

LAND USE AND HOUSING

Introduction

The key themes that emerged from the early engagement with the community on the Comprehensive Plan included the need for various housing types, the need for transit, the importance of parks and trails, supporting downtown development, and the desire for walkable neighborhoods other than the neighborhoods near downtown. These interrelated issues guide the Future Land Use Plan recommendations for Owatonna.

Land Use & Population Growth

Owatonna is projected to grow by about 8,000 population between 2022 and 2050 – from about 27,500 to 35,500 population. Household size has decreased statewide and in Owatonna in the last several decades from about 3.5 persons per household (p/HH) in the 1950s to about 2.5 p/HH in 2020. Assuming household size continues to decrease modestly to 2.4 p/HH we estimate that the added population will represent an additional 3,300 households or housing units by 2050.

The 2023 housing study by Maxfield Research & Consulting found a potential demand for new housing in Owatonna of about 1,500 units through 2030. Assuming growth slows in the decades beyond 2030 to 2050, a total of 3,300 units as estimated above, or 1,800 more units between 2030 and 2050, is a reasonable estimate for the period 2024 to 2050.

The mix of housing type and density for these new housing units will determine how much land is needed for new residential development and which land use categories should be represented in the plan for this new development. The Maxfield study estimated the demand for new housing units would be about 19% for single family units, 23% for townhomes, and 57% for apartment units. These numbers are rounded here to 20%, 20%, and 60%, respectively, for low density, medium density, and high density residential, resulting in the following rough estimates of land needs for future residential development in Owatonna through 2050, assuming a total of 3,300 new units. The densities assumed are conservative overall gross densities and are lower than the target densities identified later in this plan:

<i>Housing Type</i>	<i>% of Units</i>	<i>Units</i>	<i>Density</i>	<i>Acres</i>
Low Density	20%	650	2.5 u/a	260
Medium Density	20%	650	8.0 u/a	80
High Density	60%	2,000	20 u/a	100
Total		3,300		440

Socio-Economic and Community Context

The Background Report for this Comprehensive Plan includes an analysis of socio-economic factors in Owatonna. That report includes analysis of past census information on population, race and ethnicity, age distribution, household characteristics, income, employment, and related information. There is also a market overview highlighting development since 2010, housing needs, and trends in office, industrial, and the housing markets.

Existing Land Use

Land use in Owatonna is characterized by the general categories illustrated on Figure 1, Existing Land Use and described in Table X. The Existing Land Use Map shows how the land is used today, not how it is planned or zoned, or what can be developed on it. In most cases, the existing land use matches the zoning, but not in all cases.

Table 1 Existing Land Use Descriptions

Existing Land Use	Description	Acres	Percent of Total
Low Density Residential	Low Density residential consists of detached single-family homes, duplexes and townhomes at a density of about 6 units per acre. This land use category corresponds to the R-1, R-2 and R-3 zoning districts.	3456.2	36%
High Density Residential	The High Density residential category includes multi-family residential uses, such as townhouses, apartments and condominiums in larger buildings, usually multi-story, typically at densities over 12 units per acres. This land use category corresponds to the R-4, R-5, R-6, and RB zoning districts.	92.3	0.9%
Mobile / Manufactured Home	The Manufactured Home category includes the city's existing mobile home parks, corresponding to the Mobile Home Park & Manufactured Housing PUD zoning district. There are two existing mobile home parks in the city, Skyline Gardens on 3rd Avenue NW and Shady Acres on 24th Avenue NW.	137.3	1%
Commercial	The Commercial land use category consists of commercial, office, and services business uses, including retail stores, restaurants, banks, hotels, business offices, clinics, and similar uses that cater to retail customers.	682.4	7%
Industrial	The Industrial land use category includes both light and heavy industry, including manufacturing, processing, warehousing, storage, trucking, and handling of bulk materials. This land use category corresponds to the I-1, I-2, and I-P zoning districts.	1621.0	16.7%
Public/Institutional	Public/Institutional includes schools, churches, and government buildings and facilities – such as the Steele County Fairgrounds. These uses almost all within one of the Residential zoning districts.	354.2	3.6%
Park/Open Space	The Park/Open Space category consists of public parks, the Leo Rudolph Nature Reserve, city storm ponds, cemeteries, and other large open areas that have few if any buildings. Some of these properties are zoned Agriculture-Open Space district but some have other zoning designations.	980.5	10%
Agriculture	The Agriculture designation is for areas outside the current city limits that are farmed or otherwise open, rural land. Being outside the city the township or county zoning would apply.	207.1	2.1%
Airport	The Airport designation covers the Owatonna Degner Regional Airport, which is zoned I-1 Light Industry.	677.9	7%
Right of Way	While not an official land use designation, a portion of the land within the city is held as right of way. There is right-of-way that is owned and managed by the city, county and state.	1,524.1	15.7%
Open Water	Open Water in the city includes the Straight River, Maple Creek, Lake Kohlmeier, and other larger lakes and streams. These water bodies are covered by various zoning districts and their land use acreage is encompassed mostly within the Parks/Open Space category.	-	-
	Total	9,733.0	100%

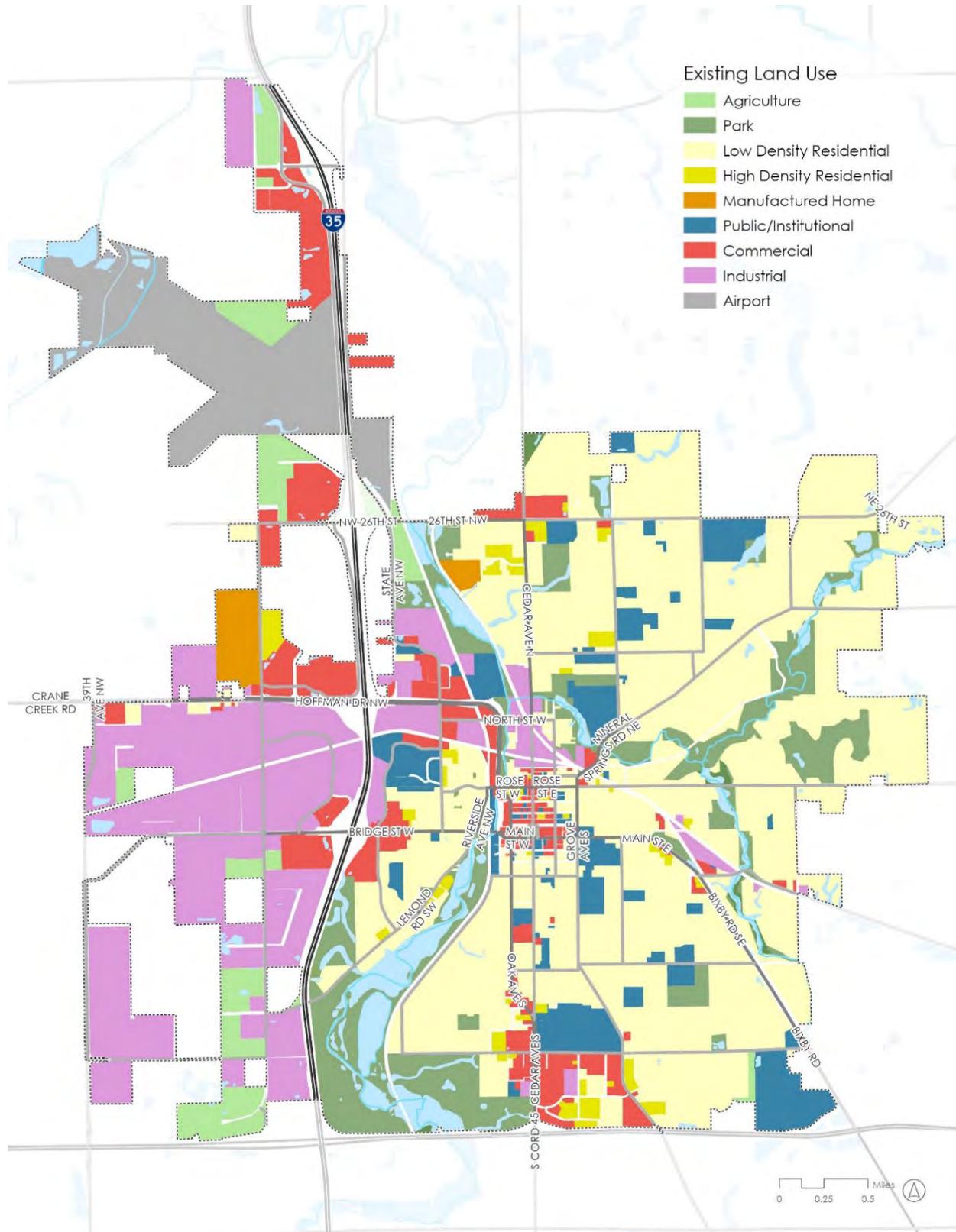


Figure 1 Existing Land Use
Source: City of Owatonna

Existing Land Use and Zoning Summary

Low Density Residential comprises much of the land in Owatonna, roughly 36 percent, nearly all of which is east of I-35. Most of this land is within the R-1 single-family residential zoning district, although there are areas allowing higher density housing as well, especially clustered around downtown. About 10 percent of the city is parks and trails, which support and provide an amenity for the residential areas.

Owatonna is a regional center for industrial businesses, which take advantage of its location at the intersection of I-35 and US Highway 14. Industrial land encompasses nearly 17 percent of the city, notably with two industrial parks west of I-35. There is additional industrial land further west of these industrial parks and north of Downtown. These areas represent a mix of industrial uses ranging from light to heavy industrial including manufacturing, processing, warehousing, storage, trucking, and handling of bulk materials. The city has three industrial zoning categories – Light Industrial (I-1), Heavy Industrial (I-2), Industrial Park (I-P) – which are encompassed by the Industrial existing land use category. Major employers include Viracon, Bosch, Jostens, Cabela's, Mills Fleet Farm, Lowe's and McQuay International (Daikin Industries).

Commercial land makes up about 7 percent of the city, with downtown serving as the hub of most of the local businesses and traditional retail. There are also highway commercial uses along the major roadways (I-35 and US-14) such as big box retail, hotels, gas stations and other service-oriented businesses. Additionally, the city has several commercial / industrial businesses, which are mainly located north of Downtown.

In the Comprehensive Plan, it will be important to examine how existing land use compares with current zoning. Understanding where the two are in conflict, especially where there are large areas of inconsistency can be one part of updating the future land use. The zoning categories in the city are listed in Table 9 and the map of zoning districts is shown in Figure 2.

Table 2 – Zoning District Descriptions

	Zoning Category	Description
	R-1, Single-Family Residential District	The R-1 District allows for low density single-family detached dwelling units. This district comprises the majority of the residential land area in the city.
	R-2, Medium Density Single-Family Residential District	The R-2 district allows for medium density single-family detached dwelling units
	R-3, Single- and Two-Family Residential District	The R-3 allows for low and moderate density one and two unit dwellings
	R-4, Townhouse District	The R-4 allows for townhouses or one and two unit dwellings
	R-5, Medium Density Residential District	The R-5 allows for medium density housing in multi-family structures up to 12 units
	R-6, High Density Residential District	The R-6 allows for high density housing in multi family structures over 12 units
	R-B, Residential-Business District	The R-B allows for high density housing and for the transition from residential uses to low intensity businesses, allowing for mixed use areas.
	B-1, Neighborhood Business District	The B-1 provides for office, service-oriented retail and goods and services that are intended to serve the surrounding neighborhood, not the entire city and beyond
	B-2, Community Business District	The B-2 provides for medium density retail providing goods and services for the entire city and region. This district includes larger retailers and other services that benefit from proximity to high traffic volumes.
	B-3, Central Business District	The B-3 provides for a centralized concentration of complementary retail uses in the downtown area.
	I-1, Light Industrial District	The I-1 provides for warehousing and light industrial uses
	I-2, Heavy Industrial District	The I-2 provides for heavy industrial and manufacturing which requires isolation from residential or commercial uses
	I-P, Industrial Park District	The I-P provides for industrial development compatible with surrounding uses with adequate open space, landscaping and parking spaces. Development is limited to administrative, wholesaling, manufacturing and related uses
	A-O, Agriculture-Open Space District	The A-O district retains area in the city for open space and agricultural uses
	FP, Floodplain District	The FP protects and preserves land within the floodplain and limits losses due to flooding. Development within this district is limited.
	PUD, Planned Unit Development District	The PUD district allows for groupings of parcels to be developed in an integrated coordinated manner. There is greater flexibility in site design within a PUD district.
	MH, Mobile Home Park	The MH district provides a dedicated area for manufactured and mobile homes.

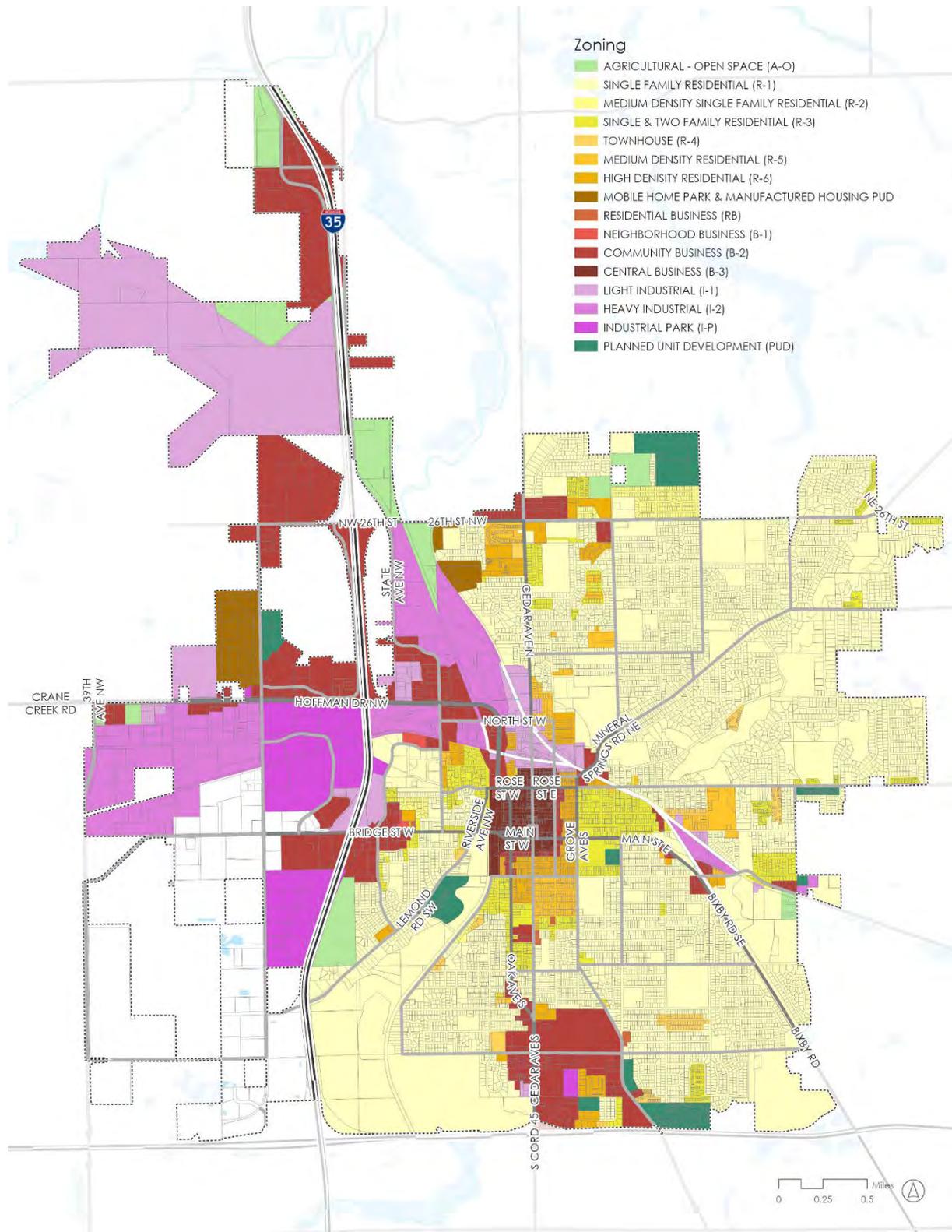


Figure 21 Existing Zoning

Current Trends and Opportunities

There are several land use trends that the city could consider as it begins to create a future land use map. These trends are explained below in relation to current city practice for land use.

- Currently the City of Owatonna represents areas with a mix of housing and commercial as Residential Business within the zoning code and Commercial in existing land use. Based on demographic shifts, more and more people are choosing to live in neighborhoods where they can easily walk to do their daily errands. This trend has led to a demand for areas with either a horizontal or vertical mix of uses, which many cities have designated as mixed use. This category could be applied in the downtown, and any other locations that the city envisions having a mix of uses.
- Currently, the city has three future land use categories for residential uses – low density residential, high density residential and mobile/manufactured homes. To attract a range of housing options and to be more consistent with zoning, the city could add a medium density residential category. The medium density residential category could represent the R-3 and R-4 zoning districts that do not fit well into the existing categories. Designating areas for different types of housing, especially missing middle housing, with clear development guidance can help the city to attract more housing options.
- The form of sites and buildings is becoming just as important as the function, or land uses. Incorporating design criteria can aide new development to fit into the character and context of the existing community. Clear development standards can also make it easier for developers to build in the community.
- Owatonna now has one commercial future land use category, where many cities have multiple representing different types of commercial development.
- Comprehensive Plans in growing cities such as Owatonna generally will consider growth areas where the city could expand within the next 20 years. This is something that could be included and planned for in a future land use map.
- The future land use map should consider the future of agricultural land within the current city boundary. Many cities are choosing to guide this land for other uses to take advantage of existing and nearby city services.
- Owatonna has good momentum in downtown with the Downtown Streetscape Project. There is an opportunity to build on this momentum through the Comprehensive Plan by carefully planning the desired future land uses. The Comprehensive Plan could also include goals related to community design, downtown economic vitality and placemaking.

DRAFT Land Use Goals

Goal 1. Explore developing a regional destination community center to include an indoor swimming pool, indoor and outdoor recreation facilities, meeting rooms, and other integrated uses.

Goal 2. Improve housing opportunities and neighborhoods in Owatonna.

- a) Provide areas for a mix of housing densities and types throughout the City.
- b) Identify and zone new neighborhoods and neighborhood nodes on the east side of the City to include commercial and high density housing to serve as focal points for new development.
- c) Encourage mixed use development at key nodes throughout the City to encourage walkability and community character.
- d) Create a mixed use node near the new Owatonna Senior High School in southeast Owatonna to include commercial and high density residential uses.
- e) Continue to explore growth opportunities outside current city limits to expand housing and commercial opportunities.

Goal 3. Support Owatonna’s economic development through land use plans and policies.

- a) Continue to invest in and support downtown Owatonna as the economic and social center of the City – a destination to live, work, and play.
- b) Explore mixed use development near the Straight River as an amenity and resource.
- c) Continue to build on Owatonna’s historic buildings and character in land use and development decisions.
- d) Explore adding residential, mixed use, and open space areas to the industrial park area along with improved connections to the rest of Owatonna.

DRAFT Housing Goals***Goal 1. Provide an appropriate mix of housing types in Owatonna.***

- a) Explore programs and opportunities to develop a range of affordable housing in Owatonna.
- b) Explore programs and opportunities to develop senior housing in Owatonna, both independent and assisted living.
- c) Develop policies and programs to ensure that the City's existing housing stock is safe, attractive, and well-maintained.
- d) Maintain and enhance policies and programs to license and regulate rental housing in the City.
- e) Encourage and support sustainable and climate resilient design in new and existing housing.
- f) Update the City's housing market study regularly to understand the evolving housing needs in Owatonna.

Goal 2. Guide residential land use in appropriate locations in the City.

- a) Encourage new housing development in and near downtown Owatonna.
- b) Encourage a mix of housing opportunities in southeast Owatonna near the new high school.
- c) Support multi-family residential in areas with proximity to major thoroughfares, commercial areas, open space or other amenities, or in areas that are an extension of existing multi-family use.
- d) Require street and sidewalk/trail connections among all new and existing housing developments wherever possible.
- e) Support annexation of land when there is less than a five-year supply of lots based on recent land consumption or if there are other benefits to the City for annexation.

Walkable Neighborhoods

Walkable neighborhoods are those in which there are goods and services available within 1/4 to 1/2 mile of people's homes, the distance most people will walk or bike for many routine trips, and suitable sidewalks or trails. Within that radius, the rule of thumb is to aim for an average of 10 units/acre for residential development to support the neighborhood commercial uses, typically in mixed-use settings. Walkable neighborhoods are shown to be more valuable in the real estate market, promote healthier active lifestyles, and have less impact on the environment due to less driving. There are social benefits as well from interacting with more people in daily activities, which is more likely in walkable neighborhoods than in places where most trips are done by car. There are economic, health, environmental, and social benefits to creating and maintaining walkable neighborhoods.

An illustration of how walkable a city is can be found on the Walk Score® website, a tool that uses Google Maps to analyze areas of a city to show a "walk score" ranging from green to yellow to orange to gray (very walkable to not walkable). A score of 25 to 100 is assigned to walkability. Owatonna's current overall score is just 25, but some of the City's neighborhoods are green and yellow, with much higher Walk Scores. Owatonna's Walk Score map is shown on the next page with four potential future mixed use nodes at the east and west edges of the City. Owatonna's existing walkable neighborhoods are, not surprisingly, in the core of the City near downtown and in two areas north and south of downtown. Adding the four new mixed use nodes illustrated on the map would help meet the goal of promoting the health and wellbeing of the community, as well as adding to the character of these places. Adding mixed use nodes closer in, in existing neighborhoods just outside downtown, is not possible since it would involve taking out existing homes to develop new mixed use areas. The four nodes mixed use suggested are on currently vacant property. These nodes are illustrated in more detail on the following pages and reflected in the Future Land Use Plan map later in this chapter.

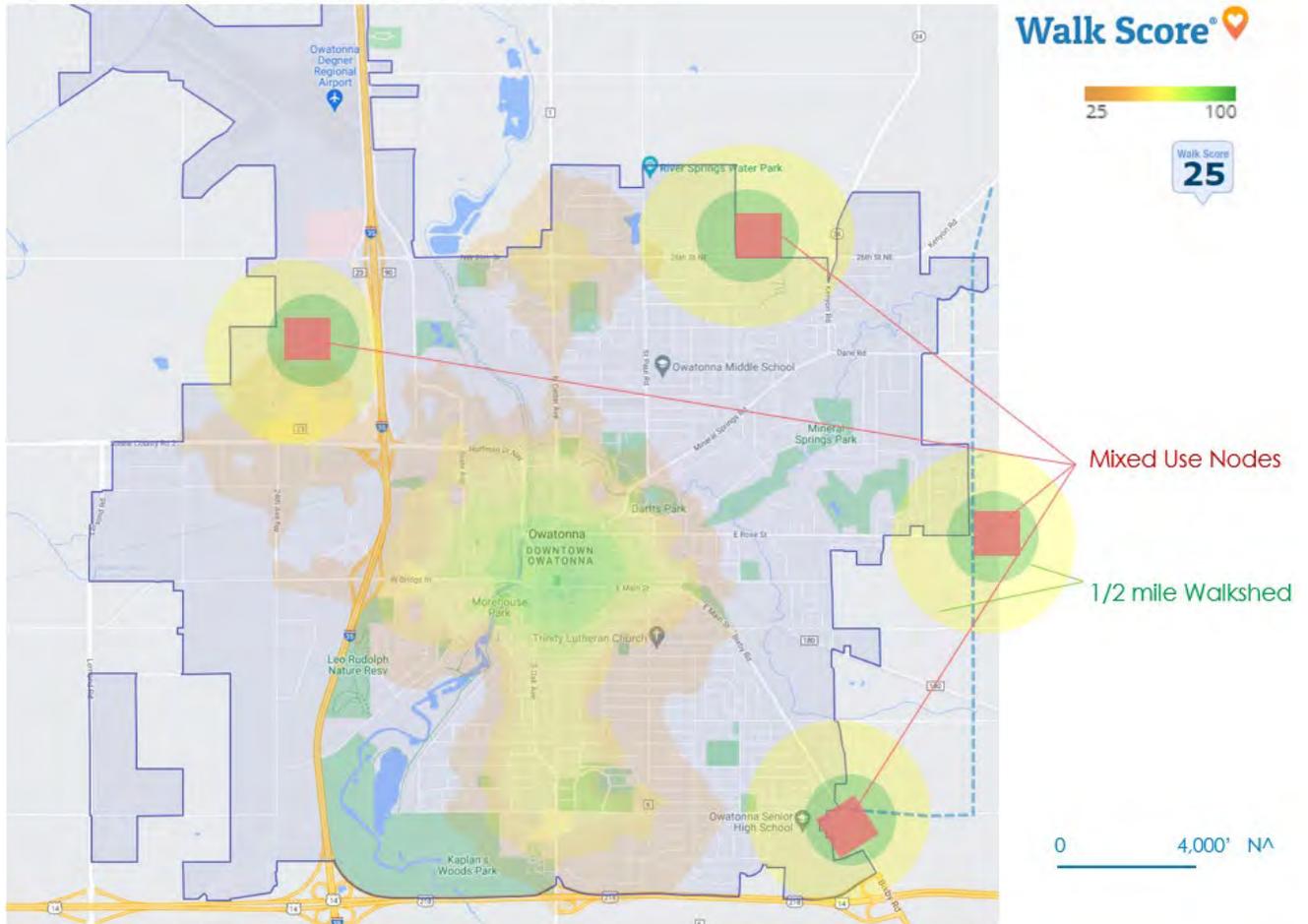
Each of the four nodes includes a central area designated Mixed Use. These areas can be commercial, high density residential, or a mix, either vertically or horizontally. The intent is to create a critical mass of people and activities that will lend itself to walking and biking to neighborhood destinations rather than always driving. The standards for what is allowed and encouraged in the Mixed Use areas will be detailed later in the zoning ordinance. Adjacent to the Mixed Use nodes are areas of high density residential, medium density residential, and low density residential, shown as HR, MR, and LR, respectively. Also shown are generalized locations for future parks, suggesting a park of some kind should be in or near the Mixed Use nodes, the location and facilities for each to be decided in future discussions.

The mixed use nodes are illustrated as generalized land use patterns, which can be refined in discussions at the City level and with developers and property owners.

- **Mixed Use Node #1** is on the north side of 26th Street at Hemlock Avenue. This includes the recently proposed Mineral Springs residential PUD (planned unit development) as well as mostly vacant land east to Kenyon Road. The mixed use area would include neighborhood commercial uses serving new development and existing residential south of 26th Street.
- **Mixed Use Node #2** is on Rose Street centered on future 29th Avenue. The area includes a future school site which might be connected to a future park in the area. Mixed use development east of 29th would serve mostly new development but also existing residential areas on County View Avenue, Greenhaven Lane, and other nearby neighborhoods.
- **Mixed Use Node #3** would be developed along SE 18th Street on either side of Bixby Road near the new Owatonna High School. Future 29th Avenue would intersect the eastern edge of this node. The high school is a major destination and this node is also near the interchange with US Highway 14 and Bixby Road, suggesting that this mixed use area could be larger than in the other nodes, with a potentially higher concentration of multi-family housing.

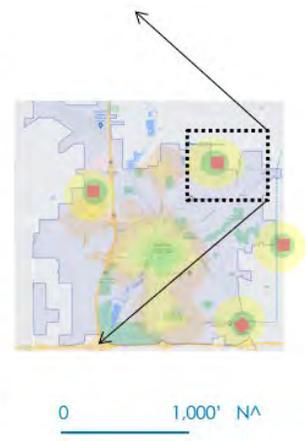
- **Mixed Use Node #4** is at 24th Avenue and 18th Street NW, adding a mixed residential-commercial component to the commercial area north of Wal Mart and Kohl's, adding to the existing manufactured home park west of 24th Avenue and the proposed apartment in the SE quadrant of 24th Avenue and 18th Street NW. This node reflects the importance of establishing a residential neighborhood in the northwest part of the City which could thrive as an attractive neighborhood of its own in an area that is now dominated by large commercial uses.

Owatonna Walk Score & Suggested Mixed Use Nodes





Owatonna
Comp Plan
**Mixed Use
Neighborhood
Node #1**
26th Street NE &
Hemlock Avenue



Owatonna
Comp Plan
**Mixed Use
Neighborhood
Node #2**
Rose Street & Future
29th Avenue

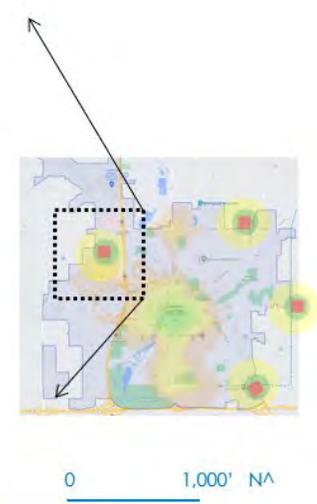




Owatonna
Comp Plan
**Mixed Use
Neighborhood
Node #3**
SE 18th Street & Bixby
Road



Owatonna
Comp Plan
**Mixed Use
Neighborhood
Node #4**
24th Ave NW
& 18th Street NW



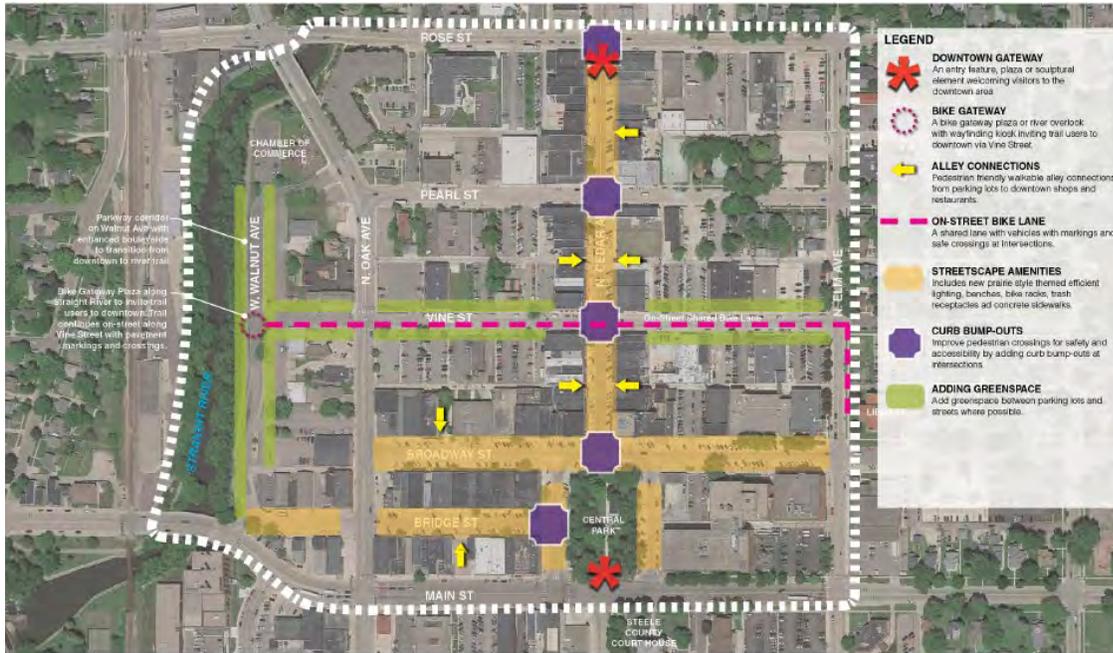
Downtown

Downtown Owatonna is the center of the community and the hub of social and economic activity. It is essential that downtown retain its vital place in the community. The City undertook a Downtown Streetscape Study (WSB, 2019) which outlined a number of goals and improvements for the downtown. That study serves as a guide for preserving and enhancing downtown Owatonna. Many of the goals of that study are included in the draft Downtown goals below and several of the plan recommendations are excerpted on the following pages.

DRAFT Downtown Goals

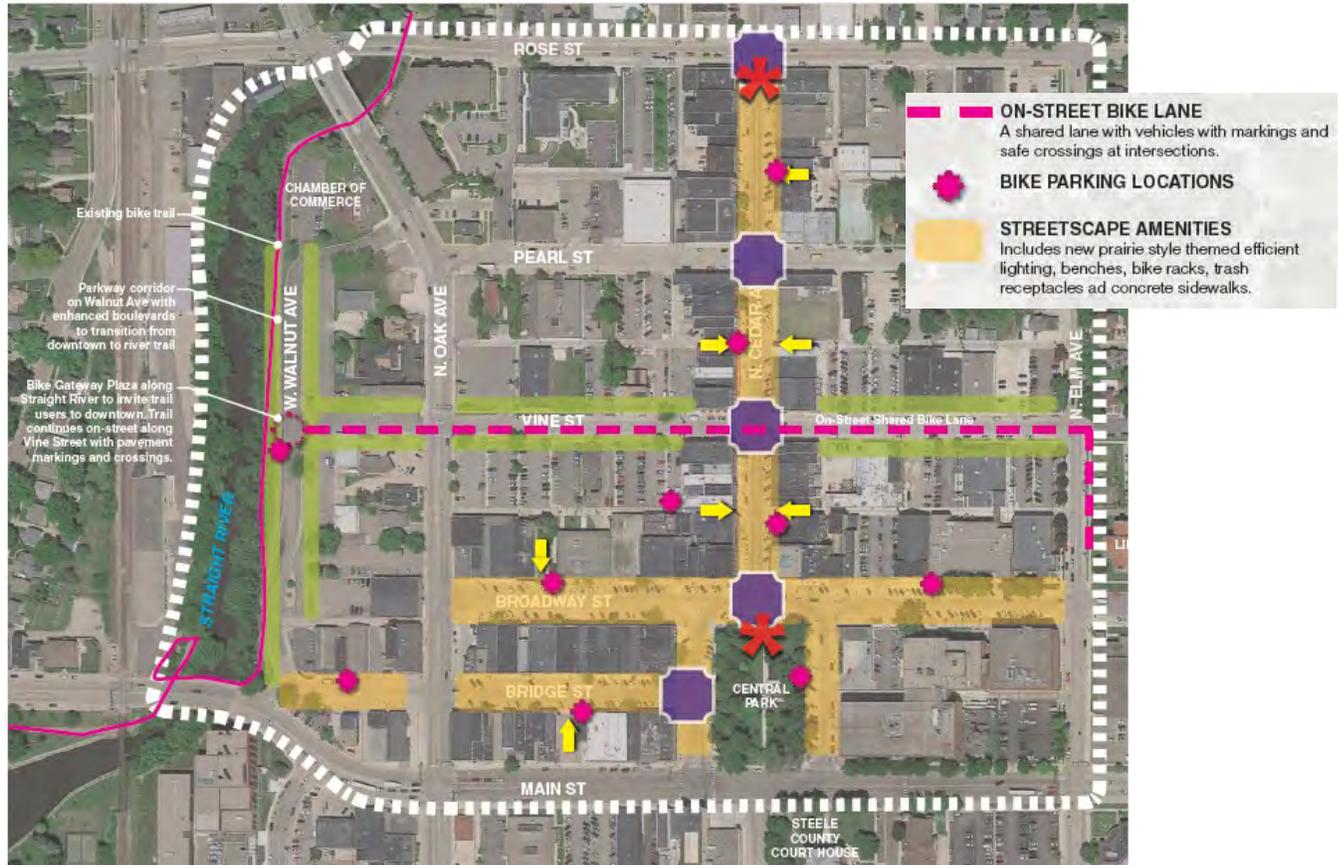
- Goal 1. Continue to promote Downtown Owatonna as the social, economic, and cultural hub of the region.*
- Goal 2. Continue to implement the Downtown Streetscape Study.*
- Goal 3. Continue to partner with the Owatonna Chamber of Commerce to promote and enhance business opportunities and activity in the downtown area.*
- Goal 4. Maintain downtown parking at its current level and quality.*
- Goal 5. Improve circulation throughout downtown for pedestrians, bicyclists and vehicles.*
- Goal 6. Maintain and enhance accessibility and pedestrian safety.*
- Goal 7. Provide new and maintain existing amenities such as street lighting and street furniture in downtown.*
- Goal 8. Continue to identify and preserve key historic structures in the downtown.*
- Goal 9. Develop design guidelines for the downtown area.*
- Goal 9. Encourage new and redeveloped housing opportunities in and near downtown.*

DOWNTOWN STREETSCAPE PLAN (WSB, 2019)



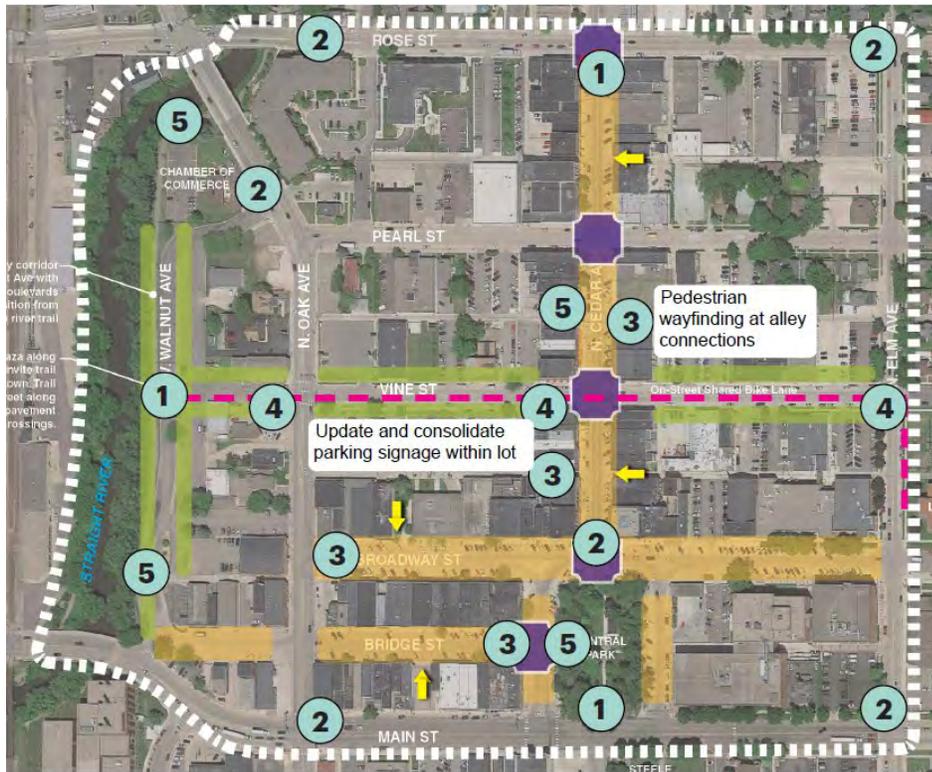
DOWNTOWN STREETSCAPE PLAN

DOWNTOWN BIKE PARKING (WSB, 2019)



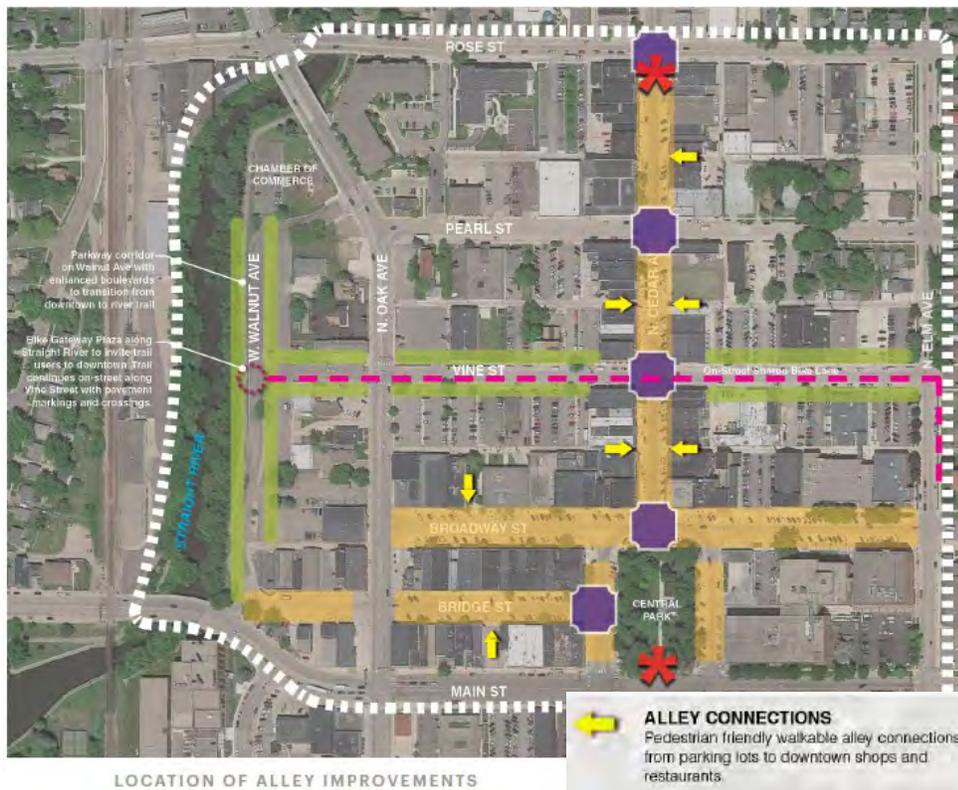
BIKE PARKING - LOCATION RECOMMENDATIONS

DOWNTOWN WAYFINDING SIGNAGE (WSB, 2019)



WAYFINDING SIGNAGE - LOCATION MAP

DOWNTOWN ALLEY IMPROVEMENTS (WSB, 2019)



LOCATION OF ALLEY IMPROVEMENTS

Community Design

Community design encompasses not only aesthetic elements, but also the basic arrangements and functioning of the built environment. The relationships between buildings, building entrances, roadways, sidewalks, lighting, landscaping, and other features all combine to create the community character. Areas with well-designed, coordinated elements are generally more popular, better cared for, and more valuable than those with less attention to design. The aesthetic character of a community is important along with the basic land use, economic, and engineering framework. Design impacts not only aesthetics and the senses, but also the economic vitality of a community. A well-designed community is more attractive in the economic marketplace and enhances the quality of life for its residents. There may also be health impacts – if a given neighborhood is more attractive to pedestrians and bikers it will encourage walking and biking, with proportional improvements to health. To this end the community can adopt design standards and regulations relating to various aspects of the building environment. These can include:

- Placement of buildings and parking
- Building materials
- Building façade and roof treatment
- Location of entrances and windows
- Landscaping and buffering
- Lighting, streetscape furniture and accessories

A well-developed set of community standards would first identify the various character areas or districts to which various design guidelines apply. In Owatonna, these districts might include:

- Downtown
- North Downtown (transitional commercial-industrial area)
- Residential neighborhoods
- Mixed Use Nodes
- Commercial areas
- West Industrial Park area

DRAFT Community Design Goals

Goal 1. Identify character districts in Owatonna for development of design guidelines.

Goal 2. In Downtown Owatonna require continuity in the design and scale of development, consistent with the historic character of the area.

Goal 3. In Downtown and Mixed Use nodes require placement of building close to the street, with sidewalks serving development and parking to the side and rear.

Goal 4. Develop minimum building materials standards within the zoning code to maintain and enhance the community character, appropriate to various character districts.

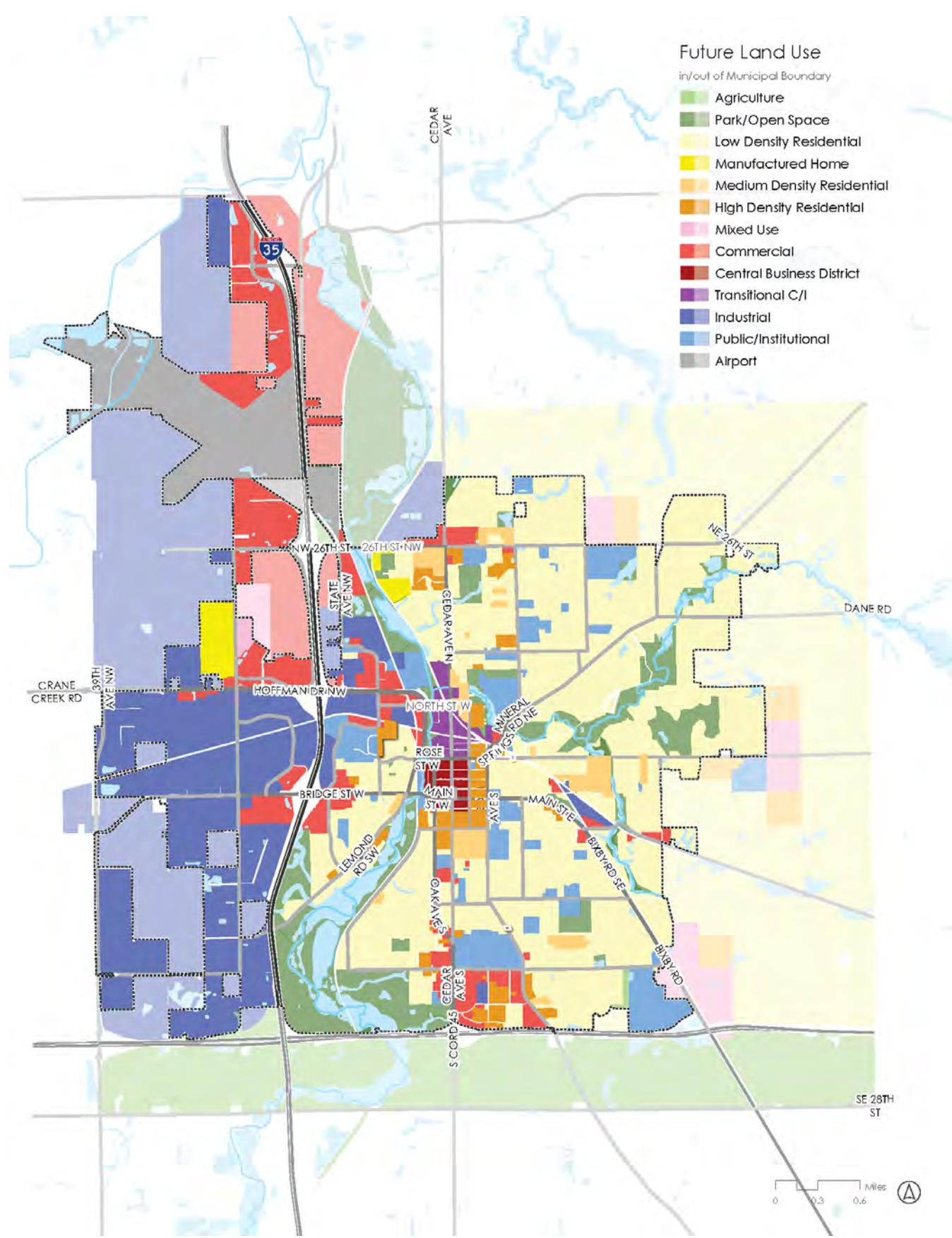
Goal 5. Develop minimum design standards related to building façade, roof treatment, landscaping, lighting and other features in the various character districts.

Goal 6. Prioritize pedestrian and bike access in all new development and redevelopment projects to provide continuity and choice in access to all parts of the City.

Land Use Categories

Future land use designations on the Future Land Use map

	Future Land Use Category	Description
	Agriculture	Crop land, pasture, farming operations
	Park/Open Space	Public park land, ballfields, recreational facilities, natural areas, public open space
	Low Density Residential	Low density single-family detached and two-family dwellings up to 6 units/acre net.
	Manufactured Home	Manufactured home park
	Medium Density Residential	Residential dwellings up to 8-unit structures, including twin homes, quads, and townhouses up to 15 units/acre net.
	High Density Residential	Residential dwellings including apartments, condominiums, and congregate care up to 40 units/acre net.
	Mixed Use	Commercial, retail, service and similar uses, plus residential up to 40 units/acre net, mixed either vertically or horizontally.
	Commercial	Office, retail, and service uses serving the public.
	Central Business District	Commercial, retail, office, service, public, semi-public, and high density uses in the downtown area.
	Transitional	Office, commercial, industrial, warehousing, and related uses in areas adjacent to the downtown area.
	Industrial	Office, warehouse, manufacturing and related uses
	Public/Institutional	Public and semi-public uses such as government buildings, schools, places of worship, and non-profit organizations.
	Airport	Owatonna Municipal Airport and associated land and buildings



PARKS, TRAILS AND RECREATION

Introduction

The open space system in any city, including Owatonna, is a significant driver for where residents purchase homes and how amenity-rich they find their neighborhoods. Access to parks, open space, and recreation has a direct impact on quality of life. Positive neighborhood impacts and development of parks and park programs that support neighborhoods should be a driving force for new parks, facilities, maintenance priorities, and culturally specific programming.

During this comprehensive planning process, one of the most beloved parts of Owatonna identified over and over was the park and trail system. This is a significant reason residents call Owatonna home, which means it needs to be equally cared for and expanded so all residents have access to these rich amenities.

This chapter highlights the city's adopted *Parks and Trails System Master Plan (2019)*, which was the first stand-alone parks and trails plan completed for the city. The plan conducted a needs assessment, detailed the existing parks and trails systems, and proposed an implementation action plan. The goals and new park/trail recommendations in the Comprehensive Plan were developed based on the 2019 *Parks and Trails System Master Plan*, as well as public input and growth analysis conducted during the Comprehensive Plan process.

Existing Conditions

Parks

Overall, the park system is comprised of 33 parks, totaling 811 acres. The recreation system features 11 playgrounds, 5 basketball courts and 13 baseball/softball fields, 4 multipurpose fields, 7 outdoor tennis courts, and an outdoor ice rink. A couple gaps identified in the 2019 *Parks and Trails System Master Plan* include the need for a community athletic complex as Owatonna grows in population, an indoor multi-purpose recreation space, and another community park. A need was also identified for additional park space in the south-eastern portion of the city.

The city's 33 parks are categorized as follows: Regional Park (1), Community Park (5), Community Athletic Complex (1), Neighborhood Park (5), Mini Park (4), Nature Preserve (1), Special Use Park (6), Urban Plaza Park (1), Undeveloped or Future Park (9). Owatonna's parks and their classifications are shown in [Table 1](#).

Table 1 Existing Parks

Park	Classification	Size (Acres_
Archery Park	Special Use Park	24
Brooktree Golf Course	Special Use Park	128.42
Brown Park	Neighborhood Park	6.77
Buecksler Park	Mini Park	4.75
Cashman Park	Neighborhood Park	8
Central Park	Urban Plaza Park	1.52
Countryview Park	Undeveloped / Future Mini Park	0.68
Crocus Park	Mini Park	0.45
Dartts Park	Community Park	18
Fairgrounds Park	Community Park	15.5
Falkland Meadow	Undeveloped	7.38
Fremont Park	Undeveloped	0.27
Hamman park	Undeveloped	10.5
Hazel Park	Undeveloped	0.31
Jaycee Park	Neighborhood Park	8.68
Kaplan's Woods Parkway	Regional Park	276.16
Kriesel Park	Undeveloped	19.76
Kriesel's Woods Park	Undeveloped	9.94
Lake Chase Park	Special Use Park	14.59
Leo Rudolph Nature Preserve	Nature Preserve	58.09
Manthey Park	Community Park	29.67
Maple Creek Park	Neighborhood Park	20.9
Mineral Springs Park	Community Park	42.57
Morehouse Park	Community Park	27.71
Daikin Soccer Complex	Community Athletic Complex	16.6
North Bluff Park	Mini Park	0.41
Owatonna Soccer Complex	Community Athletic Complex	15.9
River Springs Water Park	Special Use Park	9.97
Sid Kinyon Tennis Courts	Special Use Park	0.8
Summer Park	Undeveloped	7.9
Walter H. Gainey Park	Neighborhood Park	3.09
West Hills Park	Special Use Park	38.75
Willow Park		0.35
Total Park System		807 Acres

Source: Parks and Trails System Master Plan

Trails

Owatonna has several existing trails that connect its park system, as well as internal trails in many of its larger parks. The highlight of the system is the north-south greenway corridor along the Straight River and an east-west trail greenway generally following along Maple Creek to the city’s eastern boundary. The city’s trail system consists of several different types of trails, including of 12 miles of mixed use trails. The key multi-use trail segments are summarized in **Table 2** below. The city also has over 60 miles of sidewalks, which provide additional walking opportunities throughout the city.

Table 2 Existing Trails

Trail	Location	Length	Connections
Buxton Trail	From Elm Avenue NE to Dane Road	2.5 miles	Dartts Park, Brooktree Gold Course, Mineral Spring Park
Muckle Trail	From Bridge Street to North Street	1.5 miles	Moorehouse park, Kaplan’s Woods Parkway
Kaplan’s Woods Parkway	From Kaplan’s Woods to Bridge Street	1.5 miles	Morehouse Park, Kaplan’s Woods
Cashman Crossing	Over the Straight River, south of Morehouse Park	200 feet (Pedestrian Bridge)	Connects Kaplan’s woods Parkway Trail on the east side of Walter H. Gainey Park
26th Street Trail	Along 26 th St NE from Cashman Park to Kenyon Road	2 miles	East-west connection between North Straight River Trail and Buxton Trail Corridor
North Straight River Parkway	Along the Straight River from the Muckle Trail Corridor to 26 th Street	1.8 miles	Combination of Lange Woods Trail and Ihlenfeld/Wildung Trail

Source: *Parks and Trails System Master Plan*

In addition to the trails above, the city also maintains groomed cross country ski trails within Brooktree Golf Course and along Kaplan Woods Parkway during the winter months. Another city owned recreational opportunity are the hiking and mountain bike trails within Kaplan Woods Park. There are also a variety of planned sidewalks and trails, which date back to a 2012 Sidewalks and Trails Plan. The defining feature of this plan is trail loop around the city, which would also connect to existing parks and trails. The existing and previously planned trails and are shown in **Figure 1**.

Other recreational amenities

The *Parks and Trails System Master Plan* identifies the following non-city, private, and nearby recreational amenities:

- Owatonna County Club: private golf club with a swimming/wading pool and fitness center.
- Christian Family Church partners with Owatonna’s Pickleball Association and hosts games and tournaments.
- Steele County Fairgrounds and Four Seasons Center: The annual County Fair is held here; The Four Seasons Center hosts hockey tournaments.
- Nearby Amenities outside city limits:
 - Reptile and Amphibian Discovery Zoo
 - Havana Hills: par 3 golf course and driving range
 - Minnesota State Parks: Rice Lake State Park and Somerset Wildlife Management Area

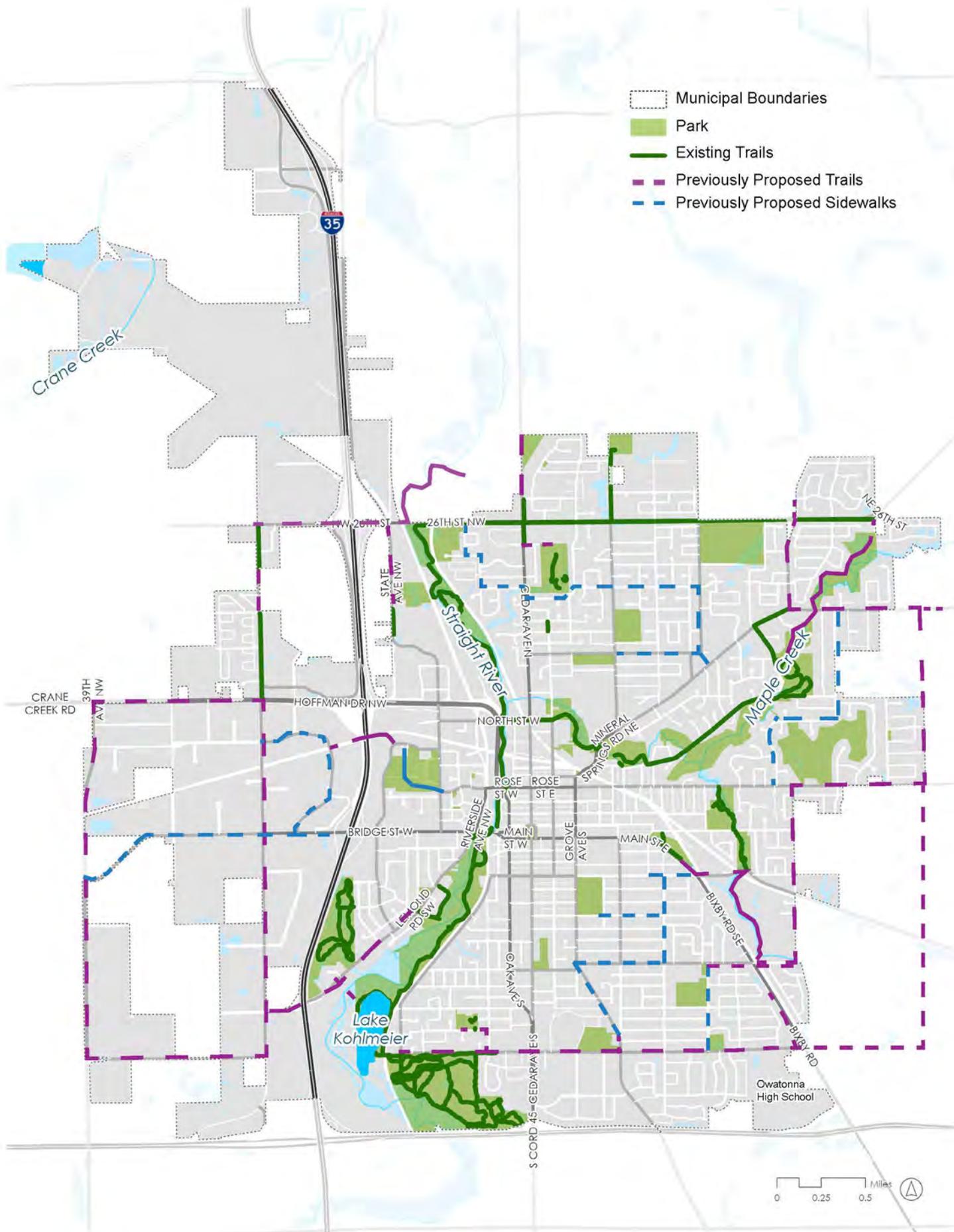


Figure 1 Existing Parks and Trails

Parks and Recreation Trends

- Increased need for trails to accommodate a trend towards more active living and health and wellness activities.
- A more intentional focus on accessible facilities to serve both people with disabilities, younger generations (moms with strollers etc.), and older generations.
- Recreational and social programming for the growing population of older adults and seniors.
- Increased participation in field sports, and a need for more space in communities for these types of facilities
- Park space as an indicator of equity. Cities are viewing park space as critical infrastructure and increasing commitments to provide open space in every neighborhood.
- Greater understanding of the connections between parks and public health, and the mental and physical health benefits of parks, open spaces and trails.
- Shifting desires in park amenities including increased interest in splash pads, pickleball courts, dog parks, challenge courses, nature play areas, community gardens. The city's *Parks and Trails System Master Plan* includes a full list of park trends, which should be referenced in master planning for any new park space.

Future Park and Trail Recommendations

Future park and trail search areas identified in the 2019 *Parks and Trails System Master Plan*, as well as those identified through this Comprehensive Planning process are shown in [Figure 2](#).

Search Areas	Description	Size
State Trail Search Corridors – Prairie Wildflower (North-South) and Stagecoach (East)	There are two legislatively designated future state trails through Owatonna. While the alignments have not been solidified, the city should continue to plan for these facilities with its partners.	N/A
Bridge Street Trail	Comprehensive plan engagement identified a desired missing connection between Downtown and the city's industrial park. The city should explore improvements to Bridge Street to fill this gap. Planning efforts are underway to add a pedestrian bridge across the river at Vine Street, as indicated in Figure 2 , which could act as the river crossing.	N/A

Search Areas	Description	Size
Hoffman Drive Trail	The city should also explore a trail connection along Hoffman Drive to serve the commercial areas west of I-35 and the proposed residential growth area south of Hoffman Drive. This trail was identified, but not added to the list of priorities in previous plans.	N/A
18th Ave Trail	The city should prioritize filling a gap in the trail system along 18 th Ave to Owatonna High School. This would facilitate safe non-motorized connections to the high school and serve the proposed growth area east of Bixby Road.	
Community Park - North	A community park search area was identified in the <i>Parks and Trails System Master Plan</i> , in the northern portion of the city. The city should continue to explore land acquisition options to fill the need for a larger park in this area of the city. This area is adjacent to the Minnesota Paving and Materials quarry. Owatonna should work with its partners at Steele County to understand potential for future park space once mining ceases.	~ 20 acres
Neighborhood Parks – North of 26th St at Hemlock Ave, Rose St and Future 29th Ave, 24th Ave and 18th St NW	The Future Land Use map in this Comprehensive Plan includes planning for four new mixed use neighborhood nodes. These nodes should all be planned with new neighborhood park space.	~ 3-5 acres
Community and Neighborhood Park - Southeast	Currently, the southeast portion of Owatonna is lacking in park land and amenities. The high school helps with this deficiency, but additional park space will be needed east of Bixby as this	~ 20 acres (community park) ~ 3-5 acres (neighborhood park)

Search Areas	Description	Size
	<p>area of the city continues to grow. The new mixed use neighborhood shown in the Future Land Use map in this Comprehensive Plan should incorporate a neighborhood park. Additionally, the city should search for a larger community park space in this area to address existing deficiencies and future needs.</p>	
<p>Greenway System</p>	<p>Search for property along the city's natural greenway corridors along the Straight River, Maple Creek, and Izaak Walton Creek for future parks and trails</p>	<p>N/A</p>

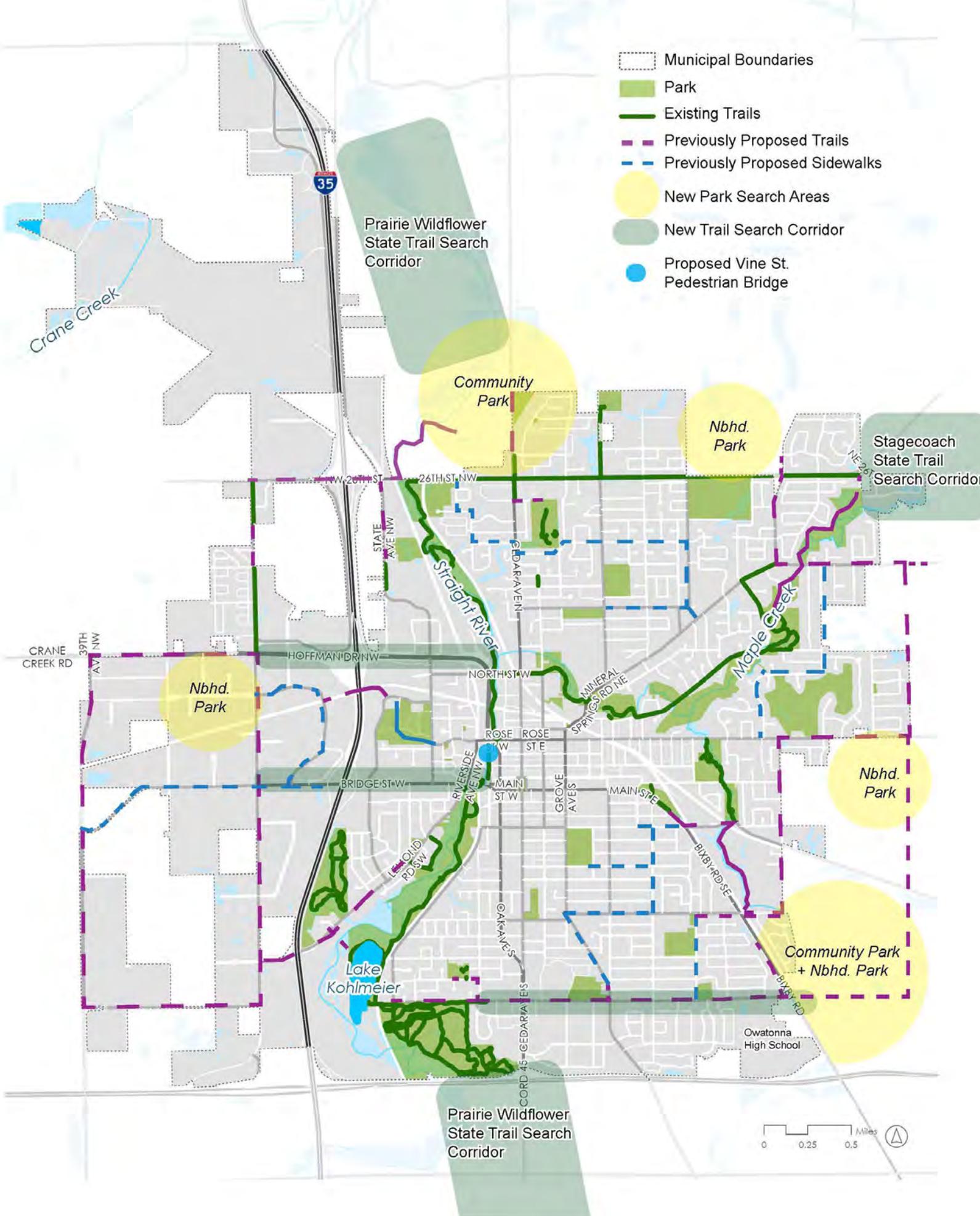


Figure 2 Future Parks and Trails

DRAFT Parks and Trails Goals

Goal 1. Improve park, trail and recreation programming in Owatonna.

- a) Follow the recommendations of the Owatonna *Parks and Trails Master Plan* and regularly update the Plan to address changing needs in the City.
- b) Provide green space for each neighborhood in Owatonna, including active park space within one half mile of all residents wherever possible, and sidewalk or trail links between Owatonna neighborhoods and key destinations and services.
- c) Continue seeking regional park status for the combined properties of Kaplan's Woods, Lake Kohlmeier and a portion of the Straight River public land as a regional park.
- d) Continue to make all City park and recreation facilities accessible to all ages and abilities.
- e) Continue to work cooperatively on park and recreation programs and facilities with Owatonna Public Schools.
- f) Continue using a master planning process to best determine correct use of park space, trail connections, amenities and to ensure accessibility standards are met before park facilities are constructed.
- g) Continue to emphasize and build in safety in all park and trail facilities and programs.
- h) Integrate park and recreation facilities into a planned community center.
- i) Explore a park land dedication ordinance.

Goal 2. Improve connections within the park and trail system in Owatonna.

- a) Explore new east-west trail connections between Downtown, across the Straight River, across I-35, and the industrial park.
- b) Continue focusing on trail development, trail safety, and maintenance of existing trails in the community.
- c) Continue to pursue including Owatonna's trail system in the regional trail system defined by the Greater Minnesota Regional Parks and Trails Commission (GMRPTC), providing both north-south and east-west trail connections to regional destinations.
- d) Continue to establish relationships with Steele County and neighboring communities (Clinton Falls, Medford, Claremont) to partner on regional trail opportunities in order to best secure future grant funding of these amenities.
- e) Pursue funding to develop and implement a Safe Routes to School program in Owatonna.

ECONOMIC DEVELOPMENT

Introduction

Owatonna has a solid economic foundation. It is a growing city in terms of population and new development. The city is known as an economic powerhouse in Southern Minnesota, with a diversified industrial and commercial base of businesses. Owatonna has natural and recreational amenities with greenways along its rivers and a strong park system. It has a downtown center and the collective will to build on its identity and vibrancy.

Understanding the trends in demographics and development a city is experiencing is a vital part of the comprehensive planning process. It can provide clues to future growth patterns and indicate what types of housing, parks and open spaces, mobility options and public facilities may be needed in the future. This chapter highlights information on Owatonna’s demographic characteristics and economic development, and provides goals for continuing economic competitiveness.

Demographics

Population

Owatonna has captured the majority of Steele County’s growth since 1990. During the 1990s and 2000s, Owatonna grew at a faster rate than the State of Minnesota. In the 2010s, though, Owatonna’s growth had slowed enough that it fell below the statewide growth rate.

In the early part of the 2020s, population growth has rebounded significantly in Owatonna. According to the MN Demographic Center, between 2020 and 2022, the City’s population grew by more than 1,100 persons. Although this high rate of growth will likely ease somewhat throughout the 2020s, growth is anticipated to remain strong in Owatonna despite a statewide slow-down caused by an aging population, declining birth rates, and reduced in-migration from outside the state.

Table XX Population Trends and Projections

Geography	1990	2000	2010	Estimate*		Projection**		
				2020	2022	2030	2040	2050
Population								
Owatonna	19,386	22,434	25,599	26,420	27,544	30,371	33,335	35,473
Clinton Falls Twp	518	466	351	386	387	410	417	411
Owatonna Twp	991	766	609	613	621	663	688	694
Steele County	30,729	33,680	36,576	37,406	38,611	41,747	44,704	46,639
Minnesota	4,375,099	4,919,479	5,303,925	5,706,494	5,757,358	5,976,058	6,190,685	6,333,531
Percent Change†								
Owatonna	--	15.7%	14.1%	3.2%	4.3%	15.0%	9.8%	6.4%
Clinton Falls Twp	--	-10.0%	-24.7%	10.0%	0.2%	6.2%	1.6%	-1.3%
Owatonna Twp	--	-22.7%	-20.5%	0.7%	1.3%	8.2%	3.7%	0.9%
Steele County	--	9.6%	8.6%	2.3%	3.2%	11.6%	7.1%	4.3%
Minnesota	--	12.4%	7.8%	7.6%	0.9%	4.7%	3.6%	2.3%
<p>* 2022 Estimate for Owatonna is from the MN Demographic Center. 2022 estimates for all other geographies is based on 2021 estimates from MN Demographic Center.</p> <p>** Projections for Owatonna are based on 2022 estimates and trended downward per MN Demographic Center's long range projections. Minnesota projections are from MN Demographic Center. All other geographies are based on estimated shares of countywide growth relative to Owatonna's 2022 estimate and projected growth.</p> <p>† Percent change based on previous 10-year increment, except for 2022, which is based on change since 2020.</p> <p>Sources: US Census; MN Demographic Center; Stantec</p>								

Age Distribution

The age distribution of the population has a profound influence on a community and its needs. Our age impacts the type of housing we need, the goods and services we consume, and numerous other elements of daily life. Due to the aging of the Baby Boom generation, those born between 1946 and 1964, Owatonna’s overall median age has increased from 35 in 2000 to almost 39 in 2020. In particular, the age groups over age 55 have swelled in recent years. This phenomenon is not unique to Owatonna as Steele County and the state have experienced similar age shifts as well.

Another important dynamic is the prevalence of lower birth rates. This can be seen in the significant decline in children under the age of 5 from 2010 to 2020. This is due to several reasons including a decrease in persons of child-bearing age, declining birth rates, and reduced immigration.

Table XX Age Distribution

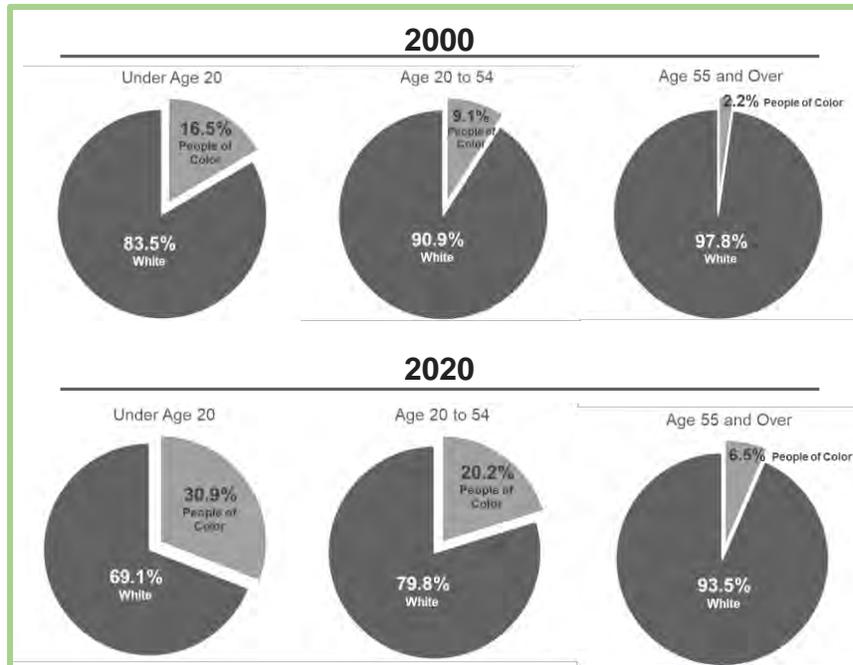
Age Group	2000	2010	2020	Change '00-'10		Change '10-'20		Distribution		
				No.	Pct.	No.	Pct.	2000	2010	2020
Owatonna										
Under 5 years	1,647	2,009	1,602	362	22.0%	-407	-20.3%	7.3%	7.8%	6.1%
5 to 14 years	3,511	3,743	3,864	232	6.6%	121	3.2%	7.6%	7.5%	7.1%
15 to 24 years	3,033	3,027	3,126	-6	-0.2%	99	3.3%	7.4%	6.7%	6.8%
25 to 34 years	3,019	3,365	3,209	346	11.5%	-156	-4.6%	13.5%	13.1%	12.1%
35 to 44 years	3,650	3,368	3,350	-282	-7.7%	-18	-0.5%	16.3%	13.2%	12.7%
45 to 54 years	2,940	3,661	3,188	721	24.5%	-473	-12.9%	13.1%	14.3%	12.1%
55 to 64 years	1,804	2,882	3,438	1,078	59.8%	556	19.3%	4.5%	6.3%	6.8%
65 to 74 years	1,378	1,663	2,648	285	20.7%	985	59.2%	6.1%	6.5%	10.0%
75 to 84 years	1,054	1,225	1,397	171	16.2%	172	14.0%	4.7%	4.8%	5.3%
85 years and over	398	656	598	258	64.8%	-58	-8.8%	1.8%	2.6%	2.3%
Total	22,434	25,599	26,420	3,165	14.1%	821	3.2%	100.0%	100.0%	100.0%
Median Age										
Owatonna	35.0	37.2	38.8	2.2	6.3%	1.6	4.3%	--	--	--
Steele County	35.9	38.5	39.9	2.6	7.2%	1.4	3.6%	--	--	--
Minnesota	35.4	37.4	38.4	2.0	5.6%	1.0	2.7%	--	--	--

Source: US Census

Race and Ethnicity

For over two decades, immigrant families have been attracted to the job opportunities in Owatonna, which has diversified the population. The percentage of the population that are people of color has increased from 8.2% in 2000 to 19.0% in 2020.

The diversity of Owatonna’s population becomes even more pronounced when it is broken down by age. The percentage of the population under age 20 that are people of color has increased from 16.5% in 2000 to 30.9% in 2020. Meanwhile, for the population age 55 and over, the percentage has only increased from 2.2% in 2000 to 6.5% in 2020.



Employment and Labor Force

From 2010 to 2019, the number of jobs in Owatonna ranged between about 17,500 and 18,300. In 2020, there was a sharp decline in jobs due to the Covid-19 pandemic. Although those losses stabilized in 2021, the downward trend persisted through 2022. Some of this persistence can be attributed to a decline in the labor force due to reasons such as increased retirements. For example, the midpoint of the Baby Boom generation (i.e., those born between 1946 and 1964) began reaching age 65 around 2020.

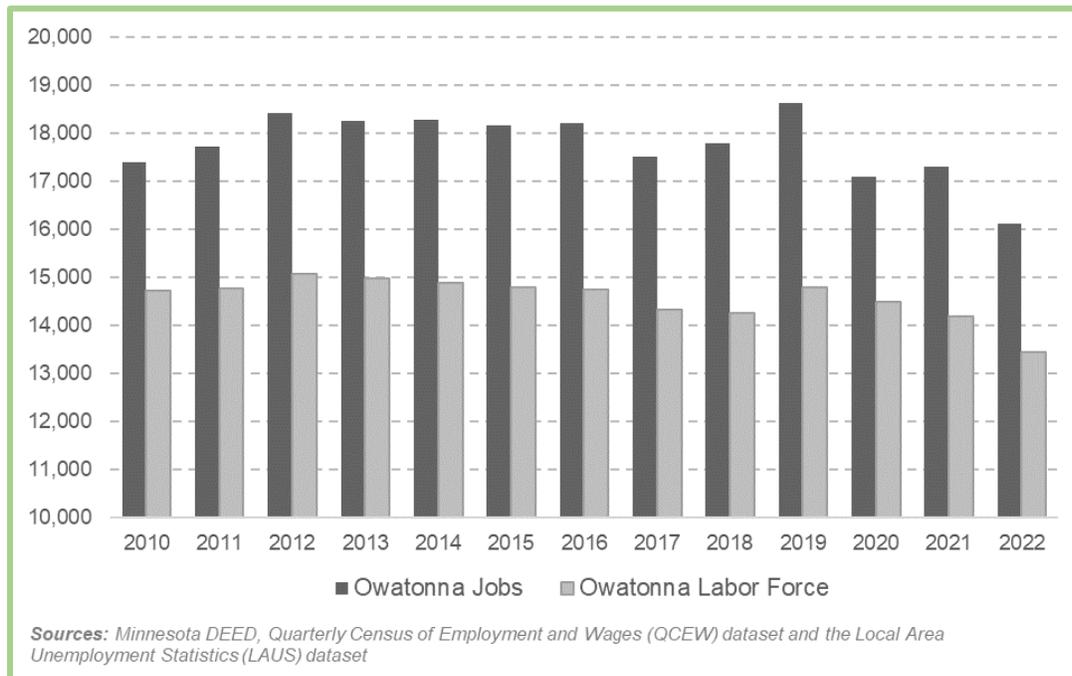


Figure XX Employment and Labor Force

Employment by Industry Sector

Nearly 38% of Owatonna’s jobs are in the Production, Distribution and Repair (PDR) industry sectors. This is significantly higher than the statewide proportion (25%). Conversely, Owatonna has a lower proportion of jobs in the education and healthcare sectors (15%) compared to the state (27%).

A strong employment base in PDR sectors typically means more higher-paying jobs. Moreover, it also results in a net inflow of dollars into the local economy, unlike service sector jobs, which typically recycle dollars within the local economy.

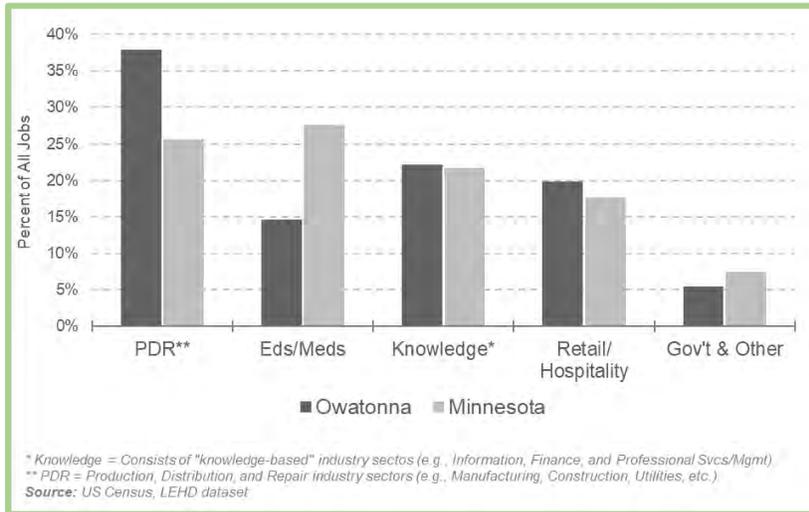
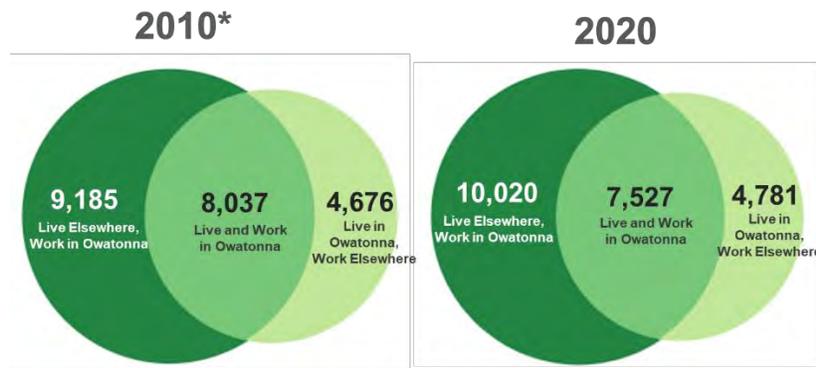


Figure XX Employment by Industry Sector

Worker Commute Patterns

Changing commute patterns can signal important shifts in the local economy, such as the relationship between job growth and the availability of housing. Between 2010 and 2020, the number of people who work in Owatonna but reside elsewhere grew by 835. Meanwhile, the number of people living and working in Owatonna decreased by -510. This imbalance suggests that both new workers and existing workers are unable to find adequate housing in Owatonna and are finding housing in other communities.



* Earliest year data is available.
 Source: US Census, LEHD Dataset

Figure XX Worker Commute Patterns

Development Market Trends

Housing Market Trends

The recession from 2008-2010 resulted in a significant decline in housing construction that lasted into the late 2010s. Starting around 2017, housing construction began to increase once again in Owatonna. Although the volume of construction has not yet risen to pre-recession levels, it has taken on a different form. In the last six years, the majority of units constructed have been in larger multi-family structures of five or more units. This is in sharp contrast to the pre-recession housing boom that was dominated by single-family construction.



Figure XX Housing Construction 2000 - 2022

Additional information on housing can be found in the Comprehensive Housing Needs Analysis completed for Owatonna by Maxfield Research and Consulting in September 2023. This study projects general occupancy housing demand and senior housing demand through 2030. The study also provides recommendations on the amount and type of housing that could be built in Owatonna to satisfy demand from current and future residents through this decade. The full document can be found on the City's website, with additional key information summarized in the land use chapter of this Comprehensive Plan.

Office Market Trends

Nationally, office real estate is undergoing a profound structural change as working from home and flexible schedules have become the norm post-pandemic. Although traditional office spaces will remain an important real estate use, the demand for such space has dropped significantly in a very short period of time. The full impact of this rapid shift is not known, but it is already evident that it is affecting businesses that use office space, office building owners, retail businesses dependent on office workers, traffic patterns, and much more.

The following charts illustrate trends in Owatonna's office market. Below are key findings:

- Owatonna's office market consists of roughly 340,000 square feet of space. This translates to about 12 square feet of office space per resident. Compared to Owatonna's peer communities, this is the lowest ratio of office square feet to population.

- There has been no new office development since 2015. Between 2013 and 2015, four small office buildings were constructed totaling about 9,500 square feet. Therefore, in the last 15 years, the inventory of office space in Owatonna has only increased about 3%.
- In the early to mid-2010s, the office vacancy rate peaked at just over 6%. Despite a short-term spike during the later stages of the pandemic, office vacancy has returned to a rate below 2%. This low vacancy rate suggests a healthy market. However, with more office workers regularly working from home, this data should be watched closely as many businesses may significantly change the amount of office space they need once their current leases expire.

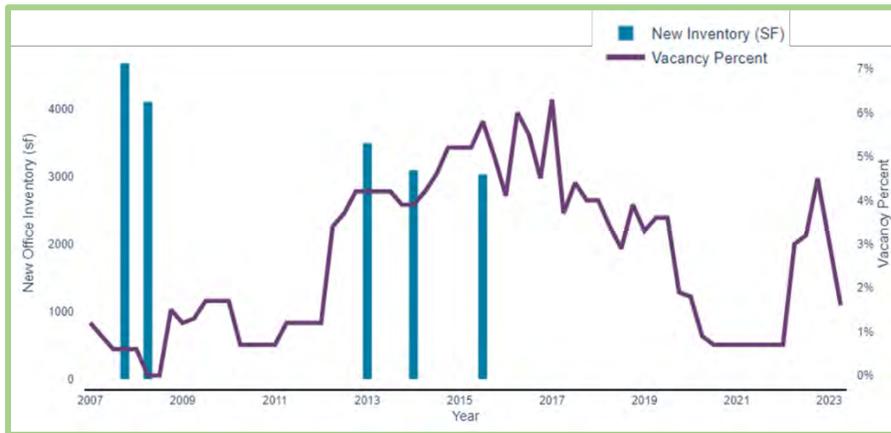


Figure XX Owatonna Office Development and Vacancy Rate 2007-2023
 Source: CoStar

Retail Market Trends

Nationally, over the past 10-15 years, retail real estate has been battered by a shift to more on-line shopping. Much of the retail industry, therefore, has been attempting to adapt to this new environment in which bricks-and-mortar stores have become integral to the overall shopping *experience* instead of simply a *convenient* location to procure a specific good or service. As a result, many marginal retail locations, such as aging shopping centers and poorly sited buildings, have become vacant, been adapted to other uses, or redeveloped altogether.

The following charts illustrates trends in Owatonna’s retail market. Below are key findings:

- Less than 8,000 square feet of new retail space has been constructed since 2013. This is less than 1% growth in Owatonna’s total retail inventory of more than 2.3 million square feet.
- Retail vacancy generally ranged between 3% and 5% prior to 2019. Since 2019, though, the vacancy rate has dropped and has been ranging between 1% and 2%.

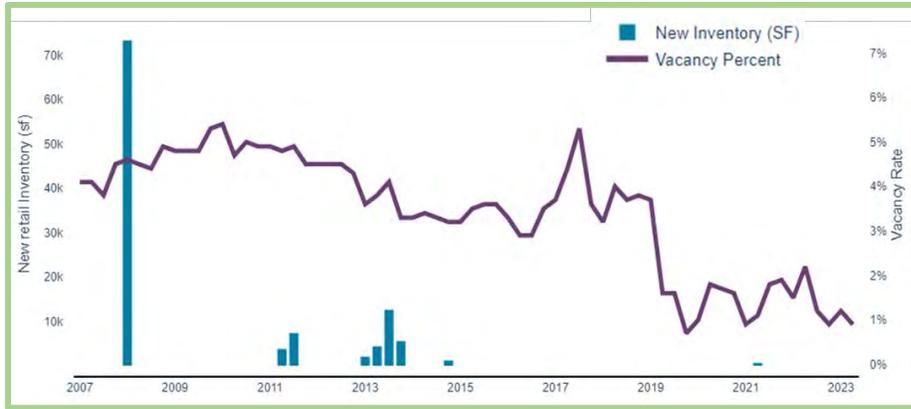


Figure XX Owatonna Retail Development and Vacancy Rate 2007-2023
Source: CoStar

Industrial Market Trends

Nationally, demand for industrial real estate used for warehousing and distribution has grown significantly over the last 10 years. The primary cause is the growth in on-line retailing and its related need for parcel storage and shipments. The growth in on-line retailing has stimulated the industrial market.

The following charts illustrates trends in Owatonna’s industrial market. Below are key findings:

- Several large properties added nearly 1 million square feet of industrial space in late 2020 and early 2021. Over the last 10 years, Owatonna’s total industrial inventory has grown by roughly 30%. This is in sharp contrast to the growth of the office and retail inventories and consistent with national trends.
- Despite the significant increase in new space, the vacancy rate for industrial space remains well below 2%.



Figure XX Owatonna Industrial Development and Vacancy Rate 2007-2023
Source: CoStar

Economic Development Trends

- **Identity and vibrancy.** Improving a city’s vibrancy by creating distinctive, active places is an economic development strategy. Special places that are distinctive and active build personal attachment to a city.
- **The creative economy.** The innovation and creative economies can offer as much to a region as a traditional manufacturing base. And they can serve as attractors of new population.
- **Building attachment.** Strategies that build attachment to Owatonna are retention strategies with respect to the city’s population and its businesses. Building connections and attachment between young people and Owatonna’s parks, trails and downtown may be a key opportunity.
- **Unleashing the existing workforce.** Meeting the needs of families for quality childcare has the effect of freeing up some of the city’s at-home parents to participate in the labor force and strengthen the economy.
- **Preconditions for workforce attraction.** Industrial growth is dependent on the ability to attract a workforce with the right technical skills, and that is often dependent on the availability of a good set of housing options at affordable rent levels.

Economic Development Recommendations

Public input shared during the Comprehensive Plan process underscored the importance and emphasis of Owatonna as an economic leader in the region. Based on public input there are several recommendations to strengthen economic development in Owatonna.

- One of the main concerns expressed was the lack of appropriately priced housing options for people who would like to live and work in Owatonna. This can be seen in the worker commute patterns. The Land Use chapter of this Comprehensive Plan includes recommendations and goals specific to providing adequate housing for those who want to live and work in Owatonna.
- Transit to access jobs in Owatonna and the greater region would be beneficial and supported by public input. A circulator connecting the residential areas to the east and the commercial and industrial jobs to the west could be considered. A circulator would likely require funding support from businesses in the area and could be explored in partnership with the Chamber of Commerce, SMART Bus, and other key stakeholders.
- An emphasis on young people and retaining talent in Owatonna was expressed in public input. Emphasis on community amenities, parks and open spaces, downtown, quality schools and affordable housing – topics emphasized throughout this Comprehensive Plan will help to retain young adults and young families in Owatonna.
- Workforce shortages were a concern expressed in focus groups with businesses and other stakeholders. The city should continue to partner with Steele Co. Works, local colleges, educational organizations, and local businesses.
- Downtown Owatonna is one of the engines for economic development in Owatonna. Continued efforts to bolster the downtown will help to attract both tourists and residents to the City.

DRAFT Economic Development Goals***Goal 1. Continue to support and expand the work force in Owatonna.***

- a) Continue to work with the Owatonna Chamber of Commerce and other business interests to attract and retain businesses in Owatonna.
- b) Continue partnerships with Steele Co. Works, Owatonna Public Schools, Riverland Community College, and other educational organizations to support educational programs that will meet Owatonna's workforce needs.
- c) Work to identify and implement activities, services, and community features that will attract and retain young people in Owatonna.
- d) Continue to identify and develop amenities and services that will attract and retain employees and businesses in Owatonna.

Goal 2. Continue to support business development in Owatonna.

- a) Expand the services and awareness of offering for the business incubator program.
- b) Work to reduce any actual or perceived regulatory barriers to development in Owatonna.
- c) Continue to build and invest in the vibrancy of Downtown Owatonna.
- d) Explore opportunities to expand transit within Owatonna and to surrounding communities to provide increased access for workers.

TRANSPORTATION

Introduction

The city adopted its [2040 Transportation Plan](#) in June 2021. The *Owatonna 2040 Transportation Plan* (the Plan) identifies key transportation issues and opportunities that are intended to advance the city's existing and future needs. The *Imagine Owatonna* background report summarizes key elements addressed in the *Owatonna 2040 Transportation Plan* related to the following elements. There are other transportation related elements from the Plan that have not been included in the background report.

- Existing Conditions
- Vision, Goals, and Policies
- Traffic Forecasts and Operational Needs
- Future System Analysis
- Planned and Potential Projects

Existing Conditions

Roadway Jurisdiction

The City of Owatonna is located in Steele County. There are a total of 173 miles of roadway (centerline) within the City of Owatonna and most of the roadways are local streets (59 percent), followed by Municipal State-Aid Streets (MSAS) (20 percent), county and County State-Aid Highways (CSAH) (14 percent), state roadways (6 percent), and township roads (1 percent). As a Municipal State-Aid Street (MSAS) City, Owatonna can designate qualified local roadways as MSAS. The municipal state-aid street (MSAS) system is a collection of higher volume and key streets located in 148 Minnesota cities. The roughly 3,700 miles of state-aid streets constitute around 16 percent of centerline miles of all city streets. One of the major benefits of having MSAS designation is the opportunity to receive state assistance for construction and maintenance of streets that are part of the system. Table 10 shows the mileage breakdown of the roadway jurisdictions within Owatonna. Figure 18 maps the existing roadway jurisdictional classifications in Owatonna.

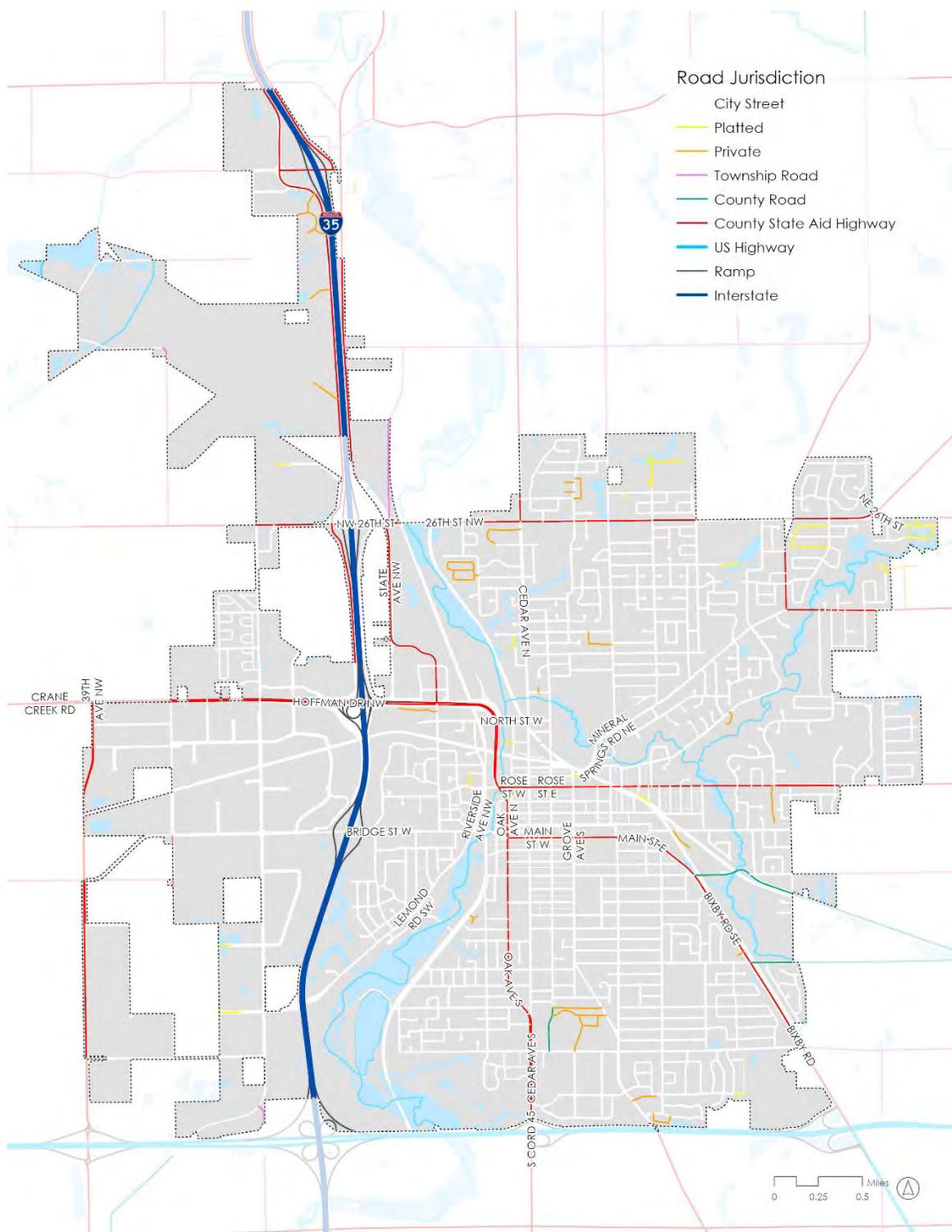


Figure 1 Existing Jurisdictional Classification

Table 1 Jurisdictional and Designation Classification

Jurisdictional Classification System		Mileage	Percentage of Total
State System	Interstate Highway	10.82	6%
	US Highway	.04	0%
	State Highway	0	0%
County System	County State Aid Highway	22.02	13%
	County Highway	2.13	1%
Municipal State Aid Street		34.41	20%
City Street		102.26	59%
Township Road		1.80	1%

Source: Owatonna 2040 Transportation Plan

Roadway Functional Classification

Roadways within the city are currently categorized into four major functional classifications: principal arterials, minor arterials, collectors (major and minor), and local roadways. As shown in Table 11, the city’s existing functional classification system mileage is mostly consistent with Federal Highway Administration (FHWA)’s guidelines; FHWA provides guidance on functional classification system mileage to help ensure balance within a given transportation network system. The two major functional classifications that are not within the FHWA recommended mileage are: minor and principal arterials. Figure 19 maps the existing roadway functional classifications.

Table 2 Existing Functional Classification Mileage

Functional Class	Percentage of Owatonna Roadways	FHWA Percentage Guidelines	Meeting FHWA Guidelines?
Local	66	62 to 74	✓
Minor Collector	7	3 to 15	✓
Major Collector	16	8 to 19	✓
Minor Arterial	7	2 to 6	1% over guideline
Principal Arterial: Expressway	0	0 to 2	✓
Principal Arterial: Interstate	4	1 to 3	1% over guideline
Principal Arterial: Other	0	2 to 6	2% under guideline

Source: Owatonna 2040 Transportation Plan

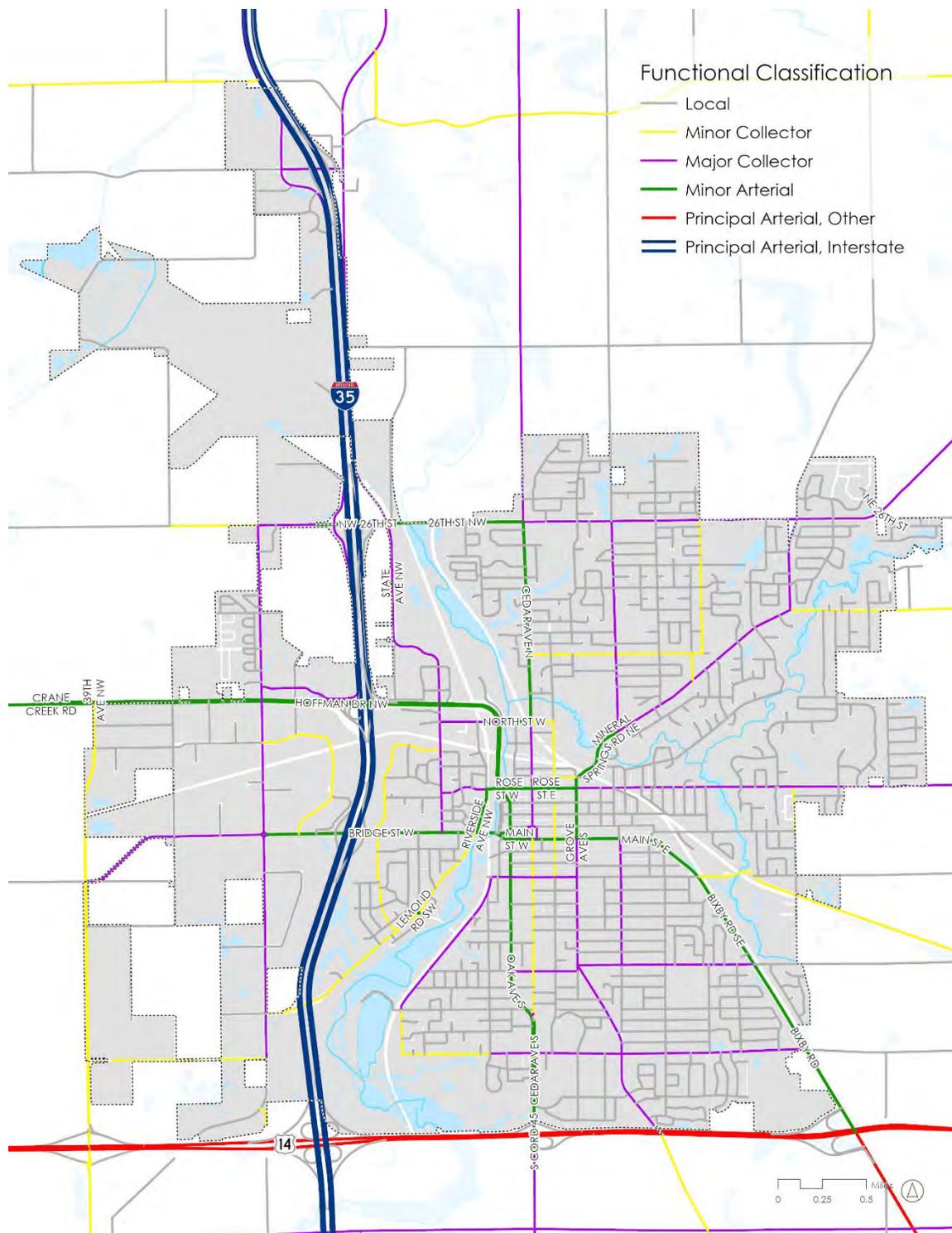


Figure 2 Existing Functional Classification

Traffic Volumes, Roadway Capacity, and Congestion

Planning-level capacity thresholds are used as guidelines to determine if a roadway is approaching or exceeding its capacity. Roadway capacity is determined by dividing the roadway’s volume by the capacity (V/C) thresholds identified for each roadway facility type. Roadways are considered “approaching capacity” if its V/C is 85 percent of the threshold and “at capacity” if the V/C is 100 or higher. The Plan identified two roadways that are approaching capacity:

- North Street East from CSAH 45 to Cedar Avenue North (Volume/Capacity [V/C] = 0.89)
- Mineral Springs Road from Cherry Street to St. Paul Road (V/C = 0.93)

There are currently no roadways that exceed capacity.

Safety Analysis

The top ten intersection crash locations were identified in the Plan and a safety analysis was completed using MnDOT five-year crash data (2016-2020). Table 12 lists the top ten intersection crash locations and the calculated critical index. A critical index is the ratio of the observed crash rate to the critical crash rate; critical indexes above 1.00 indicate potential safety concerns identified at the location. The Cedar Avenue/18th Street intersection is the only intersection with a critical index of 1.00. However, there are several intersections that have calculated critical indexes that are relatively close to 1.00.

Table 3 Top 10 Intersection Crash Locations

	Intersection	Severity					Traffic Control	Critical Index All Crashes
		Fatal	Type A	Type B	Type C	Property Damage		
1	Cedar Avenue and 18th Street	0	1	3	1	9	Signal	1.00
2	Hoffman Drive and 21st Avenue	0	0	1	4	14	Signal	0.96
3	Main Street and Grove Avenue	0	0	1	0	16	Signal	0.89
4	Hoffman Drive and 24th Avenue	0	0	2	2	8	Signal	0.77
5	Hoffman Drive / North Street / Industrial Drive	0	0	1	4	18	Signal	0.76
6	Rose Street / Hoffman Drive / Oak Avenue / Glendale Street	0	0	2	2	16	Signal	0.73
7	Bridge Street / Allan Avenue / Florence Avenue	0	1	3	0	20	Signal	0.72
8	Oak Avenue and School Street	0	1	0	1	11	Signal	0.70
9	Oak Avenue and Main Street	0	0	3	3	18	Signal	0.64
10	Hoffman Drive and State Avenue	0	0	1	0	12	Signal	0.43

Source: Owatonna 2040 Transportation Plan

Multimodal Transportation System

The city adopted a Sidewalk and Trail Plan in December 2012. The plan outlines existing multimodal connections and potential future connections to eliminate gaps within the multimodal network. It also focuses on implementation of sidewalks and trails to accommodate those who walk, bike, and/or roll. Figure 20 maps the existing multimodal system and points of interests. The city also has an ADA Transition Plan that was completed in 2016 which includes an inventory of pedestrian facilities along city roadways. Inventory of pedestrian facilities included:

- 62.76 miles of sidewalks
- 1,018 curb ramps
- 19.03 miles of trails
- 22 traffic control signals
- 16 bus stops

More information related to the [ADA Transition Plan](#) can be found here.

Additionally, Southern Minnesota Area Regional Transit (SMART) operates buses that provide transportation for workers, residents, and visitors throughout Steele, Mower, Waseca, and Freeborn Counties. SMART provides both flex-route and on-demand services. The majority of the SMART service requests are within the City of Owatonna, and generally around retail centers. A few key elements SMART staff shared with the city during the development of the Transportation Plan include:

- Many SMART riders work at Cedar Valley Services and request transport;
- Congestion is experienced frequently at roundabouts;
- Poor pavement conditions directly impact riders' experience;
- Several request to connect 20th Street as there is a gap between 20th Streets just south of McKinley Elementary School ;
- Request for a north-south connection that is east of I-35.

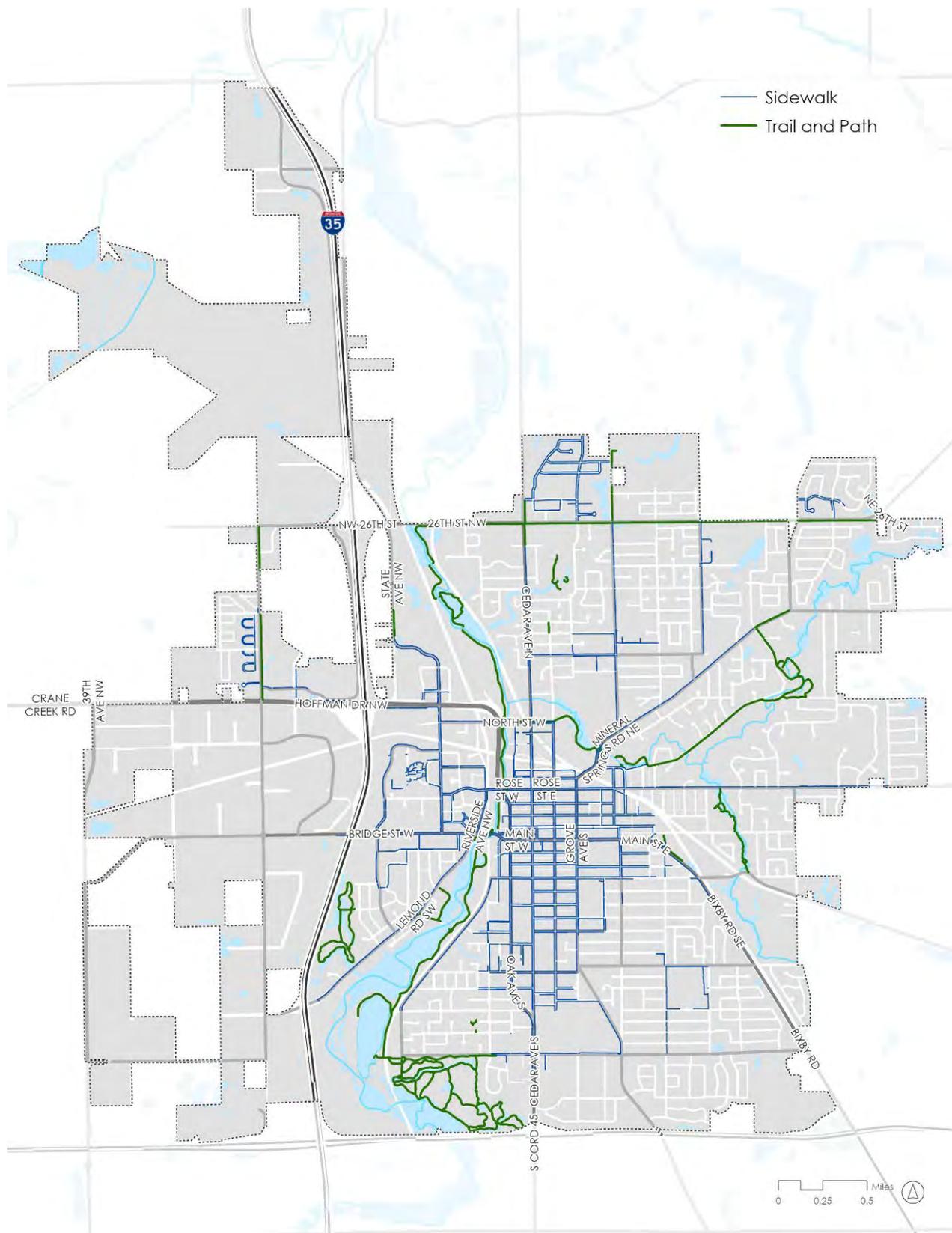


Figure 3 Existing Multimodal System

Vision, Goals, and Policies

The transportation vision statement in the Plan is as follows:

“The transportation vision for the City of Owatonna is to provide an integrated transportation system that will serve the future needs of its residents and businesses, support the city’s development plans, and balance the safety and mobility of its system for all users.”

The Plan lists four goals that support the vision statement along with policies that would help achieve these goals. Goals are focused on finding sustainable investments in the transportation system, enhancing safety for all roadway users, continuing to support and pursue opportunities that would interconnect the pedestrian and bicycle system, and supporting economic development through a reliable, affordable, and efficient multimodal transportation network.

Detailed information on the city’s transportation vision, goals, and policies can be found on pages 25-26 of the Owatonna 2040 Transportation Plan.

Traffic Forecasts and Operational Needs

Forecast 2040 Traffic Volumes

The year 2040 traffic forecasts were used to analyze roadway capacity deficiencies and operational needs on a corridor basis. Performance of the system under this future horizon can be compared to the existing system conditions, from which improvement projects are developed. Forecasted 2040 volumes confirmed that existing roadways experiencing high traffic volumes will continue to do so with additional roadways that are forecasted to experience higher volumes including: Mineral Springs Road, Main Street, and Hoffman Drive. Roadways near the retail clusters along Old Highway 14, west of I-35, are also anticipated to see large traffic volume increases. Table 13 lists the six segments that are anticipated to either approach or exceed capacity in 2040. Figure 21 maps the six segments.

Table 4 Roadways Forecasted to Approach or Exceed Capacity in 2040

Roadway	Extents		V/C	AADT
Bridge Street West	Park Drive NW	Selby Avenue SW	0.93	20,500
18th Street SW	CR 45	Hartle Avenue SE	0.95	9,500
North Street West	CR 45	Cedar Avenue N	1.13	11,300
Cedar Avenue North	North Street W	16th Street NE	0.92	9,200
Mineral Springs Road	Fremont Street E	Cherry Street NE	0.93	9,300
Mineral Springs Road	Cherry Street NE	St. Paul Road NE	1.01	10,100

Source: Owatonna 2040 Transportation Plan

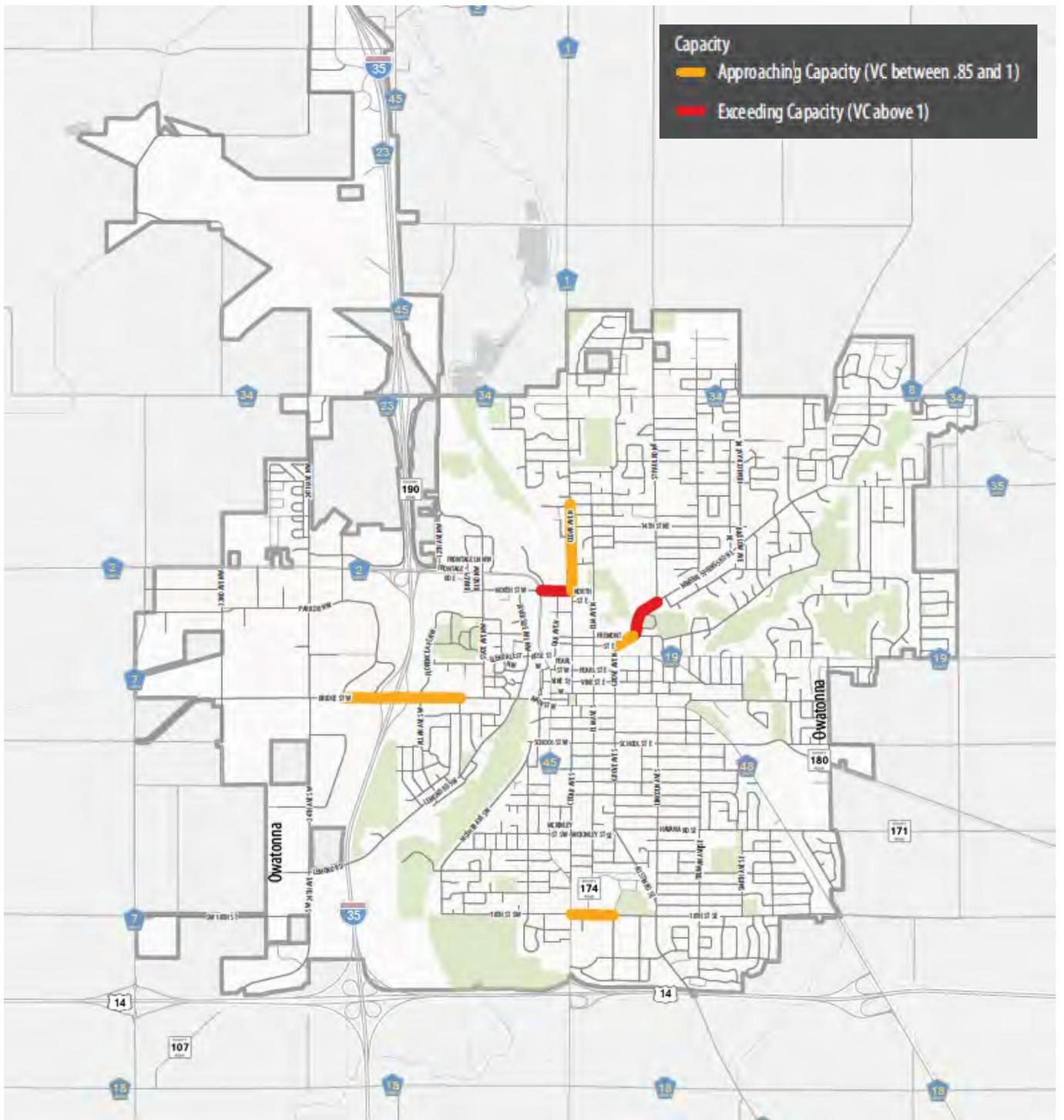


Figure 4 Future Congestion

Source: Owatonna 2040 Transportation Plan

Future System Analysis

Proposed Functional Classification Changes

Roadway functional classification changes are often recommended to help match roadway hierarchy and its functionality. Changes are often recommended to better meet FHWA’s mileage guidance, ensuring consistency among various agencies’ existing and future plans and providing functional balance within a transportation network. Based on multiple factors, the Plan proposed 13 functional classification changes. These changes are listed in Table 14.

Table 5 Proposed Functional Classification Changes

Change ID*	Roadway	Mileage	Existing Classification	Future Classification
1	20th Street NE	0.49	Local	Minor Collector
2	20th Street NE	0.12	Roadway does not exist	Local
3	14th Street NE	1.04	Minor Collector	Major Collector
4	Mineral Springs Road	1.24	Major Collector	Minor Arterial
5	Dane Road	0.73	Minor Collector	Major Collector
6	Florence Avenue	0.80	Minor Collector	Major Collector
7	Riverside Avenue	0.25	Minor Arterial	Minor Collector
8	Riverside Avenue	0.09	Minor Arterial	Major Collector
9	Bridge Street West	0.08	Minor Arterial	Local
10	Private Access along Bridge Street West	0.01	Minor Arterial	Remove
11	Lincoln Avenue South	1.21	Major Collector and Local	Minor Collector
12	Truman Avenue SE	1.00	Local	Minor Collector
13	SW 33rd Avenue	0.59	NA	Local

Source: Owatonna 2040 Transportation Plan

Proposed Jurisdictional Changes

Roadway jurisdictional changes are crucial when developing a future system plan as it impacts local, regional, and state agencies’ functions and responsibilities related to maintenance, construction, improvements, and finances. The goal of a jurisdiction realignment is to match the management of roadways with their intended function and with the jurisdiction best suited to maintain them. The Plan proposed six jurisdictional changes, listed in Table 15 **Error! Reference source not found.**. Based on the proposed jurisdictional changes, the city is anticipated to add approximately four additional miles to its local network.

Table 6 Proposed Jurisdictional Changes

Change ID*	Roadway	Mileage	Existing Jurisdiction	Future Jurisdiction
1	Kenyon Road	0.52	County	City
2	Dane Road	0.75	County	City
3	29th Avenue (Outside of City system, but along city boundary)	3.35	Roadway does not exist	County
4	Rose Street	2.41	County	City
5	Havana Road	0.24	County	City
6	SE 18th Street Extension	0.67	Roadway does not exist	County

Source:
Owatonna
2040

Transportation Plan

Future Multimodal System

Ensuring safe connectivity for non-motorists was highlighted as one of the top transportation priorities by the city in the Plan. As a result, several multimodal improvements were proposed to help eliminated existing gaps within the multimodal network which include new sidewalks and trails. Figure 22 maps the proposed multimodal improvements.

Future Transit System

Transit needs in Owatonna will continue to be served by SMART, Steele County area transit provider. As additional transit needs come to the city’s attention, the city will work closely with local, regional, and state agencies to continue to identify needs and find opportunities to expand its transit services to ensure mobility, connectivity, accessibility, and safety to those with the greatest need for transit (i.e., elder adults, individuals with disabilities, people without access to a personal vehicle, etc.).

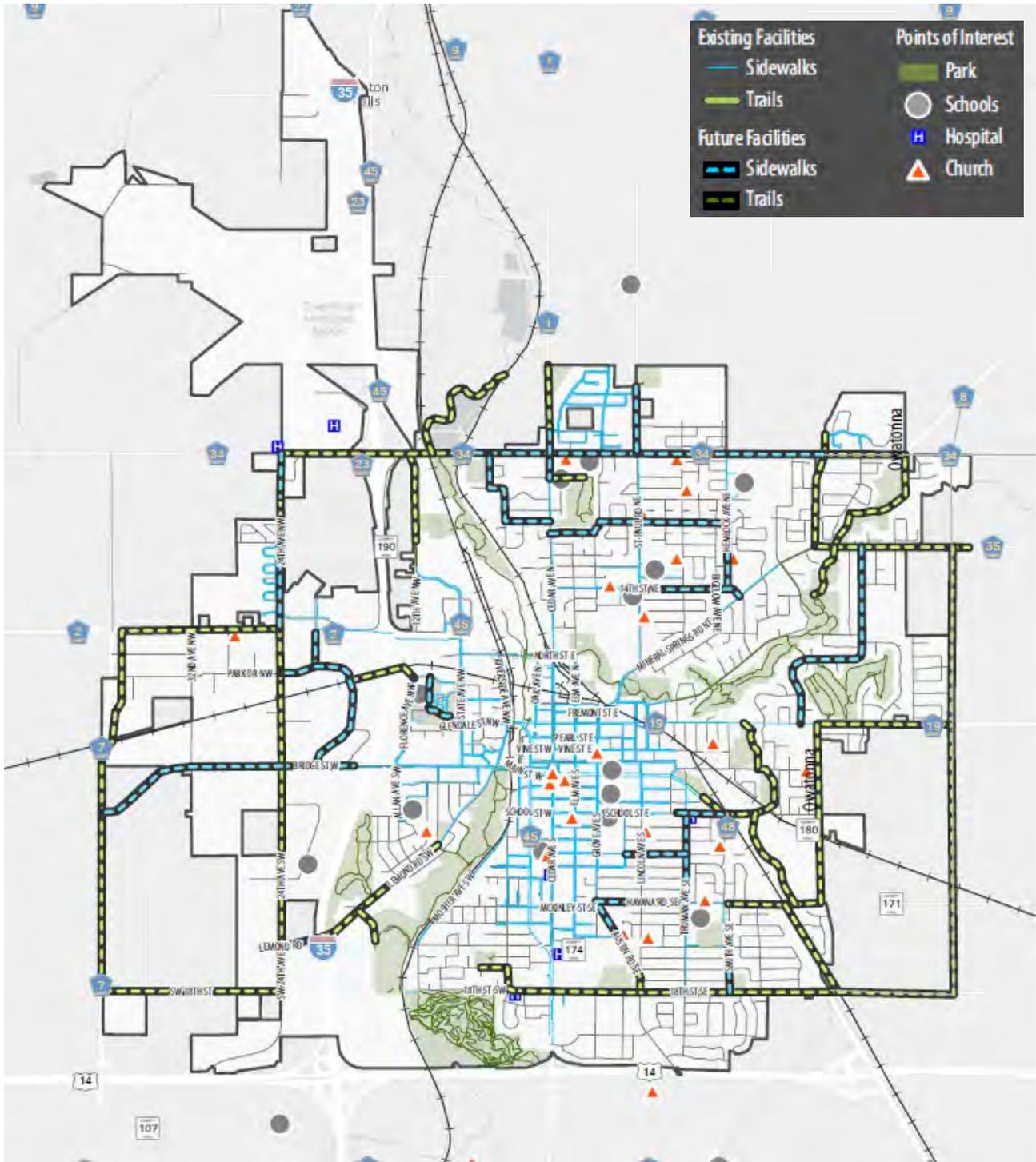


Figure 5 Future Multimodal System

Source: Owatonna 2040 Transportation Plan

Planned and Potential Projects

As part of the development of the Owatonna 2040 Transportation Plan, several potential projects were identified based on traffic volumes, crash data, future land use, stakeholder feedback and community engagement. The list consists of potential safety and operational improvements and multimodal enhancement projects. A complete list of planned and potential future projects is provided in Table 16 below. It is important to note that even if projects are identified as “Planned”, these projects may not have funding guaranteed and it may not be within the city’s control to initiate these projects if the roadway is not under the city’s jurisdiction. The City of Owatonna should continue to work closely with MnDOT, county, and/or townships to stay up to date on upcoming projects and funding opportunities for these projects.

Table 7 Planned and Potential Projects

Project Name	Project Description	Identified by:	Planned	Potential
CSAH 34 at CSAH 45 Intersection Improvement	Temporary signal replaced by roundabout	Steele County CIP	✓	
CSAH 34 (Straight River to CSAH 8)	Reconfigure lane markings to 3-lane cross section	Steele County CIP	✓	
North Street (CR 2 to Cedar Avenue)	Address existing congestion issues (V/C currently near or approaching capacity)	This Plan's Congestion Analysis		✓
Mineral Springs Road (Cherry Street to St. Paul Road)	Address existing congestion issues (V/C currently near or approaching capacity)	This Plan's Congestion Analysis		✓
Bridge Street West (Park Drive NW to Selby Avenue SW)	Address future congestion issues (V/C expected to be near or approaching capacity in 2040)	This Plan's Future Congestion Analysis		✓
18th Street SW (CR 45 to Cedar Avenue North)	Address future congestion issues (V/C expected to be near or approaching capacity in 2040)	This Plan's Future Congestion Analysis		✓
North Street West (CR 45 to Cedar Avenue North)	Address future congestion issues (V/C expected to be near or approaching capacity in 2040)	This Plan's Future Congestion Analysis		✓
Cedar Avenue North (North Street West to 16th Street NE)	Address future congestion issues (V/C expected to be near or approaching capacity in 2040)	This Plan's Future Congestion Analysis		✓
Mineral Springs Road (Fremont Street East to Cherry Street NE)	Address future congestion issues (V/C expected to be near or approaching capacity in 2040)	This Plan's Future Congestion Analysis		✓
Mineral Springs Road (Cherry Street NE to St. Paul Road NE)	Address future congestion issues (V/C expected to be near or approaching capacity in 2040)	This Plan's Future Congestion Analysis		✓

Source: Owatonna 2040 Transportation Plan

Project Name	Project Description	Identified by:	Planned	Potential
CSAH 45 State Avenue (CSAH 2 to CSAH 34)	Reconfigure lane markings from a 4-lane cross section to 3-lane	Steele County CIP	✓	
Signal Upgrades	Evaluate and upgrade signals	Steele County CIP	✓	
CSAH 2 (CSAH 7 to I-35)	Patch concrete pavement	Steele County CIP	✓	
CSAH 48 at 18th Street Roundabout	Construct roundabout	Steele County CIP, Owatonna CIP	✓	
CSAH 48 – Main Street (CSAH 45 to Chambers Ave.)	Rehabilitate pavement, convert to 3-lane cross section	Steele County CIP, Owatonna CIP	✓	
CR 174 Elm Avenue (18th St. SE to Park St.)	Reconstruct roadway	Steele County CIP	✓	
CSAH 8 Kenyon Road (CSAH 35 to CSAH 34)	Reconstruct to urban highway, add links to trail system	Steele County CIP	✓	
Bridge 4866	Replace bridge, add links to trail system	Steele County CIP	✓	
CSAH 23 (CSAH 34 to North) Realignment	Realign to the CSASH 34/24 th Street intersection, construct roundabout	Steele County CIP	✓	
29th Avenue (from 18th St. SE to CSAH 34)	Construct a north-south route on the east side of Owatonna	Steele County CIP	✓	
CSAH 34 (Future CSAH 7 to 24th Ave. NW)	Reconstruct gravel highway with paved surface	Steele County CIP	✓	
CSAH 34 (24th Ave. to I-35)	Reconstruct to urban cross section and construct multiuse trail	Steele County CIP	✓	
CSAH 34 at I-35	Construct roundabouts at both I-35 ramps, construct multiuse trails	Steele County CIP	✓	
CSAH 34 at St. Paul Road	Construct a roundabout	Steele County CIP	✓	
CSAH 45 (TH 14 to State Ave.)	Reconstruct the highway	Steele County CIP	✓	
CSAH 48 (US 218 to Chambers Ave.)	Realign intersection at Truman Ave., School Street and Havana Road	Steele County CIP	✓	
Future Sidewalks	Construction of sidewalks as shown in Figure 21	Owatonna Sidewalk and Trail Plan	✓	
Future Trails	Construction of trails as shown in Figure 21	Owatonna Sidewalk and Trail Plan	✓	
Truman Avenue (Havana Road to Main Street)	Reconstruct Truman Avenue	Owatonna CIP	✓	
Bridge Street Reconstruction	Reconstruct Bridge Street	Owatonna CIP	✓	
Downtown Streetscape (Cedar Avenue from Broadway to Rose Street)	Street reconstruction and streetscaping	Owatonna CIP	✓	
State and 26th Roundabout	Construct roundabout	Owatonna CIP	✓	
18th Street South Trail (Austin Road to Linn Avenue)	Construct shared user path	Owatonna CIP	✓	
Cedar Avenue & 18th Street Intersection	Address safety concerns (critical index near one)	This Plan's Safety Analysis		✓
Hoffman Drive & 21st Avenue Intersection	Address safety concerns (critical index near one)	This Plan's Safety Analysis		✓

Source: Owatonna 2040 Transportation Plan

DRAFT Transportation Goals

Goal 1. Improve transportation connections within Owatonna.

- a) Explore a new east-west vehicle and bicycle/pedestrian connections to connect the east and west sides of the City.
- b) Explore a new north-south vehicle and multi-modal connection on the east side of the City.
- c) Include traffic calming on roadway segments and intersections where pedestrians are present.
- d) Narrow roads and rights-of-way where possible to fit neighborhood character.
- e) Explore allowing more continuous roadway corridors by removing stop signs and other controls where possible.
- f) Continue to prioritize road maintenance throughout the City.

Goal 2. Improve multimodal transportation options in Owatonna.

- a) Explore expanded transit within the City to provide increased access for workers and shoppers.
- b) Explore expanded transit options between Owatonna and nearby cities.
- c) Provide bike lanes and sidewalks on key roadways.

SUSTAINABILITY AND RESILIENCE

Introduction

The City of Owatonna has chosen to include a chapter in its Comprehensive Plan dedicated to its Sustainability and Resilience. The Comprehensive Plan is a way to acknowledge existing work related to environment and sustainability and tie city initiatives, plans and goals together under one umbrella. Owatonna has excellent access to natural resources and protecting and sustaining them for the future is a long-term priority.

It is important to define sustainability at the outset, as it can have different meanings to different people. Sustainability in the context of this Comprehensive Plan means meeting the needs of the present generation without jeopardizing the ability of future generations to meet their needs.

Additionally, resilience is a topic that is regularly being addressed in Comprehensive Planning and discussed together with sustainability. Strategies that are deployed to achieve resilience are those that increase the ability to adapt to changing conditions and recover rapidly when disruptions or events occur. When considered regarding major weather events, resilience is often discussed as a system that is designed to better withstand the impact and recover more readily after a major event occurs.

For many reasons, the comprehensive planning process is an ideal time for a community to take inventory, complete assessments, engage a broad cross section of stakeholders, and foster conversations about sustainability and resilience. The health and well-being of the entire region is threatened by climate change. In the Midwest, those threats are manifested in more severe storms, more numerous flood events, and temperature extremes. These risks impact infrastructure, as well as the health and prosperity of residents and frequently impact socially disadvantaged populations disproportionately.

Existing Conditions

The city has many existing natural resources that provide an amenity for residents, businesses and tourists.

- The Straight River runs north-south through the middle of the city and branches off into Maple Creek and Izaak Walton Creek heading east.
- Crane Creek flows through the northwest tip of the city near the regional airport.
- Lake Kohlmeier is next to the Straight River in the south end of the city and boasts a swimming beach, fishing pier, walking paths and picnic tables.
- Much of the land along waterways is preserved in city-owned park and trail land.

These natural resources are shown in **Figure 1**, which also shows the location of parks and trails in the city.

Additionally, much of the land along the city's waterways is designated by FEMA as either floodway, 100-year floodplain or 500-year floodplain. The city has a Floodplain Management Ordinance which regulates the types of development that can occur in these areas. Generally, any development in the floodplain needs to be elevated above the regulatory flood protection elevation.

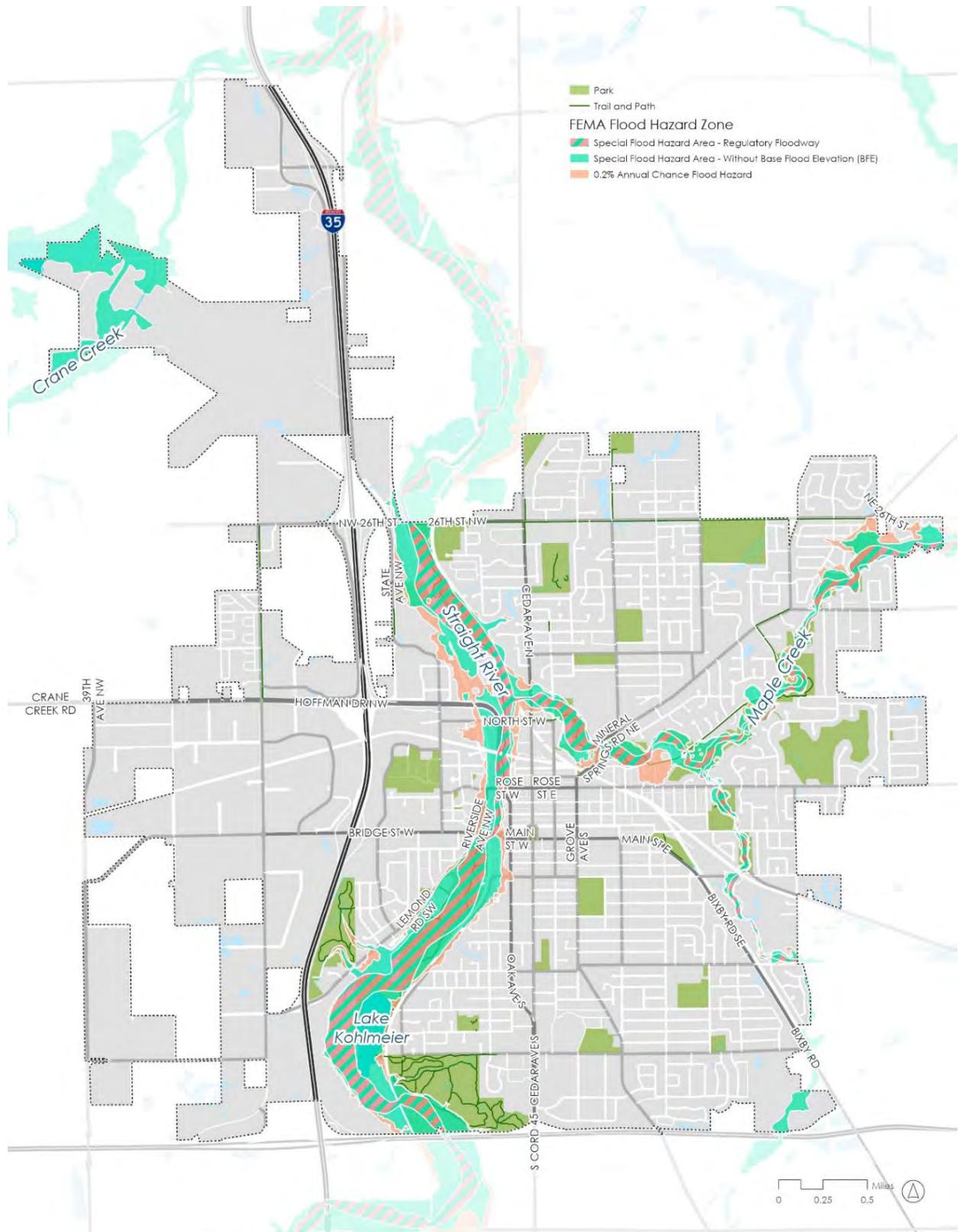


Figure 1 Natural Resources

Current Initiatives

The city has several initiatives that relate to the environment and sustainability. These initiatives include tree preservation and management, river cleanup and public works initiatives. Additionally, there are several adopted plans that discuss these topics. Current initiatives and plans are listed below.

Current Initiatives

- The city has several programs for planting, preserving and managing trees: Tree City USA, Shade Tree Committee, Emerald Ash Borer management.
- The city partners to clean up its water through the Straight River Cleanup – Clean Rivers Partners (CRP). "Clean H2Owatonna" is the city's Stormwater Management Program.
- Public Works has objectives to: provide and operate a Municipal Separate Storm Sewer System (MS4), provide and properly manage a yard waste compost site, protect the environment through administration of programs and permits, maintain a healthy and diverse urban forest; public Works Wastewater Outreach and Education.
- Owatonna is a "Pollinator Friendly City."
- The city has a compost site for community yard waste.

Current Plans

- FY 2022-2024 Strategic Plan goals for Flood Mitigation:
 - Consider engineering studies to address localized areas for flood control
 - Review options and funding sources for implementation
 - Work towards removing city facilities from floodplain
 - Pursue strategic removal of homes in floodplain
- FY 2022-2024 Strategic Plan goals for Emergency Management:
 - Continue disaster response and preparedness efforts
 - Develop Continuity of Operation Plans for the city
 - Implement 5-year Hazard Mitigation Plan
- Parks and Trails Master Plan goals to:
 - Protect and secure land for parks and trails in areas with significant natural resources such as wooded areas, prairie restoration areas, Straight River, Lake Kohlmer, Maple Creek, and Issac Walton Creek.
- [Steele County Hazard Mitigation Plan](#)
- Owatonna LRAP (Long Range Asset Plan) will address the sustainability and resiliency of city facilities.

Sustainability and Resilience Trends

- Sustainability and resiliency trends are intimately tied to land use patterns, design and function of parks and open space, economic development, and alternative mobility options.
- Planting trees and other landscaping along streets and in parks play a vital role in storm water management and quality improvements. There is also a renewed awareness about the public health benefits associated with urban forests.
- Select species of trees for urban forests that are adaptable to climate change and disease resistant.
- Using structured underground stormwater management systems with new tree plantings in highly impervious areas such as along streets and in parking lots.
- Rather than designing stormwater ponds, instead creating native planting amenity areas that can be used as open space.
- Participating in programs and partnerships that encourage City-led sustainability actions such as Green Step Cities, and Regional Indicators Initiative.
- Healthy buildings include aspects such as indoor air quality, lighting, access to open space, etc.
- Shift towards electric vehicles and the installation of charging infrastructure that is more reliable and convenient.
- Policies that focus on multiple energy sources, transition to new renewable energy options, and energy conservation should be explored.
- Partnerships that promote and support access to food, health services, housing, emergency preparedness, and overall community wellbeing should be encouraged.
- Shift towards a smart growth pattern with city infrastructure that is sustainable and affordable long-term.

DRAFT Sustainability and Resilience Goals

Goal 1. Continue activities that preserve and maintain Owatonna’s natural resources

- a) Continue efforts to plant, preserve and manage trees within the City including Tree City USA, Shade Tree Committee, Emerald Ash Borer management.
- b) Continue efforts to ensure clean water including partnership with the Straight River Cleanup – Clean Rivers Partners (CRP) and through the City’s Clean H2OWatonna program.
- c) Continue public works objectives to provide and operate a Municipal Separate Storm Sewer System (MS4), provide and properly manage a yard waste compost site, protect the environment through administration of programs and permits, maintain a healthy and diverse urban forest.
- d) Continue to embrace the city’s status as a Pollinator Friendly City and explore ways to include native plantings in parks and new developments.
- e) Continue strategic plan goals for flood mitigation and emergency management.

Goal 2. Explore programs and regulations that will enhance the city's sustainability and resilience

- a) Explore participation in the GreenStep Cities program to encourage city-led sustainability actions.
- b) Explore the adoption of ordinance language to establish shoreline buffers, address erosion issues along the city's waterways and protect waterways from pollution.

Goal 3. Continue to develop sustainable and equitable governance structures

- a) Commit to transparency and inclusion in all City decisions and actions, including exploration of a communications hub of events and resources for new and existing residents.
- b) Embrace diversity as a strength and work to ensure city leadership is representative of this diversity.

Goal 4. Continue to provide city services in an efficient and sustainable manner

- a) Plan for efficient and effective growth of City infrastructure and services.
- b) As shown in the City's Future Land Use Map, approach development growth that is sustainable in the long-term.
- c) Maximize efforts to incorporate energy savings, renewable energy, resilience, and sustainable practices in all areas of City services.
- d) Continue to be fiscally responsible through careful stewardship of City resources and staff.

UTILITIES

Introduction

Owatonna has adopted city-wide plans for water supply, wastewater and stormwater, which it relies on to plan for and provide these services to city residents. This chapter discusses these items at a high-level as it relates to future planning, but mostly relies on and references existing plans for these topics. The goals in this chapter guide the city to continue coordination of utility plans with planned growth in the Comprehensive Plan.

Water Supply

Existing Conditions

Currently, there are eight municipal wells that provide water for the city. All of these wells are installed in bedrock, with depths ranging from 670 to 1325 feet, that draw water from the Prairie Du Chien Jordan, Prairie Du Chien - Mt.Simon and Prairie du Chien - Wonewoc aquifers. Owatonna Public Utilities (OPU) is responsible for water supply within the city. The utility also provides electricity and natural gas to the Owatonna area. **Figure 1** shows the current water main system within the city.

Plans and Growth

All public water suppliers in Minnesota that operate a public water distribution system and serve more than 1,000 people (including OPU) must adopt a water supply plan approved by the Department of Natural Resources (DNR). Water supply plans must be updated and submitted to the DNR for approval every ten years. The most recent water supply plan was submitted to the DNR in 2017, and approved by the OPU Commission in March 2018. The OPU Commission is made up of representatives from each ward in the city.

One of the purposes of a water supply plan is to account for future water supply needs and population growth. It is anticipated that OPU will be required to update its water supply plan sometime between 2026-2028. This future water supply plan will analyze any water use trends and population growth that has occurred since the last plan, as well as anticipated population growth included in this Comprehensive Plan. Should proposed development occur in any of the planned growth areas on the east side of the city, as shown in the Future Land Use map, water services will need to be extended to those areas.

Wastewater

Existing Conditions

The existing wastewater collection and treatment system for the city includes the following components:

- Approximately 148 miles of sewer gravity main
- Approximately 5.6 miles of sewer force main
- Approximately 3,000 sewer manholes
- 18 sewer lift stations
- One municipal wastewater treatment facility (WWTF)

The basic layout of this system is shown in **Figure 1**.

Plans and Growth

In 2017 the city initiated a Wastewater Treatment Plant Expansion, which is expected to be completed in 2025. The expansion was needed because the Wastewater Treatment Facility (WWTF) had been operating at or above its capacity for several years. The project will expand the plant from its current capacity of five million gallons per day (MGD) to more than nine million MGD and will serve the city's expected growth through 2050.

In 2023, the city hired Advanced Engineering and Environmental Services, LLC and Nero Engineering to conduct a Wastewater Collection System Study. The purpose of the study was to plan for future growth of the wastewater system and account for the additional capacity provided by the wastewater treatment plant expansion.

The study evaluated for future growth trends. The study service area was developed by reviewing current planning documentation, considering previously completed planning documents, evaluating geographical boundaries, and discussions with City staff. These boundaries establish the future growth areas. This growth area map is shown in **Figure 2**. This map will need to be compared with the adopted Future Land Use map in this Comprehensive Plan to determine whether there are any major incompatibilities with the planned land uses, and intended growth of the wastewater system.

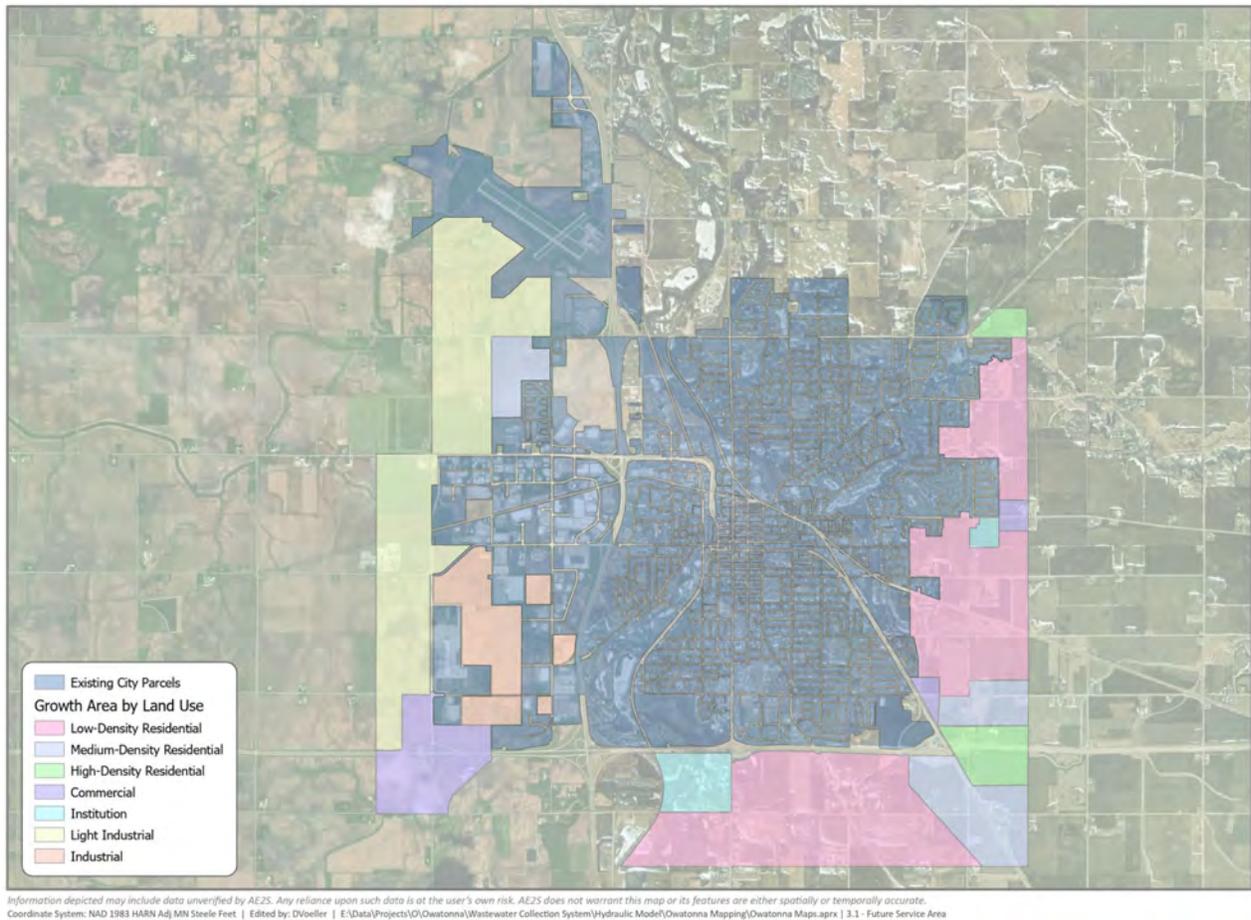


Figure 2. Wastewater Collection System Future Service Area and Planned Land Uses
 Source: Owatonna Wastewater Collection System Study

The Wastewater Collection System Study also identified existing bottlenecks in the system, reviewed how the system will grow and guided capital improvements to ensure the collection system is adequate for today and the future. Recommendations from this study are shown in **Table 1** and **Figure 3** shows the 30-Year Improvements Prioritization.

Table 1 30-Year CIP Wastewater Projects

Project Number	Capital Improvement Project	Anticipated CIP Year	Estimated CIP Cost
WW-01	Straight River Trunk Sewer #1	2024	\$2,759,619
WW-02	Straight River Trunk Sewer #2	2025	\$1,523,750
WW-03	18 th St and Smith Ave Trunk Sewer	2026	\$3,142,929
WW-04	Oakwood Lane Sewer Replacement	2027	\$999,442
WW-05	Straight River Trunk Sewer #3	2028	\$1,412,103
WW-06	Linn Ave Trunk Sewer	2029	\$2,936,955
			\$12,774,798

Source: Owatonna Wastewater Collection System Study

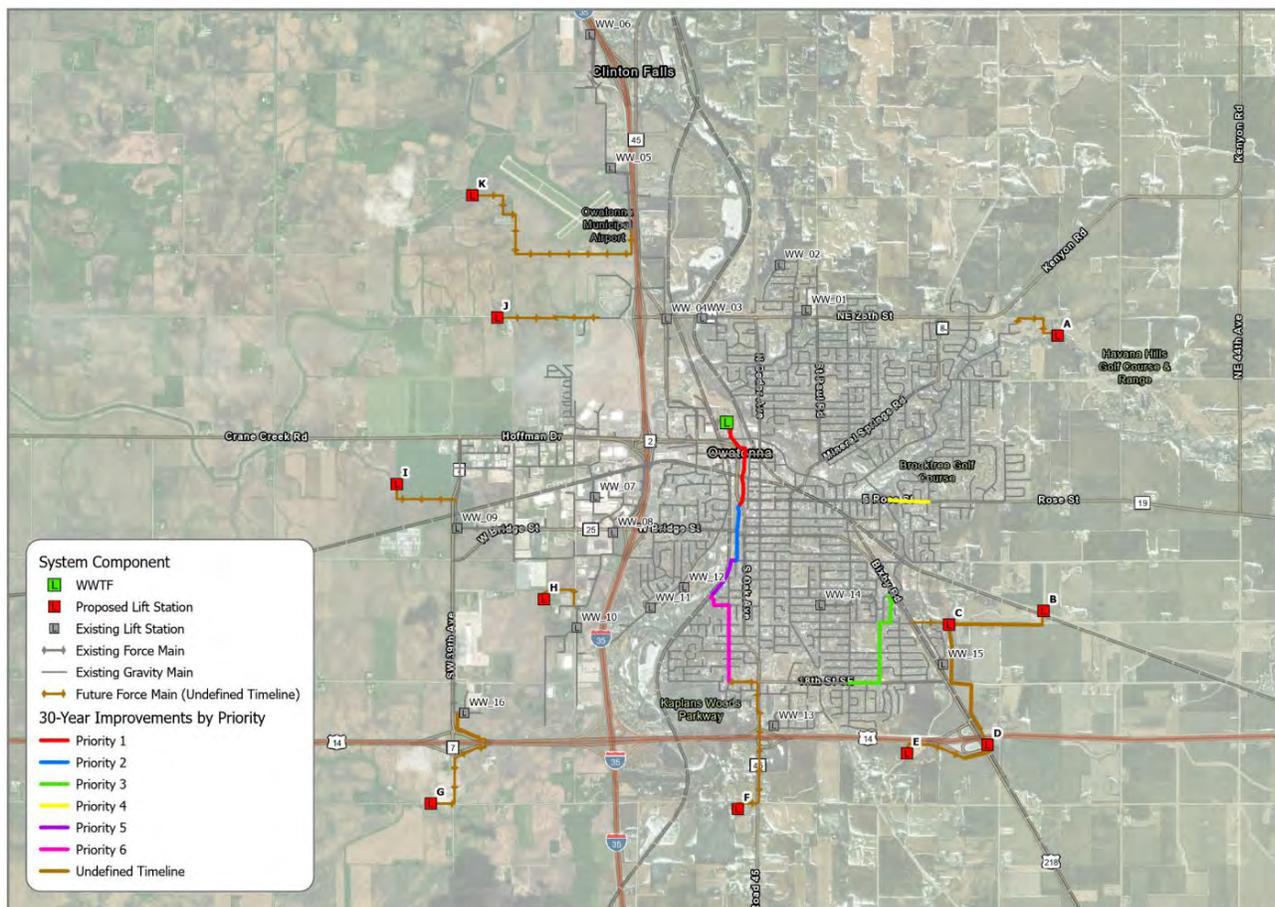


Figure 3 Wastewater 30-Year Improvements Prioritization
Source: Owatonna Wastewater Collection System Study

Stormwater

Existing Conditions

The city is situated around the Straight River, to which all runoff generated within the city ultimately discharges. Several creeks are also located around the city, which drain to the Straight River, including Maple Creek, Crane Creek, Willow Creek, and Izaak Walton Creek.

Aside from the river and creeks, the city has few other natural waterbodies. Lake Kohlmeier is the only major waterbody and wetlands are sparsely located throughout the city, with the vast majority located adjacent to the river.

Plans and Growth

The city is governed by the Minnesota Pollution Control Agency (MPCA) through National Pollutant Discharge Elimination System (NPDES) Permit called MS4 Permit. MPCA's stormwater program regulates municipal separate storm sewer systems (MS4s) to reduce the amount of sediment and pollution that enters surface and ground water from storm sewer systems to the maximum extent practicable. The city's Stormwater Ordinance requires each applicant for a building approval or subdivision approval to submit a stormwater management plan.

The city also has a Stormwater Management Program called "Clean H2Owatonna" which is designed to reduce stormwater pollution and eliminate prohibited non-stormwater discharges. Moving forward, the city should continue explore ways to improve its MS4 Program and look for opportunities to improve the resiliency of stormwater management in the city.

DRAFT Utilities Goals

Goal 1. Work with Owatonna Public Utilities to maintain the existing water supply system and plan for expansion of this system as the city plans for growth.

Goal 2. Continue to plan for expansion of the wastewater system as the city plans for growth and implement actions from the 2023 Wastewater Collection System Study or subsequent updates to this plan.

Goal 3. Continue to enforce the city's Stormwater Ordinance and MS4 permitting through the MPCA. Continue the city's Clean H2Owatonna stormwater management program.