

Chapter 9
Transportation





Introduction

The City of Rogers is a developing community located in northwest Hennepin County with a projected 2040 population of 22,800 people and employment of nearly 15,000 jobs. The City is bordered by the cities of Dayton to the east, Maple Grove to the southeast, Corcoran to the south and Hanover to the southwest. The Crow River forms the western and northern City boundaries.

Transportation challenges within Rogers are an increasing concern for residents and businesses as a well-planned, designed and constructed transportation system is essential for commuting and commerce. Today, automobile and truck traffic are dependent on the existing regional highway system and local roadway network. I-94 bisects the City, providing the local community, regional commuters and industry truck drivers direct east-west connectivity to downtown Minneapolis, St Cloud, and the greater regional freeway system. Freeway access to I-94 is limited to the existing TH 101 interchange. Regional north-south movement is also served by TH 101 which crosses the Crow River at the northern City boundary and ends with an interchange accessing I-94. Other major routes include County State Aid Highway (CSAH) 81, Brockton Lane (CSAH 101/13), Main Street (CSAH 150), 141st Avenue (CSAH 144), South Diamond Lake Road (CSAH 49), Territorial Road (CSAH 116), Fletcher Lane (CR 116) and 109th Avenue (CR 117).

The Community Vision and Guiding Principles for the City of Rogers embody our values and vision for the future of our community. The four Guiding Principles were developed to support the City's vision and be carried throughout the Comprehensive Plan. More specifically, "Broaden Community Connections" will be a consistent theme within the Transportation Plan where appropriate and relevant.

The purpose of transportation planning is to create connections to enhance the community experience, make appropriate transportation related decisions when development occurs, and identify when elements of the transportation system needs to be upgraded to provide safe and convenient travel for all people and modes that lead to a healthy, engaged and active community.

Roadway System Plan

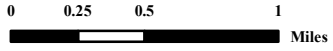
The roadway network in Rogers has been significantly shaped by several physical features, including the Crow River, I-94, TH 101, Crow Hassan Park Reserve, Burlington Northern Santa Fe (BNSF) railroad and numerous wetlands and water bodies. The City's roadway system is well-established to support existing land uses and needs with its connection to the I-94 regional highway system and several county roads – CSAH 81, Brockton Lane (CSAH 101/13) and Territorial Road (CSAH 116). As the vision for future land use and community needs evolve, a well-planned and fully integrated transportation system that creates alternative options for commerce, commuting and recreation shall be a high priority. The **Transportation Chapter** identifies the jurisdictional classification, functional classification, existing and future traffic volumes, congestion, safety and future roadway system needs.

Jurisdictional Classification

Roadway jurisdiction defines who is responsible for roadway design, construction and maintenance, and what agency has authority of the roadway. The City of Rogers' roadway jurisdiction is shared among three levels of government: Minnesota Department of Transportation (MnDOT), Hennepin County and City of Rogers. MnDOT maintains the Interstate and Trunk Highway (TH) systems. Hennepin County maintains the County State Aid Highway (CSAH) and County Road (CR) systems, and the remaining local roadways are the responsibility of Rogers. **Figure 9.1** displays the existing roadway network and jurisdictional classification within the City of Rogers.



**FIGURE 9.1:
Jurisdictional Classification**



City of Rogers, Minnesota
Comprehensive Plan 2018 Update
Date: 17 April 2019

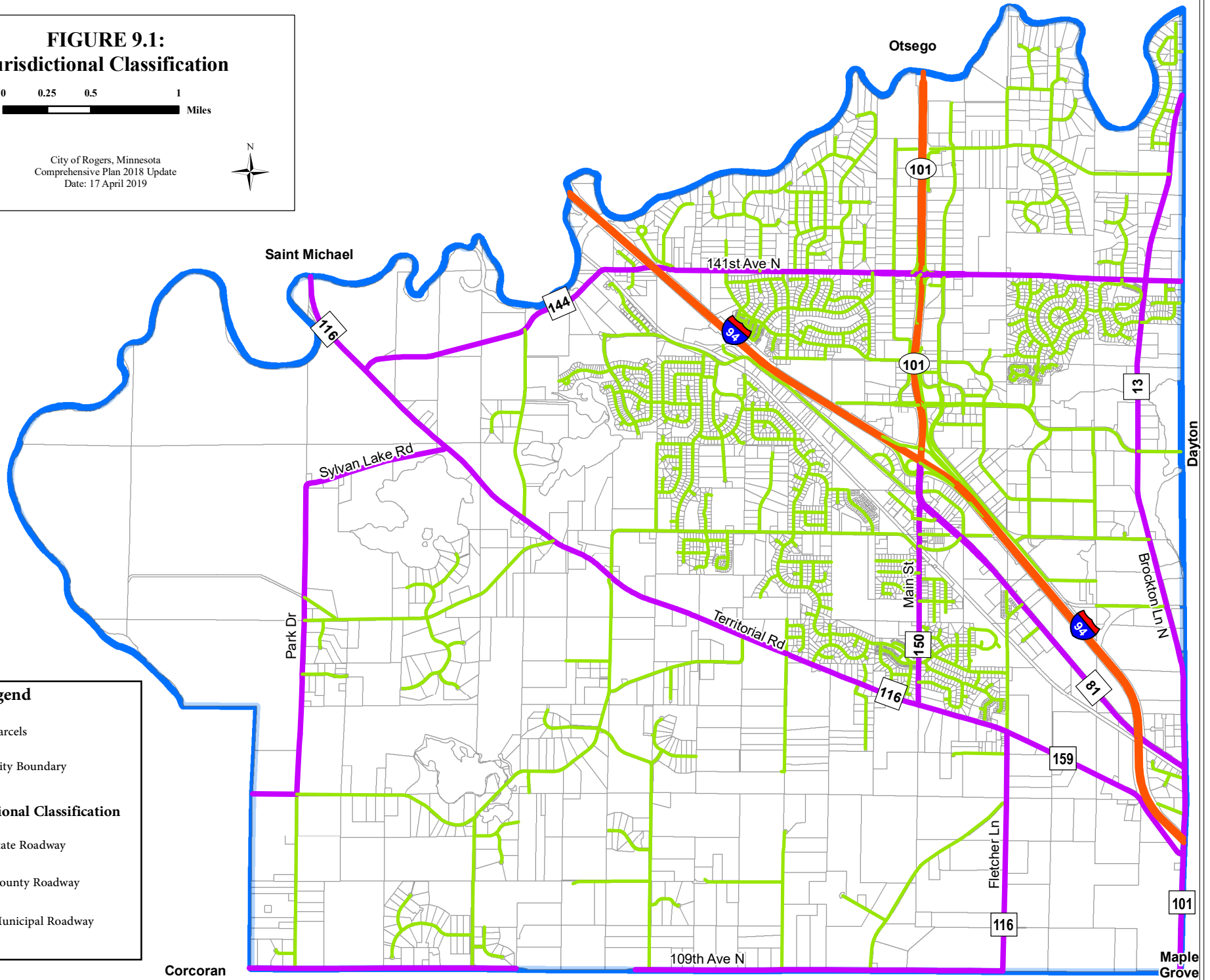


Legend

- Parcels
- City Boundary

Jurisdictional Classification

- State Roadway
- County Roadway
- Municipal Roadway





The jurisdictional classification system identifies responsibility among the different agencies and is organized around the principle that the highest volume limited access roadway, which carry regional trips, are primarily maintained by MnDOT. The intermediate volume roadways that carry medium length trips are maintained by Hennepin County. Lastly, the local street system that provides access to individual properties is maintained by the City. This shared responsibility requires agency coordination in the planning and improvement of roadways within Rogers since the MnDOT and County facilities play a critical role in the City’s transportation system. Often the municipal boundaries separating Rogers from adjacent cities fall within a roadway right-of-way, resulting in additional cooperation with neighboring cities to maintain and improve these roadways.

Due to development or changes in travel patterns, a road’s jurisdictional classification may be adjusted to reflect the new or changing role of the roadway facility. One such adjustment anticipated is the turnback of Main Street (CSAH 150) from the County to City jurisdiction after the completion of the Fletcher Bypass (CR 116). No other significant jurisdictional transfers are envisioned during this planning timeframe (2018 to 2040).

Functional Classification

The functional classification system defines both the function and role of a roadway within the hierarchy of an overall roadway system. This system is used to create a roadway network that collects and distributes traffic from neighborhoods and ultimately to the state or Interstate Highway System. Functional classification works to manage mobility, access, and alignment of routes (Figure 9.2). Functional classification also seeks to align designations that match current and future land uses with the roadway’s purpose.

A roadway’s functional classification is based on several factors, including:

- trip characteristics, such as length of route, type and size of activity centers, and route continuity
- access to regional population centers, activity centers, and major traffic generators
- proportional balance of access, ease of approaching or entering a location
- proportional balance of mobility and ability to move without restrictions
- continuity between travel destinations
- relationship with neighboring land uses
- eligibility for State and Federal funding

Within the Twin Cities metropolitan area, the Metropolitan Council has established detailed criteria for roadway functional classifications, which are summarized in Table 9.1.

Figure 9.2: Access/Mobility Relationship

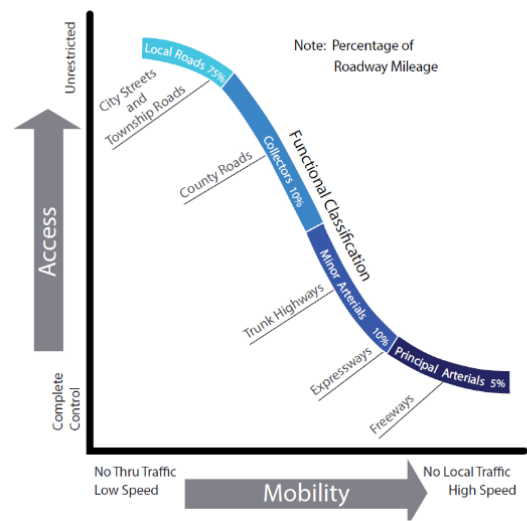




Table 9.1: Roadway Functional Classifications

Criteria	Principal Arterial	Minor Arterial	Collector	Local Street
Place Connections	Connect regional job concentrations and freight terminals within the urban service area.	Provide supplementary connections between regional job concentrations, local centers, and freight terminals within the urban service area.	Connect neighborhoods and centers within the urban service area.	Connect blocks and land parcels within neighborhoods and within commercial or industrial developments.
Spacing	Urban communities: 2 to 3 miles Suburban communities: Spacing should vary in relation to development density of land uses served, 2 to 6 miles	Regional job concentrations: ¼ to ¾ mile Urban communities: ½ to 1 mile Suburban communities: 1 to 2 miles	Job concentrations: 1/8 to ½ mile Urban Communities: ¼ to ¾ mile Suburban Communities: ½ to 1 mile	As needed to access land uses
System Connections	To Interstate freeways, other principal arterials, and selected A-minor arterials. Connections between principal arterials should be of a design type that does not require vehicles to stop. Intersections should be limited to 1 to 2 miles.	To most interstates, principal arterials, other minor arterials, collectors and some local streets	To minor arterials, other collectors, and local streets.	To a few minor arterials. To collectors and other local streets.
Trip-Making Service	Trips greater than 8 miles with at least 5 continuous miles on principal arterials. Express and highway bus rapid transit trips	Medium-to-short trips (2-6 miles depending on development density) at moderate speeds. Longer trips accessing the principal arterial network. Local, limited-stop, and arterial bus rapid transit trips.	Short trips (1-4 miles depending on development density) at low-to-moderate speeds.	Short trips (under 2 miles) at low speeds, including bicycle and pedestrian trips. Longer trips accessing the collector and arterial network.
Mobility vs. Land Access	Emphasis is on mobility for longer trips rather than direct land access. Little or no direct land access within the urbanized area.	Emphasis on mobility for longer trips rather than on direct land access. Direct land access limited to concentrations of activity including regional job concentrations, local centers, freight terminals, and neighborhoods.	Equal emphasis on mobility and land access. Direct land access predominantly to development concentrations.	Emphasis on land access, not on mobility. Direct land access predominantly to residential land uses.
System Mileage	5% to 10%	10% to 15%	5% to 15%	60% to 75%
Percent of Vehicle Miles Traveled	15% to 35%	15% to 25%	10% to 25%	10% to 25%



Criteria	Principal Arterial	Minor Arterial	Collector	Local Street
Intersections	Grade separated desirable where appropriate. At a minimum, high-capacity controlled at-grade intersections	Traffic signals, roundabouts, and cross-street stops	Four-way stops and some traffic signals	As required
Parking	None	Restricted as necessary	Restricted as necessary	Permitted as necessary
Large Trucks	No restrictions	Candidates for local truck network, large trucks restricted as necessary	May be candidates for local truck network, large trucks restricted as necessary	Permitted as necessary
Management Tools	Ramp metering, preferential treatment for transit, access control, median barriers, traffic signal progression, staging of reconstruction, intersection spacing	Traffic signal progression and spacing, land access management/control, preferential treatment for transit	Number of lanes, traffic signal timing, land access management	Intersection control, cul-de-sacs, diverters
Typical Average Daily Traffic Volumes	15,000 to 100,000+	5,000 to 30,000+	1,000 to 15,000+	Less than 1,000
Posted Speed Limit	40 to 65 mph	30 to 45 mph	30 to 40 mph	Maximum 30 mph
Right-of-Way	100 to 300 feet	60 to 150 feet	60 to 100 feet	50 to 80 feet
Transit Accommodations	Transit advantages that provide priority access and reliable movement for transit in peak periods where possible and needed	Transit advantages for reliable movement where needed.	Regular-route buses, transit advantages for reliable movement, where needed	Normally used as bus routes only in nonresidential areas
Bicycle and Pedestrian Accommodations	On facilities that cross or are parallel to the principal arterial, with greater emphasis along transit routes and in activity centers. Crossings should be spaced to allow for adequate crossing opportunities.	On facilities that cross or are parallel to the minor arterial, with greater emphasis along transit routes and in activity centers. Crossings should be spaced to allow for adequate crossing opportunities.	On, along, or crossing the collector with higher emphasis along transit routes and in activity centers. Crossings should be spaced for adequate crossing opportunities.	On, along, or crossing the local road

Source: Metropolitan Council, 2040 Transportation Policy Plan, 2015

This table summarizes characteristics for existing roadways to be used in evaluating functional classification and should not be used as design guidelines.



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. These roadways, which are typically spaced from three to six miles apart, are generally constructed as limited access freeways in the urban area but may also be constructed as multiple-lane divided highways.

As shown in **Figure 9.3**, I-94 and TH 101 are both classified as existing principal arterials and will maintain this status in the future. I-94 provides regional east-west mobility, connectivity to the metropolitan highway system, a direct route to the Twin Cities to the east, and a direct route to St. Cloud to the west. TH 101 provides Rogers with access to I-94 and regional north-south mobility.

Minor Arterials

Minor arterials also emphasize vehicular mobility over land access, serving to connect cities with adjacent communities and the metropolitan highway system. Major business nodes and other important traffic generators are usually located on minor arterial roadways.

A-minor arterials are defined by the Metropolitan Council as roadways of regional significance that are of regional importance because they relieve, expand or complement the principal arterial system. A-minor arterials are categorized into four types, consistent with Metropolitan Council guidelines:

1. **Relievers:** Minor arterials that provide direct relief for metropolitan highway traffic
2. **Expanders:** Routes that provide a way to make connections between urban areas outside the I-494/I-694 beltway.
3. **Connectors:** Roads that provide good, safe connections to and among communities at the edge of the urbanized area and in rural areas.
4. **Augmenters:** Roadways that augment principal arterials within the I-494/I-694 beltway.

A well-planned and adequately designed system of principal and A-minor arterials will allow the City's overall street system to function the way it is intended and will discourage through traffic from using residential streets, a priority for the Rogers community. Volumes on principal and minor arterial roadways are expected to be higher than on collector or local roadways. Providing the capacity for these higher volumes will keep volumes on other city streets lower.

As shown in **Figure 9.3**, the City of Rogers is served by four A-minor arterials that provide direct connections to the neighboring communities and the local business concentrations.

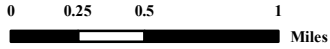
Collectors

Collectors, as the term implies, collect and distribute traffic from neighborhoods and commercial areas and provide a critical link between local streets, which are designed for property access, and minor arterials, which are designed for higher vehicular mobility. Collector streets have an equal emphasis on land access and mobility.

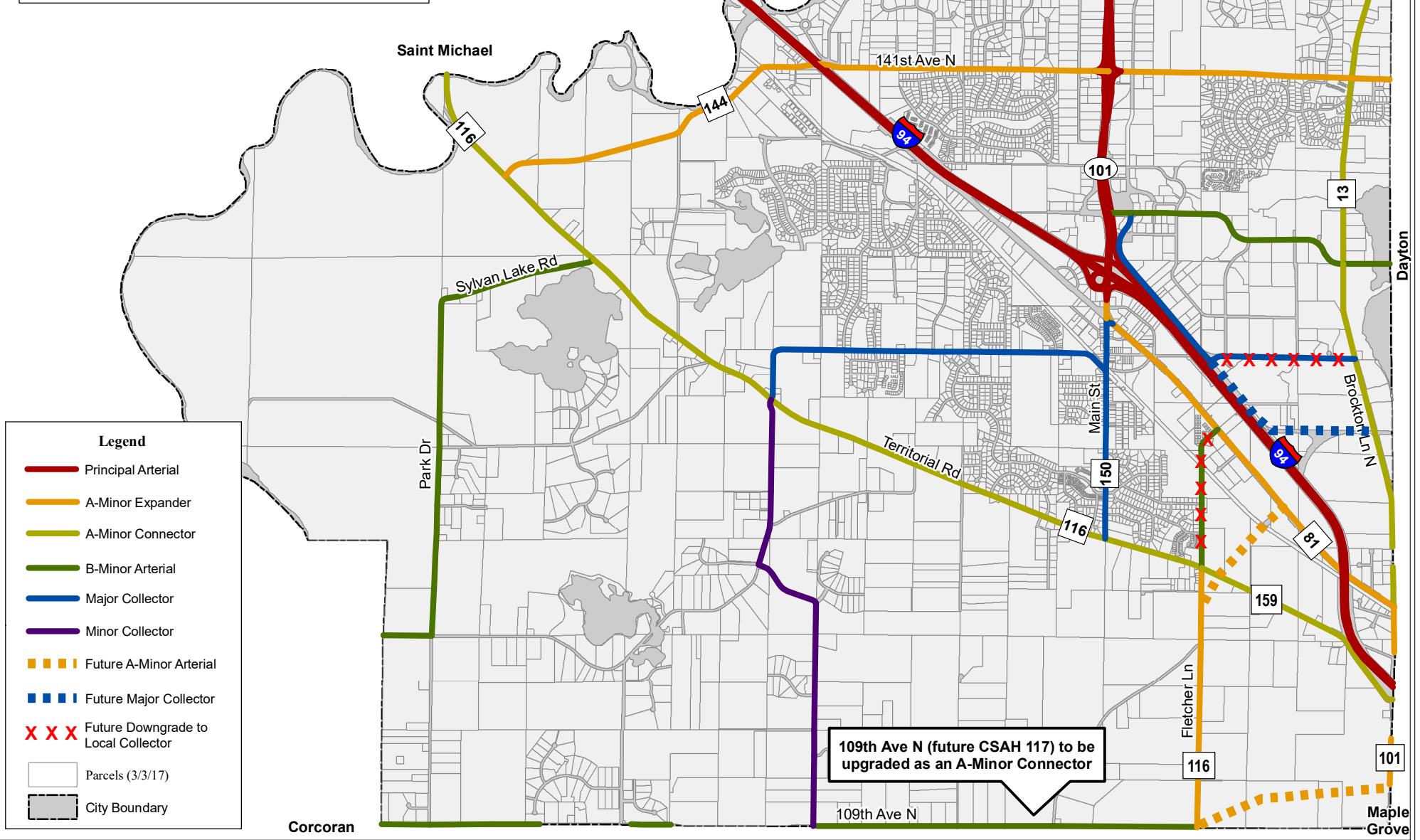
Local Streets

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

**FIGURE 9.3:
Functional Classification**



City of Rogers, Minnesota
Comprehensive Plan 2018 Update
Date: 17 April 2019





Programmed & Planned Improvements

Programmed and planned roadway improvements identified in the Rogers Transportation Capital Improvement Program (CIP) or Hennepin County's Capital Improvement Program (CIP) within the City of Rogers include:

- **Fletcher Lane (CR 116) Bypass.** The City has been working with Hennepin County on plans to upgrade and re-route Fletcher Lane to the east, bypassing the Fletcher area to connect with CSAH 81. This rerouting would allow better connection of minor arterials and relocate through traffic from downtown Main Street (CSAH 150) onto Fletcher Lane (CR 116). Ultimately, the Fletcher Lane (CR 116) Bypass will connect to CSAH 13 north of I-94 via an overpass.
- **Downtown Main Street Reconstruction.** In conjunction with the Fletcher Lane (CR 116) bypass project, the City is redesigning Main Street from CR 81 to Point Drive as part of a major reconstruction project that will feature pedestrian and bicycle enhancements and streetscape elements to improve the walkability of downtown and its connection to Triangle Park and adjacent neighborhoods.
- **Extension of 109th Avenue (CR 117).** Movement along the community's southern boundary will be facilitated by the extension of 109th Avenue (CR 117) from Fletcher Lane (CR 116) to Brockton Lane (CSAH 101).
- **Brockton Lane (CSAH 13) Expansion.** The City plans to work with Hennepin County and the City of Dayton to expand Brockton Lane (CSAH 13) to a 4-Lane roadway from CSAH 81 to Rogers Drive. This expansion will add the necessary roadway capacity to support future demand along this eastern boundary.
- **141st Avenue (CSAH 144) Expansion.** To support future land uses and increased demand along the 141st Avenue (CSAH 144) corridor, the City plans to work with Hennepin County to finish building out this corridor as a future 3-lane roadway from the I-94 overpass to Northdale Boulevard. The segment from Northdale Boulevard to Brockton Lane (CSAH 13) plans to be a 4-lane roadway.
- **Industrial Boulevard Extension.** To improve residential access and continuity in the City's roadway system, Industrial Boulevard will be extended from Edgewater Parkway to 141st Avenue (CSAH 144).

Although not located in the City of Rogers, the Dayton Parkway Interchange is a programmed roadway improvement in MnDOT's Transportation System Plan. This new interchange is located east of Brockton Lane (CSAH 101), within the City of Dayton. Design work continues for this new Interchange, which will benefit the Rogers community by providing an additional access point to I-94 and reduce overall traffic volumes near the existing I-94 and TH 101 interchange area. Improvements to adjacent roadways, such as the extension of 109th Avenue (CR 117), is being planned to facilitate traffic to and from the new interchange.

The City of Rogers will continue to coordinate with adjacent jurisdictions – Dayton, Maple Grove, Corcoran and Hanover – and Hennepin County and MnDOT when planning future improvements. This on-going coordination will result in financial and time savings through economies of scale; such coordination may reduce construction impacts to residents and businesses.

Several Hennepin County roadways border the Crow-Hassan Park Reserve. The City of Rogers will continue to coordinate with Hennepin County and the Three Rivers Park District when considering and planning for any roadway realignments to minimize negative impacts to the park reserve.



2040 Travel Demand Forecasts

The pattern and intensity of travel is directly related to the distribution and magnitude of households, population and employment within a community, neighboring communities, and the larger region. This section provides an overview of the existing land use pattern in the City of Rogers.

Land use, travel patterns, population and employment change over time may affect the efficiency and adequacy of the transportation network. This section also outlines expected changes in the City’s land use pattern, households, population and employment, which is then the basis for estimating future travel demand within the City.

Socio-Economic Data

Historic, existing and estimated population, households, and employment levels are shown in **Table 9.2**. The Metropolitan Council prepared estimates for the overall regional growth in terms of households, population, and employment for the years 2020, 2030, and 2040, allocating an appropriate portion to each municipality.

Table 9.2: Summary of Rogers Projected Socio-Economic Data

Year	Population	Households	Employment
2014	12,228	4,037	9,401
2020	14,200	5,000	11,400
2030	18,400	6,700	13,100
2040	22,800	8,750	14,800

Source: Metropolitan Council, 2018

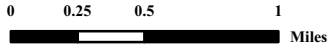
Transportation Analysis Zones

Using the Metropolitan Council’s Land Use Guide Plan and development objectives as guidance, the City has estimated existing and future population, employment and households for sub-areas of the City called Traffic Analysis Zones (TAZs). This information was required to complete the traffic forecasting procedures used to identify existing traffic volumes and estimate future traffic volumes. See **Appendix H** for socio-economic data by TAZ.

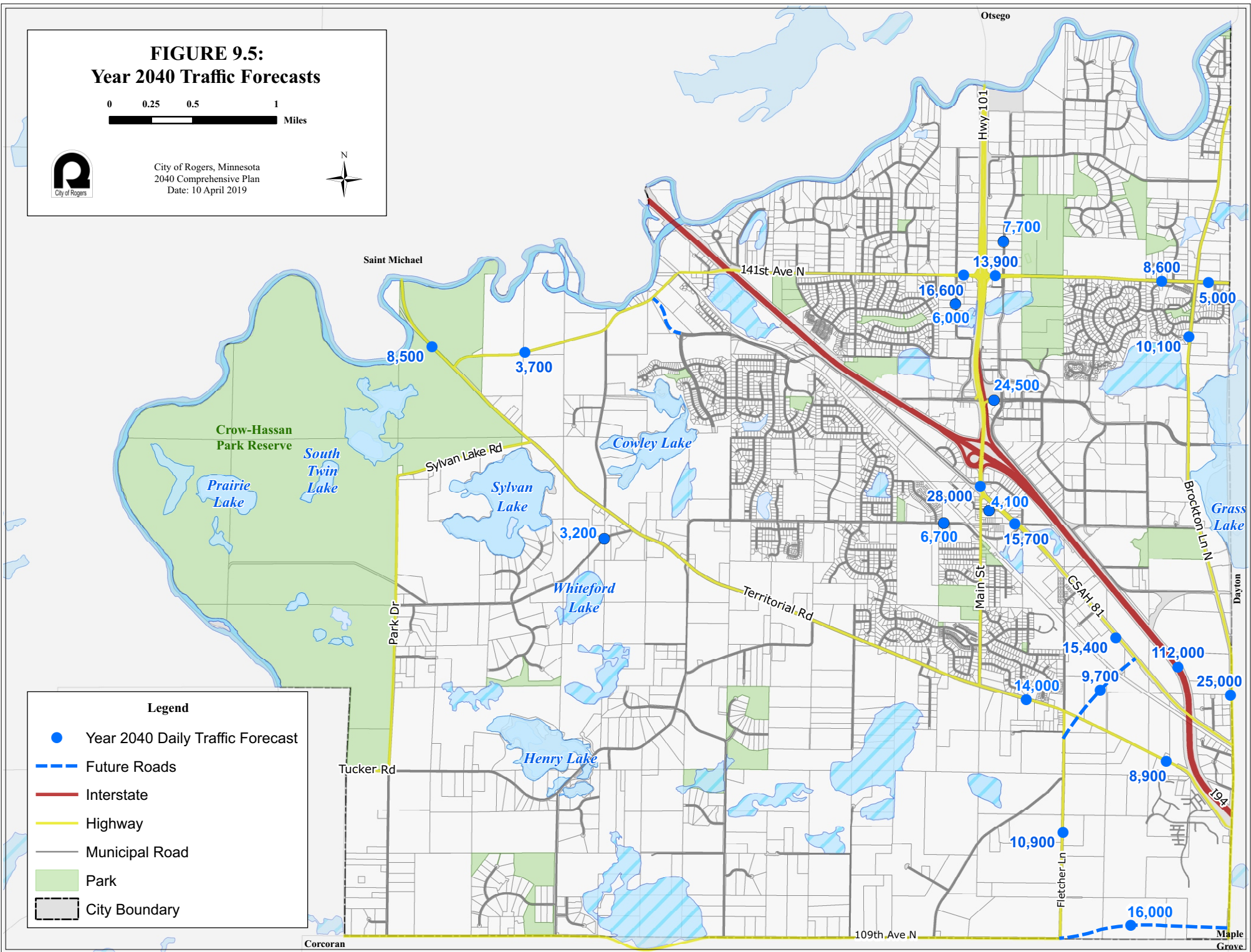
2040 Traffic Forecasts

Forecasts for the City of Rogers were prepared based upon the socio-economic distribution identified for the year 2040. These forecasts are an essential analytical tool to determine the adequacy of the roadway system to handle future development. In addition to socio-economic growth, the traffic forecast model considers future planned improvements which are in the Metropolitan Council’s TPP for regional highways outside the City. The current and forecast traffic volumes are shown in **Figures 9.4** and **9.5**.

**FIGURE 9.5:
Year 2040 Traffic Forecasts**



City of Rogers, Minnesota
2040 Comprehensive Plan
Date: 10 April 2019



Legend

- Year 2040 Daily Traffic Forecast
- Future Roads
- Interstate
- Highway
- Municipal Road
- Park
- City Boundary



Existing & Year 2040 Roadway Capacity

Roadway congestion is measured to exist when the ratio of traffic volume to roadway capacity (V/C ratio) approaches or exceeds 1.0. The V/C ratio provides a measure of congestion that can help determine where roadway improvements, access management, transit services, or demand management strategies need to be implemented. However, it does not provide a basis for determining the need for specific intersection improvements.

Table 9.3 provides a method to evaluate roadway capacity. For each facility type, the typical planning-level annual average daily traffic (AADT) capacity ranges and maximum AADT volume ranges are listed. These volume ranges are based upon guidance from the Highway Capacity Manual and professional engineering judgment. A range is used since the maximum capacity of any roadway design (V/C = 1) is a theoretical measure that can be affected by its

Table 9.3: Planning Level Roadway Capacities by Facility Type

Facility Type	Planning Level Daily Capacity Ranges (AADT)	Rogers Daily Capacity (AADT)
Two-Lane Undivided Urban	8,000 – 10,000	10,000
Two-Lane Undivided Rural	14,000 – 15,000	15,000
Two-Lane Divided Urban (Three-Lane)	14,000 – 17,000	17,000
Four-Lane Undivided Urban	18,000 – 22,000	22,000
Four-Lane Divided Urban (Five-Lane)	28,000 – 32,000	32,000
Four-Lane Divided Rural	35,000 – 38,000	38,000
Four-Lane Freeway	60,000 – 80,000	80,000
Six-Lane Freeway	90,000 – 120,000	120,000

Existing & Year 2040 Capacity Deficiencies

Using the methodology described above, existing and future capacity deficiencies were identified by comparing existing and year 2040 traffic volumes with existing and year 2040 roadway design (**Figures 9.6 and 9.8**) to the thresholds noted in **Table 9.3**. Results of this analysis were mapped to identify roadways that are approaching or over capacity. Roadway segments are defined as overcapacity if the volume-to-capacity ratio is at or above 1.0, which signifies that a segment of road has observed volumes which exceed its design capacity. It is important to understand future traffic demand and deficiencies help policymakers plan for future transportation system needs. Based on this analysis, the roadway segments that currently approach or exceed their design capacity are identified in **Figure 9.7**. **Figure 9.9** shows roadways that are approaching or over capacity under future conditions.

As shown in **Figures 9.7** and **Figures 9.9**, Brockton Lane (CSAH 13) and 141st Avenue (CSAH 144) are roadways that are over capacity under existing conditions. Both roadway segments, Brockton Lane (CSAH 13) and 141st

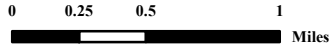


Avenue (CSAH 144) are expected to expand to 4-lane facilities by year 2040, supporting future traffic demand. In addition, the TH 101 southbound loop to eastbound I-94 is currently over capacity with significant operational issues in the morning peak hour.

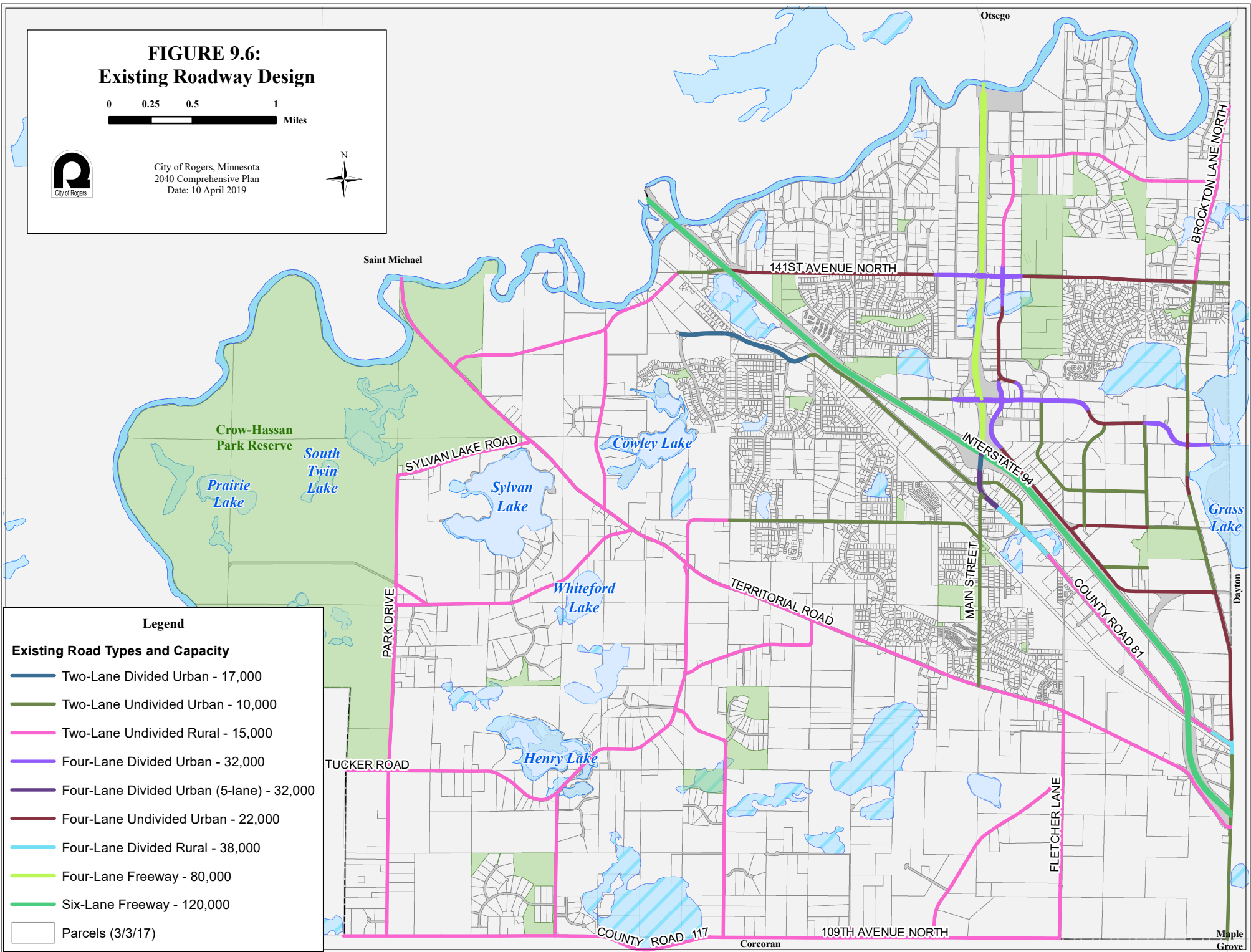
CSAH 81 is approaching capacity or over capacity under existing and future traffic conditions. In addition, roadways with increased volumes that are over capacity under year 2040 conditions include Territorial Road (CR 116) and Brockton Lane (CSAH 13) from Rogers Drive to 141st Ave (CSAH 144). Future traffic demand for both Territorial Road (CR 116) and Brockton Lane (CSAH 13) are driven heavily by the new developments expected along these corridors and travel pattern changes due to roadway network improvements such as the Dayton Parkway interchange. The planning-level capacity is used as an indicator to evaluate or monitor the roadway segment for further improvements within the 20-year planning timeframe.

The methodology described above is a planning-level analysis that uses average daily traffic volumes and is not appropriate for all traffic conditions. For example, traffic conditions that do not fit the average daily traffic criteria, such as weekend travel, holiday travel, and special events, are likely to produce different levels of congestion. Additionally, factors such as the amount of access and street geometrics may influence capacity, as will additional street features or mobility accommodations – on-street bicycle lanes, shared bicycle lanes, on-street parking, etc.

**FIGURE 9.6:
Existing Roadway Design**



City of Rogers, Minnesota
2040 Comprehensive Plan
Date: 10 April 2019



Legend

Existing Road Types and Capacity

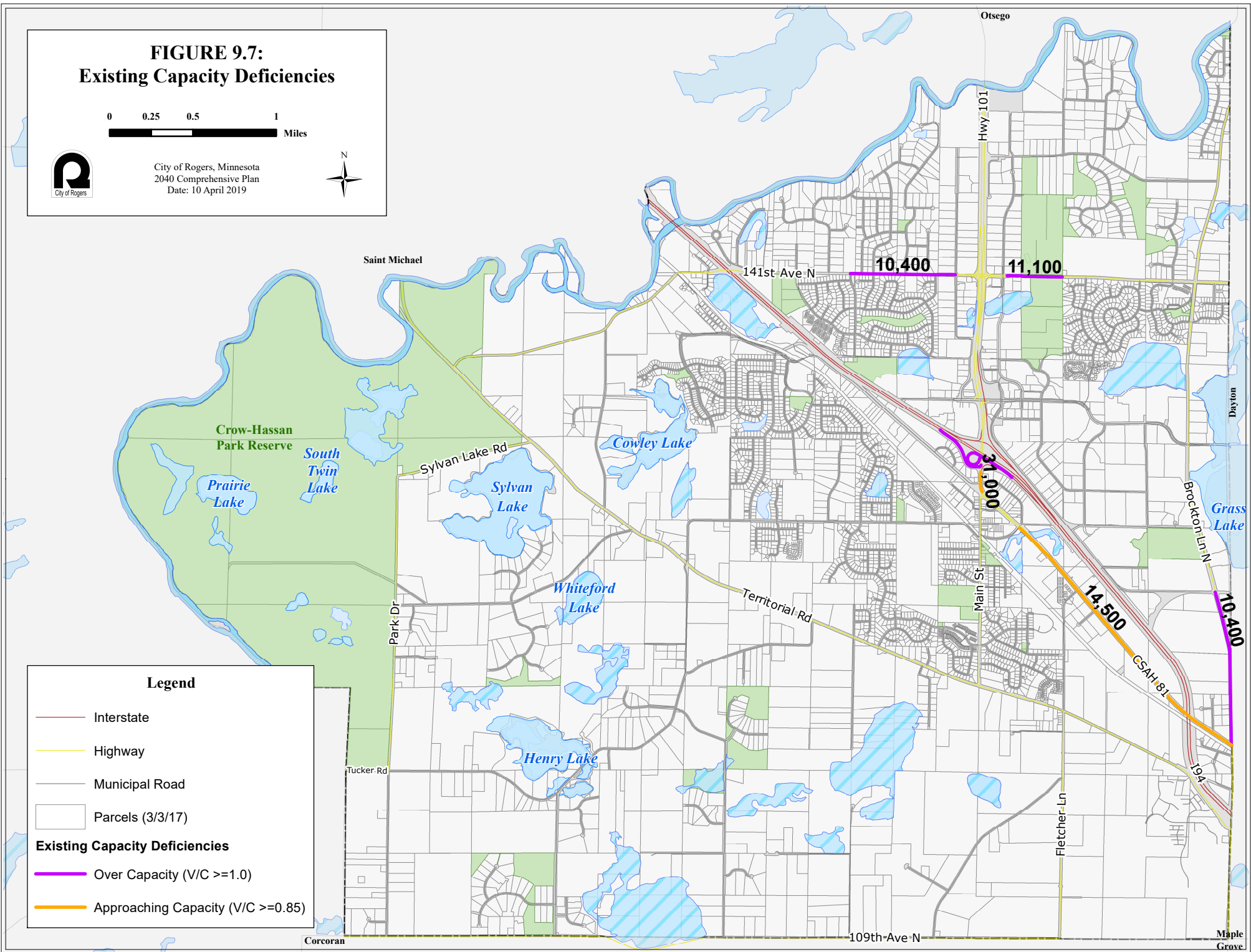
- Two-Lane Divided Urban - 17,000
- Two-Lane Undivided Urban - 10,000
- Two-Lane Undivided Rural - 15,000
- Four-Lane Divided Urban - 32,000
- Four-Lane Divided Urban (5-lane) - 32,000
- Four-Lane Undivided Urban - 22,000
- Four-Lane Divided Rural - 38,000
- Four-Lane Freeway - 80,000
- Six-Lane Freeway - 120,000
- Parcels (3/3/17)

**FIGURE 9.7:
Existing Capacity Deficiencies**

0 0.25 0.5 1 Miles



City of Rogers, Minnesota
2040 Comprehensive Plan
Date: 10 April 2019



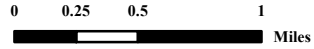
Legend

- Interstate
- Highway
- Municipal Road
- Parcels (3/3/17)

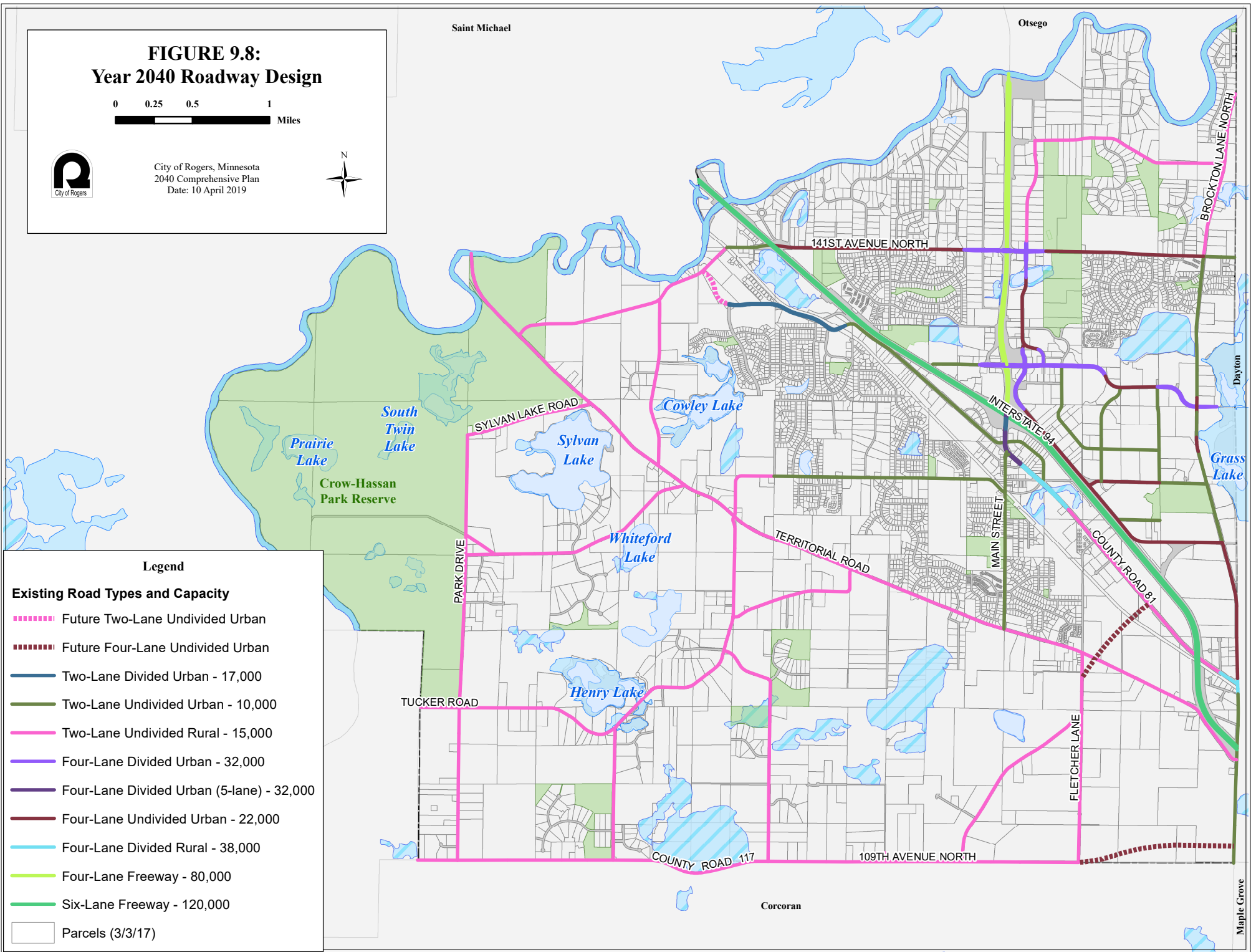
Existing Capacity Deficiencies

- Over Capacity (V/C >=1.0)
- Approaching Capacity (V/C >=0.85)

**FIGURE 9.8:
Year 2040 Roadway Design**



City of Rogers, Minnesota
2040 Comprehensive Plan
Date: 10 April 2019



Legend

Existing Road Types and Capacity

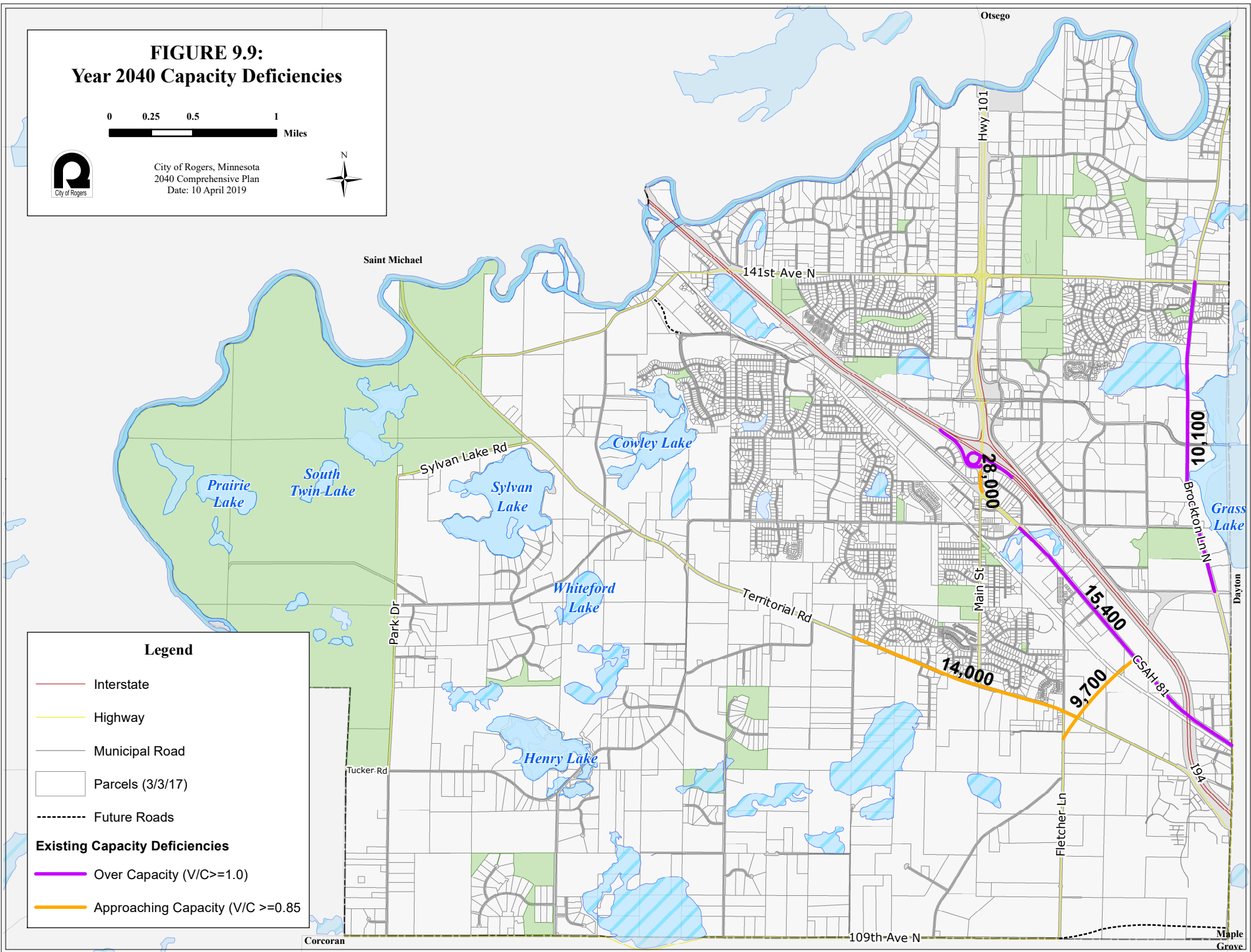
- Future Two-Lane Undivided Urban
- Future Four-Lane Undivided Urban
- Two-Lane Divided Urban - 17,000
- Two-Lane Undivided Urban - 10,000
- Two-Lane Undivided Rural - 15,000
- Four-Lane Divided Urban - 32,000
- Four-Lane Divided Urban (5-lane) - 32,000
- Four-Lane Undivided Urban - 22,000
- Four-Lane Divided Rural - 38,000
- Four-Lane Freeway - 80,000
- Six-Lane Freeway - 120,000
- Parcels (3/3/17)

FIGURE 9.9:
Year 2040 Capacity Deficiencies

0 0.25 0.5 1
Miles



City of Rogers, Minnesota
2040 Comprehensive Plan
Date: 10 April 2019



Legend

- Interstate
- Highway
- Municipal Road
- Parcels (3/3/17)
- Future Roads

- Existing Capacity Deficiencies**
- Over Capacity (V/C >= 1.0)
 - Approaching Capacity (V/C >= 0.85)



Future Roadway System Improvements

Future roadway improvements are derived from the combination of future traffic demand, safety, system continuity and connectivity, and the intended function of each roadway as it relates to the adjacent land use.

Regional System Improvements

The Rogers Transportation Plan does not identify the need for improvements to I-94 or TH 101 within City limits. Design work continues for the Dayton Parkway interchange which will reduce overall traffic volumes near the existing I-94 and TH 101 interchange area and provide an additional access point to I-94. In addition, the City will continue to work with MnDOT to address long-term access issues from TH 101 to I-94.

County System Improvements

Currently, there are no additional capacity improvements identified on Hennepin County roadways within the City beyond those mentioned in the previous Programmed and Planned Improvements section.

Local System Improvements

Potential capacity improvements on local roadways in Rogers have not been identified as a need has not been warranted. The City of Roger's local roadways do not have existing capacity deficiencies and are not expected to have capacity deficiencies under year 2040 conditions.

The Rogers Transportation Capital Improvement Program (CIP) does identify residential access improvements, roadway realignments, and intersections improvements to support future development, maintain a connected roadway network, and improve overall roadway safety.

Roadway System Impacts

As the City plans to reconstruct, widen street widths and construct new street segments to meet future connectivity demands or accommodate development projects and anticipated growth, developers of private and public lands will be encouraged to retain natural areas and consider wildlife needs during the roadway design process and after construction to enhance the health and diversity of wildlife populations.

Safety Issues

In addition to a reliable roadway system, roadway safety is a high priority to the Rogers community. A statewide database of crash records identifies the location, severity and circumstances associated with crashes in Minnesota. The most current dataset (years 2011-2015) was analyzed to identify the number, location and severity of crashes on roadways, excluding I-94, in the City of Rogers.

In general, these crashes were widely distributed throughout the City with most locations accounting for only one or two incidents, suggesting that a crash at that location was a random event. However, several crashes were concentrated at a limited number of locations. The ten intersection locations with the highest frequency of crashes between 2011 and 2015 are illustrated in **Figure 9.10** and listed in **Table 9.4**.



Many of the crashes in Rogers were minor incidents with no pattern of reoccurrence. These crashes were widely distributed throughout the City and suggest that the crashes were random events. The intersection locations with a 5-year average of two or more were compiled in **Table 9.4** and illustrated in **Figure 9.10**.

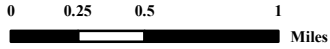
Table 9.4: Top 10 City of Rogers Crash Sites by Frequency (Years 2011-2015)

Location	Number of Crashes		Traffic Control
	5-Year Total	5-Year Average	
1. TH 101 and South Diamond Lake Road	102	20	Signal
2. TH 101 and 141st Avenue (CSAH 144)	64	13	Interchange (Opened 2015)
3. Rogers Drive and South Diamond Lake Road	63	13	Signal
4. 141st Avenue (CSAH 144) and James Road	49	10	All-Way Stop
5. CSAH 81 and Brockton Lane (CSAH 13)	44	9	Signal
6. Main Street (CSAH 150) and Industrial Boulevard	39	8	Signal
7. Northdale Boulevard and South Diamond Lake Road	28	6	Signal
8. CSAH 81 and Memorial Drive	27	5	Signal
9. Main Street (CSAH 150) and CSAH 116 (Territorial Road)	15	3	Side-Street Stop
10. Brockton Lane (CSAH 13) and 124th Avenue	14	3	Side-Street Stop
11. Brockton Lane (CSAH 13) and South Diamond Lake Road	14	3	Signal
12. Brockton Lane (CSAH 13) and David Koch Avenue	13	3	Side-Street Stop
13. CSAH 81 and Main Street (CSAH 150)	11	2	Right-In/Right-Out
14. 141st Avenue (CSAH 144) and Northdale Boulevard	10	2	Side-Street Stop

As shown in **Table 9.4**, two of the intersections with the most crashes are along South Diamond Lake Road (CSAH 49) in an area with high peak hour volumes and truck traffic. The City needs to continue to work with MnDOT to evaluate driver behavior, crash type, crash patterns and severity at these two closely spaced intersections to develop potential strategies to improve overall intersection safety.

One example within the City of Rogers where the number of crashes has significantly been reduced is the TH 101 and 141st Avenue (CSAH 144) intersection. Prior to the construction of a new interchange, this intersection averaged 15 crashes per year from year 2011 to 2014. After the construction of the interchange in 2015, only four crashes have occurred. The City is will continue to monitor and evaluate high crash locations to determine the need for addition intersection improvements.

**FIGURE 9.10:
Crash Data (2011 - 2015)**



City of Rogers, Minnesota
Comprehensive Plan 2018 Update
Date: 21 December 2018



Legend

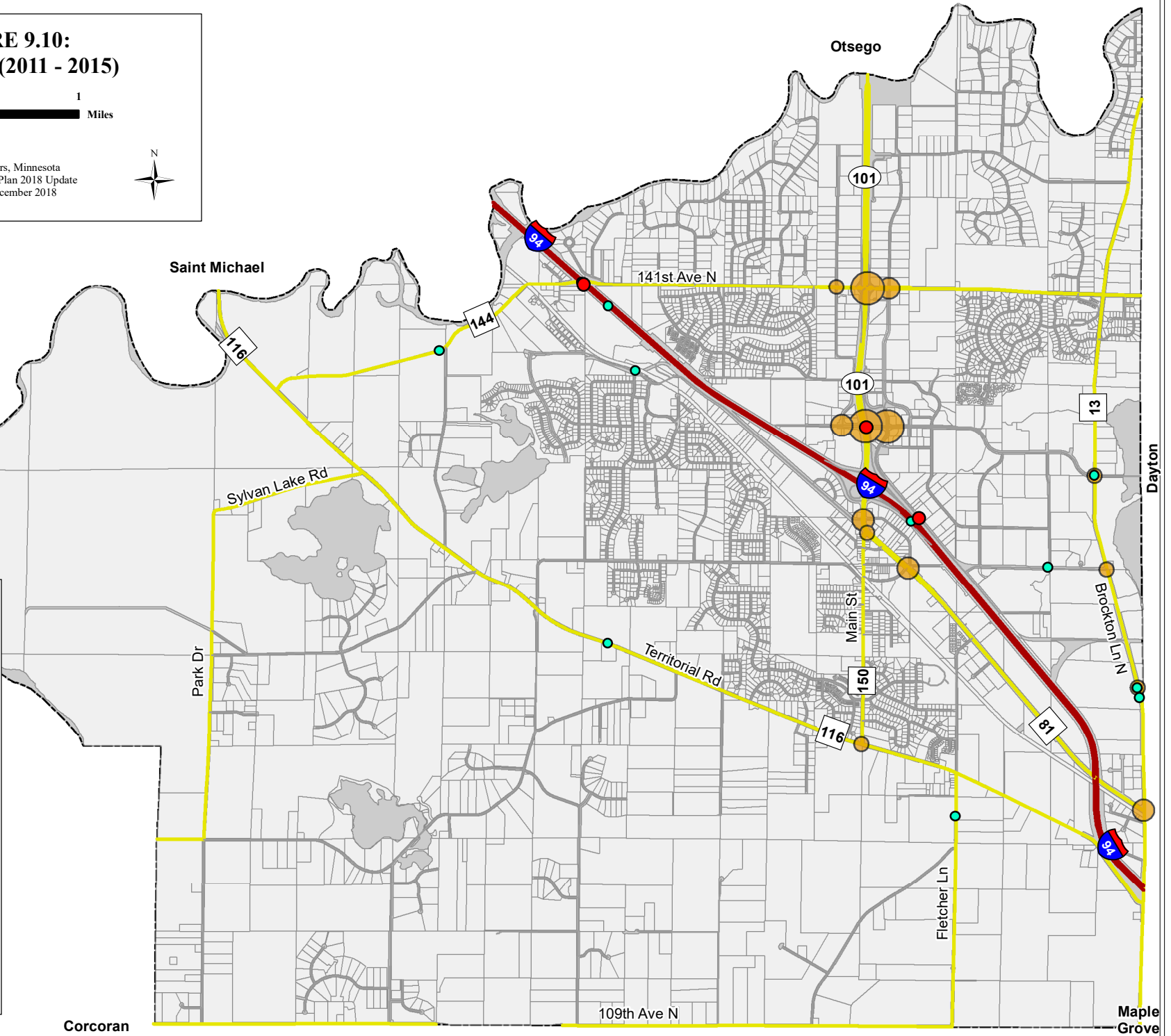
- Interstate
- Highway
- Municipal Road
- Parcels (3/3/17)
- City Boundary

Life Altering Crashes

- Fatality
- Incapacitating Injury

Top 12 Crash Intersections

- 10 - 25
- 26 - 50
- > 50





Access Management

Roadway access management for both cross-street spacing and driveway placement is critical to maintain roadway safety and the mobility of important transportation corridors. Access management involves balancing the access and mobility functions of a roadway. Access refers to providing roadway access to properties and is needed at both ends of a trip. Mobility is the ability to get from one place to another. Most roadways serve both functions to some degree based on their functional classification. The roadway's functional classification has a direct and corresponding relationship to mobility and access, as described in the Functional Classification section.

The City of Rogers does not currently have its own access management guidelines to guide development or evaluate access requests. However, the City will continue to support and utilize Access Management guidelines established by MnDOT and Hennepin County for roadways in Rogers.

Right-of-Way Preservation

Right-of-Way (ROW) is a valuable public asset. Therefore, it needs to be protected and managed to respect the roadway's intended function, while serving pedestrians, bicyclists, utilities and the greatest public good. Rogers will need to consider that adequate ROW be maintained or secured along with initial design work. The City will also coordinate with MnDOT and Hennepin County for ROW acquisition along County or State routes.

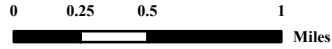
Bicycle & Trail System Plan

It is important for Rogers to expand its pedestrian and bicycle facilities to provide strong connections to schools, parks, public spaces and employment, as well as regional trail corridors. As **Figure 9.11** shows, these facilities focus on serving the local community for multi-modal transportation needs for all people and modes.

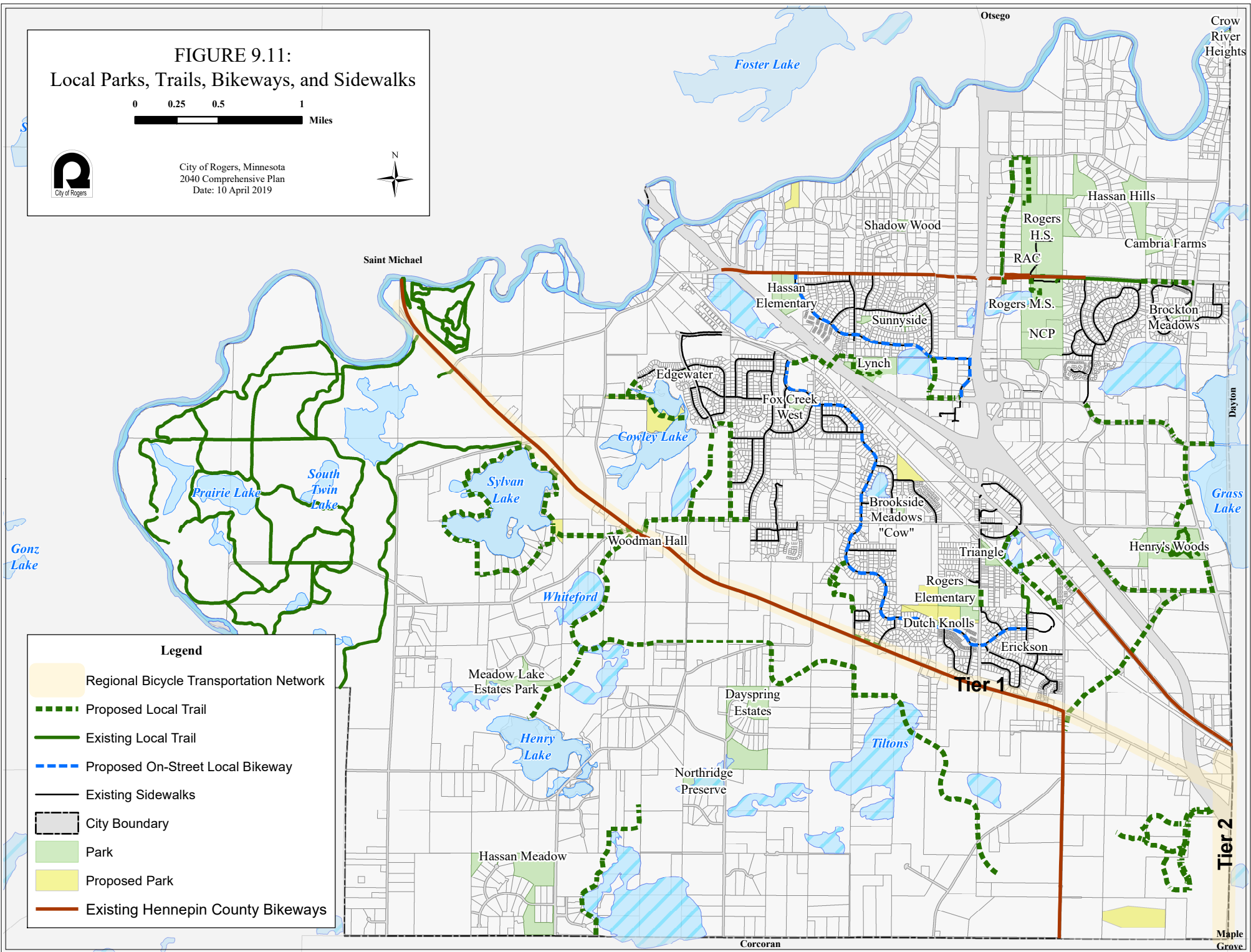
The City of Rogers' Park, Open Space and Trails Plan referenced in Chapter 6 provides additional detail on the City's future plans to address gaps in the system and future trail routes throughout the community for a complete sidewalk and trail system. As the community continues to develop, the trail plan should be reviewed to ensure its adequacy as traffic conditions change and to identify new opportunities, such as the connection of trails to commercial nodes, civic campuses, park and recreation areas and possible transit services. The City recognizes the recreational opportunities provided by trails and sidewalks, but also recognizes their ability to provide options for multi-modal transportation.

The City of Rogers currently has 26.6 miles of sidewalks in the City. Sidewalks are primarily used as a means to connect neighborhoods to local destinations and developed areas, as well as to other facilities in the trail system. Sidewalks are an essential part of the trail system, particularly for those who rely on walking as a means of transportation, recreation, or exercise, such as youth, seniors, or non-car owners. It is anticipated that the sidewalk network will grow as the City fills in gaps in the sidewalk network and as new development occurs.

FIGURE 9.11:
Local Parks, Trails, Bikeways, and Sidewalks



City of Rogers, Minnesota
2040 Comprehensive Plan
Date: 10 April 2019



Legend

- Regional Bicycle Transportation Network
- Proposed Local Trail
- Existing Local Trail
- Proposed On-Street Local Bikeway
- Existing Sidewalks
- City Boundary
- Park
- Proposed Park
- Existing Hennepin County Bikeways



Regional Bicycle Transportation Network

The Regional Bicycle Transportation Network (RBTN) was developed by the Metropolitan Council in partnership with cities and counties as an outcome of the *Regional Bicycle System Study*, and serves as a framework of the regional trail system, defining critical bicycle transportation links to help cities guide their bikeway planning and development. The RBTN is subdivided into two tiers for regional planning and investment prioritization:

Tier 1. Priority Regional Bicycle Transportation Corridors and Alignments. These corridors and alignments have been determined to provide the best transportation connectivity to regional facilities and developed areas and are given the highest priority for transportation funding.

Tier 2. Regional Bicycle Transportation Network Corridors and Alignments. These corridors and alignments are the second highest priority for funding. They provide connections to regional facilities in neighboring cities and serve to connect priority regional bicycle transportation corridors and alignments.

Both Territorial Road (CSAH 116) and CSAH 81 east of Brockton Lane are designated as **Tier 1** corridors providing east-west connectivity to the RBTN system. Additionally, north-south connectivity is provided along Brockton Lane (CSAH 13) which is designated as a **Tier 2** alignment south of CSAH 81. Local trails should focus on neighborhood connectivity to primary routes that connect to RTBN alignments, which are often connected to regional facilities.

Freight System Plan

Truck Freight

The City of Rogers has moderate levels of industrial and commercial truck traffic generated by its local industry. The Interstate and Minnesota Trunk Highway systems are all built to 10-ton axle loading standards and are part of either the National Truck Network or the Minnesota Twin Trailer Network, allowing extra capacity and flexibility for commercial trucking. This highway coverage reduces the impact of truck traffic on local roadways, minimizes the potential for disruption to neighborhoods and prevents non-local industrial and commercial truck traffic from using the county and local roadways as intended.

To further discourage truck traffic from the local roadways, particularly in residential areas, the City will continue to enforce a Weight Restrictions Ordinance and require permits for trucks that do not meet weight restrictions for a roadway. The City's Weight Restrictions Ordinance refers to Minnesota Statute §169.822 regarding weight restrictions and the resulting penalty for those who fail to comply. The City also has designated truck routes that do not require a permit and keep local truck traffic out of residential neighborhoods.

Rail Freight

The Burlington Northern Santa Fe (BNSF) Railroad line crosses the City on an east-west route parallel to I-94. This rail line is primarily for freight and serves both regional and local industries. The City of Rogers has five railroad crossings located at 141st Avenue (CSAH 144), Industrial Boulevard, Main Street (CSAH 150), Fletcher Lane, and Brockton Lane (CSAH 101). The City will enforce Federal Railroad Administration regulations and continue to work the BNSF to ensure safety on this rail line and its crossings in the City. Should safety concerns present themselves at the railroad crossings, either for motorist or for pedestrians, the City will explore options to improve crossing safety.



Transit System Plan

The City of Rogers currently has no transit routes that provide direct service to the community. There are also no improvements planned by the Metropolitan Council to expand service to Rogers. The City falls within the Transit Capital Levy District and is classified as **Transit Market Area V**. The Metropolitan Council uses Transit Market Areas to identify transit market strengths based on local characteristics, which in turn guide planning appropriate types and levels of transit service for a given location. As defined by the 2040 Metropolitan Council Transportation Policy Plan, **Transit Market Area V** is defined as an area with:

- very low population and employment densities that tends to be primarily rural communities and agricultural uses
- general public dial-a-ride service may be appropriate here, but due to the very low-intensity land uses these areas are not well-suited for fixed-route transit service.

As characterized by a **Market Area V**, Dial-A-Ride service is funded by the Metropolitan Council and provided via the Senior Transportation Program. This service operates daytime Monday through Friday offering service to senior citizens in Rogers, Dayton, Champlin, Osseo, and Maple Grove. General public Dial-A-Ride service is also offered by Transit Link. In addition to Dial-A-Ride, the City has a park and pool lot located at the I-94 and TH 101 interchange available to the public.

Though existing service is limited, the City will continue to work with Metro Transit and explore opportunities for expanded transit service to support a well-rounded transportation system. To receive expanded service via Metro Transit, improvements call for an increase in ridership to necessitate an increase in service. In any community, land use and development patterns dramatically influence the pedestrian and transit environment. The 2040 Land Use Plan identifies opportunities to increase density of both residential units and employment destinations throughout the community (TH 101 and southeast area). When future land use in the TH 101 and southeast area of Rogers provides an opportunity to add more potential users and drive transit demand, the likelihood for expanded transit service is expected to increase. Strategic land use planning, including that of trails and pedestrian amenities and connections, play a crucial role in the success of transit in the community.

Aviation System Plan

The City of Rogers does not have any airports within the City, nor are any planned. The nearest airport facilities are the Crystal Airport and Anoka County-Blaine Airport which are minor relief airports. The nearest major airport facility that provides most of the passenger and air freight service to the Rogers community is the Minneapolis-St. Paul International Airport located 40 miles southeast in Bloomington, Minnesota.

The Metropolitan Council's Transportation Policy Plan includes policies and text on protection of the region's airspace resources. The City will continue to enforce Federal Aviation Administration (FAA) regulations to protect the region's general airspace from potential obstructions. Structures which are 200 feet or higher above ground level may pose hazards to air navigation and must follow FAA and State requirements. Rogers has no existing structures of this height; does not permit such structures under its current zoning ordinance and has no plans to permit such structures in the future. Any applicant who proposes to construct such a structure shall notify the City, MnDOT, and FAA at least 30 days in advance as required by law.



Planning for the Future

As part of its transportation planning effort, the City is addressing existing transportation issues and needs, while setting the stage for future growth and the advancement of technology impacts on transportation. Items for consideration include: [Assisted Driving and Autonomous Vehicles](#), [Electrification of Mobility](#), [Wayfinding Signage Plan](#), [Complete Streets](#).

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 the transportation system by communicating with the roadside to complete driving functions or provide information to the driver to make informed decisions.

Aside from some of the more obvious predicted impacts such as the continued growth of car-sharing, and on-demand taxi services like Uber and Lyft, autonomous vehicles and connected vehicles 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 norms and standards have the potential to change dramatically over the next 40 to 50 years. The City of Rogers will need to be mindful of the potential infrastructure impacts caused by adoption of autonomous and connected vehicle culture. As the City looks to redevelop larger roadways, thoughtful consideration for how roadway infrastructure can be expanded to compliment autonomous vehicles is crucial to keeping Rogers a vital asset within the Twin Cities metropolitan region.

Electrification of Mobility

Street congestion continues to increase for vehicular traffic and urbanization is on the rise which will require significant transformations to create sustainable living conditions for residents. Energy and mobility are foundational elements of these transformations that will require radical adaptation to meet the demographic and economic growth without increasing congestion and pollution.

As electric vehicles (EV) become more affordable, new-car sales of EVs will significantly increase by 2030. According to the *World Economic Form* from January 2017, ride-sharing continues to surge, with estimates that by 2030, it will account for [more than 25 percent of all miles driven](#) globally, up from four (4) percent today. The City will need to consider the increased need for charging stations within parking lots associated with City-owned buildings, City parks and school buildings, and in commercial areas and employment centers. Additionally, the City should consider opportunities to work with businesses to offer charging stations. This could be accomplished through encouragement and City development standards, requiring EV parking spaces with new developments.

Wayfinding Signage Plan

It is a City priority to create physical and social connections that enhance the overall community experience for all persons, especially those traveling by foot, bike and vehicle. Success in creating those experiences shall depend on the development of a comprehensive wayfinding plan to communicate with and guide visitors and residents as they travel in and around the City.



A Wayfinding Signage Plan is a comprehensive and coordinated system of signs, designed to make it easier for residents, visitors and commuters to find local destinations, amenities and attractions in Rogers. Wayfinding enhances the identity of a community through cohesive, uniform design City-wide and creative placemaking that establish a “sense of place” specific to areas such as Downtown. The successful system will celebrate the vision and unique character of Rogers.

Complete Streets

It is important for the City to create and maintain a vibrant, safe and efficient multi-modal transportation system for all people and modes. The City has not established design guidelines related to complete streets, but will continue to evaluate the need for a Complete Street Policy to ensure that all streets are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. MnDOT adopted a Complete Streets Policy, updated May 2016, and has committed to assessing opportunities for incorporating complete street design principles in all MnDOT projects. MnDOT policy can serve as a resource to the City for incorporating complete street design standards into City projects.