

# CORRIDOR MANAGEMENT PLAN

**US 14 Corridor Study**  
**Project ID 5155-04-09**  
**WIS 92 to I-39/90**  
*Dane and Rock Counties*

*Prepared for:*



*Prepared by*



**July 2014**

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## **CHAPTER 1 – INTRODUCTION AND PURPOSE OF STUDY**

### **1.1 Introduction**

The Wisconsin Department of Transportation (WisDOT) Southwest Region contracted with Oneida Total Integrated Enterprises (OTIE) to conduct a study to develop a long-range plan for the US 14 corridor from WIS 92 to I-39/90 in Dane and Rock Counties. The plan involves reviewing the existing conditions on the corridor, identifying deficiencies and needs, and developing a long range plan for the corridor.

### **1.2 Project Team**

The project team and contributors include the following groups and individuals:

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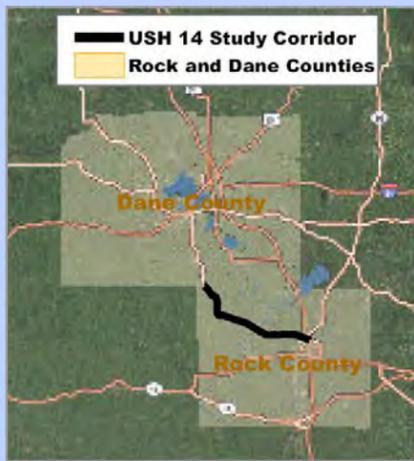
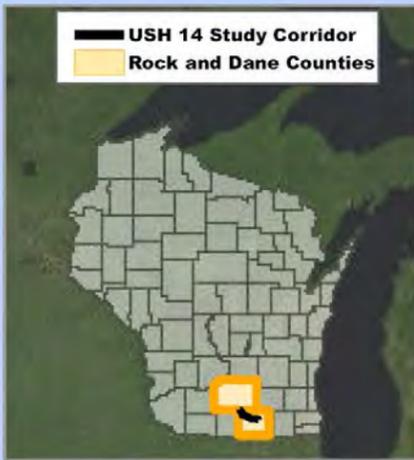
KL Engineering, Inc.  
Todd Hertz, P.E.  
Dave Tollefson

### **1.3 Study Limits**

The study limits extend along US 14 from the WIS 92/US 14 intersection in Dane County to the I-39/90 interchange in Janesville, Rock County, a distance of approximately 22.5 miles. The corridor connects Evansville, Janesville, and Brooklyn. A map of the study area is shown in Figure 1.1.

# USH 14 Study Location

WisDOT I.D. 5155-04-09  
 STH 92 to Janesville (I39/90)  
 USH 14  
 Rock and Dane Counties



Source: WDNR, ESRI,  
 US Census Bureau, KL Engineering

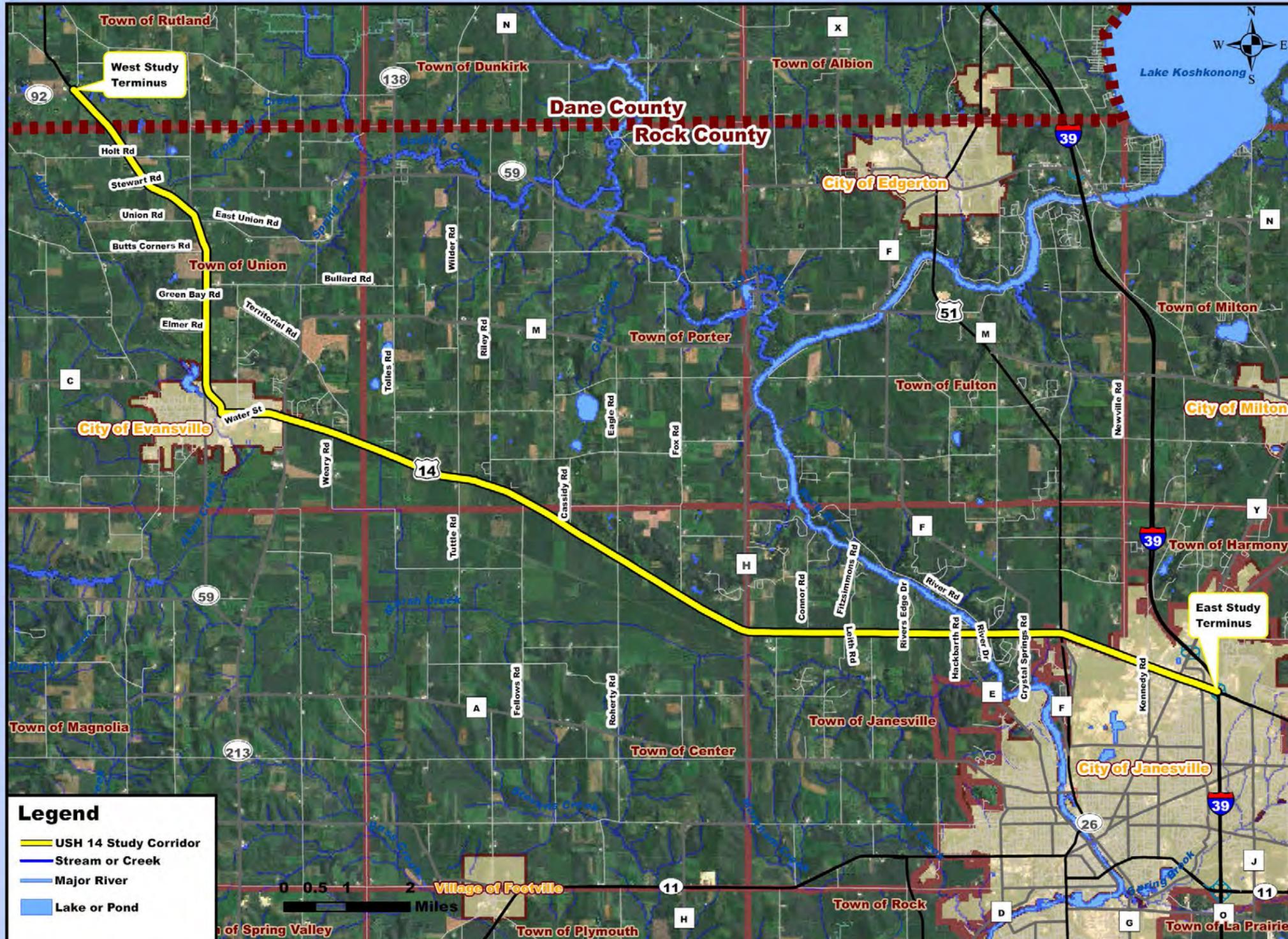


Figure 1.1: Study Area Map

## **1.4 Purpose of Study**

The purpose of this study is to develop a long-range plan (Corridor Management Plan) to evaluate access and operational and safety needs along the corridor. This will allow for WisDOT and local officials to adequately plan for future land use and transportation needs. The study will include possible improvement alternatives and strategies related to safety and mobility which will allow US 14 to operate efficiently well into the future, while maintaining the current 2-lane facility.

As traffic increases and additional nearby land is developed along such highways, events around the state have shown that unmanaged and unprotected highways can deteriorate quickly in the form of reduced safety and operational efficiency. In addition, development can increase the cost for new right-of-way and reduce alternatives for necessary road improvements.

## **1.5 Study Process**

The study process will be completed in two phases; the first phase will gather data on the existing corridor, and will culminate in an Existing Conditions Report. The second phase will analyze improvement strategies for the corridor, and will result in a Corridor Management Plan.

The data gathering phase will collect information about the existing US 14, including traffic volumes; crash rates; geometric deficiencies; number and location of access points; existing and future land use; wetlands and floodplains; potential archaeological and historical sites; potential hazardous materials sites; and railroad facilities. This phase of the study will also include agency coordination and public involvement. The results of the data gathering phase will be summarized in the Existing Conditions Report.

Possible strategies for improving safety and mobility on the corridor will be developed based on the results of the Existing Conditions Report. These strategies could include geometric improvements, intersection improvements, access improvements or modifications, passing lanes, side road access modifications, or other improvements. The study will conclude with a Corridor Management Plan. The final plan will provide possible alternatives for improvements, and identify thresholds for when these improvements might be implemented.

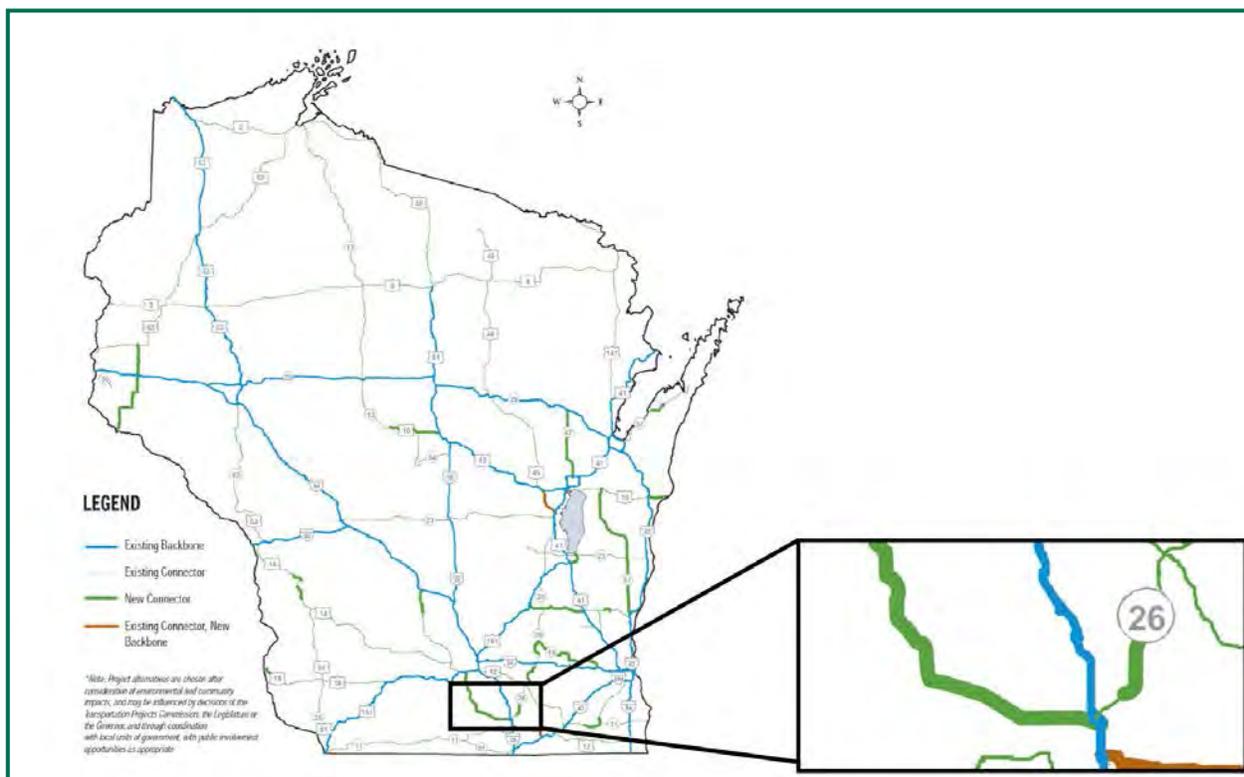
## CHAPTER 2 – EXISTING CONDITIONS

### 2.1 Transportation Facilities

#### *US 14 Corridor*

US 14 is a principal arterial highway that serves south central Wisconsin and is a major link between the Madison area, LaCrosse, Janesville, and northern Illinois. It provides access to recreational and tourist destinations as well as many farming communities. It is also used by commuters to access employment destinations in Madison and Janesville.

US 14 is identified as a Connector Route in WisDOT’s Connections 2030 plan, reiterating its importance in serving regional travel needs. Connector routes are a series of high quality two and four-lane roadways that connect the state’s economic and population centers to each other and to the backbone routes. Connector routes are expected to carry long-distance, statewide and inter-state traffic.



**Figure 2.1: Connections 2030 Map**

*Source: Wisconsin Department of Transportation*

US 14 is part of the National Highway System (NHS), which includes over 160,000 miles of highways across the nation. The NHS includes interstate highways, principal arterial highways, strategic highways and intermodal connectors. These roads are important to the nation’s economy, defense and mobility.

The US 14 corridor between Brooklyn and Janesville is predominantly a rural two-lane highway. The typical cross section for this area of US 14 consists of two 12-foot lanes with 6-foot to 8-foot

shoulders (3-foot paved). Through Evansville, US 14 becomes a two-lane urban section with curb and gutter and sidewalk. The typical cross section for this section is two 12-foot lanes with 4-foot paved shoulders and 2.5-foot curb and gutter. At County M to US 51, east of Evansville, US 14 returns to a rural two-lane highway. There is a 12-foot wide truck climbing lane located in this section east of the Rock River in the eastbound direction. US 14 becomes a four-lane divided roadway between US 51 and I-39/90, including median separation and designated turn lanes at intersections.

Many intersections throughout the rural areas lack right turn lanes and bypass lanes to accommodate turning vehicles. Bypass lanes are paved lanes that allow through traffic to bypass vehicles waiting to make a left turn at a Tee intersection. Right turn lanes provide a deceleration area for vehicles making a right turn, allowing through traffic to maintain speed.

The eastbound lane of rural US 14 has 5 right turn lanes and two bypass lanes. The right turn lanes are located at WIS 92, WIS 59/213, Weary Road, County H and Leith Road. The bypass lanes are located at WIS 59 and Bullard Road. There is also a truck climbing lane in the eastbound direction that begins at N River Road and ends at Edgewood Drive.

The westbound lane of rural US 14 has 8 right turn lanes and two bypass lanes. The right turn lanes are located at WIS 92, WIS 59, Bullard Road, J Lindemann Drive, Weary Road, County H, N River Road and Juniper Ridge Court. The bypass lanes are located at WIS 59/213 and Leith Road.

In the urban section of US 14, east of US 51, most of the intersections have right and left turn lanes. Bell Street does not have right turn lanes in the eastbound or west bound direction, and Kennedy Road does not have a right turn lane in the westbound direction. Many of the commercial driveways in this section also have right and left turn lanes.

There are eight signalized intersections within the US 14 corridor, seven of them in Janesville and one in Evansville. They are located at County M, US 51, Kennedy Road, Bell Street, WIS 26, Lexington Drive, Pontiac Drive and at I-39/90.

### ***Corridor Speed Limits***

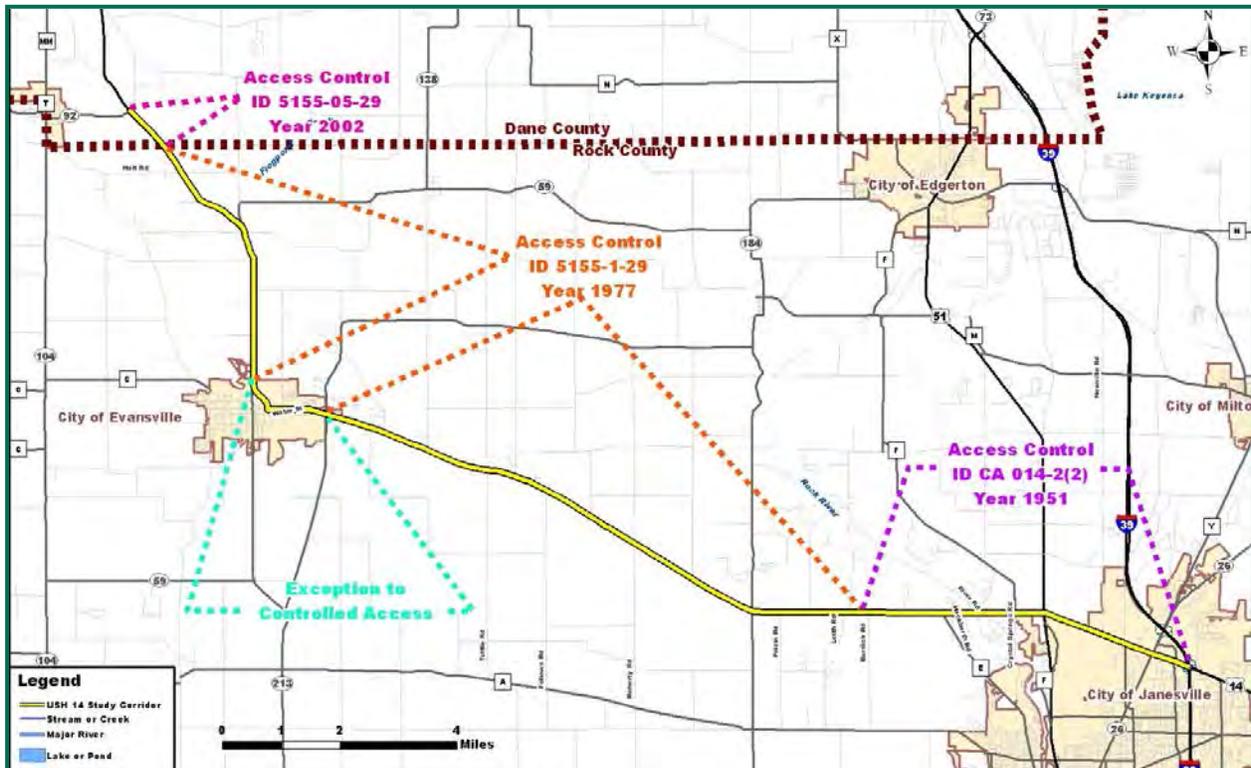
Posted speed limits within the corridor vary between 25 mph and 55 mph. The following sections have speed limits below 55 mph.

1. From Elmer Road to the north Evansville city limits, the speed limit starts at 45 mph then decreases to 35 mph.
2. From the north Evansville city limits to County M, the speed limit is 25 mph.
3. From County M to J Lindemann Drive, the speed limit is 45 mph.
4. From Edgewood Drive/Juniper Ridge Court to US 51, the speed limit is 45 mph.
5. From Newville Road to Kennedy Road, the speed limit is 50 mph.
6. From Kennedy Road to I-39/90, the speed limit is 40 mph.

### ***Access***

Wisconsin State Statute 84.25 gives WisDOT the authority to control access by freezing access along the corridor. Access control is generally completed following a roadway construction project. Once Statute 84.25 is complete, any future projects cannot remove any access without owners' consent. The addition of new access along the corridor is restricted.

Access control was completed on the US 14 corridor in Dane and Rock Counties, but has yet to be completed in Evansville (Figure 2.2, Existing 84.25 Administrative Access Control).



**Figure 2.2: Existing 84.25 Administrative Access Control**

In the 23-mile stretch of US 14, there are over 346 at-grade access points, of which 48 are intersections and 298 are commercial and residential driveways. Table 2.1 summarizes the type and frequency of access points along the US 14 corridor.

County	Length (miles)	Commercial & Residential Driveways	Intersections			
			Local Road	County Highways	WIS	US
Dane	1	2	0	0	0	0
Rock	22	296	41	3	3	1
<b>TOTAL</b>	<b>23</b>	<b>298</b>	<b>41</b>	<b>3</b>	<b>3</b>	<b>1</b>

**Table 2.1: Existing Access Points**

***Parking***

Parking is not permitted along the US 14 corridor.

***Park and Ride Lots***

There are currently no park and ride facilities located within the study area. However, the 1999 WisDOT DI Park and Ride System Plan identifies two locations in Janesville for potential future park and ride lots. One of these locations is along the west side of WIS 26, just north of US 14.

### ***Snowmobile Crossing***

There are numerous snowmobile trails located within the US 14 corridor; none of the trails are marked or signed. Specific trail crossings are located as follows:

1. Dane county trail 39 crosses US 14 north of WIS 92.
2. The corridor 40 trail crosses US 14 south of Union Road and north of Butts Corners Road.
3. The corridor 40 trail crosses US 14 at the intersection with County M.
4. The corridor 40 trail crosses US 14 at the intersection of Tolles Road.
5. The corridor 15 trail crosses US 14 at the intersection of County H.
6. The corridor 15 trail crosses US 14 west of County E, and again at the intersection of US 14 and County E.
7. The corridor 15 trail uses the US 14 bridge over the Rock River.

### ***Pedestrian and Bicycle Facilities***

There is minimal pedestrian traffic throughout a majority of the corridor due to the rural nature of the area. The exception is the urbanized area of Evansville. Sidewalks are located in Evansville between WIS 59/213 and J Lindemann Drive. Sidewalk begins 300 yards north of WIS 59/213 on the west side of US 14, and ends at J Lindemann Drive on the north side of US 14. Sidewalk on both sides of US 14 begins 500 feet north of the Union Road/Main Street intersection, and ends at County M.

Evansville has curb and gutter from Madison Street to J Lindemann Drive. There are marked pedestrian crosswalks along US 14 at Madison Street, Union Road/Main Street, Jackson Street, Cemetery Road, Countryside Drive, Water Street and County M. Included at the marked pedestrian crosswalks are curb ramps and yellow detectable warning fields. The intersection of US 14/J Lindemann Drive has curb ramps, but no detectable warning field or marked pedestrian crosswalk.

There is no sidewalk along US 14 in Janesville. However, several side streets that intersect US 14 have pedestrian facilities:

- There is sidewalk along both sides of WIS 26 north and south of US 14; there are marked pedestrian crossings and curb ramps at the US 14/WIS 26 intersection.
- There is sidewalk along the east side of Lexington Drive, south of US 14, including a curb ramp at the intersection with US 14; however, there is no marked crosswalk at the intersection.
- There is sidewalk along both sides of Pontiac Drive south of US 14, including curb ramps at the US 14 intersection; however, there is no marked crosswalk at the intersection.

None of the Janesville curb ramps have a detectable warning field. The corridor has pedestrian signals at the intersections of US 14/WIS 26 and the US 14/County M intersection. Pedestrian crossing related signing is absent throughout the corridor.

US 14 is not designated as a bike route according to the Wisconsin State Bike Map and the Bicycle Federation of Wisconsin, due to undesirable conditions and high traffic volume.

According to the Rock County Bike Route & Trails map, there are many bike trails located within the US 14 corridor, including trail crossings at the following locations:

1. Holt Road
2. Along US 14, WIS 59/213 to Main Street (Sidewalk Route)
3. Along US 14, Union Road to Cemetery Road (Sidewalk Route)
4. Water Street
5. Along US 14, County M to J Lindemann Drive (Sidewalk Route)
6. Weary Road
7. Wilder Road/Tuttle Road
8. Eagle Road/Roherty Road
9. Along US 14, Hackbarth Road to N River Road(Across Rock River)
10. Kennedy Road (Kennedy Road Trail)

Another important trail in the vicinity of US 14 is the Ice Age Trail. It is a multi-use path that circles the City of Janesville, and continues northeast to Milton. Future expansion of the trail includes a path along US 14 from US 51 to Kennedy Road. There is also a proposed corridor study of the Ice Age Trail that would include US 14 west of US 51 towards Evansville.

Additional future trail expansions around the corridor include a crossing north of Evansville in the area of Lake Leota, and a crossing at County M in Evansville.

### ***Railroads***

The Union Pacific Railroad and the Wisconsin & Southern Railroad (WSOR) both operate tracks in the corridor. The Union Pacific (UP) Railroad line extends across Evansville. This line is abandoned north of the city limits, but crosses WIS 59/213 within the city, near the intersection with US 14. Within the city and to the southeast, this rail corridor is an active freight line. This line is crucial to Nelson Young Lumber, Southern Wisconsin Grain and to Evansville's long-term industrial growth. Union Pacific also operates a small spur line with an at-grade crossing just east of Newville Road near the City of Janesville.

WSOR is considered a Class II operator, and its tracks provide freight linkages for rural and urban communities throughout southern Wisconsin. WSOR operates a track with an at-grade crossing through the middle of the intersection of US 14/Kennedy Road. Because of the configuration of the intersection, there are eight crossing gates at this location. All the at-grade rail crossings in the corridor have appropriate signing and pavement marking.

Currently passenger rail service does not exist within the US 14 corridor. In 2006 various state, county, and municipal officials in south central Wisconsin initiated the South Central Wisconsin Commuter Transportation Study (SCWCTS). This study was completed in 2008, and included recommendations for commuter rail lines and station locations. Several of these lines pass through the study area, and several stations are located in the study area:

- Janesville-Harvard, IL line
  - No stations along study corridor
- Janesville-Rockford line
  - No stations along study corridor
- Madison-Milton-Janesville line

- Station near US 14/Kennedy Road
- Madison-Evansville-Janesville line
  - Station near Main Street in Evansville

***Mass Transit***

The City of Janesville is the only community along the corridor that operates its own transit system. Janesville Transit System (JTS) offers regular bus service Monday through Saturday on six routes. Part of this service is the Beloit-Janesville Express that operates weekdays between the two cities. The route travels north from Beloit along US 51 until it intersects US 14, where it ends and turns around at WIS 26.

The Van Galder Bus Company operates an interstate bus line between Madison and Chicago that makes a stop in Janesville. There are two routes departing Janesville, one with a destination of O’Hare Airport, and one that goes to the Amtrak station in downtown Chicago and Midway Airport. Buses are arriving at and departing the Janesville location for Madison and Illinois beginning early in the morning and continuing throughout the day.

The Rock County Council on Aging provides specialized transit services that are designed for use by elderly or disabled persons. To be eligible, an individual must be at least 55 years of age, or physically disabled. Rides are available to all areas within Rock County on vans equipped with wheelchair lifts.

On weekdays, the state operates a commuter van from Evansville to Madison. The van is used by state employees, but non-state employees are also welcome. The van picks up people near the city parking lot on Montgomery Street. There are no other forms of mass transit available in Evansville, although residents have expressed an interest in the past.

**2.2 Summary of Local Land Use and Transportation Planning Activity**

In order to better understand local community impacts resulting from proposed improvements to US 14, the Study Team surveyed local land use plans and trends. This overview will be used later in the study as the foundation for a more detailed analysis of the US 14 project’s interaction with projected local community development. The following table lists local community comprehensive plans and related plans compiled and reviewed to date.

<b>Entity</b>	<b>Plan Name</b>	<b>Year Adopted</b>
Dane County	Dane County Comprehensive Plan	2007
Dane County	Parks & Open Space Plan	2006
Village of Oregon	Village of Oregon Comprehensive Plan	2007
Village of Brooklyn	Village of Brooklyn Comprehensive Plan	2005
Town of Rutland	Town of Rutland Comprehensive Plan: 2005-2024	2005
Rock County	Rock County Comprehensive Plan 2035	2009
Rock County	Parks, Outdoor Recreation, and Open Space Plan	2009

Entity	Plan Name	Year Adopted
Town of Union	Town of Union Comprehensive Plan	2005
City of Evansville	City of Evansville Comprehensive Plan	2005
Town of Magnolia	Town of Magnolia, Land Use, Transportation and Farmland Preservation Plan	2007
Town of Porter	Town Porter Smart Growth Comprehensive Plan	2005
Town of Center	Town of Center Smart Growth Comprehensive Plan: 2005-2024	2005
Town of Janesville	Town of Janesville Comprehensive Plan–2035	2009
City of Janesville	City of Janesville Comprehensive Plan	2009
Town of Harmony	Town of Harmony Comprehensive Plan–2035	2009
WDNR	Wisconsin Land Legacy Report	2006
National Park Service	Comprehensive Management Plan for the Ice Age Trail	1983

**Table 2.2: Summary of Land Use Plans**

Existing Land Use Maps, Future Land Use Maps, Transportation Maps, and Park and Recreation Maps were also collected from the plans as part of the review and are included in Appendix A, B, C, and D respectively.

In addition to the plans noted in the table, other specific entities along the corridor that may have their own plans, or that may be included in statewide documents (that were not collected or reviewed) are noted as follows:

- Dane County Farmland Preservation Plan
- Dane County Water Quality Plan
- Rock County Agricultural Preservation Plan
- Rock County Land and Water Resource Management Plan
- Janesville Area Metropolitan Planning Organization:
- Transportation Improvement Program: Janesville Metropolitan Planning Area 2010-2015
- TIP Prioritization Process
- Long Range Transportation Plan 2005-2035
- 2010 Work Program: Janesville Metropolitan Planning Area
- Stateline Area Transportation Study 2035 Long-Range Transportation Plan
- Southern Wisconsin Regional Airport Land Use Plan
- Badfish Creek Wildlife Area
- Anthony Branch Fishery Area

***Dane County Comprehensive Plan***

The northernmost portion of the US 14 corridor study area lies within Dane County, just north of the Dane-Rock county line (Figure 2.3, Dane County Map). This section of US 14 is located in Rutland. Over the past several years, Dane County has added more new residents each year than any other county in Wisconsin.

The lands surrounding this portion of the corridor are generally rural with large contiguous areas of agricultural uses and scattered residential parcels (Map A.1, Appendix A).

The Dane County Comprehensive Plan's Planned Land Use Map (Map B.1, Appendix B) depicts a continuation of agricultural uses in this area of the corridor, similar to the Rutland Future Land Use Plan. The map also identifies areas of rural development around Brooklyn to the west of US 14.

#### *Transportation*

US 14 is one of the radial arterials that connect to the Madison beltline and interstate route system in central Dane County.

The Dane County Comprehensive Plan does not include a Future Transportation Map (see Map C.1, Appendix C for Dane County highway function classifications). However, the Plan indicates that the County supports the following transportation policies and programs:

- Incorporating bikeway, transit and other facilities as a part of major street and roadway improvement projects.
- Designing highway shoulders and crossings to accommodate farm equipment, bicycles and other uses and minimize safety conflicts with automobile traffic.
- Including transportation of agricultural goods to market in all long-term planning related to truck freight transport.
- Continuing official mapping and other programs to preserve corridors for possible future travel uses.
- Using street and roadway access control measures as a means of preserving travel capacity on existing streets and roadways, and of seeking safe and appropriate driveway access points.
- Continuing transportation system measures, to make the most efficient use of the existing transportation system.

#### *Dane County Park & Open Space Plan*

The 2006 Dane County Parks & Open Space Plan identifies countywide recreation needs and cultural, historical, and natural resources that should be considered for possible protection, preservation or restoration over the five year planning period (Map D.1, Appendix D). The plan does not include recommended projects or activities within the US 14 corridor study area.



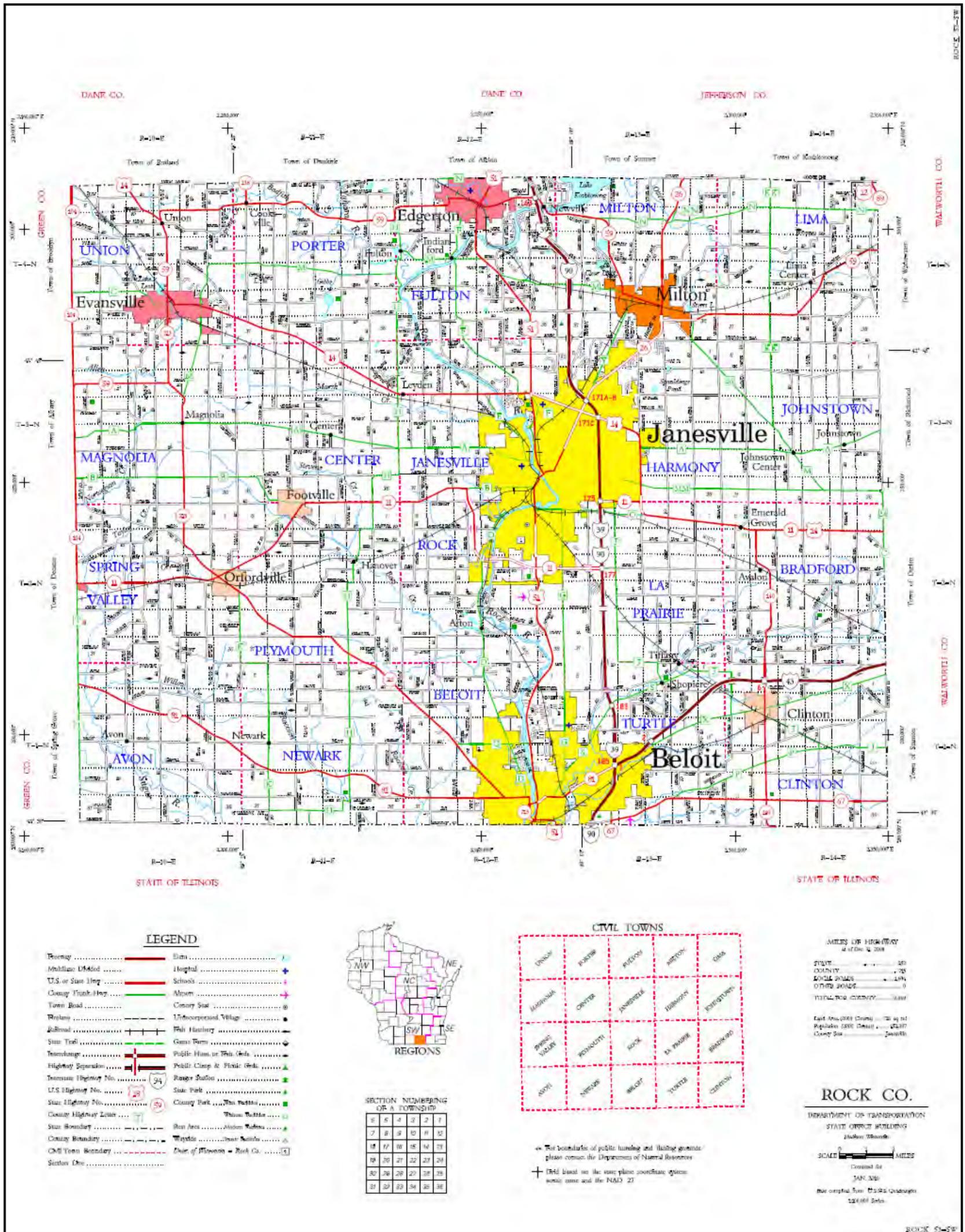


Figure 2.4: Rock County Map

### ***Village of Oregon Comprehensive Plan***

The Village of Oregon is located in southern Dane County (Figure 2.3, Dane County Map). US 14 is located along the eastern edge of the village.

#### *Land Use*

Development has been primarily dictated by major transportation corridors and land use features, namely old US 14, now North Main and Janesville Streets, and the environmental corridor that runs northwest to southeast through the village (Map A.2, Appendix A). The village has been expanding to the south, southwest, and west over the past 25 years. Commercial development is focused to the north along County MM, in the downtown area, and along Janesville Street near the US 14/WIS 138 interchange.

The Village of Oregon's Planned Land Use Map (Map B.2, Appendix B) identifies two economic development areas near the US 14 corridor. Mixed use and office development is proposed at the US 14/WIS 138 interchange with a large area of industrial development immediately to the north. The map also depicts an expansion of the existing northern industrial development to the west with smaller areas of future development at the edges.

#### *Transportation*

US 14, WIS 138, and County MM are major roads serving the village. There is an inactive rail line that runs north-south through the Village between Evansville and Madison.

The Transportation Plan Map for the village (Map C.2, Appendix C) depicts a new major north-south arterial road, with 110-foot wide right-of-way or wider, through a future non-residential development along the east side of US 14 extending from Rutland-Dunn Town Line Road to County A. The map also depicts a conceptual local road network that would serve future development in the northern industrial/office area.

### ***Village of Brooklyn***

The Village of Brooklyn is located at the convergence of Dane, Rock and Green Counties just east of the US 14 corridor (Figure 2.3, Dane County Map and Figure 2.4, Rock County Map). While US 14 does not travel through the village, it is nearby. Located just 12 miles south of Madison, the village is closely connected with the metropolitan area, yet maintains a small-town feeling that the community values.

#### *Land Use*

The village has an expansive municipal boundary area, with nearly 46 percent of it currently used for agricultural/rural purposes (Map A.3, Appendix A). Within the developed portions of the Village, the most predominant land use is single family residential. Non-residential development is focused along Hotel, Railroad, Market, and Commercial Streets.

The Village of Brooklyn Planned Land Use Map (Map B.3, Appendix B) identifies areas for new residential development mainly on the west side of the village. The map also shows a proposed 55-acre business park at the southeast edge of the village that has convenient access to US 14, WIS 92, and north to the Madison area. This site also takes advantage of rail access. There is a conceptual road that would link WIS 92 and WIS 104 to the south, allowing truck traffic to bypass the central part of the village.

### *Transportation*

Located about 2 miles east of the village, US 14 is the key principal arterial servicing Brooklyn; WIS 92 and County MM are other major roads serving the village. The former Chicago & Northwestern Railroad Company line runs northwest through the village, but the spurs have been removed. The abandoned rail line is currently owned under a joint venture between the City of Fitchburg and Village of Oregon.

The Village of Brooklyn Comprehensive Plan does not include a Future Transportation Map; it does however identify new conceptual local roads that would service future development, particularly within the proposed business park.

### ***Town of Rutland Comprehensive Plan***

The Town of Rutland is located in south central Dane County (Figure 2.3, Dane County Map). US 14 is located along the western edge of the town. The town wishes to promote managed growth that is consistent with its rural character.

### *Land Use*

As of 2003, agricultural and woodlands comprise 80 percent of the existing land use (Map A.4, Appendix A). Residential land use covers 4 percent of the town and is scattered along town roads. Small commercial and industrial land use is mostly located along US 14. Park and recreational lands cover 11 percent of the town (e.g. Badfish Creek Wildlife Area, Anthony Branch Fishery Area, US Fish and Wildlife Service land, and other smaller areas in the northeast quadrant of the town).

The Town of Rutland Future Land Use Map (Map B.4, Appendix B) depicts the majority of remaining undeveloped land as agricultural preservation areas. Future commercial and medium-density (1 acre lots) residential development areas are planned near Oregon and Brooklyn near the US 14 corridor, with development proposed in phases. A small area of commercial and medium-density residential development is also proposed in the northeastern part of the town adjacent to existing development near Stoughton. A small area of commercial development is also planned at the intersection of US 14 and WIS 92.

### *Transportation*

US 14, WIS 138, County MM, and County A are major roads serving the town. There are no railroad lines. The only major improvement shown on the Town of Rutland Future Transportation Map (Map C.3, Appendix C) is a proposed realignment of US 14. The Town of Rutland Future Bicycle Map (Map C.4, Appendix C) identifies County A, Old Stone Road, Center Road, and segments of Flint, Oak Hill and Sunrise Roads as bike routes.

### ***Rock County Comprehensive Plan***

The vast majority of the US 14 corridor study area lies in northwest Rock County (Figure 2.4, Rock County Map).

### *Land Use*

As of 2000, agriculture, livestock, and mining activities comprise nearly 88 percent of land use in Rock County (Map A.5, Appendix A). Residential use is concentrated on rolling land

to the north of US 14, while agricultural use dominates the flatter areas to the south. There is very little commercial or institutional development along the corridor outside of cities, villages, and towns. The Town of Janesville is the most heavily developed town along the corridor in Rock County, with residential development occurring on the rolling lands east of County H and both north and south of US 14.

Rock County is unique in that it has only limited ability to make decisions affecting land use; that ability lies primarily with the cities, villages, and towns through their independent planning and zoning authorities. Rock County's role is to assist communities with coordination and cooperation over areas of possible conflict. The County's land use recommendations are intended only as a tool to support and guide local planning. The Rock County Future Land Use Map (Map B.5, Appendix B) is a compilation of area future land use maps (see individual community land use maps for details). It is expected that agriculture will remain the primary land use in the county throughout the 2030 planning period.

While limited in its ability to make land use decisions, the County helps maintain a balance among the preservation of environmentally sensitive areas, agricultural lands, and continued residential, commercial, and industrial development. The County intends to investigate the use of the following programs to support agricultural preservation: Purchase of Agricultural Conservation Easements (PACE), Purchase of Development Rights (PDR), and Transfer of Development Rights (TDR) programs.

#### *Transportation*

US 14 connects Rock County to Dane and Walworth Counties. The Union Pacific (UP) Railroad operates on tracks that extend from Evansville through Janesville and then southeast into Clinton before crossing into Illinois. UP operates a large rail yard centrally located in the City of Janesville. Its yard traffic is predominately dedicated towards serving automotive, food processing, and other non-farm bulk commodity industries.

Rock County supports the study of a WIS 11 bypass, circumventing the south side of the City of Janesville from US 14 to I-43. The county also supports capacity improvements for US 14 (Map C.5, Appendix C), from Janesville north to Dane County, to facilitate corridor preservation and safe movement of vehicular traffic. The County also supports rerouting traffic around Evansville.

#### ***Rock County Park, Outdoor Recreation, and Open Space Plan***

In 2009, Rock County updated its Park, Outdoor Recreation, and Open Space Plan (POROS). In this plan, the Bicycle and Pedestrian Routes and Trails Plan Map (Map D.2, Appendix D) depicts locations for proposed off-road bicycle and pedestrian trails, Rock County bicycle routes, and the Ice Age multi-use trail. One off-road bicycle/pedestrian route would follow US 14 between Evansville and Janesville.

The POROS also includes an Ice Age Trail Corridor Plan for Rock County (Map D.3, Appendix D). The Ice Age Trail corridor study area covers significant portions of Magnolia, Center, Janesville, Milton, and Lima, and overlaps with the US 14 corridor study area. The Ice Age Trail is discussed in greater detail at the end of this report.

### ***Town of Union Comprehensive Plan***

The Town of Union is located in northwestern Rock County (Figure 2.4, Rock County Map). US 14 travels from the northwest to the southeast through town. The town is predominantly rural with large amounts of agricultural land and wishes to promote managed growth that is consistent with its rural character.

#### *Land Use*

As of 2006, agricultural operations, forestland, and other rural lands comprise nearly 89 percent of land use in the town (Map A.6, Appendix A). Residential land use covers about 4 percent of the town and is concentrated in several rural subdivisions in the southeast quadrant of town, north and east of Evansville and scattered along town roads. Small, mostly agricultural-based commercial and industrial land use is mostly located along US 14.

The Town of Union Future Land Use Map (also the town's zoning map) identifies large areas for agricultural preservation in the northeast and western portions of town where future development would be restricted (Map B.6, Appendix B). Given the number of residents that commute to Madison and Janesville, future residential developments were placed with transportation routes in mind in the areas north and east of Evansville, but mainly east of US 14. Land on both sides of US 14 from East Union Road to Elmer Road has been identified for future commercial development, using reverse frontage roads to minimize the number of properties needing access to US 14.

#### *Transportation*

US 14, WIS 59/213, County C, and County M are major roads serving the town. A Union Pacific Railroad line passes through town. In 1999 the Village of Oregon and the City of Fitchburg purchased the rail line north of Evansville; there are no definitive plans for future use of this segment. The line south of Evansville is active.

The Town of Union Comprehensive Plan encourages a Park-n-Ride lot be located along US 14 between Evansville and Union to encourage carpooling to Madison and Janesville. The Town is also interested in WisDOT studying the feasibility of a US14 bypass around Evansville. However, the Town of Union Comprehensive Plan Transportation Map (Map C.6, Appendix C) does not show a bypass route around Evansville.

### ***City of Evansville Comprehensive Plan***

The City of Evansville is located in northwest Rock County (Figure 2.4, Rock County Map). US 14 travels through the city's northeast portion. While Evansville had the highest percentage population growth in Rock County from 1990 to 2000, the City desires to maintain its "small-town" charm.

#### *Land Use*

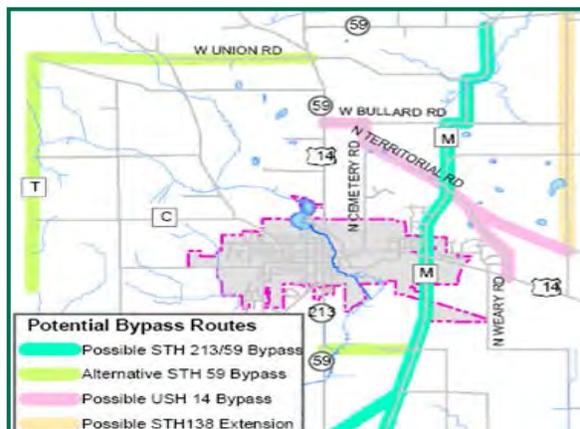
Residential development is spread throughout the city with the vast majority of neighborhoods on the western side of the city (Map A.7, Appendix A). Commercial land use is concentrated primarily in the downtown area along US 14, and north and east of downtown. Almost one-quarter of the land within the city limits is in use for agriculture.

The City is planning a new industrial park at the southeast quadrant of the US 14/County M interchange. New residential development is also planned around the outer edges of the city (Map B.7, Appendix B).

### *Transportation*

US 14, WIS 59/213, County C, County M, and Main Street are major roads in Evansville. The Union Pacific Railroad line extends across the city. The line is abandoned north of the city limits; however, within the city and to the southeast, the rail corridor is an active freight line. The continued viability of this line is crucial to existing businesses and Evansville's long-term industrial growth.

The City of Evansville Smart Growth Plan, Transportation Plan Map depicts two possible US 14 bypass routes using North Territorial Road (Figure 2.5, right). The first route follows the existing alignment of West Bullard Road, then south along North Territorial Road to its connection with the US 14 east of the city. The second route also begins at West Bullard Road then follows the existing alignment of North Territorial Road southeast to Tolles Road.



**Figure 2.5: Possible US 14 Bypass Routes**

*Source: City of Evansville*

The City of Evansville Transportation Plan Map (Map C.7, Appendix C) depicts other bypass alternatives using existing roads, including WIS 59, WIS 138, and WIS 59/213. Residents strongly support establishing a truck route that would redirect truck traffic away from downtown; however, no specific alternative was identified as “preferred”. The map also identifies potential future collector streets that would service new developments on the north and west sides of the city.

### ***Town of Magnolia Land Use, Transportation and Farmland Preservation Plan***

The Town of Magnolia is located in northwestern Rock County (Figure 2.4, Rock County Map). While US 14 does not travel through the town, it is nearby. The town is predominantly rural with large amounts of agricultural land and wishes to preserve its rural character.

### *Land Use*

As of 2000, agricultural operations, forestland, and other rural lands comprise 88 percent of the existing land use (Map A.8, Appendix A). Residential land use covers nearly 3 percent of the town and is concentrated in a few rural subdivisions, in the hamlet of Magnolia at the intersection of County M and County A, and scattered along town roads. There is very minimal commercial/industrial land use in the town.

The Town of Magnolia Future Land Use Map (Map B.8, Appendix B) reflects existing land use and identifies the vast majority of the Town as “Exclusive Agriculture”.

*Transportation*

WIS 59, WIS 59/104, WIS 213, County M, County A, and County B are major roads serving the town. There is also an active Union Pacific Railroad line passing through town.

No major transportation improvements are identified in the Town of Magnolia Comprehensive Plan (Map C.8, Appendix C).

***Town of Porter Smart Growth Comprehensive Plan***

The Town of Porter is located in northwestern Rock County (Figure 2.4, Rock County Map). US 14 travels through the southwest part of town. The town is predominantly rural with large amounts of agricultural land, and wishes to retain its rural character.

*Land Use*

As of 2004, agricultural operations, forestland, other rural lands comprise 94 percent of the existing land use (Map A.9, Appendix A). Residential land use covers about 4 percent of the town and is scattered along town roads. There is no commercial land use in the town and only minimal industrial or manufacturing use.

The Town of Porter Future Land Use Map (Map B.9, Appendix B) reflects existing land use and identifies the vast majority of land as agricultural, woodland, and scattered residential. There are three new areas of mostly infill rural single family residential development along the north side of US 14 that border with the Union between Wilder Road and Riley Road, and where US 14 crosses into the Center. There are no new non-residential developments planned.

*Transportation*

US 14, WIS 59, and County M are major roads serving the town. An active Union Pacific railroad line runs through the far southwest corner of the town.

The Town of Porter Transportation Plan (Map C.9, Appendix C) does not show any major improvements; however, the Town has asked WisDOT to convert North Tolles Road from Cooksville to US 14 to an extension of WIS 138. Evansville supports this request and believes the south end of North Tolles Road could become part of a US 14 bypass around Evansville so a possible intersection between an extended WIS 138 and US 14 bypass should be considered in planning for either project in the future. The Town intends to work with the County or State to upgrade North Tolles Road to a county or state highway and to maintain WIS 138 as a state highway.

***Town of Center Smart Growth Comprehensive Plan: 2005-2024***

The Town of Center is located in northwestern Rock County (Figure 2.4 Rock County Map). US 14 travels through the northeast part of town. The town is predominantly rural with large amounts of agricultural land, and is planning for little change to this character.

*Land Use*

As of 2004, agricultural operations, forestland, and other rural lands comprise 94 percent of the existing land use (Map A.10, Appendix A). Residential land use covers nearly 9 percent of the town and is concentrated in a few rural subdivisions north of US 14 and scattered along town roads. There is very little commercial or institutional land use.

The Town of Center Planned Land Use Map (Map B.10, Appendix B) reflects existing land use and identifies the vast majority of land as agricultural, woodlands, and scattered residential. A small area of new single-family residential is identified in County H just south of the railroad. No new developments are proposed adjacent to the US 14 corridor.

*Transportation*

US 14, WIS 11, County A, and County H are major roads serving the town. An active Union Pacific railroad line runs through the northeastern portion of the Town.

No major improvements are identified in the Town of Center Smart Growth Comprehensive Plan: 2005-2024 (Map C.10, Appendix C).

***Town of Janesville Comprehensive Plan–2035***

The Town of Janesville is located in the center of Rock County northwest of the City of Janesville (Figure 2.4, Rock County Map). US 14 travels through the northeast portion of the Town. While the town is predominately rural in character, there is a considerable level of urban influence with clustered subdivisions and other residential concentrations as well as continued annexation of land into the City of Janesville for the purpose of development.

*Land Use*

As of 2005, agricultural operations and other rural lands comprise 75 percent of existing land use (Map A.11, Appendix A). Residential land use covers nearly 20 percent of the town and is concentrated in the northern half of town and along the Rock River. There is relatively little commercial and industrial development.

The Town of Janesville Future Land Use Map (Map B.11, Appendix B) represents the long-term “build out” of the town beyond the 25-year planning period. There are two large areas of “Planned Mixed Use” along the US 14 corridor that allow for small and medium scale agricultural uses, low-density single family residential lots and subdivisions, with only limited agriculture related business or industry and conditional use multiple-family residential uses. No new commercial or industrial development is proposed.

*Transportation*

US 14, WIS 11, County A, and County H are major roads serving the town. Although not located within the town, I-39/90 is easily accessible and serves as Rock County’s principal arterial. The Wisconsin & Southern Railroad passes briefly through the town in section 34 on its northeasterly route through Rock County. No major transportation improvements are identified (Map C.11, Appendix C). The plan mentions interest by the City of Janesville in connecting WIS 11 with US 14 on the west side of the City. The plan indicates that the Town should be prepared to have policy in place to address how to manage development along this possible connection, but does not indicate support or opposition for the connection.

### *City of Janesville Comprehensive Plan*

According to 2004 population estimates, the City of Janesville is the 10<sup>th</sup> largest city in Wisconsin and the 4th fastest growing in terms of number of people added. The city, which is also the county seat, is located in central Rock County along major state and interstate transportation corridors. US 14 extends from the northwest side of the city to the east with an interchange at I-39/90 where the corridor study area ends.

#### *Land Use*

The City of Janesville Comprehensive Plan Existing Land Use Map (Map A.12, Appendix A) indicates that US 14 is mainly a commercial corridor within the city. There is a large extraction operation in the city just south of US 14.

The City of Janesville Future Land Use Map (Map B.12, Appendix B) identifies new commercial development in the northwest quadrant of the city along US 14 east of US 51 with residential use to the north. New low-density rural residential development is depicted adjacent to existing residential areas in the Town of Janesville between the Rock River and County F and between the railroad tracks and County A. This is reflective of the Town of Janesville Future Land Use Map that depicts “Planned Mixed Use” for these areas comprised of 85 percent rural residential, 5 percent commercial and industrial, and 10 percent small scale agricultural land uses. The City of Janesville Future Land Use Map also identifies areas of “Urban Reserve” at the outer edge of future developments that will likely be needed beyond the 2030 planning period. Premature exurban development and utility extensions are discouraged in these areas.

#### *Transportation*

US 14, US 51, WIS 26, and WIS 11 are major roads in the city. The city serves as a hub for several freight rail lines. Wisconsin & Southern operates east-west and north-south lines and also has a locomotive maintenance center. Union Pacific operates a southeast by northwest line; and the Iowa, Chicago, and Eastern Railroad operates on track in the middle of the city that extends south to Beloit. The Southern Wisconsin Regional Airport is at the southern edge of Janesville. The Janesville Transit System (JTS) provides bus service six days a week on six fixed routes with an additional express bus to Beloit.

Over the next 20 years, there is substantial development planned in all directions on the city’s edges, focused infill and redevelopment efforts, and notable federal, state and county investments in transportation facilities, will provide both transportation challenges and opportunities (Map C.12, Appendix C). The City supports the following improvement projects:

- A new west side bypass extending WIS 11 north from West Court Street to US 14; this is currently under study by WisDOT. The City strongly advocates for a corridor that extends due north from the current bypass and is strongly opposed to a route near to or west of County H since such a location would encourage urban and rural leapfrog development and be used by fewer vehicles than a route located further east.
- An I-43 spur between the WIS 11 south bypass at I-39/90 and I-43 on the existing US 14/WIS 11 corridor or a new alignment; this is currently under study by WisDOT.

- A study for the improvement of Town Hall Road between the planned WIS 26 interchange and US 14 in conjunction with the appropriate units of government and agencies.
- A study for the improvement of County G in conjunction with Beloit and other appropriate units of government and agencies.
- A study for improvement of the US 14 corridor through the city in conjunction with the appropriate units of government and agencies.

### ***Town of Harmony Comprehensive Plan–2035***

The Town of Harmony is located in east central Rock County on the northeast side of the City of Janesville (Figure 2.4, Rock County Map). While US 14 does not travel through the town, it is located nearby. While the town is predominately rural in character, there is a high level of urban influence that comes from sharing a border with the City of Janesville.

#### *Land Use*

The 2008 Town of Harmony Zoning Map (A.13, Appendix A) indicates that agricultural and other rural lands comprise 90 percent of existing land use . Residential land use covers nearly 8 percent of the town and is concentrated in the northern third of the town in rural subdivisions between Janesville and Madison. There is little commercial and industrial development. The town has several defining natural characteristics including the Harmony/Milton Depressional Area (a natural site for groundwater recharge and open space), high quality agricultural soils, and topography and drainage patterns associated with the kettle moraine landscape.

The Town of Harmony Future Land Use Map (Map B.13, Appendix B) concentrates all future development in the northern portion of town. This area of “Planned Mixed Use” is intended to be predominately single family residential development but would allow small and medium scale agricultural uses with accompanying housing, small neighborhood or agricultural business or industry and limited, conditional use multiple-family residential uses. The map also identifies a band of “Urban Reserve” to allow for urban expansion. The majority of the eastern part of town is proposed to remain agricultural.

#### *Transportation*

I-39/90, US 14, WIS 26, County Y, County A, and County M are major roads serving the town (Map C.13, Appendix C). The Wisconsin & Southern Railroad passes through the northwestern portion of the town, parallel to County Y.

The Town of Harmony Comprehensive Plan does not include a Future Transportation Map; however, WIS 26 is scheduled to be improved within the next few years. In town, the existing 4-lane divided roadway will remain as-is and at the northern edge of the town, the new Milton Bypass will become WIS 26. Private driveway access onto WIS 26 will be relocated to existing side roads, new frontage roads, or new development streets. The expansion project will have a significant effect on land use in the Town of Harmony.

### ***Wisconsin Land Legacy Report***

The Wisconsin Land Legacy Report identifies places considered most important in meeting the state’s conservation and recreation needs over the next 50 years. There are 229 “Legacy Places”

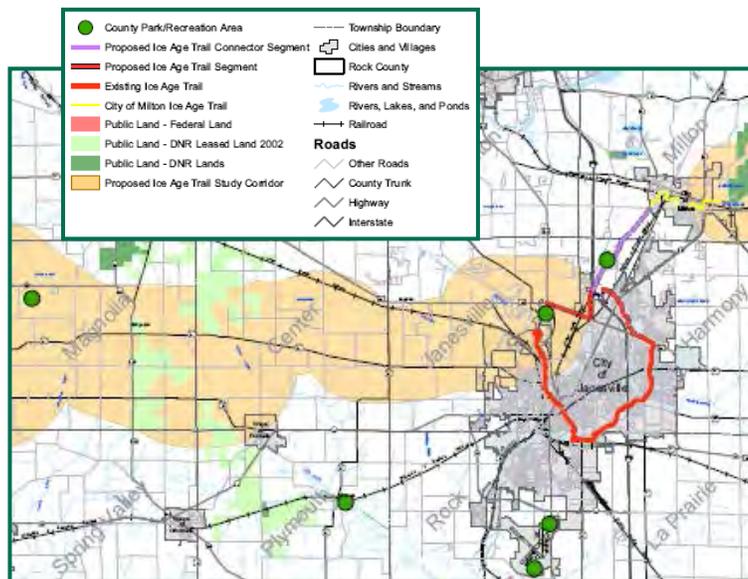
one of which, the Dunn-Rutland Savannah and Potholes, lies within the US 14 corridor study area.

The Dunn-Rutland Savannah and Potholes (Map D.5, Appendix D) extends from the southern end of Lake Waubesa to the Rock County line. This area presents an opportunity to protect and restore a unique natural setting in close proximity to rapidly developing urban areas. The area contains scattered woodlots, creeks, wetlands, pothole lakes, grasslands, and oak savannahs. The Dunn-Rutland Savannah and Potholes area has significant recreational potential, including cross country skiing, off-road bicycling, dog sledding, horseback riding, hunting, and fishing.

***Ice Age Trail Comprehensive Management Plan***

The Ice Age National Scenic Trail follows features left by the last glacial advance in Wisconsin (Maps D.5 and D.6, Appendix D). In 1983, the National Park Service completed a Comprehensive Management Plan for the Ice Age Trail that provides guidance for its development and management. About 600 miles of the planned 1,200-mile Ice Age Trail has been built. Detailed planning is being done at the county level where significant trail system gaps remain. The plans identify a corridor through which the remaining trail segments will be developed according to standards set forth in the 2001 Handbook for Trail Design, Construction and Maintenance.

In relation to the US 14 study area, the Rock County segment of the completed Ice Age Trail extends approximately 3.7 miles from Janesville to Milton. As described previously in the Rock County Parks, Outdoor Recreation, and Open Space Plan, the county intends to complete the remaining segments of the trail that will connect with existing trails in Walworth and Green Counties. When completed, the Rock County segment of the Ice Age Trail will extend from the eastern Walworth County line to Milton, south to Janesville along the rail/trail, then continue from the western edge of Janesville to Green County near Magnolia County Park. Existing public lands would be utilized whenever possible for the new trail.



**Figure 2.6: Ice Age Trail Study Corridor**  
*Source: National Park Service*

*Population and Growth Rates*

Community	Census Data			WisDOA Population Estimate	WisDOA Population Projections*					Percent Change 2009 to 2030
	1980	1990	2000	2009	2010	2015	2020	2025	2030	
Town of Rutland	1,393	1,584	1,887	1,986	2,114	2,252	2,393	2,529	2,656	33.7%
Town of Union	1,29	1,537	1,860	1,981	2,130	2,267	2,403	2,530	2,645	33.5%
Town of Porter	940	947	925	978	986	1,007	1,026	1,042	1,053	7.7%
Town of Center	908	845	1,005	1,093	1,085	1,130	1,173	1,213	1,247	14.1%
Town of Magnolia	746	717	854	842	875	900	923	943	959	13.9%
Town of Janesville	3,068	3,198	3,048	3,472	3,351	3,351	3,350	3,336	3,308	-4.7%
Town of Harmony	2,090	2,138	2,351	2,480	2,555	2,626	2,695	2,755	2,803	13.0%
Village of Oregon	3,876	4,519	7,514	8,807	9,329	10,399	11,498	12,575	13,604	54.5%
Village of Brooklyn	627	789	916	1,275	1,272	1,427	1,583	1,737	1,884	47.8%
City of Evansville	2,835	3,174	4,039	4,960	5,229	5,763	6,295	6,804	7,281	46.8%
City of Janesville	51,071	52,133	60,200	63,500	64,850	67,671	70,445	72,974	75,176	18.4%
Dane County	323,545	367,085	426,526	473,622	489,712	523,818	559,005	592,917	624,500	31.9%
Rock County	139,420	139,510	152,307	160,635	162,138	167,277	172,310	176,727	180,379	12.3%

\*Note: Population projections prepared by Wisconsin Department of Administration (WisDOA) in 2008.

**Table 2.3: Study Area Population and Growth Rates**

All of the communities within the study corridor have completed comprehensive plans as of the time of this plan review. There is at least one community that is in the process of updating their plan. Though there were many similarities in both land use and transportation issues identified in the comprehensive plans, there were also some distinct differences. Table 2.4 highlights the important transportation issues identified in the review of the plans.

Community	Major Highways	Potential Transportation Effects
Dane County	US 14 I-39/90	<ul style="list-style-type: none"> <li>• Supports incorporating bikeway, transit and other facilities as part of major street and roadway projects</li> <li>• Design highway shoulders and crossings to accommodate farm equipment and bicycles</li> <li>• Continue official mapping to preserve corridors</li> <li>• Use of access control to preserve travel capacity</li> </ul>
Village of Oregon	US 14 WIS 138 County MM	<ul style="list-style-type: none"> <li>• Identifies new major north-south route through future non-residential development east of US 14 from Rutland-Dunn Town Line Road to County A</li> <li>• Realignment of US 14 from WIS 138 to WIS 92</li> </ul>
Village of Brooklyn	US 14 WIS 92 County MM	<ul style="list-style-type: none"> <li>• New conceptual local roads</li> </ul>
Town of Rutland	US 14 WIS 138 County A, MM	<ul style="list-style-type: none"> <li>• Proposed realignment of US 14 from WIS 138 to WIS 92</li> </ul>
Rock County	US 14 I-39/90 US 51 WIS 11	<ul style="list-style-type: none"> <li>• Supports study of US 14 bypass west of Janesville</li> <li>• Supports capacity improvements on US 14 from Janesville to Dane County</li> <li>• Supports rerouting traffic around Evansville</li> </ul>
Town of Union	US 14 WIS 59/213 County C, M	<ul style="list-style-type: none"> <li>• Encourages Park-n-Ride lots along US 14 north and south of Evansville</li> <li>• Interested in WisDOT studying the feasibility of a US 14 bypass of Evansville, but does not show bypass route in comprehensive plan</li> </ul>
City of Evansville	US 14 WIS 59/213 County C, M Main Street	<ul style="list-style-type: none"> <li>• Plan shows two potential US 14 bypass routes around Evansville using Territorial Road; also shows other bypass routes using other existing roadways</li> <li>• Supports establishing a truck route that would redirect truck traffic away from the downtown</li> <li>• Plan identifies potential future collector streets to service new development on the north (crossing US 14) and west sides of the city</li> </ul>
Town of Magnolia	WIS 59, 104, 213	<ul style="list-style-type: none"> <li>• No major issues identified</li> </ul>
Town of Porter	US 14 WIS 59 County M	<ul style="list-style-type: none"> <li>• Upgrade Tolles Road to County or state highway and maintain WIS 138 as a state highway</li> </ul>
Town of Center	US 14 WIS 11 County A, H	<ul style="list-style-type: none"> <li>• No major issues identified</li> </ul>

Community	Major Highways	Potential Transportation Effects
Town of Janesville	US 14 WIS 11 County A, H	<ul style="list-style-type: none"> <li>• No major issues/improvements identified</li> </ul>
City of Janesville	US 14 I-39/90 US 51 WIS 11, 26	<ul style="list-style-type: none"> <li>• Supports US 14 bypass west of the city extending due north from existing WIS 11 bypass</li> <li>• Strongly opposes US 14 bypass route near or west of County H</li> <li>• Supports study for the improvement of US 14 corridor</li> </ul>
Town of Harmony	US 14 I-39/90 WIS 26 County A, M, Y	<ul style="list-style-type: none"> <li>• No major issues identified</li> </ul>

**Table 2.4: Comprehensive Plans Summary Matrix**

### 2.3 Environmental Resources

It is imperative that special consideration be taken to avoid or minimize potential impacts to water resources and habitat areas by working with state agencies and by employing effective erosion control practices along the US 14 corridor.

#### *Water Resources*

Throughout the study area, there are several water resources near the US 14 corridor with the Rock River being the primary resource. Tributary creeks and streams act as additional water resources. The corridor passes through four separate watersheds (Map E.1, Appendix E).

Waters near or crossing the US 14 corridor that are designated by Wisconsin Department of Natural Resources (WDNR) as areas of special natural resource interests include the Rock River, Frogpond Creek, and Allen Creek (Exhibit 2). This classification is given to water sources with characteristics that provide key functions to habitat or ecosystems within their watershed.

A breakdown of the existing water resources is as follows (Maps E.2 and E.3, Appendix E):

#### *Badfish Creek Watershed*

The Badfish Creek Watershed lies in south central Dane County and northwest Rock County. The Badfish Creek in Rock County has the dubious distinction of being one of the top watersheds in Rock County for soil loss, which is estimated at 9 tons/acre/year. Soil loss in the Dane County section is more difficult to determine but is estimated to be 8.3 tons/acre/year. This watershed is highly susceptible to groundwater contamination based on WDNR groundwater mapping.

Frogpond Creek is a small spring-fed stream that flows eastward along the southern edge of Dane County, crosses for a short distance into Rock County before crossing back into Dane County where it discharges into Badfish Creek, which discharges into the Yahara River and eventually the Rock River. The headwaters of Frogpond Creek are near the western terminus of the study area. Water quality problems are primarily due to polluted

runoff and ditching and tiling in the headwaters area, which is buffered by a significant amount of wetlands. Several species of waterfowl that are rarely found in Dane County have nested in this area. The US Fish and Wildlife Service purchased a portion of these wetlands and is managing them as a Waterfowl Production Area.

#### *Allen Creek and Middle Sugar River Watershed*

The Allen Creek and Middle Sugar River watershed is located in northeast Green County, northwest Rock County and south central Dane County. Municipal wastewater treatment plants that discharge to surface water within the watershed include Belleville, Brooklyn and Evansville. Little is known about the existing quality of streams in this watershed.

Allen Creek rises in southern Dane County, flows through northwest Rock County and northeast Green County before emptying into the Sugar River. Allen Creek Runs adjacent to US 14, and is the main source of Lake Leota. About 4.5 miles of the stream above Lake Leota are classified Class II and Class III trout waters. Below Evansville, Allen Creek was recently added to the state's anti-degradation list (NR 102) as an Exceptional Resource Water (ERW), affording it a greater level of protection. The stream below Evansville has a very good and diverse warm water sport fishery.

#### *Marsh Creek Watershed*

The Marsh Creek watershed is a small agricultural watershed that drains 44 square miles. Much of the middle and upper reaches of the creek have been ditched and straightened, thereby destroying habitat and making the stream silt-laden and sluggish. Cropland erosion is presently the primary cause of water quality problems. US 14 does not cross Marsh Creek and generally does not come within ½ mile.

#### *Rock River/Milton Watershed*

The Rock River and its tributary creeks and streams are the main water source for the Rock River/Milton Watershed. The US 14 corridor crosses the Rock River, west of the City of Janesville. The Rock River flows from Lake Koshkonong, which is located at the Rock, Dane and Jefferson County line. Lake Koshkonong and the Rock River are both on the Federal EPA list (303d) of impaired waters.

#### *Yahara River and Lake Kegonsa Watershed*

The Yahara River and Lake Kegonsa Watershed lies north of the US 14 corridor and is not in close proximity to the roadway.

### ***Floodplain and Wetland Areas***

Due to the presence of water sources along the US 14 corridor there are several floodplain zones that either cross or are adjacent to US 14 (Map E.4, Appendix E). Detailed mapping shows the floodplain area for Allen Creek in Evansville and the area of US 14 crossing of the Rock River (Map E.5, Appendix E).

As a result of the proximity of the floodplain, general topography, and poorly drained soils in low-lying areas, there are several wetland areas adjacent to US 14 (Map E.6, Appendix E). More detailed mapping shows the wetland areas associated with Allen Creek in Evansville, and the

areas associated with the US 14 crossing of the Rock River (Map E.7, Appendix E). Wetland areas are generally listed by the WDNR as areas of special natural resources. These wetland areas have been designated as high quality wetlands and are considered a key habitat resource.

### ***Rare Species and Natural Communities***

According to WDNR data, there is the potential for rare terrestrial and aquatic species and/or community occurrences along the US 14 corridor (Map E.8, Appendix E). Terrestrial species habitats are usually located adjacent to water as a source for food. Due to the varying topography and drainage patterns of Rock and Dane County, there are also secluded habitats along hilltops where terrestrial species can reside. Many of these hilly areas are limestone based and could contain especially rare terrestrial species. Rare terrestrial species that are found to reside in hilltop areas will not be affected by US 14 construction projects. Habitat changes along US 14 over the last 60 to 70 years, such as the conversion of agricultural land to residential, make it likely that a significant amount of the rare terrestrial sightings previously identified are now obsolete. Further coordination and investigation with state agencies will be needed when project plans are more defined.

### ***Topography and Natural Areas***

The eastern portion of the US 14 corridor is bisected from the northwest by the meandering Rock River, which flows out of Lake Koshkonong. Other defining natural characteristics that mark the landscape of the area include varying topography and drainage patterns, uneven hills and ridges, and poorly drained soils in low-lying areas, most of which are remnants of the last advance of Wisconsin Glaciation roughly 10,000 years ago. US Geological Survey (USGS) mapping provides standard series topographic data for the US 14 corridor (Maps E.9 through E.13, Appendix E). DNR managed lands and areas of special natural resource interest are also located near the US 14 corridor (Map E.14, Appendix E).

### ***Hazardous Materials***

Records maintained by state and federal regulatory agencies that list sites of potential environmental concern were reviewed to identify any hazardous material sites along the US 14 corridor. Other available resources were also investigated to develop a better understanding of the project corridor's history and that of the surrounding area that would help identify previous activities that may have resulted in compromised environmental conditions.

A total of 42 closed sites or closed incidents were identified within ¼ mile of the US 14 corridor along with three open ERP sites (Maps E.15 and E.16, Appendix E).

## **CHAPTER 3 – DATA GATHERING AND INVESTIGATION**

### **3.1 Public Involvement**

Public involvement has an important role in the study process. Comments received from the public were used to identify specific locations that needed to be evaluated for deficiencies. Two types of meetings were held: Local Officials Meetings (LOM) and Public Involvement Meetings (PIM). Meeting minutes, concerns of local officials, and public comments were documented and distributed (Appendix F and Appendix G).

Two LOM's were held for this study. The first meeting was held March 10, 2010 at the request of Evansville to discuss the purpose of the study and layout a timeline for its completion. Representatives were in attendance from WisDOT, OTIE, Evansville, and Union.

The second LOM was held June 29, 2010 to present the results of the data gathering and discuss any project concerns. Representatives were in attendance from WisDOT, the Study Team, and local officials from several of the communities along the study corridor.

A PIM was held on October 27, 2010. The general public, along with local officials from the various communities and counties along the corridor were invited to attend. Representatives from WisDOT and OTIE conducted the open-house meeting and gave a brief presentation. Various exhibits were used to allow those in attendance to review the data collected for the study. Comments from the public were collected and used to help identify areas of concern within the study corridor.

### **3.2 Traffic and Crash Analysis**

#### ***Study Area***

The US 14 study corridor includes the area immediately north of WIS 92/Biglow Road to the I-39/90 ramps and has been divided into four separate sections (Figure 3.1):

- Section 1 – Old Stage Road (Rutland) to 1000 feet north of Madison Street /WIS 213 (Evansville)
- Section 2 – 1000 feet north of Madison Street/WIS 213 (Evansville) to Territorial Road (Leyden)
- Section 3 - Territorial Road (Leyden) to US 51 (Janesville)
- Section 4 – US 51 (Janesville) to the I-39/90 ramps (Janesville)

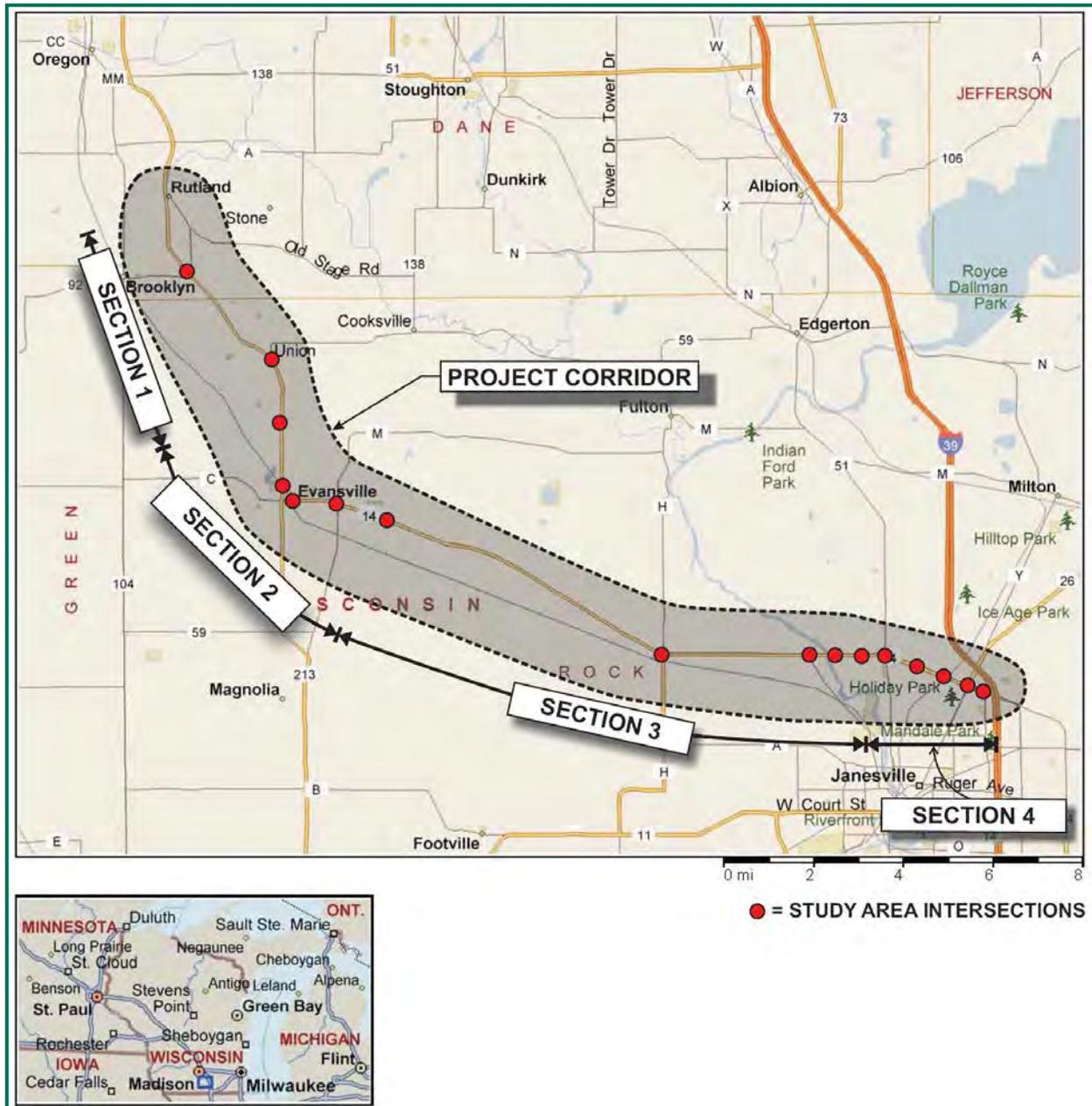


Figure 3.1: Study Area Corridor and Sections

The following intersections have been investigated as part of this study:

*Section 1*

- US 14 intersection with WIS 92/Biglow Road (two-way stop control)
- US 14 intersection with WIS 59 (one-way stop control)
- US 14 intersection with Bullard Road (one-way stop control)

*Section 2*

- US 14 intersection with Madison Street/WIS 59/213 (one-way stop control)
- US 14/Union Street intersection with Main Street/Exchange Street (all-way stop control)
- US 14 intersection with County M (traffic signal control)
- US 14 intersection with Territorial Road (one-way stop control)

*Section 3*

- US 14 intersection with County H (two-way stop control)
- US 14 intersection with County E (one-way stop control)
- US 14 intersection with River Road (one-way stop control)
- US 14 intersection with County F (two-way stop control)

*Section 4*

- US 14 intersection with US 51 (traffic signal control)
- US 14 intersection with Newville Road (one-way stop control)
- US 14 intersection with Kennedy Road (traffic signal control)
- US 14 intersection with WIS 26 (traffic signal control)
- US 14 intersection with Pontiac Drive (traffic signal control)

Figure 3.2 illustrates existing intersection lane configurations, intersection traffic controls, posted speed limits, and approximate intersection spacing within the study area.

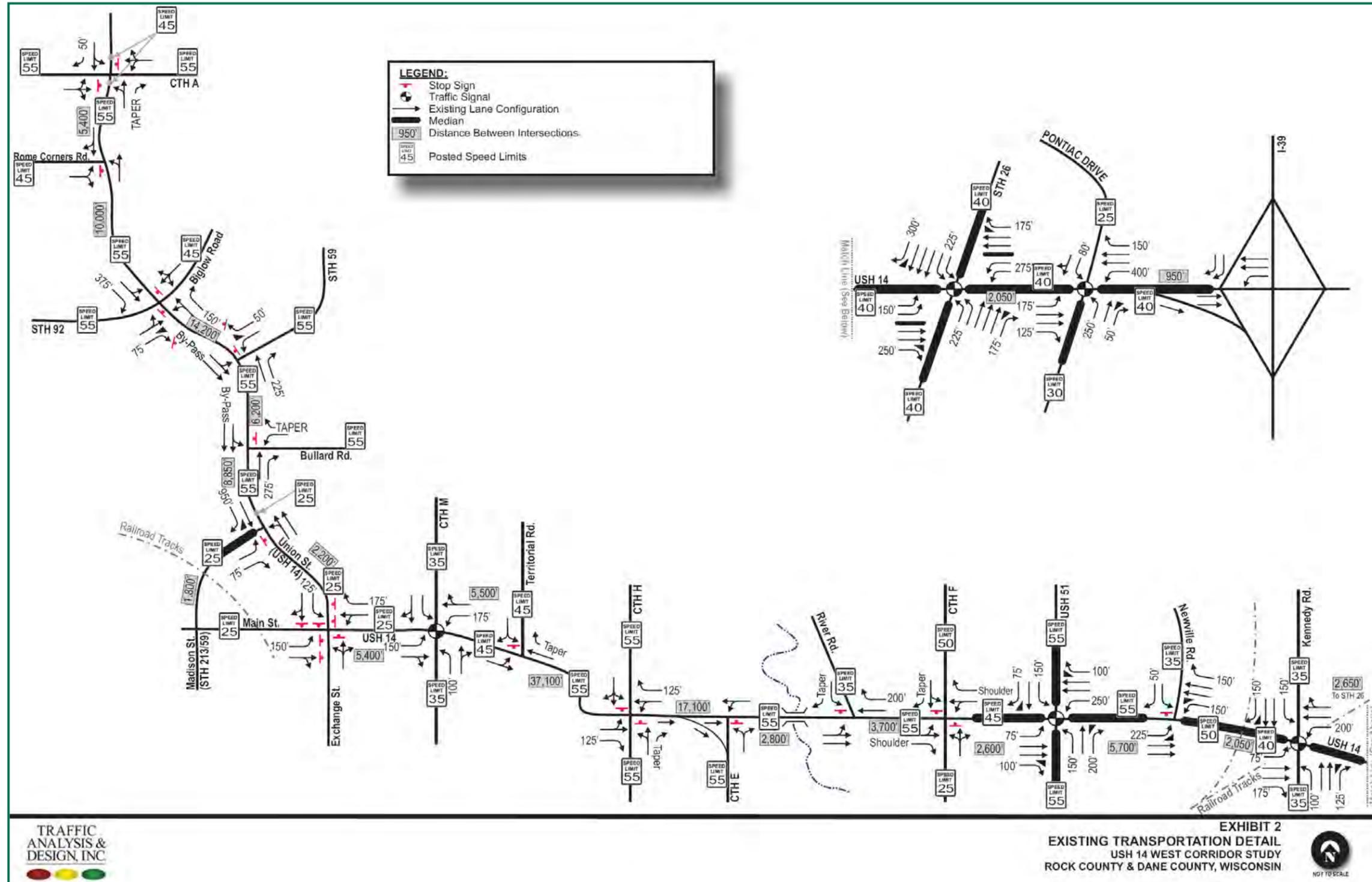
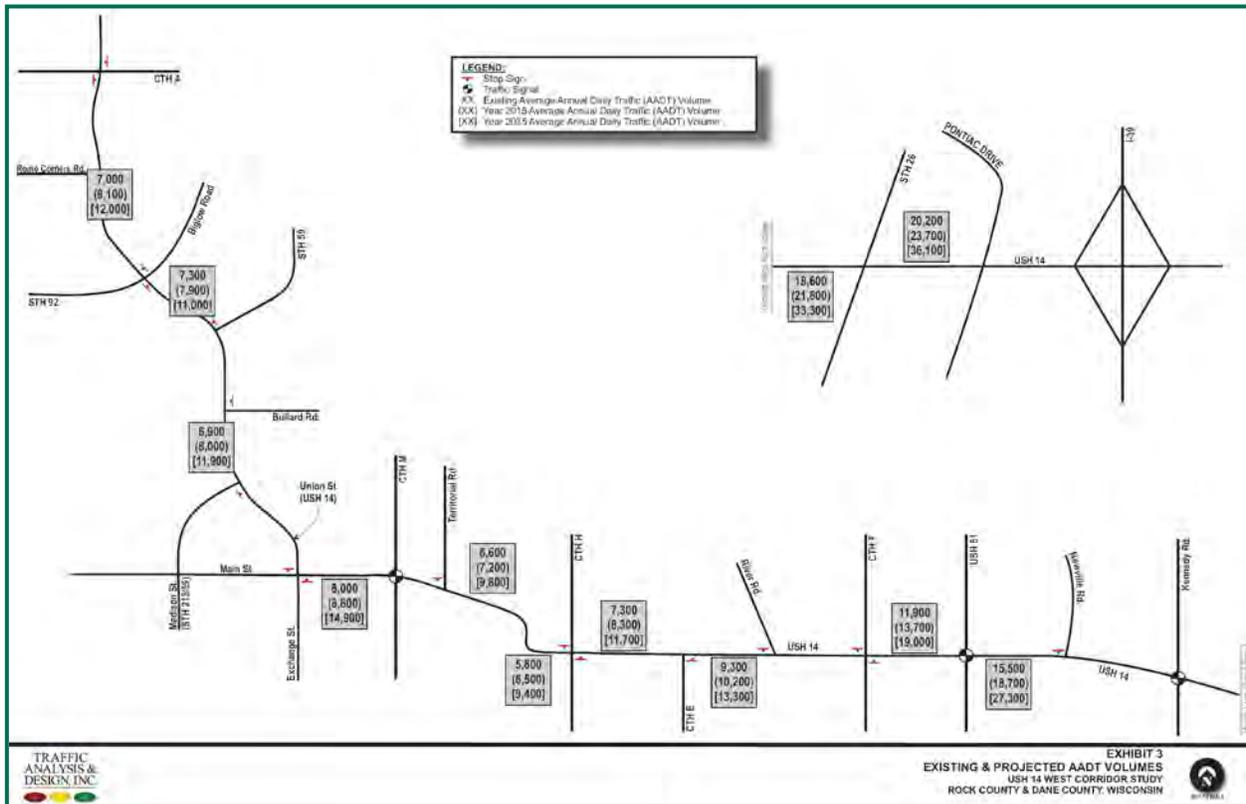


Figure 3.2: Study Area Intersection Configuration

The study area roadways are discussed below. Note that existing and projected annual average daily traffic volumes (AADT's) are shown in Figure 3.3.



**Figure 3.3: Existing and Projected Traffic Volumes**

US 14 is a two-lane rural undivided highway from north of WIS 92 to the northern limits of Evansville where it transitions to a two-lane urban undivided highway with turning lanes and bypass lanes until east of County M. US 14 then transitions back to a two-lane rural undivided highway until west of the US 51 intersection where it transitions to a four-lane rural divided highway with a raised median. The posted speed limit is 55 mph along the project corridor with lower speeds (25 mph to 45 mph) through municipalities. The following is a summary of annual average daily traffic volumes (AADT's), recorded in vehicles per day (vpd), along the project corridor:

- 7,000 vpd south of County A..... (Year 2006 count)
- 7,300 vpd north of WIS 59 ..... (Year 2008 count)
- 6,900 vpd north of Madison Street/WIS 213/59..... (Year 2007 count)
- 8,000 vpd west of County M..... (Year 2007 count)
- 6,600 vpd west of Tolles Road ..... (Year 2007 count)
- 5,800 vpd west of County H..... (Year 2007 count)
- 7,300 vpd east of County H ..... (Year 2007 count)
- 9,300 vpd east of County E..... (Year 2007 count)
- 11,900 vpd west of WIS 51..... (Year 2007 count)
- 15,500 vpd east of WIS 51..... (Year 2007 count)

**WIS 92/Biglow Road** is a southwest/northeast two-lane rural undivided highway at its intersection with US 14. The following AADT has been recorded along WIS 92:

- 1,800 vpd west of US 14..... (Year 2009 count)

**WIS 59** is a north/south two-lane rural undivided highway that intersects with US 14 to form the northeast leg of a conventional T-intersection. The following AADT has been recorded along WIS 59:

- 1,100 vpd east of US 14..... (Year 2003 count)

**Bullard Road** is an east/west two-lane rural undivided roadway that intersects with US 14 to form the east leg of a conventional T-intersection. The following AADT has been recorded along Bullard Road:

- 680 vpd..... (Year 2007 count)

**Madison Street/WIS 59/213** is a north/south two-lane urban undivided highway that intersects with US 14 to form the southwest leg of a conventional T-intersection. The following AADT has been recorded along Madison Street/WIS 59/213:

- 4,300 vpd..... (Year 2007 count)

**County M** is a north/south two-lane urban undivided highway with turning lanes at its intersection with US 14. The following AADT has been recorded along County M:

- 2,100 vpd north of US 14..... (Year 2003 count)
- 1,100 vpd south of US 14 ..... (Year 2003 count)

**Territorial Road** is a north/south two-lane rural undivided local road that intersects with US 14 to form the north leg of a conventional T-intersection. No AADT information is available along Territorial Road at this time.

**County H** is a north/south two-lane rural undivided highway with a rural cross-section at its intersection with US 14. The following AADT has been recorded along County H:

- 1,300 vpd north of US 14..... (Year 2003 count)
- 3,000 vpd south of US 14 ..... (Year 2003 count)

**County E** is a north/south two-lane rural undivided highway with a rural cross-section that intersects with US 14 to form the south leg of a conventional T-intersection. The following AADT has been recorded along County E:

- 3,400 vpd..... (Year 2003 count)

**River Road** is a north/south two-lane rural undivided local road that intersects with US 14 to form the north leg of a conventional T-intersection. No AADT information is available along River Road at this time.

**County F** is a north/south two-lane rural undivided highway with a rural cross-section at its intersection with US 14. The following AADT has been recorded along County H:

- 1,100 vpd north of US 14..... (Year 2007 count)

**US 51** is a north/south two-lane rural divided roadway with turning lanes at its intersection with US 14. The following AADT's have been recorded along US 51:

- 5,700 vpd north of US 14..... (Year 2007 count)
- 10,100 vpd south of US 14 ..... (Year 2007 count)

**Newville Road** is a north/south two-lane rural undivided local road that intersects with US 14 to form the north leg of a conventional T-intersection. No AADT information is available along Newville Road at this time.

**Kennedy Road** is a north/south four-lane urban undivided roadway south of US 14 and a two-lane urban undivided roadway with an urban cross-section to the north of US 14 with turning lanes and raised medians at its intersection with US 14. The following AADT's have been recorded along Kennedy Road:

- 2,700 vpd north of US 14..... (Year 2003 count)
- 7,600 vpd south of US 14 ..... (Year 2007 count)

**WIS 26 (Milton Avenue)** is a north/south six-lane urban divided roadway with turning lanes at its intersection with US 14. The following AADT's have been recorded along WIS 26:

- 32,300 vpd north of US 14..... (Year 2007 count)
- 25,500 vpd south of US 14 ..... (Year 2007 count)

**Pontiac Drive** is a north/south four-lane urban undivided roadway with turning lanes and a raised median at its intersection with US 14. The following AADT's have been recorded along Pontiac Drive:

- 10,900 vpd south of US 14 ..... (Year 2007 count)

***Year 2009 Existing Traffic Conditions***

In the autumn (August through October) of 2009, KL Engineering conducted weekday morning (6:00 AM to 9:00 AM) and evening (3:00 PM to 6:00 PM) peak hour turning movement counts at the study area intersections. Based on the turning movement counts, the weekday morning and evening peak hours were identified as being 7:00 AM to 8:00 AM and 4:30 PM to 5:30 PM, respectively (Figure 3.4, 2009 Existing Peak Hour Traffic Volumes). The traffic counts used to determine the peak hour traffic volumes, peak hour factors, and the trucks percents for each study area intersection have been included in this report (Appendix H).

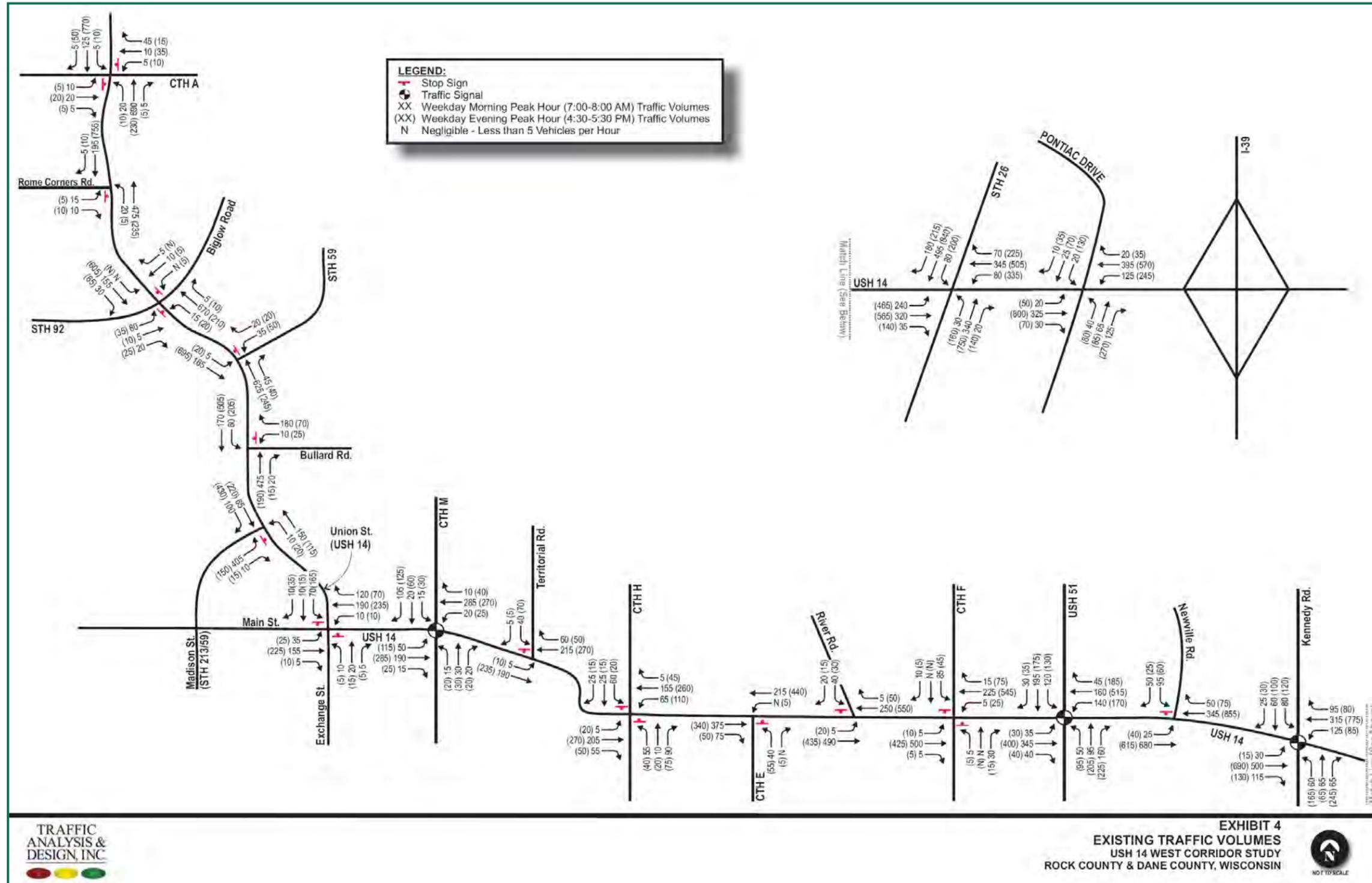


Figure 3.4: Existing Peak Hour Traffic Volumes

***Year 2009 Existing Traffic Operating Conditions***

The study area intersections were analyzed based on the procedures set forth in the *2000 Highway Capacity Manual* (HCM). All intersection traffic control analysis was conducted using Synchro 7. Intersection operation is defined by Level of Service (LOS). LOS is a quantitative measure that refers to the overall quality of flow at an intersection ranging from very good, represented by LOS A, to very poor, represented by LOS F. Since US 14 is designated as a connector route under Connections 2030, LOS C has been defined as the acceptable LOS for peak hour operating conditions. Descriptions of the various levels of service are as follows:

**LOS A** is the highest level of service that can be achieved. Under this condition, intersection approaches appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation. At signalized intersections, average delays are less than 10 seconds. At unsignalized intersections, average delays are less than 10 seconds.

**LOS B** represents stable operation. At signalized intersections, average vehicle delays are 10 to 20 seconds. At unsignalized intersections, average delays are 10 to 15 seconds.

**LOS C** still represents stable operation, but periodic backups of a few vehicles may develop behind turning vehicles. Most drivers begin to feel restricted, but not objectionably so. At signalized intersections, average vehicle delays are 20 to 35 seconds. At unsignalized intersections, average delays are 15 to 25 seconds.

**LOS D** represents increasing traffic restrictions as the intersection approaches instability. Delays to approaching vehicles may be substantial during short peaks within the peak period, but periodic clearance of long lines occurs, thus preventing excessive backups. At signalized intersections, average vehicle delays are 35 to 55 seconds. At unsignalized intersections, average delays are 25 to 35 seconds.

**LOS E** represents the capacity of the intersection. At signalized intersections, average vehicle delays are 55 to 80 seconds. At unsignalized intersections, average delays are 35 to 50 seconds.

**LOS F** represents jammed conditions where the intersection is over capacity and acceptable gaps for unsignalized intersections in the mainline traffic flow are minimal. At signalized intersections, average vehicle delays exceed 80 seconds. At unsignalized intersections, average delays exceed 50 seconds.

Table 3.1 shows the Year 2009 existing traffic peak hour operating conditions at the study area intersections. The Year 2009 existing traffic volumes as shown in Figure 3.4 as well as the existing intersection geometrics, shown in Figure 3.2, were used in the analysis.

Intersection	Traffic Control	Peak Hour	Level of Service per Movement by Approach											
			Eastbound			Westbound			Northbound			Southbound		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
US 14 & WIS 92/Biglow Road	Two-Way Stop Sign	AM	E	E	E	C	C	C	A	A	A	A	A	A
		PM	C	C	C	C	C	C	A	A	A	A	A	A
US 14 & WIS 59	One-Way Stop Sign	AM	-	-	-	C	-	C	-	A	A	A	A	-
		PM	-	-	-	B	-	B	-	A	A	A	A	-
US 14 & Bullard Road	One-Way Stop Sign	AM	-	-	-	C	-	C	-	A	A	A	A	-
		PM	-	-	-	B	-	B	-	A	A	A	A	-
US 14 & WIS 59/213	One-Way Stop Sign	AM	B	-	A	-	-	-	A	A	-	-	A	A
		PM	B	-	A	-	-	-	A	A	-	-	A	A
US 14 & Main Street	All-Way Stop Sign	AM	A	A	A	A	A	A	A	A	A	A	A	A
		PM	B	A	A	B	B	A	A	A	A	B	A	A
US 14 & County M	Traffic Signal	AM	A	A	A	A	A	A	B	B	B	B	B	B
		PM	A	A	A	A	A	A	B	B	B	B	B	B
US 14 & Territorial Road	One-Way Stop Sign	AM	A	A	-	-	A	A	-	-	-	B	-	B
		PM	A	A	-	-	A	A	-	-	-	B	-	B
US 14 & County H	Two-Way Stop Sign	AM	A	A	A	A	A	A	B	B	B	C	C	C
		PM	A	A	A	A	A	A	C	C	C	C	C	C
US 14 & County E	One-Way Stop Sign	AM	-	A	A	A	A	-	B	-	B	-	-	-
		PM	-	A	A	A	A	-	C	-	C	-	-	-
US 14 & River Road	One-Way Stop Sign	AM	A	A	-	-	A	A	-	-	-	B	-	B
		PM	A	A	-	-	A	A	-	-	-	C	-	C
US 14 & County F	Two-Way Stop Sign	AM	A	A	A	A	A	A	B	B	B	D	D	D
		PM	A	A	A	A	A	A	C	C	C	D	D	D
US 14 & WIS 51	Traffic Signal	AM	C	C	C	B	B	B	B	C	C	B	C	C
		PM	C	C	C	B	B	B	B	C	C	B	C	C
US 14 & Newville Road	One-Way Stop Sign	AM	A	A	-	-	A	A	-	-	-	C	-	C
		PM	B	A	-	-	A	A	-	-	-	E	-	E
US 14 & Kennedy Road	Traffic Signal	AM	A	A	A	A	A	A	B	B	B	B	B	B
		PM	A	B	A	A	B	B	C	B	B	C	B	B
US 14 & WIS 26	Traffic Signal	AM	C	C	B	C	C	B	C	B	B	C	B	B
		PM	D	D	C	D	C	B	D	C	B	D	C	B
US 14 & Pontiac Drive	Traffic Signal	AM	A	A	A	B	A	A	B	B	B	B	B	B
		PM	B	C	B	B	B	A	C	D	C	C	C	C

NOTE: (-) indicates a movement that is not possible.

**Table 3.1: Year 2009 Existing Traffic Peak Hour Operating Conditions With Existing Geometrics & Traffic Control**

Acceptable LOS for peak hour operating conditions has been defined as LOS C.

As shown in Table 3.1, all movements at the eastbound approach of the US 14 intersection with WIS 92 currently operates at LOS E conditions during the weekday morning peak period.

At the US 14 intersection with County F, all movements at the southbound approach currently operate at LOS D conditions during the weekday morning and evening peak periods.

All movements at the southbound approach of the US 14 intersection with Newville Road currently operate at LOS E conditions during the weekday evening peak period.

The eastbound through and left-turn movements as well as the left-turn movements at the westbound, northbound and southbound approaches at the US 14 intersection with WIS 26 currently operate at LOS D conditions during the weekday evening peak period.

At the US 14 intersection with Pontiac Drive, the northbound through movements currently operate at LOS D conditions during the weekday evening peak period.

All other movements at the study area intersections currently operate at LOS C or better conditions under the existing traffic control conditions.

#### ***Year 2009 Traffic Signal Warrant Analysis***

A traffic signal warrant analysis was performed by Traffic Analysis & Design, Inc. at the US 14 intersections with WIS 92, County F and with Newville Road. Chapter 4C of the 2000 *Manual on Uniform Traffic Control Devices* (MUTCD) outlines the standards for determining the need for traffic signals at a particular location. For a traffic signal to be considered, at least one of the following warrants must be satisfied. The eight signal warrants are listed below:

- Warrant 1 Eight-Hour Vehicular Volume
- Warrant 2 Four-Hour Vehicular Volume
- Warrant 3 Peak Hour
- Warrant 4 Pedestrian Hour
- Warrant 5 School Crossing
- Warrant 6 Coordinated Signal Systems
- Warrant 7 Crash Experience
- Warrant 8 Roadway Network

Since peak hour turning movement counts were taken for three hours in the morning (6:00 AM to 9:00 AM) and three hours in the evening (3:00 PM to 6:00 PM), only Warrant 2, the Four-Hour Vehicular warrant, has been evaluated for this project. However, if traffic signals appear to be warranted based on Warrant 2 and WisDOT determines that traffic signals are a potential remediation measure, the eight-hour vehicular warrant should be evaluated at that time.

The MUTCD has different criteria based on populations less than 10,000 people or speeds greater than 40 mph. For the WIS 92 and County F intersections, since the population in surrounding rural communities is less than 10,000 people and the speed limit is greater than

40 mph, the 70% minimum rural vehicular volume curves were used in this analysis at this location. The 100% vehicular volume curves were used for the Newville Road intersection. Warrant 2 is described below.

*Warrant 2, Four Hour Volume is satisfied if during any four hours of an average day the major street (US 14) and minor street (eastbound approach of WIS 92 or southbound approach of Newville Road) volumes fall above the four-hour curves (100% curve for Newville Road, 70% curve for WIS 92) shown in Appendix I.*

Traffic Signal Warrant Analysis – US 14 intersection with WIS 92

The need for traffic signals was investigated at the US 14 intersection with WIS 92 under Year 2009 existing traffic conditions. The warrant analysis assumes the intersection to include an exclusive right-turn lane (a one lane approach) on the WIS 92 eastbound approach. Therefore, none of the eastbound right-turn traffic was included in the warrant analysis. It is noted that the posted speed limit along US 14 at this location is currently 55 mph.

Time Period	US 14 (Total of Major Street Approaches)	Eastbound on WIS 92 (Minor Approach)
6 - 7 AM	755	70
7 - 8 AM	870	85
8 - 9 AM	565	40
3 - 4 PM	620	45
4 - 5 PM	895	45
5 - 6 PM	895	35

**Table 3.2: US 14/WIS 92 Signal Warrant Analysis**

Comparing the traffic volumes shown in Table 3.2 to the MUTCD traffic signal warrant previously outlined, Warrant 2 is *not* expected to be satisfied. More specifically:

*Warrant 2, Four Hour Volume, is not met for any of the required four hours, as shown in curves in Appendix I. Therefore, this warrant is not satisfied.*

Traffic Signal Warrant Analysis – US 14 intersection with County F

The need for traffic signals was investigated at the US 14 intersection with County F under Year 2009 existing traffic conditions. The warrant analysis assumes the intersection to include a single shared lane (a one lane approach) at the County F approaches. Therefore, all of the side road right-turn traffic was included in the warrant analysis. It is noted that the posted speed limit along US 14 at this location is currently 55 mph.

Time Period	US 14 (Total of Major Street Approaches)	Northbound on County F (Minor Approach)
6 - 7 AM	445	30
7 - 8 AM	755	95
8 - 9 AM	630	90
3 - 4 PM	910	50
4 - 5 PM	1050	40
5 - 6 PM	1050	50

**Table 3.3: US 14/County F Signal Warrant Analysis**

Comparing the traffic volumes shown in Table 3.3 to the MUTCD traffic signal warrant previously outlined, Warrant 2 is *not* expected to be satisfied. More specifically:

*Warrant 2, Four Hour Volume*, is *not* met for any of the required four hours, as shown in curves in Appendix I. Therefore, this warrant is *not* satisfied.

#### Traffic Signal Warrant Analysis – US 14 intersection with Newville Road

The need for traffic signals was investigated at the US 14 intersection with Newville Road under Year 2009 existing traffic conditions. The warrant analysis assumes the intersection to include an exclusive right-turn lane (a one-lane approach) on the Newville Road southbound approach. Therefore, none of the southbound right-turn traffic was included in the warrant analysis. It is noted that the posted speed limit along US 14 at this location currently transitions from 50 mph to 55 mph.

Time Period	US 14 (Total of Major Street Approaches)	Southbound on Newville Road (Minor Approach)
6 - 7 AM	720	40
7 - 8 AM	1100	95
8 - 9 AM	885	75
3 - 4 PM	1250	65
4 - 5 PM	1590	65
5 - 6 PM	1260	50

**Table 3.4: US 14/Newville Road Signal Warrant Analysis**

Comparing the traffic volumes shown in Table 3.4 to the MUTCD traffic signal warrant previously outlined, Warrant 2 is *not* expected to be satisfied. More specifically:

*Warrant 2, Four Hour Volume*, is *not* met for any of the required four hours, as shown in curves in Appendix I. Therefore, this warrant is *not* satisfied.

#### **Crash Analysis**

Traffic Analysis & Design, Inc. plotted, summarized, and reviewed crash data along the

24.6 mile segment of US 14 from Old Stage Road to I-39/90. Crash frequencies, rates, and severities were determined for the four sections of US 14 as shown in Table 3.5. Intersection collision diagrams were also created for several of the intersections along the US 14 Corridor. For each highway section and for each intersection listed below, crash statistics were summarized by a variety of factors, including speed-related crashes, crash type, time of day, day of week, driver age, vehicle damage level, alcohol involvement, and light and road conditions. Reported deer-vehicle crashes were removed from the analysis. Figure 3.5 shows a summary of the crash data for the study area corridor.

Section	Section Limits	Area Type	Length (miles)	Years Analyzed	Intersection Collision Diagrams Created for:
1	Old Stage Road to 1,000 feet north of Madison Street/WIS 213	Rural	7.4	5 (2004 -2008)	WIS 92
2	1,000 feet north of Madison Territorial Road Street/WIS 213 to	Urban	2.7	5 (2004 -2008)	Main Street, County M
3	Territorial Road to US 51	Rural	12.0	5 (2004 -2008)	Tuttle Road, County H, County E, River Drive/Hackbarth Road, Spring Hill Drive, County F
4	US 51 to I-39/90	Urban	2.5	3 (2006 -2008)	US 51, Kennedy Road, Bell Street, WIS 26, Lexington Drive, Pontiac Drive

**Table 3.5: US 14 Crash Analysis Parameters**

Crash severity is referenced frequently throughout the crash analysis. The definitions for the various crash severity levels, per the Law Enforcement Officer’s Instructional Manual for Completing the Wisconsin Motor Vehicle Accident Report Form (MV4000), are as follows:

- **K (Fatal Injury):** Any injury received in a traffic accident which results in death within 30 days of the accident.
- **Type A (Incapacitating Injury):** An injury other than a fatal injury which prevents the injured person from walking, driving, or from performing other activities which he/she performed before the accident.
- **Type B (Non-incapacitating Injury):** Any injury, other than fatal or incapacitating, which is evident at the scene. Evidence of injury may include known symptoms of an injury which are not directly observable.
- **Type C (Possible Injury):** Any injury which is not observable or evident at the scene but is claimed by the individual or suspected by the law enforcement officer.
- **N (No Apparent Injury):** No apparent injury to the operator. Commonly referred to as Property Damage Only (PDO).

For each crash, the maximum injury observed and reported by the officer defines its overall severity level. The crash frequency and severity statistics for the four sections of US 14 as well as 15 individual intersections are shown in Table 3.6. Crash rate statistics and comparisons to statewide averages are shown in Table 3.7.

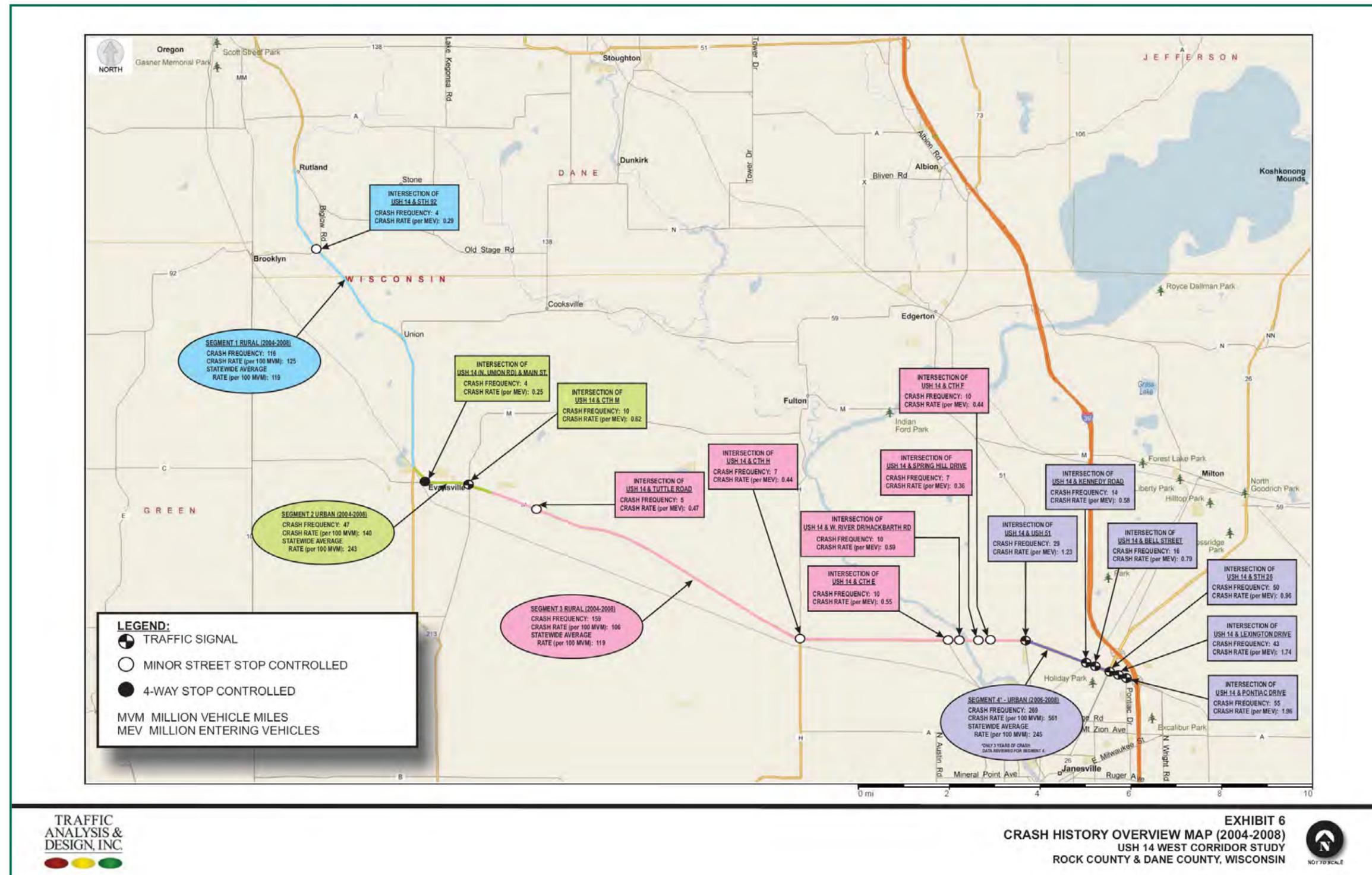


Figure 3.5: Summary of Crash Data

Location	Intersection Control Description	Average Crash Frequency per Year	Total Crash Frequency <sup>1</sup>	PDO	Type C	Type B	Type A	Fatal
<b>Old Stage Road to 1,000' north of WIS 213</b>	<b>Section 1 (Rural)</b>	<b>23.2</b>	<b>116</b>	<b>76</b>	<b>25</b>	<b>13</b>	<b>0</b>	<b>2</b>
WIS 92	Minor Stop	0.8	4	2	2	0	0	0
<b>1,000' north of WIS 213 to Territorial Road</b>	<b>Section 2 (Urban)</b>	<b>9.4</b>	<b>47</b>	<b>27</b>	<b>8</b>	<b>9</b>	<b>1</b>	<b>2</b>
Main Street	4-Way Stop	0.8	4	2	1	1	0	0
County M	Signal	2.0	10	6	2	1	1	0
<b>Territorial Road to US 51</b>	<b>Section 3 (Rural)</b>	<b>31.8</b>	<b>159</b>	<b>102</b>	<b>23</b>	<b>25</b>	<b>6</b>	<b>3</b>
Tuttle Road	Minor Stop	1.0	5	4	1	0	0	0
County H	Minor Stop	1.4	7	4	1	2	0	0
County E	Minor Stop	2.0	10	5	4	1	0	0
River Drive/ Hackbarth Road	Minor Stop	2.0	10	5	2	2	1	0
Spring Hill Drive	Minor Stop	1.4	7	7	0	0	0	0
County F	Minor Stop	2.0	10	7	1	1	1	0
<b>US 51 to I-39/90</b>	<b>Section 4 (Urban)</b>	<b>89.7</b>	<b>269</b>	<b>173</b>	<b>67</b>	<b>23</b>	<b>6</b>	<b>0</b>
US 51	Signal	9.7	29	17	9	3	0	0
Kennedy Road	Signal	4.7	14	12	1	1	0	0
Bell Street	Signal	5.3	16	11	3	2	0	0
WIS 26	Signal	16.7	50	34	11	5	0	0
Lexington Drive	Signal	14.3	43	29	9	3	2	0
Pontiac Drive	Signal	18.3	55	31	15	7	2	0

<sup>1</sup> For Sections 1, 2 & 3, the total crash frequency statistic is the number of crashes in the five year time period from [January 1, 2004 to December 31, 2008](#). For Section 4, which was located in a high-volume urban area, the total crash frequency statistic is the number of crashes in the three year time period from [January 1, 2006 to December 31, 2008](#). Includes all crashes that occurred on the corridor as well as crashes that occurred on side-street intersection approaches to the corridor. Deer crashes were excluded from study.

**Table 3.6: US 14 Crash Frequency & Severity Statistics**

Location	Intersection Control Description	Crash Rate <sup>1,2</sup>	Statewide Average/ Comparison Crash Rate <sup>3</sup>	Injury Crash Rate <sup>2</sup>	Statewide Average Injury Crash Rate <sup>3</sup>
<b>Old Stage Road to 1,000 feet north of WIS 213</b>	<b>Section 1 (Rural)</b>	<b>125</b>	<b>119</b>	<b>41</b>	<b>44</b>
WIS 92	Minor Stop	0.29	1.01	0.15	N/A
<b>1,000 feet north of WIS 59/213 to Territorial Road</b>	<b>Section 2 (Urban)</b>	<b>140</b>	<b>243</b>	<b>54</b>	<b>78</b>
Main Street	4-Way Stop	0.25	N/A	0.12	N/A
County M	Signal	0.62	0.88	0.25	N/A
<b>Territorial Road to US 51</b>	<b>Section 3 (Rural)</b>	<b>106</b>	<b>119</b>	<b>36</b>	<b>44</b>
Tuttle Road	Minor Stop	0.47	1.01	0.09	N/A
County H	Minor Stop	0.44	1.01	0.19	N/A
County E	Minor Stop	0.55	1.01	0.27	N/A
River Drive/ Hackbarth Road	Minor Stop	0.59	1.01	0.29	N/A
Spring Hill Drive	Minor Stop	0.36	1.01	0.00	N/A
County F	Minor Stop	0.44	1.01	0.13	N/A
<b>US 51 to I-39/90</b>	<b>Section 4 (Urban)</b>	<b>561</b>	<b>245</b>	<b>200</b>	<b>77</b>
US 51	Signal	1.23	0.96	0.51	N/A
Kennedy Road	Signal	0.58	0.96	0.08	N/A
Bell Street	Signal	0.79	0.96	0.25	N/A
WIS 26	Signal	0.96	0.91	0.31	N/A
Lexington Drive	Signal	1.74	0.96	0.57	N/A
Pontiac Drive	Signal	1.96	0.91	0.85	N/A

<sup>1</sup> For Sections 1, 2 & 3, the total crash frequency statistic is the number of crashes in the five year time period from [January 1, 2004 to December 31, 2008](#). For Section 4, which was located in a high-volume urban area, the total crash frequency statistic is the number of crashes in the three year time period from [January 1, 2006 to December 31, 2008](#). Includes all crashes that occurred on the corridor as well as crashes that occurred on side-street intersection approaches to the corridor. Deer crashes were excluded from study.

<sup>2</sup> For Corridors, crash rate calculated as the number of crashes per 100 million vehicle miles. For Intersections and Curves, crash rate calculated as the number of crashes per one-million entering vehicles.

<sup>3</sup> For Corridors, average of Statewide Average Rate for [Years 2004-2008](#) as published by WisDOT. For Intersections, the comparison rate shown above is the average crash rate from June 2005 Intersection Crash Summary for Wisconsin (Knapp & Campbell) for similar intersections (urban/rural, traffic control, and volume). This rate should not be considered a statewide average representative of all intersections in Wisconsin. Only intersections with (3 or more crashes in one year - rural areas, and 5 or more crashes in one year - urban areas) were included in the study (1,704 total intersections). The statewide average of all intersections would be expected to be lower than the comparison rate shown above.

**Table 3.7: US 14 Crash Rate Statistics**

### Section 1 - Corridor

There were 116 crashes along Section 1 of US 14 from Old Stage Road to 1000 feet north of Madison Street/WIS 213 in the five years analyzed. Exhibit 7.1 in Appendix H shows the crash statistics for Section 1 of the US 14 Corridor. Crash statistics worth noting on this section include:

- 2 fatal crashes
- 59 percent of crashes were run-off-the-road, including 17 overturns and 47 fixed-object collisions
- 35 percent of crashes occurred on horizontal curves
- 9 percent of crashes were alcohol-related (statewide average is 6 percent)
- 44 percent of crashes were speed-related<sup>1</sup> (statewide average is 22 percent)
- 52 percent of crashes occurred on wet, snowy, or icy roads (statewide average is 38 percent)
- 41 percent of crashes occurred at night, dusk, or dawn (statewide average is 30 percent)

On Section 1, drivers appear to be having difficulty navigating the roadway during adverse weather conditions, particularly the horizontal curves. Vehicles, when they did leave the roadway, had a propensity to hit fixed objects or overturn. Speed, alcohol, and dark light conditions also appeared to be factors in an above average number of crashes. Fatal crashes occurred in the following circumstances:

- A driver of a northbound Yamaha motorcycle at 4:00 PM on April 2, 2004 was traveling at a high rate of speed and collided with a vehicle slowing to make a northbound left-turn at Holt Road. The motorcyclist was ejected and killed.
- A driver of a northbound Ford Windstar minivan at 5:00 AM on February 14, 2006 ran off the road negotiating the curve north of W. Butts Corners Road, overcorrected, crossed both travel lanes and overturned. The driver was killed.

### Section 1 - Intersections

Collision diagrams and statistical summaries of crashes were created for one intersection along Section 1 (US 14/WIS 92). Exhibits 7.1.1a and 7.1.1b in Appendix J show the crash diagram and statistics for the intersection within Section 1 of the US 14 Corridor. The crash analysis did not appear to reveal any evident safety issues at this intersection.

### Section 2 - Corridor

There were 47 crashes along Section 2 of US 14 from 1000 feet north of Madison Street/WIS 213 to Territorial Road in the five years analyzed. Exhibit 7.2 in Appendix J shows the crash statistics for Section 2 of the US 14 Corridor. Crash statistics worth noting on this section include:

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<sup>1</sup> Speed related crashes are defined as crashes in which the officer had indicated “Speed Too Fast/Condition” or “Exceeding Speed Limit” in the driver factors section of the accident report, or if a speeding citation was issued to at least one driver.

- 2 fatal crashes
- 21 percent of crashes were run-off-the-road, which includes 10 fixed-object collisions
- 51 percent of crashes were rear-end collisions
- 51 percent of crashes were intersection-related
- 83 percent of crashes occurred on dry roads (statewide average is 48%)
- 45 percent of crashes occurred during the PM peak period (2:00 PM to 5:59 PM)

On Section 2, there were more intersection-related crashes and less run-off-the-road crashes than were observed on Section 1, as was expected because there are more intersections and fewer curves. Fifty-one percent of crashes were intersection related and 51 percent of collisions were of the rear-end variety. More than 80 percent of crashes on Section 2 were on dry road conditions indicating that adverse road conditions did not appear to be a safety issue. There were 10 collisions with fixed objects. Almost half of all crashes on Section 2 occurred during the PM peak period between 2:00 PM and 5:59 PM. Fatal crashes occurred in the following circumstances:

- An eastbound car on US 14 at 11:00 PM on July 4, 2004 left the right shoulder of the roadway approximately 300 feet east of County M, struck a utility pole and overturned. Alcohol was a factor. The driver was killed.
- An eastbound car on US 14 at 1:00 AM on April 22, 2007 left the right shoulder of the roadway approximately 500 feet east of County M and overturned. Speed and alcohol were factors. The 16-year old driver was killed.

### Section 2 - Intersections

Collision diagrams and statistical summaries of crashes were created for two intersections along Section 2 of US 14 (US 14/Main Street and US 14/County M). Exhibits 7.2.1a through 7.2.2b in Appendix J show the crash diagrams and statistics for the intersections within Section 2 of the US 14 Corridor. The crash analysis did not appear to reveal any evident safety issues at these intersections.

### Section 3 - Corridor

There were 159 crashes along Section 3 of US 14 from Territorial Road to US 51 in the five years analyzed. Exhibit 7.3 in Appendix J shows the crash statistics for Section 3 of the US 14 Corridor. Crash statistics worth noting on this section include:

- 3 fatal crashes
- 38 percent of crashes were run-off-the-road, including 15 overturns and 40 fixed-object collisions
- 27 percent of crashes were rear-end collisions
- 45 percent of crashes were intersection-related
- 69 percent of crashes occurred on dry roads (statewide average is 48 percent)
- 34 percent of crashes occurred during the PM peak period (2:00 PM to 5:59 PM)

On Section 3, 45 percent of crashes were intersection related and 27 percent of collisions were of the rear-end variety. Almost 70 percent of crashes on Section 3 were on dry road conditions indicating that adverse road conditions did not appear to be a safety issue. There were 15

reported overturn crashes and 40 collisions with fixed objects. More than 1/3<sup>rd</sup> of all crashes on Section 3 occurred during the PM peak period between 2:00 PM and 5:59 PM. Fatal crashes occurred in the following circumstances:

- A westbound car on US 14 at 2:00 PM on November 1, 2006 left the right shoulder of the roadway approximately 1,000 feet east of Cassidy Road and overturned. Alcohol was a factor. The driver was killed.
- An eastbound truck on US 14 at 11:00 PM on December 23, 2006 left the roadway approximately 0.1 miles west of Tuttle Road. After negotiating the curve, the vehicle entered the right-shoulder, overcorrected, then crossed both travel lanes and overturned. Alcohol was a factor. The driver was ejected and killed.
- A westbound car on US 14 at 3:00 PM on July 5, 2008 crossed into the eastbound lane for unknown reasons and struck a semi-truck. The driver of the car was ejected and killed.

### Section 3 - Intersections

Collision diagrams and statistical summaries of crashes were created for six intersections along Section 3 of US 14. Exhibits 7.3.1a through 7.3.6b in Appendix J show the crash diagrams and statistics for the intersections within Section 3 of the US 14 corridor. Any evident or potentially addressable safety issues revealed by the crash analysis are shown below, including suggestions to potentially address the issues.

- Tuttle Road
- County H
- County E
  - Issue: Nine failures to stop at the northbound County E stop sign resulting in run-off-the-road crashes.
  - Suggestion: Consider enhancing the indications of stop control (e.g., using a larger stop sign, using two stop signs on each side of the roadway, adding a flashing beacon to the stop sign, adding rumble strips on the northern approach, etc.). Also, consider adding a two-directional large arrow sign (W1-7) on the northern shoulder of US 14 facing the northbound approach lane of County E to help convey to drivers that the roadway ends.
- River Drive/Hackbarth Road
  - Issue: Six rear-end crashes on the westbound approach, including three that resulted in injuries.
  - Suggestion: Consider adding a westbound left-turn lane.
- Spring Hill Drive
- County F

### Section 4 - Corridor

There were 269 crashes along Section 4 of US 14 from US 51 to I-39/90 in the three years analyzed. Exhibit 7.4 in Appendix J shows the crash statistics for this section of the corridor. Crash statistics worth noting include:

- 0 fatal crashes, although six Type A crashes were reported
- Crash rates and injury crash rates are substantially higher than the statewide averages for urban streets
- 40 percent of crashes were rear-end collisions
- 38 percent of crashes were angle collisions
- 73 percent of crashes were intersection-related
- Nearly one-third of all weekend crashes occurred on Saturdays between 10:00 AM and 1:59 PM

There were significantly more intersection-related crashes reported in Section 4, than in Sections 1, 2 or 3; this is likely due to the predominately commercial land use in this section along with higher volumes and signalized intersections. The crash rate was 129 percent higher than the statewide average for urban streets and the injury crash rate was 160 percent higher. Thirty-eight percent of crashes were angle collisions and 40 percent were rear-end collisions. Seventy-three percent of crashes were intersection related. There were 25 crashes that occurred on Saturdays between 10:00 AM and 1:59 PM, making up nearly one-third of all weekend crashes on Section 4.

#### Section 4 - Intersections

Collision diagrams and statistical summaries of crashes were created for six intersections along Section 4 of US 14. Exhibits 7.4.1a through 7.4.6b in Appendix J show the crash diagrams and statistics for the intersections within Section 4 of the US 14 corridor. Any evident or potentially addressable safety issues revealed by the crash analysis are shown below, including suggestions to potentially address the issues.

- US 51
  - Issue: 19 left-turn angle crashes (4 to 6 in each direction).
  - Suggestion: Consider positive left-turn offsets in all directions and/or improved signal phasing or timing, particularly during the PM peak period.
- Kennedy Road
- Bell Street
- WIS 26
  - Issue: Patterns of rear-end crashes (7 in three years) on the northbound approach and left-turn angle crashes involving northbound through vehicles and southbound left-turners (10 in three years).
  - Suggestion: Evaluate signal timing for the northbound approach and southbound protected left-turn movement. It is suspected that platoons of vehicles may be arriving during the dilemma zone and/or adequate time is not provided for northbound through vehicles and/or southbound protected left-turn vehicles.
- Lexington Drive
  - Issue: Substantial pattern (23 occurrences in three years) of angle crashes between westbound through vehicles and eastbound left-turners.
  - Suggestion: Evaluate signal timing for the westbound through movement and the eastbound left-turn movement. Consider positively offsetting the eastbound and westbound left-turn lanes.

- Issue: Pattern (6 occurrences in three years) of angle crashes between eastbound through vehicles and westbound left-turners.
- Suggestion: Evaluate signal timing for the eastbound through movement and the westbound left-turn movement. Consider positively offsetting the eastbound and westbound left-turn lanes.
- Issue: Pattern (4 occurrences in three years) of rear-end crashes between eastbound vehicles after the intersection, likely due to downstream congestion.
- Suggestion: Evaluate signal timing, capacity, and coordination between Lexington Drive and Pontiac Drive to minimize the queuing of one intersection into the other.
- Pontiac Drive
  - Issue: Substantial pattern (24 occurrences in three years) of left-turn angle crashes (13 involving westbound through vehicles; 11 involving eastbound).
  - Suggestion: Evaluate signal timing for the eastbound/westbound through movements and the eastbound/westbound left-turn movements. Consider positively offsetting the eastbound and westbound left-turn lanes.

### 3.3 Existing Geometric Deficiencies

The US 14 corridor roadway geometrics were evaluated by conducting field reviews of the corridor and also by reviewing available as-built plans. Comments from local officials and the general public were also used to identify potential problem areas within the corridor. The geometric components reviewed consisted of the following:

1. Horizontal deficiencies (curves, passing zones and intersections)
2. Vertical deficiencies (vertical curves and sight distances)
3. Typical section deficiencies (substandard lane widths, shoulder widths, sidewalk widths, etc.)
4. Miscellaneous deficiencies

#### *Horizontal Deficiencies*

This horizontal alignment was reviewed by comparing curve data shown on as-built plans against current design standards. Based on the available as-built plans, there are no horizontal curves that were identified as currently being sub-standard. Some portions of the corridor do not have any curve data due to the lack of existing as-built plans. Table 3.8 lists the existing horizontal curve data within the corridor.

Horizontal Curve Location	Degree of Curve	Curve Radius (ft)	Posted Speed (MPH)	Design Speed (MPH)
WIS 92 to Stewart Road	?	?	55	?
Stewart Road	3° 00'	1,910	55	60
Stewart Road to WIS 59	?	?	55	?
North WIS 59	33° 13'	955	45	50
East Union Road to Butts Corners Road	?	?	45	?

Horizontal Curve Location	Degree of Curve	Curve Radius (ft)	Posted Speed (MPH)	Design Speed (MPH)
East Union Road to Butts Corners Road	-	-	55	-
North of Madison Street	1° 38'	3,500	25	30
Madison Street	5° 12'	1,103	25	30
Madison Street to Main Street	9° 48'	585	25	30
County M to Water Street	3° 16'	1,750	25	30
Weary Road to Territorial Drive	2° 10'	2,644	55	60
Territorial Drive to Tolles Road	1° 10'	4,911	55	60
Tolles Road to Wilder Road	0° 40'	8,594	55	60
Tolles Road to Wilder Road	0° 15'	22,918	55	60
Tolles Road to Wilder Road	2° 20'	2,456	55	60
Wilder Road to Riley Road	2° 30'	2,292	55	60
Fellows Road to Curtis Drive	2° 50'	2,022	55	60
Fellows Road to Curtis Drive	0° 15'	22,918	55	60
Fellows Road to Cassidy Road	2° 40'	2,456	55	60
Cassidy Road to Eagle Road	1° 40'	3,438	55	60
Cassidy Road to Eagle Road	1° 00'	5,730	55	60
Fox Road to County H	0° 45'	7,639	55	60
County H	2° 00'	2,865	55	60
US 51	-	-	45	-

**Table 3.8: US 14 Corridor Horizontal Curve Data**

Horizontal curve data was analyzed using a max super elevation rate of 6%. Following are the minimum curve radii for the various design speeds found within the corridor (curves that have smaller radii than those listed below are considered to be substandard):

- 30 mph: minimum radius = 231 feet
- 50 mph: minimum radius = 833 feet
- 60 mph: minimum radius = 1,330 feet

The following intersections or horizontal curves have problems as identified by local officials, the general public and field reviews:

1. Butts Corners Road
2. Union Road
3. Elmer Road
4. County M
5. the horizontal curve just south of Union

***Vertical Deficiencies***

This review consisted mainly of reviewing the available as-built plans and comparing vertical curve data against current design standards. Some portions of the corridor do not have any vertical curve data due to the lack of existing as-built plans. Table 3.9 lists the existing vertical curve data within the corridor.

<b>Vertical Curve Location</b>	<b>Curve K-Value</b>	<b>Vertical Curve Type</b>	<b>Posted Speed (MPH)</b>	<b>Design Speed (MPH)</b>
WIS 92 to Holt Road	128	Sag	55	60
WIS 92 to Holt Road	158	Crest	55	60
WIS 92 to Holt Road	123	Sag	55	60
Holt Road to Stewart Road	162	Crest	55	60
Holt Road to Stewart Road	108	Sag	55	60
Holt Road to Stewart Road	555	Sag	55	60
Evansville NCPL to Madison Street	122	Crest	25	30
Evansville NCPL to Madison Street	150	Sag	25	30
Madison Street to Main Street	150	Sag	25	30
Madison Street to Main Street	71	Crest	25	30
Madison Street to Main Street	76	Sag	25	30
Madison Street to Main Street	62	Crest	25	30
Madison Street to Main Street	53	Sag	25	30
Madison Street to Main Street	79	Crest	25	30
Union Road to Jackson Street	96	Crest	25	30
Jackson Street to Cemetery Road	59	Sag	25	30
Cemetery Road	58	Crest	25	30
Cemetery Road to Countryside Drive	157	Crest	25	30
Cemetery Road to Countryside Drive	78	Crest	25	30
Countryside Drive	46	Sag	25	30
Water Street to County M	74	Crest	25	30
Water Street to County M	89	Crest	25	30
Water Street to County M	61	Sag	25	30
Water Street to County M	71	Sag	25	30
Water Street to County M	128	Crest	25	30
County M to Evansville ECPL	74	Sag	25	30
Evansville ECPL to County H	667	Sag	55	60
Evansville ECPL to County H	-	-	55	60

Vertical Curve Location	Curve K-Value	Vertical Curve Type	Posted Speed (MPH)	Design Speed (MPH)
County H to US 51	416	Sag	55	60
County H to US 51	-	-	55	60
US 51 to Kennedy Road	153	Sag	55	60
US 51 to Kennedy Road	315	Crest	55	60
US 51 to Kennedy Road	326	Sag	55	60
US 51 to Kennedy Road	392	Crest	55	60
US 51 to Kennedy Road	392	Sag	55	60
US 51 to Kennedy Road	416	Crest	55	60
US 51 to Kennedy Road	166	Sag	55	60
US 51 to Kennedy Road	238	Sag	55	60
US 51 to Kennedy Road	158	Crest	55	60
US 51 to Kennedy Road	254	Sag	55	60
Kennedy Road to I-39/90	-	-	55	60

**Table 3.9: US 14 Corridor Vertical Curve Data**

For the purpose of this study it is assumed that all existing vertical curves are Category 1 vertical curves as detailed in the Facilities Development Manual (FDM), Chapter 11-10-5, Attachment 1. The following are the desirable and minimum K-values for both crest and sag vertical curves. Design speeds of 60 mph and 30 mph were used in the vertical curve analysis:

30 mph design speed Crest Curve:	$K_{\text{desirable}} = 31$	$K_{\text{min}} = 19$
60 mph design speed Crest Curve:	$K_{\text{desirable}} = 245$	$K_{\text{min}} = 151$
30 mph design speed Sag Curve:	$K_{\text{desirable}} = K_{\text{min}} = 37$	
60 mph design speed Sag Curve:	$K_{\text{desirable}} = K_{\text{min}} = 136$	

All six crest curves meet the minimum K-value for a 60 mph design speed; however, three of the curves have K-values below the desirable. These are highlighted in the table above. Eighteen of the sag curves meet the desirable K-value; while three sag curves are below the desirable K-values. These are highlighted in the table above.

### **Typical Section Deficiencies**

US 14 is identified as a Connector Route in WisDOT’s Connections 2030 plan. The design standard for a 2-lane rural highway with a 60 mph design speed is as follows:

- Traveled way width: 24 feet (two 12-foot lanes)
- Paved shoulder width: 3 feet
- Gravel shoulder width: 7 feet
- Lane cross slope: 2%

Table 3.10 lists the various roadway cross section dimensions.

Location	Number of Lanes	Lane Width (ft)	Lane Cross Slope (%)	Paved Shoulder Width (ft)	Gravel Shoulder Width (ft)
WIS 138 to WIS 92	2	12	2.0	3	2
WIS 92 to Evansville	2	12	2.0	3	3 -5
Evansville (NCPL to ECPL)	2	12	2.0	4 - 10 + C&G	N/A
Evansville to US 51	2	12	2.0	3	3'
US 51 to Kennedy Road	4 (div)	12	2.0	6	4'
Kennedy Road to I-39/90	4 (div)	12	1.5	3	7'

**Table 3.10: US 14 Corridor Lane and Shoulder Widths**

Traveled lane widths and paved shoulder widths meet current design standards. The majority of the gravel shoulders throughout the corridor fall below the current design standard of 7 feet in width, as indicated by the grey shaded areas in Table 3.10. The gravel shoulders between US 51 and Kennedy Road are considered to be acceptable, even though they are only shown as 4 feet, since the overall shoulder width is still 10 feet. The existing lane cross-slope from Kennedy Road to I-39/90 is acceptable for resurfacing projects, however, it should be upgraded to the current design standard of 2.0% for reconstruction projects.

### **3.4 Planned Future Roadway Improvement Projects/Studies in the Area**

There are several improvement projects that will be taking place inside the project corridor. These are as follows:

1. Drainage improvements will be made at the US 14/WIS 92 intersection. Construction of these improvements is scheduled for 2012.
2. US 14 will be milled and overlaid from Janesville to Evansville. Construction is scheduled for 2012.
3. The US 14 bridge over the Rock River will be replaced sometime between 2013 and 2016.

There is also a corridor study currently taking place in the study area. This is a corridor study of US 14 and WIS 11 in the Janesville area. Part of that study is analyzing the potential for a US 14 bypass on the west side of Janesville.

## **CHAPTER 4 – SUMMARY OF EXISTING CONDITIONS**

### **4.1 Summary of Existing/Future Land Use**

All of the communities within the study corridor have completed comprehensive plans as of the time of this plan review. There is at least one community that is in the process of updating their plan. Though there were many similarities in both land use and transportation issues identified in the comprehensive plans, there were also some distinct differences. The summary matrix shown in Table 2.4 highlights the important transportation corridors, and the potential transportation effects to US 14 that were identified from the review.

### **4.2 Summary of Existing Traffic Conditions**

Traffic data for the US 14 corridor from WIS 92 10 to I-39/90 was collected and analyzed to identify the current and expected traffic operations of highway sections and intersections. This section of US 14 is identified in the WisDOT Corridors 2020 Plan and the Connections 2030 Plan as a Connector route, which means that acceptable level of service for the facility is LOS C or better. This means that sections that are found to operate (or be expected to operate) at LOS D or worse should be considered for improvements.

Most of the intersections analyzed were found to currently operate at LOS C or better. The following intersections operate at LOS D or worse; WIS 92, County F, Newville Road, WIS 26 and Pontiac Drive. The intersections that currently operate at LOS C or better will continue to do so in the year 2035. A traffic signal warrant analysis was performed at the US 14 intersections with WIS 92, County F and with Newville Road, and it was determined that signals were not warranted at any of the intersections.

The crash analysis for the US 14 corridor showed that of the seven fatal crashes, alcohol was a factor in four. The crash analysis of the intersections did not reveal any safety issues in sections one or two. In section three there are safety issues at County E and Hackbarth Road. In section four there are safety issues at US 51, WIS 26, Lexington Drive and Pontiac Drive.

### **4.3 Summary of Existing Roadway Geometrics**

There are several areas in which US 14 does not meet current design standards. Based on a review of available as-built plans, none of the existing horizontal curves are sub-standard. Six existing vertical curves have sub-standard K-values. It should be noted that as-built plans were not available for some portions of the project. Further analysis of the existing roadway geometrics in those areas will be conducted and included in the Corridor Management Report.

Another area where the roadway does not meet current design standards is the gravel shoulder widths. Many areas within the corridor have the required 3-foot paved shoulders; however the outside gravel shoulders are less than the standard of 7 feet in many areas.

Sight distances are generally good at the intersections within the study area. However, there were comments about numerous individual locations that should be evaluated for intersection improvements.

## CHAPTER 5 – CONCLUSIONS AND POSSIBLE STRATEGIES

### 5.1. Introduction

Chapters 1 through 4 were completed in March of 2011 and published as the Existing Conditions Report. Data for the Existing Conditions Report included input from local officials and the general public, as-built plan data, traffic counts, computer modeling of future traffic, and field observations. This information was used to identify roadway deficiencies, high crash rate locations, and areas with future level of service issues.

Chapter 5 provides conclusions and possible strategies to address the deficiencies and corridor needs identified in Chapters 1 through 4. These conclusions and possible strategies, combined with the Existing Conditions Report (Chapters 1-4) make up the Corridor Management Plan for US 14 from WIS 92 to I-39/90.

### 5.2. Land Use and Access Control

County, township and community land use and transportation plans were reviewed to determine if any future growth plans existed that would directly impact the US 14 corridor and its operational capabilities. The transportation plans were also used to identify any community specific issues that would impact the US 14 corridor's ability to meet their specific transportation needs. After reviewing the land use and transportation plans it was determined that three objectives were identified:

1. Improve safety
2. Coordinate future development to minimize access points along US 14
3. Maintain and enhance existing transportation facilities

Wisconsin State Statute 84.25 gives WisDOT the authority to manage access by freezing access along the corridor. Access management is generally completed following a roadway construction project. Once Statute 84.25 is complete, any future projects cannot remove any access without owners' consent, while the addition of new access along the corridor is restricted. Access management was completed along the US 14 corridor in Dane and Rock Counties, but has not been completed in Evansville (see **Figure 5.1**).

In order to obtain these objectives the local townships and municipalities should avoid land use decisions that could create new access points along US 14. WisDOT should also review the corridor and eliminate unnecessary access points.

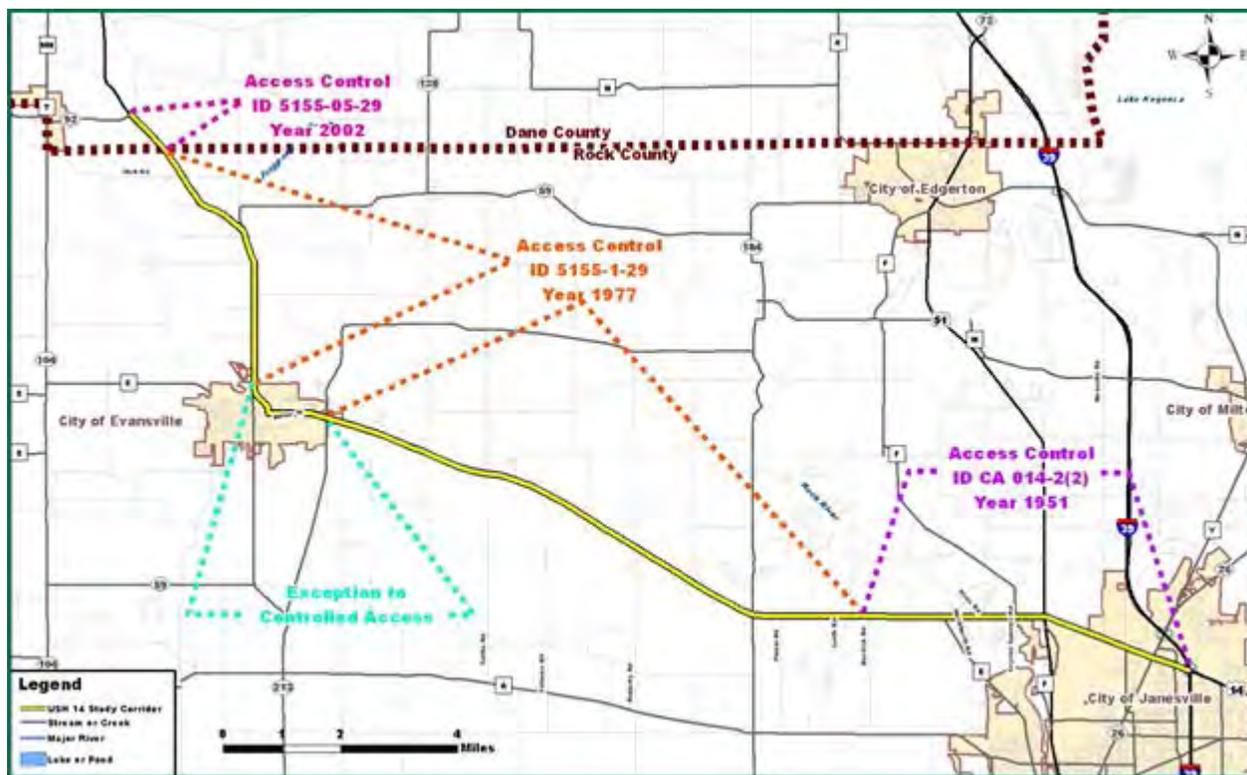


Figure 5.1: Existing 84.25 Administrative Access Control

Deficient access locations along US 14 were identified using several methods. First, property plats and certified survey map (CSM) information were reviewed to determine if an access is permitted or not, and if the driveway was shown on the most recent access control map available. Second, access points were reviewed to determine if they meet the rural principal arterial access spacing guidelines found in the Facilities Development Manual (FDM) Chapter 11-5 Attachment 5.1. The spacing requirements between intersecting facilities are as follows for a rural principal arterial:

1. Freeways every 2 miles.
2. Expressways every 2 miles.
3. Principal arterials every 2 miles for average daily traffic (ADT) volumes greater than 3,000 vehicles per day (vpd) or every 1 mile for ADTs less than 3,000 vpd.
4. Minor arterials every 2 miles for ADTs greater than 5,000 vpd or every 1 mile for ADTs less than or equal to 5,000 vpd.
5. Major collectors every 1 mile.
6. Minor collectors every 2,000 feet.
7. Local roads every 2,000 feet.
8. Private driveways every 1,000 feet.

Local access standards were also identified. The City of Janesville zoning codes require driveway openings to be:

1. At least 25 feet from a block corner for of single-family and two-family driveway openings
2. At least 40 feet from a block corner for all other driveways.

City of Evansville zoning codes require that:

1. No driveway openings shall be permitted within 100 feet of the intersection of an arterial street right-of-way line.

Finally, driveways were evaluated for vertical or horizontal sight distance deficiencies, geometric deficiencies, ability to be combined with adjacent access points, and safety concerns.

### ***Access Improvements***

Based on the previously-described access management methodology, locations for potential access improvements were identified. No deficient access points were identified based on property plats or sight distance.

### **Minimum Spacing**

Of the 374 access points along the corridor, 184 (49 percent) were closer to the nearest upstream access point or side road than the recommended minimum spacing by location or type. These points, however, were included in previous controlled-access projects along the corridor.

### **Intersection Clearances**

Clearance distances from driveways to intersections were also investigated. There are 85 access points along US 14 within the recommended 1,000-ft spacing to local side roads (rural sections only). Of these, 24 were within 500 feet and four were within 200 feet. One field access at US 14 & N Weary Road was in the southwest corner of the intersection. Corner clearances along the side roads were also examined. There were 58 access points within 400 feet, but none were closer than 50 feet to the nearest corner. With US 14 being a controlled-access highway, consideration will be given to allowing a new driveway within the recommended intersection corner clearances.

### **Crash Locations**

A review of the corridor crash statistics did not indicate any high-crash access points between intersections. The crash experience along the corridor is discussed in Chapter 3.

### **Roadway Geometry**

There are several substandard vertical curves located between WIS 92 and Stewart Road. There are nine access points within this area. In the future, care should be taken to not allow access where there are visual deficiencies along the mainline. However, at present, no access closures or relocations are anticipated because all existing driveways are visible in advance.

### **Intersection Spacing**

Intersections spacing was also examined for potential access improvements. The table below shows the spacing between each intersection along the corridor that is less than the recommended distance of 2,000 ft.

Intersection 1	Functional Classification	Intersection 2	Functional Classification	Distance (ft)
WIS 59	Major Collector	Union Rd	Local	742
W Bullard Rd	Local	W Green Bay Rd	Local	1,351
N Weary Rd	Local	N Territorial Rd	Local	1,400
N Curtis Dr	Local	N Fellows Rd	Local	955
N Eagle Rd	Local	N Roherty Rd	Local	88
N Connor Rd	Local	N Harvest View Dr	Local	1,935
N Fitzsimmons Rd	Local	N Burdick Rd	Local	1,650
County E	Minor Arterial	N Hackbarth Rd	Local	863
N Hackbarth Rd	Local	NW River Rd	Local	1,060
NW River Rd	Local	N River Rd	Local	942
N River Rd	Local	N Spring Hill Dr	Local	579
N Spring Hill Dr	Local	N Edgewood Dr	Local	1,755
N Edgewood Dr	Local	County F/N Crystal Springs Rd	Major Collector	1,356

**Table 5.1: US 14 Intersection Spacing**

The following intersections could be improved:

1. US 14 with N. Eagle Rd. and N Roherty Rd. (align offset side roads)
2. US 14 with N. Hackbarth Rd and N. W. River Drive (align offset side roads)
3. Turn N. Hackbarth Rd. into a cul-de-sac that can be accessed via County E

#### Driveway Recommendations

There were 18 driveways that had the potential to be moved, closed, or combined with an adjacent access point. The majority of these were residential properties with loop driveways with two access points on US 14. Exhibits showing these access points are provided in [Appendix K](#). These locations were based on their proximity to side roads, adjacent accesses, or the presence of one or more driveways on a single property. The properties and the reasoning behind these recommendations are given in **Table 5.2**.

Owner	Type	Address	Action	Reason
Butz	PE	10808 N US Hwy 14	Close	Two driveways on one property.
Uhe	PE	10318 N US Hwy 14	Close	Two driveways on one property.
Drewel	PE	10308 N US Hwy 14	Close	Three driveways on one property; yard access is 17 feet from paved driveway.
Wis Hwy Commission	CE	9216 N US Hwy 14	Close	Four access points on one property. Recommend closing two.
Chincilla Ranch	PE	8119 N US Hwy 14	Close	Two driveways on one property.
French Group	CE	50 Union St	Close	Two access points; one is 49 feet from adjacent driveway.
Berg Trust	PE	450 E Main St	Combine	17 feet from an adjacent driveway (456 E Main St).
Berg Trust	PE	456 E Main St	Combine	17 feet from an adjacent driveway (450 E Main St).
Parks-Vele	PE	13208 W US Hwy 14	Close	Two driveways on one property.

Owner	Type	Address	Action	Reason
Woodworth Farms	FE		Move	Access on corner of US 14 and N Weary Rd.
Andrew ETAL	FE		Close	Two access points; one is 86 feet west of an established driveway.
Bienash	FE		Close	Two access points; one is 220 feet west of an established field entrance.
Beggs	FE	6728 W US Hwy 14	Close	Three driveways on one property.
Beggs	PE	6728 W US Hwy 14	Close	Three driveways on one property.
Abb	CE	6421 W US Hwy 14	Close	Two driveways on one property.
McLoud	PE	4708 W US Hwy 14	Close	Two driveways on one property.
Breka Living Trust	FE	4207 W US Hwy 14	Combine	77 feet from an adjacent paved driveway.
Partipilo	PE	1838 W US Hwy 14	Close	Two driveways on one property.

**Table 5.2: US 14 Driveway Recommendations**

### 5.3. Possible Improvement Strategies

The goal of the Corridor Management Plan is to preserve the existing two lane US 14 corridor for as long as possible. The improvement strategies were developed with this goal in mind. The improvement strategies are grouped into the following four general types:

- Pavement Improvements
- Geometric Improvements
- Capacity Improvements
- Safety Improvements

Each of these improvement strategies will be discussed in more detail in the sections to follow.

### 5.4. Pavement Improvements

Pavement improvements include milling and overlaying the existing pavement, pavement rehabilitation work, and pavement reconstruction. Deteriorated pavement sections within the US 14 corridor should be upgraded as part of future roadway projects. WisDOT will schedule these pavement improvements as necessary.

The section of US 14 between N. Curtis drive and County F contains pavement that is in poor condition (see **Figure 5.2**) and should be evaluated for pavement improvements by WisDOT in the near future:



**Figure 5.2: Typical Pavement deterioration in US 14 Section 3 (N. Curtis Drive to County F)**

### 5.5. Geometric improvements

#### *Upgrading Sub-Standard Horizontal Curves*

There are no substandard horizontal curves within the US 14 corridor. The horizontal curve just south of Union was identified as a concern by local officials. However, the geometry of the curve meets current WisDOT standards; however, there is a higher than average crash rate on this segment. Crash data shows that drivers appear to be having difficulty navigating the horizontal curves, especially during adverse weather conditions. WisDOT should continue to monitor this curve for safety concerns, and consider improvements if warranted by increasing crash rates.

#### *Upgrading Sub-Standard Vertical Curves*

There are several substandard vertical curves within the US 14 corridor. These vertical curves do not meet current WisDOT desirable standards for their respective design speeds and should be upgraded as part of future roadway improvement projects. The minimum K values for a 60 mph design speed are listed below.

60 mph design speed Crest Curve:  $K_{desirable} = 245$   $K_{min} = 151$

60 mph design speed Sag Curve:  $K_{desirable} = 136$   $K_{min} = 136$

Vertical Curve Location	Curve K value	Vertical Curve Type	Posted Speed (MPH)	Design Speed (MPH)
WIS 92 to Holt Road	128	Sag	55	60
WIS 92 to Holt Road	158	Crest	55	60
WIS 92 to Holt Road	123	Sag	55	60
Holt Road to Stewart Road	162	Crest	55	60
Holt Road to Stewart Road	108	Sag	55	60
US 51 to Kennedy Road	158	Crest	55	60

**Table 5.3: US 14 Sub-standard Vertical Curves**

### *Upgrading Intersection Geometrics*

The following intersections were identified as having deficiencies. Examples of intersection deficiencies are poor sight distance; poor intersection angle; lack of vision corners; poor horizontal and vertical geometry; and poor signing and pavement marking.

Possible strategies for each intersection are discussed in more detail below.

1. J. Lindemann Drive
2. N. Cassidy Road
3. N. Eagle Road & N. Roherty Road
4. N. Fox Road

#### J. Lindemann Drive and US 14 Intersection

This intersection has issues with eastbound US 14 traffic turning left onto J. Lindemann Drive. The area has a lot of businesses which are accessed using J. Lindemann Drive, which increases the possibility of crashes due to the stopped left turning vehicles (see **Figures 5.3 and 5.4**). A possible strategy is to add an eastbound bypass lane at this location. See Appendix L, Exhibit 5.6 for a layout of the possible strategy.



**Figure 5.3: US 14/ J. Lindemann Drive (looking west)**



**Figure 5.4: US 14/ J. Lindemann Drive (looking east)**

N. Cassidy Road and US 14 Intersection

The angle at this intersection (see **Figure 5.5**) is less than 65°. A possible strategy would be to realign the intersection to intersect US 14 at a 90° angle. Realigning the intersection will provide more efficient and safer operations on US 14 at N. Cassidy Road. See Appendix L, Exhibit 5.7 for a layout of the possible strategy.



**Figure 5.5: US 14/ N. Cassidy Road**

N. Eagle Road & N. Roherty Road and US 14 Intersection

These two intersections are offset which causes turning movement issues for both roadways (see **Figure 5.6**). A possible strategy is to realign both roadways to intersect US 14 at a single point. See Appendix L, Exhibit 5.8 for a layout of the possible strategy.



Figure 5.6: US 14/ N. Eagle Road & N. Roherty Road

#### N. Fox Road and US 14 Intersection

The angle at this intersection (see **Figure 5.7**) is less than 65°. A possible strategy would be to realign the intersection to intersect US 14 at a 90° angle. Realigning the intersection will provide more efficient and safer operations on US 14 at N. Fox Road. See Appendix L, **Exhibit 5.9** for a layout of the possible strategy.



Figure 5.7: US 14/ N. Fox Road

#### *Upgrading Shoulder Widths*

The majority of the gravel shoulders throughout the corridor fall below the current design standard of 7 feet in width, as indicated by the grey shaded areas in **Table 5.4**.

Location	Number of Lanes	Lane Width (ft)	Lane Cross Slope (%)	Paved Shoulder Width (ft)	Gravel Shoulder Width (ft)
WIS 138 to WIS 92	2	12	2.0	3	2
WIS 92 to Evansville	2	12	2.0	3	3 - 5
Evansville (NCPL to ECPL)	2	12	2.0	4 - 10 + C&G	N/A
Evansville to US 51	2	12	2.0	3	3'
US 51 to Kennedy Road	4 (div)	12	2.0	6	4'
Kennedy Road to I-39/90	4 (div)	12	1.5	3	7'

**Table 5.4: US 14 Corridor Lane and Shoulder Widths**

The sub-standard shoulder widths in these areas should be upgraded to current design standards as part of future roadway projects. The gravel shoulders between US 51 and Kennedy Road are considered to be acceptable, even though they are only 4 feet wide, because the overall shoulder width is still 10 feet. The existing lane cross-slope from Kennedy Road to I-39/90 is acceptable for resurfacing projects, but should be upgraded to the current design standard of 2.0% for any future reconstruction projects.

### 5.6. Capacity Improvements

This section of US 14 is identified in the WisDOT Connections 2030 as a Connector Route, which means that the acceptable level of service (LOS) for peak hour operating conditions for the facility is LOS C or better. Sections that are found to operate, or are expected to operate, at LOS D or worse should be considered for capacity improvements. Most of the intersections analyzed were found to currently operate at LOS C or better. The intersections that currently operate at LOS C or better will continue to do so in the year 2035. The intersections that operate at LOS D or worse are indicated by the grey shaded areas in **Table 5.5**. Capacity improvements should be made to bring substandard intersections up to LOS C or better as part of future roadway projects.

Capacity improvements could include the addition of passing lanes, two-lane to four-lane expansion, roundabouts or signal retiming.

Intersection	Traffic Control	Peak Hour	Level of Service per Movement by Approach											
			Eastbound			Westbound			Northbound			Southbound		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
US 14 & WIS 92/Biglow Road	Two-Way Stop Sign	AM	E	E	E	C	C	C	A	A	A	A	A	A
		PM	C	C	C	C	C	C	A	A	A	A	A	A
US 14 & County F	Two-Way Stop Sign	AM	A	A	A	A	A	A	B	B	B	D	D	D
		PM	A	A	A	A	A	A	C	C	C	D	D	D
US 14 & Newville Road	One-Way Stop Sign	AM	A	A	-	-	A	A	-	-	-	C	-	C
		PM	B	A	-	-	A	A	-	-	-	E	-	E
US 14 & WIS 26	Traffic Signal	AM	C	C	B	C	C	B	C	B	B	C	B	B
		PM	D	D	C	D	C	B	D	C	B	D	C	B
US 14 & Pontiac Drive	Traffic Signal	AM	A	A	A	B	A	A	B	B	B	B	B	B
		PM	B	C	B	B	B	A	C	D	C	C	C	C

**Table 5.5: Year 2009 Existing Traffic Peak Hour Operating Conditions with Existing Geometrics and Traffic Control**

WIS 92/ Biglow Road and US 14 Intersection

WIS 92/Biglow Road is a southwest/northeast, two-lane undivided highway with a rural cross section in the vicinity of US 14. All movements at the eastbound approach of the US 14 intersection with WIS 92 currently operate at LOS E conditions (as shown above in Table 5.5) during the weekday morning peak period. An interchange is being evaluated at this intersection under a separate US 14 realignment project, which extends from WIS 92 to WIS 138, north of the corridor being evaluated in this study. See Appendix L, Exhibit 5.1 for a layout of the potential interchange footprint.

Bullard Road and US 14 Intersection

Bullard Road is an east/west, two-lane undivided highway with a rural cross section in the vicinity of US 14. The westbound left-turn and right-turn movements at the US 14 intersection with Bullard Road are expected to operate at LOS E/F conditions during the weekday morning and evening peak periods by year 2035. A possible strategy is to construct a multi-lane roundabout with a single lane approach westbound, a single lane approach northbound and a dual lane approach southbound. See Appendix L, Exhibit 5.3 for a layout of the possible strategy.

WIS 213/ WIS 59 and US 14 Intersection

WIS 213/ WIS 59 (Madison Street) is a north/south, two-lane undivided highway with an urban cross section in the vicinity of US 14. Madison Street currently intersects US 14 as a Tee intersection from the southwest. It is recommended to provide all-way stop control when delays increase to a level where warrants are met, which is expected by year 2035. An optional strategy is to construct a single-lane roundabout with a single lane approaches eastbound and westbound, a single lane northbound approach and a single lane southbound approach with a by-pass lane. See Appendix L, Exhibit 5.4 for a layout of the optional strategy.

S. Union Road/ Main Street and US 14 Intersection

The S. Union Road/ Main Street and US 14 intersection is a 4-way intersection with an urban cross section in Evansville. S. Union Road connects to US 14 from the south and Main Street connects from the west. It is recommended to provide traffic signal control when volumes reach a level where warrants are met, which is expected by year 2025. An optional strategy is to construct a single-lane roundabout with a single lane approach eastbound, a single lane westbound approach with a by-pass lane and single lane northbound and southbound approaches. See Appendix L, Exhibit 5.5 for a layout of the optional strategy.

County H and US 14 Intersection

County H is a north/south, two-lane undivided highway with a rural cross section in the vicinity of US 14. At the US 14 intersection with County H, all movements at the northbound and southbound approaches are expected to operate at LOS F conditions during the weekday morning and evening peak periods by year 2035. It is recommended to provide traffic signal control when volumes reach a level where warrants are met, which is expected by year 2025. An optional strategy is to construct a single-lane roundabout with a single lane approaches on all approaches. See Appendix L, Exhibit 5.10 for a layout of the optional strategy.

County F/ N. Crystal Springs Road and US 14 Intersection

County F/ N. Crystal Springs Road is a north/south, two-lane undivided highway with a rural cross section in the vicinity of US 14. All movements at the southbound approach of the US 14 intersection with County F/ N. Crystal Springs Road are expected to operate at LOS F conditions during the weekday morning peak period by year 2035. A possible strategy is to construct a multi-lane roundabout with single lane approaches eastbound and westbound, a single lane southbound approach with a by-pass lane and a dual lane northbound approach. See Appendix L, Exhibit 5.16 for a layout of the possible strategy.

***Passing Lanes***

Passing lanes are auxiliary lanes that are constructed alongside a two-lane rural highway to provide the desired frequency of safe passing zones. As a US 14 improvement strategy, additional passing lanes would increase LOS in sections of the US 14 corridor that are expected to have a low future LOS. An evaluation of passing lanes in the US 14 corridor is listed below:

Section 1 (Old Stage Road to 1000 feet north of N. Madison/WIS 213/WIS 59)

This rural section of the US 14 corridor does not contain any passing lanes. The 2007 ADT for this section varies from 6,900 to 7,300 and the future ADT (2035) is projected to be between 11,000 and 12,000. The existing LOS for this section is C. The future LOS (2035) is projected to be D.

Because the highway will be operating at LOS D, it is recommended that WisDOT explore capacity improvements. Possible improvements would be adding additional passing lanes or expanding to a 4-lane roadway.

Section 2 (1000 feet north of N. Madison/WIS 213/WIS 59 to Territorial Road)

This rural section of the US 14 corridor does not contain any passing lanes. The 2007 ADT for this section is 8,000 and the future ADT (2035) is projected to be 14,900. The existing Level of Service (LOS) for this section is C. The future LOS (2035) is projected to be D.

Because the highway will be operating at LOS D, it is recommended that WisDOT explore capacity improvements. Possible improvements would be adding additional passing lanes or expanding to a 4-lane roadway.

Section 3 (Territorial Road to US 51)

This rural section of the US 14 corridor does not contain any passing lanes. The 2007 ADT for this section varies from 5,800 to 11,900 and the future ADT (2035) is projected to be between 9,400 and 19,000. The existing LOS for this section is C/D. The future LOS (2035) is projected to be D/E.

Because the highway will be operating at LOS D/E, it is recommended that WisDOT explore capacity improvements. Possible improvements would be adding additional passing lanes or expanding to a 4-lane roadway.

Section 4 (US 51 to I-39/90 ramps)

This urban section of the US 14 corridor does not contain any passing lanes as it already a multi-lane roadway. The 2007 ADT for this section varies from 15,500 to 20,200 and the future ADT (2035) is projected to be between 27,300 and 36,100. The existing LOS for this section varies from B to D. The future LOS (2035) is projected to be E/F.

Because the highway will be operating at LOS D, it is recommended that WisDOT explore capacity improvements, including additional through lanes.

***Two-lane to four-lane expansion***

While the intent of this corridor management report is to preserve the two-lane nature of the US 14 corridor, there are several sections of the corridor that may warrant consideration of capacity expansion with additional lanes. US 14 is identified in the WisDOT Connections 2030 Plan as a Connector Route, which means that when ADT exceeds 8,700 vehicles per day, consideration should be given to four-lanes. Currently all the sections have future ADT (2035) values above 8,700. Based on these future traffic volumes, it is recommended that WisDOT continue monitoring traffic and safety levels between the WIS 92/US 14 intersection in Dane County to the US 51 intersection in Janesville for possible expansion to 4 lanes if conditions worsen. It is also worth noting that there are other strategies that could be applied to this section in lieu of four-lane expansion. One such strategy would be the addition of passing lanes as discussed earlier in this section.

**5.7. Safety Improvements**

Safety improvements include options to reduce crashes, accommodate pedestrians and bicycles, and other miscellaneous improvements that help to create a safer transportation facility.

### ***Crash Rate Reduction Improvements***

These improvements are engineering improvements that WisDOT can employ to help reduce crash rates.

#### US 14 and County E Intersection

This intersection has an average crash rate of 0.55 Crashes per Million Entering Vehicles (CPMEV) based on data from 2004 through 2008. While this is lower than the statewide average for rural intersections (0.96 CPMEV), there have been nine failures to stop at the northbound County E stop sign resulting in run-off-the-road crashes. Possible strategies for this intersection are to consider enhancing the indications of stop control and to add a two-directional large arrow sign (W1-7) on the northern shoulder of US 14 facing the northbound approach lane of County E to help convey to drivers that the roadway ends. See [Appendix L, Exhibit 5.12](#) for a layout of the possible strategy. An optional strategy is to construct a single-lane roundabout with a single lane approach westbound, a single lane eastbound approach with a by-pass lane and single lane northbound and southbound approaches. See [Appendix L, Exhibit 5.13](#) for a layout of the optional strategy.

WisDOT is currently developing plans for resurfacing US 14 in 2017. As part of this project, the County E intersection will be modified to better align the north and south legs, and to eliminate the eastbound to southbound slip ramp.

#### US 14 and N. Hackbarth Road/NW River Drive Intersection

This intersection has an average crash rate of 0.59 CPMEV based on data from 2004 through 2008. While this is lower than the statewide average for rural intersections (0.96 CPMEV), there have been six rear-end crashes on the westbound approach involving vehicles turning left onto N. Hackbarth Road. A possible strategy for this intersection is to add a left-turn lane or bypass lane to allow through westbound traffic to continue westbound around the left turning vehicles. See [Appendix L, Exhibit 5.14](#) for a layout of the possible strategy.

#### N. Spring Hill Drive and US 14 Intersection

This intersection has an average crash rate of 0.36 CPMEV based on data from 2004 through 2008. While this is lower than the statewide average for rural intersections (0.96 CPMEV), there have been several rear-end crashes on the westbound approach involving vehicles turning left onto N. Spring Hill Drive. A possible strategy for this intersection is to add a left-turn lane or bypass lane to allow through westbound traffic to continue westbound around the left turning vehicles. See [Appendix L, Exhibit 5.15](#) for a layout of the possible strategy.

#### US 14 and US 51 Intersection

This intersection has an average crash rate of 1.23 CPMEV based on data from 2006 through 2008; this crash rate is higher than the statewide average for rural intersections (0.96 CPMEV). There have been 19 left-turn angle crashes (4 to 6 in each direction). Possible strategies for this intersection are to consider positive left-turn offsets in all directions and/or improved signal phasing or timing, particular during the PM peak period. An optional strategy is to construct a multi-lane roundabout - dual lane approach EB, dual lane approach with by-pass lane WB, single lane approach with by-pass lane NB, dual lane approach SB. See [Appendix L, Exhibit 5.17](#) for a layout of the optional strategy.

#### US 14 and WIS 26/Milton Avenue Intersection

This intersection has an average crash rate of 0.96 CPMEV based on data from 2006 through 2008. There has been a pattern of rear-end crashes (7 in three years) on the northbound approach and left-turn angle crashes involving the northbound through vehicles and southbound left-turning vehicles (10 in three years). Possible strategies for this intersection are to evaluate signal timing for the northbound approach and southbound protected left-turn movement. It is suspected that platoons of vehicles may be arriving during the dilemma zone and/or adequate time is not provided for northbound through vehicles and/or southbound protected left-turn vehicles.

#### US 14 and N. Lexington Drive Intersection

This intersection has an average crash rate of 1.74 CPMEV based on data from 2006 through 2008. There has been a substantial pattern (23 occurrences in three years) of angle crashes between westbound through vehicles and eastbound left-turn vehicles. There has also been a pattern (6 occurrences in three years) of angle crashes between eastbound through vehicles and westbound left-turn vehicles. Possible strategies for this intersection are to evaluate signal timing for the westbound through movement and the eastbound left-turn movement and to consider positively offsetting the eastbound and westbound left-turn lanes. Another pattern that has developed is rear end crashes (4 occurrences in three years) between eastbound vehicles after the intersection, likely due to downstream congestion.

*There is an HSIP (Highway Safety Improvement Project) project planned for this intersection in 2015. The project will add offset left turn lanes and signal retiming.*

#### US 14 and N. Pontiac Drive Intersection

This intersection has an average crash rate of 1.96 CPMEV based on data from 2006 through 2008. There has been a substantial pattern (24 occurrences in three years) of left-turn angle crashes (13 involving westbound through vehicles; 11 involving eastbound).

*There is an HSIP (Highway Safety Improvement Project) project planned for this intersection in 2015. The project will add offset left turn lanes and signal retiming.*

#### ***Intersection Sight Distance Improvements***

Sight distance issues due to horizontal or vertical alignments have been identified at various intersections. Improving sight distance at these intersections is likely to also improve safety on US 14.

#### WIS 59/N. Union Road and US 14 Intersection

The WIS 59/N. Union Road intersection has issues with WIS 59 traffic making turning movements onto US 14. The intersection is located on a horizontal curve which limits sight distance. The obscured vision to the south makes it difficult to pull out from the intersection increasing the possibility of crashes (**see Figure 5.8**). A possible strategy for this intersection is to straighten out the alignment and to clear any trees or other vision obstructions to achieve the desired sight distance. Another option would be to construct a multi-lane roundabout with a single lane approach westbound, a single lane northbound approach with a by-pass lane and a

dual lane southbound approach. See [Appendix L, Exhibit 5.2](#) for a layout of the optional strategy.



**Figure 5.8: US 14/WIS 59 (looking south)**

W. Union Road/ E. Union Road and US 14 Intersection

This intersection has issues with W. Union Road traffic turning left to head north onto US 14. The intersection is located just south of a horizontal curve which limits sight distance to the north. The obscured vision to the north makes it difficult for traffic to pull out from, or cross the intersection, increasing the possibility of crashes (see **Figure 5.9**). A possible strategy for this intersection is to straighten out the alignment to the north to achieve the desired sight distance. Another possible strategy is to remove any trees or other sight obstructions north of the intersection to achieve the desired sight distance.



**Figure 5.9: US 14/W. Union Road (looking north)**

W. Butts Corners Road and US 14 Intersection

This intersection has issues with the W. Butts Corners Road traffic turning left onto northbound US 14. The intersection is located just south of a horizontal curve which limits sight distance to the north. The obscured vision to the north makes it difficult for traffic to pull out from the intersection, increasing the possibility of crashes (see **Figure 5.10**). A possible strategy for this intersection is to straighten out the alignment and/or lower the profile to achieve the desired sight distance.



**Figure 5.10: US 14/W. Butts Corners Road (looking north)**

W. Elmer Road and US 14 Intersection

This intersection has issues with W. Elmer Road traffic turning onto US 14. The intersection is located on top of a vertical crest curve which limits sight distance in both directions. The obscured vision to the north and south makes it difficult to pull out from the intersection, increasing the possibility of crashes (see **Figures 5.11 and 5.12**). Sight distance to the south is worse for traffic turning left onto US 14 from W. Elmer Road. A possible strategy for this intersection is to lower the profile to achieve the required sight distance.



**Figure 5.11: US 14/ W. Elmer Road (looking north)**



**Figure 5.12: US 14/W. Elmer Road (looking south)**

US 14 and N. Burdick Road Intersection

This intersection has a sight distance problem to the west (see **Figure 5.13**). The US 14 profile has a sag curve to the west that partially hides approaching cars. Possible strategies include adjusting the US 14 profile to improve sight distance to the west, upgrading the intersection to a type C intersection and providing a larger right turn deceleration lane taper to allow right turning vehicles to get over sooner. See Appendix L, **Exhibit 5.11** for a layout of the possible strategies.



**Figure 5.13: US 14/N. Burdick Road (looking west)**

### ***Pedestrian Crossings***

There are very few pedestrian crossings located within the US 14 corridor. Future pedestrian crossings will need to meet WisDOT and ADA standards.

Specific recommendations for each community located within the US 14 corridor are as follows:

#### City of Evansville

The pedestrian crossings along the US 14 corridor in the City of Evansville are located at the following locations:

- US 14/E. Main Street intersection
- US 14/ Jackson Street intersection

The following intersections do not have marked cross walks:

- US 14/Cemetery Road
- US 14/E. Countryside Drive

There are also pedestrian crossings located at the various side road along the US 14 corridor in the City of Evansville. It is recommended that the curb ramp cutouts, pavement markings and signs be updated to meet WisDOT and ADA standards as part of any improvement projects involving these locations.

#### City of Janesville

The pedestrian crossings along the US 14 corridor in the City of Janesville are located at the following locations:

- US 14/ WIS 26 intersection

There are also pedestrian crossings located at the various side road along the US 14 corridor in the City of Janesville. None of the Janesville curb ramps have a detectable warning field. It is

recommended that the curb ramp cutouts, pavement markings and signage be updated to meet WisDOT and ADA standards as part of any improvement projects involving these locations.

### ***Bicycle Facilities***

It is recommended that the communities located within the US 14 corridor work with County and State officials in developing bicycle facilities to serve their community's needs.

### ***Snowmobile Crossings***

There are numerous snowmobile trails located within the US 14 corridor. A signed crossing has a snowmobile crossing sign and a marked crossing has pavement marking on the road that identifies the location of the crossing. Specific crossings of funded trails are located as follows:

1. Dane county trail 39 crosses US 14 north of WIS 92. The crossing is not signed and there is no pavement marking or trail delineation on US 14.
2. The corridor 40 trail crosses US 14 south of Union Road and north of Butts Corners. The crossing is signed and there is no pavement marking on US 14.
3. The corridor 40 trail crosses US 14 at the intersection with County M. The crossing is not signed and there is no pavement marking or trail delineation on US 14.
4. The corridor 40 trail crosses US 14 at the intersection of Tolles Road. The crossing is not signed and there is no pavement marking or trail delineation on US 14.
5. The corridor 15 trail crosses US 14 at the intersection of County H. The crossing is not signed and there is no pavement marking or trail delineation on US 14.
6. The corridor 15 trail crosses US 14 west of County E, and again at the intersection of US 14 and County E. The crossing is not signed and there is no pavement marking or trail delineation on US 14.
7. The corridor 15 trail uses the US 14 bridge over the Rock River. The crossing is not signed and there is no pavement marking or trail delineation on US 14.

It is recommended that all of the US 14 snowmobile crossings be properly signed in accordance with the WisDOT Traffic Guidelines Manual. This will help identify the crossings and reduce the possibility of accidents at these locations. If the volume of snowmobiles crossing US 14 at a given location is fairly heavy, a warning sign may be advisable to warn motorists of the potential presence of snowmobiles, even if there is adequate sight distance. Also, WisDOT should consider adding pavement treatments in the areas of snowmobile crossings as policy indicates.

### ***Miscellaneous Improvements***

The following miscellaneous items should also be addressed:

1. Add centerline rumble strips where needed.
2. Add shoulder rumble strips where needed.
3. Reduce the amount of steep side slopes to make them more traversable
4. Widen clear zones where possible.
5. Add additional signing at locations with larger horizontal curves.

**5.8. Public Involvement**

A local officials meeting and public involvement meeting were held to present the improvement strategies discussed above. Based on feedback received from these meetings, additional improvement strategies were identified.

US 14/Butts Corners Road

The Butts Corners Road intersection was identified as a location with poor sight distance. As previously noted, sight distance to the north is limited by a horizontal curve. Local officials and the public have indicated that a high volume of farm equipment uses this intersection. It is recommended that WisDOT consider conducting a speed study at this location to determine if the 45 mph speed zone should be extended to the south, through the intersection.

US 14/Bullard Road

There is a high volume of traffic utilizing Bullard Road and Territorial Road as an unofficial “bypass” of Evansville. As a result, traffic volumes are increasing at the intersection. Feedback from local officials and the public also indicated that safety is decreasing at the intersection as drivers are failing to stop at the intersection prior to turning onto US 14 from Bullard Road. It is recommended that WisDOT conduct new traffic counts at this location and reevaluate whether the intersection meets signal warrants.

US 14/Tolles Road

Feedback from local officials and the public indicated that there are many near miss crashes at this location, where eastbound through vehicles use the shoulder to avoid vehicles that are stopped, waiting to turn onto Tolles Road. A possible strategy for this intersection is to add a bypass lane to allow through eastbound traffic to continue eastbound around the left turning vehicles. See Appendix L, Exhibit 5.18 for a layout of the possible strategy.

**5.9. Summary of Conclusions and Possible Strategies**

The goal of this US 14 corridor study is to develop a Corridor Management Plan that identifies both short-term and long-range planning for the US 14 corridor, while preserving the two-lane nature of the corridor as long as possible. This planning effort will help maintain mobility, function and safety for the traveling public.

The possible strategies presented in Chapter 5 are intended to provide WisDOT with a foundation for managing the US 14 corridor from WIS 92 to the I-39/90 ramps. It includes recommendations for pavement improvements, geometric improvements, capacity improvements, and safety improvements. **Table 5.6** presents a summary of possible strategies.

Table 5.4: US 14 CORRIDOR SUMMARY OF POSSIBLE STRATEGIES	
Section 1	Possible Strategies
	Work with local officials to prevent new access points along US 14; WisDOT should review existing access points for driveways that can be combined or eliminated.
	Construct multi-lane roundabout at WIS 92/Biglow Road intersection.

Table 5.4: US 14 CORRIDOR SUMMARY OF POSSIBLE STRATEGIES	
	Improve W. Union Road/ E. Union Road intersection geometrics.
	Improve W. Butts Corners Road intersection geometrics.
	Improve W. Elmer Road intersection geometrics.
	Upgrade substandard shoulder widths at various locations.
	Add passing lanes if possible.
	Straighten out the alignment to achieve the desired sight distance at the WIS 59/N. Union Road intersection. Another possible strategy is to clear any trees or other vision obstructions to achieve the desired sight distance.
	Sign and update existing snowmobile crossings.
	Add centerline and shoulder rumble strips where needed.
Section 2	Possible Strategies
	Work with local officials to prevent new access points along US 14; WisDOT should review existing access points for driveways that can be combined or eliminated.
	Provide traffic signal control when volumes reach a level where warrants are met (expected by year 2025) at the N. Union Road/ Main Street intersection.
	Provide all-way stop control (expected by year 2035) at the WIS 213/ WIS 59 intersection.
	Improve J. Lindemann Drive intersection geometrics.
	Upgrade substandard shoulder widths at various locations.
	Add passing lanes if possible.
	Update curb ramp cutouts, pavement markings and signage to meet WisDOT and ADA standards as part of any improvement projects located within Evansville.
	Sign and update existing snowmobile crossings.
Section 3	Possible Strategies
	Work with local officials to prevent new access points along US 14; WisDOT should review existing access points for driveways that can be combined or eliminated.
	Replace deteriorating pavement from N. Curtis Road to County F.
	Realign N. Cassidy Road to intersect US 14 at 90°.
	Realign N. Eagle Road and N. Roherty Road to intersect US 14 at a single point.
	Realign N. Fox Road to intersect US 14 at 90°.
	Provide all-way stop control (expected by year 2025) at the County H intersection.
	Improve N. Burdick Road intersection geometrics.
	Enhance the indications of stop control at the County E intersection.
	Add a left-turn lane or bypass lane at the N. Hackbarth Road/NW River Drive Intersection.
	Add WB US 14 bypass lane at N. Spring Hill Drive.

Table 5.4: US 14 CORRIDOR SUMMARY OF POSSIBLE STRATEGIES	
	An optional strategy is to construct a single-lane roundabout at the County F intersection with a single lane approach eastbound, a single lane westbound approach with a by-pass lane and single lane northbound and southbound approaches.
	Consider positive left-turn offsets in all directions and/or improved signal phasing or timing, particular during the PM peak period at the US 51 intersection.
	Add centerline and shoulder rumble strips where needed.
	Upgrade substandard shoulder widths at various locations.
	Add passing lanes if possible.
	Sign and update existing snowmobile crossings.
Section 4	Possible Strategies
	Work with local officials to prevent new access points along US 14; WisDOT should review existing access points for driveways that can be combined or eliminated.
	An optional strategy is to construct a single-lane roundabout at the US 51 intersection with a multi-lane roundabout with a dual lane approach eastbound, dual lane westbound approach with a by-pass lane, a single lane northbound approach with a by-pass lane and a dual lane southbound approach.
	Evaluate signal timing for the northbound approach and southbound protected left-turn movement at the WIS 26 intersection.
	Evaluate signal timing for the westbound through movement and the eastbound left-turn movement and to consider positively offsetting the eastbound and westbound left-turn lanes at the Lexington Drive intersection. Another possible strategy for this problem is to evaluate signal timing, capacity, and coordination between N. Lexington Drive and N. Pontiac Drive to minimize the queuing of one intersection into the other.
	Evaluate signal timing for the eastbound/westbound through movements and the eastbound/westbound left-turn movement and consider positively offsetting the eastbound and westbound left-turn lanes at the N. Pontiac Drive intersection.
	Update curb ramp cutouts, pavement markings and signage to meet WisDOT and ADA standards as part of any improvement projects located within this section.

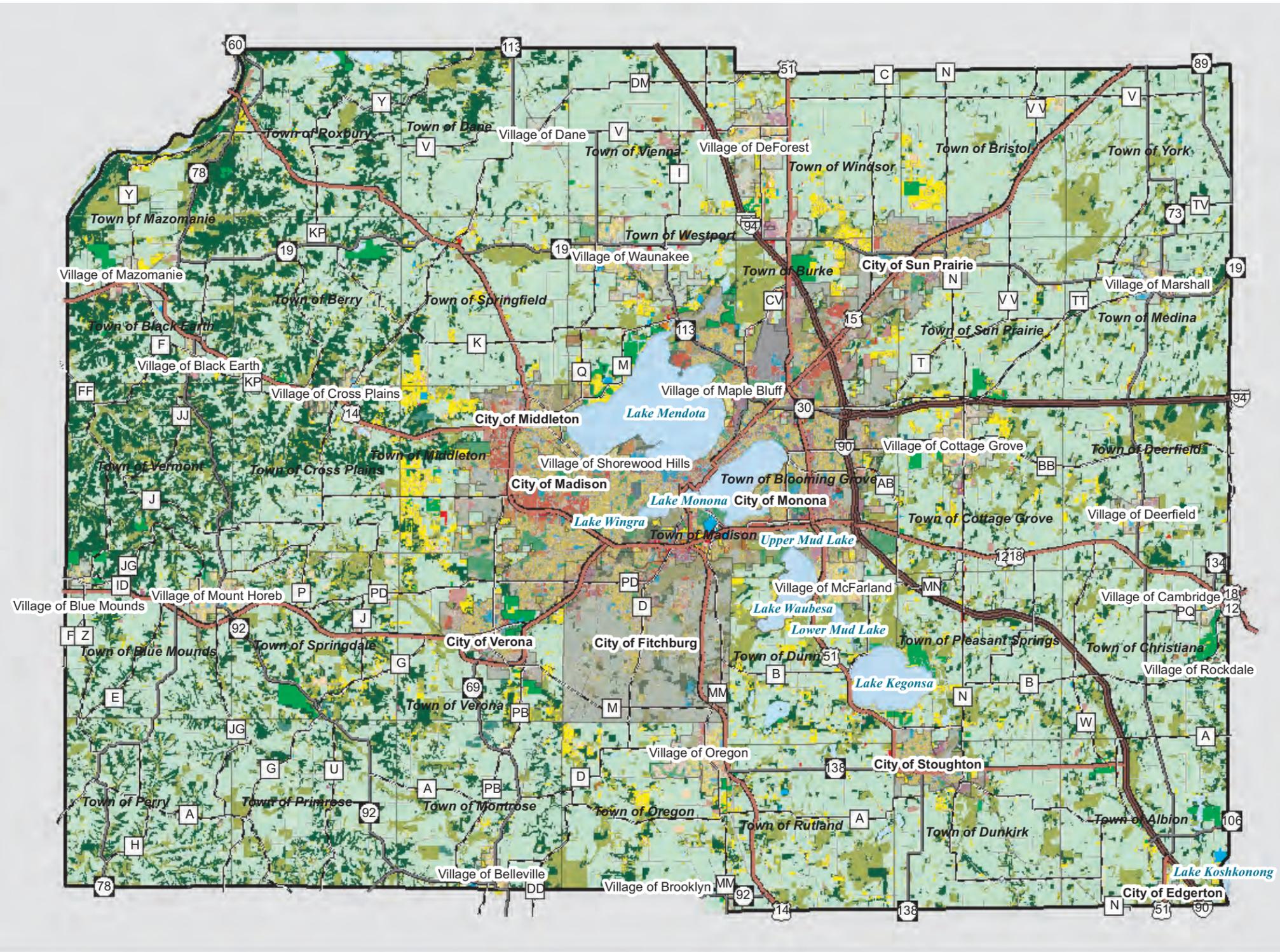
**Table 5.6: US 14 Corridor Summary of Possible Strategies**

# **Appendix A**

## **Existing Land Use Maps**



Dane County Comprehensive Plan  
Dept. of Planning & Development  
210 Martin Luther King Jr. Blvd.  
Room 116  
Madison, WI 53703  
www.daneplan.org



**Land Use Categories**

2005	
	Agriculture
	Cemetery
	Commercial Forest
	Commercial Sales or Services
	Communications or Utilities
	Extractive
	Industrial
	Institutional or Governmental
	Multi-Family
	Open Land
	Outdoor Recreation
	Right of Way
	Single Family
	Transportation
	Two Family
	Under Construction
	Vacant
	Water
	Woodland

**Standard Legend**

	Interstate
	US Highway
	State Highway
	County Highway
	City
	Village
	Town
	Major Lake

**What you're looking at:**

The 2005 land use survey was conducted by the Community Analysis & Planning Division using parcel boundaries, aerial photography, site visits and community support. Land use points represent a centroid of a building that is being used for one of the categories identified.

For more information:  
<http://www.danecorpc.org>



June, 2007



Source Info: Land Use Points: 2005 (DCCAPD). Road Network: 2006, Parcel Derived (DCLIO). Municipal Boundaries & Water: 2007, Parcel Derived (DCLIO).

This map was prepared through the Department of Planning and Development in conjunction with the Land and Water Resources Department, Land Information Office and the Dane County Regional Planning Commission.

Map A.1  
Dane County  
2005 Land Use

2005 Land Use



# Map 2a Existing Land Use

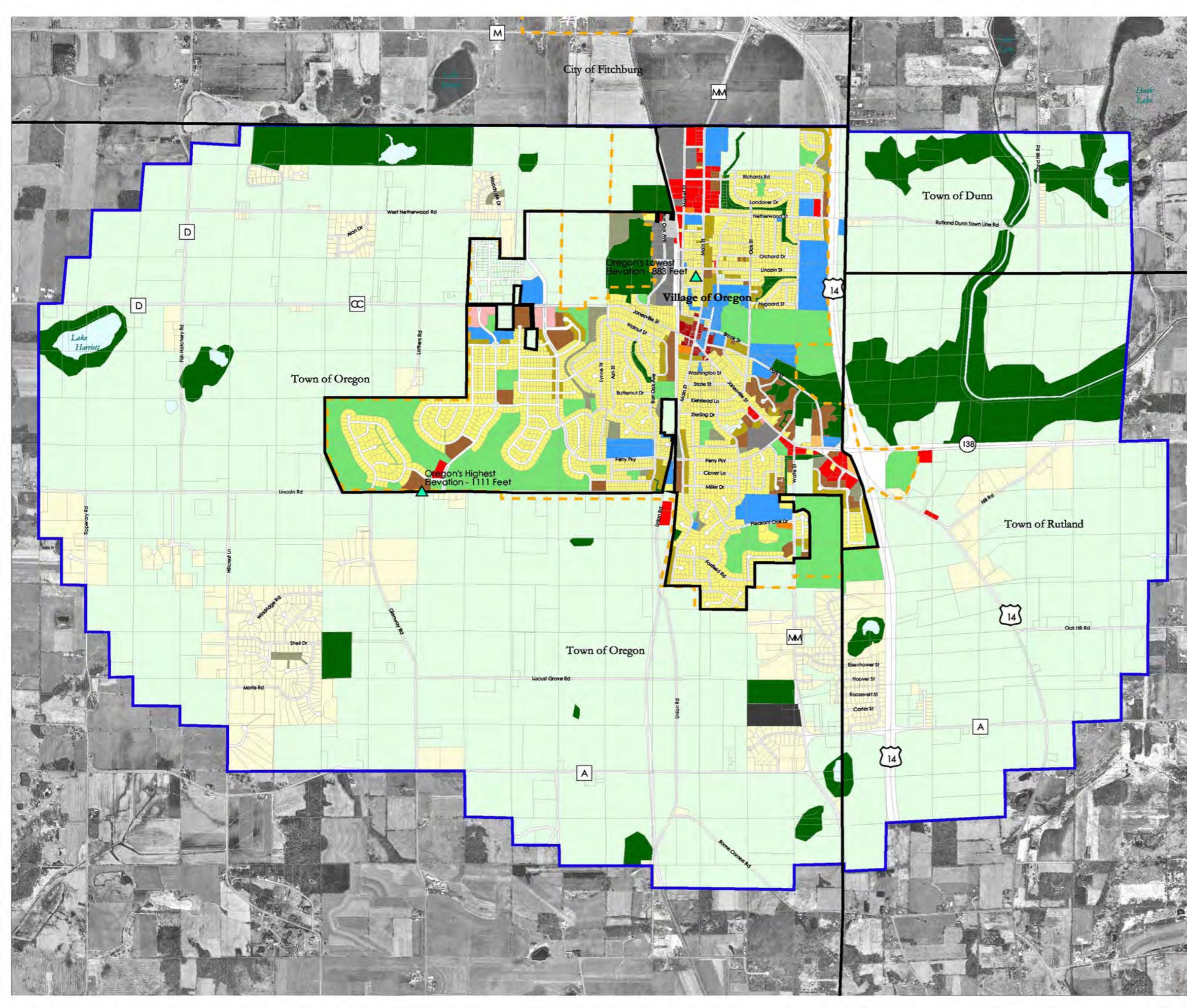
- Municipal Boundaries
- Extra-Territorial Jurisdictional Boundary
- Urban Service Area Boundaries
- Existing Land Use**
- Agriculture/Rural/Vacant
- Rural Residential
- Single Family Residential
- Two Family Residential
- Mixed Residential
- Neighborhood Office
- Planned Office
- Planned Business
- Neighborhood Business
- General Business
- Central Mixed Use
- Planned Industrial
- General Industrial
- Heavy Industrial
- Extraction
- Institutional
- Active Recreation
- Passive Recreation & Stormwater Management
- Environmental Corridor
- Surface Water
- Rights-of-Way
- High & Low Elevations

Map A.2  
Village of Oregon  
Existing Land Use

Adopted: July 27, 2004

Sources:  
Parcels: Dane County Land Information Office 2001.  
Municipal Boundaries: Dane County Land Information Office 2001.  
Other: Vandewalle & Associates Inventory 2001.

Vandewalle & Associates  
Madison, Wisconsin  
Planning - Creating - Rebuilding

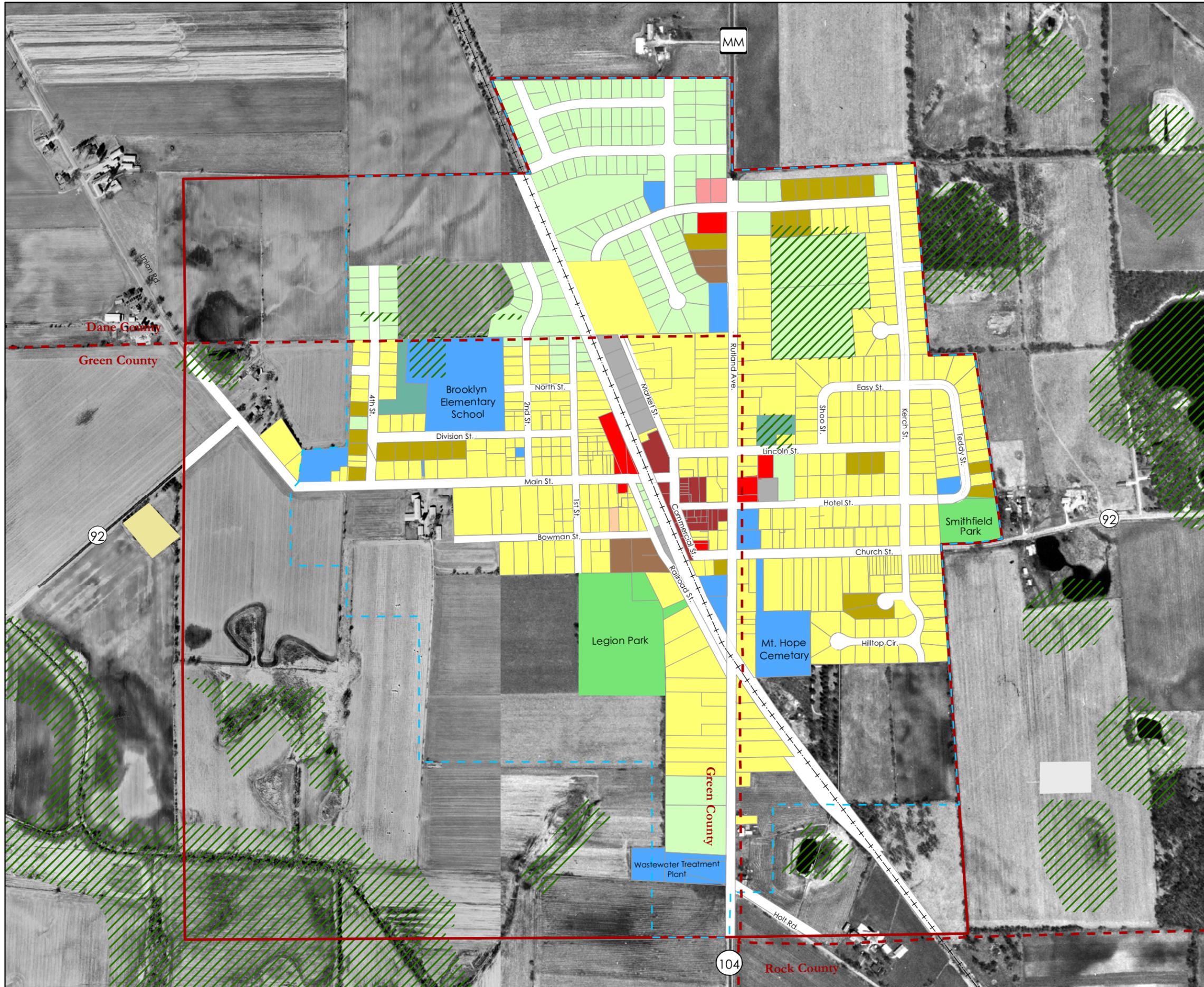
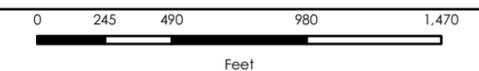


Existing Land Use

-  Village Boundary
-  County Boundaries
-  Urban Service Area
-  Agricultural/Rural
-  Rural Residential
-  Single Family Residential
-  Two Family Residential
-  Mixed Residential
-  Central Mixed Use
-  Neighborhood Business
-  Planned Business
-  General Business
-  General Industrial
-  Institutional
-  Surface Water
-  Platted Lots/Vacant
-  Active Recreation
-  Passive Recreation/Stormwater Management
-  Environmental Corridor/Open Space Corridor
-  Railroad

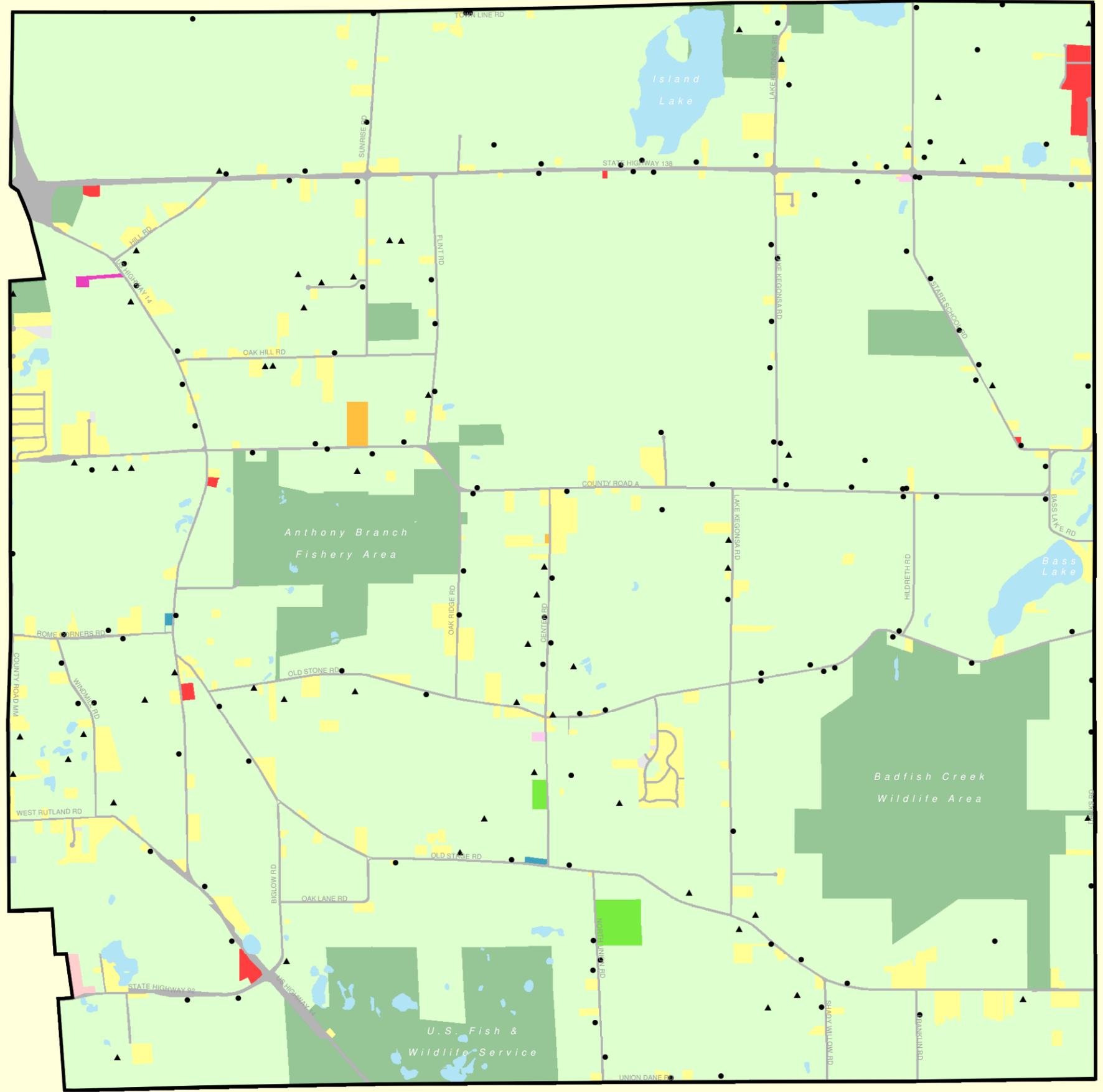


Map A.3  
Village of Brooklyn  
Existing Land Use



Map 8-5  
Existing Land Use;  
Town of Rutland: 2003

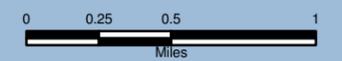
Comprehensive Plan Background Report.  
Towns of Albion, Blooming Grove,  
Dunkirk, Pleasant Springs, and Rutland



**Legend**

- Farmstead
- ▲ Single-family (large acreage)
- Single-family
- Retail
- Professional service/office
- Mixed use
- Industrial
- Governmental services
- Institutional services
- Utility
- Transportation
- Park and recreation
- Agricultural and woodlands
- Quarry
- Water
- Vacant

Map A.4  
Town of Rutland  
Existing Land Use



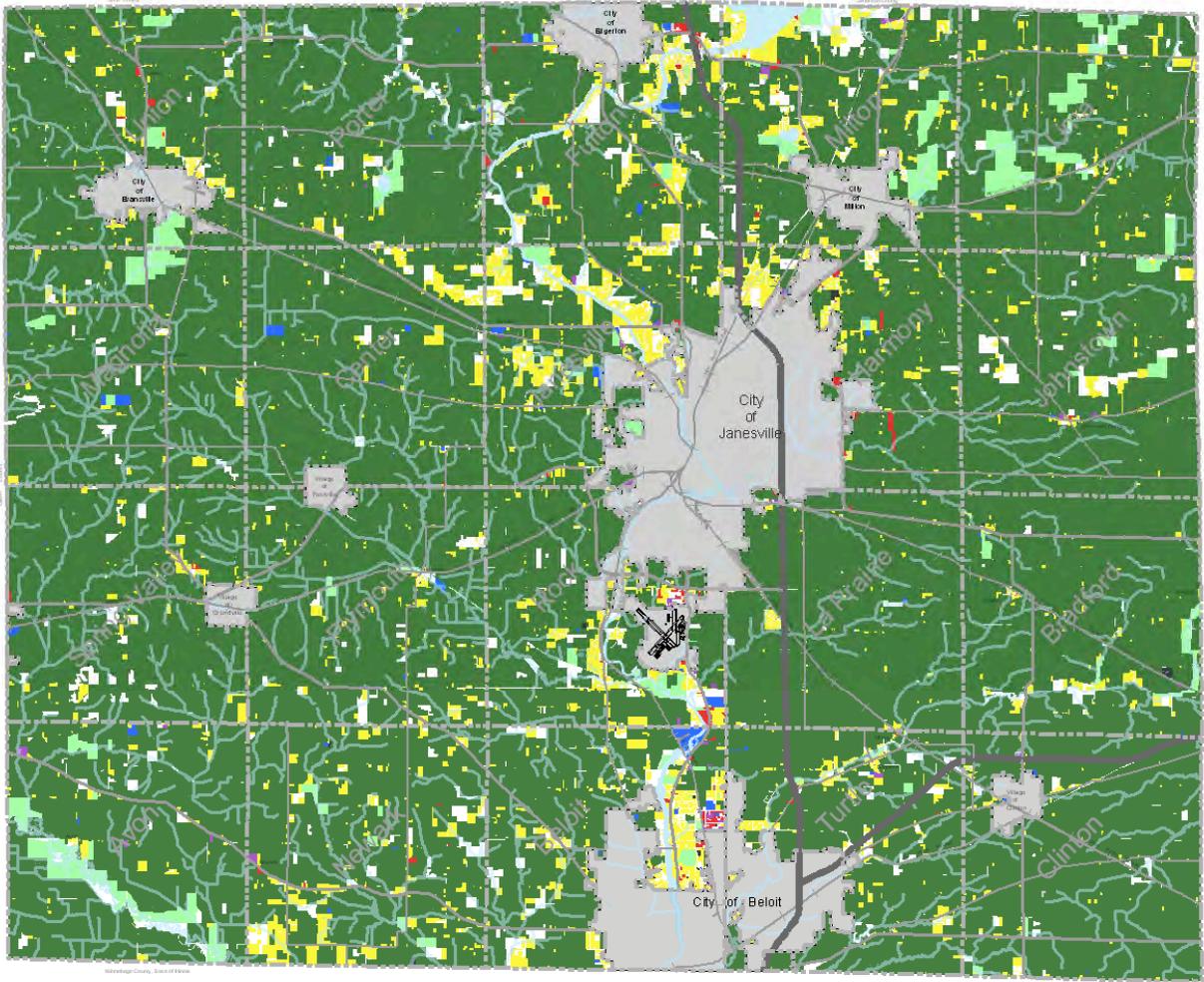
Source: Base map provided by Dane County  
Land Information Department

Land use survey conducted on October 30, 2003

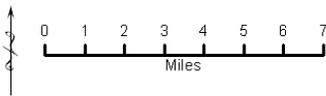
Map Created: December 9, 2003  
Map Edited: December 9, 2003



# Map 5.1: Land Use Inventory: 2000



03/2008



### Land Use (2000)

- Residential activities
- Shopping, business, or trade activities
- Industrial, manufacturing, and waste-related
- Social, institutional, or infrastructure
- Travel or movement activities
- Mass assembly of people
- Leisure activities
- Natural resource-related activities
- No human activity/unclassifiable activity
- No data

- Township Boundaries
- ☐ Cities and Villages
- Streams and Rivers
- Rivers, Ponds and Lakes
- Railroad
- Roads**
- ~ County Trunk
- ~ Highway
- ◆ Interstate

Data Sources: Rock County Planning and Development Agency.

Map A.5  
Rock County  
Land Use Inventory: 2000

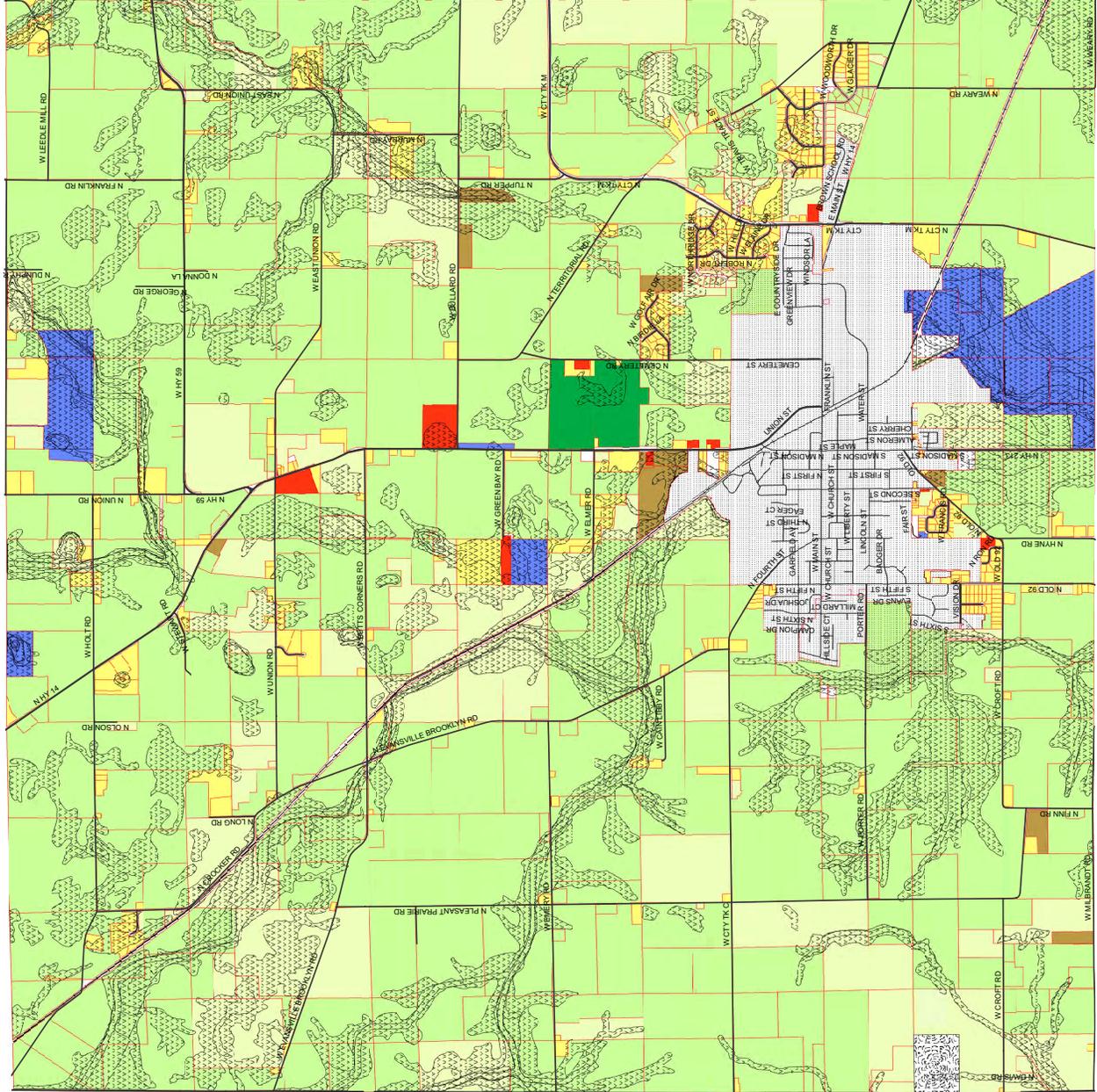
# Town of Union

Rock County, Wisconsin

## Comprehensive Plan

### Current Land Use

October 5, 2006



#### Legend

- Parcel Boundary
- Environmentally Significant Open Space
- Town Roads
- City of Evansville
- Government
- Commercial
- Golf Course
- Railroad
- Residential
- Natural Resource Related Activities
- Crop Production
- Livestock Related
- State Roads
- County Roads
- Quarry



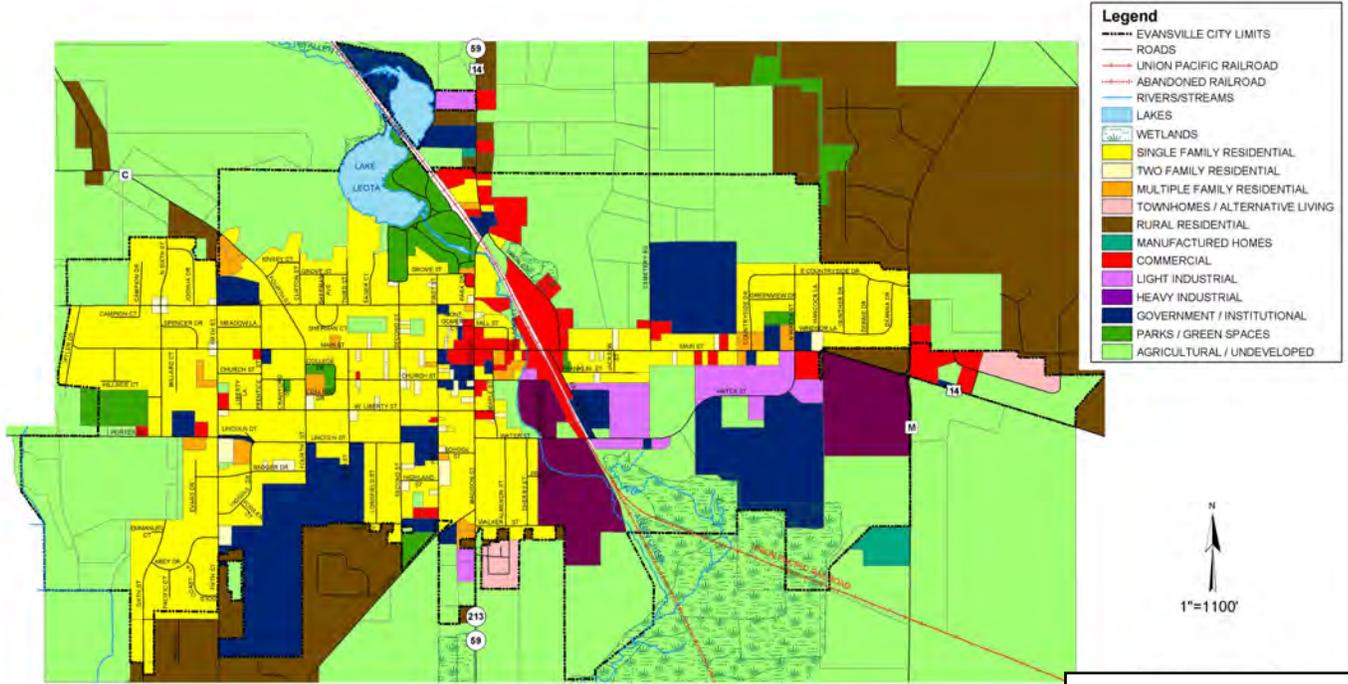
Map #1

Map A.6

Town of Union  
Current Land Use

# EXISTING LAND USE

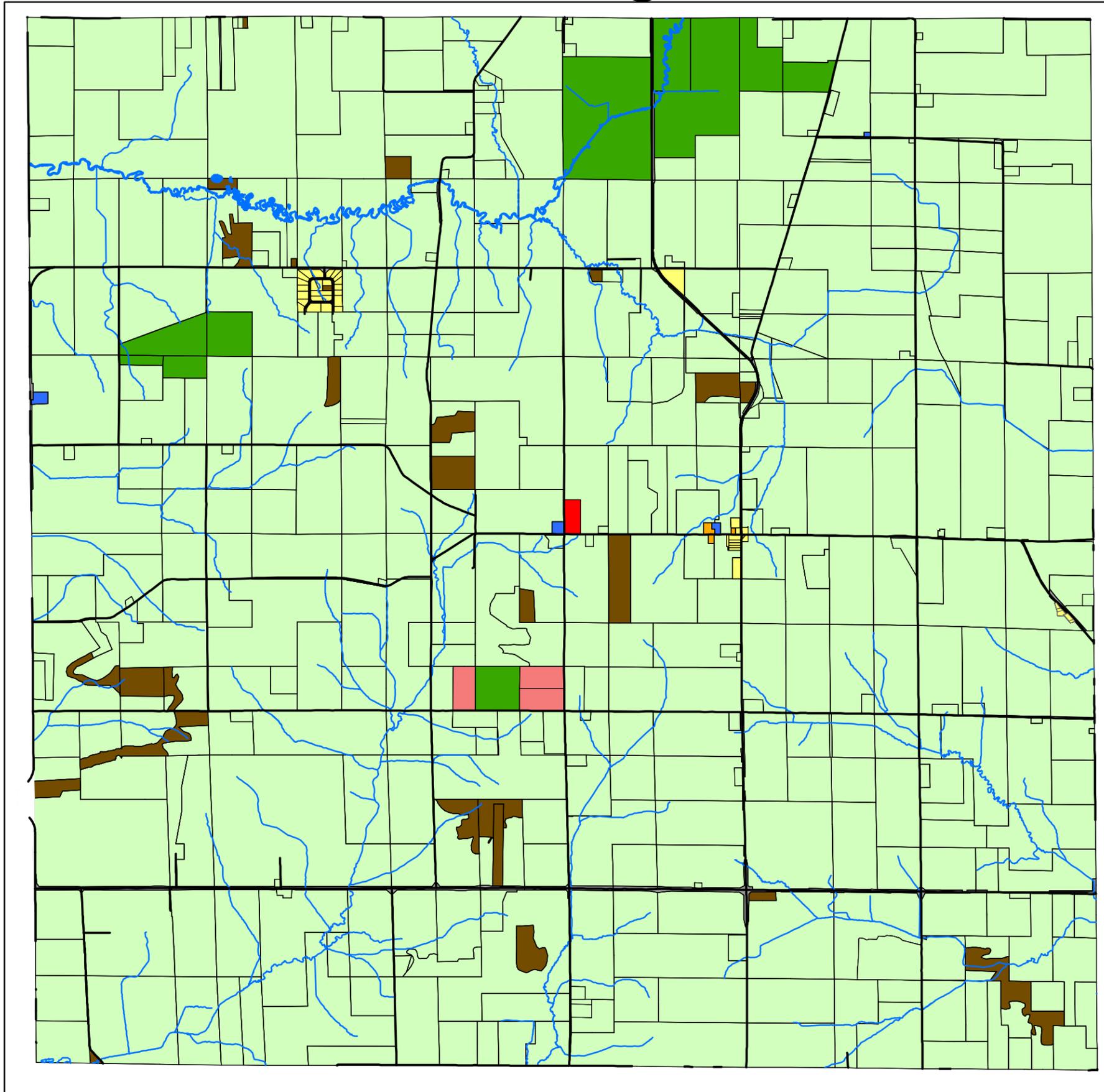
# CITY OF EVANSVILLE



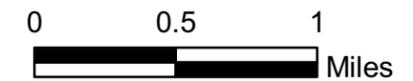
Map A.7  
City of Evansville  
Existing Land Use

# Town of Magnolia

## 2000 Land Use Inventory



-  Mining surface & subsurface
-  Mass storage (auto salvage)
-  Residential activities
-  Social, institutional, or infrastructure
-  Mass assembly of people
-  Leisure activities
-  Natural resource-related activities
-  No human activity/unclassifiable activity
-  No Data

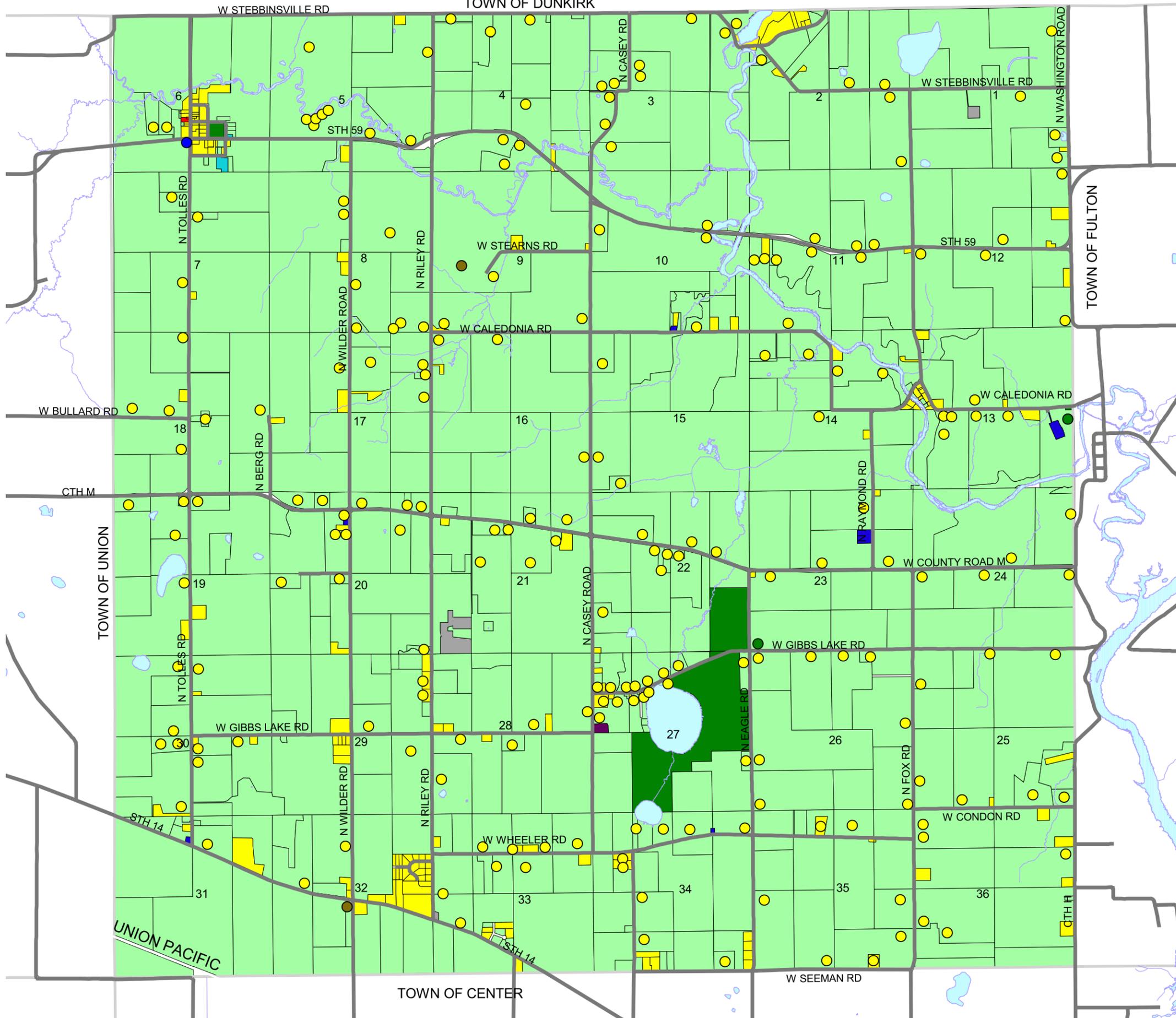


Map A.8  
Town of Magnolia  
2000 Land Use Inventory

TOWN OF DUNKIRK

# Town of Porter Existing Land Use

March 15, 2005



- Residential
- Industrial & manufacturing
- Retail
- Other institutional
- Government & public services
- Transportation & utilities
- Agriculture
- Recreational/Parks
- Extractive mining

\*Base map and ESOSA data provided by: Rock County.

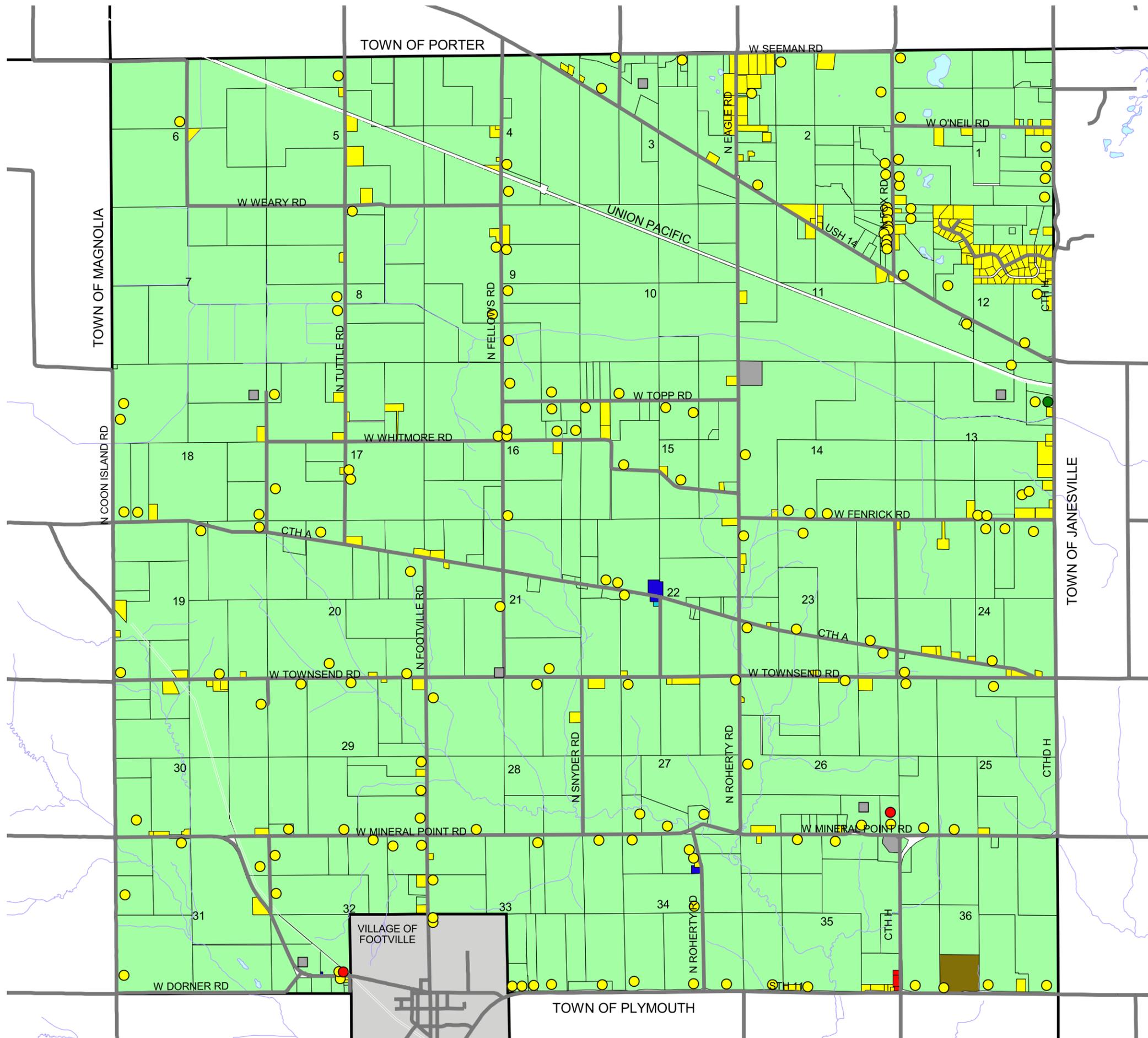


Map A.9  
Town of Porter  
Existing Land Use

# Town of Center Existing Land Use Map J-1

May 26, 2005

- Residential
- Industrial & manufacturing
- Retail
- Other institutional
- Government & public services
- Transportation & utilities
- Agriculture
- Recreational/Parks
- Extractive mining

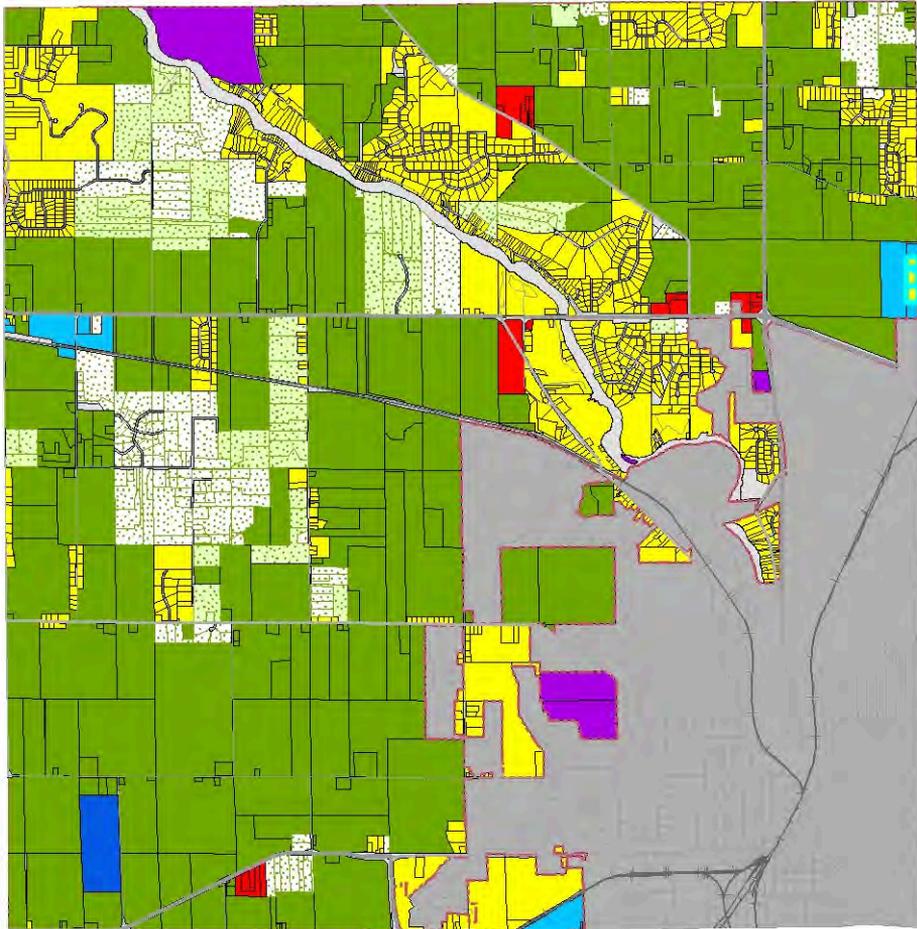


\*Base map and ESOSA data provided by: Rock County.

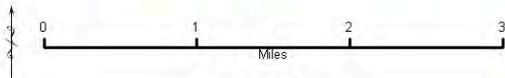


Map A.10  
Town of Center  
Existing Land Use

# Map 5.2 2005 (Current) Land Use Map Town of Janesville



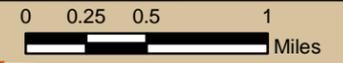
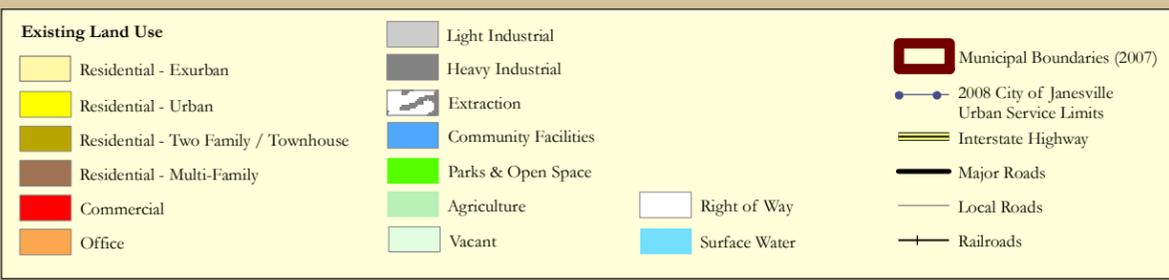
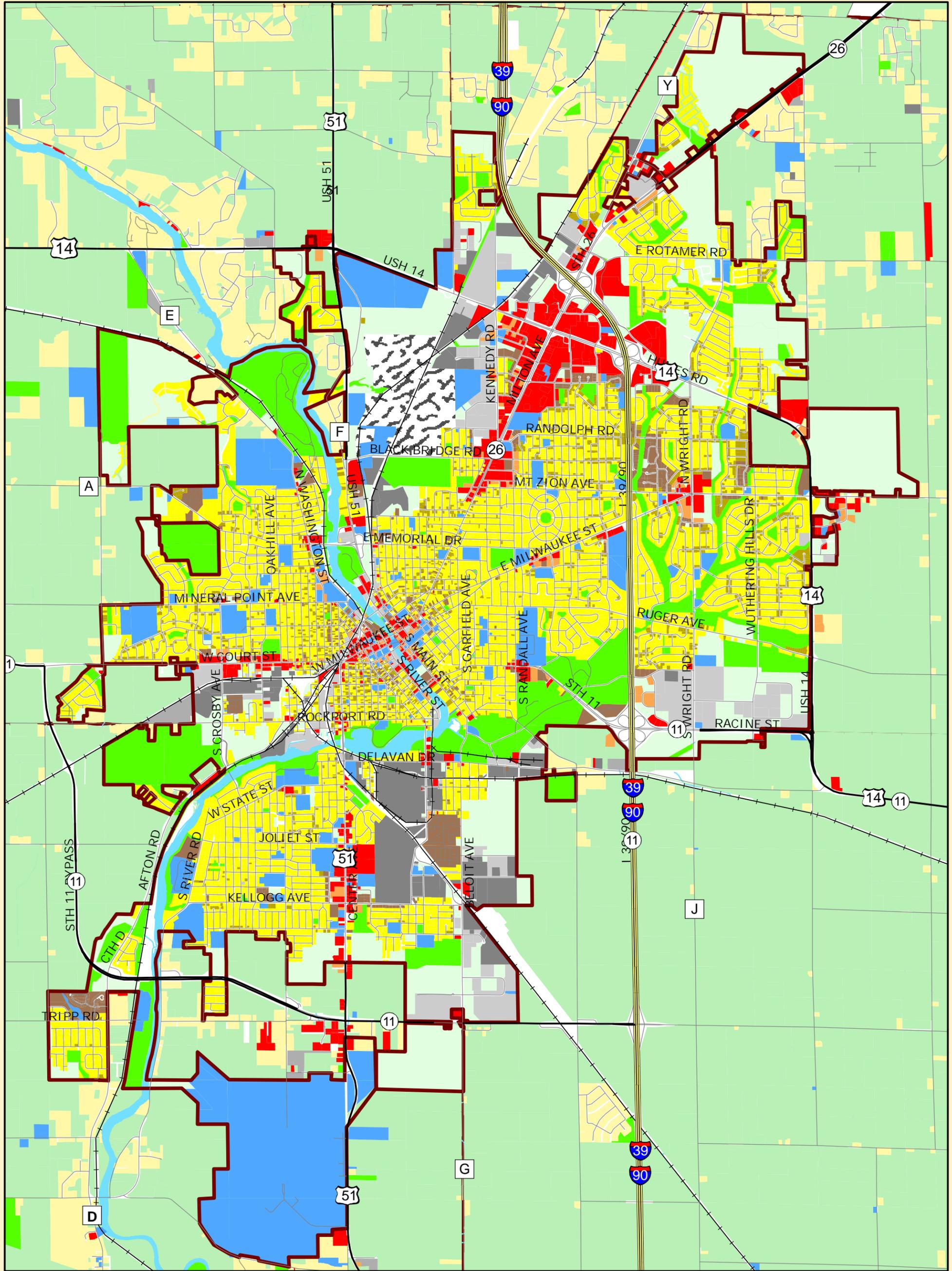
09/2008



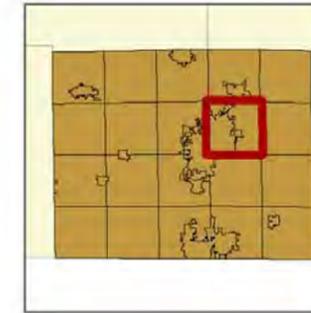
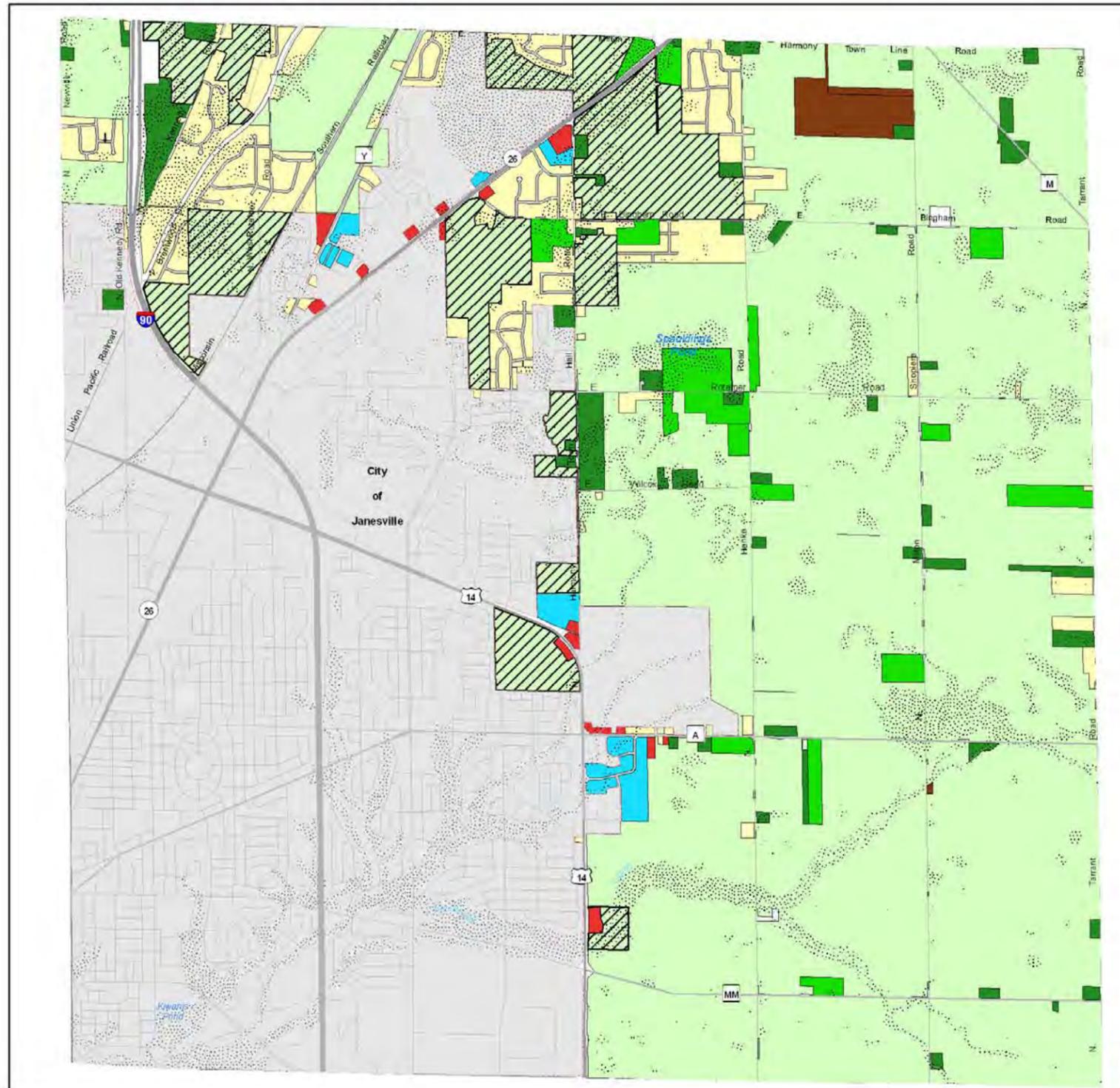
- |                              |                 |                   |
|------------------------------|-----------------|-------------------|
| <b>Land Use</b>              | Industrial      | Township Boundary |
| Agriculture                  | Woodland        | Cities and Towns  |
| General Agriculture Area     | Park/Open Space | Railroads         |
| Small Scale Agriculture Area | Special Purpose | <b>Roads</b>      |
| Rural Residential            | Right of Way    | Local Roads       |
| Commercial                   |                 | Interstate        |
|                              |                 | Highway           |
|                              |                 | County            |

Data Sources: Rock County Planning and Development Agency.

Map A.11  
Town of Janesville  
2005 (Current)  
Land Use Map

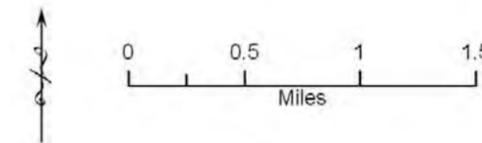


# Map 5.1: Zoning



Town of Harmony  
Rock County, Wisconsin 06/2009

- |   |                     |
|---|---------------------|
| C1 - Lowland Conservancy Overlay District     | Town Boundary Lines |
| <b>Zoning</b>                                 | Cities and Villages |
| Agricultural District One (A-1)               | Streams and Rivers  |
| Transitional Agricultural District One (A-1a) | Rivers and Lakes    |
| General Agricultural District Two (A-2)       | Railroads           |
| Small Scale Agricultural District Three (A-3) | <b>Roads</b>        |
| Rural Residential District (R-R)              | Local Roads         |
| Local Commercial District (B-1)               | Interstate          |
| Light Industrial District (M-1)               | Highway             |
| Special Purpose District (SP)                 | County              |



Duplication of this map is prohibited without written consent of the Rock County Planning, Economic and Community Development Agency. The data in this map was compiled using the Rock County Coordinate System. All graphic and attribute information is based on the Rock County Coordinate system. This map is not intended to be a substitute for an actual field survey and is an advisory reference only.

Rock County Geographic Information Systems (GIS)  
Planning, Economic and Community  
Development Agency  
51 S Main St., Janesville, WI 53545  
(608) 785-3333

Data Sources: Rock County

Map A.13  
Town of Harmony  
Zoning Map

# **Appendix B**

## **Future Land Use Maps**



Dane County Comprehensive Plan  
 Dept. of Planning & Development  
 210 Martin Luther King Jr. Blvd. Room 116  
 Madison, WI 53703  
 www.daneplan.org

**Legend**

**Farmland Preservation**

- Agricultural Preservation Areas
- Rural Development / Transitional
- Town Ag. Preservation Area

**Service Areas**

- Limited
- Urban

**Env. and Open Space Corridors**



**Overlapping Plan Areas**

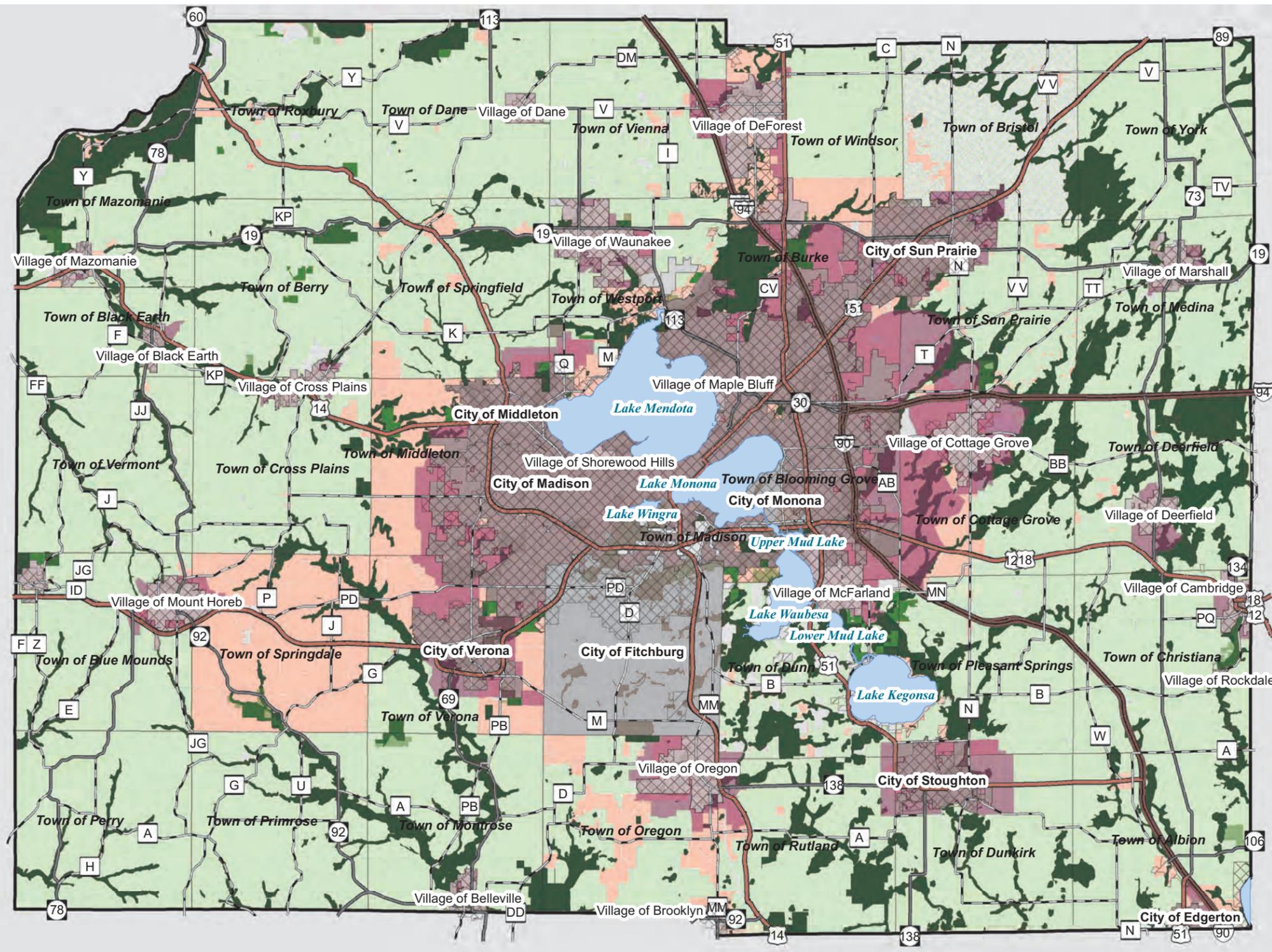
- City and Village Plans

**Parks and Open Space Plan**

- Dane County Parks Commission Lands

**Standard Legend**

- Interstate
- US Highway
- State Highway
- County Highway
- City
- Village
- Town
- Major Lake



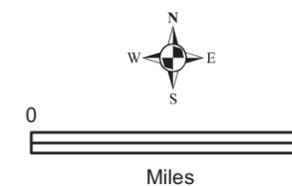
**What you're looking at:**

- The growth factors in Dane County:
1. Farmland Preservation Plan
  2. Service Areas
  3. Env. and Open Space Corridors
  4. Overlapping Plans
  5. Parks and Open Space

\*See plan text for details on the map categories.

For more information on individual features:

1. [http://www.countyofdane.com/PLANDEV/planning/farm\\_preservation.aspx](http://www.countyofdane.com/PLANDEV/planning/farm_preservation.aspx)
2. <http://www.danecorpc.org>
3. <http://www.danecorpc.org>
4. See the local plans for details and Wis Stat 59.69 and 66.1001.
5. <http://www.countyofdane.com/lwr/parks/plandev.asp>



January 1, 2008



Map B.1  
 Dane County  
 Planned Land Use

Source Info: Farmland Preservation & Overlapping Plan Areas (DPD). Park Commission Lands (LWRD). Service Areas & Envr. & Open Space Corridors (CARPC) Road Network: 2006 (DCLIO). Municipal Boundaries & Water: This map was prepared through the Department of Planning and Development in conjunction with the Dane County Land & Water Resources Department, Land Information Office and the Dane County Regional Planning Commission.

Planned Land Use

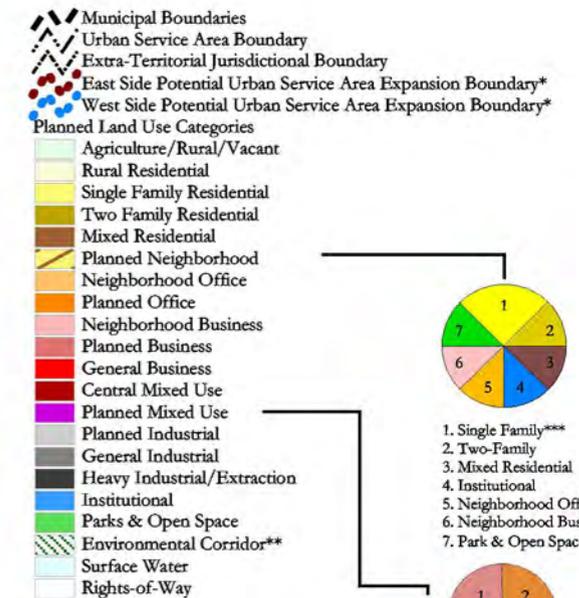
# Currently Adopted Town Plans

## Dane County Farmland Preservation Plan

Name	CB Adoption	Exec. Approval	Type	DCB Resolution
Town of Albion	8/16/2007	8/21/2007	Comp Plan	226, 06-07
Town of Berry	4/10/2003	4/15/2003	Comp Plan	244, 02-03
Town of Black Earth	10/5/2006	10/10/2006	Amendment	72, 06-07
Town of Blooming Grove	9/7/2000	9/11/2000	LU Plan	47, 00-01
Town of Blue Mounds	9/3/1998	9/8/1998	Amendment	75, 98-99
Town of Bristol	5/7/1981		LU Plan	431, 80-81
Town of Burke	9/23/1999	10/7/1999	LU Plan	20, 99-00
Town of Christiana	7/10/2003	7/14/2003	Amendment	307, 02-03
Town of Cottage Grove	12/20/2007	12/27/2007	Amendment	101, 07-08
Town of Cross Plains	2/5/2004	2/10/2004	Amendment	212, 03-04
Town of Dane	11/7/2002	11/11/2002	Comp Plan	49, 02-03
Town of Deerfield	12/20/2007	12/27/2007	Comp Plan	102, 07-08
Town of Dunkirk	7/19/2007	7/30/2007	Comp Plan	208, 06-07
Town of Dunn	2/4/1999	2/8/1999	Amendment	198, 98-99
Town of Madison			Never Adopted	--
Town of Mazomanie	10/3/2002	10/16/2002	Comp Plan	52, 02-03
Town of Medina	5/7/1981		LU Plan	422, 80-81
Town of Middleton	12/3/1981		LU Plan	221, 81-82
Town of Montrose	6/1/2000	6/14/2000	LU Plan	324, 99-00
Town of Oregon	12/20/2007	12/27/2007	Amendment	125, 07-08
Town of Perry	6/2/2005	6/7/2005	LUPlan	360, 04-05
Town of Pleasant Springs	9/7/2006	9/15/2006	Comp Plan	49, 06-07
Town of Primrose	7/13/1995	7/27/1995	LU Plan	56, 95-96
Town of Roxbury	10/3/2002	10/16/2002	Comp Plan	51, 02-03
Town of Rutland	5/16/2007	5/21/2007	Comp Plan	35, 07-08 (Sub 1)
Town of Springdale	11/21/2002	12/4/2002	LU Plan	22, 02-03
Town of Springfield	8/16/2007	8/21/2007	Amendment Sub 1	23, 07-08
Town of Sun Prairie	10/7/2004	10/13/2004	Comp Plan	69, 04-05
Town of Vermont	8/20/1998	8/24/1998	Amendment	21, 98-99
Town of Verona	7/20/2006	8/1/2006	Adopt w/ Amend.	309, 05-06
Town of Vienna	12/7/2006	12/19/2006	Comp Plan	144, 06-07
Town of Westport	11/4/2004	11/11/2004	Comp Plan	114,04-05
Town of Windsor	12/7/2006	12/19/2006	Comp Plan	243, 05-06
Town of York	2/1/2007	2/6/2007	Comp Plan	135, 06-07



# Map 3: Planned Land Use



\*Based on drainage & topographic patterns.

\*\*Environmental Corridors depicted on this map use generalized boundaries of environmental features identified on air photos by the DNR and the Dane County RPC. These generalized boundaries are refined through detailed on-site investigation at the time of land division and site plan review.

\*\*\* Within the Planned Neighborhood District: a minimum of 70% of residential units should be single family, a maximum of 10% two-family, and a maximum of 20% mixed residential



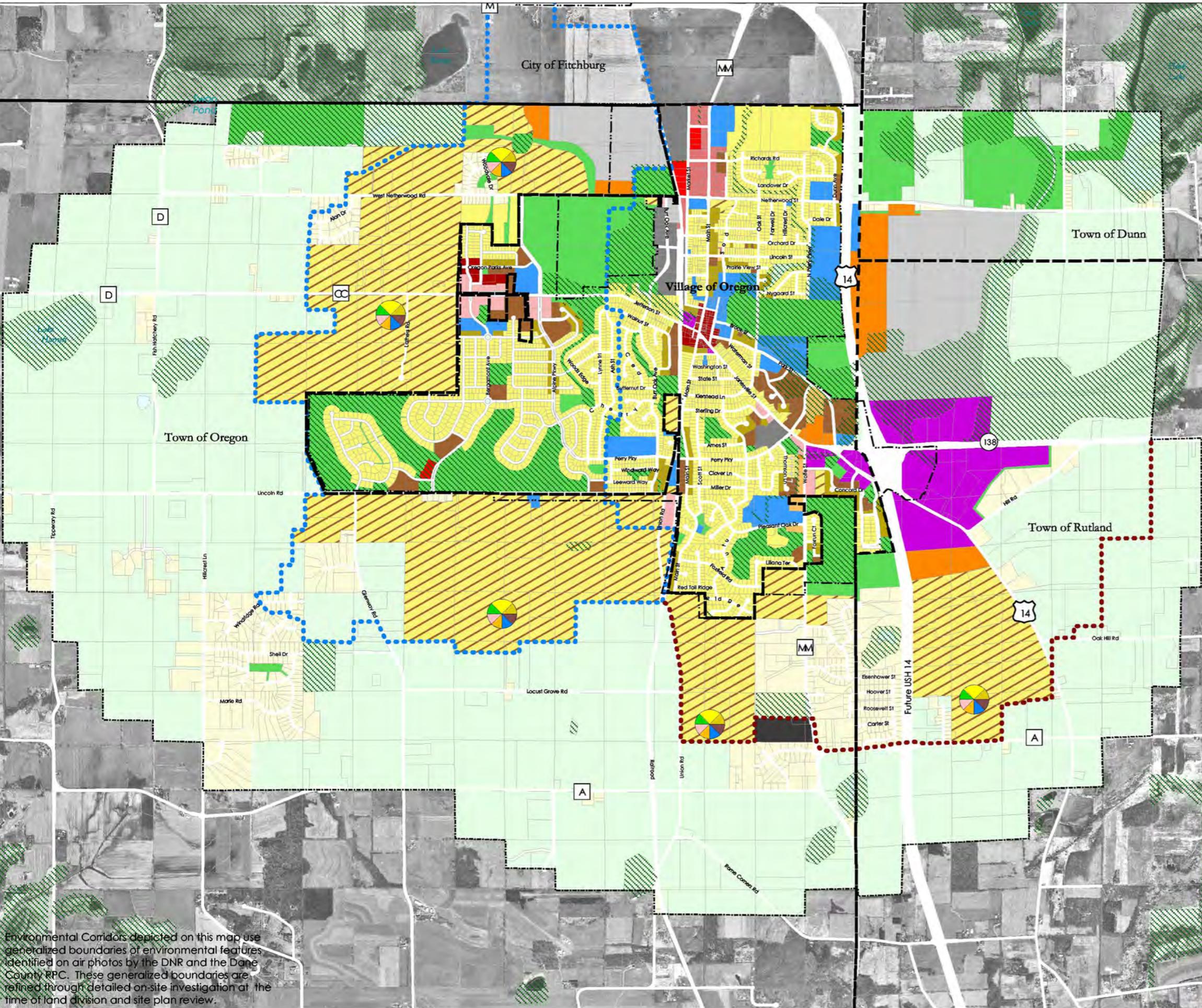
Adopted: July 27, 2004

Sources:  
Parcels: Dane County Land Information System  
Municipal Boundaries: Dane County  
Other: Vandewalle & Associates



Map B.2  
Village of Oregon  
Planned Land Use

Environmental Corridors depicted on this map use generalized boundaries of environmental features identified on air photos by the DNR and the Dane County RPC. These generalized boundaries are refined through detailed on-site investigation at the time of land division and site plan review.

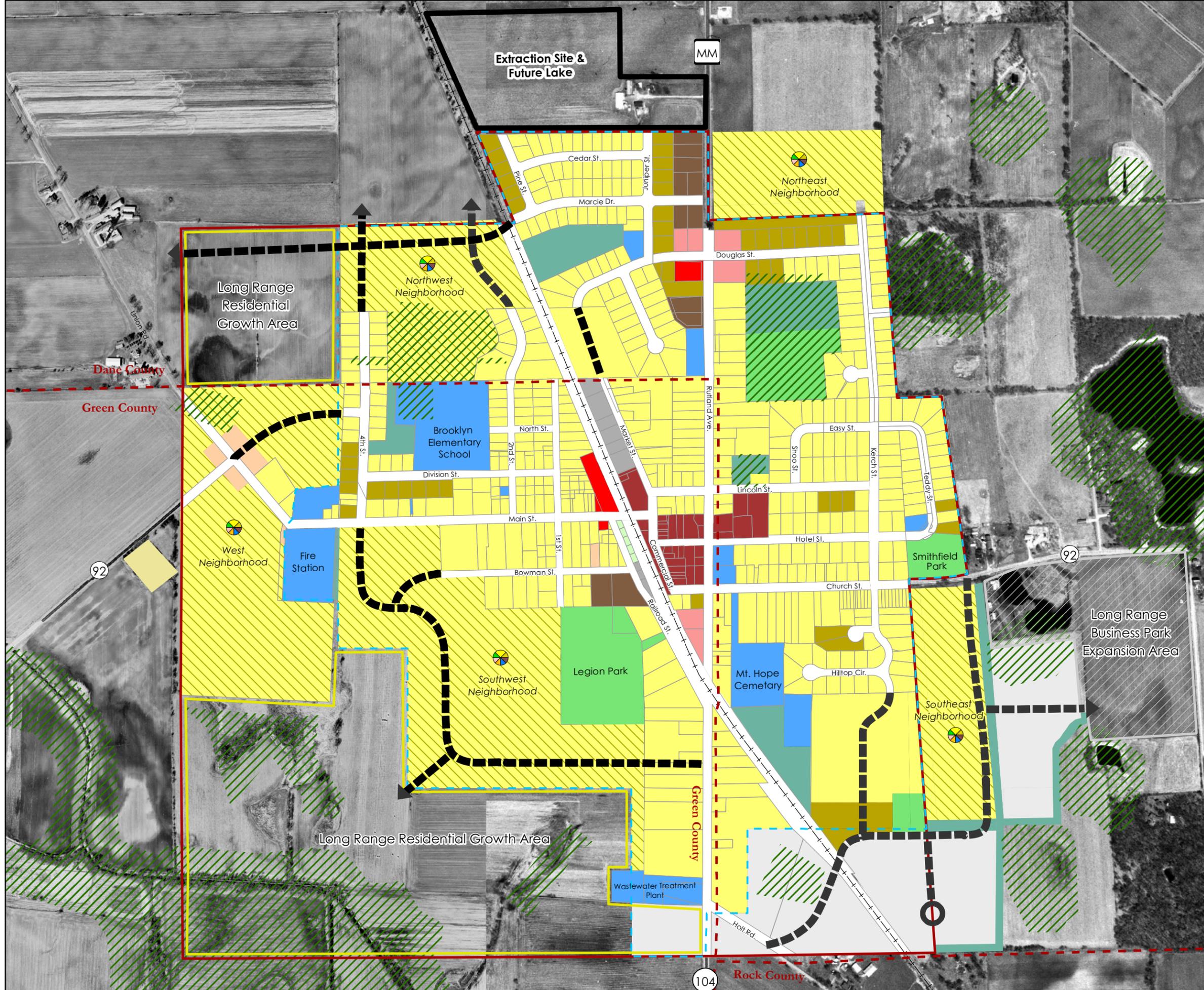


Planned Land Use

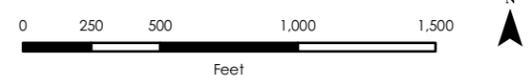
- Village Boundary
- County Boundaries
- Urban Service Area
- Long Range Industrial Growth Area
- Long Range Residential Growth Area
- Conceptual Road
- Agricultural/Rural
- Rural Residential
- Single Family Residential
- Two Family Residential
- Mixed Residential
- Planned Neighborhood
- Central Mixed Use
- Neighborhood Business
- Planned Business
- General Business
- Business Park
- General Industrial
- Institutional
- Surface Water
- Active Recreation
- Passive Recreation/Stormwater Management
- Environmental Corridor/Floodplain/Wetland
- Railroad



1. Single Family
2. Two Family
3. Mixed Residential
4. Institutional
5. Neighborhood Business
6. Passive Recreation
7. Active Recreation

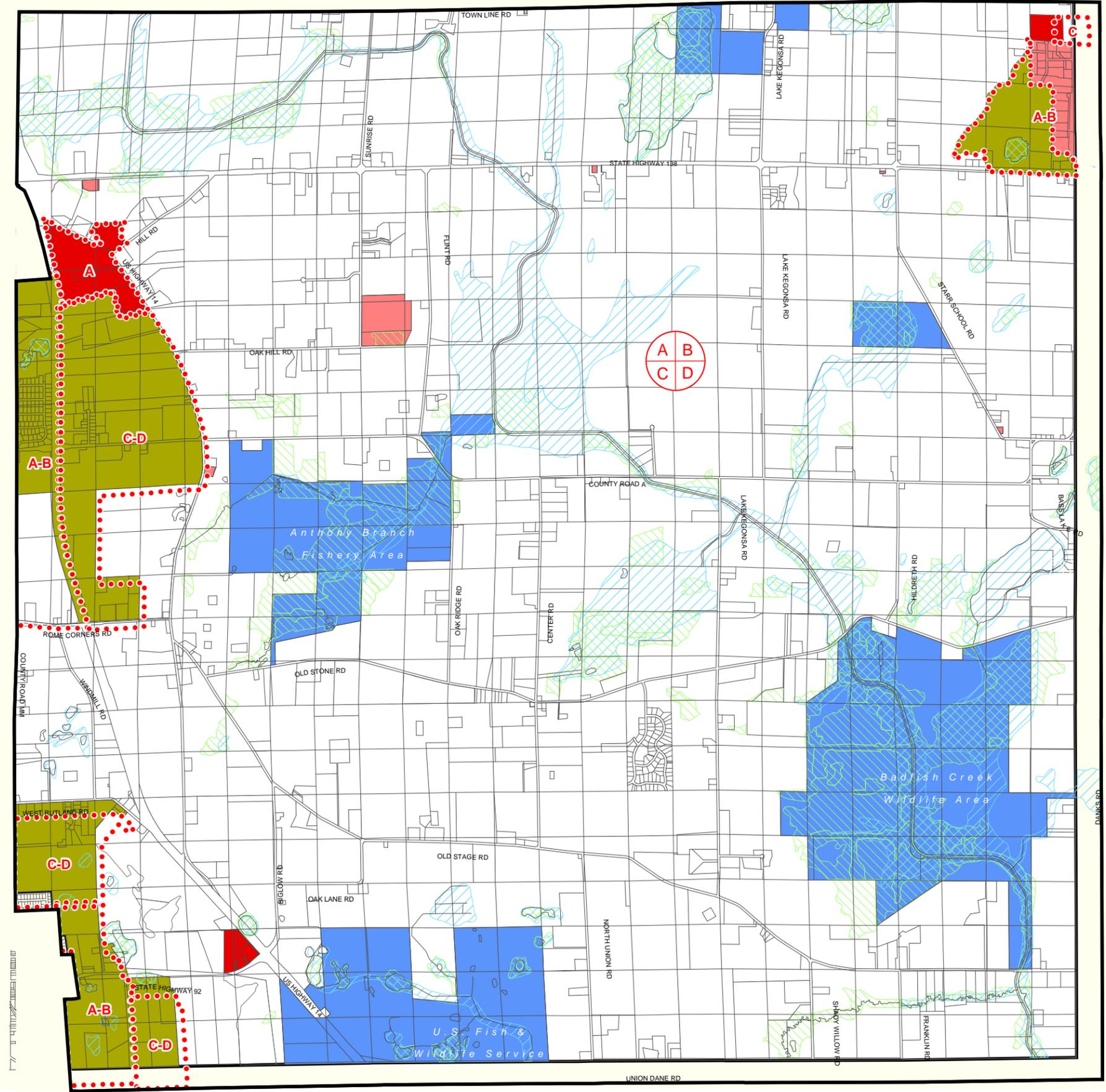


Map B.3  
Village of Brooklyn  
Planned Land Use



Map 5-2  
 Future Land Use Plan: 2005 to 2024

Town of Rutland  
 Comprehensive Plan - Policy Document



**Proposed Land Use**

- Residential - Medium density (1-acre lots)
- Commercial
- Commercial - existing
- Public resource land
- Agricultural preservation

(See exhibit 5-1 for a description of the districts.)

**Overlay Districts**

- 100-year floodplain
- Wetlands

**Development Phasing**

- A** 2005 - 2009
- B** 2010 - 2014
- C** 2015 - 2019
- D** 2020 - 2024

**Map Legend**

- Municipal boundary
- Development phase boundary
- Roads

Note:  
 1. The development phasing shown on this map is only intended to facilitate phasing for infrastructure and shall not be deemed to limit the timing of development.  
 2. This map is not a zoning map. It shows in general terms how land uses could develop in the coming years.



Source: Base map provided by Dane County Land Information Department

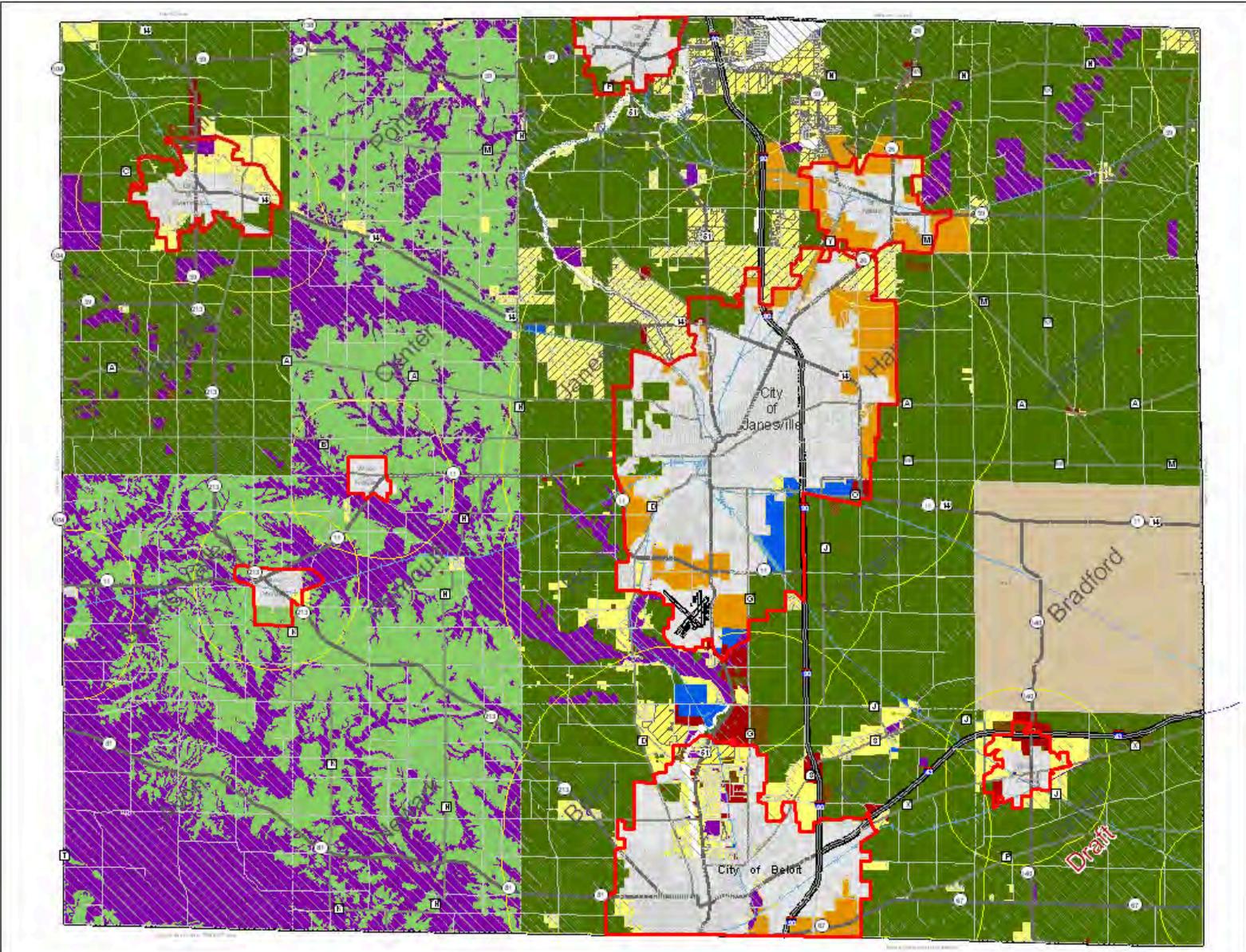
Data Source:

Map B.4  
 Town of Rutland  
 Future Land Use

Map Created:  
 Map Edited:

# Future Land Use

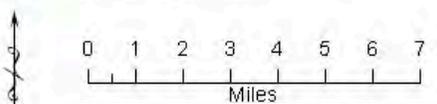
Rock County Comprehensive Plan 2035 Map 5.3



## Rock County, Wisconsin (9/10/2009) Future Land Use

- Agricultural
  - Agricultural, Woodland and Scattered Residential
  - Residential
  - Mixed Use
  - Urban Transition
  - Commercial
  - Industrial
  - Special Purpose
  - Open Space, Park or Environmental Corridor
  - Unclassified
  - Pending
- Township Boundary
  - Cities and Villages
  - Railroad
- ### Roads
- Other Roads
  - County Trunk
  - Highway
  - Interstate

- ### Overlays
- Extent of Planned Municipal Future Land Use
  - Extraterritorial Jurisdiction
  - Environmentally Significant Open Space
- ### Town Plans
- Commercial/Industrial Long Term
  - Environmental Corridor



Map B.5  
Rock County  
Future Land Use



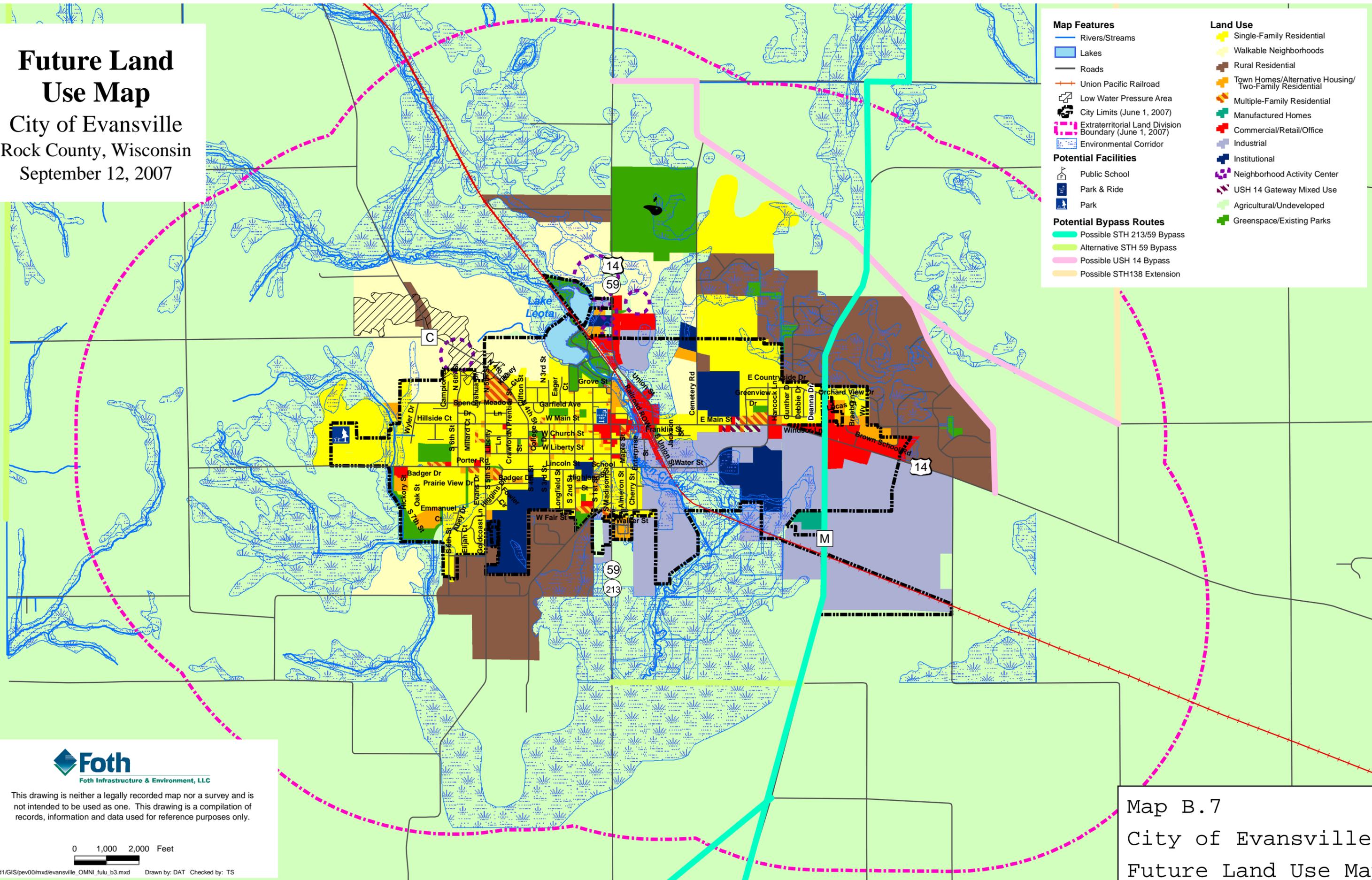
Data Sources: Rock County Planning and Development, MAPS, Vandeville & Associates, R.H. Battersman & Co., Inc. and Town of Union.  
This map is a generalized composite map of local Town Future Land Use Plans. Detailed Future Land Use Plans can be obtained from the respective towns for which the plans have been adopted.  
This map does not depict Future Land Use Plans for incorporated areas. Detailed Future Land Use Plans can be obtained from the respective municipalities for which the plans have been adopted.



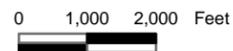
# Future Land Use Map

City of Evansville  
Rock County, Wisconsin  
September 12, 2007

<b>Map Features</b>		<b>Land Use</b>	
	Rivers/Streams		Single-Family Residential
	Lakes		Walkable Neighborhoods
	Roads		Rural Residential
	Union Pacific Railroad		Town Homes/Alternative Housing/ Two-Family Residential
	Low Water Pressure Area		Multiple-Family Residential
	City Limits (June 1, 2007)		Manufactured Homes
	Extraterritorial Land Division Boundary (June 1, 2007)		Commercial/Retail/Office
	Environmental Corridor		Industrial
<b>Potential Facilities</b>			Institutional
	Public School		Neighborhood Activity Center
	Park & Ride		USH 14 Gateway Mixed Use
	Park		Agricultural/Undeveloped
<b>Potential Bypass Routes</b>			Greenspace/Existing Parks
	Possible STH 213/59 Bypass		
	Alternative STH 59 Bypass		
	Possible USH 14 Bypass		
	Possible STH138 Extension		



This drawing is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data used for reference purposes only.



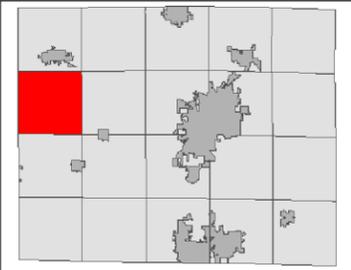
//md1/GIS/pev00/mxd/evansville\_OMNI\_fulu\_b3.mxd Drawn by: DAT Checked by: TS

Map B.7  
City of Evansville  
Future Land Use Map

# Town of Magnolia Future Land Use Plan

## Land Use Classification

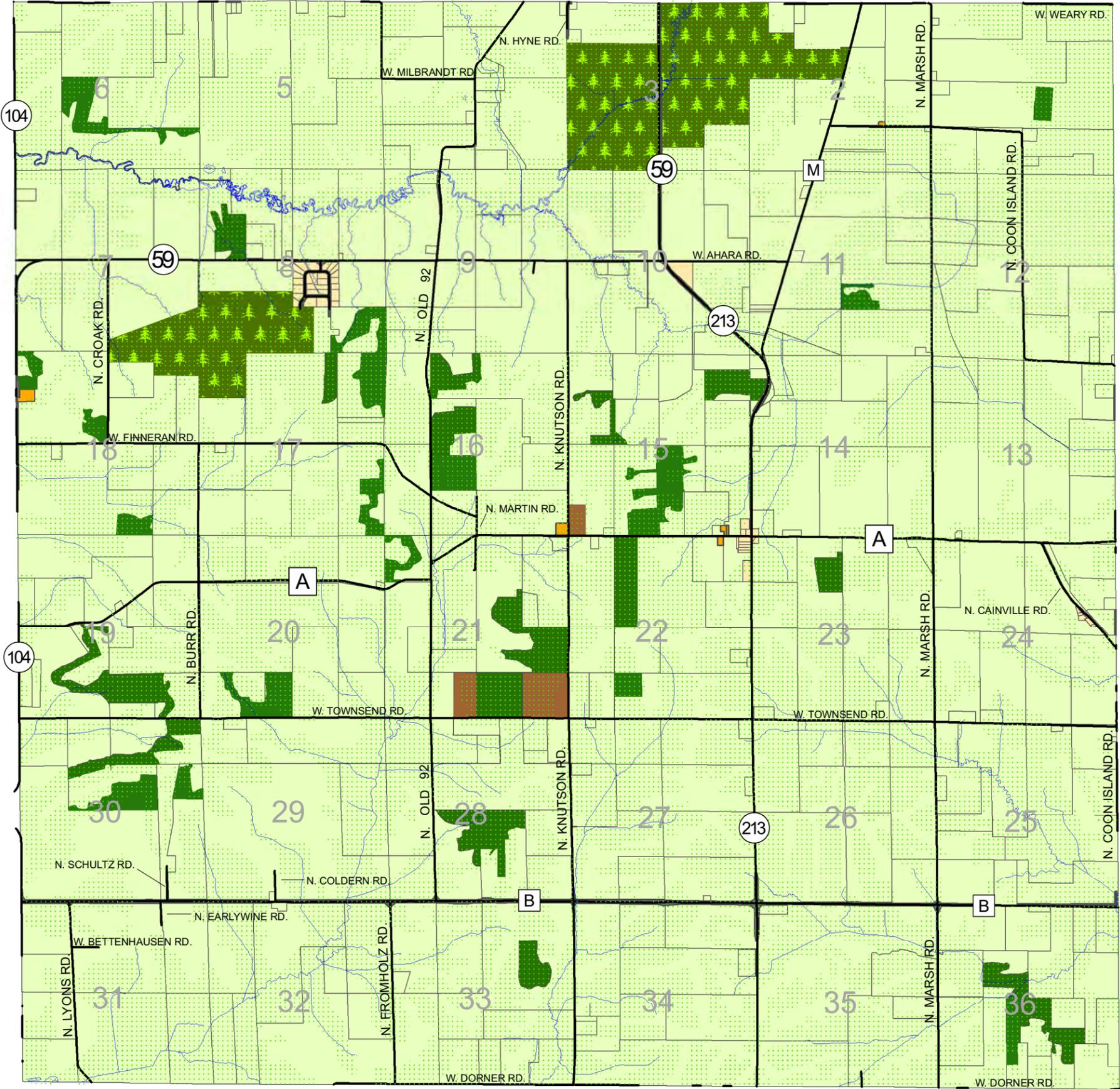
-  Exclusive Agriculture
-  Rural Residential
-  Public/Quasi-Public
-  Park and Open Space
-  Woodland
-  ROW
-  Special Purpose
-  Environmental Corridor



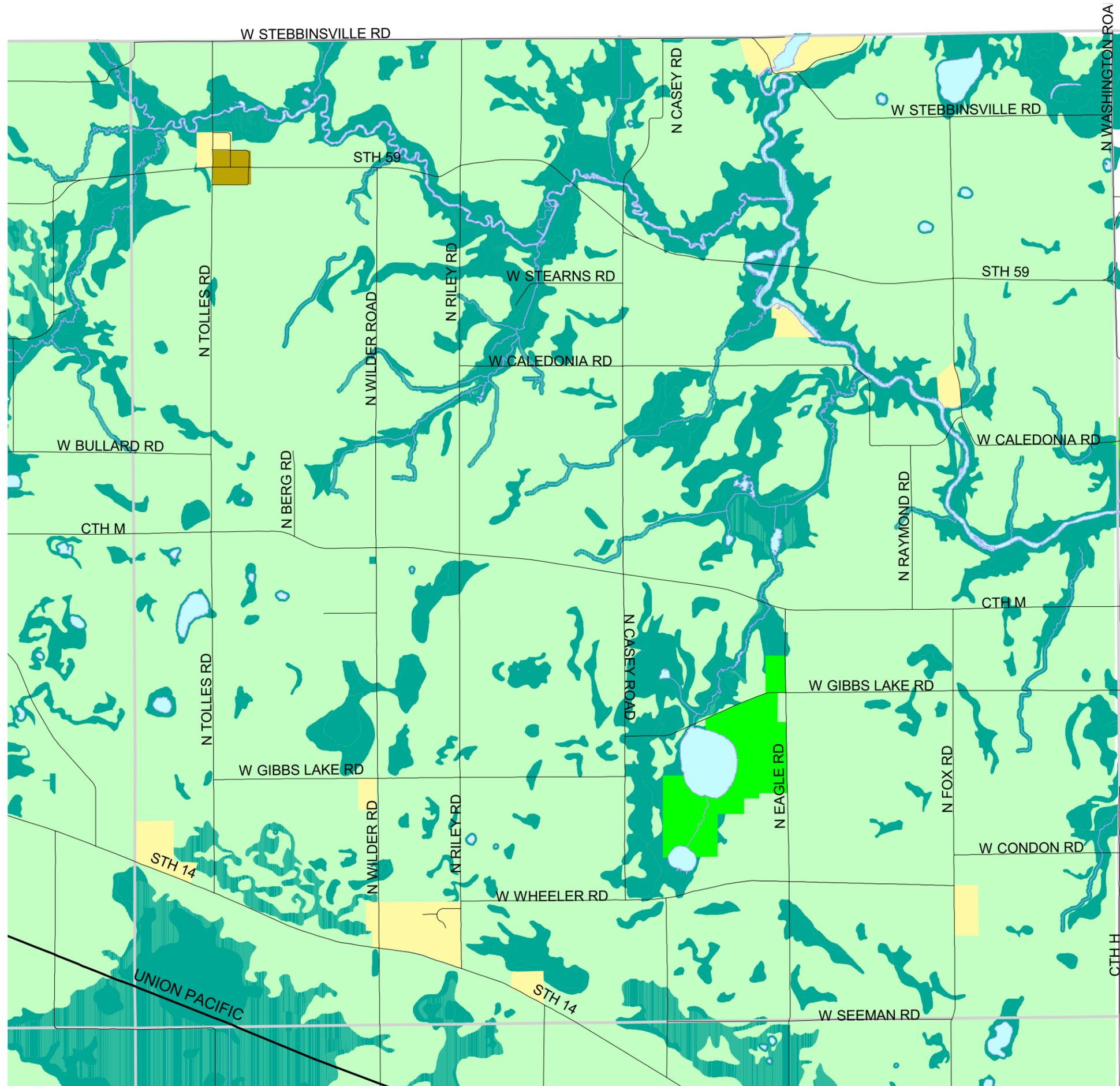
0 0.5 1 Miles



Map B.8  
Town of Magnolia  
Future Land Use Plan



Map 23



# Town of Porter Land Use Plan Map J-3

April 6, 2005

- Rural single-family residential
- Historical area & rural residential
- County parks & DNR lands
- Environmental Corridors
- Agriculture, woodlands & scattered residential

Growth in 5-year increments  
at 1.25% annual growth rate  
(scaled to map)

	2005-2009	2015-2019	2010-2014	2020-2024
Single-family residential	<span style="display: inline-block; width: 15px; height: 10px; background-color: lightcoral; border: 1px solid black; margin-right: 5px;"></span> 36 acres 36 units	<span style="display: inline-block; width: 15px; height: 10px; background-color: lightcoral; border: 1px solid black; margin-right: 5px;"></span> 32 acres 32 units	<span style="display: inline-block; width: 15px; height: 10px; background-color: lightcoral; border: 1px solid black; margin-right: 5px;"></span> 34 acres 34 units	<span style="display: inline-block; width: 15px; height: 10px; background-color: lightcoral; border: 1px solid black; margin-right: 5px;"></span> 36 acres 36 units
Multi-family residential		<span style="display: inline-block; width: 10px; height: 5px; background-color: darkred; border: 1px solid black; margin-right: 5px;"></span> 6 acres 4 units		
Duplexes			<span style="display: inline-block; width: 5px; height: 5px; background-color: darkred; border: 1px solid black; margin-right: 5px;"></span> 2 acres 2 units	
	<span style="display: inline-block; width: 10px; height: 5px; background-color: lightcoral; border: 1px solid black; margin-right: 5px;"></span> In subdivisions - 70% <span style="display: inline-block; width: 10px; height: 5px; background-color: white; border: 1px solid black; margin-right: 5px;"></span> Scattered sites - 30%			

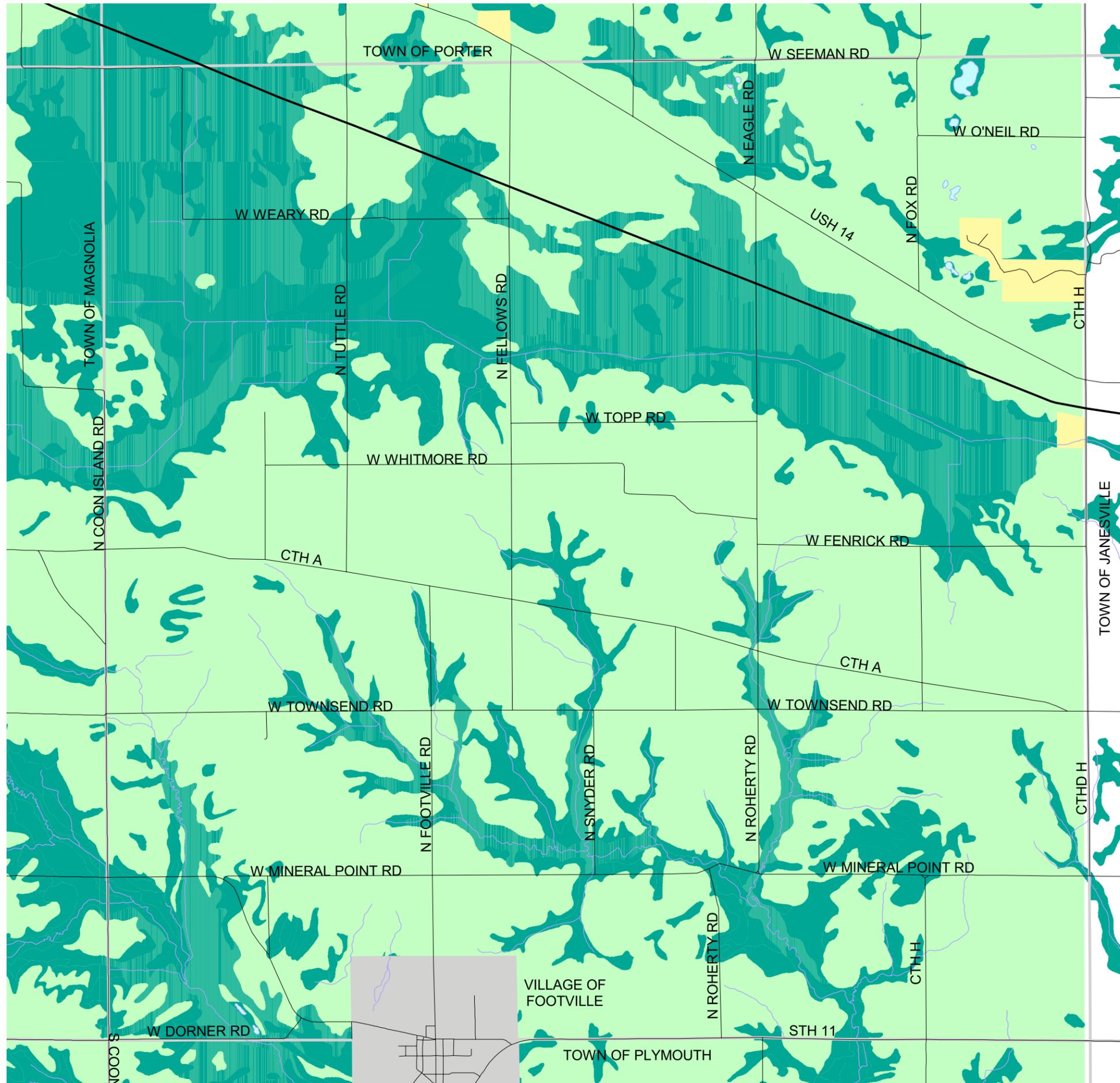
\*Base map and ESOSA data provided by: Rock County.



Map B.9  
Town of Porter  
Land Use Plan

# Town of Center Land Use Plan Map J-3

April 6, 2005



- Rural single-family residential
- Environmental Corridors
- Agriculture, woodlands & scattered residential

Growth each 5-years:  
(scaled to map)

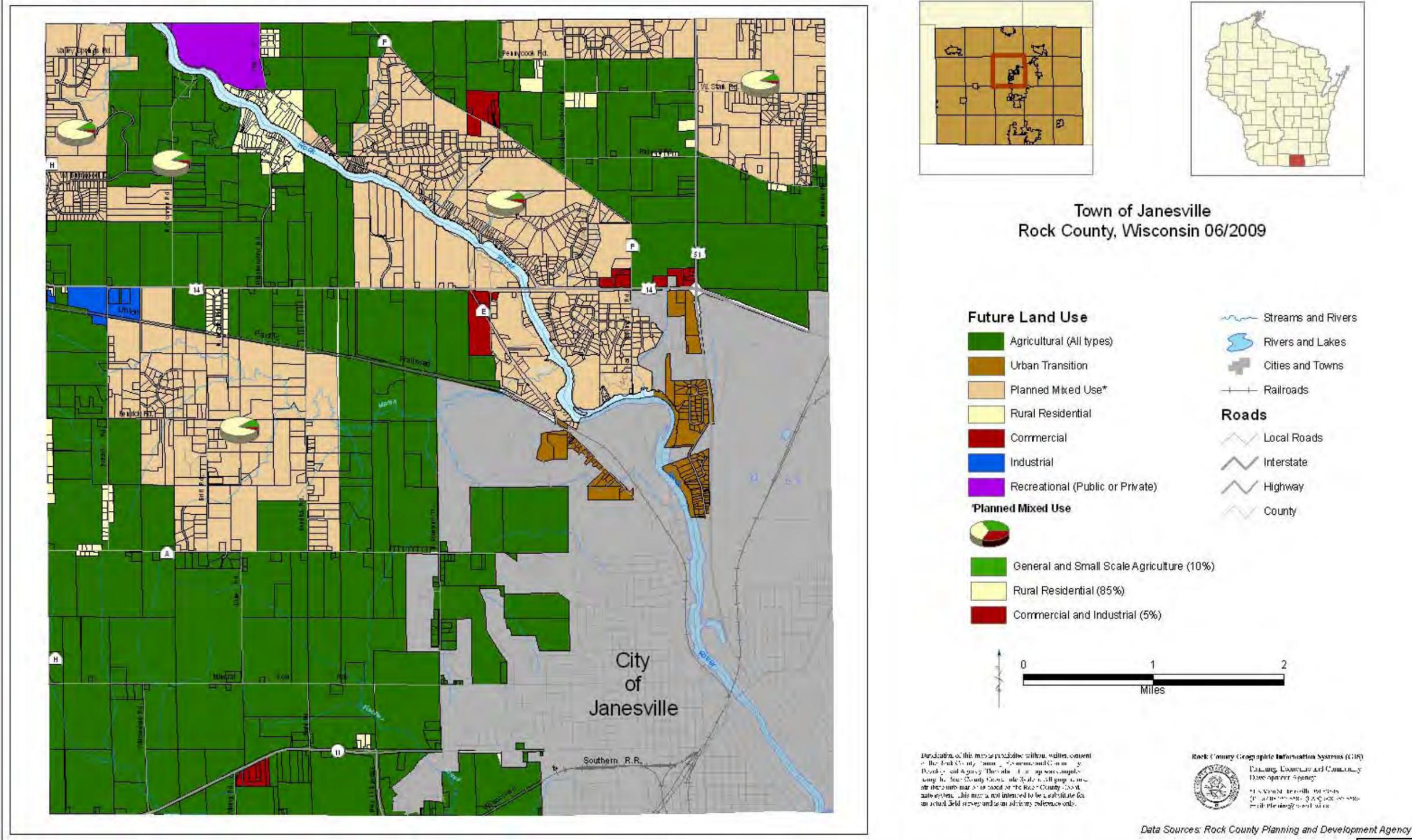
	2005-2009	2015-2019	2010-2014	2020-2024
Single-family residential				
	129 acres 43 units	132 acres 44 units	141 acres 45 units	159 acres 47 units

\*Base map and ESOSA data provided by: Rock County.



Map B.10  
Town of Center  
Land Use Plan

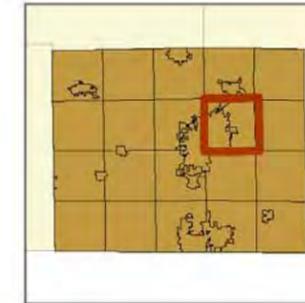
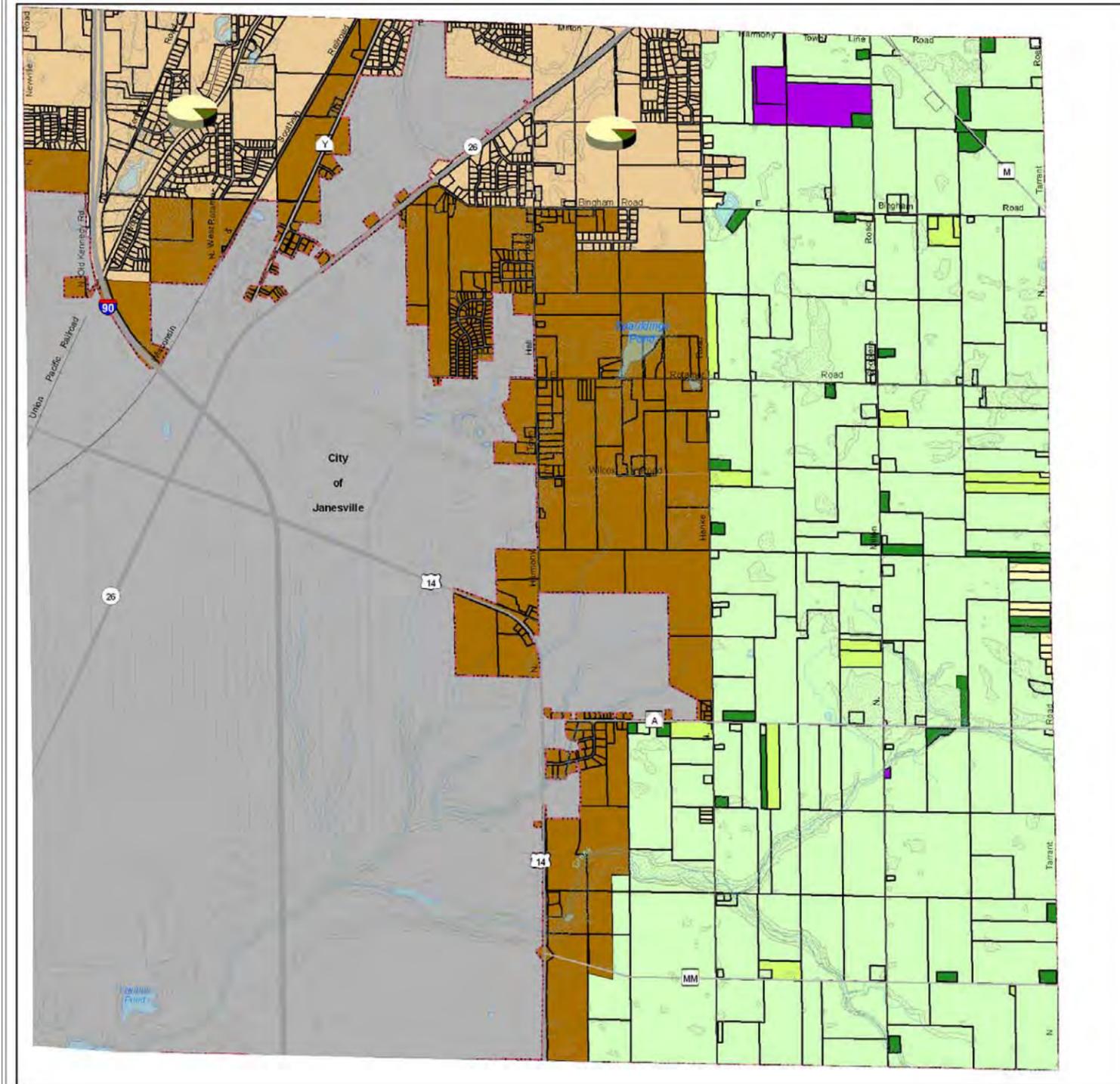
# Map 5.5: Future Land Use



Map B.11  
Town of Janesville  
Future Land Use



# Map 5.3: Future Land Use

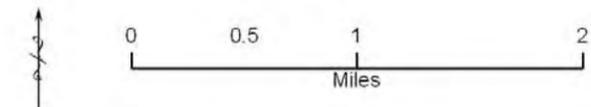


Town of Harmony  
Rock County, Wisconsin 06/2009

### Future Land Use

- Urban Expansion Area
  - Planned Mixed Use\*
  - Exclusive Agriculture
  - General Agriculture
  - Small Scale Agriculture
  - Rural Residential
  - Special Purpose
- \*Planned Mixed Use
- Rural Residential (85%)
  - Small Scale and General Agricultural (13%)
  - Commercial and Industrial (2%)

- Environmentally Significant Open Space
  - Streams and Rivers
  - Rivers and Lakes
  - Cities and Towns
  - Railroads
- ### Roads
- Local Roads
  - Interstate
  - Highway
  - County



Duplication of this map is prohibited without written consent of the Rock County Planning, Economic and Community Development Agency. The data in this map was compiled using the Rock County Coordinate System. All graphics and attribute information is based on the Rock County Coordinate system. This map is not intended to be a substitute for an actual field survey and is an advisory reference only.

**Rock County Geographic Information Systems (GIS)**  
Planning, Economic and Community Development Agency  
51 S Main St, Janesville, WI 53445  
(TEL) 608-757-5587, (FAX) 608-757-5588  
email: Planning@co.rock.wi.us

Data Sources: Rock County Planning and Development

Map B.13  
Town of Harmony  
Future Land Use

# **Appendix C**

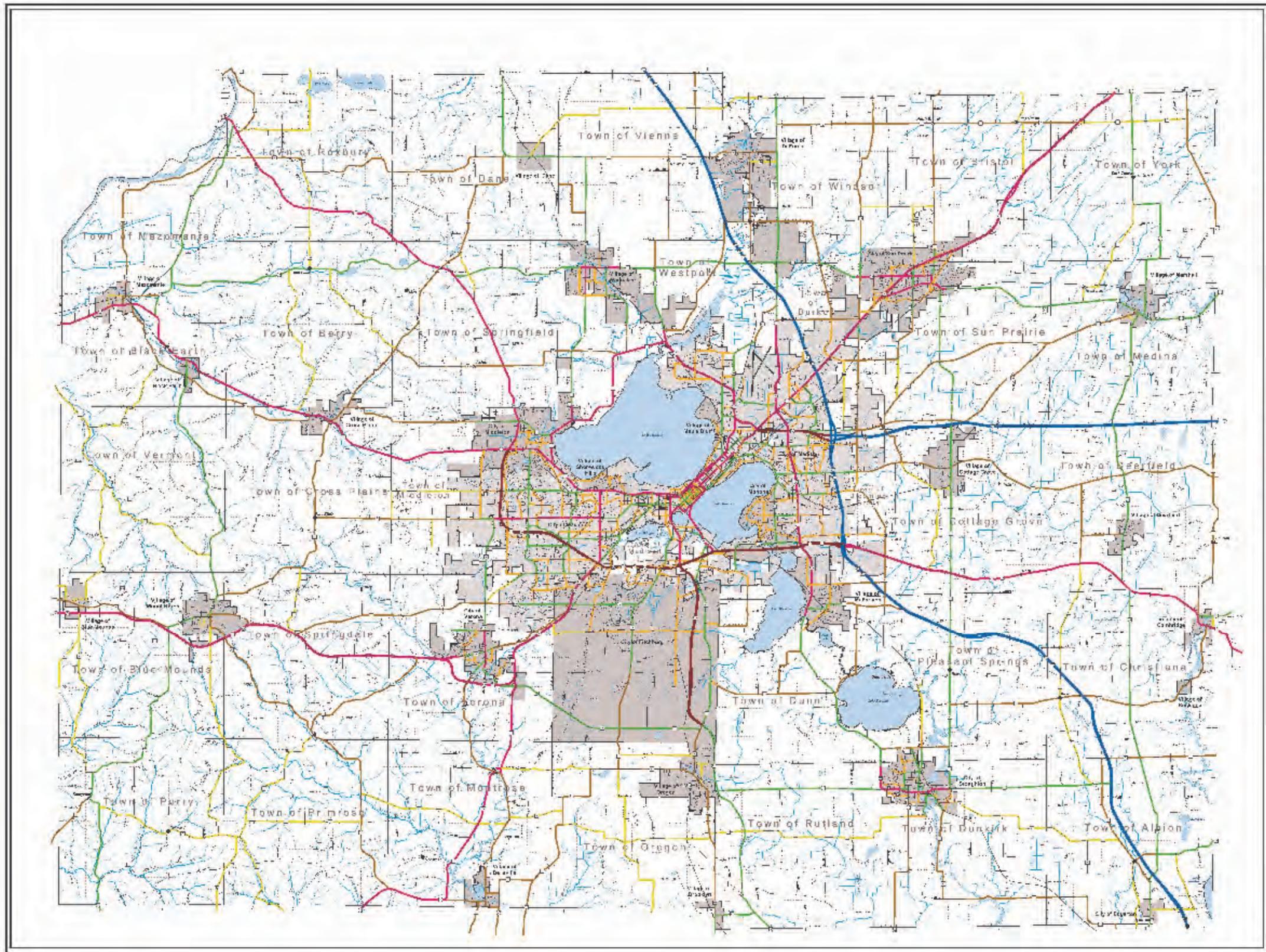
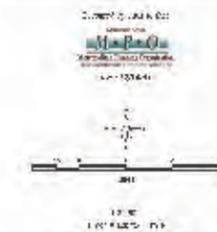
## **Transportation Maps**



### Functional Classification Systems

Dane County, Wisconsin

- Principal Arterials - Interstate
- Principal Arterials - Other - Interstates
- Principal Arterials - Others
- Minor Arterials
- Collectors - Urban
- Collectors - Major, Rural
- Collectors - Minor, Rural
- Perennial Stream
- Intermittent Stream
- Water Body



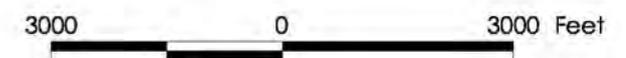
Map C.1  
Dane County  
Highways by Function



# Map 5: Transportation Plan

- Municipal Boundaries
- Oregon ETJ
- Town Boundaries
- Potential Road Extensions
- 70' ROW
- 80' ROW
- 110' ROW or Wider
- Proposed Trails
- Railroad
- Existing Roads

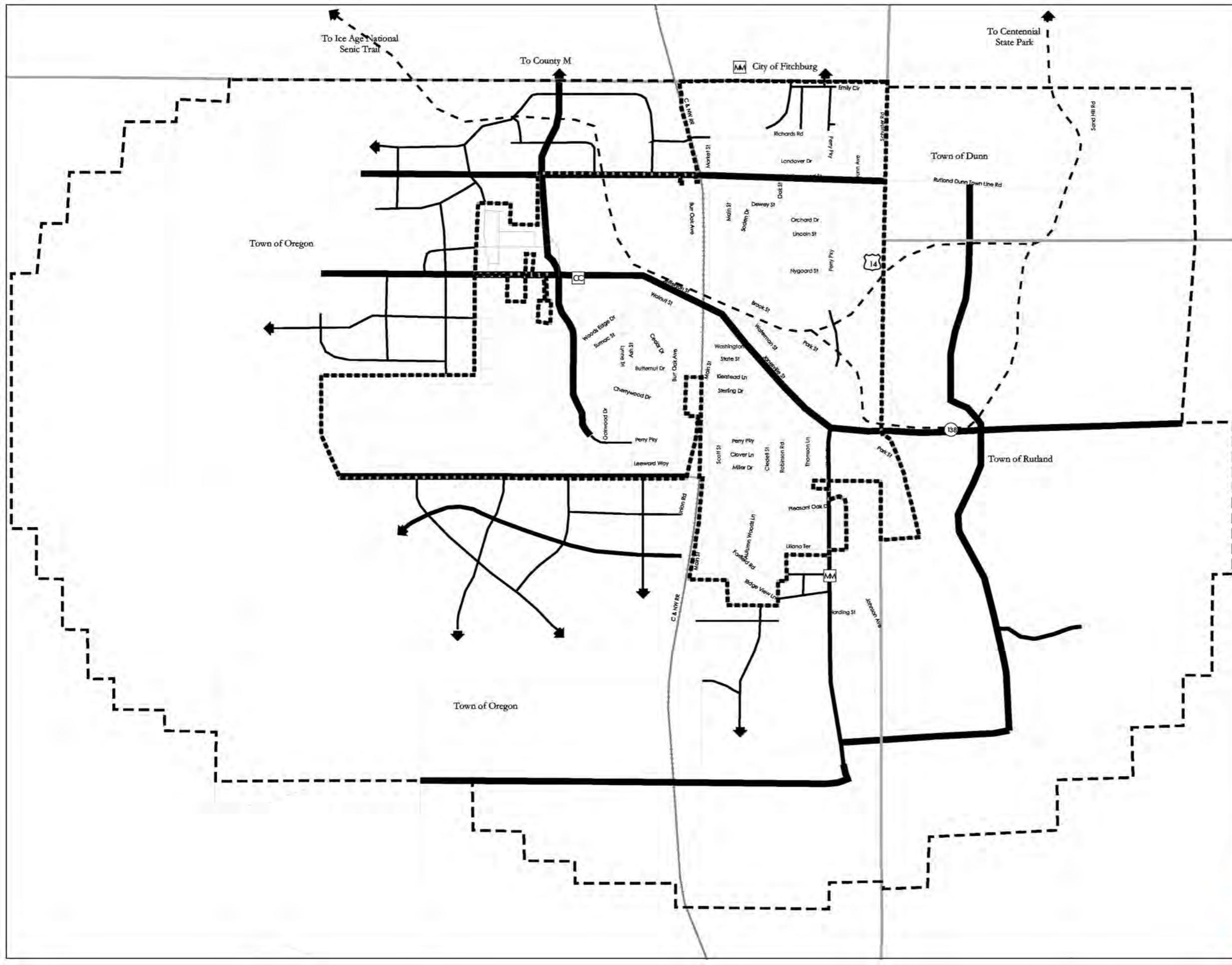
Map C.2  
Village of Oregon  
Transportation Plan



Adopted: July 27, 2004

Sources:  
Municipal Boundaries: Dane County Land Information Office 2001.

Vandewalle & Associates  
Madison, Wisconsin  
Planning - Creating - Rebuilding



Map 6-1

Future Transportation Plan:  
2005 to 2024

Town of Rutland  
Comprehensive Plan - Policy Document

**Existing Facilities**

-  Minor Arterial
-  Local
-  Collector (major, rural)
-  Collector (minor, rural)

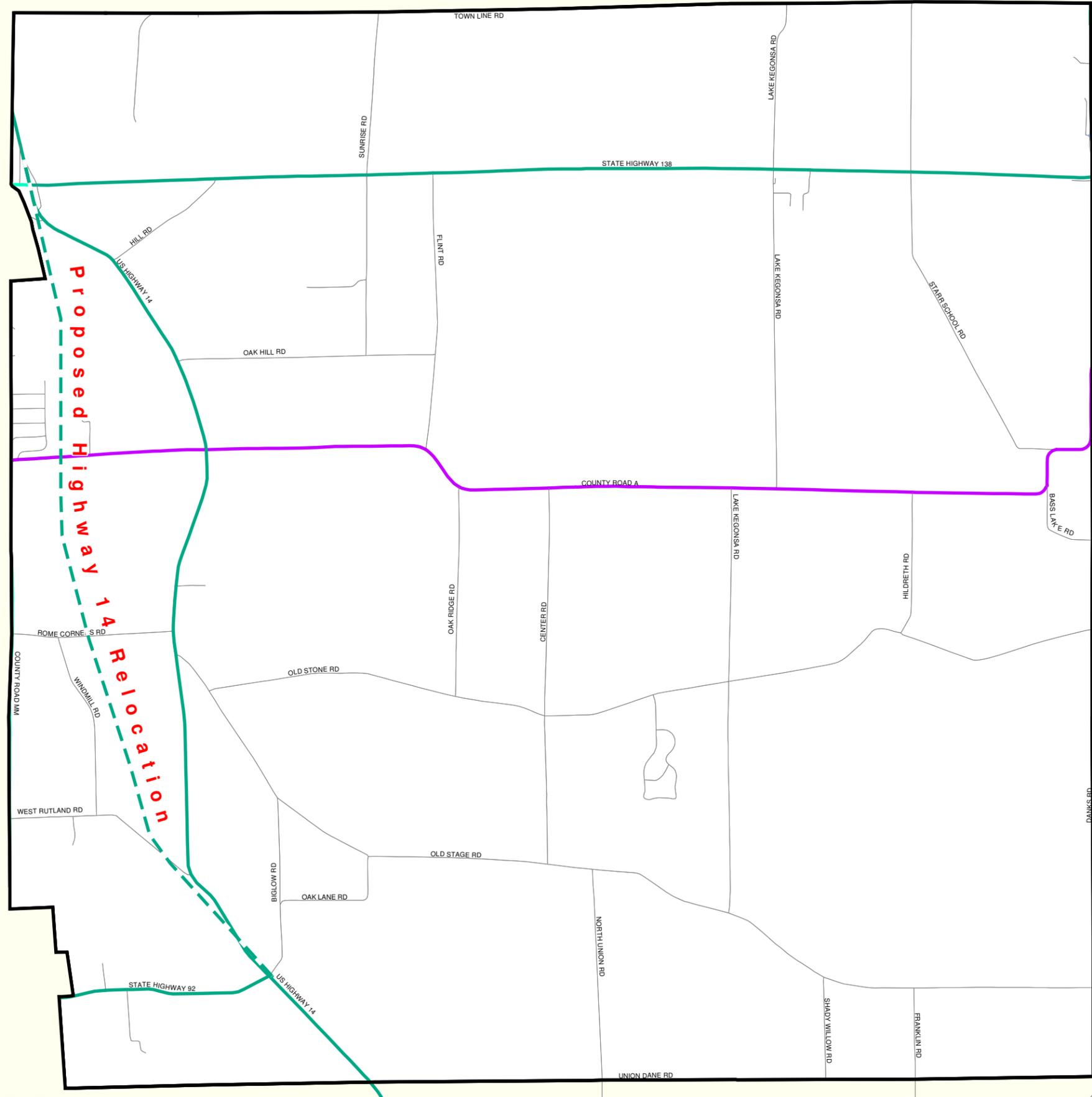
**Proposed New Facilities**

-  Principal Arterial – Interstate
-  Principal Arterial – Freeway, Expressway, other
-  Minor Arterial
-  Collector
-  Local
-  Collector (major, rural)
-  Collector (minor, rural)



Source: Base map provided by Dane County  
Land Information Department

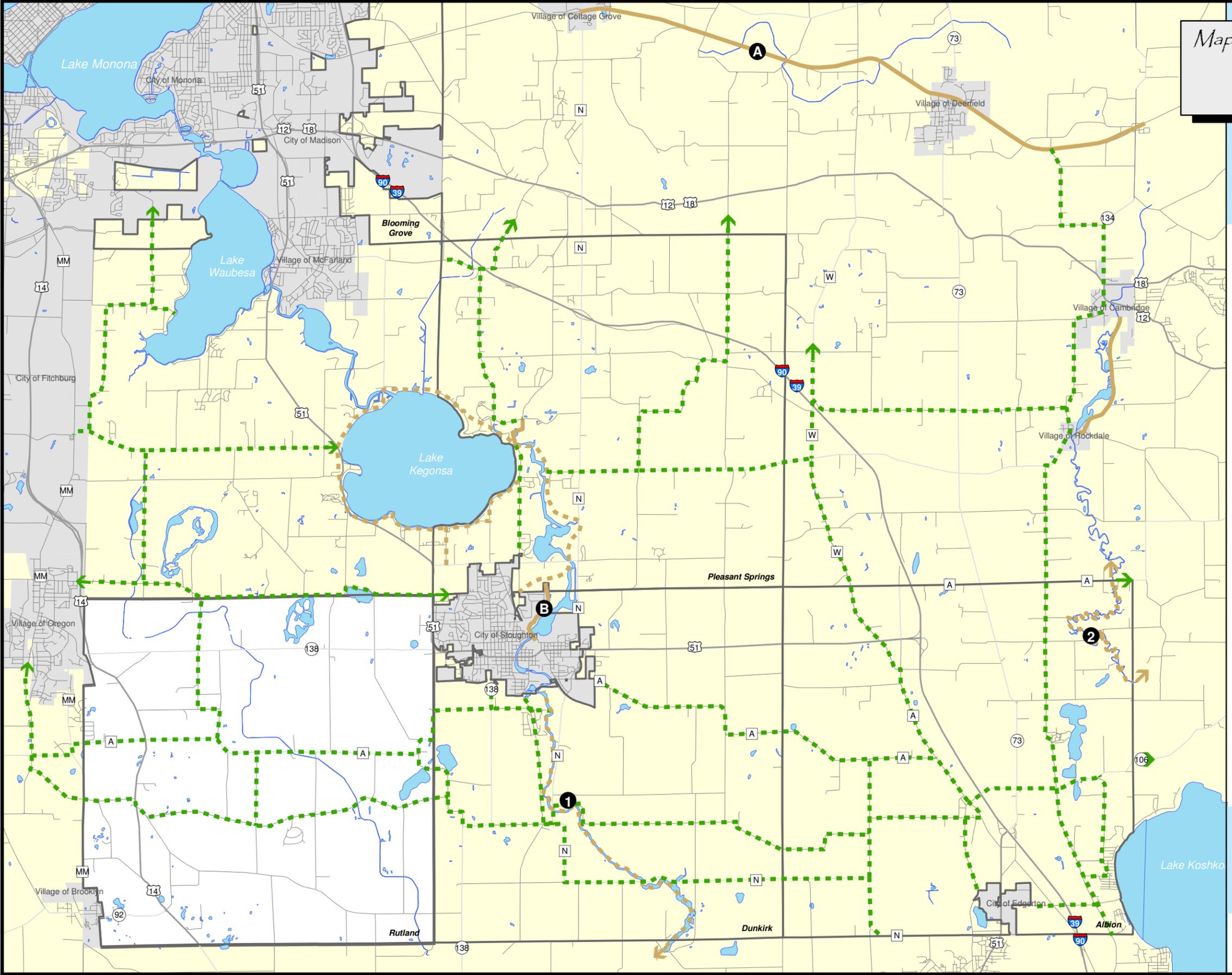
Data Source: Future Land Trail (Madison Area Metropolitan  
Planning Organization). Road Classification (Wisconsin  
Department of Transportation)



Map C.3  
Town of Rutland  
Future Transportation Plan

Map 6-2  
 Future Bicycle Plan:  
 2005 to 2024

Town of Rutland  
 Comprehensive Plan - Policy Document



- Existing**
- Multi-use trail
  - Glacial Drumlin Trail
  - River Trail
- Proposed**
- Bike route
  - Multi-use trail
  - Yahara River trail\*
  - Koshkonong Creek trail\*

- Map Features**
- Primary
  - Secondary
  - City / Village
  - Water

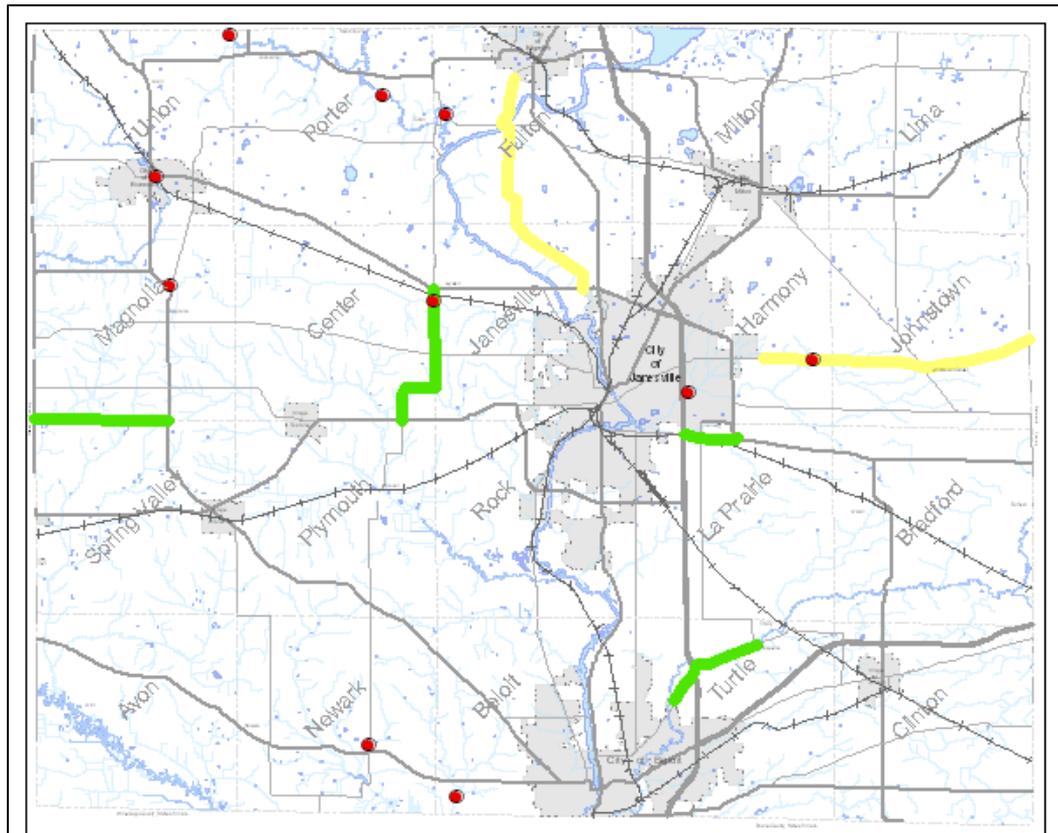
\* As proposed by Dane County Parks & Open Space Plan 2001-2005



Source: Base map provided by Dane County Land Information Department  
 Data Source: Madison Area Metropolitan Planning Organization (Bike Routes and Multi-use Trails), Dane County Regional

Map C.4  
 Town of Rutland  
 Future Bicycle Plan

# Map 7.4: Public Works Projects: 2007 and Future



2/2009

- Future Bridge Projects
- Town Boundaries
- Cities and Villages
- Railroads
- Future Road Projects**
- Interstate
- Highway
- County
- 2007
- Future
- ~ Streams and Rivers
- Rivers and Lakes

Map C.5  
Rock County  
Public Works Projects:  
2007 and Future

Source: Rock County Planning and Development Agency.

Village of Brooklyn

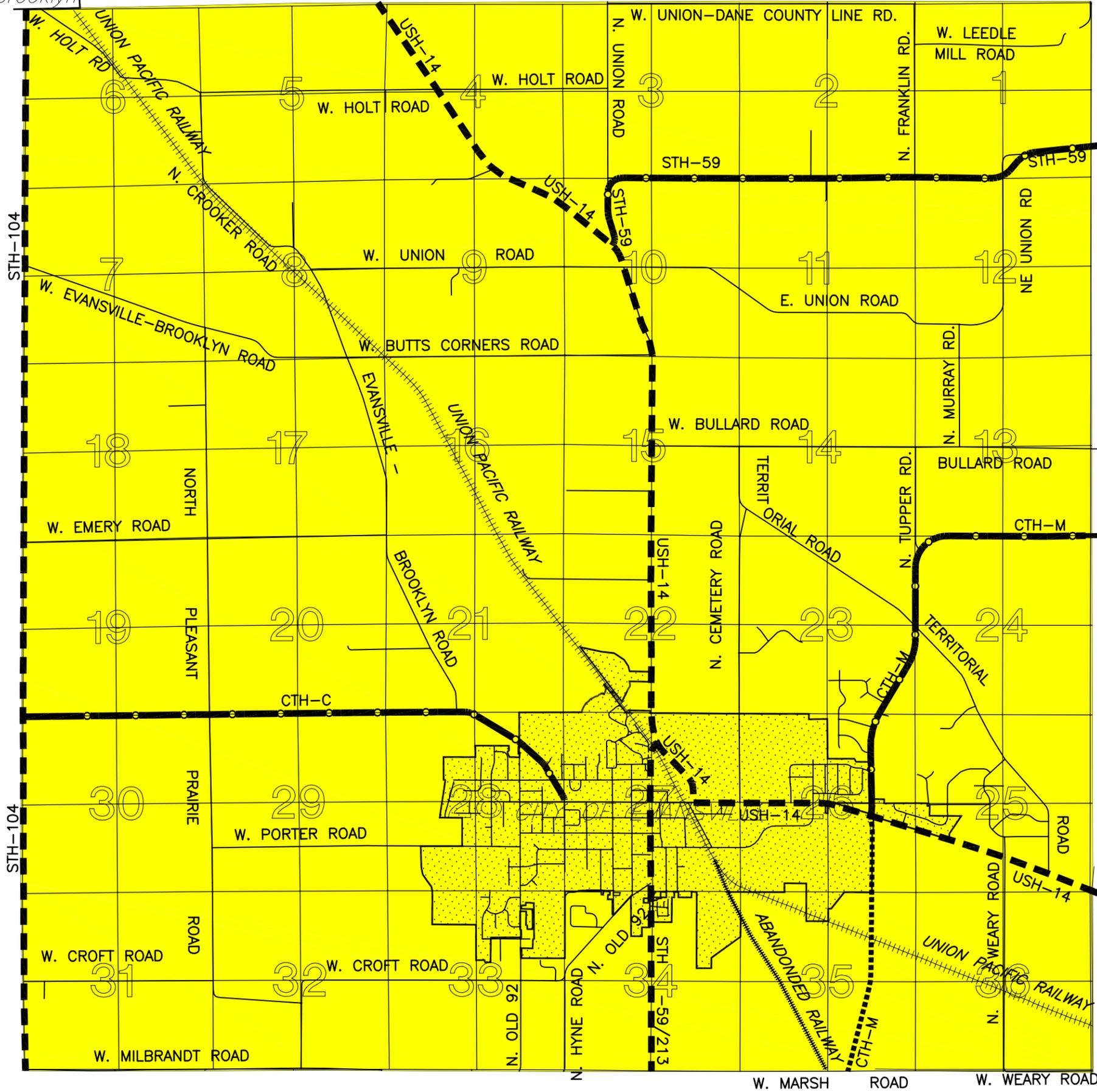
# Town of Union

Rock County, Wisconsin

## Comprehensive Plan

### Transportation

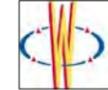
October 5, 2006



#### Legend

-  Minor Arterial Highway
-  Major Collector Highway
-  Minor Collector Highway
-  Local Roadway
-  Railway
-  Abandoned Railway

STH-138  
TOLLES  
ROAD



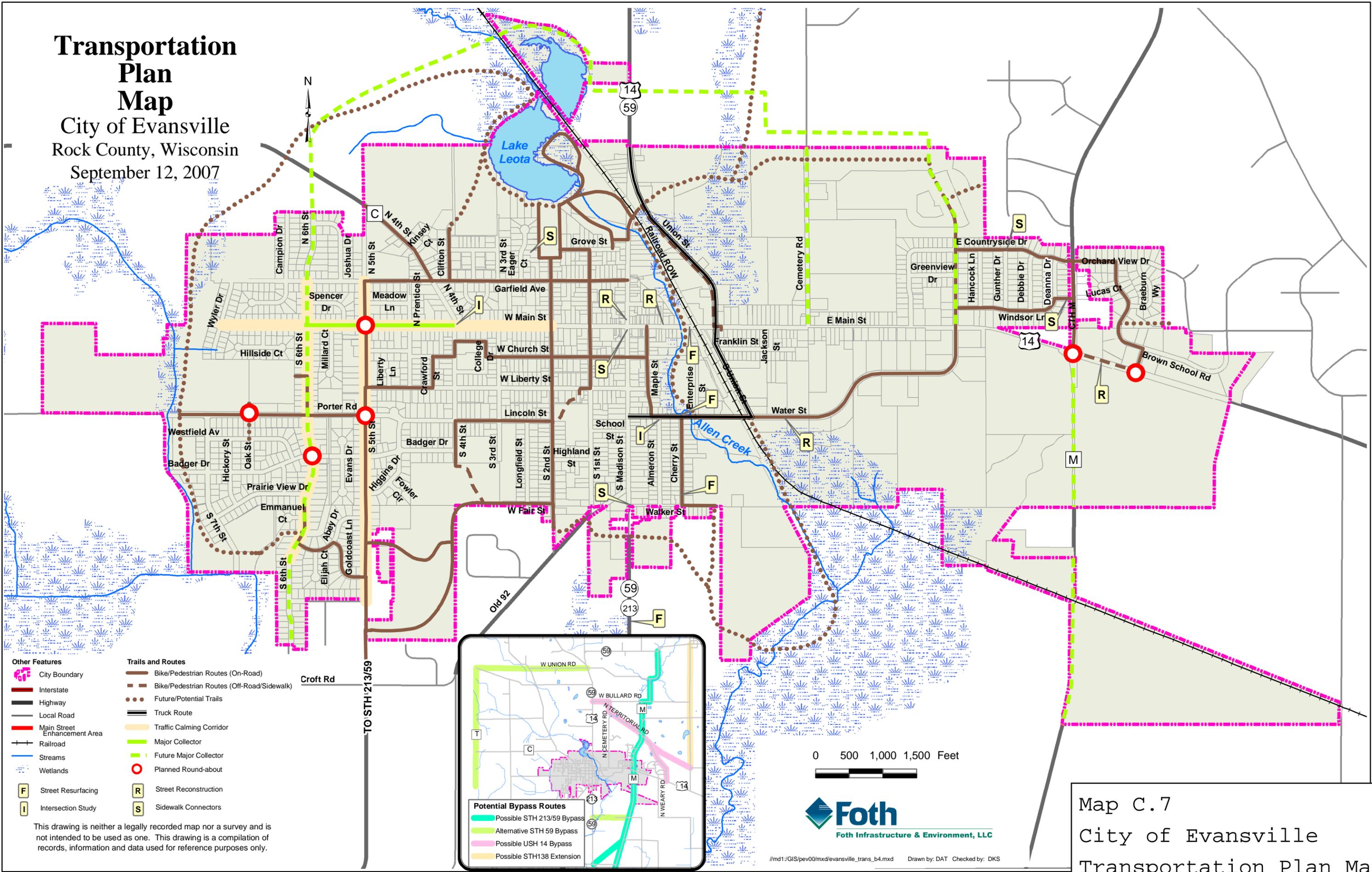
Map C.6  
Town of Union  
Transportation

# Transportation Plan Map

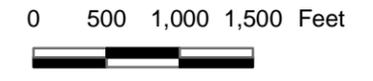
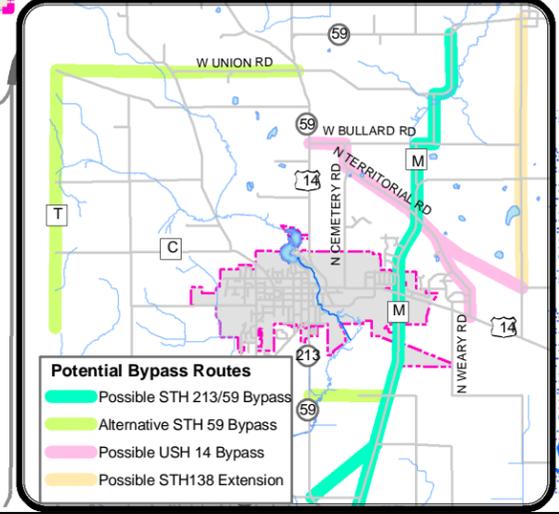
## City of Evansville

### Rock County, Wisconsin

September 12, 2007



- |                              |  |
|------------------------------|--|
| <b>Other Features</b>        | <b>Trails and Routes</b>                   |
| City Boundary                | Bike/Pedestrian Routes (On-Road)           |
| Interstate                   | Bike/Pedestrian Routes (Off-Road/Sidewalk) |
| Highway                      | Future/Potential Trails                    |
| Local Road                   | Truck Route                                |
| Main Street Enhancement Area | Traffic Calming Corridor                   |
| Railroad                     | Major Collector                            |
| Streams                      | Future Major Collector                     |
| Wetlands                     | Planned Round-about                        |
| Street Resurfacing           | Street Reconstruction                      |
| Intersection Study           | Sidewalk Connectors                        |



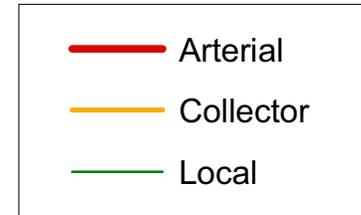
//md1:/GIS/pev00/mxd/evansville\_trans\_b4.mxd Drawn by: DAT Checked by: DKS

Map C.7  
City of Evansville  
Transportation Plan Map

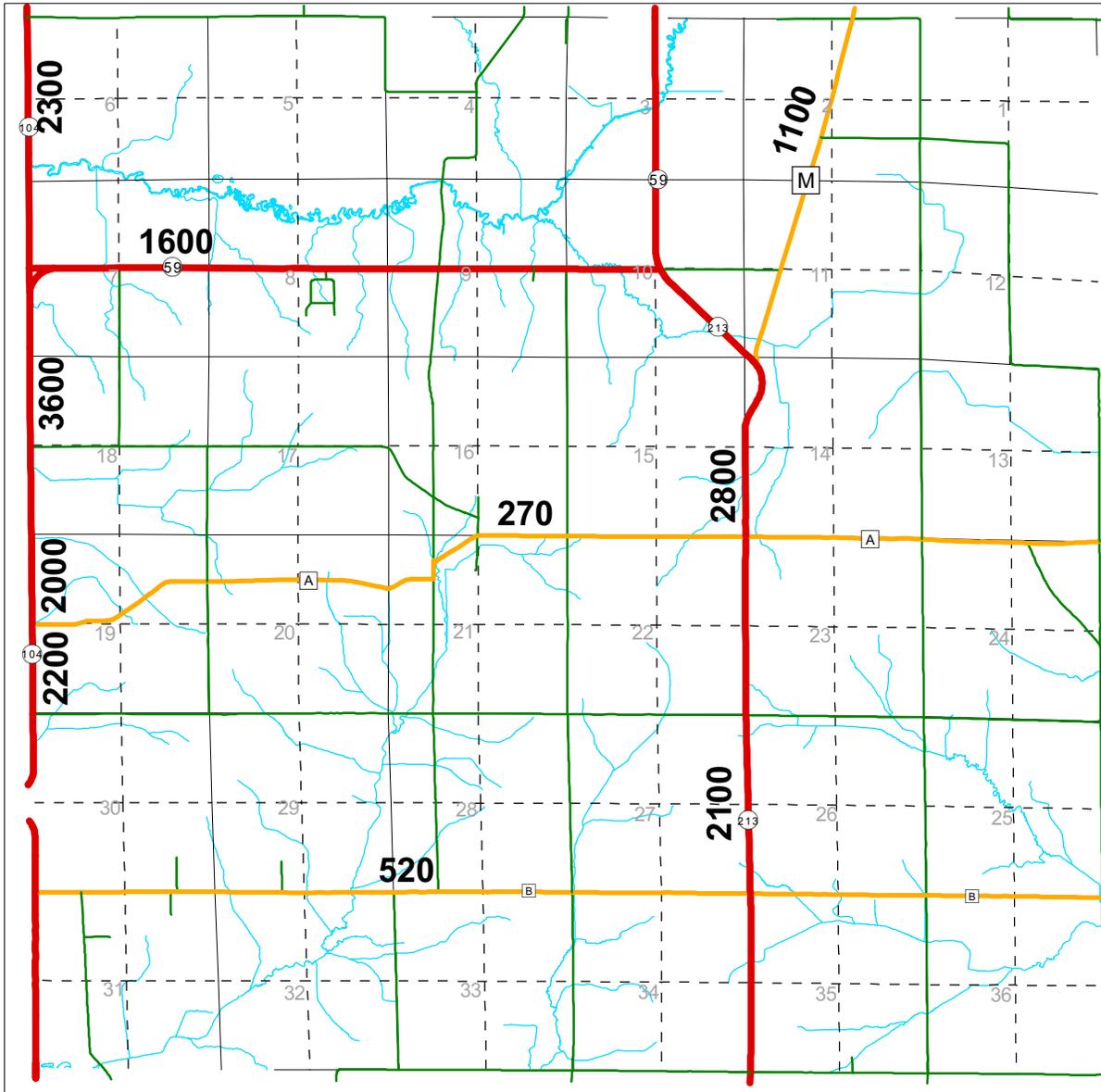
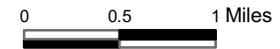
This drawing is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data used for reference purposes only.

# TOWN OF MAGNOLIA

## TRANSPORTATION PLAN FUNCTIONAL CLASSIFICATION



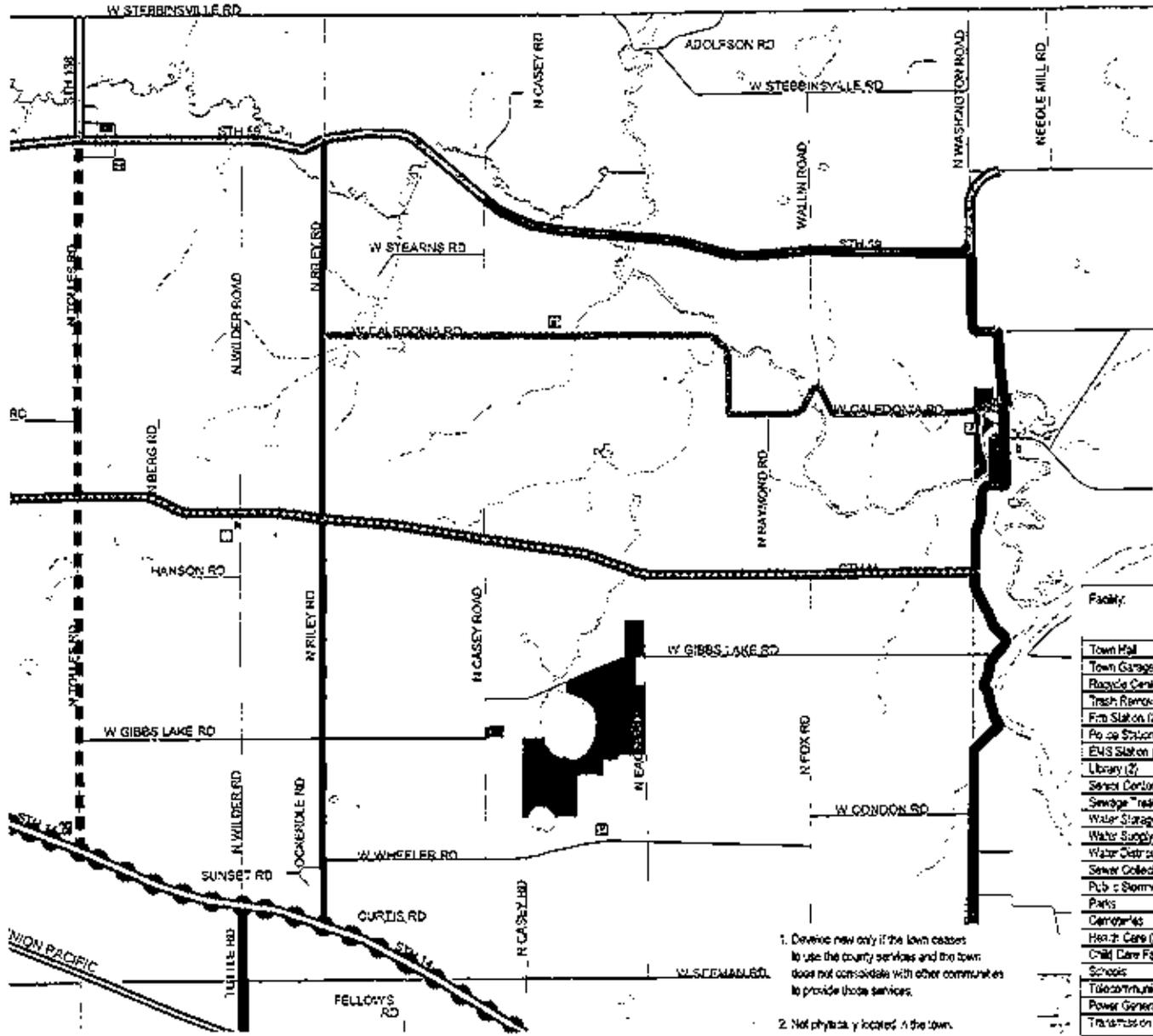
**Note: Average Daily Traffic (ADT):**  
Average number  
of  
vehicular movements  
per day in 2003



Map 24

Map C.8  
Town of Magnolia  
Transportation Plan

# Town of Porter Transportation Plan and Utilities & Community Facility Plan Maps E-2 & F-1



Porter Town Hall & Town Park  
 Cemetery  
 Recycling Center

**Functional road classifications**  
 Other principal arterials  
 Minor arterials  
 Major collectors  
 Minor collectors  
 Local roads  
 Change from a town road to a county or state highway  
 Existing Rustic Road  
 Proposed Rustic Road  
 Truck routes  
 Railroad in use

**Bicycling conditions/Touring trails**  
 Best conditions  
 Moderate conditions  
 High Vol; Undesirable  
 Potential Best  
 Potential Moderate  
 Potential

Parks & public lands

Facility	Adequate as is	Work with municipal services to provide	Expand	Relocate	Improve	Develop new
Town Hall	X				X	
Town Garage						X (C)
Recycle Center	X				X	
Trash Removal	X					
Fire Station (2)	X					
Police Station (2)	X					
EMS Station (2)	X					
Library (2)	X	X				
Senior Center (2)	X	X				
Sewage Treatment Facility	NA					
Water Storage	NA					
Water Supply (w/ 4)	NA					
Water Distribution Lines	NA					
Sewer Collection Mains	NA					
Public Stormwater Facility						
Parks						
Cemeteries						
Health Care (2)						
Child Care Facilities						
Schools						
Telecommunication Facilities						
Power Generator Plant						
Transmission Lines						

- Develop new only if the town ceases to use the county services and the town does not consolidate with other communities to provide those services.
- Not physically located in the town.

Map C.9  
Town of Porter  
Transportation Plan and  
Utilities & Community  
Facility Plan

# Town of Center Transportation Plan and Utilities & Community Facility Plan Map E-2 & F-1

March 15, 2005

- Town Hall
- Cemetery

### Functional road classifications

- Other principal arterials
- Minor arterials
- Major collectors
- Minor collectors
- Local roads
- Truck routes
- Railroad in use
- Railroad vacant

### Bicycling conditions/Touring trails

- Best conditions
- Moderate conditions
- High Vol; Undesirable
- Potential Best
- Potential Moderate
- Potential



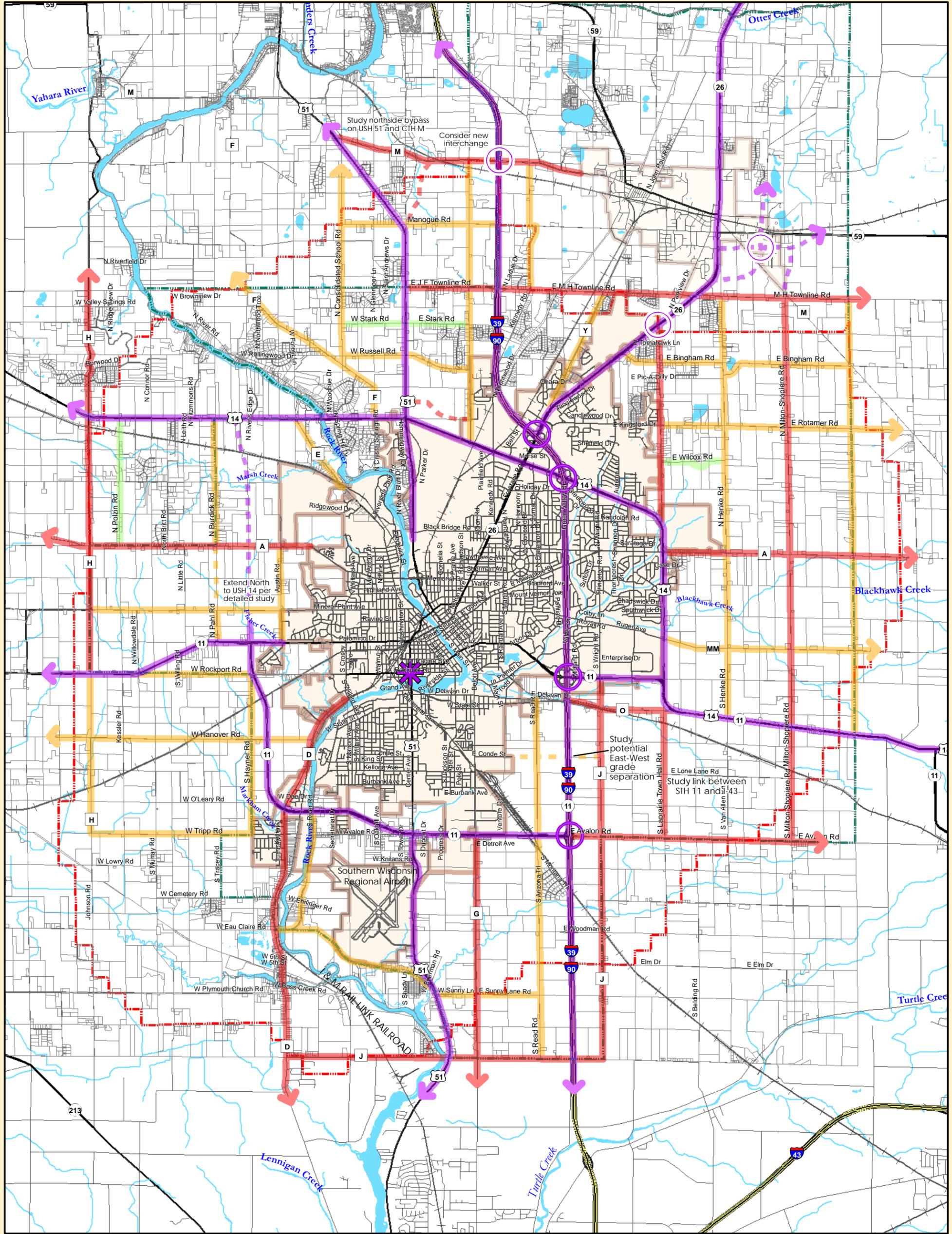
Facility:	Adequate as is	Work with municipalities to provide	Expand	Replace	Improve	Develop new
Town Hall	X					X (1)
Town Garage						
Recycle Services	X					
Trash Removal	X					
Fire Station		X				
Police Station		X				
EMS Station		X				
Library		X				
Senior Center		X				
Sewage Treatment Facility	NA					
Water Storage	NA					
Water Supply (wells)	NA					
Water Distribution Lines	NA					
Sewer Collection Mains	NA					
Public Stormwater Fac.	NA					
Parks						
Cemeteries	X					
Health Care	X					
Child Care Facilities						
Schools						
Telecommunication Facilities						
Power Generator Plant	X					
Transmission Lines	X					

Map C.10  
Town of Center  
Transportation Plan and  
Utilities & Community  
Facility Plan

1. Develop new only if the town ceases to use the county services and the town does not consolidate with other communities to provide those services.
2. At the Town Hall.







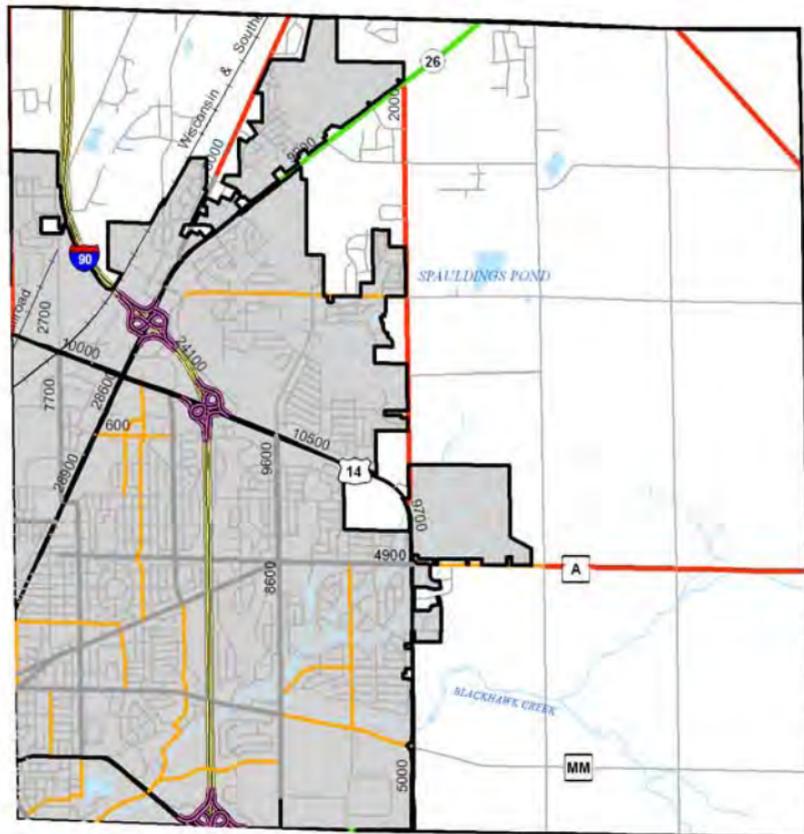
City of Janesville Comprehensive Plan **Map 3** Future Transportation Facilities

City Boundaries	City of Janesville Extraterritorial Boundary	Janesville Area MPO Boundary	Interstate Highway	Major Roads	Local Roads	Railroads	Surface Water
Type of Road		Rights-of-Way Recommendations		Existing		Proposed	
State & Federal Routes		Per Detailed Study					
Primary Arterial		100 - 125 Feet					
Standard Arterial		80 - 100 Feet					
Collector		70 - 80 Feet					
Interchange Modifications							
5 Points Reconfiguration							

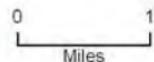


Map C.12  
City of Janesville  
Future Transportation  
Facilities

# Harmony Township Roads Functional Classifications



- City of Janesville  
**Functional Classification**  
 Local Road  
 Rural Major Collector  
 Rural Minor Arterial  
 Rural Minor Collector  
 Rural Principal Arterial  
 Urban Collector  
 Urban Minor Arterial  
 Urban Principal Arterial  
 Urban Rural Freeway  
 Urban Rural Freeway Ramp



08-2007

Map C.13  
Town of Harmony  
Functional Classifications

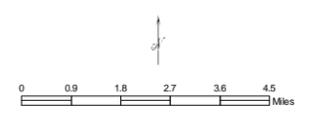
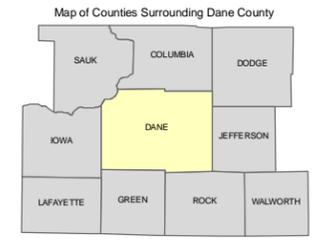
# **Appendix D**

## **Park and Recreation Maps**

# Dane County Parks & Open Space Plan 2006 - 2011

- Dane County Park Commission Lands**
- Recreation Park
  - Forest\*
  - Historical/Cultural Site
  - Natural Resource Area Property

- Dane County Natural Resource Project Areas**
- Natural Resource Area Boundary (NRAB)
  - Ice Age National Scenic Trail Corridor

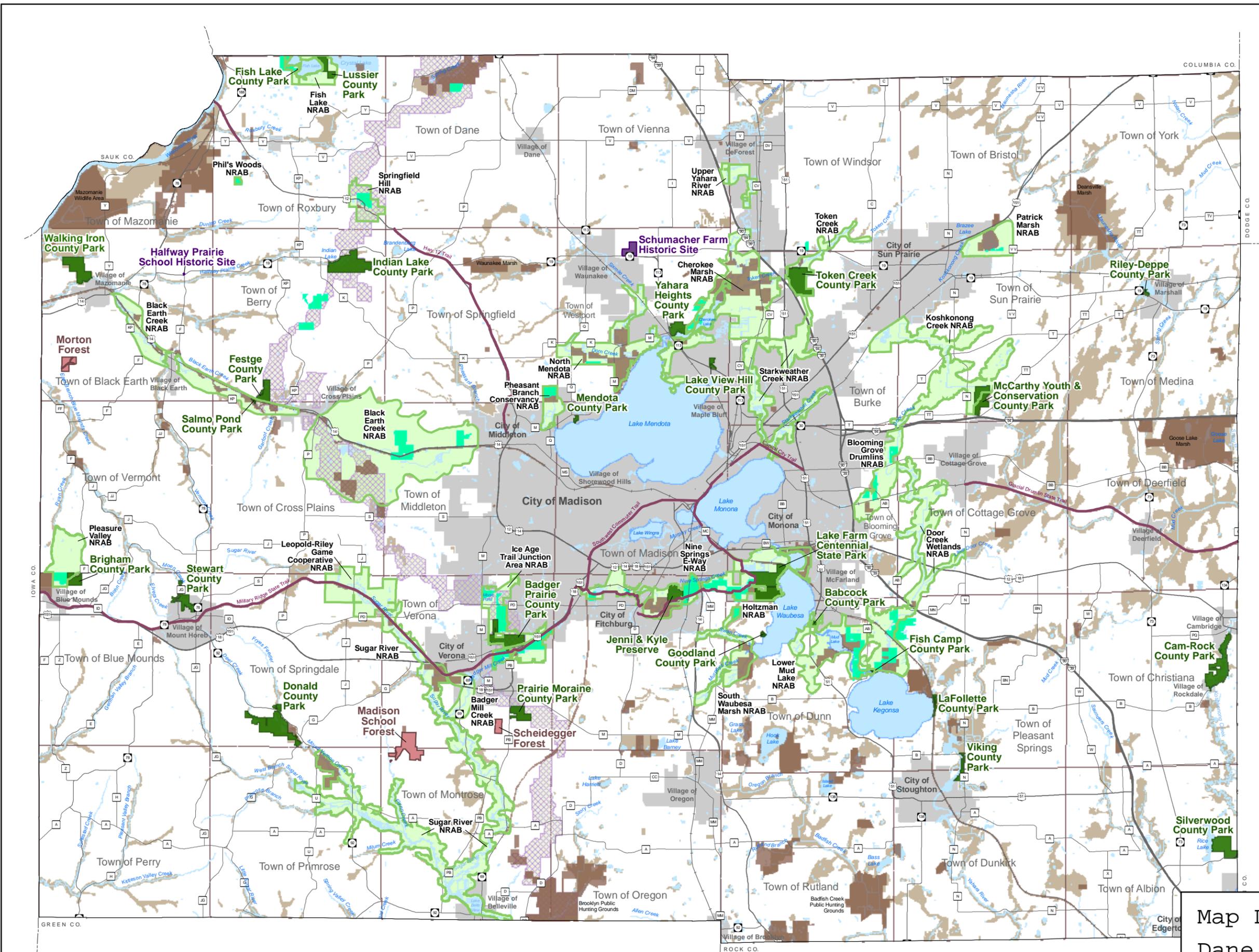


- Reference Layers**
- County & State Bike/Pedestrian Trail
  - State/Federal Land
  - Environmental Corridor
  - Urban Service Area
  - Major Road
  - Railroad
  - Lake/Pond
  - Stream/River
  - Township Boundary



\* Dane County Park Commission does not own Madison School Forest

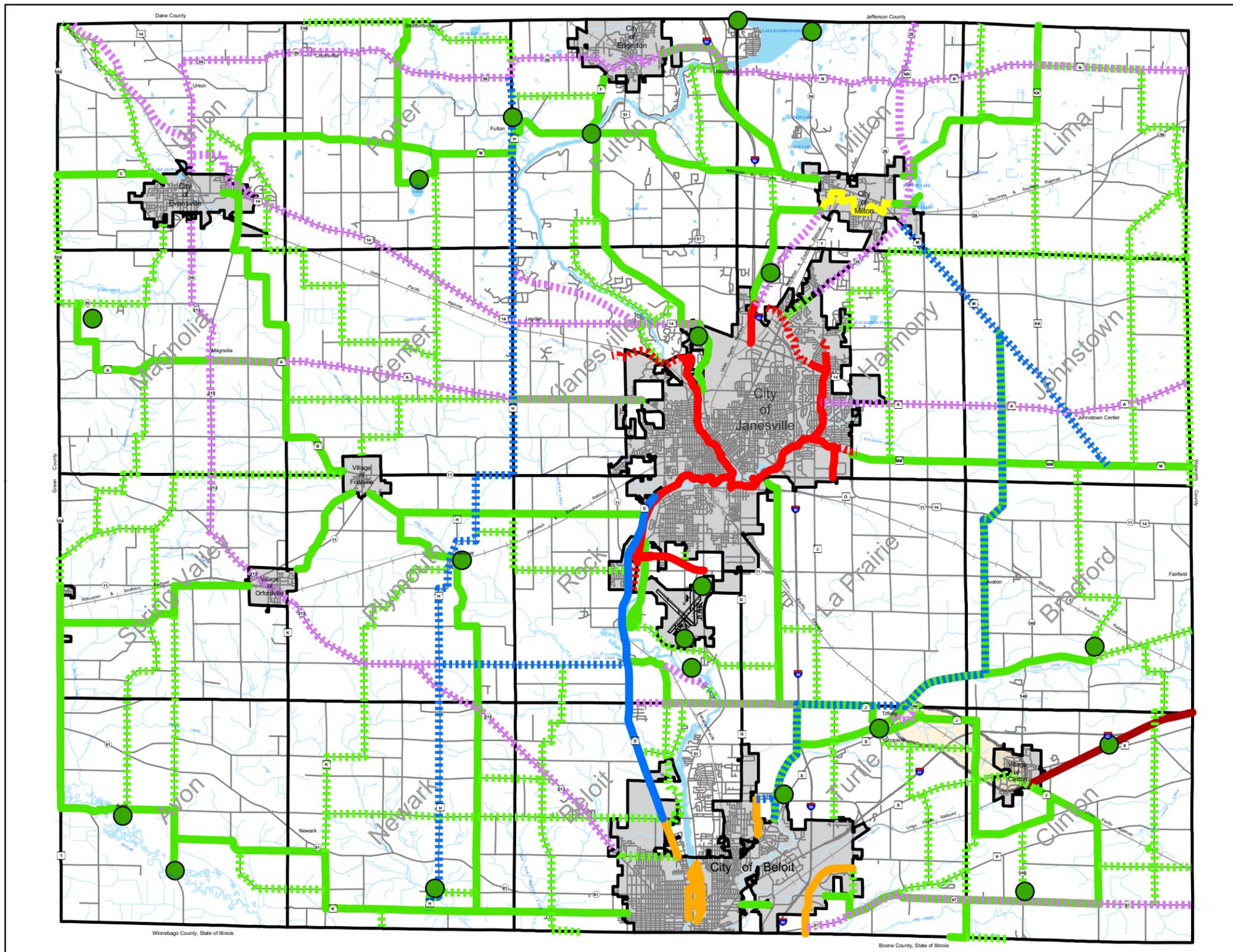
Data Sources:  
 Recreation Parks, School & Community Forests, Historical/Cultural Sites and Natural Resource Area Boundaries: (DCLWRD July 2006)  
 Parks Data (June 2006)  
 County & State Bike/Pedestrian Trail: MAMPO (1/2006)  
 Ice Age National Scenic Trail Corridor: Ice Age Park & Trail Foundation (2000).  
 Wisconsin Department of Natural Resources, Wisconsin Department of Transportation (2000)



Map D.1  
 Dane County  
 Parks & Open Space Plan

# Bicycle and Pedestrian Routes and Trails Plan

Rock County, Wisconsin



- County Park/Recreation Area
- ice\_age\_multi-use\_trail
- Existing Designated Bicycle Lane
- Proposed Designated Bicycle Lane
- Proposed Bicycle / Pedestrian Trail (Off Road)
- Existing City of Janesville Bicycle Trail
- Proposed City of Janesville Bicycle Trail
- City of Beloit Bicycle Trail
- Existing Rock County Bicycle Route
- Proposed Rock County Bicycle Route
- Pelishek Nature Trail
- City of Milton Ice Age Trail



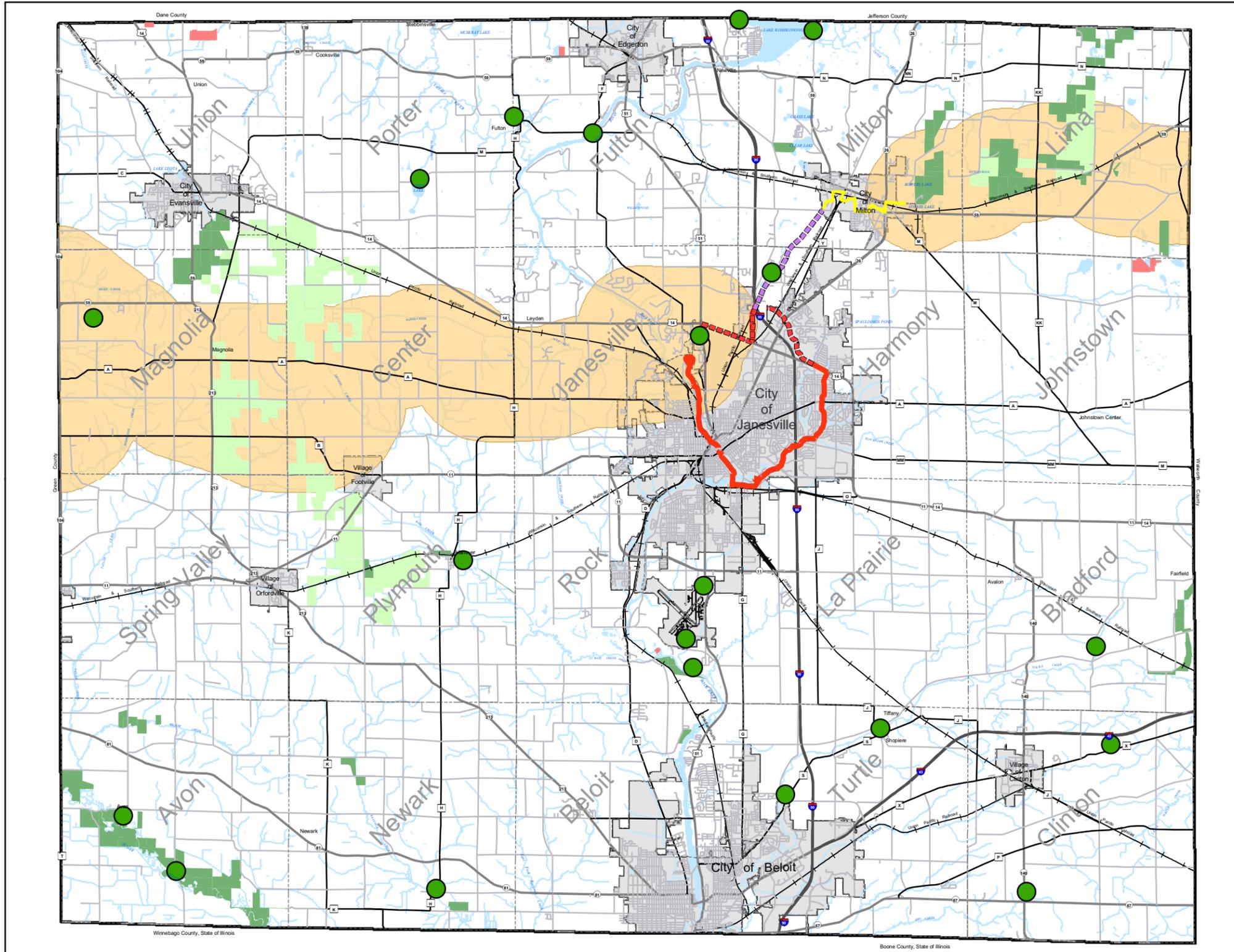
Map D.2  
 Rock County  
 Bicycle and Pedestrian  
 Routes and Trails Plan



Data Source: Rock County Planning and Development.

# Ice Age Trail Corridor Plan

Rock County, Wisconsin



- County Park/Recreation Area
- Proposed Ice Age Trail Connector Segment
- Proposed Ice Age Trail Segment
- Existing Ice Age Trail
- City of Milton Ice Age Trail
- Public Land - Federal Land
- Public Land - DNR Leased Land 2002
- Public Land - DNR Lands
- Proposed Ice Age Trail Study Corridor
- Township Boundary
- Cities and Villages
- Rock County
- ~ Rivers and Streams
- Rivers, Lakes, and Ponds
- +— Railroad
- Roads**
- Other Roads
- County Trunk
- Highway
- Interstate



Map D.3  
Rock County  
Ice Age Trail Corridor Plan

Data Source: Rock County Planning and Development.



Canada geese congregating at Horicon Marsh

# Southeast Glacial Plains

## *ecological landscape*

### Attributes and Characteristics

This ecological landscape is home to some of the world's best examples of continental glacial activity. Drumlins, eskers, kettle lakes, kames, ground and end moraines, and other glacial features are evident throughout the entire area. A particularly striking area is the long "ridge" (known as a kettle interlobate moraine) that formed between the Green Bay and Lake Michigan lobes during the Wisconsin Glaciation. The area is protected in part by the Kettle Moraine State Forest.

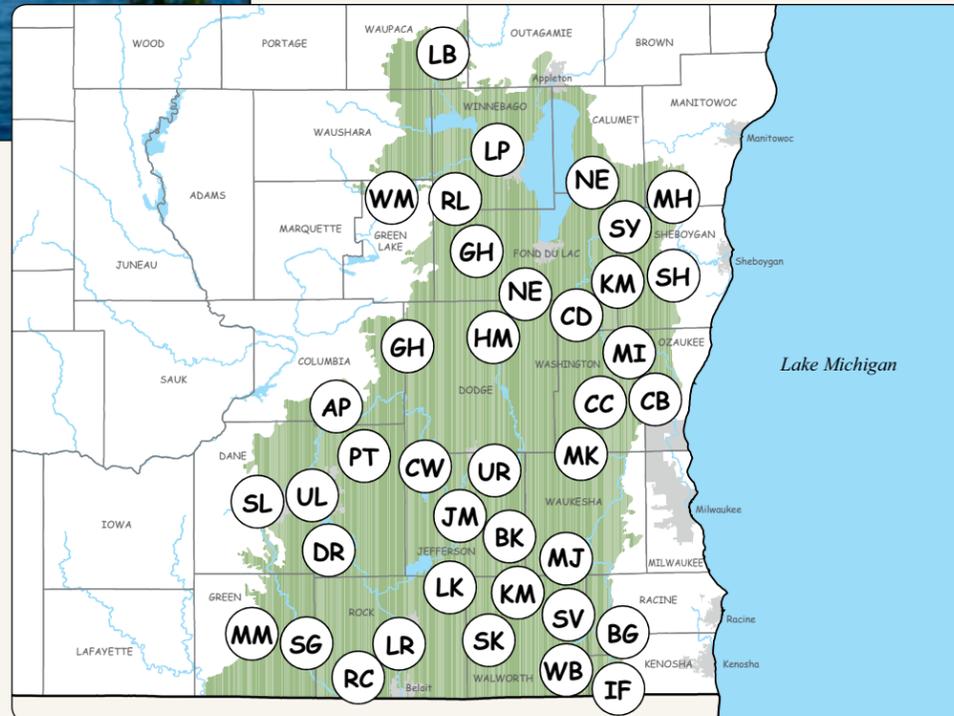
In addition to the many small kettle lakes in this landscape, there are also a number of much larger lakes, such as the Lake Winnebago Pool system, the Yahara Chain of Lakes, Lake Koshkonong, and Geneva Lake. Major rivers include the Rock, upper portion of the Milwaukee, middle portion of the Fox, and the Illinois Fox.

### Legacy Places

- |    |  |    |                                   |
|----|--|----|-----------------------------------|
| AP | Arlington Prairie                          | PT | Patrick Marsh                     |
| BK | Bark and Scuppernong Rivers                | RC | Raccoon Creek                     |
| BG | Bong Grassland                             | RL | Rush Lake                         |
| CD | Campbellsport Drumlins                     | SH | Sheboygan County Trout Streams    |
| CC | Cedar Creek                                | SY | Sheboygan River Marshes           |
| CB | Cedarburg Bog                              | SL | Shoveler Lakes-Black Earth Trench |
| CW | Crawfish River-Waterloo Drumlins           | SV | Sugar Creek Valley                |
| DR | Dunn-Rutland Savanna and Potholes          | SG | Sugar River                       |
| GH | Glacial Habitat Restoration Area           | UR | Upper Rock River                  |
| HM | Horicon Marsh                              | UL | Upper Yahara River and Lakes      |
| IF | Illinois Fox River                         | WB | White River and Bloomfield Area   |
| JM | Jefferson Marsh                            | WM | White River Marsh and Uplands     |
| LK | Lake Koshkonong to Kettle Moraine Corridor |    |                                   |
| LP | Lakes of the Winnebago Pool                |    |                                   |
| LR | Lower Rock River                           |    |                                   |
| LB | Lower Wolf River Bottomlands               |    |                                   |
| MI | Milwaukee River                            |    |                                   |
| MM | Monroe-Muralt Prairie                      |    |                                   |
| MJ | Mukwonago River and Jericho Creek          |    |                                   |
| NE | Niagara Escarpment                         |    |                                   |

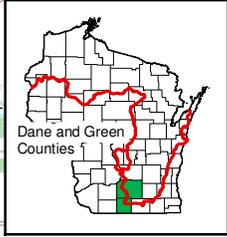
### *Along the Kettle Moraine*

- |    |  |
|----|--|
| KM | Kettle Moraine State Forest                              |
| MK | Middle Kettle Moraine                                    |
| MH | Millhome Woods   |
| SK | Southern Kettle Moraine: Whitewater Lake to Turtle Creek |



Map D.4  
Wisconsin Land Legacy Report  
Southeast Glacial Plains

**Map D.5**  
**Ice Age Trail**  
**Dane and Green Counties**

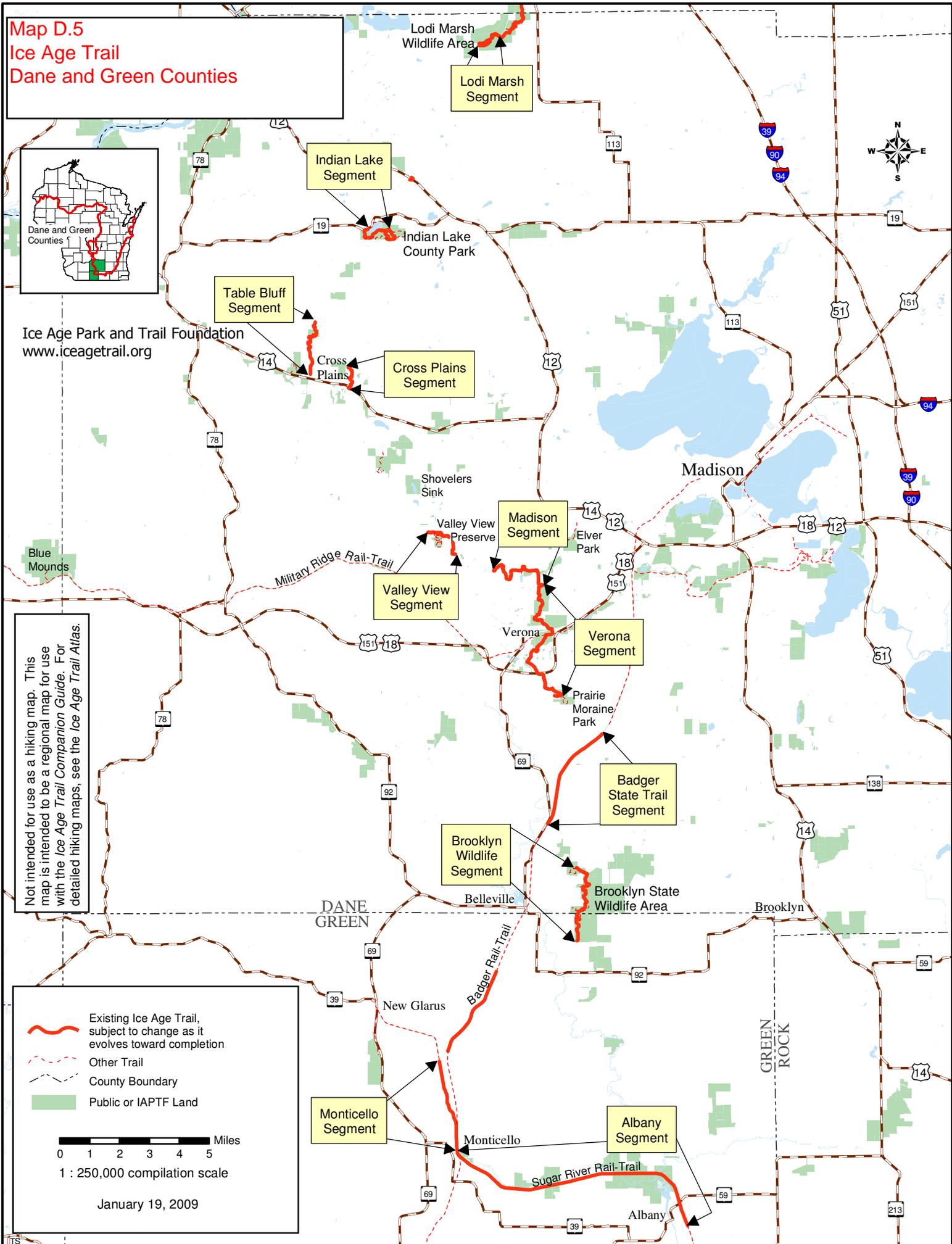


Ice Age Park and Trail Foundation  
[www.iceagetrail.org](http://www.iceagetrail.org)

Not intended for use as a hiking map. This map is intended to be a regional map for use with the *Ice Age Trail Companion Guide*. For detailed hiking maps, see the *Ice Age Trail Atlas*.

 Existing Ice Age Trail, subject to change as it evolves toward completion  
 Other Trail  
 County Boundary  
 Public or IAPTFF Land

 Miles  
 0 1 2 3 4 5  
 1 : 250,000 compilation scale  
 January 19, 2009



**Map D.6**  
**Ice Age Trail**  
**Jefferson, Walworth, and Rock**  
**Counties**

Existing Ice Age Trail, subject to change as it evolves toward completion

Other Trail

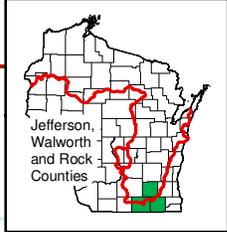
County Boundary

Public Land

0 1 2 3 4 5 Miles

1 : 280,000 compilation scale

January 14, 2009



Ice Age Park and Trail Foundation  
[www.iceagetrail.org](http://www.iceagetrail.org)

Blue Spring Lake Segment

Blackhawk Segment

Storrs Lake Wildlife Area Segment

Janesville to Milton Segment

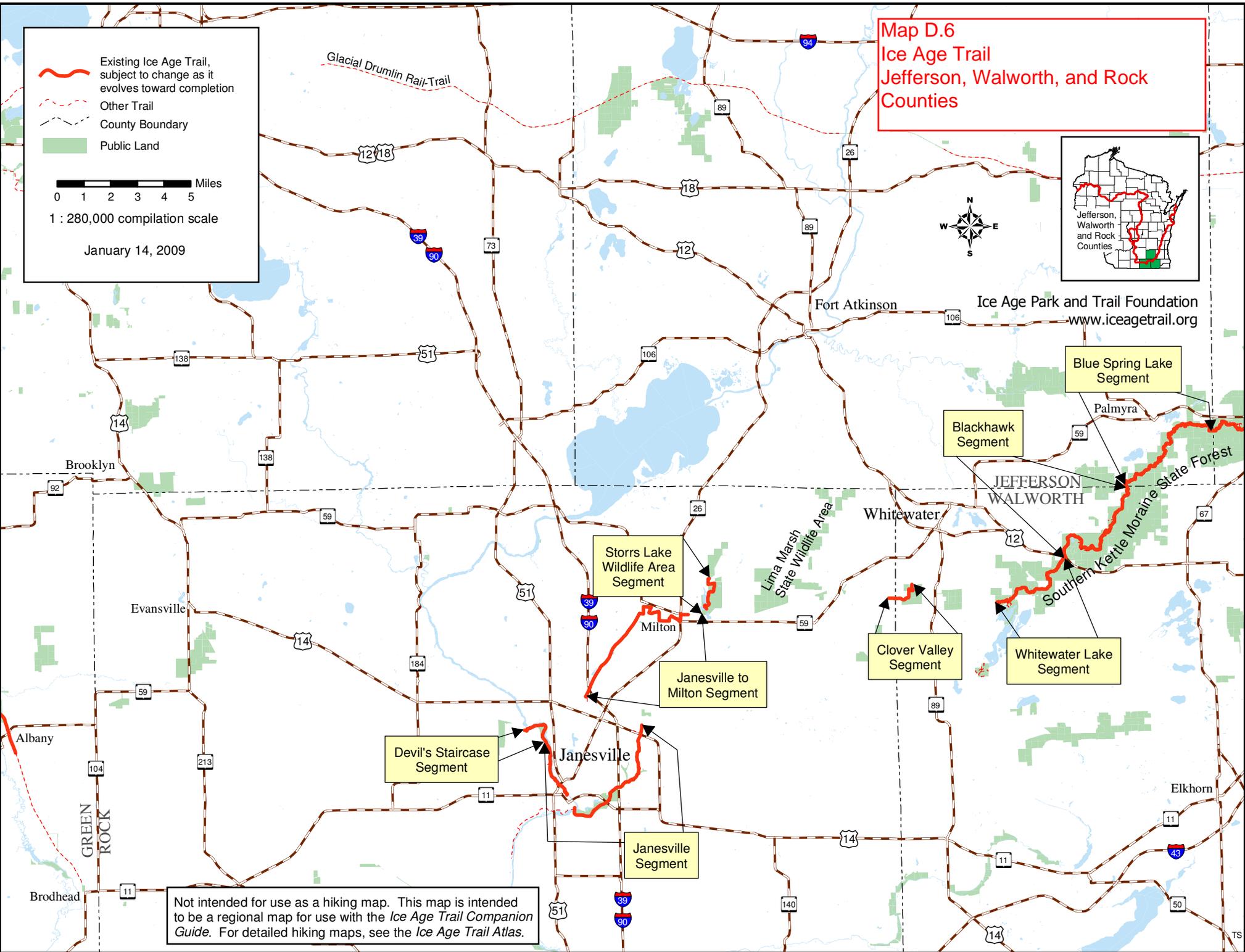
Clover Valley Segment

Whitewater Lake Segment

Devil's Staircase Segment

Janesville Segment

Not intended for use as a hiking map. This map is intended to be a regional map for use with the *Ice Age Trail Companion Guide*. For detailed hiking maps, see the *Ice Age Trail Atlas*.

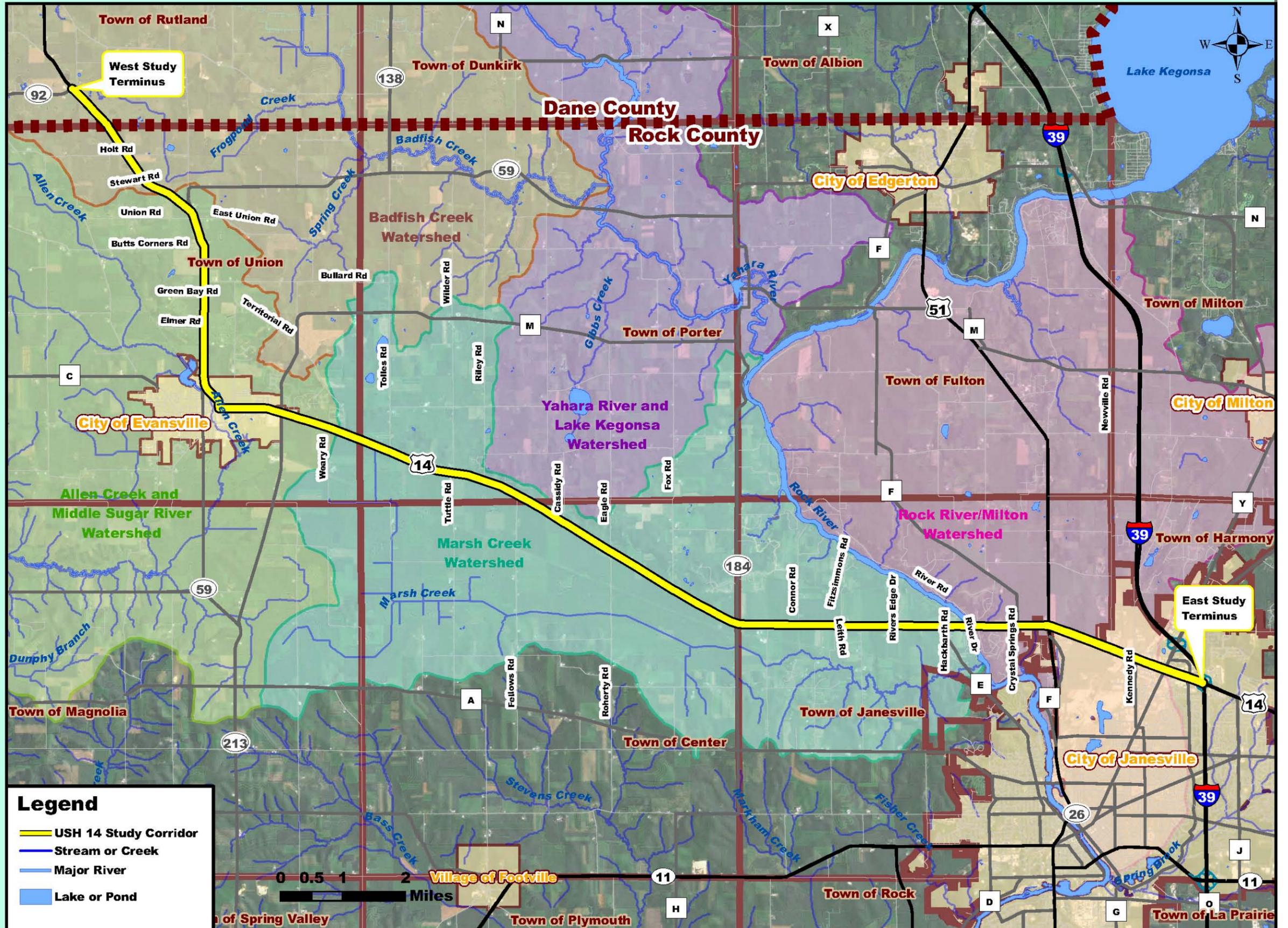
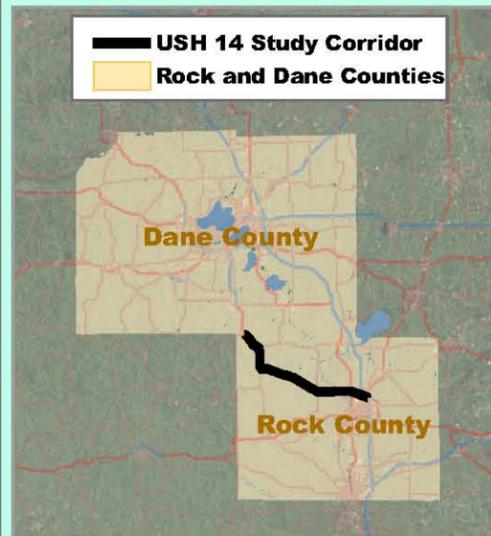


# **Appendix E**

## **Environmental Resource Maps**

# USH 14 Watersheds

WisDOT I.D. 5155-04-09  
 STH 92 to Janesville (I39/90)  
 USH 14  
 Rock and Dane Counties



**Legend**

- USH 14 Study Corridor
- Stream or Creek
- Major River
- Lake or Pond

Source: WDNr, ESRI,  
 US Census Bureau, KL Engineering

# USH 14 Water Resources

WisDOT I.D. 5155-04-09  
 STH 92 to Janesville (I39/90)  
 USH 14  
 Rock and Dane Counties

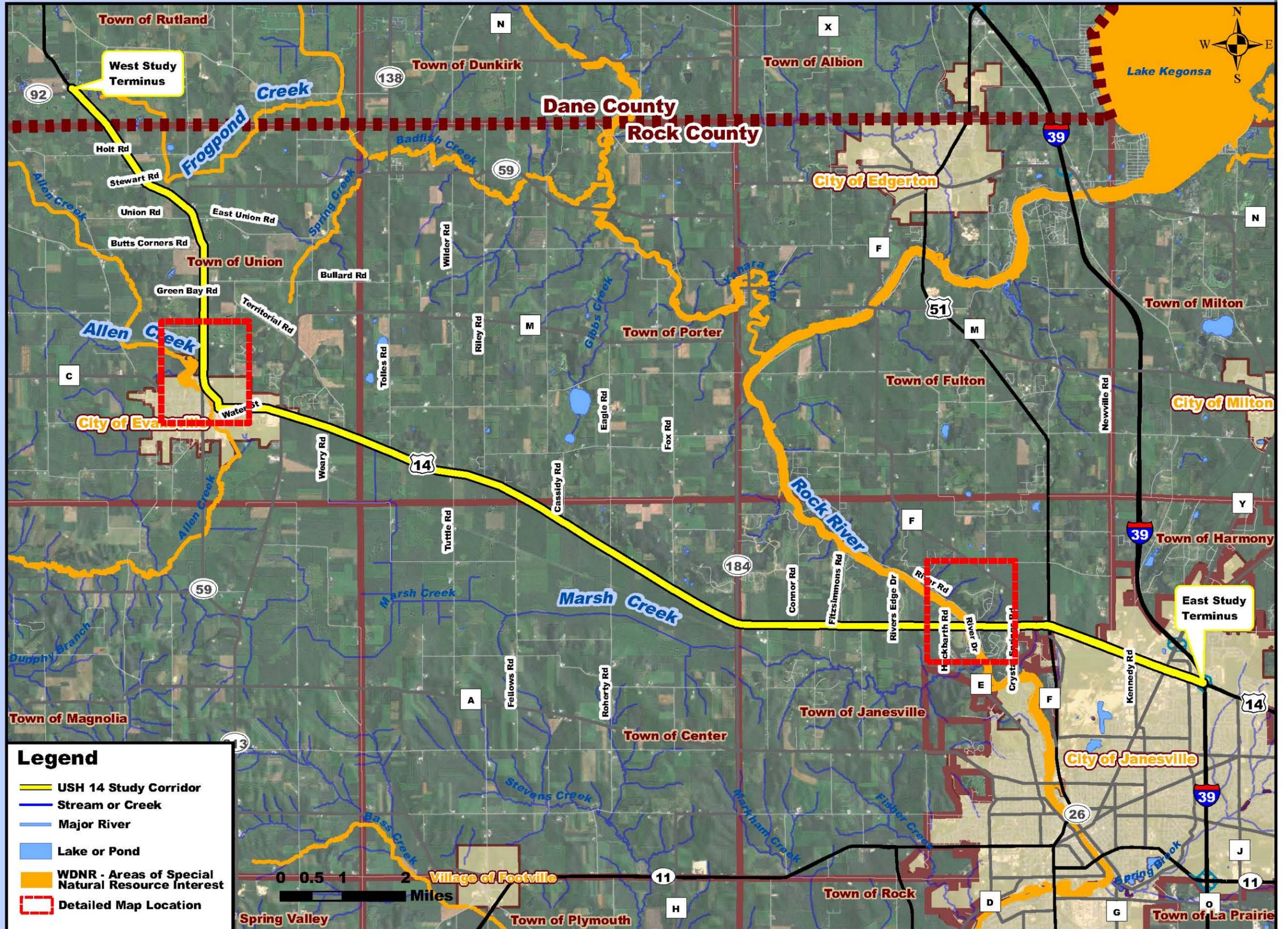
— USH 14 Study Corridor  
 Rock and Dane Counties



— USH 14 Study Corridor  
 Rock and Dane Counties



Source: WDNR, ESRI,  
 US Census Bureau, KL Engineering

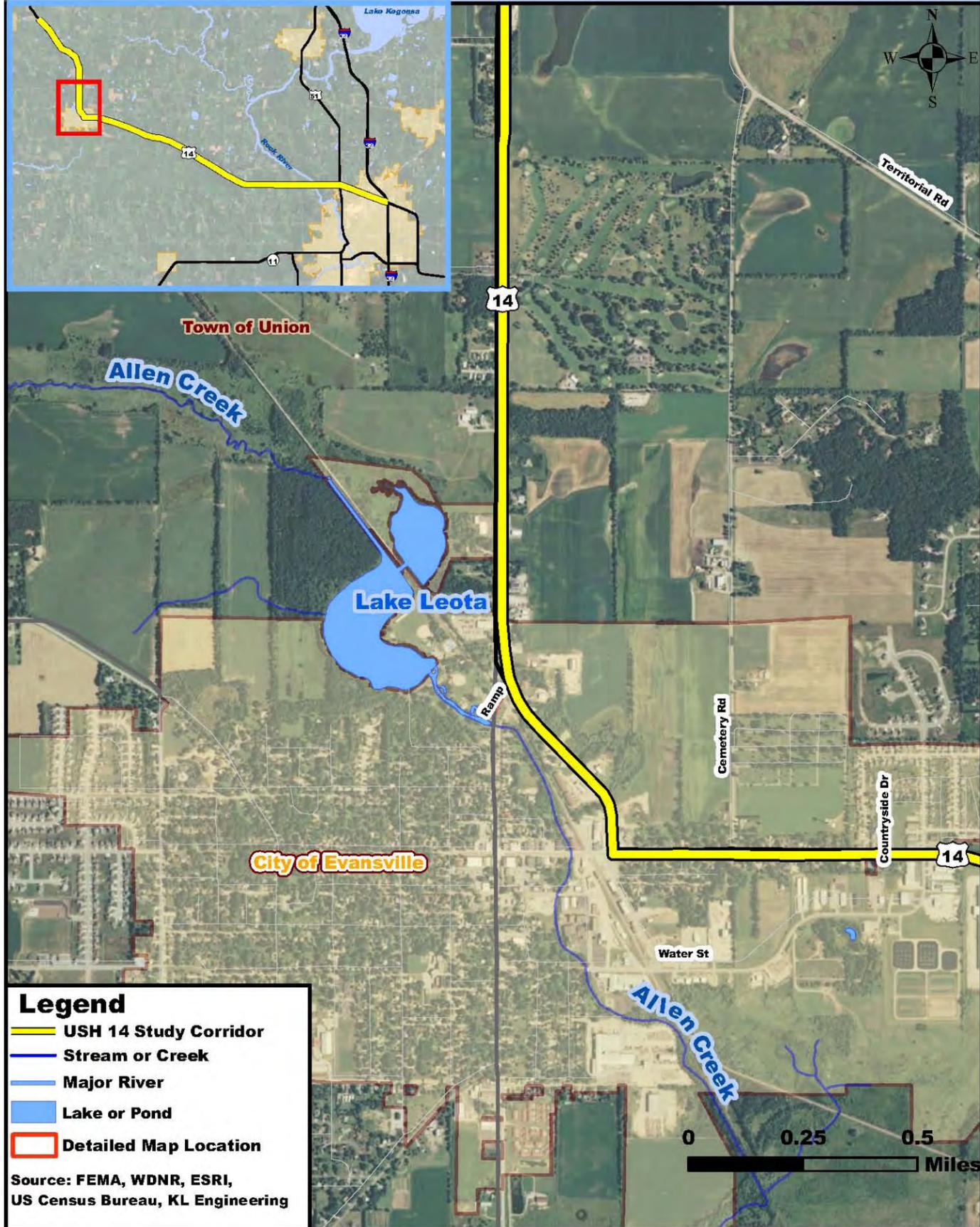


**Legend**

- USH 14 Study Corridor
- Stream or Creek
- Major River
- Lake or Pond
- WDNR - Areas of Special Natural Resource Interest
- Detailed Map Location

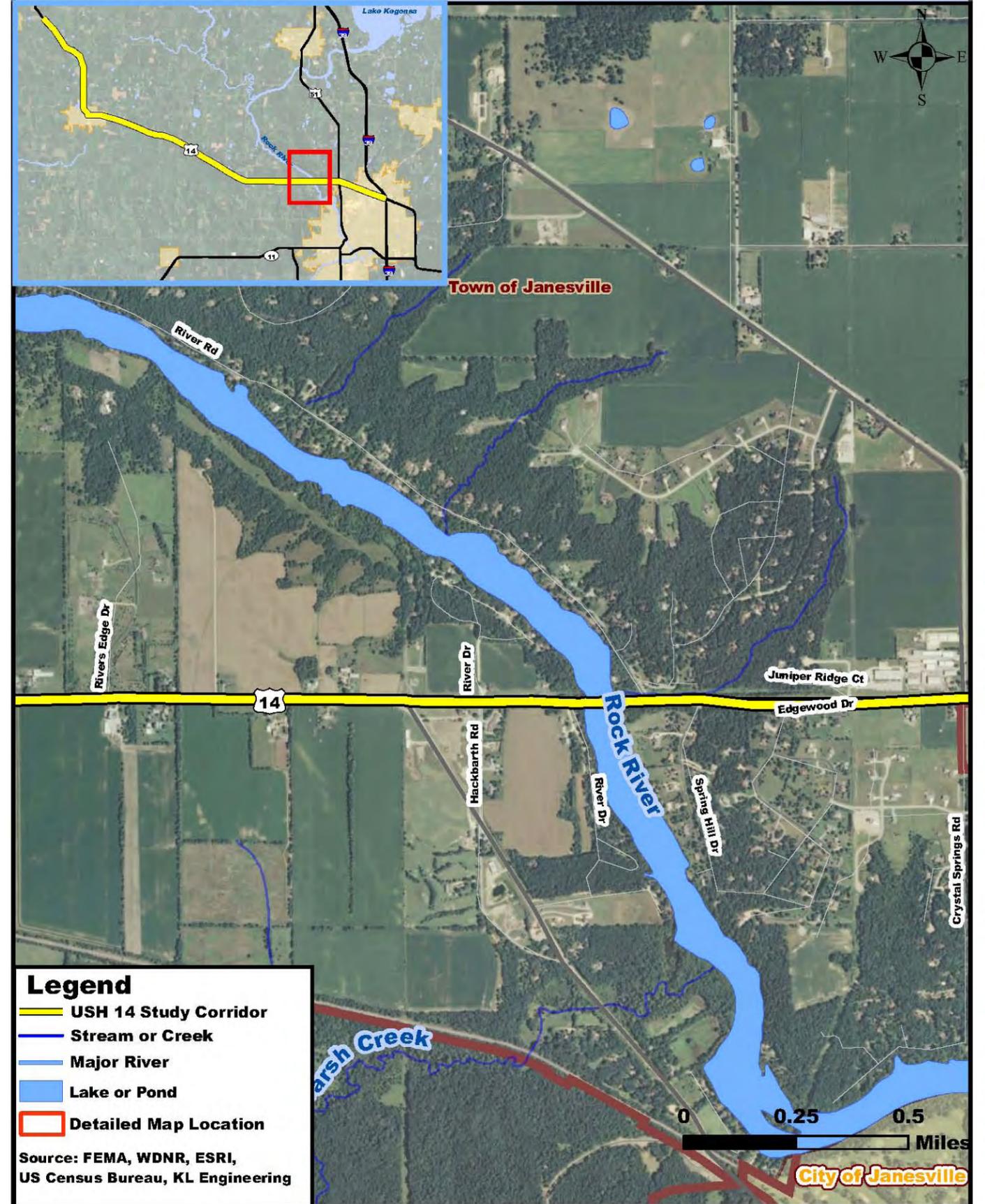
# USH 14 and Allen Creek

WisDOT I.D. 5155-04-09  
 STH 92 to Janesville (I39/90)  
 USH 14  
 Rock and Dane Counties



# USH 14 and Rock River

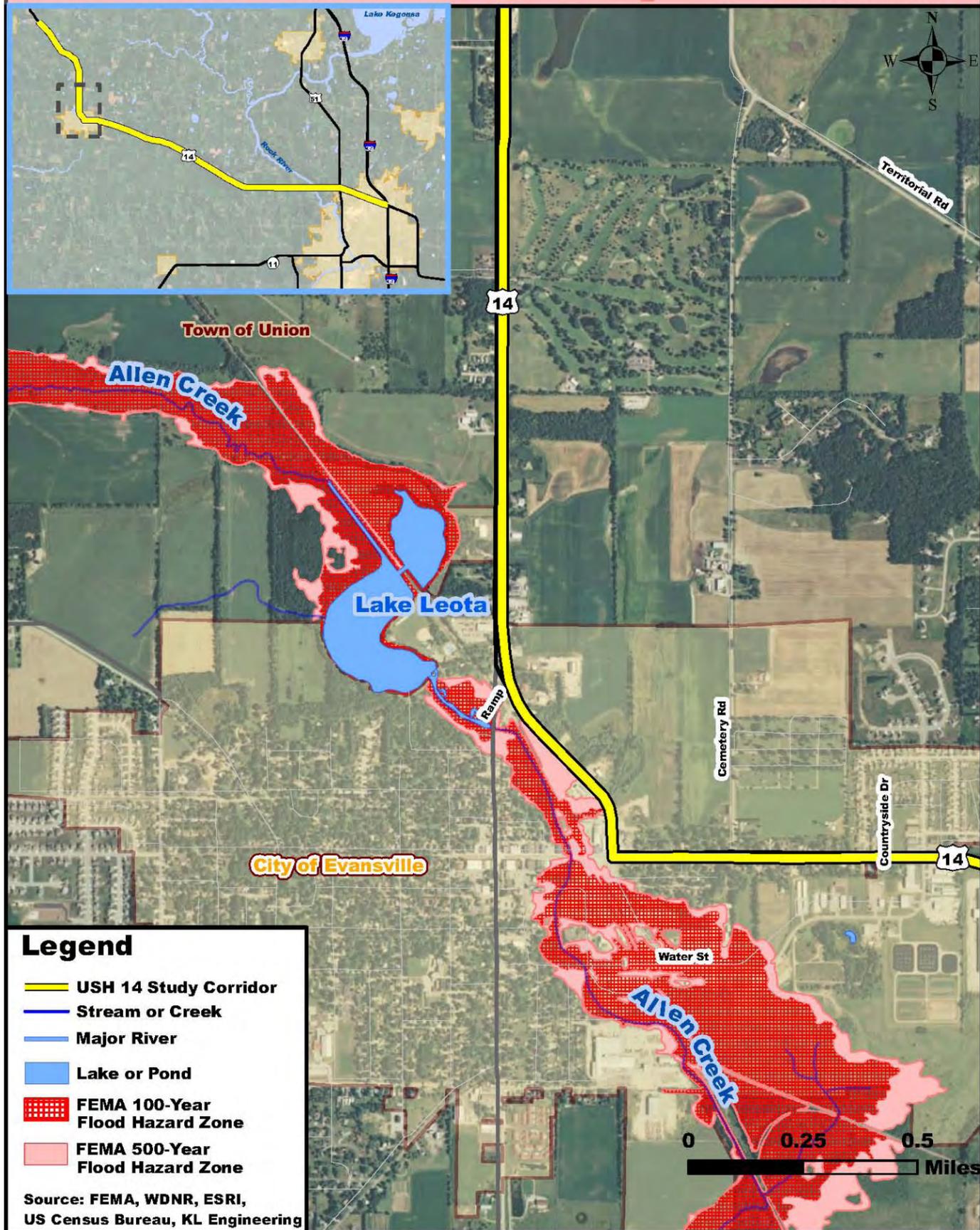
WisDOT I.D. 5155-04-09  
 STH 92 to Janesville (I39/90)  
 USH 14  
 Rock and Dane Counties





# USH 14 Allen Creek Floodplain

WisDOT I.D. 5155-04-09  
 STH 92 to Janesville (I39/90)  
 USH 14  
 Rock and Dane Counties

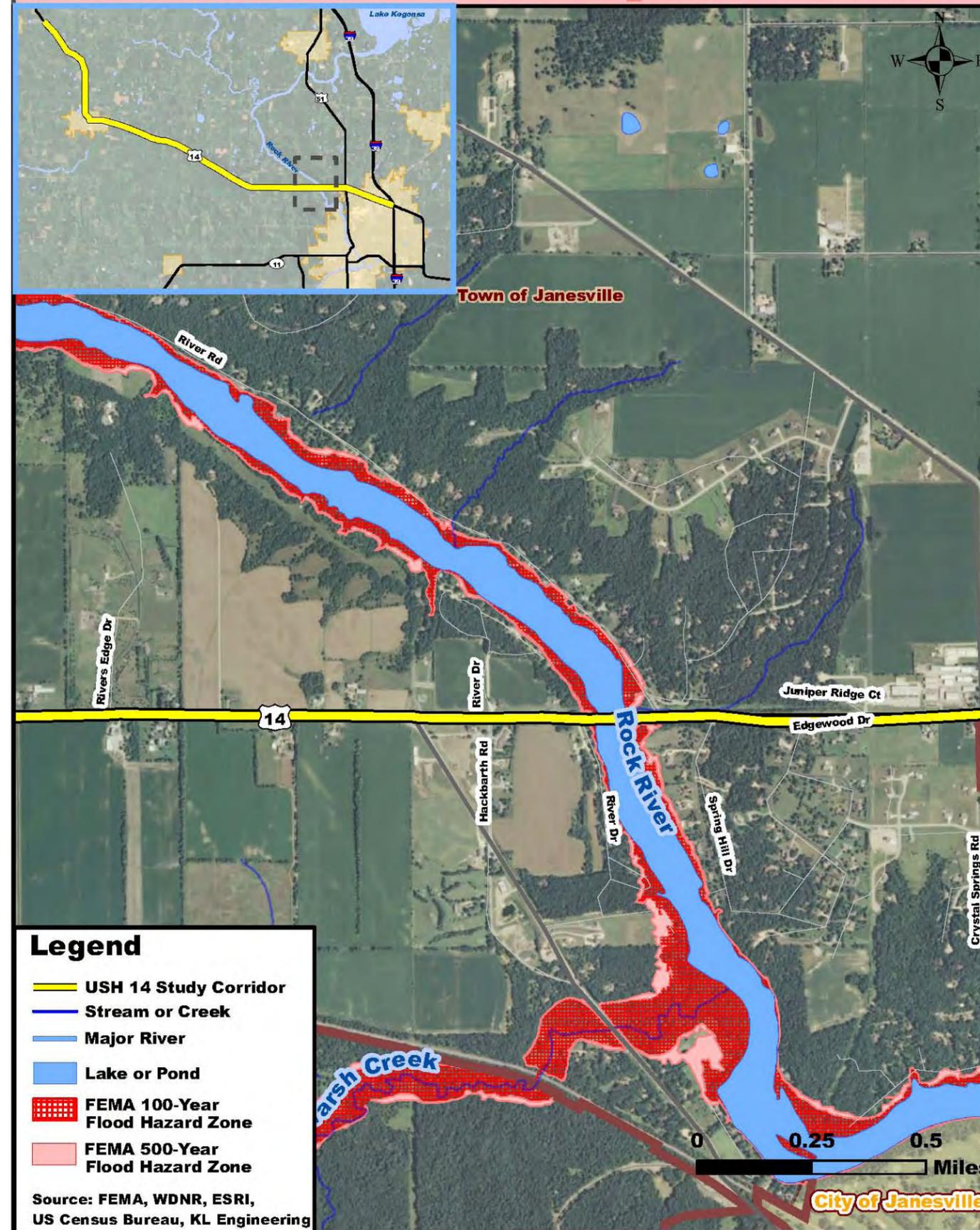


- Legend**
- USH 14 Study Corridor
  - Stream or Creek
  - Major River
  - Lake or Pond
  - ▨ FEMA 100-Year Flood Hazard Zone
  - FEMA 500-Year Flood Hazard Zone

Source: FEMA, WDNR, ESRI, US Census Bureau, KL Engineering

# USH 14 Rock River Floodplain

WisDOT I.D. 5155-04-09  
 STH 92 to Janesville (I39/90)  
 USH 14  
 Rock and Dane Counties



- Legend**
- USH 14 Study Corridor
  - Stream or Creek
  - Major River
  - Lake or Pond
  - ▨ FEMA 100-Year Flood Hazard Zone
  - FEMA 500-Year Flood Hazard Zone

Source: FEMA, WDNR, ESRI, US Census Bureau, KL Engineering

# USH 14 Wetlands

WisDOT I.D. 5155-04-09  
 STH 92 to Janesville (I39/90)  
 USH 14  
 Rock and Dane Counties

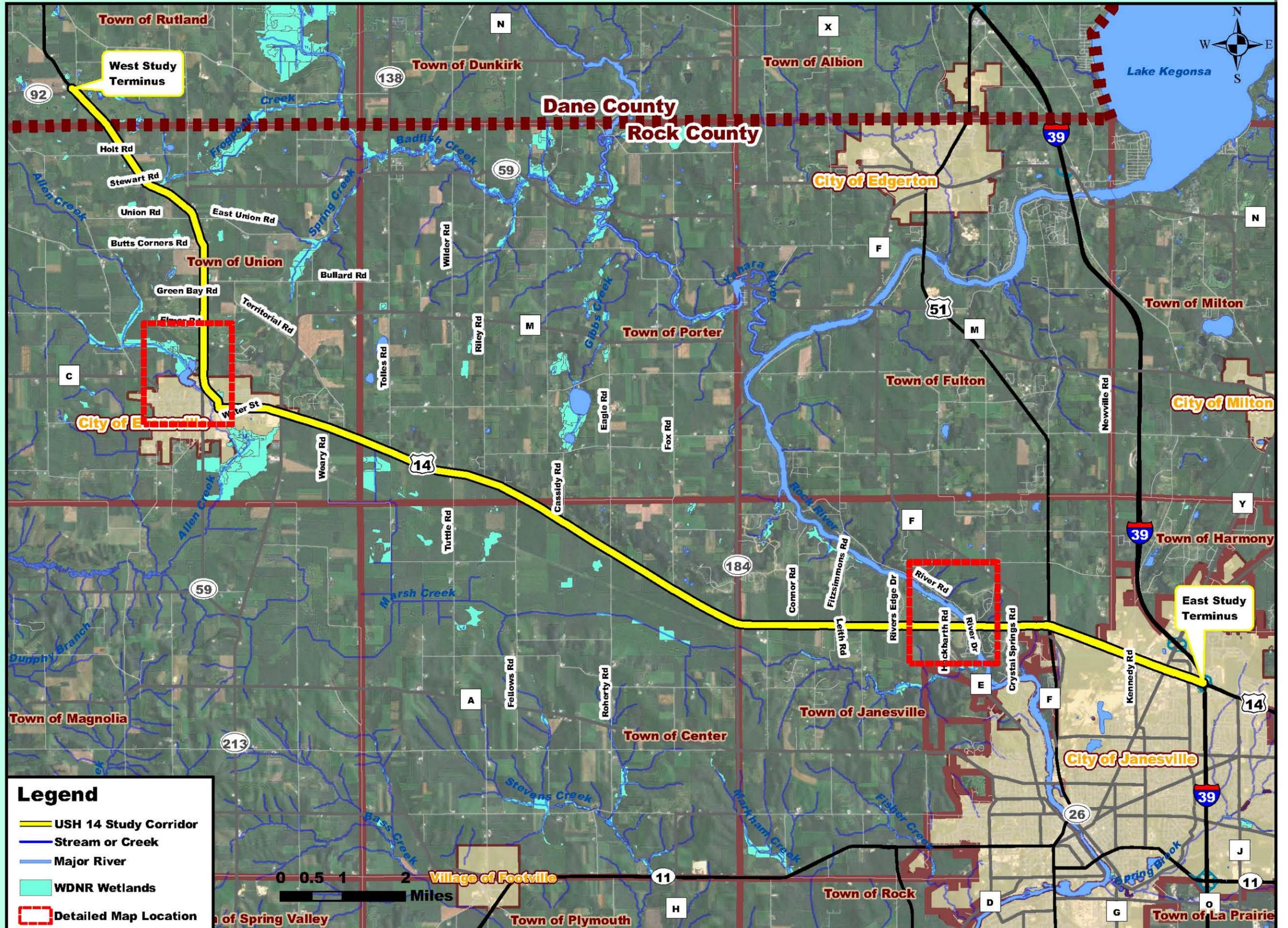
— USH 14 Study Corridor  
 Rock and Dane Counties



— USH 14 Study Corridor  
 Rock and Dane Counties

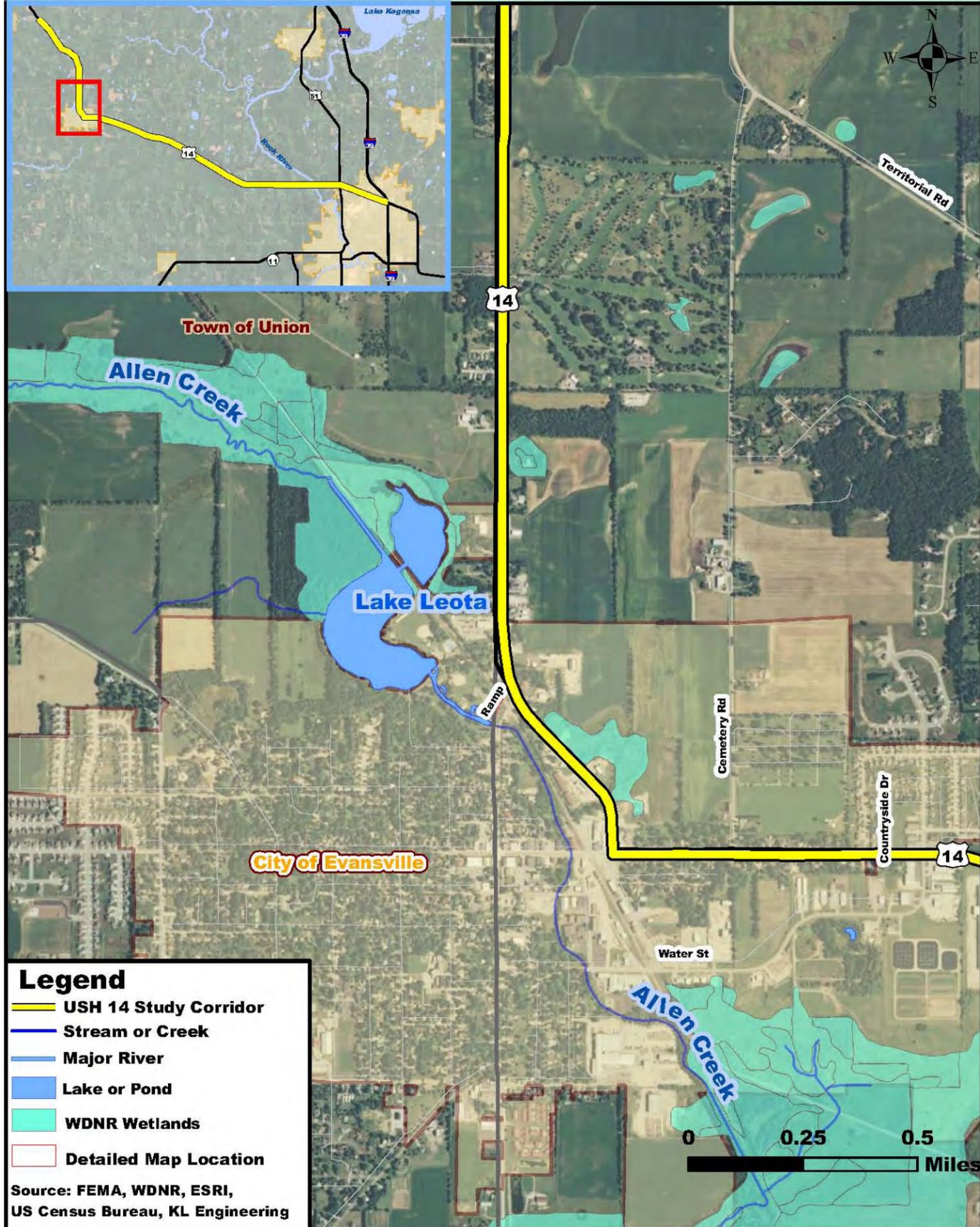


Source: WDNR, ESRI,  
 US Census Bureau, KL Engineering



# USH 14: Allen Creek Wetlands

WisDOT I.D. 5155-04-09  
 STH 92 to Janesville (I39/90)  
 USH 14  
 Rock and Dane Counties



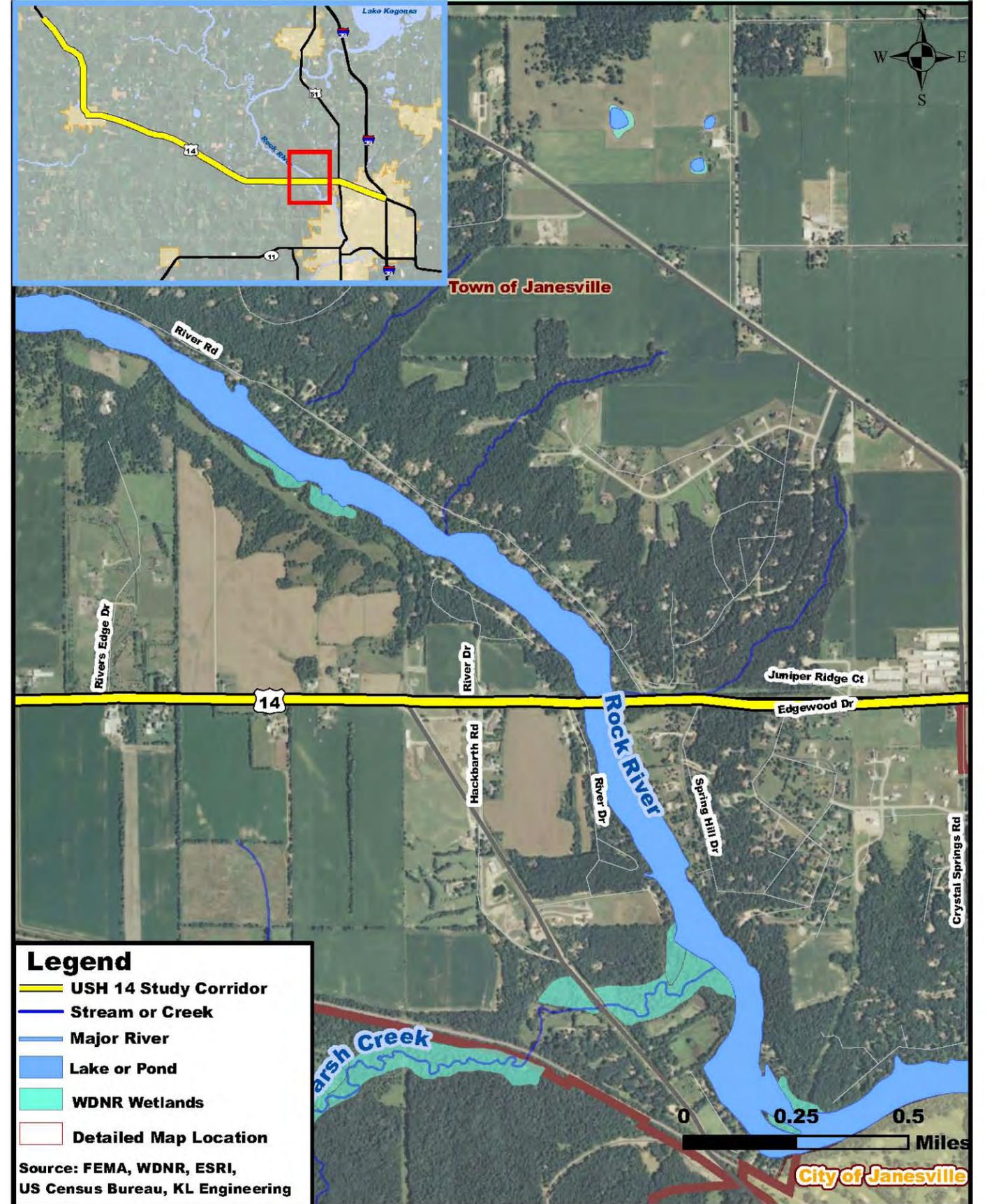
**Legend**

- USH 14 Study Corridor
- Stream or Creek
- Major River
- Lake or Pond
- WDNR Wetlands
- Detailed Map Location

Source: FEMA, WDNR, ESRI, US Census Bureau, KL Engineering

# USH 14: Rock River Wetlands

WisDOT I.D. 5155-04-09  
 STH 92 to Janesville (I39/90)  
 USH 14  
 Rock and Dane Counties



**Legend**

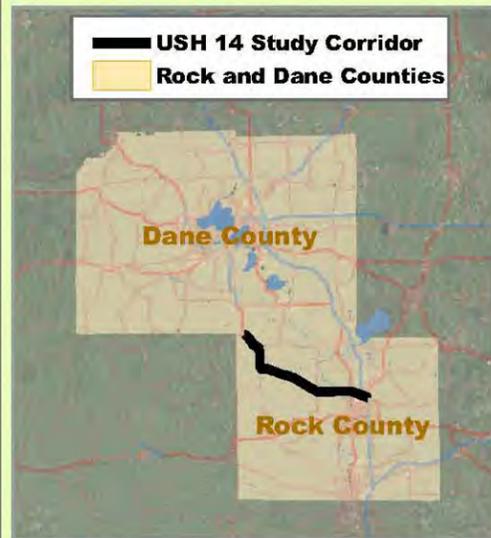
- USH 14 Study Corridor
- Stream or Creek
- Major River
- Lake or Pond
- WDNR Wetlands
- Detailed Map Location

Source: FEMA, WDNR, ESRI, US Census Bureau, KL Engineering

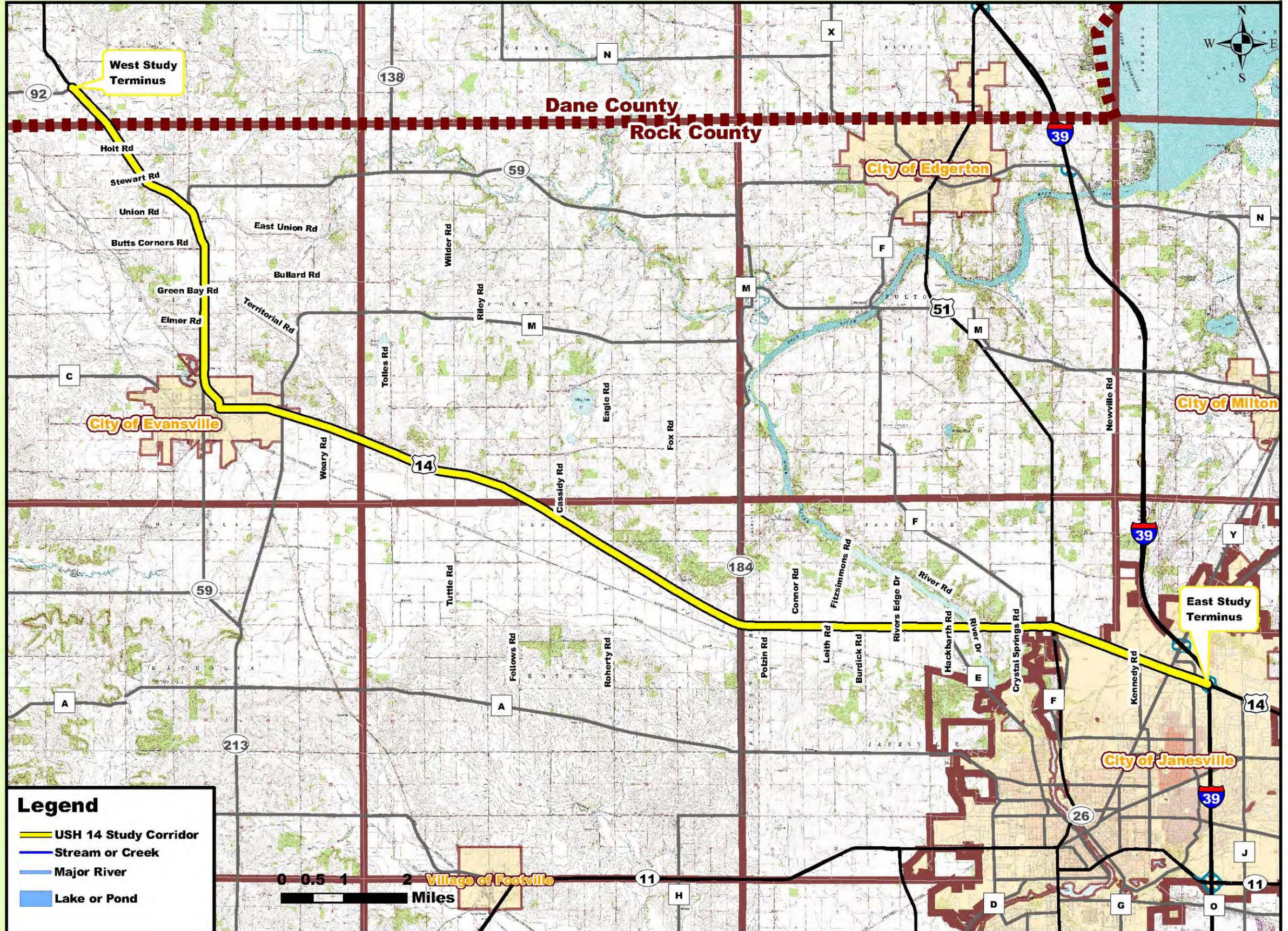


# USH 14 Topography

WisDOT I.D. 5155-04-09  
 STH 92 to Janesville (I39/90)  
 USH 14  
 Rock and Dane Counties

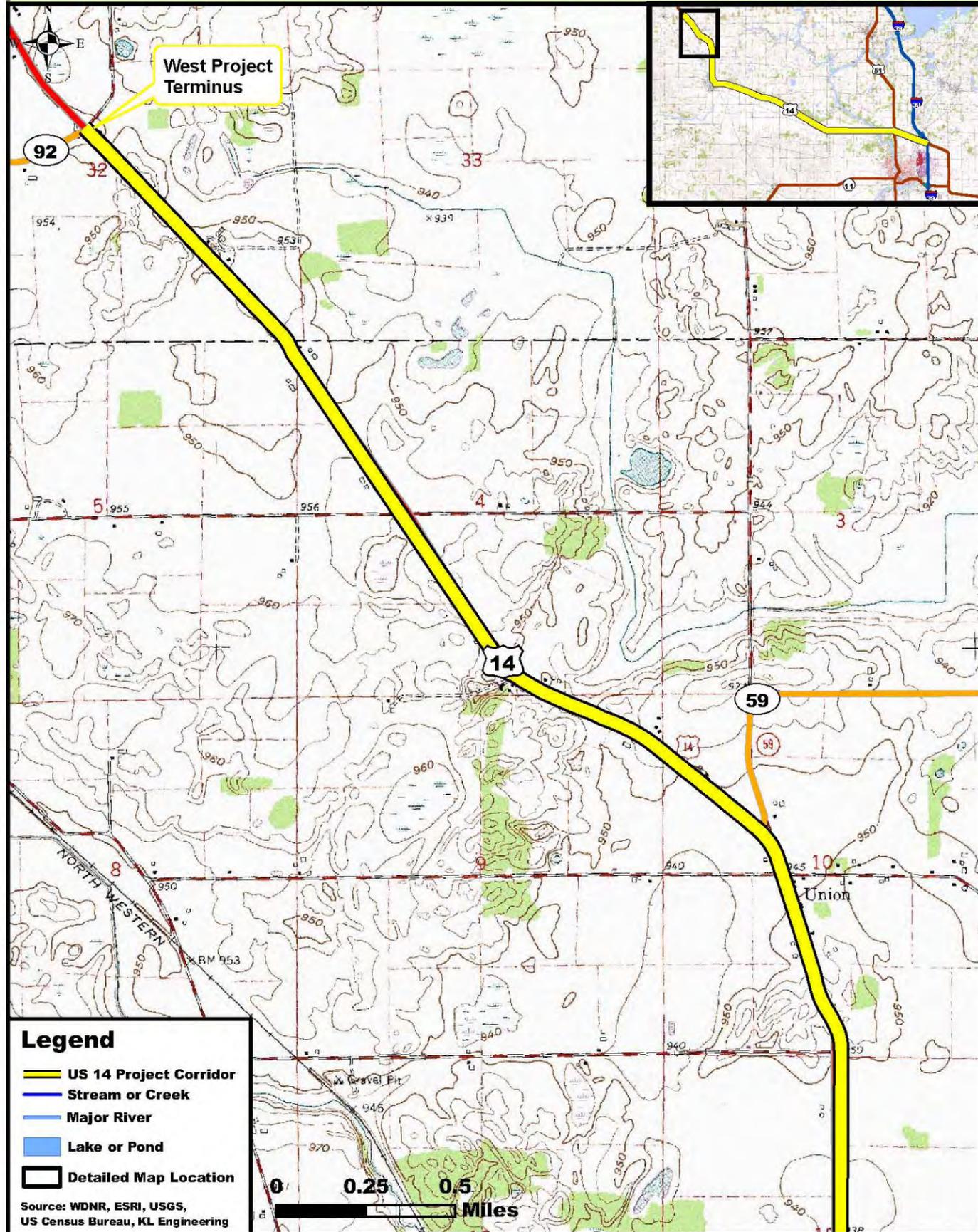


Source: WDNr, ESRI, USGS,  
 US Census Bureau, KL Engineering



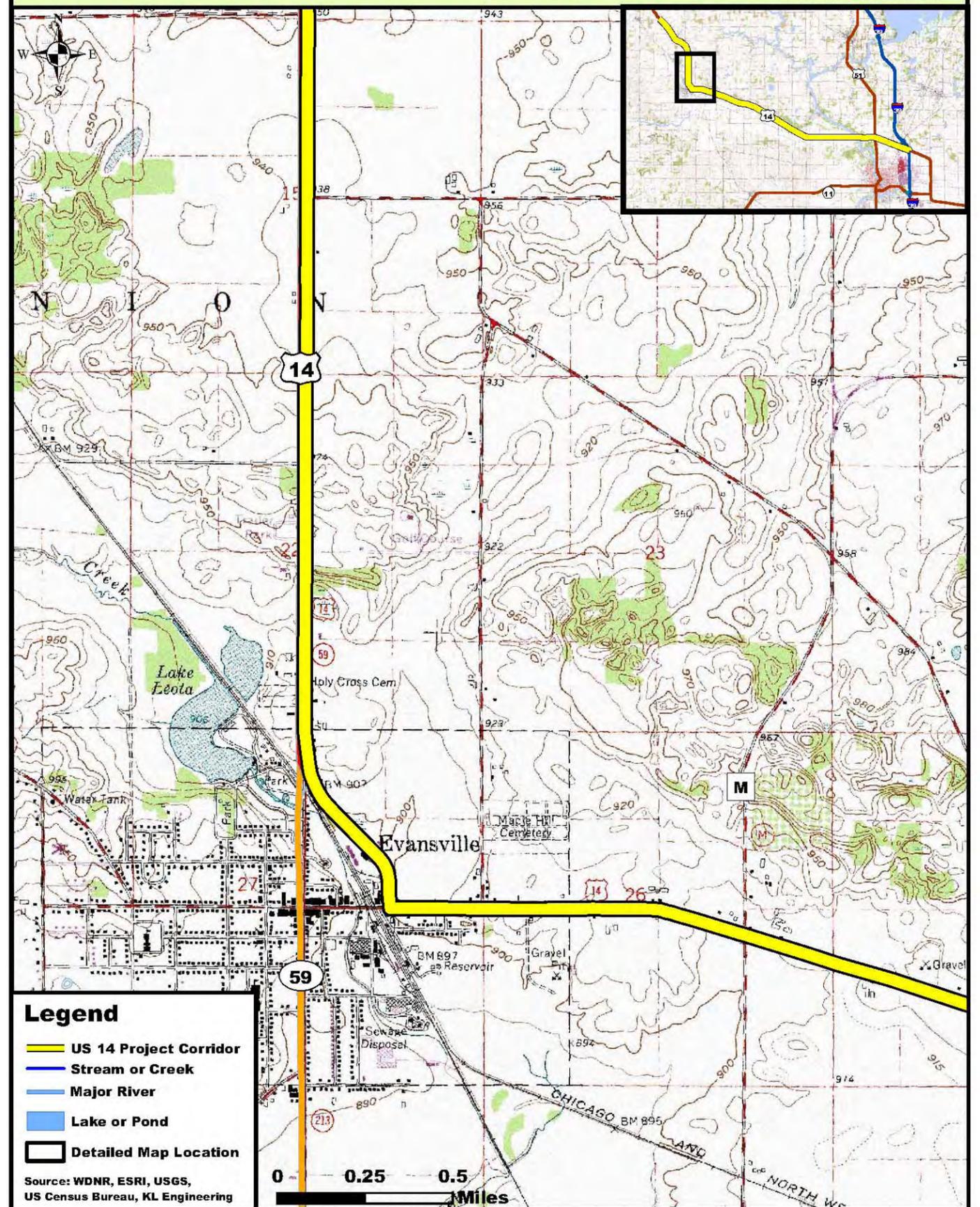
# US 14 Detailed Topography

Project I.D. 5155-04-09  
 STH 92 to Janesville (I39/90)  
 USH 14  
 Rock and Dane Counties



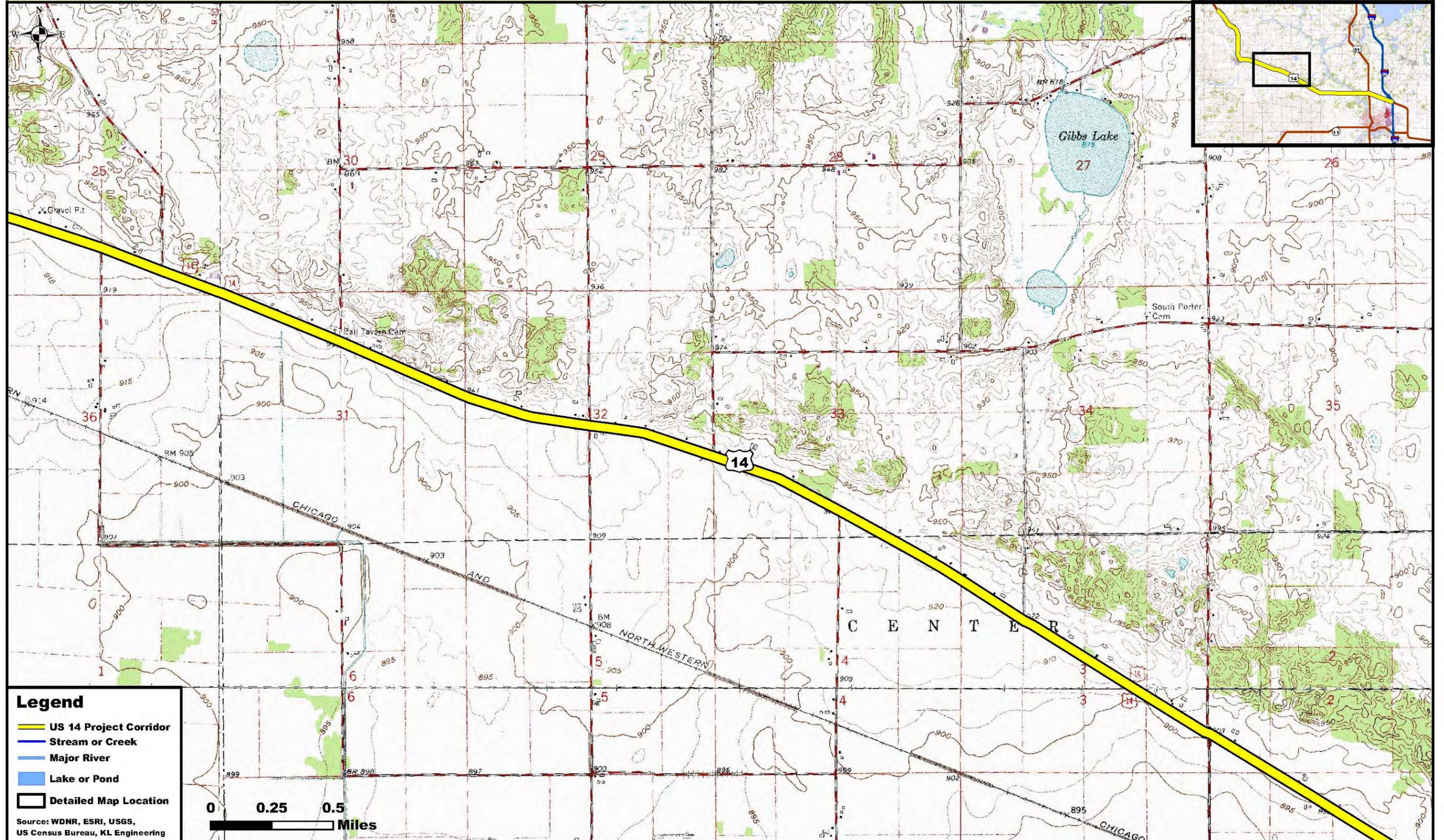
# US 14 Detailed Topography

Project I.D. 5155-04-09  
 STH 92 to Janesville (I39/90)  
 USH 14  
 Rock and Dane Counties



# US 14 Detailed Topography

Project I.D. 5155-04-09  
STH 92 to Janesville (139/90)  
USH 14  
Rock and Dane Counties



**Legend**

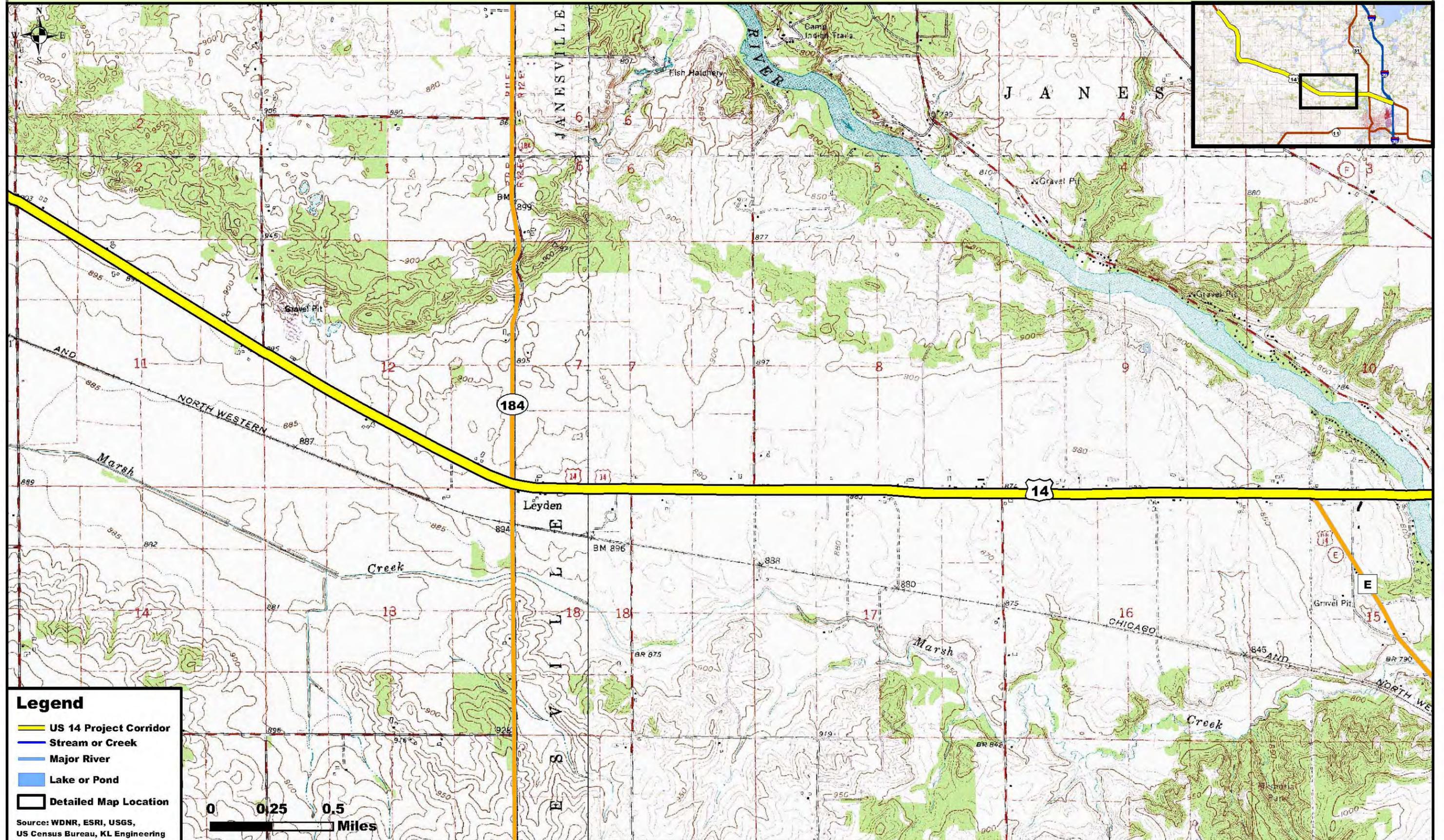
- US 14 Project Corridor
- Stream or Creek
- Major River
- Lake or Pond
- Detailed Map Location

Source: WDNR, ESRI, USGS,  
US Census Bureau, KL Engineering

0 0.25 0.5 Miles

# US 14 Detailed Topography

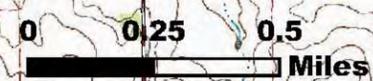
Project I.D. 5155-04-09  
STH 92 to Janesville (139/90)  
USH 14  
Rock and Dane Counties



**Legend**

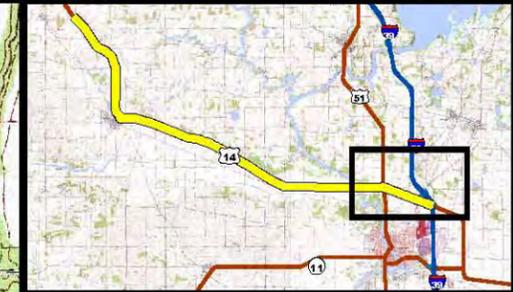
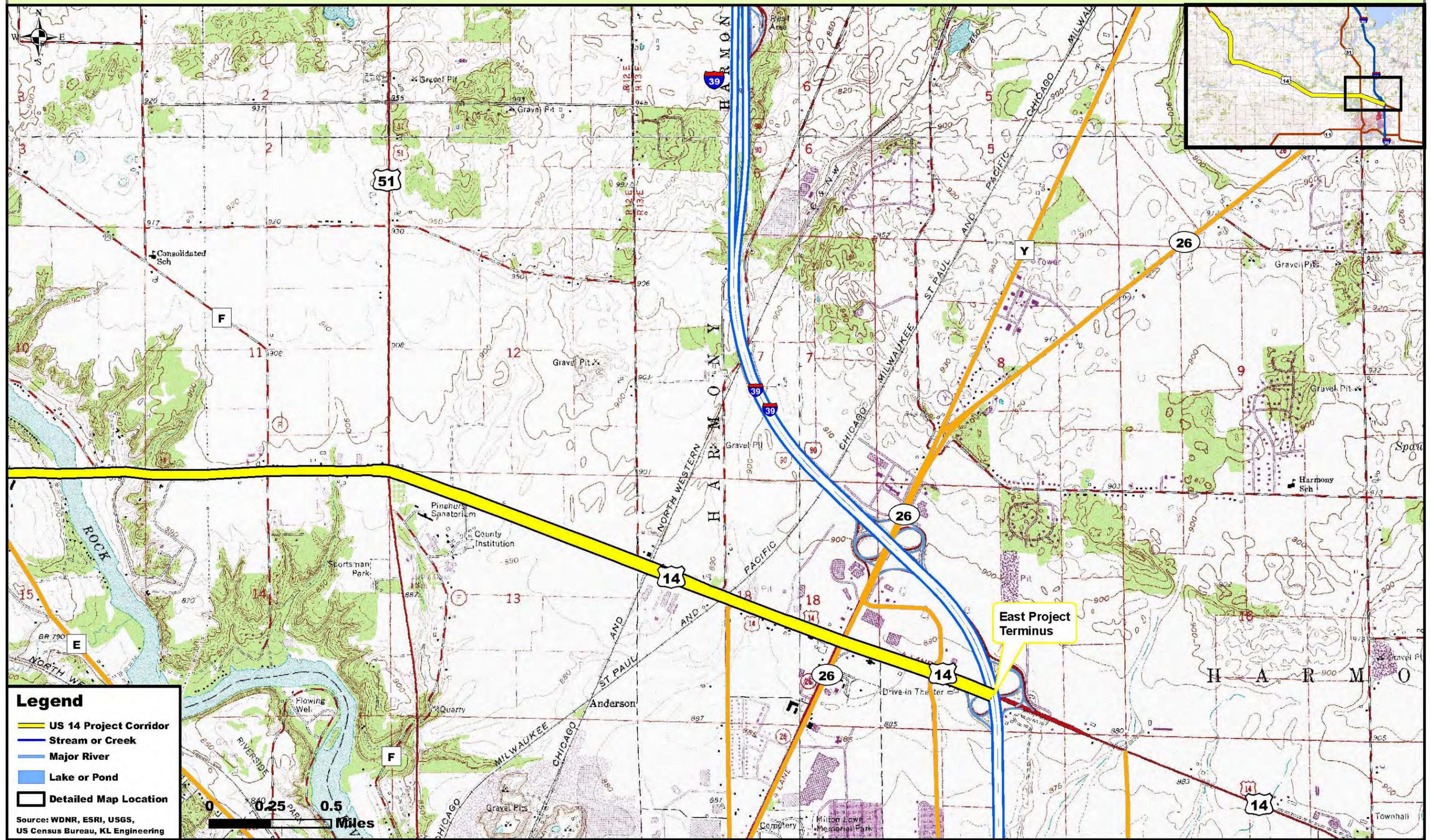
- US 14 Project Corridor
- Stream or Creek
- Major River
- Lake or Pond
- Detailed Map Location

Source: WDNR, ESRI, USGS,  
US Census Bureau, KL Engineering



# US 14 Detailed Topography

Project I.D. 5155-04-09  
STH 92 to Janesville (139/90)  
USH 14  
Rock and Dane Counties



**Legend**

- US 14 Project Corridor
- Stream or Creek
- Major River
- Lake or Pond
- Detailed Map Location

Source: WDNR, ESRI, USGS,  
US Census Bureau, KL Engineering

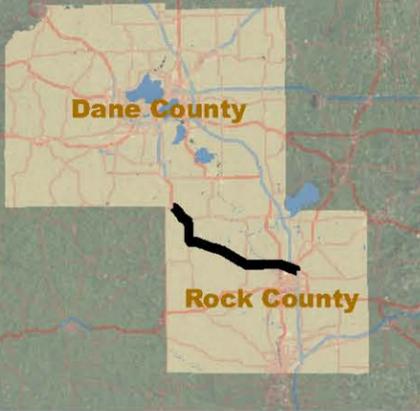
# USH 14 Natural Resources

WisDOT I.D. 5155-04-09  
 STH 92 to Janesville (I39/90)  
 USH 14  
 Rock and Dane Counties

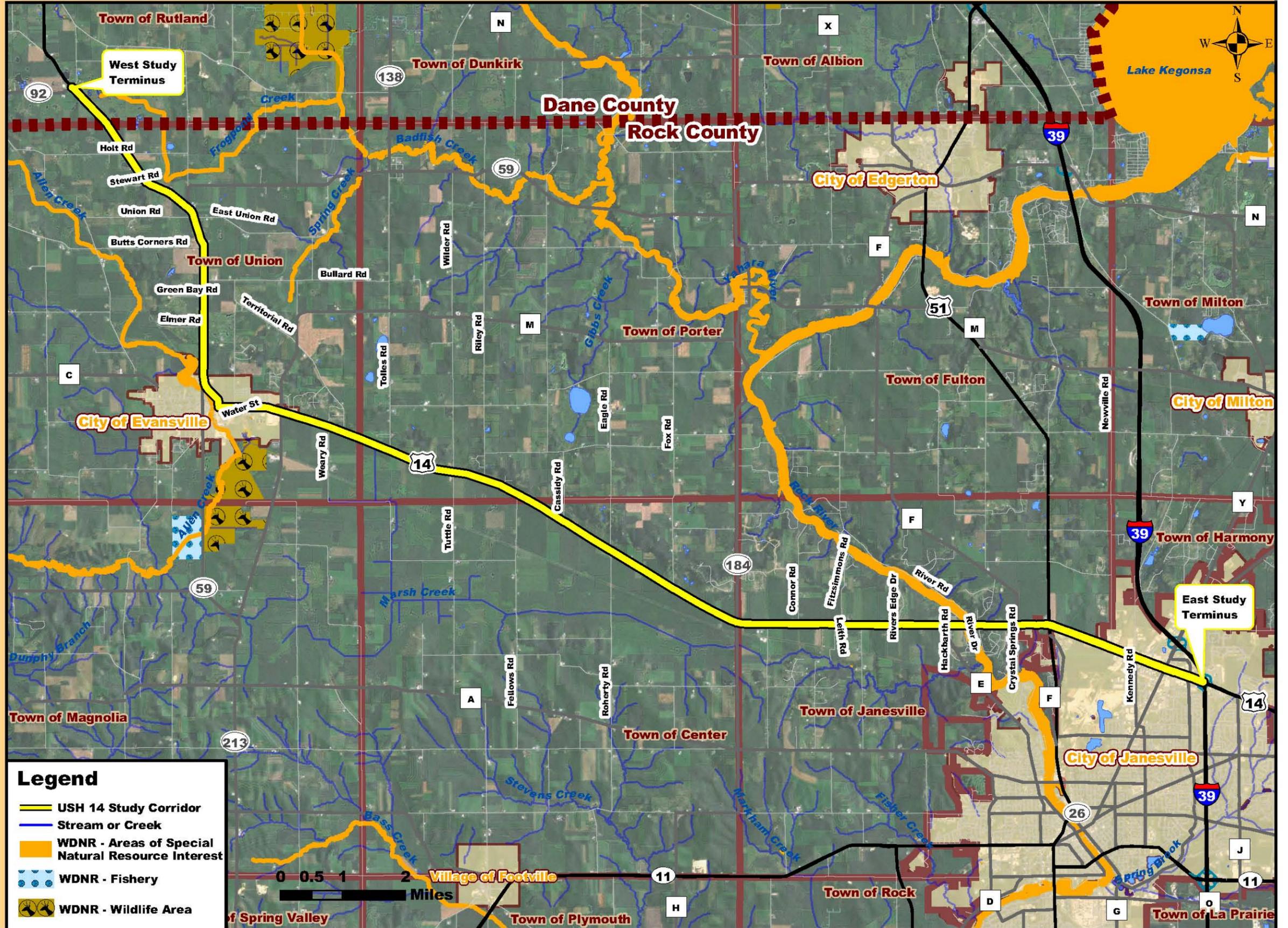
— USH 14 Study Corridor  
 Rock and Dane Counties



— USH 14 Study Corridor  
 Rock and Dane Counties



Source: WDNR, ESRI,  
 US Census Bureau, KL Engineering



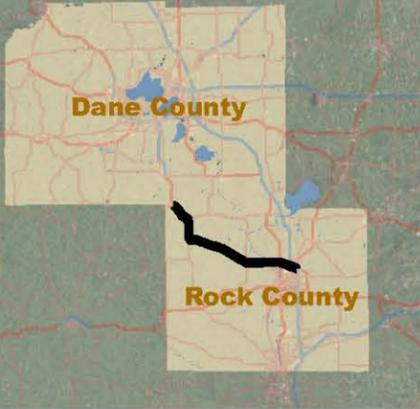
# USH 14 Potential Hazardous Material Sites

WisDOT I.D. 5155-04-09  
 STH 92 to Janesville (I39/90)  
 USH 14  
 Rock and Dane Counties

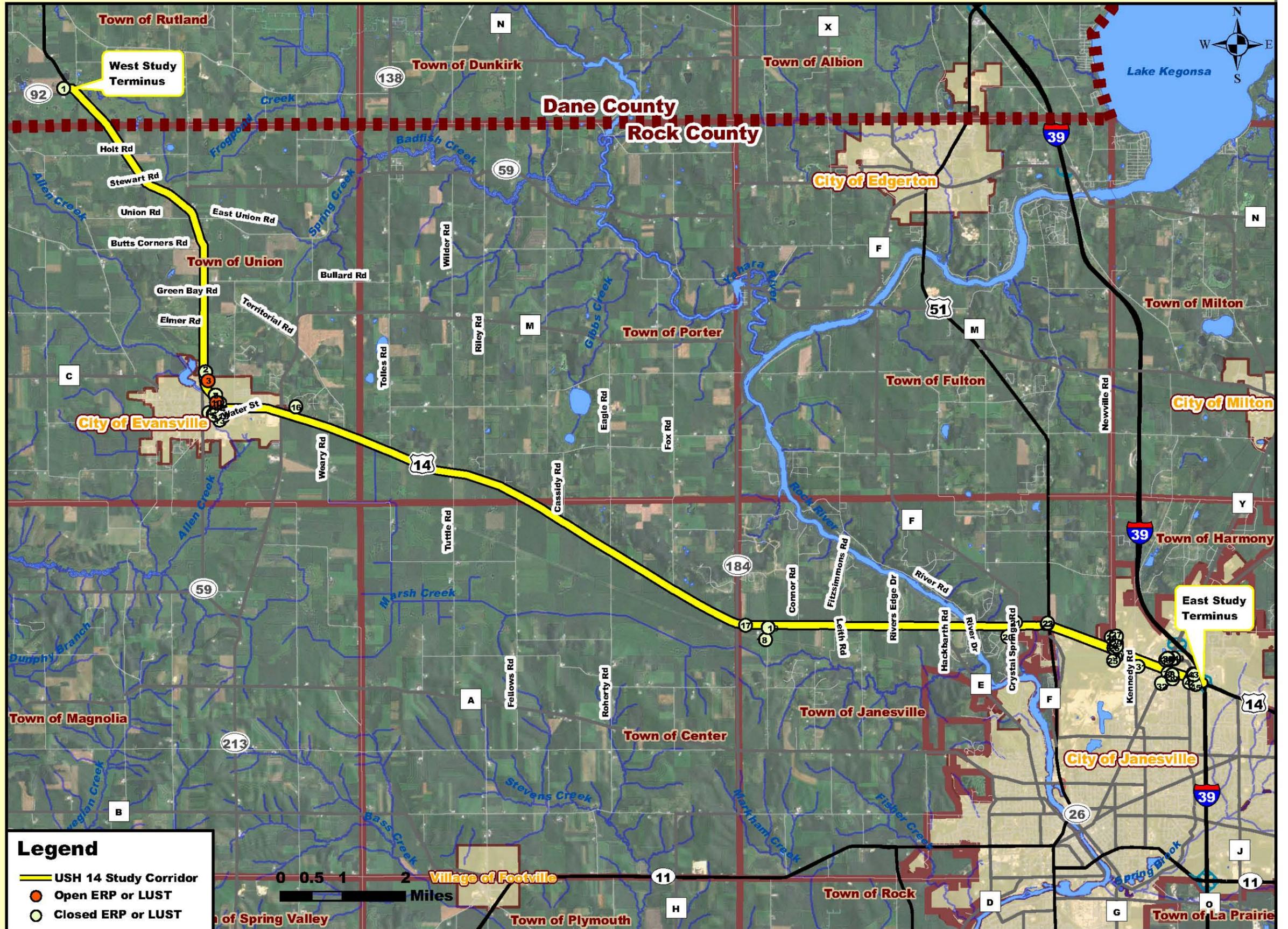
— USH 14 Study Corridor  
 Rock and Dane Counties



— USH 14 Study Corridor  
 Rock and Dane Counties



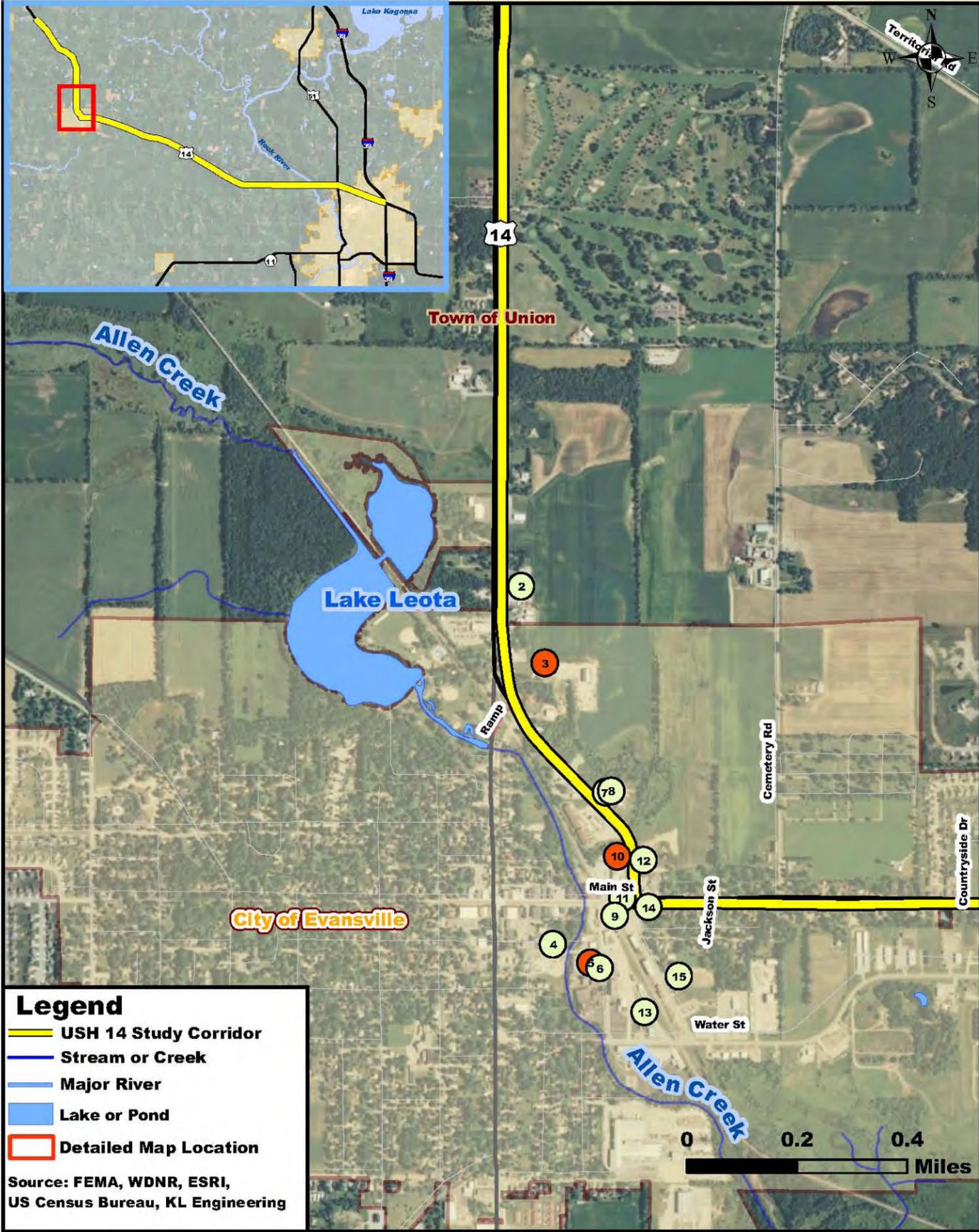
Source: WDNr, ESRI,  
 US Census Bureau, KL Engineering



**Legend**  
 — USH 14 Study Corridor  
 ● Open ERP or LUST  
 ○ Closed ERP or LUST

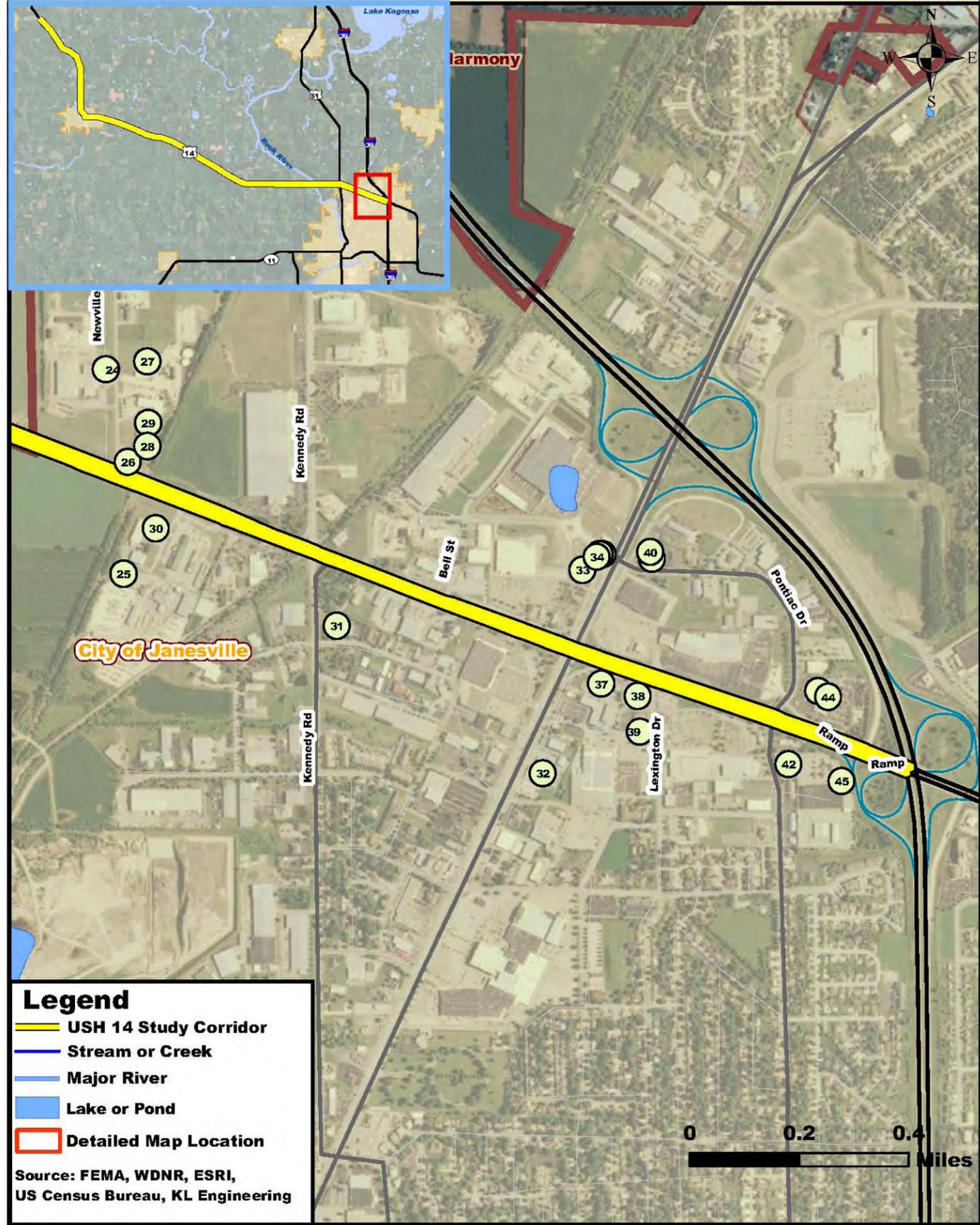
# Detailed Hazardous Materials Sites

WisDOT I.D. 5155-04-09  
 STH 92 to Janesville (I39/90)  
 USH 14  
 Rock and Dane Counties



# Detailed Hazardous Materials Sites

WisDOT I.D. 5155-04-09  
 STH 92 to Janesville (I39/90)  
 USH 14  
 Rock and Dane Counties



# **Appendix F**

## **Local Official Meeting Minutes**



## **Meeting with the City of Evansville and Town of Union**

**ATTENDEES:** Dan Wietecha, City of Evansville  
Sandy Decker, City of Evansville  
Dave Wartenweiler, City of Evansville  
Kendall Schneider, Town of Union  
Don Krajeck, Town of Union  
John Stockham, Stockham Consulting  
David Sauer, Foth Infrastructure & Environment  
Mark Westerveld, WisDOT  
Franco Marcos, WisDOT  
Ryan Murphy, OTIE

**MEETING DATE:** March 10, 2010

**LOCATION:** Evansville City Hall

**RE:** Project ID 5155-04-09 (Phase 1)  
USH 14  
STH 92 – Janesville (I-39/90)  
Dane and Rock Counties

### **PURPOSE OF MEETING:**

1. To introduce the project to the City of Evansville and Town of Union and to receive feedback on the City and Town's concerns.
2. To explain the project purpose and discuss the project steps and schedule.

### **SUMMARY OF ITEMS DISCUSSED:**

1. Dan Wietecha explained that Evansville requested the meeting because they are concerned that their views will not be fully incorporated in the study if they are not involved early in the process. Some of the issues the City is concerned with are truck traffic through Evansville, and a potential USH 14 bypass of Evansville.
2. The city recently completed a large TIA on the east end of Evansville that can be made available to the study team.
3. Mark Westerveld provided an overview of the study. He said that the purpose of the study is to preserve the corridor as it is; it is primarily a safety and access type study. The study

will have two phases. The first phase will involve data gathering and will result in an existing conditions report. The second phase will result in a corridor management plan, which makes recommendations for improvements to the corridor.

4. Franco Marcos said that the study would take a regional perspective, and would need to be compatible with both WisDOT long range plans and local land use plans.
5. Kendall Schneider said the Town of Union completed a comprehensive plan about a year and a half ago, and that the Town would like to plan for any future improvements to the corridor. He also asked if the study included looking at rail facilities. Mark Westerveld said the study would include all transportation modes.
6. John Stockham asked if the study would look at a bypass of Evansville. Mark Westerveld said the focus of the study was on preserving the existing corridor through access management and spot improvements.
7. There was a question as to whether different intersection types, including roundabouts, would be looked at for the corridor. Mark Westerveld said that yes, different intersection types would be considered in areas where improvements are needed.
8. Franco Marcos pointed out that USH 14 is a connector route in the WisDOT Connections 2030 plan. Sandy Decker asked for an explanation of the plan and what a connector route is. Franco Marcos said that the Connections 2030 plan was WisDOT's long range plan. Connector routes are two and four-lane facilities that connect important economic and population centers.
9. The City of Evansville is revisiting their comprehensive plan, and should have a new version complete by the end of the summer.
10. The upcoming project schedule includes a local officials meeting in early summer, once data gathering is complete, followed by a public information meeting. The existing conditions report is expected to be complete in the fall.



## **US 14 Study, Local Officials Meeting #1 - Minutes**

**ATTENDEES:** See Attendance Record

**MEETING DATE:** June 29, 2010

**LOCATION:** Evansville Fire District, Training Room

**RE:** Project ID 5155-04-09 (Phase 1)  
US 14  
WIS 92 – Janesville (I-39/90)  
Dane and Rock Counties

### **PURPOSE OF MEETING:**

1. To introduce and review the collected data, including traffic projections, environmental mapping, access control and land use.
2. To get input from local officials regarding concerns with the roadway.

### **SUMMARY OF ITEMS DISCUSSED:**

1. Mark Westerveld (WisDOT) welcomed everyone to the meeting and introduced WisDOT and consultant staff in attendance.
2. Darin Blang (OTIE) discussed the purpose of the meeting and gave an overview of the project limits and study process.
3. Don Lee (Traffic Analysis and Design) discussed the traffic volumes on the corridor. He said that since the corridor is a Connections 2030 connector route, the threshold for considering 4-lanes is 8,700 vehicles per day. This doesn't mean the roadway has to be expanded to 4-lanes when volumes reach this threshold, just that a 4-lane facility should be considered.
4. Don Lee summarized the crash data for each section of the corridor and provided some statistics for the crashes on each section.
5. It was pointed out that there have been several fatalities at US 14/Bullard Road that do not seem to show up in the data. Don Lee explained that the data used was from 2004 through 2008, and if these fatalities were after that time period, they do not appear in the data.

6. There were concerns with the intersection of US 14 and J. Lindemann Drive. Eastbound through traffic uses the shoulder to pass vehicles stopped and waiting to make a left turn. It is also difficult to make a left turn onto US 14 at this location.
7. There were concerns with the intersection of US 14 and Tolles Road. It is difficult to see at this intersection due to the angle of Tolles Road as it approaches the intersection. The presence of a cemetery at this intersection would make correcting the intersection angle difficult and contributes to the sight distance issues.
8. Don Lee discussed the level of service (LOS) for the corridor. He stated that a Connections 2030 connector route should have LOS C or better. Currently most sections of the corridor have LOS C or better. However, in 2035, most sections of the corridor are projected to have LOS D or worse. He also explained that the LOS shown was for the peak hour.
9. There were questions about the LOS for intersections, specifically US 14 and WIS 92. Don Lee explained that the LOS shown was for the roadway section, and that intersection LOS was calculated separately. The intersection of US 14 and WIS 92 currently has LOS E.
10. Darin Blang discussed additional data collection that has been completed, including information on access points, land use, and natural and cultural resources.
11. Darin Blang discussed existing geometric deficiencies on the corridor. There are currently substandard vertical curves, shoulder widths, and lane cross-slopes. There was agreement that the vertical curves near Holt Road, which are sub-standard, create sight distance issues.
12. It was pointed out that it would be difficult to increase the shoulder width on the section of roadway east of Kennedy Road, due to limited space. It was also pointed out that a section of US 14 in the Janesville area is scheduled for reconstruction in 2016; there was a question if this study would be completed in time to have recommendations incorporated into this reconstruction project.
13. Darin Blang went through the project schedule. He said that the project should be completed in the next year and a half. This should be soon enough for any recommendations to be incorporated into the planned reconstruction project on US 14 in Janesville.
14. There was a discussion of the US 14/WIS 11 study which is currently being completed. This study is looking at a connection between US 14 and WIS 11 on the west side of Janesville. Darin Blang explained that this study began in 2003 and is still ongoing. There are no recommended alternatives yet, and the study probably won't be completed for 2 to

3 years. Mike Hoelker (WisDOT) pointed out that there would be coordination between the two projects since the same WisDOT and consultant staff was working on both.

15. There was a discussion of agricultural traffic on US 14. There is more cross traffic than through traffic with farm equipment on US 14. There are a significant number of trucks that use US 14.
16. Following the meeting, Dale Beske (Town of Rutland) provided information to the study team regarding a historic property on US 14 near WIS 92. This property is on the National Register of Historic Places. He also provided information regarding drainage issues in the US 14/WIS 92 area.



## **US 14 Study Local Officials Meeting #2 - Minutes**

**ATTENDEES:** See Attendance Record

**MEETING DATE:** April 2, 2014

**LOCATION:** Evansville Fire District, Training Room

**RE:** Project ID 5155-04-09 (Phase 2)  
US 14  
WIS 92 – Janesville (I-39/90)  
Dane and Rock Counties

### **PURPOSE OF MEETING:**

1. To update local officials on the study progress.
2. To introduce improvement alternatives that have been developed for the corridor.
3. To get input from local officials regarding concerns with the roadway.

### **SUMMARY OF ITEMS DISCUSSED:**

1. Mark Westerveld (WisDOT) welcomed everyone to the meeting and introduced WisDOT and consultant staff in attendance. He also discussed the handout materials, which included a draft of the alternatives and recommendations chapter from the Corridor Management Plan.
2. Ryan Murphy (OTIE) discussed the purpose of the meeting and reviewed the project limit, study process, and previously completed work. The data gathering and Existing Conditions Report were completed several years ago.
3. Ryan Murphy discussed the improvement alternatives that have been developed for the corridor. Improvements include access improvements, pavement improvements, geometric and capacity improvements, safety improvements, and miscellaneous improvements.
4. After discussing improvement alternatives, there was a brief discussion on next steps in the study. There will be a PIM at the end of April. Following that meeting, the Corridor Management Plan will be finalized and posted to the project website. There is no schedule for construction of any improvements. WisDOT will continue to monitor the corridor and program improvements as warranted, based on availability of funding.

5. Following the formal presentation, there was a question and answer session.

Q: Is it possible to install lighting at any of the intersections?

A: WisDOT generally only installs lighting at signalized intersections, roundabouts, or interchanges. The Town of Union has three intersections with lighting, but that was paid for by the Town.

Q: Why aren't there advance signs for the side roads like there are on WIS 11?

A: WisDOT would have to look into why these signs were not added to US 14.

Q: Is WisDOT planning on closing or combining the driveways per the recommendations?

A: WisDOT would evaluate these driveways and make changes as part of future projects. There would not be a standalone project to move, close, or combine driveways.

Q: What about issues with trucks and elderly drivers in roundabouts?

A: WisDOT is learning from successes and failures on past projects, and working to make roundabouts easier for trucks to navigate. WisDOT's communications group is also increasing efforts to educate the public on how to drive a roundabout.

Q: What is the timing of improvements?

A: There is currently no funding to do corridor wide reconstruction and improvements. WisDOT will continue to monitor the corridor and program improvements as warranted, and as funding is available.

Q: Since there isn't funding for improvements at this time, would this study need to be redone in the future?

A: If any major improvements were programmed, and formal environmental document would need to be completed.

Q: Can speeds be lowered in certain locations?

A: WisDOT would need to do a speed study, which would likely conclude that 55 mph is appropriate, since that is how fast traffic moves now. Introducing lower speed limits in certain areas could also lead to safety concerns due to increased speed differentials between vehicles.

6. General comments from the local officials in attendance included:

- There should be no passing through the J. Lindemann Drive intersection.
- Tolles Road has issues. It intersects US 14 at a bad angle; there is also a cemetery at this corner.
- There is heavy traffic on Bullard Road, Tolles Road, and Territorial Road; vehicles use Bullard Road and Territorial Road to bypass Evansville.
- Vehicles are going too fast through the curves south of Union.
- Cars don't stop at the stop sign on Bullard Road.
- It would be helpful to have more speed limit signs along the corridor.

# **Appendix G**

## **Public Information Meeting Minutes and Comments**



**Minutes**  
**Public Information Meeting #1**  
**October 27, 2010**  
**Evansville High School – Evansville**

**ATTENDEES:**

See attached attendance sheet. Project team included representatives from WisDOT Southwest Region, Oneida Total Integrated Enterprises (OTIE), KL Engineering, Vandewalle & Associates, and Traffic Analysis and Design.

**PURPOSE OF MEETING:**

- To introduce the public to the study and explain the purpose and schedule for the corridor study.
- To gather information from the public regarding issues and concerns with the existing roadway.

**MEETING SUMMARY:**

- The meeting began with an open house format, running from 4:00 to 5:30 pm, during which time residents could view exhibits showing the corridor study limits and the traffic and crash data for the corridor.
- Following the open house period, Darin Blang, OTIE Project Manager, gave a brief presentation reviewing the study area, the purpose of the study, the study phases, and the results of the data gathering. He stressed that the purpose of the corridor study was to develop ways to maintain the existing roadway as long as possible. This study is not looking at expanding US 14 to 4-lanes or constructing a bypass of Evansville.
- Don Lee, Traffic Analysis and Design, discussed the traffic counts and projections, and the crash data for the corridor.
- After the presentation, there was a brief question and answer period, which is summarized below:

**Q:** Is farmland considered in the natural and cultural resources?

**A:** Yes, farmland impacts will be evaluated once specific improvement strategies are developed.



**Q:** Can people be better informed about meetings; many did not receive letter.

**A:** A mailing list was developed for properties adjacent to the roadway. There is a need to keep the mailing list at a manageable number. Anyone on the sign in sheets from tonight's meeting will be added to the mailing list. There will also be news releases for upcoming meetings.

**Q:** What would the next steps be after recommendations are made?

**A:** After the recommendations are formally documented in the Corridor Management Plan, it would depend on DOT funding. Recommended alternatives could also be implemented with future resurfacing projects.

- Mark Westerveld, WisDOT project manager, said that a website would be developed for the project, which would eventually have all of the meeting materials.
- After the presentation, the meeting returned to an open house format until about 7:00 pm. The project team recorded comments heard during the informal, open house sessions.
  - Many in attendance were opposed to any expansion of the roadway to 4-lanes and to a bypass of Evansville; there were also a few people in favor of expanding the roadway.
  - Several individuals mentioned that local traffic uses Territorial Road as an unofficial "bypass" of Evansville.
  - Several in attendance said there were safety concerns with some of the curves and intersections on the north end of the study corridor. Of particular concern were Butts Corners Road, Union Road, and Elmer Road.
  - Some questioned if a signal was needed at the 4-way stop in Evansville.
  - There seemed to be some consensus that during morning and evening peak periods, traffic is very heavy on US 14, and it is difficult to get on the road from side roads and driveways. During other hours, traffic is still steady and it can still be difficult to pull out onto the roadway.
  - Concerns were expressed with the snow removal on US 14; it was felt that it was not done very well.
  - There were concerns with the County M intersection.
  - Several people asked if US 14 would be a detour route when I-39/90 is constructed to 6-lanes; there were also questions about how a 6-lane interstate would affect traffic volumes on US 14.



**US 14 Corridor Study**  
**Between WIS 92 and I-39/90**  
Dane and Rock Counties  
Project Id. 5155-04-09

- There were concerns with the driveways to the gas station at the 4-way stop in Evansville. The location of the driveways causes confusion and there are a lot of near misses.
- An individual thought the speeds are too high north of Evansville, and that WisDOT should do a speed study; they mentioned that there was lax enforcement in this area. They also expressed concerns that increased noise levels from traffic were reducing property values.
- Several people complained about the speed of vehicles coming down to the bridge at the Rock River; they also mentioned problems with vehicles using the public boat landing on N. River Road.
- An individual suggested adding more bypass lanes at intersections and driveways.
- An individual mentioned a problem with one of the curves near the bar south of Union; some drivers misjudge the curve and leave the roadway.
- There was concern with farm equipment using the roadway; it currently blocks and slows traffic. The shoulders should be wider to accommodate the farm equipment. In addition, the bridge across the Rock River is too narrow for farm equipment; some of the larger equipment uses both lanes and blocks traffic in both directions.





# Comment Sheet

Turn in today or mail to: Darin Blang, Oneida Total Integrated Enterprises, 2801 Crossroads Drive, Suite 1600, Madison, WI 53718. Please return by **Friday, November 19, 2010.**

Name: Susan Woulfe

Mailing Address: 255 E. Main St.

Phone Number: 608-382-6481

We need a turning lane by Butts corner

People (cars) cannot safely get on Hwy #14 during high volume especially the intersection of Union Road, Hwy 59 section

during high volume, residents cannot get on 14 from their driveway between Citzo Gas station area out to City St intersection

Also, especially with the intersection of Exchange + Main, with the gas station traffic there are many near misses trying to get onto 14 from the driveways, during high traffic times.

**Thank you for participating**



# Comment Sheet

Turn in today or mail to: Darin Blang, Oneida Total Integrated Enterprises, 2801 Crossroads Drive, Suite 1600, Madison, WI 53718. Please return by **Friday, November 19, 2010.**

Name: James Turner

Mailing Address: 233 W Church - Evansville

Phone Number: (property owned - 332 E Main)

1. though there is a passing lane just before Union - it's too fast at that location perhaps the speed limit needs to be decreased
2. Curve design Bates corner 9 14
3. Curve design by the "murray" past Green Union
4. Improve snow plowing on Rock Ct. Section 14 Evansville - Dane Ct!

**Thank you for participating**



# Comment Sheet

Turn in today or mail to: Darin Blang, Oneida Total Integrated Enterprises, 2801 Crossroads Drive, Suite 1600, Madison, WI 53718. Please return by **Friday, November 19, 2010.**

Name: Vukle Aneson

Mailing Address: 277 Garfield Ave

Phone Number: Evansville WI 53536 608 212144

lots of near misses that don't get reported. Site lines awful you think you can pass @ tail end of passing zone but others speed affect clearance.

Plus skid marks @ every turn/hwy <sup>means</sup> near end <sub>accidents</sub>  
\* 4 lanes cost more but is destined for this Highway

Also Rock Co between Evansville & Dane has the worst maintenance in winter. 2 yrs ago icy cruts for months. Clear demarcation between Rock + Dane Co. this needs to be addressed!

92- Oregon really bad for traffic + passing also

**Thank you for participating**

**From:** Chris and Anne [mailto:5pmsomewhere@LiteWire.net]  
**Sent:** Monday, November 01, 2010 7:39 PM  
**To:** mark.westerveld@dot.wi.gov; Darin Blang  
**Subject:** US 14 Corridor Study

November 1, 2010

Dear Mr. Westerveld and Mr. Blang:

We would like to begin by thanking you for your presentation on Wednesday, October 27, 2010 in Evansville regarding Highway 14 from Highway 92 to I 39/90. We found it to be very informative. We were also glad we had the opportunity to talk with different people related to the project.

Since part of our property is on Highway 14 between Polzin and Leith Road, we drive Hwy 14 daily and have seen what we think are some needed improvements. These include:

- At Highway F and 14 there needs to be a right turn lane in the westbound lane as well as a left turn lane. Along with these, there should be a left turn lane onto F in the eastbound lane.
- The pavement on the hill between Hwy F and the Rock River bridge needs to be resurfaced due to ruts and bumps. These cause vehicles to skid when breaking causing accidents. There are 2 eastbound lanes due to the steepness of the hill, and we feel adding a bypass lane or a left turn lane in the westbound lane will help the flow of traffic around those who are turning left in middle of the hill into their subdivision.
- At the intersection of Hackbarth and Highway 14 there needs to be something put in the westbound lane to keep the flow of traffic on Hwy 14 moving around those who turn left onto Hackbarth. Our suggestions include either a left turn lane or a bypass lane traffic so traffic has room on the right to go around cars turning left. This concept has been implemented at the intersection of Leith Road and Highway 14 successfully.
- We feel this same thing need to be addressed at the intersection of Burdick Road and Highway 14. Putting in a left turn lane or a bypass lane for westbound traffic to go around cars turning onto Burdick will keep traffic moving.
- We're not sure what to do about the stretch between Evansville and Highway 92, but this is a very dangerous stretch. Accident reports give numbers of accidents, but there is no way to count the number of near misses in this stretch. Something needs to be done here. Part of the issue is farm implements frequently traveling on the highway and cars trying to pass. It is a winding stretch.
- Is there a possibility of the intersecting roads to have a speed limit of 55mph? Recently many of these roads have had a speed limit decrease to 45

mph. This encourages drivers to stay on Hwy 14, thus increasing the amount of traffic on the highway instead of traffic taking an alternate route that would include these roads.

We have seen many farm implements using the highway and one of the above suggestions gives them the opportunity to move to the right for cars to pass.

We are also concerned as Highway 14 will become very busy when the expansion project of I 39/90 takes place. We can tell whenever there is an issue on the interstate as we can see when traffic increases due to accidents on the interstate, and a decrease when the interstate is cleared.

Thank you for the opportunity to add input into this process. We look forward to attending the meeting in the future where the committee's recommendations will be shared.

If you have any questions, please feel free to call.

Sincerely,

Chris Raymond  
608-289-0466

Anne Raymond  
608-289-8756

3907 N Harvest View Drive  
Janesville, WI 53548  
[5pmsomewhere@litewire.net](mailto:5pmsomewhere@litewire.net)

**US 14 Corridor Study  
Between WIS 92 and I-39/90**

Dane and Rock Counties  
Project Id. 5155-04-09

**Comment Sheet**

**Leslie Hutchins and Tom Becker**

10209 N US Hwy 14  
Evansville, Wi 53536  
608-333-2513

We live in Section One of the study area, and our comments are for that area of Hwy 14.

We've lived at our present home for almost 8 years. Our driveway connects to Hwy 14 in the town of Union, on the west side of the highway. We have easy sight lines to access to Hwy 14 from our driveway; the only restrictions have been traffic flow rate and when our neighbor to the south piled snow too high on the side of his driveway. We've found that others use our driveway to turn around, from both directions, though from the north more than from the south. We wonder if it's because they want to either find Blue Sky Berry Farm whose sign is small and obscured by weeds, or to visit the Union Tavern on the corner of Union and East Union Road. We have had some issues turning into our driveway from the south, as others can't see us stopped to turn, if we have to wait for oncoming traffic. Turning into our driveway from the north is easier; though some people see it as an opportunity to pass, when there is a no passing zone, and potential unseen oncoming traffic from the south coming around the curve make this a hazard.

Traffic flow passing our home is almost continuous at some times of the day. The heaviest times are 6 am to 8:30 am, and 4 pm to 6 pm, Monday thru Friday. Traffic can be heavier if there is an accident or construction on the Interstate; Hwy 14 seems to be a great bypass route. The volume of traffic in general has increased since we moved here in 2003. Most people seem to want to use Hwy 14 as an interstate, to travel at higher speeds in excess of 65 mph. If a vehicle travels slower than that, then there can be a line of vehicles that can trail for miles. Because there are few places to pass safely, drivers become very impatient, and will pass in no passing zones. Impatient drivers also tailgate. This section of road is lightly patrolled from our observation. Traveling farm equipment fall into the category of slower traffic, and is higher during the spring planting and fall harvest cycles.

Our daughter would travel during the higher traffic times and would often come home upset about the aggressive driving behaviors she frequently experienced on a daily basis. If she visits now, she avoids Hwy 14. We have also experienced aggressive and dangerous driving on Hwy 14. Turn lanes, and longer, passing areas would help those who want to drive faster, and take the pressure off those who want to drive the speed limit.

Accidents seem to be a daily occurrence on Hwy 14. Of those accidents, a good number seem to be fatalities. There are several "bad" spots in Section One. The Butts Corners Road and Hwy 14 intersection is difficult, with vision from the north obscured by the curve. This curve has caused many accidents. It is unexpected from both directions. We frequently hear trucks engine breaking when entering this section of highway. The intersection at Union Road and Hwy 14 has difficult sight from the north, and even though the speed is 45 mph, it is not observed, so makes it impossible to pull out or cross from that intersection.

Thank you for asking for our input and for keeping us informed of the project and its progress.

November 11, 2010

Oneida Total Integrated Enterprises  
2801 Crossroads Drive  
Suite 1600  
Madison, Wi.

Dear Sirs:

Don't know if I can be of any help to you. I missed your October 27<sup>th</sup> but after reading about it in this weeks Evansville Review, I decided to write you about the proposed by-pass project.

I was Evansville's Mayor from 1975 to 1983. During that period of time, I, my council and Planning Commission discussed a by-pass project. I contacted the Rock County Planning Commission. Working with personnel, we developed a by-pass corridor plan.

The proposed corridor would start at Bullard road off hwy 14 north and continue east to Territorial road, then east on Territorial road to hwy 14 east.

There was quite a bit of (R.O.W.) work done and many residents along that corridor was contacted by the Rock county Planner, however to my knowledge, nothing came to fruition after I left office.

The reason I am contacting you, is perhaps Rock County Planning Department may still have the information regarding this corridor and you might want to contact them.

Just thought I would share this information with you for whatever it's worth.

Sincerely,



Robert M. Olsen  
495 W. Liberty St.  
Evansville, WI 53536  
608-882-0959



## Comment Sheet

Turn in today or mail to: Darin Blang, Oneida Total Integrated Enterprises, 2801 Crossroads Drive, Suite 1600, Madison, WI 53718. Please return by **Friday, November 19, 2010.**

Name: Rich Roberts

Mailing Address: P.O. Box 23, Brooklyn, WI 53521

Phone Number: 608 455 2905

Thank you for the info I appreciate your focus on improving safety. I will be very interested in the changes made to Hwy 14. With all your planning + interaction with homeowners, I am sure your changes will improve the well-being of travelers.

Thanks You,

Rich Roberts

The passing zone just north of City A on Hwy 14 is dangerous. About half of the zone is blind if one starts to pass at the beginning of the zone from the south.

**Thank you for participating**



# Comment Sheet

Turn in today or mail to: Darin Blang, Oneida Total Integrated Enterprises, 2801 Crossroads Drive, Suite 1600, Madison, WI 53718. Please return by **Friday, November 19, 2010.**

Name: GARY FOX

Mailing Address: 3926 N LEITH RD, JANESVILLE 53548

Phone Number: 608-752-5144

THANK YOU FOR THE PRESENTATION. THERE ARE THREE AREAS OF CONCERN. HWY 14 / CTY F / CRYSTAL SPRINGS CORNER IS VERY DANGEROUS. IT NEEDS RIGHT & LEFT TURN LANES.

NORTH OF EVANSVILLE JUST BEFORE UNION, THE FIRST CURVE IS DANGEROUS. IT SHOULD BE IMPROVED.

EVANSVILLE IS VERY CONGESTED. I TAKE TERRITORIAL ROAD TO AND FROM MADISON. THERE ARE MANY OTHERS THAT USE THIS ALTERNATE ROUTE. WE NEED A BYPASS AROUND EVANSVILLE.

RESURFACING FROM EVANSVILLE TO JANESVILLE WOULD BE NICE.

**Thank you for participating**



## **US 14 Study Public Involvement Meeting #2 - Minutes**

**ATTENDEES:** See Attendance Record

**MEETING DATE:** April 30, 2014

**LOCATION:** J.C. McKenna Middle School, Evansville

**RE:** Project ID 5155-04-09 (Phase 2)  
US 14  
WIS 92 – Janesville (I-39/90)  
Dane and Rock Counties

### **PURPOSE OF MEETING:**

1. To the public on the study progress.
2. To introduce improvement strategies that have been developed for the corridor.
3. To get input from the public regarding the improvement strategies and concerns with the roadway.

### **SUMMARY OF ITEMS DISCUSSED:**

1. The meeting began with an open house from 4:00 to 5:30; a formal presentation was made at 5:30.
2. Mark Westerveld (WisDOT) welcomed everyone to the meeting and introduced WisDOT and consultant staff in attendance.
3. Ryan Murphy (OTIE) began the formal presentation by discussing the purpose of the meeting and reviewing the project limit, study process, and previously completed work. The data gathering and Existing Conditions Report were completed several years ago.
4. Ryan Murphy discussed the improvement alternatives that have been developed for the corridor. Improvements include access improvements, pavement improvements, geometric and capacity improvements, safety improvements, and miscellaneous improvements.
5. After discussing improvement alternatives, there was a brief discussion on next steps in the study. Following the PIM, the Corridor Management Plan will be finalized and posted to the project website. There is no schedule for construction of any improvements.

WisDOT will continue to monitor the corridor and program improvements as warranted, based on availability of funding.

6. Following the formal presentation, there was a question and answer session.

Q: When were traffic counts and crash data from, and should they be updated?

A: The traffic counts are from 2009, and the crash data is from 2005-2009. These numbers will not be updated as part of this study; the study used a forecast year of 2035 when looking at improvement alternatives. New data would be used as part of the environmental process for any programmed improvements.

Q: Are types of crashes ranked differently?

A: Safety improvements were based on locations with a high crash rate. If a location had a lower crash rate, but had more severe crashes, it would also be considered for safety improvements.

Q: When was the roadway last resurfaced?

A: The roadway was last resurfaced in the early 1990s.

Q: Will any of the improvements be included with the planned resurfacing?

A: The planned resurfacing may include some sight distance improvements at intersections, but the other improvements would not be done with the resurfacing.

Q: Who maintains roundabouts?

A: The County is responsible for maintenance along USH 14.

Q: Are 4-lanes being considered?

A: The purpose of the study is to evaluate strategies for maintaining two lanes as long as possible along the corridor.

7. After the presentation, WisDOT and consultant staff were available until 7:00 for individual discussions.

8. General comments received during the meeting included:

- There are issues with the section from Union Corners through Butts Corners and Bullard Road:
  - Poor alignment – should straighten curves
  - Extend 45 mph section further south
  - Improve sight distance at Butts Corners Road
  - Butts Corners Road is heavily used by farm equipment
- Need a bypass lane at Hackbarth Road
- Need to incorporate study findings into resurfacing project
- Rumble strips through Union Corners are too noisy for residents

**From:** Tim Lauretic [<mailto:tim122960@gmail.com>]  
**Sent:** Saturday, April 19, 2014 6:45 AM  
**To:** [mark.westerveld@dot.wi.gov](mailto:mark.westerveld@dot.wi.gov); Darin Blang  
**Subject:** US 14 corridor between WIS 92 and I-39/90

Hello Mark and Darin, Teresa and I will not be able to attend this special meeting. Our input would be is that we would like to see a passing lane put in at the intersection of N, Tolles Rd and Hwy 14. In our opinion this is a very busy intersection. We can not tell you how many times people have drove off the road and onto the shoulder to get around a vehicle making making a left turn at that intersection. We know it is illegal to do and unsafe but we still feel a passing lane is warranted. We have been living here since 2001, in the fall of 2003 I think, a woman was killed at that intersection. If a passing lane was in place she maybe still alive today. If you were to drive down Hwy 14 going East you can see that Tolles and 14 is the only left hand turn without some kind of passing lane or a way to get around. Thank you for your consideration on the matter.

Sincerely  
Tim and Teresa Lauretic  
6909 N Tolles Rd  
Evansville WI 53536

**From:** Jason Risner [<mailto:jason@jasonrisner.com>]  
**Sent:** Monday, April 21, 2014 10:27 PM  
**To:** Westerveld, Mark - DOT  
**Subject:** US 14 Corridor Study

As a frequent traveler on US 14 between Janesville and Madison, I have had frequent opportunity to observe traffic behavior on various days and times. I have a few suggestions that should fit the goal of not widening or relocating US 14 to a significant degree.

1) US 14, I-90 to Kennedy Rd

With the exception of the intersection at Hwy 26 (a prime candidate for an "Echelon" intersection, by the way), the left turn lanes at each stoplight are poorly angled, making it difficult to see oncoming traffic before proceeding through the intersection. The median should be reconfigured to either eliminate traffic from side streets flowing straight through the intersection, or the left turn lanes on US 14 should be angled to provide better visibility to left-turning traffic.

2) US 14 at Newville Rd

It appears this intersection may soon warrant a stoplight due to the commercial construction immediately south of the intersection.

3) US 14 / US 51 intersection

The intersection would appear to be a prime candidate for a roundabout, given the large amount of left-turning traffic, the odd angle at which US 14 intersects US 51, and the desire to calm traffic entering and exiting the intersection. Traffic currently has to wait up to 2 minutes to make a left turn at this intersection as it waits through the remaining signal cycles. A roundabout would also limit the amount of additional land required to accommodate the intersection.

4) US 14, US 51 to County E

There is a significant amount of left-turning traffic entering and exiting the roadway all along this stretch. The intersection of County F at US 14 is particularly problematic; sightlines are very poor for southbound traffic on County F attempting to turn left to head eastbound on US 14.

The fix that would best fit the Study's goals would be to realign County F to meet at an intersection with US 51 north of US 14. This would eliminate a dangerous intersection without having to acquire and demolish buildings, or perform any widening of US 14.

If County F is not realigned, it is very difficult to improve the safety of this stretch without extending the 4-lane divided highway westward past the County F intersection and adding a stoplight or roundabout at County F. This would also add to congestion on this stretch of road. This seems to be at odds with the goals of the study.

In addition, additional turn lanes and passing flares would provide additional safety for turning traffic. 10-foot wide shoulders would provide safer travel by farm implements, bicyclists, and other slow-moving traffic. It would also provide additional safety for disabled vehicles.

5) US 14, County E to County H

More passing flares for left-turning traffic are needed, as well as turn lanes for right-turning traffic. Also, providing 10-foot paved shoulders on each side would better accommodate tractors, bicyclists, and other slow-moving traffic. It would also provide a safer place for vehicle breakdowns.

5) US 14 at County H

There is significant left-turning traffic at this intersection, and visibility for traffic northbound on County H is deficient due to the nearby buildings and the angle US 14 intersects it with. Turn lanes for left and right-turning traffic, and possibly a stoplight activated by traffic waiting on County H would provide safer travel through the intersection. Realigning County H so it is perpendicular to US 14 would also be helpful.

6) US 14, County H to County M

This stretch would also benefit from 10-foot paved shoulders, passing flares, and turn lanes.

It would also benefit from a set of passing lanes in each direction. This would cut down on traffic attempting unsafe passing maneuvers on this stretch of highway. For example, eastbound traffic could have a passing lane between Tuttle Rd and Cassidy Rd. Westbound traffic could have its passing lane between County H and Eagle Rd.

7) Territorial Rd/Bullard Rd "bypass"

The utility of the "bypass" using Territorial Rd and Bullard Rd is obvious. It easily saves 5-10 minutes of travel time for through traffic. I don't see how you would encourage traffic to continue on US 14, short of introducing dead ends on Territorial Rd. The only reasonable response to improve safety while maintaining the route's utility would be to widen and realign the route to state highway standards, which goes against the goals of the study.

A logical US 14 bypass of Evansville would start immediately north of Union, intersecting Hwy 59 perpendicularly, then make a 90 degree turn south to intersect Union Rd perpendicularly. It would then continue south to meet Territorial Rd at Bullard Rd. It would then roughly follow the existing Territorial Rd south to meet the existing US 14. The existing US 14 alignment could be retained as a business route.

8) US 14, Hwy 59/213 intersection in Evansville to Hwy 59 just north of Union

Realign US 14/Hwy 59 to bypass Union to the south and west, with a realignment of Hwy 59 to meet at a new intersection with US 14 NW of Union. The existing US 14/Hwy 59 can terminate in a cul-de-sac at both the north and south ends.

Also, as noted previously, 10-foot shoulders, passing flares, turn lanes as appropriate.

If traffic absolutely must be maintained on the existing US 14/Hwy 59 stretch through Union, a roundabout at the Hwy 59 intersection would calm traffic sufficiently. I also suspect it would prove very unpopular with area residents.

9) US 14, Hwy 59 intersection @ Union to Hwy 92

As noted previously, 10-foot shoulders, passing flares, and turn lanes as appropriate.

The stretch just south of Holt Rd northerly to Hwy 92 would be an appropriate location for passing lanes.

I appreciate the opportunity to provide commentary on this traffic study.

Sincerely,  
Jason Risner  
1612 Randolph Rd, Apt. 3  
Janesville, WI 53545

## US 14 Study

### PIM Comments

- George Shippy – George lives on the corner of Butts Corners Road and US 14. He drives truck along this highway on a daily basis, so he's very familiar with its shortcomings. He commented about the curve at the intersection (Butts Corners/US 14) and how drivers have problems negotiating the curve. He said that cars have driven into his yard, hit trees and often drove away. He said that our crash reports undoubtedly don't reflect the actual problems at the intersection since most incidents are going unreported. He feels that speed is a factor in the area and suggested lowering the speed limit.
- Miner Hayward – Miner lives on Burdick Road. He would like to see improvements to the Burdick Road intersection to better accommodate from US 14 onto Burdick Road and vice versa. He also mentioned the Bullard Road/US 14 intersection in growing more dangerous with all the traffic using Territorial Road (and Bullard Road) to bypass the City of Evansville.

# Public Involvement Meeting Comment Form

Project ID 5155-04-09  
US 14 Corridor Study  
WIS 92 to I-39/90  
Dane and Rock Counties

April 30, 2014

Please return this form today or mail by May 16, 2014 to the address on the back of this sheet. Comments can also be e-mailed to [mark.westerveld@dot.wi.gov](mailto:mark.westerveld@dot.wi.gov). Your comments assist us in developing a project that will serve the needs of the traveling public as well as the needs of the local community. Your input is welcome and appreciated throughout the study process.

Name: Phil Hamilton

Address: 7718 W Tolloles Rd

Daytime Phone Number (optional): 8825757

Email Address (optional): \_\_\_\_\_

Please Print Comments (attach additional sheets if necessary)

Need Passing lane East Bound  
At Tolloles Rd

*The information in this document including names, addresses, phone numbers, e-mail addresses, and signatures is not confidential, and may be subject to disclosure upon request, pursuant to the requirements of the Wisconsin open records law, sections 19.31 - 19.39 of the Wisconsin Statutes.*

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Name: Derek Blume

Address: 142 Gunthor Dr. Evansville

Daytime Phone Number (optional): 608-239-7527

Email Address (optional): dhblume@yahoo.com

Please Print Comments (attach additional sheets if necessary)

Stretch between Union & Evansville (Including Butts Corner & Bullard intersections) should have speed limit investigated. Currently 55mph but it is 45mph on either side of that stretch.

Need to consider a few more through lanes at some of the busier/more dangerous intersections... or as an alternative, make dedicated left turn lanes with center medians

Passing Lane on east side of the Rock River should be considered for extension all the way to the point where the road turns into 4 lanes

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Name: William Gempeler

Address: 1675 N. Coon Island Rd Janesville 53548

Daytime Phone Number (optional): \_\_\_\_\_

Email Address (optional): \_\_\_\_\_

Please Print Comments (attach additional sheets if necessary)

Approaching W. Butts Corner Road from the north  
is a problem. As you speed up from the 45 MPH  
leaving Union suddenly you are going down hill around  
a curve with your foot still on the accelerator.

I suggest extending the 45 MPH until you get to  
W. Butts Corner road.

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Name: RAY LEGGIS

Address: 12933 W WOODWORTH RD

Daytime Phone Number (optional): 608-436-0215

Email Address (optional): THE LEGGIS@yahoo.com

Please Print Comments (attach additional sheets if necessary)

CUT BANK BACK ~~BE~~ EAST SIDE BY BUTTS CORNER +  
HWY 14 TO ~~THE~~ THE NORTH

PUT PASSING LAMP BY MCDONALDS

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Name: Phil Hamilton

Address: 7718 W Tolles Rd Evansville WI 53536

Daytime Phone Number (optional): 882 5757

Email Address (optional): \_\_\_\_\_

Please Print Comments (attach additional sheets if necessary)

Need passing lane AT EASTbound Tolles rd + 14<sup>INT</sup>

Do To local NATURE OF TRAFFIC ON Eagle  
+ Roberty Expense OF buying land + making  
IT STRAIGHT across IS NOT A good investment  
OF the money IT would cost

The MAP handed out AT Evansville  
Shows Hwy 184 going North From Keyden  
That IS AND has been a "H" For several  
years

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Name: RALPH & JANE BUGGS

Address: 5993 WI BUGGS RD Janesville 53548

Daytime Phone Number (optional): 608-754-8746

Email Address (optional): \_\_\_\_\_

Please Print Comments (attach additional sheets if necessary)

STOP and Go Traffic Lights at  
Hwy 14 (184) and Hwy 14 with Right turn  
lanes.

Traffic on H would never be able to  
get on a round-a-bout

Something at this intercession should be  
done now and not wait for accidents.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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Name: FOX LLC / FOX DEN STORE - IT

Address: 3911 N. HACKBARTH RD. - JANESVILLE, WI

Daytime Phone Number (optional): 608-563-2501

Email Address (optional): janice@foxllc.com

Please Print Comments (attach additional sheets if necessary)

We strongly oppose any closure of Hackbarth Rd. at Hwy 14 intersection. In 2012 we built and opened a state-of-the-art 450 unit self-storage facility and we need to have easy access to our business for semi-trailers, moving trucks, trucks towing boats etc. These large vehicles would not be able to maneuver around Hwy E and Hackbarth Rd since this intersection is extremely tight and narrow.

Thank you.

Justin Fox

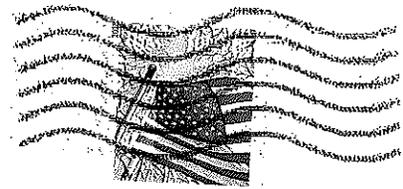
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Fold here

**Justin Fox**  
3911 N Hackbarth Rd  
Janesville WI 53548-8913

MADISON WI 5375

13 MAY 2014 PM 1 L



Wisconsin Department of Transportation

Southwest Region

2101 Wright Street

Madison, WI 53704

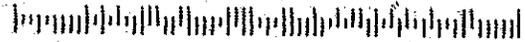
Attn: Mark Westerveld

RECEIVED

MAY 14 2014

SW REGION-MADISON

53704255901



Fold here and staple to mail

# **Appendix H**

## **Traffic Count Data**

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH A  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036010  
Site Code : 09036010  
Start Date : 9/9/2009  
Page No : 1

Groups Printed- CARS - TRUCKS

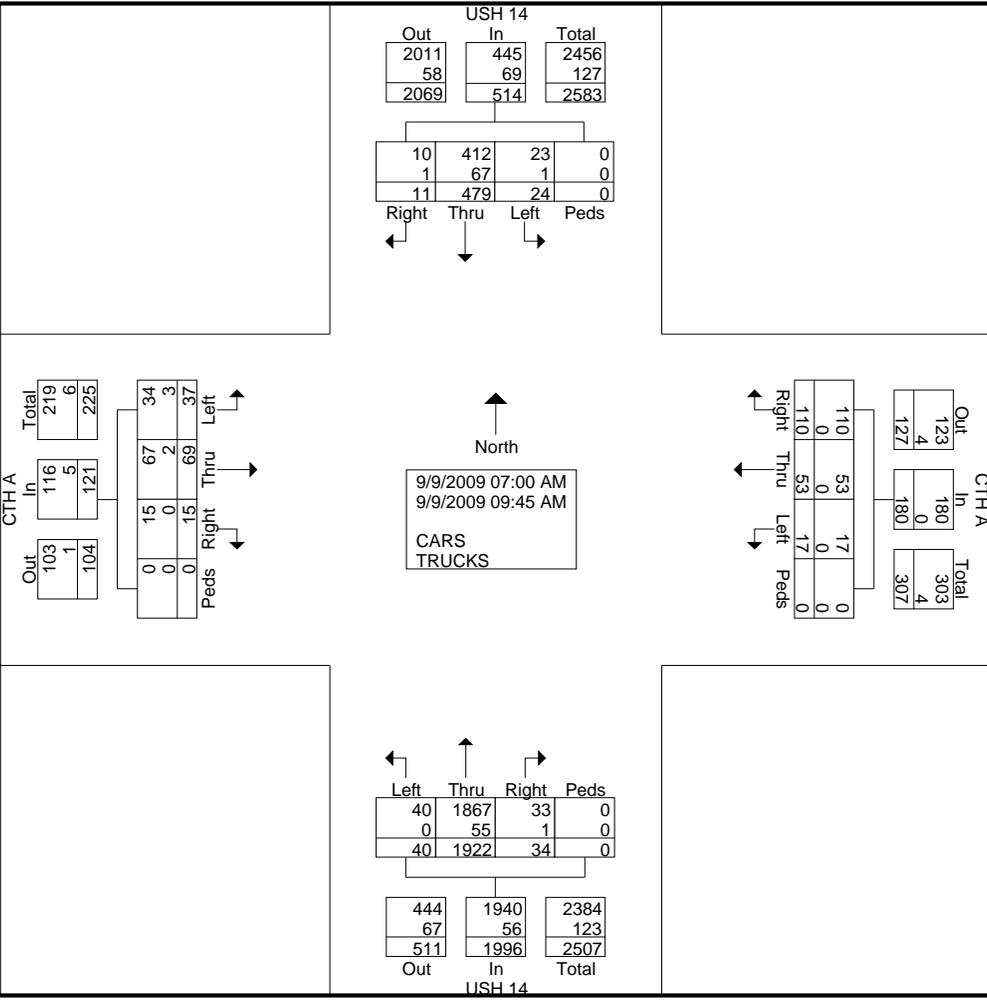
Start Time	USH 14 From North					CTH A From East					USH 14 From South					CTH A From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
07:00 AM	0	24	2	0	26	9	2	0	0	11	1	128	1	0	130	0	6	1	0	7	174
07:15 AM	1	20	2	0	23	9	1	0	0	10	2	203	4	0	209	0	1	3	0	4	246
07:30 AM	0	51	2	0	53	13	2	0	0	15	1	184	6	0	191	1	7	3	0	11	270
07:45 AM	3	29	0	0	32	14	5	2	0	21	3	175	7	0	185	1	8	2	0	11	249
Total	4	124	6	0	134	45	10	2	0	57	7	690	18	0	715	2	22	9	0	33	939
08:00 AM	0	48	5	0	53	19	2	1	0	22	6	185	2	0	193	2	6	6	0	14	282
08:15 AM	1	49	1	0	51	11	11	4	0	26	3	252	5	0	260	2	13	3	0	18	355
08:30 AM	1	36	0	0	37	6	11	4	0	21	4	190	3	0	197	2	8	9	0	19	274
08:45 AM	2	57	1	0	60	4	3	3	0	10	3	168	2	0	173	2	6	1	0	9	252
Total	4	190	7	0	201	40	27	12	0	79	16	795	12	0	823	8	33	19	0	60	1163
09:00 AM	0	36	3	0	39	8	5	1	0	14	4	124	2	0	130	2	4	3	0	9	192
09:15 AM	2	43	3	0	48	7	3	2	0	12	2	121	3	0	126	2	3	4	0	9	195
09:30 AM	1	50	2	0	53	6	2	0	0	8	2	116	5	0	123	0	2	2	0	4	188
09:45 AM	0	36	3	0	39	4	6	0	0	10	3	76	0	0	79	1	5	0	0	6	134
Total	3	165	11	0	179	25	16	3	0	44	11	437	10	0	458	5	14	9	0	28	709
Grand Total	11	479	24	0	514	110	53	17	0	180	34	1922	40	0	1996	15	69	37	0	121	2811
Apprch %	2.1	93.2	4.7	0		61.1	29.4	9.4	0		1.7	96.3	2	0		12.4	57	30.6	0		
Total %	0.4	17	0.9	0	18.3	3.9	1.9	0.6	0	6.4	1.2	68.4	1.4	0	71	0.5	2.5	1.3	0	4.3	
CARS	10	412	23	0	445	110	53	17	0	180	33	1867	40	0	1940	15	67	34	0	116	2681
% CARS	90.9	86	95.8	0	86.6	100	100	100	0	100	97.1	97.1	100	0	97.2	100	97.1	91.9	0	95.9	95.4
TRUCKS	1	67	1	0	69	0	0	0	0	0	1	55	0	0	56	0	2	3	0	5	130
% TRUCKS	9.1	14	4.2	0	13.4	0	0	0	0	0	2.9	2.9	0	0	2.8	0	2.9	8.1	0	4.1	4.6

# KL Engineering, Inc.

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Madison, WI 53711

USH 14 & CTH A  
AM PEAK HOUR  
TN-09036-01  
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File Name : 09036010  
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File Name : 09036010  
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Start Time	USH 14 From North					CTH A From East					USH 14 From South					CTH A From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	48	5	0	53	19	2	1	0	22	6	185	2	0	193	2	6	6	0	14	282
08:15 AM	1	49	1	0	51	11	11	4	0	26	3	252	5	0	260	2	13	3	0	18	355
08:30 AM	1	36	0	0	37	6	11	4	0	21	4	190	3	0	197	2	8	9	0	19	274
08:45 AM	2	57	1	0	60	4	3	3	0	10	3	168	2	0	173	2	6	1	0	9	252
Total Volume	4	190	7	0	201	40	27	12	0	79	16	795	12	0	823	8	33	19	0	60	1163
% App. Total	2	94.5	3.5	0		50.6	34.2	15.2	0		1.9	96.6	1.5	0		13.3	55	31.7	0		
PHF	.500	.833	.350	.000	.838	.526	.614	.750	.000	.760	.667	.789	.600	.000	.791	1.000	.635	.528	.000	.789	.819

Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	08:00 AM					07:45 AM					07:45 AM					07:45 AM				
+0 mins.	0	48	5	0	53	14	5	2	0	21	3	175	7	0	185	1	8	2	0	11
+15 mins.	1	49	1	0	51	19	2	1	0	22	6	185	2	0	193	2	6	6	0	14
+30 mins.	1	36	0	0	37	11	11	4	0	26	3	252	5	0	260	2	13	3	0	18
+45 mins.	2	57	1	0	60	6	11	4	0	21	4	190	3	0	197	2	8	9	0	19
Total Volume	4	190	7	0	201	50	29	11	0	90	16	802	17	0	835	7	35	20	0	62
% App. Total	2	94.5	3.5	0		55.6	32.2	12.2	0		1.9	96	2	0		11.3	56.5	32.3	0	
PHF	.500	.833	.350	.000	.838	.658	.659	.688	.000	.865	.667	.796	.607	.000	.803	.875	.673	.556	.000	.816

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH A  
PM Peak Hour  
TN-09036-01  
Turning Movement Count

File Name : 09036011  
Site Code : 09036011  
Start Date : 9/9/2009  
Page No : 1

Groups Printed- Cars - Trucks

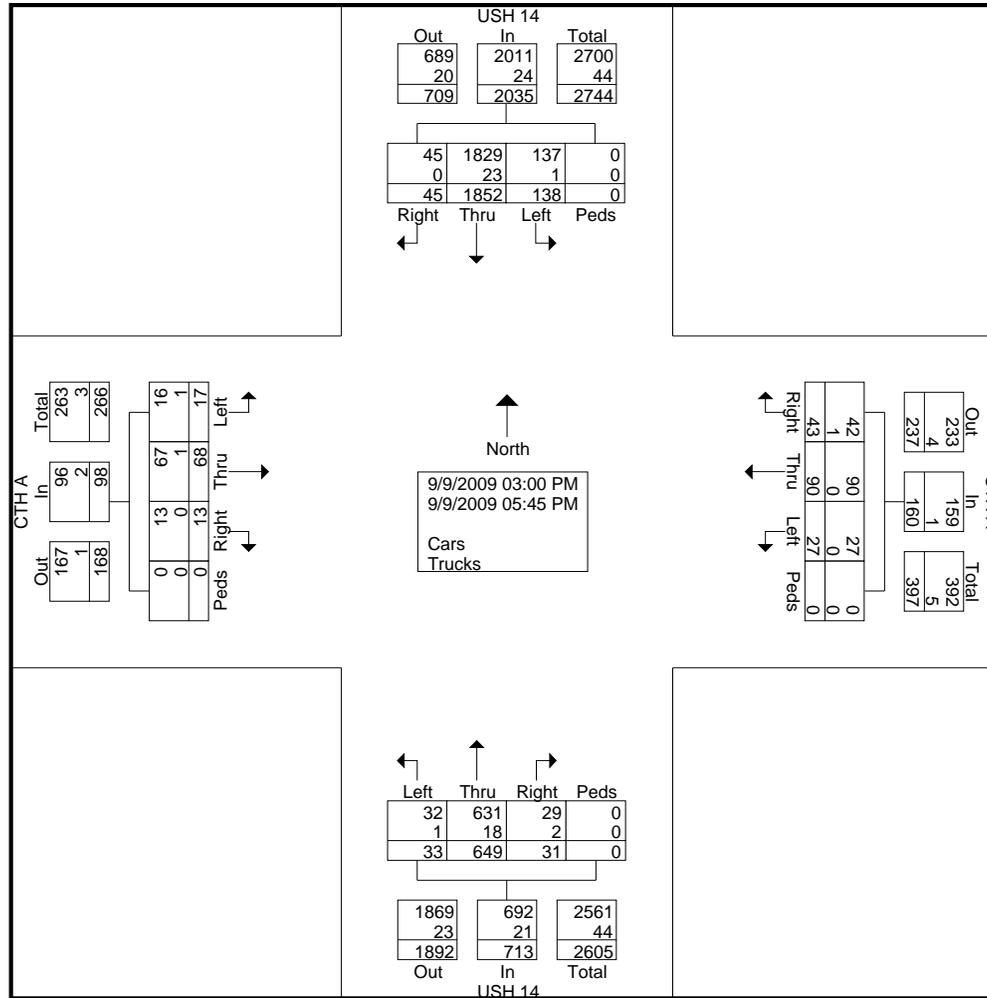
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	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
03:00 PM	5	79	6	0	90	3	7	2	0	12	6	48	0	0	54	2	7	0	0	9	165
03:15 PM	5	120	10	0	135	4	4	2	0	10	4	43	4	0	51	0	3	1	0	4	200
03:30 PM	5	139	6	0	150	7	6	2	0	15	2	47	3	0	52	0	9	1	0	10	227
03:45 PM	5	152	16	0	173	2	7	1	0	10	1	46	4	0	51	2	8	4	0	14	248
<b>Total</b>	<b>20</b>	<b>490</b>	<b>38</b>	<b>0</b>	<b>548</b>	<b>16</b>	<b>24</b>	<b>7</b>	<b>0</b>	<b>47</b>	<b>13</b>	<b>184</b>	<b>11</b>	<b>0</b>	<b>208</b>	<b>4</b>	<b>27</b>	<b>6</b>	<b>0</b>	<b>37</b>	<b>840</b>
04:00 PM	4	163	13	0	180	2	6	5	0	13	3	69	2	0	74	2	7	2	0	11	278
04:15 PM	3	143	13	0	159	2	6	2	0	10	1	68	1	0	70	1	2	1	0	4	243
04:30 PM	4	172	8	0	184	5	4	2	0	11	1	61	5	0	67	1	3	1	0	5	267
04:45 PM	2	203	16	0	221	6	9	2	0	17	3	52	2	0	57	3	4	1	0	8	303
<b>Total</b>	<b>13</b>	<b>681</b>	<b>50</b>	<b>0</b>	<b>744</b>	<b>15</b>	<b>25</b>	<b>11</b>	<b>0</b>	<b>51</b>	<b>8</b>	<b>250</b>	<b>10</b>	<b>0</b>	<b>268</b>	<b>7</b>	<b>16</b>	<b>5</b>	<b>0</b>	<b>28</b>	<b>1091</b>
05:00 PM	1	197	13	0	211	2	9	4	0	15	2	52	0	0	54	0	7	2	0	9	289
05:15 PM	4	199	11	0	214	1	11	2	0	14	1	63	2	0	66	1	8	1	0	10	304
05:30 PM	3	158	13	0	174	5	13	1	0	19	1	53	3	0	57	0	5	0	0	5	255
05:45 PM	4	127	13	0	144	4	8	2	0	14	6	47	7	0	60	1	5	3	0	9	227
<b>Total</b>	<b>12</b>	<b>681</b>	<b>50</b>	<b>0</b>	<b>743</b>	<b>12</b>	<b>41</b>	<b>9</b>	<b>0</b>	<b>62</b>	<b>10</b>	<b>215</b>	<b>12</b>	<b>0</b>	<b>237</b>	<b>2</b>	<b>25</b>	<b>6</b>	<b>0</b>	<b>33</b>	<b>1075</b>
<b>Grand Total</b>	<b>45</b>	<b>1852</b>	<b>138</b>	<b>0</b>	<b>2035</b>	<b>43</b>	<b>90</b>	<b>27</b>	<b>0</b>	<b>160</b>	<b>31</b>	<b>649</b>	<b>33</b>	<b>0</b>	<b>713</b>	<b>13</b>	<b>68</b>	<b>17</b>	<b>0</b>	<b>98</b>	<b>3006</b>
<b>Apprch %</b>	<b>2.2</b>	<b>91</b>	<b>6.8</b>	<b>0</b>		<b>26.9</b>	<b>56.2</b>	<b>16.9</b>	<b>0</b>		<b>4.3</b>	<b>91</b>	<b>4.6</b>	<b>0</b>		<b>13.3</b>	<b>69.4</b>	<b>17.3</b>	<b>0</b>		
<b>Total %</b>	<b>1.5</b>	<b>61.6</b>	<b>4.6</b>	<b>0</b>	<b>67.7</b>	<b>1.4</b>	<b>3</b>	<b>0.9</b>	<b>0</b>	<b>5.3</b>	<b>1</b>	<b>21.6</b>	<b>1.1</b>	<b>0</b>	<b>23.7</b>	<b>0.4</b>	<b>2.3</b>	<b>0.6</b>	<b>0</b>	<b>3.3</b>	
<b>Cars</b>	<b>45</b>	<b>1829</b>	<b>137</b>	<b>0</b>	<b>2011</b>	<b>42</b>	<b>90</b>	<b>27</b>	<b>0</b>	<b>159</b>	<b>29</b>	<b>631</b>	<b>32</b>	<b>0</b>	<b>692</b>	<b>13</b>	<b>67</b>	<b>16</b>	<b>0</b>	<b>96</b>	<b>2958</b>
<b>% Cars</b>	<b>100</b>	<b>98.8</b>	<b>99.3</b>	<b>0</b>	<b>98.8</b>	<b>97.7</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>99.4</b>	<b>93.5</b>	<b>97.2</b>	<b>97</b>	<b>0</b>	<b>97.1</b>	<b>100</b>	<b>98.5</b>	<b>94.1</b>	<b>0</b>	<b>98</b>	<b>98.4</b>
<b>Trucks</b>	<b>0</b>	<b>23</b>	<b>1</b>	<b>0</b>	<b>24</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>18</b>	<b>1</b>	<b>0</b>	<b>21</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>48</b>
<b>% Trucks</b>	<b>0</b>	<b>1.2</b>	<b>0.7</b>	<b>0</b>	<b>1.2</b>	<b>2.3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.6</b>	<b>6.5</b>	<b>2.8</b>	<b>3</b>	<b>0</b>	<b>2.9</b>	<b>0</b>	<b>1.5</b>	<b>5.9</b>	<b>0</b>	<b>2</b>	<b>1.6</b>

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH A  
PM Peak Hour  
TN-09036-01  
Turning Movement Count

File Name : 09036011  
Site Code : 09036011  
Start Date : 9/9/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH A  
PM Peak Hour  
TN-09036-01  
Turning Movement Count

File Name : 09036011  
Site Code : 09036011  
Start Date : 9/9/2009  
Page No : 3

Start Time	USH 14 From North					CTH A From East					USH 14 From South					CTH A From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	4	172	8	0	184	5	4	2	0	11	1	61	5	0	67	1	3	1	0	5	267
04:45 PM	2	203	16	0	221	6	9	2	0	17	3	52	2	0	57	3	4	1	0	8	303
05:00 PM	1	197	13	0	211	2	9	4	0	15	2	52	0	0	54	0	7	2	0	9	289
05:15 PM	4	199	11	0	214	1	11	2	0	14	1	63	2	0	66	1	8	1	0	10	304
Total Volume	11	771	48	0	830	14	33	10	0	57	7	228	9	0	244	5	22	5	0	32	1163
% App. Total	1.3	92.9	5.8	0		24.6	57.9	17.5	0		2.9	93.4	3.7	0		15.6	68.8	15.6	0		
PHF	.688	.950	.750	.000	.939	.583	.750	.625	.000	.838	.583	.905	.450	.000	.910	.417	.688	.625	.000	.800	.956

Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:30 PM					04:45 PM					04:00 PM					03:15 PM				
+0 mins.	4	172	8	0	184	6	9	2	0	17	3	69	2	0	74	0	3	1	0	4
+15 mins.	2	203	16	0	221	2	9	4	0	15	1	68	1	0	70	0	9	1	0	10
+30 mins.	1	197	13	0	211	1	11	2	0	14	1	61	5	0	67	2	8	4	0	14
+45 mins.	4	199	11	0	214	5	13	1	0	19	3	52	2	0	57	2	7	2	0	11
Total Volume	11	771	48	0	830	14	42	9	0	65	8	250	10	0	268	4	27	8	0	39
% App. Total	1.3	92.9	5.8	0		21.5	64.6	13.8	0		3	93.3	3.7	0		10.3	69.2	20.5	0	
PHF	.688	.950	.750	.000	.939	.583	.808	.563	.000	.855	.667	.906	.500	.000	.905	.500	.750	.500	.000	.696

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & Rome Corners Rd/Old Stone Rd  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036020  
Site Code : 09036020  
Start Date : 9/16/2009  
Page No : 1

Groups Printed- Cars - Trucks

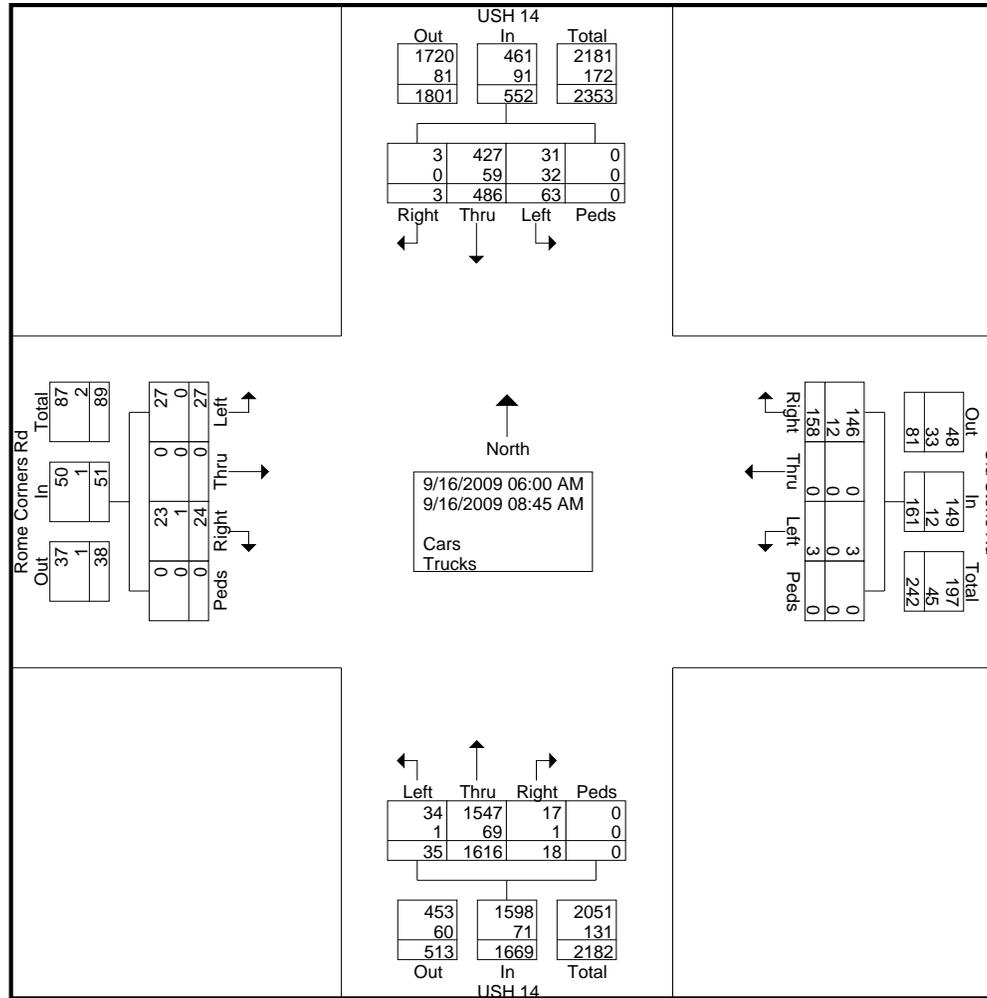
Start Time	USH 14 From North					Old Stone Rd From East					USH 14 From South					Rome Corners Rd From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:00 AM	0	22	0	0	22	7	0	0	0	7	1	110	3	0	114	1	0	2	0	3	146
06:15 AM	0	27	3	0	30	10	0	0	0	10	2	179	0	0	181	0	0	4	0	4	225
06:30 AM	0	34	5	0	39	20	0	0	0	20	7	215	3	0	225	1	0	0	0	1	285
06:45 AM	0	34	5	0	39	6	0	0	0	6	1	215	3	0	219	2	0	3	0	5	269
Total	0	117	13	0	130	43	0	0	0	43	11	719	9	0	739	4	0	9	0	13	925
07:00 AM	0	52	5	0	57	16	0	0	0	16	1	112	4	0	117	4	0	6	0	10	200
07:15 AM	0	56	13	0	69	20	0	0	0	20	0	112	9	0	121	5	0	4	0	9	219
07:30 AM	0	41	3	0	44	23	0	0	0	23	0	133	3	0	136	2	0	1	0	3	206
07:45 AM	2	46	9	0	57	16	0	0	0	16	1	119	2	0	122	1	0	2	0	3	198
Total	2	195	30	0	227	75	0	0	0	75	2	476	18	0	496	12	0	13	0	25	823
08:00 AM	1	46	3	0	50	14	0	1	0	15	3	136	3	0	142	4	0	3	0	7	214
08:15 AM	0	38	4	0	42	11	0	0	0	11	0	122	4	0	126	1	0	2	0	3	182
08:30 AM	0	44	5	0	49	8	0	1	0	9	1	96	0	0	97	2	0	0	0	2	157
08:45 AM	0	46	8	0	54	7	0	1	0	8	1	67	1	0	69	1	0	0	0	1	132
Total	1	174	20	0	195	40	0	3	0	43	5	421	8	0	434	8	0	5	0	13	685
Grand Total	3	486	63	0	552	158	0	3	0	161	18	1616	35	0	1669	24	0	27	0	51	2433
Apprch %	0.5	88	11.4	0		98.1	0	1.9	0		1.1	96.8	2.1	0		47.1	0	52.9	0		
Total %	0.1	20	2.6	0	22.7	6.5	0	0.1	0	6.6	0.7	66.4	1.4	0	68.6	1	0	1.1	0	2.1	
Cars	3	427	31	0	461	146	0	3	0	149	17	1547	34	0	1598	23	0	27	0	50	2258
% Cars	100	87.9	49.2	0	83.5	92.4	0	100	0	92.5	94.4	95.7	97.1	0	95.7	95.8	0	100	0	98	92.8
Trucks	0	59	32	0	91	12	0	0	0	12	1	69	1	0	71	1	0	0	0	1	175
% Trucks	0	12.1	50.8	0	16.5	7.6	0	0	0	7.5	5.6	4.3	2.9	0	4.3	4.2	0	0	0	2	7.2

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & Rome Corners Rd/Old Stone Rd  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036020  
Site Code : 09036020  
Start Date : 9/16/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & Rome Corners Rd/Old Stone Rd  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036020  
Site Code : 09036020  
Start Date : 9/16/2009  
Page No : 3

Start Time	USH 14 From North					Old Stone Rd From East					USH 14 From South					Rome Corners Rd From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 06:15 AM																					
06:15 AM	0	27	3	0	30	10	0	0	0	10	2	179	0	0	181	0	0	4	0	4	225
06:30 AM	0	34	5	0	39	20	0	0	0	20	7	215	3	0	225	1	0	0	0	1	285
06:45 AM	0	34	5	0	39	6	0	0	0	6	1	215	3	0	219	2	0	3	0	5	269
07:00 AM	0	52	5	0	57	16	0	0	0	16	1	112	4	0	117	4	0	6	0	10	200
Total Volume	0	147	18	0	165	52	0	0	0	52	11	721	10	0	742	7	0	13	0	20	979
% App. Total	0	89.1	10.9	0		100	0	0	0		1.5	97.2	1.3	0		35	0	65	0		
PHF	.000	.707	.900	.000	.724	.650	.000	.000	.000	.650	.393	.838	.625	.000	.824	.438	.000	.542	.000	.500	.859

Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM					07:00 AM					06:15 AM					06:45 AM				
+0 mins.	0	52	5	0	57	16	0	0	0	16	2	179	0	0	181	2	0	3	0	5
+15 mins.	0	56	13	0	69	20	0	0	0	20	7	215	3	0	225	4	0	6	0	10
+30 mins.	0	41	3	0	44	23	0	0	0	23	1	215	3	0	219	5	0	4	0	9
+45 mins.	2	46	9	0	57	16	0	0	0	16	1	112	4	0	117	2	0	1	0	3
Total Volume	2	195	30	0	227	75	0	0	0	75	11	721	10	0	742	13	0	14	0	27
% App. Total	0.9	85.9	13.2	0		100	0	0	0		1.5	97.2	1.3	0		48.1	0	51.9	0	
PHF	.250	.871	.577	.000	.822	.815	.000	.000	.000	.815	.393	.838	.625	.000	.824	.650	.000	.583	.000	.675

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & Rome Corners Rd/Old Stone Rd  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036021  
Site Code : 09036021  
Start Date : 9/16/2009  
Page No : 1

Groups Printed- Cars - Trucks

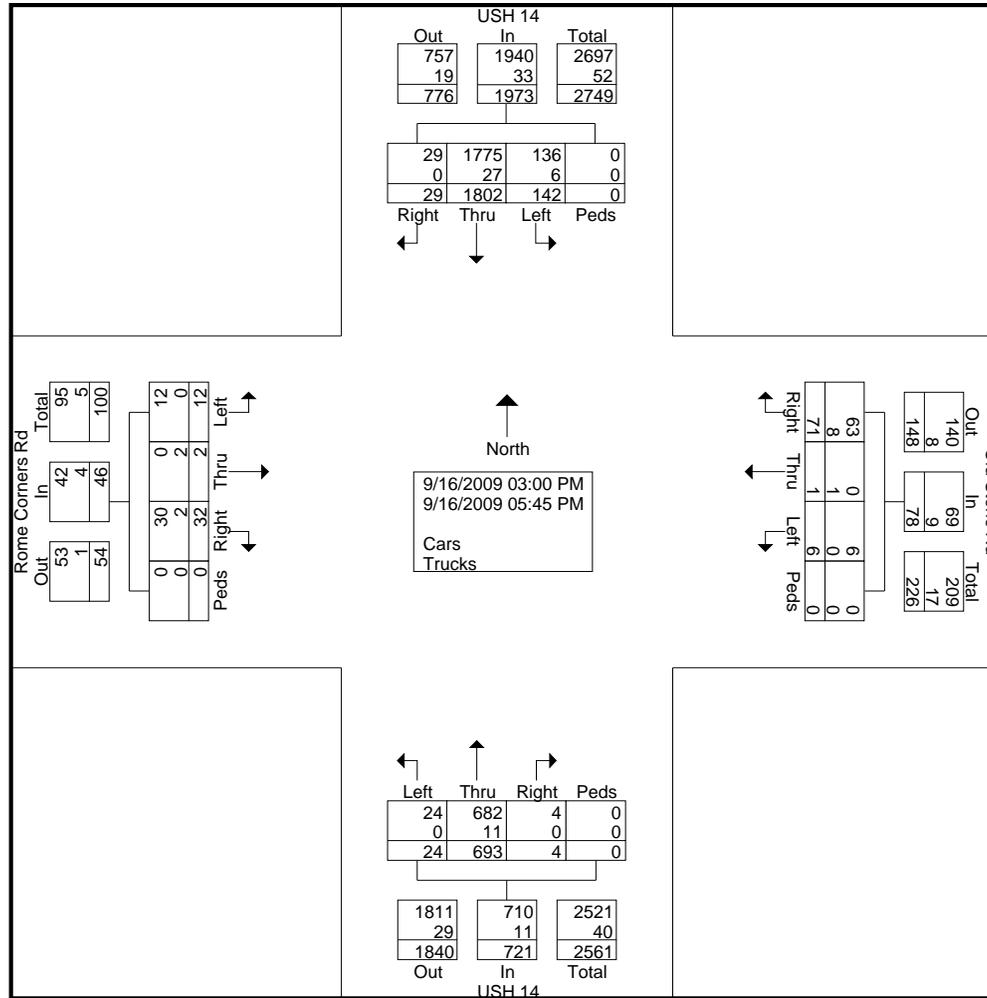
Start Time	USH 14 From North					Old Stone Rd From East					USH 14 From South					Rome Corners Rd From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
03:00 PM	3	79	5	0	87	5	0	0	0	5	1	61	1	0	63	1	0	3	0	4	159
03:15 PM	3	98	9	0	110	5	0	0	0	5	0	58	3	0	61	1	1	1	0	3	179
03:30 PM	4	123	13	0	140	6	0	0	0	6	0	56	1	0	57	1	0	0	0	1	204
03:45 PM	0	139	10	0	149	8	0	0	0	8	0	60	1	0	61	1	1	0	0	2	220
Total	10	439	37	0	486	24	0	0	0	24	1	235	6	0	242	4	2	4	0	10	762
04:00 PM	1	139	12	0	152	6	0	2	0	8	1	50	1	0	52	3	0	0	0	3	215
04:15 PM	4	184	12	0	200	5	0	0	0	5	0	65	1	0	66	5	0	0	0	5	276
04:30 PM	2	180	14	0	196	4	1	0	0	5	2	55	1	0	58	3	0	1	0	4	263
04:45 PM	0	182	12	0	194	5	0	0	0	5	0	58	2	0	60	2	0	4	0	6	265
Total	7	685	50	0	742	20	1	2	0	23	3	228	5	0	236	13	0	5	0	18	1019
05:00 PM	4	189	13	0	206	4	0	1	0	5	0	54	0	0	54	2	0	0	0	2	267
05:15 PM	4	206	16	0	226	4	0	0	0	4	0	67	2	0	69	5	0	0	0	5	304
05:30 PM	2	151	14	0	167	7	0	0	0	7	0	51	7	0	58	4	0	2	0	6	238
05:45 PM	2	132	12	0	146	12	0	3	0	15	0	58	4	0	62	4	0	1	0	5	228
Total	12	678	55	0	745	27	0	4	0	31	0	230	13	0	243	15	0	3	0	18	1037
Grand Total	29	1802	142	0	1973	71	1	6	0	78	4	693	24	0	721	32	2	12	0	46	2818
Apprch %	1.5	91.3	7.2	0		91	1.3	7.7	0		0.6	96.1	3.3	0		69.6	4.3	26.1	0		
Total %	1	63.9	5	0	70	2.5	0	0.2	0	2.8	0.1	24.6	0.9	0	25.6	1.1	0.1	0.4	0	1.6	
Cars	29	1775	136	0	1940	63	0	6	0	69	4	682	24	0	710	30	0	12	0	42	2761
% Cars	100	98.5	95.8	0	98.3	88.7	0	100	0	88.5	100	98.4	100	0	98.5	93.8	0	100	0	91.3	98
Trucks	0	27	6	0	33	8	1	0	0	9	0	11	0	0	11	2	2	0	0	4	57
% Trucks	0	1.5	4.2	0	1.7	11.3	100	0	0	11.5	0	1.6	0	0	1.5	6.2	100	0	0	8.7	2

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & Rome Corners Rd/Old Stone Rd  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036021  
Site Code : 09036021  
Start Date : 9/16/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & Rome Corners Rd/Old Stone Rd  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036021  
Site Code : 09036021  
Start Date : 9/16/2009  
Page No : 3

Start Time	USH 14 From North					Old Stone Rd From East					USH 14 From South					Rome Corners Rd From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	2	180	14	0	196	4	1	0	0	5	2	55	1	0	58	3	0	1	0	4	263
04:45 PM	0	182	12	0	194	5	0	0	0	5	0	58	2	0	60	2	0	4	0	6	265
05:00 PM	4	189	13	0	206	4	0	1	0	5	0	54	0	0	54	2	0	0	0	2	267
05:15 PM	4	206	16	0	226	4	0	0	0	4	0	67	2	0	69	5	0	0	0	5	304
Total Volume	10	757	55	0	822	17	1	1	0	19	2	234	5	0	241	12	0	5	0	17	1099
% App. Total	1.2	92.1	6.7	0		89.5	5.3	5.3	0		0.8	97.1	2.1	0		70.6	0	29.4	0		
PHF	.625	.919	.859	.000	.909	.850	.250	.250	.000	.950	.250	.873	.625	.000	.873	.600	.000	.313	.000	.708	.904

Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:30 PM					05:00 PM					05:00 PM					04:45 PM				
+0 mins.	2	180	14	0	196	4	0	1	0	5	0	54	0	0	54	2	0	4	0	6
+15 mins.	0	182	12	0	194	4	0	0	0	4	0	67	2	0	69	2	0	0	0	2
+30 mins.	4	189	13	0	206	7	0	0	0	7	0	51	7	0	58	5	0	0	0	5
+45 mins.	4	206	16	0	226	12	0	3	0	15	0	58	4	0	62	4	0	2	0	6
Total Volume	10	757	55	0	822	27	0	4	0	31	0	230	13	0	243	13	0	6	0	19
% App. Total	1.2	92.1	6.7	0		87.1	0	12.9	0		0	94.7	5.3	0		68.4	0	31.6	0	
PHF	.625	.919	.859	.000	.909	.563	.000	.333	.000	.517	.000	.858	.464	.000	.880	.650	.000	.375	.000	.792

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & STH 92/Biglow Rd  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036030  
Site Code : 09036030  
Start Date : 9/17/2009  
Page No : 1

**Groups Printed- Cars - Trucks**

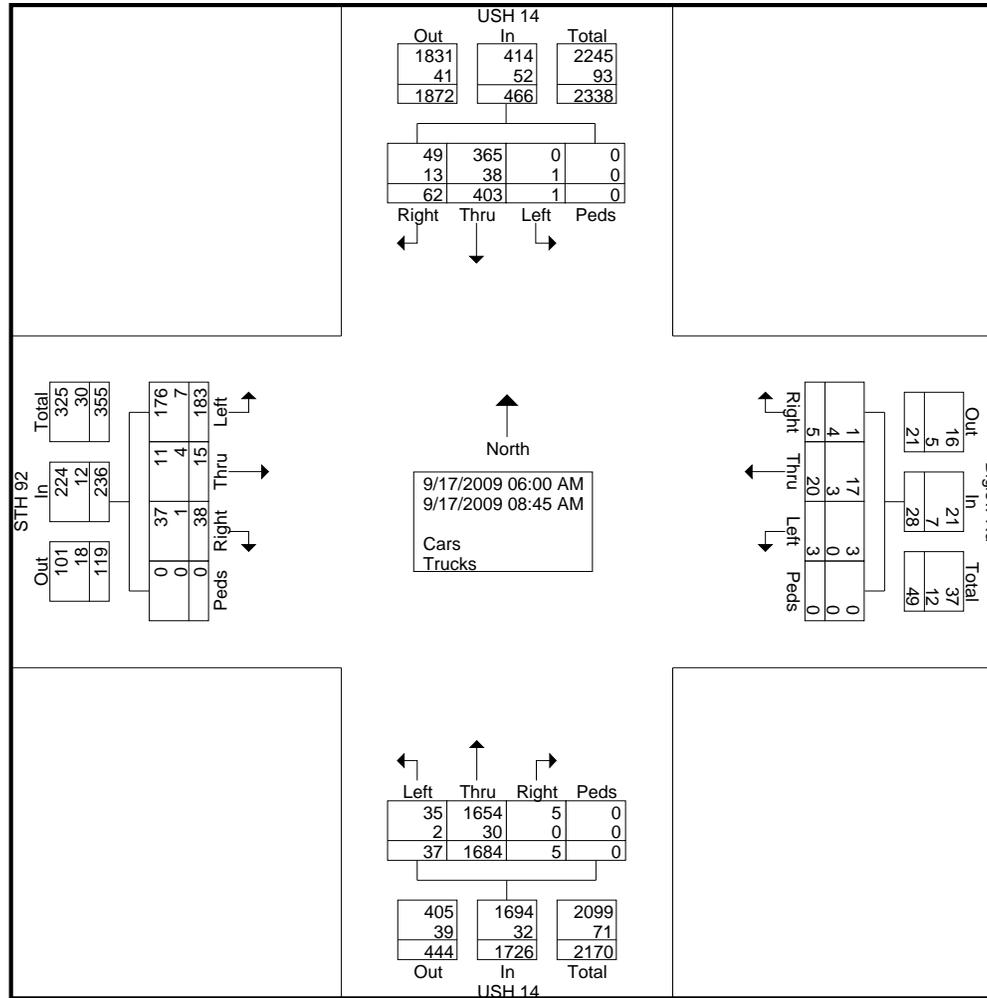
Start Time	USH 14 From North					Biglow Rd From East					USH 14 From South					STH 92 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:00 AM	1	16	0	0	17	0	0	0	0	0	1	127	2	0	130	0	2	11	0	13	160
06:15 AM	0	31	0	0	31	0	0	0	0	0	0	181	1	0	182	1	0	18	0	19	232
06:30 AM	4	33	1	0	38	2	2	0	0	4	0	176	6	0	182	2	1	20	0	23	247
06:45 AM	5	21	0	0	26	1	2	0	0	3	0	149	2	0	151	3	0	19	0	22	202
<b>Total</b>	<b>10</b>	<b>101</b>	<b>1</b>	<b>0</b>	<b>112</b>	<b>3</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>1</b>	<b>633</b>	<b>11</b>	<b>0</b>	<b>645</b>	<b>6</b>	<b>3</b>	<b>68</b>	<b>0</b>	<b>77</b>	<b>841</b>
07:00 AM	6	37	0	0	43	1	2	0	0	3	1	188	0	0	189	3	1	20	0	24	259
07:15 AM	8	44	0	0	52	0	0	0	0	0	1	206	8	0	215	5	0	34	0	39	306
07:30 AM	8	35	0	0	43	0	4	0	0	4	0	154	1	0	155	7	1	11	0	19	221
07:45 AM	9	37	0	0	46	1	4	0	0	5	1	120	6	0	127	6	3	16	0	25	203
<b>Total</b>	<b>31</b>	<b>153</b>	<b>0</b>	<b>0</b>	<b>184</b>	<b>2</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>3</b>	<b>668</b>	<b>15</b>	<b>0</b>	<b>686</b>	<b>21</b>	<b>5</b>	<b>81</b>	<b>0</b>	<b>107</b>	<b>989</b>
08:00 AM	5	40	0	0	45	0	2	0	0	2	1	143	4	0	148	2	2	10	0	14	209
08:15 AM	6	33	0	0	39	0	2	2	0	4	0	104	4	0	108	3	2	8	0	13	164
08:30 AM	3	44	0	0	47	0	2	1	0	3	0	66	1	0	67	5	1	10	0	16	133
08:45 AM	7	32	0	0	39	0	0	0	0	0	0	70	2	0	72	1	2	6	0	9	120
<b>Total</b>	<b>21</b>	<b>149</b>	<b>0</b>	<b>0</b>	<b>170</b>	<b>0</b>	<b>6</b>	<b>3</b>	<b>0</b>	<b>9</b>	<b>1</b>	<b>383</b>	<b>11</b>	<b>0</b>	<b>395</b>	<b>11</b>	<b>7</b>	<b>34</b>	<b>0</b>	<b>52</b>	<b>626</b>
<b>Grand Total</b>	<b>62</b>	<b>403</b>	<b>1</b>	<b>0</b>	<b>466</b>	<b>5</b>	<b>20</b>	<b>3</b>	<b>0</b>	<b>28</b>	<b>5</b>	<b>1684</b>	<b>37</b>	<b>0</b>	<b>1726</b>	<b>38</b>	<b>15</b>	<b>183</b>	<b>0</b>	<b>236</b>	<b>2456</b>
Apprch %	13.3	86.5	0.2	0		17.9	71.4	10.7	0		0.3	97.6	2.1	0		16.1	6.4	77.5	0		
Total %	2.5	16.4	0	0	19	0.2	0.8	0.1	0	1.1	0.2	68.6	1.5	0	70.3	1.5	0.6	7.5	0	9.6	
Cars	49	365	0	0	414	1	17	3	0	21	5	1654	35	0	1694	37	11	176	0	224	2353
% Cars	79	90.6	0	0	88.8	20	85	100	0	75	100	98.2	94.6	0	98.1	97.4	73.3	96.2	0	94.9	95.8
Trucks	13	38	1	0	52	4	3	0	0	7	0	30	2	0	32	1	4	7	0	12	103
% Trucks	21	9.4	100	0	11.2	80	15	0	0	25	0	1.8	5.4	0	1.9	2.6	26.7	3.8	0	5.1	4.2

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & STH 92/Biglow Rd  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036030  
Site Code : 09036030  
Start Date : 9/17/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & STH 92/Biglow Rd  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036030  
Site Code : 09036030  
Start Date : 9/17/2009  
Page No : 3

Start Time	USH 14 From North					Biglow Rd From East					USH 14 From South					STH 92 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 06:30 AM																					
06:30 AM	4	33	1	0	38	2	2	0	0	4	0	176	6	0	182	2	1	20	0	23	247
06:45 AM	5	21	0	0	26	1	2	0	0	3	0	149	2	0	151	3	0	19	0	22	202
07:00 AM	6	37	0	0	43	1	2	0	0	3	1	188	0	0	189	3	1	20	0	24	259
07:15 AM	8	44	0	0	52	0	0	0	0	0	1	206	8	0	215	5	0	34	0	39	306
Total Volume	23	135	1	0	159	4	6	0	0	10	2	719	16	0	737	13	2	93	0	108	1014
% App. Total	14.5	84.9	0.6	0		40	60	0	0		0.3	97.6	2.2	0		12	1.9	86.1	0		
PHF	.719	.767	.250	.000	.764	.500	.750	.000	.000	.625	.500	.873	.500	.000	.857	.650	.500	.684	.000	.692	.828

Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM					07:30 AM					06:30 AM					06:30 AM				
+0 mins.	8	44	0	0	52	0	4	0	0	4	0	176	6	0	182	2	1	20	0	23
+15 mins.	8	35	0	0	43	1	4	0	0	5	0	149	2	0	151	3	0	19	0	22
+30 mins.	9	37	0	0	46	0	2	0	0	2	1	188	0	0	189	3	1	20	0	24
+45 mins.	5	40	0	0	45	0	2	2	0	4	1	206	8	0	215	5	0	34	0	39
Total Volume	30	156	0	0	186	1	12	2	0	15	2	719	16	0	737	13	2	93	0	108
% App. Total	16.1	83.9	0	0		6.7	80	13.3	0		0.3	97.6	2.2	0		12	1.9	86.1	0	
PHF	.833	.886	.000	.000	.894	.250	.750	.250	.000	.750	.500	.873	.500	.000	.857	.650	.500	.684	.000	.692

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & STH 92/Biglow Rd  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036031  
Site Code : 09036031  
Start Date : 9/17/2009  
Page No : 1

Groups Printed- Cars - Trucks

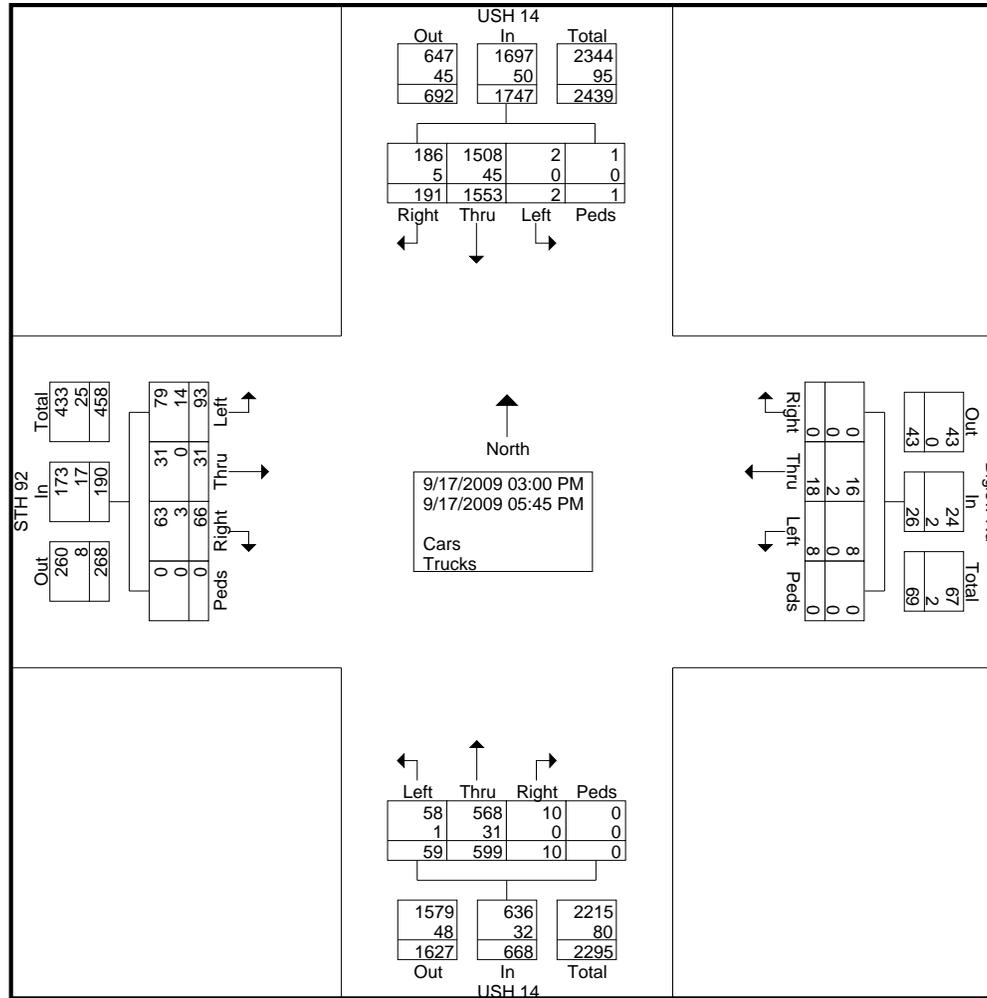
Start Time	USH 14 From North					Biglow Rd From East					USH 14 From South					STH 92 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
03:00 PM	10	83	0	0	93	0	1	0	0	1	0	41	0	0	41	4	5	10	0	19	154
03:15 PM	4	77	0	0	81	0	0	1	0	1	0	40	8	0	48	5	6	7	0	18	148
03:30 PM	17	102	0	0	119	0	0	1	0	1	1	48	4	0	53	2	1	9	0	12	185
03:45 PM	12	131	0	1	144	0	0	1	0	1	0	39	5	0	44	6	3	4	0	13	202
Total	43	393	0	1	437	0	1	3	0	4	1	168	17	0	186	17	15	30	0	62	689
04:00 PM	22	133	1	0	156	0	4	2	0	6	0	64	6	0	70	4	2	8	0	14	246
04:15 PM	19	155	0	0	174	0	2	0	0	2	0	42	8	0	50	9	3	9	0	21	247
04:30 PM	25	154	0	0	179	0	1	0	0	1	2	57	2	0	61	5	3	9	0	17	258
04:45 PM	16	131	0	0	147	0	2	3	0	5	0	55	3	0	58	5	3	8	0	16	226
Total	82	573	1	0	656	0	9	5	0	14	2	218	19	0	239	23	11	34	0	68	977
05:00 PM	13	131	1	0	145	0	3	0	0	3	1	53	7	0	61	13	2	7	0	22	231
05:15 PM	13	189	0	0	202	0	1	0	0	1	5	46	6	0	57	3	1	9	0	13	273
05:30 PM	21	148	0	0	169	0	2	0	0	2	1	59	6	0	66	5	1	9	0	15	252
05:45 PM	19	119	0	0	138	0	2	0	0	2	0	55	4	0	59	5	1	4	0	10	209
Total	66	587	1	0	654	0	8	0	0	8	7	213	23	0	243	26	5	29	0	60	965
Grand Total	191	1553	2	1	1747	0	18	8	0	26	10	599	59	0	668	66	31	93	0	190	2631
Apprch %	10.9	88.9	0.1	0.1		0	69.2	30.8	0		1.5	89.7	8.8	0		34.7	16.3	48.9	0		
Total %	7.3	59	0.1	0	66.4	0	0.7	0.3	0	1	0.4	22.8	2.2	0	25.4	2.5	1.2	3.5	0	7.2	
Cars	186	1508	2	1	1697	0	16	8	0	24	10	568	58	0	636	63	31	79	0	173	2530
% Cars	97.4	97.1	100	100	97.1	0	88.9	100	0	92.3	100	94.8	98.3	0	95.2	95.5	100	84.9	0	91.1	96.2
Trucks	5	45	0	0	50	0	2	0	0	2	0	31	1	0	32	3	0	14	0	17	101
% Trucks	2.6	2.9	0	0	2.9	0	11.1	0	0	7.7	0	5.2	1.7	0	4.8	4.5	0	15.1	0	8.9	3.8

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & STH 92/Biglow Rd  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036031  
Site Code : 09036031  
Start Date : 9/17/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & STH 92/Biglow Rd  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036031  
Site Code : 09036031  
Start Date : 9/17/2009  
Page No : 3

Start Time	USH 14 From North					Biglow Rd From East					USH 14 From South					STH 92 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	25	154	0	0	179	0	1	0	0	1	2	57	2	0	61	5	3	9	0	17	258
04:45 PM	16	131	0	0	147	0	2	3	0	5	0	55	3	0	58	5	3	8	0	16	226
05:00 PM	13	131	1	0	145	0	3	0	0	3	1	53	7	0	61	13	2	7	0	22	231
05:15 PM	13	189	0	0	202	0	1	0	0	1	5	46	6	0	57	3	1	9	0	13	273
Total Volume	67	605	1	0	673	0	7	3	0	10	8	211	18	0	237	26	9	33	0	68	988
% App. Total	10	89.9	0.1	0		0	70	30	0		3.4	89	7.6	0		38.2	13.2	48.5	0		
PHF	.670	.800	.250	.000	.833	.000	.583	.250	.000	.500	.400	.925	.643	.000	.971	.500	.750	.917	.000	.773	.905

Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:30 PM					04:00 PM					05:00 PM					04:15 PM				
+0 mins.	25	154	0	0	179	0	4	2	0	6	1	53	7	0	61	9	3	9	0	21
+15 mins.	16	131	0	0	147	0	2	0	0	2	5	46	6	0	57	5	3	9	0	17
+30 mins.	13	131	1	0	145	0	1	0	0	1	1	59	6	0	66	5	3	8	0	16
+45 mins.	13	189	0	0	202	0	2	3	0	5	0	55	4	0	59	13	2	7	0	22
Total Volume	67	605	1	0	673	0	9	5	0	14	7	213	23	0	243	32	11	33	0	76
% App. Total	10	89.9	0.1	0		0	64.3	35.7	0		2.9	87.7	9.5	0		42.1	14.5	43.4	0	
PHF	.670	.800	.250	.000	.833	.000	.563	.417	.000	.583	.350	.903	.821	.000	.920	.615	.917	.917	.000	.864

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & STH 59  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036040  
Site Code : 09036040  
Start Date : 11/4/2009  
Page No : 1

### Groups Printed- Cars - Trucks

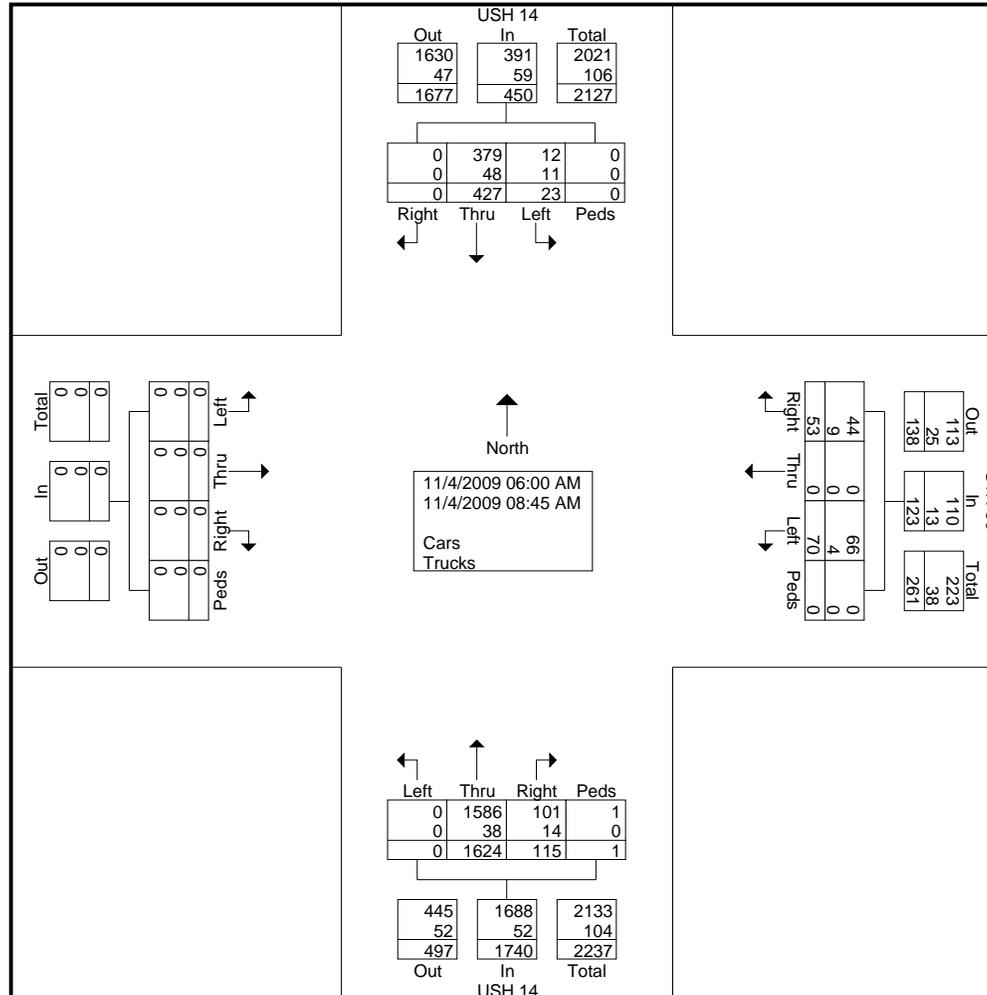
Start Time	USH 14 From North					STH 59 From East					USH 14 From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:00 AM	0	15	2	0	17	1	0	6	0	7	6	108	0	0	114	0	0	0	0	0	138
06:15 AM	0	21	0	0	21	2	0	1	0	3	12	141	0	0	153	0	0	0	0	0	177
06:30 AM	0	33	1	0	34	4	0	2	0	6	15	171	0	1	187	0	0	0	0	0	227
06:45 AM	0	37	2	0	39	6	0	3	0	9	11	143	0	0	154	0	0	0	0	0	202
Total	0	106	5	0	111	13	0	12	0	25	44	563	0	1	608	0	0	0	0	0	744
07:00 AM	0	33	1	0	34	4	0	5	0	9	18	163	0	0	181	0	0	0	0	0	224
07:15 AM	0	50	1	0	51	8	0	13	0	21	7	182	0	0	189	0	0	0	0	0	261
07:30 AM	0	37	2	0	39	5	0	11	0	16	14	145	0	0	159	0	0	0	0	0	214
07:45 AM	0	44	2	0	46	5	0	8	0	13	8	133	0	0	141	0	0	0	0	0	200
Total	0	164	6	0	170	22	0	37	0	59	47	623	0	0	670	0	0	0	0	0	899
08:00 AM	0	52	2	0	54	4	0	6	0	10	7	136	0	0	143	0	0	0	0	0	207
08:15 AM	0	29	1	0	30	5	0	6	0	11	10	111	0	0	121	0	0	0	0	0	162
08:30 AM	0	32	4	0	36	4	0	6	0	10	3	119	0	0	122	0	0	0	0	0	168
08:45 AM	0	44	5	0	49	5	0	3	0	8	4	72	0	0	76	0	0	0	0	0	133
Total	0	157	12	0	169	18	0	21	0	39	24	438	0	0	462	0	0	0	0	0	670
Grand Total	0	427	23	0	450	53	0	70	0	123	115	1624	0	1	1740	0	0	0	0	0	2313
Apprch %	0	94.9	5.1	0		43.1	0	56.9	0		6.6	93.3	0	0.1		0	0	0	0		
Total %	0	18.5	1	0	19.5	2.3	0	3	0	5.3	5	70.2	0	0	75.2	0	0	0	0	0	
Cars	0	379	12	0	391	44	0	66	0	110	101	1586	0	1	1688	0	0	0	0	0	2189
% Cars	0	88.8	52.2	0	86.9	83	0	94.3	0	89.4	87.8	97.7	0	100	97	0	0	0	0	0	94.6
Trucks	0	48	11	0	59	9	0	4	0	13	14	38	0	0	52	0	0	0	0	0	124
% Trucks	0	11.2	47.8	0	13.1	17	0	5.7	0	10.6	12.2	2.3	0	0	3	0	0	0	0	0	5.4

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & STH 59  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036040  
Site Code : 09036040  
Start Date : 11/4/2009  
Page No : 2





# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & STH 59  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036041  
Site Code : 09036041  
Start Date : 11/4/2009  
Page No : 1

### Groups Printed- Cars - Trucks

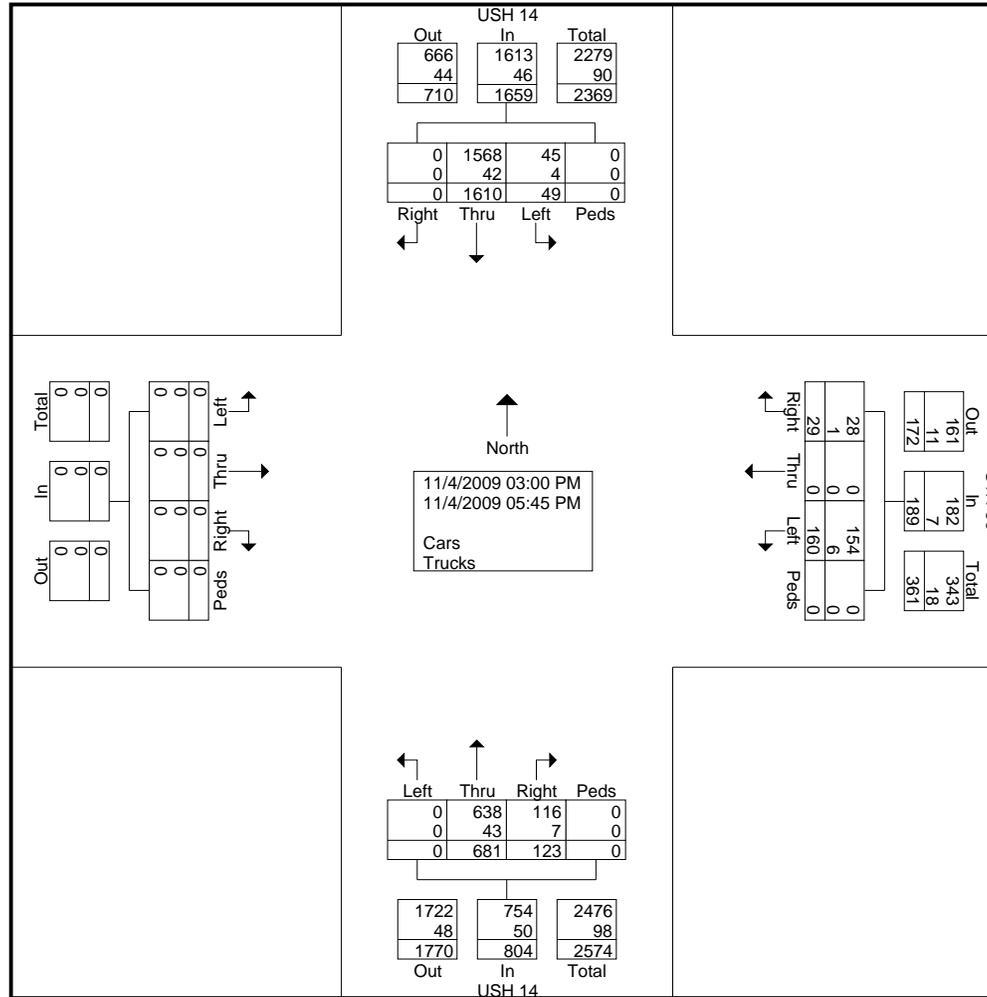
Start Time	USH 14 From North					STH 59 From East					USH 14 From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
03:00 PM	0	82	4	0	86	0	0	12	0	12	10	47	0	0	57	0	0	0	0	0	155
03:15 PM	0	101	3	0	104	1	0	8	0	9	15	48	0	0	63	0	0	0	0	0	176
03:30 PM	0	92	3	0	95	1	0	13	0	14	11	43	0	0	54	0	0	0	0	0	163
03:45 PM	0	122	2	0	124	1	0	13	0	14	10	50	0	0	60	0	0	0	0	0	198
Total	0	397	12	0	409	3	0	46	0	49	46	188	0	0	234	0	0	0	0	0	692
04:00 PM	0	131	6	0	137	2	0	18	0	20	9	68	0	0	77	0	0	0	0	0	234
04:15 PM	0	149	4	0	153	0	0	12	0	12	14	60	0	0	74	0	0	0	0	0	239
04:30 PM	0	173	8	0	181	4	0	16	0	20	7	66	0	0	73	0	0	0	0	0	274
04:45 PM	0	180	1	0	181	6	0	6	0	12	15	57	0	0	72	0	0	0	0	0	265
Total	0	633	19	0	652	12	0	52	0	64	45	251	0	0	296	0	0	0	0	0	1012
05:00 PM	0	177	6	0	183	4	0	15	0	19	11	64	0	0	75	0	0	0	0	0	277
05:15 PM	0	163	5	0	168	4	0	15	0	19	7	60	0	0	67	0	0	0	0	0	254
05:30 PM	0	131	5	0	136	4	0	18	0	22	11	67	0	0	78	0	0	0	0	0	236
05:45 PM	0	109	2	0	111	2	0	14	0	16	3	51	0	0	54	0	0	0	0	0	181
Total	0	580	18	0	598	14	0	62	0	76	32	242	0	0	274	0	0	0	0	0	948
Grand Total	0	1610	49	0	1659	29	0	160	0	189	123	681	0	0	804	0	0	0	0	0	2652
Apprch %	0	97	3	0		15.3	0	84.7	0		15.3	84.7	0	0		0	0	0	0		
Total %	0	60.7	1.8	0	62.6	1.1	0	6	0	7.1	4.6	25.7	0	0	30.3	0	0	0	0	0	
Cars	0	1568	45	0	1613	28	0	154	0	182	116	638	0	0	754	0	0	0	0	0	2549
% Cars	0	97.4	91.8	0	97.2	96.6	0	96.2	0	96.3	94.3	93.7	0	0	93.8	0	0	0	0	0	96.1
Trucks	0	42	4	0	46	1	0	6	0	7	7	43	0	0	50	0	0	0	0	0	103
% Trucks	0	2.6	8.2	0	2.8	3.4	0	3.8	0	3.7	5.7	6.3	0	0	6.2	0	0	0	0	0	3.9

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & STH 59  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036041  
Site Code : 09036041  
Start Date : 11/4/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & STH 59  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036041  
Site Code : 09036041  
Start Date : 11/4/2009  
Page No : 3

Start Time	USH 14 From North					STH 59 From East					USH 14 From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	173	<b>8</b>	0	181	4	0	<b>16</b>	0	<b>20</b>	7	<b>66</b>	0	0	73	0	0	0	0	0	274
04:45 PM	0	<b>180</b>	1	0	181	<b>6</b>	0	6	0	12	<b>15</b>	57	0	0	72	0	0	0	0	0	265
05:00 PM	0	177	6	0	<b>183</b>	4	0	15	0	19	11	64	0	0	<b>75</b>	0	0	0	0	0	<b>277</b>
05:15 PM	0	163	5	0	168	4	0	15	0	19	7	60	0	0	67	0	0	0	0	0	254
Total Volume	0	693	20	0	713	18	0	52	0	70	40	247	0	0	287	0	0	0	0	0	1070
% App. Total	0	97.2	2.8	0		25.7	0	74.3	0		13.9	86.1	0	0		0	0	0	0		
PHF	.000	.963	.625	.000	.974	.750	.000	.813	.000	.875	.667	.936	.000	.000	.957	.000	.000	.000	.000	.000	.966

Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM					05:00 PM					04:00 PM					03:00 PM				
+0 mins.	0	173	<b>8</b>	0	181	<b>4</b>	0	15	0	19	9	<b>68</b>	0	0	<b>77</b>	0	0	0	0	0
+15 mins.	0	<b>180</b>	1	0	181	4	0	15	0	19	14	60	0	0	74	0	0	0	0	0
+30 mins.	0	177	6	0	<b>183</b>	4	0	<b>18</b>	0	<b>22</b>	7	66	0	0	73	0	0	0	0	0
+45 mins.	0	163	5	0	168	2	0	14	0	16	<b>15</b>	57	0	0	72	0	0	0	0	0
Total Volume	0	693	20	0	713	14	0	62	0	76	45	251	0	0	296	0	0	0	0	0
% App. Total	0	97.2	2.8	0		18.4	0	81.6	0		15.2	84.8	0	0		0	0	0	0	
PHF	.000	.963	.625	.000	.974	.875	.000	.861	.000	.864	.750	.923	.000	.000	.961	.000	.000	.000	.000	.000

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & Bullard Rd  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036050  
Site Code : 09036050  
Start Date : 9/22/2009  
Page No : 1

**Groups Printed- Cars - Trucks**

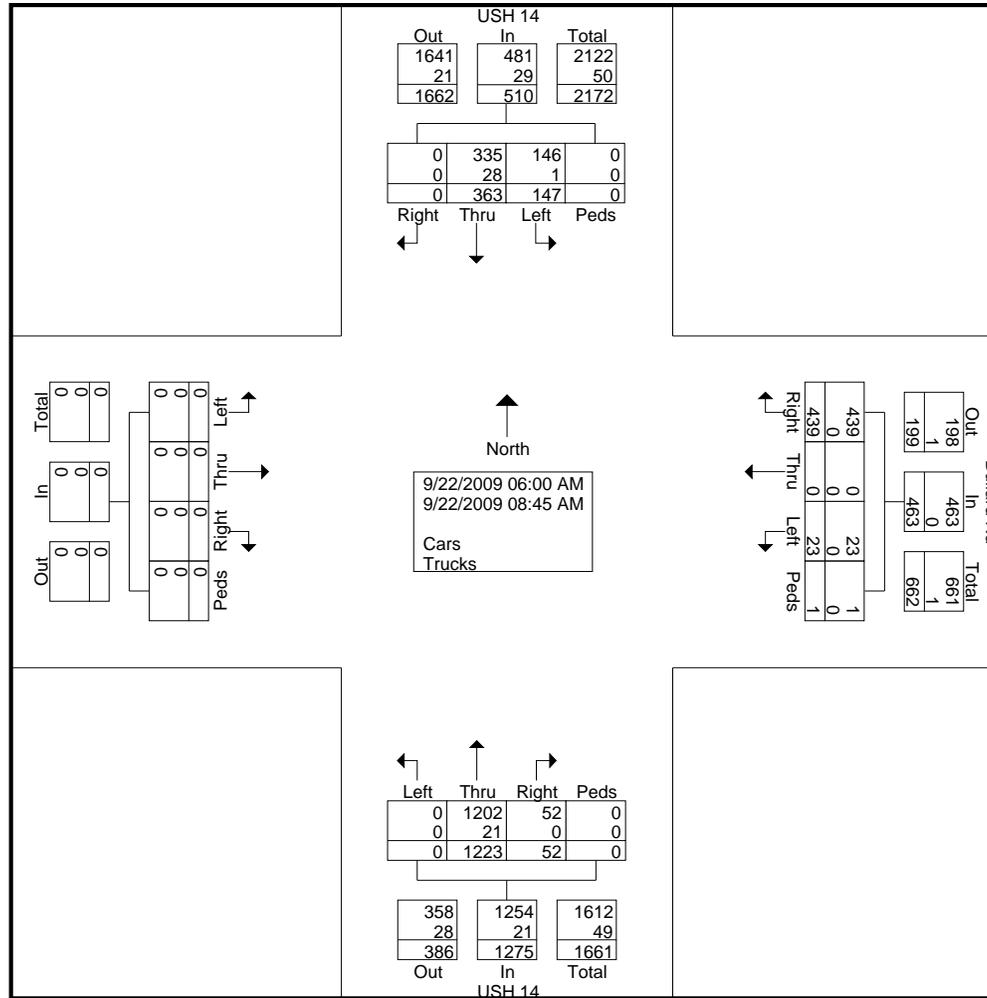
Start Time	USH 14 From North					Bullard Rd From East					USH 14 From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:00 AM	0	13	12	0	25	23	0	1	1	25	2	95	0	0	97	0	0	0	0	0	147
06:15 AM	0	14	12	0	26	56	0	0	0	56	5	120	0	0	125	0	0	0	0	0	207
06:30 AM	0	17	11	0	28	38	0	1	0	39	4	121	0	0	125	0	0	0	0	0	192
06:45 AM	0	28	16	0	44	47	0	2	0	49	2	107	0	0	109	0	0	0	0	0	202
<b>Total</b>	0	72	51	0	123	164	0	4	1	169	13	443	0	0	456	0	0	0	0	0	748
07:00 AM	0	36	16	0	52	44	0	3	0	47	6	141	0	0	147	0	0	0	0	0	246
07:15 AM	0	50	15	0	65	62	0	3	0	65	7	117	0	0	124	0	0	0	0	0	254
07:30 AM	0	36	14	0	50	38	0	3	0	41	4	126	0	0	130	0	0	0	0	0	221
07:45 AM	0	48	13	0	61	38	0	0	0	38	3	92	0	0	95	0	0	0	0	0	194
<b>Total</b>	0	170	58	0	228	182	0	9	0	191	20	476	0	0	496	0	0	0	0	0	915
08:00 AM	0	32	10	0	42	29	0	5	0	34	4	118	0	0	122	0	0	0	0	0	198
08:15 AM	0	29	7	0	36	26	0	3	0	29	5	77	0	0	82	0	0	0	0	0	147
08:30 AM	0	29	11	0	40	21	0	1	0	22	5	64	0	0	69	0	0	0	0	0	131
08:45 AM	0	31	10	0	41	17	0	1	0	18	5	45	0	0	50	0	0	0	0	0	109
<b>Total</b>	0	121	38	0	159	93	0	10	0	103	19	304	0	0	323	0	0	0	0	0	585
<b>Grand Total</b>	0	363	147	0	510	439	0	23	1	463	52	1223	0	0	1275	0	0	0	0	0	2248
Apprch %	0	71.2	28.8	0		94.8	0	5	0.2		4.1	95.9	0	0		0	0	0	0		
Total %	0	16.1	6.5	0	22.7	19.5	0	1	0	20.6	2.3	54.4	0	0	56.7	0	0	0	0	0	
Cars	0	335	146	0	481	439	0	23	1	463	52	1202	0	0	1254	0	0	0	0	0	2198
% Cars	0	92.3	99.3	0	94.3	100	0	100	100	100	100	98.3	0	0	98.4	0	0	0	0	0	97.8
Trucks	0	28	1	0	29	0	0	0	0	0	0	21	0	0	21	0	0	0	0	0	50
% Trucks	0	7.7	0.7	0	5.7	0	0	0	0	0	0	1.7	0	0	1.6	0	0	0	0	0	2.2

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & Bullard Rd  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036050  
Site Code : 09036050  
Start Date : 9/22/2009  
Page No : 2





# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & BULLARD ROAD  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036051  
Site Code : 09036051  
Start Date : 9/29/2009  
Page No : 1

### Groups Printed- Cars - Trucks

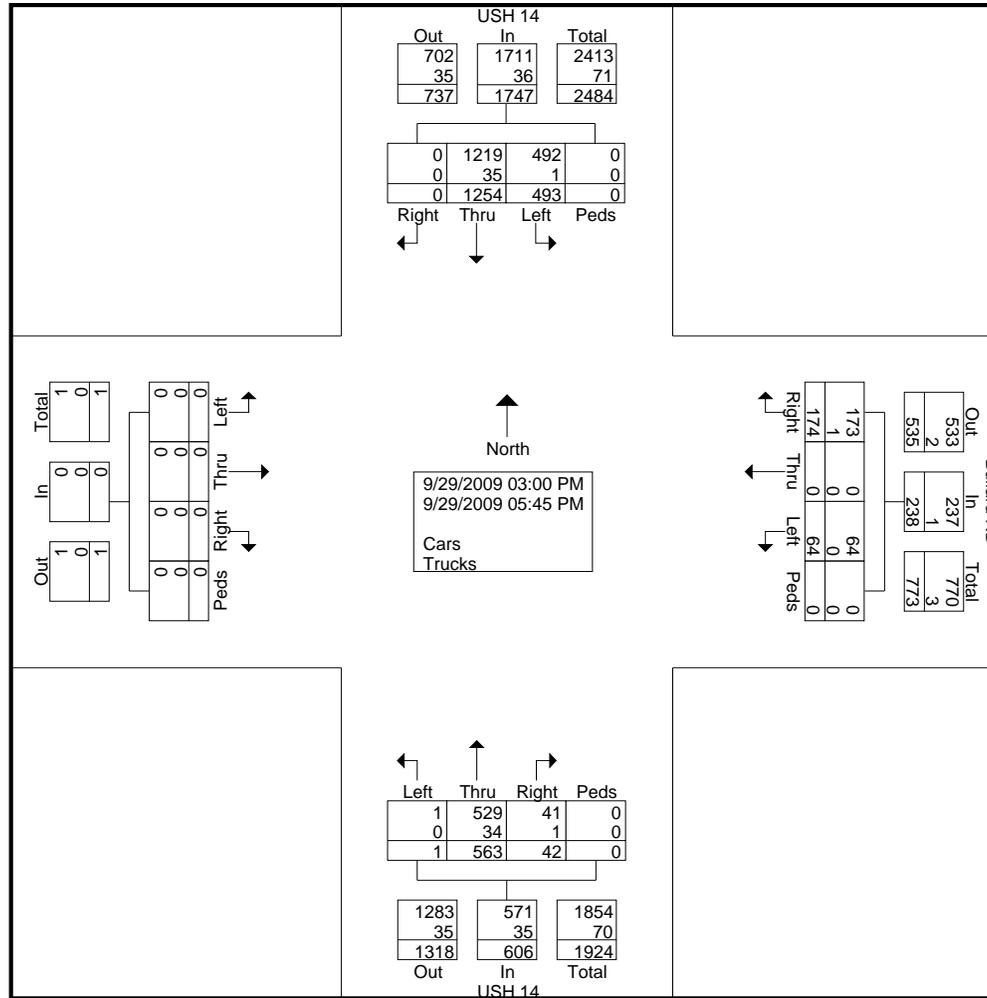
Start Time	USH 14 From North					Bullard RD From East					USH 14 From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
03:00 PM	0	61	23	0	84	7	0	9	0	16	7	48	0	0	55	0	0	0	0	0	155
03:15 PM	0	63	23	0	86	9	0	7	0	16	4	48	0	0	52	0	0	0	0	0	154
03:30 PM	0	80	25	0	105	17	0	3	0	20	2	50	0	0	52	0	0	0	0	0	177
03:45 PM	0	87	32	0	119	5	0	3	0	8	5	31	0	0	36	0	0	0	0	0	163
Total	0	291	103	0	394	38	0	22	0	60	18	177	0	0	195	0	0	0	0	0	649
04:00 PM	0	129	48	0	177	19	0	6	0	25	5	47	0	0	52	0	0	0	0	0	254
04:15 PM	0	101	44	0	145	12	0	3	0	15	3	54	1	0	58	0	0	0	0	0	218
04:30 PM	0	109	54	0	163	21	0	4	0	25	7	45	0	0	52	0	0	0	0	0	240
04:45 PM	0	156	54	0	210	13	0	7	0	20	0	40	0	0	40	0	0	0	0	0	270
Total	0	495	200	0	695	65	0	20	0	85	15	186	1	0	202	0	0	0	0	0	982
05:00 PM	0	126	60	0	186	20	0	10	0	30	5	42	0	0	47	0	0	0	0	0	263
05:15 PM	0	114	38	0	152	18	0	5	0	23	1	63	0	0	64	0	0	0	0	0	239
05:30 PM	0	131	54	0	185	19	0	5	0	24	1	49	0	0	50	0	0	0	0	0	259
05:45 PM	0	97	38	0	135	14	0	2	0	16	2	46	0	0	48	0	0	0	0	0	199
Total	0	468	190	0	658	71	0	22	0	93	9	200	0	0	209	0	0	0	0	0	960
Grand Total	0	1254	493	0	1747	174	0	64	0	238	42	563	1	0	606	0	0	0	0	0	2591
Apprch %	0	71.8	28.2	0		73.1	0	26.9	0		6.9	92.9	0.2	0		0	0	0	0		
Total %	0	48.4	19	0	67.4	6.7	0	2.5	0	9.2	1.6	21.7	0	0	23.4	0	0	0	0	0	
Cars	0	1219	492	0	1711	173	0	64	0	237	41	529	1	0	571	0	0	0	0	0	2519
% Cars	0	97.2	99.8	0	97.9	99.4	0	100	0	99.6	97.6	94	100	0	94.2	0	0	0	0	0	97.2
Trucks	0	35	1	0	36	1	0	0	0	1	1	34	0	0	35	0	0	0	0	0	72
% Trucks	0	2.8	0.2	0	2.1	0.6	0	0	0	0.4	2.4	6	0	0	5.8	0	0	0	0	0	2.8

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & BULLARD ROAD  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036051  
Site Code : 09036051  
Start Date : 9/29/2009  
Page No : 2





# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & STH 213/STH 59  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036060  
Site Code : 09036060  
Start Date : 10/20/2009  
Page No : 1

### Groups Printed- Cars - Trucks

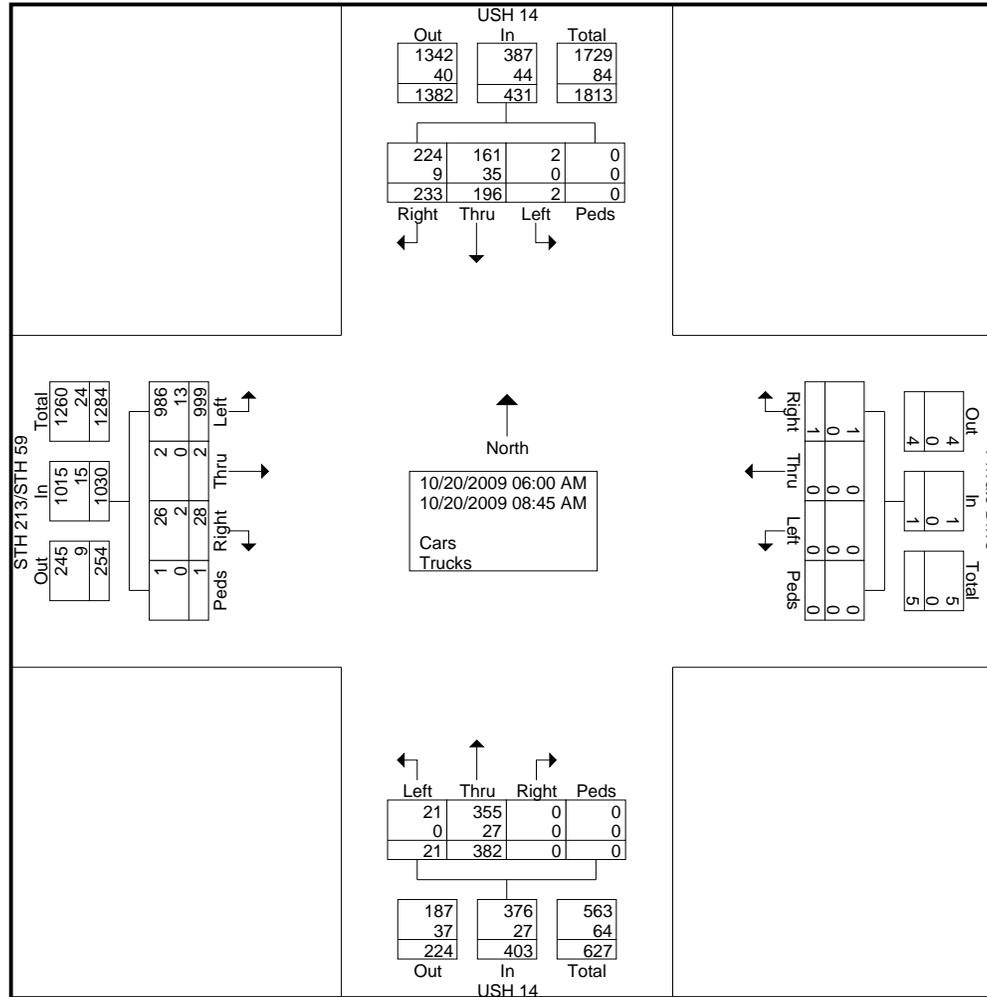
Start Time	USH 14 From North					Private Drive From East					USH 14 From South					STH 213/STH 59 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:00 AM	13	11	0	0	24	0	0	0	0	0	0	19	1	0	20	2	0	79	0	81	125
06:15 AM	8	11	0	0	19	0	0	0	0	0	0	35	0	0	35	1	0	110	0	111	165
06:30 AM	13	13	0	0	26	0	0	0	0	0	0	31	2	0	33	2	0	90	0	92	151
06:45 AM	17	18	0	0	35	0	0	0	0	0	0	39	2	0	41	0	0	100	0	100	176
Total	51	53	0	0	104	0	0	0	0	0	0	124	5	0	129	5	0	379	0	384	617
07:00 AM	17	15	0	0	32	0	0	0	0	0	0	41	2	0	43	3	0	103	0	106	181
07:15 AM	33	19	0	0	52	0	0	0	0	0	0	32	1	0	33	3	0	101	0	104	189
07:30 AM	26	13	1	0	40	0	0	0	0	0	0	42	4	0	46	1	1	109	0	111	197
07:45 AM	24	16	0	0	40	0	0	0	0	0	0	33	4	0	37	3	0	94	0	97	174
Total	100	63	1	0	164	0	0	0	0	0	0	148	11	0	159	10	1	407	0	418	741
08:00 AM	20	27	1	0	48	1	0	0	0	1	0	34	1	0	35	5	1	93	0	99	183
08:15 AM	25	18	0	0	43	0	0	0	0	0	0	33	1	0	34	3	0	53	0	56	133
08:30 AM	15	21	0	0	36	0	0	0	0	0	0	18	2	0	20	1	0	41	0	42	98
08:45 AM	22	14	0	0	36	0	0	0	0	0	0	25	1	0	26	4	0	26	1	31	93
Total	82	80	1	0	163	1	0	0	0	1	0	110	5	0	115	13	1	213	1	228	507
Grand Total	233	196	2	0	431	1	0	0	0	1	0	382	21	0	403	28	2	999	1	1030	1865
Apprch %	54.1	45.5	0.5	0		100	0	0	0		0	94.8	5.2	0		2.7	0.2	97	0.1		
Total %	12.5	10.5	0.1	0	23.1	0.1	0	0	0	0.1	0	20.5	1.1	0	21.6	1.5	0.1	53.6	0.1	55.2	
Cars	224	161	2	0	387	1	0	0	0	1	0	355	21	0	376	26	2	986	1	1015	1779
% Cars	96.1	82.1	100	0	89.8	100	0	0	0	100	0	92.9	100	0	93.3	92.9	100	98.7	100	98.5	95.4
Trucks	9	35	0	0	44	0	0	0	0	0	0	27	0	0	27	2	0	13	0	15	86
% Trucks	3.9	17.9	0	0	10.2	0	0	0	0	0	0	7.1	0	0	6.7	7.1	0	1.3	0	1.5	4.6

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & STH 213/STH 59  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036060  
Site Code : 09036060  
Start Date : 10/20/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & STH 213/STH 59  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036060  
Site Code : 09036060  
Start Date : 10/20/2009  
Page No : 3

Start Time	USH 14 From North					Private Drive From East					USH 14 From South					STH 213/STH 59 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 06:45 AM																					
06:45 AM	17	18	0	0	35	0	0	0	0	0	0	39	2	0	41	0	0	100	0	100	176
07:00 AM	17	15	0	0	32	0	0	0	0	0	0	41	2	0	43	3	0	103	0	106	181
07:15 AM	33	19	0	0	52	0	0	0	0	0	0	32	1	0	33	3	0	101	0	104	189
07:30 AM	26	13	1	0	40	0	0	0	0	0	0	42	4	0	46	1	1	109	0	111	197
Total Volume	93	65	1	0	159	0	0	0	0	0	0	154	9	0	163	7	1	413	0	421	743
% App. Total	58.5	40.9	0.6	0		0	0	0	0		0	94.5	5.5	0		1.7	0.2	98.1	0		
PHF	.705	.855	.250	.000	.764	.000	.000	.000	.000	.000	.000	.917	.563	.000	.886	.583	.250	.947	.000	.948	.943

Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM					07:15 AM					06:45 AM					06:45 AM				
+0 mins.	33	19	0	0	52	0	0	0	0	0	0	39	2	0	41	0	0	100	0	100
+15 mins.	26	13	1	0	40	0	0	0	0	0	0	41	2	0	43	3	0	103	0	106
+30 mins.	24	16	0	0	40	0	0	0	0	0	0	32	1	0	33	3	0	101	0	104
+45 mins.	20	27	1	0	48	1	0	0	0	1	0	42	4	0	46	1	1	109	0	111
Total Volume	103	75	2	0	180	1	0	0	0	1	0	154	9	0	163	7	1	413	0	421
% App. Total	57.2	41.7	1.1	0		100	0	0	0		0	94.5	5.5	0		1.7	0.2	98.1	0	
PHF	.780	.694	.500	.000	.865	.250	.000	.000	.000	.250	.000	.917	.563	.000	.886	.583	.250	.947	.000	.948

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & STH 213/STH 59  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036061  
Site Code : 09036061  
Start Date : 9/30/2009  
Page No : 1

### Groups Printed- Cars - Trucks

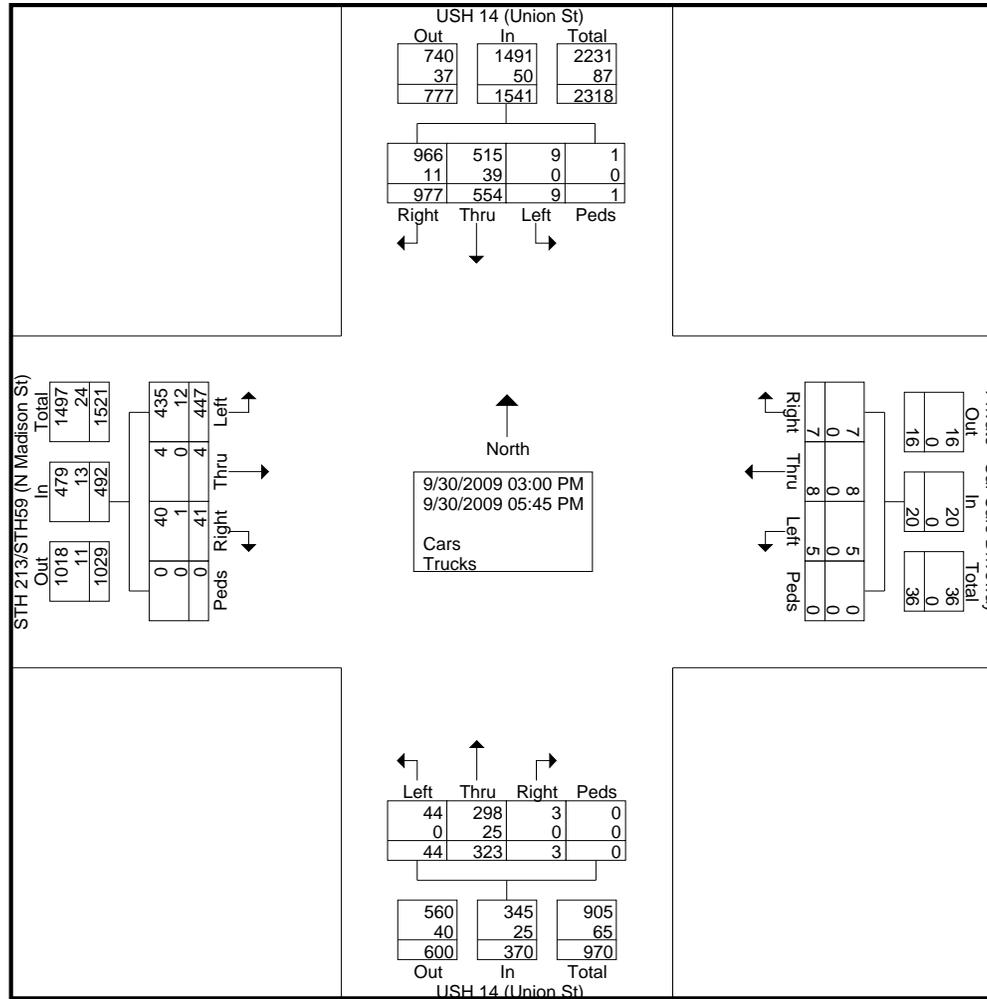
Start Time	USH 14 (Union St) From North					Private - Car Care Driveway From East					USH 14 (Union St) From South					STH 213/STH59 (N Madison St) From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
03:00 PM	55	24	0	0	79	1	0	1	0	2	0	18	1	0	19	2	1	27	0	30	130
03:15 PM	44	26	0	0	70	1	2	0	0	3	0	34	4	0	38	2	1	49	0	52	163
03:30 PM	68	31	2	1	102	0	1	0	0	1	0	24	2	0	26	1	0	39	0	40	169
03:45 PM	69	42	2	0	113	0	2	0	0	2	0	31	4	0	35	6	0	46	0	52	202
Total	236	123	4	1	364	2	5	1	0	8	0	107	11	0	118	11	2	161	0	174	664
04:00 PM	78	65	0	0	143	1	1	0	0	2	1	20	1	0	22	6	0	32	0	38	205
04:15 PM	73	43	1	0	117	1	1	0	0	2	0	31	2	0	33	3	1	39	0	43	195
04:30 PM	92	33	0	0	125	0	0	0	0	0	1	25	2	0	28	5	0	38	0	43	196
04:45 PM	105	70	1	0	176	1	0	2	0	3	0	38	4	0	42	0	0	48	0	48	269
Total	348	211	2	0	561	3	2	2	0	7	2	114	9	0	125	14	1	157	0	172	865
05:00 PM	122	60	0	0	182	0	1	1	0	2	0	28	8	0	36	4	0	32	0	36	256
05:15 PM	109	59	1	0	169	1	0	0	0	1	0	25	6	0	31	4	1	34	0	39	240
05:30 PM	88	51	1	0	140	1	0	0	0	1	1	29	4	0	34	4	0	23	0	27	202
05:45 PM	74	50	1	0	125	0	0	1	0	1	0	20	6	0	26	4	0	40	0	44	196
Total	393	220	3	0	616	2	1	2	0	5	1	102	24	0	127	16	1	129	0	146	894
Grand Total	977	554	9	1	1541	7	8	5	0	20	3	323	44	0	370	41	4	447	0	492	2423
Apprch %	63.4	36	0.6	0.1		35	40	25	0		0.8	87.3	11.9	0		8.3	0.8	90.9	0		
Total %	40.3	22.9	0.4	0	63.6	0.3	0.3	0.2	0	0.8	0.1	13.3	1.8	0	15.3	1.7	0.2	18.4	0	20.3	
Cars	966	515	9	1	1491	7	8	5	0	20	3	298	44	0	345	40	4	435	0	479	2335
% Cars	98.9	93	100	100	96.8	100	100	100	0	100	100	92.3	100	0	93.2	97.6	100	97.3	0	97.4	96.4
Trucks	11	39	0	0	50	0	0	0	0	0	0	25	0	0	25	1	0	12	0	13	88
% Trucks	1.1	7	0	0	3.2	0	0	0	0	0	0	7.7	0	0	6.8	2.4	0	2.7	0	2.6	3.6

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & STH 213/STH 59  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036061  
Site Code : 09036061  
Start Date : 9/30/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & STH 213/STH 59  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036061  
Site Code : 09036061  
Start Date : 9/30/2009  
Page No : 3

Start Time	USH 14 (Union St) From North					Private - Car Care Driveway From East					USH 14 (Union St) From South					STH 213/STH59 (N Madison St) From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	105	<b>70</b>	<b>1</b>	0	176	<b>1</b>	0	<b>2</b>	0	<b>3</b>	0	<b>38</b>	4	0	<b>42</b>	0	0	<b>48</b>	0	<b>48</b>	<b>269</b>
05:00 PM	<b>122</b>	60	0	0	<b>182</b>	0	<b>1</b>	1	0	<b>2</b>	0	28	<b>8</b>	0	<b>36</b>	<b>4</b>	0	32	0	<b>36</b>	<b>256</b>
05:15 PM	109	59	1	0	169	1	0	0	0	1	0	25	6	0	31	4	<b>1</b>	34	0	<b>39</b>	<b>240</b>
05:30 PM	88	51	1	0	140	1	0	0	0	1	<b>1</b>	29	4	0	34	4	0	23	0	<b>27</b>	<b>202</b>
Total Volume	424	240	3	0	667	3	1	3	0	7	1	120	22	0	143	12	1	137	0	150	967
% App. Total	63.6	36	0.4	0		42.9	14.3	42.9	0		0.7	83.9	15.4	0		8	0.7	91.3	0		
PHF	.869	.857	.750	.000	.916	.750	.250	.375	.000	.583	.250	.789	.688	.000	.851	.750	.250	.714	.000	.781	.899

Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:45 PM					03:00 PM					04:45 PM					03:15 PM				
+0 mins.	105	<b>70</b>	<b>1</b>	0	176	<b>1</b>	0	<b>1</b>	0	<b>2</b>	0	<b>38</b>	4	0	<b>42</b>	2	<b>1</b>	<b>49</b>	0	<b>52</b>
+15 mins.	<b>122</b>	60	0	0	<b>182</b>	<b>1</b>	<b>2</b>	0	0	<b>3</b>	0	28	<b>8</b>	0	<b>36</b>	1	0	39	0	<b>40</b>
+30 mins.	109	59	1	0	169	0	1	0	0	1	0	25	6	0	31	<b>6</b>	0	46	0	<b>52</b>
+45 mins.	88	51	1	0	140	0	2	0	0	2	<b>1</b>	29	4	0	34	6	0	32	0	<b>38</b>
Total Volume	424	240	3	0	667	2	5	1	0	8	1	120	22	0	143	15	1	166	0	182
% App. Total	63.6	36	0.4	0		25	62.5	12.5	0		0.7	83.9	15.4	0		8.2	0.5	91.2	0	
PHF	.869	.857	.750	.000	.916	.500	.625	.250	.000	.667	.250	.789	.688	.000	.851	.625	.250	.847	.000	.875

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & E. Main St.  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036070  
Site Code : 09036070  
Start Date : 10/1/2009  
Page No : 1

**Groups Printed- Cars - Trucks**

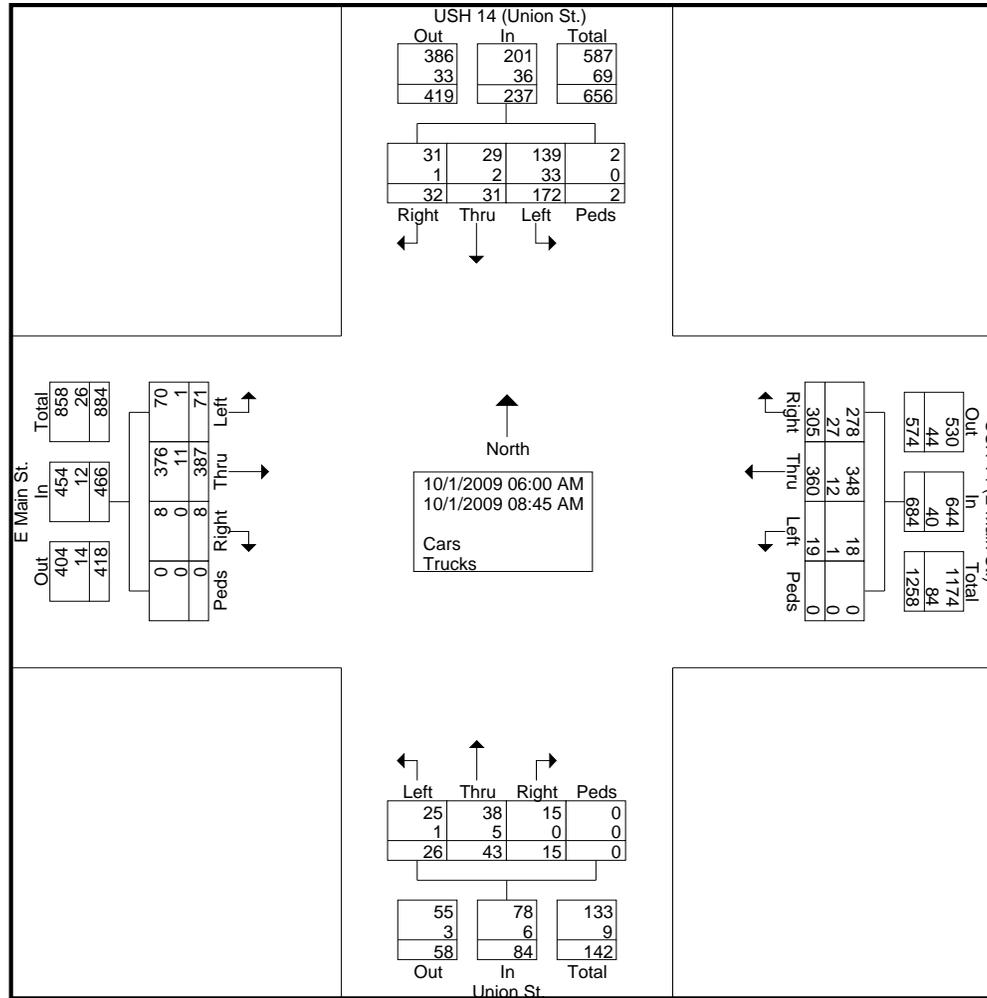
Start Time	USH 14 (Union St.) From North					USH 14 (E Main St.) From East					Union St. From South					E Main St. From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:00 AM	1	0	7	0	8	16	10	2	0	28	1	3	0	0	4	0	12	3	0	15	55
06:15 AM	2	2	10	0	14	28	15	3	0	46	0	2	1	0	3	1	17	4	0	22	85
06:30 AM	1	1	17	0	19	19	17	0	0	36	1	3	0	0	4	1	18	9	0	28	87
06:45 AM	1	3	8	0	12	27	16	1	0	44	1	7	3	0	11	1	26	4	0	31	98
Total	5	6	42	0	53	90	58	6	0	154	3	15	4	0	22	3	73	20	0	96	325
07:00 AM	2	4	21	0	27	28	29	2	0	59	1	5	5	0	11	0	30	5	0	35	132
07:15 AM	4	2	20	0	26	31	51	3	0	85	5	7	3	0	15	0	35	6	0	41	167
07:30 AM	3	3	16	0	22	33	66	4	0	103	0	5	3	0	8	2	34	11	0	47	180
07:45 AM	3	2	15	0	20	27	43	1	0	71	1	1	1	0	3	0	54	12	0	66	160
Total	12	11	72	0	95	119	189	10	0	318	7	18	12	0	37	2	153	34	0	189	639
08:00 AM	2	2	9	0	13	29	29	1	0	59	2	0	3	0	5	1	56	7	0	64	141
08:15 AM	3	6	13	0	22	21	33	2	0	56	1	4	1	0	6	1	36	4	0	41	125
08:30 AM	3	3	18	0	24	26	21	0	0	47	1	4	2	0	7	0	28	4	0	32	110
08:45 AM	7	3	18	2	30	20	30	0	0	50	1	2	4	0	7	1	41	2	0	44	131
Total	15	14	58	2	89	96	113	3	0	212	5	10	10	0	25	3	161	17	0	181	507
Grand Total	32	31	172	2	237	305	360	19	0	684	15	43	26	0	84	8	387	71	0	466	1471
Apprch %	13.5	13.1	72.6	0.8		44.6	52.6	2.8	0		17.9	51.2	31	0		1.7	83	15.2	0		
Total %	2.2	2.1	11.7	0.1	16.1	20.7	24.5	1.3	0	46.5	1	2.9	1.8	0	5.7	0.5	26.3	4.8	0	31.7	
Cars	31	29	139	2	201	278	348	18	0	644	15	38	25	0	78	8	376	70	0	454	1377
% Cars	96.9	93.5	80.8	100	84.8	91.1	96.7	94.7	0	94.2	100	88.4	96.2	0	92.9	100	97.2	98.6	0	97.4	93.6
Trucks	1	2	33	0	36	27	12	1	0	40	0	5	1	0	6	0	11	1	0	12	94
% Trucks	3.1	6.5	19.2	0	15.2	8.9	3.3	5.3	0	5.8	0	11.6	3.8	0	7.1	0	2.8	1.4	0	2.6	6.4

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & E. Main St.  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036070  
Site Code : 09036070  
Start Date : 10/1/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & E. Main St.  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036070  
Site Code : 09036070  
Start Date : 10/1/2009  
Page No : 3

Start Time	USH 14 (Union St.) From North					USH 14 (E Main St.) From East					Union St. From South					E Main St. From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	4	2	20	0	26	31	51	3	0	85	5	7	3	0	15	0	35	6	0	41	167
07:30 AM	3	3	16	0	22	33	66	4	0	103	0	5	3	0	8	2	34	11	0	47	180
07:45 AM	3	2	15	0	20	27	43	1	0	71	1	1	1	0	3	0	54	12	0	66	160
08:00 AM	2	2	9	0	13	29	29	1	0	59	2	0	3	0	5	1	56	7	0	64	141
Total Volume	12	9	60	0	81	120	189	9	0	318	8	13	10	0	31	3	179	36	0	218	648
% App. Total	14.8	11.1	74.1	0		37.7	59.4	2.8	0		25.8	41.9	32.3	0		1.4	82.1	16.5	0		
PHF	.750	.750	.750	.000	.779	.909	.716	.563	.000	.772	.400	.464	.833	.000	.517	.375	.799	.750	.000	.826	.900

Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM					07:00 AM					06:45 AM					07:15 AM				
+0 mins.	2	4	21	0	27	28	29	2	0	59	1	7	3	0	11	0	35	6	0	41
+15 mins.	4	2	20	0	26	31	51	3	0	85	1	5	5	0	11	2	34	11	0	47
+30 mins.	3	3	16	0	22	33	66	4	0	103	5	7	3	0	15	0	54	12	0	66
+45 mins.	3	2	15	0	20	27	43	1	0	71	0	5	3	0	8	1	56	7	0	64
Total Volume	12	11	72	0	95	119	189	10	0	318	7	24	14	0	45	3	179	36	0	218
% App. Total	12.6	11.6	75.8	0		37.4	59.4	3.1	0		15.6	53.3	31.1	0		1.4	82.1	16.5	0	
PHF	.750	.688	.857	.000	.880	.902	.716	.625	.000	.772	.350	.857	.700	.000	.750	.375	.799	.750	.000	.826

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & E. Main St.  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036071  
Site Code : 09036071  
Start Date : 10/1/2009  
Page No : 1

**Groups Printed- Cars - Trucks**

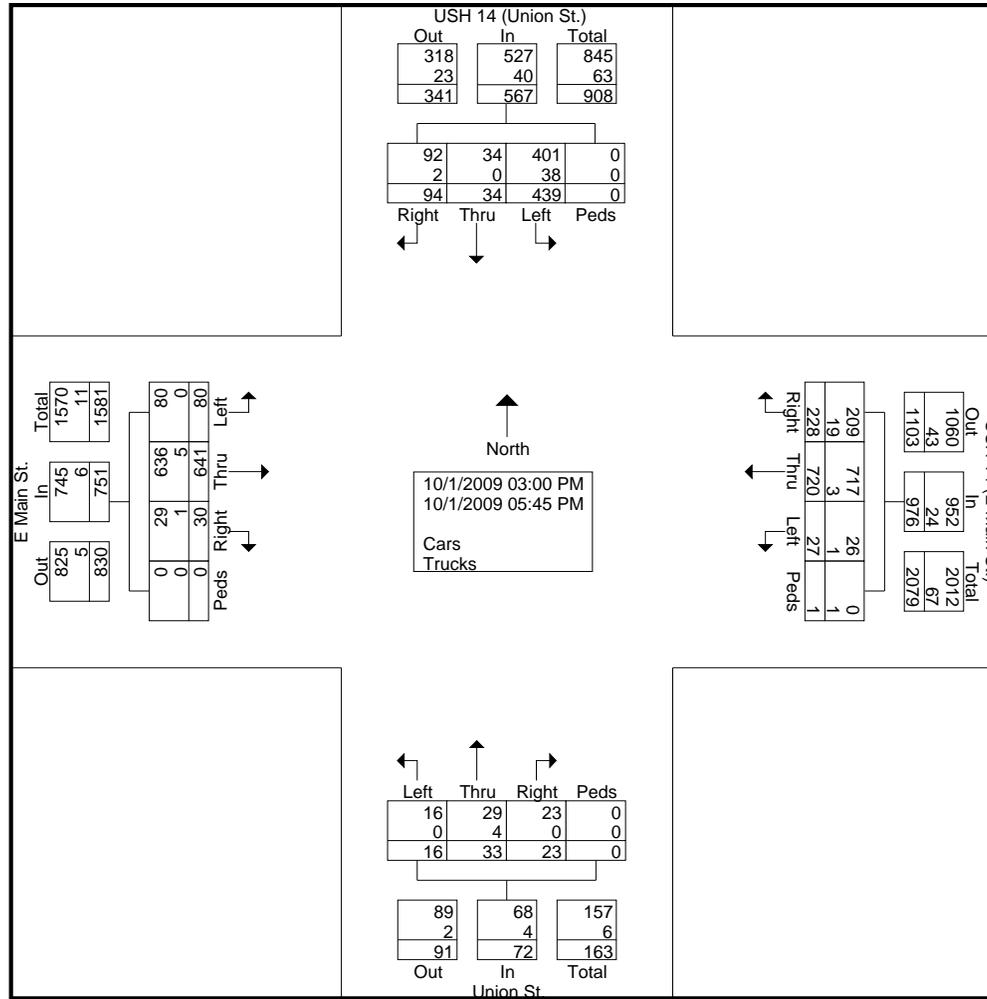
Start Time	USH 14 (Union St.) From North					USH 14 (E Main St.) From East					Union St. From South					E Main St. From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
03:00 PM	10	1	18	0	29	12	47	3	0	62	0	4	0	0	4	3	48	2	0	53	148
03:15 PM	6	2	24	0	32	22	42	3	0	67	5	0	1	0	6	3	74	12	0	89	194
03:30 PM	9	4	44	0	57	24	61	2	0	87	2	4	0	0	6	3	49	5	0	57	207
03:45 PM	6	3	25	0	34	17	56	2	0	75	0	1	3	0	4	4	35	6	0	45	158
Total	31	10	111	0	152	75	206	10	0	291	7	9	4	0	20	13	206	25	0	244	707
04:00 PM	7	2	42	0	51	23	76	1	0	100	4	1	5	0	10	4	42	6	0	52	213
04:15 PM	8	2	44	0	54	16	71	2	0	89	1	3	1	0	5	2	52	5	0	59	207
04:30 PM	4	4	42	0	50	22	55	5	1	83	1	5	1	0	7	3	61	6	0	70	210
04:45 PM	11	4	50	0	65	15	64	1	0	80	1	2	1	0	4	1	51	1	0	53	202
Total	30	12	178	0	220	76	266	9	1	352	7	11	8	0	26	10	206	18	0	234	832
05:00 PM	5	1	37	0	43	15	56	2	0	73	0	7	0	0	7	3	60	10	0	73	196
05:15 PM	14	6	36	0	56	18	62	0	0	80	3	3	0	0	6	2	53	6	0	61	203
05:30 PM	5	3	33	0	41	28	74	6	0	108	2	2	1	0	5	1	49	7	0	57	211
05:45 PM	9	2	44	0	55	16	56	0	0	72	4	1	3	0	8	1	67	14	0	82	217
Total	33	12	150	0	195	77	248	8	0	333	9	13	4	0	26	7	229	37	0	273	827
Grand Total	94	34	439	0	567	228	720	27	1	976	23	33	16	0	72	30	641	80	0	751	2366
Apprch %	16.6	6	77.4	0		23.4	73.8	2.8	0.1		31.9	45.8	22.2	0		4	85.4	10.7	0		
Total %	4	1.4	18.6	0	24	9.6	30.4	1.1	0	41.3	1	1.4	0.7	0	3	1.3	27.1	3.4	0	31.7	
Cars	92	34	401	0	527	209	717	26	0	952	23	29	16	0	68	29	636	80	0	745	2292
% Cars	97.9	100	91.3	0	92.9	91.7	99.6	96.3	0	97.5	100	87.9	100	0	94.4	96.7	99.2	100	0	99.2	96.9
Trucks	2	0	38	0	40	19	3	1	1	24	0	4	0	0	4	1	5	0	0	6	74
% Trucks	2.1	0	8.7	0	7.1	8.3	0.4	3.7	100	2.5	0	12.1	0	0	5.6	3.3	0.8	0	0	0.8	3.1

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & E. Main St.  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036071  
Site Code : 09036071  
Start Date : 10/1/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & E. Main St.  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036071  
Site Code : 09036071  
Start Date : 10/1/2009  
Page No : 3

Start Time	USH 14 (Union St.) From North					USH 14 (E Main St.) From East					Union St. From South					E Main St. From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	7	2	42	0	51	23	76	1	0	100	4	1	5	0	10	4	42	6	0	52	213
04:15 PM	8	2	44	0	54	16	71	2	0	89	1	3	1	0	5	2	52	5	0	59	207
04:30 PM	4	4	42	0	50	22	55	5	1	83	1	5	1	0	7	3	61	6	0	70	210
04:45 PM	11	4	50	0	65	15	64	1	0	80	1	2	1	0	4	1	51	1	0	53	202
Total Volume	30	12	178	0	220	76	266	9	1	352	7	11	8	0	26	10	206	18	0	234	832
% App. Total	13.6	5.5	80.9	0		21.6	75.6	2.6	0.3		26.9	42.3	30.8	0		4.3	88	7.7	0		
PHF	.682	.750	.890	.000	.846	.826	.875	.450	.250	.880	.438	.550	.400	.000	.650	.625	.844	.750	.000	.836	.977

Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM					04:00 PM					03:15 PM					05:00 PM					
+0 mins.	7	2	42	0	51	23	76	1	0	100	5	0	1	0	6	3	60	10	0	73	
+15 mins.	8	2	44	0	54	16	71	2	0	89	2	4	0	0	6	2	53	6	0	61	
+30 mins.	4	4	42	0	50	22	55	5	1	83	0	1	3	0	4	1	49	7	0	57	
+45 mins.	11	4	50	0	65	15	64	1	0	80	4	1	5	0	10	1	67	14	0	82	
Total Volume	30	12	178	0	220	76	266	9	1	352	11	6	9	0	26	7	229	37	0	273	
% App. Total	13.6	5.5	80.9	0		21.6	75.6	2.6	0.3		42.3	23.1	34.6	0		2.6	83.9	13.6	0		
PHF	.682	.750	.890	.000	.846	.826	.875	.450	.250	.880	.550	.375	.450	.000	.650	.583	.854	.661	.000	.832	

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH M  
12 HOUR COUNT (6 AM TO 6:00 PM)  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036080  
Site Code : 09036080  
Start Date : 10/7/2009  
Page No : 1

**Groups Printed- Cars - Trucks**

Start Time	CTH M From North					USH 14 From East					CTH M From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:00 AM	2	0	1	0	3	1	17	0	0	18	3	7	0	0	10	3	18	6	0	27	58
06:15 AM	4	2	1	0	7	3	33	2	0	38	3	14	0	0	17	2	24	3	0	29	91
06:30 AM	8	1	5	0	14	3	39	1	0	43	4	7	3	0	14	0	38	12	0	50	121
06:45 AM	11	4	2	0	17	3	34	3	0	40	5	9	4	0	18	5	33	5	0	43	118
<b>Total</b>	<b>25</b>	<b>7</b>	<b>9</b>	<b>0</b>	<b>41</b>	<b>10</b>	<b>123</b>	<b>6</b>	<b>0</b>	<b>139</b>	<b>15</b>	<b>37</b>	<b>7</b>	<b>0</b>	<b>59</b>	<b>10</b>	<b>113</b>	<b>26</b>	<b>0</b>	<b>149</b>	<b>388</b>
07:00 AM	20	10	2	0	32	0	45	3	0	48	4	5	2	0	11	0	47	11	0	58	149
07:15 AM	30	3	9	0	42	3	74	6	0	83	3	12	2	0	17	4	50	12	0	66	208
07:30 AM	27	5	2	0	34	5	78	10	0	93	4	5	9	0	18	5	47	8	0	60	205
07:45 AM	27	4	4	0	35	4	86	0	0	90	11	7	3	0	21	4	46	19	0	69	215
<b>Total</b>	<b>104</b>	<b>22</b>	<b>17</b>	<b>0</b>	<b>143</b>	<b>12</b>	<b>283</b>	<b>19</b>	<b>0</b>	<b>314</b>	<b>22</b>	<b>29</b>	<b>16</b>	<b>0</b>	<b>67</b>	<b>13</b>	<b>190</b>	<b>50</b>	<b>0</b>	<b>253</b>	<b>777</b>
08:00 AM	12	3	1	0	16	4	48	5	0	57	5	6	5	0	16	3	71	17	0	91	180
08:15 AM	21	2	4	0	27	7	51	3	0	61	5	5	3	0	13	2	42	13	0	57	158
08:30 AM	8	0	3	0	11	4	44	4	0	52	5	4	4	0	13	3	43	12	0	58	134
08:45 AM	10	0	1	0	11	1	48	5	0	54	1	3	3	0	7	0	52	10	0	62	134
<b>Total</b>	<b>51</b>	<b>5</b>	<b>9</b>	<b>0</b>	<b>65</b>	<b>16</b>	<b>191</b>	<b>17</b>	<b>0</b>	<b>224</b>	<b>16</b>	<b>18</b>	<b>15</b>	<b>0</b>	<b>49</b>	<b>8</b>	<b>208</b>	<b>52</b>	<b>0</b>	<b>268</b>	<b>606</b>
09:00 AM	10	1	6	0	17	2	32	2	0	36	5	2	1	0	8	3	34	12	0	49	110
09:15 AM	14	2	2	0	18	7	25	9	0	41	4	3	2	0	9	3	32	10	0	45	113
09:30 AM	13	2	5	0	20	2	33	2	0	37	4	6	3	0	13	2	37	9	0	48	118
09:45 AM	5	2	7	0	14	6	31	6	0	43	3	3	0	0	6	1	52	16	0	69	132
<b>Total</b>	<b>42</b>	<b>7</b>	<b>20</b>	<b>0</b>	<b>69</b>	<b>17</b>	<b>121</b>	<b>19</b>	<b>0</b>	<b>157</b>	<b>16</b>	<b>14</b>	<b>6</b>	<b>0</b>	<b>36</b>	<b>9</b>	<b>155</b>	<b>47</b>	<b>0</b>	<b>211</b>	<b>473</b>
10:00 AM	13	5	4	0	22	4	29	5	0	38	3	1	3	0	7	4	30	13	0	47	114
10:15 AM	19	0	2	0	21	6	41	4	0	51	3	3	7	0	13	4	45	14	0	63	148
10:30 AM	15	1	2	0	18	3	41	8	0	52	10	4	9	0	23	2	45	17	0	64	157
10:45 AM	13	2	1	0	16	4	42	4	0	50	8	3	3	0	14	4	42	13	0	59	139
<b>Total</b>	<b>60</b>	<b>8</b>	<b>9</b>	<b>0</b>	<b>77</b>	<b>17</b>	<b>153</b>	<b>21</b>	<b>0</b>	<b>191</b>	<b>24</b>	<b>11</b>	<b>22</b>	<b>0</b>	<b>57</b>	<b>14</b>	<b>162</b>	<b>57</b>	<b>0</b>	<b>233</b>	<b>558</b>
11:00 AM	12	4	4	0	20	5	38	6	0	49	5	5	6	0	16	4	51	12	0	67	152
11:15 AM	19	9	6	0	34	6	32	3	0	41	11	1	6	0	18	6	42	19	0	67	160
11:30 AM	15	3	3	0	21	7	40	6	0	53	3	3	4	0	10	1	46	11	0	58	142
11:45 AM	17	5	4	0	26	6	45	0	0	51	2	2	5	0	9	2	51	14	0	67	153
<b>Total</b>	<b>63</b>	<b>21</b>	<b>17</b>	<b>0</b>	<b>101</b>	<b>24</b>	<b>155</b>	<b>15</b>	<b>0</b>	<b>194</b>	<b>21</b>	<b>11</b>	<b>21</b>	<b>0</b>	<b>53</b>	<b>13</b>	<b>190</b>	<b>56</b>	<b>0</b>	<b>259</b>	<b>607</b>
12:00 PM	18	4	2	1	25	7	39	7	0	53	1	1	4	0	6	6	61	20	0	87	171
12:15 PM	15	4	1	0	20	5	45	9	0	59	4	6	1	0	11	4	50	15	0	69	159
12:30 PM	16	4	6	0	26	4	40	4	0	48	8	4	2	0	14	1	40	19	0	60	148
12:45 PM	17	3	2	0	22	6	60	6	0	72	4	4	0	0	8	0	47	19	0	66	168
<b>Total</b>	<b>66</b>	<b>15</b>	<b>11</b>	<b>1</b>	<b>93</b>	<b>22</b>	<b>184</b>	<b>26</b>	<b>0</b>	<b>232</b>	<b>17</b>	<b>15</b>	<b>7</b>	<b>0</b>	<b>39</b>	<b>11</b>	<b>198</b>	<b>73</b>	<b>0</b>	<b>282</b>	<b>646</b>

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH M  
12 HOUR COUNT (6 AM TO 6:00 PM)  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036080  
Site Code : 09036080  
Start Date : 10/7/2009  
Page No : 2

**Groups Printed- Cars - Trucks**

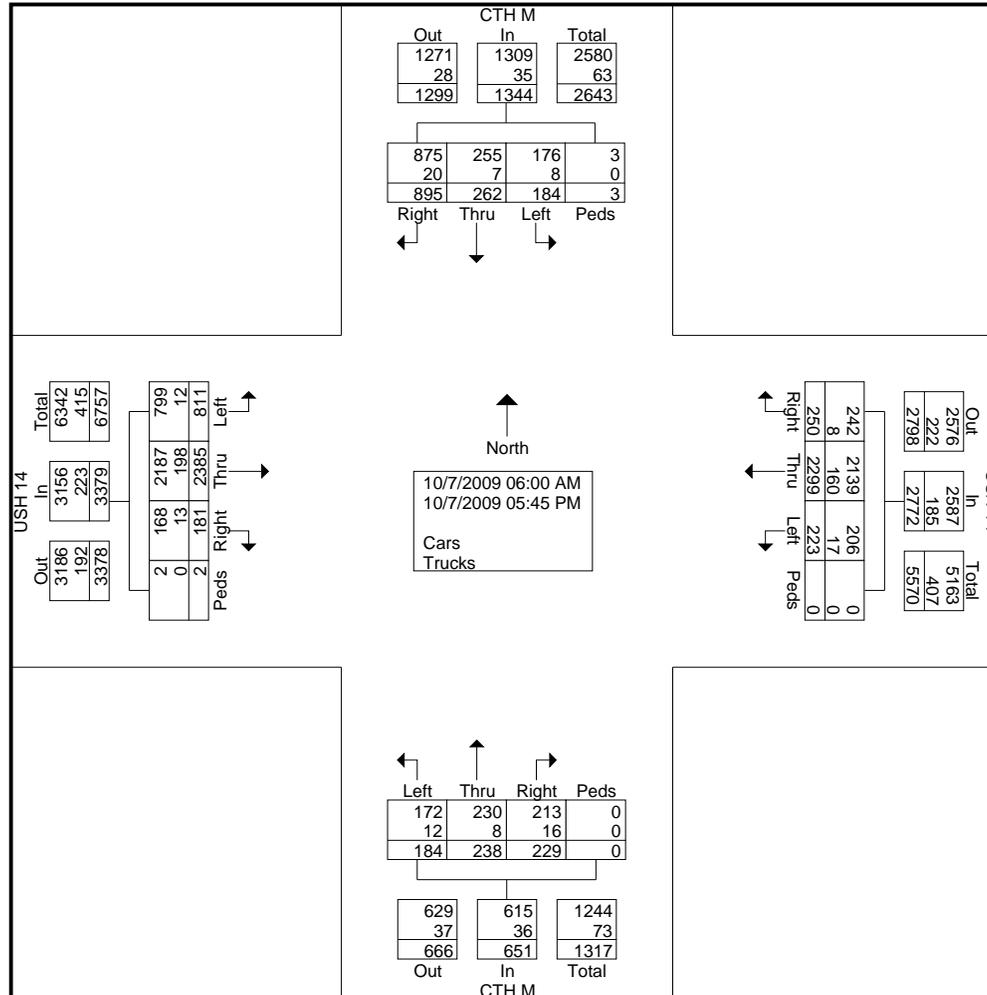
Start Time	CTH M From North					USH 14 From East					CTH M From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
01:00 PM	25	6	3	0	34	6	34	2	0	42	5	3	3	0	11	5	41	14	0	60	147
01:15 PM	14	11	3	0	28	2	58	3	0	63	4	4	6	0	14	4	44	12	0	60	165
01:30 PM	14	3	1	1	19	3	53	2	0	58	4	3	6	0	13	3	45	19	0	67	157
01:45 PM	20	3	4	0	27	7	44	7	0	58	2	5	0	0	7	5	41	14	0	60	152
<b>Total</b>	<b>73</b>	<b>23</b>	<b>11</b>	<b>1</b>	<b>108</b>	<b>18</b>	<b>189</b>	<b>14</b>	<b>0</b>	<b>221</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>0</b>	<b>45</b>	<b>17</b>	<b>171</b>	<b>59</b>	<b>0</b>	<b>247</b>	<b>621</b>
02:00 PM	13	5	5	0	23	9	34	1	0	44	4	2	4	0	10	4	51	18	0	73	150
02:15 PM	17	4	5	0	26	7	50	2	0	59	6	4	1	0	11	5	45	20	2	72	168
02:30 PM	17	7	3	0	27	6	51	3	0	60	8	5	8	0	21	3	37	12	0	52	160
02:45 PM	21	5	5	0	31	2	56	6	0	64	6	3	5	0	14	9	46	16	0	71	180
<b>Total</b>	<b>68</b>	<b>21</b>	<b>18</b>	<b>0</b>	<b>107</b>	<b>24</b>	<b>191</b>	<b>12</b>	<b>0</b>	<b>227</b>	<b>24</b>	<b>14</b>	<b>18</b>	<b>0</b>	<b>56</b>	<b>21</b>	<b>179</b>	<b>66</b>	<b>2</b>	<b>268</b>	<b>658</b>
03:00 PM	21	5	4	0	30	6	43	3	0	52	3	5	4	0	12	3	57	22	0	82	176
03:15 PM	26	5	3	0	34	7	53	7	0	67	4	2	5	0	11	9	84	28	0	121	233
03:30 PM	22	6	4	0	32	4	48	6	0	58	7	8	4	0	19	7	64	25	0	96	205
03:45 PM	24	9	1	0	34	6	64	7	0	77	6	10	4	0	20	1	49	27	0	77	208
<b>Total</b>	<b>93</b>	<b>25</b>	<b>12</b>	<b>0</b>	<b>130</b>	<b>23</b>	<b>208</b>	<b>23</b>	<b>0</b>	<b>254</b>	<b>20</b>	<b>25</b>	<b>17</b>	<b>0</b>	<b>62</b>	<b>20</b>	<b>254</b>	<b>102</b>	<b>0</b>	<b>376</b>	<b>822</b>
04:00 PM	28	14	0	0	42	6	67	3	0	76	4	10	4	0	18	5	65	25	0	95	231
04:15 PM	34	13	7	0	54	8	48	5	0	61	5	4	7	0	16	5	68	27	0	100	231
04:30 PM	20	13	9	0	42	6	71	5	0	82	5	5	2	0	12	8	75	23	0	106	242
04:45 PM	28	24	3	0	55	11	62	5	0	78	7	6	10	0	23	8	75	31	0	114	270
<b>Total</b>	<b>110</b>	<b>64</b>	<b>19</b>	<b>0</b>	<b>193</b>	<b>31</b>	<b>248</b>	<b>18</b>	<b>0</b>	<b>297</b>	<b>21</b>	<b>25</b>	<b>23</b>	<b>0</b>	<b>69</b>	<b>26</b>	<b>283</b>	<b>106</b>	<b>0</b>	<b>415</b>	<b>974</b>
05:00 PM	42	10	8	0	60	14	65	10	0	89	4	12	4	0	20	6	64	33	0	103	272
05:15 PM	37	15	9	0	61	10	72	7	0	89	3	6	4	0	13	3	70	30	0	103	266
05:30 PM	36	9	9	1	55	7	60	10	0	77	7	2	5	0	14	7	83	29	0	119	265
05:45 PM	25	10	6	0	41	5	56	6	0	67	4	4	4	0	12	3	65	25	0	93	213
<b>Total</b>	<b>140</b>	<b>44</b>	<b>32</b>	<b>1</b>	<b>217</b>	<b>36</b>	<b>253</b>	<b>33</b>	<b>0</b>	<b>322</b>	<b>18</b>	<b>24</b>	<b>17</b>	<b>0</b>	<b>59</b>	<b>19</b>	<b>282</b>	<b>117</b>	<b>0</b>	<b>418</b>	<b>1016</b>
<b>Grand Total</b>	<b>895</b>	<b>262</b>	<b>184</b>	<b>3</b>	<b>1344</b>	<b>250</b>	<b>2299</b>	<b>223</b>	<b>0</b>	<b>2772</b>	<b>229</b>	<b>238</b>	<b>184</b>	<b>0</b>	<b>651</b>	<b>181</b>	<b>2385</b>	<b>811</b>	<b>2</b>	<b>3379</b>	<b>8146</b>
Apprch %	66.6	19.5	13.7	0.2		9	82.9	8	0		35.2	36.6	28.3	0		5.4	70.6	24	0.1		
Total %	11	3.2	2.3	0	16.5	3.1	28.2	2.7	0	34	2.8	2.9	2.3	0	8	2.2	29.3	10	0	41.5	
Cars	875	255	176	3	1309	242	2139	206	0	2587	213	230	172	0	615	168	2187	799	2	3156	7667
% Cars	97.8	97.3	95.7	100	97.4	96.8	93	92.4	0	93.3	93	96.6	93.5	0	94.5	92.8	91.7	98.5	100	93.4	94.1
Trucks	20	7	8	0	35	8	160	17	0	185	16	8	12	0	36	13	198	12	0	223	479
% Trucks	2.2	2.7	4.3	0	2.6	3.2	7	7.6	0	6.7	7	3.4	6.5	0	5.5	7.2	8.3	1.5	0	6.6	5.9

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH M  
12 HOUR COUNT (6 AM TO 6:00 PM)  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036080  
Site Code : 09036080  
Start Date : 10/7/2009  
Page No : 3



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH M  
12 HOUR COUNT (6 AM TO 6:00 PM)  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036080  
Site Code : 09036080  
Start Date : 10/7/2009  
Page No : 4

Start Time	CTH M From North					USH 14 From East					CTH M From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	30	3	9	0	42	3	74	6	0	83	3	12	2	0	17	4	50	12	0	66	208
07:30 AM	27	5	2	0	34	5	78	10	0	93	4	5	9	0	18	5	47	8	0	60	205
07:45 AM	27	4	4	0	35	4	86	0	0	90	11	7	3	0	21	4	46	19	0	69	215
08:00 AM	12	3	1	0	16	4	48	5	0	57	5	6	5	0	16	3	71	17	0	91	180
Total Volume	96	15	16	0	127	16	286	21	0	323	23	30	19	0	72	16	214	56	0	286	808
% App. Total	75.6	11.8	12.6	0		5	88.5	6.5	0		31.9	41.7	26.4	0		5.6	74.8	19.6	0		
PHF	.800	.750	.444	.000	.756	.800	.831	.525	.000	.868	.523	.625	.528	.000	.857	.800	.754	.737	.000	.786	.940

Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM					07:15 AM					07:15 AM					07:15 AM					
+0 mins.	20	10	2	0	32	3	74	6	0	83	3	12	2	0	17	4	50	12	0	66	
+15 mins.	30	3	9	0	42	5	78	10	0	93	4	5	9	0	18	5	47	8	0	60	
+30 mins.	27	5	2	0	34	4	86	0	0	90	11	7	3	0	21	4	46	19	0	69	
+45 mins.	27	4	4	0	35	4	48	5	0	57	5	6	5	0	16	3	71	17	0	91	
Total Volume	104	22	17	0	143	16	286	21	0	323	23	30	19	0	72	16	214	56	0	286	
% App. Total	72.7	15.4	11.9	0		5	88.5	6.5	0		31.9	41.7	26.4	0		5.6	74.8	19.6	0		
PHF	.867	.550	.472	.000	.851	.800	.831	.525	.000	.868	.523	.625	.528	.000	.857	.800	.754	.737	.000	.786	

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH M  
12 HOUR COUNT (6 AM TO 6:00 PM)  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036080  
Site Code : 09036080  
Start Date : 10/7/2009  
Page No : 5

Start Time	CTH M From North					USH 14 From East					CTH M From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	18	4	2	1	25	7	39	7	0	53	1	1	4	0	6	6	61	20	0	87	171
12:15 PM	15	4	1	0	20	5	45	9	0	59	4	6	1	0	11	4	50	15	0	69	159
12:30 PM	16	4	6	0	26	4	40	4	0	48	8	4	2	0	14	1	40	19	0	60	148
12:45 PM	17	3	2	0	22	6	60	6	0	72	4	4	0	0	8	0	47	19	0	66	168
Total Volume	66	15	11	1	93	22	184	26	0	232	17	15	7	0	39	11	198	73	0	282	646
% App. Total	71	16.1	11.8	1.1		9.5	79.3	11.2	0		43.6	38.5	17.9	0		3.9	70.2	25.9	0		
PHF	.917	.938	.458	.250	.894	.786	.767	.722	.000	.806	.531	.625	.438	.000	.696	.458	.811	.913	.000	.810	.944

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	12:30 PM					12:45 PM					10:30 AM					11:45 AM				
+0 mins.	16	4	6	0	26	6	60	6	0	72	10	4	9	0	23	2	51	14	0	67
+15 mins.	17	3	2	0	22	6	34	2	0	42	8	3	3	0	14	6	61	20	0	87
+30 mins.	25	6	3	0	34	2	58	3	0	63	5	5	6	0	16	4	50	15	0	69
+45 mins.	14	11	3	0	28	3	53	2	0	58	11	1	6	0	18	1	40	19	0	60
Total Volume	72	24	14	0	110	17	205	13	0	235	34	13	24	0	71	13	202	68	0	283
% App. Total	65.5	21.8	12.7	0		7.2	87.2	5.5	0		47.9	18.3	33.8	0		4.6	71.4	24	0	
PHF	.720	.545	.583	.000	.809	.708	.854	.542	.000	.816	.773	.650	.667	.000	.772	.542	.828	.850	.000	.813

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH M  
12 HOUR COUNT (6 AM TO 6:00 PM)  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036080  
Site Code : 09036080  
Start Date : 10/7/2009  
Page No : 6

Start Time	CTH M From North					USH 14 From East					CTH M From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 05:30 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	28	<b>24</b>	3	0	55	11	62	5	0	78	7	6	<b>10</b>	0	<b>23</b>	8	75	31	0	114	270
05:00 PM	<b>42</b>	10	8	0	60	<b>14</b>	65	<b>10</b>	0	<b>89</b>	4	<b>12</b>	4	0	20	6	64	<b>33</b>	0	103	<b>272</b>
05:15 PM	37	15	<b>9</b>	0	<b>61</b>	10	<b>72</b>	7	0	89	3	6	4	0	13	3	70	30	0	103	266
05:30 PM	36	9	9	<b>1</b>	55	7	60	10	0	77	7	2	5	0	14	7	<b>83</b>	29	0	<b>119</b>	265
Total Volume	143	58	29	1	231	42	259	32	0	333	21	26	23	0	70	24	292	123	0	439	1073
% App. Total	61.9	25.1	12.6	0.4		12.6	77.8	9.6	0		30	37.1	32.9	0		5.5	66.5	28	0		
PHF	.851	.604	.806	.250	.947	.750	.899	.800	.000	.935	.750	.542	.575	.000	.761	.750	.880	.932	.000	.922	.986

Peak Hour Analysis From 02:00 PM to 05:30 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:45 PM					04:30 PM					03:30 PM					04:45 PM				
+0 mins.	28	<b>24</b>	3	0	55	6	71	5	0	82	7	8	4	0	19	8	75	31	0	114
+15 mins.	<b>42</b>	10	8	0	60	11	62	5	0	78	6	<b>10</b>	4	0	<b>20</b>	6	64	<b>33</b>	0	103
+30 mins.	37	15	<b>9</b>	0	<b>61</b>	<b>14</b>	65	<b>10</b>	0	<b>89</b>	4	10	4	0	18	3	70	30	0	103
+45 mins.	36	9	9	<b>1</b>	55	10	<b>72</b>	7	0	89	5	4	<b>7</b>	0	16	7	<b>83</b>	29	0	<b>119</b>
Total Volume	143	58	29	1	231	41	270	27	0	338	22	32	19	0	73	24	292	123	0	439
% App. Total	61.9	25.1	12.6	0.4		12.1	79.9	8	0		30.1	43.8	26	0		5.5	66.5	28	0	
PHF	.851	.604	.806	.250	.947	.732	.938	.675	.000	.949	.786	.800	.679	.000	.913	.750	.880	.932	.000	.922

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & TERRITORIAL ROAD  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036090  
Site Code : 09036090  
Start Date : 10/6/2009  
Page No : 1

### Groups Printed- Cars - Trucks

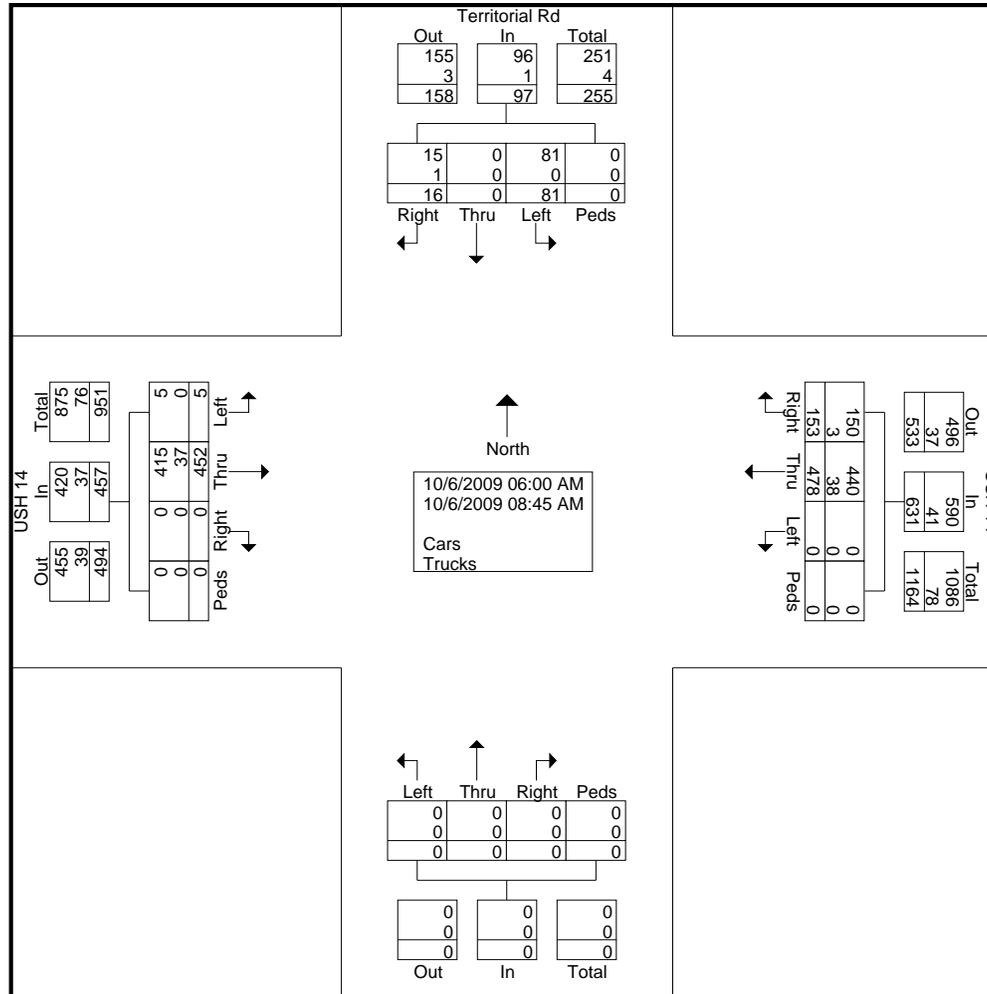
Start Time	Territorial Rd From North					USH 14 From East					From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:00 AM	2	0	5	0	7	13	18	0	0	31	0	0	0	0	0	0	24	0	0	24	62
06:15 AM	0	0	3	0	3	16	33	0	0	49	0	0	0	0	0	0	21	0	0	21	73
06:30 AM	2	0	8	0	10	19	29	0	0	48	0	0	0	0	0	0	30	0	0	30	88
06:45 AM	1	0	5	0	6	18	43	0	0	61	0	0	0	0	0	0	35	0	0	35	102
Total	5	0	21	0	26	66	123	0	0	189	0	0	0	0	0	0	110	0	0	110	325
07:00 AM	1	0	13	0	14	19	40	0	0	59	0	0	0	0	0	0	52	1	0	53	126
07:15 AM	2	0	12	0	14	12	57	0	0	69	0	0	0	0	0	0	50	1	0	51	134
07:30 AM	2	0	9	0	11	16	60	0	0	76	0	0	0	0	0	0	53	1	0	54	141
07:45 AM	2	0	6	0	8	13	59	0	0	72	0	0	0	0	0	0	33	0	0	33	113
Total	7	0	40	0	47	60	216	0	0	276	0	0	0	0	0	0	188	3	0	191	514
08:00 AM	1	0	4	0	5	10	33	0	0	43	0	0	0	0	0	0	49	0	0	49	97
08:15 AM	1	0	5	0	6	7	30	0	0	37	0	0	0	0	0	0	37	0	0	37	80
08:30 AM	1	0	6	0	7	7	46	0	0	53	0	0	0	0	0	0	39	1	0	40	100
08:45 AM	1	0	5	0	6	3	30	0	0	33	0	0	0	0	0	0	29	1	0	30	69
Total	4	0	20	0	24	27	139	0	0	166	0	0	0	0	0	0	154	2	0	156	346
Grand Total	16	0	81	0	97	153	478	0	0	631	0	0	0	0	0	0	452	5	0	457	1185
Apprch %	16.5	0	83.5	0		24.2	75.8	0	0		0	0	0	0		0	98.9	1.1	0		
Total %	1.4	0	6.8	0	8.2	12.9	40.3	0	0	53.2	0	0	0	0	0	0	38.1	0.4	0	38.6	
Cars	15	0	81	0	96	150	440	0	0	590	0	0	0	0	0	0	415	5	0	420	1106
% Cars	93.8	0	100	0	99	98	92.1	0	0	93.5	0	0	0	0	0	0	91.8	100	0	91.9	93.3
Trucks	1	0	0	0	1	3	38	0	0	41	0	0	0	0	0	0	37	0	0	37	79
% Trucks	6.2	0	0	0	1	2	7.9	0	0	6.5	0	0	0	0	0	0	8.2	0	0	8.1	6.7

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & TERRITORIAL ROAD  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036090  
Site Code : 09036090  
Start Date : 10/6/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & TERRITORIAL ROAD  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036090  
Site Code : 09036090  
Start Date : 10/6/2009  
Page No : 3

Start Time	Territorial Rd From North					USH 14 From East					From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	1	0	13	0	14	19	40	0	0	59	0	0	0	0	0	0	52	1	0	53	126
07:15 AM	2	0	12	0	14	12	57	0	0	69	0	0	0	0	0	0	50	1	0	51	134
07:30 AM	2	0	9	0	11	16	60	0	0	76	0	0	0	0	0	0	53	1	0	54	141
07:45 AM	2	0	6	0	8	13	59	0	0	72	0	0	0	0	0	0	33	0	0	33	113
Total Volume	7	0	40	0	47	60	216	0	0	276	0	0	0	0	0	0	188	3	0	191	514
% App. Total	14.9	0	85.1	0		21.7	78.3	0	0		0	0	0	0		0	98.4	1.6	0		
PHF	.875	.000	.769	.000	.839	.789	.900	.000	.000	.908	.000	.000	.000	.000	.000	.000	.887	.750	.000	.884	.911

Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM					07:00 AM					06:00 AM					06:45 AM				
+0 mins.	1	0	13	0	14	19	40	0	0	59	0	0	0	0	0	0	35	0	0	35
+15 mins.	2	0	12	0	14	12	57	0	0	69	0	0	0	0	0	0	52	1	0	53
+30 mins.	2	0	9	0	11	16	60	0	0	76	0	0	0	0	0	0	50	1	0	51
+45 mins.	2	0	6	0	8	13	59	0	0	72	0	0	0	0	0	0	53	1	0	54
Total Volume	7	0	40	0	47	60	216	0	0	276	0	0	0	0	0	0	190	3	0	193
% App. Total	14.9	0	85.1	0		21.7	78.3	0	0		0	0	0	0		0	98.4	1.6	0	
PHF	.875	.000	.769	.000	.839	.789	.900	.000	.000	.908	.000	.000	.000	.000	.000	.000	.896	.750	.000	.894

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & Terretorial Road  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036091  
Site Code : 09036091  
Start Date : 10/28/2009  
Page No : 1

## Groups Printed- Cars - Trucks

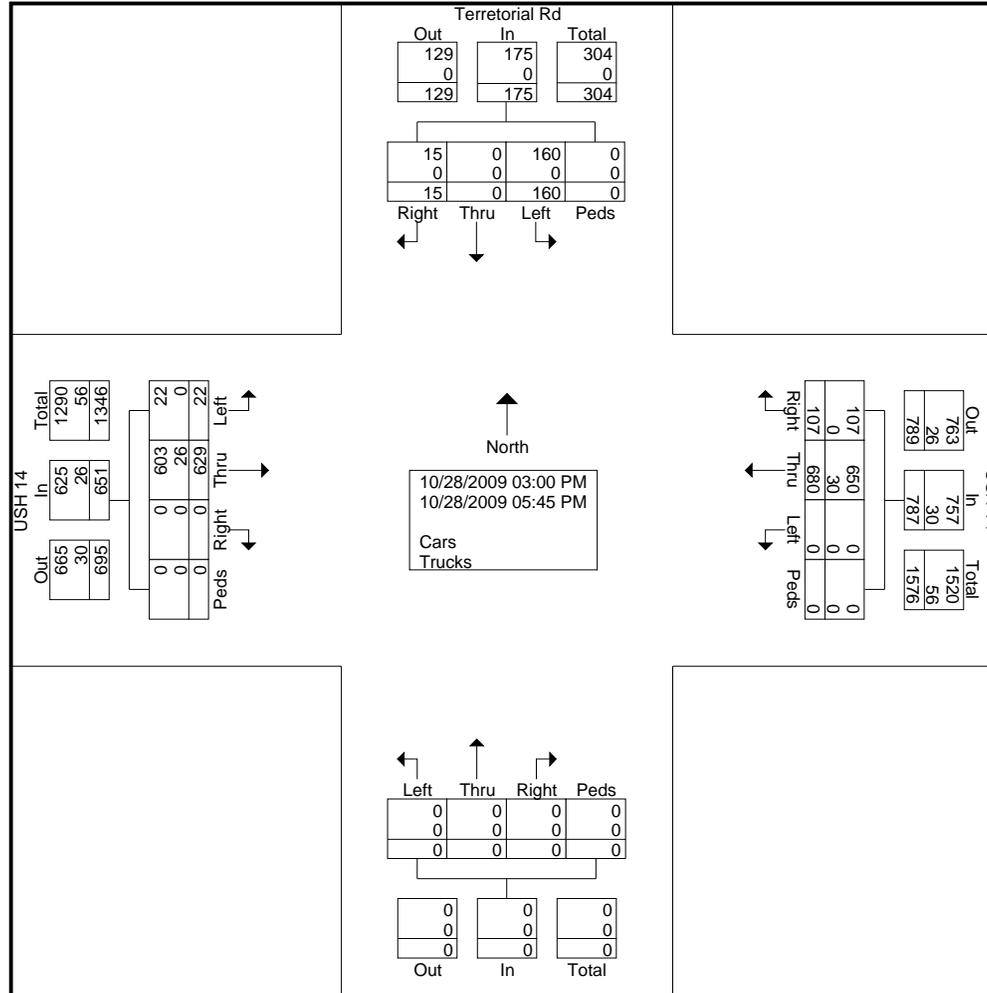
Start Time	Terretorial Rd From North					USH 14 From East					From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
03:00 PM	1	0	5	0	6	5	53	0	0	58	0	0	0	0	0	0	40	0	0	40	104
03:15 PM	0	0	11	0	11	2	47	0	0	49	0	0	0	0	0	0	52	0	0	52	112
03:30 PM	1	0	11	0	12	7	35	0	0	42	0	0	0	0	0	0	53	1	0	54	108
03:45 PM	0	0	7	0	7	11	62	0	0	73	0	0	0	0	0	0	39	1	0	40	120
Total	2	0	34	0	36	25	197	0	0	222	0	0	0	0	0	0	184	2	0	186	444
04:00 PM	1	0	10	0	11	7	55	0	0	62	0	0	0	0	0	0	50	2	0	52	125
04:15 PM	4	0	12	0	16	6	65	0	0	71	0	0	0	0	0	0	63	5	0	68	155
04:30 PM	0	0	17	0	17	10	63	0	0	73	0	0	0	0	0	0	62	4	0	66	156
04:45 PM	2	0	16	0	18	13	57	0	0	70	0	0	0	0	0	0	51	3	0	54	142
Total	7	0	55	0	62	36	240	0	0	276	0	0	0	0	0	0	226	14	0	240	578
05:00 PM	1	0	21	0	22	8	73	0	0	81	0	0	0	0	0	0	63	1	0	64	167
05:15 PM	0	0	17	0	17	18	76	0	0	94	0	0	0	0	0	0	59	0	0	59	170
05:30 PM	3	0	22	0	25	14	52	0	0	66	0	0	0	0	0	0	50	3	0	53	144
05:45 PM	2	0	11	0	13	6	42	0	0	48	0	0	0	0	0	0	47	2	0	49	110
Total	6	0	71	0	77	46	243	0	0	289	0	0	0	0	0	0	219	6	0	225	591
Grand Total	15	0	160	0	175	107	680	0	0	787	0	0	0	0	0	0	629	22	0	651	1613
Apprch %	8.6	0	91.4	0		13.6	86.4	0	0		0	0	0	0	0	0	96.6	3.4	0		
Total %	0.9	0	9.9	0	10.8	6.6	42.2	0	0	48.8	0	0	0	0	0	0	39	1.4	0	40.4	
Cars	15	0	160	0	175	107	650	0	0	757	0	0	0	0	0	0	603	22	0	625	1557
% Cars	100	0	100	0	100	100	95.6	0	0	96.2	0	0	0	0	0	0	95.9	100	0	96	96.5
Trucks	0	0	0	0	0	0	30	0	0	30	0	0	0	0	0	0	26	0	0	26	56
% Trucks	0	0	0	0	0	0	4.4	0	0	3.8	0	0	0	0	0	0	4.1	0	0	4	3.5

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & Terretorial Road  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036091  
Site Code : 09036091  
Start Date : 10/28/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & Terretorial Road  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036091  
Site Code : 09036091  
Start Date : 10/28/2009  
Page No : 3

Start Time	Terretorial Rd From North					USH 14 From East					From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	17	0	17	10	63	0	0	73	0	0	0	0	0	0	62	4	0	66	156
04:45 PM	2	0	16	0	18	13	57	0	0	70	0	0	0	0	0	0	51	3	0	54	142
05:00 PM	1	0	21	0	22	8	73	0	0	81	0	0	0	0	0	0	63	1	0	64	167
05:15 PM	0	0	17	0	17	18	76	0	0	94	0	0	0	0	0	0	59	0	0	59	170
Total Volume	3	0	71	0	74	49	269	0	0	318	0	0	0	0	0	0	235	8	0	243	635
% App. Total	4.1	0	95.9	0		15.4	84.6	0	0		0	0	0	0		0	96.7	3.3	0		
PHF	.375	.000	.845	.000	.841	.681	.885	.000	.000	.846	.000	.000	.000	.000	.000	.000	.933	.500	.000	.920	.934

Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM					04:30 PM					03:00 PM					04:15 PM				
+0 mins.	2	0	16	0	18	10	63	0	0	73	0	0	0	0	0	0	63	5	0	68
+15 mins.	1	0	21	0	22	13	57	0	0	70	0	0	0	0	0	0	62	4	0	66
+30 mins.	0	0	17	0	17	8	73	0	0	81	0	0	0	0	0	0	51	3	0	54
+45 mins.	3	0	22	0	25	18	76	0	0	94	0	0	0	0	0	0	63	1	0	64
Total Volume	6	0	76	0	82	49	269	0	0	318	0	0	0	0	0	0	239	13	0	252
% App. Total	7.3	0	92.7	0		15.4	84.6	0	0		0	0	0	0		0	94.8	5.2	0	
PHF	.500	.000	.864	.000	.820	.681	.885	.000	.000	.846	.000	.000	.000	.000	.000	.000	.948	.650	.000	.926

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH H  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036100  
Site Code : 09036100  
Start Date : 9/23/2009  
Page No : 1

### Groups Printed- Cars - Trucks

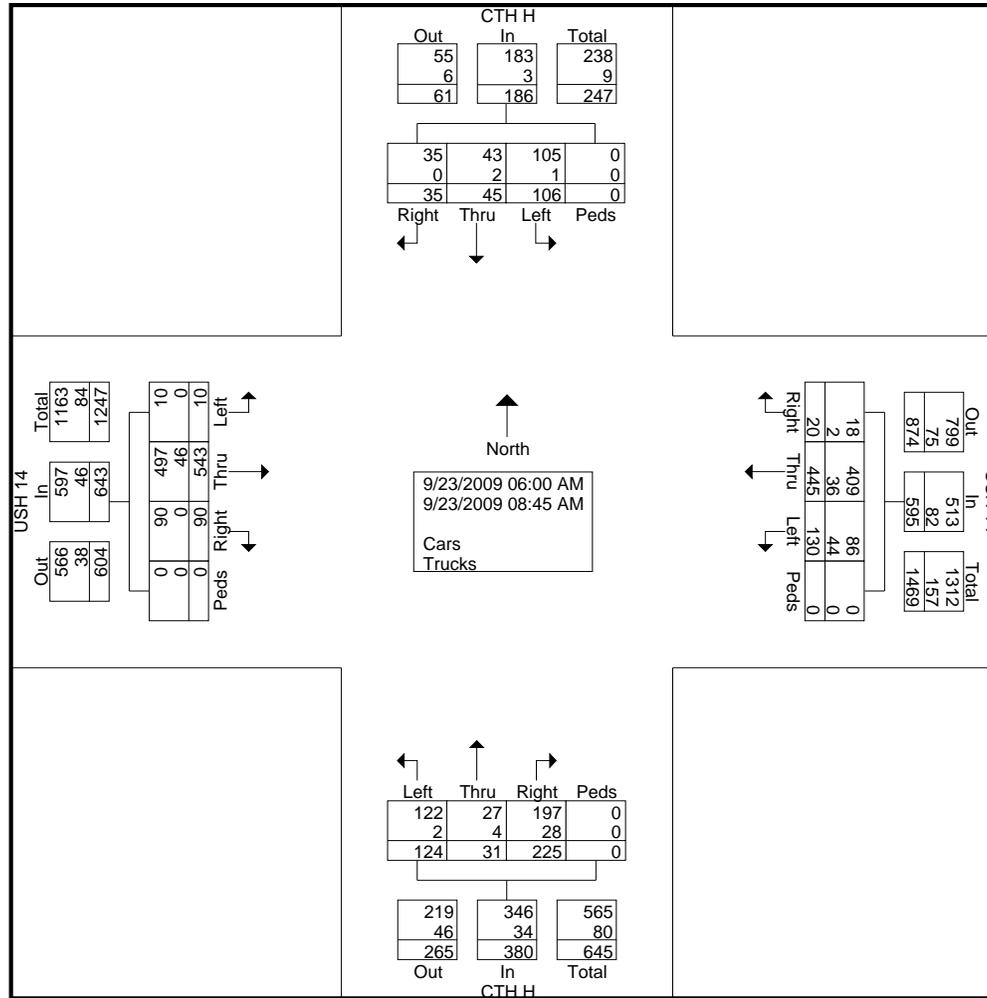
Start Time	CTH H From North					USH 14 From East					CTH H From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:00 AM	0	0	0	0	0	0	38	0	0	38	0	0	0	0	0	1	59	1	0	61	99
06:15 AM	2	0	3	0	5	0	12	5	0	17	12	5	6	0	23	8	29	0	0	37	82
06:30 AM	2	6	10	0	18	2	24	4	0	30	29	4	14	0	47	7	41	0	0	48	143
06:45 AM	2	0	8	0	10	1	49	8	0	58	21	4	13	0	38	2	37	0	0	39	145
Total	6	6	21	0	33	3	123	17	0	143	62	13	33	0	108	18	166	1	0	185	469
07:00 AM	11	8	15	0	34	1	42	13	0	56	19	3	10	0	32	12	55	1	0	68	190
07:15 AM	8	10	10	0	28	3	47	16	0	66	18	2	14	0	34	16	38	0	0	54	182
07:30 AM	4	3	23	0	30	1	38	17	0	56	28	1	14	0	43	19	63	2	0	84	213
07:45 AM	2	3	14	0	19	0	27	18	0	45	24	4	17	0	45	9	49	1	0	59	168
Total	25	24	62	0	111	5	154	64	0	223	89	10	55	0	154	56	205	4	0	265	753
08:00 AM	1	2	3	0	6	2	41	20	0	63	15	1	11	0	27	4	50	2	0	56	152
08:15 AM	1	4	5	0	10	6	49	9	0	64	16	3	7	0	26	4	47	0	0	51	151
08:30 AM	1	1	6	0	8	1	45	15	0	61	19	4	11	0	34	5	32	2	0	39	142
08:45 AM	1	8	9	0	18	3	33	5	0	41	24	0	7	0	31	3	43	1	0	47	137
Total	4	15	23	0	42	12	168	49	0	229	74	8	36	0	118	16	172	5	0	193	582
Grand Total	35	45	106	0	186	20	445	130	0	595	225	31	124	0	380	90	543	10	0	643	1804
Apprch %	18.8	24.2	57	0		3.4	74.8	21.8	0		59.2	8.2	32.6	0		14	84.4	1.6	0		
Total %	1.9	2.5	5.9	0	10.3	1.1	24.7	7.2	0	33	12.5	1.7	6.9	0	21.1	5	30.1	0.6	0	35.6	
Cars	35	43	105	0	183	18	409	86	0	513	197	27	122	0	346	90	497	10	0	597	1639
% Cars	100	95.6	99.1	0	98.4	90	91.9	66.2	0	86.2	87.6	87.1	98.4	0	91.1	100	91.5	100	0	92.8	90.9
Trucks	0	2	1	0	3	2	36	44	0	82	28	4	2	0	34	0	46	0	0	46	165
% Trucks	0	4.4	0.9	0	1.6	10	8.1	33.8	0	13.8	12.4	12.9	1.6	0	8.9	0	8.5	0	0	7.2	9.1

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH H  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036100  
Site Code : 09036100  
Start Date : 9/23/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH H  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036100  
Site Code : 09036100  
Start Date : 9/23/2009  
Page No : 3

Start Time	CTH H From North					USH 14 From East					CTH H From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	11	8	15	0	34	1	42	13	0	56	19	3	10	0	32	12	55	1	0	68	190
07:15 AM	8	10	10	0	28	3	47	16	0	66	18	2	14	0	34	16	38	0	0	54	182
07:30 AM	4	3	23	0	30	1	38	17	0	56	28	1	14	0	43	19	63	2	0	84	213
07:45 AM	2	3	14	0	19	0	27	18	0	45	24	4	17	0	45	9	49	1	0	59	168
Total Volume	25	24	62	0	111	5	154	64	0	223	89	10	55	0	154	56	205	4	0	265	753
% App. Total	22.5	21.6	55.9	0		2.2	69.1	28.7	0		57.8	6.5	35.7	0		21.1	77.4	1.5	0		
PHF	.568	.600	.674	.000	.816	.417	.819	.889	.000	.845	.795	.625	.809	.000	.856	.737	.813	.500	.000	.789	.884

Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM					06:45 AM					07:00 AM					07:00 AM				
+0 mins.	11	8	15	0	34	1	49	8	0	58	19	3	10	0	32	12	55	1	0	68
+15 mins.	8	10	10	0	28	1	42	13	0	56	18	2	14	0	34	16	38	0	0	54
+30 mins.	4	3	23	0	30	3	47	16	0	66	28	1	14	0	43	19	63	2	0	84
+45 mins.	2	3	14	0	19	1	38	17	0	56	24	4	17	0	45	9	49	1	0	59
Total Volume	25	24	62	0	111	6	176	54	0	236	89	10	55	0	154	56	205	4	0	265
% App. Total	22.5	21.6	55.9	0		2.5	74.6	22.9	0		57.8	6.5	35.7	0		21.1	77.4	1.5	0	
PHF	.568	.600	.674	.000	.816	.500	.898	.794	.000	.894	.795	.625	.809	.000	.856	.737	.813	.500	.000	.789

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH H  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036101  
Site Code : 09036101  
Start Date : 9/23/2009  
Page No : 1

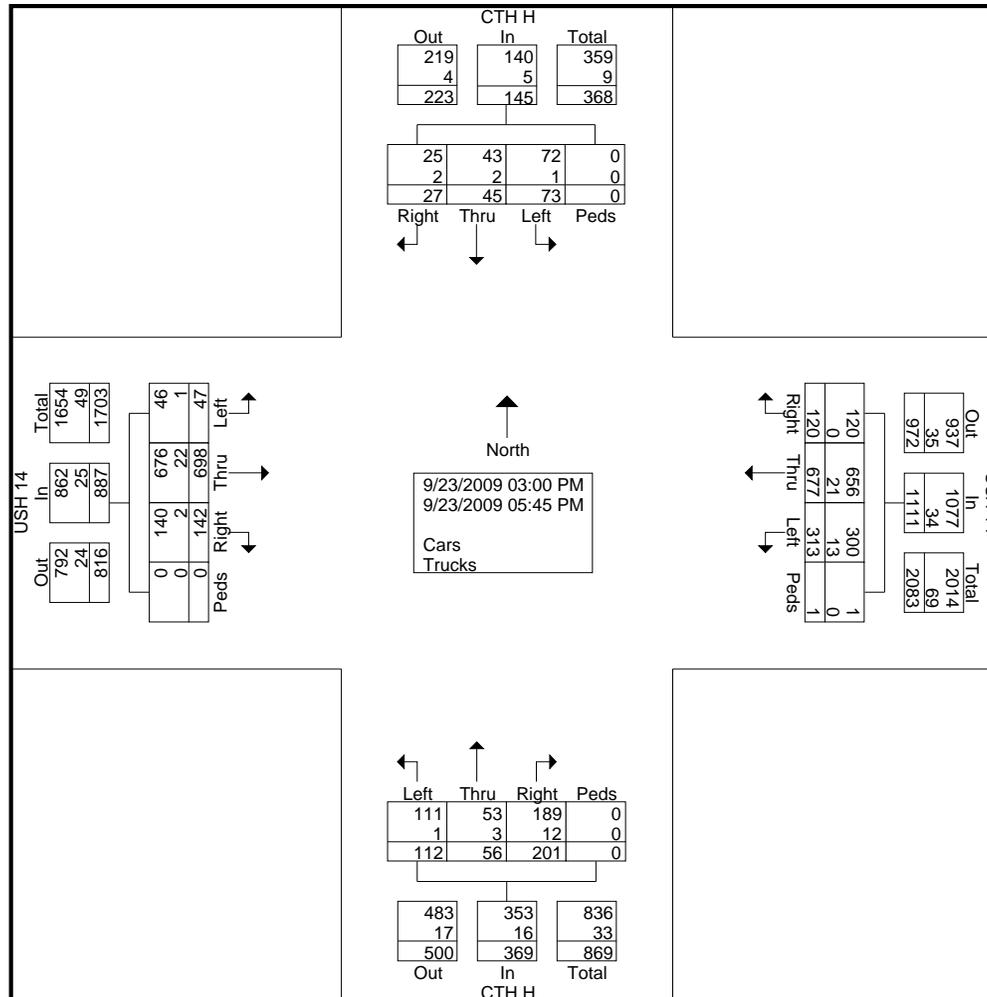
### Groups Printed- Cars - Trucks

Start Time	CTH H From North					USH 14 From East					CTH H From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
03:00 PM	0	1	8	0	9	11	52	19	0	82	14	2	8	0	24	5	39	2	0	46	161
03:15 PM	0	5	4	0	9	4	45	25	0	74	14	2	11	0	27	10	48	4	0	62	172
03:30 PM	2	4	5	0	11	14	54	23	1	92	20	5	8	0	33	13	62	2	0	77	213
03:45 PM	1	3	10	0	14	11	46	23	0	80	21	3	8	0	32	9	48	2	0	59	185
Total	3	13	27	0	43	40	197	90	1	328	69	12	35	0	116	37	197	10	0	244	731
04:00 PM	2	3	7	0	12	7	55	32	0	94	15	4	16	0	35	9	61	2	0	72	213
04:15 PM	3	5	9	0	17	12	62	33	0	107	15	7	8	0	30	18	57	5	0	80	234
04:30 PM	2	6	6	0	14	7	65	25	0	97	13	7	11	0	31	8	67	5	0	80	222
04:45 PM	7	2	4	0	13	15	58	31	0	104	26	4	11	0	41	17	65	5	0	87	245
Total	14	16	26	0	56	41	240	121	0	402	69	22	46	0	137	52	250	17	0	319	914
05:00 PM	4	2	4	0	10	12	63	28	0	103	18	6	6	0	30	13	64	2	0	79	222
05:15 PM	0	5	7	0	12	12	74	25	0	111	18	3	12	0	33	10	72	9	0	91	247
05:30 PM	1	7	2	0	10	8	44	21	0	73	15	7	7	0	29	21	53	4	0	78	190
05:45 PM	5	2	7	0	14	7	59	28	0	94	12	6	6	0	24	9	62	5	0	76	208
Total	10	16	20	0	46	39	240	102	0	381	63	22	31	0	116	53	251	20	0	324	867
Grand Total	27	45	73	0	145	120	677	313	1	1111	201	56	112	0	369	142	698	47	0	887	2512
Apprch %	18.6	31	50.3	0		10.8	60.9	28.2	0.1		54.5	15.2	30.4	0		16	78.7	5.3	0		
Total %	1.1	1.8	2.9	0	5.8	4.8	27	12.5	0	44.2	8	2.2	4.5	0	14.7	5.7	27.8	1.9	0	35.3	
Cars	25	43	72	0	140	120	656	300	1	1077	189	53	111	0	353	140	676	46	0	862	2432
% Cars	92.6	95.6	98.6	0	96.6	100	96.9	95.8	100	96.9	94	94.6	99.1	0	95.7	98.6	96.8	97.9	0	97.2	96.8
Trucks	2	2	1	0	5	0	21	13	0	34	12	3	1	0	16	2	22	1	0	25	80
% Trucks	7.4	4.4	1.4	0	3.4	0	3.1	4.2	0	3.1	6	5.4	0.9	0	4.3	1.4	3.2	2.1	0	2.8	3.2

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

File Name : 09036101  
Site Code : 09036101  
Start Date : 9/23/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

File Name : 09036101  
Site Code : 09036101  
Start Date : 9/23/2009  
Page No : 3

Start Time	CTH H From North					USH 14 From East					CTH H From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	2	6	6	0	14	7	65	25	0	97	13	7	11	0	31	8	67	5	0	80	222
04:45 PM	7	2	4	0	13	15	58	31	0	104	26	4	11	0	41	17	65	5	0	87	245
05:00 PM	4	2	4	0	10	12	63	28	0	103	18	6	6	0	30	13	64	2	0	79	222
05:15 PM	0	5	7	0	12	12	74	25	0	111	18	3	12	0	33	10	72	9	0	91	247
Total Volume	13	15	21	0	49	46	260	109	0	415	75	20	40	0	135	48	268	21	0	337	936
% App. Total	26.5	30.6	42.9	0		11.1	62.7	26.3	0		55.6	14.8	29.6	0		14.2	79.5	6.2	0		
PHF	.464	.625	.750	.000	.875	.767	.878	.879	.000	.935	.721	.714	.833	.000	.823	.706	.931	.583	.000	.926	.947

Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	03:45 PM					04:30 PM					04:00 PM					04:30 PM				
+0 mins.	1	3	10	0	14	7	65	25	0	97	15	4	16	0	35	8	67	5	0	80
+15 mins.	2	3	7	0	12	15	58	31	0	104	15	7	8	0	30	17	65	5	0	87
+30 mins.	3	5	9	0	17	12	63	28	0	103	13	7	11	0	31	13	64	2	0	79
+45 mins.	2	6	6	0	14	12	74	25	0	111	26	4	11	0	41	10	72	9	0	91
Total Volume	8	17	32	0	57	46	260	109	0	415	69	22	46	0	137	48	268	21	0	337
% App. Total	14	29.8	56.1	0		11.1	62.7	26.3	0		50.4	16.1	33.6	0		14.2	79.5	6.2	0	
PHF	.667	.708	.800	.000	.838	.767	.878	.879	.000	.935	.663	.786	.719	.000	.835	.706	.931	.583	.000	.926

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH E  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036110  
Site Code : 09036110  
Start Date : 9/24/2009  
Page No : 1

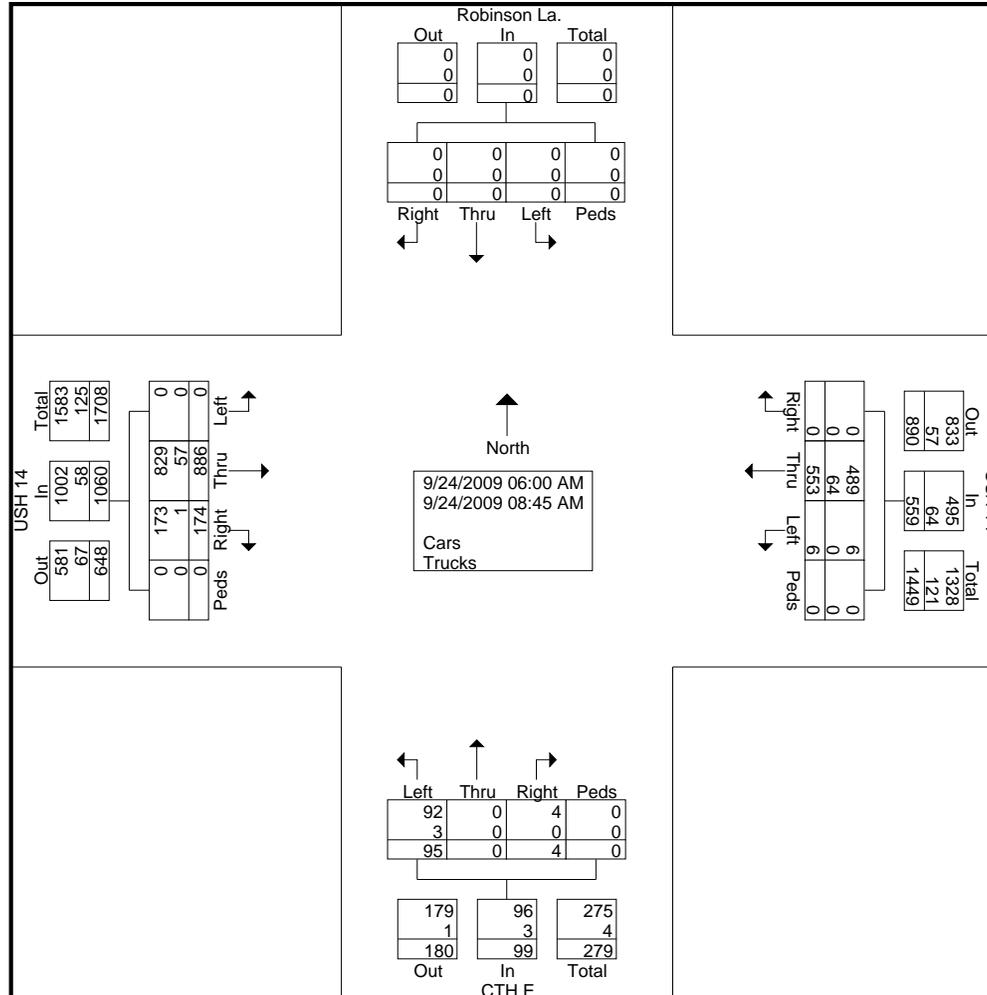
Groups Printed- Cars - Trucks

Start Time	Robinson La. From North					USH 14 From East					CTH E From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:00 AM	0	0	0	0	0	0	25	0	0	25	0	0	3	0	3	9	32	0	0	41	69
06:15 AM	0	0	0	0	0	0	26	0	0	26	0	0	5	0	5	11	53	0	0	64	95
06:30 AM	0	0	0	0	0	0	45	0	0	45	1	0	10	0	11	11	88	0	0	99	155
06:45 AM	0	0	0	0	0	0	39	1	0	40	2	0	15	0	17	15	92	0	0	107	164
Total	0	0	0	0	0	0	135	1	0	136	3	0	33	0	36	46	265	0	0	311	483
07:00 AM	0	0	0	0	0	0	58	1	0	59	0	0	15	0	15	8	62	0	0	70	144
07:15 AM	0	0	0	0	0	0	61	0	0	61	0	0	8	0	8	21	98	0	0	119	188
07:30 AM	0	0	0	0	0	0	51	0	0	51	0	0	11	0	11	19	106	0	0	125	187
07:45 AM	0	0	0	0	0	0	47	0	0	47	0	0	8	0	8	29	108	0	0	137	192
Total	0	0	0	0	0	0	217	1	0	218	0	0	42	0	42	77	374	0	0	451	711
08:00 AM	0	0	0	0	0	0	43	1	0	44	0	0	3	0	3	14	66	0	0	80	127
08:15 AM	0	0	0	0	0	0	65	0	0	65	0	0	7	0	7	11	60	0	0	71	143
08:30 AM	0	0	0	0	0	0	50	1	0	51	1	0	3	0	4	16	69	0	0	85	140
08:45 AM	0	0	0	0	0	0	43	2	0	45	0	0	7	0	7	10	52	0	0	62	114
Total	0	0	0	0	0	0	201	4	0	205	1	0	20	0	21	51	247	0	0	298	524
Grand Total	0	0	0	0	0	0	553	6	0	559	4	0	95	0	99	174	886	0	0	1060	1718
Apprch %	0	0	0	0	0	0	98.9	1.1	0	98.9	4	0	96	0	96	16.4	83.6	0	0	83.6	
Total %	0	0	0	0	0	0	32.2	0.3	0	32.5	0.2	0	5.5	0	5.8	10.1	51.6	0	0	61.7	
Cars	0	0	0	0	0	0	489	6	0	495	4	0	92	0	96	173	829	0	0	1002	1593
% Cars	0	0	0	0	0	0	88.4	100	0	88.6	100	0	96.8	0	97	99.4	93.6	0	0	94.5	92.7
Trucks	0	0	0	0	0	0	64	0	0	64	0	0	3	0	3	1	57	0	0	58	125
% Trucks	0	0	0	0	0	0	11.6	0	0	11.4	0	0	3.2	0	3	0.6	6.4	0	0	5.5	7.3

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

File Name : 09036110  
Site Code : 09036110  
Start Date : 9/24/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

File Name : 09036110  
Site Code : 09036110  
Start Date : 9/24/2009  
Page No : 3

Start Time	Robinson La. From North					USH 14 From East					CTH E From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	58	1	0	59	0	0	15	0	15	8	62	0	0	70	144
07:15 AM	0	0	0	0	0	0	61	0	0	61	0	0	8	0	8	21	98	0	0	119	188
07:30 AM	0	0	0	0	0	0	51	0	0	51	0	0	11	0	11	19	106	0	0	125	187
07:45 AM	0	0	0	0	0	0	47	0	0	47	0	0	8	0	8	29	108	0	0	137	192
Total Volume	0	0	0	0	0	0	217	1	0	218	0	0	42	0	42	77	374	0	0	451	711
% App. Total	0	0	0	0	0	0	99.5	0.5	0	100	0	0	100	0	100	17.1	82.9	0	0	451	711
PHF	.000	.000	.000	.000	.000	.000	.889	.250	.000	.893	.000	.000	.700	.000	.700	.664	.866	.000	.000	.823	.926

Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	06:00 AM					07:00 AM					06:30 AM					07:15 AM				
+0 mins.	0	0	0	0	0	0	58	1	0	59	1	0	10	0	11	21	98	0	0	119
+15 mins.	0	0	0	0	0	0	61	0	0	61	2	0	15	0	17	19	106	0	0	125
+30 mins.	0	0	0	0	0	0	51	0	0	51	0	0	15	0	15	29	108	0	0	137
+45 mins.	0	0	0	0	0	0	47	0	0	47	0	0	8	0	8	14	66	0	0	80
Total Volume	0	0	0	0	0	0	217	1	0	218	3	0	48	0	51	83	378	0	0	461
% App. Total	0	0	0	0	0	0	99.5	0.5	0	100	5.9	0	94.1	0	100	18	82	0	0	461
PHF	.000	.000	.000	.000	.000	.000	.889	.250	.000	.893	.375	.000	.800	.000	.750	.716	.875	.000	.000	.841

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH E  
PM PEAK HOUR  
TN-09036091  
TURNING MOVEMENT COUNT

File Name : 09036111  
Site Code : 09036111  
Start Date : 9/24/2009  
Page No : 1

**Groups Printed- Cars - Trucks**

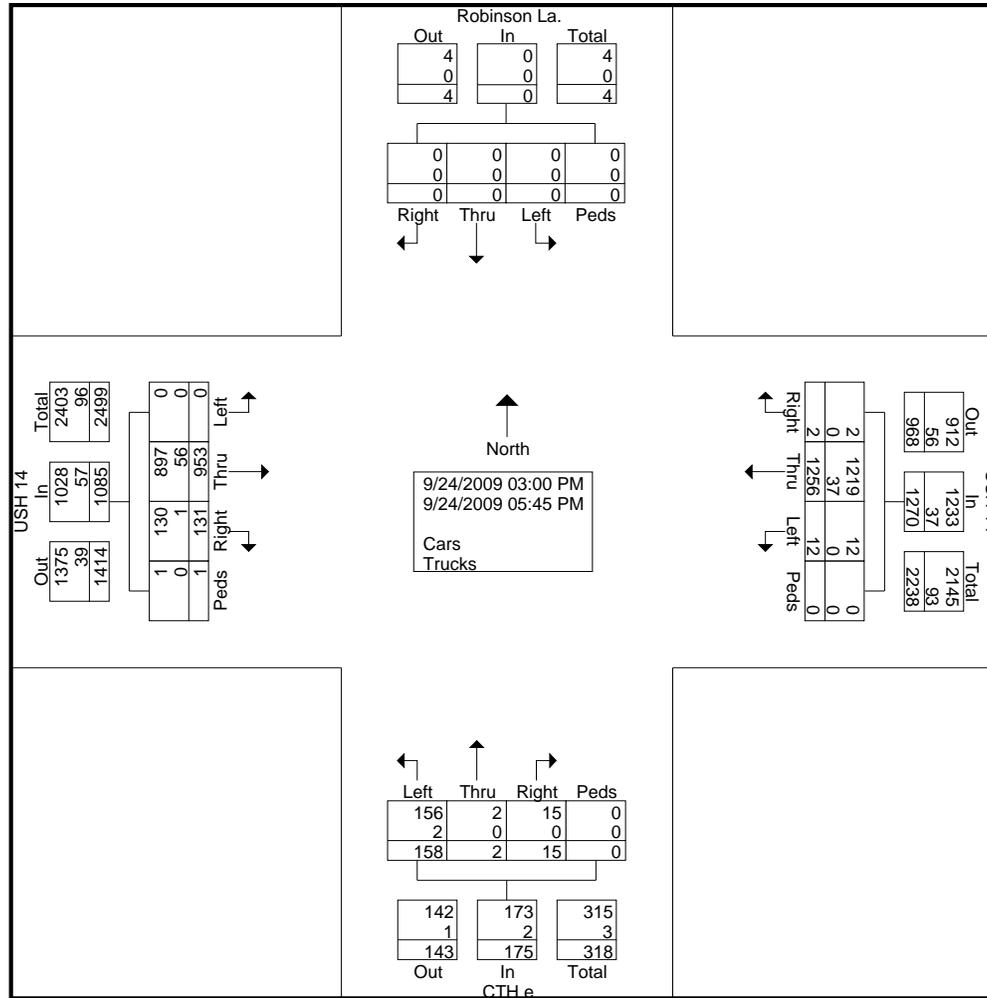
Start Time	Robinson La. From North					USH 14 From East					CTH e From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
03:00 PM	0	0	0	0	0	0	82	1	0	83	0	0	12	0	12	6	50	0	0	56	151
03:15 PM	0	0	0	0	0	0	109	2	0	111	0	0	19	0	19	7	68	0	0	75	205
03:30 PM	0	0	0	0	0	0	118	1	0	119	6	0	22	0	28	8	80	0	0	88	235
03:45 PM	0	0	0	0	0	0	100	0	0	100	2	0	6	0	8	10	79	0	0	89	197
Total	0	0	0	0	0	0	409	4	0	413	8	0	59	0	67	31	277	0	0	308	788
04:00 PM	0	0	0	0	0	0	112	0	0	112	1	0	19	0	20	10	74	0	0	84	216
04:15 PM	0	0	0	0	0	0	108	1	0	109	3	1	6	0	10	10	91	0	0	101	220
04:30 PM	0	0	0	0	0	0	92	0	0	92	2	0	10	0	12	14	87	0	0	101	205
04:45 PM	0	0	0	0	0	1	109	2	0	112	1	0	12	0	13	11	79	0	0	90	215
Total	0	0	0	0	0	1	421	3	0	425	7	1	47	0	55	45	331	0	0	376	856
05:00 PM	0	0	0	0	0	0	115	3	0	118	0	1	14	0	15	11	95	0	1	107	240
05:15 PM	0	0	0	0	0	1	124	0	0	125	0	0	19	0	19	12	77	0	0	89	233
05:30 PM	0	0	0	0	0	0	98	0	0	98	0	0	14	0	14	16	80	0	0	96	208
05:45 PM	0	0	0	0	0	0	89	2	0	91	0	0	5	0	5	16	93	0	0	109	205
Total	0	0	0	0	0	1	426	5	0	432	0	1	52	0	53	55	345	0	1	401	886
Grand Total	0	0	0	0	0	2	1256	12	0	1270	15	2	158	0	175	131	953	0	1	1085	2530
Apprch %	0	0	0	0		0.2	98.9	0.9	0		8.6	1.1	90.3	0		12.1	87.8	0	0.1		
Total %	0	0	0	0	0	0.1	49.6	0.5	0	50.2	0.6	0.1	6.2	0	6.9	5.2	37.7	0	0	42.9	
Cars	0	0	0	0	0	2	1219	12	0	1233	15	2	156	0	173	130	897	0	1	1028	2434
% Cars	0	0	0	0	0	100	97.1	100	0	97.1	100	100	98.7	0	98.9	99.2	94.1	0	100	94.7	96.2
Trucks	0	0	0	0	0	0	37	0	0	37	0	0	2	0	2	1	56	0	0	57	96
% Trucks	0	0	0	0	0	0	2.9	0	0	2.9	0	0	1.3	0	1.1	0.8	5.9	0	0	5.3	3.8

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH E  
PM PEAK HOUR  
TN-09036091  
TURNING MOVEMENT COUNT

File Name : 09036111  
Site Code : 09036111  
Start Date : 9/24/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH E  
PM PEAK HOUR  
TN-09036091  
TURNING MOVEMENT COUNT

File Name : 09036111  
Site Code : 09036111  
Start Date : 9/24/2009  
Page No : 3

Start Time	Robinson La. From North					USH 14 From East					CTH e From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	0	0	0	0	1	109	2	0	112	1	0	12	0	13	11	79	0	0	90	215
05:00 PM	0	0	0	0	0	0	115	3	0	118	0	1	14	0	15	11	95	0	1	107	240
05:15 PM	0	0	0	0	0	1	124	0	0	125	0	0	19	0	19	12	77	0	0	89	233
05:30 PM	0	0	0	0	0	0	98	0	0	98	0	0	14	0	14	16	80	0	0	96	208
Total Volume	0	0	0	0	0	2	446	5	0	453	1	1	59	0	61	50	331	0	1	382	896
% App. Total	0	0	0	0	0	0.4	98.5	1.1	0		1.6	1.6	96.7	0		13.1	86.6	0	0.3		
PHF	.000	.000	.000	.000	.000	.500	.899	.417	.000	.906	.250	.250	.776	.000	.803	.781	.871	.000	.250	.893	.933

Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	03:00 PM					04:45 PM					03:15 PM					05:00 PM				
+0 mins.	0	0	0	0	0	1	109	2	0	112	0	0	19	0	19	11	95	0	1	107
+15 mins.	0	0	0	0	0	0	115	3	0	118	6	0	22	0	28	12	77	0	0	89
+30 mins.	0	0	0	0	0	1	124	0	0	125	2	0	6	0	8	16	80	0	0	96
+45 mins.	0	0	0	0	0	0	98	0	0	98	1	0	19	0	20	16	93	0	0	109
Total Volume	0	0	0	0	0	2	446	5	0	453	9	0	66	0	75	55	345	0	1	401
% App. Total	0	0	0	0	0	0.4	98.5	1.1	0		12	0	88	0		13.7	86	0	0.2	
PHF	.000	.000	.000	.000	.000	.500	.899	.417	.000	.906	.375	.000	.750	.000	.670	.859	.908	.000	.250	.920

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & N RIVER RD.  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036120  
Site Code : 09036120  
Start Date : 10/8/2009  
Page No : 1

### Groups Printed- Cars - Trucks

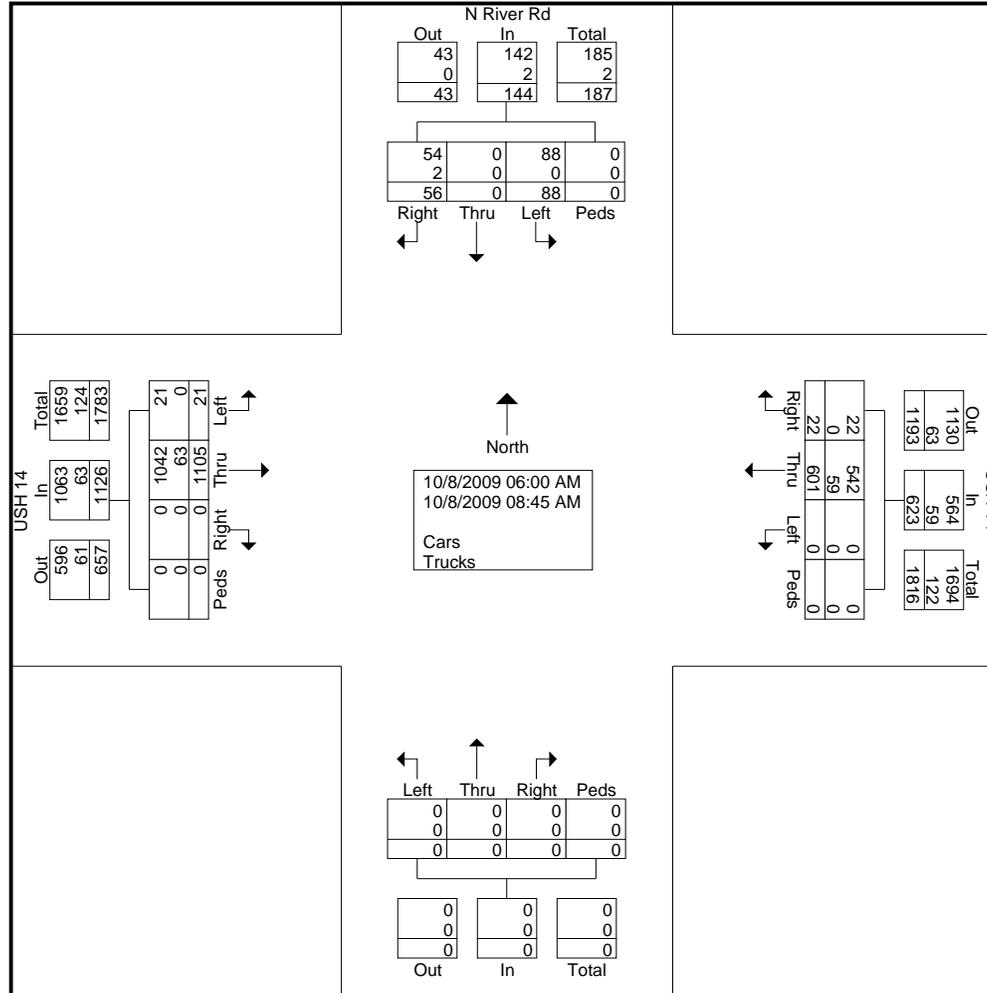
Start Time	N River Rd From North					USH 14 From East					From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:00 AM	1	0	4	0	5	0	37	0	0	37	0	0	0	0	0	0	42	0	0	42	84
06:15 AM	4	0	4	0	8	2	22	0	0	24	0	0	0	0	0	0	65	1	0	66	98
06:30 AM	5	0	8	0	13	2	53	0	0	55	0	0	0	0	0	0	76	2	0	78	146
06:45 AM	3	0	11	0	14	1	42	0	0	43	0	0	0	0	0	0	105	1	0	106	163
<b>Total</b>	<b>13</b>	<b>0</b>	<b>27</b>	<b>0</b>	<b>40</b>	<b>5</b>	<b>154</b>	<b>0</b>	<b>0</b>	<b>159</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>288</b>	<b>4</b>	<b>0</b>	<b>292</b>	<b>491</b>
07:00 AM	3	0	8	0	11	0	58	0	0	58	0	0	0	0	0	0	97	2	0	99	168
07:15 AM	9	0	5	0	14	1	66	0	0	67	0	0	0	0	0	0	124	1	0	125	206
07:30 AM	6	0	15	0	21	3	69	0	0	72	0	0	0	0	0	0	133	2	0	135	228
07:45 AM	3	0	11	0	14	1	56	0	0	57	0	0	0	0	0	0	134	1	0	135	206
<b>Total</b>	<b>21</b>	<b>0</b>	<b>39</b>	<b>0</b>	<b>60</b>	<b>5</b>	<b>249</b>	<b>0</b>	<b>0</b>	<b>254</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>488</b>	<b>6</b>	<b>0</b>	<b>494</b>	<b>808</b>
08:00 AM	6	0	5	0	11	1	56	0	0	57	0	0	0	0	0	0	87	3	0	90	158
08:15 AM	7	0	6	0	13	2	48	0	0	50	0	0	0	0	0	0	80	2	0	82	145
08:30 AM	4	0	6	0	10	8	43	0	0	51	0	0	0	0	0	0	82	4	0	86	147
08:45 AM	5	0	5	0	10	1	51	0	0	52	0	0	0	0	0	0	80	2	0	82	144
<b>Total</b>	<b>22</b>	<b>0</b>	<b>22</b>	<b>0</b>	<b>44</b>	<b>12</b>	<b>198</b>	<b>0</b>	<b>0</b>	<b>210</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>329</b>	<b>11</b>	<b>0</b>	<b>340</b>	<b>594</b>
<b>Grand Total</b>	<b>56</b>	<b>0</b>	<b>88</b>	<b>0</b>	<b>144</b>	<b>22</b>	<b>601</b>	<b>0</b>	<b>0</b>	<b>623</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1105</b>	<b>21</b>	<b>0</b>	<b>1126</b>	<b>1893</b>
Apprch %	38.9	0	61.1	0		3.5	96.5	0	0		0	0	0	0		0	98.1	1.9	0		
Total %	3	0	4.6	0	7.6	1.2	31.7	0	0	32.9	0	0	0	0	0	0	58.4	1.1	0	59.5	
Cars	54	0	88	0	142	22	542	0	0	564	0	0	0	0	0	0	1042	21	0	1063	1769
% Cars	96.4	0	100	0	98.6	100	90.2	0	0	90.5	0	0	0	0	0	0	94.3	100	0	94.4	93.4
Trucks	2	0	0	0	2	0	59	0	0	59	0	0	0	0	0	0	63	0	0	63	124
% Trucks	3.6	0	0	0	1.4	0	9.8	0	0	9.5	0	0	0	0	0	0	5.7	0	0	5.6	6.6

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & N RIVER RD.  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036120  
Site Code : 09036120  
Start Date : 10/8/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & N RIVER RD.  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036120  
Site Code : 09036120  
Start Date : 10/8/2009  
Page No : 3

Start Time	N River Rd From North					USH 14 From East					From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	3	0	8	0	11	0	58	0	0	58	0	0	0	0	0	0	97	2	0	99	168
07:15 AM	9	0	5	0	14	1	66	0	0	67	0	0	0	0	0	0	124	1	0	125	206
07:30 AM	6	0	15	0	21	3	69	0	0	72	0	0	0	0	0	0	133	2	0	135	228
07:45 AM	3	0	11	0	14	1	56	0	0	57	0	0	0	0	0	0	134	1	0	135	206
Total Volume	21	0	39	0	60	5	249	0	0	254	0	0	0	0	0	0	488	6	0	494	808
% App. Total	35	0	65	0		2	98	0	0		0	0	0	0		0	98.8	1.2	0		
PHF	.583	.000	.650	.000	.714	.417	.902	.000	.000	.882	.000	.000	.000	.000	.000	.000	.910	.750	.000	.915	.886

Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	06:45 AM					07:00 AM					06:00 AM					07:00 AM				
+0 mins.	3	0	11	0	14	0	58	0	0	58	0	0	0	0	0	0	97	2	0	99
+15 mins.	3	0	8	0	11	1	66	0	0	67	0	0	0	0	0	0	124	1	0	125
+30 mins.	9	0	5	0	14	3	69	0	0	72	0	0	0	0	0	0	133	2	0	135
+45 mins.	6	0	15	0	21	1	56	0	0	57	0	0	0	0	0	0	134	1	0	135
Total Volume	21	0	39	0	60	5	249	0	0	254	0	0	0	0	0	0	488	6	0	494
% App. Total	35	0	65	0		2	98	0	0		0	0	0	0		0	98.8	1.2	0	
PHF	.583	.000	.650	.000	.714	.417	.902	.000	.000	.882	.000	.000	.000	.000	.000	.000	.910	.750	.000	.915

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & N. River Road  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036121  
Site Code : 09036121  
Start Date : 10/8/2009  
Page No : 1

### Groups Printed- Cars - Trucks

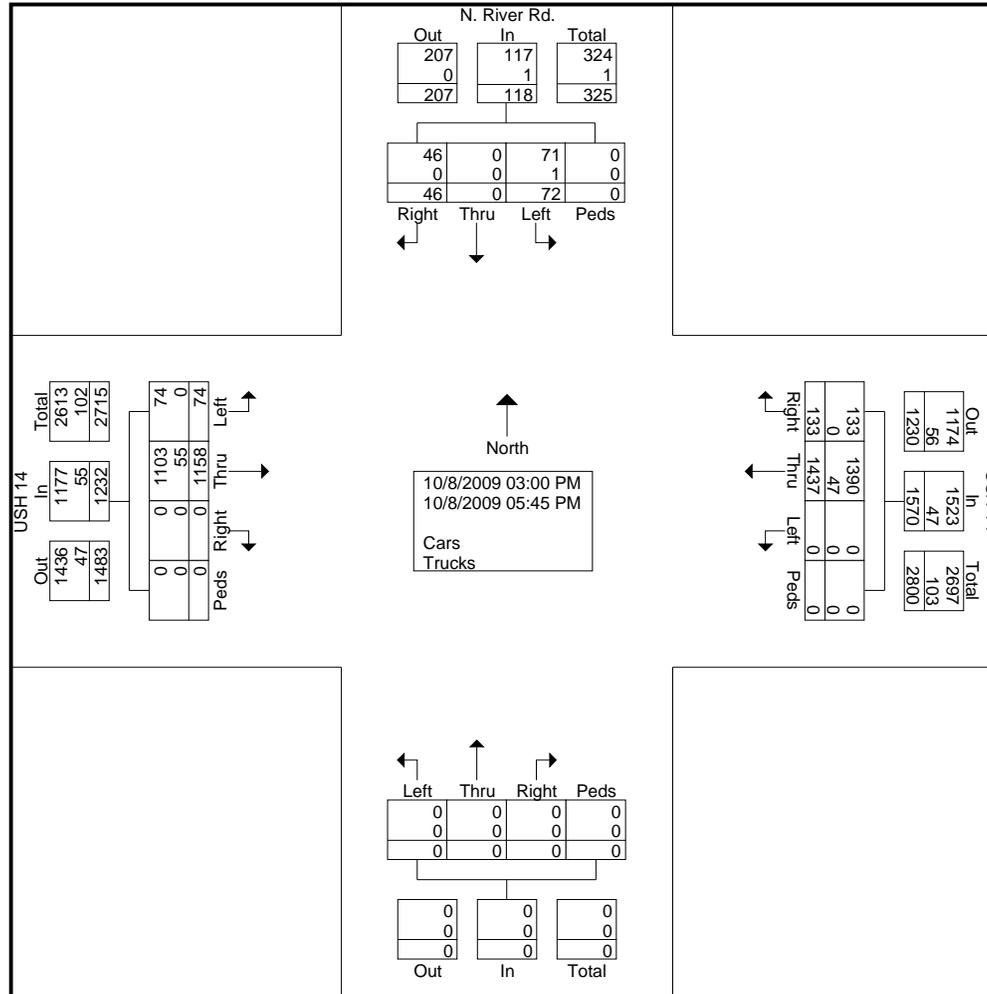
Start Time	N. River Rd. From North					USH 14 From East					From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
03:00 PM	2	0	5	0	7	6	88	0	0	94	0	0	0	0	0	0	61	4	0	65	166
03:15 PM	5	0	5	0	10	7	105	0	0	112	0	0	0	0	0	0	81	5	0	86	208
03:30 PM	4	0	8	0	12	8	112	0	0	120	0	0	0	0	0	0	82	2	0	84	216
03:45 PM	3	0	5	0	8	9	137	0	0	146	0	0	0	0	0	0	95	4	0	99	253
<b>Total</b>	<b>14</b>	<b>0</b>	<b>23</b>	<b>0</b>	<b>37</b>	<b>30</b>	<b>442</b>	<b>0</b>	<b>0</b>	<b>472</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>319</b>	<b>15</b>	<b>0</b>	<b>334</b>	<b>843</b>
04:00 PM	1	0	7	0	8	13	129	0	0	142	0	0	0	0	0	0	85	11	0	96	246
04:15 PM	4	0	4	0	8	9	123	0	0	132	0	0	0	0	0	0	108	4	0	112	252
04:30 PM	3	0	5	0	8	13	143	0	0	156	0	0	0	0	0	0	108	4	0	112	276
04:45 PM	5	0	14	0	19	15	125	0	0	140	0	0	0	0	0	0	124	8	0	132	291
<b>Total</b>	<b>13</b>	<b>0</b>	<b>30</b>	<b>0</b>	<b>43</b>	<b>50</b>	<b>520</b>	<b>0</b>	<b>0</b>	<b>570</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>425</b>	<b>27</b>	<b>0</b>	<b>452</b>	<b>1065</b>
05:00 PM	1	0	5	0	6	7	123	0	0	130	0	0	0	0	0	0	102	2	0	104	240
05:15 PM	4	0	5	0	9	16	157	0	0	173	0	0	0	0	0	0	100	8	0	108	290
05:30 PM	4	0	3	0	7	10	114	0	0	124	0	0	0	0	0	0	89	2	0	91	222
05:45 PM	10	0	6	0	16	20	81	0	0	101	0	0	0	0	0	0	123	20	0	143	260
<b>Total</b>	<b>19</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>38</b>	<b>53</b>	<b>475</b>	<b>0</b>	<b>0</b>	<b>528</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>414</b>	<b>32</b>	<b>0</b>	<b>446</b>	<b>1012</b>
<b>Grand Total</b>	<b>46</b>	<b>0</b>	<b>72</b>	<b>0</b>	<b>118</b>	<b>133</b>	<b>1437</b>	<b>0</b>	<b>0</b>	<b>1570</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1158</b>	<b>74</b>	<b>0</b>	<b>1232</b>	<b>2920</b>
Apprch %	39	0	61	0		8.5	91.5	0	0		0	0	0	0		0	94	6	0		
Total %	1.6	0	2.5	0	4	4.6	49.2	0	0	53.8	0	0	0	0	0	0	39.7	2.5	0	42.2	
Cars	46	0	71	0	117	133	1390	0	0	1523	0	0	0	0	0	0	1103	74	0	1177	2817
% Cars	100	0	98.6	0	99.2	100	96.7	0	0	97	0	0	0	0	0	0	95.3	100	0	95.5	96.5
Trucks	0	0	1	0	1	0	47	0	0	47	0	0	0	0	0	0	55	0	0	55	103
% Trucks	0	0	1.4	0	0.8	0	3.3	0	0	3	0	0	0	0	0	0	4.7	0	0	4.5	3.5

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & N. River Road  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036121  
Site Code : 09036121  
Start Date : 10/8/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & N. River Road  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036121  
Site Code : 09036121  
Start Date : 10/8/2009  
Page No : 3

Start Time	N. River Rd. From North					USH 14 From East					From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	3	0	5	0	8	13	143	0	0	156	0	0	0	0	0	0	108	4	0	112	276
04:45 PM	5	0	14	0	19	15	125	0	0	140	0	0	0	0	0	0	124	8	0	132	291
05:00 PM	1	0	5	0	6	7	123	0	0	130	0	0	0	0	0	0	102	2	0	104	240
05:15 PM	4	0	5	0	9	16	157	0	0	173	0	0	0	0	0	0	100	8	0	108	290
Total Volume	13	0	29	0	42	51	548	0	0	599	0	0	0	0	0	0	434	22	0	456	1097
% App. Total	31	0	69	0		8.5	91.5	0	0		0	0	0	0		0	95.2	4.8	0		
PHF	.650	.000	.518	.000	.553	.797	.873	.000	.000	.866	.000	.000	.000	.000	.000	.000	.875	.688	.000	.864	.942

Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM					04:30 PM					03:00 PM					04:15 PM				
+0 mins.	1	0	7	0	8	13	143	0	0	156	0	0	0	0	0	0	108	4	0	112
+15 mins.	4	0	4	0	8	15	125	0	0	140	0	0	0	0	0	0	108	4	0	112
+30 mins.	3	0	5	0	8	7	123	0	0	130	0	0	0	0	0	0	124	8	0	132
+45 mins.	5	0	14	0	19	16	157	0	0	173	0	0	0	0	0	0	102	2	0	104
Total Volume	13	0	30	0	43	51	548	0	0	599	0	0	0	0	0	0	442	18	0	460
% App. Total	30.2	0	69.8	0		8.5	91.5	0	0		0	0	0	0		0	96.1	3.9	0	
PHF	.650	.000	.536	.000	.566	.797	.873	.000	.000	.866	.000	.000	.000	.000	.000	.000	.891	.563	.000	.871

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH F  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036130  
Site Code : 09036130  
Start Date : 10/15/2009  
Page No : 1

**Groups Printed- Cars - Trucks**

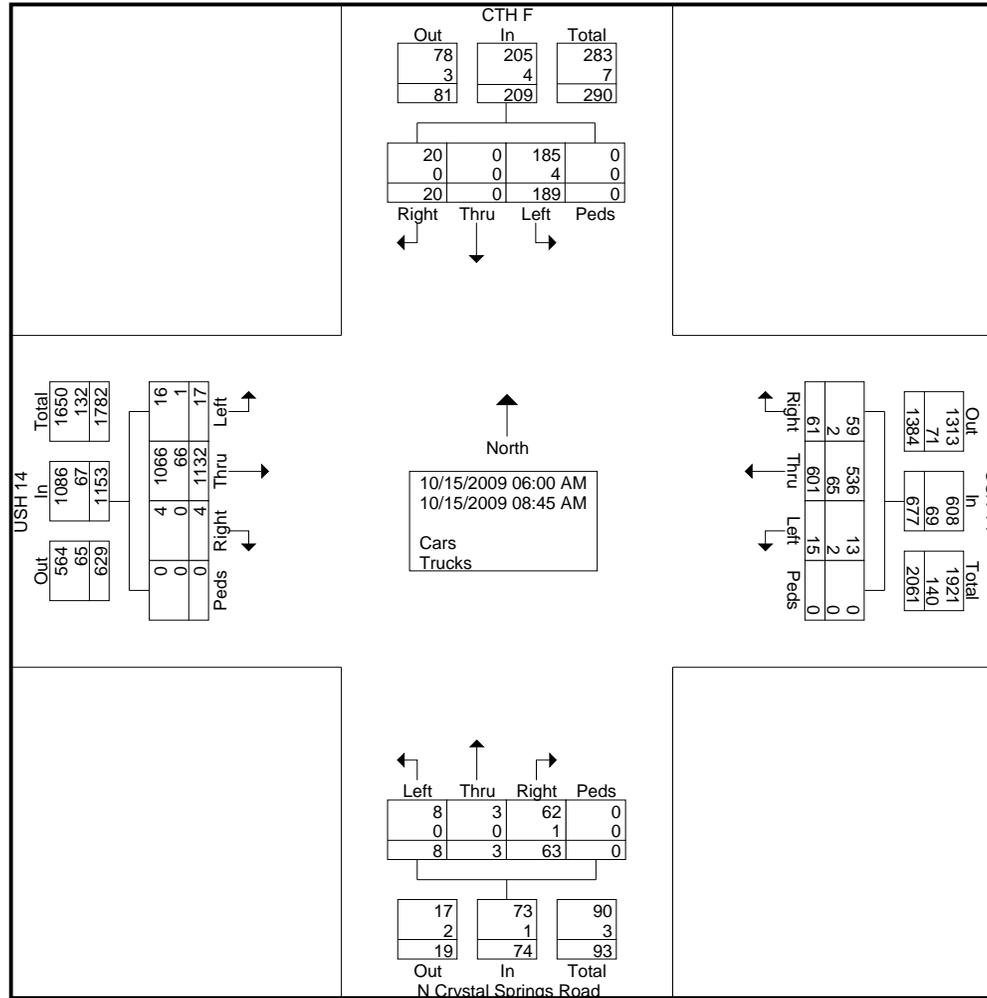
Start Time	CTH F From North					USH 14 From East					N Crystal Springs Road From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:00 AM	0	0	2	0	2	3	32	1	0	36	2	0	0	0	2	0	45	0	0	45	85
06:15 AM	1	0	6	0	7	1	28	0	0	29	5	1	1	0	7	1	64	0	0	65	108
06:30 AM	0	0	12	0	12	2	40	2	0	44	4	0	0	0	4	0	80	0	0	80	140
06:45 AM	0	0	7	0	7	3	43	0	0	46	6	0	0	0	6	0	96	5	0	101	160
<b>Total</b>	<b>1</b>	<b>0</b>	<b>27</b>	<b>0</b>	<b>28</b>	<b>9</b>	<b>143</b>	<b>3</b>	<b>0</b>	<b>155</b>	<b>17</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>19</b>	<b>1</b>	<b>285</b>	<b>5</b>	<b>0</b>	<b>291</b>	<b>493</b>
07:00 AM	1	0	17	0	18	3	55	0	0	58	6	0	4	0	10	0	121	0	0	121	207
07:15 AM	3	0	17	0	20	3	59	2	0	64	5	1	0	0	6	1	109	1	0	111	201
07:30 AM	2	0	27	0	29	0	57	1	0	58	8	0	1	0	9	0	128	2	0	130	226
07:45 AM	4	0	22	0	26	10	53	1	0	64	10	0	1	0	11	1	143	3	0	147	248
<b>Total</b>	<b>10</b>	<b>0</b>	<b>83</b>	<b>0</b>	<b>93</b>	<b>16</b>	<b>224</b>	<b>4</b>	<b>0</b>	<b>244</b>	<b>29</b>	<b>1</b>	<b>6</b>	<b>0</b>	<b>36</b>	<b>2</b>	<b>501</b>	<b>6</b>	<b>0</b>	<b>509</b>	<b>882</b>
08:00 AM	2	0	19	0	21	8	67	1	0	76	5	0	0	0	5	0	79	5	0	84	186
08:15 AM	1	0	22	0	23	13	61	2	0	76	3	1	0	0	4	0	89	1	0	90	193
08:30 AM	3	0	23	0	26	8	59	2	0	69	6	0	0	0	6	1	84	0	0	85	186
08:45 AM	3	0	15	0	18	7	47	3	0	57	3	0	1	0	4	0	94	0	0	94	173
<b>Total</b>	<b>9</b>	<b>0</b>	<b>79</b>	<b>0</b>	<b>88</b>	<b>36</b>	<b>234</b>	<b>8</b>	<b>0</b>	<b>278</b>	<b>17</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>19</b>	<b>1</b>	<b>346</b>	<b>6</b>	<b>0</b>	<b>353</b>	<b>738</b>
<b>Grand Total</b>	<b>20</b>	<b>0</b>	<b>189</b>	<b>0</b>	<b>209</b>	<b>61</b>	<b>601</b>	<b>15</b>	<b>0</b>	<b>677</b>	<b>63</b>	<b>3</b>	<b>8</b>	<b>0</b>	<b>74</b>	<b>4</b>	<b>1132</b>	<b>17</b>	<b>0</b>	<b>1153</b>	<b>2113</b>
Apprch %	9.6	0	90.4	0		9	88.8	2.2	0		85.1	4.1	10.8	0		0.3	98.2	1.5	0		
Total %	0.9	0	8.9	0	9.9	2.9	28.4	0.7	0	32	3	0.1	0.4	0	3.5	0.2	53.6	0.8	0	54.6	
Cars	20	0	185	0	205	59	536	13	0	608	62	3	8	0	73	4	1066	16	0	1086	1972
% Cars	100	0	97.9	0	98.1	96.7	89.2	86.7	0	89.8	98.4	100	100	0	98.6	100	94.2	94.1	0	94.2	93.3
Trucks	0	0	4	0	4	2	65	2	0	69	1	0	0	0	1	0	66	1	0	67	141
% Trucks	0	0	2.1	0	1.9	3.3	10.8	13.3	0	10.2	1.6	0	0	0	1.4	0	5.8	5.9	0	5.8	6.7

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH F  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036130  
Site Code : 09036130  
Start Date : 10/15/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH F  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036130  
Site Code : 09036130  
Start Date : 10/15/2009  
Page No : 3

Start Time	CTH F From North					USH 14 From East					N Crystal Springs Road From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	1	0	17	0	18	3	55	0	0	58	6	0	4	0	10	0	121	0	0	121	207
07:15 AM	3	0	17	0	20	3	59	2	0	64	5	1	0	0	6	1	109	1	0	111	201
07:30 AM	2	0	27	0	29	0	57	1	0	58	8	0	1	0	9	0	128	2	0	130	226
07:45 AM	4	0	22	0	26	10	53	1	0	64	10	0	1	0	11	1	143	3	0	147	248
Total Volume	10	0	83	0	93	16	224	4	0	244	29	1	6	0	36	2	501	6	0	509	882
% App. Total	10.8	0	89.2	0		6.6	91.8	1.6	0		80.6	2.8	16.7	0		0.4	98.4	1.2	0		
PHF	.625	.000	.769	.000	.802	.400	.949	.500	.000	.953	.725	.250	.375	.000	.818	.500	.876	.500	.000	.866	.889

Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM					07:45 AM					07:00 AM					07:00 AM				
+0 mins.	2	0	27	0	29	10	53	1	0	64	6	0	4	0	10	0	121	0	0	121
+15 mins.	4	0	22	0	26	8	67	1	0	76	5	1	0	0	6	1	109	1	0	111
+30 mins.	2	0	19	0	21	13	61	2	0	76	8	0	1	0	9	0	128	2	0	130
+45 mins.	1	0	22	0	23	8	59	2	0	69	10	0	1	0	11	1	143	3	0	147
Total Volume	9	0	90	0	99	39	240	6	0	285	29	1	6	0	36	2	501	6	0	509
% App. Total	9.1	0	90.9	0		13.7	84.2	2.1	0		80.6	2.8	16.7	0		0.4	98.4	1.2	0	
PHF	.563	.000	.833	.000	.853	.750	.896	.750	.000	.938	.725	.250	.375	.000	.818	.500	.876	.500	.000	.866

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH F  
PM Peak Hour  
TN-0903036-01  
TURNING MOVEMENT COUNT

File Name : 09036131  
Site Code : 09036131  
Start Date : 10/15/2009  
Page No : 1

### Groups Printed- Cars - Trucks

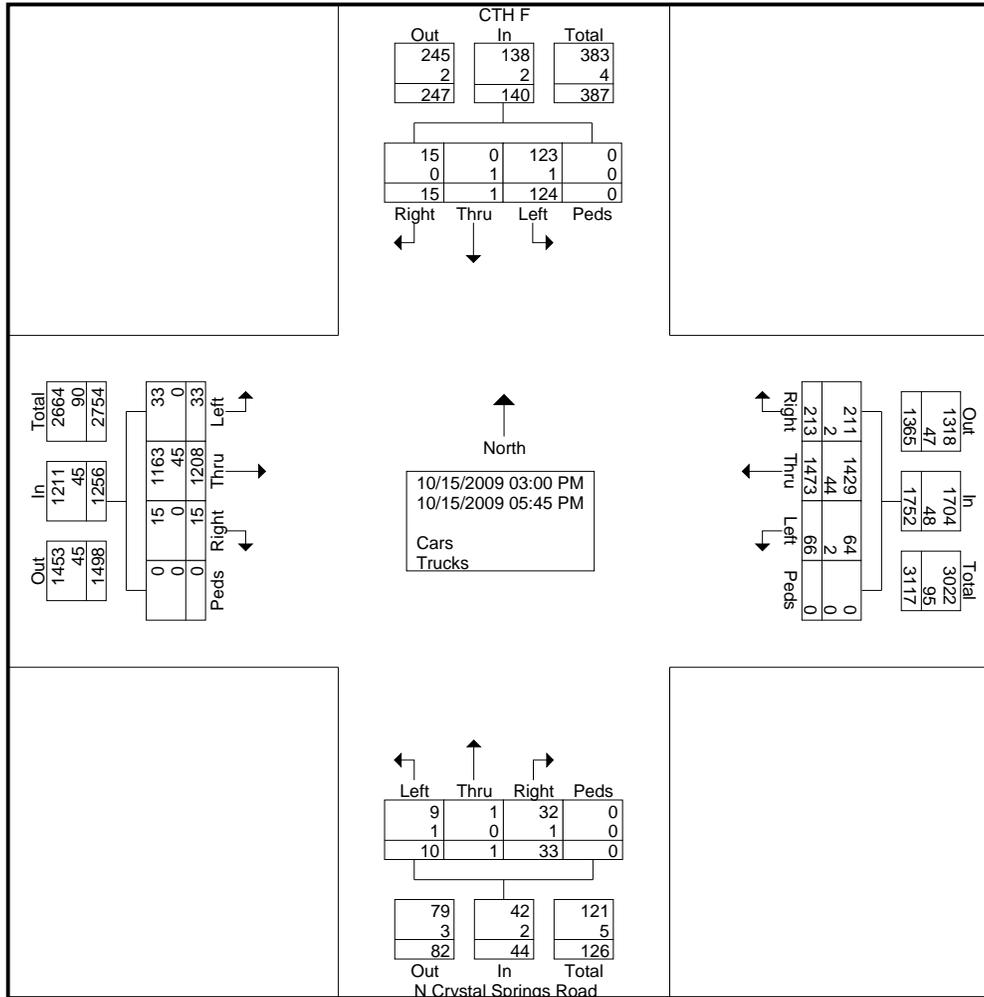
Start Time	CTH F					From East					N Crystal Springs Road					From West					Int. Total
	From North					From South					From West										
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
03:00 PM	0	0	1	0	1	4	81	6	0	91	2	0	0	0	2	5	91	4	0	100	194
03:15 PM	1	0	12	0	13	27	99	4	0	130	2	0	2	0	4	1	86	4	0	91	238
03:30 PM	3	0	19	0	22	13	138	6	0	157	1	0	2	0	3	2	99	2	0	103	285
03:45 PM	0	1	14	0	15	20	109	5	0	134	2	0	1	0	3	0	103	3	0	106	258
Total	4	1	46	0	51	64	427	21	0	512	7	0	5	0	12	8	379	13	0	400	975
04:00 PM	3	0	6	0	9	24	127	5	0	156	3	0	0	0	3	1	98	3	0	102	270
04:15 PM	1	0	8	0	9	18	134	3	0	155	4	1	1	0	6	1	91	3	0	95	265
04:30 PM	3	0	9	0	12	17	130	7	0	154	1	0	2	0	3	1	102	5	0	108	277
04:45 PM	2	0	9	0	11	19	138	3	0	160	1	0	0	0	1	0	114	4	0	118	290
Total	9	0	32	0	41	78	529	18	0	625	9	1	3	0	13	3	405	15	0	423	1102
05:00 PM	0	0	11	0	11	29	123	7	0	159	7	0	2	0	9	2	91	2	0	95	274
05:15 PM	0	0	14	0	14	9	154	7	0	170	4	0	0	0	4	1	117	0	0	118	306
05:30 PM	1	0	10	0	11	16	132	8	0	156	2	0	0	0	2	0	117	0	0	117	286
05:45 PM	1	0	11	0	12	17	108	5	0	130	4	0	0	0	4	1	99	3	0	103	249
Total	2	0	46	0	48	71	517	27	0	615	17	0	2	0	19	4	424	5	0	433	1115
Grand Total	15	1	124	0	140	213	1473	66	0	1752	33	1	10	0	44	15	1208	33	0	1256	3192
Apprch %	10.7	0.7	88.6	0		12.2	84.1	3.8	0		75	2.3	22.7	0		1.2	96.2	2.6	0		
Total %	0.5	0	3.9	0	4.4	6.7	46.1	2.1	0	54.9	1	0	0.3	0	1.4	0.5	37.8	1	0	39.3	
Cars	15	0	123	0	138	211	1429	64	0	1704	32	1	9	0	42	15	1163	33	0	1211	3095
% Cars	100	0	99.2	0	98.6	99.1	97	97	0	97.3	97	100	90	0	95.5	100	96.3	100	0	96.4	97
Trucks	0	1	1	0	2	2	44	2	0	48	1	0	1	0	2	0	45	0	0	45	97
% Trucks	0	100	0.8	0	1.4	0.9	3	3	0	2.7	3	0	10	0	4.5	0	3.7	0	0	3.6	3

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH F  
PM Peak Hour  
TN-0903036-01  
TURNING MOVEMENT COUNT

File Name : 09036131  
Site Code : 09036131  
Start Date : 10/15/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & CTH F  
PM Peak Hour  
TN-0903036-01  
TURNING MOVEMENT COUNT

File Name : 09036131  
Site Code : 09036131  
Start Date : 10/15/2009  
Page No : 3

Start Time	CTH F From North					From East					N Crystal Springs Road From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	2	0	9	0	11	19	138	3	0	160	1	0	0	0	1	0	114	4	0	118	290
05:00 PM	0	0	11	0	11	29	123	7	0	159	7	0	2	0	9	2	91	2	0	95	274
05:15 PM	0	0	14	0	14	9	154	7	0	170	4	0	0	0	4	1	117	0	0	118	306
05:30 PM	1	0	10	0	11	16	132	8	0	156	2	0	0	0	2	0	117	0	0	117	286
Total Volume	3	0	44	0	47	73	547	25	0	645	14	0	2	0	16	3	439	6	0	448	1156
% App. Total	6.4	0	93.6	0		11.3	84.8	3.9	0		87.5	0	12.5	0		0.7	98	1.3	0		
PHF	.375	.000	.786	.000	.839	.629	.888	.781	.000	.949	.500	.000	.250	.000	.444	.375	.938	.375	.000	.949	.944

Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:15 PM					04:45 PM					04:15 PM					04:45 PM					
+0 mins.	1	0	12	0	13	19	138	3	0	160	4	1	1	0	6	0	114	4	0	118	
+15 mins.	3	0	19	0	22	29	123	7	0	159	1	0	2	0	3	2	91	2	0	95	
+30 mins.	0	1	14	0	15	9	154	7	0	170	1	0	0	0	1	1	117	0	0	118	
+45 mins.	3	0	6	0	9	16	132	8	0	156	7	0	2	0	9	0	117	0	0	117	
Total Volume	7	1	51	0	59	73	547	25	0	645	13	1	5	0	19	3	439	6	0	448	
% App. Total	11.9	1.7	86.4	0		11.3	84.8	3.9	0		68.4	5.3	26.3	0		0.7	98	1.3	0		
PHF	.583	.250	.671	.000	.670	.629	.888	.781	.000	.949	.464	.250	.625	.000	.528	.375	.938	.375	.000	.949	

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & USH 51  
12 HOUR COUNT (6 am to 6 pm)  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036140  
Site Code : 09036140  
Start Date : 10/21/2009  
Page No : 1

### Groups Printed- Cars - Trucks

Start Time	USH 51 From North					USH 14 From East					USH 51 From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:00 AM	1	11	13	0	25	3	13	4	0	20	6	17	4	0	27	1	33	1	0	35	107
06:15 AM	1	26	15	0	42	5	24	6	0	35	18	17	11	0	46	4	48	9	0	61	184
06:30 AM	5	26	20	0	51	6	34	8	0	48	17	32	13	0	62	5	51	8	0	64	225
06:45 AM	4	39	22	0	65	15	58	36	0	109	19	27	10	0	56	11	82	9	0	102	332
Total	11	102	70	0	183	29	129	54	0	212	60	93	38	0	191	21	214	27	0	262	848
07:00 AM	6	25	20	0	51	15	41	22	0	78	27	19	10	0	56	15	71	6	0	92	277
07:15 AM	12	51	34	0	97	8	33	29	0	70	38	31	20	0	89	4	77	8	0	89	345
07:30 AM	6	60	32	0	98	6	41	29	0	76	44	28	9	0	81	10	94	12	0	116	371
07:45 AM	5	58	34	0	97	18	45	59	0	122	52	17	11	0	80	12	105	9	1	127	426
Total	29	194	120	0	343	47	160	139	0	346	161	95	50	0	306	41	347	35	1	424	1419
08:00 AM	10	39	16	0	65	11	49	39	0	99	29	27	16	0	72	7	76	5	0	88	324
08:15 AM	4	39	18	0	61	11	51	30	0	92	28	24	17	0	69	14	60	4	0	78	300
08:30 AM	3	23	29	0	55	19	44	27	0	90	31	14	19	0	64	16	72	7	0	95	304
08:45 AM	5	31	23	0	59	12	50	41	0	103	13	21	8	0	42	19	98	6	0	123	327
Total	22	132	86	0	240	53	194	137	0	384	101	86	60	0	247	56	306	22	0	384	1255
09:00 AM	9	19	19	0	47	9	41	19	0	69	30	17	11	0	58	1	53	5	0	59	233
09:15 AM	4	26	34	0	64	15	53	30	0	98	40	18	13	0	71	13	45	9	0	67	300
09:30 AM	6	30	27	0	63	13	37	32	0	82	22	24	10	0	56	9	75	4	0	88	289
09:45 AM	6	24	35	0	65	13	60	28	0	101	39	18	10	0	67	18	67	5	0	90	323
Total	25	99	115	0	239	50	191	109	0	350	131	77	44	0	252	41	240	23	0	304	1145
10:00 AM	6	18	24	0	48	13	51	32	0	96	42	17	11	1	71	20	77	12	1	110	325
10:15 AM	2	33	32	0	67	23	59	29	2	113	47	21	18	0	86	26	76	5	0	107	373
10:30 AM	3	24	26	0	53	20	43	37	0	100	30	28	13	1	72	14	60	7	0	81	306
10:45 AM	1	24	31	0	56	21	61	33	0	115	59	21	13	4	97	18	71	4	0	93	361
Total	12	99	113	0	224	77	214	131	2	424	178	87	55	6	326	78	284	28	1	391	1365
11:00 AM	6	21	32	0	59	28	65	39	0	132	33	23	13	0	69	14	79	3	0	96	356
11:15 AM	8	24	33	0	65	23	57	24	0	104	35	29	11	0	75	18	85	4	0	107	351
11:30 AM	2	18	24	0	44	23	80	43	0	146	63	18	24	0	105	24	82	6	0	112	407
11:45 AM	13	21	30	0	64	29	88	36	0	153	52	22	16	0	90	17	94	8	0	119	426
Total	29	84	119	0	232	103	290	142	0	535	183	92	64	0	339	73	340	21	0	434	1540
12:00 PM	10	26	19	0	55	16	76	25	0	117	45	24	16	1	86	9	71	2	0	82	340
12:15 PM	1	21	23	0	45	35	80	38	0	153	49	27	14	1	91	13	61	6	0	80	369
12:30 PM	3	33	19	0	55	25	63	40	0	128	37	21	21	1	80	13	65	6	0	84	347
12:45 PM	5	33	17	0	55	17	93	46	0	156	35	38	25	0	98	13	81	6	0	100	409
Total	19	113	78	0	210	93	312	149	0	554	166	110	76	3	355	48	278	20	0	346	1465

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & USH 51  
12 HOUR COUNT (6 am to 6 pm)  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036140  
Site Code : 09036140  
Start Date : 10/21/2009  
Page No : 2

**Groups Printed- Cars - Trucks**

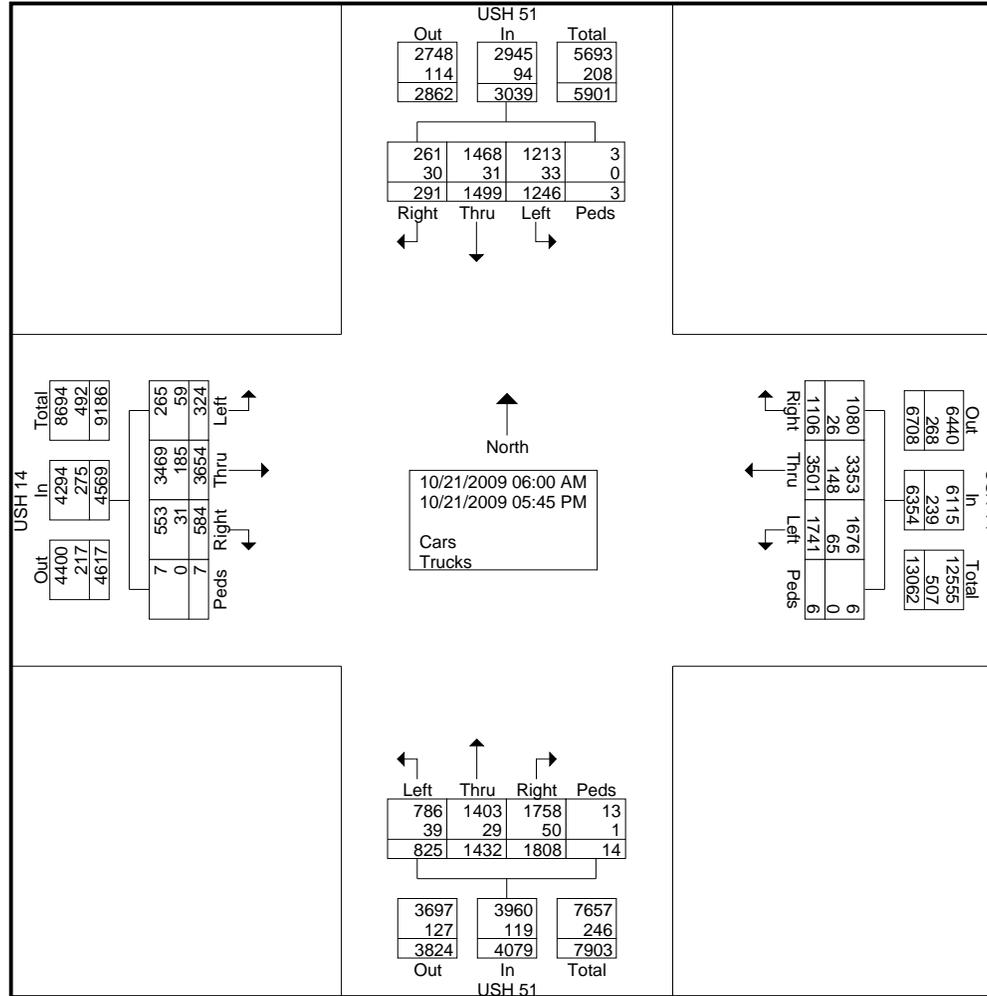
Start Time	USH 51 From North					USH 14 From East					USH 51 From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
01:00 PM	5	18	29	0	52	27	101	46	0	174	22	13	17	1	53	13	92	4	0	109	388
01:15 PM	9	29	25	0	63	19	79	35	0	133	38	31	14	0	83	8	71	11	0	90	369
01:30 PM	5	29	20	0	54	26	81	42	0	149	33	21	18	0	72	11	64	9	0	84	359
01:45 PM	3	28	27	0	58	31	77	57	0	165	31	32	17	0	80	16	99	7	1	123	426
Total	22	104	101	0	227	103	338	180	0	621	124	97	66	1	288	48	326	31	1	406	1542
02:00 PM	8	25	31	0	64	28	71	39	0	138	24	29	18	0	71	10	62	5	0	77	350
02:15 PM	5	32	23	0	60	30	85	42	0	157	32	32	18	0	82	14	75	4	0	93	392
02:30 PM	9	37	20	0	66	25	92	48	0	165	46	43	20	1	110	13	72	4	0	89	430
02:45 PM	7	20	22	0	49	27	83	45	0	155	41	33	21	0	95	21	82	6	0	109	408
Total	29	114	96	0	239	110	331	174	0	615	143	137	77	1	358	58	291	19	0	368	1580
03:00 PM	5	40	27	3	75	24	74	31	0	129	56	45	23	3	127	1	65	10	0	76	407
03:15 PM	11	32	19	0	62	25	111	47	0	183	41	32	25	0	98	7	69	3	0	79	422
03:30 PM	7	21	28	0	56	32	110	56	0	198	52	55	31	0	138	5	83	11	0	99	491
03:45 PM	7	28	29	0	64	17	75	47	0	139	38	27	19	0	84	8	66	14	0	88	375
Total	30	121	103	3	257	98	370	181	0	649	187	159	98	3	447	21	283	38	0	342	1695
04:00 PM	6	39	24	0	69	50	114	45	0	209	39	52	12	0	103	8	79	5	0	92	473
04:15 PM	4	60	28	0	92	42	113	44	0	199	33	66	29	0	128	4	97	8	0	109	528
04:30 PM	5	42	30	0	77	45	134	41	3	223	56	58	21	0	135	9	97	5	3	114	549
04:45 PM	7	36	37	0	80	38	133	40	0	211	50	38	25	0	113	11	116	8	0	135	539
Total	22	177	119	0	318	175	494	170	3	842	178	214	87	0	479	32	389	26	3	450	2089
05:00 PM	10	55	33	0	98	49	99	45	0	193	65	51	20	0	136	14	94	6	0	114	541
05:15 PM	12	43	30	0	85	53	150	43	0	246	54	60	29	0	143	7	92	11	0	110	584
05:30 PM	13	26	32	0	71	32	125	52	1	210	45	46	42	0	133	27	76	11	1	115	529
05:45 PM	6	36	31	0	73	34	104	35	0	173	32	28	19	0	79	19	94	6	0	119	444
Total	41	160	126	0	327	168	478	175	1	822	196	185	110	0	491	67	356	34	1	458	2098
Grand Total	291	1499	1246	3	3039	1106	3501	1741	6	6354	1808	1432	825	14	4079	584	3654	324	7	4569	18041
Apprch %	9.6	49.3	41	0.1		17.4	55.1	27.4	0.1		44.3	35.1	20.2	0.3		12.8	80	7.1	0.2		
Total %	1.6	8.3	6.9	0	16.8	6.1	19.4	9.7	0	35.2	10	7.9	4.6	0.1	22.6	3.2	20.3	1.8	0	25.3	
Cars	261	1468	1213	3	2945	1080	3353	1676	6	6115	1758	1403	786	13	3960	553	3469	265	7	4294	17314
% Cars	89.7	97.9	97.4	100	96.9	97.6	95.8	96.3	100	96.2	97.2	98	95.3	92.9	97.1	94.7	94.9	81.8	100	94	96
Trucks	30	31	33	0	94	26	148	65	0	239	50	29	39	1	119	31	185	59	0	275	727
% Trucks	10.3	2.1	2.6	0	3.1	2.4	4.2	3.7	0	3.8	2.8	2	4.7	7.1	2.9	5.3	5.1	18.2	0	6	4

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & USH 51  
12 HOUR COUNT (6 am to 6 pm)  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036140  
Site Code : 09036140  
Start Date : 10/21/2009  
Page No : 3



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & USH 51  
12 HOUR COUNT (6 am to 6 pm)  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036140  
Site Code : 09036140  
Start Date : 10/21/2009  
Page No : 4

Start Time	USH 51 From North					USH 14 From East					USH 51 From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	12	51	34	0	97	8	33	29	0	70	38	31	20	0	89	4	77	8	0	89	345
07:30 AM	6	60	32	0	98	6	41	29	0	76	44	28	9	0	81	10	94	12	0	116	371
07:45 AM	5	58	34	0	97	18	45	59	0	122	52	17	11	0	80	12	105	9	1	127	426
08:00 AM	10	39	16	0	65	11	49	39	0	99	29	27	16	0	72	7	76	5	0	88	324
Total Volume	33	208	116	0	357	43	168	156	0	367	163	103	56	0	322	33	352	34	1	420	1466
% App. Total	9.2	58.3	32.5	0		11.7	45.8	42.5	0		50.6	32	17.4	0		7.9	83.8	8.1	0.2		
PHF	.688	.867	.853	.000	.911	.597	.857	.661	.000	.752	.784	.831	.700	.000	.904	.688	.838	.708	.250	.827	.860

Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM					07:45 AM					07:15 AM					07:00 AM				
+0 mins.	12	51	34	0	97	18	45	59	0	122	38	31	20	0	89	15	71	6	0	92
+15 mins.	6	60	32	0	98	11	49	39	0	99	44	28	9	0	81	4	77	8	0	89
+30 mins.	5	58	34	0	97	11	51	30	0	92	52	17	11	0	80	10	94	12	0	116
+45 mins.	10	39	16	0	65	19	44	27	0	90	29	27	16	0	72	12	105	9	1	127
Total Volume	33	208	116	0	357	59	189	155	0	403	163	103	56	0	322	41	347	35	1	424
% App. Total	9.2	58.3	32.5	0		14.6	46.9	38.5	0		50.6	32	17.4	0		9.7	81.8	8.3	0.2	
PHF	.688	.867	.853	.000	.911	.776	.926	.657	.000	.826	.784	.831	.700	.000	.904	.683	.826	.729	.250	.835

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & USH 51  
12 HOUR COUNT (6 am to 6 pm)  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036140  
Site Code : 09036140  
Start Date : 10/21/2009  
Page No : 5

Start Time	USH 51 From North					USH 14 From East					USH 51 From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:30 AM																					
11:30 AM	2	18	24	0	44	23	80	<b>43</b>	0	146	<b>63</b>	18	<b>24</b>	0	<b>105</b>	<b>24</b>	82	6	0	112	407
11:45 AM	<b>13</b>	21	<b>30</b>	0	<b>64</b>	29	<b>88</b>	36	0	<b>153</b>	52	22	16	0	90	17	<b>94</b>	<b>8</b>	0	<b>119</b>	<b>426</b>
12:00 PM	10	<b>26</b>	19	0	55	16	76	25	0	117	45	24	16	<b>1</b>	86	9	71	2	0	82	340
12:15 PM	1	21	23	0	45	<b>35</b>	80	38	0	153	49	<b>27</b>	14	1	91	13	61	6	0	80	369
Total Volume	26	86	96	0	208	103	324	142	0	569	209	91	70	2	372	63	308	22	0	393	1542
% App. Total	12.5	41.3	46.2	0		18.1	56.9	25	0		56.2	24.5	18.8	0.5		16	78.4	5.6	0		
PHF	.500	.827	.800	.000	.813	.736	.920	.826	.000	.930	.829	.843	.729	.500	.886	.656	.819	.688	.000	.826	.905

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	10:15 AM					01:00 PM					11:30 AM					11:00 AM					
+0 mins.	2	<b>33</b>	<b>32</b>	0	<b>67</b>	27	<b>101</b>	46	0	<b>174</b>	<b>63</b>	18	<b>24</b>	0	<b>105</b>	14	79	3	0	96	
+15 mins.	3	24	26	0	53	19	79	35	0	133	52	22	16	0	90	18	85	4	0	107	
+30 mins.	1	24	31	0	56	26	81	42	0	149	45	24	16	<b>1</b>	86	<b>24</b>	82	6	0	112	
+45 mins.	<b>6</b>	21	32	0	59	<b>31</b>	77	<b>57</b>	0	165	49	<b>27</b>	14	1	91	17	<b>94</b>	<b>8</b>	0	<b>119</b>	
Total Volume	12	102	121	0	235	103	338	180	0	621	209	91	70	2	372	73	340	21	0	434	
% App. Total	5.1	43.4	51.5	0		16.6	54.4	29	0		56.2	24.5	18.8	0.5		16.8	78.3	4.8	0		
PHF	.500	.773	.945	.000	.877	.831	.837	.789	.000	.892	.829	.843	.729	.500	.886	.760	.904	.656	.000	.912	

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & USH 51  
12 HOUR COUNT (6 am to 6 pm)  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036140  
Site Code : 09036140  
Start Date : 10/21/2009  
Page No : 6

Start Time	USH 51 From North					USH 14 From East					USH 51 From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	5	42	30	0	77	45	134	41	3	223	56	58	21	0	135	9	97	5	3	114	549
04:45 PM	7	36	37	0	80	38	133	40	0	211	50	38	25	0	113	11	116	8	0	135	539
05:00 PM	10	55	33	0	98	49	99	45	0	193	65	51	20	0	136	14	94	6	0	114	541
05:15 PM	12	43	30	0	85	53	150	43	0	246	54	60	29	0	143	7	92	11	0	110	584
Total Volume	34	176	130	0	340	185	516	169	3	873	225	207	95	0	527	41	399	30	3	473	2213
% App. Total	10	51.8	38.2	0		21.2	59.1	19.4	0.3		42.7	39.3	18	0		8.7	84.4	6.3	0.6		
PHF	.708	.800	.878	.000	.867	.873	.860	.939	.250	.887	.865	.863	.819	.000	.921	.732	.860	.682	.250	.876	.947

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:15 PM					04:30 PM					04:30 PM					04:45 PM				
+0 mins.	4	60	28	0	92	45	134	41	3	223	56	58	21	0	135	11	116	8	0	135
+15 mins.	5	42	30	0	77	38	133	40	0	211	50	38	25	0	113	14	94	6	0	114
+30 mins.	7	36	37	0	80	49	99	45	0	193	65	51	20	0	136	7	92	11	0	110
+45 mins.	10	55	33	0	98	53	150	43	0	246	54	60	29	0	143	27	76	11	1	115
Total Volume	26	193	128	0	347	185	516	169	3	873	225	207	95	0	527	59	378	36	1	474
% App. Total	7.5	55.6	36.9	0		21.2	59.1	19.4	0.3		42.7	39.3	18	0		12.4	79.7	7.6	0.2	
PHF	.650	.804	.865	.000	.885	.873	.860	.939	.250	.887	.865	.863	.819	.000	.921	.546	.815	.818	.250	.878

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & N. Newville Rd.  
AM Peak Hour  
TN-09036-01  
Turning Movement Count

File Name : 09036150  
Site Code : 09036150  
Start Date : 10/13/2009  
Page No : 1

### Groups Printed- Cars - Trucks

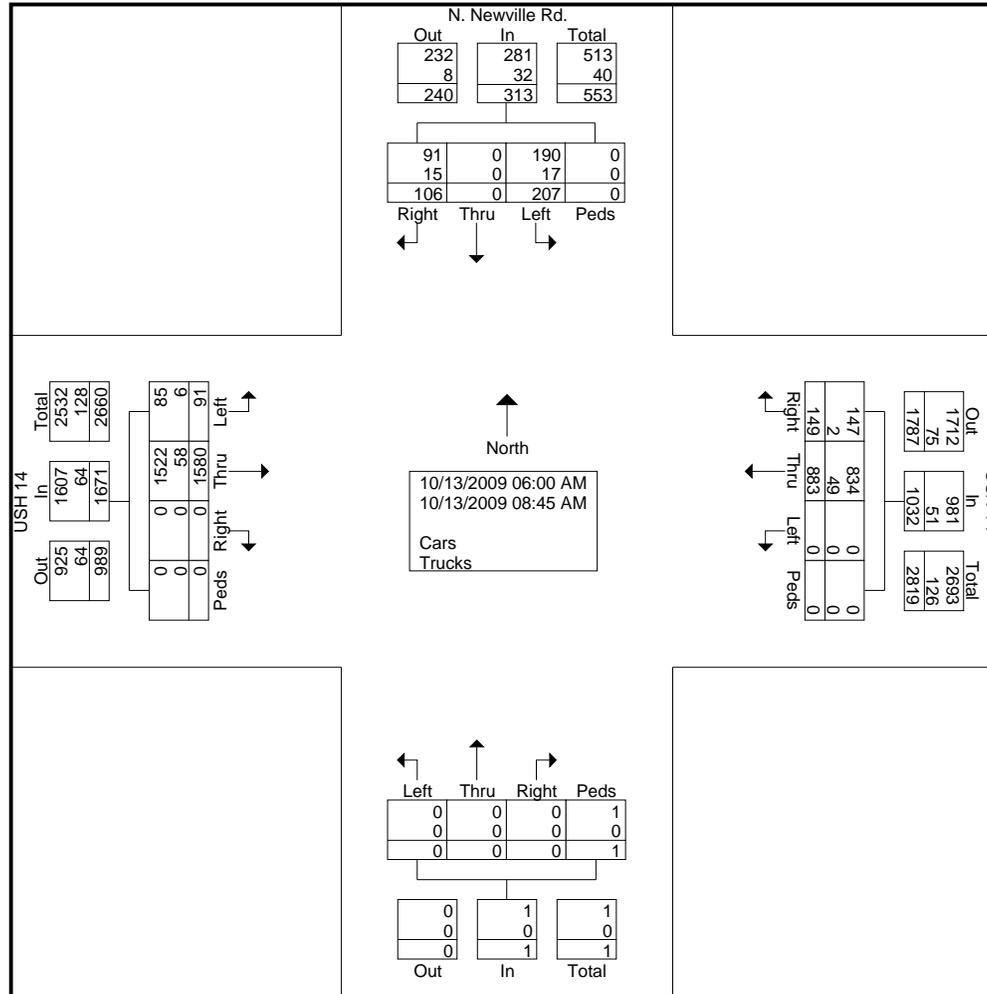
Start Time	N. Newville Rd. From North					USH 14 From East					From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:00 AM	3	0	7	0	10	10	45	0	0	55	0	0	0	0	0	0	77	4	0	81	146
06:15 AM	4	0	8	0	12	8	36	0	0	44	0	0	0	0	0	0	74	5	0	79	135
06:30 AM	11	0	8	0	19	10	66	0	0	76	0	0	0	0	0	0	114	4	0	118	213
06:45 AM	8	0	17	0	25	26	82	0	0	108	0	0	0	0	0	0	139	20	0	159	292
<b>Total</b>	<b>26</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>66</b>	<b>54</b>	<b>229</b>	<b>0</b>	<b>0</b>	<b>283</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>404</b>	<b>33</b>	<b>0</b>	<b>437</b>	<b>786</b>
07:00 AM	9	0	22	0	31	12	77	0	0	89	0	0	0	1	1	0	130	7	0	137	258
07:15 AM	15	0	20	0	35	8	76	0	0	84	0	0	0	0	0	0	156	6	0	162	281
07:30 AM	12	0	29	0	41	12	82	0	0	94	0	0	0	0	0	0	188	3	0	191	326
07:45 AM	12	0	23	0	35	19	108	0	0	127	0	0	0	0	0	0	206	8	0	214	376
<b>Total</b>	<b>48</b>	<b>0</b>	<b>94</b>	<b>0</b>	<b>142</b>	<b>51</b>	<b>343</b>	<b>0</b>	<b>0</b>	<b>394</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>680</b>	<b>24</b>	<b>0</b>	<b>704</b>	<b>1241</b>
08:00 AM	7	0	17	0	24	19	92	0	0	111	0	0	0	0	0	0	108	6	0	114	249
08:15 AM	11	0	22	0	33	6	70	0	0	76	0	0	0	0	0	0	109	15	0	124	233
08:30 AM	6	0	22	0	28	8	80	0	0	88	0	0	0	0	0	0	141	9	0	150	266
08:45 AM	8	0	12	0	20	11	69	0	0	80	0	0	0	0	0	0	138	4	0	142	242
<b>Total</b>	<b>32</b>	<b>0</b>	<b>73</b>	<b>0</b>	<b>105</b>	<b>44</b>	<b>311</b>	<b>0</b>	<b>0</b>	<b>355</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>496</b>	<b>34</b>	<b>0</b>	<b>530</b>	<b>990</b>
<b>Grand Total</b>	<b>106</b>	<b>0</b>	<b>207</b>	<b>0</b>	<b>313</b>	<b>149</b>	<b>883</b>	<b>0</b>	<b>0</b>	<b>1032</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1580</b>	<b>91</b>	<b>0</b>	<b>1671</b>	<b>3017</b>
Apprch %	33.9	0	66.1	0		14.4	85.6	0	0		0	0	0	100		0	94.6	5.4	0		
Total %	3.5	0	6.9	0	10.4	4.9	29.3	0	0	34.2	0	0	0	0	0	0	52.4	3	0	55.4	
Cars	91	0	190	0	281	147	834	0	0	981	0	0	0	1	1	0	1522	85	0	1607	2870
% Cars	85.8	0	91.8	0	89.8	98.7	94.5	0	0	95.1	0	0	0	100	100	0	96.3	93.4	0	96.2	95.1
Trucks	15	0	17	0	32	2	49	0	0	51	0	0	0	0	0	0	58	6	0	64	147
% Trucks	14.2	0	8.2	0	10.2	1.3	5.5	0	0	4.9	0	0	0	0	0	0	3.7	6.6	0	3.8	4.9

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & N. Newville Rd.  
AM Peak Hour  
TN-09036-01  
Turning Movement Count

File Name : 09036150  
Site Code : 09036150  
Start Date : 10/13/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & N. Newville Rd.  
AM Peak Hour  
TN-09036-01  
Turning Movement Count

File Name : 09036150  
Site Code : 09036150  
Start Date : 10/13/2009  
Page No : 3

Start Time	N. Newville Rd. From North					USH 14 From East					From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	9	0	22	0	31	12	77	0	0	89	0	0	0	1	1	0	130	7	0	137	258
07:15 AM	15	0	20	0	35	8	76	0	0	84	0	0	0	0	0	0	156	6	0	162	281
07:30 AM	12	0	29	0	41	12	82	0	0	94	0	0	0	0	0	0	188	3	0	191	326
07:45 AM	12	0	23	0	35	19	108	0	0	127	0	0	0	0	0	0	206	8	0	214	376
Total Volume	48	0	94	0	142	51	343	0	0	394	0	0	0	1	1	0	680	24	0	704	1241
% App. Total	33.8	0	66.2	0		12.9	87.1	0	0		0	0	0	100		0	96.6	3.4	0		
PHF	.800	.000	.810	.000	.866	.671	.794	.000	.000	.776	.000	.000	.000	.250	.250	.000	.825	.750	.000	.822	.825

Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM					07:15 AM					06:15 AM					07:00 AM				
+0 mins.	9	0	22	0	31	8	76	0	0	84	0	0	0	0	0	0	130	7	0	137
+15 mins.	15	0	20	0	35	12	82	0	0	94	0	0	0	0	0	0	156	6	0	162
+30 mins.	12	0	29	0	41	19	108	0	0	127	0	0	0	0	0	0	188	3	0	191
+45 mins.	12	0	23	0	35	19	92	0	0	111	0	0	0	1	1	0	206	8	0	214
Total Volume	48	0	94	0	142	58	358	0	0	416	0	0	0	1	1	0	680	24	0	704
% App. Total	33.8	0	66.2	0		13.9	86.1	0	0		0	0	0	100		0	96.6	3.4	0	
PHF	.800	.000	.810	.000	.866	.763	.829	.000	.000	.819	.000	.000	.000	.250	.250	.000	.825	.750	.000	.822

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & N. Newville Road  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036151  
Site Code : 09036151  
Start Date : 10/13/2009  
Page No : 1

### Groups Printed- Cars - Trucks

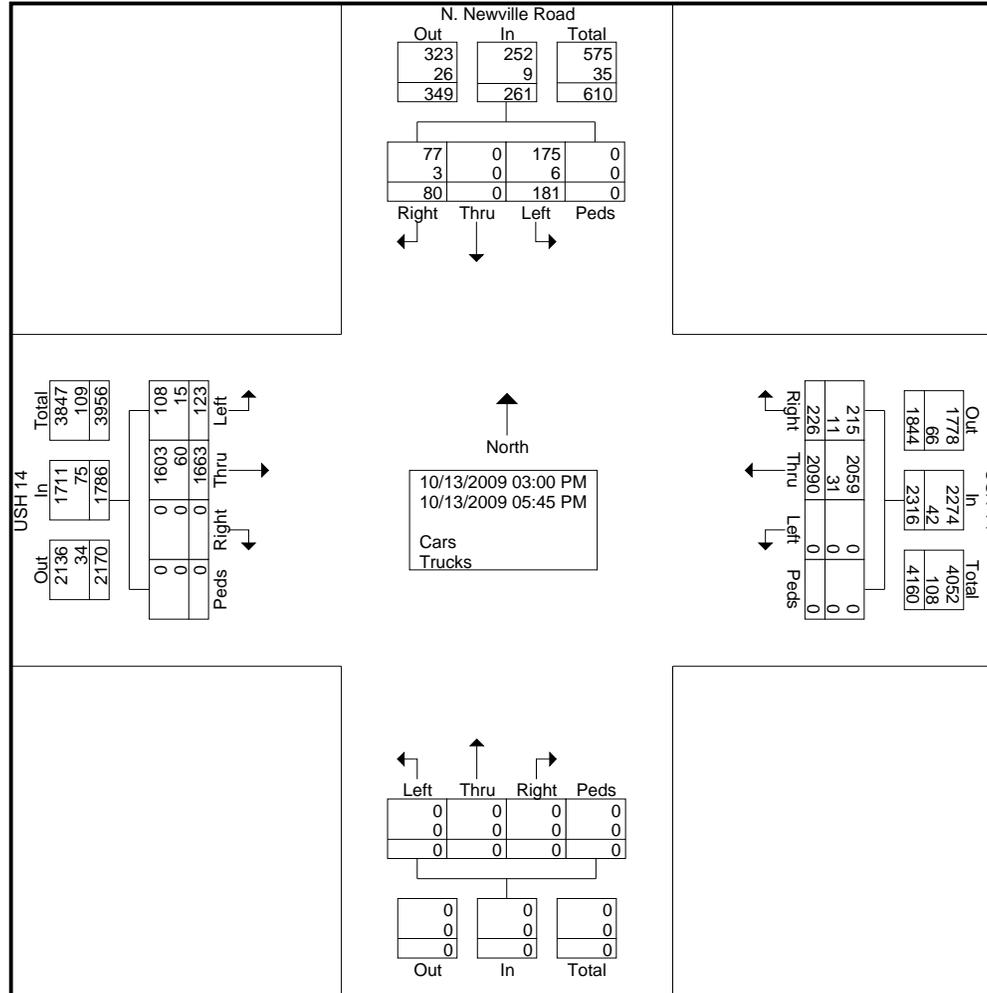
Start Time	N. Newville Road From North					USH 14 From East					From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
03:00 PM	3	0	14	0	17	14	131	0	0	145	0	0	0	0	0	0	86	10	0	96	258
03:15 PM	13	0	26	0	39	17	159	0	0	176	0	0	0	0	0	0	138	8	0	146	361
03:30 PM	10	0	11	0	21	20	189	0	0	209	0	0	0	0	0	0	123	7	0	130	360
03:45 PM	8	0	15	0	23	22	172	0	0	194	0	0	0	0	0	0	145	7	0	152	369
Total	34	0	66	0	100	73	651	0	0	724	0	0	0	0	0	0	492	32	0	524	1348
04:00 PM	3	0	13	0	16	27	191	0	0	218	0	0	0	0	0	0	160	11	0	171	405
04:15 PM	13	0	21	0	34	13	116	0	0	129	0	0	0	0	0	0	177	16	0	193	356
04:30 PM	5	0	16	0	21	16	265	0	0	281	0	0	0	0	0	0	150	14	0	164	466
04:45 PM	6	0	16	0	22	17	224	0	0	241	0	0	0	0	0	0	184	11	0	195	458
Total	27	0	66	0	93	73	796	0	0	869	0	0	0	0	0	0	671	52	0	723	1685
05:00 PM	9	0	15	0	24	21	181	0	0	202	0	0	0	0	0	0	146	9	0	155	381
05:15 PM	4	0	14	0	18	22	186	0	0	208	0	0	0	0	0	0	136	7	0	143	369
05:30 PM	4	0	12	0	16	18	160	0	0	178	0	0	0	0	0	0	117	8	0	125	319
05:45 PM	2	0	8	0	10	19	116	0	0	135	0	0	0	0	0	0	101	15	0	116	261
Total	19	0	49	0	68	80	643	0	0	723	0	0	0	0	0	0	500	39	0	539	1330
Grand Total	80	0	181	0	261	226	2090	0	0	2316	0	0	0	0	0	0	1663	123	0	1786	4363
Apprch %	30.7	0	69.3	0		9.8	90.2	0	0		0	0	0	0		0	93.1	6.9	0		
Total %	1.8	0	4.1	0	6	5.2	47.9	0	0	53.1	0	0	0	0	0	0	38.1	2.8	0	40.9	
Cars	77	0	175	0	252	215	2059	0	0	2274	0	0	0	0	0	0	1603	108	0	1711	4237
% Cars	96.2	0	96.7	0	96.6	95.1	98.5	0	0	98.2	0	0	0	0	0	0	96.4	87.8	0	95.8	97.1
Trucks	3	0	6	0	9	11	31	0	0	42	0	0	0	0	0	0	60	15	0	75	126
% Trucks	3.8	0	3.3	0	3.4	4.9	1.5	0	0	1.8	0	0	0	0	0	0	3.6	12.2	0	4.2	2.9

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & N. Newville Road  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036151  
Site Code : 09036151  
Start Date : 10/13/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & N. Newville Road  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036151  
Site Code : 09036151  
Start Date : 10/13/2009  
Page No : 3

Start Time	N. Newville Road From North					USH 14 From East					From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	3	0	13	0	16	27	191	0	0	218	0	0	0	0	0	0	160	11	0	171	405
04:15 PM	13	0	21	0	34	13	116	0	0	129	0	0	0	0	0	0	177	16	0	193	356
04:30 PM	5	0	16	0	21	16	265	0	0	281	0	0	0	0	0	0	150	14	0	164	466
04:45 PM	6	0	16	0	22	17	224	0	0	241	0	0	0	0	0	0	184	11	0	195	458
Total Volume	27	0	66	0	93	73	796	0	0	869	0	0	0	0	0	0	671	52	0	723	1685
% App. Total	29	0	71	0		8.4	91.6	0	0		0	0	0	0		0	92.8	7.2	0		
PHF	.519	.000	.786	.000	.684	.676	.751	.000	.000	.773	.000	.000	.000	.000	.000	.000	.912	.813	.000	.927	.904

Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:15 PM					04:30 PM					03:00 PM					04:00 PM				
+0 mins.	13	0	21	0	34	16	265	0	0	281	0	0	0	0	0	0	160	11	0	171
+15 mins.	5	0	16	0	21	17	224	0	0	241	0	0	0	0	0	0	177	16	0	193
+30 mins.	6	0	16	0	22	21	181	0	0	202	0	0	0	0	0	0	150	14	0	164
+45 mins.	9	0	15	0	24	22	186	0	0	208	0	0	0	0	0	0	184	11	0	195
Total Volume	33	0	68	0	101	76	856	0	0	932	0	0	0	0	0	0	671	52	0	723
% App. Total	32.7	0	67.3	0		8.2	91.8	0	0		0	0	0	0		0	92.8	7.2	0	
PHF	.635	.000	.810	.000	.743	.864	.808	.000	.000	.829	.000	.000	.000	.000	.000	.000	.912	.813	.000	.927

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & Kennedy Road  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036160  
Site Code : 09036160  
Start Date : 10/14/2009  
Page No : 1

**Groups Printed- Cars - Trucks**

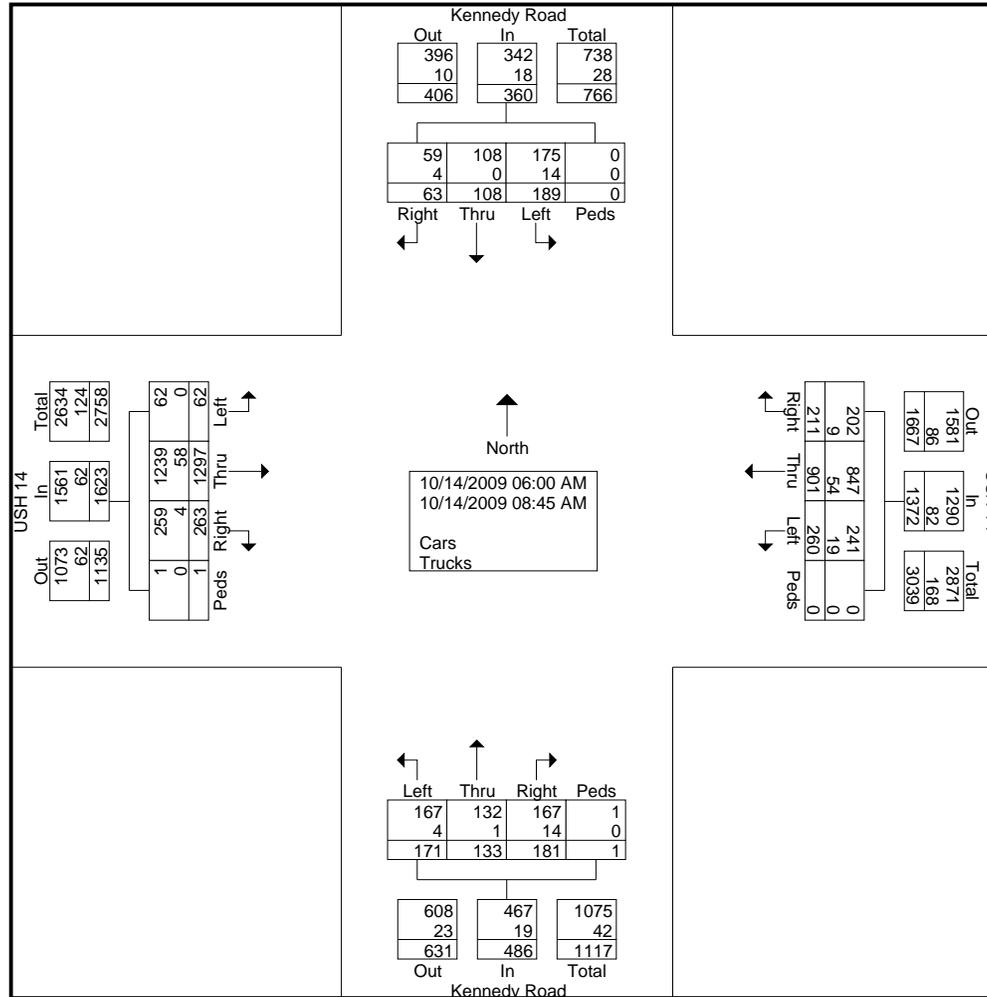
Start Time	Kennedy Road From North					USH 14 From East					Kennedy Road From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:00 AM	2	3	7	0	12	4	38	2	0	44	6	4	8	0	18	6	64	1	0	71	145
06:15 AM	1	0	16	0	17	7	34	7	0	48	8	1	8	0	17	11	56	4	0	71	153
06:30 AM	5	2	11	0	18	18	79	16	0	113	6	7	5	0	18	9	88	4	0	101	250
06:45 AM	10	19	15	0	44	24	90	19	0	133	17	19	19	0	55	22	101	13	0	136	368
Total	18	24	49	0	91	53	241	44	0	338	37	31	40	0	108	48	309	22	0	379	916
07:00 AM	3	9	15	0	27	14	72	32	0	118	12	8	16	0	36	23	118	5	0	146	327
07:15 AM	5	14	24	0	43	13	73	26	0	112	13	10	13	0	36	31	128	6	0	165	356
07:30 AM	8	11	23	0	42	32	60	25	0	117	17	20	13	1	51	28	132	7	0	167	377
07:45 AM	10	24	19	0	53	38	109	43	0	190	22	25	20	0	67	31	120	11	0	162	472
Total	26	58	81	0	165	97	314	126	0	537	64	63	62	1	190	113	498	29	0	640	1532
08:00 AM	5	9	16	0	30	22	88	21	0	131	13	12	13	0	38	31	123	7	0	161	360
08:15 AM	6	5	20	0	31	15	66	24	0	105	21	10	20	0	51	30	131	1	0	162	349
08:30 AM	6	4	12	0	22	8	94	22	0	124	21	9	18	0	48	16	115	2	1	134	328
08:45 AM	2	8	11	0	21	16	98	23	0	137	25	8	18	0	51	25	121	1	0	147	356
Total	19	26	59	0	104	61	346	90	0	497	80	39	69	0	188	102	490	11	1	604	1393
Grand Total	63	108	189	0	360	211	901	260	0	1372	181	133	171	1	486	263	1297	62	1	1623	3841
Apprch %	17.5	30	52.5	0		15.4	65.7	19	0		37.2	27.4	35.2	0.2		16.2	79.9	3.8	0.1		
Total %	1.6	2.8	4.9	0	9.4	5.5	23.5	6.8	0	35.7	4.7	3.5	4.5	0	12.7	6.8	33.8	1.6	0	42.3	
Cars	59	108	175	0	342	202	847	241	0	1290	167	132	167	1	467	259	1239	62	1	1561	3660
% Cars	93.7	100	92.6	0	95	95.7	94	92.7	0	94	92.3	99.2	97.7	100	96.1	98.5	95.5	100	100	96.2	95.3
Trucks	4	0	14	0	18	9	54	19	0	82	14	1	4	0	19	4	58	0	0	62	181
% Trucks	6.3	0	7.4	0	5	4.3	6	7.3	0	6	7.7	0.8	2.3	0	3.9	1.5	4.5	0	0	3.8	4.7

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & Kennedy Road  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036160  
Site Code : 09036160  
Start Date : 10/14/2009  
Page No : 2



# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & Kennedy Road  
AM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036160  
Site Code : 09036160  
Start Date : 10/14/2009  
Page No : 3

Start Time	Kennedy Road From North					USH 14 From East					Kennedy Road From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	5	14	<b>24</b>	0	43	13	73	26	0	112	13	10	13	0	36	<b>31</b>	128	6	0	165	356
07:30 AM	8	11	23	0	42	32	60	25	0	117	17	20	13	<b>1</b>	51	28	<b>132</b>	7	0	<b>167</b>	377
07:45 AM	<b>10</b>	<b>24</b>	19	0	<b>53</b>	<b>38</b>	<b>109</b>	<b>43</b>	0	<b>190</b>	<b>22</b>	<b>25</b>	<b>20</b>	0	<b>67</b>	31	120	<b>11</b>	0	162	<b>472</b>
08:00 AM	5	9	16	0	30	22	88	21	0	131	13	12	13	0	38	31	123	7	0	161	360
Total Volume	28	58	82	0	168	105	330	115	0	550	65	67	59	1	192	121	503	31	0	655	1565
% App. Total	16.7	34.5	48.8	0		19.1	60	20.9	0		33.9	34.9	30.7	0.5		18.5	76.8	4.7	0		
PHF	.700	.604	.854	.000	.792	.691	.757	.669	.000	.724	.739	.670	.738	.250	.716	.976	.953	.705	.000	.981	.829

Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:15 AM					07:15 AM					07:30 AM					07:15 AM				
+0 mins.	5	14	<b>24</b>	0	43	13	73	26	0	112	17	20	13	<b>1</b>	51	<b>31</b>	128	6	0	165
+15 mins.	8	11	23	0	42	32	60	25	0	117	<b>22</b>	<b>25</b>	<b>20</b>	0	<b>67</b>	28	<b>132</b>	7	0	<b>167</b>
+30 mins.	<b>10</b>	<b>24</b>	19	0	<b>53</b>	<b>38</b>	<b>109</b>	<b>43</b>	0	<b>190</b>	13	12	13	0	38	31	120	<b>11</b>	0	162
+45 mins.	5	9	16	0	30	22	88	21	0	131	21	10	20	0	51	31	123	7	0	161
Total Volume	28	58	82	0	168	105	330	115	0	550	73	67	66	1	207	121	503	31	0	655
% App. Total	16.7	34.5	48.8	0		19.1	60	20.9	0		35.3	32.4	31.9	0.5		18.5	76.8	4.7	0	
PHF	.700	.604	.854	.000	.792	.691	.757	.669	.000	.724	.830	.670	.825	.250	.772	.976	.953	.705	.000	.981

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & Kennedy Road  
PM PEAK HOUR  
TN-09036-01  
TURNING MOVEMENT COUNT

File Name : 09036161  
Site Code : 09036160  
Start Date : 10/14/2009  
Page No : 1

**Groups Printed- Cars - Trucks**

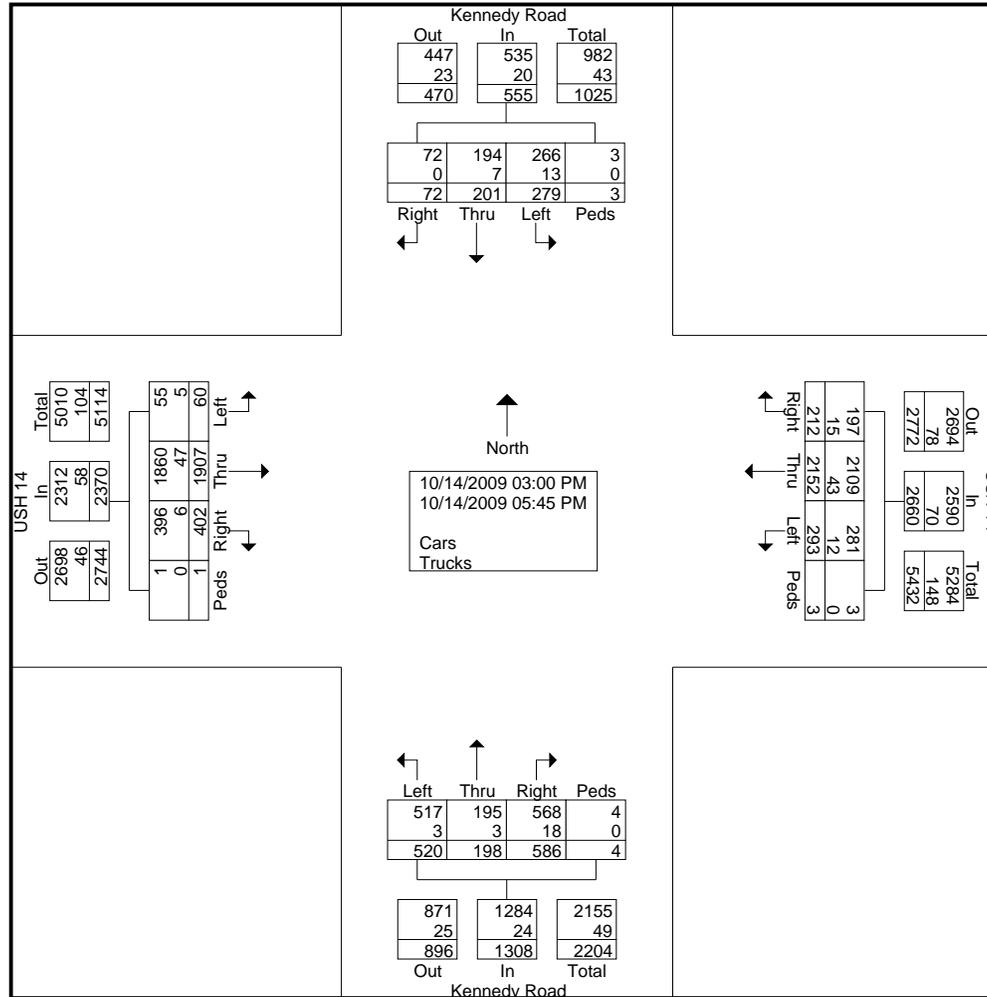
Start Time	Kennedy Road From North					USH 14 From East					Kennedy Road From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
03:00 PM	5	17	18	0	40	14	158	28	0	200	28	16	42	0	86	33	136	5	1	175	501
03:15 PM	0	10	13	0	23	18	146	28	0	192	40	21	33	0	94	36	171	1	0	208	517
03:30 PM	9	7	24	0	40	16	191	33	0	240	48	16	53	0	117	35	163	2	0	200	597
03:45 PM	1	15	16	0	32	20	140	38	2	200	38	17	57	1	113	34	144	12	0	190	535
Total	15	49	71	0	135	68	635	127	2	832	154	70	185	1	410	138	614	20	1	773	2150
04:00 PM	12	14	22	3	51	13	214	32	0	259	75	21	51	0	147	30	159	8	0	197	654
04:15 PM	7	18	21	0	46	16	208	18	0	242	52	12	51	3	118	35	148	10	0	193	599
04:30 PM	8	29	28	0	65	18	154	28	0	200	67	11	36	0	114	31	178	1	0	210	589
04:45 PM	5	15	17	0	37	14	201	19	0	234	65	22	34	0	121	39	142	3	0	184	576
Total	32	76	88	3	199	61	777	97	0	935	259	66	172	3	500	135	627	22	0	784	2418
05:00 PM	9	42	53	0	104	25	229	17	0	271	83	18	57	0	158	27	219	6	0	252	785
05:15 PM	6	13	22	0	41	23	190	20	1	234	29	15	38	0	82	35	153	5	0	193	550
05:30 PM	7	11	35	0	53	17	158	15	0	190	26	13	38	0	77	28	148	5	0	181	501
05:45 PM	3	10	10	0	23	18	163	17	0	198	35	16	30	0	81	39	146	2	0	187	489
Total	25	76	120	0	221	83	740	69	1	893	173	62	163	0	398	129	666	18	0	813	2325
Grand Total	72	201	279	3	555	212	2152	293	3	2660	586	198	520	4	1308	402	1907	60	1	2370	6893
Apprch %	13	36.2	50.3	0.5		8	80.9	11	0.1		44.8	15.1	39.8	0.3		17	80.5	2.5	0		
Total %	1	2.9	4	0	8.1	3.1	31.2	4.3	0	38.6	8.5	2.9	7.5	0.1	19	5.8	27.7	0.9	0	34.4	
Cars	72	194	266	3	535	197	2109	281	3	2590	568	195	517	4	1284	396	1860	55	1	2312	6721
% Cars	100	96.5	95.3	100	96.4	92.9	98	95.9	100	97.4	96.9	98.5	99.4	100	98.2	98.5	97.5	91.7	100	97.6	97.5
Trucks	0	7	13	0	20	15	43	12	0	70	18	3	3	0	24	6	47	5	0	58	172
% Trucks	0	3.5	4.7	0	3.6	7.1	2	4.1	0	2.6	3.1	1.5	0.6	0	1.8	1.5	2.5	8.3	0	2.4	2.5

# KL Engineering, Inc.

5950 Seminole Centre Court  
Madison, WI 53711

USH 14 & Kennedy Road  
PM PEAK HOUR  
TN-09036-01  
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File Name : 09036161  
Site Code : 09036160  
Start Date : 10/14/2009  
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# KL Engineering, Inc.

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File Name : 09036161  
Site Code : 09036160  
Start Date : 10/14/2009  
Page No : 3

Start Time	Kennedy Road From North					USH 14 From East					Kennedy Road From South					USH 14 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	7	18	21	0	46	16	208	18	0	242	52	12	51	3	118	35	148	10	0	193	599
04:30 PM	8	29	28	0	65	18	154	28	0	200	67	11	36	0	114	31	178	1	0	210	589
04:45 PM	5	15	17	0	37	14	201	19	0	234	65	22	34	0	121	39	142	3	0	184	576
05:00 PM	9	42	53	0	104	25	229	17	0	271	83	18	57	0	158	27	219	6	0	252	785
Total Volume	29	104	119	0	252	73	792	82	0	947	267	63	178	3	511	132	687	20	0	839	2549
% App. Total	11.5	41.3	47.2	0		7.7	83.6	8.7	0		52.3	12.3	34.8	0.6		15.7	81.9	2.4	0		
PHF	.806	.619	.561	.000	.606	.730	.865	.732	.000	.874	.804	.716	.781	.250	.809	.846	.784	.500	.000	.832	.812

Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1

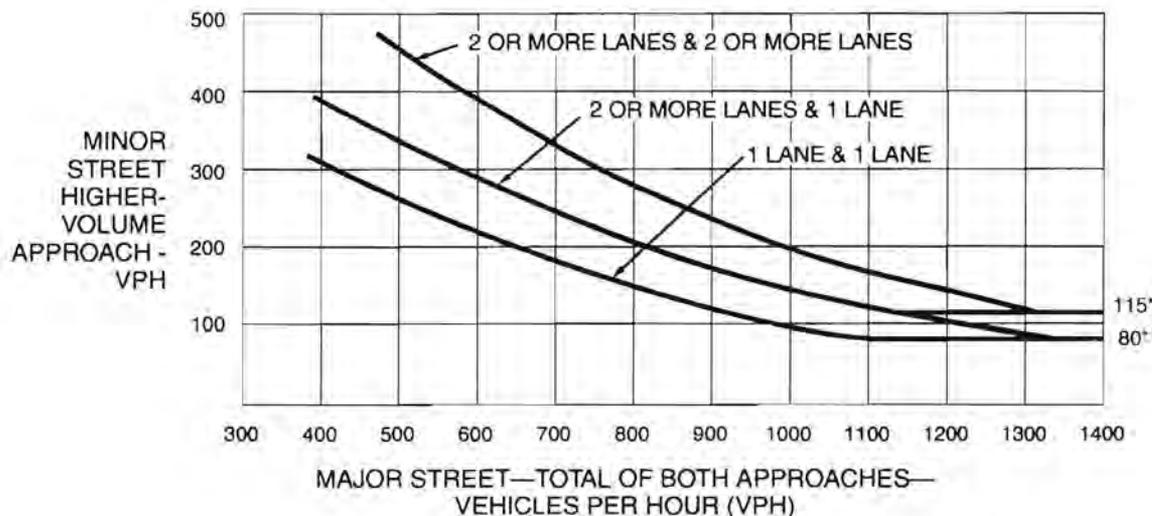
Peak Hour for Each Approach Begins at:

	04:15 PM					04:15 PM					04:15 PM					04:15 PM				
+0 mins.	7	18	21	0	46	16	208	18	0	242	52	12	51	3	118	35	148	10	0	193
+15 mins.	8	29	28	0	65	18	154	28	0	200	67	11	36	0	114	31	178	1	0	210
+30 mins.	5	15	17	0	37	14	201	19	0	234	65	22	34	0	121	39	142	3	0	184
+45 mins.	9	42	53	0	104	25	229	17	0	271	83	18	57	0	158	27	219	6	0	252
Total Volume	29	104	119	0	252	73	792	82	0	947	267	63	178	3	511	132	687	20	0	839
% App. Total	11.5	41.3	47.2	0		7.7	83.6	8.7	0		52.3	12.3	34.8	0.6		15.7	81.9	2.4	0	
PHF	.806	.619	.561	.000	.606	.730	.865	.732	.000	.874	.804	.716	.781	.250	.809	.846	.784	.500	.000	.832

# **Appendix I**

## **Traffic Signal Warrant Analysis Curves**

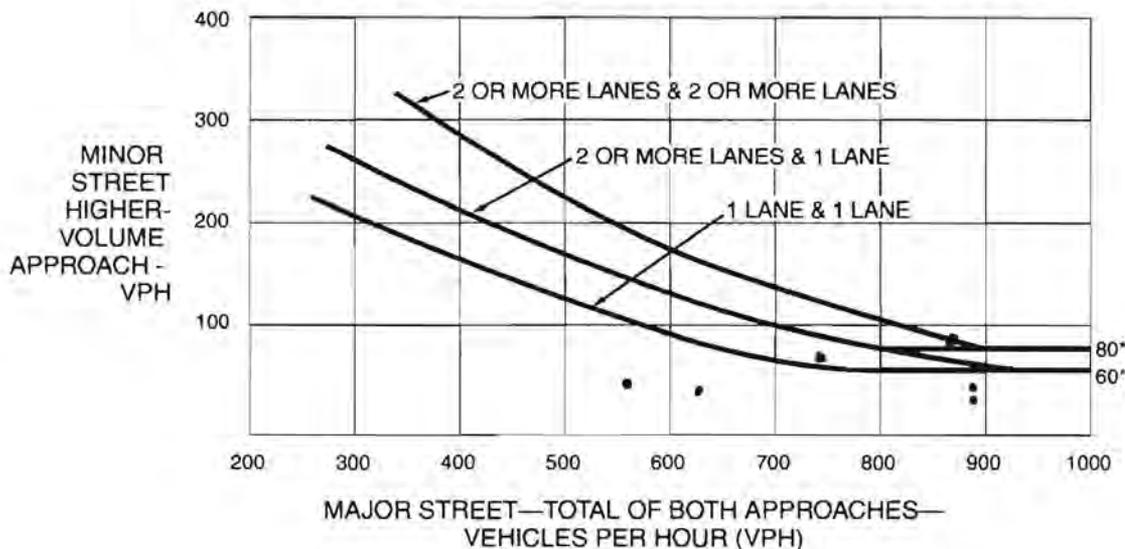
**Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume**



\*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

**Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)**

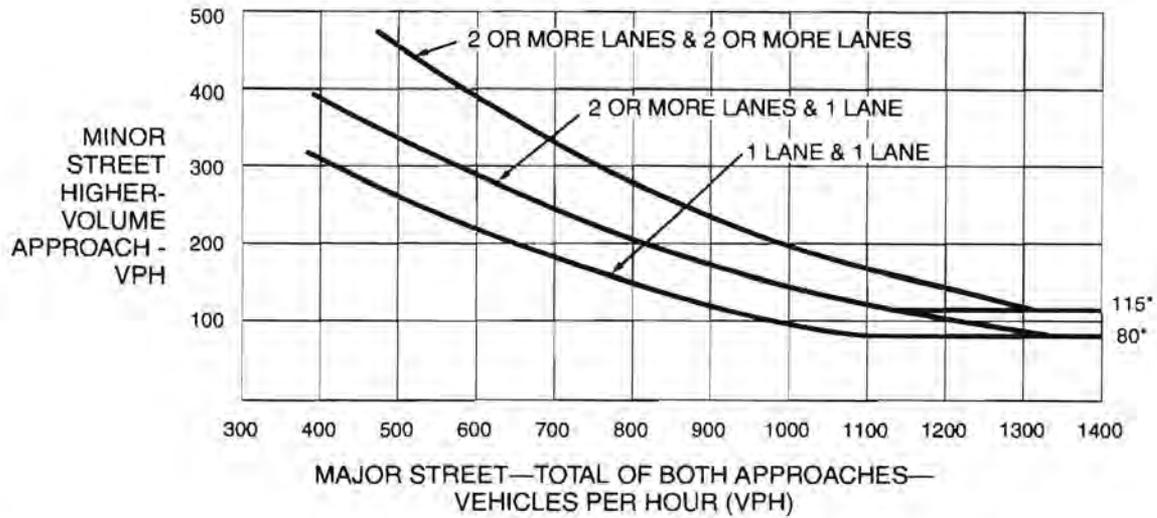
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



\*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

USH 14 @ STH '92

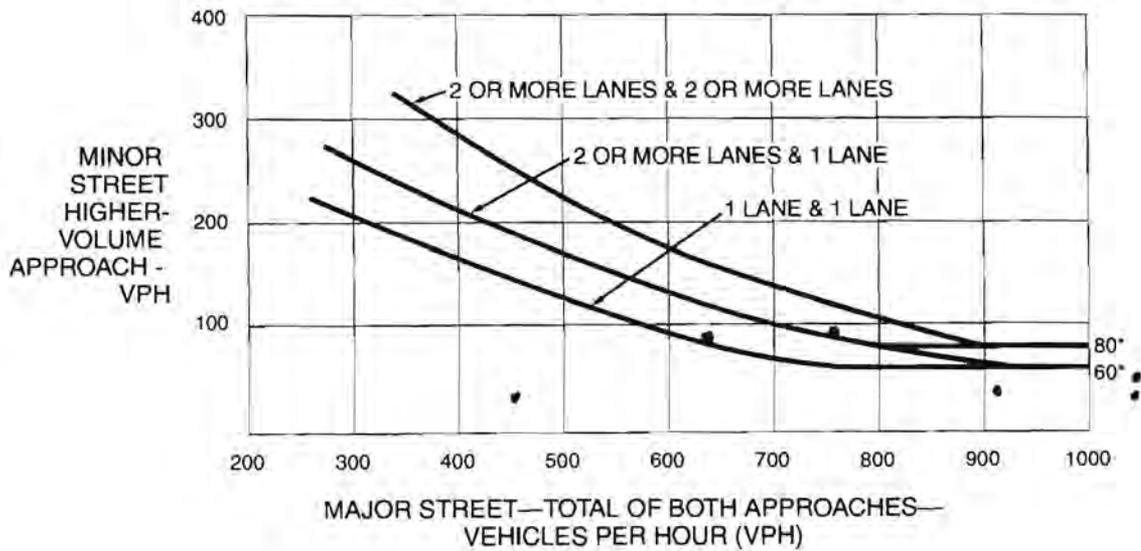
**Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume**



\*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

**Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)**

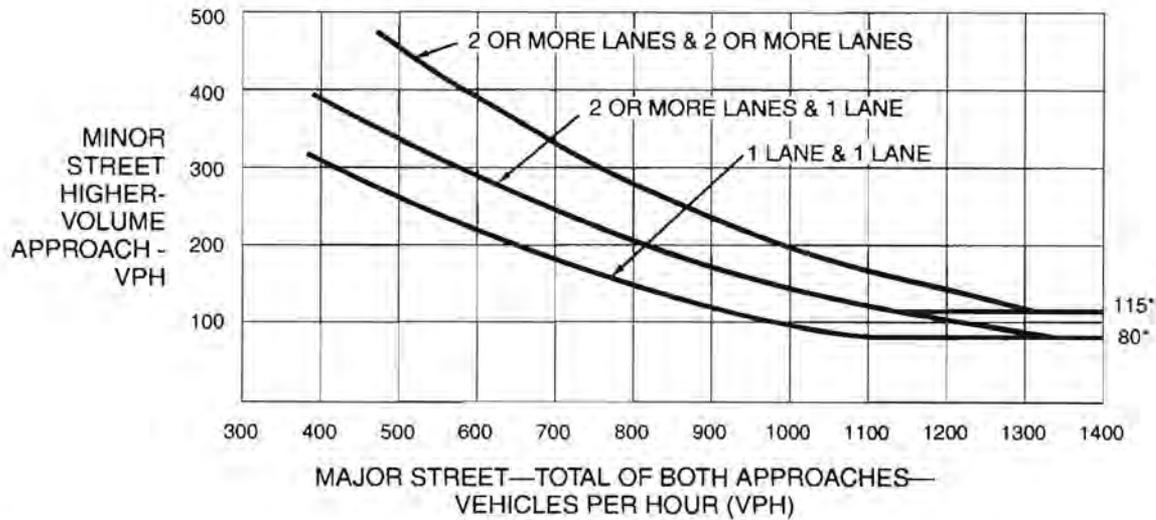
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



\*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

USH 140 CTH

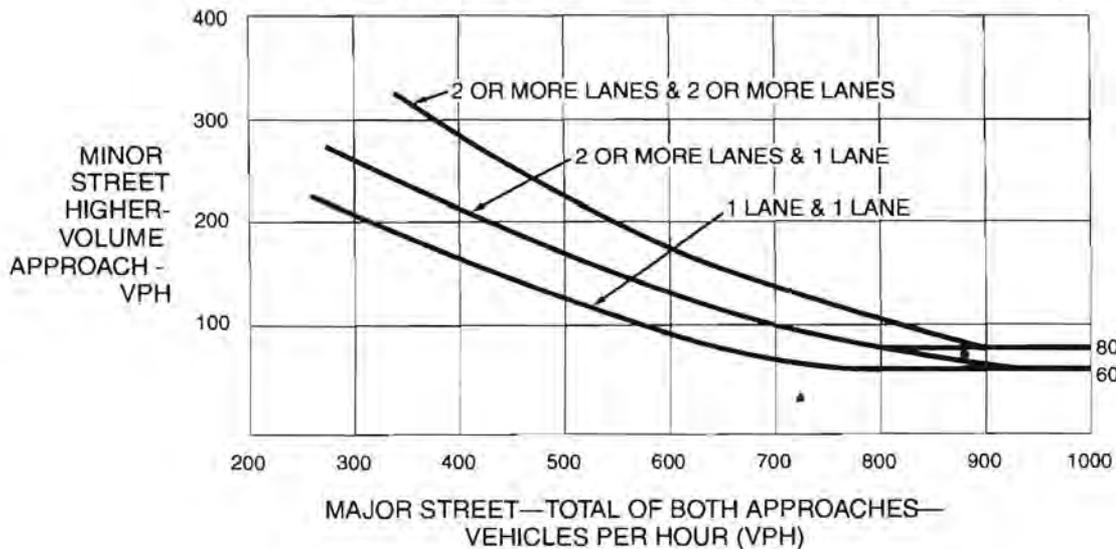
**Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume**



\*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

**Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)**

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



\*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

*USH 14 @ Newcastle Road*

# **Appendix J**

## **Crash Statistics and Collision Diagrams**

## GENERAL INFORMATION

<b>ROADWAY AND LIMITS:</b> USH 14 (Old Stage Rd to 1000 ft north of Madison St/STH 213)	<b>DURATION</b>	
<b>MUNICIPALITY:</b> Rutland to Evansville	<b>CRASHES FROM:</b> 1/1/2004	5 YEARS
<b>COUNTY:</b> Dane - Rock	<b>TO:</b> 12/31/2008	0 MONTHS
<b>STATE:</b> WI		
<b>TADI PROJECT ID:</b> 1033	<b>PREPARED BY:</b> ACP	<b>DATE:</b> 5/24/2010

## SEGMENT CHARACTERISTICS

<b>ROADWAY TYPE:</b> RURAL STH	<b>POSTED SPEED:</b> VARIES
<b>ROADWAY AADT: Year (2006)</b> 6,890	<b>DEER CRASHES INCLUDED:</b> NO
<b>SEGMENT LENGTH (MILES):</b> 7.4	<b>AREA TYPE:</b> RURAL

## CRASH STATISTICS

### CRASH FREQUENCY & SEVERITY

YEAR	PD	TYPE C	TYPE B	TYPE A	FATAL	TOTAL
2004	18	6	1	0	1	26
2005	12	5	2	0	0	19
2006	9	2	3	0	1	15
2007	18	7	5	0	0	30
2008	19	5	2	0	0	26

ROAD CONDITIONS		PERCENT
DRY	56	48.3%
WET	19	16.4%
SNOW	21	18.1%
ICE	18	15.5%
MUD	0	0.0%
OTHER/UNK	2	1.7%
<b>TOTAL</b>	<b>116</b>	<b>100.0%</b>

TOTAL	76	25	13	0	2	116
<b>PERCENT</b>	<b>65.5%</b>	<b>21.6%</b>	<b>11.2%</b>	<b>0.0%</b>	<b>1.7%</b>	<b>100.0%</b>
<b>YEAR AVG.</b>	<b>15.2</b>	<b>5.0</b>	<b>2.6</b>	<b>0.0</b>	<b>0.4</b>	<b>23.2</b>

CRASH TYPE		PERCENT
ANGLE	11	9.5%
REAR-END	19	16.4%
HEAD-ON	2	1.7%
SS-SAME	8	6.9%
SS-OPPOSITE	5	4.3%
PEDESTRIAN	0	0.0%
BICYCLE	1	0.9%
FIXED	47	40.5%
NOT FIXED	3	2.6%
DEER	0	0.0%
OVERTURN	17	14.7%
OTHR/UNKN	3	2.6%
<b>TOTAL</b>	<b>116</b>	<b>100.0%</b>

CRASH RATES	per 100 MVM	WI STATEWIDE AVG YEAR(S):	2004-2008
TOTAL	125		119
FATAL	2.2		1.6
INJURY	41		44
TYPE A	0.0		7.1
TYPE B	14		16
TYPE C	27		21

LIGHT CONDITIONS	PERCENT	VEHICLE TYPES	PERCENT
DAY	69 59.5%	CAR	113 68.9%
DARK	47 40.5%	TRUCK	42 25.6%
TOTAL	116 100.0%	OTHER/UNK	9 5.5%
		<b>TOTAL</b>	<b>164 100.0%</b>

Note: Dawn, dusk, or street lighted conditions included in dark total.

Note: Statistics based on first and second vehicles in crashes.

### DAY AND TIME

DAY OF WEEK	EARLY	AM	MIDDAY	PM	EVENING	LATE	UNKNOWN	TOTAL	
	MORNING	PEAK		PEAK		EVENING			
	2:00 AM TO 5:59 AM	6:00 AM TO 9:59 AM	10:00 AM TO 1:59 PM	2:00 PM TO 5:59 PM	6:00 PM TO 9:59 PM	10:00 PM TO 1:59 AM			
MONDAY	0	4	1	5	3	0	1	14	Weekday
TUESDAY	4	10	2	2	3	1	1	23	
WEDNESDAY	2	4	5	3	1	1	2	18	
THURSDAY	1	5	5	3	1	0	0	15	
FRIDAY	0	5	3	6	1	2	1	18	
SATURDAY	3	0	4	2	2	3	0	14	Weekend
SUNDAY	3	2	3	1	4	0	1	14	
<b>TOTAL</b>	<b>13</b>	<b>30</b>	<b>23</b>	<b>22</b>	<b>15</b>	<b>7</b>	<b>6</b>	<b>116</b>	

DRIVER AGES	PERCENT
<25	42 25.6%
25-34	40 24.4%
35-44	27 16.5%
45-54	22 13.4%
55-64	15 9.1%
65-74	4 2.4%
75-84	3 1.8%
85+	1 0.6%
UNKNOWN	10 6.1%
<b>TOTAL</b>	<b>164 100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

VEHICLE DAMAGE	PERCENT
OTHER/UNK	6 3.7%
NONE	6 3.7%
VERY MINOR	17 10.4%
MINOR	25 15.2%
MODERATE	57 34.8%
SEVERE	32 19.5%
VERY SEVERE	21 12.8%
<b>TOTAL</b>	<b>164 100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

VEHICLES INVOLVED	PERCENT
SINGLE VEHICLE	59.5%
TWO VEHICLES	38.8%
3 OR MORE VEHICLES	1.7%

BY SEASON	PERCENT
SPRING	26 22.4%
SUMMER	21 18.1%
FALL	23 19.8%
WINTER	46 39.7%
<b>TOTAL</b>	<b>116 100.0%</b>

Note: Wint=Dec-Feb, Spr=Mar-May, Sum=June-Aug, Fall=Sept-Nov

PERCENT OF CRASHES	
ON HORIZONTAL CURVE	34.5%
ON VERTICAL CURVE	23.3%
AT INTERSECTION	14.7%
ALCOHOL RELATED	8.6%
SPEED RELATED	44.0%

**TRAFFIC ANALYSIS & DESIGN, INC.**

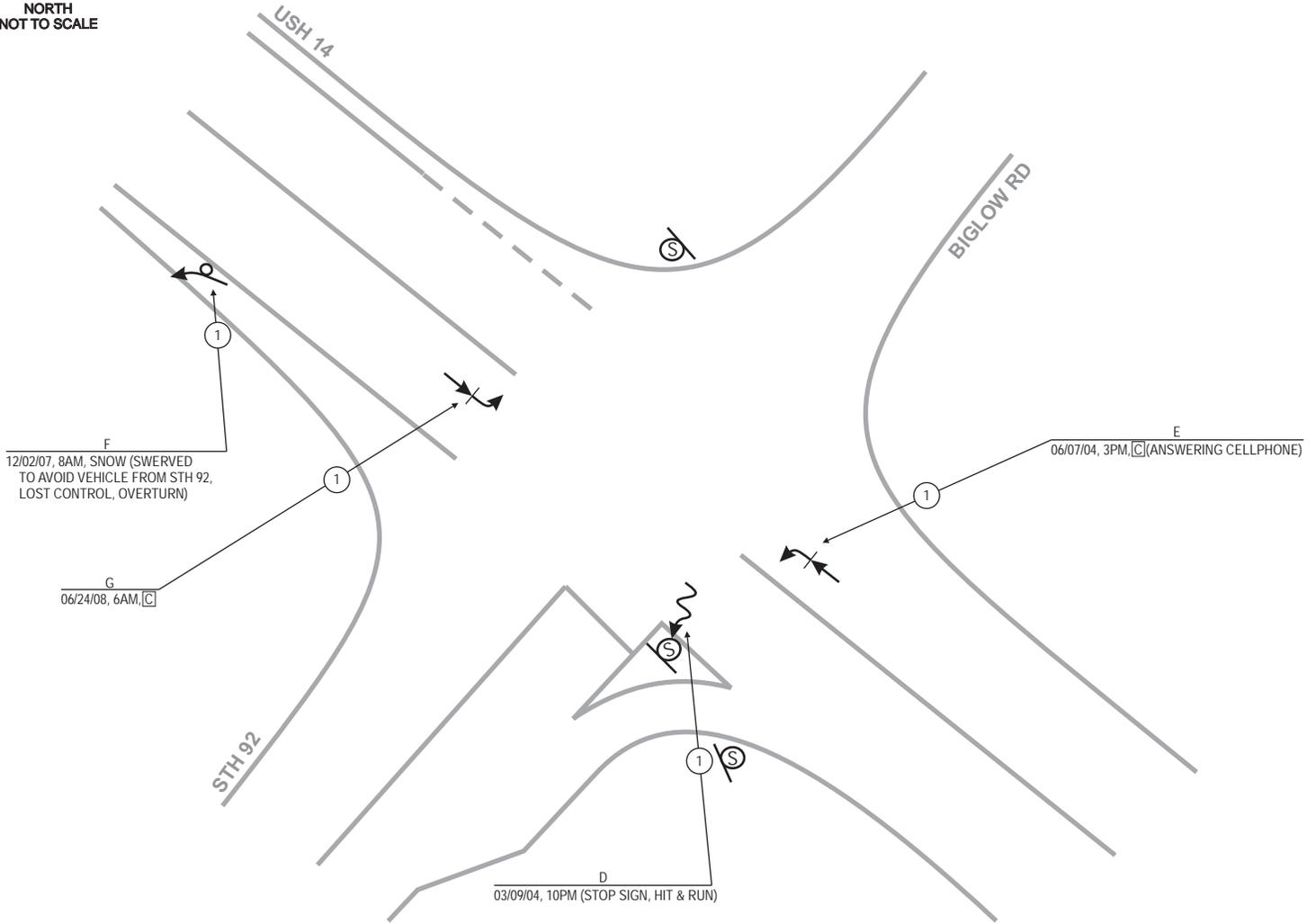


EXHIBIT DATE: 05-28-10

## EXHIBIT 7.1 CRASH STATISTICS (2004-2008) SEGMENT 1 - USH 14 (OLD STAGE ROAD TO 1000 FEET NORTH OF STH 213) DANE/ROCK COUNTIES, WISCONSIN



NORTH  
NOT TO SCALE



**CRASH RATE**  
0.29 Crashes  
Per Million  
Entering Vehicles  
Entering Vehicles: 7,500/day

**CRASH FREQUENCY/SEVERITY**  
4 Crashes  
0 Fatal Crash (K)  
0 Incapacitating (Type A) Injury Crash  
0 Non-Incapacitating (Type B) Injury Crash  
2 Possible (Type C) Injury Crash  
2 Property Damage Only

NOTES: DEER CRASHES NOT INCLUDED.

**LEGEND**

- Moving Vehicle
- ↔ Backing Vehicle
- - - Pedestrian
- ⋯ Bicyclist
- [ ] Parked Vehicle
- ⊙ Stop/Yield Sign
- ⊙ Tree
- ⊙ Utility Pole
- ⊙ Fixed Object
- ⊙ Non-Fixed Object
- ↔ Angle (Right Angle)
- ↔ Angle (Left Turn)
- ↔ Angle (Right Turn)
- ↔ Sideswipe-Same
- ↔ Sideswipe-Opposite
- ↔ Head-On
- ↔ Rear-End
- ⋈ Out of Control
- ↔ Overtake
- ↔ Overtake

# = CRASH FREQUENCY

\*"LETTER" = USED FOR REFERENCING CRASHES IN REPORT AS NEEDED

DATE OF CRASH  
HOUR  
SEVERITY (SEE SEVERITY DEFINITIONS)  
ROAD CONDITIONS (DRY IF BLANK)  
LIGHT CONDITIONS (DAYTIME IF BLANK)  
ALCOHOL INVOLVEMENT ("ALC" IF YES)  
SPEED RELATED ("SP" IF YES)

**CRASH SEVERITY DEFINITIONS**

- [K] = Fatal Crash
- [A] = Incapacitating Injury Crash
- [B] = Non-Incapacitating Injury Crash
- [C] = Possible Injury Crash
- [ ] = Property Damage Only Crash

TRAFFIC ANALYSIS & DESIGN, INC.



EXHIBIT DATE: 05-28-10

**EXHIBIT 7.1.1a**  
**CRASH HISTORY (2004-2008)**  
**STH 92 INTERSECTION**  
**ROCK COUNTY, WISCONSIN**

## GENERAL INFORMATION

<b>INTERSECTION:</b> USH 14 & STH 92	<b>CRASHES FROM:</b> 1/1/2004	<b>DURATION</b>
<b>MUNICIPALITY:</b> Brooklyn	<b>TO:</b> 12/31/2008	5 YEARS
<b>COUNTY:</b> Dane		0 MONTHS
<b>STATE:</b> WI	<b>PREPARED BY:</b> ACP	<b>DATE:</b> 4/28/2010
<b>TADI PROJECT ID:</b> 1033		

## INTERSECTION CHARACTERISTICS

<b>TRAFFIC CONTROL:</b> MINOR STOP CONTROLLED	<b>POSTED SPEED (MAJOR):</b> 55
<b>INTERSECTION AADT: Year (2006)</b> 7,500	<b>DEER CRASHES INCLUDED:</b> NO
<b>NUMBER OF LEGS:</b> 4	<b>AREA TYPE:</b> RURAL

## CRASH STATISTICS

### CRASH FREQUENCY & SEVERITY

YEAR	PD	TYPE C	TYPE B	TYPE A	FATAL	TOTAL
2004	1	1	0	0	0	2
2005	0	0	0	0	0	0
2006	0	0	0	0	0	0
2007	1	0	0	0	0	1
2008	0	1	0	0	0	1

ROAD CONDITIONS		PERCENT
DRY	2	50.0%
WET	0	0.0%
SNOW	1	25.0%
ICE	0	0.0%
MUD	0	0.0%
OTHER/UNK	1	25.0%
<b>TOTAL</b>	<b>4</b>	<b>100.0%</b>

TOTAL	2	2	0	0	0	4
PERCENT	50.0%	50.0%	0.0%	0.0%	0.0%	100.0%
YEAR AVG.	0.4	0.4	0.0	0.0	0.0	0.8

CRASH TYPE		PERCENT
ANGLE	0	0.0%
REAR-END	2	50.0%
HEAD-ON	0	0.0%
SS-SAME	0	0.0%
SS-OPPOSITE	0	0.0%
PEDESTRIAN	0	0.0%
BICYCLE	0	0.0%
FIXED	1	25.0%
NOT FIXED	0	0.0%
DEER	0	0.0%
OVERTURN	1	25.0%
OTHR/UNKN	0	0.0%
<b>TOTAL</b>	<b>4</b>	<b>100.0%</b>

CRASH RATES	per MEV	COMPARISON STATISTIC
TOTAL	0.29	1.01 Crashes per MEV
FATAL	0.00	The comparison rate shown above is the average crash rate from June 2005 Intersection Crash Summary for Wisconsin (Knapp & Campbell) for similar intersections (urban/rural, traffic control, and volume). This rate should not be considered a statewide average representative of all intersections in Wisconsin. Only intersections with (3 or more crashes in one year - rural areas, and 5 or more crashes in one year - urban areas) were included in the study (1,704 total intersections). The statewide average of all intersections would be expected to be lower than the comparison rate shown above.
INJURY	0.15	
TYPE A	0.00	
TYPE B	0.00	
TYPE C	0.15	

LIGHT CONDITIONS		PERCENT
DAY	4	100.0%
DARK	0	0.0%
<b>TOTAL</b>	<b>4</b>	<b>100.0%</b>

VEHICLE TYPES		PERCENT
CAR	2	33.3%
TRUCK	3	50.0%
OTHER/UNK	1	16.7%
<b>TOTAL</b>	<b>6</b>	<b>100.0%</b>

Note: Dawn, dusk, or street lighted conditions included in dark total.

Note: Statistics based on first and second vehicles in crashes.

### DAY AND TIME

DAY OF WEEK	EARLY MORNING	AM PEAK	MIDDAY	PM PEAK	EVENING	LATE EVENING	UNKNOWN	TOTAL	
	2:00 AM TO 5:59 AM	6:00 AM TO 9:59 AM	10:00 AM TO 1:59 PM	2:00 PM TO 5:59 PM	6:00 PM TO 9:59 PM	10:00 PM TO 1:59 AM			
	5:59 AM	9:59 AM	1:59 PM	5:59 PM	9:59 PM	1:59 AM			
MONDAY	0	0	0	1	0	0	0	1	Weekday
TUESDAY	0	1	0	0	0	1	0	2	
WEDNESDAY	0	0	0	0	0	0	0	0	
THURSDAY	0	0	0	0	0	0	0	0	
FRIDAY	0	0	0	0	0	0	0	0	
SATURDAY	0	0	0	0	0	0	0	0	Weekend
SUNDAY	0	1	0	0	0	0	0	1	
<b>TOTAL</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>4</b>	

DRIVER AGES		PERCENT
<25	1	16.7%
25-34	2	33.3%
35-44	0	0.0%
45-54	2	33.3%
55-64	0	0.0%
65-74	0	0.0%
75-84	0	0.0%
85+	0	0.0%
UNKNOWN	1	16.7%
<b>TOTAL</b>	<b>6</b>	<b>100.0%</b>

VEHICLE DAMAGE		PERCENT
OTHER/UNK	0	0.0%
NONE	0	0.0%
VERY MINOR	2	33.3%
MINOR	0	0.0%
MODERATE	4	66.7%
SEVERE	0	0.0%
VERY SEVERE	0	0.0%
<b>TOTAL</b>	<b>6</b>	<b>100.0%</b>

BY SEASON		PERCENT
SPRING	1	25.0%
SUMMER	2	50.0%
FALL	0	0.0%
WINTER	1	25.0%
<b>TOTAL</b>	<b>4</b>	<b>100.0%</b>

Note: Wint=Dec-Feb, Spr=Mar-May, Sum=June-Aug, Fall=Sept-Nov

PERCENT OF CRASHES	
ALCOHOL RELATED	0.0%
SPEED RELATED	0.0%

VEHICLES INVOLVED		PERCENT
SINGLE VEHICLE		50.0%
TWO VEHICLES		50.0%
3 OR MORE VEHICLES		0.0%

Note: Statistics based on first and second vehicles in crashes.



## GENERAL INFORMATION

<b>ROADWAY AND LIMITS:</b> USH 14 (1000 ft north of Madison St/STH 213 to Territorial Rd.)	<b>DURATION</b>	
<b>MUNICIPALITY:</b> Evansville	<b>CRASHES FROM:</b> 1/1/2004	5 YEARS
<b>COUNTY:</b> Rock	<b>TO:</b> 12/31/2008	0 MONTHS
<b>STATE:</b> WI	<b>PREPARED BY:</b> ACP	<b>DATE:</b> 5/24/2010
<b>TADI PROJECT ID:</b> 1033		

## SEGMENT CHARACTERISTICS

<b>ROADWAY TYPE:</b> URBAN STREET	<b>POSTED SPEED:</b> 25-55
<b>ROADWAY AADT: Year (2007)</b> 6,870	<b>DEER CRASHES INCLUDED:</b> NO
<b>SEGMENT LENGTH (MILES):</b> 2.7	<b>AREA TYPE:</b> URBAN

## CRASH STATISTICS

### CRASH FREQUENCY & SEVERITY

YEAR	PD	TYPE C	TYPE B	TYPE A	FATAL	TOTAL
2004	2	3	1	1	1	8
2005	4	0	2	0	0	6
2006	8	2	2	0	0	12
2007	5	2	1	0	1	9
2008	8	1	3	0	0	12

ROAD CONDITIONS	PERCENT	
DRY	39	83.0%
WET	5	10.6%
SNOW	2	4.3%
ICE	1	2.1%
MUD	0	0.0%
OTHER/UNK	0	0.0%
<b>TOTAL</b>	<b>47</b>	<b>100.0%</b>

TOTAL	27	8	9	1	2	47
<b>PERCENT</b>	<b>57.4%</b>	<b>17.0%</b>	<b>19.1%</b>	<b>2.1%</b>	<b>4.3%</b>	<b>100.0%</b>
<b>YEAR AVG.</b>	<b>5.4</b>	<b>1.6</b>	<b>1.8</b>	<b>0.2</b>	<b>0.4</b>	<b>9.4</b>

CRASH TYPE	PERCENT	
ANGLE	8	17.0%
REAR-END	24	51.1%
HEAD-ON	1	2.1%
SS-SAME	1	2.1%
SS-OPPOSITE	2	4.3%
PEDESTRIAN	1	2.1%
BICYCLE	0	0.0%
FIXED	10	21.3%
NOT FIXED	0	0.0%
DEER	0	0.0%
OVERTURN	0	0.0%
OTHR/UNKN	0	0.0%
<b>TOTAL</b>	<b>47</b>	<b>100.0%</b>

CRASH RATES	per 100 MVM		WI STATEWIDE AVG YEAR(S):		2004-2008
TOTAL	140		243		
FATAL	6.0		0.6		
INJURY	54		78		
TYPE A	3.0		5.7		
TYPE B	27		23		
TYPE C	24		49		

LIGHT CONDITIONS	PERCENT		VEHICLE TYPES	PERCENT	
DAY	36	76.6%	CAR	57	68.7%
DARK	11	23.4%	TRUCK	23	27.7%
<b>TOTAL</b>	<b>47</b>	<b>100.0%</b>	OTHER/UNK	3	3.6%
			<b>TOTAL</b>	<b>83</b>	<b>100.0%</b>

Note: Dawn, dusk, or street lighted conditions included in dark total.

Note: Statistics based on first and second vehicles in crashes.

### DAY AND TIME

DAY OF WEEK	EARLY MORNING		AM PEAK		PM PEAK		LATE EVENING		UNKNOWN	TOTAL	
	TO	TO	TO	TO	TO	TO					
	5:59 AM	9:59 AM	10:00 AM	2:00 PM	6:00 PM	10:00 PM					
MONDAY	0	2	0	2	0	1	0	5	Weekday		
TUESDAY	0	0	3	5	0	0	8				
WEDNESDAY	0	1	1	3	1	0	6				
THURSDAY	0	2	0	3	1	1	7				
FRIDAY	0	0	2	6	0	1	10				
SATURDAY	1	1	2	0	0	0	4	Weekend			
SUNDAY	0	0	2	2	0	3	7				
<b>TOTAL</b>	<b>1</b>	<b>6</b>	<b>10</b>	<b>21</b>	<b>2</b>	<b>6</b>	<b>1</b>	<b>47</b>			

DRIVER AGES	PERCENT	
<25	30	36.1%
25-34	11	13.3%
35-44	12	14.5%
45-54	13	15.7%
55-64	5	6.0%
65-74	3	3.6%
75-84	5	6.0%
85+	1	1.2%
UNKNOWN	3	3.6%
<b>TOTAL</b>	<b>83</b>	<b>100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

VEHICLE DAMAGE	PERCENT	
OTHER/UNK	6	7.2%
NONE	4	4.8%
VERY MINOR	14	16.9%
MINOR	15	18.1%
MODERATE	27	32.5%
SEVERE	11	13.3%
VERY SEVERE	6	7.2%
<b>TOTAL</b>	<b>83</b>	<b>100.0%</b>
VEHICLES INVOLVED	PERCENT	
SINGLE VEHICLE	25.5%	
TWO VEHICLES	70.2%	
3 OR MORE VEHICLES	4.3%	

Note: Statistics based on first and second vehicles in crashes.

BY SEASON	PERCENT	
SPRING	15	31.9%
SUMMER	14	29.8%
FALL	10	21.3%
WINTER	8	17.0%
<b>TOTAL</b>	<b>47</b>	<b>100.0%</b>

Note: Wint-Dec-Feb, Spr-Mar-May, Sum-June-Aug, Fall-Sept-Nov

PERCENT OF CRASHES	
ON HORIZONTAL CURVE	12.8%
ON VERTICAL CURVE	6.4%
AT INTERSECTION	51.1%
ALCOHOL RELATED	10.6%
SPEED RELATED	12.8%

**TRAFFIC ANALYSIS & DESIGN, INC.**



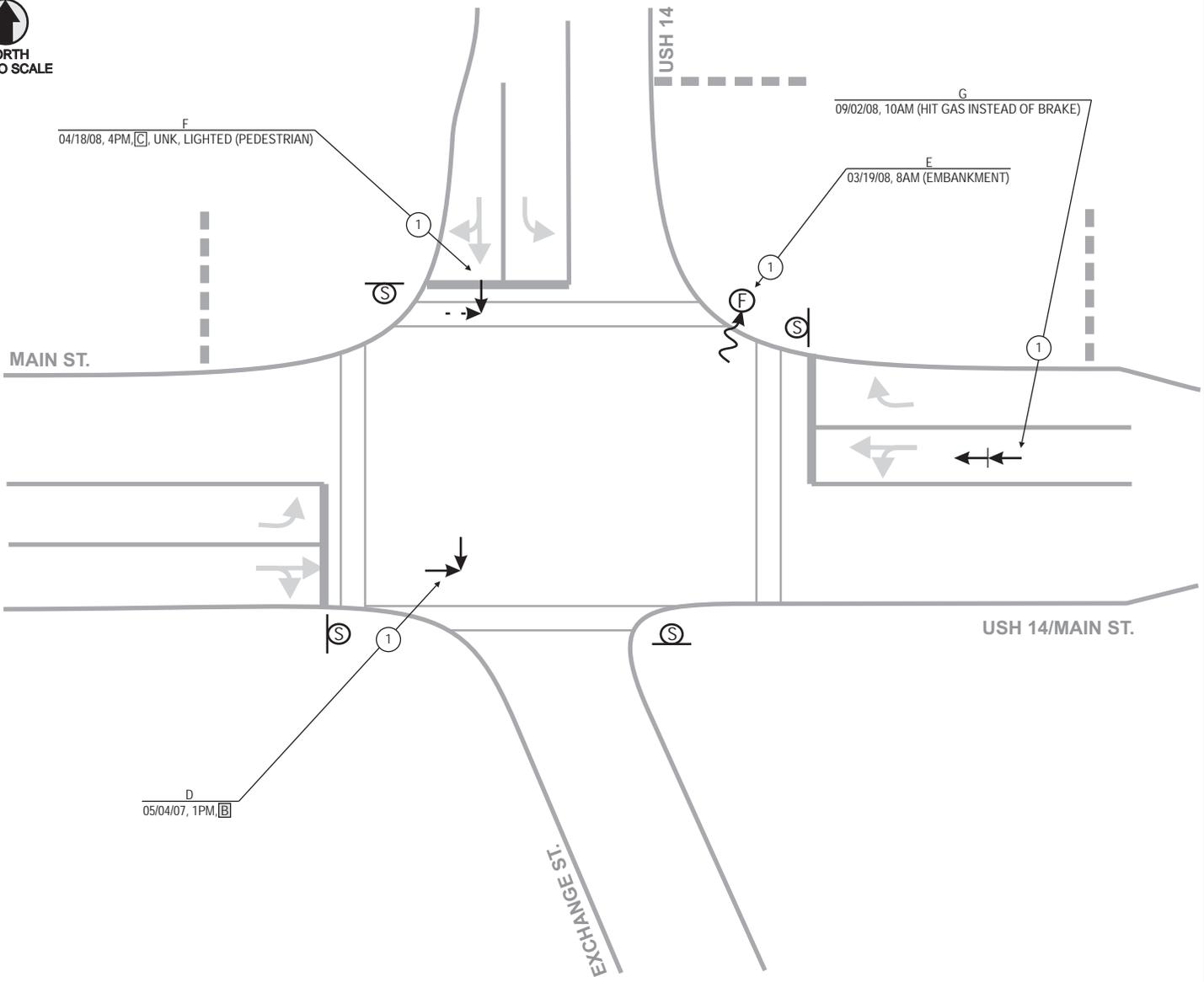
EXHIBIT DATE: 05-28-10

**EXHIBIT 7.2**

**CRASH STATISTICS (2004-2008)**

**SEGMENT 2 - USH 14 (1000 FEET NORTH OF STH 213 to TERRITORIAL ROAD)**

**ROCK COUNTY, WISCONSIN**



**CRASH RATE**

0.25 Crashes  
Per Million  
Entering Vehicles

Entering Vehicles: 8,900/day

NOTES: DEER CRASHES NOT INCLUDED.

**CRASH FREQUENCY/SEVERITY**

4 Crashes

- 0 Fatal Crash (K)
- 0 Incapacitating (Type A)
- 1 Non-Incapacitating (Type B)
- 1 Possible (Type C)
- 2 Property Damage Only

**LEGEND**

→ Moving Vehicle	⊙ Stop/Yield Sign	↘ Angle (Right Angle)	↔ Head-On
←← Backing Vehicle	⊙ Tree	↙ Angle (Left Turn)	→ Rear-End
- - - Pedestrian	⊙ Utility Pole	↘ Angle (Right Turn)	⚡ Out of Control
⋯ Bicyclist	⊙ Fixed Object	↔ Sideswipe-Same	→ Overtake
▭ Parked Vehicle	⊙ Non-Fixed Object	↔ Sideswipe-Opposite	⚡ Overturn

# = CRASH FREQUENCY

**CRASH SEVERITY DEFINITIONS**

[K] = Fatal Crash  
 [A] = Incapacitating Injury Crash  
 [B] = Non-Incapacitating Injury Crash  
 [C] = Possible Injury Crash  
 [D] = Property Damage Only Crash

\*"LETTER" = USED FOR REFERENCING CRASHES IN REPORT AS NEEDED

DATE OF CRASH  
 HOUR  
 SEVERITY (SEE SEVERITY DEFINITIONS)  
 ROAD CONDITIONS (DRY IF BLANK)  
 LIGHT CONDITIONS (DAYTIME IF BLANK)  
 ALCOHOL INVOLVEMENT ("ALC" IF YES)  
 SPEED RELATED ("SP" IF YES)



EXHIBIT DATE: 05-28-10

**EXHIBIT 7.2.1a**  
**CRASH HISTORY (2004-2008)**  
**MAIN STREET INTERSECTION**  
**ROCK COUNTY, WISCONSIN**

## GENERAL INFORMATION

<b>INTERSECTION:</b> USH 14 (Union) & Main Street	<b>DURATION</b>	
<b>MUNICIPALITY:</b> Evansville	<b>CRASHES FROM:</b> 1/1/2004	5 YEARS
<b>COUNTY:</b> Rock	<b>TO:</b> 12/31/2008	0 MONTHS
<b>STATE:</b> WI	<b>PREPARED BY:</b> ACP	<b>DATE:</b> 4/28/2010
<b>TADI PROJECT ID:</b> 1033		

## INTERSECTION CHARACTERISTICS

<b>TRAFFIC CONTROL:</b> ALL-WAY STOP CONTROLLED	<b>POSTED SPEED (MAJOR):</b> 25
<b>INTERSECTION AADT: Year (2007)</b> 8,900	<b>DEER CRASHES INCLUDED:</b> NO
<b>NUMBER OF LEGS:</b> 4	<b>AREA TYPE:</b> URBAN

## CRASH STATISTICS

### CRASH FREQUENCY & SEVERITY

YEAR	PD	TYPE C	TYPE B	TYPE A	FATAL	TOTAL
2004	0	0	0	0	0	0
2005	0	0	0	0	0	0
2006	0	0	0	0	0	0
2007	0	0	1	0	0	1
2008	2	1	0	0	0	3

ROAD CONDITIONS	PERCENT
DRY	100.0%
WET	0.0%
SNOW	0.0%
ICE	0.0%
MUD	0.0%
OTHER/UNK	0.0%
<b>TOTAL</b>	<b>100.0%</b>

TOTAL	2	1	1	0	0	4
<b>PERCENT</b>	<b>50.0%</b>	<b>25.0%</b>	<b>25.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100.0%</b>
<b>YEAR AVG.</b>	<b>0.4</b>	<b>0.2</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.8</b>

CRASH TYPE	PERCENT
ANGLE	25.0%
REAR-END	25.0%
HEAD-ON	0.0%
SS-SAME	0.0%
SS-OPPOSITE	0.0%
PEDESTRIAN	25.0%
BICYCLE	0.0%
FIXED	25.0%
NOT FIXED	0.0%
DEER	0.0%
OVERTURN	0.0%
OTHR/UNKN	0.0%
<b>TOTAL</b>	<b>100.0%</b>

### CRASH RATES

CRASH RATES	per MEV	COMPARISON STATISTIC
TOTAL	0.25	N/A Crashes per MEV
FATAL	0.00	The comparison rate shown above is the average crash rate from June 2005 Intersection Crash Summary for Wisconsin (Knapp & Campbell) for similar intersections (urban/rural, traffic control, and volume). This rate should not be considered a statewide average representative of all intersections in Wisconsin. Only intersections with (3 or more crashes in one year - rural areas, and 5 or more crashes in one year - urban areas) were included in the study (1,704 total intersections). The statewide average of all intersections would be expected to be lower than the comparison rate shown above.
INJURY	0.12	
TYPE A	0.00	
TYPE B	0.06	
TYPE C	0.06	

LIGHT CONDITIONS	PERCENT
DAY	75.0%
DARK	25.0%
<b>TOTAL</b>	<b>100.0%</b>

Note: Dawn, dusk, or street lighted conditions included in dark total.

VEHICLE TYPES	PERCENT
CAR	66.7%
TRUCK	33.3%
OTHER/UNK	0.0%
<b>TOTAL</b>	<b>100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

### DAY AND TIME

DAY OF WEEK	EARLY MORNING		AM PEAK		PM PEAK		LATE EVENING		UNKNOWN	TOTAL	
	2:00 AM TO 5:59 AM	6:00 AM TO 9:59 AM	10:00 AM TO 1:59 PM	2:00 PM TO 5:59 PM	6:00 PM TO 9:59 PM	10:00 PM TO 1:59 AM					
MONDAY	0	0	0	0	0	0	0	0	0	Weekday	
TUESDAY	0	0	1	0	0	0	0	0	1		
WEDNESDAY	0	1	0	0	0	0	0	0	1		
THURSDAY	0	0	0	0	0	0	0	0	0		
FRIDAY	0	0	1	1	0	0	0	0	2		
SATURDAY	0	0	0	0	0	0	0	0	0	Weekend	
SUNDAY	0	0	0	0	0	0	0	0	0		
<b>TOTAL</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>		

DRIVER AGES	PERCENT
<25	33.3%
25-34	16.7%
35-44	0.0%
45-54	0.0%
55-64	0.0%
65-74	33.3%
75-84	16.7%
85+	0.0%
UNKNOWN	0.0%
<b>TOTAL</b>	<b>100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

VEHICLE DAMAGE	PERCENT
OTHER/UNK	16.7%
NONE	0.0%
VERY MINOR	33.3%
MINOR	16.7%
MODERATE	0.0%
SEVERE	33.3%
VERY SEVERE	0.0%
<b>TOTAL</b>	<b>100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

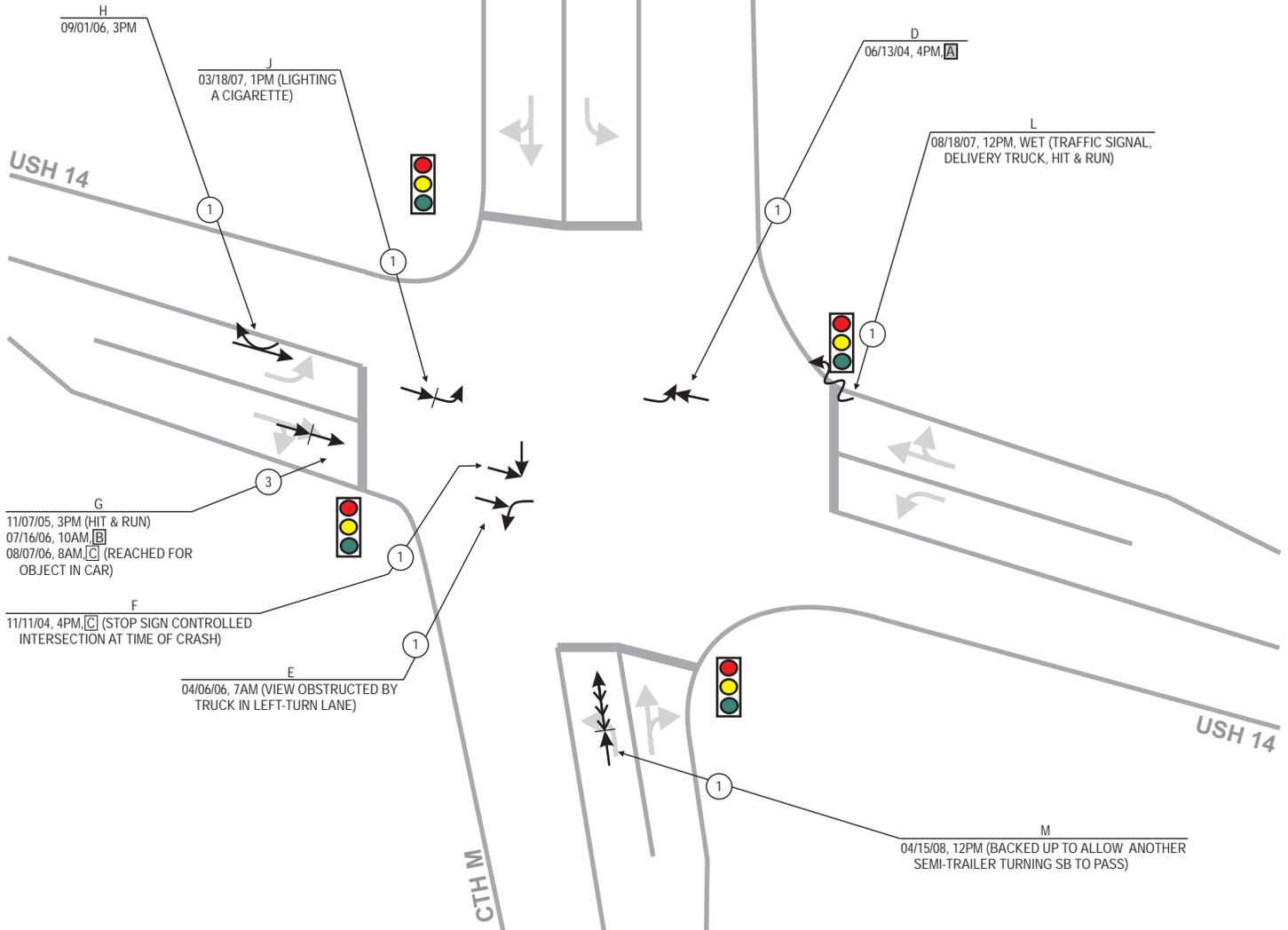
VEHICLES INVOLVED	PERCENT
SINGLE VEHICLE	50.0%
TWO VEHICLES	50.0%
3 OR MORE VEHICLES	0.0%

BY SEASON	PERCENT
SPRING	75.0%
SUMMER	0.0%
FALL	25.0%
WINTER	0.0%
<b>TOTAL</b>	<b>100.0%</b>

Note: Wint=Dec-Feb, Spr=Mar-May, Sum=June-Aug, Fall=Sept-Nov

PERCENT OF CRASHES	
ALCOHOL RELATED	0.0%
SPEED RELATED	0.0%





NOTES: DEER CRASHES NOT INCLUDED.

**CRASH RATE**

0.62 Crashes  
Per Million  
Entering Vehicles

Entering Vehicles: 8,900/day

**CRASH FREQUENCY/SEVERITY**

10 Crashes

0 Fatal Crash (K)  
1 Incapacitating (Type A)  
1 Non-Incapacitating (Type B)  
2 Possible (Type C)  
6 Property Damage Only

**LEGEND**

- Moving Vehicle
- ↔ Backing Vehicle
- - - Pedestrian
- ⋯ Bicyclist
- [ ] Parked Vehicle
- ⊙ Stop/Yield Sign
- ⊙ Tree
- ⊙ Utility Pole
- ⊙ Fixed Object
- ⊙ Non-Fixed Object
- ↘ Angle (Right Angle)
- ↙ Angle (Left Turn)
- ↘ Angle (Right Turn)
- ↔ Sideswipe-Same
- ↔ Sideswipe-Opposite
- ↔ Head-On
- ↔ Rear-End
- ~ Out of Control
- ↔ Overtake
- ↔ Overtake

# = CRASH FREQUENCY

**CRASH SEVERITY DEFINITIONS**

[K] = Fatal Crash  
[A] = Incapacitating Injury Crash  
[B] = Non-Incapacitating Injury Crash  
[C] = Possible Injury Crash  
= Property Damage Only Crash

\*"LETTER" = USED FOR REFERENCING CRASHES IN REPORT AS NEEDED

DATE OF CRASH  
HOUR  
SEVERITY (SEE SEVERITY DEFINITIONS)  
ROAD CONDITIONS (DRY IF BLANK)  
LIGHT CONDITIONS (DAYTIME IF BLANK)  
ALCOHOL INVOLVEMENT ("ALC" IF YES)  
SPEED RELATED ("SP" IF YES)

TRAFFIC ANALYSIS & DESIGN, INC.



EXHIBIT DATE: 05-28-10

**EXHIBIT 7.2.2a**  
**CRASH HISTORY (2004-2008)**  
**CTH M INTERSECTION**  
**ROCK COUNTY, WISCONSIN**

## GENERAL INFORMATION

<b>INTERSECTION:</b> USH 14 and CTH M	<b>DURATION</b>	
<b>MUNICIPALITY:</b> Evansville	<b>CRASHES FROM:</b> 1/1/2004	5 YEARS
<b>COUNTY:</b> Rock	<b>TO:</b> 12/31/2008	0 MONTHS
<b>STATE:</b> WI	<b>PREPARED BY:</b> ACP	<b>DATE:</b> 4/28/2010
<b>TADI PROJECT ID:</b> 886-6		

## INTERSECTION CHARACTERISTICS

<b>TRAFFIC CONTROL:</b> TRAFFIC SIGNAL	<b>POSTED SPEED (MAJOR):</b> 45
<b>INTERSECTION AADT: Year (2006)</b> 8,900	<b>DEER CRASHES INCLUDED:</b> NO
<b>NUMBER OF LEGS:</b> 4	<b>AREA TYPE:</b> RURAL

## CRASH STATISTICS

### CRASH FREQUENCY & SEVERITY

YEAR	PD	TYPE C	TYPE B	TYPE A	FATAL	TOTAL
2004	0	1	0	1	0	2
2005	1	0	0	0	0	1
2006	2	1	1	0	0	4
2007	2	0	0	0	0	2
2008	1	0	0	0	0	1

ROAD CONDITIONS	PERCENT
DRY	90.0%
WET	10.0%
SNOW	0.0%
ICE	0.0%
MUD	0.0%
OTHER/UNK	0.0%
<b>TOTAL</b>	<b>10 100.0%</b>

TOTAL	6	2	1	1	0	10
<b>PERCENT</b>	<b>60.0%</b>	<b>20.0%</b>	<b>10.0%</b>	<b>10.0%</b>	<b>0.0%</b>	<b>100.0%</b>
<b>YEAR AVG.</b>	<b>1.2</b>	<b>0.4</b>	<b>0.2</b>	<b>0.2</b>	<b>0.0</b>	<b>2.0</b>

CRASH TYPE	PERCENT
ANGLE	30.0%
REAR-END	50.0%
HEAD-ON	0.0%
SS-SAME	0.0%
SS-OPPOSITE	10.0%
PEDESTRIAN	0.0%
BICYCLE	0.0%
FIXED	10.0%
NOT FIXED	0.0%
DEER	0.0%
OVERTURN	0.0%
OTHR/UNKN	0.0%
<b>TOTAL</b>	<b>10 100.0%</b>

CRASH RATES	per MEV	COMPARISON STATISTIC
TOTAL	0.62	0.88 Crashes per MEV
FATAL	0.00	The comparison rate shown above is the average crash rate from June 2005 Intersection Crash Summary for Wisconsin (Knapp & Campbell) for similar intersections (urban/rural, traffic control, and volume). This rate <u>should not be considered a statewide average</u> representative of all intersections in Wisconsin. Only intersections with (3 or more crashes in one year - rural areas, and 5 or more crashes in one year - urban areas) were included in the study (1,704 total intersections). The statewide average of all intersections would be expected to be lower than the comparison rate shown above.
INJURY	0.25	
TYPE A	0.06	
TYPE B	0.06	
TYPE C	0.12	

LIGHT CONDITIONS	PERCENT
DAY	100.0%
DARK	0.0%
<b>TOTAL</b>	<b>100.0%</b>

VEHICLE TYPES	PERCENT
CAR	63.2%
TRUCK	36.8%
OTHER/UNK	0.0%
<b>TOTAL</b>	<b>100.0%</b>

Note: Dawn, dusk, or street lighted conditions included in dark total.

Note: Statistics based on first and second vehicles in crashes.

### DAY AND TIME

DAY OF WEEK	EARLY MORNING	AM PEAK	MIDDAY	PM PEAK	EVENING	LATE EVENING	UNKNOWN	TOTAL	
	2:00 AM TO 5:59 AM	6:00 AM TO 9:59 AM	10:00 AM TO 1:59 PM	2:00 PM TO 5:59 PM	6:00 PM TO 9:59 PM	10:00 PM TO 1:59 AM			
	5:59 AM	9:59 AM	1:59 PM	5:59 PM	9:59 PM	1:59 AM			
MONDAY	0	1	0	1	0	0	0	2	Weekday
TUESDAY	0	0	1	0	0	0	0	1	
WEDNESDAY	0	0	0	0	0	0	0	0	
THURSDAY	0	1	0	1	0	0	0	2	
FRIDAY	0	0	0	1	0	0	0	1	
SATURDAY	0	0	1	0	0	0	0	1	Weekend
SUNDAY	0	0	2	1	0	0	0	3	
<b>TOTAL</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	

DRIVER AGES	PERCENT
<25	21.1%
25-34	10.5%
35-44	26.3%
45-54	26.3%
55-64	5.3%
65-74	0.0%
75-84	5.3%
85+	0.0%
UNKNOWN	5.3%
<b>TOTAL</b>	<b>100.0%</b>

VEHICLE DAMAGE	PERCENT
OTHER/UNK	5.3%
NONE	10.5%
VERY MINOR	26.3%
MINOR	15.8%
MODERATE	36.8%
SEVERE	5.3%
VERY SEVERE	0.0%
<b>TOTAL</b>	<b>100.0%</b>

BY SEASON	PERCENT
SPRING	30.0%
SUMMER	40.0%
FALL	30.0%
WINTER	0.0%
<b>TOTAL</b>	<b>100.0%</b>

PERCENT OF CRASHES	PERCENT
ALCOHOL RELATED	0.0%
SPEED RELATED	0.0%

Note: Statistics based on first and second vehicles in crashes.

VEHICLES INVOLVED	PERCENT
SINGLE VEHICLE	10.0%
TWO VEHICLES	90.0%
3 OR MORE VEHICLES	0.0%



## GENERAL INFORMATION

<b>ROADWAY AND LIMITS:</b> USH 14 (Territorial Rd. to USH 51)	<b>DURATION</b>	
<b>MUNICIPALITY:</b> Leyden, Janesville	<b>CRASHES FROM:</b> 1/1/2004	5 YEARS
<b>COUNTY:</b> Rock	<b>TO:</b> 12/31/2008	0 MONTHS
<b>STATE:</b> WI	<b>PREPARED BY:</b> ACP	<b>DATE:</b> 5/24/2010
<b>TADI PROJECT ID:</b> 1033		

## SEGMENT CHARACTERISTICS

<b>ROADWAY TYPE:</b> RURAL STH	<b>POSTED SPEED:</b> 55
<b>ROADWAY AADT: Year (2007)</b> 6,880	<b>DEER CRASHES INCLUDED:</b> NO
<b>SEGMENT LENGTH (MILES):</b> 12.0	<b>AREA TYPE:</b> RURAL

## CRASH STATISTICS

### CRASH FREQUENCY & SEVERITY

YEAR	PD	TYPE C	TYPE B	TYPE A	FATAL	TOTAL
2004	23	5	6	2	0	36
2005	20	7	3	1	0	31
2006	20	4	6	2	2	34
2007	15	3	5	1	0	24
2008	24	4	5	0	1	34

ROAD CONDITIONS	PERCENT
DRY	68.6%
WET	13.2%
SNOW	10.7%
ICE	6.9%
MUD	0.0%
OTHER/UNK	0.6%
<b>TOTAL</b>	<b>100.0%</b>

TOTAL	102	23	25	6	3	159
<b>PERCENT</b>	<b>64.2%</b>	<b>14.5%</b>	<b>15.7%</b>	<b>3.8%</b>	<b>1.9%</b>	<b>100.0%</b>
<b>YEAR AVG.</b>	<b>20.4</b>	<b>4.6</b>	<b>5.0</b>	<b>1.2</b>	<b>0.6</b>	<b>31.8</b>

CRASH TYPE	PERCENT
ANGLE	15.7%
REAR-END	27.0%
HEAD-ON	3.8%
SS-SAME	7.5%
SS-OPPOSITE	5.0%
PEDESTRIAN	0.0%
BICYCLE	0.0%
FIXED	25.2%
NOT FIXED	3.1%
DEER	0.0%
OVERTURN	9.4%
OTHR/UNKN	3.1%
<b>TOTAL</b>	<b>100.0%</b>

CRASH RATES	per 100 MVM	WI STATEWIDE AVG YEAR(S):	2004-2008
TOTAL	106		119
FATAL	2.0		1.6
INJURY	36		44
TYPE A	4.0		7.1
TYPE B	17		16
TYPE C	15		21

LIGHT CONDITIONS	PERCENT
DAY	61.0%
DARK	39.0%
<b>TOTAL</b>	<b>100.0%</b>

VEHICLE TYPES	PERCENT
CAR	69.4%
TRUCK	27.8%
OTHER/UNK	2.7%
<b>TOTAL</b>	<b>100.0%</b>

Note: Dawn, dusk, or street lighted conditions included in dark total.

Note: Statistics based on first and second vehicles in crashes.

### DAY AND TIME

DAY OF WEEK	EARLY MORNING		AM PEAK		PM PEAK		LATE EVENING		UNKNOWN	TOTAL	
	2:00 AM TO 5:59 AM	6:00 AM TO 9:59 AM	10:00 AM TO 1:59 PM	2:00 PM TO 5:59 PM	6:00 PM TO 9:59 PM	10:00 PM TO 1:59 AM					
	MONDAY	1	0	4	6	4	2	1			
TUESDAY	2	4	1	7	3	1	0	18			
WEDNESDAY	3	6	3	11	3	1	0	27			
THURSDAY	1	5	6	5	3	1	1	22			
FRIDAY	3	3	5	7	7	0	0	25			
SATURDAY	3	4	6	11	3	2	0	29	Weekend		
SUNDAY	2	1	4	7	1	4	1	20			
<b>TOTAL</b>	<b>15</b>	<b>23</b>	<b>29</b>	<b>54</b>	<b>24</b>	<b>11</b>	<b>3</b>	<b>159</b>			

DRIVER AGES	PERCENT
<25	31.4%
25-34	14.5%
35-44	14.5%
45-54	18.4%
55-64	11.0%
65-74	4.7%
75-84	2.4%
85+	0.8%
UNKNOWN	2.4%
<b>TOTAL</b>	<b>100.0%</b>

VEHICLE DAMAGE	PERCENT
OTHER/UNK	2.7%
NONE	3.1%
VERY MINOR	5.1%
MINOR	16.5%
MODERATE	39.6%
SEVERE	20.4%
VERY SEVERE	12.5%
<b>TOTAL</b>	<b>100.0%</b>

BY SEASON	PERCENT
SPRING	23.3%
SUMMER	22.6%
FALL	20.8%
WINTER	33.3%
<b>TOTAL</b>	<b>100.0%</b>

Note: Wint-Dec-Feb, Spr-Mar-May, Sum-June-Aug, Fall-Sept-Nov

PERCENT OF CRASHES	
ON HORIZONTAL CURVE	7.5%
ON VERTICAL CURVE	18.2%
AT INTERSECTION	44.7%
ALCOHOL RELATED	7.5%
SPEED RELATED	26.4%

Note: Statistics based on first and second vehicles in crashes.

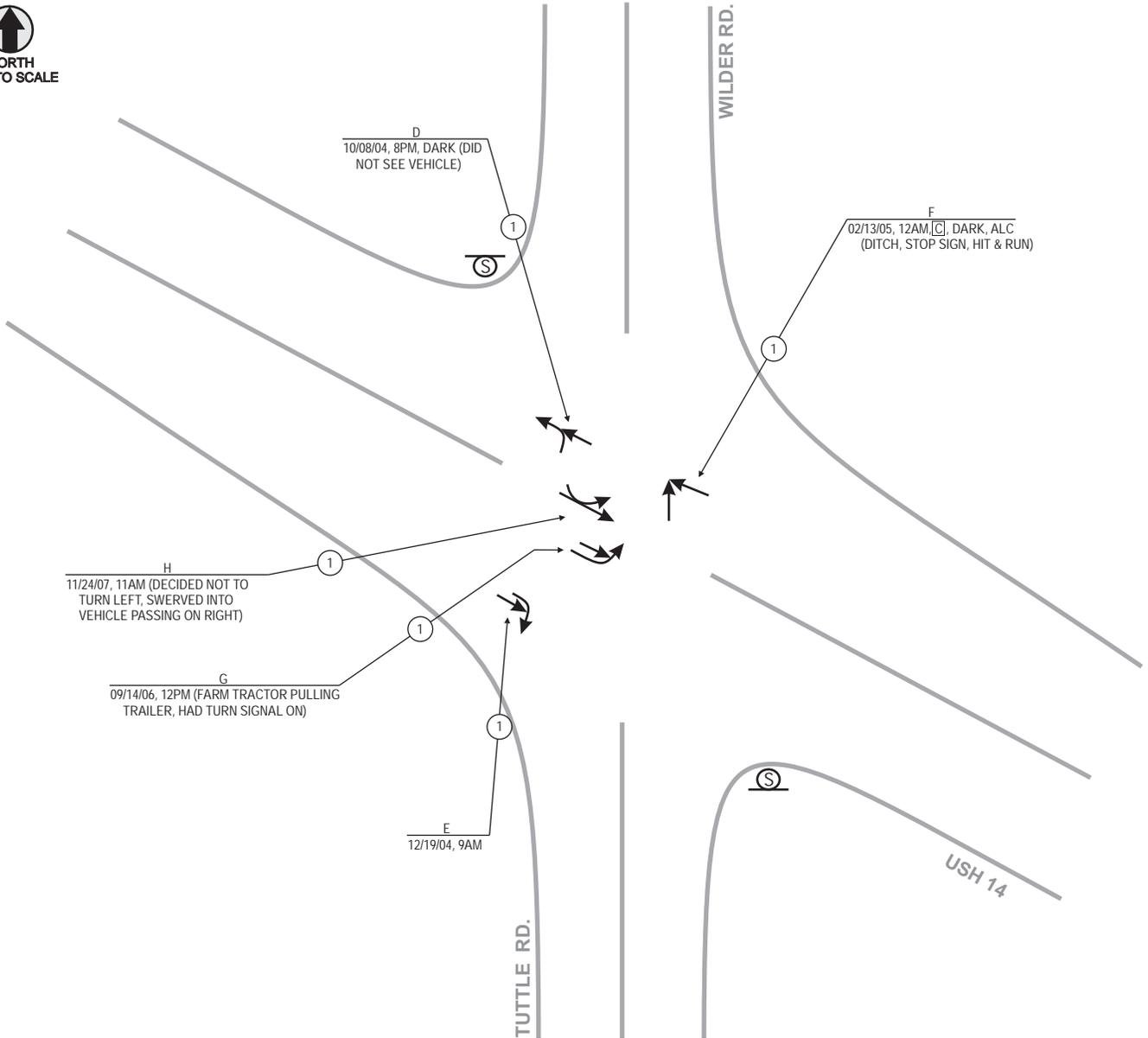
VEHICLES INVOLVED	PERCENT
SINGLE VEHICLE	39.6%
TWO VEHICLES	53.5%
3 OR MORE VEHICLES	6.9%

**TRAFFIC ANALYSIS & DESIGN, INC.**



EXHIBIT DATE: 05-28-10

**EXHIBIT 7.3**  
**CRASH STATISTICS (2004-2008)**  
**SEGMENT 3 - USH 14 (TERRITORIAL ROAD TO USH 51)**  
**ROCK COUNTY, WISCONSIN**



**CRASH RATE**

0.47 Crashes  
Per Million  
Entering Vehicles

Entering Vehicles: 5,850/day

**CRASH FREQUENCY/SEVERITY**

5 Crashes

- 0 Fatal Crash (K)
- 0 Incapacitating (Type A) Injury Crash
- 0 Non-Incapacitating (Type B) Injury Crash
- 1 Possible (Type C) Injury Crash
- 4 Property Damage Only Crash

NOTES: DEER CRASHES NOT INCLUDED.

**LEGEND**

- Moving Vehicle
- ↔ Backing Vehicle
- - - Pedestrian
- ⋯ Bicyclist
- [ ] Parked Vehicle
- ⊙ Stop/Yield Sign
- ⊙ Tree
- ⊙ Utility Pole
- ⊙ Fixed Object
- ⊙ Non-Fixed Object
- ↘ Angle (Right Angle)
- ↙ Angle (Left Turn)
- ↗ Angle (Right Turn)
- ↔ Sideswipe-Same
- ↔ Sideswipe-Opposite
- ↔ Head-On
- ↔ Rear-End
- ~ Out of Control
- ↔ Overtake
- ↔ Overtake

# = CRASH FREQUENCY

\*"LETTER" = USED FOR REFERENCING CRASHES IN REPORT AS NEEDED

DATE OF CRASH
HOUR
SEVERITY (SEE SEVERITY DEFINITIONS)
ROAD CONDITIONS (DRY IF BLANK)
LIGHT CONDITIONS (DAYTIME IF BLANK)
ALCOHOL INVOLVEMENT ("ALC" IF YES)
SPEED RELATED ("SP" IF YES)

**CRASH SEVERITY DEFINITIONS**

- [K] = Fatal Crash
- [A] = Incapacitating Injury Crash
- [B] = Non-Incapacitating Injury Crash
- [C] = Possible Injury Crash
- [ ] = Property Damage Only Crash



## GENERAL INFORMATION

<b>INTERSECTION:</b> USH 14 & Tuttle Road	<b>CRASHES FROM:</b> 1/1/2004	<b>DURATION</b>
<b>MUNICIPALITY:</b> Evansville	<b>TO:</b> 12/31/2008	5 YEARS
<b>COUNTY:</b> Rock		0 MONTHS
<b>STATE:</b> WI	<b>PREPARED BY:</b> ACP	<b>DATE:</b> 4/28/2010
<b>TADI PROJECT ID:</b> 1033		

## INTERSECTION CHARACTERISTICS

<b>TRAFFIC CONTROL:</b> MINOR STOP CONTROLLED	<b>POSTED SPEED (MAJOR):</b> 55
<b>INTERSECTION AADT: Year (2007)</b> 5,850	<b>DEER CRASHES INCLUDED:</b> NO
<b>NUMBER OF LEGS:</b> 4	<b>AREA TYPE:</b> RURAL

## CRASH STATISTICS

### CRASH FREQUENCY & SEVERITY

YEAR	PD	TYPE C	TYPE B	TYPE A	FATAL	TOTAL
2004	2	0	0	0	0	2
2005	0	1	0	0	0	1
2006	1	0	0	0	0	1
2007	1	0	0	0	0	1
2008	0	0	0	0	0	0

ROAD CONDITIONS		PERCENT
DRY	5	100.0%
WET	0	0.0%
SNOW	0	0.0%
ICE	0	0.0%
MUD	0	0.0%
OTHER/UNK	0	0.0%
<b>TOTAL</b>	<b>5</b>	<b>100.0%</b>

TOTAL	4	1	0	0	0	5
<b>PERCENT</b>	<b>80.0%</b>	<b>20.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100.0%</b>
<b>YEAR AVG.</b>	<b>0.8</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>

CRASH TYPE		PERCENT
ANGLE	3	60.0%
REAR-END	1	20.0%
HEAD-ON	0	0.0%
SS-SAME	1	20.0%
SS-OPPOSITE	0	0.0%
PEDESTRIAN	0	0.0%
BICYCLE	0	0.0%
FIXED	0	0.0%
NOT FIXED	0	0.0%
DEER	0	0.0%
OVERTURN	0	0.0%
OTHR/UNKN	0	0.0%
<b>TOTAL</b>	<b>5</b>	<b>100.0%</b>

CRASH RATES	per MEV	COMPARISON STATISTIC
TOTAL	0.47	1.01 Crashes per MEV
FATAL	0.00	The comparison rate shown above is the average crash rate from June 2005 Intersection Crash Summary for Wisconsin (Knapp & Campbell) for similar intersections (urban/rural, traffic control, and volume). This rate <u>should not be considered a statewide average</u> representative of all intersections in Wisconsin. Only intersections with (3 or more crashes in one year - rural areas, and 5 or more crashes in one year - urban areas) were included in the study (1,704 total intersections). The statewide average of all intersections would be expected to be lower than the comparison rate shown above.
INJURY	0.09	
TYPE A	0.00	
TYPE B	0.00	
TYPE C	0.09	

LIGHT CONDITIONS		PERCENT
DAY	3	60.0%
DARK	2	40.0%
<b>TOTAL</b>	<b>5</b>	<b>100.0%</b>

VEHICLE TYPES		PERCENT
CAR	6	60.0%
TRUCK	3	30.0%
OTHER/UNK	1	10.0%
<b>TOTAL</b>	<b>10</b>	<b>100.0%</b>

Note: Dawn, dusk, or street lighted conditions included in dark total.

Note: Statistics based on first and second vehicles in crashes.

### DAY AND TIME

DAY OF WEEK	EARLY MORNING	AM PEAK	MIDDAY	PM PEAK	EVENING	LATE EVENING	UNKNOWN	TOTAL	
	2:00 AM TO 5:59 AM	6:00 AM TO 9:59 AM	10:00 AM TO 1:59 PM	2:00 PM TO 5:59 PM	6:00 PM TO 9:59 PM	10:00 PM TO 1:59 AM			
	5:59 AM	9:59 AM	1:59 PM	5:59 PM	9:59 PM	1:59 AM			
MONDAY	0	0	0	0	0	0	0	0	Weekday
TUESDAY	0	0	0	0	0	0	0	0	
WEDNESDAY	0	0	0	0	0	0	0	0	
THURSDAY	0	0	1	0	0	0	0	1	
FRIDAY	0	0	0	0	1	0	0	1	
SATURDAY	0	0	1	0	0	0	0	1	Weekend
SUNDAY	0	1	0	0	0	1	0	2	
<b>TOTAL</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>5</b>	

DRIVER AGES		PERCENT
<25	2	20.0%
25-34	2	20.0%
35-44	3	30.0%
45-54	2	20.0%
55-64	0	0.0%
65-74	1	10.0%
75-84	0	0.0%
85+	0	0.0%
UNKNOWN	0	0.0%
<b>TOTAL</b>	<b>10</b>	<b>100.0%</b>

VEHICLE DAMAGE		PERCENT
OTHER/UNK	0	0.0%
NONE	0	0.0%
VERY MINOR	0	0.0%
MINOR	3	30.0%
MODERATE	4	40.0%
SEVERE	1	10.0%
VERY SEVERE	2	20.0%
<b>TOTAL</b>	<b>10</b>	<b>100.0%</b>

BY SEASON		PERCENT
SPRING	0	0.0%
SUMMER	0	0.0%
FALL	3	60.0%
WINTER	2	40.0%
<b>TOTAL</b>	<b>5</b>	<b>100.0%</b>

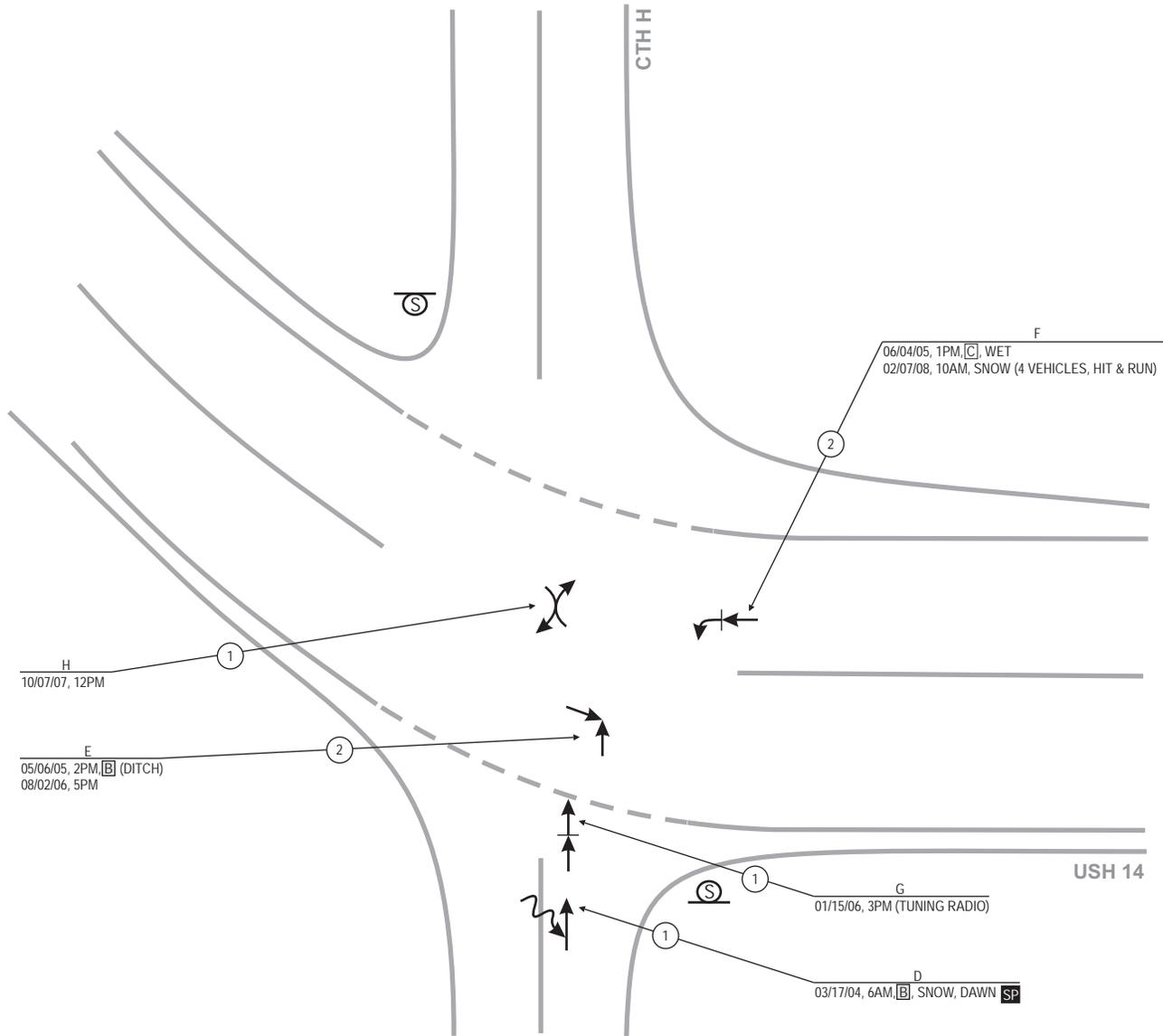
Note: Wint=Dec-Feb, Spr=Mar-May, Sum=June-Aug, Fall=Sept-Nov

PERCENT OF CRASHES	
ALCOHOL RELATED	20.0%
SPEED RELATED	0.0%

VEHICLES INVOLVED		PERCENT
SINGLE VEHICLE		0.0%
TWO VEHICLES		100.0%
3 OR MORE VEHICLES		0.0%

Note: Statistics based on first and second vehicles in crashes.





**CRASH RATE**  
**0.44 Crashes**  
 Per Million  
 Entering Vehicles  
 Entering Vehicles: 8,700/day

**CRASH FREQUENCY/SEVERITY**  
**7 Crashes**  
 0 Fatal Crash (K)  
 0 Incapacitating (Type A)  
 2 Non-Incapacitating (Type B)  
 1 Possible (Type C)  
 4 Property Damage Only

NOTES: DEER CRASHES NOT INCLUDED.

**LEGEND**

→ Moving Vehicle	⊙ Stop/Yield Sign	↔ Angle (Right Angle)	↔ Head-On
↔ Backing Vehicle	⊙ Tree	↔ Angle (Left Turn)	↔ Rear-End
--- Pedestrian	⊙ Utility Pole	↔ Angle (Right Turn)	↔ Out of Control
⋯ Bicyclist	⊙ Fixed Object	↔ Sideswipe-Same	↔ Overtake
▭ Parked Vehicle	⊙ Non-Fixed Object	↔ Sideswipe-Opposite	↔ Overtake

# = CRASH FREQUENCY

**CRASH SEVERITY DEFINITIONS**

\*"LETTER" = USED FOR REFERENCING CRASHES IN REPORT AS NEEDED

DATE OF CRASH  
 HOUR  
 SEVERITY (SEE SEVERITY DEFINITIONS)  
 ROAD CONDITIONS (DRY IF BLANK)  
 LIGHT CONDITIONS (DAYTIME IF BLANK)  
 ALCOHOL INVOLVEMENT ("ALC" IF YES)  
 SPEED RELATED ("SP" IF YES)

⊙ = Fatal Crash  
 ⊙ = Incapacitating Injury Crash  
 ⊙ = Non-Incapacitating Injury Crash  
 ⊙ = Possible Injury Crash  
 ⊙ = Property Damage Only Crash

TRAFFIC ANALYSIS & DESIGN, INC.



EXHIBIT DATE: 05-28-10

**EXHIBIT 7.3.2a**  
**CRASH HISTORY (2004-2008)**  
**CTH H INTERSECTION**  
**ROCK COUNTY, WISCONSIN**

## GENERAL INFORMATION

<b>INTERSECTION:</b> USH 14 & CTH H	<b>DURATION</b>	
<b>MUNICIPALITY:</b> Center	<b>CRASHES FROM:</b> 1/1/2004	5 YEARS
<b>COUNTY:</b> Rock	<b>TO:</b> 12/31/2008	0 MONTHS
<b>STATE:</b> WI	<b>PREPARED BY:</b> ACP	<b>DATE:</b> 4/28/2010
<b>TADI PROJECT ID:</b> 1033		

## INTERSECTION CHARACTERISTICS

<b>TRAFFIC CONTROL:</b> MINOR STOP CONTROLLED	<b>POSTED SPEED (MAJOR):</b> 55
<b>INTERSECTION AADT: Year (2006)</b> 8,700	<b>DEER CRASHES INCLUDED:</b> NO
<b>NUMBER OF LEGS:</b> 4	<b>AREA TYPE:</b> RURAL

## CRASH STATISTICS

### CRASH FREQUENCY & SEVERITY

YEAR	PD	TYPE C	TYPE B	TYPE A	FATAL	TOTAL
2004	0	0	1	0	0	1
2005	0	1	1	0	0	2
2006	2	0	0	0	0	2
2007	1	0	0	0	0	1
2008	1	0	0	0	0	1

ROAD CONDITIONS		PERCENT
DRY	4	57.1%
WET	1	14.3%
SNOW	2	28.6%
ICE	0	0.0%
MUD	0	0.0%
OTHER/UNK	0	0.0%
<b>TOTAL</b>	<b>7</b>	<b>100.0%</b>

TOTAL	4	1	2	0	0	7
<b>PERCENT</b>	<b>57.1%</b>	<b>14.3%</b>	<b>28.6%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100.0%</b>
<b>YEAR AVG.</b>	<b>0.8</b>	<b>0.2</b>	<b>0.4</b>	<b>0.0</b>	<b>0.0</b>	<b>1.4</b>

CRASH TYPE		PERCENT
ANGLE	3	42.9%
REAR-END	3	42.9%
HEAD-ON	0	0.0%
SS-SAME	0	0.0%
SS-OPPOSITE	1	14.3%
PEDESTRIAN	0	0.0%
BICYCLE	0	0.0%
FIXED	0	0.0%
NOT FIXED	0	0.0%
DEER	0	0.0%
OVERTURN	0	0.0%
OTHR/UNKN	0	0.0%
<b>TOTAL</b>	<b>7</b>	<b>100.0%</b>

### CRASH RATES

CRASH RATES	per MEV	COMPARISON STATISTIC
TOTAL	0.44	1.01 Crashes per MEV
FATAL	0.00	The comparison rate shown above is the average crash rate from June 2005 Intersection Crash Summary for Wisconsin (Knapp & Campbell) for similar intersections (urban/rural, traffic control, and volume). This rate <u>should not be considered a statewide average</u> representative of all intersections in Wisconsin. Only intersections with (3 or more crashes in one year - rural areas, and 5 or more crashes in one year - urban areas) were included in the study (1,704 total intersections). The statewide average of all intersections would be expected to be lower than the comparison rate shown above.
INJURY	0.19	
TYPE A	0.00	
TYPE B	0.13	
TYPE C	0.06	

LIGHT CONDITIONS		PERCENT
DAY	6	85.7%
DARK	1	14.3%
<b>TOTAL</b>	<b>7</b>	<b>100.0%</b>

Note: Dawn, dusk, or street lighted conditions included in dark total.

VEHICLE TYPES		PERCENT
CAR	10	71.4%
TRUCK	4	28.6%
OTHER/UNK	0	0.0%
<b>TOTAL</b>	<b>14</b>	<b>100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

### DAY AND TIME

DAY OF WEEK	EARLY	AM	MIDDAY	PM	EVENING	LATE	UNKNOWN	TOTAL	
	MORNING	PEAK		PEAK		EVENING			
	2:00 AM TO 5:59 AM	6:00 AM TO 9:59 AM	10:00 AM TO 1:59 PM	2:00 PM TO 5:59 PM	6:00 PM TO 9:59 PM	10:00 PM TO 1:59 AM			
MONDAY	0	0	0	0	0	0	0	0	Weekday
TUESDAY	0	0	0	0	0	0	0		
WEDNESDAY	0	1	0	1	0	0	0	2	
THURSDAY	0	0	1	0	0	0	0	1	
FRIDAY	0	0	0	1	0	0	0	1	
SATURDAY	0	0	1	0	0	0	0	1	Weekend
SUNDAY	0	0	1	1	0	0	0	2	
<b>TOTAL</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	

DRIVER AGES		PERCENT
<25	3	21.4%
25-34	4	28.6%
35-44	2	14.3%
45-54	2	14.3%
55-64	1	7.1%
65-74	0	0.0%
75-84	1	7.1%
85+	1	7.1%
UNKNOWN	0	0.0%
<b>TOTAL</b>	<b>14</b>	<b>100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

VEHICLE DAMAGE		PERCENT
OTHER/UNK	0	0.0%
NONE	1	7.1%
VERY MINOR	1	7.1%
MINOR	0	0.0%
MODERATE	10	71.4%
SEVERE	2	14.3%
VERY SEVERE	0	0.0%
<b>TOTAL</b>	<b>14</b>	<b>100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

VEHICLES INVOLVED		PERCENT
SINGLE VEHICLE		0.0%
TWO VEHICLES		85.7%
3 OR MORE VEHICLES		14.3%

BY SEASON		PERCENT
SPRING	2	28.6%
SUMMER	2	28.6%
FALL	1	14.3%
WINTER	2	28.6%
<b>TOTAL</b>	<b>7</b>	<b>100.0%</b>

Note: Wint=Dec-Feb, Spr=Mar-May, Sum=June-Aug, Fall=Sept-Nov

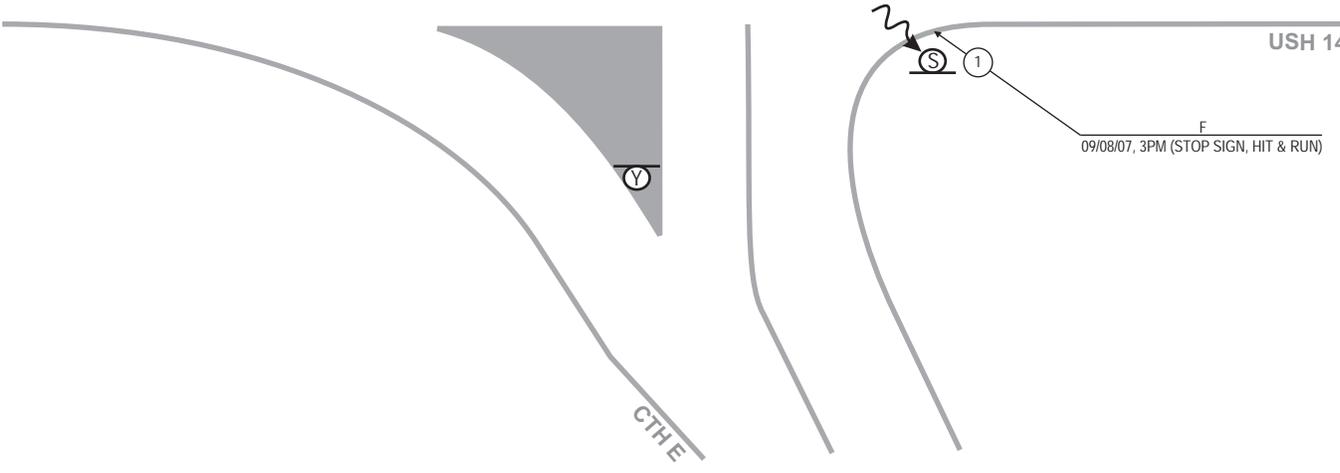
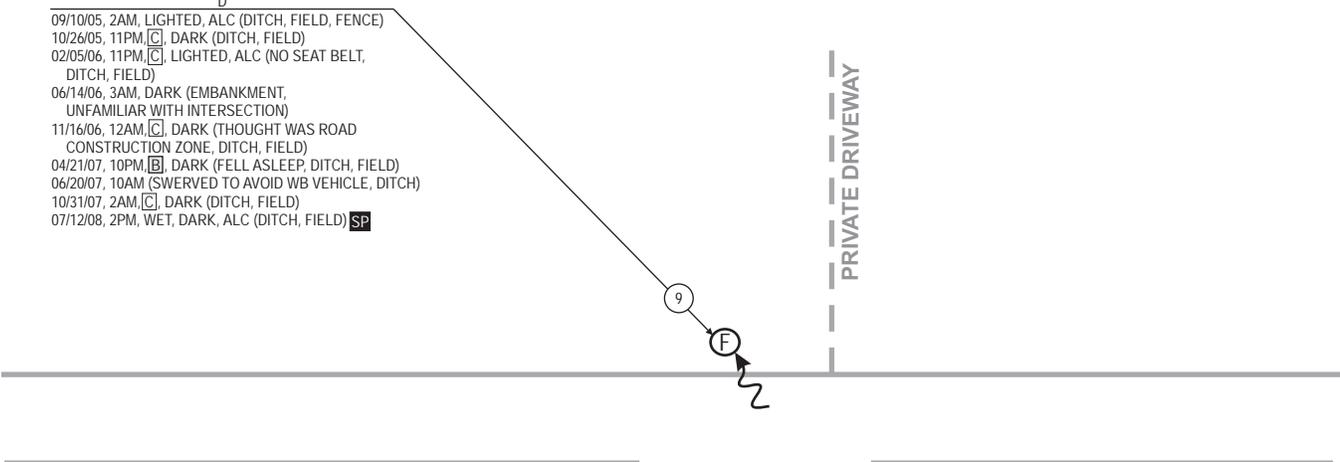
PERCENT OF CRASHES		PERCENT
ALCOHOL RELATED		0.0%
SPEED RELATED		14.3%





D  
 09/10/05, 2AM, LIGHTED, ALC (DITCH, FIELD, FENCE)  
 10/26/05, 11PM, [C], DARK (DITCH, FIELD)  
 02/05/06, 11PM, [C], LIGHTED, ALC (NO SEAT BELT, DITCH, FIELD)  
 06/14/06, 3AM, DARK (EMBANKMENT, UNFAMILIAR WITH INTERSECTION)  
 11/16/06, 12AM, [C], DARK (THOUGHT WAS ROAD CONSTRUCTION ZONE, DITCH, FIELD)  
 04/21/07, 10PM, [B], DARK (FELL ASLEEP, DITCH, FIELD)  
 06/20/07, 10AM (SWERVED TO AVOID WB VEHICLE, DITCH)  
 10/31/07, 2AM, [C], DARK (DITCH, FIELD)  
 07/12/08, 2PM, WET, DARK, ALC (DITCH, FIELD) **SP**

PRIVATE DRIVEWAY



**CRASH RATE**  
 0.55 Crashes  
 Per Million  
 Entering Vehicles  
 Entering Vehicles: 10,000/day

NOTES: DEER CRASHES NOT INCLUDED.  
**CRASH FREQUENCY/SEVERITY**  
 10 Crashes  
 0 Fatal Crash (K)  
 0 Incapacitating (Type A)  
 1 Non-Incapacitating (Type B)  
 4 Possible (Type C)  
 5 Property Damage Only

**LEGEND**

→ Moving Vehicle	⊙ Stop/Yield Sign	↘ Angle (Right Angle)	↔ Head-On
←← Backing Vehicle	⊙ Tree	↙ Angle (Left Turn)	↔ Rear-End
- - - Pedestrian	⊙ Utility Pole	↘ Angle (Right Turn)	⚡ Out of Control
⋯ Bicyclist	⊙ Fixed Object	↔ Sideswipe-Same	→ Overtake
▭ Parked Vehicle	⊙ Non-Fixed Object	↔ Sideswipe-Opposite	⚡ Overturn

# = CRASH FREQUENCY

**CRASH SEVERITY DEFINITIONS**

\*"LETTER" = USED FOR REFERENCING CRASHES IN REPORT AS NEEDED

DATE OF CRASH  
 HOUR  
 SEVERITY (SEE SEVERITY DEFINITIONS)  
 ROAD CONDITIONS (DRY IF BLANK)  
 LIGHT CONDITIONS (DAYTIME IF BLANK)  
 ALCOHOL INVOLVEMENT ("ALC" IF YES)  
 SPEED RELATED ("SP" IF YES)

⊙ = Fatal Crash  
 ⊙ = Incapacitating Injury Crash  
 ⊙ = Non-Incapacitating Injury Crash  
 ⊙ = Possible Injury Crash  
 ⊙ = Property Damage Only Crash

## GENERAL INFORMATION

<b>INTERSECTION:</b> USH 14 & CTH E	<b>DURATION</b>	
<b>MUNICIPALITY:</b> Janesville	<b>CRASHES FROM:</b> 1/1/2004	5 YEARS
<b>COUNTY:</b> Rock	<b>TO:</b> 12/31/2008	0 MONTHS
<b>STATE:</b> WI	<b>PREPARED BY:</b> ACP	<b>DATE:</b> 4/28/2010
<b>TADI PROJECT ID:</b> 1033		

## INTERSECTION CHARACTERISTICS

<b>TRAFFIC CONTROL:</b> MINOR STOP CONTROLLED	<b>POSTED SPEED (MAJOR):</b> 55
<b>INTERSECTION AADT: Year (2007)</b> 10,000	<b>DEER CRASHES INCLUDED:</b> NO
<b>NUMBER OF LEGS:</b> 3	<b>AREA TYPE:</b> RURAL

## CRASH STATISTICS

### CRASH FREQUENCY & SEVERITY

YEAR	PD	TYPE C	TYPE B	TYPE A	FATAL	TOTAL
2004	0	0	0	0	0	0
2005	1	1	0	0	0	2
2006	1	2	0	0	0	3
2007	2	1	1	0	0	4
2008	1	0	0	0	0	1

ROAD CONDITIONS	PERCENT
DRY	80.0%
WET	10.0%
SNOW	0.0%
ICE	0.0%
MUD	0.0%
OTHER/UNK	10.0%
<b>TOTAL</b>	<b>10 100.0%</b>

TOTAL	5	4	1	0	0	10
<b>PERCENT</b>	<b>50.0%</b>	<b>40.0%</b>	<b>10.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100.0%</b>
<b>YEAR AVG.</b>	<b>1.0</b>	<b>0.8</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>2.0</b>

CRASH TYPE	PERCENT
ANGLE	0.0%
REAR-END	0.0%
HEAD-ON	0.0%
SS-SAME	0.0%
SS-OPPOSITE	0.0%
PEDESTRIAN	0.0%
BICYCLE	0.0%
FIXED	90.0%
NOT FIXED	0.0%
DEER	0.0%
OVERTURN	0.0%
OTHR/UNKN	10.0%
<b>TOTAL</b>	<b>10 100.0%</b>

CRASH RATES	per MEV	COMPARISON STATISTIC
TOTAL	0.55	1.01 Crashes per MEV
FATAL	0.00	The comparison rate shown above is the average crash rate from June 2005 Intersection Crash Summary for Wisconsin (Knapp & Campbell) for similar intersections (urban/rural, traffic control, and volume). This rate should not be considered a statewide average representative of all intersections in Wisconsin. Only intersections with (3 or more crashes in one year - rural areas, and 5 or more crashes in one year - urban areas) were included in the study (1,704 total intersections). The statewide average of all intersections would be expected to be lower than the comparison rate shown above.
INJURY	0.27	
TYPE A	0.00	
TYPE B	0.05	
TYPE C	0.22	

LIGHT CONDITIONS	PERCENT	VEHICLE TYPES	PERCENT
DAY	20.0%	CAR	81.8%
DARK	80.0%	TRUCK	18.2%
<b>TOTAL</b>	<b>100.0%</b>	OTHER/UNK	0.0%
		<b>TOTAL</b>	<b>11 100.0%</b>

Note: Dawn, dusk, or street lighted conditions included in dark total.

Note: Statistics based on first and second vehicles in crashes.

### DAY AND TIME

DAY OF WEEK	EARLY MORNING	AM PEAK	MIDDAY	PM PEAK	EVENING	LATE EVENING	UNKNOWN	TOTAL	
	2:00 AM TO 5:59 AM	6:00 AM TO 9:59 AM	10:00 AM TO 1:59 PM	2:00 PM TO 5:59 PM	6:00 PM TO 9:59 PM	10:00 PM TO 1:59 AM			
	5:59 AM	9:59 AM	1:59 PM	5:59 PM	9:59 PM	1:59 AM			
MONDAY	1	0	0	0	0	0	0	1	Weekday
TUESDAY	0	0	0	0	0	0	0	0	
WEDNESDAY	2	0	1	0	0	1	0	4	
THURSDAY	0	0	0	0	0	1	0	1	
FRIDAY	0	0	0	0	0	0	0	0	
SATURDAY	1	0	0	1	0	1	0	3	Weekend
SUNDAY	0	0	0	0	0	1	0	1	
<b>TOTAL</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>10</b>	

DRIVER AGES	PERCENT
<25	27.3%
25-34	27.3%
35-44	9.1%
45-54	18.2%
55-64	9.1%
65-74	0.0%
75-84	0.0%
85+	0.0%
UNKNOWN	9.1%
<b>TOTAL</b>	<b>11 100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

VEHICLE DAMAGE	PERCENT
OTHER/UNK	0.0%
NONE	9.1%
VERY MINOR	0.0%
MINOR	27.3%
MODERATE	45.5%
SEVERE	9.1%
VERY SEVERE	9.1%
<b>TOTAL</b>	<b>11 100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

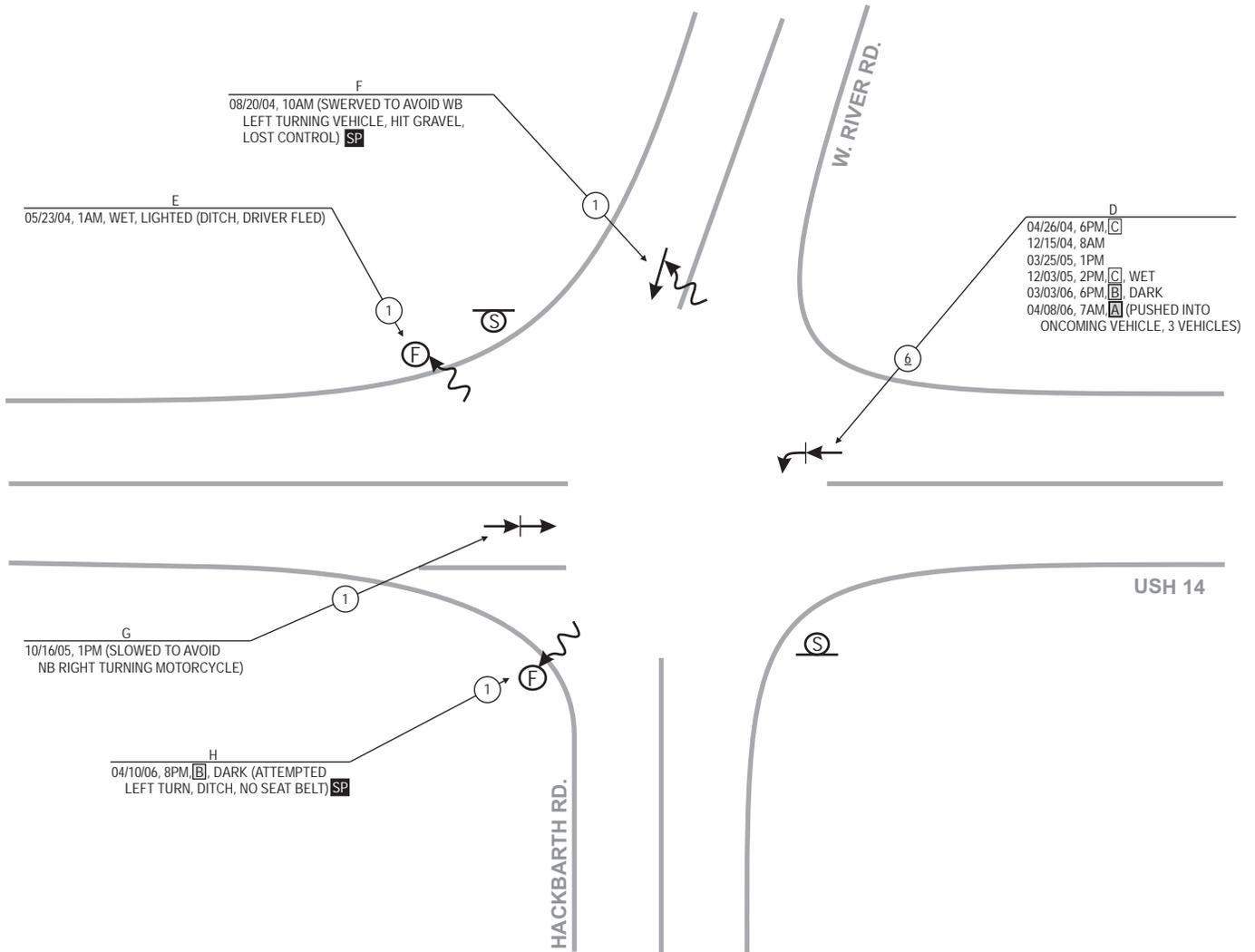
VEHICLES INVOLVED	PERCENT
SINGLE VEHICLE	90.0%
TWO VEHICLES	10.0%
3 OR MORE VEHICLES	0.0%

BY SEASON	PERCENT
SPRING	10.0%
SUMMER	30.0%
FALL	50.0%
WINTER	10.0%
<b>TOTAL</b>	<b>10 100.0%</b>

Note: Wint=Dec-Feb, Spr=Mar-May, Sum=June-Aug, Fall=Sept-Nov

PERCENT OF CRASHES	PERCENT
ALCOHOL RELATED	30.0%
SPEED RELATED	10.0%





**CRASH RATE**

0.59 Crashes  
Per Million  
Entering Vehicles

Entering Vehicles: 9,300/day

NOTES: DEER CRASHES NOT INCLUDED.

**CRASH FREQUENCY/SEVERITY**

10 Crashes

- 0 Fatal Crash (K)
- 1 Incapacitating (Type A)
- 2 Non-Incapacitating (Type B)
- 2 Possible (Type C)
- 5 Property Damage Only

**LEGEND**

→ Moving Vehicle	⊙ Stop/Yield Sign	↔ Angle (Right Angle)	↔ Head-On
↔ Backing Vehicle	⊙ Tree	↔ Angle (Left Turn)	↔ Rear-End
--- Pedestrian	⊙ Utility Pole	↔ Angle (Right Turn)	⚡ Out of Control
⋯ Bicyclist	⊙ Fixed Object	↔ Sideswipe-Same	↔ Overtake
⊠ Parked Vehicle	⊙ Non-Fixed Object	↔ Sideswipe-Opposite	↔ Overtake

# = CRASH FREQUENCY

**CRASH SEVERITY DEFINITIONS**

⊠ = Fatal Crash  
⊠ = Incapacitating Injury Crash  
⊠ = Non-Incapacitating Injury Crash  
⊠ = Possible Injury Crash  
⊠ = Property Damage Only Crash

\*"LETTER" = USED FOR REFERENCING CRASHES IN REPORT AS NEEDED

DATE OF CRASH  
HOUR  
SEVERITY (SEE SEVERITY DEFINITIONS)  
ROAD CONDITIONS (DRY IF BLANK)  
LIGHT CONDITIONS (DAYTIME IF BLANK)  
ALCOHOL INVOLVEMENT ("ALC" IF YES)  
SPEED RELATED ("SP" IF YES)

## GENERAL INFORMATION

<b>INTERSECTION:</b> USH 14 & W. River Rd/Hackbarth Rd	<b>DURATION</b>	
<b>MUNICIPALITY:</b> Janesville	<b>CRASHES FROM:</b> 1/1/2004	5 YEARS
<b>COUNTY:</b> Rock	<b>TO:</b> 12/31/2008	0 MONTHS
<b>STATE:</b> WI	<b>PREPARED BY:</b> ACP	<b>DATE:</b> 4/28/2010
<b>TADI PROJECT ID:</b> 1033		

## INTERSECTION CHARACTERISTICS

<b>TRAFFIC CONTROL:</b> MINOR STOP CONTROLLED	<b>POSTED SPEED (MAJOR):</b> 55
<b>INTERSECTION AADT: Year (2007)</b> 9,300	<b>DEER CRASHES INCLUDED:</b> NO
<b>NUMBER OF LEGS:</b> 3	<b>AREA TYPE:</b> RURAL

## CRASH STATISTICS

### CRASH FREQUENCY & SEVERITY

YEAR	PD	TYPE C	TYPE B	TYPE A	FATAL	TOTAL
2004	3	1	0	0	0	4
2005	2	1	0	0	0	3
2006	0	0	2	1	0	3
2007	0	0	0	0	0	0
2008	0	0	0	0	0	0

ROAD CONDITIONS	PERCENT
DRY	80.0%
WET	20.0%
SNOW	0.0%
ICE	0.0%
MUD	0.0%
OTHER/UNK	0.0%
<b>TOTAL</b>	<b>10 100.0%</b>

TOTAL	5	2	2	1	0	10
<b>PERCENT</b>	<b>50.0%</b>	<b>20.0%</b>	<b>20.0%</b>	<b>10.0%</b>	<b>0.0%</b>	<b>100.0%</b>
<b>YEAR AVG.</b>	<b>1.0</b>	<b>0.4</b>	<b>0.4</b>	<b>0.2</b>	<b>0.0</b>	<b>2.0</b>

CRASH TYPE	PERCENT
ANGLE	20.0%
REAR-END	50.0%
HEAD-ON	0.0%
SS-SAME	10.0%
SS-OPPOSITE	0.0%
PEDESTRIAN	0.0%
BICYCLE	0.0%
FIXED	20.0%
NOT FIXED	0.0%
DEER	0.0%
OVERTURN	0.0%
OTHR/UNKN	0.0%
<b>TOTAL</b>	<b>10 100.0%</b>

CRASH RATES	per MEV	COMPARISON STATISTIC
TOTAL	0.59	1.01 Crashes per MEV
FATAL	0.00	The comparison rate shown above is the average crash rate from June 2005 Intersection Crash Summary for Wisconsin (Knapp & Campbell) for similar intersections (urban/rural, traffic control, and volume). This rate <u>should not be considered a statewide average</u> representative of all intersections in Wisconsin. Only intersections with (3 or more crashes in one year - rural areas, and 5 or more crashes in one year - urban areas) were included in the study (1,704 total intersections). The statewide average of all intersections would be expected to be lower than the comparison rate shown above.
INJURY	0.29	
TYPE A	0.06	
TYPE B	0.12	
TYPE C	0.12	

LIGHT CONDITIONS	PERCENT	VEHICLE TYPES	PERCENT
DAY	70.0%	CAR	72.2%
DARK	30.0%	TRUCK	22.2%
<b>TOTAL</b>	<b>100.0%</b>	OTHER/UNK	5.6%
		<b>TOTAL</b>	<b>18 100.0%</b>

Note: Dawn, dusk, or street lighted conditions included in dark total.

Note: Statistics based on first and second vehicles in crashes.

### DAY AND TIME

DAY OF WEEK	EARLY MORNING	AM PEAK	MIDDAY	PM PEAK	EVENING	LATE EVENING	UNKNOWN	TOTAL	
	2:00 AM TO 5:59 AM	6:00 AM TO 9:59 AM	10:00 AM TO 1:59 PM	2:00 PM TO 5:59 PM	6:00 PM TO 9:59 PM	10:00 PM TO 1:59 AM			
	5:59 AM	9:59 AM	1:59 PM	5:59 PM	9:59 PM	1:59 AM			
MONDAY	0	0	0	0	2	0	0	2	Weekday
TUESDAY	0	0	0	0	0	0	0	0	
WEDNESDAY	0	1	0	0	0	0	0	1	
THURSDAY	0	0	0	0	0	0	0	0	
FRIDAY	0	0	2	0	1	0	0	3	
SATURDAY	0	1	0	1	0	0	0	2	Weekend
SUNDAY	0	0	1	0	0	1	0	2	
<b>TOTAL</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>10</b>	

DRIVER AGES	PERCENT
<25	55.6%
25-34	5.6%
35-44	5.6%
45-54	27.8%
55-64	0.0%
65-74	5.6%
75-84	0.0%
85+	0.0%
UNKNOWN	0.0%
<b>TOTAL</b>	<b>18 100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

VEHICLE DAMAGE	PERCENT
OTHER/UNK	0.0%
NONE	5.6%
VERY MINOR	5.6%
MINOR	33.3%
MODERATE	33.3%
SEVERE	11.1%
VERY SEVERE	11.1%
<b>TOTAL</b>	<b>18 100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

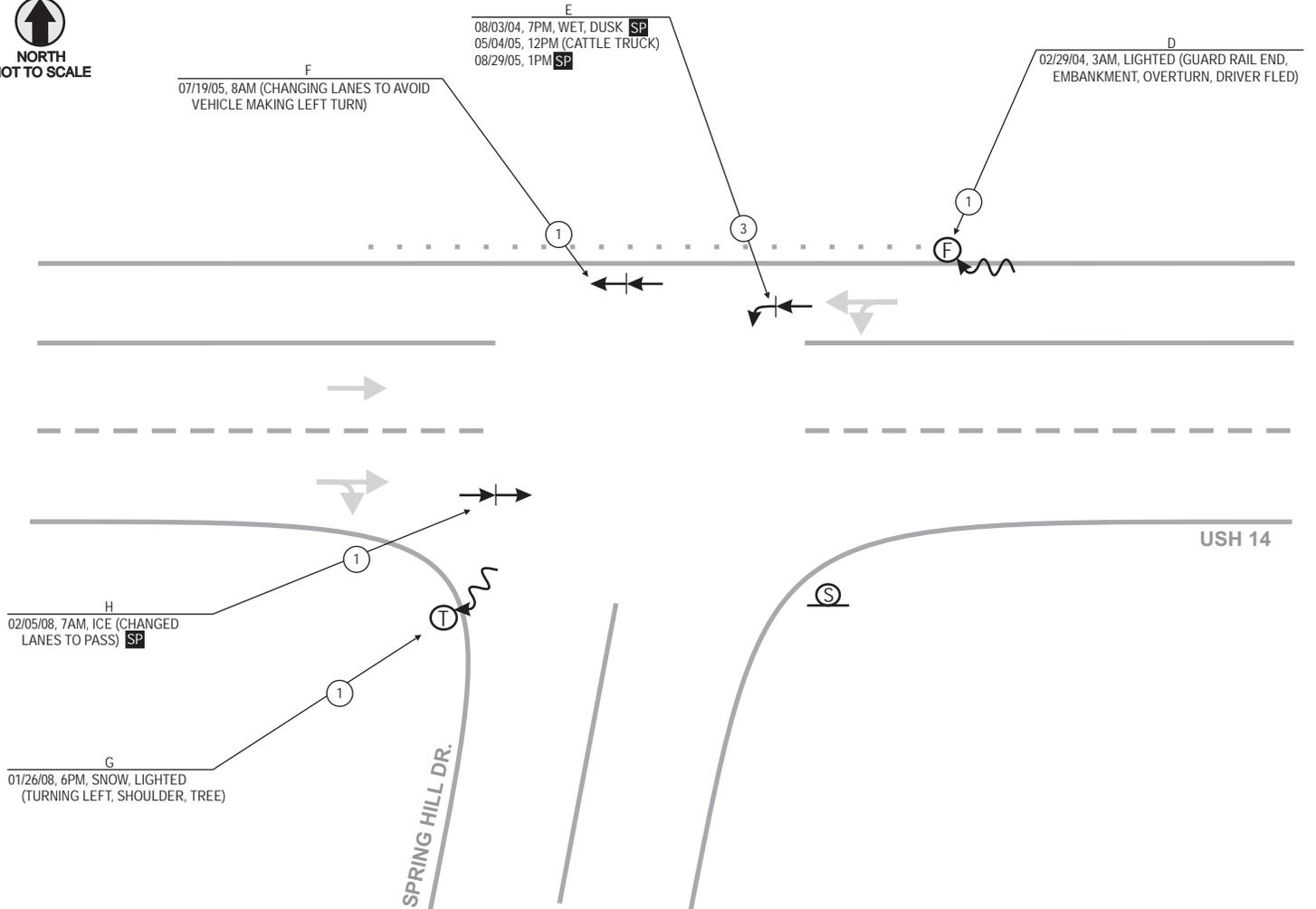
VEHICLES INVOLVED	PERCENT
SINGLE VEHICLE	20.0%
TWO VEHICLES	60.0%
3 OR MORE VEHICLES	20.0%

BY SEASON	PERCENT
SPRING	60.0%
SUMMER	10.0%
FALL	10.0%
WINTER	20.0%
<b>TOTAL</b>	<b>10 100.0%</b>

Note: Wint=Dec-Feb, Spr=Mar-May, Sum=June-Aug, Fall=Sept-Nov

PERCENT OF CRASHES	PERCENT
ALCOHOL RELATED	0.0%
SPEED RELATED	20.0%





**CRASH RATE**

0.36 Crashes  
 Per Million  
 Entering Vehicles

Entering Vehicles: 10,600/day

NOTES: DEER CRASHES NOT INCLUDED.

**CRASH FREQUENCY/SEVERITY**

7 Crashes

- 0 Fatal Crash (K)
- 0 Incapacitating (Type A) Injury Crash
- 0 Non-Incapacitating (Type B) Injury Crash
- 0 Possible (Type C) Injury Crash
- 7 Property Damage Only

**LEGEND**

→ Moving Vehicle	⊙ Stop/Yield Sign	↔ Angle (Right Angle)	↔ Head-On
↔ Backing Vehicle	⊙ Tree	↔ Angle (Left Turn)	↔ Rear-End
- - - Pedestrian	⊙ Utility Pole	↔ Angle (Right Turn)	⊙ Out of Control
⋯ Bicyclist	⊙ Fixed Object	↔ Sideswipe-Same	→ Overtake
⊙ Parked Vehicle	⊙ Non-Fixed Object	↔ Sideswipe-Opposite	⊙ Overtake

# = CRASH FREQUENCY

**CRASH SEVERITY DEFINITIONS**

\*"LETTER" = USED FOR REFERENCING CRASHES IN REPORT AS NEEDED

DATE OF CRASH  
 HOUR  
 SEVERITY (SEE SEVERITY DEFINITIONS)  
 ROAD CONDITIONS (DRY IF BLANK)  
 LIGHT CONDITIONS (DAYTIME IF BLANK)  
 ALCOHOL INVOLVEMENT ("ALC" IF YES)  
 SPEED RELATED ("SP" IF YES)

⊙ = Fatal Crash  
 ⊙ = Incapacitating Injury Crash  
 ⊙ = Non-Incapacitating Injury Crash  
 ⊙ = Possible Injury Crash  
 ⊙ = Property Damage Only Crash



EXHIBIT DATE: 05-28-10

**EXHIBIT 7.3.5a**  
**CRASH HISTORY (2004-2008)**  
**SPRING HILL DRIVE INTERSECTION**  
**ROCK COUNTY, WISCONSIN**

## GENERAL INFORMATION

<b>INTERSECTION:</b> USH 14 & Spring Hill Drive	<b>DURATION:</b> 5 YEARS	
<b>MUNICIPALITY:</b> Janesville	<b>CRASHES FROM:</b> 1/1/2004	<b>TO:</b> 12/31/2008
<b>COUNTY:</b> Rock		<b>0 MONTHS</b>
<b>STATE:</b> WI	<b>PREPARED BY:</b> ACP	<b>DATE:</b> 4/28/2010
<b>TADI PROJECT ID:</b> 1033		

## INTERSECTION CHARACTERISTICS

<b>TRAFFIC CONTROL:</b> MINOR STOP CONTROLLED	<b>POSTED SPEED (MAJOR):</b> 55
<b>INTERSECTION AADT: Year (2007)</b> 10,600	<b>DEER CRASHES INCLUDED:</b> NO
<b>NUMBER OF LEGS:</b> 3	<b>AREA TYPE:</b> RURAL

## CRASH STATISTICS

### CRASH FREQUENCY & SEVERITY

YEAR	PD	TYPE C	TYPE B	TYPE A	FATAL	TOTAL
2004	2	0	0	0	0	2
2005	3	0	0	0	0	3
2006	0	0	0	0	0	0
2007	0	0	0	0	0	0
2008	2	0	0	0	0	2

ROAD CONDITIONS	PERCENT
DRY	57.1%
WET	14.3%
SNOW	14.3%
ICE	14.3%
MUD	0.0%
OTHER/UNK	0.0%
<b>TOTAL</b>	<b>100.0%</b>

TOTAL	7	0	0	0	0	7
<b>PERCENT</b>	<b>100.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100.0%</b>
<b>YEAR AVG.</b>	<b>1.4</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.4</b>

CRASH TYPE	PERCENT
ANGLE	0.0%
REAR-END	71.4%
HEAD-ON	0.0%
SS-SAME	0.0%
SS-OPPOSITE	0.0%
PEDESTRIAN	0.0%
BICYCLE	0.0%
FIXED	28.6%
NOT FIXED	0.0%
DEER	0.0%
OVERTURN	0.0%
OTHR/UNKN	0.0%
<b>TOTAL</b>	<b>100.0%</b>

CRASH RATES	per MEV	COMPARISON STATISTIC
TOTAL	0.36	1.01 Crashes per MEV
FATAL	0.00	The comparison rate shown above is the average crash rate from June 2005 Intersection Crash Summary for Wisconsin (Knapp & Campbell) for similar intersections (urban/rural, traffic control, and volume). This rate <u>should not be considered a statewide average</u> representative of all intersections in Wisconsin. Only intersections with (3 or more crashes in one year - rural areas, and 5 or more crashes in one year - urban areas) were included in the study (1,704 total intersections). The statewide average of all intersections would be expected to be lower than the comparison rate shown above.
INJURY	0.00	
TYPE A	0.00	
TYPE B	0.00	
TYPE C	0.00	

LIGHT CONDITIONS	PERCENT
DAY	57.1%
DARK	42.9%
<b>TOTAL</b>	<b>100.0%</b>

VEHICLE TYPES	PERCENT
CAR	50.0%
TRUCK	50.0%
OTHER/UNK	0.0%
<b>TOTAL</b>	<b>100.0%</b>

Note: Dawn, dusk, or street lighted conditions included in dark total.

Note: Statistics based on first and second vehicles in crashes.

### DAY AND TIME

DAY OF WEEK	EARLY MORNING	AM PEAK	MIDDAY	PM PEAK	EVENING	LATE EVENING	UNKNOWN	TOTAL	
	2:00 AM TO 5:59 AM	6:00 AM TO 9:59 AM	10:00 AM TO 1:59 PM	2:00 PM TO 5:59 PM	6:00 PM TO 9:59 PM	10:00 PM TO 1:59 AM			
	5:59 AM	9:59 AM	1:59 PM	5:59 PM	9:59 PM	1:59 AM			
MONDAY	0	0	1	0	0	0	0	1	Weekday
TUESDAY	0	2	0	0	1	0	0	3	
WEDNESDAY	0	0	1	0	0	0	0	1	
THURSDAY	0	0	0	0	0	0	0	0	
FRIDAY	0	0	0	0	0	0	0	0	
SATURDAY	0	0	0	0	1	0	0	1	Weekend
SUNDAY	1	0	0	0	0	0	0	1	
<b>TOTAL</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>7</b>	

DRIVER AGES	PERCENT
<25	50.0%
25-34	0.0%
35-44	25.0%
45-54	16.7%
55-64	8.3%
65-74	0.0%
75-84	0.0%
85+	0.0%
UNKNOWN	0.0%
<b>TOTAL</b>	<b>100.0%</b>

VEHICLE DAMAGE	PERCENT
OTHER/UNK	0.0%
NONE	8.3%
VERY MINOR	0.0%
MINOR	25.0%
MODERATE	33.3%
SEVERE	33.3%
VERY SEVERE	0.0%
<b>TOTAL</b>	<b>100.0%</b>

BY SEASON	PERCENT
SPRING	14.3%
SUMMER	42.9%
FALL	0.0%
WINTER	42.9%
<b>TOTAL</b>	<b>100.0%</b>

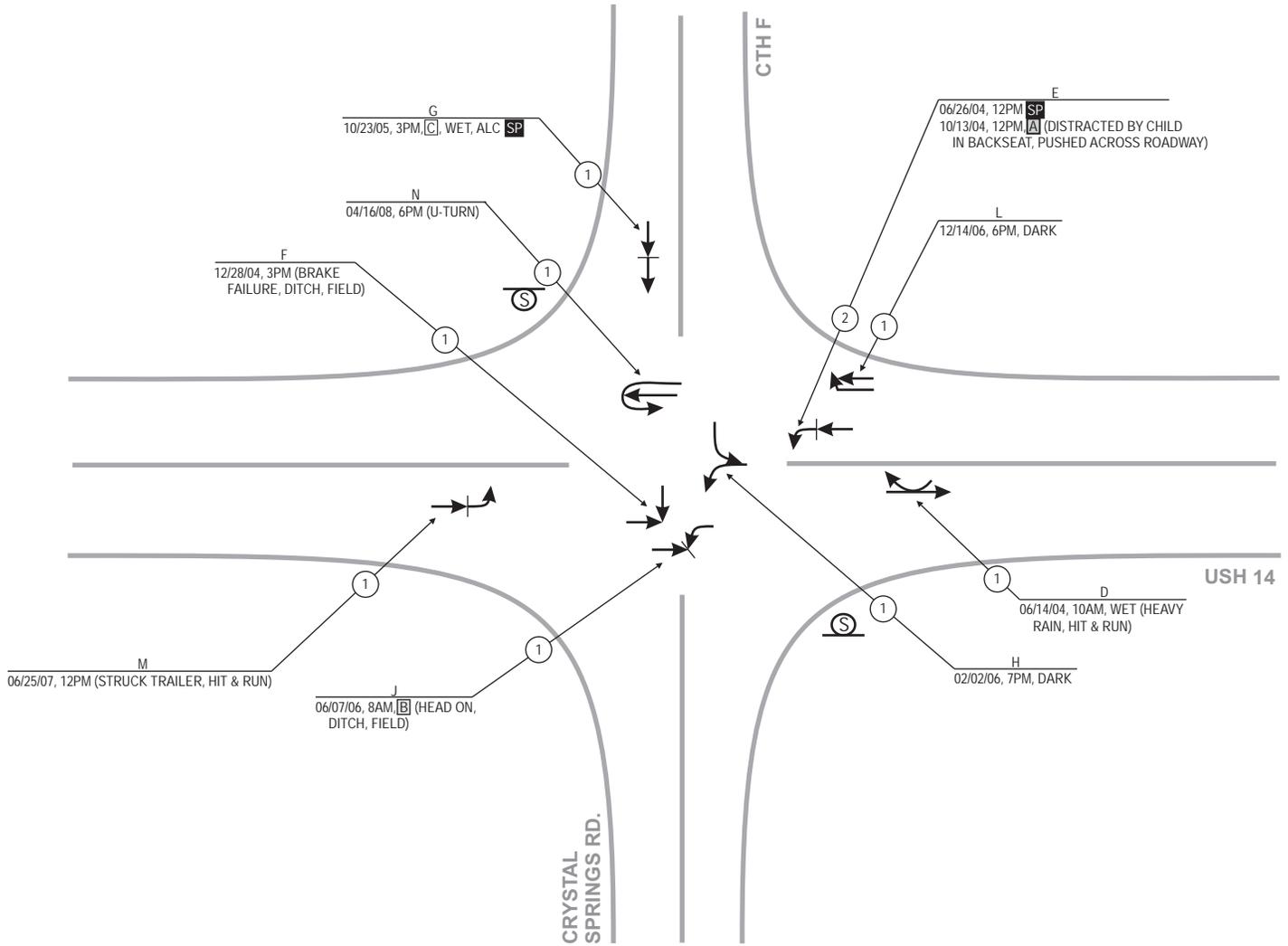
Note: Wint=Dec-Feb, Spr=Mar-May, Sum=June-Aug, Fall=Sept-Nov

PERCENT OF CRASHES	PERCENT
ALCOHOL RELATED	0.0%
SPEED RELATED	42.9%

Note: Statistics based on first and second vehicles in crashes.

VEHICLES INVOLVED	PERCENT
SINGLE VEHICLE	28.6%
TWO VEHICLES	71.4%
3 OR MORE VEHICLES	0.0%





**CRASH RATE**  
 0.44 Crashes  
 Per Million  
 Entering Vehicles  
 Entering Vehicles: 12,450/day

NOTES: DEER CRASHES NOT INCLUDED.

**CRASH FREQUENCY/SEVERITY**

10 Crashes	0 Fatal Crash (K)
	1 Incapacitating (Type A)
	1 Non-Incapacitating (Type B)
	1 Possible (Type C)
	7 Property Damage Only

**LEGEND**

→ Moving Vehicle	⊙ Stop/Yield Sign	↔ Angle (Right Angle)	↔ Head-On
↔ Backing Vehicle	⊙ Tree	↔ Angle (Left Turn)	↔ Rear-End
--- Pedestrian	⊙ Utility Pole	↔ Angle (Right Turn)	↔ Out of Control
⋯ Bicyclist	⊙ Fixed Object	↔ Sideswipe-Same	↔ Overtake
▭ Parked Vehicle	⊙ Non-Fixed Object	↔ Sideswipe-Opposite	↔ Overtake

# = CRASH FREQUENCY

**CRASH SEVERITY DEFINITIONS**

\*"LETTER" = USED FOR REFERENCING CRASHES IN REPORT AS NEEDED

DATE OF CRASH  
 HOUR  
 SEVERITY (SEE SEVERITY DEFINITIONS)  
 ROAD CONDITIONS (DRY IF BLANK)  
 LIGHT CONDITIONS (DAYTIME IF BLANK)  
 ALCOHOL INVOLVEMENT ("ALC" IF YES)  
 SPEED RELATED ("SP" IF YES)

⊙ = Fatal Crash  
 ⊙ = Incapacitating Injury Crash  
 ⊙ = Non-Incapacitating Injury Crash  
 ⊙ = Possible Injury Crash  
 ⊙ = Property Damage Only Crash

## GENERAL INFORMATION

<b>INTERSECTION:</b> USH 14 & CTH F	<b>DURATION</b>	
<b>MUNICIPALITY:</b> Janesville	<b>CRASHES FROM:</b> 1/1/2004	5 YEARS
<b>COUNTY:</b> Rock	<b>TO:</b> 12/31/2008	0 MONTHS
<b>STATE:</b> WI	<b>PREPARED BY:</b> ACP	<b>DATE:</b> 4/28/2010
<b>TADI PROJECT ID:</b> 1033		

## INTERSECTION CHARACTERISTICS

<b>TRAFFIC CONTROL:</b> MINOR STOP CONTROLLED	<b>POSTED SPEED (MAJOR):</b> 55
<b>INTERSECTION AADT: Year (2007)</b> 12,450	<b>DEER CRASHES INCLUDED:</b> NO
<b>NUMBER OF LEGS:</b> 4	<b>AREA TYPE:</b> RURAL

## CRASH STATISTICS

### CRASH FREQUENCY & SEVERITY

YEAR	PD	TYPE C	TYPE B	TYPE A	FATAL	TOTAL
2004	3	0	0	1	0	4
2005	0	1	0	0	0	1
2006	2	0	1	0	0	3
2007	1	0	0	0	0	1
2008	1	0	0	0	0	1

ROAD CONDITIONS	PERCENT	
DRY	8	80.0%
WET	2	20.0%
SNOW	0	0.0%
ICE	0	0.0%
MUD	0	0.0%
OTHER/UNK	0	0.0%
<b>TOTAL</b>	<b>10</b>	<b>100.0%</b>

TOTAL	7	1	1	1	0	10
<b>PERCENT</b>	<b>70.0%</b>	<b>10.0%</b>	<b>10.0%</b>	<b>10.0%</b>	<b>0.0%</b>	<b>100.0%</b>
<b>YEAR AVG.</b>	<b>1.4</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.0</b>	<b>2.0</b>

CRASH TYPE	PERCENT	
ANGLE	3	30.0%
REAR-END	4	40.0%
HEAD-ON	1	10.0%
SS-SAME	1	10.0%
SS-OPPOSITE	1	10.0%
PEDESTRIAN	0	0.0%
BICYCLE	0	0.0%
FIXED	0	0.0%
NOT FIXED	0	0.0%
DEER	0	0.0%
OVERTURN	0	0.0%
OTHR/UNKN	0	0.0%
<b>TOTAL</b>	<b>10</b>	<b>100.0%</b>

CRASH RATES	per MEV	COMPARISON STATISTIC
TOTAL	0.44	1.01 Crashes per MEV
FATAL	0.00	The comparison rate shown above is the average crash rate from June 2005 Intersection Crash Summary for Wisconsin (Knapp & Campbell) for similar intersections (urban/rural, traffic control, and volume). This rate <u>should not be considered a statewide average</u> representative of all intersections in Wisconsin. Only intersections with (3 or more crashes in one year - rural areas, and 5 or more crashes in one year - urban areas) were included in the study (1,704 total intersections). The statewide average of all intersections would be expected to be lower than the comparison rate shown above.
INJURY	0.13	
TYPE A	0.04	
TYPE B	0.04	
TYPE C	0.04	

LIGHT CONDITIONS	PERCENT	
DAY	8	80.0%
DARK	2	20.0%
<b>TOTAL</b>	<b>10</b>	<b>100.0%</b>

VEHICLE TYPES	PERCENT	
CAR	15	75.0%
TRUCK	3	15.0%
OTHER/UNK	2	10.0%
<b>TOTAL</b>	<b>20</b>	<b>100.0%</b>

Note: Dawn, dusk, or street lighted conditions included in dark total.

Note: Statistics based on first and second vehicles in crashes.

### DAY AND TIME

DAY OF WEEK	EARLY MORNING	AM PEAK	MIDDAY	PM PEAK	EVENING	LATE EVENING	UNKNOWN	TOTAL	
	2:00 AM TO 5:59 AM	6:00 AM TO 9:59 AM	10:00 AM TO 1:59 PM	2:00 PM TO 5:59 PM	6:00 PM TO 9:59 PM	10:00 PM TO 1:59 AM			
	5:59 AM	9:59 AM	1:59 PM	5:59 PM	9:59 PM	1:59 AM			
MONDAY	0	0	2	0	0	0	0	2	Weekday
TUESDAY	0	0	0	1	0	0	0	1	
WEDNESDAY	0	1	1	0	1	0	0	3	
THURSDAY	0	0	0	0	2	0	0	2	
FRIDAY	0	0	0	0	0	0	0	0	
SATURDAY	0	0	1	0	0	0	0	1	Weekend
SUNDAY	0	0	0	1	0	0	0	1	
<b>TOTAL</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>10</b>	

DRIVER AGES	PERCENT	
<25	6	30.0%
25-34	3	15.0%
35-44	1	5.0%
45-54	2	10.0%
55-64	4	20.0%
65-74	1	5.0%
75-84	1	5.0%
85+	0	0.0%
UNKNOWN	2	10.0%
<b>TOTAL</b>	<b>20</b>	<b>100.0%</b>

VEHICLE DAMAGE	PERCENT	
OTHER/UNK	1	5.0%
NONE	0	0.0%
VERY MINOR	2	10.0%
MINOR	3	15.0%
MODERATE	9	45.0%
SEVERE	4	20.0%
VERY SEVERE	1	5.0%
<b>TOTAL</b>	<b>20</b>	<b>100.0%</b>

BY SEASON	PERCENT	
SPRING	1	10.0%
SUMMER	4	40.0%
FALL	2	20.0%
WINTER	3	30.0%
<b>TOTAL</b>	<b>10</b>	<b>100.0%</b>

Note: Wint=Dec-Feb, Spr=Mar-May, Sum=June-Aug, Fall=Sept-Nov

PERCENT OF CRASHES	
ALCOHOL RELATED	10.0%
SPEED RELATED	20.0%

VEHICLES INVOLVED	PERCENT
SINGLE VEHICLE	0.0%
TWO VEHICLES	100.0%
3 OR MORE VEHICLES	0.0%

Note: Statistics based on first and second vehicles in crashes.



## GENERAL INFORMATION

**ROADWAY AND LIMITS:** USH 14 (USH 51 to I-39)

**MUNICIPALITY:** Janesville

**COUNTY:** Rock

**STATE:** WI

**TADI PROJECT ID:** 1033

**CRASHES FROM:** 1/1/2006

**TO:** 12/31/2008

**PREPARED BY:** ACP

**DATE:** 5/17/2010

**DURATION**

3 YEARS

0 MONTHS

## SEGMENT CHARACTERISTICS

**ROADWAY TYPE:** URBAN STREET

**ROADWAY AADT: Year (2007)** 17,520

**SEGMENT LENGTH (MILES):** 2.5

**POSTED SPEED:** 45

**DEER CRASHES INCLUDED:** NO

**AREA TYPE:** URBAN

## CRASH STATISTICS

### CRASH FREQUENCY & SEVERITY

YEAR	PD	TYPE C	TYPE B	TYPE A	FATAL	TOTAL
2006	57	19	6	3	0	85
2007	68	29	11	1	0	109
2008	48	19	6	2	0	75

### ROAD CONDITIONS

ROAD CONDITIONS	PERCENT
DRY	65.1%
WET	20.1%
SNOW	10.0%
ICE	3.7%
MUD	0.0%
OTHER/UNK	1.1%
<b>TOTAL</b>	<b>100.0%</b>

TOTAL	173	67	23	6	0	269
PERCENT	64.3%	24.9%	8.6%	2.2%	0.0%	100.0%
YEAR AVG.	57.7	22.3	7.7	2.0	0.0	89.7

### CRASH TYPE

CRASH TYPE	PERCENT
ANGLE	38.3%
REAR-END	40.1%
HEAD-ON	1.1%
SS-SAME	6.3%
SS-OPPOSITE	0.7%
PEDESTRIAN	0.0%
BICYCLE	0.0%
FIXED	8.9%
NOT FIXED	0.0%
DEER	0.0%
OVERTURN	0.7%
OTHR/UNKN	3.7%
<b>TOTAL</b>	<b>100.0%</b>

CRASH RATES	per 100 MVM	WI STATEWIDE AVG YEAR(S):	2006-2008
TOTAL	561		245
FATAL	0.0		0.6
INJURY	200		77
TYPE A	12.5		5.6
TYPE B	48		24
TYPE C	140		48

LIGHT CONDITIONS	PERCENT
DAY	71.7%
DARK	28.3%
<b>TOTAL</b>	<b>100.0%</b>

Note: Dawn, dusk, or street lighted conditions included in dark total.

VEHICLE TYPES	PERCENT
CAR	75.6%
TRUCK	21.2%
OTHER/UNK	3.1%
<b>TOTAL</b>	<b>100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

### DAY AND TIME

DAY OF WEEK	EARLY	AM	MIDDAY	PM	EVENING	LATE	UNKNOWN	TOTAL	
	MORNING	PEAK		PEAK		EVENING			
	2:00 AM TO 5:59 AM	6:00 AM TO 9:59 AM	10:00 AM TO 1:59 PM	2:00 PM TO 5:59 PM	6:00 PM TO 9:59 PM	10:00 PM TO 1:59 AM			
MONDAY	1	7	9	16	3	0	1	37	Weekday
TUESDAY	1	3	9	13	6	1	0	33	
WEDNESDAY	2	2	8	19	7	3	0	41	
THURSDAY	0	5	12	10	4	0	1	32	
FRIDAY	1	6	9	15	11	5	2	49	
SATURDAY	1	2	25	13	7	4	0	52	Weekend
SUNDAY	2	0	10	8	4	1	0	25	
<b>TOTAL</b>	<b>8</b>	<b>25</b>	<b>82</b>	<b>94</b>	<b>42</b>	<b>14</b>	<b>4</b>	<b>269</b>	

DRIVER AGES	PERCENT
<25	25.5%
25-34	16.5%
35-44	19.3%
45-54	15.3%
55-64	10.0%
65-74	5.3%
75-84	5.1%
85+	0.4%
UNKNOWN	2.6%
<b>TOTAL</b>	<b>100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

VEHICLE DAMAGE	PERCENT
OTHER/UNK	2.8%
NONE	3.3%
VERY MINOR	9.4%
MINOR	22.2%
MODERATE	43.8%
SEVERE	13.2%
VERY SEVERE	5.3%
<b>TOTAL</b>	<b>100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

VEHICLES INVOLVED	PERCENT
SINGLE VEHICLE	10.8%
TWO VEHICLES	79.6%
3 OR MORE VEHICLES	9.7%

BY SEASON	PERCENT
SPRING	20.4%
SUMMER	23.8%
FALL	20.1%
WINTER	35.7%
<b>TOTAL</b>	<b>100.0%</b>

Note: Wint-Dec-Feb, Spr-Mar-May, Sum-June-Aug, Fall-Sept-Nov

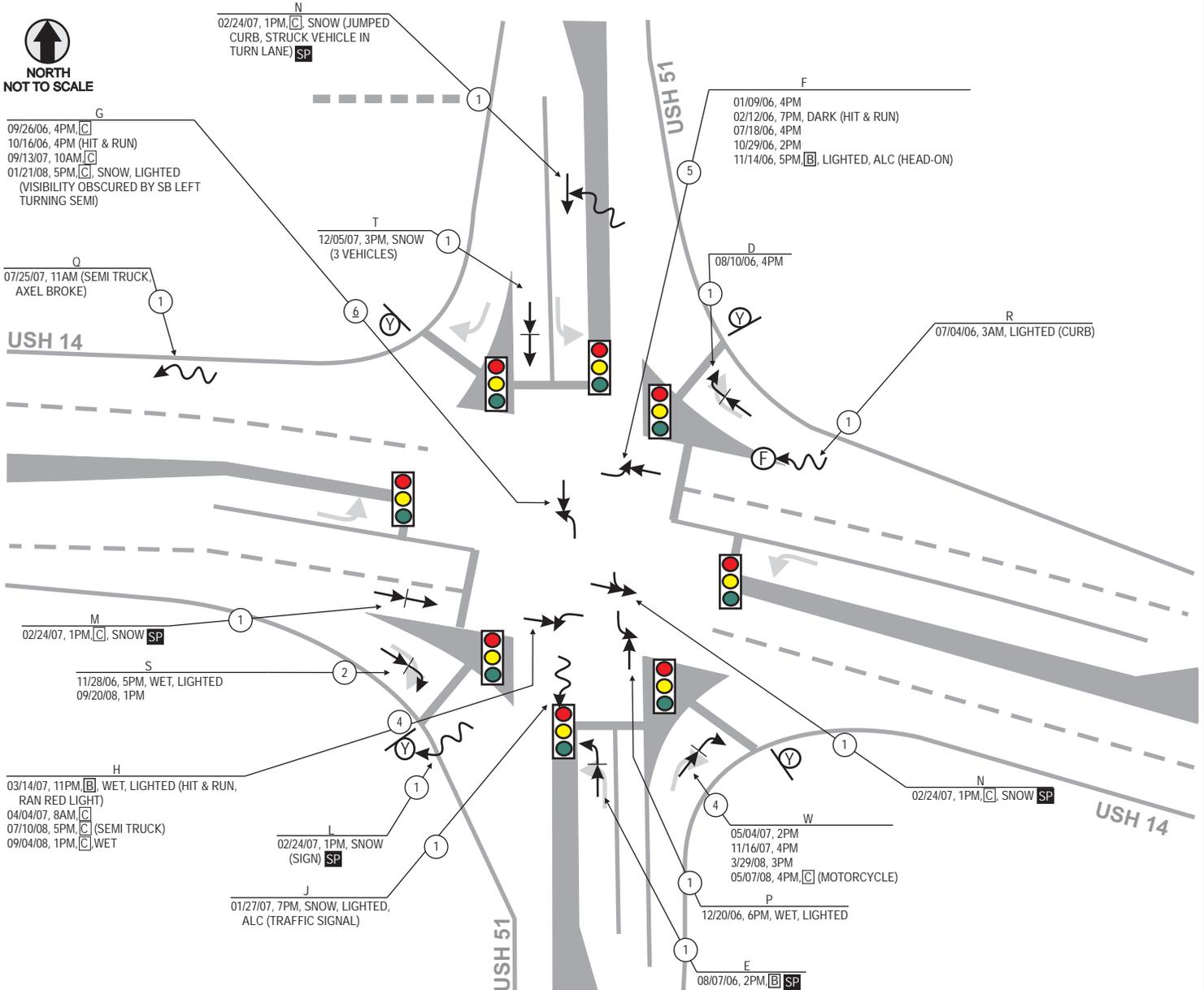
PERCENT OF CRASHES	PERCENT
ON HORIZONTAL CURVE	5.2%
ON VERTICAL CURVE	1.5%
AT INTERSECTION	72.9%
ALCOHOL RELATED	3.0%
SPEED RELATED	13.8%

**TRAFFIC ANALYSIS & DESIGN, INC.**



EXHIBIT DATE: 05-28-10

**EXHIBIT 7.4**  
**CRASH STATISTICS (2006-2008)**  
**SEGMENT 4 - USH 14 (USH 51 to IH-39)**  
**ROCK COUNTY, WISCONSIN**



NOTES: DEER CRASHES NOT INCLUDED.

**CRASH RATE**  
**1.23 Crashes**  
 Per Million  
 Entering Vehicles  
 Entering Vehicles: 21,600/day

**CRASH FREQUENCY/SEVERITY**  
**29**  
**Crashes**  
 0 Fatal Crash (K)  
 0 Incapacitating (Type A)  
 3 Non-Incapacitating (Type B)  
 9 Possible (Type C)  
 17 Property Damage Only

**LEGEND**

- Moving Vehicle
- ↔ Backing Vehicle
- - - Pedestrian
- ⋯ Bicyclist
- ☐ Parked Vehicle
- ⊙ Stop/Yield Sign
- ⊙ Tree
- ⊙ Utility Pole
- ⊙ Fixed Object
- ⊙ Non-Fixed Object
- ↔ Angle (Right Angle)
- ↔ Angle (Left Turn)
- ↔ Angle (Right Turn)
- ↔ Sideswipe-Same
- ↔ Sideswipe-Opposite
- ↔ Head-On
- ↔ Rear-End
- ↔ Out of Control
- ↔ Overtake
- ↔ Overtake

# = CRASH FREQUENCY

\*LETTER\* = USED FOR REFERENCING CRASHES IN REPORT AS NEEDED

DATE OF CRASH  
 HOUR  
 SEVERITY (SEE SEVERITY DEFINITIONS)  
 ROAD CONDITIONS (DRY IF BLANK)  
 LIGHT CONDITIONS (DAYTIME IF BLANK)  
 ALCOHOL INVOLVEMENT ("ALC" IF YES)  
 SPEED RELATED ("SP" IF YES)

**CRASH SEVERITY DEFINITIONS**

- ☐ = Fatal Crash
- ⊙ = Incapacitating Injury Crash
- ⊙ = Non-Incapacitating Injury Crash
- ⊙ = Possible Injury Crash
- ⊙ = Property Damage Only Crash

TRAFFIC ANALYSIS & DESIGN, INC.



EXHIBIT DATE: 05-28-10

**EXHIBIT 7.4.1a**  
**CRASH HISTORY (2006-2008)**  
**USH 51 INTERSECTION**  
**ROCKCOUNTY, WISCONSIN**

## GENERAL INFORMATION

<b>INTERSECTION:</b> USH 14 and USH 51	<b>DURATION:</b> 3 YEARS	
<b>MUNICIPALITY:</b> Janesville	<b>CRASHES FROM:</b> 1/1/2006	<b>TO:</b> 12/31/2008
<b>COUNTY:</b> Rock		<b>0 MONTHS</b>
<b>STATE:</b> WI	<b>PREPARED BY:</b> ACP	<b>DATE:</b> 4/28/2010
<b>TADI PROJECT ID:</b> 886-6		

## INTERSECTION CHARACTERISTICS

<b>TRAFFIC CONTROL:</b> TRAFFIC SIGNAL	<b>POSTED SPEED (MAJOR):</b> 45
<b>INTERSECTION AADT: Year (2007)</b> 21,600	<b>DEER CRASHES INCLUDED:</b> NO
<b>NUMBER OF LEGS:</b> 4	<b>AREA TYPE:</b> URBAN

## CRASH STATISTICS

### CRASH FREQUENCY & SEVERITY

YEAR	PD	TYPE C	TYPE B	TYPE A	FATAL	TOTAL
2006	9	1	2	0	0	12
2007	6	4	1	0	0	11
2008	2	4	0	0	0	6

ROAD CONDITIONS	PERCENT
DRY	65.5%
WET	13.8%
SNOW	20.7%
ICE	0.0%
MUD	0.0%
OTHER/UNK	0.0%
<b>TOTAL</b>	<b>29</b>

<b>TOTAL</b>	17	9	3	0	0	29
<b>PERCENT</b>	58.6%	31.0%	10.3%	0.0%	0.0%	100.0%
<b>YEAR AVG.</b>	5.7	3.0	1.0	0.0	0.0	9.7

CRASH TYPE	PERCENT
ANGLE	41.4%
REAR-END	34.5%
HEAD-ON	3.4%
SS-SAME	3.4%
SS-OPPOSITE	3.4%
PEDESTRIAN	0.0%
BICYCLE	0.0%
FIXED	10.3%
NOT FIXED	0.0%
DEER	0.0%
OVERTURN	0.0%
OTHR/UNKN	3.4%
<b>TOTAL</b>	<b>29</b>

CRASH RATES	per MEV	COMPARISON STATISTIC
TOTAL	1.23	0.96 Crashes per MEV
FATAL	0.00	The comparison rate shown above is the average crash rate from June 2005 Intersection Crash Summary for Wisconsin (Knapp & Campbell) for similar intersections (urban/rural, traffic control, and volume). This rate <u>should not be considered a statewide average</u> representative of all intersections in Wisconsin. Only intersections with (3 or more crashes in one year - rural areas, and 5 or more crashes in one year - urban areas) were included in the study (1,704 total intersections). The statewide average of all intersections would be expected to be lower than the comparison rate shown above.
INJURY	0.51	
TYPE A	0.00	
TYPE B	0.13	
TYPE C	0.38	

LIGHT CONDITIONS	PERCENT	VEHICLE TYPES	PERCENT
DAY	72.4%	CAR	75.9%
DARK	27.6%	TRUCK	22.2%
<b>TOTAL</b>	<b>100.0%</b>	OTHER/UNK	1.9%
		<b>TOTAL</b>	<b>54</b>

Note: Dawn, dusk, or street lighted conditions included in dark total.

Note: Statistics based on first and second vehicles in crashes.

### DAY AND TIME

DAY OF WEEK	EARLY MORNING	AM PEAK	MIDDAY	PM PEAK	EVENING	LATE EVENING	UNKNOWN	TOTAL	
	2:00 AM TO 5:59 AM	6:00 AM TO 9:59 AM	10:00 AM TO 1:59 PM	2:00 PM TO 5:59 PM	6:00 PM TO 9:59 PM	10:00 PM TO 1:59 AM			
	5:59 AM	9:59 AM	1:59 PM	5:59 PM	9:59 PM	1:59 AM			
MONDAY	0	0	0	4	0	0	0	4	Weekday
TUESDAY	1	0	0	4	0	0	0	5	
WEDNESDAY	0	1	1	2	1	1	0	6	
THURSDAY	0	0	2	2	0	0	0	4	
FRIDAY	0	0	0	2	0	0	0	2	
SATURDAY	0	0	4	1	1	0	0	6	Weekend
SUNDAY	0	0	0	1	1	0	0	2	
<b>TOTAL</b>	<b>1</b>	<b>1</b>	<b>7</b>	<b>16</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>29</b>	

DRIVER AGES	PERCENT
<25	16.7%
25-34	13.0%
35-44	35.2%
45-54	11.1%
55-64	11.1%
65-74	5.6%
75-84	5.6%
85+	0.0%
UNKNOWN	1.9%
<b>TOTAL</b>	<b>54</b>

Note: Statistics based on first and second vehicles in crashes.

VEHICLE DAMAGE	PERCENT
OTHER/UNK	1.9%
NONE	3.7%
VERY MINOR	0.0%
MINOR	18.5%
MODERATE	55.6%
SEVERE	11.1%
VERY SEVERE	9.3%
<b>TOTAL</b>	<b>54</b>

Note: Statistics based on first and second vehicles in crashes.

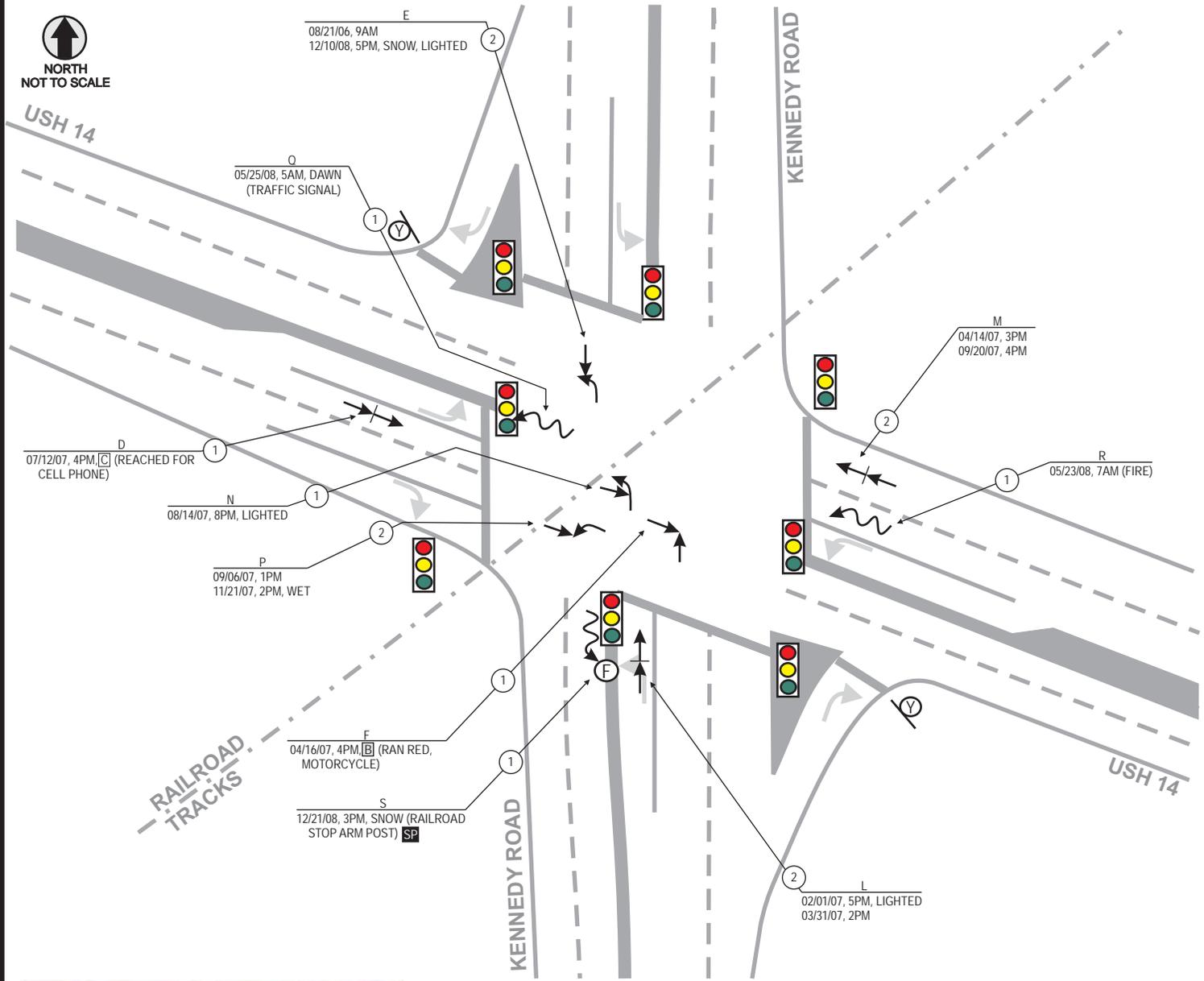
VEHICLES INVOLVED	PERCENT
SINGLE VEHICLE	13.8%
TWO VEHICLES	82.8%
3 OR MORE VEHICLES	3.4%

BY SEASON	PERCENT
SPRING	17.2%
SUMMER	20.7%
FALL	31.0%
WINTER	31.0%
<b>TOTAL</b>	<b>29</b>

Note: Wint=Dec-Feb, Spr=Mar-May, Sum=June-Aug, Fall=Sept-Nov

PERCENT OF CRASHES	PERCENT
ALCOHOL RELATED	6.9%
SPEED RELATED	13.8%





**CRASH RATE**  
 0.58 Crashes  
 Per Million  
 Entering Vehicles  
 Entering Vehicles: 22,200/day

NOTES: DEER CRASHES NOT INCLUDED.

**CRASH FREQUENCY/SEVERITY**

14 Crashes	0 Fatal Crash (K)
	0 Incapacitating (Type A)
	1 Non-Incapacitating (Type B)
	1 Possible (Type C)
	12 Property Damage Only

**LEGEND**

- Moving Vehicle
- ←←← Backing Vehicle
- Pedestrian
- ..... Bicyclist
- ▭ Parked Vehicle
- ⊙ Stop/Yield Sign
- ⊙ Tree
- ⊙ Utility Pole
- ⊙ Fixed Object
- ⊙ Non-Fixed Object
- ↔ Angle (Right Angle)
- ↔ Angle (Left Turn)
- ↔ Angle (Right Turn)
- ↔ Sideswipe-Same
- ↔ Sideswipe-Opposite
- ↔ Head-On
- ↔ Rear-End
- ⚡ Out of Control
- ↔ Overtake
- ↔ Overtake

# = CRASH FREQUENCY

\*"LETTER" = USED FOR REFERENCING CRASHES IN REPORT AS NEEDED

DATE OF CRASH  
 HOUR  
 SEVERITY (SEE SEVERITY DEFINITIONS)  
 ROAD CONDITIONS (DRY IF BLANK)  
 LIGHT CONDITIONS (DAYTIME IF BLANK)  
 ALCOHOL INVOLVEMENT ("ALC" IF YES)  
 SPEED RELATED ("SP" IF YES)

**CRASH SEVERITY DEFINITIONS**

- ⊙ = Fatal Crash
- ⊙ = Incapacitating Injury Crash
- ⊙ = Non-Incapacitating Injury Crash
- ⊙ = Possible Injury Crash
- ⊙ = Property Damage Only Crash



EXHIBIT DATE: 05-28-10

**EXHIBIT 7.4.2a**  
**CRASH HISTORY (2006-2008)**  
**KENNEDY ROAD INTERSECTION**  
**ROCK COUNTY, WISCONSIN**

## GENERAL INFORMATION

<b>INTERSECTION:</b> USH 14 and Kennedy Road	<b>DURATION</b>	
<b>MUNICIPALITY:</b> Janesville	<b>CRASHES FROM:</b> 1/1/2006	3 YEARS
<b>COUNTY:</b> Rock	<b>TO:</b> 12/31/2008	0 MONTHS
<b>STATE:</b> WI	<b>PREPARED BY:</b> ACP	<b>DATE:</b> 5/17/2010
<b>TADI PROJECT ID:</b> 886-6		

## INTERSECTION CHARACTERISTICS

<b>TRAFFIC CONTROL:</b> TRAFFIC SIGNAL	<b>POSTED SPEED (MAJOR):</b> 45
<b>INTERSECTION AADT: Year (2007)</b> 22,200	<b>DEER CRASHES INCLUDED:</b> NO
<b>NUMBER OF LEGS:</b> 4	<b>AREA TYPE:</b> URBAN

## CRASH STATISTICS

### CRASH FREQUENCY & SEVERITY

YEAR	PD	TYPE C	TYPE B	TYPE A	FATAL	TOTAL
2006	1	0	0	0	0	1
2007	7	1	1	0	0	9
2008	4	0	0	0	0	4

ROAD CONDITIONS		PERCENT
DRY	11	78.6%
WET	1	7.1%
SNOW	2	14.3%
ICE	0	0.0%
MUD	0	0.0%
OTHER/UNK	0	0.0%
<b>TOTAL</b>	<b>14</b>	<b>100.0%</b>

TOTAL	12	1	1	0	0	14
<b>PERCENT</b>	<b>85.7%</b>	<b>7.1%</b>	<b>7.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100.0%</b>
<b>YEAR AVG.</b>	<b>4.0</b>	<b>0.3</b>	<b>0.3</b>	<b>0.0</b>	<b>0.0</b>	<b>4.7</b>

CRASH TYPE		PERCENT
ANGLE	5	35.7%
REAR-END	5	35.7%
HEAD-ON	0	0.0%
SS-SAME	0	0.0%
SS-OPPOSITE	1	7.1%
PEDESTRIAN	0	0.0%
BICYCLE	0	0.0%
FIXED	2	14.3%
NOT FIXED	0	0.0%
DEER	0	0.0%
OVERTURN	0	0.0%
OTHR/UNKN	1	7.1%
<b>TOTAL</b>	<b>14</b>	<b>100.0%</b>

CRASH RATES	per MEV	COMPARISON STATISTIC
TOTAL	0.58	0.96 Crashes per MEV
FATAL	0.00	The comparison rate shown above is the average crash rate from June 2005 Intersection Crash Summary for Wisconsin (Knapp & Campbell) for similar intersections (urban/rural, traffic control, and volume). This rate <u>should not be considered a statewide average</u> representative of all intersections in Wisconsin. Only intersections with (3 or more crashes in one year - rural areas, and 5 or more crashes in one year - urban areas) were included in the study (1,704 total intersections). The statewide average of all intersections would be expected to be lower than the comparison rate shown above.
INJURY	0.08	
TYPE A	0.00	
TYPE B	0.04	
TYPE C	0.04	

LIGHT CONDITIONS		PERCENT	VEHICLE TYPES		PERCENT
DAY	10	71.4%	CAR	20	80.0%
DARK	4	28.6%	TRUCK	4	16.0%
<b>TOTAL</b>	<b>14</b>	<b>100.0%</b>	OTHER/UNK	1	4.0%
			<b>TOTAL</b>	<b>25</b>	<b>100.0%</b>

Note: Dawn, dusk, or street lighted conditions included in dark total.

Note: Statistics based on first and second vehicles in crashes.

### DAY AND TIME

DAY OF WEEK	EARLY	AM	MIDDAY	PM	EVENING	LATE	UNKNOWN	TOTAL	
	MORNING	PEAK		PEAK		EVENING			
	2:00 AM TO 5:59 AM	6:00 AM TO 9:59 AM	10:00 AM TO 1:59 PM	2:00 PM TO 5:59 PM	6:00 PM TO 9:59 PM	10:00 PM TO 1:59 AM			
MONDAY	0	1	0	1	0	0	0	2	Weekday
TUESDAY	0	0	0	1	1	0	0	2	
WEDNESDAY	0	0	0	2	0	0	0	2	
THURSDAY	0	0	1	3	0	0	0	4	
FRIDAY	0	1	0	0	0	0	0	1	
SATURDAY	0	0	0	1	0	0	0	1	Weekend
SUNDAY	1	0	0	1	0	0	0	2	
<b>TOTAL</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>9</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>14</b>	

DRIVER AGES		PERCENT
<25	7	28.0%
25-34	8	32.0%
35-44	3	12.0%
45-54	4	16.0%
55-64	3	12.0%
65-74	0	0.0%
75-84	0	0.0%
85+	0	0.0%
UNKNOWN	0	0.0%
<b>TOTAL</b>	<b>25</b>	<b>100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

VEHICLE DAMAGE		PERCENT
OTHER/UNK	0	0.0%
NONE	1	4.0%
VERY MINOR	3	12.0%
MINOR	5	20.0%
MODERATE	10	40.0%
SEVERE	4	16.0%
VERY SEVERE	2	8.0%
<b>TOTAL</b>	<b>25</b>	<b>100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

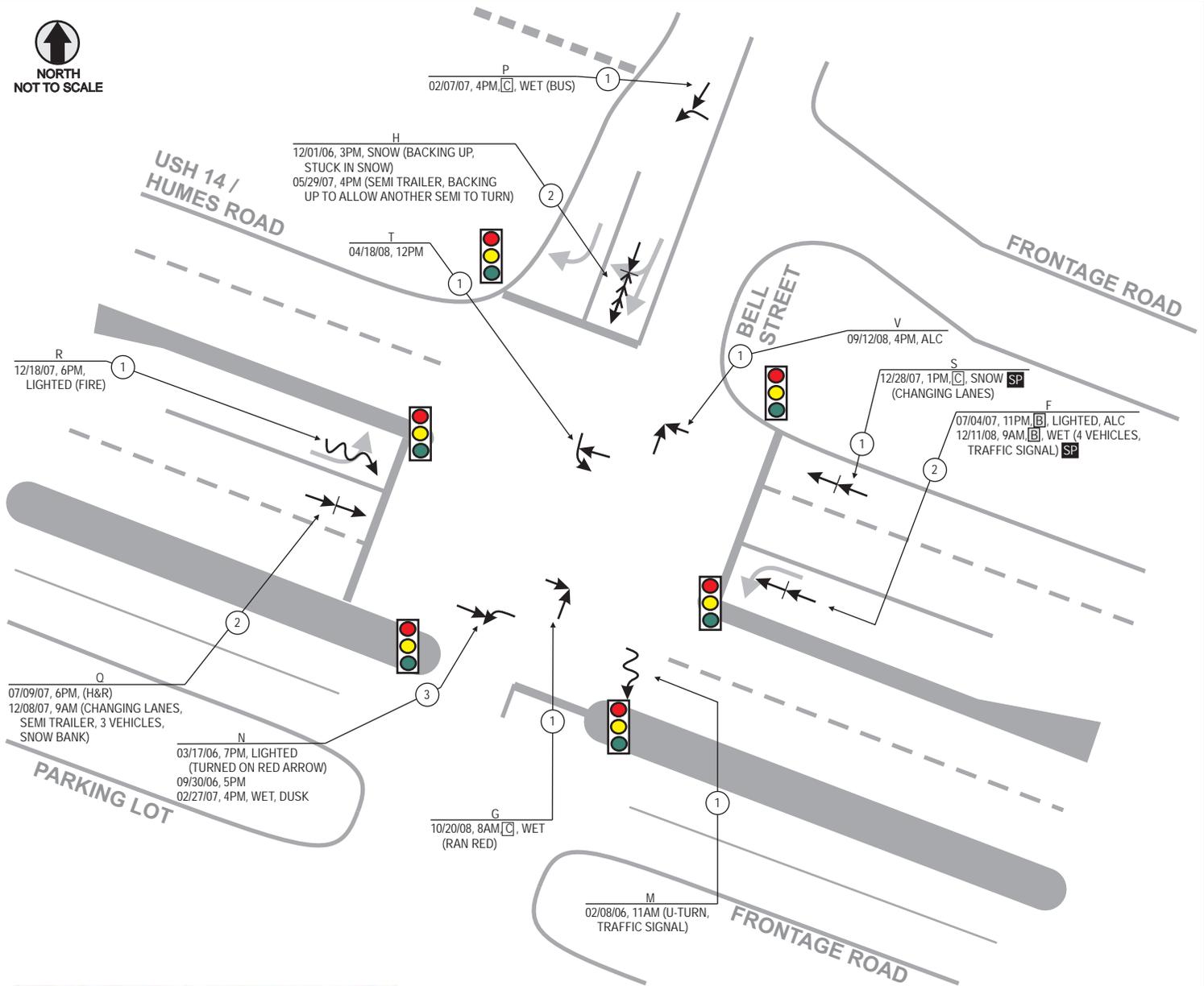
VEHICLES INVOLVED		PERCENT
SINGLE VEHICLE		21.4%
TWO VEHICLES		78.6%
3 OR MORE VEHICLES		0.0%

BY SEASON		PERCENT
SPRING	5	35.7%
SUMMER	3	21.4%
FALL	3	21.4%
WINTER	3	21.4%
<b>TOTAL</b>	<b>14</b>	<b>100.0%</b>

Note: Wint=Dec-Feb, Spr=Mar-May, Sum=June-Aug, Fall=Sept-Nov

PERCENT OF CRASHES		PERCENT
ALCOHOL RELATED		0.0%
SPEED RELATED		7.1%





NOTES: DEER CRASHES NOT INCLUDED.

**CRASH RATE**  
**0.79 Crashes**  
 Per Million  
 Entering Vehicles  
 Entering Vehicles: 18,600/day

**CRASH FREQUENCY/SEVERITY**  
**16 Crashes**  
 0 Fatal Crash (K)  
 0 Incapacitating (Type A)  
 2 Non-Incapacitating (Type B)  
 3 Possible (Type C)  
 11 Property Damage Only

**LEGEND**

→ Moving Vehicle	⊙ Stop/Yield Sign	↘ Angle (Right Angle)	↔ Head-On
↔ Backing Vehicle	⊙ Tree	↙ Angle (Left Turn)	↔ Rear-End
- - - Pedestrian	⊙ Utility Pole	↘ Angle (Right Turn)	⚡ Out of Control
⋯ Bicyclist	⊙ Fixed Object	↔ Sideswipe-Same	↔ Overtake
▭ Parked Vehicle	⊙ Non-Fixed Object	↔ Sideswipe-Opposite	↔ Overtake

# = CRASH FREQUENCY

**CRASH SEVERITY DEFINITIONS**

\*"LETTER" = USED FOR REFERENCING CRASHES IN REPORT AS NEEDED

DATE OF CRASH  
 HOUR  
 SEVERITY (SEE SEVERITY DEFINITIONS)  
 ROAD CONDITIONS (DRY IF BLANK)  
 LIGHT CONDITIONS (DAYTIME IF BLANK)  
 ALCOHOL INVOLVEMENT ("ALC" IF YES)  
 SPEED RELATED ("SP" IF YES)

⊙ = Fatal Crash  
 ⊙ = Incapacitating Injury Crash  
 ⊙ = Non-Incapacitating Injury Crash  
 ⊙ = Possible Injury Crash  
 ⊙ = Property Damage Only Crash

TRAFFIC ANALYSIS & DESIGN, INC.



EXHIBIT DATE: 05-28-10

**EXHIBIT 7.4.3a**  
**CRASH HISTORY (2006-2008)**  
**BELL STREET INTERSECTION**  
**ROCK COUNTY, WISCONSIN**

## GENERAL INFORMATION

<b>INTERSECTION:</b> USH 14 and Bell Street	<b>CRASHES FROM:</b> 1/1/2006	<b>DURATION:</b> 3 YEARS
<b>MUNICIPALITY:</b> Janesville	<b>TO:</b> 12/31/2008	0 MONTHS
<b>COUNTY:</b> Rock	<b>PREPARED BY:</b> ACP	<b>DATE:</b> 5/17/2010
<b>STATE:</b> WI		
<b>TADI PROJECT ID:</b> 886-6		

## INTERSECTION CHARACTERISTICS

<b>TRAFFIC CONTROL:</b> TRAFFIC SIGNAL	<b>POSTED SPEED (MAJOR):</b> 45
<b>INTERSECTION AADT: Year (2007)</b> 18,600	<b>DEER CRASHES INCLUDED:</b> NO
<b>NUMBER OF LEGS:</b> 4	<b>AREA TYPE:</b> URBAN

## CRASH STATISTICS

### CRASH FREQUENCY & SEVERITY

YEAR	PD	TYPE C	TYPE B	TYPE A	FATAL	TOTAL
2006	4	0	0	0	0	4
2007	5	2	1	0	0	8
2008	2	1	1	0	0	4

ROAD CONDITIONS	PERCENT
DRY	62.5%
WET	25.0%
SNOW	12.5%
ICE	0.0%
MUD	0.0%
OTHER/UNK	0.0%
<b>TOTAL</b>	<b>100.0%</b>

TOTAL	11	3	2	0	0	16
<b>PERCENT</b>	<b>68.8%</b>	<b>18.8%</b>	<b>12.5%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100.0%</b>
<b>YEAR AVG.</b>	<b>3.7</b>	<b>1.0</b>	<b>0.7</b>	<b>0.0</b>	<b>0.0</b>	<b>5.3</b>

CRASH TYPE	PERCENT
ANGLE	37.5%
REAR-END	37.5%
HEAD-ON	6.3%
SS-SAME	0.0%
SS-OPPOSITE	0.0%
PEDESTRIAN	0.0%
BICYCLE	0.0%
FIXED	6.3%
NOT FIXED	0.0%
DEER	0.0%
OVERTURN	0.0%
OTHR/UNKN	12.5%
<b>TOTAL</b>	<b>100.0%</b>

### CRASH RATES

CRASH RATES	per MEV	COMPARISON STATISTIC
TOTAL	0.79	0.96 Crashes per MEV
FATAL	0.00	The comparison rate shown above is the average crash rate from June 2005 Intersection Crash Summary for Wisconsin (Knapp & Campbell) for similar intersections (urban/rural, traffic control, and volume). This rate <u>should not be considered a statewide average</u> representative of all intersections in Wisconsin. Only intersections with (3 or more crashes in one year - rural areas, and 5 or more crashes in one year - urban areas) were included in the study (1,704 total intersections). The statewide average of all intersections would be expected to be lower than the comparison rate shown above.
INJURY	0.25	
TYPE A	0.00	
TYPE B	0.10	
TYPE C	0.15	

LIGHT CONDITIONS	PERCENT
DAY	75.0%
DARK	25.0%
<b>TOTAL</b>	<b>100.0%</b>

Note: Dawn, dusk, or street lighted conditions included in dark total.

VEHICLE TYPES	PERCENT
CAR	56.7%
TRUCK	40.0%
OTHER/UNK	3.3%
<b>TOTAL</b>	<b>100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

### DAY AND TIME

DAY OF WEEK	EARLY MORNING	AM PEAK	MIDDAY	PM PEAK	EVENING	LATE EVENING	UNKNOWN	TOTAL	
	2:00 AM TO 5:59 AM	6:00 AM TO 9:59 AM	10:00 AM TO 1:59 PM	2:00 PM TO 5:59 PM	6:00 PM TO 9:59 PM	10:00 PM TO 1:59 AM			
	5:59 AM	9:59 AM	1:59 PM	5:59 PM	9:59 PM	1:59 AM			
MONDAY	0	1	0	0	1	0	0	2	Weekday
TUESDAY	0	0	0	2	1	0	0	3	
WEDNESDAY	0	0	1	1	0	1	0	3	
THURSDAY	0	1	0	0	0	0	0	1	
FRIDAY	0	0	2	2	1	0	0	5	
SATURDAY	0	1	0	1	0	0	0	2	Weekend
SUNDAY	0	0	0	0	0	0	0	0	
<b>TOTAL</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>6</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>16</b>	

DRIVER AGES	PERCENT
<25	30.0%
25-34	10.0%
35-44	20.0%
45-54	20.0%
55-64	6.7%
65-74	10.0%
75-84	0.0%
85+	0.0%
UNKNOWN	3.3%
<b>TOTAL</b>	<b>100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

VEHICLE DAMAGE	PERCENT
OTHER/UNK	10.0%
NONE	3.3%
VERY MINOR	3.3%
MINOR	30.0%
MODERATE	43.3%
SEVERE	3.3%
VERY SEVERE	6.7%
<b>TOTAL</b>	<b>100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

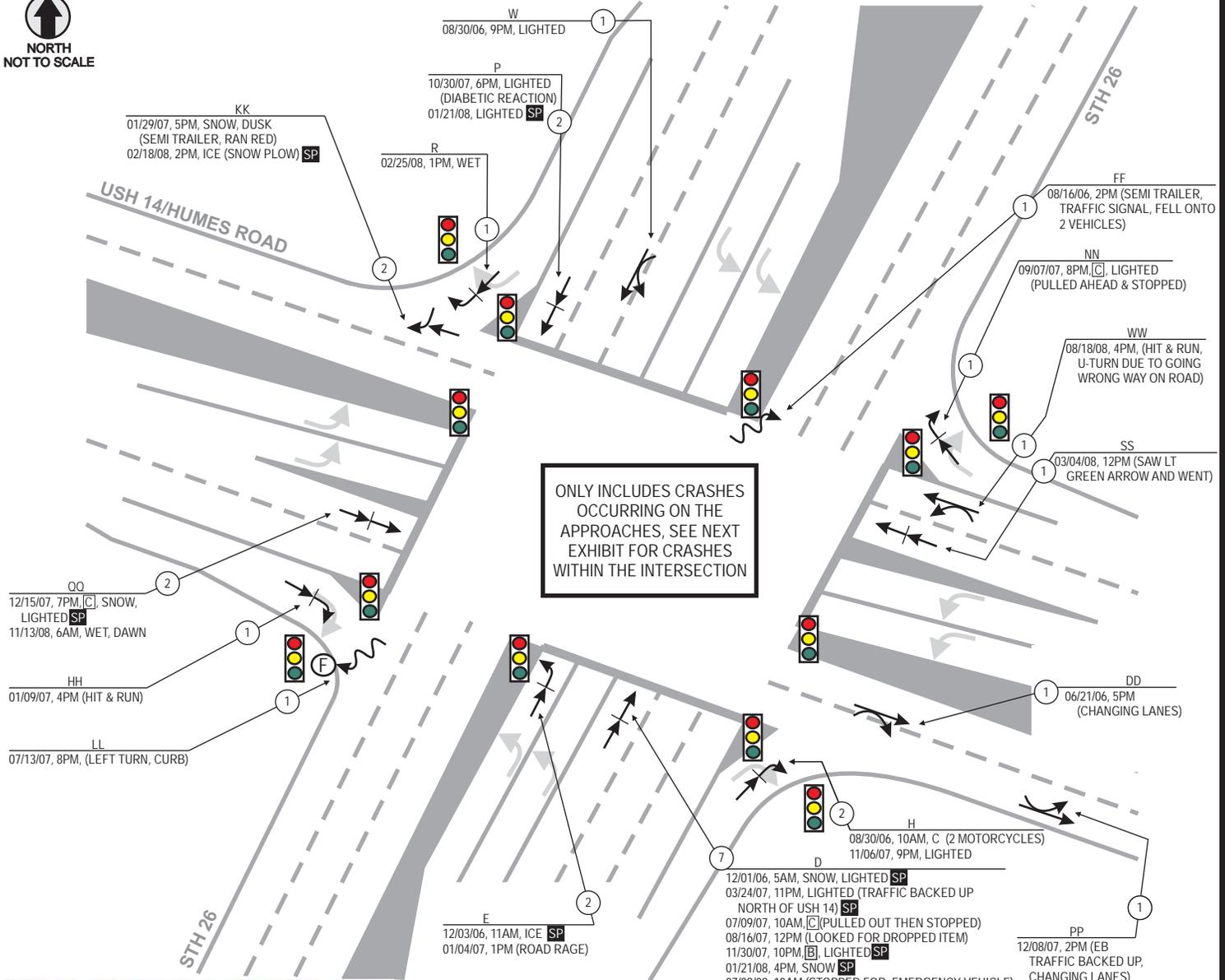
VEHICLES INVOLVED	PERCENT
SINGLE VEHICLE	12.5%
TWO VEHICLES	75.0%
3 OR MORE VEHICLES	12.5%

BY SEASON	PERCENT
SPRING	18.8%
SUMMER	12.5%
FALL	18.8%
WINTER	50.0%
<b>TOTAL</b>	<b>100.0%</b>

Note: Wint=Dec-Feb, Spr=Mar-May, Sum=June-Aug, Fall=Sept-Nov

PERCENT OF CRASHES	PERCENT
ALCOHOL RELATED	12.5%
SPEED RELATED	12.5%





ONLY INCLUDES CRASHES OCCURRING ON THE APPROACHES, SEE NEXT EXHIBIT FOR CRASHES WITHIN THE INTERSECTION



**CRASH RATE**  
**0.96 Crashes**  
 Per Million  
 Entering Vehicles  
 Entering Vehicles: 47,500/day

NOTES: DEER CRASHES NOT INCLUDED.

**CRASH FREQUENCY/SEVERITY**

50 Crashes	0 Fatal Crash (K)
	0 Incapacitating (Type A)
	5 Non-Incapacitating (Type B)
	11 Possible (Type C)
	34 Property Damage Only

**LEGEND**

→ Moving Vehicle	⊙ Stop/Yield Sign	↔ Angle (Right Angle)	↔ Head-On
←← Backing Vehicle	⊙ Tree	↔ Angle (Left Turn)	↔ Rear-End
- - - Pedestrian	⊙ Utility Pole	↔ Angle (Right Turn)	⚡ Out of Control
⋯ Bicyclist	⊙ Fixed Object	↔ Sideswipe-Same	↔ Overtake
⊠ Parked Vehicle	⊙ Non-Fixed Object	↔ Sideswipe-Opposite	↔ Overtake

# = CRASH FREQUENCY

**CRASH SEVERITY DEFINITIONS**

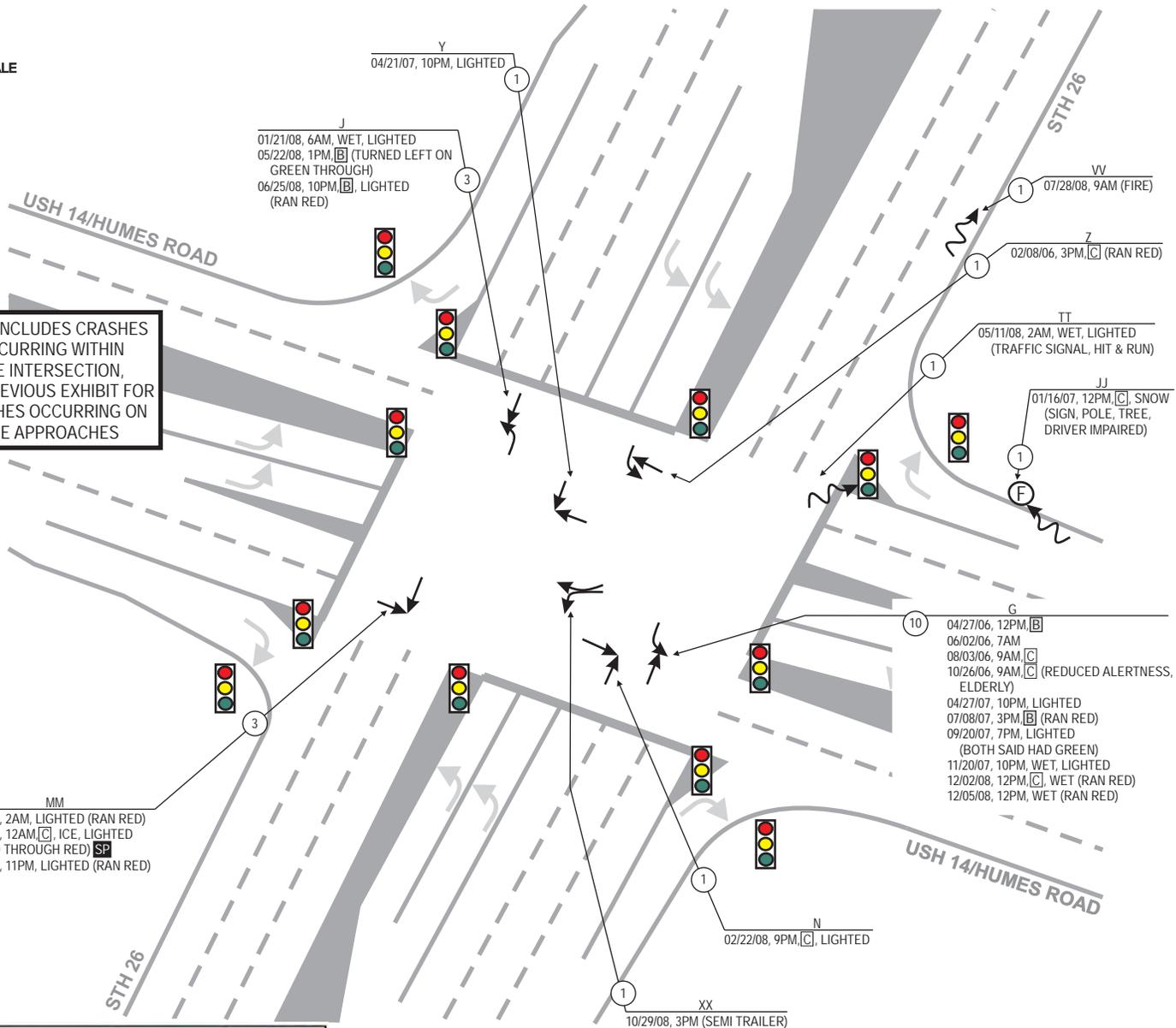
\*LETTER\* = USED FOR REFERENCING CRASHES IN REPORT AS NEEDED

DATE OF CRASH  
 HOUR  
 SEVERITY (SEE SEVERITY DEFINITIONS)  
 ROAD CONDITIONS (DRY IF BLANK)  
 LIGHT CONDITIONS (DAYTIME IF BLANK)  
 ALCOHOL INVOLVEMENT ("ALC" IF YES)  
 SPEED RELATED ("SP" IF YES)

⊠ = Fatal Crash  
 ⊠ = Incapacitating Injury Crash  
 ⊠ = Non-Incapacitating Injury Crash  
 ⊠ = Possible Injury Crash  
 ⊠ = Property Damage Only Crash



ONLY INCLUDES CRASHES OCCURRING WITHIN THE INTERSECTION, SEE PREVIOUS EXHIBIT FOR CRASHES OCCURRING ON THE APPROACHES



NOTES: DEER CRASHES NOT INCLUDED.



**CRASH RATE**  
SEE EXHIBIT 7.4.4a

**CRASH FREQUENCY/SEVERITY**  
SEE EXHIBIT 7.4.4a

**LEGEND**

- Moving Vehicle
- ↔ Backing Vehicle
- - - Pedestrian
- ⋯ Bicyclist
- [ ] Parked Vehicle
- ⊙ Stop/Yield Sign
- ⊙ Tree
- ⊙ Utility Pole
- ⊙ Fixed Object
- ⊙ Non-Fixed Object
- ↔ Angle (Right Angle)
- ↔ Angle (Left Turn)
- ↔ Angle (Right Turn)
- ↔ Sideswipe-Same
- ↔ Sideswipe-Opposite
- ↔ Head-On
- ↔ Rear-End
- ⚡ Out of Control
- ↔ Overtake
- ↔ Overtake

# = CRASH FREQUENCY

\*"LETTER" = USED FOR REFERENCING CRASHES IN REPORT AS NEEDED

DATE OF CRASH  
HOUR  
SEVERITY (SEE SEVERITY DEFINITIONS)  
ROAD CONDITIONS (DRY IF BLANK)  
LIGHT CONDITIONS (DAYTIME IF BLANK)  
ALCOHOL INVOLVEMENT ("ALC" IF YES)  
SPEED RELATED ("SP" IF YES)

**CRASH SEVERITY DEFINITIONS**

- [K] = Fatal Crash
- [A] = Incapacitating Injury Crash
- [B] = Non-Incapacitating Injury Crash
- [C] = Possible Injury Crash
- [P] = Property Damage Only Crash

TRAFFIC ANALYSIS & DESIGN, INC.



EXHIBIT DATE: 05-28-10

**EXHIBIT 7.4.4b**  
**CRASH HISTORY (2006-2008)**  
**STH 26 INTERSECTION**  
**ROCK COUNTY, WISCONSIN**

## GENERAL INFORMATION

<b>INTERSECTION:</b> USH 14 and STH 26/Milton Ave.	<b>DURATION</b>	
<b>MUNICIPALITY:</b> Janesville	<b>CRASHES FROM:</b> 1/1/2006	5 YEARS
<b>COUNTY:</b> Rock	<b>TO:</b> 12/31/2008	0 MONTHS
<b>STATE:</b> WI	<b>PREPARED BY:</b> ACP	<b>DATE:</b> 5/17/2010
<b>TADI PROJECT ID:</b> 886-6		

## INTERSECTION CHARACTERISTICS

<b>TRAFFIC CONTROL:</b> TRAFFIC SIGNAL	<b>POSTED SPEED (MAJOR):</b> 45
<b>INTERSECTION AADT: Year (2007)</b> 47,500	<b>DEER CRASHES INCLUDED:</b> NO
<b>NUMBER OF LEGS:</b> 4	<b>AREA TYPE:</b> URBAN

## CRASH STATISTICS

### CRASH FREQUENCY & SEVERITY

YEAR	PD	TYPE C	TYPE B	TYPE A	FATAL	TOTAL
2006	6	4	1	0	0	11
2007	14	4	2	0	0	20
2008	14	3	2	0	0	19

ROAD CONDITIONS	PERCENT	
DRY	34	68.0%
WET	7	14.0%
SNOW	5	10.0%
ICE	3	6.0%
MUD	0	0.0%
OTHER/UNK	1	2.0%
<b>TOTAL</b>	<b>50</b>	<b>100.0%</b>

TOTAL	34	11	5	0	0	50
<b>PERCENT</b>	<b>68.0%</b>	<b>22.0%</b>	<b>10.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100.0%</b>
<b>YEAR AVG.</b>	<b>11.3</b>	<b>3.7</b>	<b>1.7</b>	<b>0.0</b>	<b>0.0</b>	<b>16.7</b>

CRASH TYPE	PERCENT	
ANGLE	20	40.0%
REAR-END	18	36.0%
HEAD-ON	0	0.0%
SS-SAME	6	12.0%
SS-OPPOSITE	0	0.0%
PEDESTRIAN	0	0.0%
BICYCLE	0	0.0%
FIXED	4	8.0%
NOT FIXED	0	0.0%
DEER	0	0.0%
OVERTURN	0	0.0%
OTHR/UNKN	2	4.0%
<b>TOTAL</b>	<b>50</b>	<b>100.0%</b>

CRASH RATES	per MEV	COMPARISON STATISTIC
TOTAL	0.96	0.91 Crashes per MEV
FATAL	0.00	The comparison rate shown above is the average crash rate from June 2005 Intersection Crash Summary for Wisconsin (Knapp & Campbell) for similar intersections (urban/rural, traffic control, and volume). This rate <u>should not be considered a statewide average</u> representative of all intersections in Wisconsin. Only intersections with (3 or more crashes in one year - rural areas, and 5 or more crashes in one year - urban areas) were included in the study (1,704 total intersections). The statewide average of all intersections would be expected to be lower than the comparison rate shown above.
INJURY	0.31	
TYPE A	0.00	
TYPE B	0.10	
TYPE C	0.21	

LIGHT CONDITIONS		PERCENT	VEHICLE TYPES		PERCENT
DAY	28	56.0%	CAR	77	80.2%
DARK	22	44.0%	TRUCK	16	16.7%
<b>TOTAL</b>	<b>50</b>	<b>100.0%</b>	OTHER/UNK	3	3.1%
			<b>TOTAL</b>	<b>96</b>	<b>100.0%</b>

Note: Dawn, dusk, or street lighted conditions included in dark total.

Note: Statistics based on first and second vehicles in crashes.

### DAY AND TIME

DAY OF WEEK	EARLY	AM	MIDDAY	PM	EVENING	LATE	UNKNOWN	TOTAL	
	MORNING	PEAK		PEAK		EVENING			
	2:00 AM TO 5:59 AM	6:00 AM TO 9:59 AM	10:00 AM TO 1:59 PM	2:00 PM TO 5:59 PM	6:00 PM TO 9:59 PM	10:00 PM TO 1:59 AM			
MONDAY	1	2	2	4	1	0	0	10	Weekday
TUESDAY	0	0	3	1	2	1	0	7	
WEDNESDAY	0	0	2	4	1	1	0	8	
THURSDAY	0	3	4	0	1	0	0	8	
FRIDAY	1	1	1	0	3	3	0	9	
SATURDAY	0	0	0	1	1	3	0	5	Weekend
SUNDAY	1	0	1	1	0	0	0	3	
<b>TOTAL</b>	<b>3</b>	<b>6</b>	<b>13</b>	<b>11</b>	<b>9</b>	<b>8</b>	<b>0</b>	<b>50</b>	

DRIVER AGES	PERCENT	
<25	30	31.3%
25-34	12	12.5%
35-44	15	15.6%
45-54	18	18.8%
55-64	9	9.4%
65-74	5	5.2%
75-84	5	5.2%
85+	0	0.0%
UNKNOWN	2	2.1%
<b>TOTAL</b>	<b>96</b>	<b>100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

VEHICLE DAMAGE	PERCENT	
OTHER/UNK	1	1.0%
NONE	4	4.2%
VERY MINOR	10	10.4%
MINOR	25	26.0%
MODERATE	42	43.8%
SEVERE	8	8.3%
VERY SEVERE	6	6.3%
<b>TOTAL</b>	<b>96</b>	<b>100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

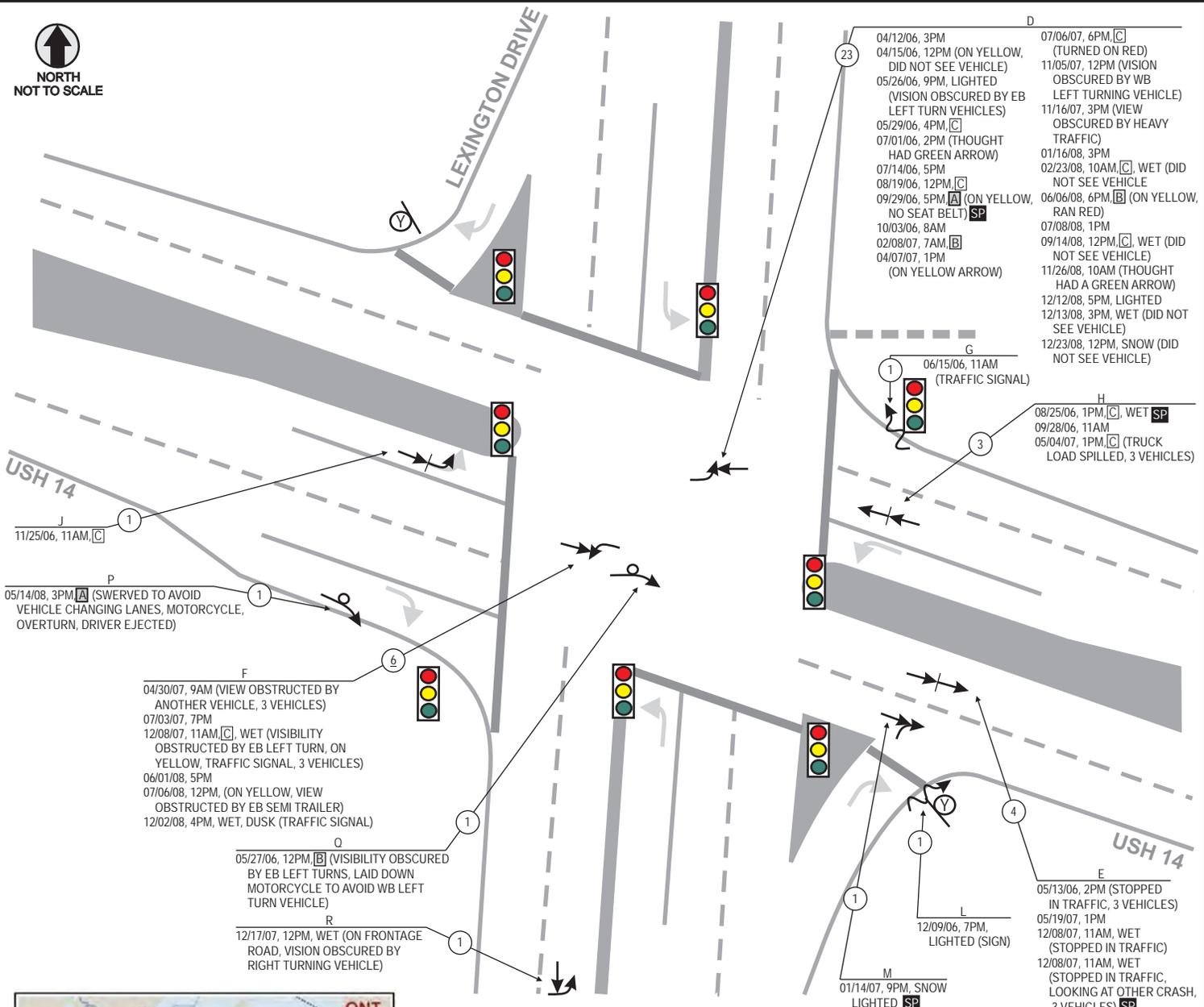
VEHICLES INVOLVED	PERCENT
SINGLE VEHICLE	8.0%
TWO VEHICLES	88.0%
3 OR MORE VEHICLES	4.0%

BY SEASON	PERCENT	
SPRING	7	14.0%
SUMMER	15	30.0%
FALL	9	18.0%
WINTER	19	38.0%
<b>TOTAL</b>	<b>50</b>	<b>100.0%</b>

Note: Wint=Dec-Feb, Spr=Mar-May, Sum=June-Aug, Fall=Sept-Nov

PERCENT OF CRASHES	
ALCOHOL RELATED	0.0%
SPEED RELATED	18.0%





**CRASH RATE**  
**1.74 Crashes**  
 Per Million  
 Entering Vehicles  
 Entering Vehicles: 22,550/day

**CRASH FREQUENCY/SEVERITY**  
**43 Crashes**  
 0 Fatal Crash (K)  
 2 Incapacitating (Type A)  
 3 Non-Incapacitating (Type B)  
 9 Possible (Type C)  
 29 Property Damage Only

NOTES: DEER CRASHES NOT INCLUDED.

**LEGEND**

- Moving Vehicle
- ←←← Backing Vehicle
- Pedestrian
- ..... Bicyclist
- ▭ Parked Vehicle
- ⊙ Stop/Yield Sign
- ⊙ Tree
- ⊙ Utility Pole
- ⊙ Fixed Object
- ⊙ Non-Fixed Object
- ↔ Angle (Right Angle)
- ↔ Angle (Left Turn)
- ↔ Angle (Right Turn)
- ↔ Sideswipe-Same
- ↔ Sideswipe-Opposite
- ↔ Head-On
- ↔ Rear-End
- ↔ Out of Control
- ↔ Overtake
- ↔ Overtake

# = CRASH FREQUENCY

\*"LETTER" = USED FOR REFERENCING CRASHES IN REPORT AS NEEDED

DATE OF CRASH  
 HOUR  
 SEVERITY (SEE SEVERITY DEFINITIONS)  
 ROAD CONDITIONS (DRY IF BLANK)  
 LIGHT CONDITIONS (DAYTIME IF BLANK)  
 ALCOHOL INVOLVEMENT ("ALC" IF YES)  
 SPEED RELATED ("SP" IF YES)

**CRASH SEVERITY DEFINITIONS**

- [K] = Fatal Crash
- [A] = Incapacitating Injury Crash
- [B] = Non-Incapacitating Injury Crash
- [C] = Possible Injury Crash
- [SP] = Property Damage Only Crash



EXHIBIT DATE: 05-28-10

**EXHIBIT 7.4.5a**  
**CRASH HISTORY (2006-2008)**  
**LEXINGTON DRIVE INTERSECTION**  
**ROCK COUNTY, WISCONSIN**

## GENERAL INFORMATION

<b>INTERSECTION:</b> USH 14 and Lexington Drive	<b>DURATION:</b> 3 YEARS	
<b>MUNICIPALITY:</b> Janesville	<b>CRASHES FROM:</b> 1/1/2006	<b>TO:</b> 12/31/2008
<b>COUNTY:</b> Rock		<b>0 MONTHS</b>
<b>STATE:</b> WI	<b>PREPARED BY:</b> ACP	<b>DATE:</b> 5/17/2010
<b>TADI PROJECT ID:</b> 886-6		

## INTERSECTION CHARACTERISTICS

<b>TRAFFIC CONTROL:</b> TRAFFIC SIGNAL	<b>POSTED SPEED (MAJOR):</b> 45
<b>INTERSECTION AADT: Year (2007)</b> 22,550	<b>DEER CRASHES INCLUDED:</b> NO
<b>NUMBER OF LEGS:</b> 4	<b>AREA TYPE:</b> URBAN

## CRASH STATISTICS

### CRASH FREQUENCY & SEVERITY

YEAR	PD	TYPE C	TYPE B	TYPE A	FATAL	TOTAL
2006	10	4	1	1	0	16
2007	10	3	1	0	0	14
2008	9	2	1	1	0	13

### ROAD CONDITIONS

ROAD CONDITIONS	PERCENT
DRY	72.1%
WET	20.9%
SNOW	4.7%
ICE	0.0%
MUD	0.0%
OTHER/UNK	2.3%
<b>TOTAL</b>	<b>100.0%</b>

TOTAL	29	9	3	2	0	43
<b>PERCENT</b>	<b>67.4%</b>	<b>20.9%</b>	<b>7.0%</b>	<b>4.7%</b>	<b>0.0%</b>	<b>100.0%</b>
<b>YEAR AVG.</b>	<b>9.7</b>	<b>3.0</b>	<b>1.0</b>	<b>0.7</b>	<b>0.0</b>	<b>14.3</b>

### CRASH TYPE

CRASH TYPE	PERCENT
ANGLE	69.8%
REAR-END	18.6%
HEAD-ON	0.0%
SS-SAME	2.3%
SS-OPPOSITE	0.0%
PEDESTRIAN	0.0%
BICYCLE	0.0%
FIXED	4.7%
NOT FIXED	0.0%
DEER	0.0%
OVERTURN	0.0%
OTHR/UNKN	4.7%
<b>TOTAL</b>	<b>100.0%</b>

### CRASH RATES

CRASH RATES	per MEV	COMPARISON STATISTIC
TOTAL	1.74	0.96 Crashes per MEV
FATAL	0.00	The comparison rate shown above is the average crash rate from June 2005 Intersection Crash Summary for Wisconsin (Knapp & Campbell) for similar intersections (urban/rural, traffic control, and volume). This rate should not be considered a statewide average representative of all intersections in Wisconsin. Only intersections with (3 or more crashes in one year - rural areas, and 5 or more crashes in one year - urban areas) were included in the study (1,704 total intersections). The statewide average of all intersections would be expected to be lower than the comparison rate shown above.
INJURY	0.57	
TYPE A	0.08	
TYPE B	0.12	
TYPE C	0.36	

LIGHT CONDITIONS	PERCENT
DAY	88.4%
DARK	11.6%
<b>TOTAL</b>	<b>100.0%</b>

Note: Dawn, dusk, or street lighted conditions included in dark total.

VEHICLE TYPES	PERCENT
CAR	75.0%
TRUCK	22.6%
OTHER/UNK	2.4%
<b>TOTAL</b>	<b>100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

### DAY AND TIME

DAY OF WEEK	EARLY MORNING	AM PEAK	MIDDAY	PM PEAK	EVENING	LATE EVENING	UNKNOWN	TOTAL	
	2:00 AM TO 5:59 AM	6:00 AM TO 9:59 AM	10:00 AM TO 1:59 PM	2:00 PM TO 5:59 PM	6:00 PM TO 9:59 PM	10:00 PM TO 1:59 AM			
	5:59 AM	9:59 AM	1:59 PM	5:59 PM	9:59 PM	1:59 AM			
MONDAY	0	1	2	1	0	0	0	4	Weekday
TUESDAY	0	1	2	1	1	0	0	5	
WEDNESDAY	0	0	1	3	0	0	0	4	
THURSDAY	0	1	2	0	0	0	0	3	
FRIDAY	0	0	2	4	3	0	0	9	
SATURDAY	0	0	10	3	1	0	0	14	Weekend
SUNDAY	0	0	2	1	1	0	0	4	
<b>TOTAL</b>	<b>0</b>	<b>3</b>	<b>21</b>	<b>13</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>43</b>	

DRIVER AGES	PERCENT
<25	28.6%
25-34	16.7%
35-44	17.9%
45-54	9.5%
55-64	11.9%
65-74	6.0%
75-84	7.1%
85+	1.2%
UNKNOWN	1.2%
<b>TOTAL</b>	<b>100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

VEHICLE DAMAGE	PERCENT
OTHER/UNK	1.2%
NONE	4.8%
VERY MINOR	8.3%
MINOR	15.5%
MODERATE	47.6%
SEVERE	16.7%
VERY SEVERE	6.0%
<b>TOTAL</b>	<b>100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

VEHICLES INVOLVED	PERCENT
SINGLE VEHICLE	4.7%
TWO VEHICLES	79.1%
3 OR MORE VEHICLES	16.3%

BY SEASON	PERCENT
SPRING	25.6%
SUMMER	25.6%
FALL	18.6%
WINTER	30.2%
<b>TOTAL</b>	<b>100.0%</b>

Note: Wint=Dec-Feb, Spr=Mar-May, Sum=June-Aug, Fall=Sept-Nov

PERCENT OF CRASHES	PERCENT
ALCOHOL RELATED	0.0%
SPEED RELATED	9.3%

**TRAFFIC ANALYSIS & DESIGN, INC.**



EXHIBIT DATE: 05-28-10

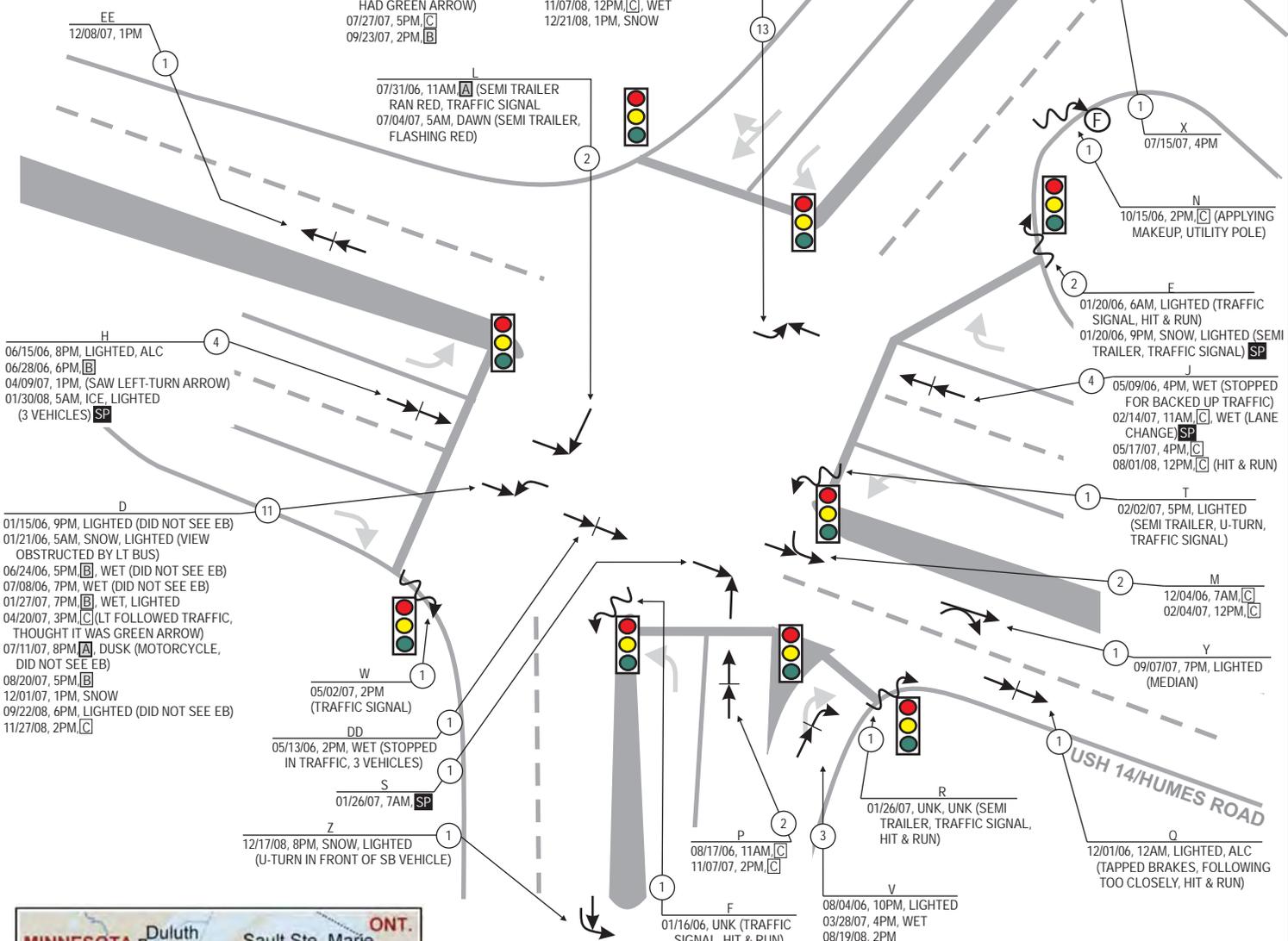
**EXHIBIT 7.4.5b**  
**CRASH STATISTICS (2006-2008)**  
**LEXINGTON DRIVE INTERSECTION**  
**ROCK COUNTY, WISCONSIN**



03/08/06, 11AM (ON YELLOW)  
 03/15/06, 6PM, [C], DARK (3 VEHICLES; DID NOT SEE WB)  
 07/31/06, 4PM (OTHER WB VEHICLE OBSCURED VIEW)  
 08/10/06, 4PM, [C]  
 05/26/07, 12PM, [B], WET (SAID HAD GREEN ARROW)  
 07/27/07, 5PM, [C]  
 09/23/07, 2PM, [B]

11/17/07, 12PM, [B], WET (DID NOT SEE WB)  
 01/05/08, 10AM, WET (GREEN LIGHT, RED ARROW)  
 02/23/08, 12PM, WET (DID NOT SEE WB)  
 04/03/08, 2PM, [C]  
 11/07/08, 12PM, [C], WET  
 12/21/08, 1PM, SNOW

07/31/06, 11AM, [A] (SEMI TRAILER RAN RED, TRAFFIC SIGNAL)  
 07/04/07, 5AM, DAWN (SEMI TRAILER, FLASHING RED)



**CRASH RATE**  
 1.96 Crashes  
 Per Million  
 Entering Vehicles  
 Entering Vehicles: 25,650/day

NOTES: DEER CRASHES NOT INCLUDED.

**CRASH FREQUENCY/SEVERITY**

55 Crashes	0 Fatal Crash (K)
	2 Incapacitating (Type A)
	7 Non-Incapacitating (Type B)
	15 Possible (Type C)
	31 Property Damage Only

**LEGEND**

- Moving Vehicle
- ↔ Backing Vehicle
- - - Pedestrian
- ⋯ Bicyclist
- [ ] Parked Vehicle
- ⊙ Stop/Yield Sign
- ⊙ Tree
- ⊙ Utility Pole
- ⊙ Fixed Object
- ⊙ Non-Fixed Object
- ↘ Angle (Right Angle)
- ↙ Angle (Left Turn)
- ↗ Angle (Right Turn)
- ↔ Sideswipe-Same
- ↔ Sideswipe-Opposite
- ↔ Head-On
- ↔ Rear-End
- ⤴ Out of Control
- ↔ Overtake
- ↔ Overtake

# = CRASH FREQUENCY

\*LETTER\* = USED FOR REFERENCING CRASHES IN REPORT AS NEEDED

DATE OF CRASH  
 HOUR  
 SEVERITY (SEE SEVERITY DEFINITIONS)  
 ROAD CONDITIONS (DRY IF BLANK)  
 LIGHT CONDITIONS (DAYTIME IF BLANK)  
 ALCOHOL INVOLVEMENT ("ALC" IF YES)  
 SPEED RELATED ("SP" IF YES)

**CRASH SEVERITY DEFINITIONS**

- [K] = Fatal Crash
- [A] = Incapacitating Injury Crash
- [B] = Non-Incapacitating Injury Crash
- [C] = Possible Injury Crash
- [ ] = Property Damage Only Crash



EXHIBIT DATE: 05-28-10

**EXHIBIT 7.4.6a**  
**CRASH HISTORY (2006-2008)**  
**PONTIAC DRIVE INTERSECTION**  
**ROCK COUNTY, WISCONSIN**

## GENERAL INFORMATION

<b>INTERSECTION:</b> USH 14 and Pontiac Drive	<b>DURATION</b>	
<b>MUNICIPALITY:</b> Janesville	<b>CRASHES FROM:</b> 1/1/2006	3 YEARS
<b>COUNTY:</b> Rock	<b>TO:</b> 12/31/2008	0 MONTHS
<b>STATE:</b> WI	<b>PREPARED BY:</b> ACP	<b>DATE:</b> 5/17/2010
<b>TADI PROJECT ID:</b> 886-6		

## INTERSECTION CHARACTERISTICS

<b>TRAFFIC CONTROL:</b> TRAFFIC SIGNAL	<b>POSTED SPEED (MAJOR):</b> 45
<b>INTERSECTION AADT: Year (2007)</b> 25,650	<b>DEER CRASHES INCLUDED:</b> NO
<b>NUMBER OF LEGS:</b> 4	<b>AREA TYPE:</b> URBAN

## CRASH STATISTICS

### CRASH FREQUENCY & SEVERITY

YEAR	PD	TYPE C	TYPE B	TYPE A	FATAL	TOTAL
2006	13	5	2	1	0	21
2007	11	6	5	1	0	23
2008	7	4	0	0	0	11

ROAD CONDITIONS	PERCENT	
DRY	37	67.3%
WET	12	21.8%
SNOW	5	9.1%
ICE	1	1.8%
MUD	0	0.0%
OTHER/UNK	0	0.0%
<b>TOTAL</b>	<b>55</b>	<b>100.0%</b>

TOTAL	31	15	7	2	0	55
<b>PERCENT</b>	<b>56.4%</b>	<b>27.3%</b>	<b>12.7%</b>	<b>3.6%</b>	<b>0.0%</b>	<b>100.0%</b>
<b>YEAR AVG.</b>	<b>10.3</b>	<b>5.0</b>	<b>2.3</b>	<b>0.7</b>	<b>0.0</b>	<b>18.3</b>

CRASH TYPE	PERCENT	
ANGLE	28	50.9%
REAR-END	16	29.1%
HEAD-ON	0	0.0%
SS-SAME	2	3.6%
SS-OPPOSITE	0	0.0%
PEDESTRIAN	0	0.0%
BICYCLE	0	0.0%
FIXED	7	12.7%
NOT FIXED	0	0.0%
DEER	0	0.0%
OVERTURN	0	0.0%
OTHR/UNKN	2	3.6%
<b>TOTAL</b>	<b>55</b>	<b>100.0%</b>

CRASH RATES	per MEV	COMPARISON STATISTIC
TOTAL	1.96	0.91 Crashes per MEV
FATAL	0.00	The comparison rate shown above is the average crash rate from June 2005 Intersection Crash Summary for Wisconsin (Knapp & Campbell) for similar intersections (urban/rural, traffic control, and volume). This rate should not be considered a statewide average representative of all intersections in Wisconsin. Only intersections with (3 or more crashes in one year - rural areas, and 5 or more crashes in one year - urban areas) were included in the study (1,704 total intersections). The statewide average of all intersections would be expected to be lower than the comparison rate shown above.
INJURY	0.85	
TYPE A	0.07	
TYPE B	0.25	
TYPE C	0.53	

LIGHT CONDITIONS	PERCENT		VEHICLE TYPES	PERCENT	
DAY	39	70.9%	CAR	78	75.7%
DARK	16	29.1%	TRUCK	19	18.4%
<b>TOTAL</b>	<b>55</b>	<b>100.0%</b>	OTHER/UNK	6	5.8%
			<b>TOTAL</b>	<b>103</b>	<b>100.0%</b>

Note: Dawn, dusk, or street lighted conditions included in dark total.

Note: Statistics based on first and second vehicles in crashes.

### DAY AND TIME

DAY OF WEEK	EARLY MORNING	AM PEAK	MIDDAY	PM PEAK	EVENING	LATE EVENING	UNKNOWN	TOTAL	
	2:00 AM TO 5:59 AM	6:00 AM TO 9:59 AM	10:00 AM TO 1:59 PM	2:00 PM TO 5:59 PM	6:00 PM TO 9:59 PM	10:00 PM TO 1:59 AM			
	5:59 AM	9:59 AM	1:59 PM	5:59 PM	9:59 PM	1:59 AM			
MONDAY	0	1	2	2	1	0	1	7	Weekday
TUESDAY	0	0	0	2	0	0	0	2	
WEDNESDAY	2	0	2	3	4	0	0	11	
THURSDAY	0	0	1	4	1	0	0	6	
FRIDAY	0	2	2	3	2	2	1	12	
SATURDAY	1	0	6	2	2	0	0	11	Weekend
SUNDAY	0	0	2	3	1	0	0	6	
<b>TOTAL</b>	<b>3</b>	<b>3</b>	<b>15</b>	<b>19</b>	<b>11</b>	<b>2</b>	<b>2</b>	<b>55</b>	

DRIVER AGES	PERCENT	
<25	22	21.4%
25-34	22	21.4%
35-44	15	14.6%
45-54	16	15.5%
55-64	7	6.8%
65-74	7	6.8%
75-84	7	6.8%
85+	0	0.0%
UNKNOWN	7	6.8%
<b>TOTAL</b>	<b>103</b>	<b>100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

VEHICLE DAMAGE	PERCENT	
OTHER/UNK	7	6.8%
NONE	3	2.9%
VERY MINOR	10	9.7%
MINOR	25	24.3%
MODERATE	36	35.0%
SEVERE	19	18.4%
VERY SEVERE	3	2.9%
<b>TOTAL</b>	<b>103</b>	<b>100.0%</b>

Note: Statistics based on first and second vehicles in crashes.

VEHICLES INVOLVED	PERCENT	
SINGLE VEHICLE		12.7%
TWO VEHICLES		81.8%
3 OR MORE VEHICLES		5.5%

BY SEASON	PERCENT	
SPRING	11	20.0%
SUMMER	16	29.1%
FALL	8	14.5%
WINTER	20	36.4%
<b>TOTAL</b>	<b>55</b>	<b>100.0%</b>

Note: Wint=Dec-Feb, Spr=Mar-May, Sum=June-Aug, Fall=Sept-Nov

PERCENT OF CRASHES	
ALCOHOL RELATED	3.6%
SPEED RELATED	7.3%

DRAFT  
TRAFFIC  
ANALYSIS &  
DESIGN, INC.



EXHIBIT DATE: 05-28-10

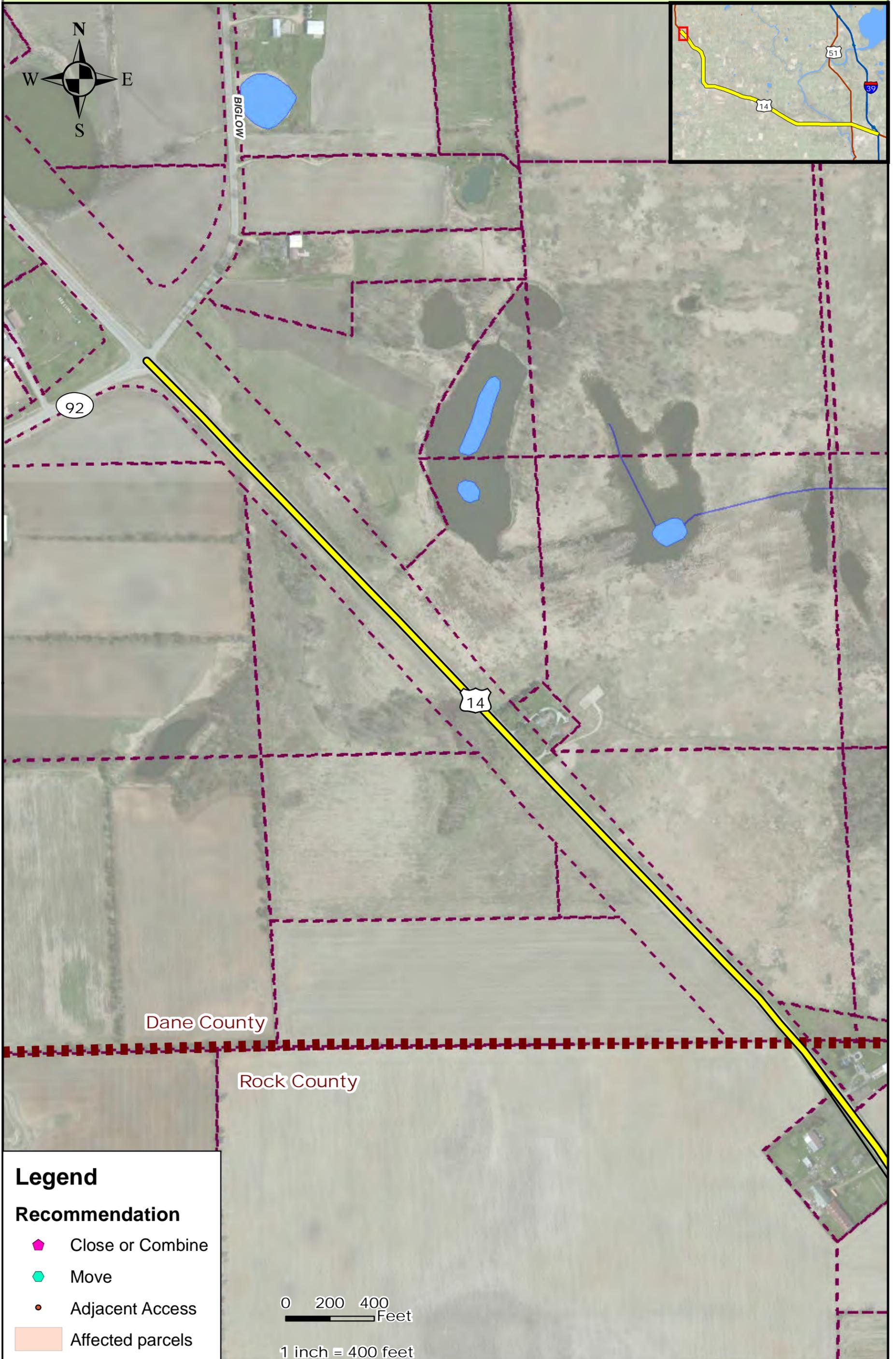
**EXHIBIT 7.4.6b**  
**CRASH STATISTICS (2006-2008)**  
**PONTIAC DRIVE INTERSECTION**  
**ROCK COUNTY, WISCONSIN**

# **Appendix K**

## **Access Management Recommendations**

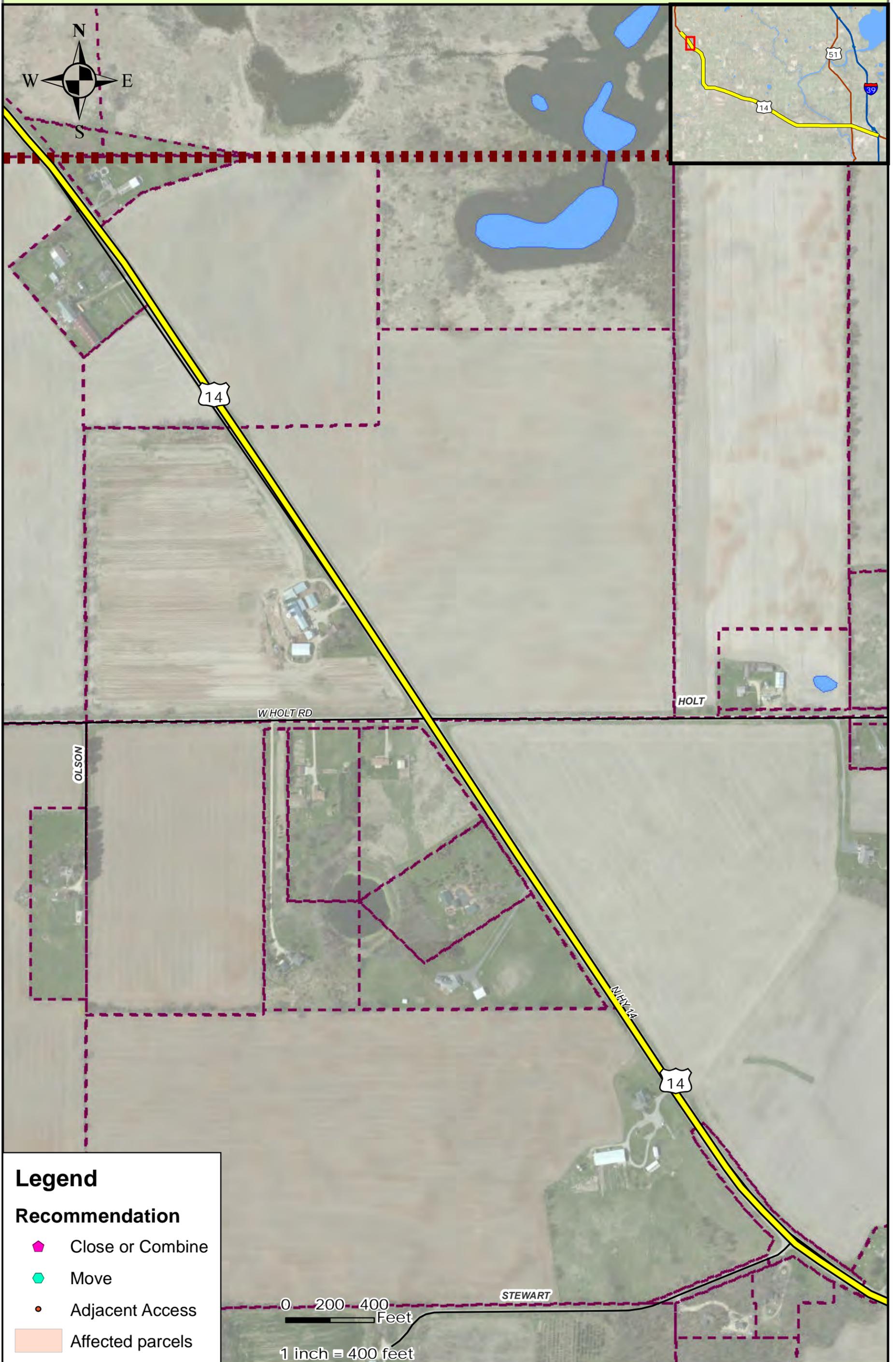
# US 14 Access Management

Project I.D. 5155-04-09  
STH 92 to Janesville (139/90)  
USH 14  
Rock and Dane Counties



# US 14 Access Management

Project I.D. 5155-04-09  
STH 92 to Janesville (I39/90)  
USH 14  
Rock and Dane Counties



## Legend

### Recommendation

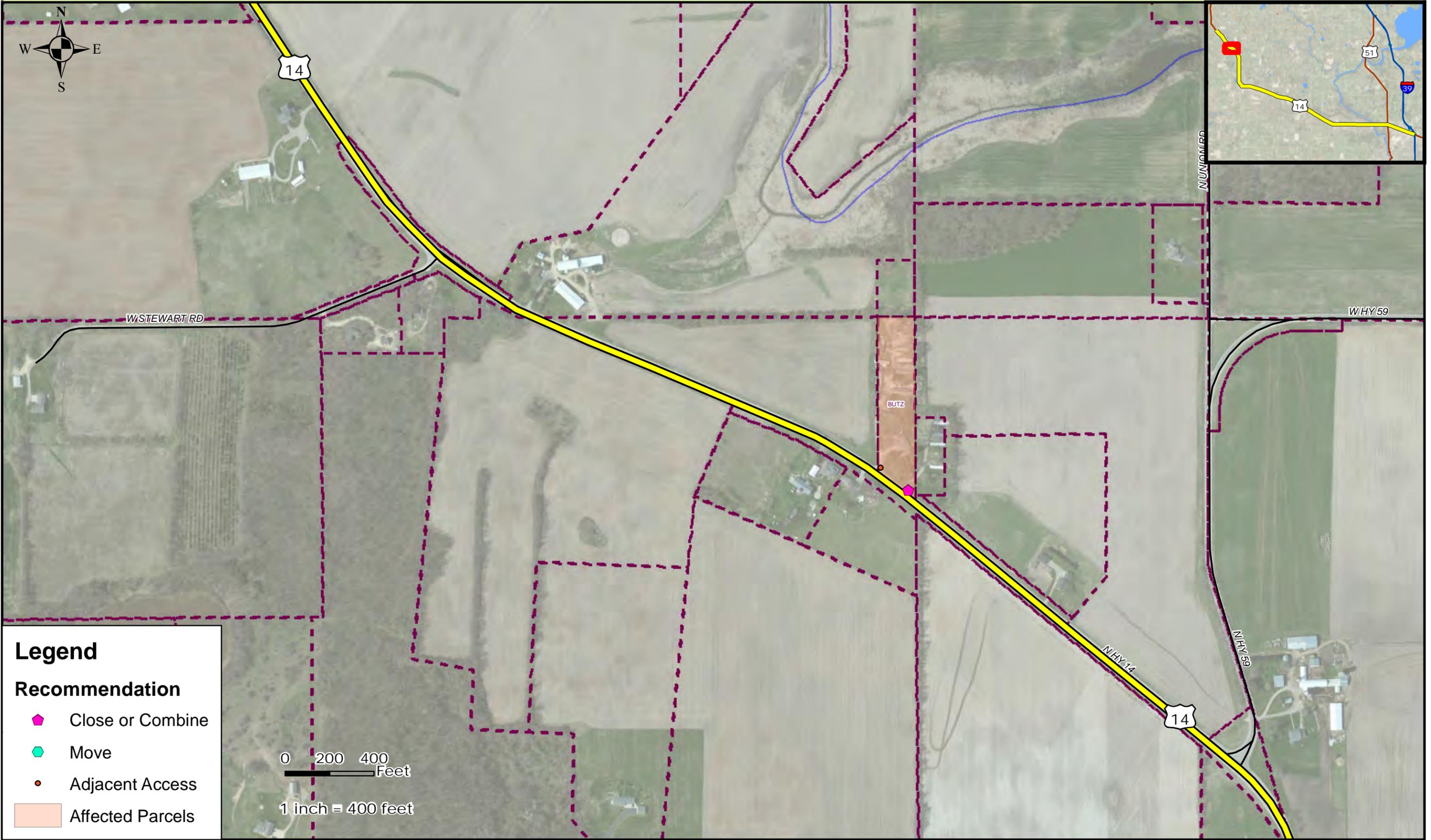
- ◆ Close or Combine
- ◆ Move
- Adjacent Access
- Affected parcels

0 200 400  
Feet

1 inch = 400 feet

# US 14 Access Management

Project I.D. 5155-04-09  
STH 92 to Janesville (139/90)  
USH 14  
Rock and Dane Counties



## Legend

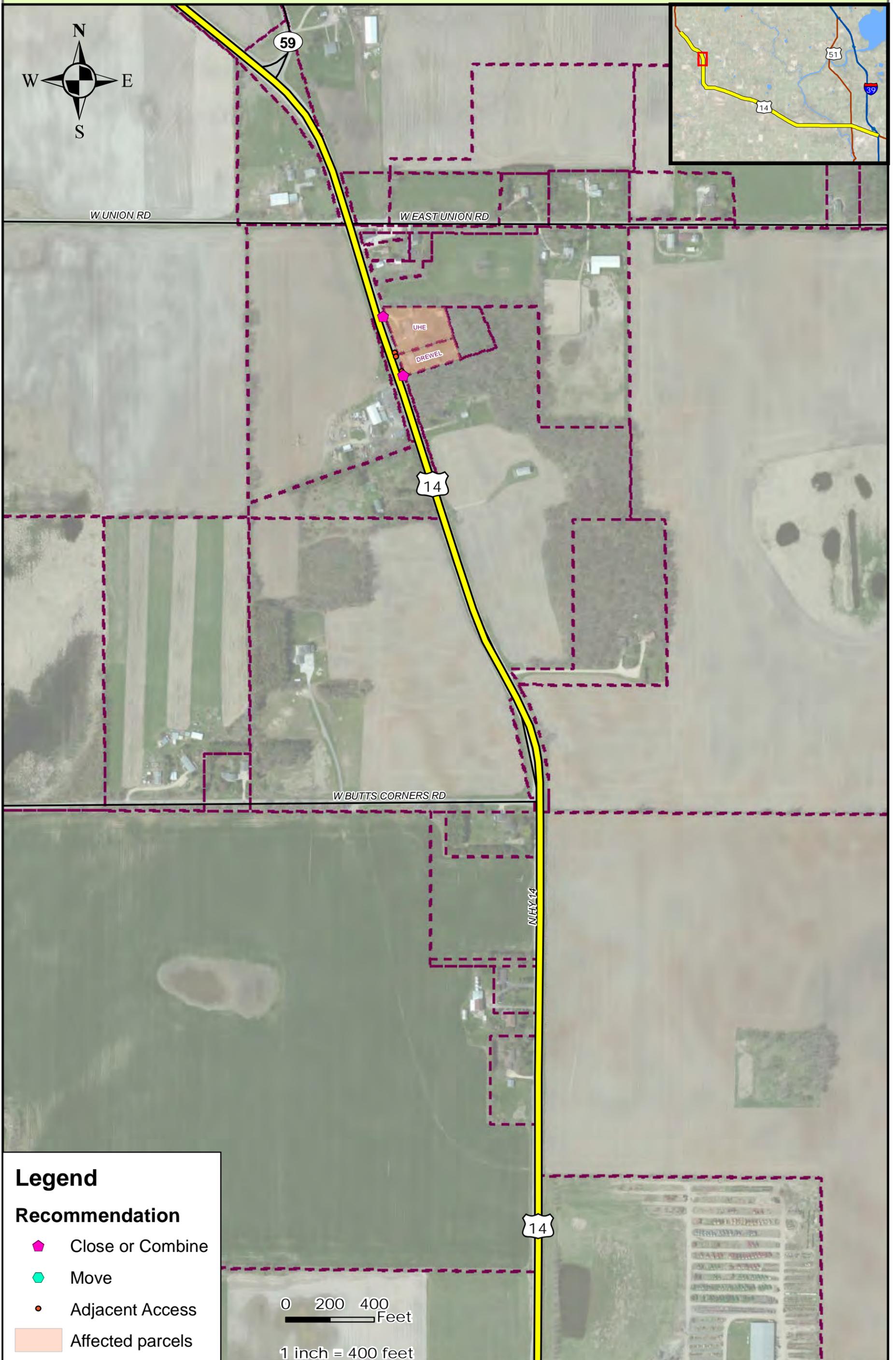
### Recommendation

- ◆ Close or Combine
- ◆ Move
- Adjacent Access
- Affected Parcels

0 200 400 Feet  
1 inch = 400 feet

# US 14 Access Management

Project I.D. 5155-04-09  
STH 92 to Janesville (139/90)  
USH 14  
Rock and Dane Counties



## Legend

### Recommendation

- ◆ Close or Combine
- ◆ Move
- Adjacent Access
- Affected parcels

0 200 400  
Feet

1 inch = 400 feet

# US 14 Access Management

Project I.D. 5155-04-09  
STH 92 to Janesville (139/90)  
USH 14  
Rock and Dane Counties



14

14

WIS HWY COMMISSION

NHY-14

W GREEN BAY RD

W ELMER RD

## Legend

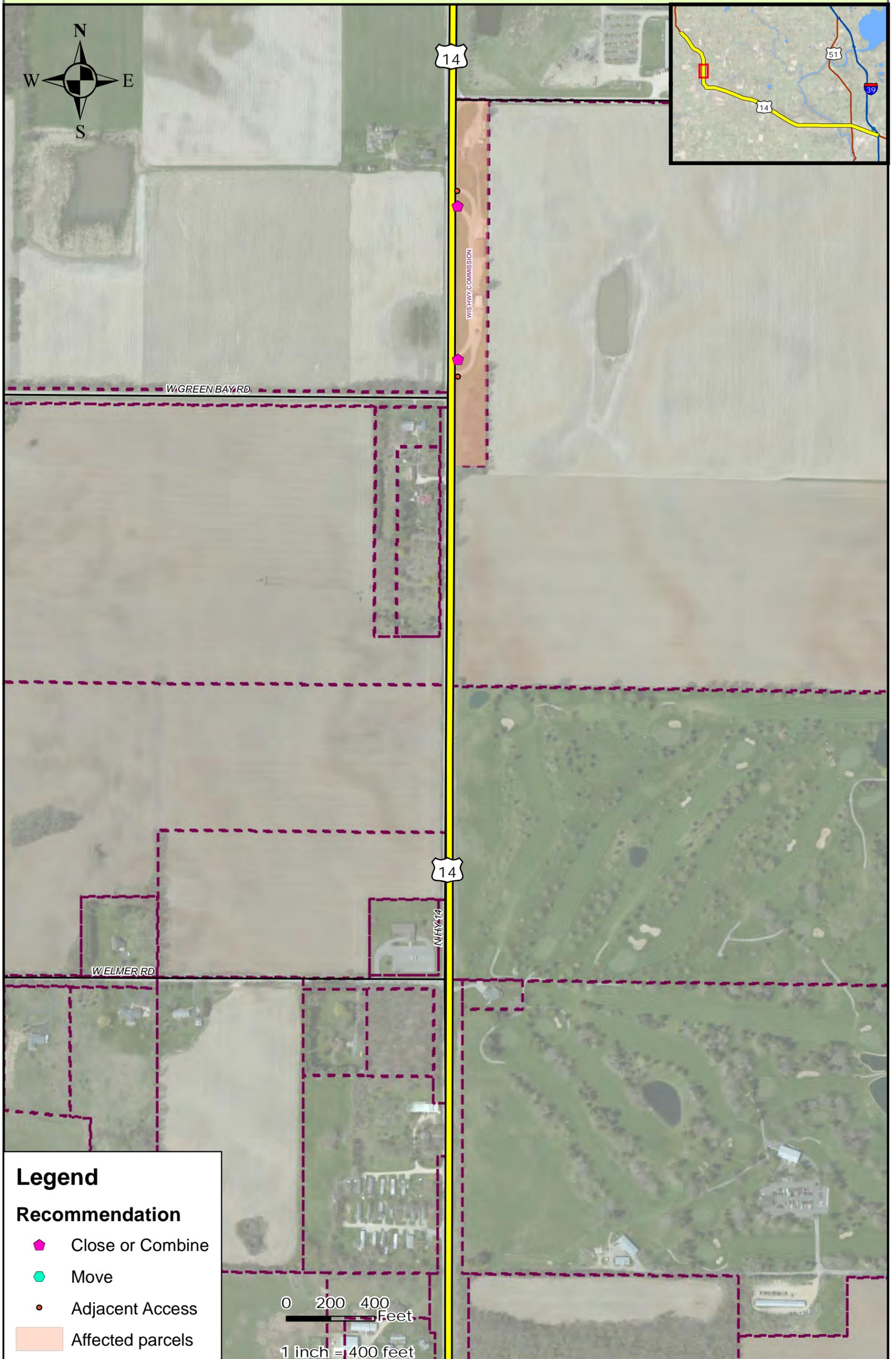
### Recommendation

- ◆ Close or Combine
- ◆ Move
- Adjacent Access

Affected parcels

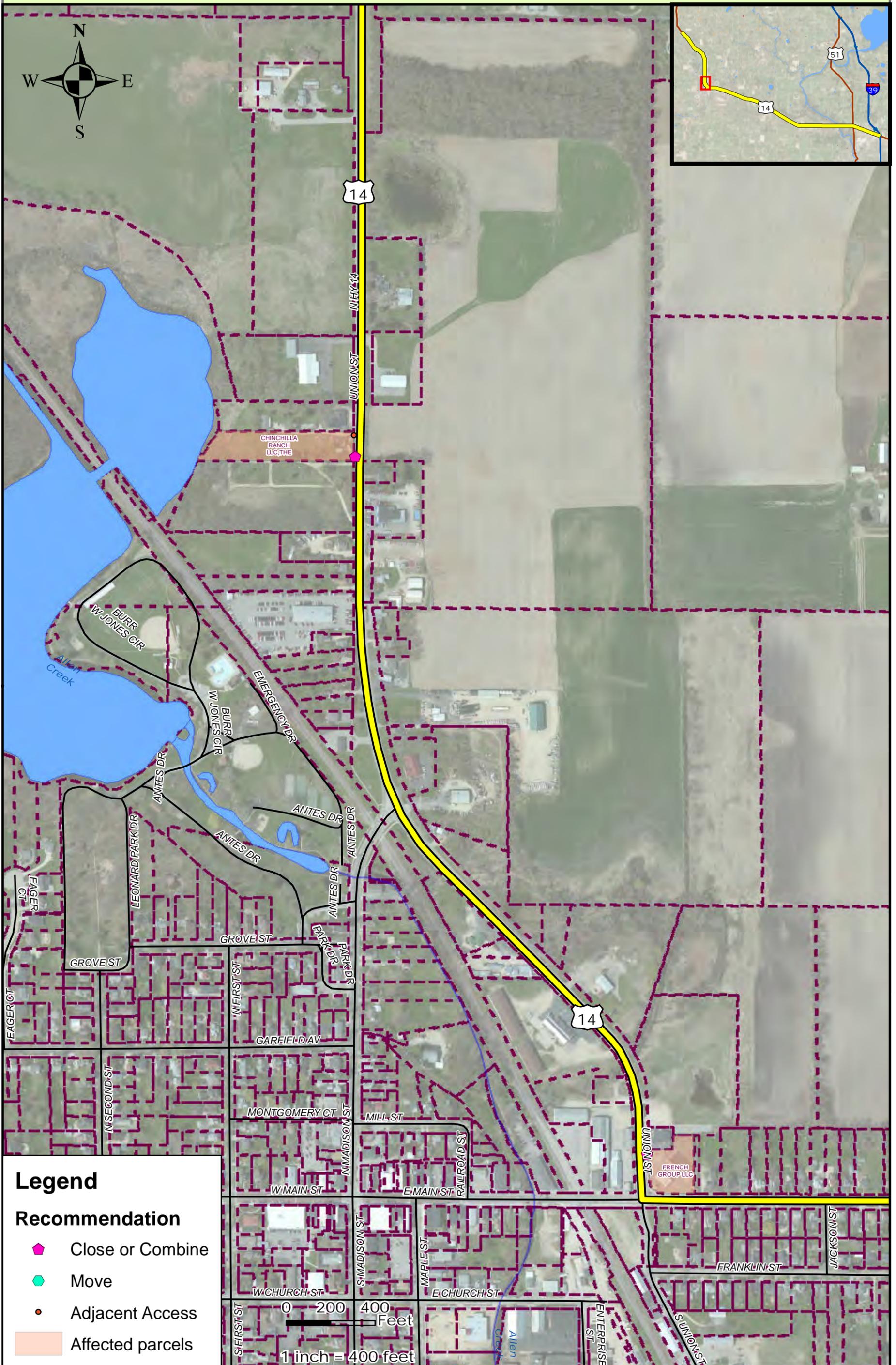
0 200 400 Feet

1 inch = 400 feet



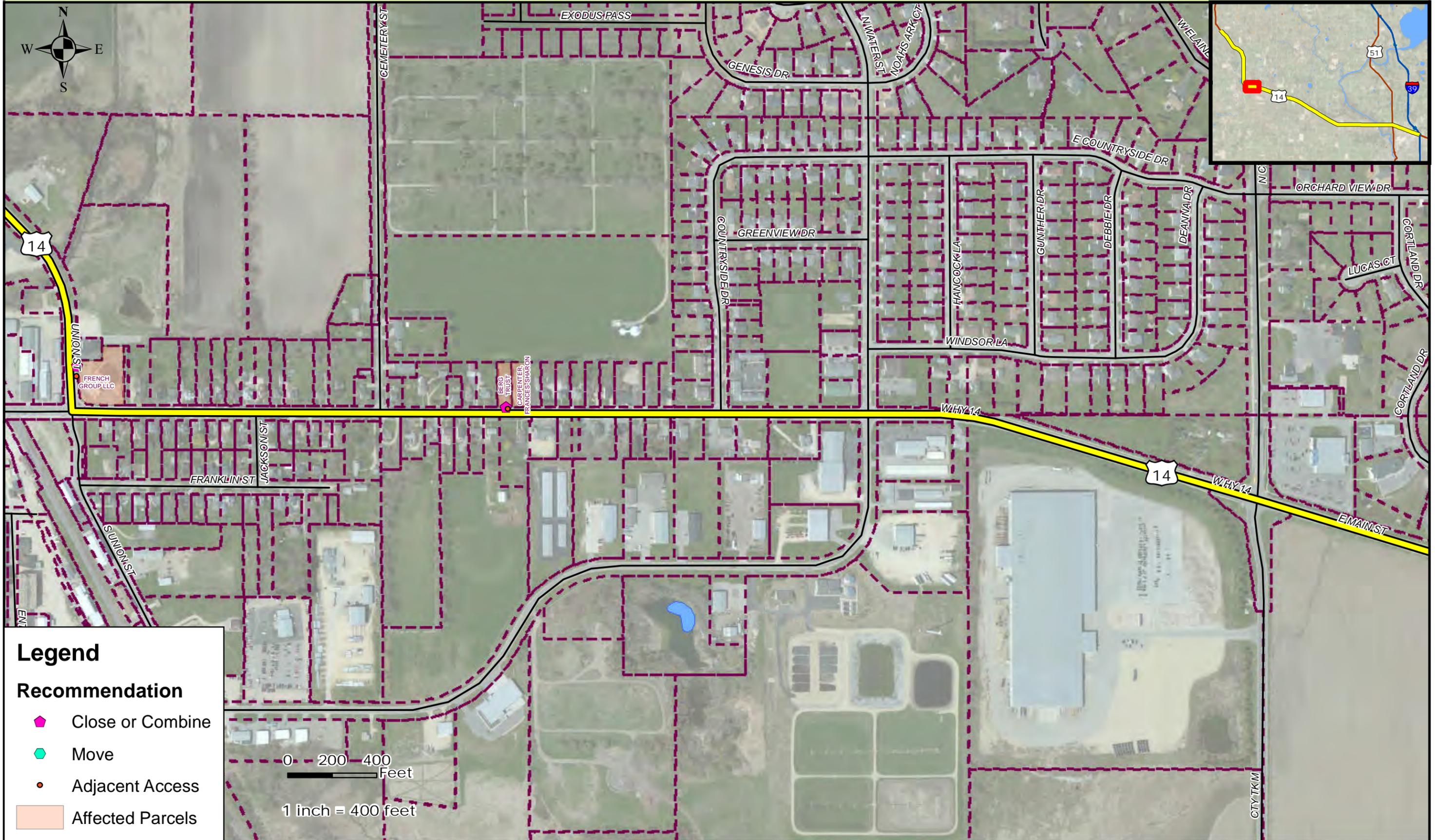
# US 14 Access Management

Project I.D. 5155-04-09  
 STH 92 to Janesville (I39/90)  
 USH 14  
 Rock and Dane Counties



# US 14 Access Management

Project I.D. 5155-04-09  
STH 92 to Janesville (139/90)  
USH 14  
Rock and Dane Counties



**Legend**

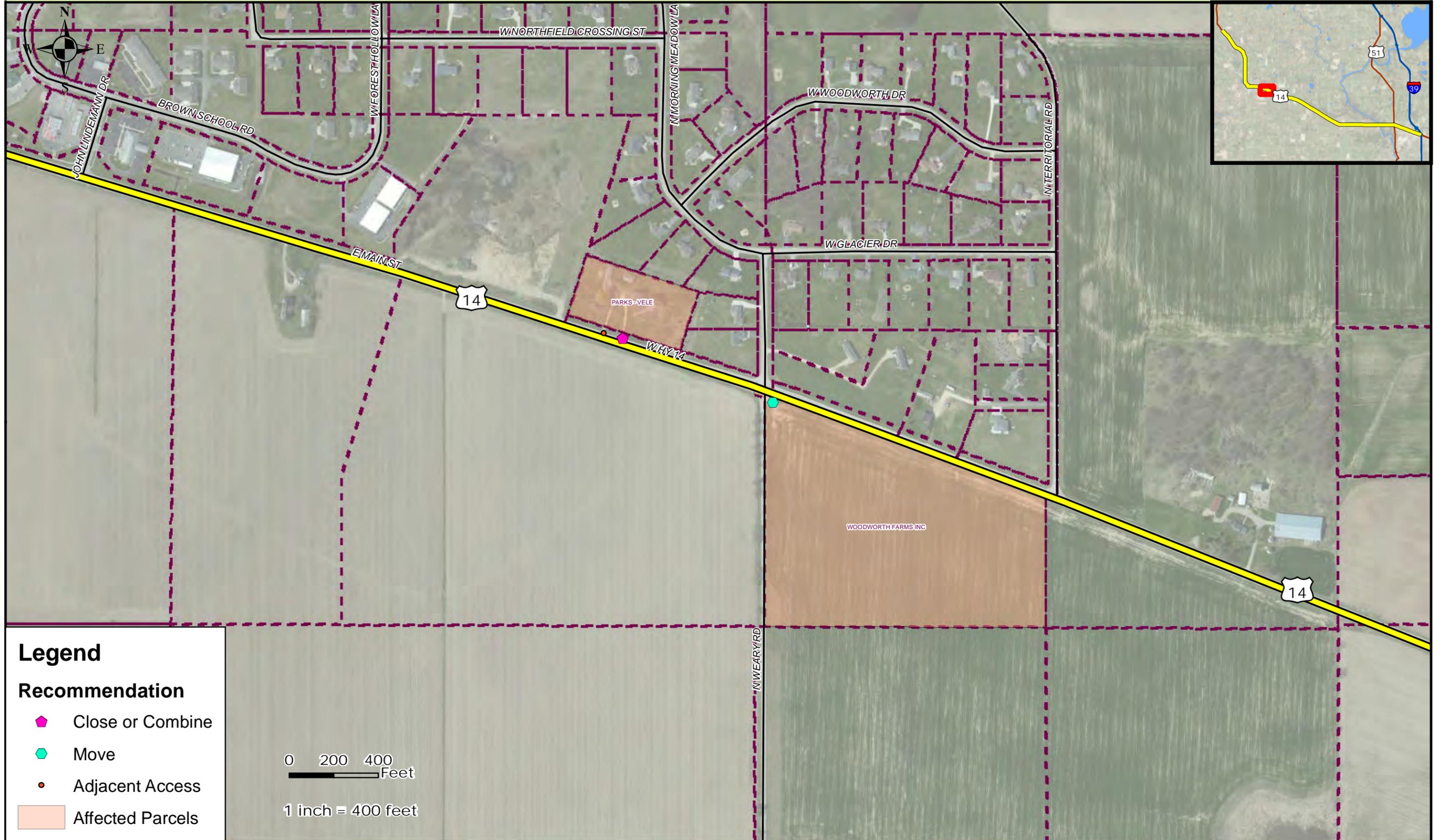
**Recommendation**

- ◆ Close or Combine
- ◆ Move
- Adjacent Access
- Affected Parcels

0 200 400  
Feet  
1 inch = 400 feet

# US 14 Access Management

Project I.D. 5155-04-09  
STH 92 to Janesville (139/90)  
USH 14  
Rock and Dane Counties



**Legend**

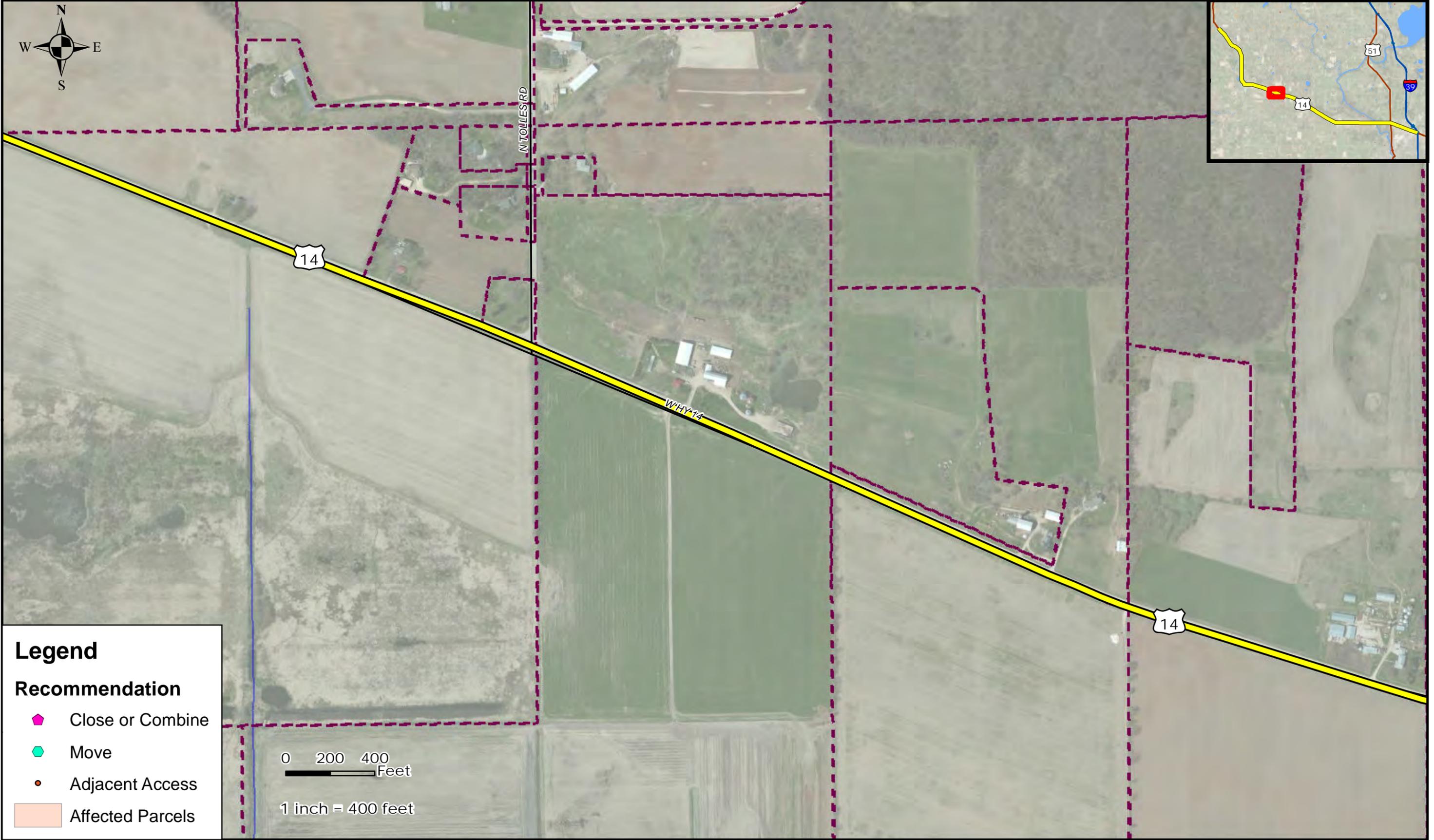
**Recommendation**

- ◆ Close or Combine
- ◆ Move
- Adjacent Access
- Affected Parcels

0 200 400 Feet  
1 inch = 400 feet

# US 14 Access Management

Project I.D. 5155-04-09  
STH 92 to Janesville (139/90)  
USH 14  
Rock and Dane Counties



## Legend

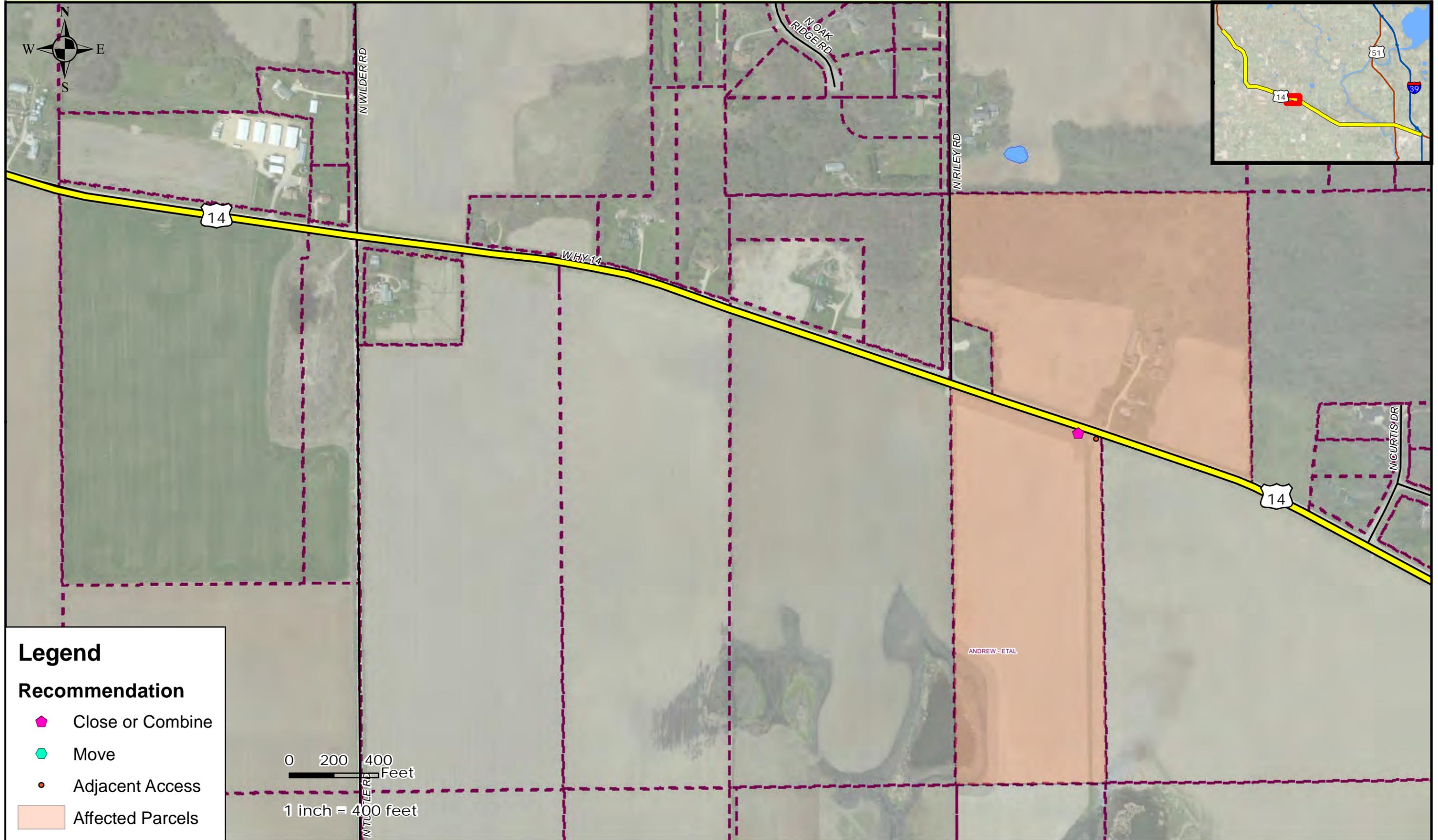
### Recommendation

- ◆ Close or Combine
- ◆ Move
- Adjacent Access
- Affected Parcels

0 200 400  
Feet  
1 inch = 400 feet

# US 14 Access Management

Project I.D. 5155-04-09  
STH 92 to Janesville (139/90)  
USH 14  
Rock and Dane Counties



## Legend

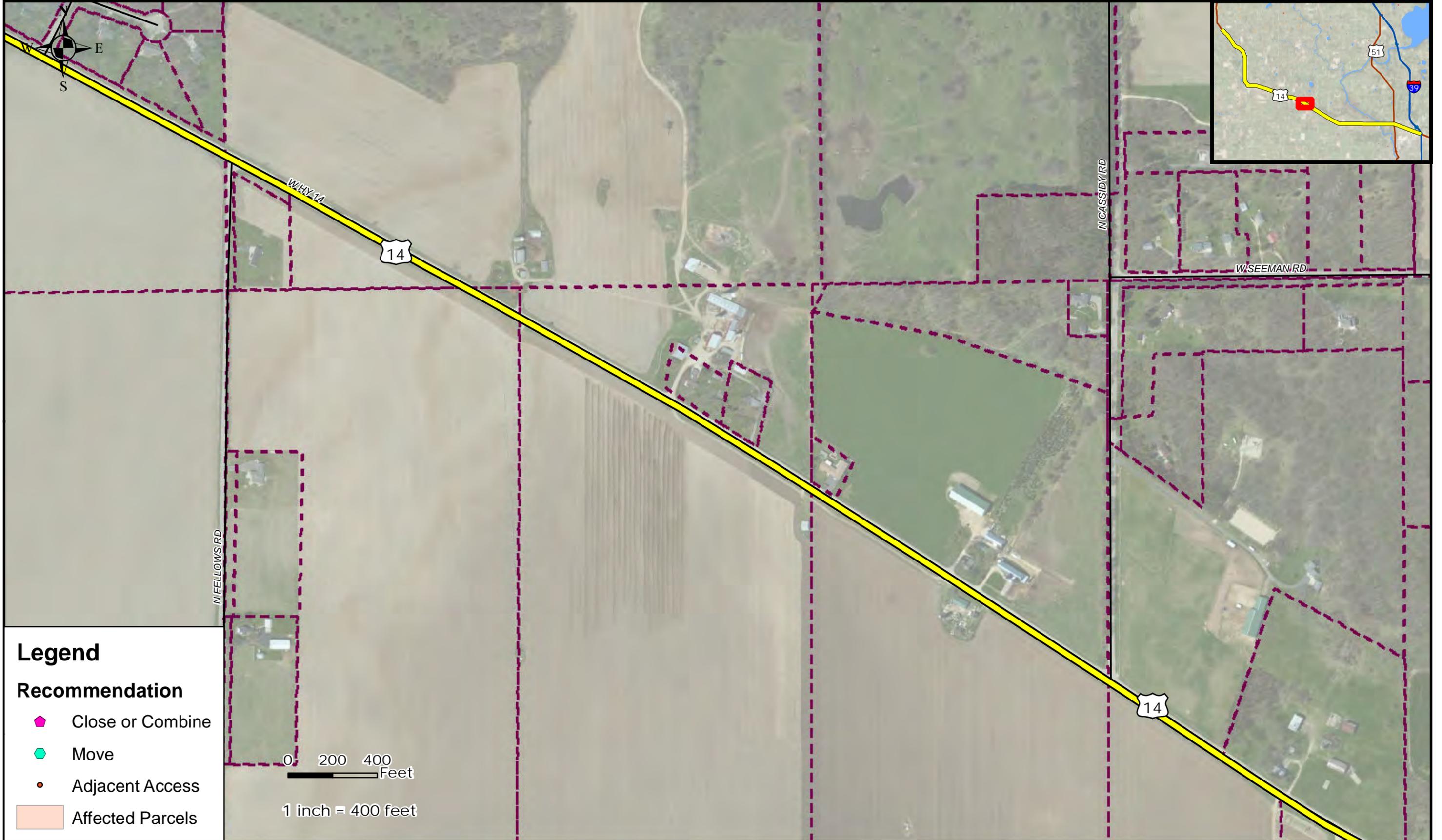
### Recommendation

- ◆ Close or Combine
- ◆ Move
- Adjacent Access
- Affected Parcels

0 200 400 Feet  
1 inch = 400 feet

# US 14 Access Management

Project I.D. 5155-04-09  
STH 92 to Janesville (139/90)  
USH 14  
Rock and Dane Counties



## Legend

### Recommendation

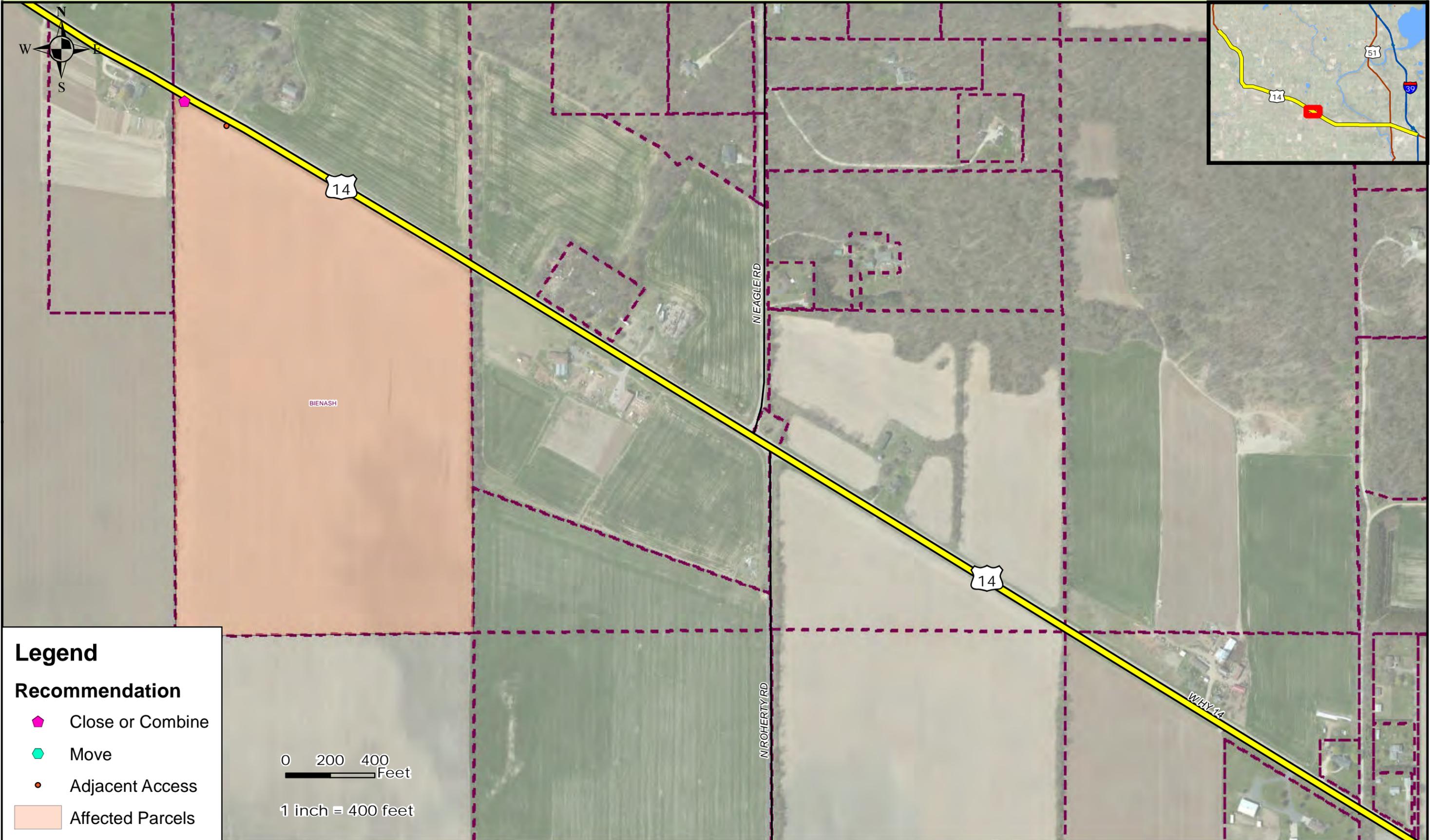
- ◆ Close or Combine
- ◆ Move
- Adjacent Access
- Affected Parcels

0 200 400 Feet

1 inch = 400 feet

# US 14 Access Management

Project I.D. 5155-04-09  
STH 92 to Janesville (139/90)  
USH 14  
Rock and Dane Counties



## Legend

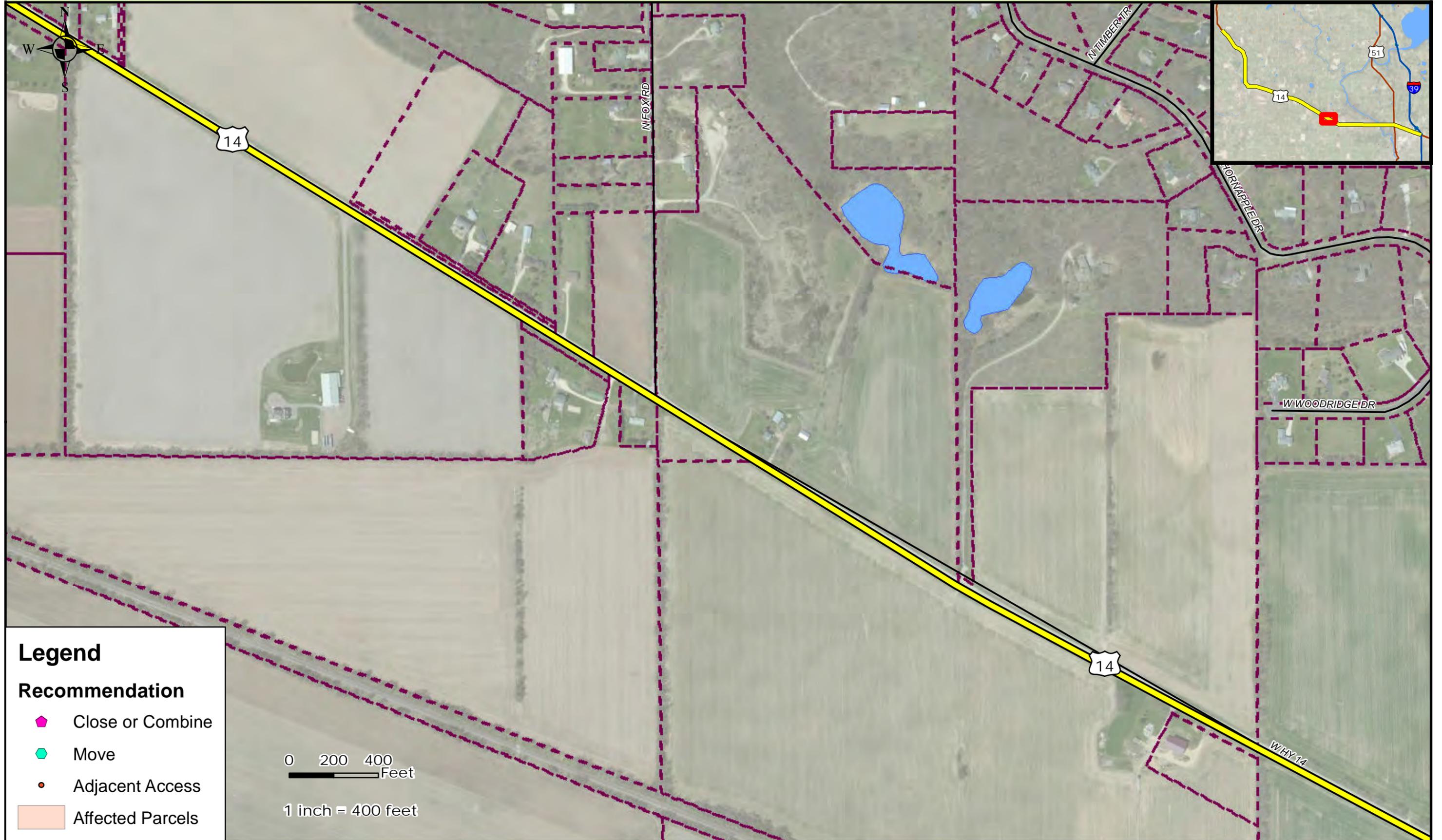
### Recommendation

- ◆ Close or Combine
- ◆ Move
- Adjacent Access
- Affected Parcels

0 200 400 Feet  
1 inch = 400 feet

# US 14 Access Management

Project I.D. 5155-04-09  
STH 92 to Janesville (139/90)  
USH 14  
Rock and Dane Counties



**Legend**

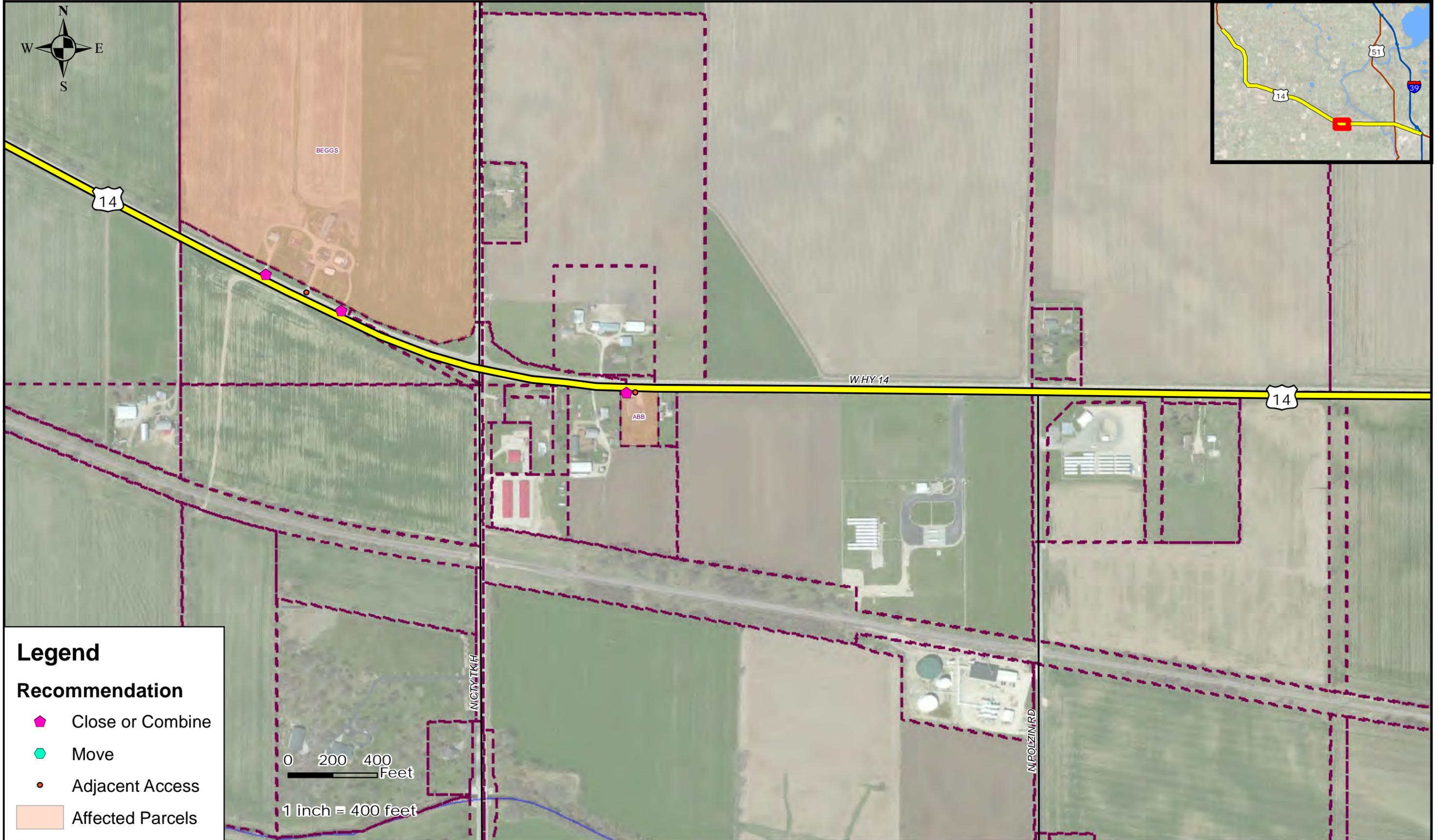
**Recommendation**

- ◆ Close or Combine
- ◆ Move
- Adjacent Access
- Affected Parcels

0 200 400 Feet  
1 inch = 400 feet

# US 14 Access Management

Project I.D. 5155-04-09  
STH 92 to Janesville (139/90)  
USH 14  
Rock and Dane Counties



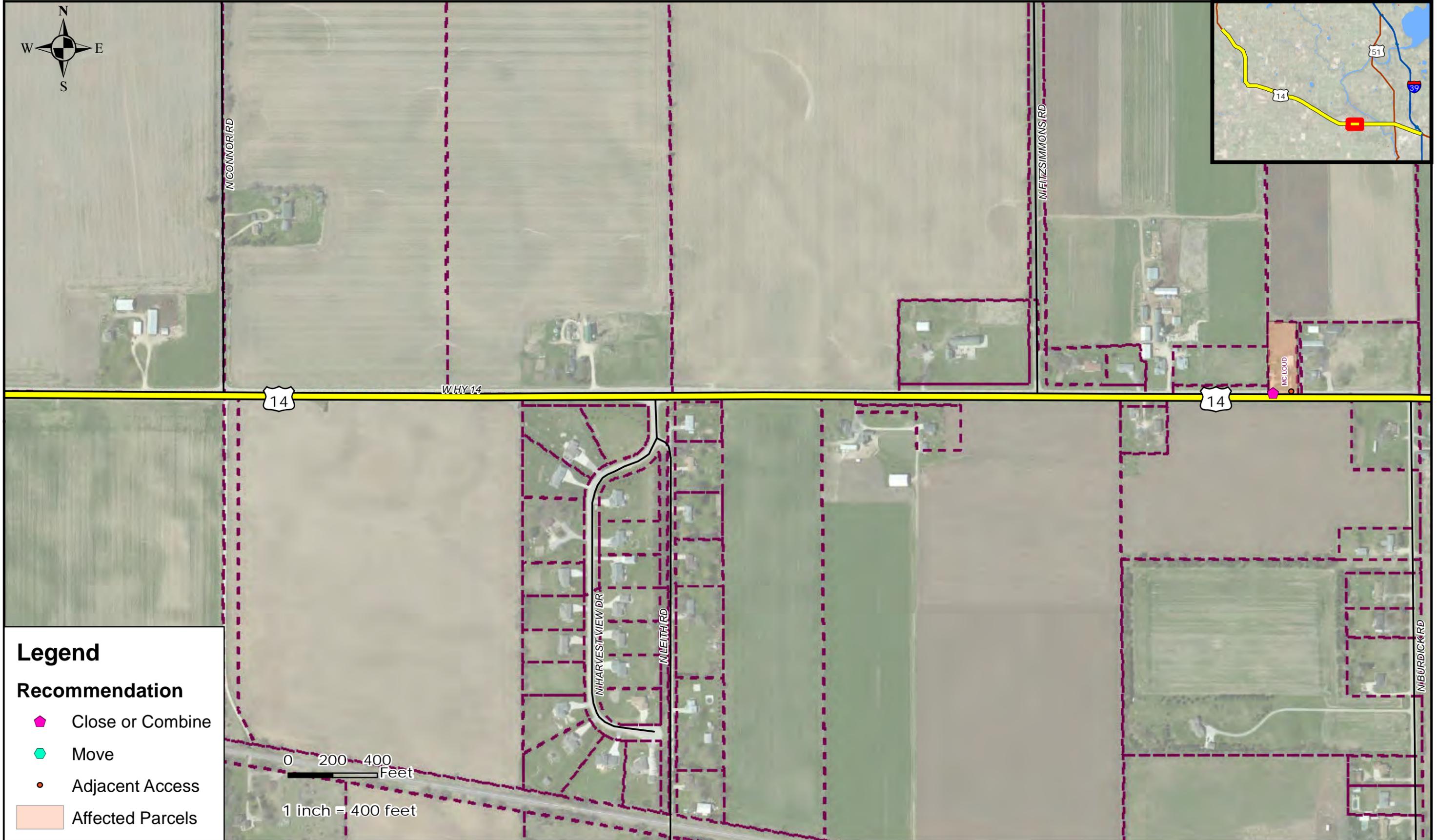
## Legend

### Recommendation

-  Close or Combine
-  Move
-  Adjacent Access
-  Affected Parcels

# US 14 Access Management

Project I.D. 5155-04-09  
STH 92 to Janesville (139/90)  
USH 14  
Rock and Dane Counties



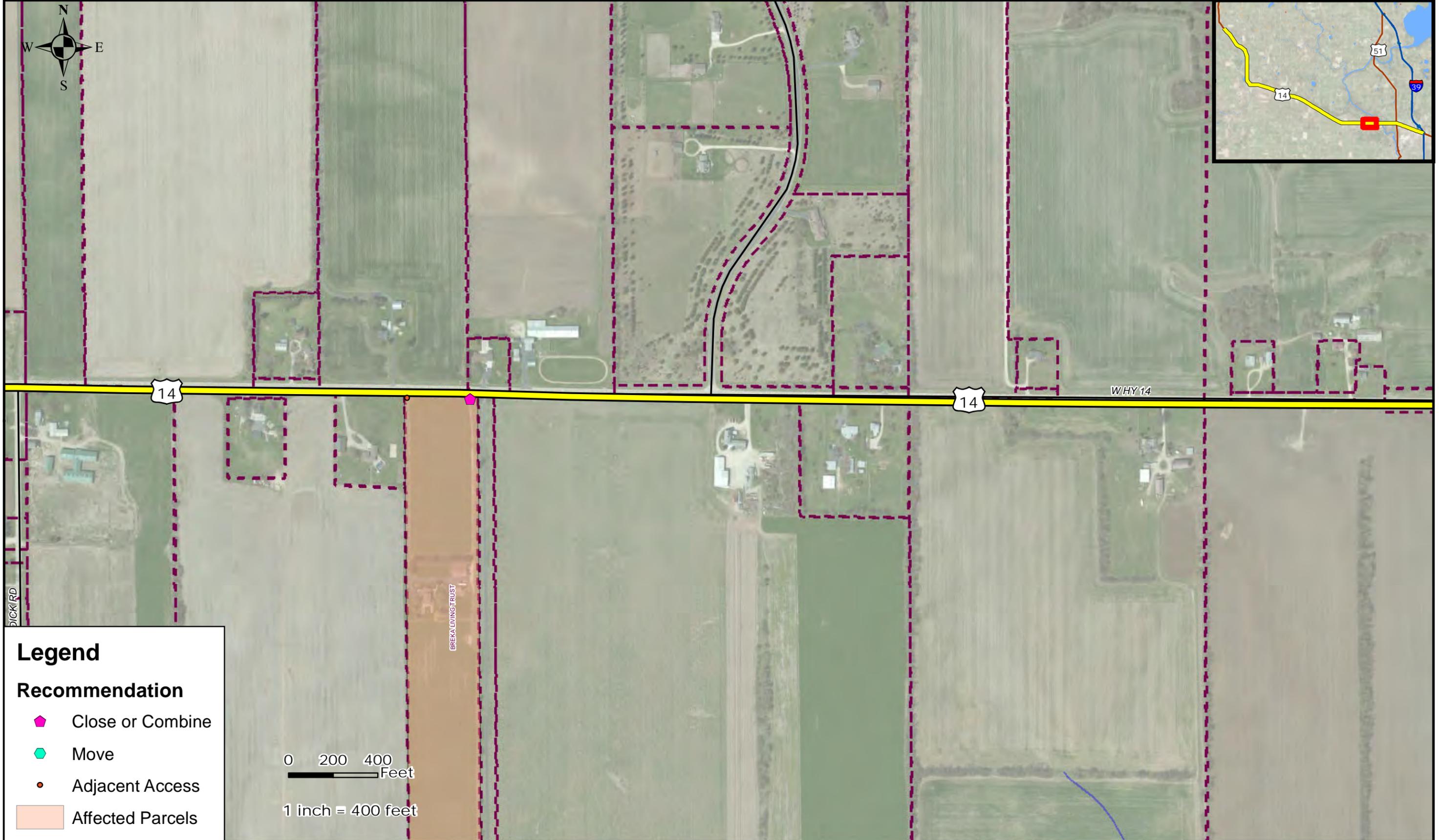
## Legend

### Recommendation

-  Close or Combine
-  Move
-  Adjacent Access
-  Affected Parcels

# US 14 Access Management

Project I.D. 5155-04-09  
STH 92 to Janesville (139/90)  
USH 14  
Rock and Dane Counties



**Legend**

**Recommendation**

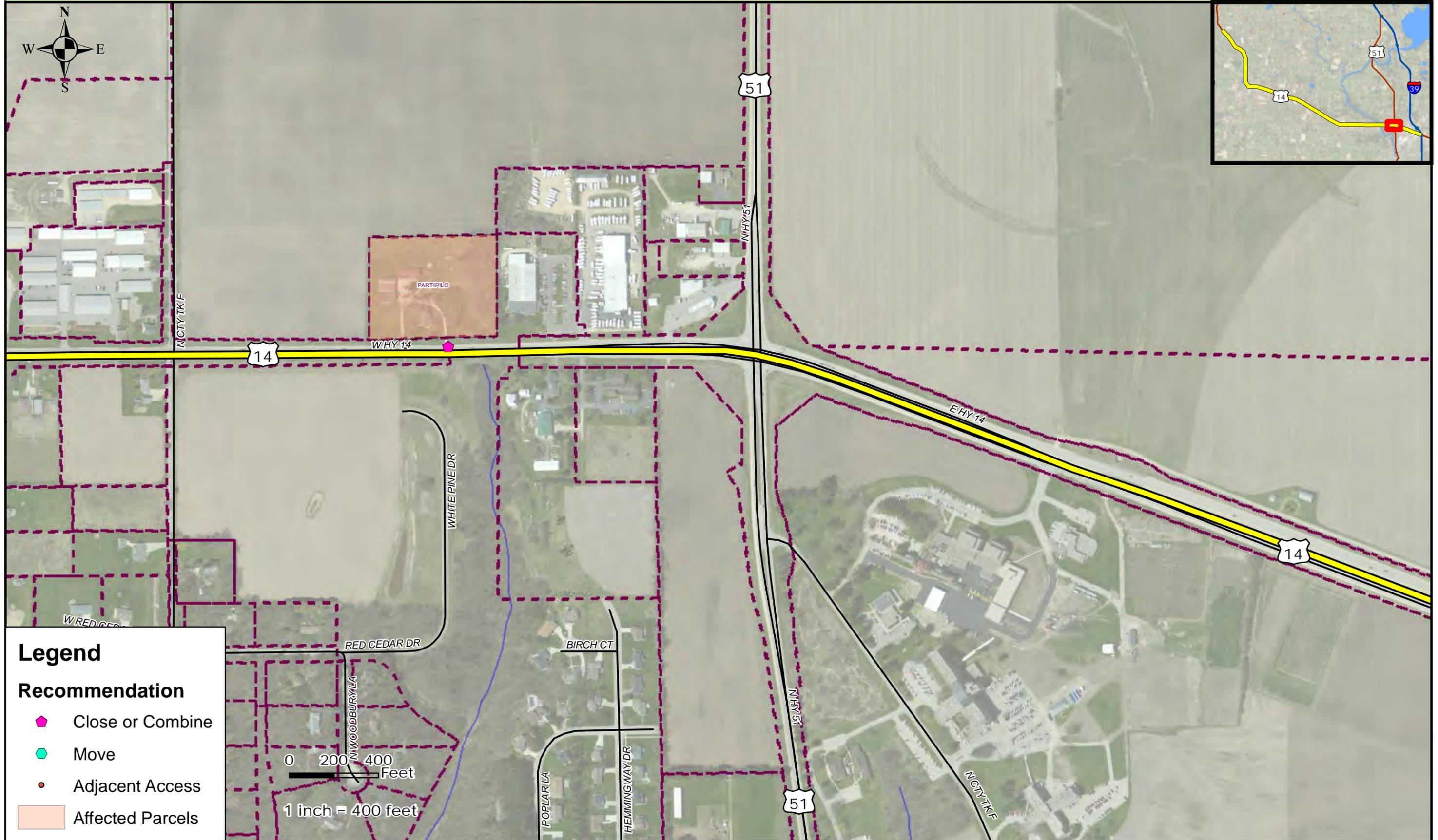
- ◆ Close or Combine
- ◆ Move
- Adjacent Access
- Affected Parcels

0 200 400 Feet  
1 inch = 400 feet



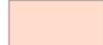
# US 14 Access Management

Project I.D. 5155-04-09  
STH 92 to Janesville (139/90)  
USH 14  
Rock and Dane Counties



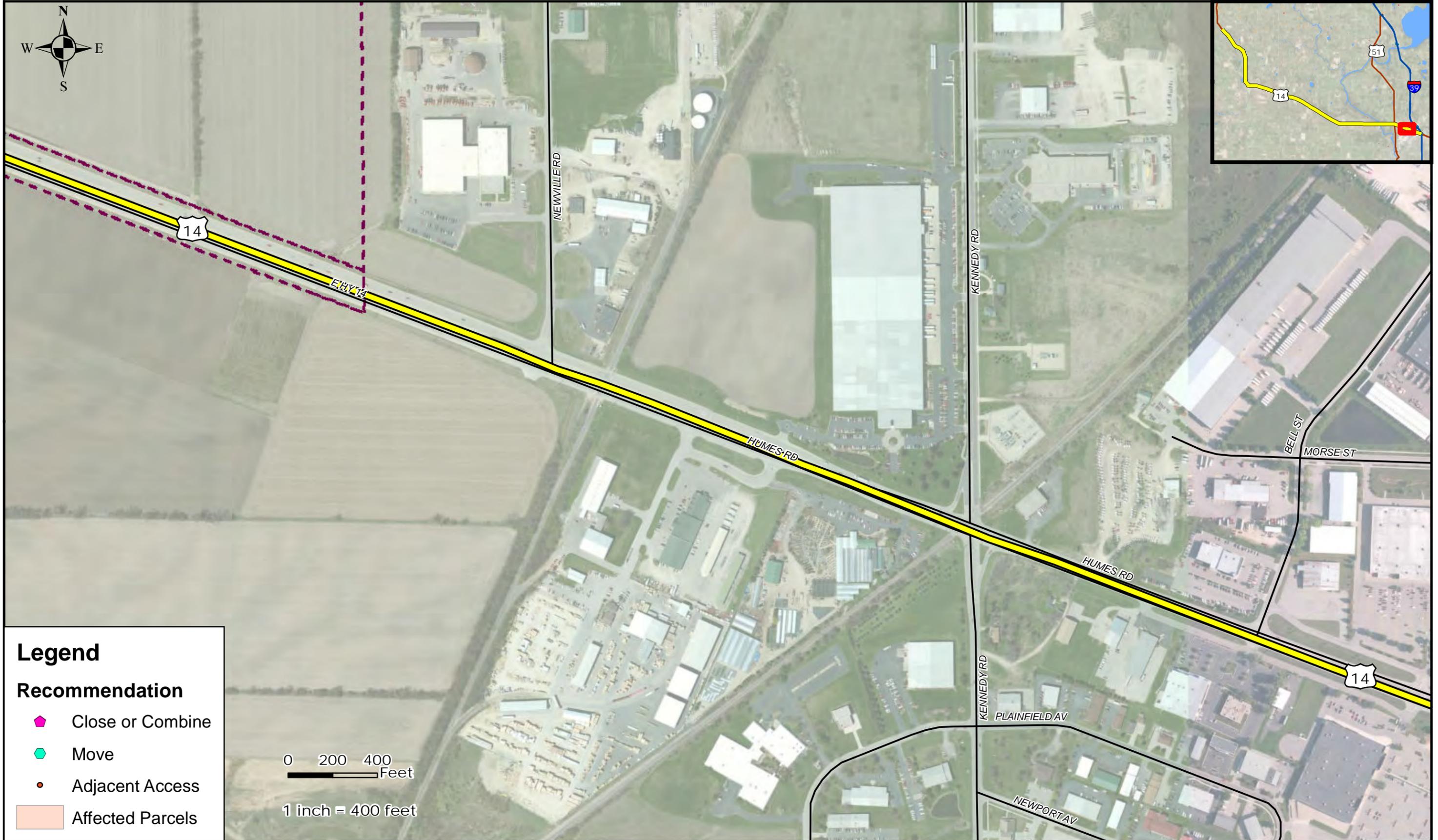
## Legend

### Recommendation

-  Close or Combine
-  Move
-  Adjacent Access
-  Affected Parcels

# US 14 Access Management

Project I.D. 5155-04-09  
STH 92 to Janesville (139/90)  
USH 14  
Rock and Dane Counties



## Legend

### Recommendation

- ◆ Close or Combine
- ◆ Move
- Adjacent Access
- Affected Parcels

0 200 400  
Feet

1 inch = 400 feet

# US 14 Access Management

Project I.D. 5155-04-09  
STH 92 to Janesville (139/90)  
USH 14  
Rock and Dane Counties



**Legend**

**Recommendation**

- ◆ Close or Combine
- ◆ Move
- Adjacent Access
- Affected Parcels

0 200 400 Feet  
1 inch = 400 feet

# **Appendix L**

## **Possible Strategies and Recommendations**

# EXHIBIT 5.1 US 14 / WIS 92 INTERSECTION

POSSIBLE STRATEGIES FOR WIS 92 INTERSECTION

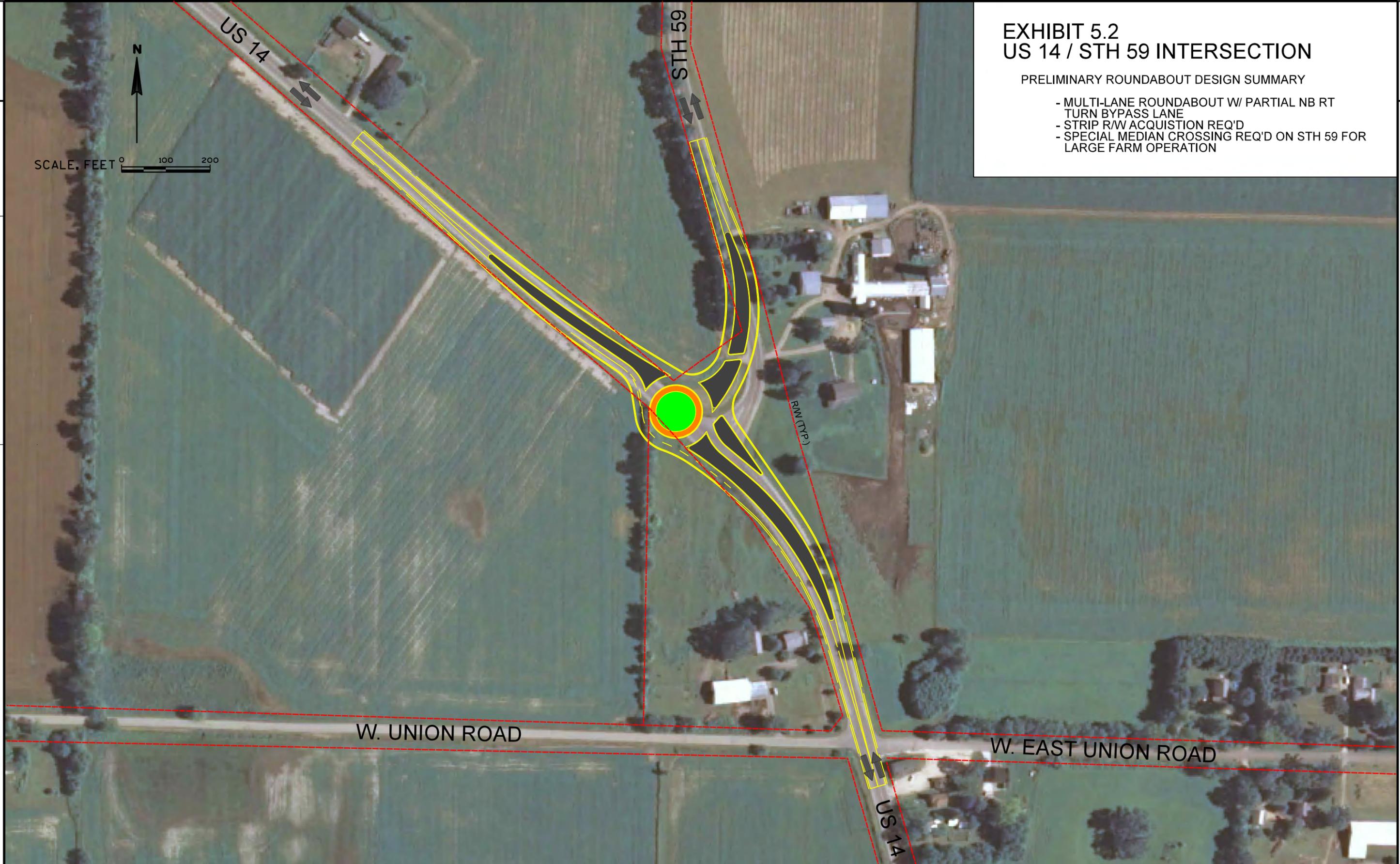
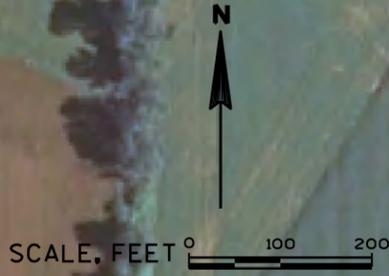
- INTERCHANGE BEING EVALUATED AS PART OF US 14 REALIGNMENT PROJECT
- EXACT INTERCHANGE CONFIGURATION TO BE DETERMINED



# EXHIBIT 5.2 US 14 / STH 59 INTERSECTION

PRELIMINARY ROUNDABOUT DESIGN SUMMARY

- MULTI-LANE ROUNDABOUT W/ PARTIAL NB RT TURN BYPASS LANE
- STRIP R/W ACQUISITION REQ'D
- SPECIAL MEDIAN CROSSING REQ'D ON STH 59 FOR LARGE FARM OPERATION



# EXHIBIT 5.3 US 14 / BULLARD RD INTERSECTION

## PRELIMINARY ROUNDABOUT DESIGN SUMMARY

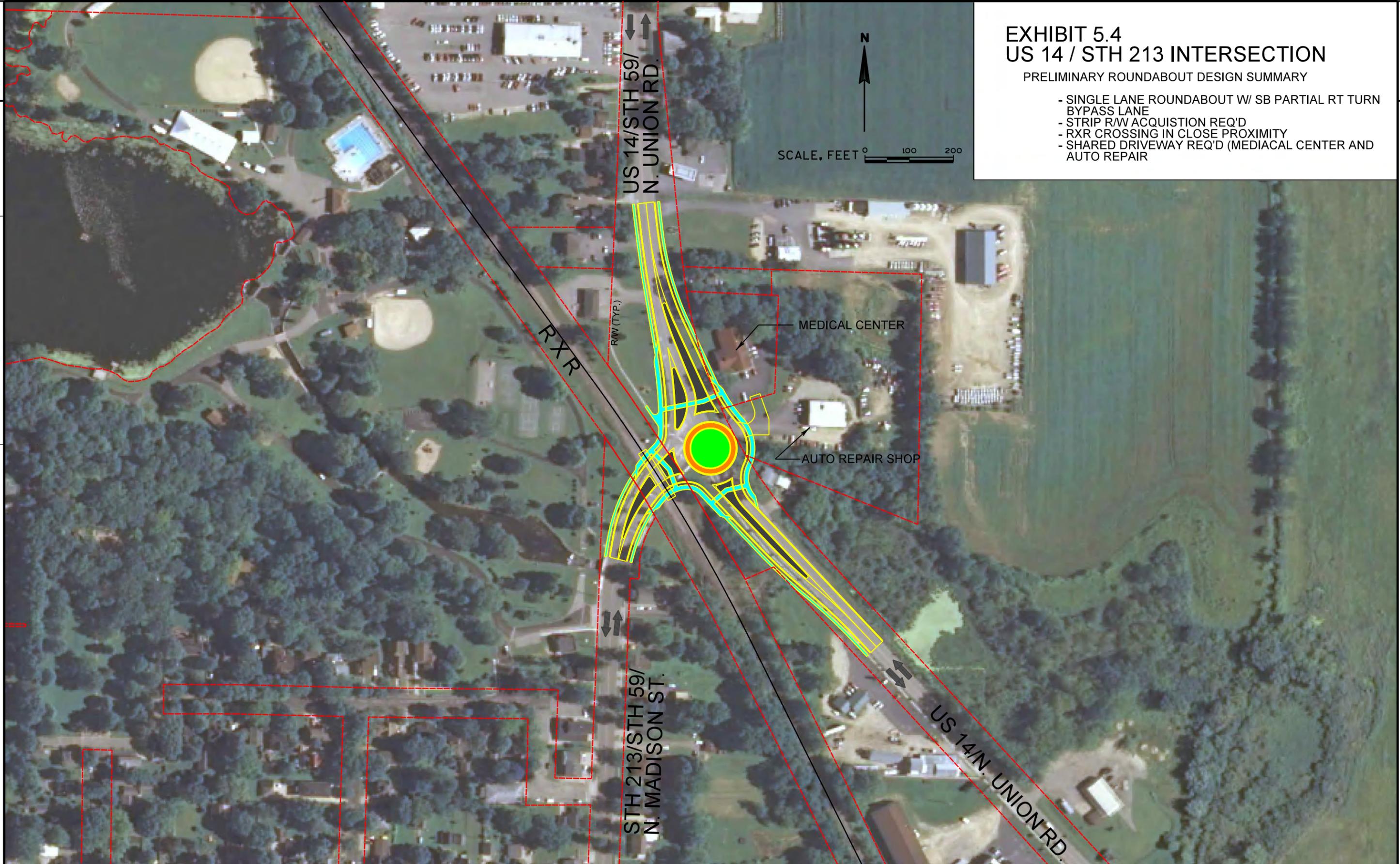
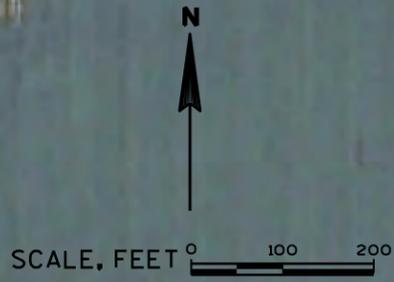
- MULTI-LANE ROUNDABOUT W/ NB PARTIAL RT TURN BYPASS LANE
- STRIP R/W ACQUISTION REQ'D
- 1 FARM HOUSE RELOCATION REQ'D



# EXHIBIT 5.4 US 14 / STH 213 INTERSECTION

PRELIMINARY ROUNDABOUT DESIGN SUMMARY

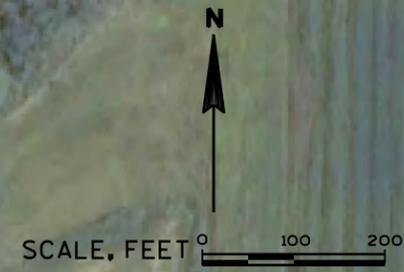
- SINGLE LANE ROUNDABOUT W/ SB PARTIAL RT TURN BYPASS LANE
- STRIP R/W ACQUISTION REQ'D
- RXR CROSSING IN CLOSE PROXIMITY
- SHARED DRIVEWAY REQ'D (MEDIACAL CENTER AND AUTO REPAIR



# EXHIBIT 5.5 US 14 / E. MAIN ST. INTERSECTION

## PRELIMINARY ROUNDABOUT DESIGN SUMMARY

- SINGLE LANE ROUNDABOUT--OVAL SHAPE W/ WB PARTIAL RT TURN BYPASS LANE
- RETAINING WALL NE QUAD REQ'D
- 1 RESIDENTIAL RELOCATION & STRIP RW ACQUISITION REQ'D
- NUMEROUS DRIVEWAYS WITHIN INTERSECTION
- RXR CROSSING IN CLOSE PROXIMITY

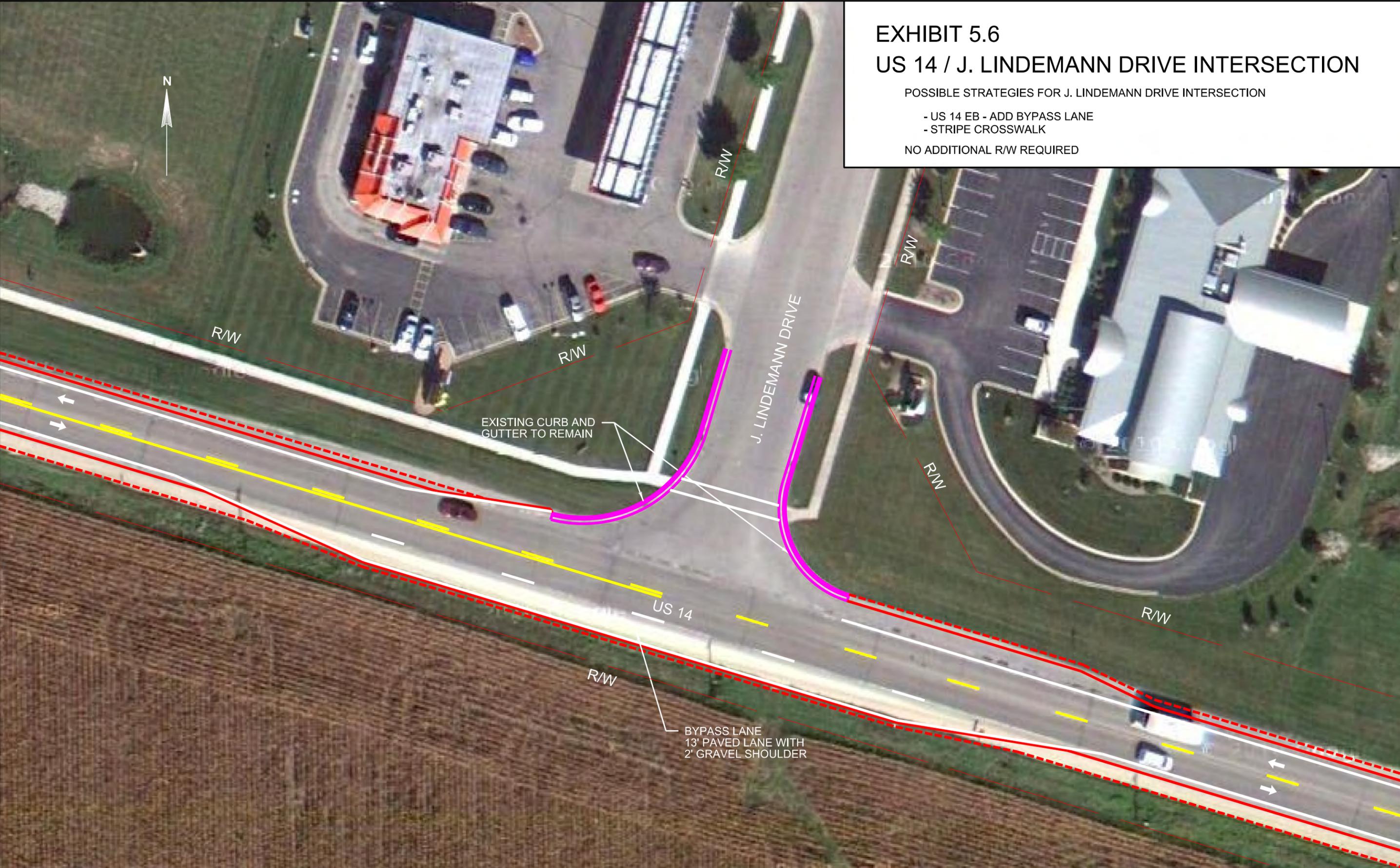


# EXHIBIT 5.6 US 14 / J. LINDEMANN DRIVE INTERSECTION

POSSIBLE STRATEGIES FOR J. LINDEMANN DRIVE INTERSECTION

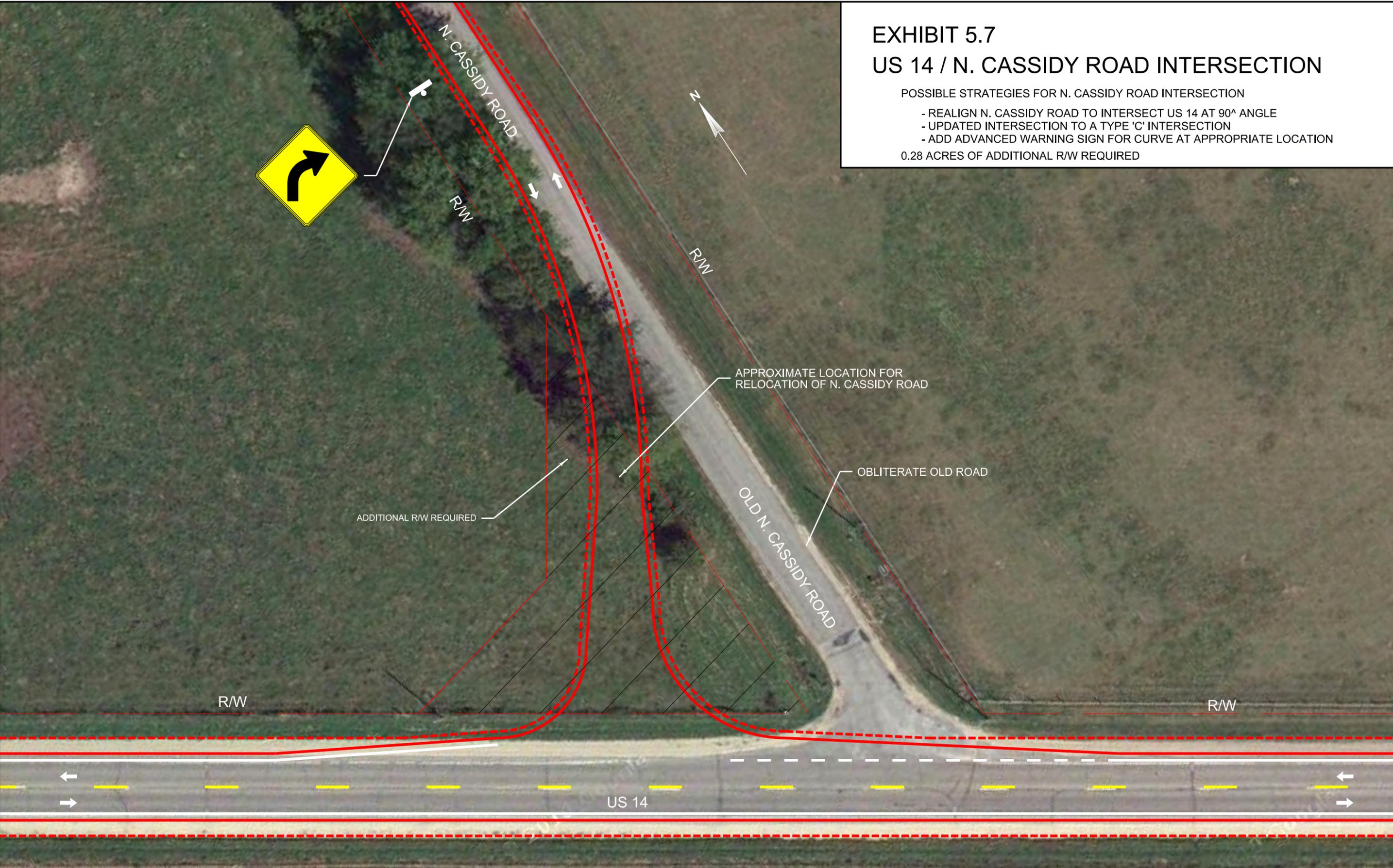
- US 14 EB - ADD BYPASS LANE
- STRIPE CROSSWALK

NO ADDITIONAL R/W REQUIRED



# EXHIBIT 5.7 US 14 / N. CASSIDY ROAD INTERSECTION

- POSSIBLE STRATEGIES FOR N. CASSIDY ROAD INTERSECTION
- REALIGN N. CASSIDY ROAD TO INTERSECT US 14 AT 90° ANGLE
  - UPDATED INTERSECTION TO A TYPE 'C' INTERSECTION
  - ADD ADVANCED WARNING SIGN FOR CURVE AT APPROPRIATE LOCATION
- 0.28 ACRES OF ADDITIONAL R/W REQUIRED



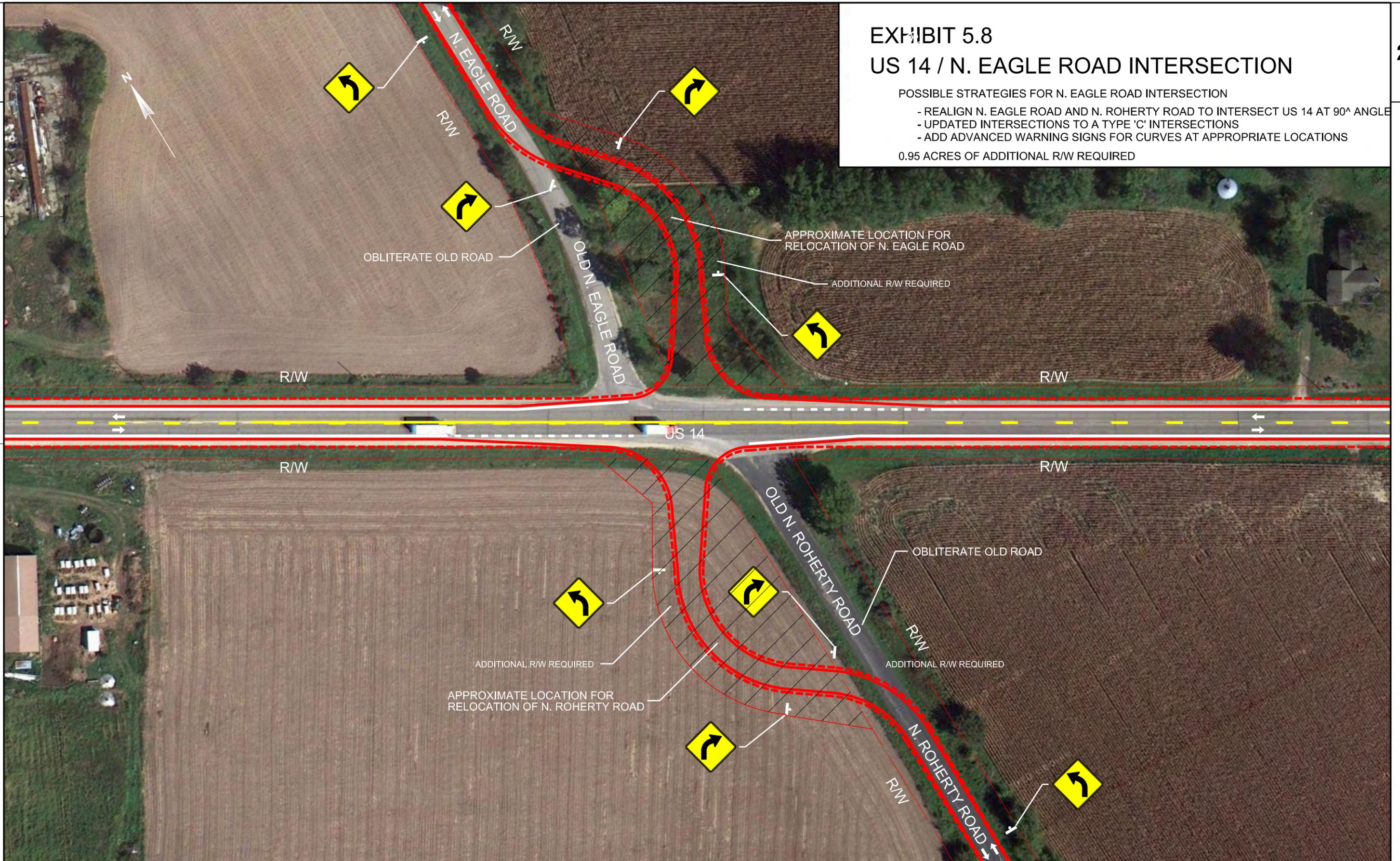
# EXHIBIT 5.8

## US 14 / N. EAGLE ROAD INTERSECTION

### POSSIBLE STRATEGIES FOR N. EAGLE ROAD INTERSECTION

- REALIGN N. EAGLE ROAD AND N. ROHERTY ROAD TO INTERSECT US 14 AT 90° ANGLE
- UPDATED INTERSECTIONS TO A TYPE 'C' INTERSECTIONS
- ADD ADVANCED WARNING SIGNS FOR CURVES AT APPROPRIATE LOCATIONS

0.95 ACRES OF ADDITIONAL R/W REQUIRED

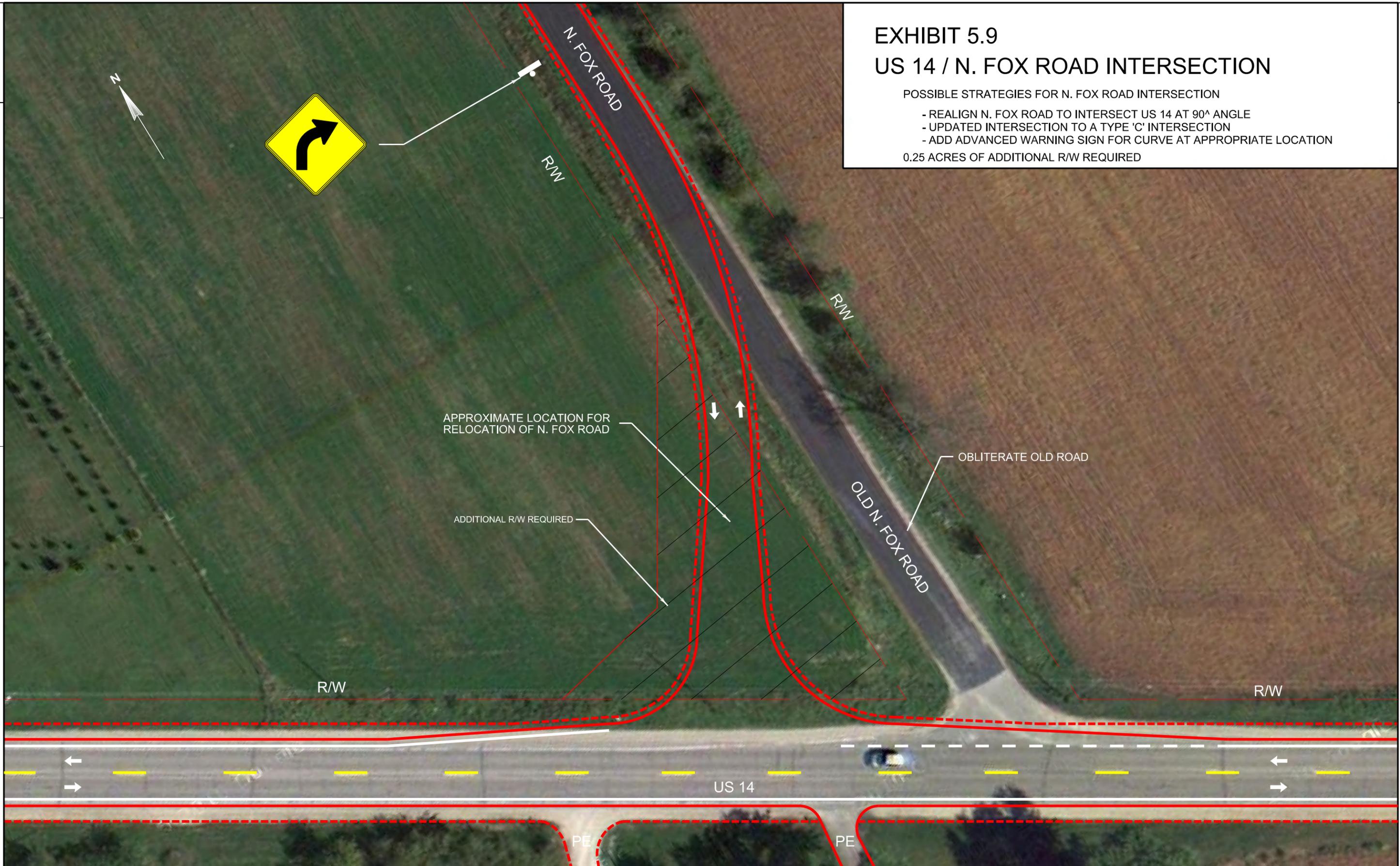


# EXHIBIT 5.9 US 14 / N. FOX ROAD INTERSECTION

POSSIBLE STRATEGIES FOR N. FOX ROAD INTERSECTION

- REALIGN N. FOX ROAD TO INTERSECT US 14 AT 90° ANGLE
- UPDATED INTERSECTION TO A TYPE 'C' INTERSECTION
- ADD ADVANCED WARNING SIGN FOR CURVE AT APPROPRIATE LOCATION

0.25 ACRES OF ADDITIONAL R/W REQUIRED

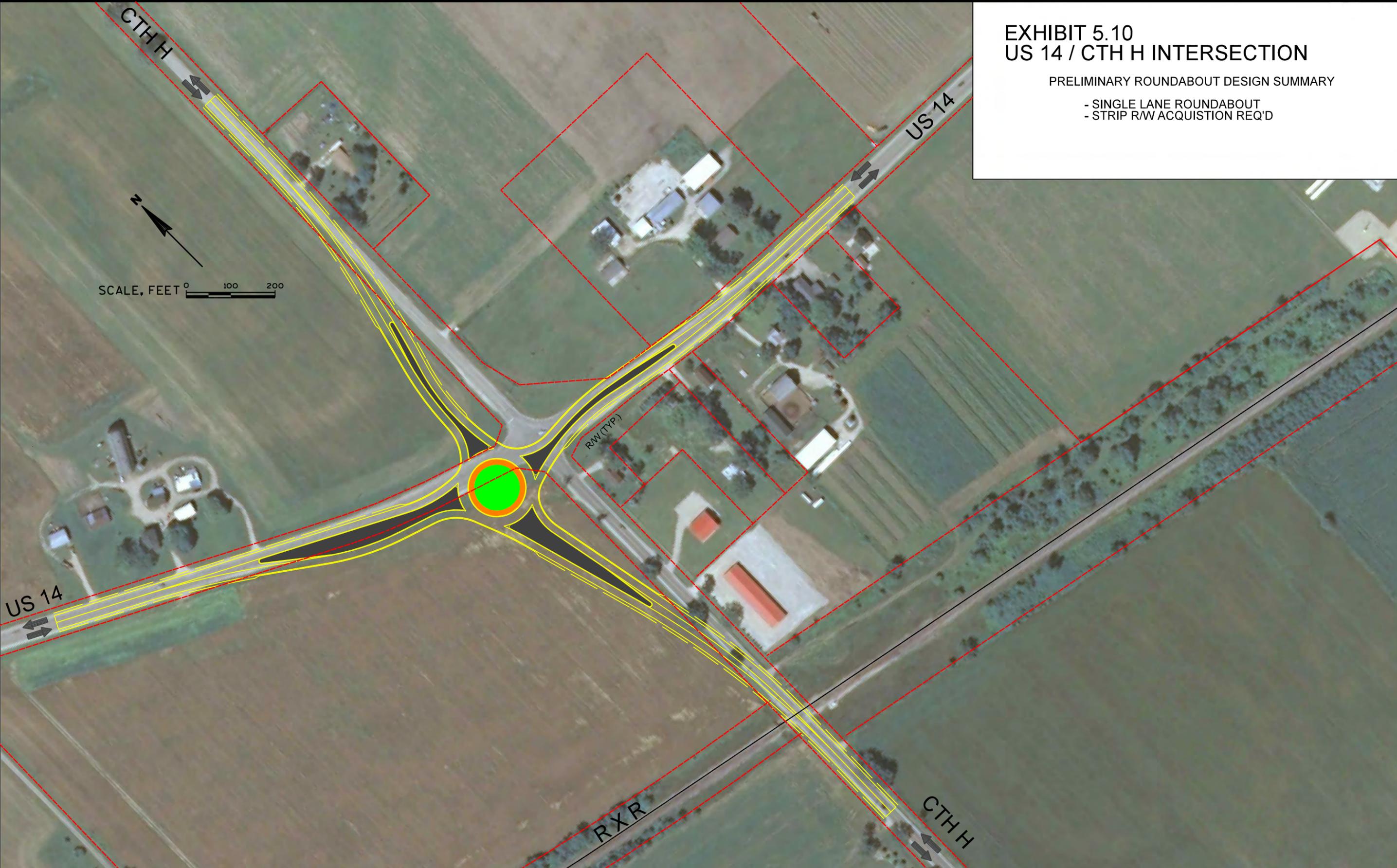


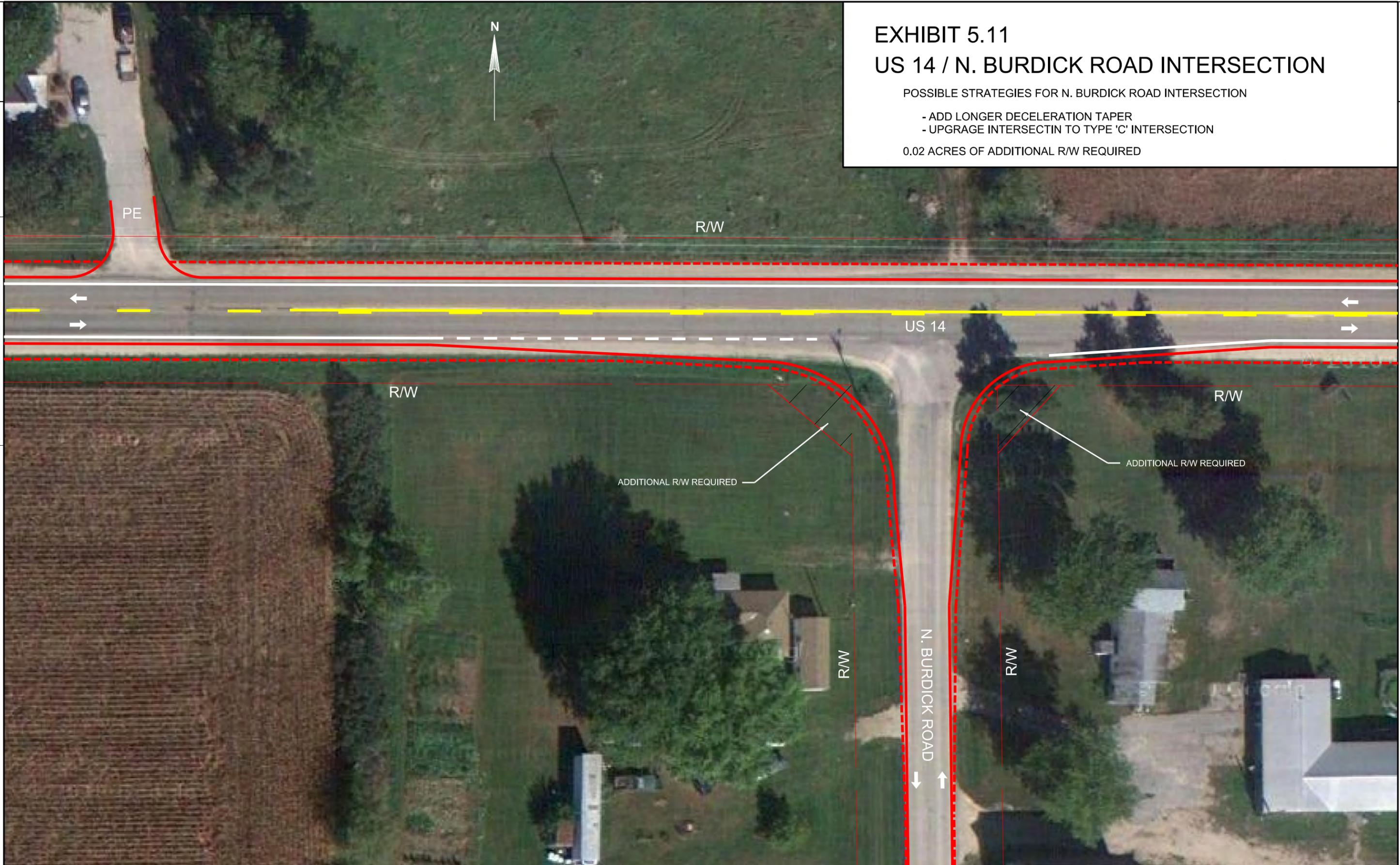
PROJECT NO:	HWY: USH 14	COUNTY: ROCK	EXHIBIT 5.9: US 14 / N. FOX ROAD INTERSECTION	SHEET	<b>E</b>
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# EXHIBIT 5.10 US 14 / CTH H INTERSECTION

PRELIMINARY ROUNDABOUT DESIGN SUMMARY

- SINGLE LANE ROUNDABOUT
- STRIP R/W ACQUISITION REQ'D





**EXHIBIT 5.11**  
**US 14 / N. BURDICK ROAD INTERSECTION**

POSSIBLE STRATEGIES FOR N. BURDICK ROAD INTERSECTION

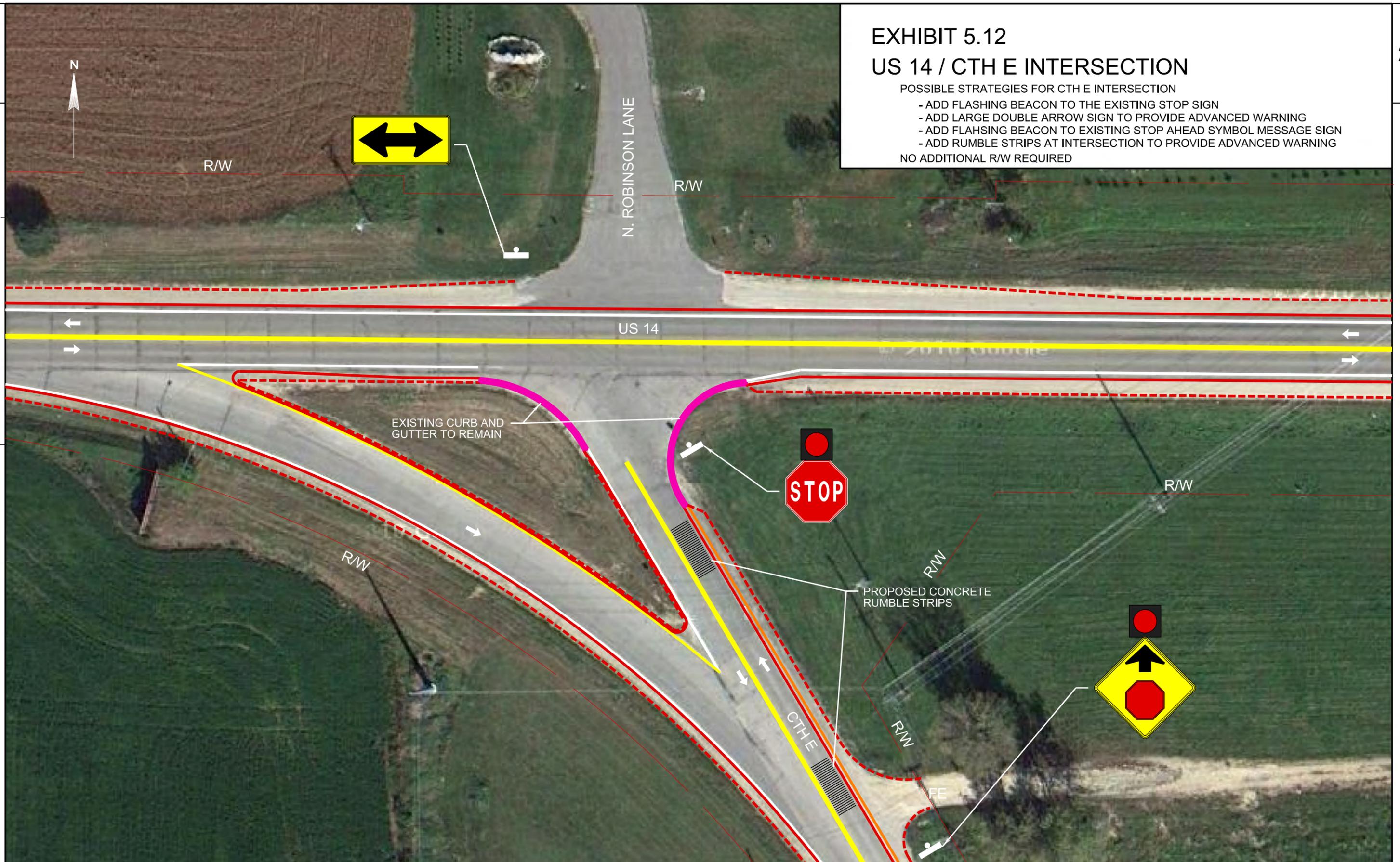
- ADD LONGER DECELERATION TAPER
- UPGRADE INTERSECTION TO TYPE 'C' INTERSECTION

0.02 ACRES OF ADDITIONAL R/W REQUIRED

# EXHIBIT 5.12 US 14 / CTH E INTERSECTION

## POSSIBLE STRATEGIES FOR CTH E INTERSECTION

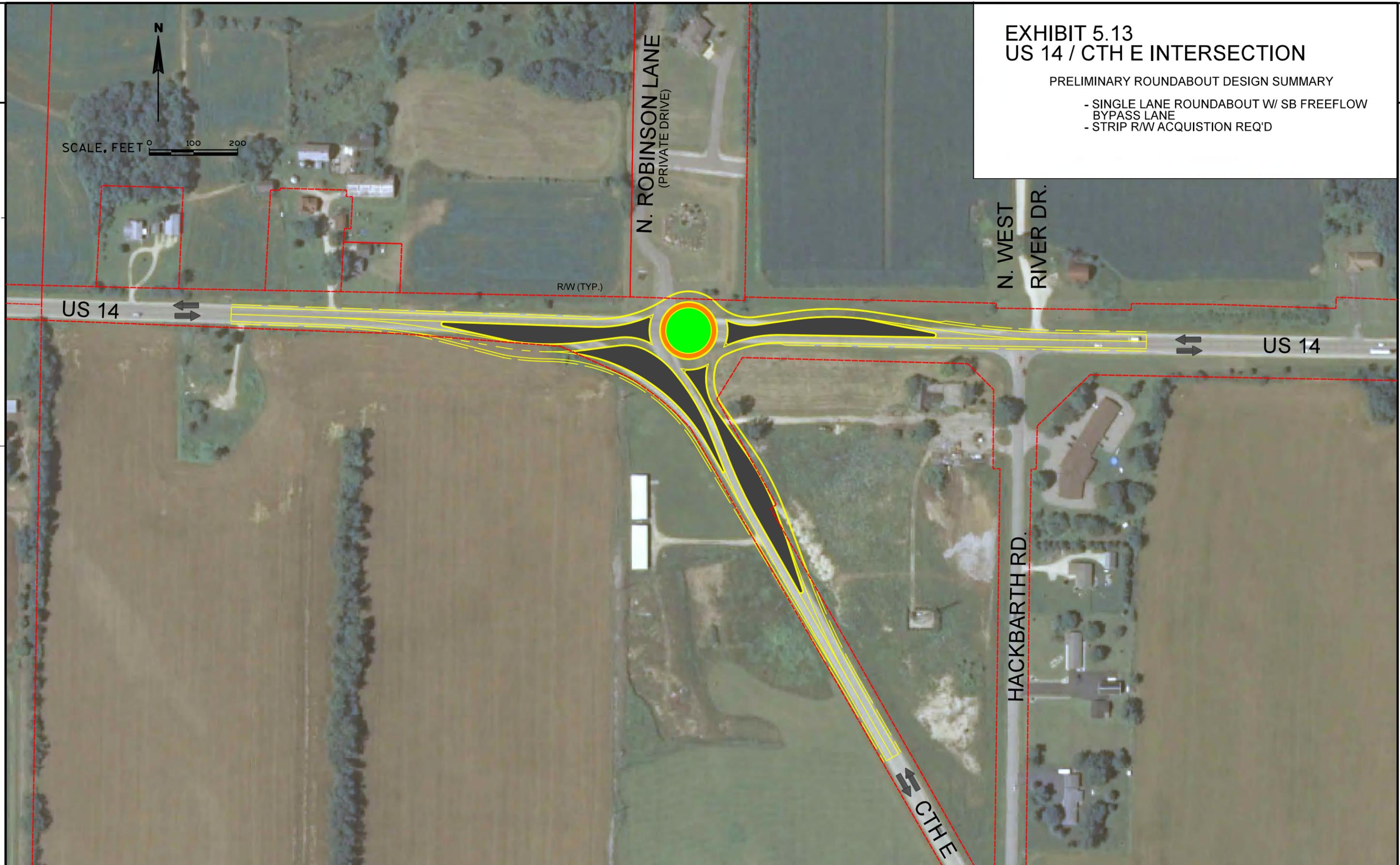
- ADD FLASHING BEACON TO THE EXISTING STOP SIGN
  - ADD LARGE DOUBLE ARROW SIGN TO PROVIDE ADVANCED WARNING
  - ADD FLASHING BEACON TO EXISTING STOP AHEAD SYMBOL MESSAGE SIGN
  - ADD RUMBLE STRIPS AT INTERSECTION TO PROVIDE ADVANCED WARNING
- NO ADDITIONAL R/W REQUIRED



# EXHIBIT 5.13 US 14 / CTH E INTERSECTION

PRELIMINARY ROUNDABOUT DESIGN SUMMARY

- SINGLE LANE ROUNDABOUT W/ SB FREEFLOW BYPASS LANE
- STRIP R/W ACQUISTION REQ'D



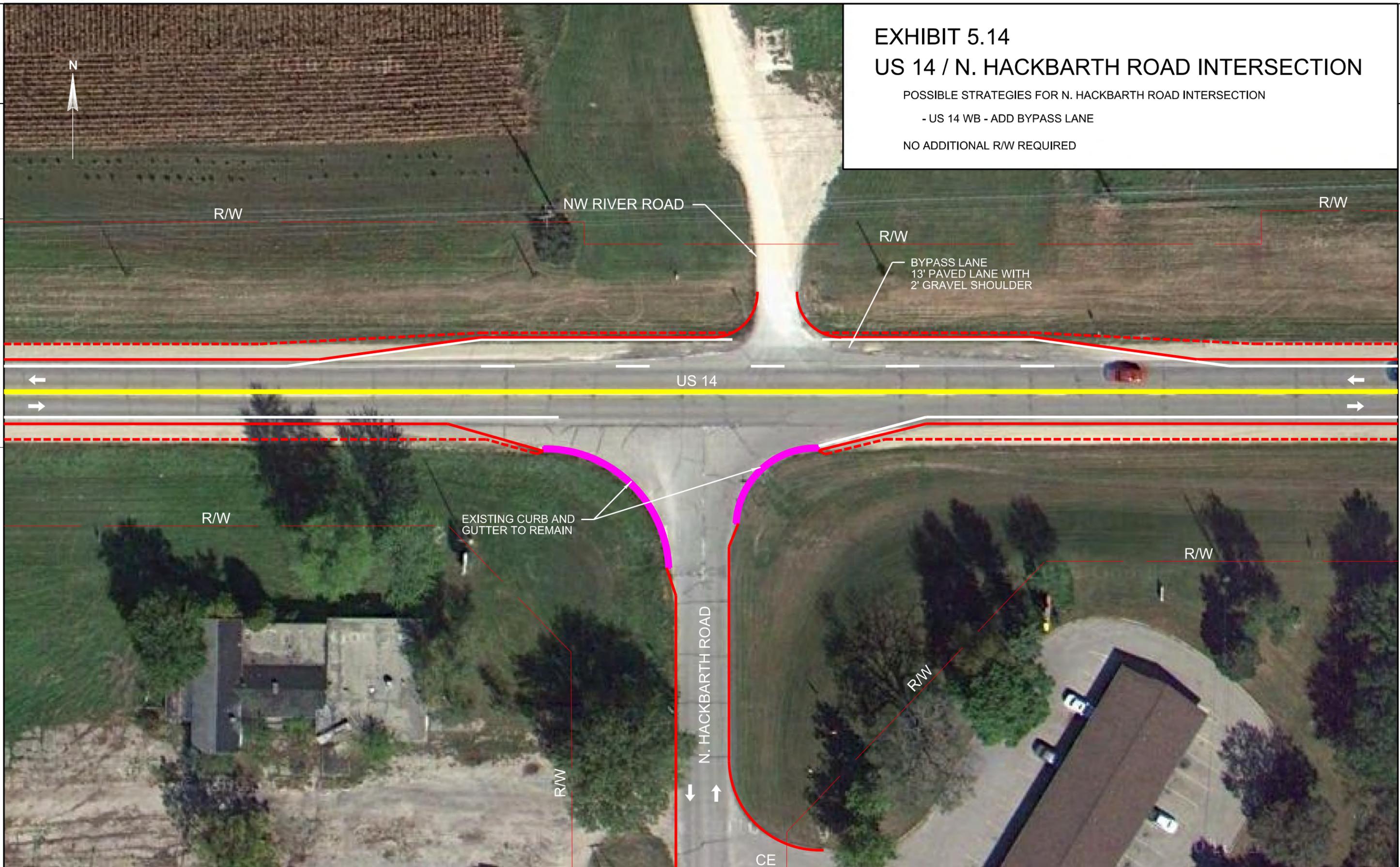


# EXHIBIT 5.14 US 14 / N. HACKBARTH ROAD INTERSECTION

POSSIBLE STRATEGIES FOR N. HACKBARTH ROAD INTERSECTION

- US 14 WB - ADD BYPASS LANE

NO ADDITIONAL R/W REQUIRED



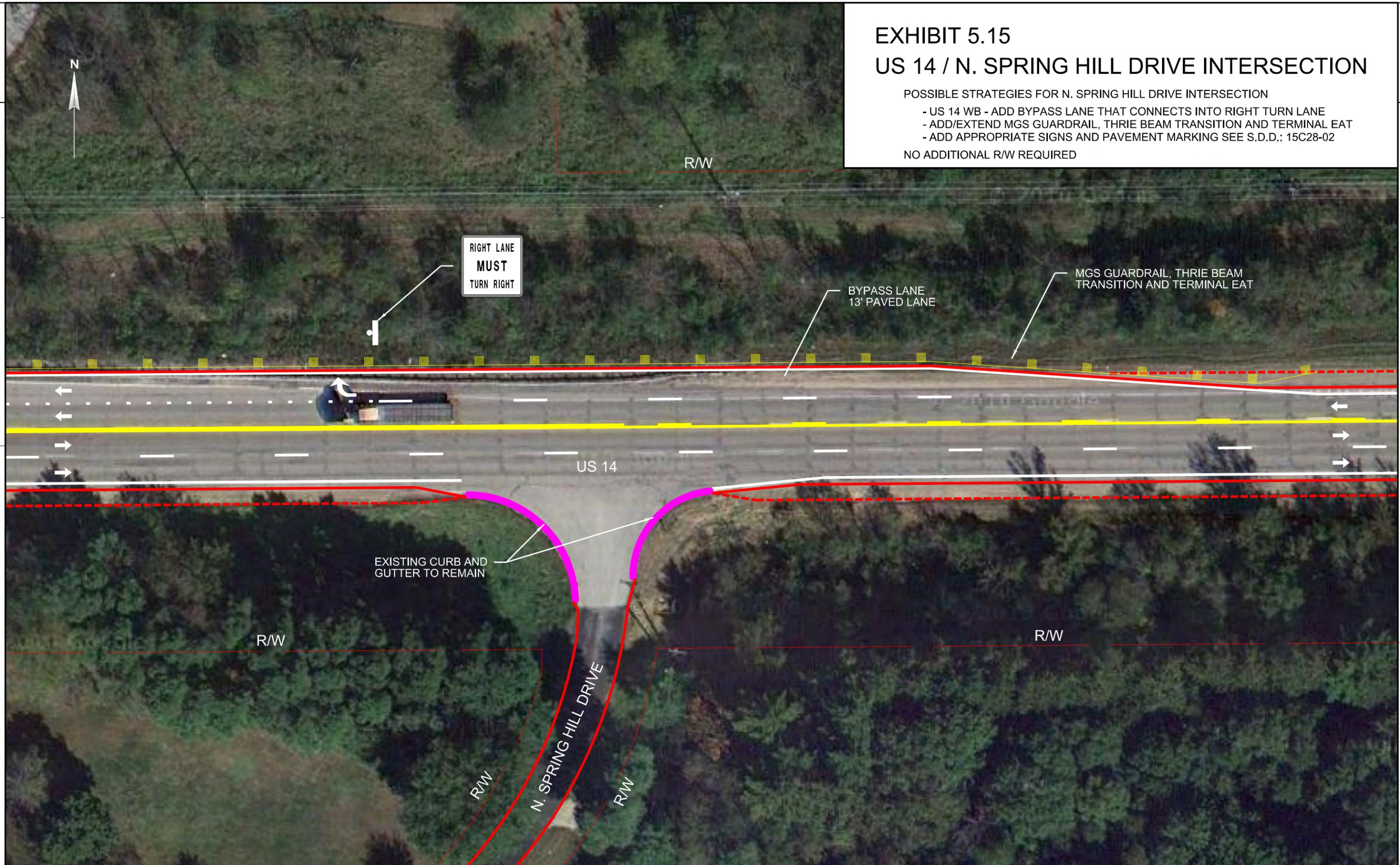


# EXHIBIT 5.15 US 14 / N. SPRING HILL DRIVE INTERSECTION

## POSSIBLE STRATEGIES FOR N. SPRING HILL DRIVE INTERSECTION

- US 14 WB - ADD BYPASS LANE THAT CONNECTS INTO RIGHT TURN LANE
- ADD/EXTEND MGS GUARDRAIL, THRIE BEAM TRANSITION AND TERMINAL EAT
- ADD APPROPRIATE SIGNS AND PAVEMENT MARKING SEE S.D.D.: 15C28-02

NO ADDITIONAL R/W REQUIRED

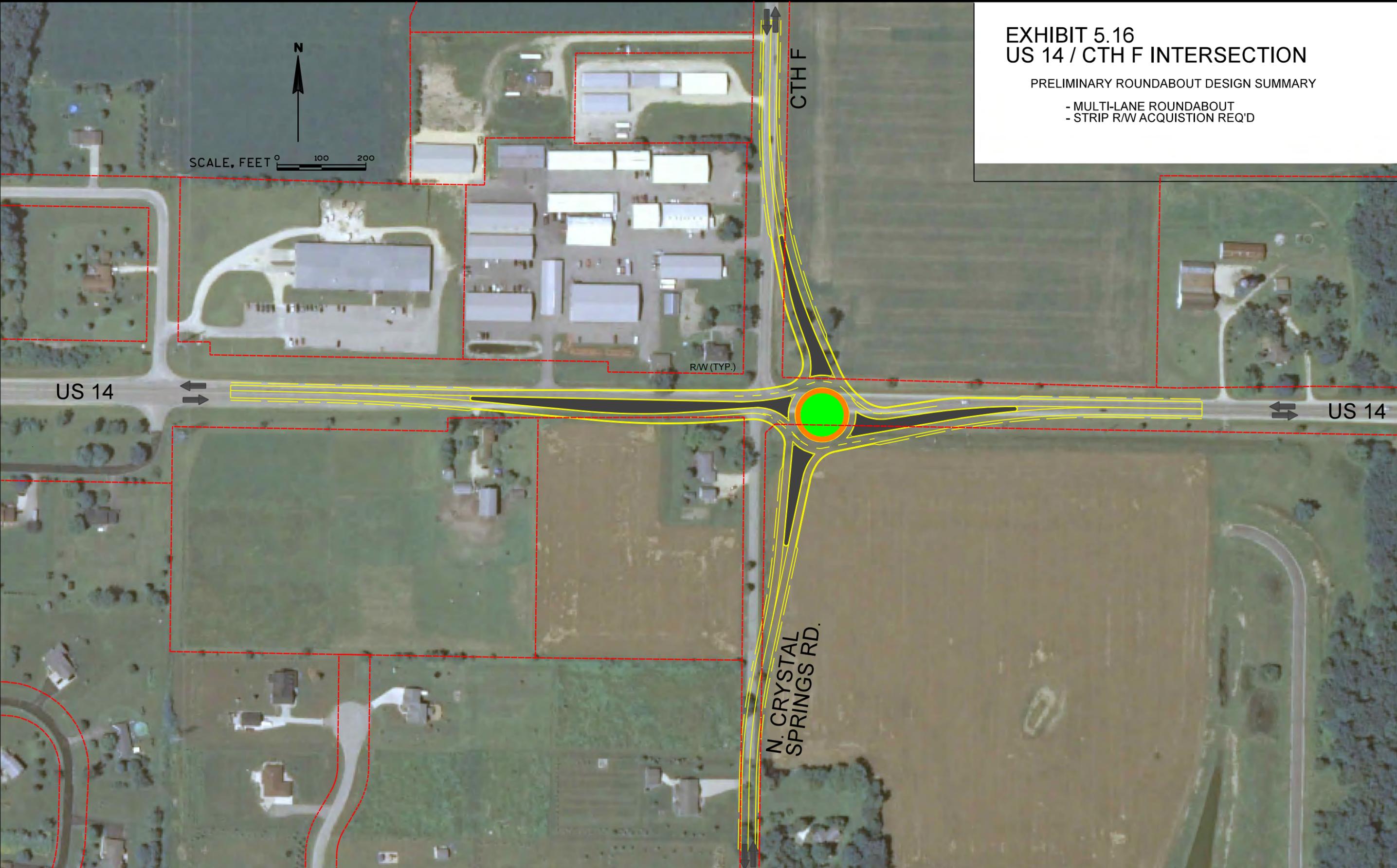


PROJECT NO:	HWY: USH 14	COUNTY: ROCK	EXHIBIT 5.15: US 14 / N. SPRING HILL DRIVE INTERSECTION	SHEET	<b>E</b>
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# EXHIBIT 5.16 US 14 / CTH F INTERSECTION

PRELIMINARY ROUNDABOUT DESIGN SUMMARY

- MULTI-LANE ROUNDABOUT
- STRIP R/W ACQUISITION REQ'D



# EXHIBIT 5.17 US 14 / US 51 INTERSECTION

PRELIMINARY ROUNDABOUT DESIGN SUMMARY

- MULTI-LANE ROUNDABOUT
- PARTIAL RT TURN BYPASS LANES NB & WB
- STRIP R/W ACQUISITION REQ'D



SCALE, FEET 0 100 200



# EXHIBIT 5.18 US 14 / N. TOLLES ROAD INTERSECTION

POSSIBLE STRATEGIES FOR N. TOLLES ROAD INTERSECTION  
 - US 14 EB - ADD BYPASS LANE  
 NO ADDITIONAL R/W REQUIRED

