Transportation Plan

Figures

Major Transportation Issues

These are the major transportation planning questions that should be discussed, debated and resolved during the course of this plan:

1. **Mississippi River bridges:** Should there be another bridge over the Mississippi River near Big Lake?

   There are only four Mississippi River crossings that connect Wright and Sherburne Counties: Minnesota 25, one of the four, crosses the river and links Big Lake to Monticello and I-94. Over the past five years, population and employment in the region has increased, placing additional travel demand pressure on the Minnesota 25 Bridge. As the region grows, traffic volumes will rise, perhaps requiring an additional river crossing in the vicinity of Big Lake.

2. **Potential rail-served industrial park:** How should Big Lake adjust its road system if a rail-served industrial park emerges?

   A large industrial district on the western side of the city has been discussed for a number of years. The potential for this facility becoming a reality was under study in 2018. This district could have major implications for traffic on County Highway 17, Minnesota Highway 25 and even a second bridge over the Mississippi River.

3. **Direct access to and from US 10:** Should the City urge the Minnesota Department of Transportation to reduce the number of direct access driveways and intersections along Highway 10 in favor of a more complete frontage road system?

4. **Lack of reasonably continuous travel routes across the city:** Can Big Lake adopt and follow a plan to require developers build a system of collector and minor arterial roads that connect across the city?

   Big Lake is generally oriented east and west. The number of reasonably continuous east-west collector roads is inadequate given the length of the city. North-south movement is better but still inadequate. There are two reasons for this problem: 1) the many lakes and wetlands and 2) non-adjacent annexations that have prevented the logical extensions of roads.

5. **Local street design:** Should minor residential streets be built narrower than they have been in the past?

   Some residential streets have been built 36 feet wide between curb faces. Local streets need not be wider than 29 feet to 32 feet. Excessive widths contribute to higher speeds on neighborhood streets and increased construction and maintenance costs.

6. **Sidewalks:** Should sidewalks be built on both sides of future residential streets?

   The current policy the Big Lake is that sidewalks should be installed on at least one side of the street in all residential neighborhoods.
   a. Are there some neighborhood characteristics and features that should warrant consideration of sidewalks on both sides of the street?
   b. Should the City retroactively install sidewalks in certain locations?
   c. Should sidewalks be planned or built in commercial or industrial locations, such as along US 10 frontage roads or in industrial areas?

7. **Trails:** How active should the City be in planning and building an interconnected system of off-road asphalt paths?

   The network of sidewalks and paved, off-street paths is not continuous and inter-connected. Trail systems not only provide residents with respite from the hardscape of concrete and asphalt, they also provide cities with:
   - A physical feature around which growth and development can occur
   - An amenity that increases desirability of land
   - Public accessibility to parks and open spaces
   - Facilities for non-motorized transportation for both recreation and commuter travel

Functional Classification Plan

Classify and build roads so that they support land development and provide a safe and efficient network for driving, walking and bicycling.

1. Street Network

Adopt a plan for a network of collector and minor arterial roads that is coordinated with the land use plan.

2. Road Functional Classification System

Reserve land and build roads that follow an orderly pattern with appropriate spacing, access controls, traffic capacity and speeds to accommodate planned land uses as well as space for walking and bicycling.

During the land subdivision process, require that developers dedicate land for public right-of-way and build streets according to the widths and other standards adopted by the City.

When a proposed plat abuts a county, state or federal road, ensure that the appropriate agency has a chance to comment on the plat before it is approved and ensure that any planned additional land is dedicated on the plat.

Coordinate with Sherburne County to plan and implement possible changes to the functional classification of certain arterial roads and to upgrade those County roads appropriately.

Figure 12-1 illustrates the proposed functional classification plan for Big Lake.

Table 12-1 describes the various road functional classes and their characteristics.

A Local Street serving a neighborhood of attached housing in Big Lake.

A view of US Highway 10, which primarily serves regional traffic and has limited parcel access

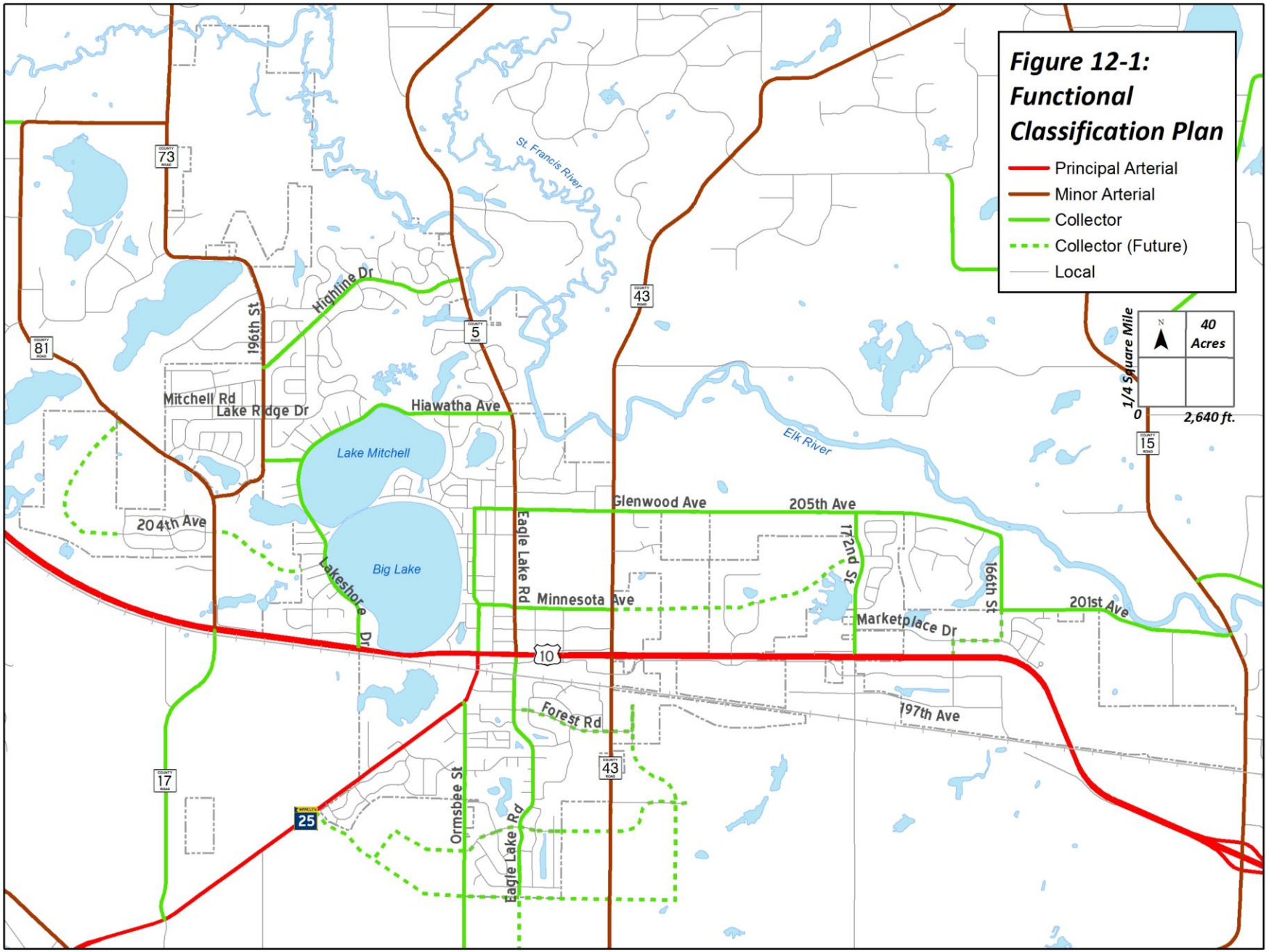
Figure 12-1:
Functional
Classification Plan
Principal Arterial
Minor Arterial
Collector
Collector (Future)
Local
1/4 Square Mile
40
Acres
0
2,640 ft.
St. Francis River
Elk River
Highline Dr
196th St
Mitchell Rd
Lake Ridge Dr
Hiawatha Ave
Lake Mitchell
Big Lake
204th Ave
Lakeshore Dr
Eagle Lake Rd
Glenwood Ave
205th Ave
172nd St
166th St
Minnesota Ave
Marketplace Dr
201st Ave
197th Ave
Forest Rd
Ormsbee St
Eagle Lake Rd
73
81
5
43
15
10
17
25

Table 12-1
Descriptions of Road Functional Classes

	Principal Arterial	**Minor Arterial**	**Collector – Major or Minor**	**Local**
Examples	US Highway 10	County Highways 43 and 15	Glenwood, Minnesota, Hiawatha	Many
Definition and Purpose	Partial access control and high priority for traffic flow with at-grade signalized intersections for major roads. High-volume, moderate-to-high speed movement across metro areas with minimal access to adjacent land.	Augments and feeds the primary arterial system and intended for moderate-volume, moderate-speed traffic movement. Access to abutting property is partially controlled.	Collects and distributes traffic between arterial streets and local streets. Intended for short trips while providing access to abutting properties. Design varies depending on the character and intensity of traffic generated by land development.	Provides direct access to abutting property. Intended for low-speed, low-volume movement and short trips. Design varies depending on the character and intensity of traffic generated by land development.
Traffic Flow and Access Priority	Flow : Access 90 : 10 At-grade intersections with arterial and collector streets. Signals are uniformly spaced for optimum flow. Driveway and street intersections designed for maximum decrease of 10 mph in thru-lane for turns.	Flow : Access 60 : 40 Safety is higher priority than traffic flow in determining signal spacing.	Flow : Access 40 : 60 160 feet spacing recommended for non-residential driveways	Flow : Access 10:90 No restrictions. 40 feet between access
Spacing	3 to 10 miles	½ to 1 mile	¼ to ½ mile	As required
Trip Length	Across metro areas and between major activity centers	Between and within activity centers	Local street to arterial street (1/2 to 2 miles)	Access to individual property; less than ½ mile
Typical Traffic Speeds	65 mph and under	55 mph and under	Under 35 mph	Under 30 mph

Local and Collector Street Design

Design and build streets to accommodate all modes of movement, provide safety and support land development.

1. Interconnect Local Streets

During the plat review process, ensure that local streets are interconnected when feasible. Allow some cul-de-sacs, especially where necessary to serve difficult locations or protect natural resources, but interconnect most local residential streets for efficient driving, walking and bicycling.

2. Municipal Road Design Standards

Adopt and use slightly narrower standards for the width of Local and Collector roads, as shown in Table 12-3.

3. Plan for Complete Streets

Obtain enough land during the subdivision process to include sidewalks, bike paths, bike lanes and trees on local or collector streets where supported by City plan, policy or ordinance. Ensure that the ability to circulate by automobile is protected.

4. Adjust Local and Collector Road Width Standards

Study and adopt slightly narrower standards for the paved width of future Local Residential Streets as shown by Figure 12-2 and Table 12-3. Adopt a preferred standard width but allow some deviation in either direction upon staff agreement and Council approval.

Current Width Standards for Local and Collector Roads

The currently adopted width standards for Local and Collector Streets in Big Lake are shown in Table 12-2.

Table 12-2
Current Functional Classification and Roadway Design Standards

Classification	Face-to-Face Width	Right of Way Width	Number of Parking Lanes
Local Residential	32'	60'	0
Service Roads	28′	50′	0
Cull-de-Sac	32′	60′	0
Minor Collector	Determined by City Engineer	80'	0
Major Collector	Determined by City Engineer	100′	2

Source: City Code Section 1108, Design Standards

Most recently-built residential streets in Big Lake measure 32 feet between curb faces; a few measure 36 feet or more. A more appropriate, and more commonly used, width for Local Residential Streets would be **29 feet** measured to the face of the curbs, with parking on both sides. Streets with very low volumes and speeds could be 26 feet with parking only on one side.

Studies have shown that excessive pavement widths contribute to higher speeds, reduced safety and increased construction and maintenance costs.

Conversely, there are several benefits of narrower residential streets: (1) reduced costs, (2) more green space, (3) less stormwater runoff, (4) appropriately slower traffic and (5) greater safety for bicyclists, pedestrians, and children at play.

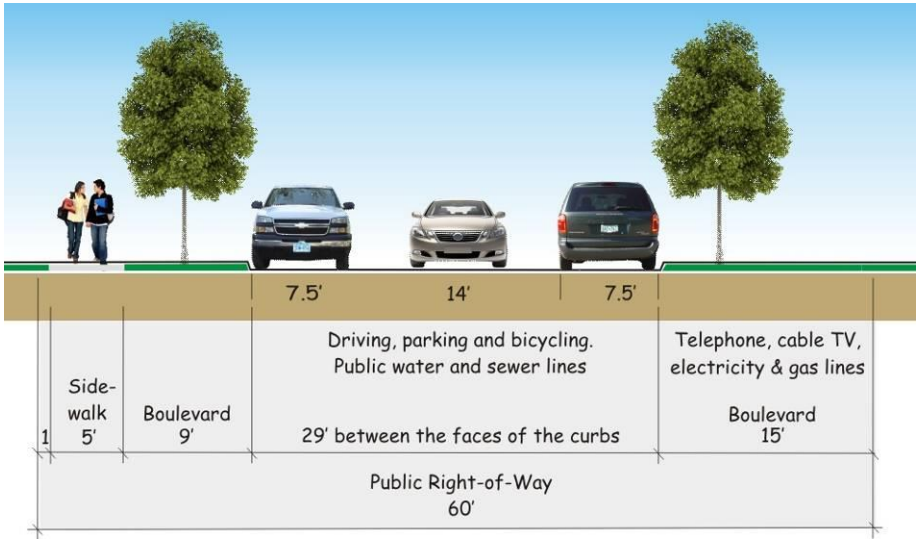

Figure 12-2: Recommended Local Residential Street Design

Table 12-3
Road Design Standards (Typical) by Classification

	Jurisdiction	Average Vehicles / Day	Road Width incl Turn Lanes	Right-of Way Width	Travel Lanes	Turning Lanes	On-Street Parking	Design Speed	Sidewalks
Principal Arterial (Expressway)	Federal or State	> 15,000	Varies	160' - 200'	4	Yes	No	55 – 70	No
Minor Arterial	County	2,000 - 10,000	24 – 58	80 – 100	2	Yes	No	35 – 50	One or both sides in urban locations
Parkway Collector	City	1,000 - 4,000	34 – 48	100	2	Yes	In Bays	35 - 45	Sidewalk and bike path
Collector	City	1,000 - 3,000	34 – 36	66 - 100	2	Yes	Yes	30 – 45	One side or both sides
Local Residential	City	300 - 1,000	29	60′	--	No	Yes	30	One side
Local Residential or Cul-de-Sac	City	< 300	**26 – 29**	58 - 60'	--	No	One side	25	Varies based on conditions

-- Table dimensions are preferred standards. Built dimensions may vary up or down from the standards with City staff and Council approval.
-- Standards apply to new construction. Rebuilt streets may vary based upon conditions.
-- Road widths are measured to the face of the surmountable curbs.
-- Road width, particularly for collector streets, may be increased to accommodate striped bicycling lanes.
-- Narrow streets may have parking restricted to one side only.
-- Shaded cells in the table show the streets and roads fall under City jurisdiction.

Typical Local Street in Big Lake. 32 feet wide. Sidewalk on one side. No street trees.

Recommended Local Street example with street trees.

Collector Street example.

Collector Street Network

Plan and build a system of Collector Streets for efficient movement across and between neighborhoods.

1. Connections across the City

Expand the current system of Collector streets that provide movement across and among neighborhoods. Follow the pattern suggested by Figure 12-1, Functional Classification Plan.

Collector Streets are intended to carry traffic entirely across one or more neighborhoods. They function in between Local and Arterial Streets in that they have fewer driveways than a Local but wider pavement, more continuity, more directional alignment and slightly higher speeds. They might also include bicycle lanes and sidewalks on both sides. Local Streets should also be planned for continuity and connections but may have more curves and shorter runs.

To the extent possible, the new collector streets should be located approximately one-quarter to one-half mile apart. That would form a strong foundation for a logical and economically efficient street system.

Most of the Collector Streets needed to accommodate planned growth already exist, so the City can build upon that framework. The primary additional Collector Streets would be:

Minnesota Avenue

Minnesota Avenue should be extended from County Highway 43 to 177th Street. This alignment will relieve some intra-city traffic from Highway 10, which is not intended for short local trips. It will also serve bicyclists and pedestrians.

This route will cross the Big Lake Industrial Park either where a segment has already been built or on a new alignment one block north. The northerly alignment would require platting an additional segment of street right-of-way but would allow business expansion over part of the original alignment. The future residential neighborhood to the east has planned for this route.

Minnesota Avenue should be improved to "parkway" standards, as described below.

Southern Parkway

A Collector Street designed as a "parkway" is planned to run from Minnesota Highway 25 east to County Highway 43 then swing north to the NorthStar commuter rail station. Ultimately, this route should loop further east to meet 172nd Street at Highway 10.

204th Avenue

As the far western part of the city develops, 204th Street should be extended with Collector standards to loop back to County Highway 81.

Traffic Benefits

Big Lake is generally oriented east and west, and the number of reasonably continuous east-west collector roads is inadequate given the length of the city. North-south movement across the city is better but still inadequate. The lack of continuous (or even semi-continuous) east-west routes requires drivers to use Highway 10 as a crosstown travel route, which, as traffic volumes grow, is an ever-increasing issue in terms of safety, convenience, and sustainability.

As comparatively more orderly development occurs in the future, where planned neighborhoods are contiguous to previously developed areas, east-west and north-south Collector routes should be identified early in the platting process to provide a framework on which the planned neighborhoods will be designed.

Parkway Collector Street System

Create a system of landscaped collector streets called parkways.

1. Collector Street System

Designate certain existing or future Collector Streets as "parkways" and improve them with trees, sidewalks, off-road bicycling paths and/or bicycle lanes. Refer to Figure 12-2, for recommended streets.

Streets do more than move traffic, they also provide structure, identity and, sometimes, beauty to a city. Because Big Lake is on a flat, treeless sand plain, streets can be used to do all of that. The parkway system would be an element of a broader effort to use public facilities to accomplish these objectives from the Concept Plan:

- Raise housing values and attract move-up housing
- Create small-town charm and character
- Attract jobs and economic development
- Enhance quality of life
- Sustain the property tax base.

These existing or future streets should be retro-fitted or newly built with some or all of these features:

- Regularly spaced trees behind the curb in the public road right-of-way
- Landscaped median
- A sidewalk on one or both sides
- A ten-foot wide asphalt bicycling path on one side
- Five-foot wide bicycling lanes striped on the road
- Two travel lanes; possibly also a left-turn lane at major intersections.
- A reduced number of street and driveway intersections
- Decorative lighting, a step up from the standard street lighting.

The best opportunity for a new parkway would be the Collector Street planned on the southern perimeter of the City. Right-of-way would be acquired either during the platting process or through direct purchase in advance of platting; some is already owned.

A 100-foot right-of-way for the southern parkway would provide sufficient land for two travel lanes, green space and bicycling or walking facilities.

Existing streets that are upgraded to parkway standards would work within the existing right-of-way. In the very distant future, there may need to be four travel lanes in a few segments, something the 100-foot right-of-way could accommodate.

The additional cost of the parkway standards cannot be assessed only to the abutting property owners but would have to be spread across a much wider area and/or come from the General Fund. The relatively modest additional cost of a "parkway" compared to a normal Collector Street will benefit the broader neighborhood and have a positive effect on housing values deep into the neighborhood.

Examples of parkway streets.
Many design options are possible.

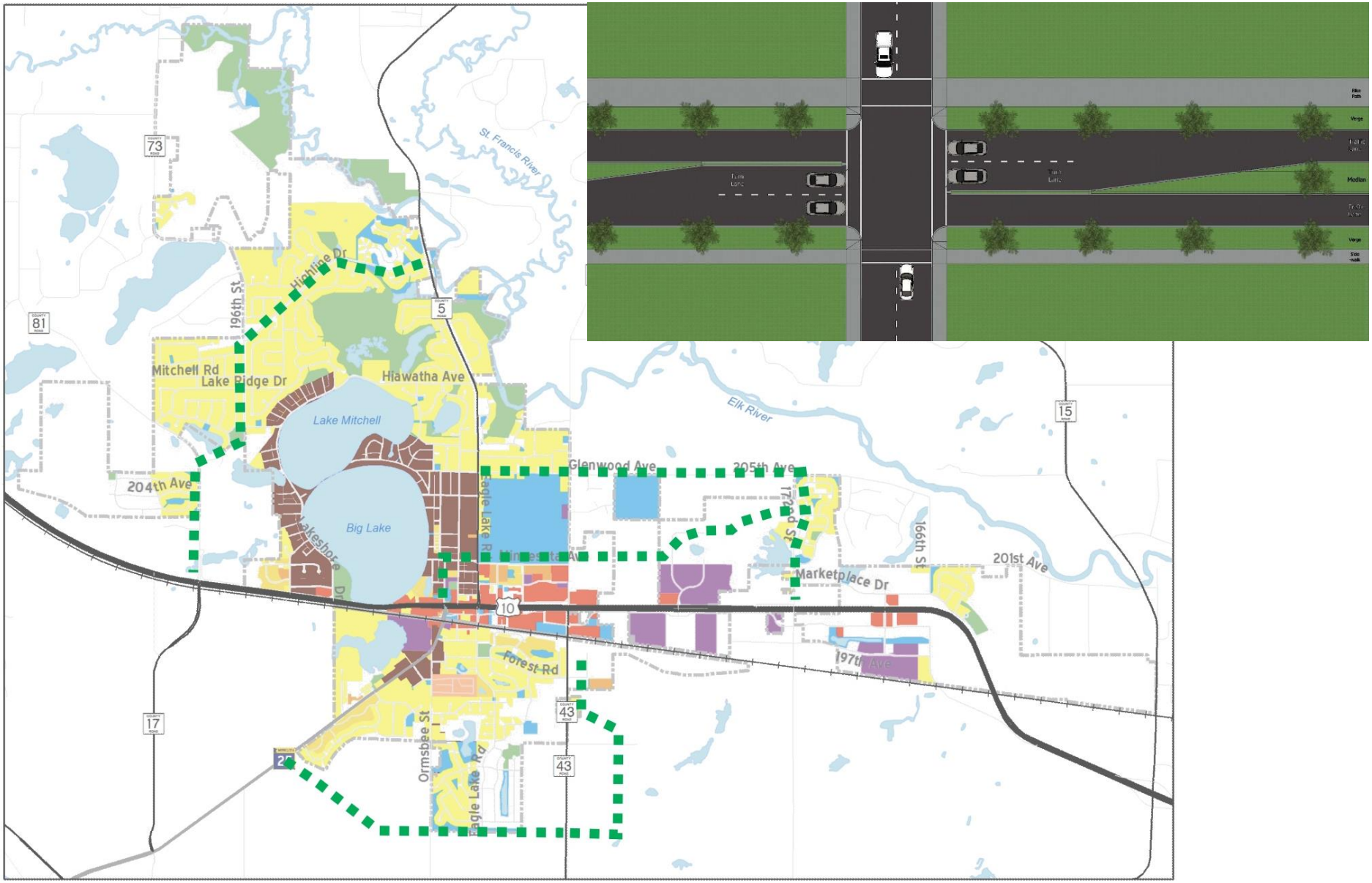

Figure 12-3: Planned Parkway Roads

Inset: Typical parkway plan view, including left-turn lanes at a major intersection, sidewalk, bicycling path and trees.

Mississippi River Bridge Study

Support a second Mississippi River bridge for the sake of regional, county and local development.

History of Studies

Analysis of the feasibility of constructing an additional Mississippi River crossing in the vicinity of Big Lake first began in 1996 when MnDOT conducted the *Mississippi River Crossing Study*. Three additional studies conducted since 1996 include:

- Cumulative Impact Study for the Mississippi Scenic Riverway (2003, MnDOT)
- I-94 – Highway 10 Interregional Connection Final EIS (2006 MnDOT)
- Second Mississippi River Crossing Preliminary Review (2011 City of Monticello)

Each of the four previous studies identified a need for additional capacity across the Mississippi River and evaluated potential crossing locations. Today, the issue is being studied by the Highway 25 Coalition, which comprises representatives from the Cities of Becker, Big Lake, and Monticello; the Towns of Becker and Big Lake; Sherburne and Wright Counties; and MnDOT. The Coalition's comprehensive study, which began in spring 2017, recognizes that the Mississippi River in this location is classified as a Wild and Scenic River and any new crossing of the Mississippi River would need to be fully justified through an environmental review process in order to obtain the necessary approvals. The Coalition's current study is the first step in that process.

Coalition Goals

The Coalition has established three transportation-related goals that support a long-term vision for the TH 25 corridor area. The three goals include improving safety, reducing congestion, and improving freight mobility while encouraging economic development.

Although the study began in 2017, alternative approaches for achieving the goals were analyzed, including some that were previously developed plus new ones. The analysis will work toward identifying a locally preferred alternative, which may or may not include a new bridge.

Implementation Plan

A key component of the Coalition's study will be to develop an implementation plan that identifies next steps and an associated schedule as alternatives move forward from this study through the environmental evaluation (preferred alternative selection), preliminary design, final design and construction. This plan will also identify ways in which the Coalition can: 1) involve and gain support from the public and elected officials and 2) identify potential funding programs and the process to pursue these funding sources.

Possible Time Schedule

The Coalition's study was expected to be completed in 2019, and the process for obtaining Congressional approval and identifying funding for a new river bridge is a long one. In other words, identifying the bridge location is just the beginning of another process that must take place before construction occurs. With this level of uncertainty, if there is a demonstrated need for a new river bridge, it may or may not touch down near Big Lake and, if it does, it will not be built before 2028.

1. Mississippi Bridge Study

Participate in the study for a possible second bridge over the Mississippi River and the related approach roads. Advocate for a result that serves economic development in Big Lake and the Sherburne-Wright County region.

Walking

Improve the network of sidewalks and multi-use paths for walking.

1. Complete Streets

Work toward a street system that more fully accommodates walking and bicycling. Ensure that each neighborhood or district has viable options for safe bicycling. Follow the City's 2010 Complete Streets policy.

In prior decades, development of Big Lake accommodated mostly cars and gave little or no attention to walking and bicycling. That has begun to change as people realize the many benefits of walking and bicycling.

The City of Big Lake adopted a Complete Streets policy resolution in 2010 that states "streets and roads should be designed and operated to be safe and accessible for all transportation users." The specific policy recommendation states "bicyclist and pedestrian transportation users shall be included in street construction, re-construction, re-paving and re-habilitation projects" but provides some exceptions. The policy goes on to explain that significant destinations, such as schools, be given high priority for project development.

"Complete Streets" means that walking and bicycling should be considered and implemented on a neighborhood or district basis, using a variety of techniques.

2. Residential Sidewalks

Continue to apply the practice, as written in the Subdivisions chapter of the City Code, of requiring land developers who install streets for future residential neighborhoods to build a six-foot concrete sidewalk along at least one side of all Local and Collector Streets in their plats.

A sidewalk will be added to at least one side of an existing neighborhood street when the street is completely rebuilt unless the project falls under one or more of the exceptions listed in the City's Complete Streets policy.

3. Safe Routes to Schools

Build sidewalks along certain existing streets as needed to implement the City's 2015 Safe Routes to School Plan. The means of paying for those improvements will be determined by the City Council.

4. Commercial and Industrial District Roads

Require concrete sidewalks along at least one side of future streets in industrial parks and commercial areas. Existing streets in those areas may have sidewalks installed if property owners express an interest.

In existing commercial or industrial districts that are undergoing redevelopment, sidewalks should be required on at least one side of the street.

5. Town Center

The planned Town Center should be easily walkable and have a sidewalk in front of each new development.

6. Arterial Roads

Build sidewalks along segments of US Highway 10, Minnesota Highway 25, County State-Aid Highway 43 and County Roads 43, 73, 81 and 68 on a case-by-case basis. Sidewalks will be built only in those road segments where it has been determined that a sufficient demand for walking has been demonstrated. In some cases, walking will be accommodated on asphalt paths that are shared with bicyclists.

Frontage roads of Highway 10 should have a sidewalk or asphalt path on at least one side.

Bicycling

Continue to improve the network of streets, striped lanes and off-road multi-use paths for bicycling.

1. Complete Streets

Work toward a street system that more fully accommodates bicycling and walking throughout the city. Ensure that each neighborhood or district has viable options for safe bicycling. Follow the City's 2010 Complete Streets policy.

2. Off-Street Paths Network

Continue to expand the system of off-street bicycling facilities as shown by Figure 14-2, 2016 Trails Plan, in the Parks and Trails Plan and listed below. See also Appendix B of the 2016 *Parks, Trails and Open Space Master Plan.*

First Priority Trail Improvements

- Build a trail along **County Highway 73** (196th Street) connecting Delta Street and 204th Avenue Northwest
- Build an additional connection from **County Highway 73** along Manitou Street (Lake Ridge Park to Lake Mitchell)
- Continue the trail from Highline Park along **Highland Drive; c**onnect it to County Road 73 Trail
- Create a regional connection along **County Highway 5** (Eagle Lake Road) at Lions Park North to Sherburne National Wildlife Refuge
- Build a connection along **205th Ave NW** (Bluff Park neighborhood to Liberty Elementary)
- More clearly delineated pedestrian/cycle route along **198th Avenue**
- Build an additional connection from **County Highway 73** along Highland Trail to connect to Highland Drive/to McDowell Park
- Create a **direct east-west connection** from 204th Avenue NW to Big Lake (a trail easement will potentially be required).

Long-Range Trail Improvements

- **Elk River Trail** (south side of Elk River from CSAH 43 to 172nd Street)
- Elk River **Trail** (south side of Elk River between CSAH 5 and CSAH 43)
- **Elk River** (Sweetwater Bend to CSAH 5)
- **Industrial Park East Trail** (Minnesota Avenue to Highway 10)
- **172nd Street** Parkway to Highway 10
- **Hudson Woods Trail** (172nd Street to 196th Ave and US 10)
- Trail Connecting **Big Lake Marketplace to Hudson Woods** (along Railroad)
- CSAH 81 Trail from **Norland Park to Wood Lake**
- CR 81 Trail from **Norland Park to Highway 10**
- Highway 10 Trail (from **Lakeshore Drive to Landis Lake**)
- South Side **Highway 10 to Highway 25** Trail
- CSAH 81 to Highway 10 to Highway 25 to Keller Loop Trail
- **Loop Trail** CSAH 43 to 172nd Street South
- **Minnesota Avenue Trail** (CSAH 43 to Prairie Meadows PUD)

Bicycling on a path along 172nd Street

3. Local Streets

Continue to require that most local and collector residential streets are interconnected to the extent feasible and linked to the framework of arterial streets. This is the most effective and least costly way to accommodate and encourage bicycling. No special treatments such as street markings or signing are needed in many cases.

These streets are generally low-volume, low-speed local residential streets or streets having direct access to the off-street pathway network.

4. Future Local and Collector Streets

Require future local and collector streets to be interconnected to the maximum extent possible so that all can become part of the bicycling and walking network. New collector and minor arterial roads should be built with bicycle lanes or paved shoulders that meet MnDOT guidelines for width, striping and signage. Use bike-safe sewer grates.

5. Site Design

Require that major commercial developments, tourist attractions, public buildings, or Town Center buildings include bicycle parking near the entrance. Design safe routes between streets and storefronts.

Parking

Off-Street Parking for Business or Industry

1. Amend the zoning ordinance to greatly reduce or eliminate minimum off-street parking requirements for businesses and industries. Allow more business discretion in setting parking quantities. Encourage and facilitate negotiations between site owners about shared parking.

Businesses usually have a very good idea of what their parking needs are, and no auto-dependent business would forego on-site parking altogether. In Big Lake and other cities, excessive minimum parking requirements have often resulted in many unused spaces, even at peak periods. Reducing unneeded parking pavement will help create a more attractive and walkable city. This amendment would be consistent with the plan objective of giving more discretion to the private market.

Goods Movement and Rail Lines

Trucking accounts for deliveries and shipments of much or most raw materials to and from Big Lake. Three local industries have rail spurs from the Burlington Northern-Santa Fe Railroad (BNSF) track.

In recent years there has been private interest in the development of a rail-served, industrial district. This idea is an element in the study by the Highway 25 Corridor Coalition for a possible second bridge over the Mississippi River. A candidate location for the facility is south of the BNSF right-of-way near CSAH 17. This location has a "place-holder" on Figure 11-1, Land Use Plan Map.

Factors to be considered in the facility's feasibility are:

- Availability of land; 200 or more acres might be needed
- Engineering feasibility; tracks to and from the BNSF mainline would need to be constructed, and the ability to construct these linkages within design parameters will be critical
- Volume of freight; in order to make the development worthwhile, a minimum required volume of freight would be needed
- Truck operations on CSAH 17 and TH 25.

Transit and Para-Transit

2. Tri-Cap

Continue to support Tri-Cap, which provides bus service on an on-demand, dial-a-ride basis.

Tri-Cap is a way to move to or from any destination in Big Lake city limits, including the Northstar commuter rail station. There is no other local bus service in Big Lake. Please refer to Chapter 5, Transportation System Assessment, for a further description of this program.

3. Northstar Commuter Rail

Continue to support the Northstar commuter rail service by planning and zoning for attached housing near the station and the extension of a parkway street from the station. Please refer to the Transportation System Assessment for a further description of the Northstar system.

Road Access Management

Protect traffic flow and safety along roads in Big Lake during land development and road planning.

1. Access Management Guidelines

Follow access management guidelines for City, County and State roads when reviewing plats and site plans. Coordinate with Sherburne County and the Minnesota Department of Transportation to help protect the flow and safety of their roads.

Access management is the planning, design, and implementation of land use and transportation strategies in an effort to maintain a safe flow of traffic while accommodating the access needs of adjacent development. Access management guidelines provide a means for transportation engineers and planners to balance private property concerns with the need to provide for a safe and efficient transportation system.

Access management criteria by the state and the county are shown on tables 12-4 and 12-5 on the next page.

Please refer to Chapter 5, Transportation System Assessment, for a further description of the purpose and benefits of road access management, especially along US Highway 10.

2. Federal, State and County Highways

Follow access management guidelines published by MnDOT for *Medium Priority Interregional Corridors* along US Highway 10. Coordinate with MnDOT to ensure that access between Highway 10 and any adjacent and development is in compliance with those criteria. (Refer to Chapter 5, Transportation System Assessment, for a description of the Highway 10 corridor and its crash rates.)

Complying with MnDOT's access management criteria may require the eventual consolidation of certain driveways during redevelopment and building parallel City streets, such as Minnesota Avenue.

3. City Streets

Follow the City's current access management guidelines for streets under its control.

The City's criteria for local streets are outlined in Chapter 11 of the City's Subdivision Ordinance and describe driveway design, driveway spacing along City blocks and driveway corner clearance.

The City's approach to access management indicates that new commercial, industrial or multiple family housing fronting on an arterial or major collector street shall be designed to minimize the number of direct access points through the following methods, which are listed in order of preference. If the highest preference is not possible, the next preference shall be used until an access method is possible:

1 Access from a local street
2. Frontage road serving multiple properties.
3. Frontage driveway or connected parking lot with cross easements serving multiple properties.
4. Shared driveways.
5. One driveway access, no closer than two hundred (200) feet to another driveway and that meets the City's minimum spacing standards from a street intersection.

Aviation

There is a privately-owned, grass landing strip parallel to CSAH 17 west of the solar farm. That facility may remain or eventually re-purposed as farm land or urban development.

The nearest major airport is St. Cloud Regional Airport. This airport has domestic flights from Saint Cloud and is 23 miles from Big Lake.

Table 12-4
MnDOT Access Management Criteria for US Highway 10

Category	Area or Facility Type	Typical Functional Class	Intersection Spacing		Signal Spacing	Private Access	Turn Lanes
			Primary Full Movement Intersection	Conditional Secondary Intersection			
2	**Medium Priority Interregional Corridors** *(TH 10 from TH 169 to TH 24)*						
2B	Urbanizing	Principal Arterials	1/2 Mile	1/4 Mile	STRONGLY DISCOURAGED By Deviation Only	By Exception or Deviation Only	Yes
2C	Urban Core		300 – 600 depending on block length		1/4 Mile	Subject to Conditions	Yes

Table 12-5
Sherburne County Access Management Criteria

Area Type	Functional Class	Facility Type	Intersection Spacing		Signal Spacing	Private Access	Turn Lane
			Full Median Opening	Right-In/ Right-Out			
Minor Arterials							
Urbanizing	Minor Arterial	Divided	1/4 Mile	1/8 Mile	1/4 Mile	By exception or deviation only	Yes
		Undivided	1/4 Mile	1/8 Mile		660’ minimum or subject to conditions	Yes
Urban Core	Minor Arterial	All	300-660 feet dependent upon block length		1/4 Mile	Permitted subject to conditions	Yes
Collectors							
Urbanizing	Collectors	All	1/4 Mile	N/A	1/4 Mile	660’ minimum or subject to conditions	Yes
Urban Core	Collectors	All	300-660’ dependent upon block length		1/8 Mile	Permitted subject to conditions	Yes
Local							
Urban Rural	Local Road Local Road	All	300-660 feet dependent upon block length 1/4 Mile		warranted NA	Spacing from any intersection should be 330’	Yes

Source: Sherburne County 2007 Transportation Plan. Being revised in 2018 after the City of Big Lake Comprehensive Plan was adopted.

Plan Action Steps

The City will take the following major steps to implement the recommendations of the Transportation Plan.

Table 12-6
Major Transportation Plan Actions

Action	Timing
Adopt a **road functional classification system** and apply it to those streets and roads that are under municipal jurisdiction	2018 and ongoing
Continue involvement with TH 25 Coalition to advocate Big Lake's position on the possible second **river bridge** and the "rail served industrial park." Advance the discussion on the viability or feasibility of new roles for TH 25, CSAH 17 and CSAH 11.	Following strategy discussions among Big Lake City staff, other agencies and the City Council.
Conduct a study to determine the feasibility of the proposed **parkway system**: ▪ Obstacles and constraints? Opportunities? Costs? ▪ Conceptual-level designs? ▪ Means of land acquisition for the southern parkway ▪ Present Council with study conclusions and recommendations.	2019
Apply the **road access management guidelines** when building new streets or reviewing plats and site plans. Ensure that plans are sent to MnDOT or Sherburne County during the plan review period for their comment. Communicate with state and county staff to ensure that the access management criteria are understood.	Ongoing
Amend the zoning ordinance to greatly reduce or eliminate minimum off-street **parking requirements** for businesses and industry.	2019