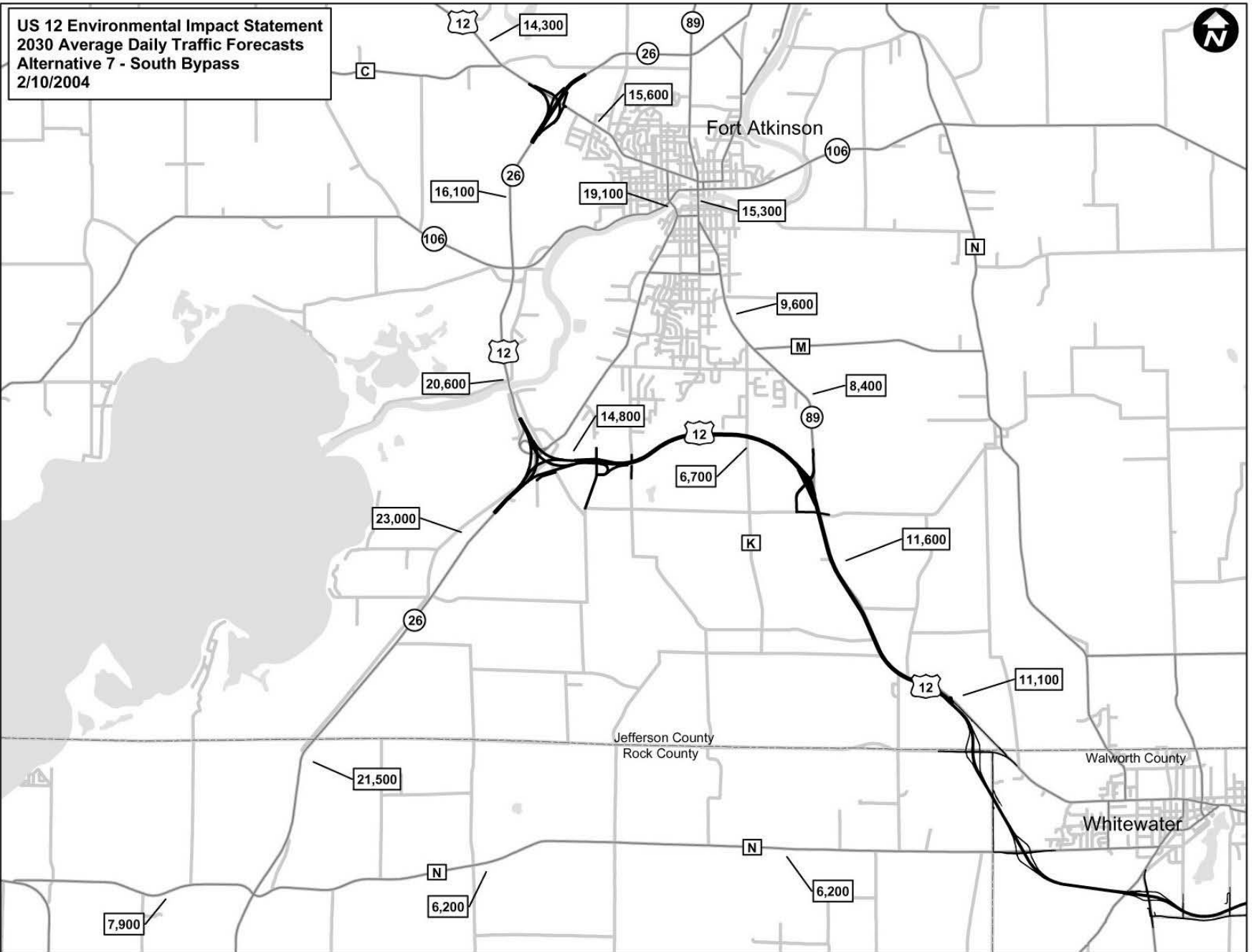
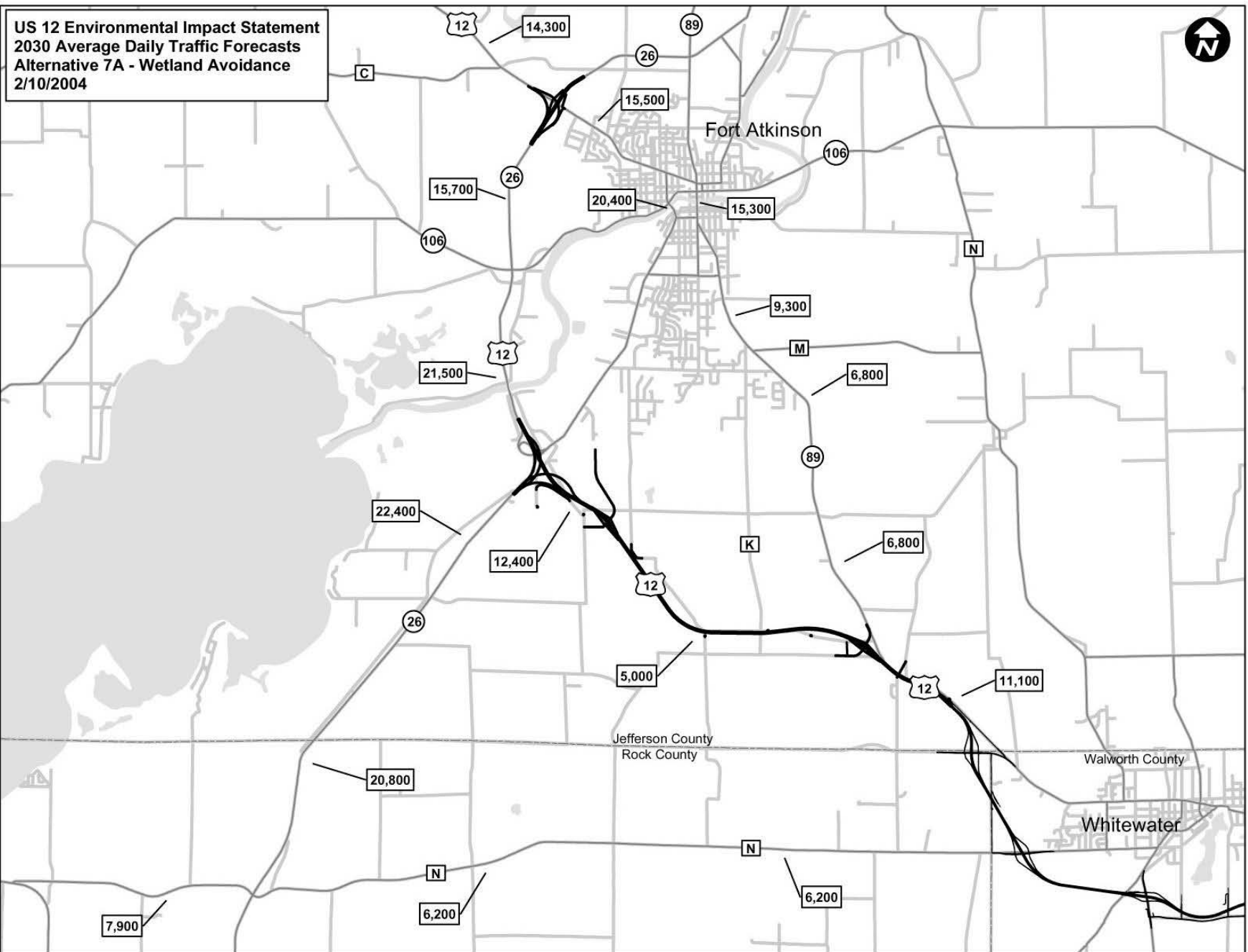


Source: HNTB Corporation



Source: HNTB Corporation



Source: HNTB Corporation

6. Land Use

1) Describe existing land use (attach land use maps if available)

See Figure 9 on page 22 for a map of the existing and proposed land uses.

a) Land use in immediate area.

In general, all the build alternatives are located in agricultural and rural residential areas.

Alternatives 1, 1a and 2b remain on the existing alignment, which also travels through urbanized Fort Atkinson and encounters land uses of all kinds including residential, commercial, industrial, agricultural and open space consisting of uplands, woodlands and wetlands.

b) Land use in area surrounding project area.

Surrounding areas are also as described in question 1(a), above.

7. Compatibility with Adopted Plans

1) Briefly identify adopted plans for the area and discuss whether the proposed action is compatible with the plan. (For example, the following may be considered: Regional Planning Commission Plans, Transportation Improvement Program, State Transportation Improvement Plan, Local zoning and land use plans, DOT Storm Water Management Plans, Others.)

In the table below, the box is marked if alternatives are incompatible with the noted plan.

Table 10: Summary of Compatibility with Adopted Plans

Plan Name/Date	Alternative 1	Alternative 1a	Alternative 2b	Alternative 3	Alternative 7	Alternative 7a	Discussion
	"X" = INCOMPATIBLE						
Fort Atkinson Master Plan Update 1997	X	X	X	X			An alignment similar to Alternative 7 is presented in the Master Plan as a future bypass of Fort Atkinson. The area where the existing industrial park is now located was planned to accommodate industrial and economic development based on the limited availability of suitable areas elsewhere. The business park site was selected because of its potential direct access to "the southern Highway 12 bypass".
Fort Atkinson Downtown Plan	X		X	X			Downtown streetscape improvements are proposed on North and South Main Street including, historic street lighting, red brick paver strips, street trees and tree grates, and crosswalk striping. One objective that the City has is to control through-traffic, particularly truck traffic, on Main Street and provide safe and efficient pedestrian and bicycle circulation. The through-city alternative (Alt. 2b) does not increase controls on regional traffic, but may move it through quicker and more safely for vehicles. Pedestrian safety would potentially be degraded to some extent due to increased potential for speed, which could occur since the vehicles would not be so cramped in their lanes.
Fort Atkinson NW Quadrant Plan – 2002							Changes in the WIS 26 interchange associated with Alternatives 7 and 7a in Fort Atkinson’s northwest quadrant would not conflict with Fort Atkinson’s land use plans in this area.
Town of Koshkonong Land Use Plan – 1996					X	X	The Town of Koshkonong Plan explicitly does not recognize the need for a bypass of Fort Atkinson. A bypass on new alignment would sever farmland and take tillable acreage out of production, which is contrary to the Town’s Agricultural Preservation goals.

Plan Name/Date	Alternative 1	Alternative 1a	Alternative 2b	Alternative 3	Alternative 7	Alternative 7a	Discussion
"X" = INCOMPATIBLE							
Town of Koshkonong Comprehensive Park and Outdoor Recreation Plan (March 2004)					X	X	None of the alternatives would use parkland from any existing or proposed Town Parks. Alternatives 7 and 7a would conflict with future bike route plans which call for designated bike routes along Poeppel, McIntyre and Creamery Roads.
Town of Milton – 2001				X			Land Use in the Alternative 3 study corridor is designated Exclusive Agriculture. Widening of the road would result in negative impacts to farmland because of strip acquisitions from farmland and access control, which could impede access for some farmers.
Town of Lima – 1979				X			Land Use in the Alternative 3 study corridor is designated Exclusive Agriculture. Widening of the road would result in negative impacts to farmland because of strip acquisitions from farmland and access control, which could impede access for some farmers.
Jefferson County Agricultural Preservation and Land Use Plan - 1999					X	X	Agricultural Preservation Areas in the Town of Koshkonong would be affected by the bypass options. It is the county's policy to minimize non-agricultural development on prime agricultural soils although there is no specific policy toward road building. The Plan's environmental corridor policy is that road construction associated with non-agricultural development should be prohibited on slopes in excess of 20%. A potential bypass similar to Alternative 7 is indicated in the document's Transportation Plan and maps. The Bikeway and Pedestrian-way Plan identifies the Glacial River Trail as a key multiuse trail. This trail would be temporarily impacted with either Alternative 7 or Alternative 7a because it would need to be relocated.
Jefferson County Bikeway/Pedestrian way Plan – 1996					X	X	Alternative 7a affects the planned bicycle route to connect Fort Atkinson with Walworth County along town roads. Glacier Creek trail would need to be relocated in the vicinity of the WIS 26/US 12 interchange southwest of Fort Atkinson for Alternatives 7 and 7a.
National Highway System Planning (Subchapter E Part 470, Subpart A – Federal-Aid Highway Systems)	X	X		X			A NHS route shall serve major population centers, and serve interstate and interregional travel. Proposed additions to the NHS should connect at each end with other routes on the NHS.

Plan Name/Date	Alternative 1	Alternative 1a	Alternative 2b	Alternative 3	Alternative 7	Alternative 7a	Discussion
"X" = INCOMPATIBLE							
Corridors 2020 Wisconsin's Connections to the 21st Century and Corridors 2020 Review and Update June 1994	X	X	X	X			US 12 is designated a Connector route and so must connect trade centers and provide connections to the Backbone routes in the State. All the alternatives continue to connect to Fort Atkinson and Jefferson County. But, Alternative 3 increases the distance from Whitewater to Fort Atkinson. Alternatives 1 and 2b do not separate regional traffic from local traffic.
Wisconsin State Highway Plan 2020	X	X		X			A US 12 project was listed as a candidate "Major Project" in 1997. The State Highway Plan identifies several Major Projects that include highway projects that can result in capacity expansion. The US 12 Fort Atkinson project was approved for study in 1998 based on traffic conditions and the fact that all US 12 and WIS 89 regional traffic had to pass through Fort Atkinson.
Wisconsin Bicycle Transportation Plan 2020	X						<p>The goals of the Bicycle Plan are to increase levels of bicycling throughout Wisconsin, doubling the number of trips by 2010 and reducing crashes involving bicyclists and motor vehicles by at least 10% by 2010. New transportation facilities are to be planned and designed to accommodate bicyclists and encourage their use.</p> <p>The bypass alternatives 7 and 7a would increase safety and decrease congestion on local roads within Fort Atkinson by removing much of the regional traffic. Alternative 7 and 7a do not include bike lanes, which would be inappropriate for such a facility. The Glacial River Trail that lies within the interchange of WIS 26 and the bypass alternatives would be altered, but maintained. Alternative 7a would alter Rustic Road #87 thereby eliminating one recreational bicycle route.</p> <p>Doing nothing would not increase bicycle safety within Fort Atkinson or on the rural portions of US 12.</p>
Translinks 21 (1995)	X						US 12 is identified by WisDOT as a Connector with congestion problems. It is part of a network of key two- and multi-lane state and interstate highways connecting all communities over 5,000 population. The Connector network connects key communities with the Backbone system. See also Corridors 2020 and Wisconsin State Highway Plan discussions above, which are plan elements that resulted from the Translinks 21 Plan.

B. ENVIRONMENTAL CONSEQUENCES

1. Environmental Issues

1) Indicate whether the issue listed below is a concern for the proposed action. If the issue is a concern, explain how that concern is to be addressed or where the issue is addressed in this environmental document.

a) Stimulation of secondary environmental effects.

- No - Substantial secondary environmental effects will not be stimulated.
- Yes - Stimulation of substantial secondary environmental effects will occur. Explain or indicate where addressed.

Alternatives 7 and 7a may stimulate new development south of Fort Atkinson, especially near the interchanges. See Appendix D: Secondary and Cumulative Impacts Report.

A bypass may improve the economy by creating better access to employment and increased efficiencies in hauling goods. An improved economy may increase demand for other land uses including residential, commercial, park and recreation, and civic and institutional. This could have both beneficial as well as adverse impacts.

A US 12 bypass of Fort Atkinson could encourage expansion of the industrial park, with Alternative 7 allowing already planned development to extend beyond the bypass. Alternative 7a coincides better with the Urban Service Area boundary near the industrial park. The Urban Service Area boundary is shown on maps located in the Secondary and Cumulative Impacts Report.

There was public comment that a bypass may eventually create a local desire to bypass Cambridge, as it would become the only community along US 12 not bypassed between Whitewater and Madison.

b) Creation of a new environmental effect.

- No - A new environmental effect will not be created.
- Yes - The project will create a new environmental effect. Explain or indicate where addressed.

c) Impacts on geographically scarce resources.

- No - Geographically scarce resources will not be impacted.
- Yes - Impacts on geographically scarce resources will occur. Explain or indicate where addressed.

d) Precedent-setting nature of the proposed action.

- No - The proposed project does not have a precedent-setting nature.
- Yes - The proposed project has a precedent-setting nature. Explain or indicate where addressed.

e) The degree of controversy associated with the proposed action.

- No - The proposed action is not controversial or the level of controversy is low.
- Yes - The project has a high degree of controversy. Explain or indicate where addressed.

A telephone survey of the residents in the Town of Koshkonong and Fort Atkinson, conducted by St. Norbert Survey Center as a part of the Needs Assessment Study, indicated residents had a high degree of concern with existing US 12 through the City of Fort Atkinson. Results of this survey are contained in their report, which states that overall, respondents overwhelmingly felt that US 12 presented serious problems

regarding safety issues, congestion, and heavy truck usage and that overall safety conditions, traffic congestion, access to schools and work had deteriorated along US 12 over the last five years.¹⁷

The Friends of Koshkonong group and the Koshkonong Town Board have issued Resolutions stating that they felt a bypass was not warranted and that an Alternative using Rock County N would be more appropriate. See Resolution in Appendix F. In response the Boards of Lima, Milton and the Rock County Planning and Development Committee of the Rock County Board of Supervisors adopted resolutions stating that they were not in support of Alternative 3. In addition the Rock County Land Conservation and Agricultural Committee of the Rock County Board of Supervisors are also on record in opposition to Alternative 3. None of these groups indicated that the No Action alternative was preferred over other alternatives.

The Fort Atkinson Chamber of Commerce has expressed interest in eliminating the mix of traffic downtown because they feel that the regional traffic including semi-trucks and regional travelers do not contribute to their customer base, but they do interfere with the local traffic and destination shoppers.

The Fort Atkinson Industrial Development Corporation has also indicated their desire to have improved US 12 access to their business park on the southwest side of Fort Atkinson.

f) Conflicts with official agency plans or local, state, or national policies, including conflicts resulting from potential effects of transportation on land use and land use on transportation demand.

- No - No conflicts with any plans, policies, or land uses will result.
- Yes - Conflicts with plans, policies or land uses will result. Explain or indicate where addressed.

The City of Fort Atkinson and the City of Fort Atkinson Industrial Development Corporation has planned to provide access to a future US 12 bypass south of the city, as evidenced by the layout of roads in the Robert L. Klement Business Park on the southwest side of Fort Atkinson and as offered in their advertisements to prospective businesses. Likewise the City of Fort Atkinson and Jefferson County have both planned their future land use plans on the presence of a bypass similar to Alternative 7.

The Town of Koshkonong Town Plan does not recognize the need for a bypass such as proposed with Alternatives 7 and 7a.

g) Cumulative environmental impacts of repeated actions of the type proposed.

- No - The proposed action will not contribute to cumulative environmental impacts of repeated actions.
- Yes - Cumulative environmental impacts will result from repeated actions of the type proposed. Explain or indicate where addressed.

See Appendix D: Secondary and Cumulative Impacts Report.

For the No Action alternative and the TSM alternative, as traffic volumes increase on the US Highway System, increased congestion in Fort Atkinson and other similar communities would generally contribute to the cumulative effects of increased air pollution, increased crashes and related lost productivity.

For the bypass alternatives, a bypass may eventually create a desire to bypass Cambridge, as it would become the only community along US 12 not bypassed between Whitewater and Madison.

There would be cumulative impacts to loss of wetland acreage and wetland fragmentation, loss of woodland and plant and animal habitat acreage and fragmentation. Under a cooperative agreement the WisDOT and the DNR agree to consult and cooperate with each other on all projects such that each agency can accomplish its assigned statutory responsibilities while assuring at the same time adverse

¹⁷ St. Norbert College Survey Center (2001) *US Highway 12 Needs Assessment Study Final Report* Prepared for the Wisconsin Department of Transportation and HNTB Corporation.

effects on Wisconsin's land, water, fish, and wildlife resources are minimized to the fullest extent practicable under law. Under this agreement, critical resources would be avoided, where possible, during alignment location studies. If avoidance is not feasible, impacts to critical resources are to be minimized. Unavoidable impacts would be mitigated. Under the cooperative agreement, cumulative losses of resources are minimized.

Additional farmland would be removed from production, which is a regional and national problem. Once land is converted to developed uses, it is taken out of production and not likely to revert back.

New road construction would use non-renewable construction materials through sand and gravel mining.

New roads would create additional impervious surfaces with the potential to affect water quality by producing highway runoff, and pre-and post-construction sediments. Wear from vehicle tires, engine and body parts, spills of oil and gasoline, road salt and/or deicing agents will also accumulate.

As other US 12 communities are bypassed, and as US 12 has fewer and fewer access points it could result in easier regional travel and make US 12 a more desirable alternative to the interstate. This could in turn cause an increase in heavy truck traffic and other regional automobile traffic.

Bypasses can contribute to a continued loss of rural character.

Continued improvements to the highway system make it more efficient and could influence how travelers choose to use the system. The improved transportation facilities may contribute to creating travel demand as investigated in *The Impacts of Highway Facility Improvements On Travel and Regional Development - Wisconsin TransLinks 21 (January 1994)*.

h) Foreclosure of future options.

- No - The proposed action will not foreclose future options. That is, the proposal will not require or preclude alternative transportation improvements.**
- Yes - The proposed action will foreclose future options. That is, other transportation improvements will be required or alternatives for future improvements are precluded. Explain or indicate where addressed.**

i) Direct or indirect impacts on minority groups.

- No - Neither direct nor indirect impacts on minority groups will occur.**
- Yes - Either direct or indirect impacts on minority groups will occur. Explain or indicate where addressed.**

j) Disproportionately high and adverse effects on minority population or low-income populations

- No - Disproportionately high and adverse effects on a minority population or low-income populations will not occur**
- Yes - A minority population or low-income population will experience disproportionately high and adverse effects. Explain or indicate where addressed.**

2. Summary Table of Environmental Impacts of All Alternatives

PLEASE READ THIS → Calculations of the potential impacts were based on a study corridor width of 400 feet for the areas that would require 4-lanes and 200 feet for Alternative 3, which would remain a two-lane highway. For Alternative 2b, the nature of the alternative is to avoid acquisition of as much right-of-way as possible and to remain on the current alignment therefore the study corridor is narrow downtown to include only the right-of-way that is anticipated to be needed. In this way, each alternative can be fairly compared. In addition, the maximum impact that would likely occur is indicated. It is likely that for most impacted areas such as wetlands, woodlands, historic districts and relocations, minimization of effects would occur as roadway design is refined.

In the study corridor, WIS 89 runs along US 12 from the intersection of Main and Madison, south along Main Street through Fort Atkinson and continues on US 12 to the Whitewater Bypass. Improvements will eventually be needed to WIS 89. Each alternative leaves a different length of WIS 89 remaining. For example, Alternative 3 would leave the entire length of WIS 89 in the project area out of the project. Alternative 7 would leave the portion between the new bypass and Fort Atkinson and Alternative 2b would improve the entire length of WIS 89. Improvements to WIS 89 would be made using Existing Highway Improvement program funding for resurfacing, reconditioning, and reconstruction of the non-interstate portion of the state trunk highway system (3R funds). Any improvements to WIS 89 will require a separate environmental review. Alternatives 3, 7 and 7a will also require jurisdictional transfer of US 12 along Robert Street and South Third Street from Madison Avenue to Main Street and Madison Avenue from Main Street to the northwest Fort Atkinson interchange. Costs of the jurisdictional transfer will be associated with necessary minor reconditioning of Robert Street and South Third Street.

Table 11: Environmental Matrix for All Alternatives

Environmental Issue	Unit Measure	Alt 1 No Action	Alt 1a TSM	Alt 2b Through -city	Alt 3 CTH N	Alt 7 Near South Bypass	Alt 7a South Bypass
Project Length							
Length to be constructed including the mainline plus ramps and other new roads not including length of WIS 89	Mi (km)	0	6.2 (10.0)	7.1 (11.4)	8.3 (13.4)	13.7 (22.0)	12.9 (20.8)
Travel distance between CTH S interchange of Whitewater Bypass and WIS 26 interchange northwest of Fort Atkinson	Mi (km)	10.1 (16.3)	10.1 (16.3)	10.1 (16.3)	17.5 (28.2)	11.9 (19.2)	11.3 (18.2)
Length of WIS 89 remaining to be reconstructed	Mi (km)	0	0	0	6.2 (10.0)	3.0 (4.8)	5.5 (8.9)
Cost							
Construction	Million \$	0	5.0	16.0	11.0	32.0	26.0
Real Estate	Million \$	0	<0.1	6.8	2.8	7.5	5.6
Relocation Estimate (2003 \$)	Million \$	0	0	1.9	1.1	1.7	1.2
Bypass Interchange @ US 12/County Line Road	Million \$	0	0	4.3	0	4.3	4.3
Jurisdictional Transfer Costs	Million \$	0	0	0	1.3	1.3	1.3
<i>Total US 12 Project Costs</i>	Million \$	0	5.1	29.0	16.2	46.8	38.4
WIS 89 Remaining 3R improvement construction	Million \$	0	0	0	9.0	5.0	8.0
<i>Total US 12 Costs plus WIS 89 Costs</i>	Million\$	0	5.1	29.8	23.9	50.5	45.1

Environmental Issue	Unit Measure	Alt 1 No Action	Alt 1a TSM	Alt 2b Through -city	Alt 3 CTH N	Alt 7 Near South Bypass	Alt 7a South Bypass
Land Conversions to Right of Way							
Total Area	Acres (Hectares)	0	0	161 (65)	94 (38)	351 (142)	298 (121)
Wetland Area	Acres (Hectares)	0	0	2 (<1)	2 (<1)	12 (5)	1 (<1)
Upland Area (Woodland)	Acres (Hectares)	0	0	11 (4)	0	19 (8)	21 (8)
Other Area: Including Multi- and Single Family Residential, Commercial, Industrial, Landfill, Open Space/Vacant, Public/Quasi-Public, Surface Water, and Transportation	Acres (Hectares)	0	0	60 (24)	9 (4)	63 (25)	30 (12)
Real Estate							
Number of Farms Affected	Number	0	0	17	37	20	20
Agricultural area	Acres (Hectares)	0	0	88 (36)	83 (34)	257 (104)	247 (100)
Farm Unit Relocations	Number	0	0	1	2	1	2
Residential Unit Relocations	Number	0	0	41	14	32	25
Business Unit Relocations	Number	0	0	4	2	1	1
Environmental Issues							
In Floodplain?	Yes/No	Yes	Yes	Yes	Yes	Yes	Yes
Affected Stream Crossings	Number	0	0	1	1	2	2
Endangered Species Habitat?	Yes/No	No	No	No	Yes	Yes	Yes
Historic Sites/Districts identified	Number	6	6	6	2	0	0
Archeological Sites Identified	Number	0	0	4	6	1	3
Sec. 106 MOA Required?	Yes/No	Not Determined	Not Determined	Not Determined	Not Determined	Not Determined	Not Determined
Sec. 4(f) Evaluation Required?	Yes/No	Not Determined	Not Determined	Not Determined	Not Determined	Not Determined	Not Determined
Environ Justice At Issue?	Yes/No	No	No	No	No	No	No
Air Quality Permit?	Yes/No	No	No	No	No	No	No
Design Year Noise Sensitive Receptors Impacted Exceed dBa Levels	Number Number	86 10**	86 10**	86 10**	62 7**/2	15 3**/3	15 3**/2
Contaminated Sites identified	Number	79	79	79	6	2	3
Indirect & Cumulative Impacts	Yes/No	Yes	Yes	Yes	Yes	Yes	Yes

**existing units on US 12

3. Environmental Matrix

This matrix was completed for each Alternative retained for detailed study

ENVIRONMENTAL FACTORS	EFFECTS				COMMENTS
	Adverse	Benefit	None	Not Applicable	
(Blacked out cells require a check in at least one of the other columns)					
SOCIO-ECONOMIC FACTORS					
General Economics				<i>Factor Sheet completed – see page 72.</i>	
No Action, Alternative 1a – TSM	X				Congestion and crashes can be expected to affect the mobility of US 12, a Corridors 2020 Connector Route. This can be expected to affect the State’s general economy as it is designated a long truck route and is a part of the National Highway System. Fort Atkinson and Jefferson County are considered to be important to the State’s economy as they are listed in the State Plan as important trade and manufacturing centers.
Alternative 2b – One-way Pair	X				This alternative is not expected to remove regional traffic, including semi truck traffic, through Fort Atkinson, which Fort Atkinson expects would help make the downtown more pedestrian and shopper friendly.
Alternative 3 – Rock County N	X				Since this alternative is not expected to substantially remove regional traffic through Fort Atkinson, continued congestion and crashes can be expected to affect the mobility of WIS 89 through the City of Fort Atkinson, which runs concurrently with US 12 from Whitewater to Madison Avenue, along Whitewater Avenue and Main Street. This can be expected to affect the State’s general economy since Fort Atkinson is considered to be important to the State’s economy as an important trade and manufacturing center.
Alternative 7 – South Bypass and Alternative 7a – Far South Bypass	X	X			Increased mobility of this Corridors 2020 Connector Route can be expected to positively affect the State’s general economy as US 12 is designated a long truck route and is a part of the National Highway System. Fort Atkinson and Jefferson County are considered to be important to the State’s economy as they are listed in the State Plan as important trade and manufacturing centers. Impacts can be expected from farm severances (see Agriculture)

ENVIRONMENTAL FACTORS	EFFECTS				COMMENTS
	Adverse	Benefit	None	Not Applicable	
					(Blacked out cells require a check in at least one of the other columns)
Community & Residential					<i>Factor Sheet completed – See page 76.</i>
No Action, Alternative 1a – TSM, Alternative 2b – One-way Pair	X				Comments received from residents living along US 12 in Fort Atkinson have indicated a problem getting out of their driveways. The No Action and through-city alternatives would not address this existing problem and as traffic increases, these problems can be expected to increase.
Alternative 3 – Rock County N	X				Residents along Rock County N would be affected due to widening of the roadway right-of-way.
Alternative 7 – South Bypass, Alternative 7a – Far South Bypass	X	X			Comments received from residents living along US 12 in Fort Atkinson have indicated a problem getting out of their driveways. Alternative 7 can be expected to address this existing problem, at least in the short term. Some residences would need to be relocated.
Economic Development & Business					<i>Factor Sheet completed – See page 92.</i>
No Action, Alternative 1a – TSM Alternative 2b – One-way Pair	X				The City of Fort Atkinson, the Fort Atkinson Industrial Development Corporation and Chamber of Commerce have indicated that the congestion, safety and perception of their downtown are affected by the regional traffic. A restaurant would need to be acquired with Alternative 2b.
Alternative 3 – Rock County N	X				Alternative 3 is not expected to greatly reduce the regional traffic in downtown Fort Atkinson. Access to Fort Atkinson’s business park will not be addressed.
Alternative 7 – South Bypass, Alternative 7a – Far South Bypass	X	X			The City of Fort Atkinson has indicated that the congestion, safety and perception of their downtown are affected by the regional traffic. The Fort Atkinson Industrial Development Corporation and Chamber of Commerce have also indicated via Resolution that a bypass would have a positive impact on their ability to bring business to the downtown area and provide easy access to their business park. Farming business would be negatively impacted by Alternatives 7 and 7a if agricultural lands are converted to roadway use. Some farms would lose buildings as well as land, some farms would be severed. A restaurant would need to be acquired with Alternatives 7 and 7a.
Agriculture					<i>Factor Sheet completed – See page 99.</i>
No Action, Alternative 1a – TSM, Alternative 2b – One-way Pair	X	X			The roadway alignment would remain the same and no right-of-way would be acquired that would take agricultural lands. As congestion increases on US 12, safe farm access would continue to degrade.

ENVIRONMENTAL FACTORS	EFFECTS				COMMENTS
	Adverse	Benefit	None	Not Applicable	
(Blacked out cells require a check in at least one of the other columns)					
Alternative 3 – Rock County N	X				Impacts to agriculture would occur including access changes, and conversion of agricultural lands.
Alternative 7 – South Bypass, Alternative 7a – Far South Bypass	X				Impacts to agriculture would occur including access changes, conversion of agricultural lands and severance of farms.
Environmental Justice					<i>Factor Sheet completed – See page 108.</i>
All Alternatives			X		There are potential populations of concern including low income, minority, and disabled at two mobile home parks and one Community Based Residential Facility. No populations of concern at these locations were identified that would receive disproportionately high or adverse impacts as a result of any of the alternatives. See page 108 for a discussion of public involvement with populations of concern.
NATURAL ENVIRONMENT FACTORS					
Wetlands					<i>Factor Sheet completed – See page 113.</i>
No Action, Alternative 1a – TSM			X		There would be no impacts to wetlands because the roadway alignment would remain the same and no right-of-way would be acquired that would take wetlands.
Alternative 2b – One-way Pair	X				Alternative 2b would require less than 2 acres of wetland for the widening of US 12 at the southern end of the project corridor.
Alternative 3 – Rock County N	X				Alternative 3 would require 2 acres or less of wetland due to widening on existing roadway.
Alternative 7 – South Bypass	X				Alternative 7 would require up to 12 acres of wetland along the new bypass.
Alternative 7a – Far South Bypass	X				Alternative 7a would require up to 2 acres of wetland due to widening on existing mainline.
Streams & Floodplains					<i>Factor Sheet completed – See page 122.</i>
No Action, Alternative 1a – TSM,				X	The roadway alignment would remain the same and no right-of-way would be acquired that would require construction within streams and floodplains and so there would be no impacts.
Alternative 2b – One-way Pair	X				This alternative may impact Galloway Creek which is crossed by existing US 12.

ENVIRONMENTAL FACTORS	EFFECTS				COMMENTS
	Adverse	Benefit	None	Not Applicable	
					(Blacked out cells require a check in at least one of the other columns)
Alternative 3 – Rock County N			X		No impacts to streams or floodplains are expected with this alternative.
Alternative 7 – South Bypass, Alternative 7a – Far South Bypass	X				These alternatives both cross Allen Creek and Galloway Creek.
Lakes or Other Open Water					<i>No Factor Sheet completed</i>
All alternatives				X	The roadway alignments for each alternative would not require any construction within lakes or other open water and so there would be no direct impacts.
Upland Habitat					<i>Factor Sheet completed – See page 127.</i>
No Action, Alternative 1a – TSM, Alternative 3 – Rock County N.				X	The roadway alignment would remain the same and no right-of-way would be acquired that would require any construction within upland habitat and so there would be no impacts.
Alternative 2b – One-way Pair	X				Alternative 2b would require up to 11 acres of woodland habitat.
Alternative 7 – South Bypass, Alternative 7a – Far South Bypass	X				Impacts to upland habitat would occur to accommodate new right-of-way for Alternatives 7 and 7a. 19 acres of woodland are within the study corridor for Alternative 7 and 23 acres for Alternative 7a.
Geology					<i>No Factor Sheet completed.</i>
No Action, Alternative 1a - TSM			X		No geologic impacts are expected since there would be no construction.
Alternative 2b – One-way Pair, Alternative 3 – Rock County N	X				Karst features may be encountered during construction, particularly during any rock cut splitting, rock blasting, rock excavation, and grading. Karst features may require special treatment due to geotechnical, drainage or environmental concerns. Alternatives 2b and 3 are located generally on the existing US 12 and CTH N alignments, respectively; therefore, the potential for encountering Karst conditions such as sinkholes and springs during construction is relatively low because the roadbed is generally established.

ENVIRONMENTAL FACTORS	EFFECTS				COMMENTS
	Adverse	Benefit	None	Not Applicable	
					(Blacked out cells require a check in at least one of the other columns)
Alternative 7 – South Bypass, Alternative 7a – Far South Bypass	X				These alternatives involve roadway construction on new alignment; therefore, the possibility of encountering Karst conditions during construction of either of these alternatives is higher than it is for Alternatives 2b and 3. Geographic information indicates that springs located near Alternative 7a may form the headwaters of Allen Creek. Cutting or blasting in these areas has the potential to uncover sinkholes or shallow steams and springs.
Erosion					<i>No Factor Sheet completed.</i>
No Action			X		Erosion would not be an issue since there would be no construction.
Alternative 1a – TSM and Alternative 2b – One-way Pair	X				These alternatives involve minimal construction. Erosion control at the construction site would be standard. Sediment would be contained within the construction site and erosion would be kept to a minimum.
Alternative 3 – Rock County N	X				Erosion control would be required for construction in areas requiring roadway widening or straightening and flattening. Erosion control at the construction site would be standard. Sediment would be contained within the construction site and erosion would be kept to a minimum.
Alternative 7 – South Bypass, Alternative 7a – Far South Bypass	X				Alternatives 7 and 7a would involve new construction. Erosion control measures would be required. Erosion control at the construction site would be standard. Sediment would be contained within the construction site and erosion would be kept to a minimum.
Stormwater management					<i>No Factor Sheet completed.</i>
No Action, Alternative 1a – TSM, Alternative 2b – One-way Pair			X		Stormwater management would not change.
Alternative 3 – Rock County N			X		Stormwater management would remain essentially the same. WisDOT would follow the requirements of the DNR cooperative agreement and TRANS 401.
Alternative 7 – South Bypass, Alternative 7a – Far South Bypass			X		Stormwater management would be required for new roadways. WisDOT would follow the requirements of the DNR cooperative agreement and TRANS 401.

ENVIRONMENTAL FACTORS	EFFECTS				COMMENTS
	Adverse	Benefit	None	Not Applicable	
(Blacked out cells require a check in at least one of the other columns)					
PHYSICAL ENVIRONMENT FACTORS					
Air Quality					<i>Factor Sheet completed – See page 131.</i>
All Alternatives	X				Each alternative is exempt from permit requirements under Wisconsin Administrative Code - Chapter NR 411. No substantial impacts to air quality are expected.
Construction Stage Sound Quality					<i>Factor Sheet completed – See page 133.</i>
All alternatives			X		Receptors are located in the area where construction would occur. No receptors are expected to require special noise abatement measures. Depending on the alternative, there are 15 to 86 receptors that will experience an increase in noise levels.
Traffic Noise					<i>Factor Sheet completed – See page 135.</i>
All alternatives	X				A noise analysis was performed. Some impacts are anticipated per Wisconsin Administrative Code - Chapter TRANS 405. Depending on the alternative, there are 15 to 86 receptors that will experience an increase in noise levels.
Groundwater and geology					<i>No Factor Sheet completed</i>
Alternatives 2b, 3, 7 and 7a	X				The study area contains “karst” geological formations or subsurface limestone cavities that carry groundwater. These formations can be easily contaminated and affect groundwater quality, which may in turn impact area wetlands. The formations themselves could be damaged if not protected from physical disturbance or from road salt contamination. Construction design would need to incorporate appropriate measures to avoid or protect karst formations to avoid the collapse of roadways and to protect the groundwater from contamination.
Hazardous Substances or UST's					<i>Factor Sheet completed – See page 146.</i>
No Action, Alternative 1a – TSM				X	No excavation would be required and no right-of-way purchased and so no effect is anticipated regarding hazardous substances.
Alternative 2b – One-way Pair, Alternative 3 – Rock County N, Alternative 7, Alternative 7a	X	X			Phase I screening assessments of hazardous materials indicate that some contaminated sites were located within each study corridor. Prior to purchasing right-of-way for this project, contaminated sites would be remediated. Remediation of sites would be positive, but it would be an added project expense.

ENVIRONMENTAL FACTORS	EFFECTS				COMMENTS
	Adverse	Benefit	None	Not Applicable	
(Blacked out cells require a check in at least one of the other columns)					
CULTURAL ENVIRONMENT FACTORS					
Section 4(f) and 6(f)					<i>No Factor Sheet completed</i>
All Alternatives				X	<p>None of the alternatives would require the use of publicly owned land of a public park, recreation area, or wildlife/waterfowl refuge or land of a historic site of National, State, or local significance and so there would be no Section 4(f) use. (23 CFR 771.135(a)(1)).</p> <p>None of the alternatives would require the use of property acquired or developed with LAWCON funds and so there would be no 6(f) impacts. (Section 6(f)(3) of the Land and Water Conservation Fund Act of 1965 (LAWCON)).</p>
Historic Resources					<i>Factor Sheet completed - See page 149.</i>
No Action, Alternative 1a – TSM, Alternative 2b – One-way Pair	X				The existing highway runs through two historic districts.
Alternative 3 – Rock County N				X	Three historic potentially-eligible properties were identified on CTH N. Traffic would only increase slightly. Direct impacts could be avoided through design.
Alternative 7 – South Bypass, Alternative 7a – Far South Bypass				X	No historic properties were identified along Alternatives 7 or 7a.
Archaeological Resources					<i>Factor Sheet completed – See page 157.</i>
No Action, Alternative 1a – TSM				X	No impacts to archaeological resources are anticipated.
Alternative 2b – One-way Pair, Alternative 3 – Rock County N, Alternative 7 – South Bypass, Alternative 7a – Far South Bypass	X				Preliminary studies show historic and pre-historic archaeological sites. Determinations of Eligibility will be completed for the preferred alternative and will be included in the FEIS. The potential for adverse effects is present, although not yet determined fully.
Aesthetics					<i>Factor Sheet completed – See page 161.</i>
No Action, Alternative 1a – TSM			X		There would be no substantial physical changes that would alter the aesthetics of the surrounding area.

ENVIRONMENTAL FACTORS	EFFECTS				COMMENTS
	Adverse	Benefit	None	Not Applicable	
					(Blacked out cells require a check in at least one of the other columns)
Alternative 2b – One-way Pair			X		Aside from a change in views for travelers due to the one-way direction, there would be no physical changes to the highway facility and so aesthetics would not be an issue. Continued increases in congestion can be expected to impact the central business district, with added traffic congestion.
Alternative 3 – Rock County N			X		For Alternative 3, there would be no physical changes to the highway facility except where it approaches the interchange at the western end at WIS 26. This interchange would be constructed as part of another project.
Alternative 7 – South Bypass, Alternative 7a – Far South Bypass	X				Alternatives 7 and 7a would create a new highway facility where one does not currently exist. Views would be impacted as described in the Factor Sheet
Coastal Zone					<i>No Factor Sheet completed</i>
All Alternatives				X	The project is not in a coastal zone.
Other – Secondary Impacts					<i>Secondary and Cumulative Impact Study completed. See Appendix D. Also see Environmental Issues question 1 on page 56.</i>
No Action, Alternative 1a – TSM	X	X			Not likely to induce substantial land development pattern changes.
Alternative 2b – One-way Pair	X	X			Not likely to induce substantial land development pattern changes.
Alternative 3 – Rock County N	X	X			Not likely to induce substantial land development pattern changes.
Alternative 7 – South Bypass	X	X			New interchanges will create the potential for new land development. A bypass may improve the economy by creating better access to employment and increased efficiencies in hauling goods. An improved economy may increase demand for other land uses creating potential beneficial and adverse effects of new development.
Alternative 7a – Far South Bypass	X	X			New interchanges will create the potential for new land development. A bypass may improve the economy by creating better access to employment and increased efficiencies in hauling goods. An improved economy may increase demand for other land uses creating potential beneficial and adverse effects of new development.

ENVIRONMENTAL FACTORS	EFFECTS				COMMENTS
	Adverse	Benefit	None	Not Applicable	
(Blacked out cells require a check in at least one of the other columns)					
EIS SPECIFIC FACTORS (Complete the following portion for all projects.)					
Long vs. Short Term Effects			<i>No factor sheets. This item is discussed in its entirety below.</i>		
No Action	X				In the short term, traffic congestion is high, but not at an unmanageable level. In the long-term, the congestion is expected to increase to an unacceptable level for a connector route, reaching LOS D by 2030. This could affect the state and local economy as described in the General Economic and Economic Development & Business Factor Sheets.
Alternative 1a – TSM	X				In the short-term the TSM measures would alleviate some of the problems with traffic flow and congestion. But, the level of service would reach D by 2030 along Main Street and Whitewater Avenue in Fort Atkinson.
Alternative 2b – One way Pair	X	X			In the short and long-term a one-way pair may alleviate some traffic flow and congestion problems. By 2030 the LOS would be C in Fort Atkinson. At the same time, the solution favors the regional traffic movement on US 12 at the expense of local traffic movement.
Alternative 3 – Rock County N	X				In the long term, Alternative 3 may not effectively address the needs of a Connector Route as defined by the State’s Highway Plans. Re-signing Rock County N to US 12 is not expected to change many drivers travel patterns. The impacts of purchasing additional right-of-way for this roadway to meet the standards for a Connector Route and the resulting losses to residents and farmers along the corridor may not be justified if traffic patterns would not change.
Alternative 7 – South Bypass, Alternative 7a – Far South Bypass	X	X			In the short-term, the bypass alternatives provide higher cost solutions to the identified problems. The solution would also provide operational effectiveness for the regional system for a longer term than the other alternatives.
Irretrievable Commitments of Resources			<i>No factor sheets. This item is discussed in its entirety below.</i>		
No Action, Alternative 1a – TSM Alternative 2b – One-way Pair	X				The through-city alternatives would not require much of a commitment in construction resources, but in the long-term the fuel efficiency that is lost to congestion and slower traffic would increase.
Alternative 3 – Rock County N	X				Road building resources would be committed for those areas where the roadway would be straightened or flattened. Fuel for construction equipment would be expended.

ENVIRONMENTAL FACTORS	EFFECTS				COMMENTS
	Adverse	Benefit	None	Not Applicable	
					(Blacked out cells require a check in at least one of the other columns)
Alternative 7 – South Bypass Alternative 7a – Far South Bypass	X				These bypass alternatives have the greatest commitment of construction resources. They also would expend the most fuel for construction equipment.