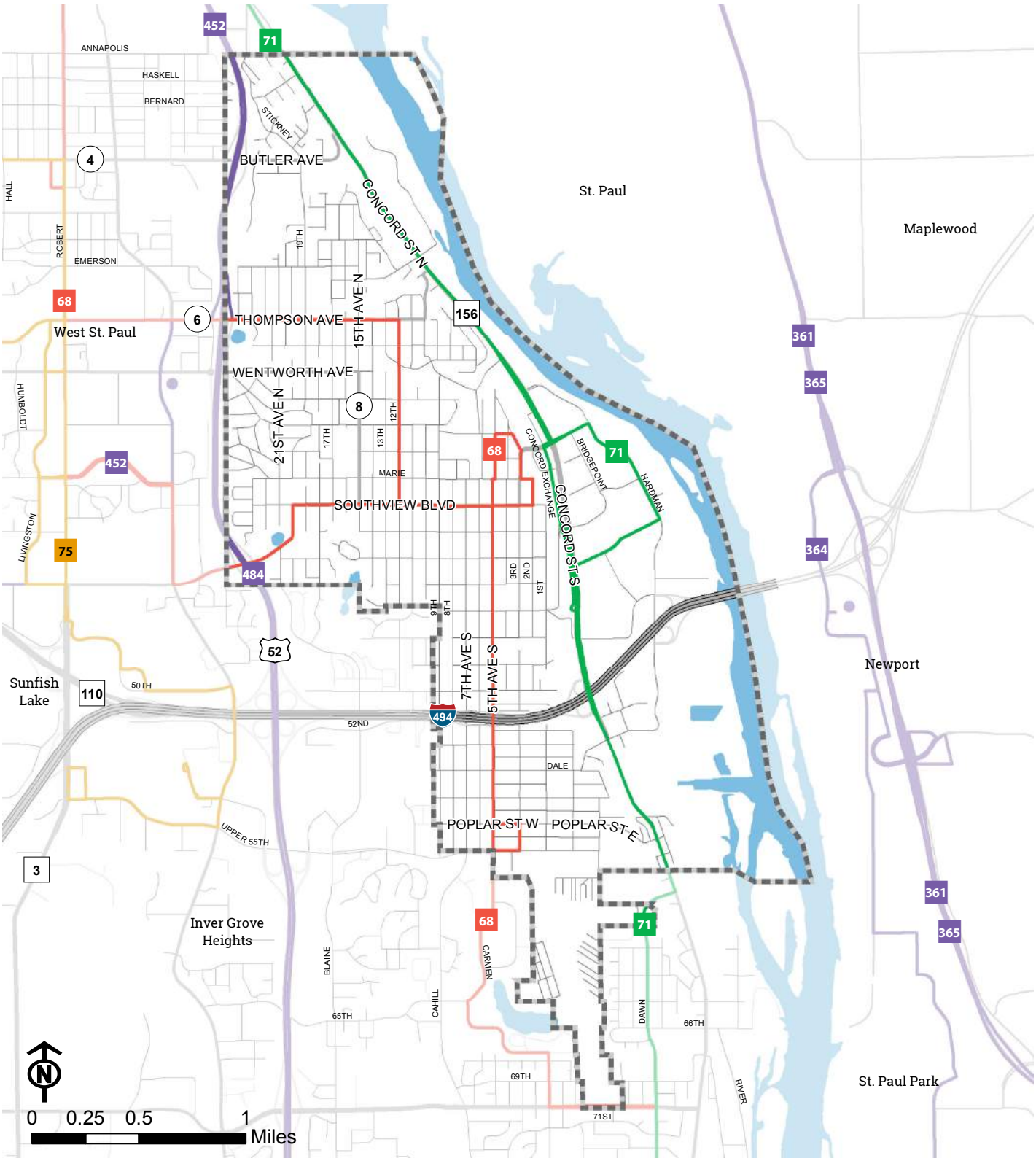
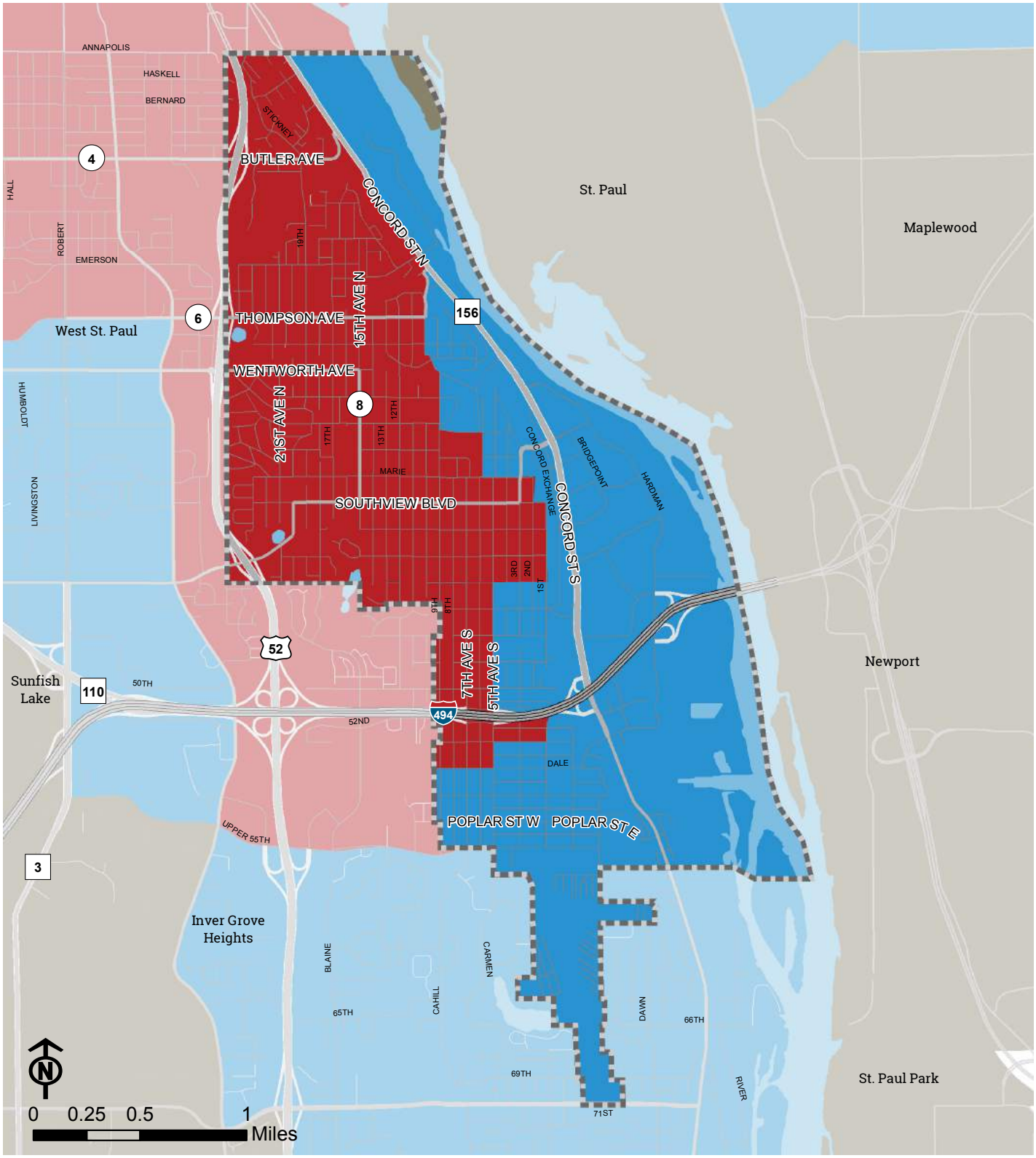


Figure 7.9: Transit Market Areas



Future Transit Improvements

In the next several years new transit options may be developed on the Robert Street Corridor. Those options may include Arterial Bus Rapid Transit (aBRT), Modern Streetcar or Highway BRT to link St. Paul with parts of Dakota County. The Robert Street Corridor Committee, of which the City was a member, explored options for the best alignment and best type of transit to service the area. The main alignments in the northern portion of Dakota County ran along Robert Street or Trunk Highway 52. The Alternatives Analysis (AA) deferred decision on the best type of transit to service the area until local comprehensive plans were updated to help determine which mode is better supported by local cities. The City recognizes the potential benefits that the additional transit service could provide to the community and supports better inter-connectivity of transit options to coordinate with the Robert Street Corridor transit. In particular, the development of new transit options in the Robert Street Corridor offers an opportunity to explore different types of transit and better transit technologies and services.

Transit lines along Concord Street offer another opportunity to provide inter-connectivity to the Robert Street corridor via St. Paul. New technologies should be promoted to encourage transit use in South St. Paul. These technologies include real-time bus location information (via mobile applications) for the transit rider about the location of the transit vehicle and can therefore increase the reliability and desirability of transit. Better transit stops or shelters at designated locations should also be explored with Metropolitan Council as opportunities arrive and can be coordinated with redevelopment. The transit lines can also encourage the redevelopment of property through Mixed-Use or Transit Oriented Development principles, such as the planned Mixed-Use development area along North and South Concord Street.

Trails and the Regional Bicycle Transportation Network

Bicycling and walking are becoming increasingly important in the Twin Cities for commuting to work or school, running personal errands, and traveling to entertainment and activity venues. The increasing demand for on- and off-street bikeway facilities offers a significant opportunity to help reduce traffic congestion, improve air quality, improve personal health, and improve the marketability and attractiveness of living in South St. Paul.

Regional Bicycle Transportation Network

Because bicycle trips often cross municipal boundaries, the Metropolitan Council has developed an arterial backbone network of regional bicycle facilities for transportation and has included it in the Transportation Policy Plan. This network, called the Regional Bicycle Transportation Network (RBTN), allows for planning of bicycle systems similar to how we handle street/transit systems. Not to be confused with the regional trail system composed of existing and planned regional trails and trail search corridors, the RBTN's primary function is for transportation rather than recreational and scenic value. Both networks overlap in many locations and can serve both purposes.

The goal of the RBTN is to establish an integrated seamless network of on-street bikeways and off-road trails to most effectively improve conditions for bicycle transportation at the regional level. The network is divided into two tiers for regional planning and investment prioritization. Those tiers are Tier 1 and Tier 2 and are listed as either an alignment or corridor in the RBTN.

In planning for specific RBTN alignments, the following guiding principles for regional bicycle corridors should be considered.

- Overcome physical barriers and eliminate critical system gaps.
- Facilitate safe and continuous trips to regional destinations.
- Accommodate a broad range of cyclist abilities and preferences to attract a wide variety of users.
- Integrate and/or supplement existing and planned infrastructure.
- Consider opportunities to enhance economic development.

Bicycle facility types that are suggested examples for implementing the RBTN include the following:

- Off-street trails
- Wide paved shoulders
- Bicycle boulevards
- Conventional bicycle lanes
- Buffered bicycle lanes
- Protected bikeways or cycle tracks

Tier 1 and Tier 2 Regional Bicycle Transportation Corridors

Tier 1 Corridors are a subset of the RBTN and have been identified as the highest priority for regional transportation planning and investment. The priority corridors are planned in locations where they can attract the most riders and where they can most effectively enhance mode choice in favor of biking, walking, and transit over driving alone. High rates of bicycle travel demand, as well as current and planned population and employment densities, were heavily weighted in the analysis of corridors. These corridors are intended to allow flexibility among local government agencies to tailor specific alignments for bikeway facilities through the local planning process. When specific alignments are designated through the local planning process, the regional corridor will be replaced on the RBTN map with the preferred alignment.

Tier 1 Corridors in South St. Paul are shown as a red bubble on Figure 7.10 and are located generally in a one-mile corridor along Concord St. (north of I-494), Southview Blvd., and Oakdale Ave. (outside South St. Paul).

Tier 2 Corridors are the remaining corridors in the overall RBTN. These corridors are assigned the second tier priority for regional transportation planning and investment.

Tier 2 Corridors in South St. Paul are shown as a blue bubble on Figure 7.10 and are located generally in a half-mile corridor along Concord St. (south of Southview St. and north of the River to River Greenway).

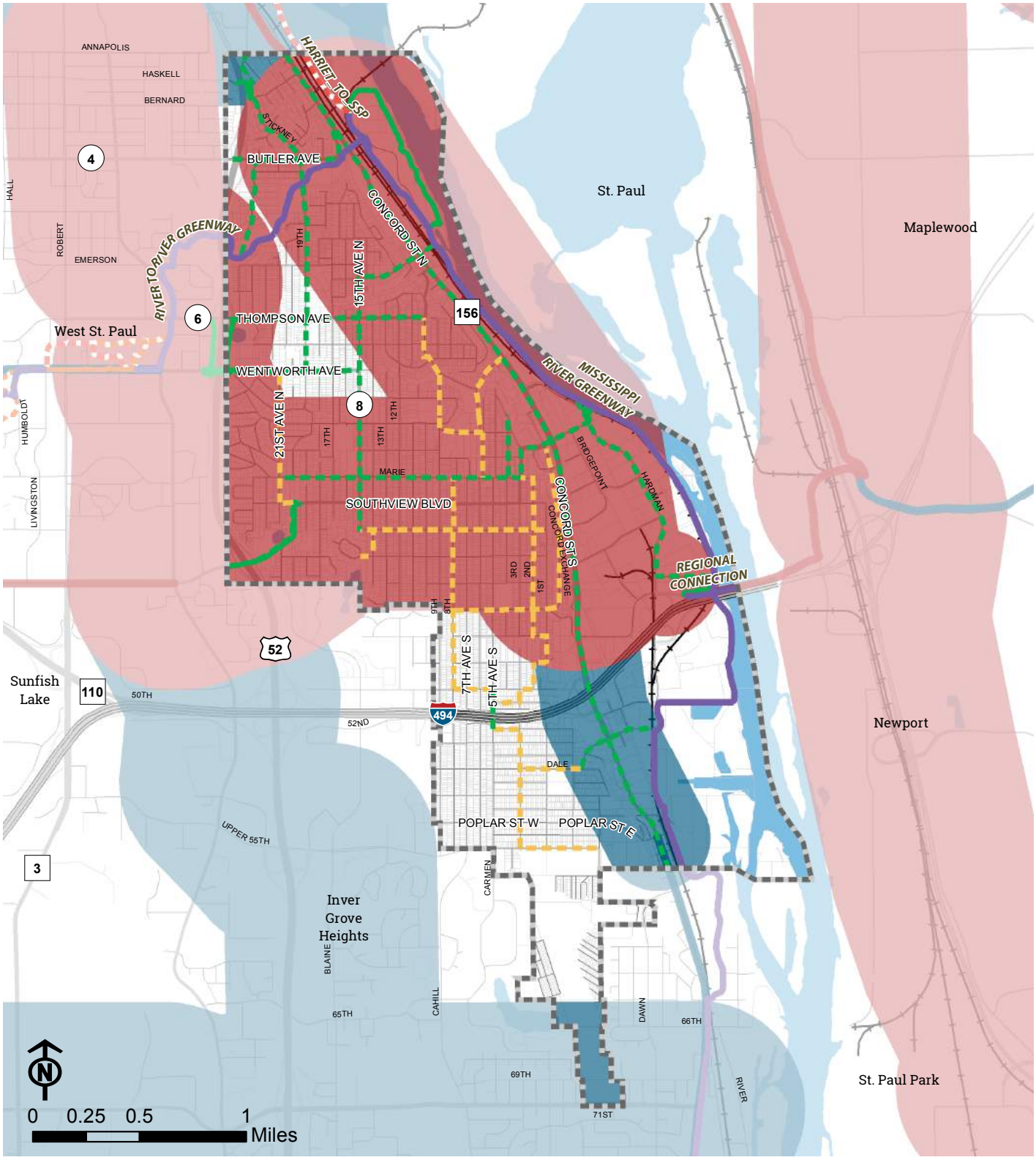
Relationship of Existing and Planned Bicycle Facilities to RBTN Corridors

Within South St. Paul, the closest existing bicycle facility alignment to the RBTN tier 1 corridor along Concord St. is the Dakota County Mississippi River Regional Trail. The proposed South St. Paul bike lane (interim) or trail (long-term) along Concord St. would be the best candidate to be proposed for this RBTN tier 1 corridor because of its improved accessibility and immediate proximity to destinations along Concord St.

There are no existing bicycle facility alignments within South St. Paul along the Southview Blvd. RBTN tier 1 corridor. The South St. Paul proposed bike lane/shoulder along Marie Ave. would be the best candidate to be proposed for this corridor because of its proximity to Southview Blvd. and route similarity.

Because of topography and existing development patterns there are no existing or planned bicycle facilities within South St. Paul that make good candidates for the RBTN corridor to connect to Oakdale Ave. (outside South St. Paul) via Thompson Ave. or Wentworth Ave.

Figure 7.10: Regional Bicycle Transportation Network



City

RBTN Alignments

Tier 1 Alignment

Tier 2 Alignment

RBTN Corridors

Tier 1 Corridor

Tier 2 Corridor

Dakota County Greenways

Existing

Alternate

Funded

Planned

Concept

Alternate, Future

Proposed Ped/Bike Plan Network

Shared Use Path, Bike Lane, or Shoulder

Bicycle Boulevard

Within South St. Paul, the closest existing bicycle facility alignment to the RBTN tier 2 corridor along Concord St. would be the Dakota County Mississippi River Regional Trail. The proposed South St. Paul bike lane (interim) or trail (long-term) along Concord St. would be the best candidate to be proposed for this RBTN tier 2 corridor because of its improved accessibility and immediate proximity to destinations along Concord St.

Tier 1 and Tier 2 Regional Bicycle Transportation Alignments

Similar to the regional bicycle transportation corridors, there are Tier 1 and Tier 2 regional bicycle transportation alignments where specific route alignments have been designated through the Regional Bicycle System Study process that included discusses with local agency staff. The designated RBTN alignments are based on local bicycle plans and in many cases already exist in some form and may need little or no improvement for the regional network. Those regional trails that provide direct transportation connections to and between regional destinations were included as Tier 1 alignments.

Tier 1 Alignments are shown as a bold red line on Figure 7.10. No Tier 1 Alignments fall directly within the boundaries of South St. Paul.

Tier 2 Alignments in South St. Paul are shown as a bold blue line on Figure 7.10 and are located along a short stretch of Concord St. (south of I-494).

Relationship of Existing and Planned Bicycle Facilities to RBTN Alignments

No RBTN tier 1 alignments fall within the boundaries of South St. Paul, so no facilities are designated as part of this category.

Within South St. Paul, the closest existing bicycle facility alignment to the RBTN tier 2 alignment along Concord St. is the Dakota County Mississippi River Regional Trail. The proposed South St. Paul bike lane (interim) or trail (long-term) along Concord St. would be the best candidate to be proposed for this RBTN tier 2 alignment because of its improved accessibility and immediate proximity to destinations along Concord St.

Trails

The City and Dakota County have entered into a joint powers agreement for the planning, acquisition, development and future operation/maintenance of the Mississippi River Regional Trail (MRRT). The trail runs along the Mississippi River for the majority of its length. At the northern end of the MRRT it passes through a park called Kaposia Landing. A future trail extension to the north is planned to make a connection to Harriet Island in Saint Paul (construction is scheduled for the fall of 2019).

Going westward from Kaposia Landing is the River to River Greenway which runs through Simon's Ravine. This Dakota County trail connects to the MRRT and runs into West St. Paul over TH52. The River to River Greenway continues in Simon's Ravine, a drainage ravine owned by South St. Paul. South St. Paul has developed trailheads in two locations along the River to River Greenway. In 2008, the City completed construction of a pedestrian underpass at 19th Avenue to remove the non-ADA compliant section of the trail.

The current MRRT has two overpasses over the Union Pacific Railroad facility. On the overpass at Grand Avenue, a viewing platform has been installed to watch eagles and herons at their nesting areas across the river in St. Paul. As previously mentioned the reconstructed Wakota Bridge provided a sidewalk connection that connects to the MRRT near the DNR boat launch site. This provides another pedestrian way and connection across to the other side of the river.

Trail and Bike Network Needs

The City has identified the following trail and bike network needs:

- Establish a network of bicycle-friendly streets in the city consisting of trails, bicycle lanes, shoulders, bicycle boulevards, and bicycle routes as shown in Figure 7.10
  - Multi-use trails along Concord St., Seidl's Lake, and from the MRRT to northern city limits.
  - On-street bicycle facilities, as show on Figure 7.10, which can be traditional bike lanes or shoulders, buffered bike lanes, cycle tracks, or advisory bike lanes can be considered.
  - For bicycle facilities on County highways, as shown on Figure 7.10, the City will work with Dakota County to determine the appropriate facility type.
  - Bicycle boulevards, as shown on Figure 7.10.
- Trail easements.
- Bicycle and pedestrian connections to trail access points; i.e. need for trail/sidewalk along Grand Avenue east of Concord Street, and Villaume/Verderosa from Concord Street to the boat launch site.

South St. Paul Bicycle and Pedestrian Plan

The City of South St. Paul recognizes that walking and bicycling infrastructure benefit its residents and businesses and completed a bicycle and pedestrian master plan in 2014. The plan addresses the City of South St. Paul's role in making walking and bicycling safe and easy choices for residents.

The recommendations of this plan are tailored to help the city reach these goals. The plan is guided by a 5 Es approach to bicycle and pedestrian planning: engineering, education, encouragement, enforcement, and evaluation. Recommendations in this plan include:

- Establish an Arterial Sidewalk Network based on priority pedestrian connections
- Identify critical gaps in the sidewalk system
- Identify bicycle network, including multi-use trails, bike lanes, and bicycle boulevards
- Maintenance recommendations for sidewalks and bikeways
- Community outreach to encourage walking and bicycling
- Support Safe Routes to School programs
- Educate residents about safe walking, bicycling, and driving behavior

» Safe intersection treatments for pedestrians and bicyclists that utilize an appropriate combination of signalization, pavement marking, and physical improvements.

» Ongoing sidewalk maintenance and pavement re-striping.

Trail Access Points

The following are the points where the regional trails can be accessed in South St. Paul:

» Kaposia Park

» 19th Avenue

» Simon's Ravine Trailhead

» Kaposia Landing park and at Bryant Avenue in Kaposia Landing (Bryant Ave./Concord St. intersection)

» The Spiral Bridge at Grand Avenue East and Hardman Avenue

» The DNR Boat Launch site off of Verderosa Avenue

» Richmond Street at Hardman Avenue

Sidewalk System

Other than the trails, the City has an extensive sidewalk system (Figure 7.11). There are, however, areas that need improved sidewalk facilities:

» Southview Boulevard from 20th Street to West St. Paul border.

» North Concord Street from Grand Avenue to St. Paul border.

» 19th Avenue North from Bromley Street to Butler Avenue.

» 7th Avenue South from I-494 to Inver Grove Heights border.

» East-West trail/sidewalk connections between Lorraine Park and Roosevelt Parks and the existing (mostly) North-South network of sidewalks.

The addition of these sidewalk segments would allow pedestrian access to all facilities, schools, neighboring cities, and commercial access in and near the City.

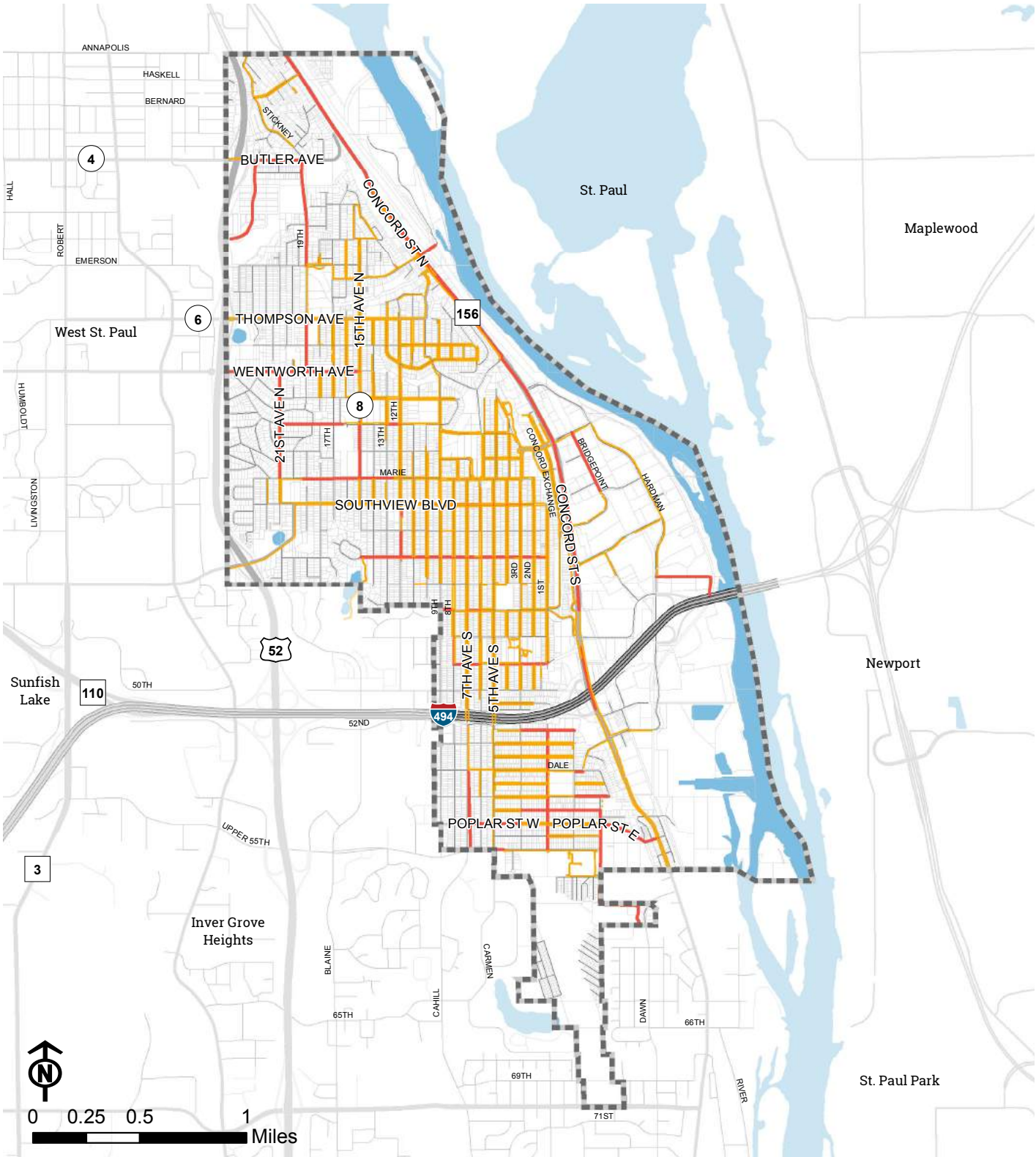
The City has established a maintenance program for its sidewalks. This program replaces segments in need of repair and assesses the cost to the adjacent homeowner. A program has not been established to implement new segments of sidewalk as identified above. The City will work with Dakota County to develop a maintenance program for the regional trail.

In addition to physical improvements, education and encouragement strategies are also needed to give people more information about how and where to walk and bike safely, as well as how to drive safely around those who are biking and walking. Education and encouragement can be done through community outreach/communications, a Safe Routes to School plan/program, and enforcement.

WHAT WE HEARD

During the community engagement events held as part of this planning process, City residents and community members mentioned the need for usable sidewalks throughout the City. Currently, there are some sections of the City lacking complete sidewalks while others are in disrepair. Residents stated that sidewalks should be ADA-accessible and should be maintained and cleared of snow and ice throughout the winter months, especially at the corners.

Figure 7.11: Sidewalk Network



Aviation /Airport

History

South St. Paul's Fleming Field Airport was built in 1939 and was first used by a flying club. In 1942, the US Navy purchased the land and existing hangars and spent 1 million dollars on improvements such as a control tower (which has since been removed) and additional hangars. While owned by the Navy, the airport served as a primary training base. At the end of World War II, the airport was deemed surplus property and the City of South St. Paul claimed the land which came with a deed restriction that the land must be used as an airport, otherwise, the airport land would return to the Navy. The City began using Fleming Field airport in 1946 for general aviation and then in the 1970's began leasing land at the airport to individuals for private hangars. The City built the first of its own hangars in 1978.

In the 1980's The Metropolitan Airport Commission (MAC) conducted a study of Fleming Field airport to determine if they wanted to add the airport to their system. The MAC's study determined that acquisition of the airport would not be in the MAC's interest as they would likely lose money. In 1992 the MAC dropped consideration of the airport altogether.

The airport was named Fleming Field in honor of Captain Richard E. Fleming of the US Marine Corps Reserve, a native of St. Paul and graduate of St. Thomas Academy and the University of Minnesota. Captain Fleming received the Congressional Medal of Honor for his bravery and heroics as a flight officer in a Marine scout bombing squadron in the Pacific during World War II.

Source: Fleming Field

Source: Fleming Field

Purpose

Today, Fleming Field continues to operate as a general aviation airport and caters primarily to recreational pilots though there has been an increase in business travel. In addition to public and private hangars for general aviation there are also several aviation related businesses at the airport including Wipaire (aircraft float manufacturing company), Ballistic Recovery Systems/BRS (a company that makes whole airplane parachute systems), Sierra Hotel Aero (rebuilds old airplanes), and Spectrum Medical Services (a company that brings specialist doctors to rural areas). Lysdale Flying Service (aircraft sales), which was one of the original airport tenants in the post Navy era, is still in operation at Fleming Field airport.

The City added a terminal building in 1997 to serve as the hub for the airport, a neighborhood meeting space, and to provide inviting quarters to cater to the growing business use of the airport. The terminal offers a 24-hour pilot's lounge. Fleming Field airport continues to be an important facility to the community of South St. Paul and an important hub of commerce.

There are approximately 464 jobs at the airport and the businesses located there.

Aviation/Airport Plan

Fleming Field Airport is designed to serve South St. Paul and the surrounding regional area. The airport sits on 204 acres of land and has one 4,002 x 100 foot paved runway. It is an active airport with approximately 58,100 landings and takeoffs per year (2012). Approximately 260 aircraft are based at the airport.

The airport serves two main purposes: business and recreation. Most of the activity occurs between 7 a.m. and 9 p.m. weekdays and on weekends. The economic impact from airport related activities totals approximately 41 million dollars.

Helicopters / Helipad (none)

While there is no helipad there are 10 helicopters that operate out of Fleming Field Airport. The flight path (approach) for helicopters is from the Wakota Bridge to the windsock on the Fleming Field tarmac and back out the reverse way. This flight path accommodates the needs of helicopter use at the airport while offering the least disruption to neighboring residential properties.

Safety - Landing Aides

There is no air traffic control tower at the Fleming Field airport. The tower that had been built after the Navy left has long since been removed. The type and quantity of air traffic do not warrant an air traffic control tower. Fleming Field currently uses; pilot controlled lighting (remote controlled via radio), a Non-Precision Global Positioning System (GPS) and localizer (World War II Era instrument) landing aid for the Runway 34 approach (from the south heading north), and Precision Approach Path Indicator (PAPI) (visual landing aid [red boxes]) for both Runway 34 and Runway 16 approach (from the north heading south). Due to the proximity to the St. Paul Downtown Airport, the FAA indicated that they would not support any type of instrument approach to Runway 16. All of the safety equipment is located on-site at the airport.

The City will work with the FAA to acquire Precision GPS aides for the Runway 34 approach which should help to decrease the safe viewing height to the runway and increase the ability for planes to land in bad weather safely.

- Pilot controlled lighting (remote controlled via radio)
- PAPI for Runway 34
- GPS and NDB instrument approaches

Airport - Future Land Use

In 2007 the 25 acres on the west side of the airport was platted and access roads to the site were installed. There are currently five hangars constructed in this area, and space for 46 private aircraft storage hangar lots and one 14-unit public T-hangar building lot.

The only other area remaining for expansion of the airport is within the city limits of neighboring Inver Grove Heights where seven hangar lots were created; two of those lots are developed and six lots are still available. The entirety of Fleming Field is located within South St. Paul city limits with the exception of eight acres of land in Inver Grove Heights where these hangar lots are located along with a small section of tarmac.

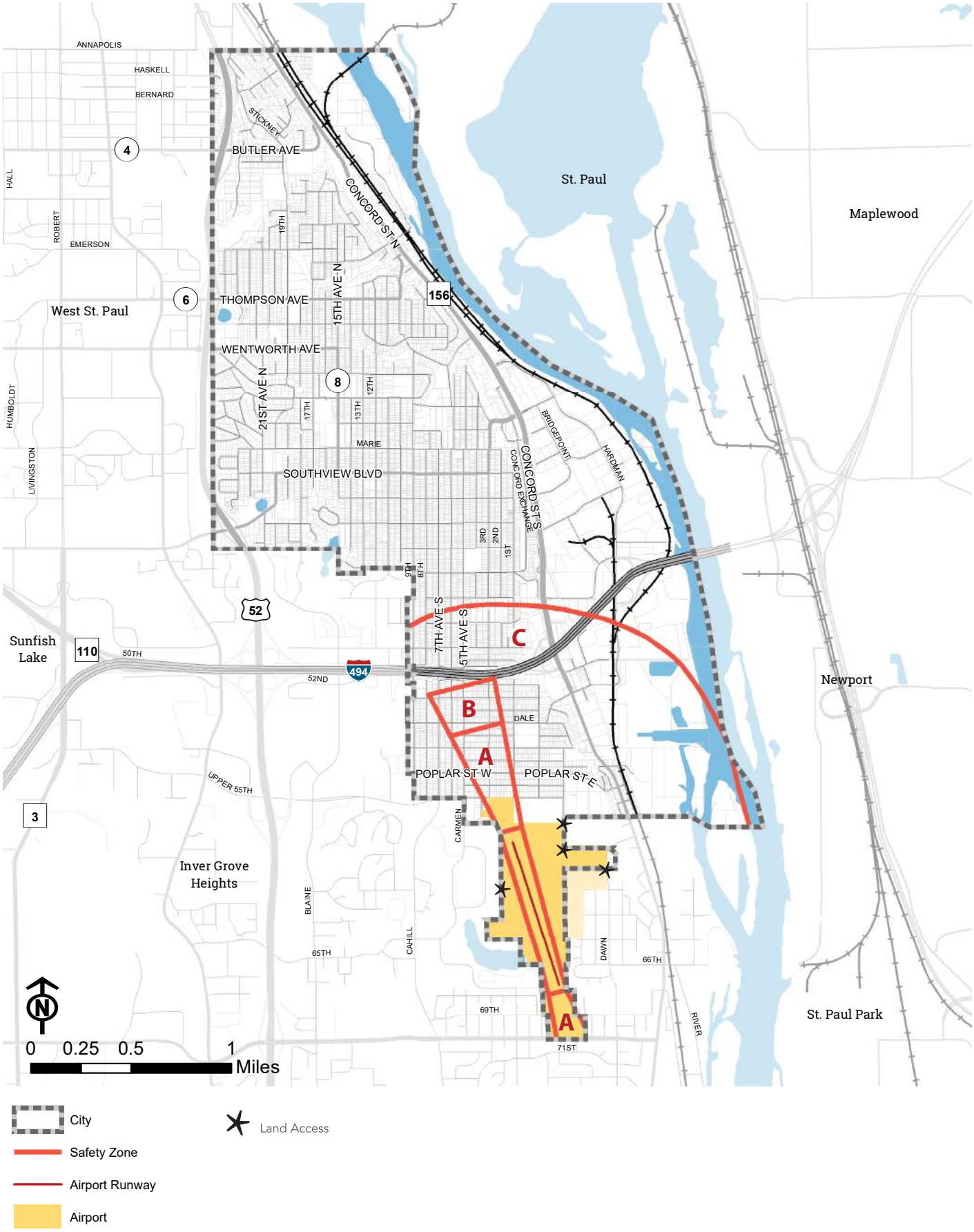
In 2015, the most recent Airport Layout Plan (ALP) was completed and approved by the Federal Aviation Administration. The airport is currently in the process of updating their master plan and the newest version of the plan should be ready for adoption sometime in 2020.

It is not anticipated that any additional land will be acquired for future expansion of Fleming Field. The City of South St. Paul currently owns roughly 27 acres of vacant land to the south of Fleming Field's existing runway which is considered part of the airport. There has been informal exploration of the idea of someday extending the runway onto this vacant land but that type of project would be very challenging due to the close proximity of existing single-family homes. There are no immediate plans to formally study the viability of extending the runway.

Airspace Protection Regulatory Control / Airport Zoning

The cities of South St. Paul, Inver Grove Heights, and Newport have adopted an airport zoning ordinance which is managed by an Airport Zoning Board. The ordinance provides airspace protection for the airport by regulating the type of uses, type and manner of lighting used on properties in the area, and height of structures in the respective safety zones in and around the airport. The City has continued to enforce airport zoning regulations on properties within its boundaries. The Metropolitan Council has indicated that the airport zoning ordinance has not been changed since the 1970's and should be updated. However, since the Airport Zoning Board has not been active for some time, and the board (which is made up of representatives from several communities) would be required for changes to the existing ordinance, it would prove to be a substantial undertaking and likely will not be completed until at least 2025. The City acknowledges that the ordinance will need to be updated and will work with MnDOT Aeronautics and the Metropolitan Council to develop an updated airport zoning ordinance. The City also understands that MnDOT has been working on a model airport zoning ordinance which should be completed soon and this model ordinance may provide the City with necessary framework for updating the City's airport zoning ordinance.

Figure 7.12: Airport Safety Zones



Permits

Per Minnesota State Statute 360.83, the city will also notify MnDOT Aeronautics for any construction or alteration that would exceed a height of 200 feet above ground level at the site, or any construction or alteration of greater height than an imaginary surface extending upward and outward at a slope of 40:1 from the nearest point of the nearest runway of a public airport.

Airport Influence on Land Uses

Runway Clear Zones

The airport's land use safety zone extends north and south of the airport property itself (Figure 7.12). Land uses within these zones are predominantly residential in nature, specifically single family. A softball complex, community park, and community gardens are located directly adjacent to the airport. Land use incompatibilities have recently been addressed including the reconfiguration of McMorrow Field, acquisition of two residential properties on South Street, the removal of a storage shed and trees along Craig Ct., and the acquisition of aviation easements. The City has opted to work with property owners when acquisition of property is necessary and to acquire the properties when the owners are ready to sell. The Federal Aviation Administration (FAA) has stated that Fleming Field is in a built-up urban zone and therefore allows the City great leeway since many of the buildings have been in the clear zones for around 50 years.

FAA Notification

The City will work with the FAA and provide notice as required of changes to the airport, and particularly regarding runway clear zones.

Noise

The noise generated by South St. Paul's municipal airport is not to an extent which would require soundproofing or other corrective measures. One way the City has attempted to control noise is by having the set approach areas for airplanes and helicopters. This minimizes noise impacts to the residential properties around the airport.

St. Paul Downtown Airport (Holman Field)

South St. Paul is within the influence area of St. Paul Downtown airport, also known as Holman Field. Holman Field is roughly 540 acres in size and contains three asphalt runways. The Downtown Airport (STP) is designated by the FAA as a Reliever Airport for the metropolitan area. It serves an important role to reduce congestion at Minneapolis/Saint Paul International Airport (MSP) by accommodating general aviation traffic that might otherwise use MSP. STP is classified as a Primary Reliever Airport by MAC; a Key Airport by the Minnesota Department of Transportation State Aviation System Plan; and an Intermediate Airport by the Metropolitan Council Regional Aviation System Plan. Further, the FAA has classified STP as a National category general aviation airport. It accommodated approximately 40,500 aircraft takeoffs and landings

in 2017. STP also has an Air National Guard operation that includes the use of helicopters. By 2040, approximately 50,000 to 70,000 annual flight operations are predicted.

Seaplanes

There is no documented seaplane usage within South St. Paul city limits. The Wipline Seaplane Base is located south of city limits in neighboring Inver Grove Heights. The region's seaplane users likely choose to land near that facility versus landing in the Mississippi River near South St. Paul and then taxiing the considerable distance to reach the Wipline Seaplane Base via the river.

Freight

Regional Freight

In addition to the aviation system, the region's freight system has four components:

- Trucks
- Freight Rail
- Barges
- Intermodal Transfer Facilities

All four of these components are present within South St. Paul. Figure 7.13 illustrates the location of freight and intermodal facilities. Existing (2016) heavy commercial annual average daily traffic (HCAADT) volumes are depicted in Figure 7.14. Of these economic centers, portions of the I-494, TH 52, TH 61 and Concord Boulevard are significant to the region's freight network as it provides access to barge terminals, regional shopping centers, employment hubs and the Fleming Field – South St. Paul Airport.

Thrive MSP 2040 recognizes special features that communities share around the region that allow the Metropolitan Council to apply policy consistently in similar places. A manufacturing/distribution location has been highlighted, see Figure 7.13, as one special feature located within South St. Paul. Manufacturing/distribution locations are defined by densities of employment in manufacturing, distribution, and warehouse of at least 2 jobs per acre. Manufacturing/distribution locations benefit from significant existing regional infrastructure such as wastewater, highways, and rail. The Council discourages redevelopment of industrial land in strategically important locations along rivers and railroads in the region into other uses.

Local Freight

Most aspects of freight movement are controlled by the private sector, though there is still a need to plan for a safe and efficient multi-modal freight system at the local level.

Figure 7.13: Freight and Intermodal Facilities

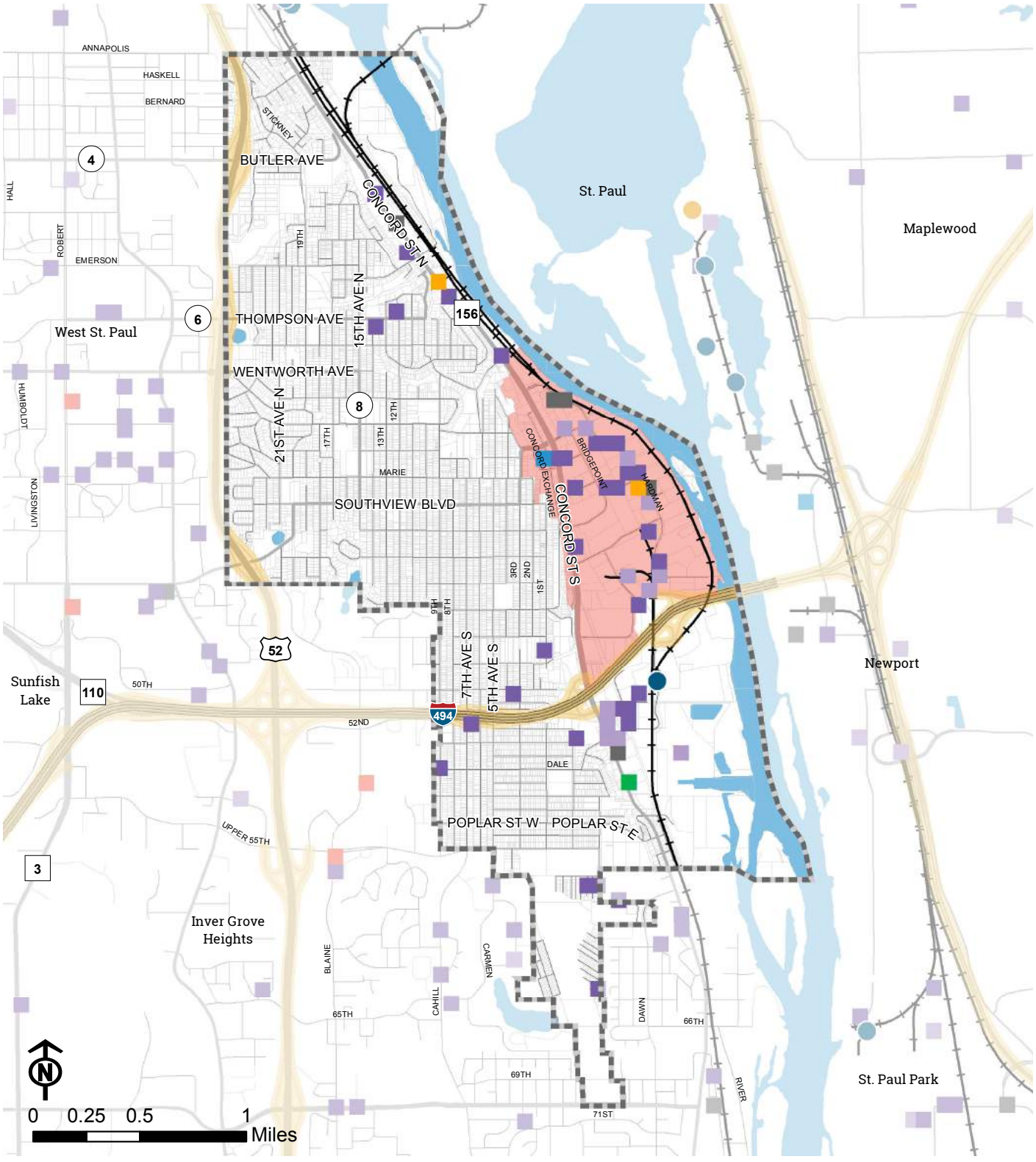
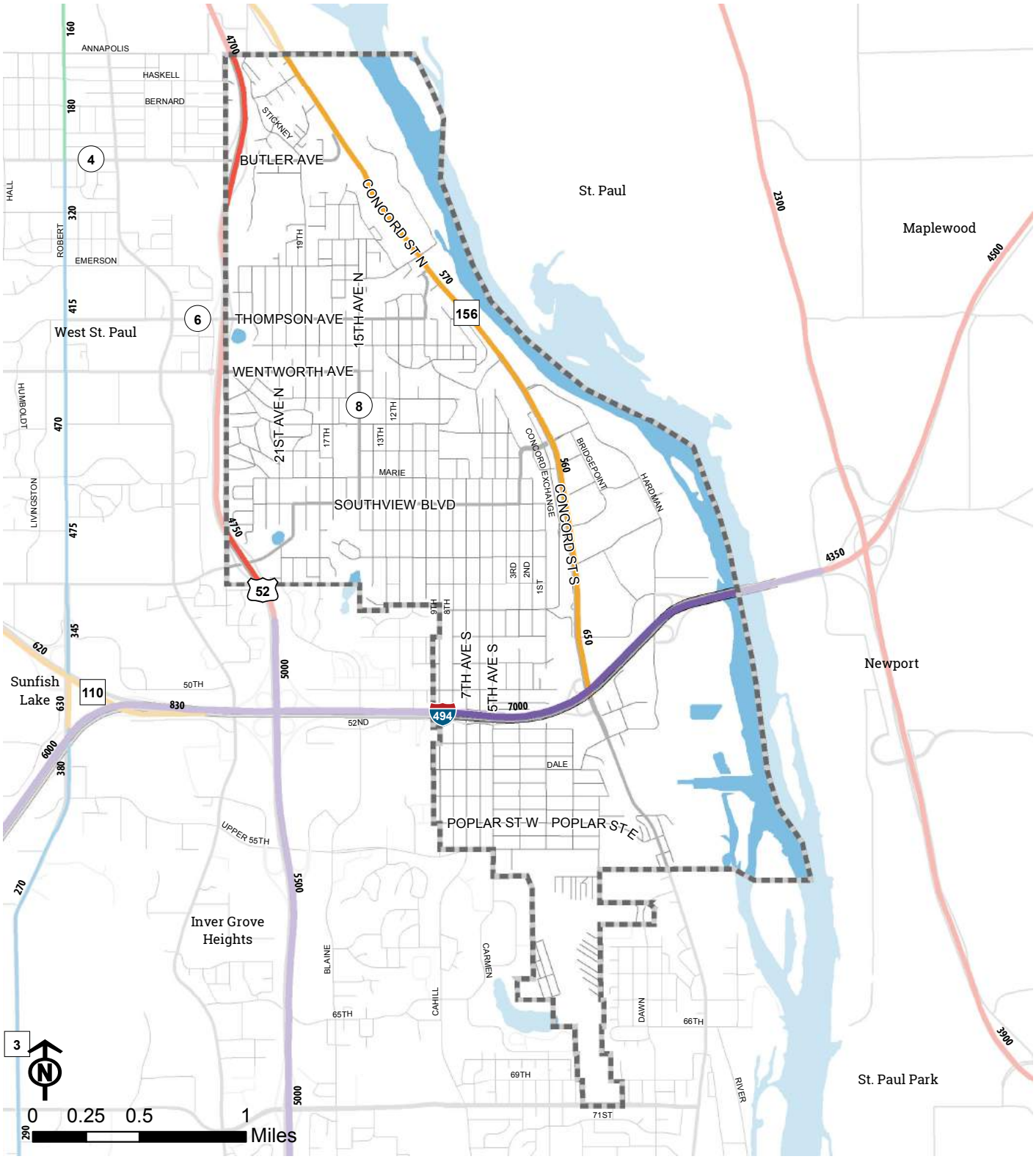


Figure 7.14: 2016 Traffic Volumes (HCAADT)



A major component of South St. Paul's freight system is the roadway network. Key freight corridors within the community include I-494, and non-interstate highway corridors, including TH 52 and TH 61 (east of the Mississippi River) (see Figure 7.13). These corridors provide limited access for uninterrupted traffic flows with a relatively high level of service.

More importantly, the County State Aid Highway (CSAH) System connects to heavy freight corridors and provides first- and last- mile connections to local customers and businesses. CSAH routes that parallel interstates/highways or connect to industrial and commercial centers significantly support the transportation of freight within South St. Paul. This includes CSAH 156 (Concord Boulevard). Other significant routes include city streets that provide circulation within the City's industrial park (e.g., Hardman Avenue) and access to CSAH 156.

As seen in Figure 7.13, the primary railroad corridor within South St. Paul is the Union Pacific Railroad corridor that runs North-South along the Mississippi River, east of Concord St. There are a few railroad spurs located within South St. Paul serving the barge fleeting facility south of I-494 and major industrial uses in the City's industrial park along Hardman Avenue. Within South St. Paul the Union Pacific Railroad line does not have any at-grade crossings with any arterial roads.

Assisted Driving and Autonomous Vehicles

Fully autonomous cars are still in the advanced testing stages, but partially automated technology and low-speed cars are beginning to embed themselves into markets across the country. In that respect, understanding autonomous vehicles will play an important role in how agencies manage their transportation assets, while setting the stage for investments. In addition to fully autonomous vehicles, there are connected vehicles that will interact with our transportation system to complete driving functions or provide information to the driver to make informed decisions.

Aside from some of the predicted impacts such as the continued growth of car-sharing, and on-demand taxi services like Uber and Lyft, autonomous vehicles (AVs) and connected vehicles (CVs) also stand to disrupt the norms of both transportation and land use planning. Parking minimums, street design, right-of-way needs, development demand, signage and signalization, building siting and design, access management, and their accompanying standards have the potential to change dramatically over the next 40-50 years.

Researchers have concluded that AVs and CVs will reshape the right-of-way of future roadways. Autonomous vehicles are likely to be smaller than existing passenger vehicles, permitting narrower lanes, likely will not require medians, and due to wireless communication between vehicles, will allow travel much closer to one another. By

accommodating the same or more volume in less space, newly available roadway can be reapportioned to other road users like pedestrians and bicycles.

Although new roads can be configured for additional multimodal use, there are some potential drawbacks for pedestrians, bicyclists, and other road users that the City will need to be conscious of when moving towards a more automated roadway infrastructure. The reapportioning of right-of-way may allow for expanded sidewalks and more dedicated bike lanes; however, due to potential signal removal this may cause longer waits at intersections dominated by free-flowing vehicles. Adding pick-up and drop-off locations could also fragment the streetscape, complicating travel for multimodal users.

The redevelopment of former parking lots has the potential to transform existing urban centers. Future site designs will be impacted by the implementation of autonomous vehicle structure, potentially allowing for buildings to more regularly front streets rather than parking lots. Accommodation for pick-up and drop-off locations within these parking lots will need to be a consideration.

The City will need to be mindful of the potential infrastructure impacts caused by adoption of autonomous and connected vehicle cultures. As the City looks to redevelop larger roadways, thoughtful consideration for how roadway infrastructure can be expanded to compliment autonomous and connected vehicles is important.

Transportation Goals and Policies

Goal 7.1: Support and facilitate cutting edge telecommunications and transportation infrastructure to all local centers of economic activity – business, industrial, and office areas.

Policy 7.1.1: Continue the program of assessing the surface condition of local streets and budgeting for their systematic maintenance and periodic reconstruction.

Policy 7.1.2: Consider enhancing the streets program to include reconstruction of alleys.

Goal 7.2: Manage access on major streets to improve traffic flow and road capacity, always with a concern for neighborhood livability.

Policy 7.2.1: Design and maintain local streets for land access while making them less attractive to sub-regional and regional traffic through traffic calming techniques.

Goal 7.3: Establish New Street Reconstruction and Design Standards.

Policy 7.3.1: Decrease the width of new local (minor) residential streets from current standards. Fully interconnect new local residential streets and discourage the construction of cul-de-sacs where other alternatives are feasible.

Policy 7.3.2: Use distinct street design and streetscaping to help identify collector streets from minor residential streets.

Policy 7.3.3: Reduce residential streets in width to the extent that on-street parking and other demands allow.

Policy 7.3.4: Extend the established pattern of streets into new neighborhoods through the platting process, while being sensitive to work around natural topography like bluffs, ravines, and wetlands.

Policy 7.3.5: Integrate a green connection along the North Concord Street corridor to connect the Concord Exchange and BridgePoint Business Park areas up to Kaposia Landing park and on to the City's northern border.

Goal 7.4: Plan for a Transportation Link through the Dawn Way Landfill Site in Coordination with Redevelopment of the Site.

Policy 7.4.1: Future redevelopment of the Dawn Way Landfill may include a transportation link through the site, possibly the extension of South Street through the site to connect to Concord Street at the current Poplar Street connection.

Goal 7.5: Plan to coordinate with the potential development of Light Rail Transit (LRT) or Bus Rapid Transit (BRT) on either the Trunk Highway 52 (TH52) corridor or along Robert Street (in West St. Paul).

Policy 7.5.1: Work with Dakota County and other area cities to lobby for this transitway which would serve all of the cities in this region.

Policy 7.5.2: Work with Dakota County and other area cities to develop improved transit that can be supportive to the LRT or BRT line.

Policy 7.5.3: Work with Dakota County and Metro Transit to develop improved routes or express routes along the City's existing transit corridors of Concord Street or Southview/3rd Street.

Policy 7.5.4: Work with Metro Transit, Dakota County, and other area cities to explore possible transit connections to Metro Transit Blue Line LRT (Hiawatha) at Fort Snelling and improved connections to the Metro Transit Green Line LRT (University).

Goal 7.6: Establish a system of attractive trails that connect the City and offer an alternative means of transportation and recreation for residents and visitors. In addition, provide trail connections to regional systems and trails in other communities.

Policy 7.6.1: Develop a citywide trail map, especially for off-street trails.

Policy 7.6.2: Identify and prioritize missing connections between city sidewalks and trails.

Policy 7.6.3: Identify official pedestrian/non-vehicle connections between parks, schools, shopping, and work.

Policy 7.6.4: Utilize the annual concrete program for installation and maintenance of sidewalks. Explore possible use of the program for trail installation and maintenance.

Policy 7.6.5: Construct a trail connection at Bromley Street; signage, information kiosk to show linkage to Kaposia Park and Dakota County River to River Greenway Trail (R2RG).

Policy 7.6.6: Continue the development of the Mississippi River Regional Trail (MRRT) in cooperation with Dakota County. Continue to seek Federal, State, and Regional dollars to accomplish this goal.

Policy 7.6.7: Cooperate with Federal, State County, and other agencies for the funding, construction and maintenance of high priority trail connections and corridors.

Goal 7.7: Maintain and improve the safety of the South St. Paul Fleming Field Airport while encouraging the growth of business and recreational aviation.

Policy 7.7.1: Acquire runway protection zone land as directed by the Federal Aviation Administration (FAA).

Policy 7.7.2: The City will work to achieve the runway clear zones (particularly 40 to 1 approach) as established by the FAA where feasible.

Policy 7.7.3: Work with the Minnesota Department of Transportation (MnDOT) Office of Aeronautics and the FAA for Precision Global Positioning Systems (GPS) for Runway 1/6 (approach from the south) and Runway 3/4 (approach from the north).

Policy 7.7.4: Update the current airport zoning ordinance. Develop updated regulatory controls through airport zoning regulations to ensure that proper safety and development standards are followed.

Policy 7.7.5: Work cooperatively with the City of Inver Grove Heights to identify and minimize, to the extent possible, impacts to adjacent land uses as development occurs.

Goal 7.8: Adopt new design criteria to ensure that the airport remains an attractive place for recreational aviation and encourages new development or aviation related businesses.

Policy 7.8.1: Continue to use the existing architectural design standards, established in Airport Rearrangement 3rd and 4th Addition plats, and apply these standards to all new hangars and redevelopment of existing hangars.

Goal 7.9: Continue to recognize the importance of Fleming Field Airport as an important facility in the economic development efforts of the City and support economic development and redevelopment at the airport.

Policy 7.9.1: Encourage aviation businesses to relocate to Fleming Field Airport when their business goals and operating procedures coincide with the expectations of South St. Paul and Inver Grove Heights residents; develop sites for those relocations.

Policy 7.9.2: Commercial airport buildings and operations at the airport should be concentrated in the area adjacent to the Fleming Field Terminal Building. Recreational airport users may be located on all other areas of the airport.

Goal 7.10: Consider the critical importance of safe and adequate site access, considering all modes of transportation, in all land use decisions.

Policy 7.10.1: Evaluate all site plans and land use decisions through an equitable lens that includes accessibility for those of all abilities, ages, and those using alternative modes of transportation.

Policy 7.10.2: Prioritize infrastructure improvements that improve usage and passage by those of all abilities, ages, and those using alternative transportation modes.

Policy 7.10.3: Continue to address barriers to bicycle and pedestrian travel that were identified in the City's 2014 Bicycle and Pedestrian Master Plan.

Policy 7.10.4: Monitor intersections and streets for unsafe conditions and consider traffic calming and/or pedestrian safety measures where feasible.

Policy 7.10.5: Maintain excellent access to metro-wide destinations through roadway and transit connections.

Policy 7.10.6: Monitor traffic congestion issues and prioritize solutions that will have a long-term impact on traffic flow.

Policy 7.10.7: Continue to coordinate with MnDOT, Metro Transit, and Dakota County on projects that may affect or change the transportation and transit connectivity in South St. Paul.

Goal 7.11: Capitalize on development activity and infrastructure upgrades as an opportunity to improve and increase bicycle and pedestrian amenities in the community.

Table 7.8: Transportation Actions

Action	Time Frame	Same As
Action 7.1: Create a small area/corridor plan for the North Concord Corridor (from the northern City Border to Wentworth Avenue). This plan should focus on: » Establishing architectural and design standards that promote traditional urban design » Promoting a mix of uses as well as reducing parking requirements, or creating consolidated public parking areas » Placemaking and wayfinding » Establishing connections to Concord Exchange and Kaposia Landing by enhancing the bicycle and pedestrian network and taking advantage of the 2021 reconstruction of North Concord Street » Looking for ways to make Concord a future high-frequency transit corridor	0-5	Action 4.1; Action 5.1
Action 7.2: Create a small area/corridor plan for the Concord Exchange Corridor (Concord Street and Concord Exchange from Wentworth Avenue to Interstate 494). This plan should focus on: » Building off the historical significance of the Concord Exchange building and surrounding area along Grand Avenue » Creating connections for bicycles and pedestrians to the Southview Hill Area to the west, Hardman Triangle to the east, North Concord Corridor to the north, and South Concord Corridor to the south » Through decorative signage and placemaking, this area should act as a gateway on Grand Avenue from Concord to the Mississippi River to the East » Planning for the extension of Concord Exchange » Looking for ways to make Concord a future high-frequency transit corridor	0-5	Action 4.2; Action 5.2
Action 7.3: Update the South Concord Corridor Plan, which was established in 2009 and had an unadopted update in 2012. The update should focus on: » Development and redevelopment potential of the mixed-use areas along the corridor as well as the industrial areas between the corridor and the Mississippi River » Establishing design standards to integrate well with the 494 Commercial area to the north as well as Concord Street as a corridor as a whole » Emphasizing bicycle and pedestrian connections, especially from the corridor to the Mississippi River » Looking for ways to make Concord a future high-frequency transit corridor	5-10	Action 4.3; Action 5.3

Action	Time Frame	Same As
Action 7.4: Construct a trail connection at Bromley Street; signage, information kiosk to show linkage to Kaposia Park and Dakota County River to River Greenway Trail (R2RG).	10+	Action 9.2
Action 7.5: Adopt subdivision and zoning regulations that mandate interconnected local streets, sidewalks on at least one side of all local and collector streets and trees along all streets where boulevard widths allow.	5-10	Action 4.10
Action 7.6: Update the current airport zoning ordinance to: » Ensure that the airport remains an attractive place for recreational aviation and encourages new development or aviation related businesses » Continue to use the existing architectural design standards, established in Airport Rearrangement 3rd and 4th Addition plats, and apply these standards to all new hangars and redevelopment of existing hangars	10+ ongoing ongoing	Action 4.11
Action 7.7: Develop a citywide trail map, especially for off-street trails » Identify and prioritize missing connections between city sidewalks and trails	5-10	Action 9.7
Action 7.8: Evaluate all site plans and land use decisions through an equitable lens that includes accessibility for those of all abilities, ages, and those using alternative modes of transportation	ongoing	