

# Eau Claire Comprehensive Plan 2015

## Transportation System Assessment



City of Eau Claire Wisconsin

# Transportation Assessment

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## Transportation System Assessment

This section of the *Eau Claire Comprehensive Plan* focuses on the City's transportation system. It identifies transportation-related issues to be addressed through the comprehensive planning process and it establishes a baseline of existing conditions from which future transportation needs can be identified. Transportation issues are intertwined with land use decisions and other public policies regarding growth and development. As a result, transportation should be considered during all aspects of the planning process. The following section identifies some of the more significant transportation issues currently facing the City of Eau Claire.

### Transportation Issues

The following issues were identified early in the study process through discussions with City staff and a thorough review of existing planning documents. These issues will be discussed, debated and evaluated during the planning process. The major transportation issues identified include:

- 1. Movement across I-94:** What should be done to provide access over I-94 to growth areas presently in the Towns of Union and Washington?
- 2. Railroad "Quiet Zones":** Should the City invest in railroad crossing improvements at selected locations to that trains do not sound their whistles?
- 3. Galloway Street Improvements:** Should a bridge be built on Galloway Street over the railroad track so that traffic may be reduced on Birch Street?
- 4. Golf Road Interchange:** What should be done to relieve the growing traffic congestion at the interchange of Golf Road and US 53?
- 5. Transit Alternatives:** Should the City adopt the changes recommended in the 2014 *Transit Development Plan*? Should the City continue support for passenger rail service?
- 6. Cameron Street Interchange:** Should the City continue to request that WisDOT build a new interchange along I-94 at Cameron Street? Should the City pay part of the cost?
- 7. Sidewalk Requirements:** Should the City continue to require sidewalks on both sides of new streets or should amendments to this requirement be made?
- 8. Trail Connectivity:** To what extent should additional investments be made to construct a connected trail system? Where should future trails be located?

## Summary of Findings

Some significant findings were revealed based on the analysis of the existing conditions of the Eau Claire transportation system. These findings are listed below.

### Road Capacity and Overall Level of Service

Generally, traffic moves very well in Eau Claire with few delays and a relatively low rate of crashes. The majority of roads in Eau Claire can accommodate the current traffic volumes as a whole and congestion is not a major issue. Most roads are under capacity and create few major delays. However certain areas do exhibit time of day or seasonal congestion, or are affected by intersection limitations. Congested segments include portions of Farwell Street, Harding Avenue and selected other segments throughout the City.

### Land Use

Eau Claire has relatively low-density housing and has many other land uses and developments that are auto-dependant. This is quite common among Midwestern cities similar to Eau Claire in population and geography. As the City continues to grow and expand, maintaining the proper connections and an adequate road system will be important.

### Travel Behavior

The automobile is easily the most common mode of transportation for people going to work. However, it is worth noting that compared to the U.S. average, Eau Claire has a high percentage of people who walk to work, but the percentage of people who carpool or use transit is lower than the U.S. average. These results may be due to the presence of the University of Wisconsin - Eau Claire and its large number of students and faculty. Median commute time for workers in Eau Claire in 2000 was approximately 15.1 minutes, which is significantly less than the national average.

### Downtown Access and Circulation

Downtown Eau Claire has a typical roadway grid system that supports downtown urban land uses. This grid system is shaped around the Chippewa River which winds through the downtown area. Barstow Street and Graham Avenue were reconstructed in 2013 as two-way downtown streets from their prior one-way configuration to make them more supportive of the downtown retail and pedestrian environment.

One of the primary complaints voiced is the lack of a good connection between the downtown area and the regional highway system, which includes I-94, US 53, US 12 and Wisconsin Highway 312, the North Crossing. Birch Street was recently improved for better access to and from the northeast, but this road still travels through a developed neighborhood. Third Street, Cameron Street and Brackett Avenue have been improved. The City has long wished to see an interchange on I-94 at Cameron Street.



An improved Galloway Street has been mentioned as a parallel reliever to Birch Street on the east side of Downtown.

## **Traffic Volumes and Circulation**

Overall, traffic moves at acceptable levels of service. In only a few locations does Eau Claire experience congestion problems, and they tend to be limited to peak hours. Isolated problems have been recorded on Golf Road, Clairemont Avenue, US 53, Hastings Way and Highway 93. Road improvements during the past 10 to 20 years such as the new route for US 53 and building the North Crossing have improved conditions.

## **Crash Summary**

Crashes in Eau Claire are primarily concentrated on five roads. The vast majority of high crash locations are found along Hastings Way, Clairemont Avenue, the North Crossing (Wisconsin 312), Golf Road and Birch Street. Analyses are regularly conducted by the City to identify potential causes and improvements that would reduce the number of crashes along these roads.

## **Truck Traffic**

The City currently does not have any truck routes identified. Certain city streets have restricted truck usage as a result of a study undertaken many years ago by the City Council to address citizen concerns regarding truck traffic. Those streets include Ferry Street, Carson Park Drive and Lake Street.

## **Transit**

The Eau Claire Transit (ECT) service covers a vast majority of Eau Claire and selected portions of Altoona, while the paratransit service extends to residents outside of the City of Eau Claire. Maintaining proper funding into the future will remain to be one of the largest challenges facing the ECT.

## **Bicycles and Pedestrians**

A city-wide plan for bicycling and walking was prepared and adopted by the City in 2010. There are few good opportunities for on-street bicycling lanes because of the width of collector and minor arterial roads. However, the off-street path system is strong and growing. Also, the city has an extensive sidewalk system and a policy of requiring land developers to build a sidewalk on both sides of every street, although many exceptions have been made.

The Chippewa River State Trail runs through Eau Claire. This is an excellent facility for bicyclists, pedestrians, in-line skaters and roller skiers to use for recreational or utilitarian trips.

Eau Claire has 3.7 miles of bicycling lanes, 32 miles of off-road multi-use paths, 3.8 miles of “sharrows” and 0.4 miles of bicycle boulevard.

## Prior Relevant Transportation System Plans

### ***Chippewa - Eau Claire Metro Planning Area Long-Range Transportation Plan Update, 2010 to 2030***

In 2006, the Chippewa-Eau Claire Metropolitan Planning Organization (MPO) updated its metro-wide plan for improving roads, transit service and bicycle and pedestrian facilities for the 2005 to 2030 time period. A scheduled update to that series of plans was being prepared in 2014 concurrent with this *Analysis of Conditions*.

No future projects listed in that plan would significantly affect land use planning, land development activity or cooperative boundary agreements in the City of Eau Claire or in the Sewer Service Area. The listed projects are either outside of the Sewer Service Area, ongoing maintenance, safety improvements, or upgrades to existing facilities that have relatively minor effects on land development.

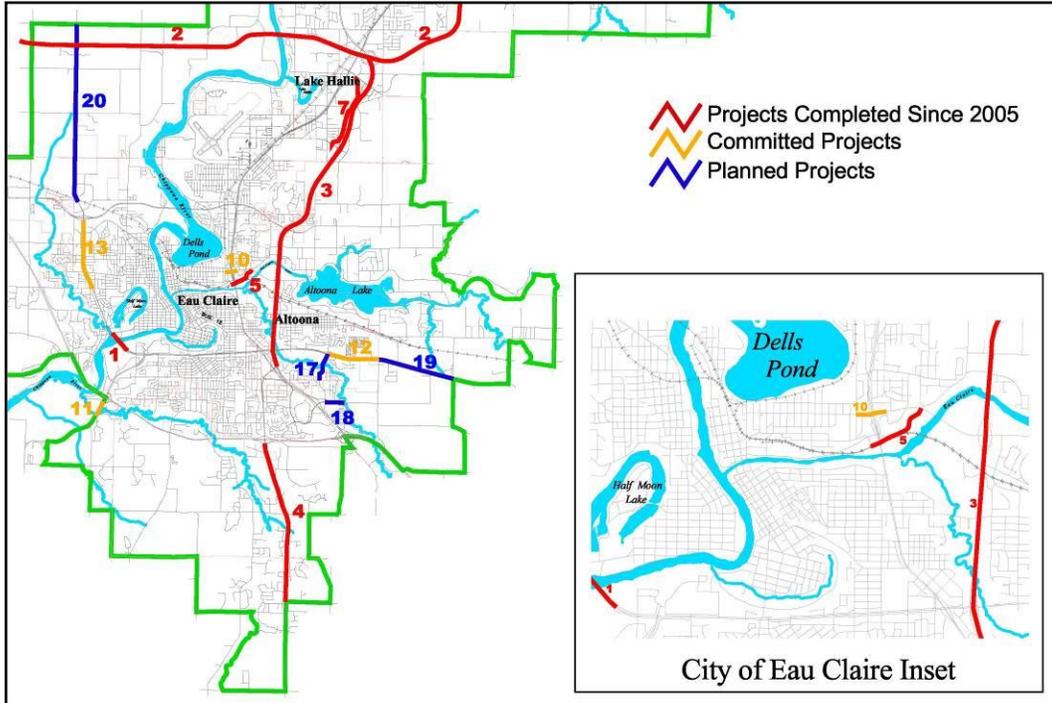
Notable planned road improvements benefiting Eau Claire shown in the LRTP are:

- Gateway Drive completion (US Highway 12 to US Highway 53) [17]
- County Highway T widening (Alpine Road to Former Wisconsin Highway 29) [20]

The regional highway system in and around Eau Claire is good condition as a result of the following recent major improvements. The numbers in brackets refer to the project number on Figure 5-1.

- **Wisconsin Highway 29** realignment and upgrading to freeway design (I-94 to Chippewa Falls) [ 2 ]
- **US Highway 53** (new alignment) [ 3 ]
- **Hastings Way** reconstruction, land reduction, intersection improvements, ped-bike improvements, crossings and landscaping (US Business 53)
- **Wisconsin Highway 312** widening and river bridge (the North Crossing)
- **US Highway 12** reconstruction and intersection improvements (Clairemont Avenue from Wisconsin Highway 37 to US Highway 53)
- **Birch Street** widening, intersection improvements, crossing and ped-bike improvements
- **Galloway Street** reconstruction and connection to River Prairie Drive
- The **Chippewa River Bridge** reconstruction on US Highway 12 [1]
- **Wisconsin Highway 93** reconstruction (south of I-94) [4]

The West Central Wisconsin Regional Planning Commission serves as the Metropolitan Planning Organization for this region. West Central is empowered by the State to make plans for and coordinate transportation improvements while assisting cities and towns with general community planning.



**Figure 5-1: Status of Regional Highway Improvement Projects, 2008**

## Fringe Area Road System Plans

In 2012, the City of Eau Claire prepared a land use plan and a future road system for the Sewer Service Area of the five Towns that abut Eau Claire – Brunswick, Union, Wheaton, Seymour and Washington. Those land use plans apply only to properties whose owners successfully petition for annexation to the City.

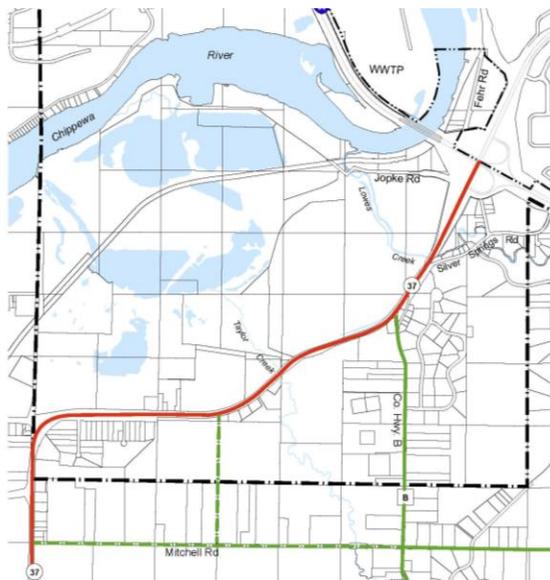
**Planned Roads:** The road system plan for each Town addresses the minor arterial and collector roads but not the local streets. The minor arterial roads are usually owned by the County, which is the agency that would be responsible to maintain or upgrade them. Examples of Town roads that are planned as minor arterials include Old Town Hall Road and Graff Road in Washington. The collector roads are usually built by the land developers at their expense and then given to the City or Town. Local roads are funded and built by the land developers.

Very few miles of new collector or minor arterial road are recommended by these fringe area plans, as most of the necessary network already exists. The extension of Gunnes Road in the Town of Washington and the extension of Tower Drive in the Town of Seymour are two examples of future collector alignments. Gateway Drive through the Cities of Altoona and Eau Claire is a planned minor arterial road.

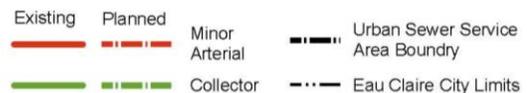
**Alignment Protection:** In those locations where new road alignments are planned, it will be imperative that the alignments are protected by the Town from other uses. If a subdivision plat is proposed, it should dedicate to the Town the right-of-way needed for these officially-mapped future roads. The City of Eau Claire has power given to it by the State to review proposed subdivision plats within three miles of its border to ensure that planned road alignments are protected.

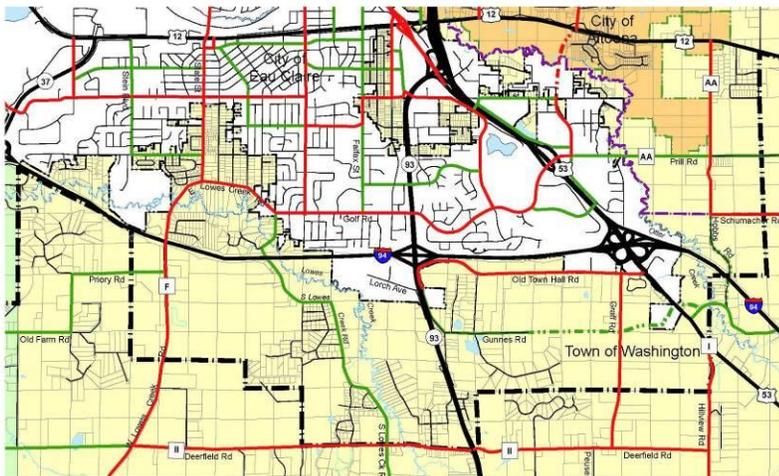
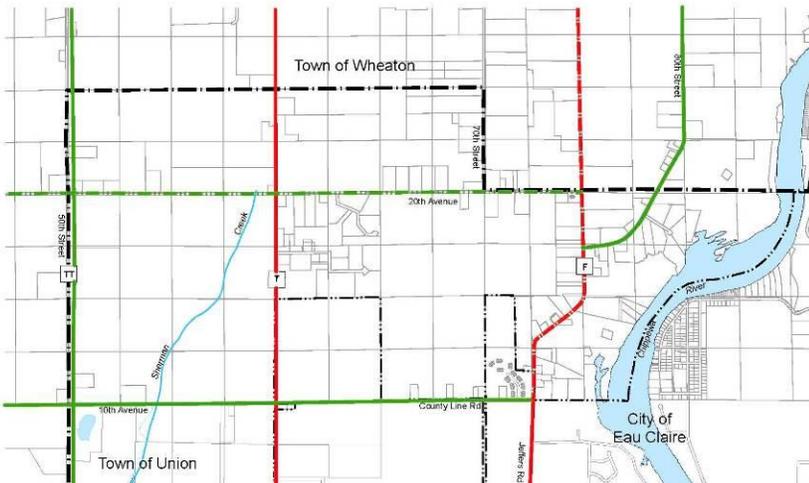
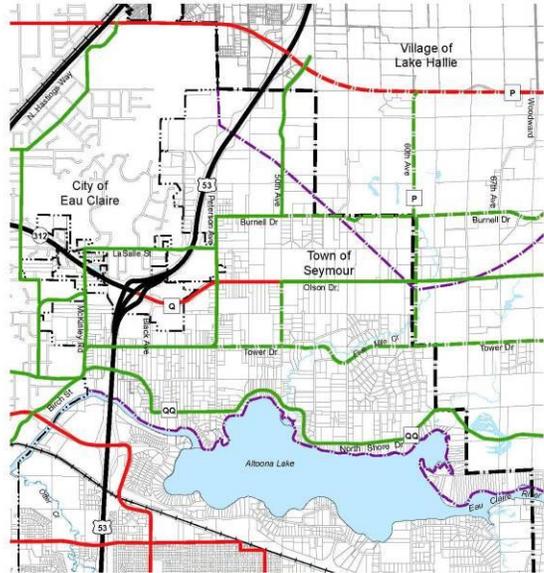
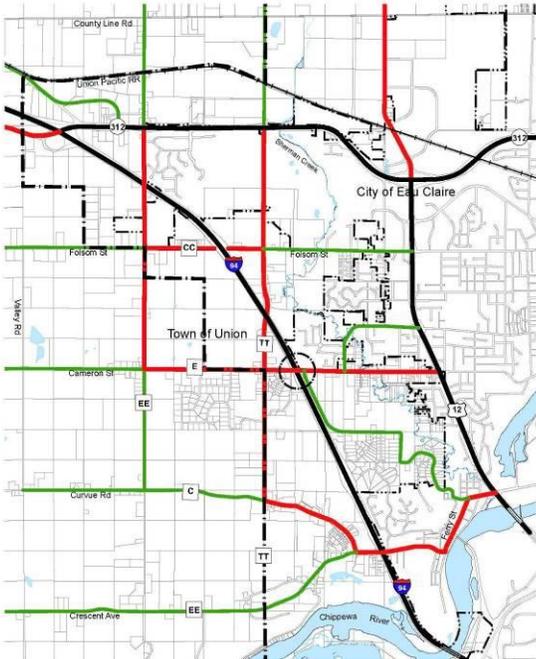
In order to build local or collector roads with useful lengths and connections, it is sometimes necessary to either annex enough land to contain the entire alignment or, alternatively, negotiate an arrangement between the City and the Town.

The road system plan map in the Sewer Service Area of each of adjacent Town is shown below.



**Figure 5-2:  
Road System Plan Map for the Sewer  
Service Area of the Town of Brunswick**





**Figures 5-3 through 5-6:  
Road System Plan Maps for the Sewer  
Service Area of the Towns of Union,  
Seymour, Wheaton and Washington  
(from upper left)**

|           |         |                |                                  |
|-----------|---------|----------------|----------------------------------|
| Existing  | Planned | Minor Arterial | Urban Sewer Service Area Boundry |
| Collector |         |                | Eau Claire City Limits           |

## **Growth and Travel Characteristics**

### **Historical Setting**

The City of Eau Claire is located at the confluence of the Eau Claire and Chippewa Rivers. When the city was settled in the 1840's, these rivers served as a means of transportation for many of the first settlers' goods, and solidified transportation's role as a vital component of the city's livelihood.

The city's early street network consisted of a system of radial routes extending out from the downtown area, and a grid system into the surrounding neighborhoods. Neighborhoods contained a mix of housing and retail stores for general commercial goods, allowing people to travel short distances. Evidence of this early street network can be found in some of the more traditional neighborhoods in the city, as well as the downtown area.

As the city developed more completely, land uses spread, and with the advent of the automobile a highway system was slowly developed permitting people to make longer trips. Eau Claire has evolved into a major trade center in west central Wisconsin and is linked to the cities of Madison, Green Bay and St. Paul by various state and nationally significant highways.

### **Land Use Trends**

According to the U.S. Census Bureau, the 2010 population for the City of Eau Claire was 65,883, a 13 percent increase over 2000. The number of housing units in the City of Eau Claire increased to 27,507 from 24,895 in 2000, a 10 percent increase. This growth in population and households has generated the need for a slight expansion of the urban area and improved transportation. Most of this growth has occurred on the perimeter of the urban area but a growing percentage has been on infill or redevelopment sites such as the North Barstow District.

### **Mode Choice**

According to the 2010 U.S. Census, about 80 percent of Eau Claire's commuters drove alone to work, which is on par with the national average of 76 percent. The percentages of carpooling and transit use were lower than the national averages, but the percentage of commuters walking or bicycling (11.4 percent) was higher than the national average of 8.9 percent.

### **Median Commute Times**

In 2010, the median commute time for workers in the City of Eau Claire using all modes of transportation was 14.8 minutes. Data for Eau Claire County suggests that workers had longer commute times if they carpooled or used public transportation, but shorter commute times if they bicycled or walked.<sup>1</sup>

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<sup>1</sup> Data for commute times has only been released on a county level.

## Existing Transportation System

### National Highway System

The NHS includes all interstate routes, selected Principal Arterials and the Defense Strategic Highway Network. Routes the NHS system are eligible to compete for federal funding monies that are not available to non-NHS routes. NHS roadways within the Eau Claire urbanized area are shown in Figure 5-7, Functional Classification of Roads, 2014, and listed below:

- Interstate Highway 94
- US Highway 53
- US Highway 12
- Wisconsin Highway 29
- Wisconsin Highway 93
- Wisconsin Highway 37
- Wisconsin Highway 312

### Functional Classification

Functional classification is used to categorize roadways based on the service they provide within the transportation network and their relationship to surrounding land uses. The functional classification determines the role that each individual street should play in moving traffic in the area or region. Each roadway's role is balanced between providing land access and providing mobility. Four general categories are used for defining functional classification: principal arterial, minor arterial, collector and local. The purpose and characteristics of these classes is summarized below:

**Principal Arterial:** Serves long trips within and/or through the urban area, connects an urban area to other major trade centers, provides limited access; exhibits high emphasis on mobility; typically has high traffic volume.

**Minor Arterial:** Serves medium to short trips within an urban area; connects major activity centers, restricts access and limits curb cuts, has moderate to high traffic volumes.

**Collector:** Provides access to residential neighborhoods and commercial or industrial centers; has low to moderate traffic volumes, is used for inter-neighborhood trips.

**Local:** Serves short trips with direct land access within neighborhoods and other nearby land uses; has low traffic volumes, these are the roadways that serve the majority of travel within the local neighborhood and/or area.

Eau Claire roadway mileage, by functional classification, is shown below in Table 5-1. In order to receive Federal and State funding, the Wisconsin Department of Transportation (WisDOT) determines the maximum percentages of each classification for an entire urban area's roadway system. Functional classification in mileage for the Eau Claire's roadway network has been approved by the State.

**Table 5-1  
City of Eau Claire Functional Classification Mileage**

| Road Type          | Miles      | Percent    | Recommended Percent of System |
|--------------------|------------|------------|-------------------------------|
| Principal Arterial | 31         | 9          | 5 - 10                        |
| Minor Arterial     | 27         | 8          | 10 - 15                       |
| Urban Collector    | 36         | 10         | 5 – 10                        |
| Local              | 250        | 73         | 65 – 80                       |
| <b>Total</b>       | <b>344</b> | <b>100</b> |                               |

Figure 5-7 displays the existing functional classification system for the City of Eau Claire.

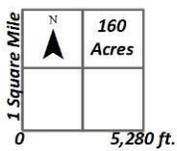
As shown on that map, there are several natural barriers such as rivers and lakes that influence traffic patterns within the City, and also affect certain key functional classification characteristics such as access, continuity, trip length, travel shed size and roadway spacing. Among these are the Chippewa and Eau Claire Rivers which act as impediments to traffic flow.

Fortunately, in the past 10 or 15 years, new river crossings have been added along Wisconsin Highway 312 (the North Crossing), River Prairie Drive and the new US Highway 53. New bicycle crossings of the rivers include the S Bridge near Banbury Place, the River Prairie Drive bridge, the High Bridge and the State Trail bridge near West Clairemont Avenue.

An earlier proposal to extend Wisconsin Highway 37 over the Chippewa River at 5<sup>th</sup> Avenue is officially no longer under consideration.



Oakwood Hills Parkway is classified as a Minor Arterial



- Principal Arterial
- Minor Arterial
- Collector
- Local
- Interchanges

**Figure 5-7**  
**Road Functional**  
**Classification System, 2015**

Overall, Eau Claire’s roadway network, especially its principal arterials, provide mobility around the city. I-94 is a limited-access, principal arterial freeway that skirts the City’s south and west side. US 53 and US 12 (Clairemont Avenue) are also principal arterials with freeway or expressway designs. These roadways provide mobility for a large portion of the city. Other principal arterials routes, Wisconsin Highway 312 (the North Crossing), Wisconsin Highway 93 and Wisconsin Highway 37, also add mobility and connectivity to other trade areas.

### Roadway Jurisdiction

Roadway jurisdiction refers to the governmental agency that has ownership of the roadway. WisDOT provides funding to cities for general roadway maintenance and major construction projects based on an established tax revenue sharing system. Several county roads enter the Eau Claire City limits, and then become part of the city roadway system.

The City is responsible for approximately 317 miles of roadways within the City boundary. Through a contract with WisDOT, the County is responsible for the maintenance of state roads, both inside and outside of the City limits.

**State Highway 37 Extension:** The City of Eau Claire is interested in exploring the idea of extending Wisconsin Highway 37 from its present terminus at Hendrickson Drive and Clairemont Avenue north along W. Clairemont Avenue and up the present alignment of County Highway T to Wisconsin Highway 29. Clairemont Avenue is presently designated as US 12 but could carry dual jurisdictions. County Highway T may need to be upgraded beyond the usual capabilities of a County highway, and the route connection to State 29 on the north would make sense. The functional classification of County Highway T would be upgraded to Principal Arterial from Minor Arterial.

Since the 2005 *Comprehensive Plan*, the jurisdiction of the former US 53, Hastings Way, was transferred from the State to the City after the road was completely rebuilt with State funding.



The ownership of Hastings Way was transferred from the Wisconsin Department of Transportation to the City of Eau Claire when the route for US Highway 53 was moved to a new alignment. In exchange, the State paid for the City to redesign and rebuild the road before the change of jurisdiction.

## Existing Network Characteristics

### Signalized Intersections

As traffic increases and more conflicts arise, signalized intersections and roundabouts may be needed to reduce conflicts, crash severity, and enhance overall traffic flow. Traffic signals provide opportunities for side-street traffic to safely access main routes when gaps are insufficient. They can also be timed to give priority to the major roadway, and accommodate a high percentage of turning vehicles in a safe and efficient manner. While traffic signals have several benefits, they are expensive, need regular maintenance and from time to time need to be updated. Traffic signals can also cause safety and/or traffic flow problems if improperly used or designed. As a result, there are a strict set of standards (warrants) that must be met prior to design and installation. Eau Claire's signalized intersections and roundabouts are shown on Figure 5-8, Lane Configuration and Traffic Controls.

Roundabouts are a viable substitute for traffic signals or stop signs at some intersections, particularly when the intersection has four legs with approximately equal traffic volumes and low volumes of pedestrian traffic. Use of roundabouts has increased in the United States during the past 20 years, and there are three built in Eau Claire with five more planned, as shown by Figure 5-8 Roundabouts have several benefits:

- Improved safety
- Fewer collisions
- Reduced delay and improved traffic flow
- Lower cost to build and maintain

However, a roundabout can require more land at the intersection and be difficult for pedestrians to navigate because the auto traffic rarely stops.

### Lane Configuration

Because of the large number of local streets in the city, the vast majority of highways and streets are two-lane roads. However, there are several roads that have three or more lanes, most of which are classified as Principal Arterials (e.g. Clairemont Avenue), but there are no more one-way streets now that Barstow and Graham have been changed downtown. There are also several three-lane streets that have one lane in each direction and two-way left turn shared such as Truax Boulevard and Rudolph Road. Roads with more than two lanes are shown on Figure 5-8. While roadway capacity is often largely determined by the number of lanes, intersection geometry, intersection control, parking, pedestrian activity, access and facility speeds play a significant part in determining how the facility operates.

### Parking

Eau Claire uses a variety of parking restrictions to regulate on-street parking based on neighborhood characteristics or the type of roadway. Overall, on-street parking is generally permitted on both sides of the street throughout the City. The City does use alternate side parking from November 1 to May 1 from 12:00 A.M. to 6:00 A.M.

In addition to alternate side parking, there are a number of other special restrictions enforced by the City. Parking restrictions on both sides of the street are enforced along Highways 12, 37, 53, and 93 and Business 12 (Hastings Way). Parking restrictions are also enforced along

segments of Hastings Way, Farwell Street, State Street, 5th Street, Madison Street, Birch Street, Brackett Avenue, Main Street, Lake Street, and Water Street. These streets contain some of the highest traffic volumes, and allowing on-street parking would decrease the capacity of these roads. Special restrictions are also in place near both high schools, North and Memorial, with no parking allowed in residential areas from 7:00 A.M. to 3:00 P.M.

### **Traffic Volumes**

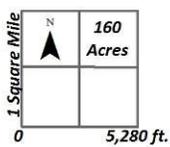
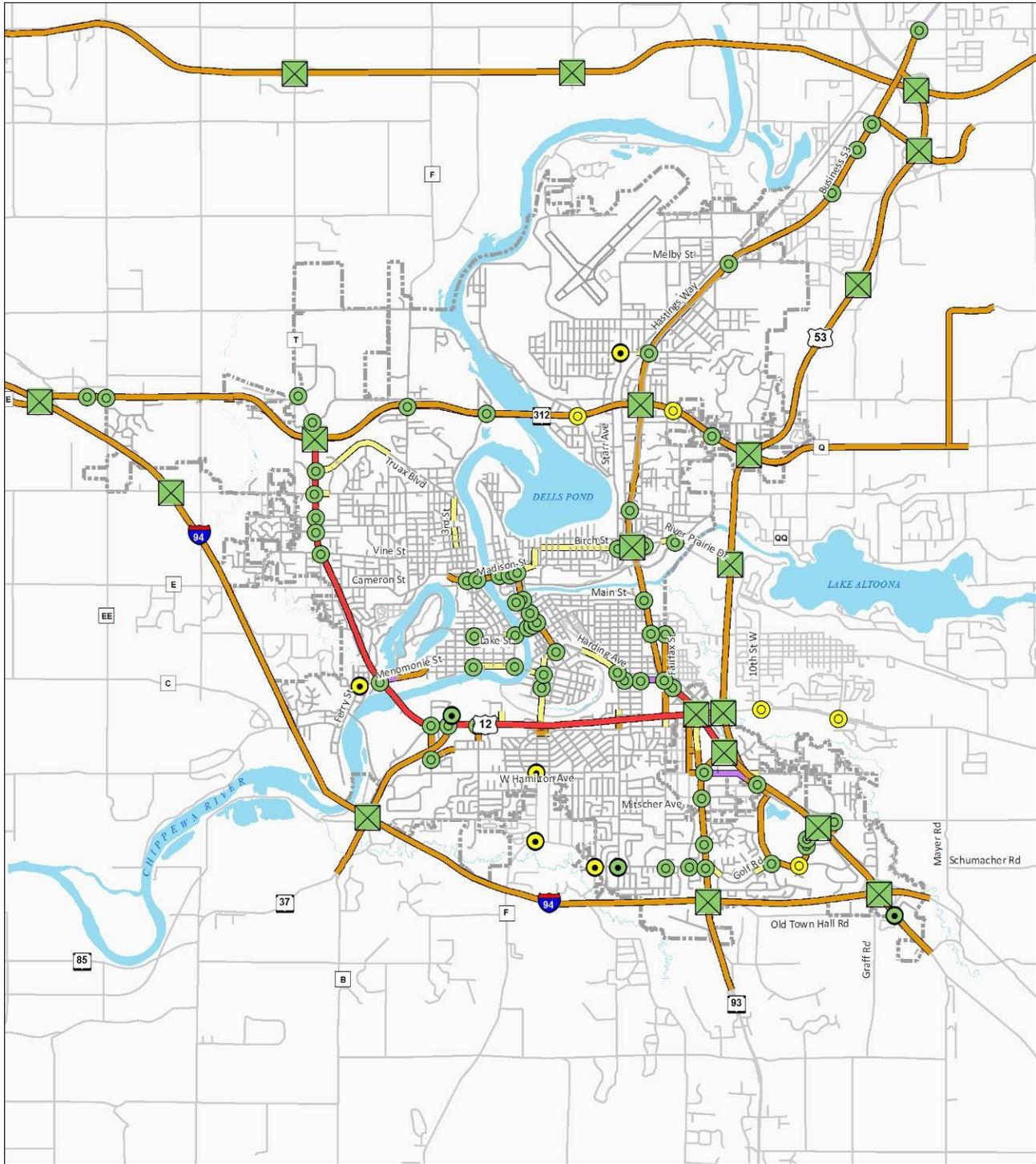
The Wisconsin Department of Transportation regularly collects traffic count data for many roads in Eau Claire. The most recent traffic volume data was for 2013, and previous WisDOT collection occurred in 2008.

Table 5-2 includes historic traffic volumes for Principal and Minor Arterial roads in Eau Claire. As shown, the highest volumes throughout the city are along I-94, US 53, US 12 (Clairemont Avenue) and Wisconsin 312. This is not surprising as these are the highest capacity roadways in the city, and they serve more regional trips than other city streets. While these roads tend to have the highest traffic volumes, certain local roads also had volumes above 10,000 vehicles per day, such as Hastings Way, State Street, Farwell Street, Madison Street, Brackett Avenue and others.

Traffic volumes on the majority of roadways has continued to increase; however, certain other roads have experienced some decline. Roads under the state or county jurisdiction all experienced an increase in traffic volumes since 1990.

A major change in traffic volumes resulted when US 53 was realigned from Hastings Way to a new route through Altoona and east of Eau Claire. Many trips, especially heavy trucks, were diverted from Hastings Way, which now serves mostly local trips and carries less pass-through traffic.

Likewise some road volumes declined after Wisconsin Highway 312 (the North Crossing), which has a river bridge, was opened in 1994. Roads affected by this highway were Madison Street, Truax Boulevard, Third Street, Platt Street, Oxford Avenue and Birch Street. These roads were either parallel routes or alternate routes to Highway 312. It is also interesting to note that the year 2001 volumes for Highway 312 already exceeded the original 2010 forecasts.



**Traffic Controls**

- Existing Signal
- Existing Roundabout
- Proposed Roundabout
- Proposed Signal
- Grade Separation

**Lanes**

- 6
- 5
- 4
- 3
- 2

**Figure 5-8**  
**Lane Configuration**  
**and Traffic Controls**

**Table 5-2  
Historic Traffic Volumes**

| Roadway                 | From              | To                | Historical Average Daily Traffic Volumes |        |        | Percent Change (2003-2013) |   |
|-------------------------|-------------------|-------------------|--|--------|--------|----------------------------|---|
|                         |                   |                   | 2003                                     | 2008   | 2013   |                            |   |
| I-94                    | US-12 (Exit 59)   | STH 85 (Exit 65)  | 23,200                                   | 25,500 | 27,900 | 20.26                      |   |
|                         | STH 85 (Exit 65)  | STH 93 (Exit 68)  | 25,900                                   | 27,400 | 27,500 | 6.18                       |   |
|                         | STH 93 (Exit 68)  | US 53 (Exit 70)   | 21,700                                   | 21,900 | 20,900 | (3.69)                     |   |
| US-12                   | I-94              | CTH T             | 18,700                                   | 15,700 | 16,400 | (12.30)                    |   |
|                         | CTH T             | STH 85            | 29,700                                   | 26,700 | 30,400 | 2.36                       |   |
|                         | STH 85            | US-53             | 30,300                                   | 32,000 | 32,500 | 7.26                       |   |
|                         | US-53             | East City Limits  | 19,200                                   | 19,900 | 18,300 | (4.69)                     |   |
| Hastings Way            | North City Limits | STH 124 (STH 312) | 33,500                                   | 19,700 | -      | -                          |   |
|                         | STH 124 (STH 312) | STH 93            | 38,900                                   | 22,500 | -      | -                          |   |
|                         | STH 93            | South City Limits | 23,400                                   | 18,800 | -      | -                          |   |
| USH 53                  | North City Limits | STH 312           | -  | 31,400 | -      | -                          |   |
|                         | STH 312           | STH 93            | -  | 36,900 | 34,000 | -                          |   |
|                         | STH 93            | South City Limits | -  | 25,000 | 18,800 | -                          |   |
| STH 85                  | I-94              | US 12             | 10,300                                   | 13,300 | 14,500 | 40.78                      |   |
| STH 312                 | US 12             | US 53             | 25,000                                   | 27,600 | -      | -                          |   |
| STH 93                  | US 53             | South City Limits | 15,000                                   | 16,800 | 11,500 | (23.33)                    |   |
| CTH T                   | North City Limits | US 12             | 4,800                                    | 5,100  | 5,600  | 16.67                      |   |
| CTH Q                   | US 53             | McKinley Rd.      | 12,900                                   | 12,100 | -      | -                          |   |
| CTH F                   | I-94              | State St.         | 3,400                                    | 2,600  | 2,300  | (32.35)                    |   |
| CTH S                   | State St.         | Rudolph Rd.       | 6,700                                    | 8,100  | 6,900  | 2.99                       |   |
| CTH AA                  | US 53             | East City Limits  | 6,000                                    | 4,900  | -      | -                          |   |
| Truax Blvd.             | US 12             | 3rd St.           | 4,300                                    | 4,700  | 4,700  | 9.30                       |   |
| Third St.               | Truax Blvd.       | Vine St.          | 5,700                                    | 6,900  | -      | -                          |   |
| Platt St.               | Third St.         | Oxford Ave.       | 7,400                                    | 7,500  | 7,750  | 4.73                       |   |
| Oxford Ave.             | Platt St.         | Madison St.       | 7,200                                    | 6,400  | 6,600  | (8.33)                     |   |
| Madison St.             | Bellinger St.     | Germania St.      | 10,500                                   | 20,000 | 17,500 | 66.67                      |   |
| Birch St.               | Dewey St.         | US 53             | 13,200                                   | 12,200 | 11,700 | (11.36)                    |   |
| Farwell St.             | Madison St.       | Washington St.    | 17,000                                   | 13,700 | -      | -                          |   |
| Menomonie/<br>Water St. | US 12             | Fifth Ave.        | 11,100                                   | 12,600 | 12,200 | 9.91                       |   |
|                         |                   |                   | 9,900                                    | -      | 7,200  | (27.27)                    |   |
| Fifth Ave.              | Lake St.          | Water St.         | 5,300                                    | 8,500  | 7,100  | 33.96                      |   |
| Lake St.                | Fifth Ave.        | Farwell St.       | 9,500                                    | 9,600  | 8,600  | (9.47)                     |   |
| State St.               | Lexington Blvd.   | Washington St.    | 14,800                                   | 14,300 | 12,300 | (16.89)                    |   |
| Washington St.          | State St.         | Harding Ave.      | 14,000                                   | 14,000 | 12,400 | (11.43)                    |   |
| Harding Ave.            | Washington St.    | Rudolph Rd.       | 17,200                                   | 15,500 | 15,700 | (8.72)                     |   |
| Brackett Ave.           | Rudolph Rd.       | US 53             | 18,900                                   | 16,700 | 16,500 | (12.70)                    |   |
| Cameron St.             | US 12             | Fifth Ave.        | I-94                                     | 4,200  | 4,200  | -                          | - |
|                         |                   |                   | 9,600                                    | 10,200 | 10,800 | 12.50                      |   |
| Barstow St.             | Madison St.       | Eau Claire St.    | 6,600                                    | 4,600  | 4,700  | (28.79)                    |   |
|                         | Eau Claire St.    | Washington St.    | 3,300                                    | 2,700  | -      | -                          |   |
| Water St.               | Fifth Ave.        | State St.         | 16,000                                   | 14,700 | 10,700 | (33.13)                    |   |
| Golf Rd.                | Cottonwood Rd.    | STH 93            | 12,400                                   | 12,200 | 13,500 | 8.87                       |   |
|                         | STH 93            | US 53             | 11,400                                   | 17,800 | 12,200 | 7.02                       |   |
| London Rd.              | US 12             | Hamilton Ave.     | 9,000                                    | 8,300  | 8,400  | (6.67)                     |   |

**Volume-to-Capacity Ratios and Levels of Service**

**Volume-to-Capacity Ratio:** A volume-to-capacity (V/C) ratio is an index that can be used to evaluate whether a road is over capacity based on its volume and design. The V/C ratio is a comparison of the volume on a road to the volume that the roadway is capable of carrying based on its design.

Roads generally operate poorly at or near capacity and are rarely designed to operate in that range. The V/C ratio is intended to estimate the maximum amount of traffic that can be accommodated by a facility while maintaining desired operational qualities. A V/C ratio uses traffic volumes and the roadway’s design capacity to determine if the section will be congested or experience delay.

Ranges of operating conditions are defined for each type of facility and are related to the amount of traffic that can be accommodated at different levels of service. While the volume fluctuates for each road, the design type for each roadway has a set capacity. Table 5-3 contains the design types and capacity thresholds that have been established for roads in Eau Claire.

**Table 5-3  
Roadway Description and Volume Thresholds**

| <b>Roadway Description</b>   | <b>Volume Threshold</b> |
|--|-------------------------|
| <b>Urban Sections:</b>   |                         |
| U-1: Two-lane at-grade urban arterial at 25 mph                      | 10,000                  |
| U-2: Two-lane at-grade one-way urban street at 25 mph                | 14,000                  |
| U-3: Two-lane at-grade with turn lanes/three lanes                   | 16,000                  |
| U-4: Four-lane at-grade at 25 mph                                    | 24,000                  |
| U-5: Four-lane expressway at 45 mph                                  | 35,000                  |
| U-6: Five-lane at-grade at 25 mph                                    | 24,000                  |
| U-7: Six-lane at-grade at 45 mph                                     | 45,000                  |
| U-8: Four-lane grade-separated at 45 mph                             | 60,000                  |
| <b>Rural Sections:</b>   |                         |
| R-1: Two-lane at-grade 45-55 mph                                     | 14,000                  |
| R-2: Two-lane reduced capacity (limited visibility, poor geometrics) | 8,000                   |
| R-3: Expressway at 45-55 mph   | 45,000                  |
| R-4: Four-lane grade separated                                       | 60,000                  |

A V/C ratio below 0.85 allows for good flow, reliable speeds and safe operating conditions. Segments that have a V/C ratio above 0.85 indicate a progressively congested roadway that will have increasing safety problems, delay and operational deficiencies. Figure 5-9 displays the V/C ratios for roadways within the City.

**Level of Service:** Another congestion measure, level of service (LOS) analysis, is also commonly used to determine the operating conditions of a roadway. LOS uses a rating system of “A” through “F,” with “A” as the highest rating (free flow conditions). Generally a V/C ratio over 1.00 would be rated LOS “F” meaning that the road is over-capacity, experiences major delays, and most or all vehicles stop at signalized intersections.

While Eau Claire has developed as a thriving economic center for west-central Wisconsin, traffic volumes and congestion have been well managed and are no major system problems. This is because of the design capacity of the roadways and alternative routes provided by the developed grid network through much of the city.

However, selected locations during the peak hour do produce delays. Two areas of concern are **Oakwood Hills Drive** during the holiday shopping season and **State Street** when school is in session. Neither of these sites were identified by the V/C analysis, since most of the problems are a result of seasonal type volumes and/or specific intersection issues.

County Highways Q and AA, Farwell Street, Harding Avenue and a portion of Cameron Street are also congestion locations based on this V/C analysis.

During 2014 and 2015, the Eau Claire Metropolitan Planning Organization will be updating its regional traffic model. This model incorporates existing traffic volumes, road capacities, existing and proposed land uses, transit use, and other multi-modal factors to determine future traffic volumes for the majority of roads in the Eau Claire metropolitan area. Based on past forecasts, increases are expected in population, number of dwelling units, employment and consequently, vehicle miles traveled. Areas that are identified by the forecast model as being congested either by a V/C ratio or LOS analysis will be examined further to determine if any improvements are needed or warranted.



The new US Highway 53 provides a high level of service

**Figure 5-4:**  
**Volume-to-Capacity Ratios 2001**

This map is expected to be completed in late 2014 when the data become available from the West Central Wisconsin Regional Planning Commission based on their update of the *Long-Range Transportation Plan*.

## Safety Analysis

Crash data was obtained from the Wisconsin Department of Transportation (WisDOT) for a five-year period (2008-2012). Sites that have a five-year average of 10 or more crashes per year were classified as “high crash locations.”

Many of the high crash locations are along State Trunk Highways at signalized intersections. The locations with the highest five-year average of incidents were:

- Clairemont Avenue at Stein Boulevard
- Clairemont Avenue at Fairfax Street
- Clairemont Avenue at London road
- Highway 53 at Golf Road
- Highway 93 at Hamilton Avenue
- Wisconsin 312 at US 53
- Hastings Way at Birch Street
- Hastings Way at Brackett Avenue

There is a long list of locations that have a five-year average of fewer than 10 crashes per year.

Clairemont Avenue and Hastings Way carry the largest traffic volumes through the urbanized area and also have the most crashes. The large amount of traffic and the number of access points are contributing factors to the high number of crashes along those roads.

Wisconsin 312, another roadway with high traffic volumes, also exhibits locations with several crashes. However, the total number of crashes along Highway 312 is substantially less than along Clairemont Avenue and Hastings Way because of its limited access. The skewed design of the Highway 312 intersections at Old Wells Road and Riverview Drive may explain the number of crashes that have occurred there.

Various types of roadway and intersection improvements can be constructed to improve safety and reduce crash statistics. Areas with a significantly high number of crashes will be addressed later in the Plan component.

## Right-of-Way and Roadway Standards

According to the City's Subdivision Ordinance (section 17.12), right-of-way standards for Eau Claire range between 60 feet for local (minor) streets to 80 feet for major streets. Collector streets require a 66 foot right-of-way which is commonly found on many of Eau Claire's streets. These standards are followed for all new streets. Some of the existing city streets have very wide right-of-way widths such as Melby Street with an 80 foot right-of-way. Highways such as US 12, US 53, and I-94 have right-of-way widths that exceed 100 feet.

Road widths are generally determined by the road's function, traffic volumes, parking regulations and various other factors. The Subdivision Ordinance also has standards that relate to street widths. The range of street widths is generally between 30 feet for minor streets and 48 feet for major streets. The 30 foot width (measured to the back of the curb) for new minor streets provides for two lanes of traffic and on-street parking. This width of street helps to keep speeds low, minimizes cut-through traffic in neighborhoods, and maintains a residential neighborhood atmosphere. Streets that generally carry more traffic and have higher speeds are typically wider than 30 foot minimum for minor streets. Collector streets, for example, have a 36-foot minimum roadway width.

Local street widths should be wide enough to accommodate traffic at appropriately low speeds, and to allow some on-street parking. Recent new housing has typically included two or three garage and driveway space, requiring on-street parking only for visitors.

## Mobility and Accessibility

Roads are typically classified along a continuum of mobility and access. Mobility is typically best served by a freeway type facility with very little access, usually in the form of interchanges. Access is the ability to reach nearby property. Local streets and cul de sacs provide the highest level of access with many driveways, narrow widths and curved alignments with parking on one or both sides.

Maintaining a balance between mobility and access is important to the success of the road network. Overall, Eau Claire has an effective mix of arterial, collector and minor roads.

However, a few major mobility and access deficiencies do exist in Eau Claire and include:

1. A shortage of arterial or collector links across I-94, especially in the western and southeastern sides of the urban area
2. The lack of an I-94 interchange between the North Crossing and Hendrickson Drive.
3. A lack of direct access to downtown Eau Claire. For example, there currently is no direct connection to downtown from the new US 53 freeway or from I-94.

## Access Management Strategies

Several roads in Eau Claire could benefit from some form of access management. Many of the major arterials have multiple driveways and inadequate access spacing. In the past, Hastings Way (then US 53) was an example of inadequate spacing and site design decisions diminishing the road capacity to the point where a new alignment was necessary. That situation has been rectified by the new highway alignment.

While the City does not have formal access management policies, they do refer during access location deliberations to their ordinance's Planned Unit Developments standards, WisDOT access standards and the Institute of Transportation Engineers Manual.

Adopting an access management plan can improve traffic flow, increase capacity and improve vehicular and pedestrian safety. A good access management program can save money, travel time and lives.

An access management plan may include:

- Eliminating uncontrolled left-turning movements by creating medians
- Combining and sharing driveways
- Eliminating unnecessary driveways
- Creating right-turn lanes where possible
- Creating dedicated left-turn lanes at intersections
- Creating right-in, right-out only intersections
- Creating frontage roads where appropriate.

Access management can be beneficial for businesses and residents, when combined with additional street landscaping elements. Occasionally, cities will face opposition to access management from businesses and residents. Business owners are often fearful that eliminating additional driveways or installing a median will result in reduced customers and sales. Residents dislike access management because of the limitations on turning. However, many communities have worked with business owners and residents to create solutions that result in efficient corridors with improved safety and operations.

## Transit System

The Eau Claire Transit (ECT) provides transit service for the City of Eau Claire. The *Transit Development Plan* (2014) includes specific data regarding the transit facilities, fleet size, ridership information, funding information, routes, schedules, and fares. The plan described and evaluated the system and provided strategies for improvement.

### Fixed Route Service

The fixed routes operate on a radial loop route structure centered on downtown Eau Claire. Fixed route services operate on 20-, 30-, or 60-minute headways. Please refer to Figure 5-10, Transit Route Map, 2014.

Eau Claire Transit provides fixed-route transit service throughout the City of Eau Claire and areas of the City of Altoona. There are 15 fixed bus routes with service from 6:00 a.m. to 10:00 p.m. Monday through Friday, and from 8:00 a.m. to 6:00 p.m. on Saturdays. During the school year, supplemental tripper (express) service is provided for neighborhood access to area schools. These routes are open to the public and charge regular fares. Express Route 12 was added in September 2013 as a supplement to existing service and a connection to Dunn County Transit, as well as Greyhound Lines and Jefferson Lines intercity bus services.

### Major Generators

The City of Eau Claire serves as the major metropolitan area for a large portion of western Wisconsin, and as a result is home to a number of large businesses, manufacturing plants and other high employment locations. These types of locations are ideal candidates for a transit system because of the high worker concentration. The list of locations with high employment includes the University of Wisconsin Eau Claire (UWEC), Chippewa Valley Technical College, Oakwood Mall, the downtown, Gateway Business Park, Mayo Clinic Hospital, Sacred Heart Hospital and other employers or retail centers.

### Service Coverage

Service coverage measures the area within walking distance of transit stops. The more area covered by transit, the greater the geographic availability of transit. Industry standard minimum densities are used in this analysis.

A residential density of three housing units per gross acre is considered the minimum density capable of supporting a basic level of transit service (at 60-minute headways). An employment density of four or more jobs per acre is also considered capable of supporting the basic level of service. Places that meet this threshold are referred to as transit-supportive areas (TSAs). Areas within ¼ mile of bus routes are considered covered by transit service.

As displayed in Figure 6 of the *Transit Development Plan* (2014), there are large segments of Routes 3 and 4 northeastern Eau Claire east of Hastings Way) that do not serve transit supportive areas. Areas in southern Eau Claire on Routes 5 and 6 also have limited transit potential. Outside of the existing service network, the industrial area in northwest Eau Claire, areas of Altoona, and areas of Chippewa Falls also have some transit potential.

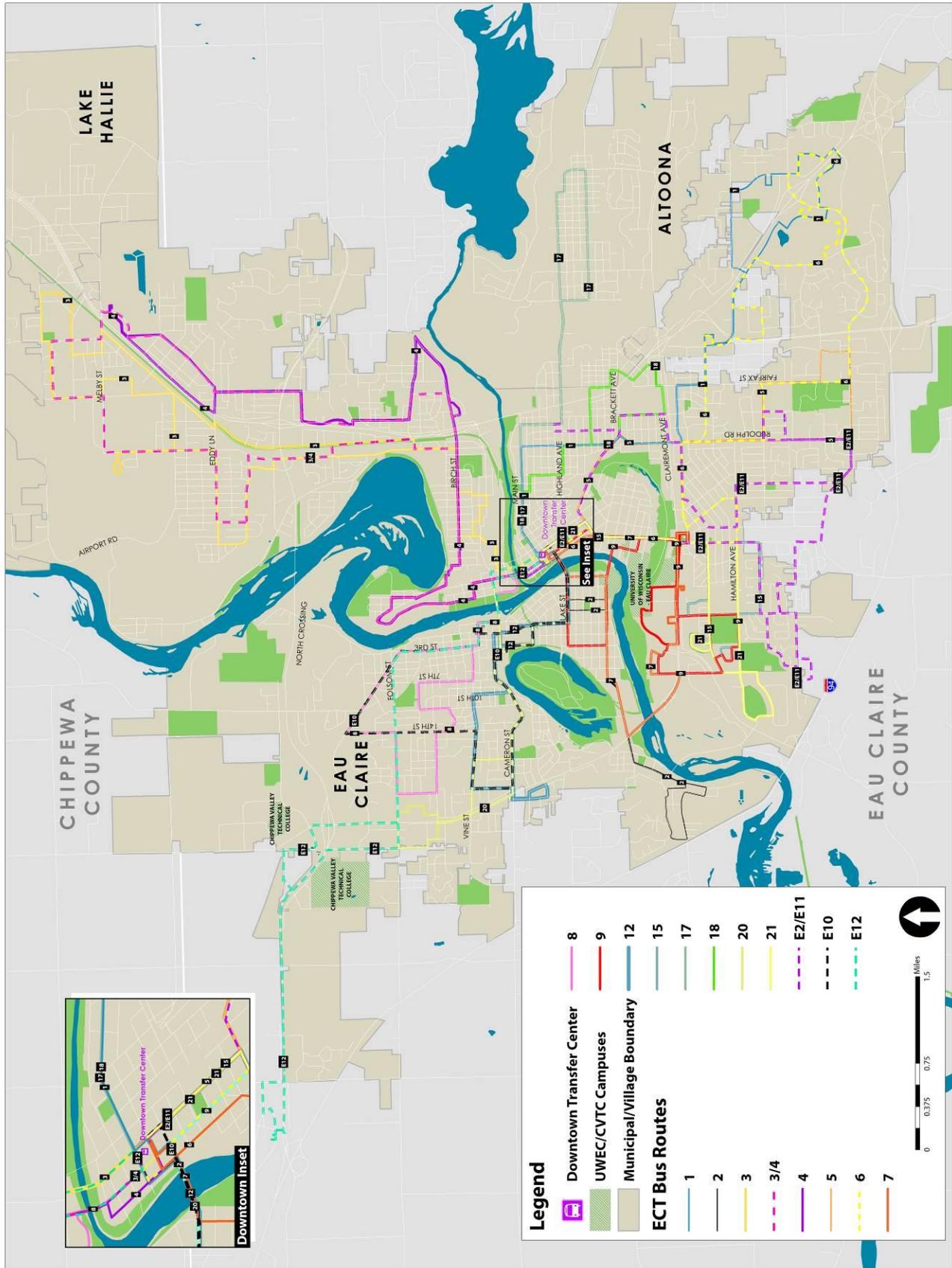


Figure 5-10: Transit Routes, 2014

A total of 3,620 acres of transit-supportive areas are located within ¼ mile of an Eau Claire Transit route, or 96 percent of the total transit-supportive areas within the Eau Claire city limits. The remaining four percent of transit-supportive areas are outside the ¼-mile service area. Eau Claire Transit performs at LOS A for system coverage of transit-supportive areas within the city limits. As noted in Table 5-4, this level of service means generally that almost all major origins and destinations are served.

**Table 5-4:  
Summary of Transit-Supportive Area Analysis**

| <b>Definition of Area</b>                     | <b>Area (acres)</b> | <b>Percent of Total</b> |
|---|---------------------|-------------------------|
| Eau Claire urbanized area (city limits)       | 21,837              | --                      |
| Transit-supportive area (outside city limits) | 2,205               | -                       |
| Transit-supportive area (city limits)         | 3,752               | --                      |
| Within ¼ mile of transit route                | 3,620               | 96%                     |
| Not within ¼ mile of transit route            | 132                 | 4%                      |

Sources: City of Eau Claire, Eau Claire Transit, 2011 Census Longitudinal Employer-Household Dynamics Program, 2010 Census

**Transit-Oriented Development**

Land use decisions greatly affect a city’s transportation system, especially as it relates to transit use. For fixed route transit to be successful, the following land use conditions should be present:

- Residential densities need to be high so that transit can serve a large population base relative to a short distance to stations and stops.
- Employment and commercial districts should be located in a centralized location (i.e. downtown) serving as a primary destination for a large portion of the population.
- Businesses and housing should be within walking distance of transit stations.
- An integrated pedestrian system should be in place providing a comfortable, safe and attractive environment.
- Auto-related uses should be balanced with the mobility and access needs of pedestrians.

The redevelopment of the downtown area in Eau Claire is one example of land use that supports a system of multi-modal travel options. Most routes are concentrated in the downtown area. Combined with a strong downtown pedestrian network and a good bicycle network, transit provides the third mode choice that will be used by young adults and others who are willing to change travel behaviors. As downtown redevelops and becomes a stronger commercial hub, combined with a strong residential component, Eau Claire Transit has the opportunity to capture a significant share of the local travel market with a focused investment in additional bus service.

**Service Area Population**

An overview of the Eau Claire area’s population characteristics is useful in reviewing the current route structure to identify if there are any gaps in service for specific populations. The demographic overview in this section examines patterns in:

- Population density
- Vehicle availability
- Age (senior populations)
- Low-income population
- Disabled population

Peer communities have an average service area population density of approximately 2,582 persons per square mile, or 3.8 persons per acre. The population density of the Eau Claire Transit service area is 2,607 persons per square mile, or 4.1 persons (1.4 households) per acre.

Using the most recent 5-year estimates from the American Community Survey (2007-2011), Table 5-5 includes characteristics of Eau Claire related to transit propensity. Although Eau Claire Transit primarily operates within the City of Eau Claire, key transit propensity measures for the City of Altoona are also included to better understand the area-wide need for transit, and to mirror the previously addressed service area population density definition.

**Table 5-5:  
Summary of Transit Propensity Measures in Eau Claire and Altoona**

| Transit Propensity Measure       | City of Eau Claire | City of Altoona |
|----------------------------------|--------------------|-----------------|
| Zero-Vehicle Households          | 2.7%               | 0%              |
| Individuals Below Poverty Status | 11,466<br>9 %      | 461<br>7 %      |
| Senior Population (65+)          | 6,906<br>12 %      | 965<br>15 %     |
| Individuals with a Disability    | 8,798<br>15 %      | 958<br>15 %     |

Whether or not a household has a vehicle for use is a major factor in determining transit need. Individuals below poverty, senior citizens, and individuals with a disability also all play an important role in determining a community’s transit need, as each population may be unable to afford or operate an automobile, and is a significant share of the population in both Eau Claire and Altoona.

**Performance Trends**

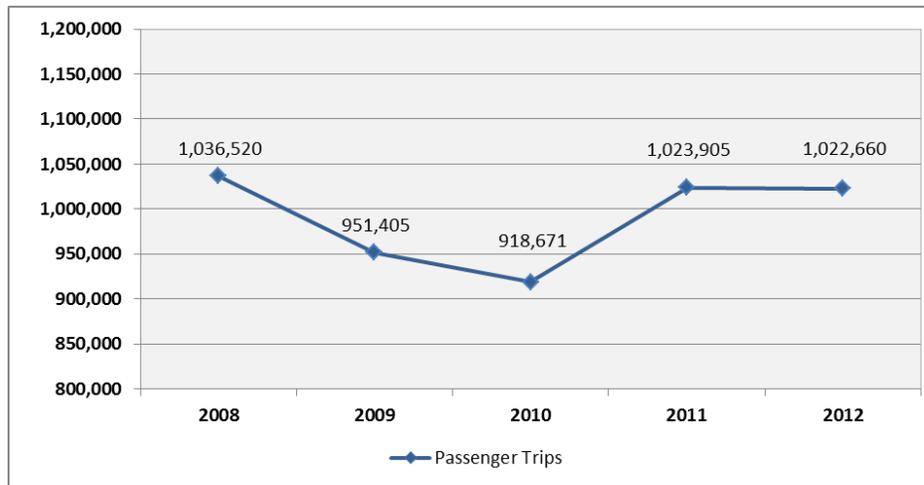
Performance data for Eau Claire Transit over the 2008 to 2012 period is shown in Table 5-6.

**Table 5-6:  
Eau Claire Transit Performance Trends, 2008 to 2012**

| Performance Measure              | 2008      | 2009    | 2010    | 2011      | 2012      |
|----------------------------------|-----------|---------|---------|-----------|-----------|
| Passenger Trips                  | 1,036,520 | 951,405 | 918,671 | 1,023,905 | 1,022,660 |
| Revenue Hours                    | 45,491    | 49,405  | 46,033  | 46,228    | 46,372    |
| Revenue Miles                    | 678,151   | 681,865 | 680,967 | 663,039   | 666,408   |
| Passenger Trips / Revenue Hour   | 22.8      | 19.3    | 20.0    | 22.1      | 22.1      |
| Operating Expense (000s)         | \$3,464   | \$3,273 | \$3,475 | \$3,549   | \$3,696   |
| Passenger Revenue (000s)         | \$835     | \$905   | \$958   | \$948     | \$917     |
| Operating Cost per Passenger     | \$3.35    | \$3.44  | \$3.78  | \$3.47    | \$3.62    |
| Operating Expense / Revenue Hour | \$76.25   | \$66.25 | \$75.50 | \$79.79   | \$79.72   |

Source: 2008-2012 National Transit Database Note: Passenger revenue includes agency fares.

**Table 5-6  
Annual Passenger Trips, 2008 to 2012**



**Paratransit Service**

ECT also provides paratransit service to people in Eau Claire and Altoona. This demand-responsive door-to-door service is in full compliance with the Americans with Disabilities Act. Passengers must call for reservations.

Currently there are 12 to 14 vans being operated in this service in Eau Claire County, with most vehicles operating in Eau Claire or surrounding communities.

### **Trends that Affect Transit Ridership**

When evaluating future transit development in Eau Claire, it is important to note some current trends in travel behavior at the national level in addition to local market conditions that will affect recommendations.

Eau Claire has a core ridership of young adults, which is a population segment where many of these trends are prevalent. In the last decade, there has been a steady decline in vehicle miles traveled, a decrease in young licensed drivers, and a shift in preference from the automobile to other modes of transportation. Additionally, mobile technology, which is easily accessible while traveling on transit, has impacted the way people communicate and do work. Those same tools can be used to obtain transit schedule and route information making the mode more accessible to new users.

These trends, which are expected to continue and intensify in the future, will be part of the demand for additional transit service in the Eau Claire area.

It is also noted that these trends typically occur in university communities with strong transit systems. However, Eau Claire Transit is inconsistent in the level of service that is provided. While area coverage is at an “A” level, frequency and span of service are much lower.

Improvements to the route frequency in these areas will have the greatest return on investment and provide better service to the people most likely to use transit service in Eau Claire.



A new and improved transit center on another site in the downtown is being considered by the City

## Walking and Bicycling

The central portion of Eau Claire was developed at a time when streets were interconnected and laid out in a grid pattern. This pattern of street development spawned a compact, mixed-use, and most importantly, walkable community. As the city expanded outward, the street system evolved into a suburban pattern with more cul-de-sacs, fewer sidewalks, and segregated land use. Thus, in newer portions of the city, dispersed land use and lack of continuity between streets create longer, circuitous routes that discourage walking.

### Walking

Eau Claire has an extensive system of concrete sidewalks along most of its local and collector streets. These promote walking, of course, and help build a sense of neighborhood and community. Walking and bicycling for recreation or utilitarian trips can also help reduce, at least somewhat, the epidemic of obesity in our country.

Figure 5-1 illustrates the pattern of existing and proposed sidewalks and off-street paths. Sidewalks are mapped together with the paths to show their relationship as a system.

Figures 5-12 and 5-13 were borrowed from the *Bicycle and Pedestrian System Plan* and illustrate in greater detail than Figure 5-11 the existing and planned network of sidewalks and off-street paths. Also shown are locations needing further study and locations perceived as being a gap in the network.

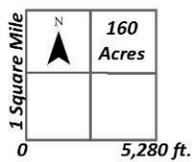
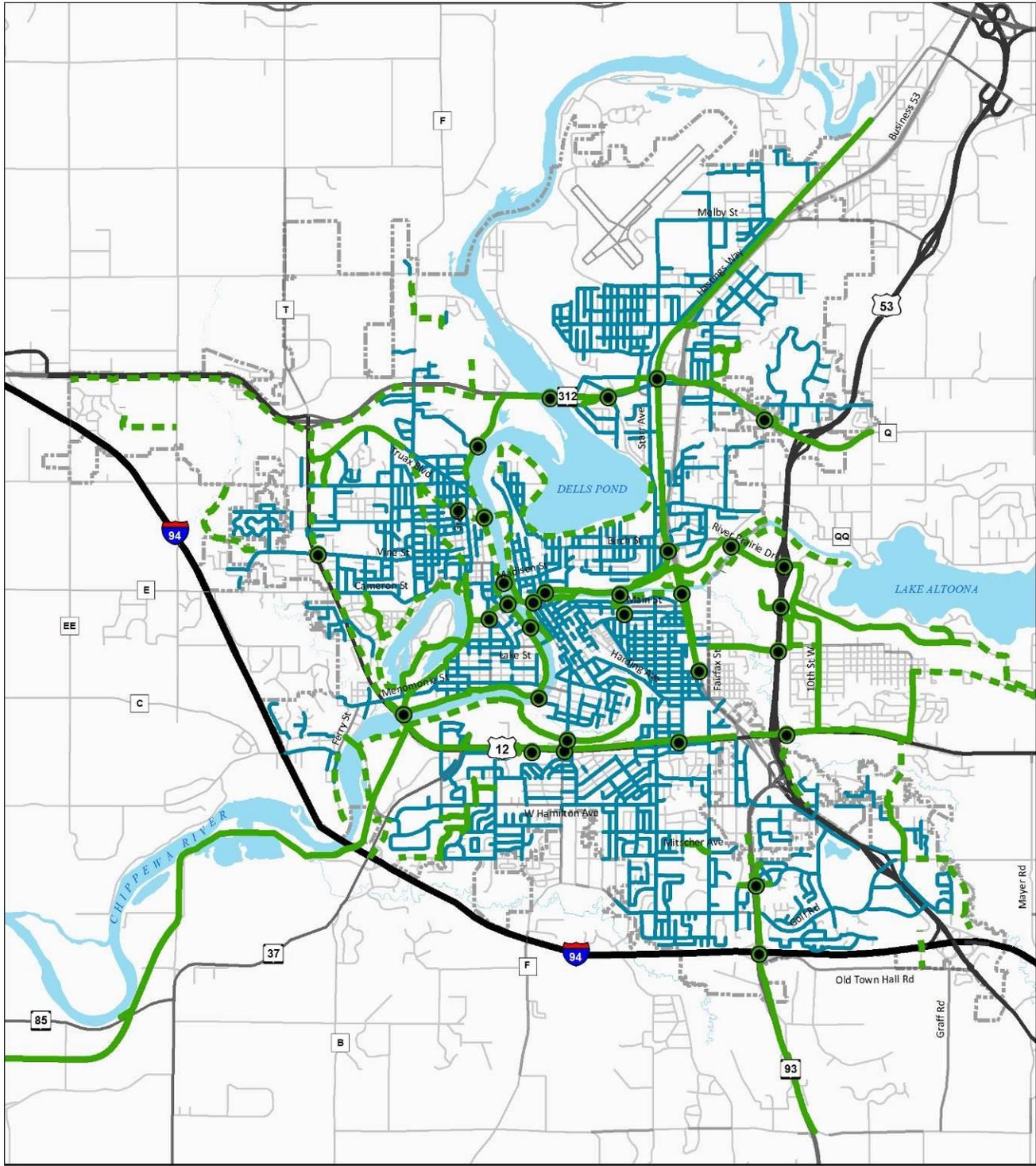
The majority of pedestrian activity in the city is located downtown, on the University of Wisconsin–Eau Claire campus, and along Water Street. New residential and mixed-use buildings downtown, growing employment and the trail system are combining to make the four quadrants of downtown much more walkable.

To ensure that walking remains a safe mode of travel in these areas and other areas, overpasses or underpasses have been constructed several locations as shown on Figure 5-11. Pedestrian bridges crossing the Chippewa and Eau Claire Rivers have been constructed on the UWEC campus and near Banbury Place. A new crossing of the Chippewa River is under construction in 2014 at the High Bridge, a former railroad bridge near the Dells Dam.

Current city policy and Subdivision Code Section 17.12.280 requires every new street to have a five-foot wide sidewalk on both sides, subject to City Council review. This ordinance dates back to 1974, but there has been inconsistent implementation of the sidewalk ordinance by changing City Councils. The result has been a mixture of streets with sidewalks on both sides, one side, or no sidewalks on either side. This has produced gaps in the pedestrian system. Consistent and full application of the sidewalk policy should be the norm.



Walking is enabled by an interconnected, city-wide network of sidewalk and paths.



- Existing Off-Street Path
- - - Proposed Off-Street Path
- Sidewalks
- Grade Separated Facility

**Figure 5-6**  
**Existing and Proposed**  
**Sidewalks and Off-Street Paths**

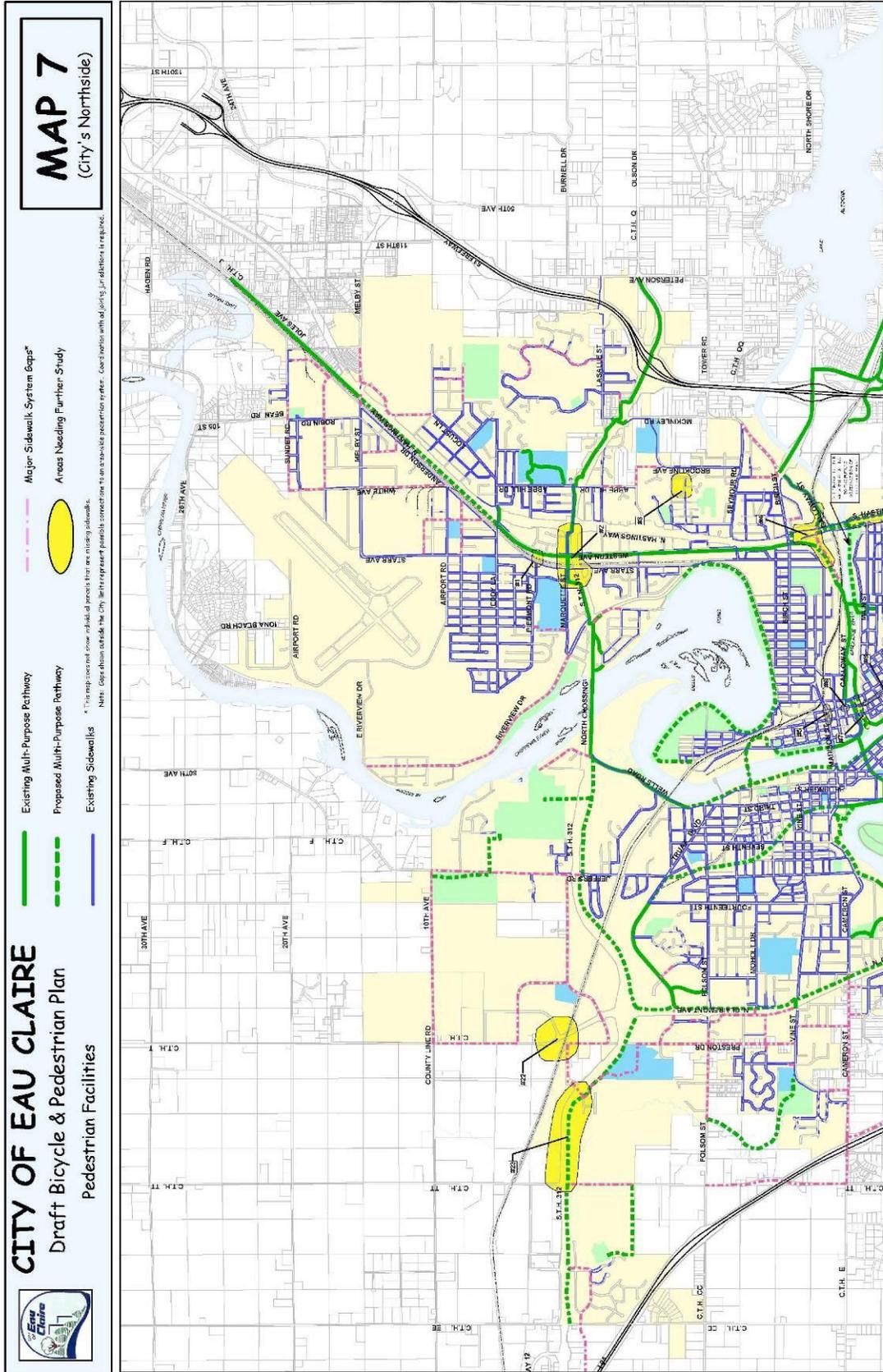


Figure 5-12: Existing and Planned Walking Routes - North

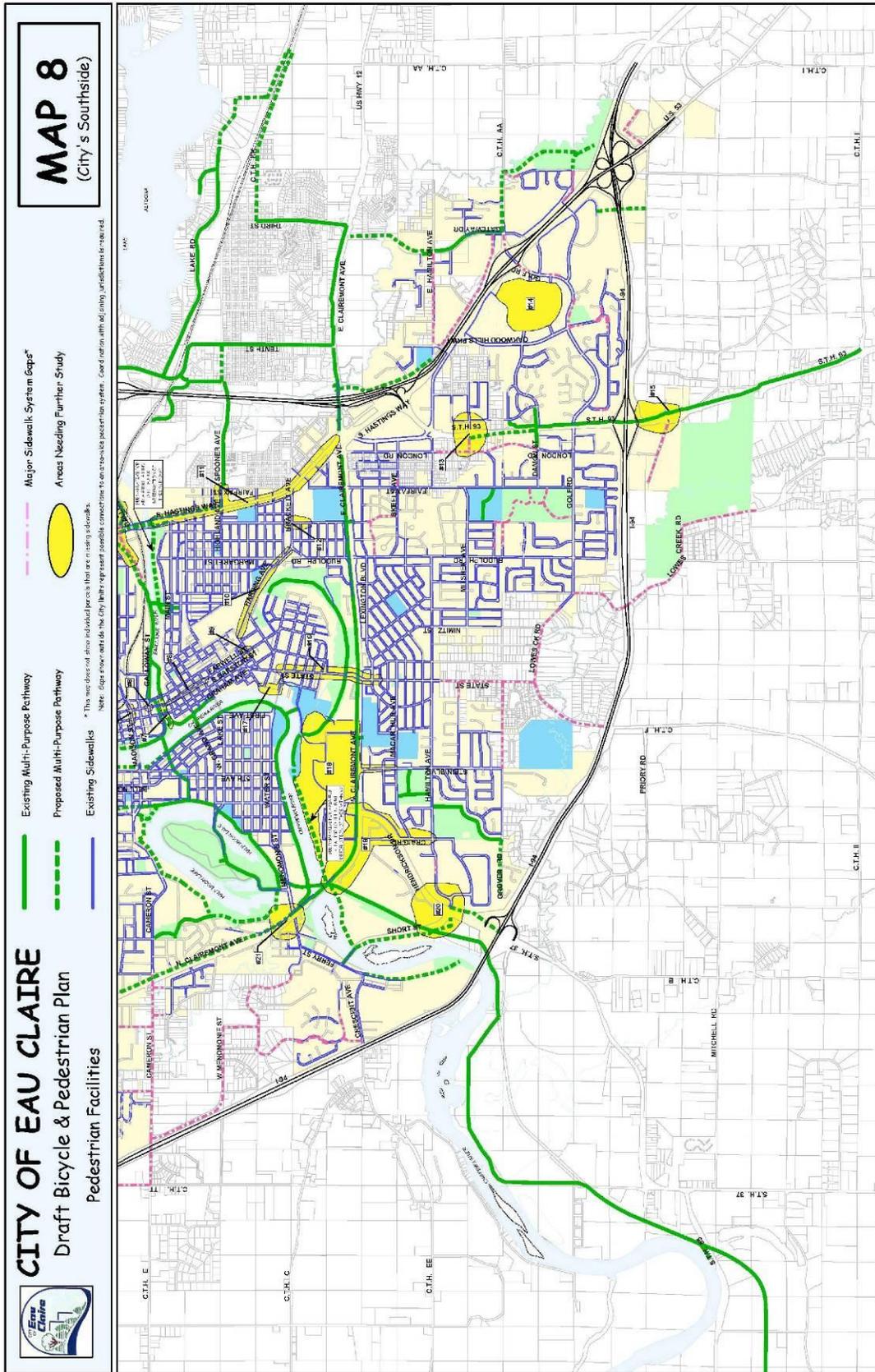


Figure 5-13: Existing and Planned Walking Routes – South

## Bicycling

Eau Claire has 3.7 miles of bicycling lanes, 32 miles of off-road multi-use paths, 3.8 miles of “sharrows” and 0.4 miles of bicycle boulevard. The backbone of Eau Claire’s off-street path system is the Chippewa River State Trail, a 37-mile State facility that runs along the Chippewa River with a trail head at Phoenix Park.

Figure 5-14 Existing and Proposed Multi-Use Paths, identifies the existing trail system and grade separated crossings.

As noted above, the *Bicycle and Pedestrian System Plan* included many recommendations for public improvements that would benefit bicyclists.

Figures 5-15 and 5-16, borrowed from that plan, show the existing and planned bicycling system including on-road lanes, off-road paths and areas needing further study.

Several separated grade facilities for pedestrians and bicyclists are included in the present sidewalk and trail network:

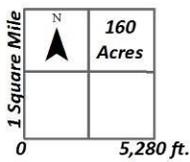
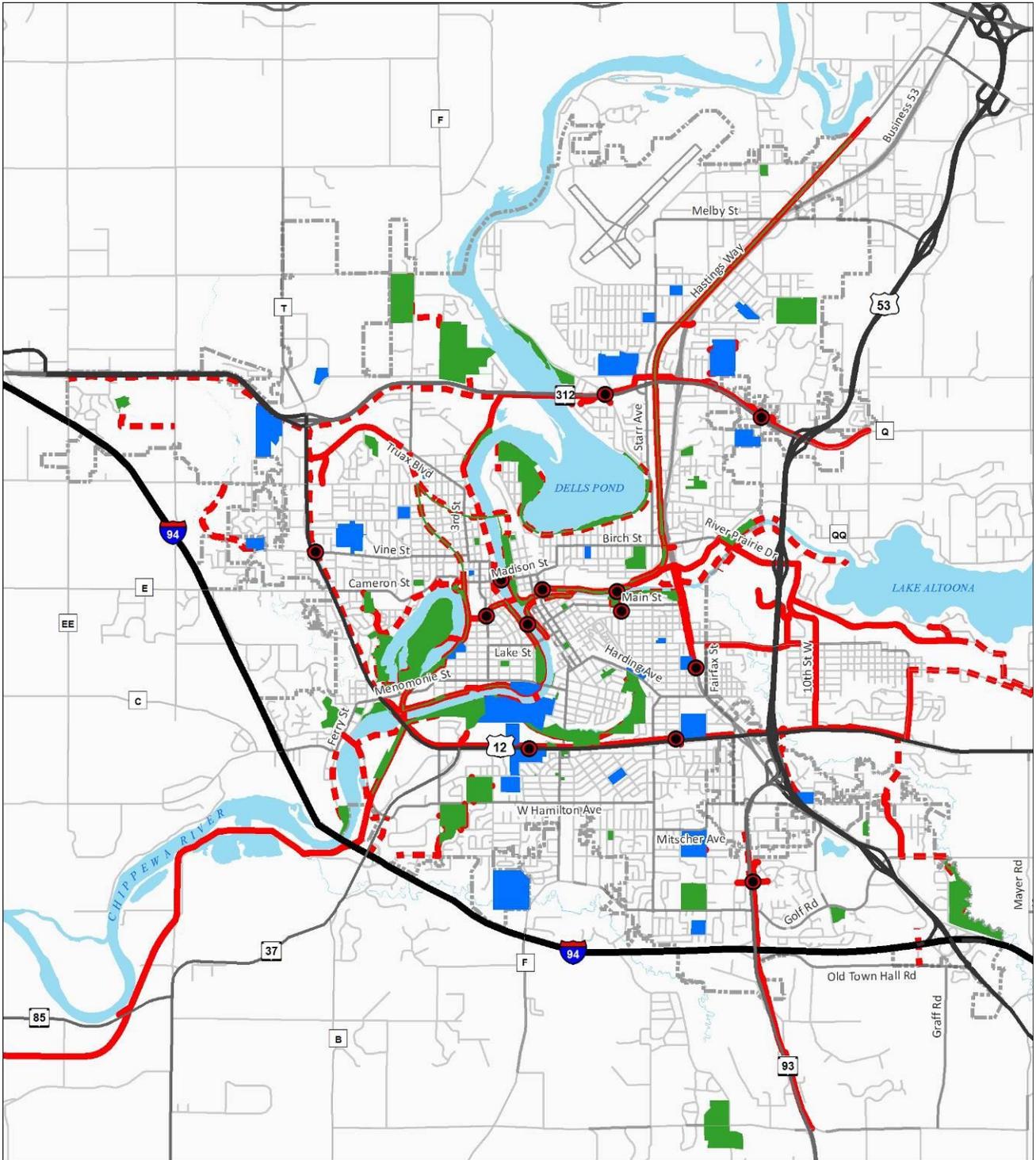
- Memorial High School tunnel under Clairemont Avenue
- Chippewa Valley Technical College bridge over Clairemont Avenue
- Fine Arts Building bridge over the Chippewa River
- Uniroyal / Boyd Suspension bridge over the Eau Claire River
- Grand Avenue bridge over the Chippewa River
- Railroad Street bridge
- Soo Line “S” Bridge
- North Crossing at Riverview Drive
- North Crossing at McKinley Road
- Old railroad right-of-way at 5th Avenue underpass
- 5th Avenue/Chestnut Street underpass
- STH 93 / Damon Street underpass
- STH 12 / Vine Street underpass
- Main Street underpass at Boyd School
- The High Bridge (2014)

The existing and planned systems were illustrated with maps of the northern and southern halves of the city, as shown by Figures 5-15 and 5-16. The bicycling network consists of:

- Off-road multi-use paths
- On-street striped lanes, wide curb lanes, paved shoulders or shared-road markings
- Signed-only routes on streets

### Bicycle and Pedestrian System Plan, 2010

- Led by the Bicycle and Pedestrian Advisory Commission, this plan recommended as interconnected network of on- and off-road that link neighborhoods and major destinations. It outlined public and private actions for the next 20 years or more to improve bicycling and walking for either recreational or utilitarian trips. Many sound policies and practical ideas were presented. The full document is available on the City’s Website under Departments, Public Works, Transportation.



- Existing Multi-Purpose Path
- - - Proposed Multi-Purpose Path
- Grade Separated Facility
- Schools
- Parks

**Figure 5-14**  
**Existing and Proposed**  
**Multi-Use Paths**



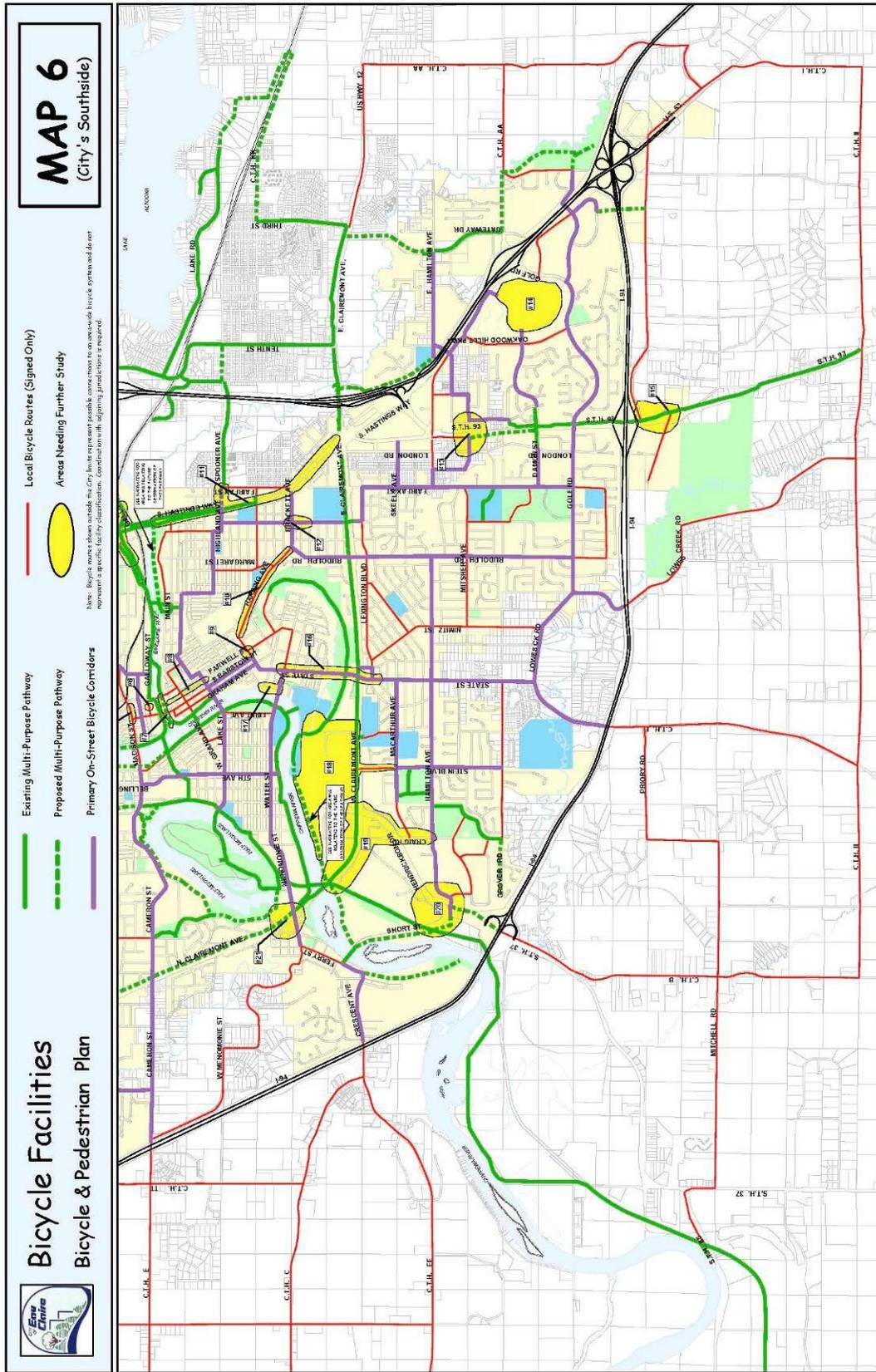


Figure 5-16: Existing and Planned Bicycling Routes – South

## Freight and Shipping Facilities – Ground

The movement of goods in and out of the Eau Claire area is one of the primary functions of the transportation system. A system that is easily accessible for large trucks with close access to major highways is desirable for businesses, which in turn, improves the economic well being of the City. There are several manufacturing and warehousing centers in Eau Claire, most them are near a major highway. Figure 5-17 identifies major freight and shipping facilities in and around Eau Claire.

Eau Claire’s highway system is well designed to accommodate the flow of external freight movement. Wisconsin Highway 312, built in the early 1990s, provides excellent access to I-94 and US 53. Just north of Eau Claire is Wisconsin 29. This roadway travels east-west across the state connecting I-94 on the west with Green Bay on the east. These highway connections allow for goods to be shipped in any direction in and out of the Eau Claire area. Other small manufacturing sites are located throughout the city with many of the recent developments being located in close proximity to these major highways.

Truck traffic through local neighborhoods has been an issue that the City has dealt with in the past. Currently there are no official “truck routes” through Eau Claire. Efforts by residents to restrict truck traffic from residential areas have been made. At this point, the City Council has responded to these concerns by prohibiting truck traffic through certain neighborhoods. Truckers are informed of these prohibitions by posted street signs.

### Freight Rail Traffic

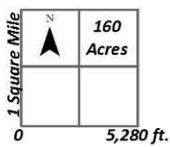
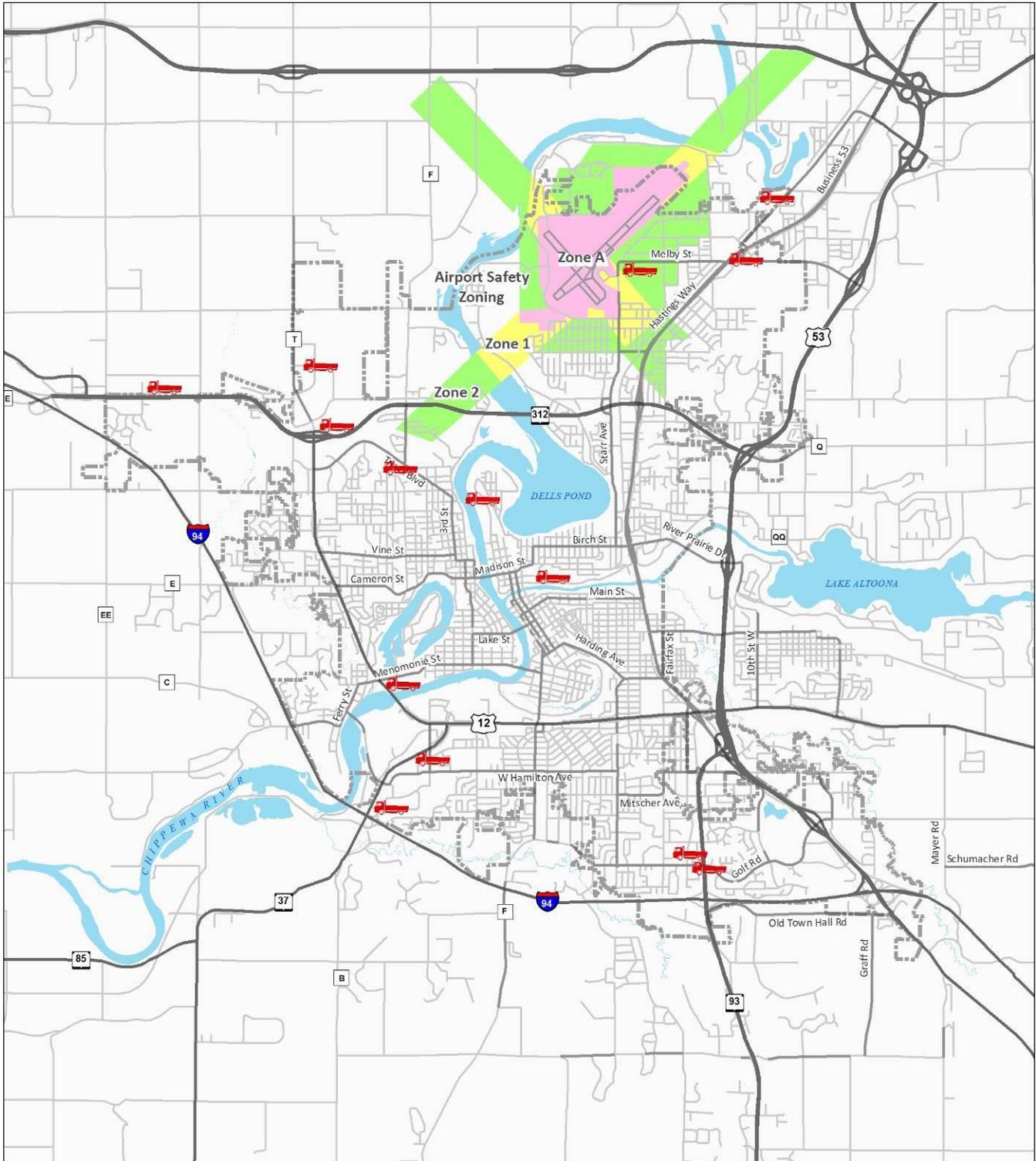
Overall, Eau Claire is not heavily dependant on rail transportation for the shipment of goods. Some of the industrial parks within Eau Claire are located near rail service. The Gateway Industrial Park and the Banbury Place warehouse are located near major highway routes and also have access to rail transportation.

**Train Traffic through Eau Claire:** The volume of train traffic through Eau Claire has been changing because of the evolving nature of the frac sand industry and other demand factors. In 2014, traffic through Eau Claire could be summarized as follows:

- **Through Trains:** 5 to 9 per day. Some of these originate or terminate at Altoona. Operations occur 24 hours per day.
- **Local Trains:** There are 2 trains per day in each direction from Altoona.
- **Transfers** to the Wisconsin Northern Railroad near Chippewa Falls: 2 to 4 per day.

There has been an overall increase in freight rail traffic nationally during the past ten years. Locally, some additional traffic may be attributable to the frac sand operations north of Chippewa Falls. As of 2014, the Union Pacific Railroad did not run oil trains through Eau Claire and was not expected to do so, but that could change, according to a WisDOT official who monitors train traffic.

Train traffic in Eau Claire is forecast by a Union Pacific representative to grow another 25 to 50 percent in the next five years. The switching and assembly yard at Altoona is planned for expansion, which would likely increase the number and length of trains through Eau Claire.



 Freight or Shipping Facility

**Figure 5-17**  
**Freight and**  
**Shipping Facilities**

**Railroads and Lines:** A Union Pacific (UP) main rail line runs east-west through the city. As a transcontinental, Class I line, the UP line connects Eau Claire with Minneapolis-St. Paul and Chicago, and beyond. A UP spur line also runs north, linking to the Canadian Pacific line in Chippewa Falls. See Figures 5-18 and 5-19 for the track alignments.

The main UP line enters the City through the Gateway West Business Park near County Highway T, crosses the Chippewa River north of the Dells Dam, turns southeast to cross Birch and Galloway Streets, runs along the Eau Claire River then exists the City by crossing the river west of River Prairie Drive. The northern spur line diverges from the main line south of Mount Simon Park and runs along the southern edge of Dells Pond before turning north to run parallel to Hastings Way on its way to the switching yard near Chippewa Falls. Thus, residential neighborhoods are affected by both lines.

### **Possible Railroad Quiet Zones**

In 2014, the City of Eau Claire studied the feasibility of establishing one or more railroad “quiet zones.” Two possible Quiet Zones were studied:

1. Galloway and Putnam Street Crossings
2. Seven crossings from Centre Street to Hogarth Street.

A Quiet Zone is:

A section of rail line at least one-half mile long that contains one or more consecutive public highway-rail grade crossings at which locomotive horns are not routinely sounded when trains are approaching the crossings. Train horns may be sounded in emergency situations or to comply with other railroad or FRA rules even within a Quiet Zone.

The Federal Railroad Administration has established standards or thresholds with which to judge whether a Quiet Zone may be established. Such zones have been created in other cities. Normally, federal regulations require that a locomotive engineer sounds his train horn for at least 15 seconds and no longer than 20 seconds in advance of all public crossings. A federal permit would be required to establish a Quiet Zone.

Although a locomotive horn is an effective deterrent to accidents at certain grade crossings, most people know that the noise from train horns creates stress, harms quality of life and sometimes also leads to loss of property value.

### **Possible Quiet Zone #1: Galloway and Putnam Street Crossings**

There is an average of 6 trains per day through the Galloway and Putnam Street crossings.

- Galloway Street: Eliminate driveway access
- Putnam Street : Install RR equipment, eliminate driveway access

Estimated cost: \$421,000



**Figure 5-18: Possible Quiet Zone #1**

**Possible Quiet Zone #2: Centre to Hogarth Streets**

There is an average of 5 trains per day through these 7 crossings. A variety of physical improvements were recommended at these crossings, with each crossing receiving a slightly different combination. They included:

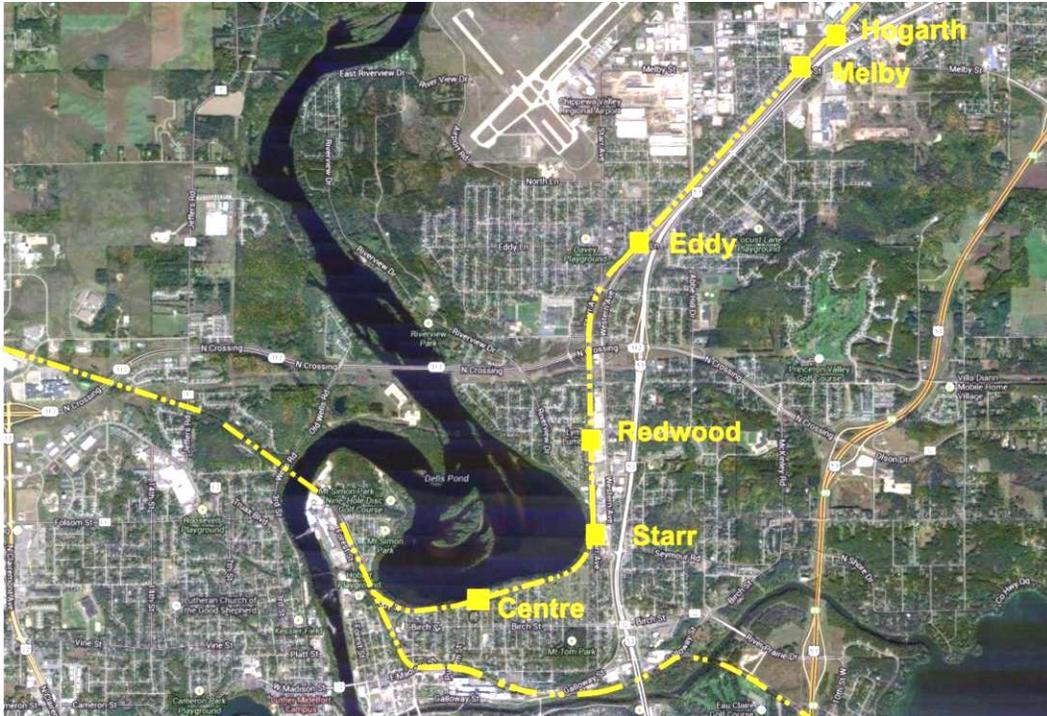
- Flashing lights with gate arms
- Street closings
- Driveway closings or relocations
- Vertical medians
- Signs
- Bike-pedestrian trail relocations
- Track switch replacements.

Recommended improvements were:

- Centre Street: Install RR equipment, sign & mark pedestrian access
- Starr Avenue : Install RR equipment, relocate driveway access
- Redwood Drive: Install RR equipment, improve track switch, driveway access review
- Eddy Lane: Install RR equipment (four gates), relocate or close multi-use path
- Melby Street: Install RR equipment
- Hogarth Street: Install RR equipment, improve track switch

Estimated cost: \$2,460,000

The Delbert Road crossing was originally proposed as a quiet zone, but the crossing was closed in 2014.



**Figure 5-19: Possible Quiet Zone #2**

## Passenger Rail

Eau Claire last saw passenger rail service in 1963, served by the Chicago and Northwestern Railway’s Twin Cities “400.” Since the late 1990s, efforts have been made by the City and the West Central Wisconsin Rail Coalition to bring back service as part of the larger Midwest Regional Rail System. Currently, potential service is indicated in both the Wisconsin and Minnesota state rail plans, using Union Pacific’s mainline through the city. The former site of the C&NW depot near Putnam Street is the candidate location for the station.

The *Wisconsin Rail Plan 2030* identifies intercity passenger rail routes through Eau Claire. The plan states, “Eau Claire and West Central Wisconsin could be served in multiple ways. One possibility is that the region could be connected to the selected route of the Minnesota-led Milwaukee to Minneapolis-St. Paul Tier 1 EIS, with through service between Chicago, Milwaukee and Minneapolis-St. Paul. Alternatively, or in addition, it could be served with trains exclusively between Eau Claire and the Twin Cities. As part of the long range plan, studies will be undertaken to explore these options in the long-term plan timeframe.”

The *Minnesota State Rail Plan* identifies service exclusively between the Twin Cities and Eau Claire. Implementation is considered a Phase 1 priority; however it is unlikely a project would occur before 2020. The route is contemplated for conventional intercity passenger rail with speeds up to 79 miles per hour, served by four daily round-trips. Future ridership studies will determine if the route is better suited for intercity passenger rail or commuter rail. It might also be possible that synergies could exist to more readily implement these shorter commuter or intercity frequencies if the route were upgraded with 110 mph or faster train infrastructure as part of the Twin Cities to Chicago main corridor.

## Air Transportation

The Chippewa Valley Regional Airport is the airport located on the north side of Eau Claire. This facility has an intersecting runway configuration with the primary runway being 7,301 feet long, 150 feet wide and running in a northeast-southwest direction. The other runway serves as a crosswind runway is oriented in a northwest-southeast direction and is 4,999 feet long and 100 feet wide.

Land-side facilities include a 25,385 square foot passenger terminal building that provides ticketing, baggage claim, rental cars, administration, departure gates and a restaurant.

### Air Space Zoning Overlay District

For the sake of flight safety and consistent with Federal Aviation Administration (FAA) requirements, Eau Claire County administers Chapter 18.60 in its zoning ordinance, which restricts the height, setback, density and use of structures in four zones on and around the airport property, including lands in the City of Eau Claire or Chippewa County. Zone A contains the airport perimeter and zoning of airport buildings, Zone 1 is the runway approach and departure district, Zone 2 regulates noise reception, Zone 3 is limits building height, density and use within three miles of the airport. These zones are shown on Figure 5-17, Freight and Shipping Facilities.

Types of permitted on-airport land uses include, among others, air cargo facilities and intermodal facilities. The County Committee on Planning and Development receives a recommendation from the City of Eau Claire Community Development Department regarding any building or land use application within an airport safety zone that is also in the City.

### Passenger Traffic

Scheduled air service is provided by United Airlines / SkyWest, which offers two flights to Chicago daily, one in the morning and one in the afternoon. Charter flights for vacation travelers also occur on a periodic basis. In 2014, the number of annual enplanements was approximately 22,000. The forecast for year 2031 is 34,000.

### Air Cargo Operations

As of 2014, there was no regularly scheduled air cargo operations locally because most freight is trucked to or from the Twin Cities. Only, 6 to 10 cargo flights occur at the airport in a given year.

In the *Airport Master Plan*, two alternative sites were identified for development of air cargo operations in the long-term future. Both include cargo aircraft parking, a cargo processing facility and ground vehicle parking. Alternative 1 is north of the general aviation hangars adjacent to Taxiway A with access via Hogarth Street. Alternative 2 is south of the airfield with access from 10<sup>th</sup> Avenue and Airport Road. Alternative 1 was preferred in the master plan.

Airport representatives have requested that the City amend its *Comprehensive Plan* to allow for air cargo operations and that the zoning be changed from P-Public to a new zone that is specific to the airport, similar to the zone administered by Eau Claire County, the owner of the airport. While there were no prospective tenants in 2014, airport representatives would like to retain the ability to consider this type of development if the opportunity is presented.

## **Intergovernmental Relationships**

### **Institutional Relationships**

The City of Eau Claire has several different types of relations with other governmental agencies. Most of the arrangements in place deal with funding or cooperative agreements. The most significant agreement in place regarding transportation is between WisDOT and the City regarding the allocation of dollars to maintain the city's functional classified streets. The City also works closely with Eau Claire County on projects that affect transportation issues within the City.

### **Metropolitan Planning Organization (MPO)**

The City of Eau Claire became an urbanized area in 1980 and the Chippewa-Eau Claire MPO was formally established in 1982. The West Central Regional Planning Commission (West Central) houses the Chippewa-Eau Claire MPO. The MPO completes all federally required transportation planning activities for the metropolitan area, (such as the maintenance of a Metropolitan Transportation Plan and its modal elements and the annual preparation of a Metropolitan Transportation Improvement Plan) and it conducts various demographic traffic forecasting and special transportation planning studies.



Eau Claire is a city of many bridges, and their maintenance or replacement sometimes involves other units of government. The City-owned Dewey Street bridge, shown above, is scheduled for structural improvement in 2015 and 2016.

## Committed and Planned Projects

Improvements that will enhance Eau Claire’s transportation system and alleviate future congestion and safety issues are identified by various planning agencies with jurisdiction over the City’s street system. Funding plans that have an effect on the City include the Eau Claire Capital Improvement Program (CIP), the MPO’s Transportation Improvement Program (TIP), and the State Transportation Improvement Program (STIP). These documents plan and program local, state, and federal money for the next 4 years (2015 to 2019).

The City of Eau Claire, through its CIP, has several general programs in place for various types of maintenance and regular improvements. These programs are regularly budgeted each year include a city-wide street and sidewalk improvement program, a bituminous overlay program, a program to repair concrete joints, and a boulevard tree program. In addition, the City regularly receives Hazard Elimination Project funds and Surface Transportation Program funds.

The projects included in these various plans cover a wide variety of multi-modal transportation improvements such as street maintenance, streetscaping, safety improvements, road construction, new roadway alignment and bicycle/pedestrian facilities. Listed below are the programmed projects with a cost greater than \$500,000:

- Downtown Redevelopment (2015-2016)
  - Structure improvements to Madison Street Bridge and Dewey Street Bridge
  - Roadway construction or improvements to Galloway Street, Hobart Street, Graham Avenue, Eau Claire Street
- Galloway Street (2018)
  - Connection improvements to Hastings Way
- Harding Avenue and Washington Street (2019)
  - Reconstruction
- Water Street and Campus Area (2016-2017)
  - WisDOT will be replacing the Water Street bridge; also Summit Avenue, Park Avenue and First Avenue improvements.



The Water Street bridge over the Chippewa River is programmed for replacment

## Assessment of Transportation Policies

Many of the city’s existing policies impact the transportation system. These various policies or goals and objectives are found in several municipal documents. The following summary provides an assessment of the impacts to the transportation system from these policies.

### Zoning Ordinance

Overall the city’s zoning regulations are compatible with the majority of the transportation components. The zoning ordinance allows densities and mixed- or multiple-use development if desired by the market.

Many of the industrial uses are located near the major highways (I-94, STH 124, US 53), as are the heavy concentrations of commercial uses and “big box” retail located around the I-94/US 53/STH 93 area. These uses are typically located with good highway access and serve the traffic volumes generated. The majority of the city is made up of residential use.

### Parking Requirements

The City’s Zoning Ordinance includes standards for the number of off-street parking spaces, and it typically requires more spaces than needed for commercial land uses, especially retail developments.

### Street Standards

The City’s Subdivision Ordinance contains specifications for street widths and roadway right-of-way. This information may also be found on the official map. Street widths are based on the type of street (road classification) and the function that the street serves. Also included in the Subdivision Ordinance, along with street width, are the right-of-way standards for defined type of streets. Street widths and right-of-way standards are presented below:

**Table 5-8**  
**Standards for Rights-of-Way and Road Widths, City of Eau Claire**

|                   | <b>Right-of-Way</b> | <b>Road Width</b> |
|-------------------|---------------------|-------------------|
| Major Streets     | 80 feet             | 48 feet           |
| Collector Streets | 66 feet             | 36 feet           |
| Minor Streets     | 60 feet             | 30 feet           |

\*Source: *City of Eau Claire Subdivision Ordinance*

These current street standards are similar to those used by other municipalities for local streets. The city provides flexibility in these standards to allow different types of development to occur. This flexibility, in turn, provides citizens with a choice regarding the types of neighborhoods and environment they would like to live and work.

Alleys are not allowed in residential areas unless necessary because of topography of other exceptional circumstances; they are allowed in the Traditional Neighborhood Development zoning district.

**Access Management**

At the current time, the City has no standards or policies related to access management or the spacing of driveways along roads. However, the City does utilize a site plan review process, and standards from the Planned Development Ordinance to guide future access permits. In addition, WisDOT maintains standards along state highways that traverse the city. These State standards are as follows:

**Table 5-9  
Standards for Intersection Spacing, City of Eau Claire**

| <b>Average Daily Traffic</b> | <b>Minimum Spacing</b>   |
|------------------------------|--|
| Under 2,000                  | 500 feet for private access,<br>1,000 feet for public access   |
| Between 2,000 and 5,000      | 1,000 feet for private access,<br>2,000 feet for public access |

In addition to access spacing, WisDOT also enforces building setbacks along state trunk highways (STH). An administrative rule under the State of Wisconsin states that a property that abuts a STH must be 50 feet from the public right-of-way or 110 feet from the centerline, whichever is greater. This rule, which the City considers excessive and inappropriate, applies to any improvements such as buildings, signs, septic improvements or other property enhancements.

**Sidewalks**

Under the current City policy, sidewalks are required on both sides of newly constructed local streets; however the final determination on whether or not sidewalks are constructed is determined by the City Council. Turnover in Council members have led to the inconsistent use and enforcement of the City’s existing policy and in turn, have created an irregular system of sidewalks along new streets.



Sidewalks are required on both sides of newly-constructed local streets.