Consider the Improvements and Addition of Traffic Lanes to the Existing Route of USH 12 between the Cities of Elkhorn and Whitewater as an Alternative to the Extension of the USH 12 Freeway

The year 2035 regional transportation system plan and the Walworth County jurisdictional highway system plan recommends the extension of the USH 12 freeway between the City of Elkhorn and the City of Whitewater. This recommendation is not new, as this extension of the USH 12 freeway was recommended in State and regional plans in the mid-1960’s, and in the original Walworth County jurisdictional highway system plan adopted in 1973. The USH 12 extension right-of-way from Elkhorn to CTH O was officially mapped by the Wisconsin Department of Transportation in 1967. The proposed extension of the USH 12 freeway was reevaluated, reconsidered, and reaffirmed during the preparation of an amendment to the Walworth County jurisdictional highway system plan adopted by the Walworth County Board of Supervisors on January 14, 1992.

The existing route of USH 12 between the terminus of the USH 12 freeway and CTH P is predominantly a two traffic lane rural cross-section, with an overall right-of-way width ranging from 66 to 200 feet. In 2006, the average weekday traffic volumes on this section of USH 12 ranged from 7,600 to 8,900 vehicles between CTH P and STH 67, ranged from 6,200 to 12,200 vehicles between STH 20 and CTH D, and was 13,700 vehicles between CTH D and the terminus of the USH 12 freeway. Thus, current traffic volumes are approaching the 14,000 vehicles per average weekday design capacity of the existing two lane facility on the current route of USH 12 between CTH D and the terminus of the USH 12 freeway. Forecast year 2035 average weekday traffic volumes are 19,000 vehicles between CTH P and STH 67, exceeding the 14,000 vehicles per average weekday design capacity of a two traffic lane arterial. Forecast year average traffic volumes on USH 12 range from 13,000 to 16,000 vehicles between STH 20 and CTH D, approaching or exceeding the 14,000 vehicles per average weekday design capacity of the existing two traffic lane arterial. Forecast year average weekday traffic volumes on USH 12 are 21,000 vehicles between CTH D and the terminus of the USH 12 freeway, exceeding the 14,000 vehicles per average weekday design capacity of the existing two traffic lane arterial.
The long-planned and officially mapped alignment of the USH 12 freeway extension is shown on Map A-1. Between Kettle Moraine Drive and a point north of Bluff Creek, the long-planned alignment for USH 12 may be adjusted to avoid the particularly sensitive environmental areas within the Kettle Moraine State Forest known as the Bluff Creek Fens and Bluff Creek Woods. The planned facility could be implemented in stages, with the construction of a two traffic lane rural cross-section and acquisition of 300 feet of right-of-way to accommodate a divided four traffic lane freeway to be constructed at a later date. The construction cost of the initial stage without grade separation at cross-streets is $53.9 million, including $16.7 million for right-of-way acquisition. The forecast year 2035 average weekday traffic for the extension of the USH 12 freeway ranges from 27,000 to 29,000 between its terminus and CTH P. The total cost of constructing the divided four-lane freeway with grade separation would be an additional $62.8 million over the cost of right-of-way acquisition and construction of the initial two lanes, or a total cost of $116.7 million¹.

An alternative to the extension of the long-planned USH 12 freeway is the widening of the existing route of USH 12 from two to four traffic lanes between the current terminus of the USH 12 freeway and CTH P. This facility would be constructed as a four-lane divided facility on 130 feet of right-of-way. The right-of-way could be narrowed and the roadway reconstructed as an undivided four traffic lane facility in some locations to avoid disturbance to existing development along USH 12. The construction cost of this alternative is estimated at $64.2 million, including $9.2 million for right-of-way acquisition. The forecast year 2035 average weekday traffic which may be expected to use this alternative would range from 19,000 to 27,000 vehicles.

If the necessary capacity improvement is provided on the existing alignment rather than the freeway alignment, it may be expected that the design year traffic volumes would be substantially lower than on a freeway alignment. The primary reason for this difference is that the USH 12 freeway may be expected to provide a higher level of service and capacity relief, not only for the existing route of USH 12, but for IH 94 and IH 90 between the Chicago, Illinois, area and the Madison, Wisconsin, area as well. Adding two lanes on the existing USH 12 alignment would not be expected to provide capacity relief to IH 90 or IH 94. Table A-1 compares the alternative of improvement on new alignment with that of improvement on existing alignment. Improvement on the existing alignment has an estimated construction cost which is approximately 19 percent more than the cost of constructing the initial two lanes of a freeway. However,

¹ In addition, it would be necessary to maintain the existing route of USH 12 as an arterial facility, potentially as a county trunk facility. However, the planned jurisdiction of the existing route of USH 12 would be evaluated as part of this Walworth County jurisdictional planning effort. The estimated cost to reconstruct the existing route of USH 12 to maintain two traffic lanes within the next 20 years is $23.2 million.
EXISTING ROUTE OF USH 12 BETWEEN THE CITIES OF ELKHORN AND WHITEWATER

FUNCTIONAL IMPROVEMENTS RECOMMENDED IN THE CITIES OF ELKHORN AND WHITEWATER AREA UNDER THE YEAR 2035 REGIONAL TRANSPORTATION PLAN

ARTERIAL STREET OR HIGHWAY
- NEW WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
- RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (ADDITIONAL LANES OR NEW FACILITY)
- RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY
- POTENTIAL ADJUSTMENT IN PLANNED ALIGNMENT OF THE EXTENSION OF USH 12 TO MINIMIZE DISTURBANCE OF ENVIRONMENTALLY SENSITIVE AREAS
- EXISTING ROUTE OF USH 12 BETWEEN THE CITIES OF ELKHORN AND WHITEWATER

FREeways INTERCHANGE
- NEW
- NEW HALF
- EXISTING
- RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (POTENTIAL) NEW INTERCHANGE

Source: SEWRPC
**Table A-1**

**COMPARISON OF USH 12 ALTERNATIVES BETWEEN THE USH 12 AND STH 67 INTERCHANGE AND CTH P**

<table>
<thead>
<tr>
<th>Evaluation Measures</th>
<th>Long-Planned Freeway Route(a)</th>
<th>Existing USH 12 Route Without Long-Planned Freeway Route Widened to Provide Four Traffic Lanes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disruptions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right-of-Way Acquisition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Residential Units</td>
<td>40</td>
<td>11</td>
</tr>
<tr>
<td>• Businesses</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>• Institutional Buildings</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>• Acres</td>
<td>491</td>
<td>66</td>
</tr>
<tr>
<td>Primary Environmental Corridors (acres)</td>
<td>44</td>
<td>21</td>
</tr>
<tr>
<td>Secondary Environmental Corridors (acres)</td>
<td>5</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Isolated Natural Area (acres)</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>Wetlands (acres)</td>
<td>19</td>
<td>6</td>
</tr>
<tr>
<td>Prime Agricultural Land (acres)</td>
<td>291</td>
<td>34</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Initial Two-Traffic Lane Arterial without Grade Separation</th>
<th>Ultimate Four-Traffic Lane Freeway with Grade Separation</th>
<th>Four-Traffic Lane Arterial without Grade Separation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Costs (2008 Dollars)</td>
<td>$37,200,000</td>
<td>$100,000,000</td>
<td>$55,000,000</td>
</tr>
<tr>
<td>Construction</td>
<td>$37,200,000</td>
<td>$100,000,000</td>
<td>$55,000,000</td>
</tr>
<tr>
<td>Right-of-Way</td>
<td>$16,700,000</td>
<td>$16,700,000</td>
<td>$9,200,000</td>
</tr>
<tr>
<td>Total</td>
<td>$53,900,000(b)</td>
<td>$116,700,000(b)</td>
<td>$64,200,000</td>
</tr>
</tbody>
</table>

\(a\) The conceptual alignment shown on Map A-1 has been refined from Kettle Moraine Drive to a point north of Bluff Creek to indicate the intent to avoid impacting certain areas within the Kettle Moraine State Forest which have been designated as natural areas of statewide or greater significance, aquatic areas of statewide or greater significance, and/or rare species habitat associated with Bluff Creek. Bluff Creek is a Class I trout stream with high-quality springs and associated calcareous fens running through a designated State Natural Area supporting threatened and endangered species.

\(b\) Does not include the $23.2 million estimated to reconstruct the existing USH 12 route between the Cities of Elkhorn and Whitewater maintaining two traffic lanes.
the completion to a freeway on new alignment would entail a total cost of approximately 82 percent more than that of improvement on existing alignment.

The disruptions that would be attendant to improvement on the existing alignment is less than that of development of a freeway on new alignment. All the alternatives would require crossing several primary and secondary environmental corridors, but the improvement of USH 12 on the existing alignment would require acquisition of only 21 acres of primary corridor compared to 44 acres required for the freeway alignment. Improvement of USH 12 on the existing alignment would require acquisition of about 34 acres of prime agricultural land as compared to 291 acres of prime agricultural land required for the freeway. The improvement of USH 12 on existing alignment would require the acquisition of 11 residences, 8 businesses, and one institutional building, while the freeway alignment would require the acquisition of 40 residences and one business.

The completion of USH 12 as a freeway through Walworth County and its extension through Jefferson County and into Dane County to Madison, Wisconsin, along the southerly extension to IH 90 in Illinois, has long been recognized as providing an important facility to serve travel not only within Walworth County, but within northeastern Illinois and southern Wisconsin. Improvement of USH 12 remains on long-range transportation plans of agencies responsible for developing such plans, as well as agencies responsible for plan implementation outside of the Southeastern Wisconsin Region in both Illinois and Wisconsin. In 2005, the Wisconsin Department of Transportation completed the USH 12 Whitewater bypass around the southern side of the City of Whitewater. Although currently a two traffic lane roadway with at-grade intersections, this facility was designed and constructed to facilitate its eventual upgrade to a divided four traffic lane freeway with grade separation at cross streets. In addition, The Wisconsin Department of Transportation is currently conducting a corridor study of USH 12 in the City of Fort Atkinson area, northwest of the City of Whitewater, in Jefferson County and which is considering, among other alternatives, a bypass on the south side of the City of Fort Atkinson. The Illinois Department of Transportation completed a feasibility study in 2007 for a USH 12 bypass of the Village of Richmond just south of the Wisconsin state line. An Environmental Assessment for the bypass is currently underway and is expected to be completed in 2011. The Richmond bypass is expected to extend from the existing USH 12 freeway at its current terminus at CTH H near the Wisconsin-Illinois border south to IL 31. In the long term, the 2030 regional transportation plan for northeastern Illinois prepared by the Chicago Metropolitan Agency for Planning recognizes the need for the extension of USH 12 to both IH 90 to the south and IH 94 to the east. Thus, it may be concluded that there is continued interest on the part of concerned planning
agencies and implementing agencies in providing an improved USH 12 extending from the Chicago area to Madison, although perhaps not improved to freeway standards.

It may be expected that the long-planned freeway on new alignment would be a safer, more attractive facility with higher travel speeds than an improved highway on the existing alignment. The new facility would have a superior vertical and horizontal alignment and grade-separated interchanges, as well as full control of access. Statewide, crash rates are historically about 50 percent lower on freeways than on rural four-lane surface arterials. The extension of the USH 12 freeway between the City of Elkhorn and the City of Whitewater has an estimated total cost of $116.7 million, not including the $23.2 million needed to reconstruct the existing route of USH 12 to maintain two traffic lanes. This compares to $64.2 million for the improvement to four traffic lanes and reconstruction of the existing USH 12 route between the City of Elkhorn and the City of Whitewater. The right-of-way acquisition needed to implement the planned extension of USH 12 is estimated as 491 acres. This compares to the 66 acres of right-of-way necessary to implement the improvement to four traffic lanes and reconstruction of the existing route of USH 12.

[Following Advisory Committee discussion of the USH 12 alternatives, the Advisory Committee recommendation with respect to USH 12 will be documented.]

**Reconsider the Proposed Foundry Road Extension in the Village of Darien**

The extension of Foundry Road to USH 14, as depicted in the year 2035 regional transportation system plan (see Map A-2), was recommended in the original Walworth County jurisdictional highway system plan adopted in 1973. Subsequent to the adoption of the Walworth County jurisdictional highway system plan, different alignments have been depicted, including the use of existing roadways. The original extension was depicted in the year 2035 regional transportation system plan at the request of the Village of Darien to provide system continuity along CTH C and Foundry Road between the Wisconsin-Illinois State line and USH 14 in the Village of Darien. The planned extension may also be expected to provide capacity relief to the Village center and specifically the intersection of CTH X and USH 14. However, the intersection of the planned extension of Foundry Road and USH 14 would provide neither the desirable (1,320 feet) nor minimum (1,000 feet) separation between the ramp and a new public street as specified in the Wisconsin Department of Transportation (WisDOT) guidelines for access control.

Accordingly, two alternative arterial routes utilizing existing facilities were considered. The first alternative route considered, but not recommended, was the use of Madison Street between Foundry Road
ALTERNATIVE ALIGNMENTS FOR THE EXTENSION OF FOUNDRY ROAD IN THE VILLAGE OF DARIEN

Source: SEWRPC
and USH 14 (see Map A-2). While this route consists of only the right-angle turns between Foundry Road and Madison Street, the existing acute angle (about 45 degrees) of the intersection between Madison Street and USH 14 would require the realignment of Madison Street east and west of USH 14 to provide 90 degree intersecting roadways. This may be expected to impact existing development in the northeast and southwest quadrants of the existing intersection.

The second alternative route considered consists of the use of Madison Street between Foundry Road and the Badger Parkway, and Badger Parkway between Madison Street and USH 14 (see Map A-2). Badger Parkway was constructed to accommodate heavier traffic and traffic volumes, and has an exclusive left turn lane on the northeast bound approach to its intersection with USH 14. However, this alignment would require right angle turns at two intersections—Foundry Road and Westbound Lane, and Badger Parkway and Madison Street—in addition to the Badger Parkway intersection with USH 14. This could be partially alleviated by connecting Foundry Road and Westbound Lane with a long-radius, roadway segment to eliminate the right-angle turns at that intersection.

It is recommended that the jurisdiction plan map no longer identify the extension of Foundry Road between Madison Street and Walworth Street, and identify Madison Street between Foundry Road and Badger Parkway, and Badger Parkway between Madison Street and Walworth Street as an arterial route. The removal of the extension of Foundry Road and the addition of Madison Street and Badger Parkway would result an increase of less than 0.1 miles to the planned arterial system.

Reconsider the Proposed Alignment of the Planned City of Elkhorn Ring Road on the West Side of the City, and Consider the Need for New Arterial Located South of the City of Elkhorn Beyond the Proposed City of Elkhorn Ring Road Extending from STH 11 East of the City to STH 11 West of the City

The year 2035 regional transportation plan and the Walworth County jurisdictional highway system plan recommends the construction of a ring road in the City of Elkhorn northwest of IH-43 and southwest of USH 12 (See Map A-3). In 2005, the City of Elkhorn completed a comprehensive plan which recommended a refinement of the planned ring road alignment (See Map A-4). In addition, the City of Elkhorn’s comprehensive plan recommends a second outer ring road to serve planned development in the southern and eastern portions of the Elkhorn area (See Map A-4).

In an existing or planned urban area of medium density, the year 2035 regional transportation plan recommends a grid of arterial streets at approximately one-mile spacing. Between the “inner” ring road
FUNCTIONAL IMPROVEMENTS RECOMMENDED IN THE ELKHORN AREA UNDER THE YEAR 2035 REGIONAL TRANSPORTATION PLAN
and CTH H, the proposed “outer” ring road extension would provide the desirable spacing in the southern portion of the Elkhorn area consistent with planned development in the Elkhorn future sanitary sewer service area (See Map A-5). Between CTH H and STH 11, the proposed “outer” ring road extension would serve predominately planned rural development, except for an area of planned urban development located along CTH NN, including the County’s Lakeland Complex. However, this area can be considered adequately served by an existing arterial facility—CTH NN. The City of Elkhorn comprehensive plan recommends urban development in the eastern portion of the Elkhorn outside of the planned Elkhorn future sanitary sewer service area to occur beyond the year 2035.

Therefore, it is recommended that the alignment of the “inner” ring road be refined consistent with the City of Elkhorn comprehensive plan. It is further recommended that the plan recommend as an arterial, consistent with the City of Elkhorn comprehensive plan, the extension of an “outer” ring road between the “inner” ring road and CTH H to serve planned urban development in the southern portion of the Elkhorn area, and the reservation of right-of-way for the extension of the “outer” ring road between CTH H to STH to serve the urban development planned to occur beyond the year 2035 in the eastern portion of the Elkhorn area (see Map A-6). The refinement of the “inner” ring road and the addition of the planned “outer” ring road would result in a net increase of 3.4 miles to the planned arterial system.

Reconsider the Planned Alignment of the Proposed New Arterial between Main Street and Tratt Street in the City of Whitewater

The year 2035 regional transportation plan and the Walworth County jurisdictional highway system plan recommend the extension of Indian Mound Parkway between Main Street and Tratt Street (See Map A-7). This alignment is consistent with the City of Whitewater’s neighborhood development plan for the western portion of the Whitewater area completed in 2000.

The City of Whitewater asked the Commission staff to reconsider the extension of Indian Mound Parkway between Main Street and Tratt Street, and as an alternative, consider the addition of a new east-west arterial between Main Street and Tratt Street along the Jefferson County line. A study of the extension of Indian Mound Parkway between Main Street and Tratt Street by the City of Whitewater indicated that the wetlands located along the planned route of the Indian Mound Parkway extension would likely prevent implementation of the planned extension of Indian Mound Parkway as shown on the plan. The new east-west arterial would provide a more desirable arterial spacing for existing and planned future development in the western portion of the Whitewater area. Like the Indian Mound Road
FUNCTIONAL IMPROVEMENTS RECOMMENDED IN THE ELKHORN AREA
IN THE YEAR 2035 WALWORTH COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN

Source: SEWRPC
Map A-7

FUNCTIONAL IMPROVEMENTS RECOMMENDED IN THE NORTHWEST WHITEWATER AREA UNDER THE YEAR 2035 REGIONAL TRANSPORTATION PLAN

Source: SEWRPC
extension, the new east-west arterial is also recommended as a new facility in the City’s development plan.

It is therefore recommended that the Walworth County jurisdictional highway system plan show the conceptual alignment of a new east-west arterial between Main Street and Tratt Street along the Jefferson County line, and the planned extension of Indian Mound Parkway between Main Street and Tratt Street be removed from the plan. A preliminary engineering study should be undertaken by the City of Whitewater to establish the centerline alignment for the extension. The addition of the new east-west arterial and removal of the extension of Indian Mound Parkway between Main Street and Tratt Street would result in a net increase of 1.0 miles to the planned arterial system.

Consider the Need for an Extension of Indian Mound Parkway
between Walworth Street and STH 59 in the City of Whitewater

In an existing or planned urban area of medium density, the year 2035 regional transportation plan recommends a grid of arterial streets at approximately one-mile spacing. The addition of an extension of Indian Mound Parkway between Walworth Street and STH 59 would further provide the desirable one-mile spacing in the southwest portion of the Whitewater area consistent with the planned development in the Whitewater future sanitary sewer service area (see Map A-8).

Therefore, it is recommended that the county jurisdictional highway system plan recommend the potential alignment for the extension of Indian Mound Parkway between Walworth Street and STH 59 (See Map A-9). A preliminary engineering study should be undertaken by the City of Whitewater to establish the centerline alignment for the extension. The addition of this facility to the Walworth County jurisdictional highway system plan as an arterial would increase the planned arterial system by about 1.2 miles.

Consider as an Addition to the Planned Arterial System, Starin Road
between Tratt Street and Fremont Street and its Planned Extension
between Fremont Street and Newcomb Street (STH 59) in the City of Whitewater

In an existing and planned urban area of medium density, the year 2035 regional transportation plan recommends a grid of arterial streets at approximately one mile spacing. Starin Road and its planned extension is located about 0.3 to 0.6 miles north of Main Street (see Map A-10). However, Starin Road and its planned extension would directly serve the University of Wisconsin-Whitewater campus and a planned technology park to be located in the eastern portion of the City. In addition, existing year 2006 average weekday traffic volumes on Starin Road between Tratt Street and Fremont Street range from
CITY OF WHITEWATER PLANNED SANITARY SEWER SERVICE AREA

- PRIMARY ENVIRONMENTAL CORRIDOR
- SECONDARY ENVIRONMENTAL CORRIDOR
- ISOLATED NATURAL RESOURCE AREA
- EXISTING AREA SERVED BY PUBLIC SANITARY SEWER SYSTEM: 1990
- PLANNED SANITARY SEWER SERVICE AREA
- PLANNED SANITARY SEWER SERVICE AREA BOUNDARY
- EXISTING TRUNK SEWER
- EXISTING FORCE MAIN
- EXISTING PUMPING STATION
- EXISTING PUBLIC SEWAGE TREATMENT PLANT
- LANDS ADDED TO THE ADOPTED WHITEWATER SANITARY SEWER SERVICE AREA IN 2003
- LANDS REMOVED FROM THE ADOPTED WHITEWATER SANITARY SEWER SERVICE AREA IN 2003

Source: SEWRPC.
FUNCTIONAL IMPROVEMENTS RECOMMENDED IN THE SOUTHWEST
WHITEWATER AREA UNDER THE YEAR 2035 REGIONAL TRANSPORTATION PLAN

AR TERIAL STREET OR HIGHWAY

NEW
WIDENING AND/OR OTHER
IMPROVEMENT TO PROVIDE
SIGNIFICANT ADDITIONAL CAPACITY
RESERVE RIGHT-OF-WAY TO
ACCOMMODATE FUTURE IMPROVEMENT
(ADDITIONAL LANES OR NEW FACILITY)
RESURFACING OR RECONSTRUCTION
TO PROVIDE ESSENTIALLY THE SAME
CAPACITY

POTENTIAL SEGMENT TO BE OPERATED
AS AN ARTERIAL

POTENTIAL NEW CONNECTION

FREEWAY INTERCHANGE

NEW

Source: SEWRPC
FUNCTIONAL IMPROVEMENTS RECOMMENDED IN THE NORTH
WHITEWATER AREA UNDER THE YEAR 2035 REGIONAL TRANSPORTATION PLAN

Source: SEWRPC

17/09/09

17/09/09

17/09/09

17/09/09

17/09/09

17/09/09
2,200 to 5,200 vehicles, indicating that Starin Road is beginning to function as an arterial rather than a collector facility. Also, the proposed extension of Starin Road between Fremont Street and STH 59 would provide another crossing of Whitewater Creek, and may divert some traffic from the Main Street crossing of Whitewater Creek.

Accordingly, it is recommended that the county jurisdictional highway system plan recommend Starin Road between Tratt Street and Fremont Street be added to the planned arterial street and highway system, and the potential conceptual alignment for the extension of Starin Road between Fremont Street and Newcomb Street (STH 59). A preliminary engineering study should be undertaken by the City of Whitewater to establish the centerline alignment for the extension. The addition of this facility to the Walworth County jurisdictional highway system plan as an arterial would increase the planned arterial system by about 1.6 miles.

**Consider Alternatives to Providing Four Traffic Lanes on STH 50 through the City of Lake Geneva to Address Existing and Future Congestion**

STH 50 is the only east-west arterial route through the City of Lake Geneva (see Map A-11). The segment of STH 50 in the City of Lake Geneva provides two traffic lanes, and carries existing or future forecast year 2035 traffic volumes which exceed the design capacity of those lanes. The regional transportation plan indentified this as a segment of STH 50 which should be studied in more detail in the Walworth County jurisdictional highway system plan. The City of Lake Geneva’s central business district is located along STH 50 between Cook Street and Mill Street. Over the last twenty years, City officials and residents have expressed opposition to many measures proposed to alleviate congestion and have indicated a willingness to accept the traffic congestion and attendant consequences. The stated opposition to the measures—which ranged from parking reconfiguration and/or prohibitions to a bypass—has generally been expressed as one of two general themes: 1) the proposed measure would have an adverse impact on the City’s business climate and economy, or 2) the proposed measure would have an adverse impact the ambiance or character of the central business district, in particular, and of the City, in general.

STH 50 between Lakeview Drive and Maxwell Street is a two traffic lane urban roadway approximately 24 feet wide, with an overall right-of-way width ranging from 66 to 86 feet. There is no parking on this segment of STH 50. In 2005, the average weekday traffic volumes on STH 50 between Lakeview Drive and Maxwell Street was 11,500 vehicles, below the design capacity of 14,000 vehicles per average weekday. Forecast year 2035 average weekday traffic volume on STH 50 between Lakeview Drive and
Map A- 11

ARTERIAL STREETS AND HIGHWAYS IN THE CITY OF LAKE GENEVA AREA

Source: SEWRPC

RHHKv
07/08/09
I:\Tran\Work\JHSP\WAL\HSP\MAP\Walw Co Map A-11 - Lake Geneva Area.mxd
Maxwell Street are 15,000 vehicles per average weekday, exceeding the 14,000 vehicles per average weekday design capacity of the existing two traffic lane arterial.

Between Maxwell Street and Cook Street, STH 50 is approximately 50 feet in width with two traffic lanes and one parking or auxiliary lane, with an overall right-of-way width of 100 feet. Angle parking is generally permitted on the south side of STH 50. In 2005, the average weekday traffic volumes on STH 50 between Maxwell Street and Cook Street was 13,800 vehicles, just below the design capacity of 14,000 vehicles per average weekday. Forecast year 2035 average weekday traffic volume on STH 50 between Maxwell Street and Cook Street is 15,000 vehicles per average weekday, exceeding the 14,000 vehicles per average weekday design capacity of the existing two traffic lane arterial.

Between Cook Street and Mill Street, STH 50 is approximately 70 feet in width with two traffic lanes and two parking or auxiliary lanes, with an overall right-of-way width of 100 feet. Angle parking is generally permitted on both sides of STH 50 between Cook Street and Center Street, and parallel parking is generally permitted on both sides of STH 50 between Center Street and Mill Street. In 2005, the average weekday traffic volumes on STH 50 between Cook Street and Mill Street ranged from 18,400 to 22,000 vehicles, exceeding the design capacity of 14,000 vehicles per average weekday. Forecast year 2035 average weekday traffic volume on STH 50 between Maxwell Street and Cook Street range from 21,000 to 24,000 vehicles per average weekday, again exceeding the 14,000 vehicles per average weekday design capacity of the existing two traffic lane arterial.

Between Mill Street and Wells Street, STH 50 ranges from 30 to 42 feet in width with two traffic lanes and two auxiliary lanes, with an overall right-of-way width of 100 feet. Parking is prohibited on this section of STH 50. In 2005, the average weekday traffic volumes on STH 50 between Maxwell Street and Cook Street was 22,000 vehicles, exceeding the design capacity of 14,000 vehicles per average weekday. Forecast year 2035 average weekday traffic volume on STH 50 between Maxwell Street and Cook Street are 24,000 vehicles per average weekday, again exceeding the 14,000 vehicles per average weekday design capacity of the existing two traffic lane arterial.

Between Wells Street and Curtis Street, STH 50 is a two-traffic lane urban roadway, with an overall right-of-way width of 100 feet. STH 50 is approximately 30 feet in width between Wells Street and East Street, and 44 feet in width between East Street and Curtis Street. Parking is generally prohibited between Wells Street and Curtis Street, except for the south side of STH 50 between East Street and Curtis Street where angle parking is permitted. In 2005, the average weekday traffic volumes on STH 50 between Wells
Street and Curtis Street was 15,300 vehicles, exceeding the design capacity of 14,000 vehicles per average weekday. Forecast year 2035 average weekday traffic volume on STH 50 between Wells Street and Curtis Street ranges from 17,000 to 18,000 vehicles per average weekday, again exceeding the 14,000 vehicles per average weekday design capacity of the existing two traffic lane arterial.

Between Curtis Street and STH 120, STH 50 is generally 40 feet in width with two-traffic lanes and two auxiliary lanes, with an overall right-of-way of 75 feet, except for the segment between East Drive and STH 120, where the road widens to four-traffic lanes with auxiliary lanes at the intersection. STH 50 between Wells Street and Curtis Street has a mixture of urban and rural cross-sections. In 2005, the average weekday traffic volumes on STH 50 between Curtis Street and STH 120 was 15,300 vehicles, exceeding the design capacity of 14,000 vehicles per average weekday. Forecast year 2035 average weekday traffic volume on STH 50 between Curtis Street and STH 120 ranges from 17,000 to 18,000 vehicles per average weekday, again exceeding the 14,000 vehicles per average weekday design capacity of the existing two traffic lane arterial.

Thus, consideration of improvements is warranted on STH 50 between its intersection with Lakeview Drive and the intersection of STH 120 to alleviate the congestion expected under existing or future forecast year 2035 traffic volumes. Potential options to alleviate congestion of STH 50 through the City of Lake Geneva include the provision of a bypass route north or south of the City, the provision of four traffic lanes on the current alignment, and some combination of traffic engineering and physical improvements.

One alternative considered was the provision of a southern STH 50 bypass which would reroute STH 50 south of the City of Lake Geneva. Because of Geneva Lake’s proximity to STH 50, the southern bypass would have to be routed around the eastern, southern, and western shores of Geneva Lake. Such a bypass must be located relatively close to the Lake Geneva area to have the potential to attract any significant traffic. Given the size and location of Lake Geneva, the travel indirection attendant to this bypass is estimated to virtually double the travel distance and time compared to the existing route of STH 50 making such a route likely infeasible.

Another alternative considered was the provision of a northern STH 50 bypass which would reroute STH 50 north of the City of Lake Geneva. A potential northern bypass was identified as shown on Map A-12 that would be routed concurrent with USH 12 from its current STH 50 interchange to a new interchange at Springfield Road, then routed over a new facility connecting Springfield Road at USH 12 with Palmer
Map A-12

POTENTIAL NORTHERN BYPASS ROUTE FOR STH 50 IN THE CITY OF LAKE GENEVA

Source: SEWRPC
Road at CTH H, and then over Town Hall Road and Palmer Road to STH 50 near Delavan Lake. Analyses of the potential northern bypass indicated that the bypass route may be expected to have the potential to divert some traffic—about 2,000 vehicles per average weekday—from STH 50 in the City of Lake Geneva. However, it would not remove enough traffic volume to eliminate the need for the provision of four traffic lanes on STH 50 through the City of Lake Geneva. In addition, this particular northern bypass route received an overwhelmingly negative reaction from the public, as well as, the mayor of the City of Lake Geneva, the town chairman of the Town of Geneva and a town supervisor from the Town of Delavan, when presented at public hearings during the conduct of a previous jurisdictional highway system plan update completed in 1991.

Another alternative that was considered, but rejected, is the provision of informational guide signs on STH 50, USH 12, and IH 43 approaches to STH 50 between the Cities of Delavan and Lake Geneva in an attempt to divert STH 50 traffic to the USH 12 and IH 43 freeways. This alternative has been at least partially implemented with the installation of “FREEWAY ROUTE TO DELAVAN” signs with an arrow on USH 12 immediately south of STH 50, on STH 50 immediately east of USH 12, and on USH 12 immediately north of STH 67. Because average weekday traffic volumes have remained steady or increased on STH 50 through the City of Lake Geneva since the signing was installed, it may be concluded that the existing signing was no more than marginally successful in diverting traffic from STH 50.

Another alternative considered consisted of providing four traffic lanes on STH 50 between Lakeview Drive and STH 120. Some segments would require widening to add two traffic lanes within existing right-of-way, while others may add the proposed lanes by converting angle parking to parallel parking. One segment could add the proposed lanes within the existing cross-section. Under this alternative four traffic lanes may be provided on STH 50 between Lakeview Drive and STH 120 as follows:

- Lakeview Drive to Maxwell Street – Improve and widen within existing right-of-way (66 to 86 feet) to urban four-traffic lane roadway (48 feet from curb-to-curb).
- Maxwell Street to Cook Street – Improve and widen within existing right-of-way (100 feet) to urban four-traffic lane roadway and converting angle parking to parallel parking on the south side of STH 50 (60 feet from curb-to-curb).
- 12 -

- Cook Street to Center Street – Provide over the existing 70 foot wide roadway four-traffic lanes (50 feet in width) and two parallel parking lanes (20 feet in width) by converting angle parking to parallel parking between Cook Street and Center Street.

- Center Street to Mill Street – Provide over the existing 70 foot wide roadway four traffic lanes (50 feet in width) and two parallel parking lanes (20 feet wide).

- Mill Street to Curtis Street – Improve and widen within existing right-of-way (100 feet) to urban four-traffic lanes, and converting angle parking to parallel parking between East Street and Curtis Street (52 feet from curb-to-curb between Mill Street and East Street and 60 feet from curb-to-curb between East Street and Curtis Street), including the widening of the bridge over the White River.

- Curtis Street to STH 120 – Improve and widen within existing right-of-way (75 feet) to urban four-traffic lanes (52 feet from curb-to-curb).

However, it may be difficult to provide the needed four traffic lanes on STH 50 through the City of Lake Geneva, particularly between Maxwell Street and Center Street, as on-street parking is heavily used along the public park located between Maxwell Street and Cook Street, and in the business district between Cook Street and Center Street, and as the reduction of available parking along STH 50 has historically been opposed by the City. However, alternative off-street parking could be provided along with signing to ease the impact of the loss of parking.

Another alternative considered was potential traffic engineering improvements, like those proposed in an improvement plan prepared for the City of Lake Geneva and the Wisconsin Department of Transportation in 1998. This planning effort was guided by an advisory committee comprised of representatives from local businesses, organizations, and City elected officials, that was aided by technical staff consisting of consultants, and City, State, and Commission staff. The plan recommended, like the regional transportation plan and Walworth County jurisdictional highway system plan, that four traffic lanes be provided on STH 50 between Center Street and STH 120. The plan also recommended that the existing two traffic lane cross-sections be retained on STH 50 west of Center Street, and instead implement a number of traffic engineering improvements (see Map A-13). The traffic engineering improvements identified in the plan included the relocation of Wells Street to provide a 90 degree intersection with STH 50 and the extension of Geneva Street between STH 50 at the realigned Wells Street and Sage Street/Mill Street. These improvements were recommended to improve traffic circulation to and from the downtown
POTENTIAL TRAFFIC ENGINEERING IMPROVEMENTS IN THE CITY OF LAKE GENEVA AREA

1. REALIGNMENT OF WELLS STREET
2. EXTENSION OF GENEVA STREET
3. CONVERT SAGE STREET TO SOUTHBOUND ONE-WAY OPERATION
4. PROVIDE TRAFFIC SIGNAL AT CENTER STREET AND GENEVA STREET
5. REMOVAL OF ACCESS TO MILL STREET FROM STH 50
6. PROHIBIT LEFT TURN MOVEMENTS ONTO LAKESHORE DRIVE FROM STH 50
7. CLOSURE OR MODIFICATION OF LINDA LANE AT ELMWOOD AVENUE AND STH 50
8. PROVIDE LEFT TURN LANES AT COOK STREET/WRIGLEY DRIVE AND STH 50

Source: SEWRPC
area, to provide better access to parking facilities and businesses north of STH 50, and to address safety
issues at the existing intersection of Wells Street and STH 50. The realignment of Wells Street at STH 50
would require the taking of an existing business located on the southeast corner of the intersection. The
plan also recommended the conversion of Sage Street from a two-way operation to a southbound one-way
operation between Dodge Street and Geneva Street, the provision of traffic signals at the intersection of
Center Street and Geneva Street, the removal of access to Mill Street from STH 50, the prohibition of left-
turning movements onto Lake Shore Drive from STH 50, the closure or modification of Linda Lane at the
intersection of Elmwood Avenue and STH 50, and the provision of left turn lanes at the intersection of
Cook Street/Wrigley Drive and STH 50.

[Following Advisory Committee discussion of the STH 50 alternatives, the Advisory
Committee recommendations with respect to STH 50 will be documented.]

**Consider as an Addition to the Planned Arterial System Bowers Road**

*between IH 43 and CTH ES, and CTH N between CTH ES and STH 20*

In rural areas, it is recommended that arterial facilities be provided at intervals of no less than two miles
in each direction. Bowers Road between IH 43 and CTH ES is located about 2.0 miles west of STH 120
and 1.0 east of CTH ES, and CTH N between CTH ES and STH 20 is located about 1.0 miles west of
Town Line Road and over 5 miles east of USH 12 (see Map A-14). While these segments of Bowers
Road and CTH N would not provide the recommended spacing for rural areas, they would provide service
to the existing interchange at IH 43, and would provide system continuity between CTH D and STH 20.

Accordingly, it is recommended that Bowers Road between IH 43 and CTH ES, and CTH N between
CHES and STH 20 be added to the plan as an arterial to serve rural development west of the Village of
East Troy, to serve the freeway interchange at IH 43, and to provide system continuity between CTH D
and STH 20. As a result of the foregoing recommendation, the spacing between CTH ES and Bowers
road would be less than what is recommended for planned rural development. Consequently, it is further
recommended that CTH ES between CTH A and CTH D be removed from the plan as an arterial as the
lands currently served by this section of CTH ES could be considered served by other existing arterials.
The addition of Bowers Road between IH 43 and CTH ES, and CTH N between CTH ES and STH 20 to
the regional transportation plan and Walworth County jurisdictional highway system plan, and the
removal of CTH ES between CTH A and CTH D from the plan would result in a net increase of 1.4 miles
to the planned arterial street and highway system.
FUNCTIONAL IMPROVEMENTS RECOMMENDED IN THE EAST TROY AREA UNDER THE YEAR 2035 REGIONAL TRANSPORTATION PLAN

ARterial STREET OR HIGHWAY
RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY

POtENTIAL SEGMENT TO BE OPERATED AS AN ARTERIAL

POtENTIAL SEGMENT TO BE REMOVED FROM ARTERIAL SYSTEM

FREEWAY INTERCHANGE

EXISTING

Source: SEWRPC
Consider Pickeral Lake Road between STH 20 and CTH J as an Alternative to the Planned Arterial Routes of Townline Road Between STH 20 and CTH J and of CTH N Between STH 20 and CTH J

The year 2035 regional transportation plan and Walworth County jurisdictional highway system plan recommends Townline Road between STH 20 and CTH J, and CTH N between STH 20 and CTH J to provide approximately two mile spacing in a rural portion of Walworth County (See Map A-14). This recommendation is not new, as both of these segments of Townline Road, and CTH N were recommended as arterial facilities in the original jurisdictional highway system plan for Walworth County adopted in 1973.

Pickeral Lake Road between STH 20 and CTH J would provide more desirable arterial spacing for existing and planned rural development in the northeastern portion of Walworth County, than would Townline Road, and CTH NN. This segment of Pickeral Lake Road, along with the previously recommended additions to the planned arterial street and highway system—Bowers Road between CTH D and CTH ES, and CTH N between CTH ES and STH 20—would provide system continuity between CTH D and CTH J. In addition, these segments would serve an existing interchange at IH 43.

It is therefore recommended that the jurisdictional plan map identify Pickeral Lake Road between STH 20 and CTH J as an arterial route, and that Townline Road and CTH N between STH 20 and CTH J be recommended as nonarterial facilities. The addition of Pickeral Lake Road between STH 20 and CTH J to the regional transportation plan and Walworth County jurisdictional highway system plan, and the removal of Town Line Road between STH 20 and CTH J, and CTH N between STH 20 and CTH J from the plan would result in a net decrease of 2.1 miles to the planned arterial street and highway system.

Consider the Removal from the Planned Arterial System of Sharon-Darien Town Line Road between CTH X and CTH O

The year 2035 regional transportation plan and the Walworth County jurisdictional highway system plan recommends Sharon-Darien Town Line Road between CTH X and CTH O as an east-west arterial south of the Village of Darien (see Map A-15). In rural areas, it is recommended that arterial facilities be provided at no less than two miles in each direction. Sharon-Darien Town Line Road is generally less than 1.3 miles south of CTH X and USH 14. Current year 2006 traffic volume on Sharon-Darien Town Line Road is less than 300 vehicles per average weekday. Further, Sharon-Darien Town Line Road currently does not function as an arterial, and may not warrant designation as an arterial by the year 2035 based on planned development.

It is therefore recommended that Sharon-Darien Town Line Road between CTH X and CTH O be removed
FUNCTIONAL IMPROVEMENTS RECOMMENDED IN THE SOUTHERN DARIEN AREA UNDER THE YEAR 2035 REGIONAL TRANSPORTATION PLAN

Source: SEWRPC
from the arterial system, based on planned development. The deletion of this facility from the regional transportation plan and the Walworth County jurisdictional highways system plan would reduce the planned arterial street and highway mileage by about 5.6 miles.

**Consider the Removal from the Planned Arterial System**

**of South Road and Mill Street between STH 50 and STH 36**

The year 2035 regional transportation plan and the Walworth County jurisdictional highway system plan recommend South Road and Mill Street between STH 50 and STH 36 as a north-south arterial. In rural areas, it is recommended that arterial facilities be provided at intervals of no less than two miles in each direction. South Road and Mill Street are located 3.0 miles east of STH 120 (see Map A-16).

South Road between STH 50 and Spring Valley Road is part of a 19.5 mile rustic road system within the Town of Lyons. In order to be designated as a rustic road, a facility should be bordered by outstanding natural features or open vistas and should be a low traffic volume, local access road. Roadways are added to the system at the discretion of the Rustic Roads Board of the Wisconsin Department of Transportation upon petition by a local municipality. South Road between STH 50 and Spring Valley Road is a two traffic lane rural roadway approximately 20 feet wide with 3 foot shoulders. Changes to the roadway cross-section and horizontal and vertical alignment of facilities designated as rustic roads are not permitted so as to preserve the characteristics of the facility which led to its designation as a rustic road. Thus, its designation as a rustic road precludes its reconstruction to the cross-section desired for an arterial facility which includes a 24 feet wide pavement with ten feet wide shoulders.

The current year 2002 average weekday traffic volume on South Road between STH 50 and Spring Valley Road is 700 vehicles per average weekday, while the current year 2005 average weekday traffic volume on Mill Street between Spring Valley Road and STH 36 is 2,200 vehicles per average weekday. South Road between STH 50 and Spring Valley Road currently does not function as an arterial and may not be expected to warrant designation as an arterial by the year 2035 based on planned development in the Town of Lyons. It is therefore recommended that South Road and Mill Street between STH 50 and STH 36 be removed from the arterial system, based on planned development. The deletion of these facilities from the regional transportation plan and the Walworth County jurisdictional highway system plan would reduce the arterial street and highway mileage by about 4.1 miles.

---

2 The Rustic Roads System in Wisconsin provides a linear park-like system of lightly traveled country roads intended to accommodate leisurely enjoyment of the outstanding natural features or open vistas bordering the roadway by motorists, bicyclists, and pedestrians alike.
FUNCTIONAL IMPROVEMENTS RECOMMENDED IN THE
LYONS AREA UNDER THE YEAR 2035 REGIONAL TRANSPORTATION PLAN

Source: SEWRPC
Reconsider the Proposed Removal from the Planned Arterial System of CTH O between USH 12 and STH 11; and Consider the Removal From the Planned Arterial System Of Briggs Road between STH 11 and Hazel Ridge Road, Hazel Ridge Road between Briggs Road and Granville Road, Granville Road between Hazel Ridge Road and Sugar Creek Road, Sugar Creek Road between Granville Road and Cobbie Road, and Cobbie Road between Sugar Creek Road and CTH H

The Walworth County jurisdictional highway system plan has long recommended, as shown on Map A-17, that CTH O between STH 11 and USH 12 not be proposed as a planned arterial facility and retained as a county trunk highway, but rather, Briggs Road, Hazel Ridge Road, Granville Road, Sugar Creek Road, and Cobbie Road be proposed as an arterial facility and be converted to a county trunk highway. This has been long proposed due to the relative close spacing of CTH O and CTH P, and the potential of Briggs Road, Hazel Ridge Road, Granville Road, Sugar Creek Road, and Cobbie Road together with CTH H and CTH F to provide a continuous arterial and county trunk highway. However, the proposed change has not been implemented for over 35 years.

[Following Advisory Committee discussion, the Advisory Committee recommendation will be documented.]

Reconsider the Proposed Removal from the Planned Arterial System of CTH M between STH 89 and CTH P

The year 2035 regional transportation plan and the Walworth County jurisdictional highway system plan shows CTH M between STH 89 and CTH P as a non-arterial facility. In rural areas, it is recommended that arterial facilities be provided at intervals no less than two miles in each direction. CTH M is generally located 0.5 to 2.5 miles north of STH 11 (see Map A-18).

The current year 2002 average weekday traffic volumes on this segment of CTH M between STH 89 and CTH P is 400 vehicles per average weekday. Additionally, CTH M does not function as an arterial and may not be expected to warrant designation as an arterial by the year 2035 based on planned development in the Towns of Darien and Richmond. Accordingly, it is recommended that the plan continue to show CTH M between STH 89 and CTH P remain as a non-arterial facility in the Towns of Darien and Richmond, based on planned development.
FUNCTIONAL IMPROVEMENTS RECOMMENDED IN THE WESTERN WALWORTH COUNTY UNDER THE YEAR 2035 REGIONAL TRANSPORTATION PLAN

ARTERIAL STREET OR HIGHWAY
- NEW
- WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
- RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (ADDITIONAL LAKES OR NEW FACILITY)
- RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY
- POTENTIAL SEGMENT TO BE OPERATED AS AN ARTERIAL
- POTENTIAL SEGMENT TO BE REMOVED FROM ARTERIAL SYSTEM

FREEWAY INTERCHANGE
- NEW
- NEW HALF
- EXISTING
- RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (POTENTIAL NEW INTERCHANGE)

Source: SEWRPC
FUNCTIONAL IMPROVEMENTS RECOMMENDED IN THE NORTHWESTERN DELAVAN AREA UNDER THE YEAR 2035 REGIONAL TRANSPORTATION PLAN
Reconsider the Proposed Realignment of CTH P North of CTH A

The year 2035 regional transportation plan and the Walworth County jurisdictional highway system plan recommends the realignment of CTH P (west) from Territorial Road south to the intersection of CTH A and CTH P (east), as delineated by the black line on Map A-19. The Town of Richmond asked the Commission staff to reconsider the proposed alignment of CTH P due to development that has occurred east of CTH P and south of Territorial Road that is potentially located along the conceptual route of the alignment shown. The proposed alignment shown is conceptual, indicating the need to provide system continuity on CTH P between USH 12 in Whitewater and STH 11 in Delavan.

It is recommended that the conceptual alignment of the planned realignment of CTH P be refined to avoid existing development, and also reduce the disturbance of an isolated natural resource area located east of CTH P and south of Territorial Road. The red line delineated on Map A-19 shows a new potential conceptual alignment for the realignment of CTH P. A preliminary engineering study should be undertaken by Walworth County, in cooperation with the Town of Richmond, to establish the actual centerline alignment for the realignment of CTH P. The alignment as revised would add approximately 0.4 miles to the arterial street and highway system.
ALTERNATIVE ALIGNMENTS RECOMMENDED FOR CTH P NORTH OF CTH A IN THE TOWN OF RICHMOND UNDER THE YEAR 2035 REGIONAL TRANSPORTATION PLAN

PROPOSED CTH P REALIGNMENT
- CURRENT CONCEPTUAL ALIGNMENT
- PROPOSED CONCEPTUAL ALIGNMENT

ENVIRONMENTAL CORRIDORS
- PRIMARY ENVIRONMENTAL CORRIDOR
- ISOLATED NATURAL RESOURCE AREAS
- SURFACE WATER

Source: SEWRPC