

BASIC SHEETS – BACKGROUND INFORMATION

This Section of the EIS, called the “Basic Sheets”, contains background information, summaries of impacts, and other information pertinent to the environmental impact studies. It discusses the purpose and need for a project and describes all the alternatives that were studied.

A. BACKGROUND INFORMATION

1. Geographical Setting

The study area for this Environmental Impact Statement is located in south central Wisconsin. The study area encompasses portions of the southern half of Jefferson County and the northern quarter of Rock County. See Figure 1 on page 4. The area is situated roughly half-way between the two major cities of southern Wisconsin, Madison and Milwaukee.

Landscape

In Jefferson County, the study area includes the incorporated city of Fort Atkinson and the surrounding Township of Koshkonong. Within Rock County, the study area includes the northern portions of the Townships of Lima and Milton.

Outside of the urban landscape of Fort Atkinson (population 11,621), the area is dominated by agricultural uses and open space/wetland natural areas. Many land and water resources are present in the study area including the Rock River and its tributaries, streams, a large wetland complex, Lake Koshkonong, tilled agricultural lands, and dairy farms.

Elevations in the study area range between approximately 750 and 1,000 feet above sea level. The topography is typical of a glaciated region with the hilly drumlins interspersed with low lying wetland areas.

Climate

The area's average annual temperature is 46 degrees F with an average annual rainfall of 34.11 inches.

Geology and Hydrology

The predominantly sandstone bedrock is overlain by glacial drift in most of the study area. Water supplies are from groundwater. For the most part the water table lies within the glacial drift where groundwater recharge occurs. The source of all groundwater is from precipitation. Well yields differ widely throughout the area.

The study area region is known to contain Karst topography. Karst refers to areas where sinkholes, shallow soils, or sinking streams or springs occur. A Karst-related sinkhole usually indicates an area of weakness in bedrock stability. Sinkholes can occur in clusters or as isolated features and are often found at the intersection of weathered bedrock joints (enlarged bedrock fractures). Some sinkholes are connected to an intricate subsurface drainage network or cave system.

Karst conditions make it easier for groundwater to become contaminated. In areas where Karst occurs, underwater streams and springs can be impacted by contaminants such as pesticides, animal waste, or roadway runoff. While linear projects such as roadway construction have minimal impact on the recharge region of most springs, exposure of these springs to contaminants such as roadway runoff or construction sediment has the potential to impact groundwater supplies. In many instances, the risk of contaminating groundwater in Karst areas is reduced if rock cutting or blasting is avoided.

Additional detailed information about the various affected resources can be found on the Factor Sheets beginning on page 71.

2. Description of Proposed Action

The Wisconsin Department of Transportation (WisDOT) proposes to improve the regional mobility of the US 12 highway system in the Fort Atkinson area from the US 12 Bypass of Whitewater to the North Fort Atkinson US12/WIS26 interchange. See Figure 1 on page 4 for a map of the study area. Several alternative improvements of a broad range of type and intensity were proposed to improve the regional mobility of the US 12 highway system in the Fort Atkinson area. See the alternatives in Figure 2 on page 5. Potential improvements ranged from doing nothing to improving the existing alignment to building a new bypass of Fort Atkinson, to rerouting US 12 to another highway. WisDOT developed alternatives in consultation with the public, a locally appointed Advisory Committee² and cooperating and interested agencies. Each alternative is fully described in Item 4 on page 23.

US 12 is designated a Corridors 2020 Connector route in the State's highway plans. The connector routes are a system of two- and four-lane highways that connect key communities and regional economic centers to the Corridors 2020 Backbone routes. The backbone routes are key multi-lane routes that connect major population and economic centers and provide economic links to national and international markets e.g. the interstate highways. The system is to carry high volumes of auto and heavy truck traffic. The existing typical section for Main Street in Fort Atkinson is contained in Figure 3 on page 6. Fort Atkinson's Robert Street can be seen in Figure 4 on page 7.

WisDOT examined the broad range of alternatives and selected six for detailed study in this DEIS. See Figure 5 on page 8 for a map of the alternatives selected for further study. Item 4 on page 23 describes fully the various alternatives.

A preferred alternative has not yet been selected by WisDOT. This Draft Environmental Impact Statement (DEIS) provides a comparative assessment of the alternatives to assist decision-makers in selecting a preferred alternative. A preferred alternative will be presented in the Final EIS (FEIS) after public comment and testimony is weighed.

² The Advisory Committee members are presented on page 3.

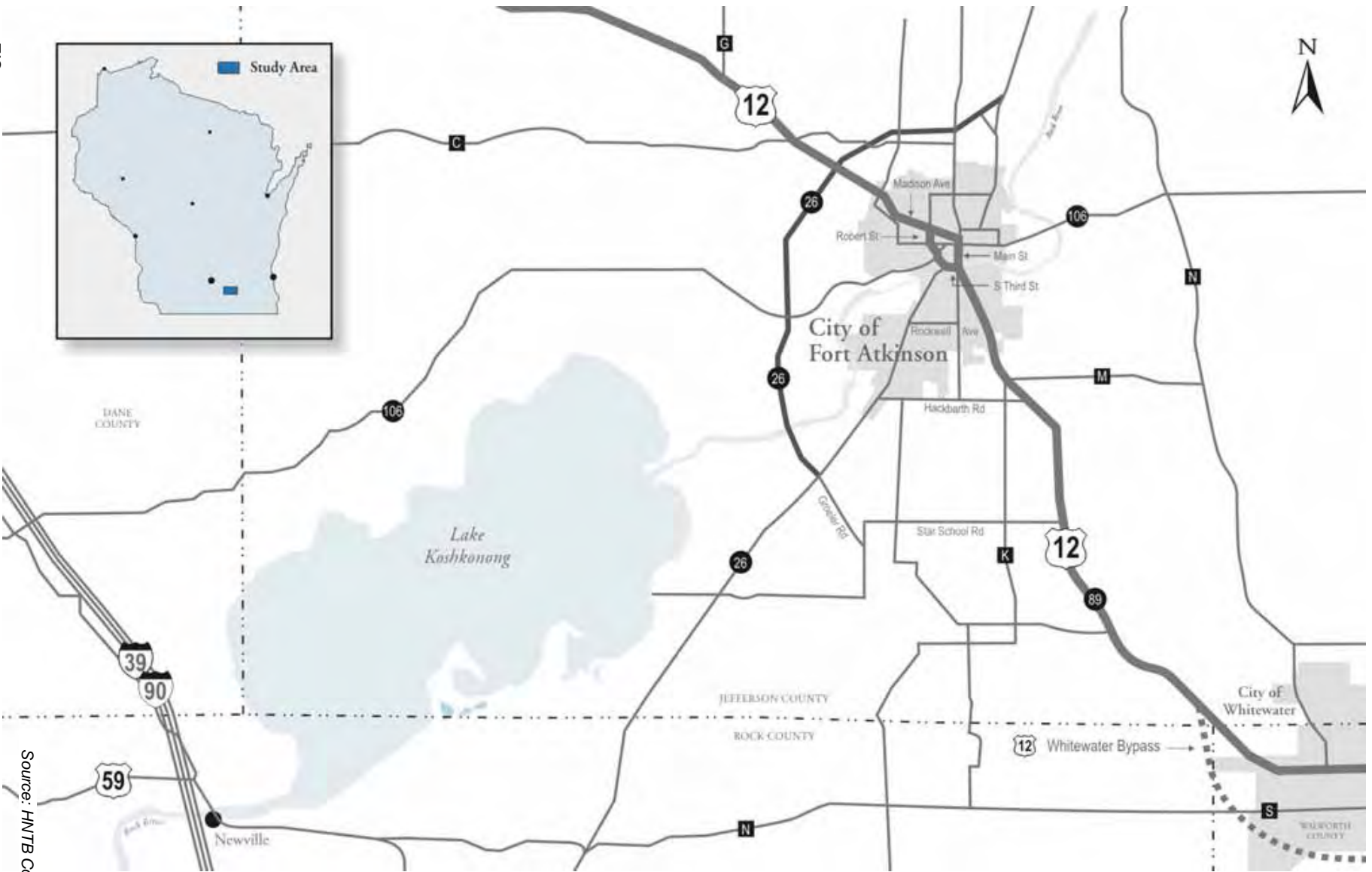
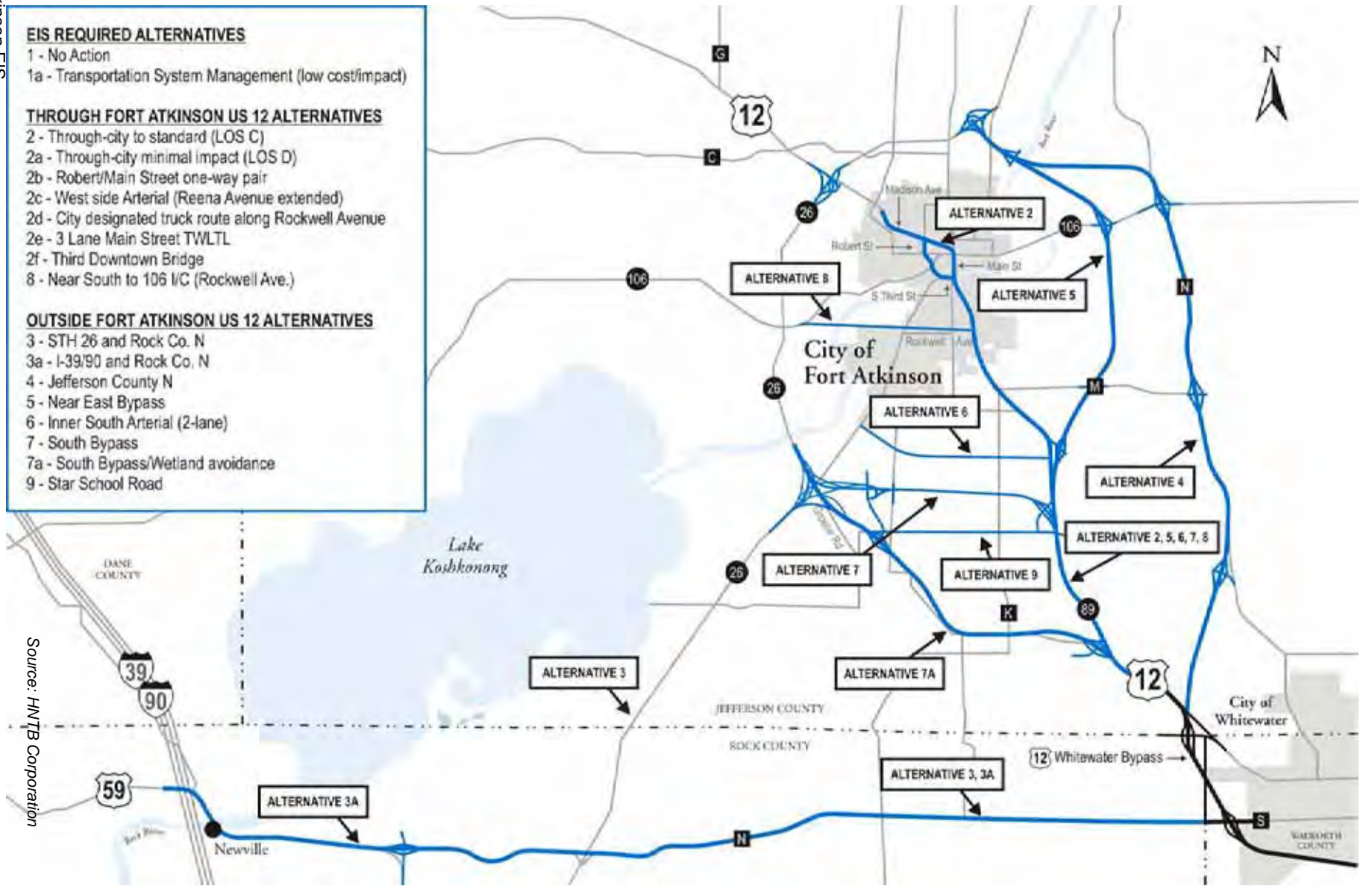


Figure 1: Study Area

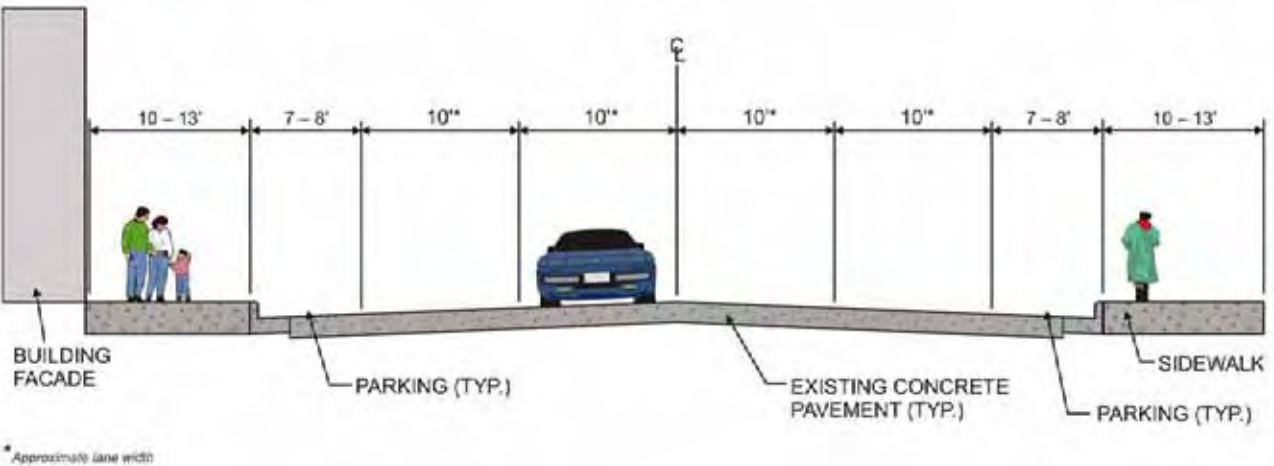
Source: HNTB Corporation

- EIS REQUIRED ALTERNATIVES**
- 1 - No Action
 - 1a - Transportation System Management (low cost/impact)
- THROUGH FORT ATKINSON US 12 ALTERNATIVES**
- 2 - Through-city to standard (LOS C)
 - 2a - Through-city minimal impact (LOS D)
 - 2b - Robert/Main Street one-way pair
 - 2c - West side Arterial (Reena Avenue extended)
 - 2d - City designated truck route along Rockwell Avenue
 - 2e - 3 Lane Main Street TWLTL
 - 2f - Third Downtown Bridge
 - 8 - Near South to 106 I/C (Rockwell Ave.)
- OUTSIDE FORT ATKINSON US 12 ALTERNATIVES**
- 3 - STH 26 and Rock Co. N
 - 3a - I-39/90 and Rock Co. N
 - 4 - Jefferson County N
 - 5 - Near East Bypass
 - 6 - Inner South Arterial (2-lane)
 - 7 - South Bypass
 - 7a - South Bypass/Wetland avoidance
 - 9 - Star School Road

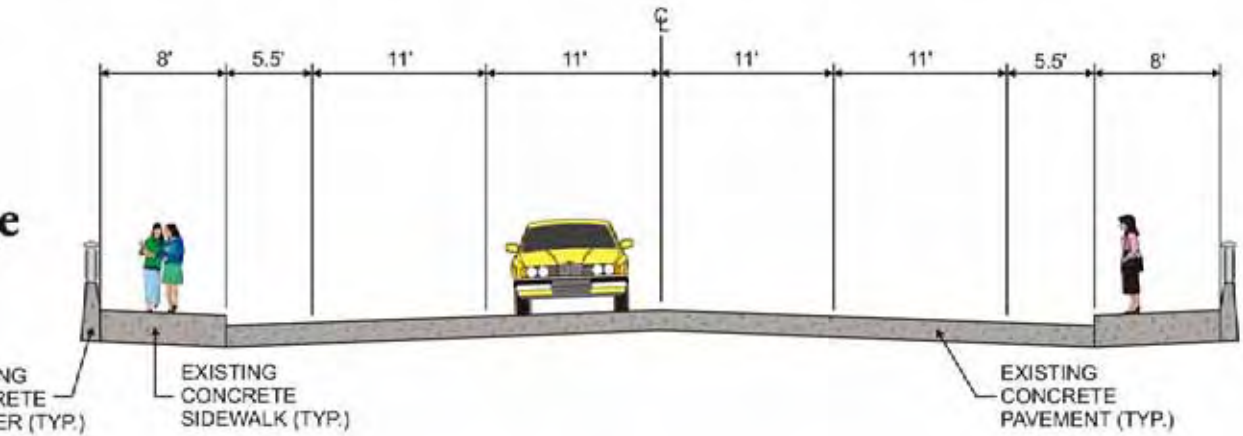


Source: HNTB Corporation

Figure 2: Broad Range of Alternatives

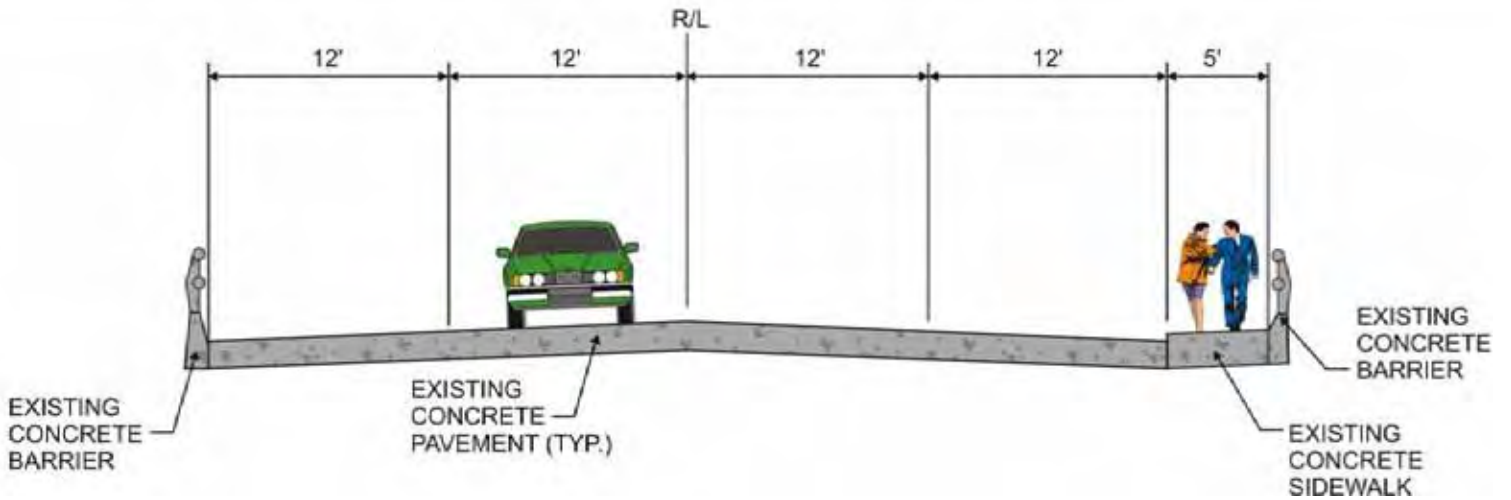
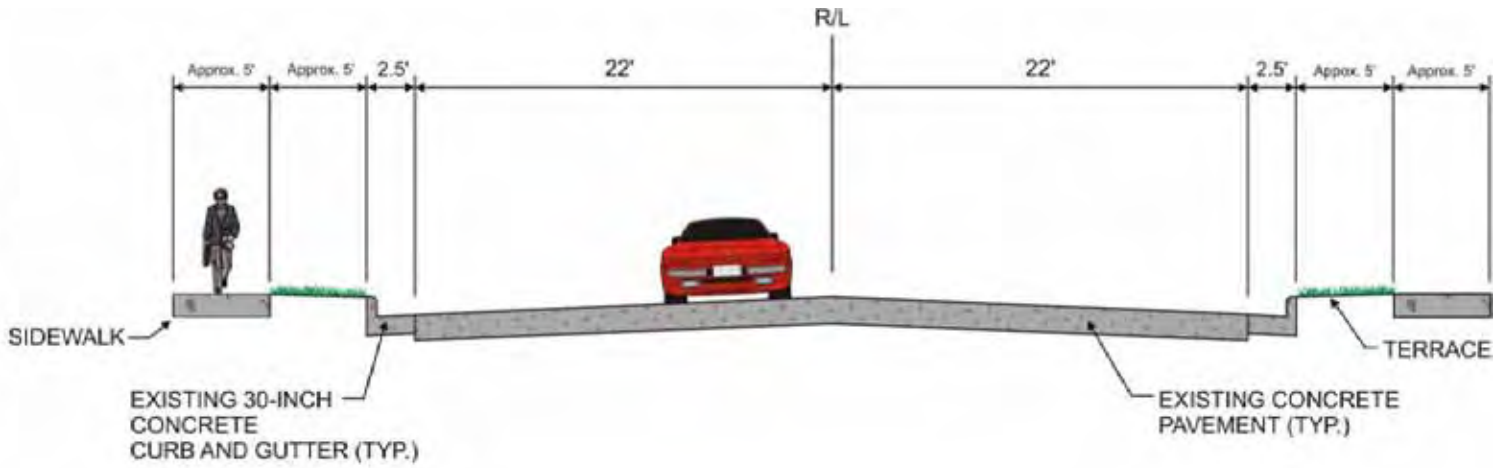


Main Street



Main Street Bridge

Source: HNTB Corporation

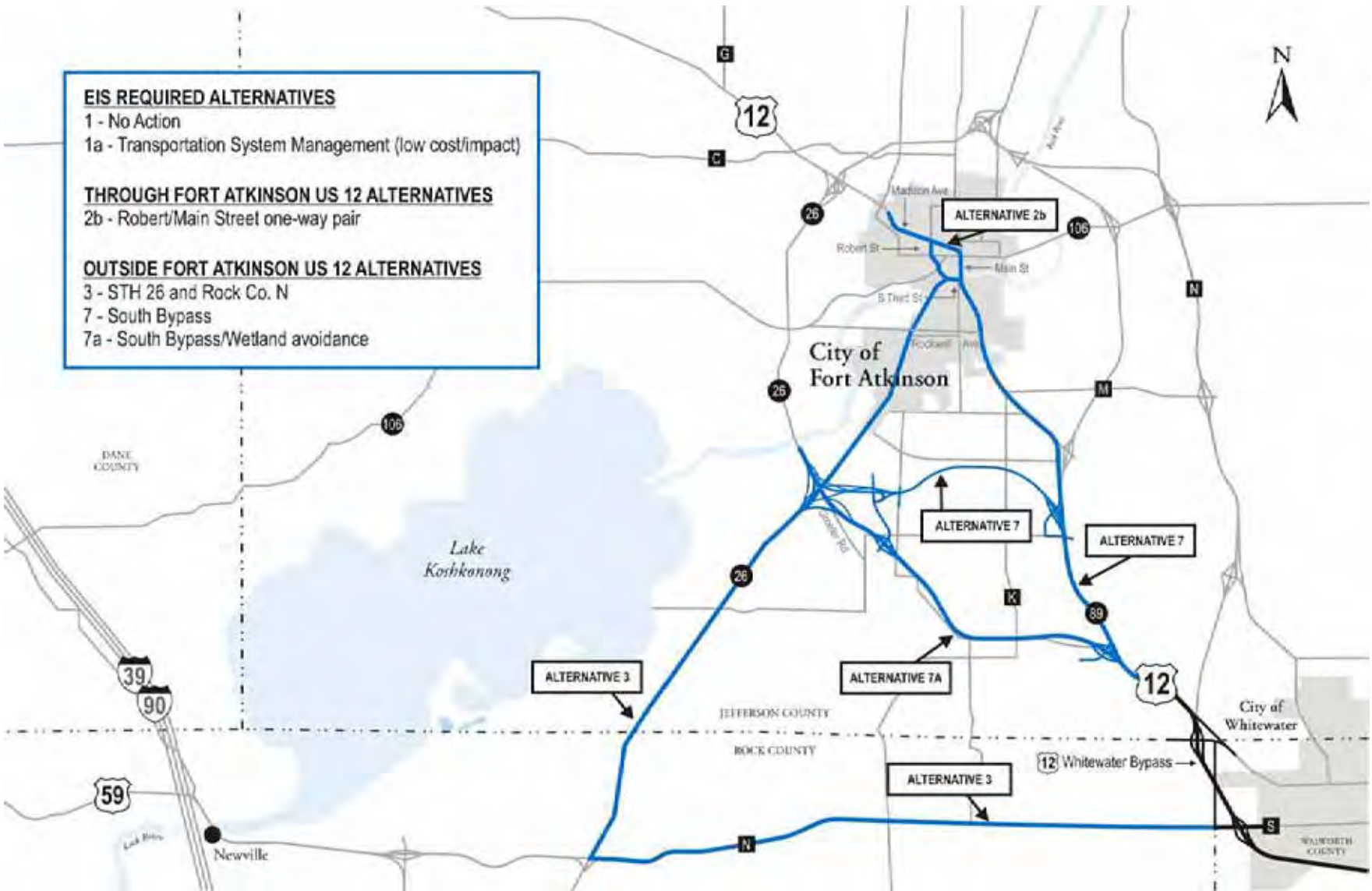


Robert Street North of Bridge

Robert Street Bridge Facing North

Source: HNTB Corporation

Figure 4: Robert Street Existing Typical Sections



Source: HNTB Corporation

Figure 5: Alternatives Retained for Detailed Study

3. Purpose and Need of Proposed Action

Include description of existing facilities, abutting facilities, and how the action links into the overall transportation system. When appropriate, show that commitment for future work is not being made without evaluation, and that viable alternatives in a larger framework are not being unduly foreclosed.

Current Role of US 12

US Highway 12 is a part of the National Highway System (NHS) that stretches across much of the continent. In this respect, its function is of state and national concern. The purpose of the NHS is to serve major population centers, international border crossings, ports, airports, public transportation facilities, and other intermodal transportation facilities and destinations and to serve interstate and interregional travel. The NHS is expected to carry 40% of the nation’s highway traffic, 75% of heavy truck traffic, and 80% of tourist traffic.

US 12 extends from Aberdeen, Washington to Detroit, Michigan, passing through ten states. The highway is of regional importance and makes needed interconnections to the interstate highway system. US 12, enters the State of Wisconsin from the west via Minneapolis – St. Paul, Minnesota at Hudson Wisconsin. As it proceeds east, it passes Wisconsin Dells, Baraboo, Sauk City, Middleton, Madison, Cambridge, Fort Atkinson and Whitewater. It continues on through Wisconsin, leaving the state at the southeast corner of Walworth County, on to the greater Chicago area.



Through Madison, US 12 is a freeway with full access control . In addition, WisDOT has scheduled the construction of US 12 bypasses around Whitewater and Middleton to be completed in 2005.

US 12 is designated as a “connector route” in the WisDOT Corridors 2020 plan as shown in Figure 6 on page 19. The purpose of the connector system is to link significant economic and tourism centers to the backbone system in order to integrate them into the statewide and national transportation system. The criteria for connector highway design include highest standards of roadway width, passing opportunities, safety and driving comfort, where economically feasible³. In this region, US 12 serves the backbone routes of Interstate Highways 39, 90, 94 and 43.

To be designated a connector route; the roadway must meet certain established criteria. The segment of US 12 in the study area was so designated because it provides service to the trade centers of Fort Atkinson and Whitewater, is a segment that has current or predicted average daily truck volumes of greater than 625 in 1994 or greater than 1,050 by 2020, and has connections and direct service to Jefferson County, which is classified as a Tier 2 Manufacturing Center and a Tier 1 Agricultural Center.⁴

³ *Corridors 2020 Review and Update*. Wisconsin Department of Transportation. June 1994.

⁴ WisDOT classifies counties into three manufacturing “tiers” based on the number of businesses, number of employees, and value added. Agricultural counties were ranked into three tiers based on agricultural productivity. Tiers are ranked from 1 to 3 with Tier 1 locations having higher significance to the state.

In the project area, US 12 is a “principal arterial” throughout the study area. The highway is a two-lane rural roadway as it enters Fort Atkinson at the northwest on Madison Avenue, where it is a two lane urban section. Eastbound US 12 traffic continues on Madison Avenue until the route splits at Robert Street, continuing to South Third Street and then to Whitewater Avenue. Eastbound traffic then continues on Whitewater Avenue where it again becomes a two-lane rural roadway to the end of the study area at the US 12 Bypass of Whitewater. Westbound traffic enters Fort Atkinson at the south along Whitewater Avenue, continuing north on Main Street to Madison Avenue where it continues until it meets up again at Robert Street and continuing on Madison Avenue west to the intersection with the WIS 26 Bypass of Fort Atkinson. See Figure 7 on page 20.

The stretch of the study corridor between the Whitewater bypass and the intersection of Main and Madison Streets in Fort Atkinson is also designated state trunk highway 89 (WIS 89). WIS 89 is classified a “minor arterial” by the state.

As a fundamental link in the state highway system, this route’s primary purpose is to provide statewide mobility. The primary function of US 12 in the Fort Atkinson area is as a regional traffic carrier. Regional traffic has neither an origin nor destination in Fort Atkinson. It passes through the city. But for many of its trips, US 12 also acts as a local street providing a high level of local access. These dual roles often conflict. This is especially true within the city of Fort Atkinson, as evidenced by the Needs Assessment Study completed for the project in 2002.⁵

Along the US 12 alignment within Fort Atkinson, the different local uses provided include residential and business access, on street parking and river crossings. For many Fort Atkinson residents, US 12 provides access to their front door. US 12 provides businesses with direct access throughout the downtown area, on portions of Whitewater Avenue, Madison Avenue and South Third Street and along US 12 in the rural areas. Currently, parking is allowed along several sections of US 12 as it traverses the city of Fort Atkinson. Parallel parking spaces are available in the downtown area on Main Street and parking exists along portions of Robert Street, Whitewater Avenue, and South Third Street. US 12 crosses the Rock River on Robert Street and Main Street. These are the only bridges of the river in the downtown area. Other crossings are located west of Fort Atkinson on the WIS 26 bypass and east of Fort Atkinson on WIS 106.

Project Purpose

- Improve current and future regional traffic flow to serve inter-state and inter-regional travelers.
- Improve safety for users including pedestrians, bicyclists and motor vehicles.
- Accommodate heavy traffic volumes, including heavy trucks, so that the roadway meets the role of a Corridors 2020 and National Highway System (NHS) route.
- Improve the Level of Service of US 12 in the study area.

Project Need

US 12 is part of the NHS and is a Corridors 2020 Connector Route and so needs to serve the purposes of the State and National highway systems. There are a number of factors driving the need to improve mobility and safety of US 12 through the Ft. Atkinson area including reduced mobility, increasing travel demand and reduced roadway capacity, reduced safety and socio-economic demands.

⁵ HNTB Corporation. *U.S. Highway 12 Fort Atkinson Area Needs Assessment*. Prepared for the Wisconsin Department of Transportation, District 1. 2002.

Factors Affecting Need

Reduced Mobility

Land access/mobility conflicts occur frequently within the corridor as the highway is called upon to meet its conflicting role of providing regional mobility and local land access.

Two distinct user groups travel on US 12 in the project area. They can be described as regionally- and locally-based users.

Regional trips (also known as through-trips) do not necessarily originate and/or are not always destined for points inside the city. In other words, motorists probably do not have the need to access any local land uses. They do not have to make high numbers of turning movements and do not need to have parking space on their route. Therefore, motorists making through-trips do not behave the same as motorists making local trips.

Local motorists generally have origins and destinations in the city. Local users rely on side-street intersections, and driveways, and curb-lane parking to access local land uses located along the corridor.



These differences in motorist needs create the potential for a number of operational traffic problems along the corridor.

Local motorists making turns to and from a side street impede through-movements on US 12 (Whitewater Avenue). It only takes one left turning vehicle from US 12 opposing as few as two or three vehicles in the oncoming direction to severely impede and many times bring through traffic to a stop. This is due to the presence of a single through-lane in each direction on US 12 with no provision for removing turning vehicles from the through vehicle traffic flow. See picture below.

The presence of several successive business driveways creates localized congestion on US 12 due to the number of turning vehicles requiring access to and from the various businesses located along the route. This becomes a particularly serious problem when business driveways generate high volumes of traffic.

Another problematic operational traffic condition exists when business driveways are located in close proximity to major intersecting streets. This condition has the potential to create many turn-related traffic problems for both through and local users. For many reasons, this is a situation where rear-end crashes (mostly turn-related) tend to take place. There are several examples of this condition throughout the US 12 corridor in Fort Atkinson. The safety assessment presented later indicates that 34% of the crashes within the corridor occurred at mid-block locations.

Oversized driveways can create driver confusion regarding where to make turns to and from the adjacent connecting street. When drivers have before them a large amount of unmarked paved surface area, an amount of uncertainty develops. Developments that generate high volumes of traffic often experience queuing problems both in the parking lot area and on the adjacent street.

When drivers travel on a US Highway such as US 12 they become conditioned to expect a set of roadway features and conditions that would suggest to them that they have the right-of-way. This is because a US Highway is typically the “main street” in town. Therefore, driver expectation is such that while on a US Highway they have the right-of-way and should not experience a number of turns, interruptions, excessive delays and recurring stops.

While traveling eastbound on US 12 from South Third Street onto Main Street, drivers have one block (approximately 300 feet) to make a full lane change to remain on US 12. If a driver, intending to follow US 12, fails to make a mid-block lane change at this location, he or she could mistakenly proceed southbound on Main Street and turn off of US 12. A more serious condition could develop should that same driver make a forced or unannounced lane change to remain on US 12. This has the added danger of cutting off a successive through vehicle in the center lane.

US 12 is designated a long truck route. Heavier trucks require more room to maneuver and so NHS standards for these types of highways require at least one 12-foot lane in each direction to accommodate heavy truck traffic. Currently, the roadway widths through the city do not meet this requirement. See the existing typical sections for the urban portion of US 12 in Figure 3 and Figure 4.

Another design standard that is minimally met in Fort Atkinson is the parking width. Sufficient parking width enables traffic to bypass a disabled vehicle better, maintain a greater separation of pedestrians and moving vehicles when sidewalks abut the curb as they do on Main Street, and to provide for parking. As an arterial street in a commercial district, standards dictate a minimum 7-foot parking width with a desired 12-foot width (10 foot travel lane plus 2 foot gutter pan). Currently in Fort Atkinson along US 12 there are many areas that barely meet the minimum parking width. On-street parking widths vary from 7 feet to 8 feet and none meet the desired 12-foot width along Main Street.

On US 12 in downtown Fort Atkinson, drivers are faced with a variety of recurring circumstances that have the potential to create operational problems. They include parking maneuvers, pedestrian activities, turning traffic, and lane changes. As previously mentioned, these recurring circumstances are not always easily recognized or anticipated by through motorists.

Increased Travel Demand and Reduced Roadway Capacity

Existing roadways and intersections will have trouble handling the increased traffic resulting from projected development. High levels of congestion are anticipated on US 12 within the Fort Atkinson Area.

Truck traffic, recreational traffic, and non-local traffic have an impact on the commercial and residential areas. Regional traffic traveling through the city will increasingly impact local system mobility and perceived quality of life factors such as noise and vibration, safety, speeding, and congestion. In addition to land access conflicts noted previously, the operational capacity of US 12 in the project area is negatively affected by increasing travel demand in the area. Annual Average Daily Traffic (AADT) projections were developed based on analyses of traffic patterns in the study area in conjunction with a review of potential future land development trip generation impacts according to each segment's proximity to the land use development and growth area zones. Existing Average Daily Traffic (ADT) is presented in Figure 8 on page 21.

The projected traffic volume for each segment was compared to the planning capacity of the facility type. The traffic volume that a roadway can safely handle is related to traffic mix (autos and trucks), peak hour characteristics, presence of traffic control devices, quality of the highway system's alignment, and other physical characteristics. Traffic data are presented in Table 9 on page 46.

The increased travel demand in the project area directly affects traffic operations on US 12, which is defined as Level of Service (LOS). LOS C is the required design capacity standard for Connector 2020 routes such as US 12. LOS refers to the overall quality of traffic flow at an intersection or mainline section. Levels range from very good, represented by LOS A, to very poor, represented by LOS F. In the study area, levels of service for the design year of 2030 are projected to be LOS D along the majority of the study corridor, except along Madison Avenue where it will reach a LOS C.

Parallel parking results in a reduction in capacity on typical streets, especially during peak traffic times. In areas of high turnover, interruptions in traffic flow on adjacent lanes occur as vehicles pull in and out of the parking spaces.⁶

⁶ FDM 11-20-1

Reduced Safety

Compared to the statewide crash rate, existing roadway and intersection geometrics contribute to a higher frequency of crashes at a number of intersections. Increasing corridor traffic will cause safety problems to intensify, particularly at the Main Street intersections, and the Robert Street and Madison Avenue, and South Main and Rockwell intersections.

Pavement condition, notably in rural areas, contributes to safety problems, especially in poor weather conditions. The proposed project is necessary to correct existing and potential safety hazards. The existing crash rate is higher than the statewide average for similar facilities because of the existing geometrics and levels of traffic. Pavement conditions in some areas create hazardous conditions. The selected alternative would need to improve the safety of the highway.



Traffic crash data were compiled from a State of Wisconsin database for each US 12 intersecting street in the study corridors. The data included crashes that occurred at each intersection over a 7-year period from 1994 to 2000. During that time, 746 crashes were recorded. Of these, 492 crashes, or 66% occurred at intersections. The remaining 254 crashes (34%) occurred at various mid-block locations.

A high number of crashes do not necessarily equate to an unsafe intersection. The number of crashes must be considered in the context of the traffic volumes carried on a segment or through an intersection. This requires the calculation of a crash “rate” by which crash frequencies can be compared between alternative locations. Several US 12 intersecting streets in the city of Fort Atkinson display traffic crash rates that are considered above the “average” rate when considering all intersection crashes that took place in the corridor over the 7-year time frame. US 12 intersections with a higher-than-average crash rate are shown in Table 1 on page 14.

The statewide average annual crash rate from 1996 – 2000 for similar urban corridors in Wisconsin was 324 per 100 million vehicle miles of travel (MVMT). The average annual crash rate for the urban portion of US 12 over the 7-year period was 523, 61 percent above the average statewide rate during the same period. Table 1 shows the calculated crash rates for various sections of US 12 in the Fort Atkinson area.

Maintaining an adequate level of roadway and intersection safety is a considerable problem on portions of the US 12 corridor under today’s traffic volume, intersection geometry, and operational characteristics. Numerous access points and mainline roadway geometry (undivided 2-lane and narrow 4-lane with parking sections) along US 12 contribute to the high crash rate on segments of the corridor. Refer to Figure 7 on page 20.

On-street parking can be a contributing factor to traffic crashes due to improperly parked vehicles and pedestrians entering the street from between parked vehicles. On Main Street in Fort Atkinson, the parking lane width is narrow at 7 to 8 feet. The narrow lanes are a safety issue. This is an apparent problem in Fort Atkinson along Main Street, as evidenced by the posted signs that state it is unlawful to open your car door into traffic lanes.

Table 1: 1994-2000 US 12 Average Annual Crash Rates by Segment

Segment	Total Crashes	VMT/Yr.	Annual Avg. Crashes	Crashes per 100 MVMT	Exceeds Statewide Rate?1 (Yes/No)
CTH C – WIS 26 Interchange	15	2,200,950	2.1	97	No
WIS 26 - Banker Rd Intersection	20	3,003,220	2.9	95	No
Banker Rd - Roosevelt St Intersection	26	2,119,920	3.7	175	No
Roosevelt St – Robert St Intersection	66	1,467,300	9.4	643	Yes
Robert St - Riverside Dr Intersection	58	1,012,875	8.3	818	Yes
Riverside Dr - Janesville St Intersection	37	1,148,290	5.3	460	Yes
Janesville St - S Main St	24	443,840	3.4	772	Yes
Robert St - N Main St/N Third St Intersection	67	1,051,200	9.6	911	Yes
N Main St/N Third St - E Sherman St Intersection	84	547,500	12.0	2,192	Yes
E Sherman St - S Water St Intersection	52	930,750	7.4	798	Yes
S Water St - S Third St Intersection	107	657,000	15.3	2,327	Yes
S Third St - Elm St Intersection	43	1,103,760	6.1	557	Yes
Elm St - Hilltop Tr/Fox Hill Rd Intersection	46	1,685,205	6.6	390	Yes
Hilltop Tr/Fox Hill Rd - Hackbarth Rd Intersection	36	3,013,440	5.1	171	No
Hackbarth Road - Carnes Road Intersection	27	4,256,265	3.9	91	No
Carnes Road - Tri County Road Intersection	38	8,361,420	5.4	65	No
TOTAL - All segments	746	33,002,935	106.6	323	No

¹324 per 100 MVMT

US 12, between Fort Atkinson and Whitewater is rutted with longitudinal depressions in the asphalt along the length of the highway. Some members of the public have commented that in wet weather, hydroplaning occurs, possibly due to water collecting in the depressions.

Socio-Economic Demands

Projected economic development and land use changes indicate a need to improve or add to the highway capacity.

Social demands and economic development factors will influence the transportation needs of a community. New employment opportunities, recreational facilities, schools, land use plans and commercial services all will affect the growth of Fort Atkinson and will influence whether people will choose to reside in the area. The Fort Atkinson area has all of the necessary activity centers that influence land use development. One example is the newly built high school and commercial businesses on the northwest side of Fort Atkinson. This area is beginning to experience increased impacts due to rising traffic volumes. In addition, residents indicated they felt there were safety issues in the newly developing area along the US 12 corridor.

Population and Growth Rates. Table 2 below includes the population characteristics of the communities most directly served by this portion of the US 12 corridor. The data show these communities are largely continuing to grow and develop compared to the State as a whole. This growth contributes to the increasing number of trips being made on US 12. Table 2 compares population distribution in southeast Wisconsin using 1970 to 2000 census figures and growth rates.

Table 2: Population Trends

Community	1970	1980	1990	2000	1990 –2000 Growth
C. of Fort Atkinson	9,164	9,785	10,213	11,621	13.8%
T. of Koshkonong	2,671	2,979	2,984	3,395	13.8%
T. of Oakland	1,984	2,240	2,526	2,887	14.3%
C. of Whitewater	12,038	11,520	12,636	13,437	6.3%
C. of Madison	171,809	170,616	190,766	208,054	9.1%
V. of Cambridge	689	844	963	1,101	14.3%
Jefferson County	60,060	66,152	67,783	75,784	11.8%
Dane County	290,272	323,545	367,085	416,088	13.3%
Walworth County	63,444	71,507	75,000	84,943	13.3%
Rock County	131,970	139,420	139,510	145,656	4.4%
Wisconsin	4,417,821	4,705,642	4,891,769	5,287,825	8.1%

Source: US Bureau of the Census

Land Use. Existing land use has been compared to planned land use from locally adopted land use plans and was used to forecast future growth and potential traffic generation that may occur from these planned changes in land use. Figure 9 on page 22 shows existing and planned land use in the study area.

Future Growth Areas. Adjacent land use and development is one of the most significant factors affecting highway operation. Roads must be viewed in terms of their service to and impact upon adjacent land uses, and vice-versa. Generally, local streets furnish access to abutting land and discourage through-traffic movement, while arterials provide a primary service to through-travel and avoid penetrating identifiable neighborhoods whenever possible. According to local land use plans, there is a high potential for additional residential trip generation in the northern portion of Fort Atkinson. The city of Fort Atkinson established an ad hoc planning committee to review existing land use plans for the city’s northwest side.

One area where employment-related vehicle trip generation is expected to increase is the area south of Fort Atkinson, where additional industrial development is expected. Almost half of the future new commercial vehicle trip generation is expected to be near the South Fort WIS 26/Business WIS 26 (Janesville Street) interchange.

Business Climate. Economic data show that the study area has a healthy and growing economy, which will ultimately translate into increased demands on the transportation system. In Wisconsin, the labor force grew an average 1.9% per year from 1970 to the year 2000. In the 1970s, the labor force averaged strong 2.6% annual gains. Labor force growth is expected to slow from 2001 to 2025 due to retirement of the baby boomers. There is evidence that an economic recovery can provide job growth over the next few years as non-farm employment is expected to grow 1.2% in 2004 and 2.0% in 2005. Average growth is projected to be 1.7% annually over the next five years, whereas over the past five years it was 0.1%.

In 2001, Jefferson County’s labor force rate was 73.7%; higher than the state’s 72.8% rate and the nation’s 66.9% rate, but still lower than it had been in the late 1990s when it stood at 75% to 76%. The state expects Jefferson County’s participation rates to be further reduced in the future, which will tighten the labor market. Jefferson County’s unemployment rate averaged 3.9 percent in 2001 and 4.7 percent in 2002.

⁷ Wisconsin Economic Outlook. Wisconsin Department of Revenue Division of Research and Policy. June 8, 2004.

Commuting patterns in Jefferson County suggest that most commuters are going to Waukesha County with a significant number going to Dane County.⁸ A telephone survey conducted as part of the *US 12 Fort Atkinson Needs Assessment Study* found that over half of the respondents surveyed (52 percent) stated that they worked in Fort Atkinson as shown in Table 3 below.

Table 3: Work Location of Survey Respondents

Work Location	Percent*
City of Fort Atkinson	52%
City of Whitewater	7
City of Watertown	1
City of Jefferson	11
Town of Koshkonong	4
Dane County	6
Rock County	4
Rural Jefferson County	6
Other	10

Source: St. Norbert College Survey Center

*Percentages were rounded up at the .5 level and down for levels below .5, leading to the percentages not totaling 100%.

Table 4: Jefferson County Civilian Labor Force Data

	1997	1998	1999	2000	2001	2002
Labor Force	42,196	41,897	41,343	43,277	43,266	42,292
Employed	40,911	40,747	40,344	42,082	41,591	40,293
Unemployed	1,285	1,150	999	1,195	1,675	1,999
Unemployment Rate	3.0%	2.7%	2.4%	2.8%	3.9%	4.7%

Source: Jefferson County Workforce Profile. Department of Workforce Development, Office of Economic Advisors. Jan. 2004

Employers are working to address the labor shortage situation by offering more competitive wages and benefits and providing training programs. Based on a survey of Jefferson County residents, 32% of the workers commute out of the County, and less than 19% said they would consider a job closer to home.⁹

Fort Atkinson, the second largest city in Jefferson County behind Watertown, has a large manufacturing sector with two industrial parks and plans for more industrial land use in the future as exhibited in their Master Plan.¹⁰ The city has a wide range of retail and service business establishments including groceries, discount stores, specialty shops, restaurants, and a hospital.

⁸ Jefferson County Workforce Profile. Wisconsin Department of Workforce Development Office of Economic Advisors. January 2004.

⁹ Jefferson County Economic Development Corporation, March 2001.

¹⁰ Discovery Group, Ltd. (September 1997) *Fort Atkinson Master Plan Update* prepared for the City of Fort Atkinson, Wisconsin.

The Fort Atkinson area contains a number of tourist destinations that attracts people from the State and Midwest. These include the Kettle Moraine State Forest, Whitewater Lake, University-related activities, the Fireside Theater in Fort Atkinson, Lake Geneva, and resorts in the Lake Geneva and Delavan areas. In addition, many people use US 12 from Illinois to reach Madison and the Wisconsin Dells. The John Muir and Emma F. Carlin mountain bike trails in the Kettle Moraine State Forest (Southern Unit) attract people region-wide, as does the State Forest itself. The Ice Age Trail crosses US 12 between Walworth County Trunk Highways P and O in the Kettle Moraine State Forest.

Jefferson County has a number of agricultural business operations that contribute to the area’s economy.

Modal Interrelationships. Interrelationships between highways and other modes of transportation are important to WisDOT. WisDOT’s Corridors 2020 Revision and Update of June 1994 reports that estimates of passenger diversion from further development of alternative transportation modes (such as rail), as called for under the most expansive of the State’s Translinks 2020 multimodal plan alternatives, will have only limited potential to divert significant percentages of traffic off most Corridors 2020 routes. Alternative modes such as trains and busses are not currently planned for Fort Atkinson.

Planned Highway Improvements. Much of US 12 is already being considered for reconstruction between now and 2012. Corridors 2020 identifies the study area as congested and needing improvements. Table 5 shows state highway improvements already included in WisDOT’s Six-Year Plan on or in the vicinity of US 12 in the Fort Atkinson area. Any proposed improvements to US 12 in the project area would need to be consistent with these proposed improvements to avoid forcing or foreclosing future actions. Some work on US 12 in this area has been postponed pending outcome of this environmental study and alternatives analysis.

Table 5: WisDOT Planned Highway Improvements

Scheduled Construction	Road	Location	Type of Improvements
2002 - 2005	US 12	Bypass of the city of Whitewater	Constructing a 2-lane bypass (with ROW acquired for 4 lanes) to the southwest of the city of Whitewater.
2003	US 12	Madison Avenue	Reconstructed the existing urban street; to modify intersection traffic operation, construct decorative lighting, terrace paving, and landscaping on Madison Avenue
2004	US 12	Cambridge to Fort Atkinson	Reconstruct 8.48 miles to provide 24 feet of pavement, 10-foot shoulders, 3 feet minimum paved
2011*	US 12	Fort Atkinson – Whitewater (Hilltop Trail to Woodlawn Road	Reconstruct existing roadway
2011*	US 12	Whitewater Avenue, South Third Street to Fox Hill Lane, Fort Atkinson	Reconstruct .92 miles of the existing urban street
2007	WIS 106	Rock River Bridge and approaches	Replace deficient existing structure
2007	WIS 106	Fort Atkinson - Edgewater Road to CTH CI	Recondition 9.84 miles to correct geometric deficiencies; provide 24 feet of pavement with 3-foot paved shoulders
2007	WIS 106	Sherman Avenue, Fort Atkinson - Robert Street to Edgewater Road	Reconstruct .98 miles of the existing urban street
2009	WIS 26	South Fort Interchange to North Fort Interchange	Construct two additional lanes to the Fort Atkinson Bypass

Source: Wisconsin Six-Year Highway Improvement Program - 2005-2011. WisDOT District 1. 2005.

* The projects that were scheduled to reconstruct US 12 in the study area have been delayed pending the outcome of this environmental study.

Conclusion

This purpose and need statement documents how existing conditions and future travel demand and traffic operations will impact US 12 in the Fort Atkinson area. US 12 in the Fort Atkinson area does not serve the purposes of the State and National Highway System for which it is intended.

US 12 is an important link in the State and National Highway Systems. Its purpose is for commercial, recreational and business travel for the entire region and accommodates the movement of goods and people from the Chicago area to Madison and beyond. US 12 is classified as a 2020 Connector route and as such needs to facilitate the mobility of through-traveling traffic. US 12 in the Fort Atkinson area currently does not serve the purpose of the State and National highway system for which it is intended. Traffic congestion, existing and planned land use, deteriorating pavement and geometric deficiencies prevent the highway from functioning as needed.

Traffic projections show this situation will worsen. The highway will experience increasing levels of traffic, lower levels of service, and safety problems, indicating the need for improvements.

In order to alleviate the operational and safety problems along US 12 in the Fort Atkinson area, the following needs must be met.

- Improve current and future regional traffic flow to serve inter-state and inter-regional travelers.
- Improve safety on US 12 in the study area.
- Accommodate the heavy traffic volumes including heavy trucks as required of a State Connector Route and as a part of the National Highway System.
- Improve local system mobility, and decrease the impacts of noise, vibrations, and congestion.
- Address access/mobility conflicts.