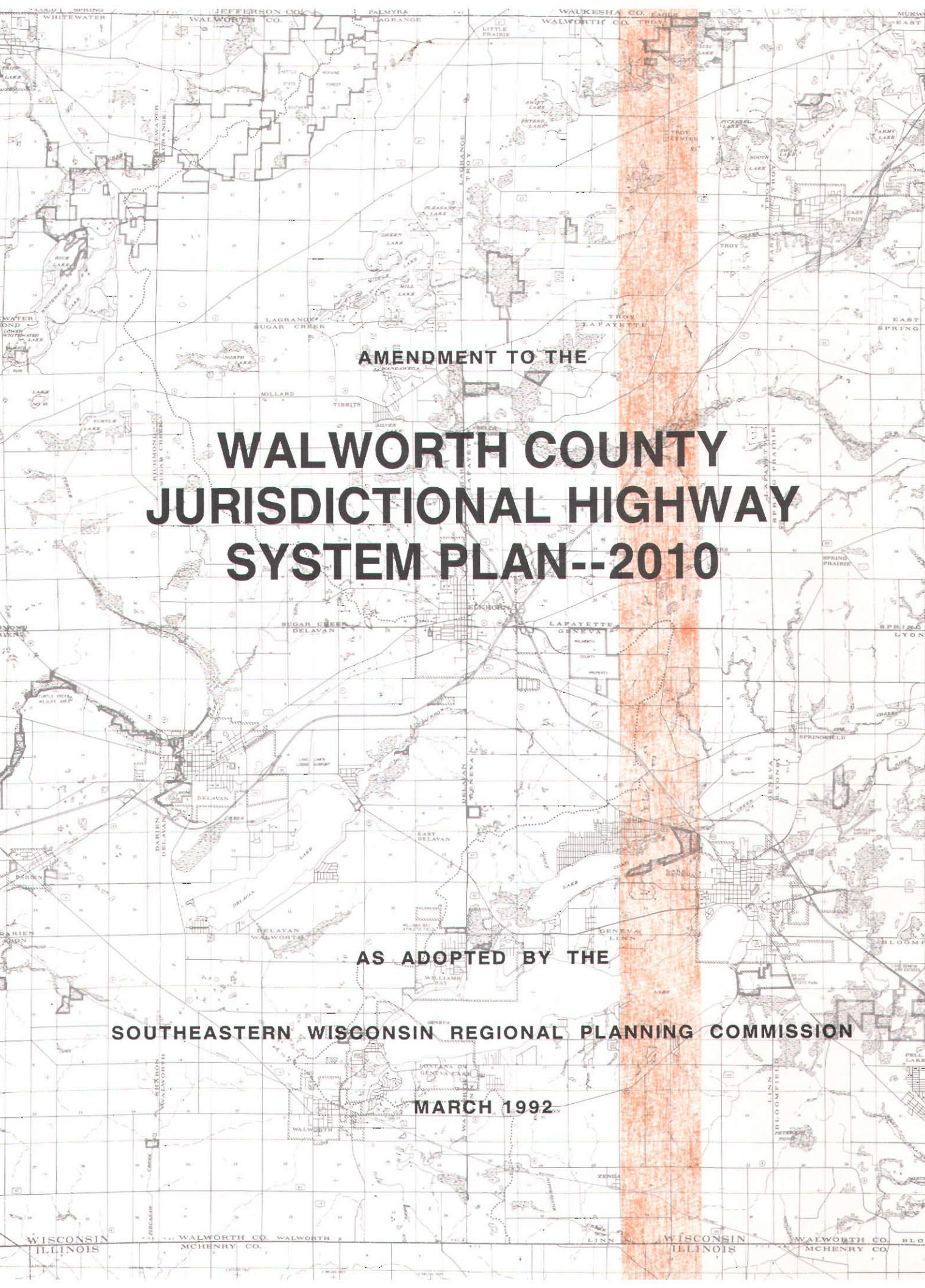




AMENDMENT TO THE

WALWORTH COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN--2010

AS ADOPTED BY THE

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

MARCH 1992

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**AMENDMENT TO THE WALWORTH COUNTY
JURISDICTIONAL HIGHWAY SYSTEM PLAN—2010**

**This Document Amends SEWRPC Planning Report No. 15,
A Jurisdictional Highway System Plan for Walworth County, October 1972**

Prepared by the

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October 1991

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SEWRPC PLAN AMENDMENT

AMENDMENT TO THE WALWORTH COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN—2010

INTRODUCTION

On April 19, 1973, the Walworth County Board of Supervisors adopted a jurisdictional highway system plan. That plan, set forth in SEWRPC Planning Report No. 15, A Jurisdictional Highway System Plan for Walworth County, was based upon a comprehensive study of the jurisdictional responsibilities for the construction, maintenance, and operation of arterial streets and highways in Walworth County. Prepared under the guidance of a technical coordinating and advisory committee consisting of federal, state, county, and local officials, the plan was intended to help provide the County, over time, with an integrated highway transportation system that would effectively serve and promote a desirable land use pattern in the County, abate traffic congestion, reduce travel time and costs, and reduce accident exposure. The plan was intended to help concentrate appropriate resources and capabilities on corresponding areas of need, thus assuring the most effective use of public resources in the provision of highway transportation.

In the 16 years since adoption of the Walworth County jurisdictional highway system plan, some progress has been made toward implementation of the plan, and certain revisions have been made to that plan to take into account changing conditions. In July 1989, the Walworth County Highway Commissioner approached the Commission with a request that the Walworth County Jurisdictional Highway Planning Committee reexamine the arterial street and highway needs of the County. In response, the Commission indicated that it would reconstitute and reconvene the Walworth County Jurisdictional Highway System Planning Committee, conduct whatever studies might be necessary to consider needs that may not be currently addressed by the adopted county jurisdictional highway system plan, and amend the county jurisdictional highway system plan as may be necessary.

The purpose of this report is fourfold. First, the report is intended to document in summary form the original Walworth County jurisdictional highway system plan as adopted and amended to date. Second, the report is intended to summa-

rize the major actions taken to date to implement both the functional highway improvement and the jurisdictional responsibility elements of the plan. Third, the report is intended to document any proposed revisions to the plan emanating from the current study effort. Finally, the report is intended to serve as a redescription of the Walworth County jurisdictional highway system plan for use in the preparation of a new regional highway system plan.

As an amendment to the aforementioned SEWRPC Planning Report No. 15, this document is intended to be reviewed and approved by the Technical Coordinating and Advisory Committee on Jurisdictional Highway Planning for Walworth County, by the Highway Committee of the Walworth County Board of Supervisors, by the Board itself, and by the Southeastern Wisconsin Regional Planning Commission as the official areawide planning agency for southeastern Wisconsin.

BACKGROUND

Original Walworth County Jurisdictional Highway System Plan

The Walworth County jurisdictional highway system plan adopted in 1973 was based upon the functional highway system recommended in the original regional transportation plan.¹ That plan consisted of recommendations concerning the location, type, capacity, and service levels of the arterial street and highway facilities needed to serve the developing and changing Southeastern Wisconsin Region. Except for freeways, however, that original plan did not contain recommendations as to which levels and agen-

¹See SEWRPC Planning Report No. 7, The Regional Land Use-Transportation Study, Volume One, Inventory Findings—1963, May 1965; Volume Two, Forecasts and Alternative Plans—1990, June 1966; and Volume Three, Recommended Regional Land Use-Transportation Plans—1990, November 1966.

cies of government should assume responsibility for the construction, operation, and maintenance of each of the various facilities included in the functional plan. It was recommended in the plan that the Wisconsin Department of Transportation assume jurisdictional responsibility for all proposed freeways. The subsequently prepared Walworth County jurisdictional highway system plan, then, together with similar plans for the six other counties comprising the Southeastern Wisconsin Region, represented a logical sequel to, and an implementation action recommended in, the original regional transportation system plan. In effect, the functional highway system plan prepared at the regional level was converted to a jurisdictional highway system plan on a county-by-county basis.

The primary purpose of jurisdictional highway system planning is to group into classes arterial streets and highways that serve similar functions and which, accordingly, should have similar design standards and levels of service. Once this classification process is completed, it is possible to assign jurisdictional responsibility logically for the design, construction, operation, and maintenance of each of the groups to the state, county, and local levels of government. Thus, in addition to indicating needed improvements, each county jurisdictional highway system plan indicates which highway facilities should be the primary responsibility of state government, county government, and local government, city, village or town.

The Walworth County jurisdictional highway system plan is intended to help Walworth County:

- Cope with the growing traffic demands within the County;
- Adjust the existing jurisdictional highway systems to changes in land use development along their alignment;
- Maintain an integrated county trunk highway system within the County;
- Adjust the existing jurisdictional highway system to serve better the major changes in traffic patterns taking place within the County; and
- Achieve an equitable distribution of arterial street and highway development and main-

tenance costs and revenues among the various levels and agencies of government concerned.

The Walworth County jurisdictional highway system plan was based upon certain "functional" criteria for jurisdictional classification; that is, the plan recommendations as to whether or not a given facility should be a state trunk highway, a county trunk highway, or a local arterial street or highway were based upon careful consideration of the existing and probable future function of each facility in the total arterial highway system. The particular function that a facility serves was defined by examining three basic characteristics of the facility: 1) the kinds of trips served, 2) the land uses connected and served, and 3) the operational characteristics of the facilities themselves. The specific functional criteria used for jurisdictional classification of arterial highways in Walworth County are summarized in Table 1.

The criterion selected to best characterize trip service was trip length. In general, this criterion states that the longest trips should be accommodated on state trunk highways and the shortest trips on local streets and highways, with trips of intermediate length being accommodated on county trunk highways.

With respect to the land uses connected and served, the criterion states that state trunk highways should serve land uses of areawide importance, for example, interregional transportation terminals, such as General Mitchell Field, regional shopping centers, higher educational facilities, and regional industrial centers. County trunk highway facilities should serve land uses of countywide importance, such as general aviation airports, county parks, large truck terminals, and subregional commercial and industrial centers. Local arterials should serve the land uses of local importance.

The criteria for the operational characteristics involve considerations of system continuity, spacing, and traffic volume.

In the jurisdictional highway system planning process, careful analyses were made to identify the trips served by, the land uses served by, and the operational characteristics of, each facility. Application of the criteria to these data resulted in the recommended jurisdictional highway

system plan.² In general, the recommended state trunk highways, which are supported primarily by the taxpayers of the entire State, serve the longest trips and the most important land uses and carry the highest traffic volumes. The recommended county trunk highways, which are supported primarily by county taxpayers, serve trips of intermediate length and intermediate traffic volumes. The local trunk facilities, which are supported primarily by municipal taxpayers, serve the shortest trips, serve locally-oriented land uses, and carry the lightest traffic volumes.

The jurisdictional highway system plan for Walworth County adopted by the County Board of Supervisors on April 19, 1973, and by the Regional Planning Commission on March 1, 1973, is shown on Map 1. The arterial street and highway system recommended in the original plan totaled about 489 route miles of facilities. Of this total arterial system, 217 route miles, or about 44 percent, were proposed to constitute the state trunk highway system, representing an increase of 26 route miles over the then existing system of state trunk highways and connecting streets. The system was expected to carry about 74 percent of the arterial traffic demand generated within Walworth County. The recommended state trunk highway system is identified by red lines on Map 1.

The county trunk highway system recommended in the original plan consisted of about 258 route miles, or an additional 53 percent of the total arterial network. This system would represent an increase of 85 route miles over the then existing county trunk highway system. The county trunk highways were expected to carry about 24 percent of the arterial travel demand. The initially recommended county trunk system is identified by blue lines on Map 1.

Finally, the original plan recommended a local trunk highway system consisting of the remaining 14 route miles of arterial facilities, or about 3 percent of the total planned arterial network. The local trunk highways were expected to carry about 2 percent of the arterial travel demand.

This recommended local system is identified by green lines on Map 1.

Second-Generation Regional Transportation Plan: 1978

The original Walworth County jurisdictional highway system plan has been amended once, in 1978, upon the adoption by the Regional Planning Commission of the second-generation regional transportation system plan.³ While this second-generation regional transportation system plan was adopted by the Regional Planning Commission on June 1, 1978, it was never formally adopted by the Walworth County Board of Supervisors.

The second-generation regional transportation system plan took into account changes that had taken place in southeastern Wisconsin since the adoption of the first-generation plan. These changes included changes in population and economic activity, in household formation rates, and in labor force participation rates, as well as changes in public attitudes toward the construction of freeways and bypass facilities.

With respect to Walworth County, the basic structure of the original jurisdictional highway system plan was not significantly changed. The following changes were, however, made to the original plan:

1. The Burlington area outer bypass was eliminated from the revised plan, including the extreme western section of the outer bypass in the Towns of Lyons and Spring Prairie. Also, the proposed relocation of a short segment of CTH DD which was to directly align with the outer bypass was eliminated from the revised plan.
2. Krueger Road between CTH H and CTH G in the Towns of Geneva and Lyons was eliminated from the revised plan.

²See SEWRPC Planning Report No. 15, A Jurisdictional Highway System Plan for Walworth County, October 1974.

³See SEWRPC Planning Report No. 25, A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin—2000, Volume One, Inventory Findings, April 1975; and Volume Two, Alternative and Recommended Plans, May 1978.

Table 1

**SUMMARY OF FUNCTIONAL CRITERIA FOR JURISDICTIONAL
CLASSIFICATION OF ARTERIAL HIGHWAYS IN WALWORTH COUNTY**

Criteria	I (state trunk)	II (county trunk)	III (local trunk) ^a
Trip Service Average Trip Length (miles)	<u>Urban^b and Rural^c</u> More than 21	<u>Urban^b and Rural^c</u> 10 to 21	<u>Urban^b</u> Less than 10
Land Use Service Transportation Terminals	<u>Urban and Rural</u> Connect and serve interregional rail, bus, and major truck terminals, and air carrier airports	<u>Urban and Rural</u> Connect and serve freeway interchanges, general-aviation airports, pipeline terminals, major intraregional truck terminals, and rapid transit and modified rapid transit system loading and unloading points not served by Type I arterials	<u>Urban</u> Connect and serve truck terminals generating 50 or more truck trips per average weekday and off-street parking facilities having a minimum of 50 parking spaces not served by Type I and II arterials
Recreational Facilities	<u>Urban and Rural</u> Connect and serve all state parks having a gross area of 500 acres or more	<u>Urban and Rural</u> Connect and serve regional parks and special recreational use areas of countywide significance	<u>Urban</u> Connect and serve community parks not served by Type I and II arterials
Commercial Centers	<u>Urban and Rural</u> Connect and serve major retail and service centers	<u>Urban and Rural</u> Connect and serve community retail and service centers not served by Type I arterials	<u>Urban</u> Connect and serve neighborhood retail and and service commercial centers not served by Type I and II arterials
Industrial Centers	<u>Urban and Rural</u> Connect and serve major regional industrial centers	<u>Urban and Rural</u> Connect and serve major community industrial centers not served by Type I arterials	<u>Urban</u> Connect and serve minor community industrial centers not served by Type I and II arterials
Institutional	<u>Urban and Rural</u> Connect and serve universities, county seats, and state institutions	<u>Urban and Rural</u> Connect and serve community institutions; accredited, degree-granting colleges, public vocational schools; and community hospitals not served by Type I arterials	<u>Urban</u> Connect and serve city and village halls and high schools not served by Type I and II arterials
Urban Areas	<u>Rural</u> Connect and serve urban areas of 2,500 or more population	<u>Rural</u> Connect and serve developed areas of 500 or more population	--
Operational Characteristics System Continuity	<u>Urban and Rural</u> Interregional or regional continuity comprising total systems at the regional and state level	<u>Urban and Rural</u> Intermunicipality and intercounty continuity comprising integrated systems at the county level	<u>Urban</u> Intracommunity continuity comprising an integrated system at the city or village level
Spacing	<u>Urban and Rural</u> Minimum two miles	<u>Urban and Rural</u> Minimum one mile	<u>Urban</u> Minimum 0.5 mile
Volume	<u>Urban and Rural</u> Minimum 3,000 vehicles per average weekday (2010 forecast)	<u>Urban and Rural</u> 800 to 3,000 vehicles per average weekday (2010 forecast)	<u>Urban</u> Fewer than 800 vehicles per average weekday (2010 forecast)
Traffic Mobility	<u>Urban</u> Average overall travel speed ^d 30 to 70 miles per hour	<u>Urban</u> Average overall travel speed ^d 25 to 50 miles per hour	<u>Urban</u> Average overall travel speed ^d 20 to 40 miles per hour
	<u>Rural</u> Average overall travel speed 40 to 70 miles per hour	<u>Rural</u> Average overall travel speed 30 to 60 miles per hour	--
Land Access Control	Full or partial control of access ^{e,f}	Partial control of access ^f	Minimum control of access ^g

Table 1 (continued)

^aA rural subcategory for Type III arterials is not provided.

^bUrban arterial facilities are considered to "connect and serve" given land uses when direct access from the facility to roads serving the land use area is available within the following maximum over-the-road distances from the main vehicular entrance to the land use to be served: Type I arterial facility, one mile; Type II arterial facility, 0.5 mile; Type III arterial facility, 0.25 mile.

^cRural arterial facilities are considered to "connect and serve" given land uses when direct access from the facility to roads serving the land use area is available within the following maximum over-the-road distances from the main vehicular entrance to the land use to be served: Type I arterial facility, two miles; Type II arterial facility, one mile.

^dAverage overall travel speed is defined as the sum of the distances traveled by all vehicles using a given section of highway during an average weekday divided by the sum of the actual travel times, including traffic delays.

^eFull control of access is defined as the exercise of eminent domain or police power to control access so as to give preference to movement of through traffic by providing access connections only at selected public roads via grade-separated interchanges.

^fPartial control of access is defined as the exercise of eminent domain or police power to control access so as to give preference to the movement of through traffic to a degree that, in addition to access connections at selected public roads, there may be some direct access to abutting land uses with generally one point of reasonably direct access to each parcel of abutting land as those parcels existed at the time of an official declaration that partial control of access shall be exercised.

^gMinimum control of access is defined as the exercise of eminent domain or police power to regulate the placement and geometrics of direct access roadway connections as necessary for safety.

Source: SEWRPC.

3. South Road from USH 12 to the county line in the Town of Bloomfield and the Village of Genoa City was added to the revised plan as an arterial.
4. CTH Z was added to the revised plan between STH 67 and the county line in the Town of Troy.
5. STH 36 between CTH G and the county line in the Town of Lyons was recommended in the revised plan to remain on its existing alignment. Previously, the plan had recommended substantial realignment.
6. STH 11 from STH 67 to the proposed City of Burlington bypass was recommended to provide two travel lanes in the revised plan. Previously, the plan had recommended reconstruction of this facility to provide four travel lanes.
7. USH 14 from STH 67 to the county line was recommended to provide two travel lanes in the revised plan. Previously, the plan had recommended this facility be reconstructed to provide four travel lanes.
8. CTH G from STH 11 to CTH ES was recommended to provide two travel lanes in

the revised plan. Previously, the plan had recommended this facility be reconstructed to provide four travel lanes.

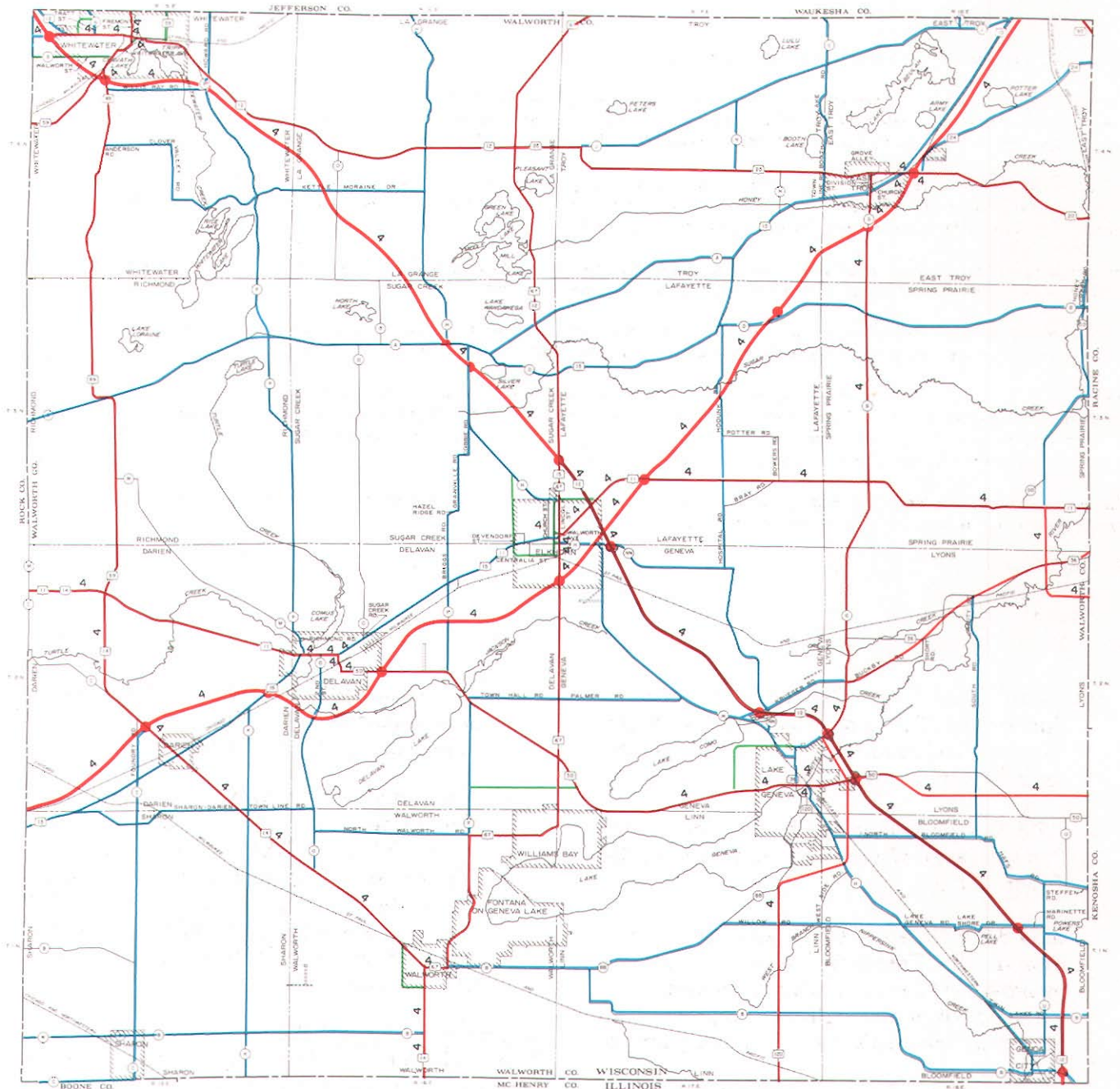
9. The jurisdictional transfer of CTH W from the county line to CTH C and of CTH B from CTH C to USH 14 in the Towns of Sharon and Walworth from the County to the State was recommended in the revised plan. Previously, these facilities had been included as arterials under the jurisdiction of the County.

Overview of Current Plan

The jurisdictional highway system plan for Walworth County, then, as amended to date by the Regional Planning Commission, is shown on Map 2. The arterial street and highway system recommended in the amended plan totals about 483 route miles of facilities. Of this total arterial system, 224 route miles, or about 46 percent, are proposed to comprise the state trunk highway system. This represents an increase of 10 route miles over the present system of state trunk highways and connecting streets as of December 31, 1989. The state trunk highway system is expected to carry about 73 percent of the arterial traffic demand within the County. The current recommended state trunk highway system is identified by red lines on Map 2.

Map 1

JURISDICTIONAL HIGHWAY SYSTEM PLAN FOR WALWORTH COUNTY ADOPTED IN 1973



LEGEND

CURRENT PLAN

FREEWAY

STATE TRUNK HIGHWAY

INTERCHANGE

STANDARD ARTERIAL

STATE TRUNK HIGHWAY

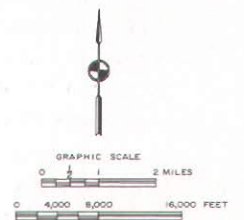
COUNTY TRUNK HIGHWAY

LOCAL TRUNK HIGHWAY

NUMBER OF TRAFFIC LANES

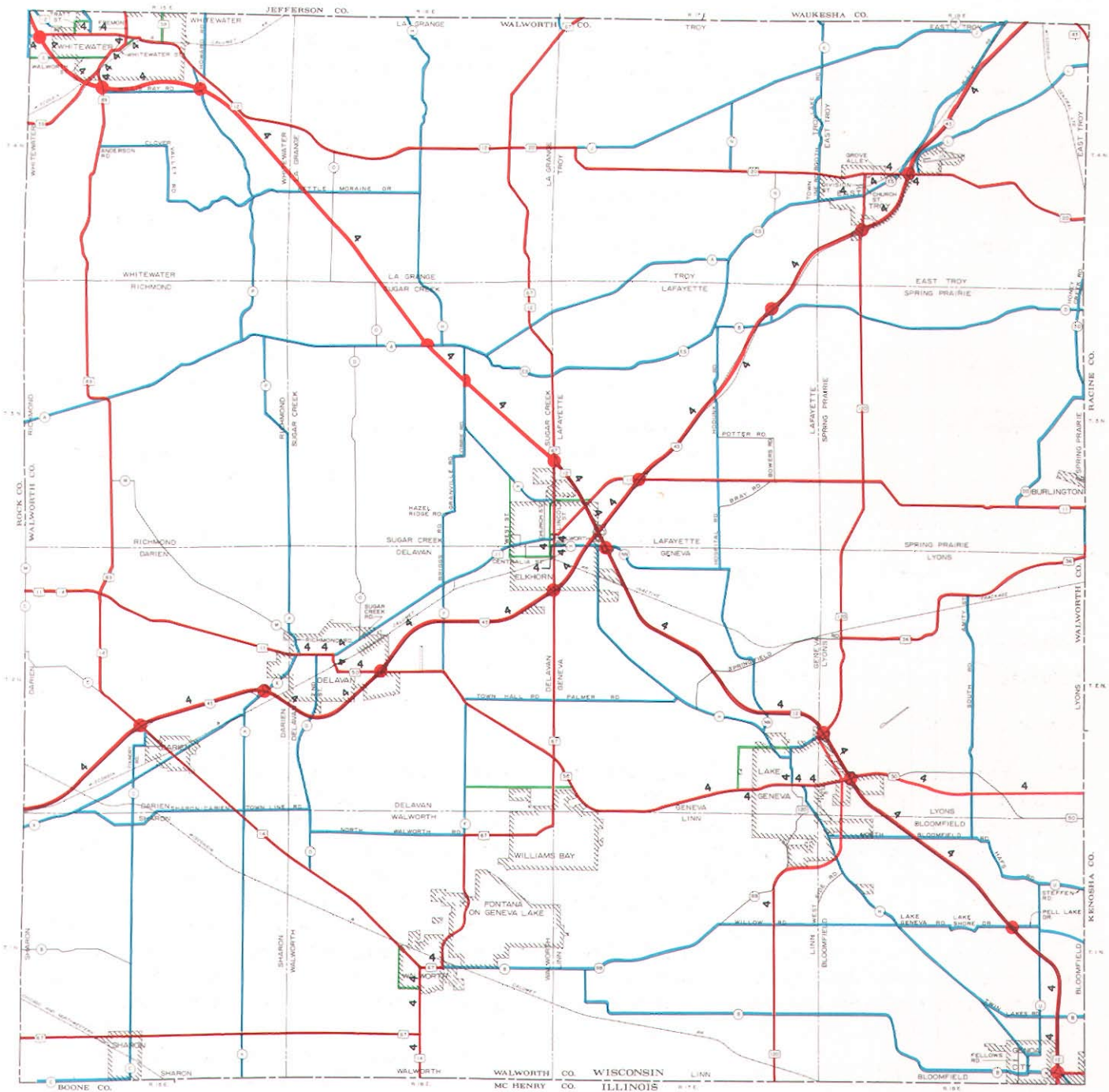
4 (2 WHERE UNNUMBERED)

Source: SEWRPC.



Map 2

JURISDICTIONAL HIGHWAY SYSTEM PLAN FOR WALWORTH COUNTY AS AMENDED IN 1978



LEGEND

CURRENT PLAN

FREEWAY

STATE TRUNK HIGHWAY

INTERCHANGE

STANDARD ARTERIAL

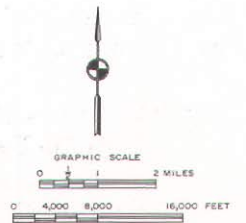
STATE TRUNK HIGHWAY

COUNTY TRUNK HIGHWAY

LOCAL TRUNK HIGHWAY

4 NUMBER OF TRAFFIC LANES

(2 WHERE UNNUMBERED)



Source: SEWRPC.

Table 2

**ARTERIAL STREET AND HIGHWAY SYSTEM IMPROVEMENT AND
EXPANSION PROJECTS COMPLETED IN WALWORTH COUNTY: 1973-1989**

Facility	Limits	Miles	Project Type
State IH 43	Rock-Walworth County line to STH 20 in Walworth County	26.7	Expansion
STH 50	Washington Street to Wright Street in the City of Delavan	0.9	Improvement
Whitewater Street	Janesville Street (STH 59) to Fremont Street in the City of Whitewater	0.4	Improvement ^a
Subtotal	--	28.0	--
County STH 11	Sunshine Avenue to Mound Road in the City of Delavan	0.3	Improvement ^b
Local Whitewater Street	Fremont Street to Main Street (USH 12) in the City of Whitewater	0.2	Improvement
Total	--	28.5	--

^aThis improvement was implemented by the City of Whitewater.

^bThis improvement was implemented by the State.

Source: SEWRPC.

The county trunk highway system recommended in the plan, as amended, consists of about 244 route miles, or an additional 51 percent of the total arterial network. This system would represent an increase of 44 route miles over the existing county trunk highway system. The county trunk highways are expected to carry about 26 percent of the arterial travel demand within the county. The current recommended county trunk highway system is identified by blue lines on Map 2.

Finally, the amended plan current recommends local trunk highways consisting of the remaining 15 route miles of arterial facilities, or about 3 percent of the total planned arterial network. This recommended local system is identified by green lines on Map 2.

MAJOR PLAN IMPLEMENTATION ACTIONS TO DATE

Functional Highway Improvements

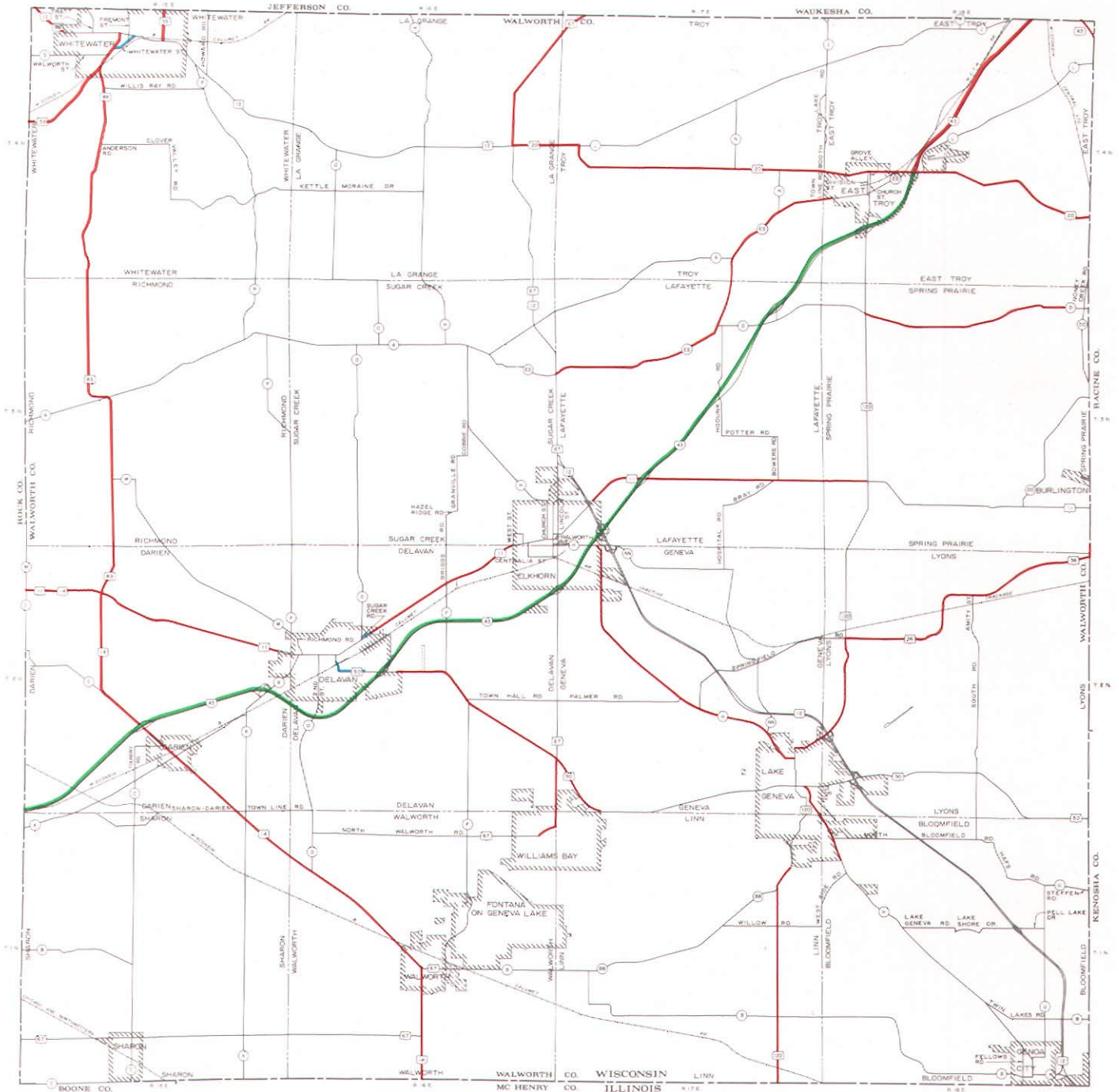
Of the recommended 483-mile total arterial street and highway network for Walworth County, about 403 miles, or 83 percent, are roads that

may be categorized for functional improvement purposes by the term "system preservation," that is, existing facilities that over the plan implementation period will require either no improvement, resurfacing only, or, in some cases, reconstruction, to provide the same traffic carrying capacity. An additional 19 miles, or 4 percent, may be categorized by the term "system improvement"; that is, existing facilities that over the plan implementation period will need to be reconstructed and widened to provide additional traffic lanes for traffic carrying capacity. The remaining 61 miles, or 13 percent, may be categorized by the term "system expansion," that is, totally new arterial highway facilities.

Those functional highway projects undertaken in Walworth County since the adoption of the original jurisdictional highway system plan in 1973 and which fall into the system improvement and system expansion categories as defined above are identified in Table 2. These four system improvement and expansion projects are also shown on Map 3, along with 26 system preservation highway projects com-

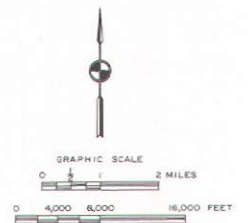
Map 3

ARTERIAL STREET AND HIGHWAY PROJECTS COMPLETED IN WALWORTH COUNTY BY IMPROVEMENT CATEGORY: 1973-1989



LEGEND

- SYSTEM PRESERVATION**
- FREEWAY
 - STANDARD ARTERIAL
- SYSTEM IMPROVEMENT**
- (NONE) FREEWAY
 - STANDARD ARTERIAL
- SYSTEM EXPANSION**
- FREEWAY
 - (NONE) STANDARD ARTERIAL



Source: SEWRPC.

Table 3

**STATUS OF FUNCTIONAL HIGHWAY IMPROVEMENTS IN WALWORTH COUNTY
BY IMPROVEMENT CATEGORY AND PLANNED JURISDICTIONAL SYSTEM: 1973-1989**

Improvement Category	State Trunk Highway	County Trunk Highway	Local Trunk Highway	Total
System Preservation				
Length (miles)	162.5	235.8	5.0	403.3
Projects Completed (miles)	82.8	26.6	0.6	110.0
Percent Implemented	51	11	12	27
System Improvement				
Length (miles)	13.7	4.6	0.4	18.7
Projects Completed (miles)	1.3	0.3	0.2	1.8
Percent Implemented	9	7	50	10
System Expansion				
Freeway				
Length (miles)	43.6	--	--	43.6
Projects Completed (miles)	26.7	--	--	26.7
Percent Implemented	61	--	--	61
Standard Arterials				
Length (miles)	4.4	3.9	9.3	17.6
Projects Completed (miles)	0	0	0	0
Percent Implemented	0	0	0	0
Total System				
Length (miles)	224.2	244.3	14.7	483.2
Projects Completed (miles)	110.8	26.9	0.8	138.5
Percent Implemented	49	11	5	29

Source: SEWRPC.

pleted in Walworth County since 1973 in accordance with the original jurisdictional highway system plan.

Taken together, the system improvement and expansion projects noted above total about 28 miles and represent about 35 percent of the total such miles of system improvement and expansion projects recommended in the plan as amended to date. The system preservation projects identified above total about 110 miles and represent about 27 percent of the system preservation work recommended in the plan. The status of all functional highway improvement projects by improvement category and by planned jurisdictional system is summarized in Table 3.

Jurisdictional Highway Transfers

Progress made to date in implementing the jurisdictional transfer element of the Walworth County plan are summarized in Table 4 and on

Map 4. Of the 74 miles of highway proposed to be added to the state trunk highway system, including both new facilities and transfers of county or local facilities, nearly 45 miles have been added to date, or about 61 percent of the total proposed. The new state trunk highway facilities consist of the IH 43 Freeway from the Rock County line to STH 20; STH 67, a combination of former CTH B and former CTH W from the Rock County line to USH 14; and STH 120, which was former CTH G from STH 36 to IH 43.

Of the 94 miles of highways proposed to be added to the county trunk highway system, nearly 22 miles, or 23 percent, have been added to date. All this mileage is represented by the transfer from the State to the County of portions of former STH 15 in the Village of East Troy and the Towns of Darien, East Troy, LaFayette, Sharon, and Troy; and former STH 24 in the Village of East Troy and Town of East Troy.

Table 4

**JURISDICTIONAL HIGHWAY SYSTEM TRANSFERS AND NEW
FACILITIES COMPLETED IN WALWORTH COUNTY: 1973-1989**

Facility	Limits	Municipality	Length (miles)
Transfers to State/ New State Facilities			
County to State			
CTH B	CTH C to USH 14	Village of Sharon, Town of Sharon, and Town of Walworth	6.57
CTH G	STH 36 to IH 43	Town of East Troy, Town of Lyons, and Town of Spring Prairie	9.23
CTH W	Rock County line to CTH C	Village of Sharon and Town of Sharon	2.52
Subtotal	--	--	18.32
Local to State ^a			
Newcomb Street	USH 12 to Main Street	City of Whitewater	0.08
New State Facility			
IH 43	Rock County line to STH 20	City of Delavan, City of Elkhorn, Village of East Troy, Town of Darien, Town of Delavan, Town of East Troy, Town of Lafayette, and Town of Troy	26.74
State Total	--	--	45.14
Transfers to County/ New County Facilities			
State to County			
STH 15	Rock County line to Creek Road	Village of Darien, Town of Darien, and Town of Sharon	6.91
STH 15	USH 12-STH 67 to STH 20	Village of East Troy, Town of East Troy, Town of Lafayette, and Town of Troy	10.22
STH 24	STH 20 to Racine County line	Village of East Troy and Town of East Troy	4.79
County Total	--	--	21.92
Transfers to Local/ New Local Facilities			
State to Local ^b			
STH 15	Creek Road to STH 11	City of Delavan	0.61

^aThis facility recommended for transfer to local trunk highway system.

^bThis facility recommended for transfer to county trunk highway system.

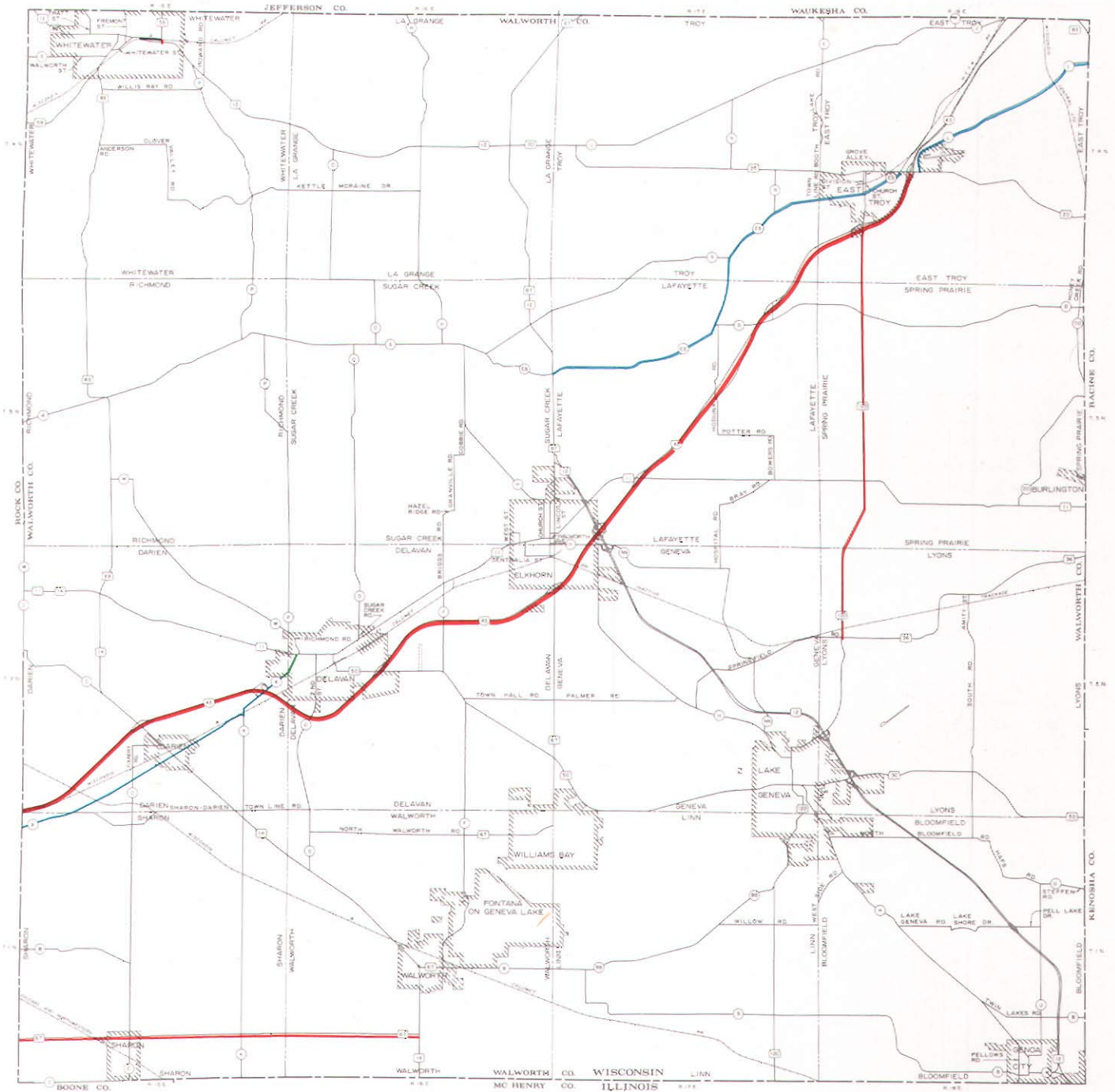
Source: SEWRPC.

Less than one mile of former state trunk highway facilities has been transferred to local jurisdiction. Former STH 15 from Creek Road to

STH 11 was transferred to the City of Delavan. Ultimately, this segment is proposed to be transferred to the county trunk highway system.

Map 4

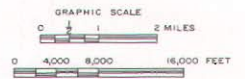
JURISDICTIONAL HIGHWAY SYSTEM TRANSFERS COMPLETED IN WALWORTH COUNTY: 1973-1989



LEGEND

TRANSFERS TO:

- STATE TRUNK HIGHWAY SYSTEM
- COUNTY TRUNK HIGHWAY SYSTEM
- LOCAL TRUNK HIGHWAY SYSTEM
- LOCAL (NON-ARTERIAL) SYSTEM



Source: SEWRPC.

PROPOSED PLAN REVISIONS

The Technical and Intergovernmental Coordinating and Advisory Committee on Jurisdictional Highway Planning for Walworth County met on February 8, 1990, and at that meeting identified the following potential amendments to the county jurisdictional highway system plan which should be evaluated by the Commission staff for Committee consideration:

- Consideration of an alternative northerly alignment to the long-recommended southerly bypass of the City of Whitewater on USH 12. The USH 12 bypass of Whitewater is part of the long-planned extension of the USH 12 freeway from the Elkhorn area to IH 90-94. The bypass is needed in the Whitewater area to provide relief to USH 12 with or without the freeway extension. The construction of a bypass should be consistent with the eventual construction of the long-planned freeway extension.
- Reexamination of the need for the long-planned extension of the USH 12 freeway and consideration of changes in the alignment of the proposed freeway. Reexamination of the need for the freeway extension should include a comparison to the relative costs and benefits of an alternative of improving USH 12 along its existing route.
- Consideration of alternative improvements to the present USH 12 terminus at Town Line Road in the Town of Bloomfield. Such improvements would be designed to address existing problems which may be anticipated to occur until the USH 12 freeway is extended in the State of Illinois.
- Consideration of improvements to STH 50 between IH 43 and USH 12, including improvements to the existing route of STH 50 and the provision of additional capacity on alternative routes in the corridor. Alternative routes to be considered include the improvement of Town Hall Road, Palmer Road, CTH H and CTH NN; and of the potential for additional interchanges with USH 12, including an interchange at CTH NN.
- Consideration of improvements to STH 120 and CTH D which may be necessary to serve average weekday traffic and weekend traffic generated by Alpine Valley Music Theatre.

- Consideration of the need for a new interchange on IH 43 at CTH O.
- Consideration of a new interchange with USH 12 at Town Line Road south and east of the City of Lake Geneva.
- Consideration of the need to widen USH 14 and STH 11 between IH 43 and the Walworth-Rock County line, with further improvement of these routes to the City of Janesville.
- Improvement of USH 14 from the Walworth-McHenry County line to STH 67 in the Town and Village of Walworth.

Subsequent to the February 8, 1990, Advisory Committee meeting, a number of additional potential amendments to the county jurisdictional highway system plan were identified for Commission staff evaluation by the Wisconsin Department of Transportation, by the Village of Genoa City, and by the Town of Whitewater. Those issues are as follows:

- Reconsideration of the planned jurisdictional transfer of STH 59 from Newcomb Street to Fremont Street in the City of Whitewater.
- Reconsideration of the planned jurisdictional transfer of CTH G between IH 43 and CTH ES and of Church Street and Grove Alley between CTH ES and STH 20 to the state trunk highway system in the Town and Village of East Troy.
- Reconsideration of the proposed STH 120 Lake Geneva bypass from a point just south of the STH 120 interchange with USH 12 to a point just south of Big Foot Beach State Park and associated planned jurisdictional transfer of the existing STH 120 route segments to the county trunk highway system between STH 50 and the STH 120 and USH 12 interchange and to the local street system between Big Foot Beach State Park and STH 50 in the City of Lake Geneva.
- Consideration of a transfer in jurisdiction to the county trunk highway system of existing STH 11 between STH 67 and IH 43 in the City of Elkhorn and the Town of LaFayette.

- Reconsideration of the planned jurisdictional transfer to county jurisdiction of Warner Road between CTH S and USH 12.
- Reconsideration of the planned jurisdictional transfer to county jurisdiction of Willis Ray Road between CTH P and STH 89.
- Reconsideration of the planned jurisdictional transfer to county jurisdiction of Howard Road between the Walworth-Jefferson County line and USH 12.
- Reconsideration of the planned jurisdictional transfer to county jurisdiction of Kettle Moraine Drive, Clover Valley Road, and Anderson Road between CTH P and STH 89.
- Consideration of a transfer in jurisdiction to the county trunk highway system of Fellows Road between the Walworth-McHenry County line and CTH B in the Village of Genoa City.
- Consideration of an STH 67 bypass to the west of the Village of Fontana on Geneva Lake.
- Consideration of the jurisdictional transfer of CTH X from the Walworth-Boone County line to USH 14 to the state trunk highway system and a potential change in the alignment of the extension of CTH C between CTH X and USH 14.
- Consideration of an STH 67 bypass around the Village of Williams Bay.

Whitewater Bypass

The Jurisdictional Highway Planning Committee requested that consideration be given to the alternative of a northerly bypass of the City of Whitewater to the long-planned southerly bypass of the Whitewater area. The USH 12 bypass of the Whitewater area was proposed as part of the long-planned extension of the USH 12 freeway from the Elkhorn area through Walworth, Jefferson, and Dane Counties to IH 90. The USH 12 bypass of Whitewater is needed to provide relief to the Whitewater area with or without this long-planned freeway extension. Map 5 identifies the long-planned alignment of the southerly USH 12 bypass as officially mapped by the State of Wisconsin Department of Transportation as a planned

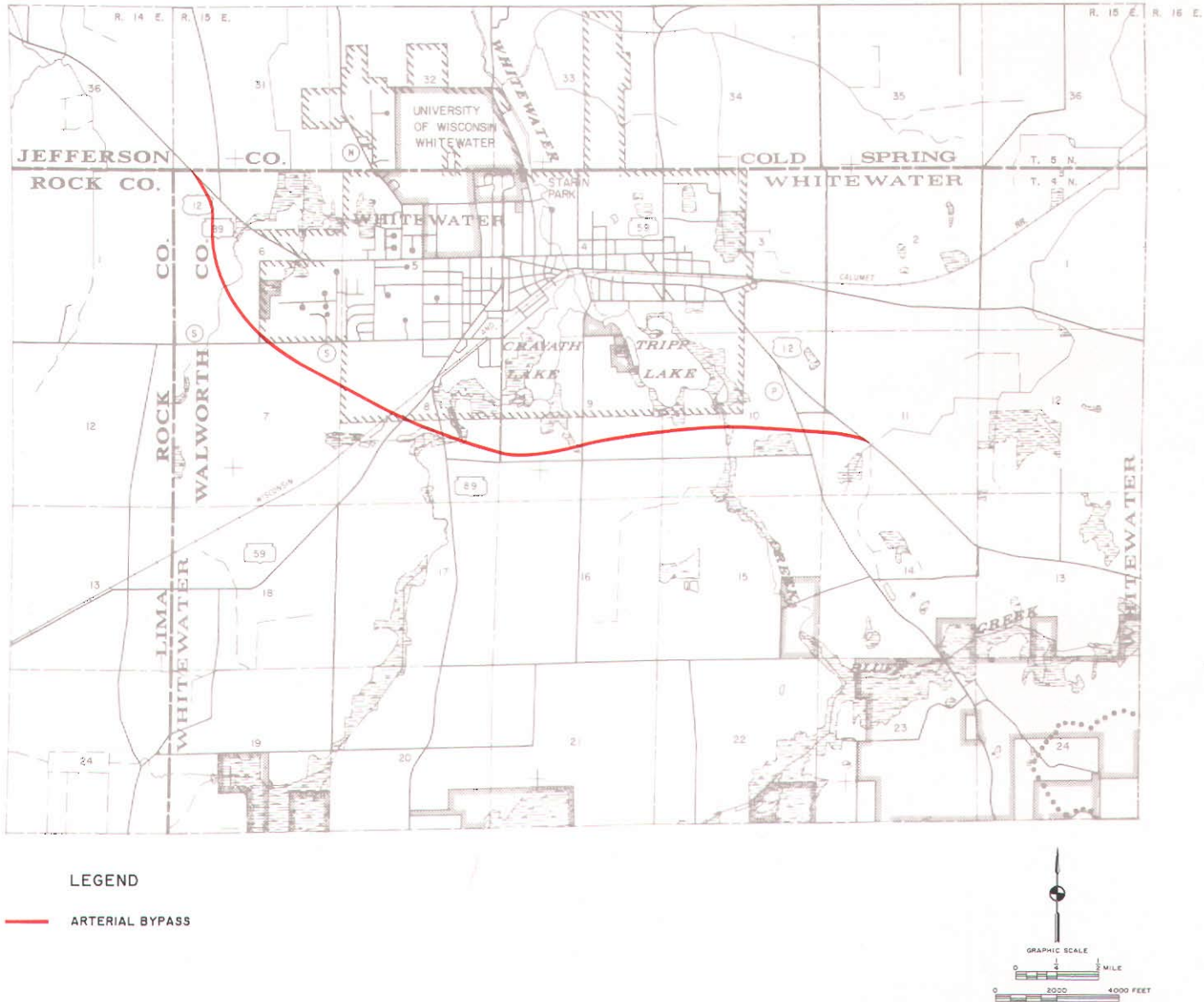
state trunk highway system route. The route has been modified only to provide connection to the existing route of USH 12 to permit its evaluation and comparison to the northerly route with respect to its construction as a bypass without the freeway. Map 6 displays a potential alternative northerly bypass route for the Whitewater bypass. The estimated construction costs of the northerly and southerly alternative bypass alignments are shown in Table 5 and benefits and costs of these two alternative alignments are compared in Table 6. It may be noted that the alternatives were evaluated based upon the need to acquire a 300-foot-wide right-of-way to permit ultimate construction to a freeway as part of the long-planned extension of the USH 12 freeway. The evaluation considered, however, the initial construction of a two-lane roadway which is the arterial capacity which would be necessary on the bypass to the year 2010.

Both the southerly and the northerly alternative bypasses may be expected to carry similar traffic volumes by the year 2010. The southerly bypass may be expected to carry approximately 6,000 vehicles per average weekday, of which approximately 3,000 vehicles per average weekday may be expected to be through trips, trips having neither trip end in the Whitewater area. The northerly alternative bypass may be expected to carry approximately 5,500 vehicles per average weekday, including 3,000 through trips. The southerly bypass may be expected to remove approximately 6,000 vehicles per average weekday from the existing route of USH 12 through the City of Whitewater and the northerly bypass may be expected to remove approximately 5,500 vehicles per average weekday from the route of USH 12 in the City of Whitewater.

Both alternative bypasses would thus provide similar relief to the existing route of USH 12 through the City of Whitewater. This relief includes elimination of the need to improve USH 12 between the westerly terminus of the bypass and Frontage Road to a divided four-lane section; permits the construction of an undivided four-lane roadway rather than an divided four-lane roadway between Frontage Road and Fremont Street; eliminates the need to reconstruct USH 12 between Fremont Street and Second Street, entailing setting the curbs back to provide for four traffic lanes and the need to prohibit parking on that stretch of USH 12; eliminates the need to reconstruct USH 12

Map 5

LONG-PLANNED SOUTHERLY USH 12 BYPASS ALIGNMENT



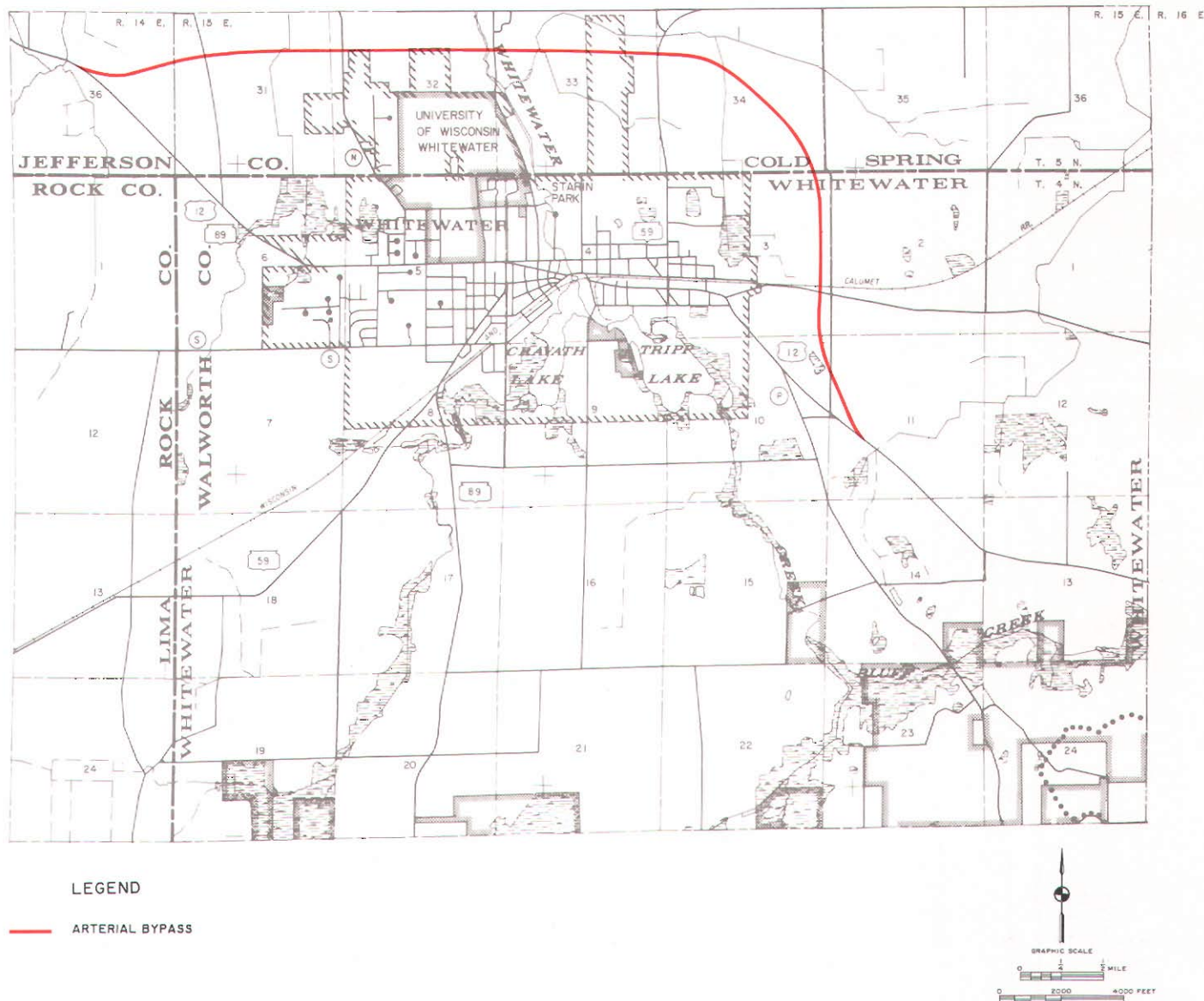
Source: SEWRPC.

between Second Street and Whitewater Street, entailing setting the curbs back to provide for four traffic lanes and two parking lanes; eliminates the need to reconstruct the segment of USH 12 between Whitewater Street and Wisconsin Street to provide for a five-traffic-lane section and prohibit parking; eliminates the need to prohibit parking on the stretch of USH 12 between Wisconsin Street and Clay Street; and eliminates the need to improve USH 12 to a four-lane divided section between Clay Street and Howard Road.

Both bypass alignment alternatives may be expected to have impacts on the future traffic using other existing Whitewater area streets. The northerly alternative may be expected to result in reductions in traffic on Tratt Street and STH 59 between Main Street and the proposed bypass of about 800 vehicles per average weekday. The northerly alternative may be expected to increase traffic on Fremont Street between Main Street and the bypass by about 2,100 vehicles per average weekday. The southerly alternative may be expected to reduce traffic on

Map 6

ALTERNATIVE NORTHERLY USH 12 BYPASS ALIGNMENT



Source: SEWRPC.

Elizabeth Street by 500 vehicles per average weekday; on CTH S by 500 to 1,000 vehicles per average weekday; and on STH 59 between Whitewater Street and the bypass by 700 to 3,000 vehicles per average weekday. The southerly alternative may be expected to increase traffic on Franklin Street between Janesville Road and the bypass by 1,300 to 2,300 vehicles per average weekday; and on Wisconsin Street, by 700 vehicles per average weekday.

The estimated cost of the southerly alignment of the USH 12 Whitewater area bypass is \$6 to \$7 million, including right-of-way costs. This is

somewhat less than the estimated costs of the northerly alternative alignment of \$7 to \$8 million. The estimated cost of the northerly alignment is somewhat greater as its length is approximately 6.7 miles compared to the 5.0-mile-length of the southerly alternative.

The disruption that would be attendant to the construction of the northerly alignment is somewhat greater than that of the southerly alignment due to its somewhat longer route. It would require acquisition of a 300-foot-wide right-of-way 6.7 miles in length, compared to a 300-foot-wide right-of-way 5.0 miles in length for

Table 5

COMPARISON OF CONSTRUCTION COSTS OF WHITEWATER AREA BYPASS ALTERNATIVES

	Alignment	Grade and Pave Initial Two of Ultimate Four Traffic Lanes	Grade Ultimate Four Traffic Lanes and Pave Initial Two Traffic Lanes
Construction Cost (including right-of-way)	Southerly alignment	\$6 million	\$7 million
	Northerly alignment	\$7 million	\$8 million
<u>Advantages of Grading and Paving Initial Two Lanes</u> • Lower initial cost • Avoids potential of wasting resources if four lanes are not needed in future • Lower total cost if the annual increase in highway construction unit costs is less than the interest rate			
<u>Advantages of Grading Ultimate Four Lanes and Paving Initial Two Lanes</u> • Less potential for disruption of traffic during construction of final two lanes • May forestall future opposition to adding final two lanes as intent to ultimately provide four lanes is apparent and partial construction is implemented • Lower total cost if the annual increase in highway construction unit costs is greater than the interest rate			

Source: SEWRPC.

the southerly alignment. Both alternatives would require crossing a primary and a secondary environmental corridor. The crossing of primary environmental corridor lands of the southerly alignment would be 400 feet in length; the crossing of secondary environmental corridor lands would be 200 feet in length. All of these would be wetlands. The northerly alignment would require a 400-foot-long crossing of a primary environmental corridor and a 1,200-foot-long crossing of a secondary environmental corridor, all of which would consist of wetlands. Both alternatives would require the acquisition of prime agricultural lands. The southerly alignment would extend across 13,300 feet of prime agricultural lands and the northerly alignment would extend across 30,200 feet of prime agricultural lands. The southerly alignment would require the taking of one business, Whitewater Limestone, Inc., and the northerly alignment would require the taking of one residence and a private airport.

In summary, both alternative alignments would have similar benefits and costs. The southerly alignment may be expected to carry approximately 10 percent more traffic than the northerly alignment, and its construction costs may be expected to be approximately 10 percent less than the northerly alignment. Either alternative

would perform about equally with respect to the intended function, which is removing traffic from the existing route of USH 12 to eliminate the need to make substantial improvements on that route. The Jurisdictional Highway Planning Advisory Committee determined to not recommend a specific alignment, and to take both alternatives to a public hearing on the preliminary recommended amended plan.

Jurisdiction of Willis Ray Road between CTH P and STH 89

The Town of Whitewater representative on the Advisory Committee suggested a change in the planned jurisdiction of Willis Ray Road between CTH P and STH 89. Willis Ray Road is currently a local arterial and is proposed under the currently adopted plan to be converted to a county trunk arterial. Analysis of the amount and type of existing and forecast year traffic carried by this stretch of Willis Ray Road and also of the land use served by Willis Ray Road indicates that Willis Ray Road only marginally meets the adopted criteria for county trunk highways, including traffic volume and trip length. The Town of Whitewater representative identified special circumstances which would warrant amending the system plan to recommend that Willis Ray Road remain a local arterial. The Town Hall and town highway

Table 6

**EVALUATION AND COMPARISON OF THE ALTERNATIVE
NORTHERLY AND SOUTHERLY BYPASSES OF THE WHITEWATER AREA**

	Southerly Alignment	Northerly Alignment
Benefits Traffic Carried on Bypass and Removed from Existing Route of USH 12 (year 2010 average weekday traffic) Reduced Need to Improve Main Street (USH 12) - Westerly terminus of bypass to Frontage Road - Frontage Road to Fremont Street - Fremont Street to Second Street - Second Street to Whitewater Street - Whitewater Street to Wisconsin Street - Wisconsin Street to Clay Street - Clay Street to easterly terminus of bypass Direct Service to Major Traffic Generators	6,000 vehicles per average weekday - Eliminates need to widen USH 12 to four-lane divided section - Improved roadway section needed is four-lane undivided rather than four-lane divided - Eliminates need to reconstruct to set curbs back and prohibit parking to provide four traffic lanes - Eliminates need to reconstruct to set curbs back to provide four traffic lanes and two parking lanes - Eliminates need to reconstruct to four-lane undivided roadway with center two-way left-turn lane and prohibit parking - Eliminates need to prohibit parking - Eliminates need to widen to four-lane divided section --	5,500 vehicles per average weekday - Eliminates need to widen USH 12 to four-lane divided section - Improved roadway section needed is four-lane undivided rather than four-lane divided - Eliminates need to reconstruct to set curbs back and prohibit parking to provide four traffic lanes - Eliminates need to reconstruct to set curbs back to provide four traffic lanes and two parking lanes - Eliminates need to reconstruct to four-lane undivided roadway with center two-way left-turn lane and prohibit parking - Eliminates need to prohibit parking - Eliminates need to widen to four-lane divided section Directly serves the city industrial park and the University of Wisconsin-Whitewater
Costs Construction Costs (including right-of-way) Right-of-Way Required Environmental Corridor Prime Agricultural Land Impacts Property Acquisition Other	\$6 to 7 million 5.0-mile strip of right-of-way (300 feet wide) 400-foot-crossing of primary corridor and 200-foot crossing of secondary corridor. Both corridor crossings are largely on wetlands 2.5 miles of bypass to be located on prime agricultural land, entailing acquisition of 91.6 acres One business (Whitewater Limestone, Inc.) Alignment would be adjacent to the Whitewater Country Club	\$7 to 8 million 6.7-mile strip of right-of-way (300 feet wide; includes approximately 0.5 mile of right-of-way on city property, industrial park and sewage treatment plant) 400-foot-crossing of primary corridor and 1,200-foot crossing of secondary corridor. Both corridor crossings are largely on wetlands 5.7 miles of bypass to be located on prime agricultural land, entailing acquisition of 208.0 acres One residence, one private airport --

Source: SEWRPC.

operations and maintenance facilities are located on Willis Ray Road; as a result, the Town can readily and efficiently conduct roadway operations and maintenance work, such as snowplowing, on Willis Ray Road when traveling between the town highway facility headquarters and town roads. Therefore, it is recommended by the Commission staff and by the Advisory Committee that the jurisdictional highway system plan be amended to recommend that the jurisdiction of Willis Ray Road between CTH P and STH 89 remain as a local arterial highway.

Jurisdiction of Kettle Moraine Drive, Clover Valley Road, and Anderson Road between CTH P and STH 89

The Town of Whitewater representative on the Advisory Committee suggested a change in the planned jurisdiction of Kettle Moraine Drive, Clover Valley Road, and Anderson Road between CTH P and STH 89 from the currently recommended county trunk highway in the adopted plan to maintaining these segments of roadway as a local trunk highway. Analysis of the amount and type of existing and forecast year traffic carried by these segments of roadway and, as well, of the land use served by the roadway, indicates that the segments of Kettle Moraine Drive, Clover Valley Road, and Anderson Road only marginally meet the adopted criteria for county trunk highways. The principal criterion for county trunk highway designation which this stretch of roadway meets is the direct service it provides to a region-level park: the Whitewater Lake recreation area in the Kettle Moraine State Forest. The traffic-related criterion for designation as a county trunk highway may be expected to be approached only upon the implementation of the long-planned extension of the USH 12 freeway. The potential closure of other local roads at the proposed freeway may be anticipated to direct more and longer distance traffic to the segments of Kettle Moraine Drive, Clover Valley Road, and Anderson Road concerned.

Because these segments of Kettle Moraine Drive, Clover Valley Road and Anderson Road between CTH P and STH 89 may be expected to meet the criteria for classification as a county trunk highway upon the implementation of the proposed USH 12 freeway extension and the potential closure of other local streets at the freeway, it is recommended by the Commission staff and by the Advisory Committee that the jurisdictional

highway system plan be reaffirmed with respect to its recommendation that the jurisdiction of this stretch of Kettle Moraine Drive, Clover Valley Road, and Anderson Road between CTH P and STH 89 be converted to a county trunk highway. It is important to recognize, however, that implementation of this recommendation should occur only following implementation of the USH 12 freeway extension.

Improvement of USH 14 between IH 43 and the Walworth County-Rock County Line

The City of Delavan representative on the Advisory Committee proposed that consideration be given to amending the jurisdictional highway system plan to recommend that USH 14 between IH 43 and the Walworth-Rock County line be improved to provide additional traffic carrying capacity through the widening from its existing two-lane pavement to a divided four-lane pavement. This segment of USH 14 in 1987 carried approximately 4,300 vehicles per average weekday between IH 43 and STH 89; and 6,500 vehicles per average weekday between STH 89 and the Walworth County-Rock County line. The typical design capacity of this stretch of USH 14, a two-lane rural roadway, approximates 7,000 vehicles per average weekday. Thus, existing traffic volumes on the segment of USH 14 between the Walworth County-Rock County line and STH 89 are approaching design capacity, while existing traffic volumes on the segment of USH 14 between STH 89 and IH 43 remain below design capacity. The forecast year 2010 traffic volumes on this segment of USH 14, based upon the adopted regional population, household, and employment forecasts, and regional land use and transportation system plans, may be expected to approach 10,000 vehicles per average weekday on the segment of USH 14 between the Walworth-Rock County line and STH 89; and 8,000 vehicles per average weekday on the segment between STH 89 and IH 43. Accordingly, this entire stretch of USH 14 will warrant improvement to a divided four-lane roadway by the year 2010. The segment of USH 14 between STH 89 and the Walworth-Rock County line warrants such improvement in the short term, while the segment of USH 14 between STH 89 and IH 43 warrants such widening in the long term. The estimated construction cost of this improvement is \$4.6 million. The improvement will require widening of the existing 66-foot-wide right-of-way to a 130-foot width. It is recommended by the Commission

staff and by the Advisory Committee that the jurisdictional highway system plan be amended to recommend that four traffic lanes be provided on the segment of USH 14 between IH 43 and the Walworth-Rock County line.

Jurisdiction of STH 11 between IH 43 and STH 67

The Wisconsin Department of Transportation representative on the Advisory Committee suggested a change in the planned jurisdiction of STH 11 between IH 43 and STH 67 in the Elkhorn area. Under the currently adopted plan, STH 11 is proposed to remain a state trunk highway. The Wisconsin Department of Transportation representative suggested that this segment of STH 11 be considered for transfer to the county trunk highway system. Analysis of the amount and type of existing and forecast year traffic carried by this segment of STH 11 and, as well, of the land use served by STH 11, indicates that this segment of STH 11 between IH 43 and STH 67 clearly meets the adopted criteria for a state trunk highway, particularly in terms of land use served and connected, traffic volume, and vehicle traffic trip length. The only criterion which is not met is state trunk highway spacing; STH 11 is located within approximately one-half mile of IH 43. The criterion for spacing of state trunk highways recommends that state trunk highways be spaced at least two miles apart. This segment of STH 11, however, serves as the principal route to and from the east via IH 43 to and from the Elkhorn area. Therefore, it is recommended by Commission staff that the recommendation of the jurisdictional highway system plan that STH 11 between IH 43 and STH 67 remain a state trunk highway, be reaffirmed. The Advisory Committee, however, recommended amending the plan to propose that STH 11 between IH 43 and STH 67 be converted to a county trunk highway, based upon its proximity to IH 43.

Jurisdiction of CTH G between IH 43 and CTH ES and of Church Street and Grove Alley between CTH ES and STH 20

The Wisconsin Department of Transportation representative on the Advisory Committee suggested a change in the planned jurisdiction of CTH G between IH 43 and CTH ES, and of Church Street and Grove Alley between CTH ES and STH 20. These roadways are currently a county trunk highway and local trunk highway,

respectively, and are proposed under the currently adopted plan to be converted to a state trunk highway. Analysis of the amount and type of existing and forecast year traffic carried by these segments of CTH G and Church Street and of the land use served indicates that these roadway facilities generally meet the criteria for a county trunk highway between IH 43 and CTH ES; and for a local arterial highway between CTH ES and STH 20. The principal reason for the currently adopted plan recommendation for the extension of STH 120 from IH 43 to STH 20 is to provide a direct connection between STH 120 and STH 20 to and from the west. However, only about 100 vehicles per average weekday under existing and 200 vehicles per average weekday under anticipated future traffic conditions may be expected to make the direct connection between STH 120 and STH 20 to and from the west. Therefore, all the quantitative and qualitative jurisdictional classification criteria indicate that these existing roadways should remain a county trunk highway between IH 43 and CTH ES, and a local arterial highway between CTH ES and STH 20. In addition, given the lack of implementation of this jurisdictional reclassification and of the direct extension of Church Street which would be a necessary part of the extended state trunk highway routing, it is recommended by Commission staff that the jurisdictional highway system plan be amended. The proposed amendment would recommend that CTH G between IH 43 and CTH ES remain a county trunk highway routed along Church Street and that the local arterial extension of Church Street proposed in the plan between CTH ES and STH 20 be replaced with the current routing of the local arterial via Church Street, Main Street, and Division Street between CTH ES and STH 20. The Advisory Committee recommended that the plan be amended to recommend that the entire segment of CTH G between IH 43 and STH 20 be a proposed local arterial, because the County and the Village of East Troy are currently negotiating the transfer to the Village of CTH G between IH 43 and CTH ES.

Improvement of USH 14 from the Walworth-McHenry County Line to the Village of Walworth

The Advisory Committee identified the need to improve USH 14 between the Walworth-McHenry County line and the Village of Walworth. This existing segment of USH 14 is a two-lane rural

roadway with a design capacity of approximately 7,000 vehicles per average weekday. The estimated average weekday traffic carried by this segment of USH 14 in 1987 was 5,400 vehicles per average weekday. Forecast year 2010 average weekday traffic on this segment of USH 14 may be expected to be approximately 10,000 vehicles per average weekday, which would exceed the design capacity of the facility. The existing adopted Walworth County jurisdictional highway system plan recommends that this segment of USH 14 between the Walworth-McHenry County line and the Village of Walworth, where USH 14 becomes an urban two-traffic-lane roadway, be improved to provide four traffic lanes on a four-lane divided roadway. Thus, implementation of the improvement long recommended in the current adopted plan should be sufficient to meet existing and future traffic needs.

USH 14 through the Village of Walworth is currently carried on two-lane two-way urban roadways and on two-lane one-way urban roadways. This current route of USH 14 within the Village was estimated to carry in 1987 between 5,000 and 6,500 vehicles per average weekday and is anticipated to carry approximately 10,000 to 12,000 vehicles per average weekday in the plan design year 2010. As the design capacity of the existing route of USH 14 within the Village of Walworth is an estimated 13,000 vehicles per average weekday, the existing route may be expected to have adequate capacity to meet existing and future traffic needs.

The segment of USH 14 between the Village of Walworth and the Village of Darien was estimated to carry approximately 4,000 to 4,800 vehicles per average weekday in 1987, well within the design traffic carrying capacity of this two-lane rural roadway of approximately 7,000 vehicles per average weekday. The forecast year 2010 traffic on this segment of USH 14 is approximately 8,000 vehicles per average weekday, which exceeds the design capacity of the roadway and warrants the improvement of this stretch of USH 14 between the Villages of Walworth and Darien to four traffic lanes by the year 2010.

The segment of USH 14 within the Village of Darien currently carries approximately 4,100 to 4,300 vehicles per average weekday. Within the Village, USH 14 is routed over a two-traffic-lane urban arterial with a design capacity of 13,000 vehicles per average weekday, adequate to carry

the existing traffic as well as forecast future year 2010 traffic of 10,000 to 11,000 vehicles per average weekday.

It may be noted that, based on current Wisconsin Department of Transportation practice, the provision of four traffic lanes in rural areas between communities should be accompanied by the provision of four traffic lanes through the communities concerned. Therefore, four traffic lanes should be provided through the Village of Walworth and the Village of Darien upon implementation of the improvement of the rural segments of this portion of USH 14.

Therefore, it is recommended by Commission staff and by the Advisory Committee that the proposed improvement in the current adopted county jurisdictional highway system plan of USH 14 between the Walworth County-McHenry County line and the Village of Walworth to a four-lane divided roadway be reaffirmed and that the improvement of USH 14 between the Village of Walworth and the Village of Darien to a divided four-traffic-lane roadway be added to the Walworth County jurisdictional highway system plan.

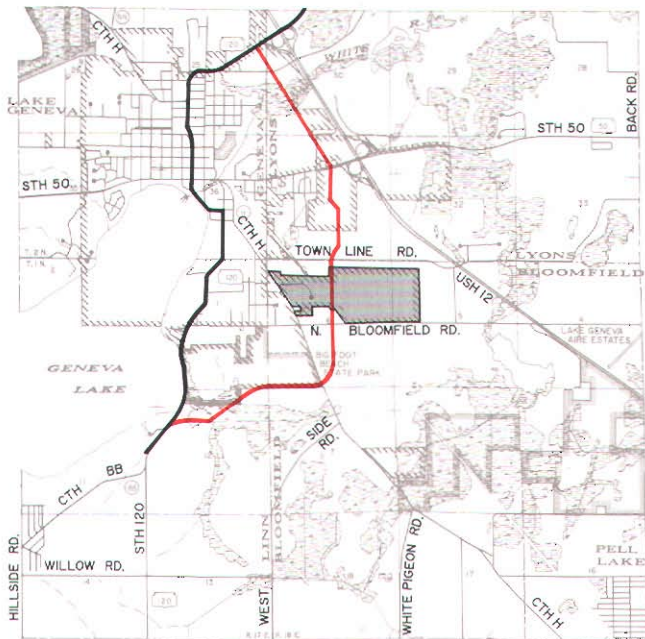
STH 120 Lake Geneva Bypass

The Wisconsin Department of Transportation representative on the Advisory Committee requested reconsideration of the proposed STH 120 Lake Geneva bypass, which, on the adopted plan, is proposed to be located on new alignment from just south of the STH 120 interchange with USH 12 to just south of Big Foot Beach State Park. The STH 120 Lake Geneva bypass was proposed as a part of the original jurisdictional highway system plan to provide traffic congestion relief to the Lake Geneva area, to provide improved arterial spacing for future development within the Lake Geneva area, and to enhance the Big Foot Beach State Park by permitting elimination of the roadway which currently separates the beach area of the park from all other facilities within the park, including parking, picnicking, and restroom facilities.

Map 7 identifies the long-proposed alignment of the STH 120 Lake Geneva bypass. Implementation of the segment of the STH 120 Lake Geneva bypass between the USH 12-STH 120 interchange and STH 50 may be difficult due to construction of the Geneva Square Shopping Center and a Hardee's Restaurant immediately

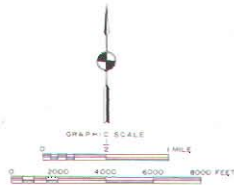
Map 7

CORRIDOR IDENTIFIED FOR PROPOSED STH 120 LAKE GENEVA BYPASS IN CURRENT JURISDICTIONAL HIGHWAY SYSTEM PLAN



LEGEND

- EXISTING STH 120 ROUTE
- CITY OF LAKE GENEVA INDUSTRIAL PARK
- CURRENT JURISDICTIONAL HIGHWAY SYSTEM PLAN STH 120 BYPASS ROUTE

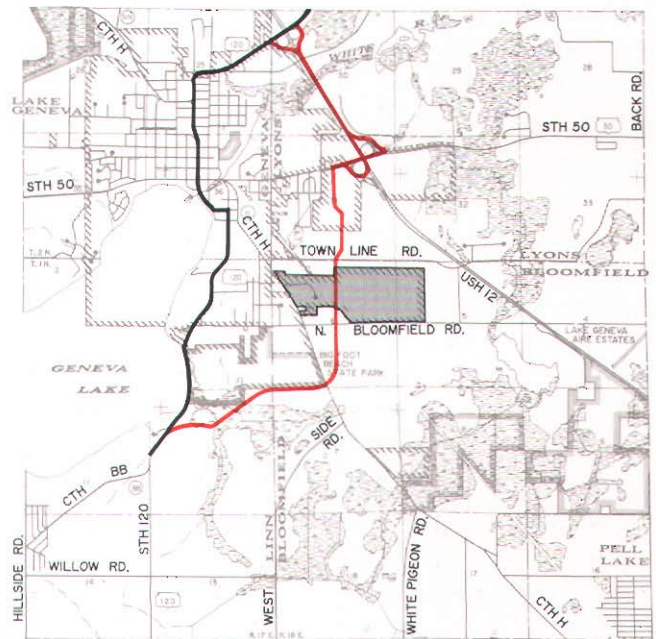


Source: SEWRPC.

adjacent to the USH 12 southeastbound on and off ramps at the USH 12-STH 120 interchange. However, the segment of the proposed STH 120 bypass north of STH 50 to the STH 120 interchange with USH 12 is not an absolutely essential element of the bypass, and could be replaced with a routing of STH 120 over the USH 12 freeway between the existing interchange at STH 120 and the interchange at STH 50, as shown on Map 8. Even with this alternative routing, the bypass may still be expected to provide a substantial reduction in the amount of traffic on the existing route of STH 120 over its entire length through the City of Lake Geneva. The alternative routing, like the original routing, would provide direct access to the Lake Geneva industrial park from USH 12 via the existing STH 50 interchange. This may alleviate the perceived need to provide better access to the industrial park via a new freeway interchange with USH 12, which has an estimated cost of

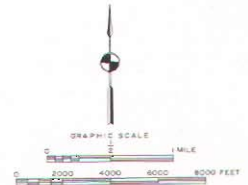
Map 8

CORRIDOR REFINEMENT FOR PROPOSED STH 120 LAKE GENEVA BYPASS



LEGEND

- EXISTING STH 120 ROUTE
- CITY OF LAKE GENEVA INDUSTRIAL PARK
- STH 120 BYPASS ROUTE ALIGNMENT TAKEN TO PUBLIC HEARING



Source: SEWRPC.

\$3.1 million, including attendant roadway improvement costs. With the STH 120 bypass, traffic to the industrial park from areas north and east of the Lake Geneva area no longer would need to travel through the central business district, using STH 120 and CTH H or STH 50 and CTH H to travel from USH 12. Also, the alternative bypass routing would provide a direct connection between the industrial park and STH 120 south of Lake Geneva, provide improved surface arterial spacing to accommodate future community growth, and permit the closure of the existing STH 120 route from the entrance to Big Foot Beach State Park near the southern park boundary north to Ceylon Court. The benefits and costs of the STH 120 bypass are compared in Table 7.

The STH 120 bypass may be expected to carry between 6,000 and 7,000 vehicles per average weekday by the year 2010, as shown on Map 9.

Table 7
EVALUATION OF THE STH 120 LAKE GENEVA BYPASS

	STH 120 Bypass
<u>Benefits</u>	
Traffic Carried on Bypass and Removed from Existing Arterial Including STH 120 (year 2010 average weekday traffic)	4,000 to 6,000
Reduced Need to Improve Existing STH 120	Eliminates need to provide four traffic lanes between CTH H and STH 50
Improved Access to Industrial Park	Eliminates need for traffic to and from the north and east of the Lake Geneva area to travel through the central business district to and from the industrial park
Improved Surface Arterial Spacing	Accommodates community growth to the east and south
Enhanced Big Foot Beach State Park	Removes traffic from STH 120 through the State Park, improving pedestrian safety Would permit the closure of STH 120 through the State Park and thus integrate the beach with the remainder of the Park's facilities
<u>Costs</u>	
Construction Costs (including right-of-way)	\$5.3 million
Right-of-Way Required	Approximately 1.1-mile strip of right-of-way 80 feet wide, of which about 1,400 feet is located in the City of Lake Geneva industrial park Approximately 1.92-mile strip of right-of-way 100 feet wide
Environmental Corridors	1,630-foot crossing of isolated natural areas 1,225-foot crossing of the primary environmental corridor comprising wetlands
Prime Agricultural Land Impacts	About 0.28 mile of bypass to cross prime agricultural lands, entailing acquisition of 2.7 acres
Property Acquisition	Four residences
Inconvenient Travel	Potentially circuitous travel for residents on the eastern and southern shores of Lake Geneva, depending upon destination

Source: SEWRPC.

It is estimated that implementation of the STH 120 bypass would divert approximately 4,000 vehicles per average weekday from the existing route of STH 120 between USH 12 and STH 50, and an estimated 5,500 vehicles per average weekday between STH 50 and the point where the proposed bypass route would intersect existing STH 120 south of Big Foot Beach State Park.⁴ Implementation of the STH 120 bypass may also be expected to divert an estimated 500 vehicles per average weekday from CTH H between STH 50 and the industrial park by the year 2010, and an estimated 2,000 vehicle trips per day from STH 50 between Edwards Boulevard and the existing route of STH 120 through the central business district in the City of Lake Geneva.

The estimated cost of implementing the STH 120 bypass, including routing STH 120 over the USH 12 freeway between the USH 12 and STH 120 interchange and the USH 12 and STH 50 interchange, over STH 50 between USH 12 and Edwards Boulevard, and over Edwards Boulevard between STH 50 and its southern terminus and the construction of a new two-lane roadway from a point on Edwards Boulevard to the proposed intersection with existing STH 120 south of Big Foot Beach State Park is estimated to be \$5.3 million, including right-of-way acquisition. The disruption that would be attendant to the new roadway includes the acquisition of an 80-foot-wide right-of-way from the end of Edwards Boulevard to N. Bloomfield Road and the acquisition of 100-foot-wide strip of right-of-way from N. Bloomfield Road to the existing STH 120. The proposed bypass alignment would traverse 1,225 feet of primary environmental corridor composed primarily of wetlands and 450 feet of Big Foot Beach State Park, of which 200 feet would cross an isolated natural area. In addition the alignment would pass through approximately 1,500 feet of prime

agricultural lands. An estimated four residences would have to be acquired.

Because of the substantial diversion of traffic from downtown Lake Geneva, the improved access to the Lake Geneva industrial park, the provision of improved north-south surface arterial spacing, and the potential to enhance the Big Foot Beach State Park, particularly with regard to integrating the beach area with the remainder of the park, the Commission staff and Advisory Committee recommended that the STH 120 bypass remain part of the Walworth County jurisdictional highway system plan along the proposed alternative routing. The Advisory Committee further recommended that the plan be amended to add the existing route of STH 120 to the plan as a local arterial between the proposed STH 120 bypass and STH 50.

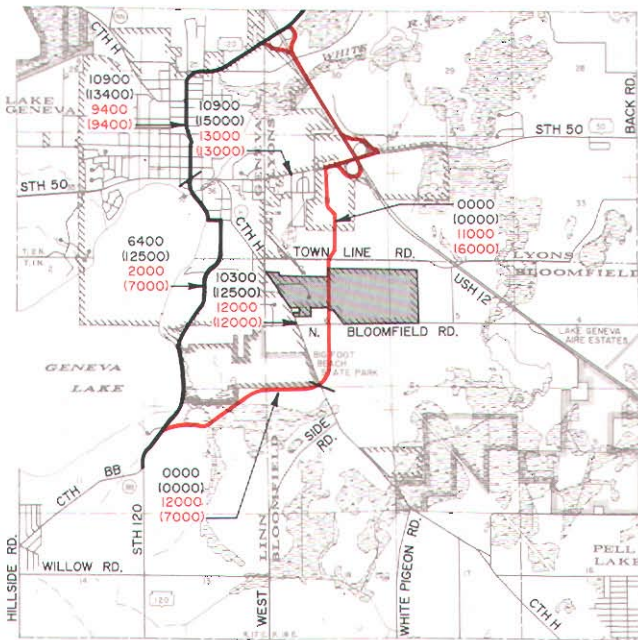
New Interchange on USH 12 at Town Line Road in the Towns of Bloomfield and Lyons

The City of Lake Geneva representative on the Advisory Committee requested consideration of the provision of a new interchange on USH 12 at Town Line Road in the Towns of Bloomfield and Lyons east of the City of Lake Geneva, as shown on Map 10. This interchange is intended to improve access to the City of Lake Geneva's industrial park from the USH 12 freeway and remove industrial park truck traffic from STH 50 through the City. The Federal Highway Administration has adopted guidelines for use in considering the addition of new interchanges and ramps to the interstate highway system. These guidelines are also appropriate for use in considering new interchanges on noninterstate freeway segments. The guidelines include identification of the purpose of the new interchange and of distances to, and the size of, communities and land use activities to be directly served; the conduct of traffic and operational analyses under existing and proposed conditions with respect to the freeway and the crossroad to assure the ability to effectively collect and distribute traffic from the new access; and, finally, identification of existing and proposed access, including alternatives that have been considered. It should be noted that provision of an interchange at Town Line Road would result in an interchange with a facility which is neither currently nor planned to be an arterial. Thus, the current plan would have to be further amended to include a new surface arterial

⁴This traffic diversion estimate assumes that the existing route of STH 120 would remain open through Big Foot Beach State Park. If STH 120 through the State Park is closed, however, an estimated additional 5,000 vehicle would be diverted from the existing STH 120 route between USH 12 and STH 50 and an estimated additional 5,000 vehicle per average weekday from existing STH 120 between STH 50 and the bypass route.

Map 9

**CURRENT AND FORECAST YEAR 2010
AVERAGE WEEKDAY TRAFFIC VOLUMES AT
SELECTED LOCATIONS IN THE LAKE GENEVA AREA**



LEGEND

— EXISTING STH 120 ROUTE

CITY OF LAKE GENEVA INDUSTRIAL PARK

STH 120 BYPASS ROUTE ALIGNMENT TAKEN TO PUBLIC HEARING

AVERAGE WEEKDAY TRAFFIC VOLUMES

6400 1987 COUNTS
 (12500) IF BYPASS NOT CONSTRUCTED
 2000 WITH BYPASS AND EXISTING STH 120 CLOSED
 (7000) WITH BYPASS AND EXISTING STH 120 OPEN

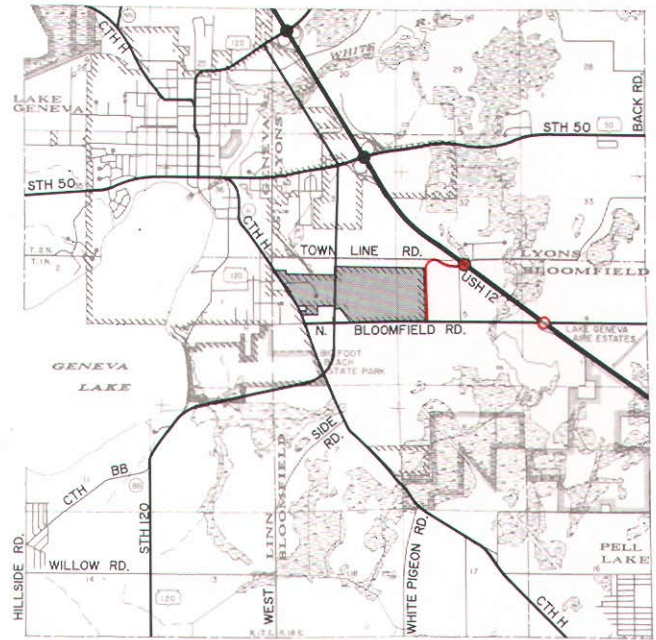
Source: SEWRPC.

connection between the proposed interchange and the existing and planned surface arterial network, as shown on Map 10.

The purpose of the requested interchange is to provide improved access to the City of Lake Geneva industrial park and to remove traffic, particularly truck traffic, from the central business district of the City of Lake Geneva. The industrial park currently provides employment for about 400 persons on 59 acres, and is planned to accommodate about 2,200 employees upon completion of the development of a total of 265 acres. The traffic to and from the industrial park, which may be expected to be served by the proposed interchange, is estimated to total about

Map 10

**PROPOSED INTERCHANGE ON
USH 12 AT TOWN LINE ROAD IN THE
TOWNS OF BLOOMFIELD AND LYONS**



LEGEND

EXISTING AND PLANNED ARTERIAL STREET AND HIGHWAY SYSTEM

— FREEWAY

— STANDARD ARTERIAL

● FREEWAY INTERCHANGE

● PROPOSED USH 12 INTERCHANGE WITH TOWN LINE ROAD

ARTERIAL STREET ADDITION TO CONNECT PROPOSED USH 12 INTERCHANGE AT TOWN LINE ROAD TO THE ARTERIAL SYSTEM

POTENTIAL ALTERNATIVE USH 12 INTERCHANGE WITH N. BLOOMFIELD ROAD

CITY OF LAKE GENEVA INDUSTRIAL PARK

Source: SEWRPC.

700 trips per average weekday under current conditions, and about 2,400 trips per average weekday by the year 2010.

Access to the industrial park from USH 12 is currently via STH 50 and CTH H between USH 12 and the industrial park. The provision of a new interchange at Town Line Road would reduce the travel distance from the USH 12 freeway at STH 50 to the industrial park from 2.5 miles, all on standard arterials, to about 1.7 miles, 0.8 mile on freeway and 0.9 mile on standard arterials and ramps. The travel dis-

tance from the USH 12 freeway at Town Line Road would be reduced from 4.1 miles, 1.1 miles on freeway and 3.0 miles on standard arterials and ramps, to about 0.9 mile on standard arterials and ramps.

The provision of the proposed interchange as a diamond interchange with off-ramps in the southeast and northwest quadrants and on-ramps in the northeast and southwest quadrants would minimize disruption and costs. The on-ramp in the northeast quadrant would cross 700 feet of isolated natural area, of which 400 feet would be across wetlands. It is not anticipated that any residential or commercial properties would have to be displaced. The estimated construction cost of providing the new interchange and the surface arterial connection between the interchange and N. Bloomfield Road is estimated to be \$3.1 million, including right-of-way acquisition.

The Federal Highway Administration standards for minimum freeway interchange spacing are one mile in urban areas and five to six mile in rural areas. The one mile spacing standard applies to the STH 50 interchange to the north; and the five to six mile spacing standard applies to the Pell Lake Road interchange to the south. The proposed interchange would be spaced approximately three-quarters of a mile south of the interchange with STH 50, somewhat less than the desired spacing of one mile for urban interchanges. Further, it would be located approximately 3.4 miles north of the USH 12 interchange with Pell Lake Road, appreciably less than the five to six mile spacing desired for rural areas. Thus, the provision of an interchange at this location would not meet interchange spacing criteria.

The traffic carrying capacity of Town Line Road is 7,000 vehicles per average weekday. This capacity is expected to be adequate for both the existing and the forecast year 2010 traffic volumes. Traffic volumes on USH 12 are expected to remain well below the design capacity of 51,500 vehicles per average weekday to the year 2010. Thus, it may be concluded that there would be sufficient freeway capacity available to meet traffic demand in the year 2010 at the proposed interchange. Indeed, because a substantial surplus of capacity may be expected, no operational problems should be entailed in the proposed interchange. It should be noted, however, that the proposed interchange is not

necessary to alleviate any existing or future traffic problems at the STH 50 interchange. The STH 50 interchange with USH 12 has sufficient capacity to carry both the existing and the forecast year 2010 traffic volumes. It may be further noted that STH 50 between the USH 12 freeway and the proposed STH 120 bypass is a four-lane divided facility with a capacity of 25,000 vehicles per average weekday. This capacity may be expected to be more than adequate to accommodate both the existing and forecast year 2010 traffic demands.

Two alternative improvements in lieu of a new interchange between USH 12 and Town Line Road were also considered to improve access to the City of Lake Geneva industrial park and to remove traffic from STH 50 and CTH H in the City of Lake Geneva. The first alternative was the construction of an interchange at N. Bloomfield Road and USH 12. The benefits and costs of providing an interchange at N. Bloomfield Road are virtually the same as those associated with a new interchange at Town Line Road. It should be noted, however, that N. Bloomfield Road is part of both the current and planned arterial systems. An interchange at N. Bloomfield Road would entail a greater distance to the industrial park, 1.4 miles versus 0.9 mile, than an interchange at Town Line Road and, although it would be located more than the required one mile from the STH 50 interchange, it would violate the spacing criteria for rural interchanges, since it is located about 2.7 miles from the USH 12-Pell Lake Road interchange. In addition, it may be expected that industrial park traffic to and from the east on STH 50 would not use the new interchange but, rather, would continue to use the existing STH 50-CTH H route into the industrial park. Thus, it is recommended that this alternative be rejected from any further consideration.

The second alternative considered was the implementation of the STH 120 Lake Geneva bypass. This alternative may be expected to improve access to the City of Lake Geneva industrial park for vehicles using USH 12 and STH 50 and to divert traffic from STH 50 and CTH H in the City of Lake Geneva, thereby eliminating the need to provide four traffic lanes on STH 120 between CTH H and STH 50. Direct access to the industrial park would be provided on STH 120 to and from areas south of the Lake Geneva area. Moreover, implementation of the STH 120 Lake Geneva bypass would provide an

additional north-south surface arterial to accommodate future City of Lake Geneva growth and would enhance Big Foot Beach State Park by eliminating STH 120 through the Park. This alternative is superior to that of adding a new interchange on USH 12 at Town Line Road. Therefore, it is recommended by the Commission staff and Advisory Committee that the plan not be amended to recommend a new USH 12 interchange at Town Line Road.

USH 12 Terminus at CTH H in the Town of Bloomfield

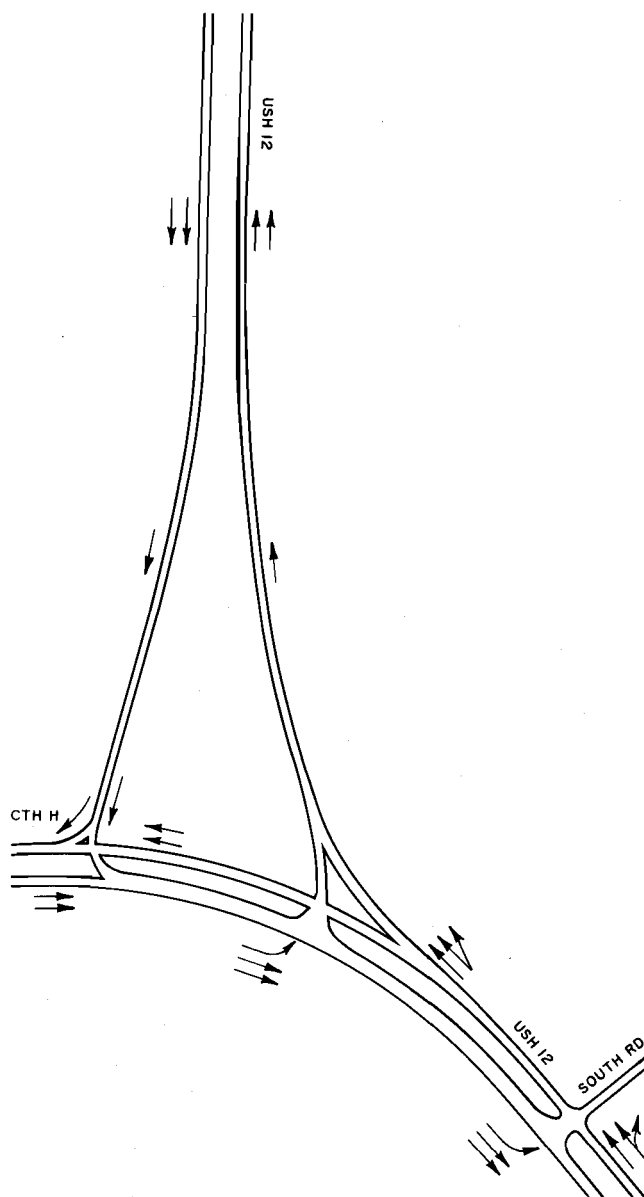
The Village of Genoa City representative requested that consideration be given to interim improvements to the present USH 12 terminus at CTH H in the Town of Bloomfield. These improvements would be designed to address existing problems which may be anticipated to continue until the USH 12 freeway is extended into the State of Illinois. The problems identified by the Village of Genoa City representative include periodic queueing on USH 12 from its terminus at CTH H northerly for distances of up to almost a mile. This queueing may cause some traffic which would otherwise use the USH 12 freeway to use CTH H through the Village.

The existing roadway configuration at the USH 12 freeway terminus is shown in Figure 1. Currently, southbound USH 12 traffic merges to a single lane north of the freeway terminus and proceeds down what is intended to eventually become the southbound off-ramp at this location to the cross street, CTH H. The southbound traffic movement is uncontrolled at the intersection of the cross street with CTH H, while the east- and westbound cross street approaches are stop sign-controlled. Thus, southbound traffic at this intersection can proceed through the intersection without interruption, although it must execute a right-angle left turn to continue on USH 12. Based on staff observations, about 10 percent of all motorists on the southbound USH 12 approach come to a complete stop in spite of having the right of way. This may be attributed to the existing geometrics, which are identical to true freeway-surface arterial interchanges at which the off-ramp is subordinate to the cross street and, thus, left-turning off-ramp traffic is required to stop and can only proceed in the absence of cross street traffic.

The southbound USH 12 freeway off-ramp leading to the terminus of the USH 12 freeway may

Figure 1

EXISTING ROADWAY CONFIGURATION OF THE USH 12 FREEWAY TERMINUS IN THE TOWN OF BLOOMFIELD: 1990



Source: SEWRPC.

be considered to have a traffic carrying capacity of 1,700 vehicles per hour. The capacity of the southbound USH 12 approach to the USH 12 and CTH H intersection should be 1,400 vehicles per hour. However, because about 10 percent of all motorists on the southbound approach come to a complete stop, the capacity of the approach is reduced to about 1,200 vehicles per hour. Because the off-ramp has more traffic carrying capacity than the southbound intersection approach, any breakdown in traffic flow will

occur first at the intersection and then has the potential to extend up the off-ramp when the demand equals or exceeds the capacity of the intersection.

Historical hourly traffic flow rate data indicate that the capacity of the southbound approach is exceeded about 10 times per year. Thus, the problem of queues extending back onto the freeway main line may be expected to occur relatively infrequently. These back-up problems, however, do occur generally on successive hours of the same day, and substantial queues may develop both with respect to length and duration. In addition, there may be additional time periods of duration shorter than an hour throughout the year, when the traffic capacity is approached or exceeded, thus creating queues shorter in both length and duration.

Accordingly, the staff analyzed three interim alternative roadway improvements. Two of the alternative roadway improvements provide for significant improvement in the alignment of southbound USH 12 through its intersection with CTH H. These two alternatives were compared to a third alternative, which would not alter the alignment of southbound USH 12 through its intersection with CTH H, but would provide a second lane on the off-ramp to increase the capacity of the southbound approach through the intersection.

The first alternative roadway improvement considered to provide more direct alignment for southbound USH 12 is shown in Figure 2. The primary advantage of this alternative roadway improvement is elimination of the right-angle left turn from southbound USH 12 at CTH H and the provision of a direct alignment for USH 12 as it makes the transition from the freeway to a surface arterial at CTH H. Other advantages of this alternative roadway improvement are the provision of two traffic lanes in each direction in the transition from the freeway to the surface arterial and the confinement of all traffic movements between CTH H and USH 12 to a single intersection located approximately at the existing intersection between the northbound USH 12 on-ramps and CTH H. The disadvantages of this alternative include: 1) the need to acquire additional right-of-way, 2) incompatibility with the ultimate southerly extension of the freeway and with the possible interim construction of an USH 12 Richmond bypass, and 3) the cost attendant to the reconstruction necessary to

implement this alternative roadway improvement, estimated to total \$1.9 million.

The second alternative roadway improvement considered is shown in Figure 3. The advantage of this roadway improvement alternative is that the right-angle left turn from southbound USH 12 at CTH H is eliminated and a more direct alignment is provided for USH 12. This alternative does not eliminate the southbound USH 12 off-ramp and CTH H intersection, but shifts it approximately 150 feet east of its current location. The primary disadvantages of this alternative are its cost, estimated to be \$0.5 million, and its incompatibility with the ultimate southerly extension of the freeway and with the possible interim construction of a USH 12 Richmond bypass.

The final roadway improvement alternative considered was to add a second lane to the existing southbound off-ramp from USH 12. Adding the lane to the left of the existing ramp would permit truck traffic to be restricted to the right lane. Thus, the depth of new pavement necessary could be minimized. The primary advantage of this alternative roadway improvement is that the capacity of the southbound approach to the intersection would be substantially increased. Another advantage is that this alternative can be readily converted into a diamond interchange configuration upon extension of the freeway to the south. Implementation of this alternative is estimated to cost about \$0.1 million.

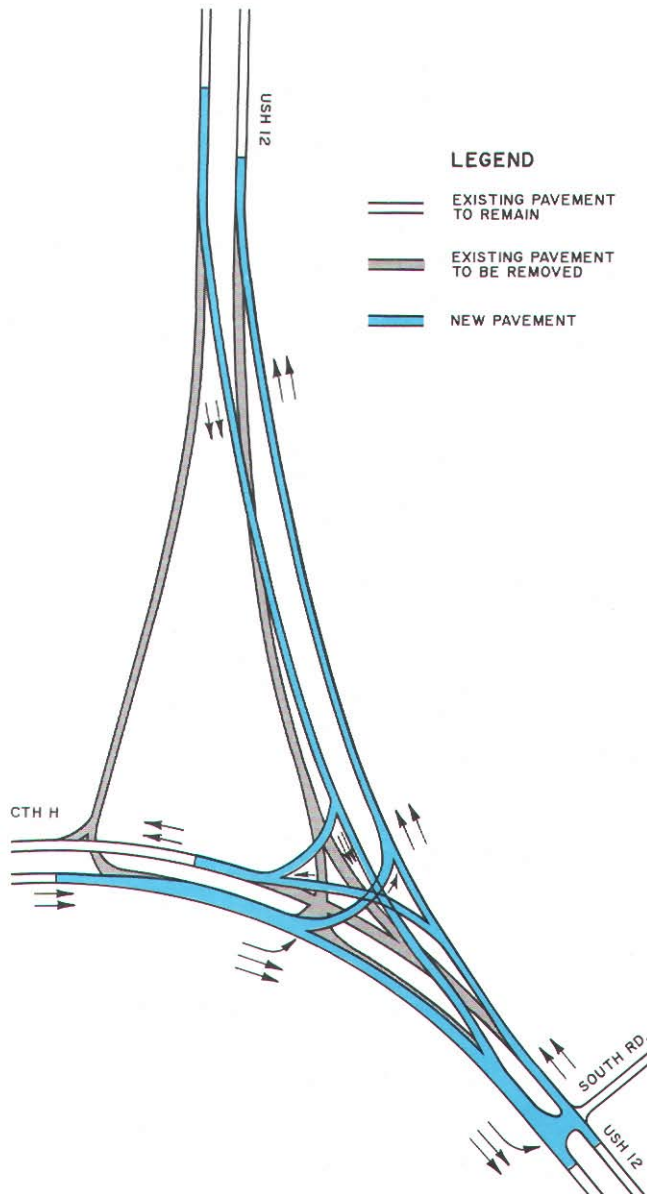
Because the addition of a second lane to the existing off-ramp may be expected to provide the capacity required to accommodate the maximum traffic flow rate occurring at this location, because it is compatible with both the ultimate southerly extension of the freeway and possible interim construction of a USH 12 Richmond bypass, and because of its low cost, it is recommended by the Commission staff and by the Advisory Committee that a second lane be added to the southbound USH 12 off-ramp at CTH H in the Town of Bloomfield as an interim measure to abate the periodic traffic congestion at this location.

STH 50 Corridor between the City of Delavan and the City of Lake Geneva

The Advisory Committee identified the need to improve the existing route of STH 50 between IH 43 in the City of Delavan and USH 12 in the

Figure 2

**ALTERNATIVE ROADWAY IMPROVEMENT
TO PROVIDE DIRECT USH 12 ALIGNMENT
BETWEEN THE FREEWAY AND NONFREEWAY
ROUTE SEGMENTS AT THE EXISTING
USH 12 FREEWAY TERMINUS**

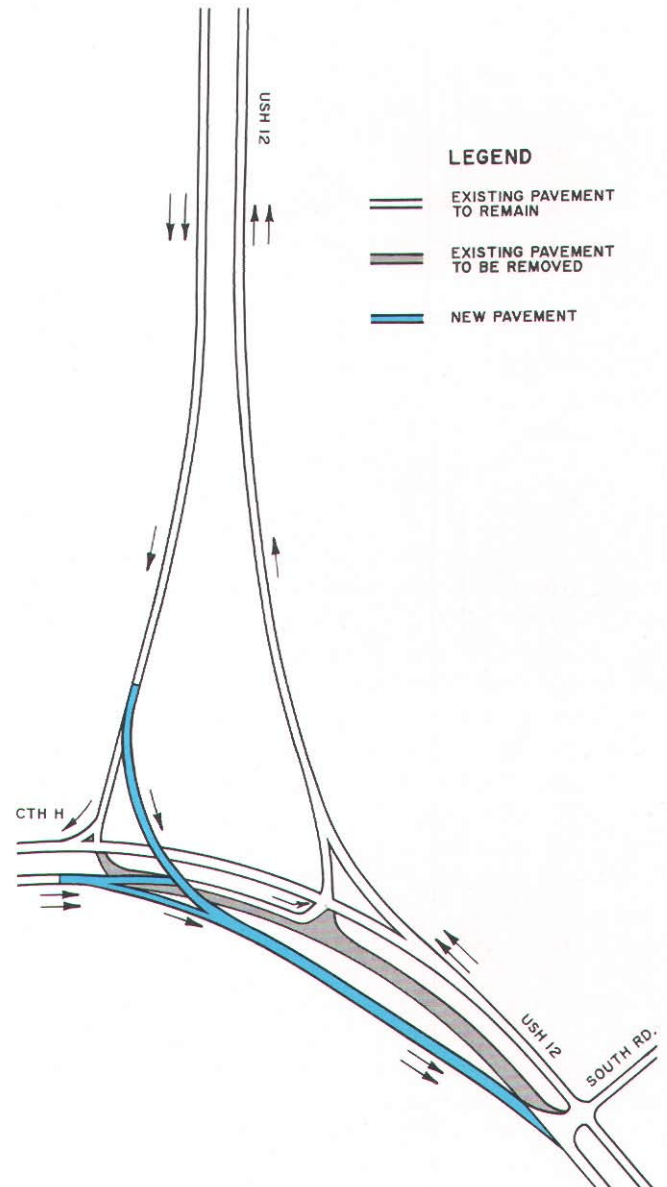


Source: SEWRPC.

City of Lake Geneva and further requested that consideration be given to providing additional capacity in the STH 50 corridor on alternate routes. An alternate route specifically identified for consideration by the Advisory Committee included provision of a new interchange on USH 12 with CTH NN, with the alternate route

Figure 3

**ALTERNATIVE ROADWAY IMPROVEMENT
TO ELIMINATE EXISTING RIGHT-ANGLE LEFT TURN
FROM THE USH 12 SOUTHBOUND OFF-RAMP AT
THE EXISTING USH 12 FREEWAY TERMINUS**



Source: SEWRPC.

then following CTH NN westerly to CTH H, northerly on CTH H to Palmer Road, westerly on Palmer Road to Town Hall Road, and westerly on Town Hall Road to its existing intersection with STH 50. A subalternative to this alternative route was also identified. The subalternative would not include the segment of Town

Hall Road between Palmer Road and STH 50 but, rather, would include the segment of STH 67 between Palmer Road and STH 50.

The existing segment of STH 50 between USH 12 and Pearson Drive near the west corporate limits of the City of Lake Geneva, with the exception of a 0.3-mile-long section at the STH 50 intersection, which has a four-lane divided roadway, is a two-traffic-lane urban roadway with parking lanes. The two-lane segment has a design capacity of 13,000 vehicles per average weekday; the four-lane segment has a design capacity of 25,000 vehicles per average weekday. Existing average weekday traffic volumes on the two-traffic-lane segment range between 10,900 and 18,600 vehicles per average weekday. The volume on the four-lane segment is 9,800 vehicles per average weekday. Thus, current average weekday traffic volume exceeds the capacity of the two-traffic-lane section of STH 50 in the City of Lake Geneva.

The adopted Walworth County jurisdictional highway system plan has long recommended the prohibition of on-street parking to provide additional traffic carrying capacity on this stretch of STH 50. However, current average weekday traffic volumes on some portions of this segment of STH 50 are in excess even of the capacity of a four-traffic-lane undivided roadway, that is, are more than 17,000 vehicles per average weekday. The long-recommended parking prohibitions, although needed for traffic capacity purposes, have been difficult to implement, particularly in the City of Lake Geneva central business district.

From Geneva Street near the Village of Williams Bay east corporate limits to Pearson Drive, STH 50 is a four-traffic-lane divided roadway with a design capacity of 25,000 vehicles per average weekday. This segment of STH 50 currently is estimated to carry between 11,100 and 13,100 vehicles per average weekday, and is forecast to carry an expected 17,000 to 21,000 vehicles per average weekday by the year 2010. Thus, the four-lane divided roadway segment has adequate capacity to accommodate both the existing and the year 2010 forecast traffic volumes.

From N. Shore Road to Geneva Street, STH 50 is a two-traffic-lane rural roadway with a design capacity of 7,000 vehicles per average weekday. Existing traffic volumes on this segment are

estimated to range between 5,000 and 9,700 vehicles per average weekday. Thus, the existing traffic volumes equal or exceed the design capacity of this 5.8-mile segment of STH 50, and there is a need to provide additional traffic capacity to accommodate even the existing demand. The forecast year 2010 traffic volume on the western 2.0 miles of this segment of STH 50 between N. Shore Road and Town Hall Road approximates 24,000 vehicles per average weekday. This forecast traffic volume nearly equals the design capacity of a four-traffic-lane divided roadway section. The forecast year 2010 traffic volumes on the remainder of this segment are expected to range between 12,000 and 15,000 vehicles per average weekday. These forecast traffic volumes exceed the design capacity of a two-traffic-lane roadway.

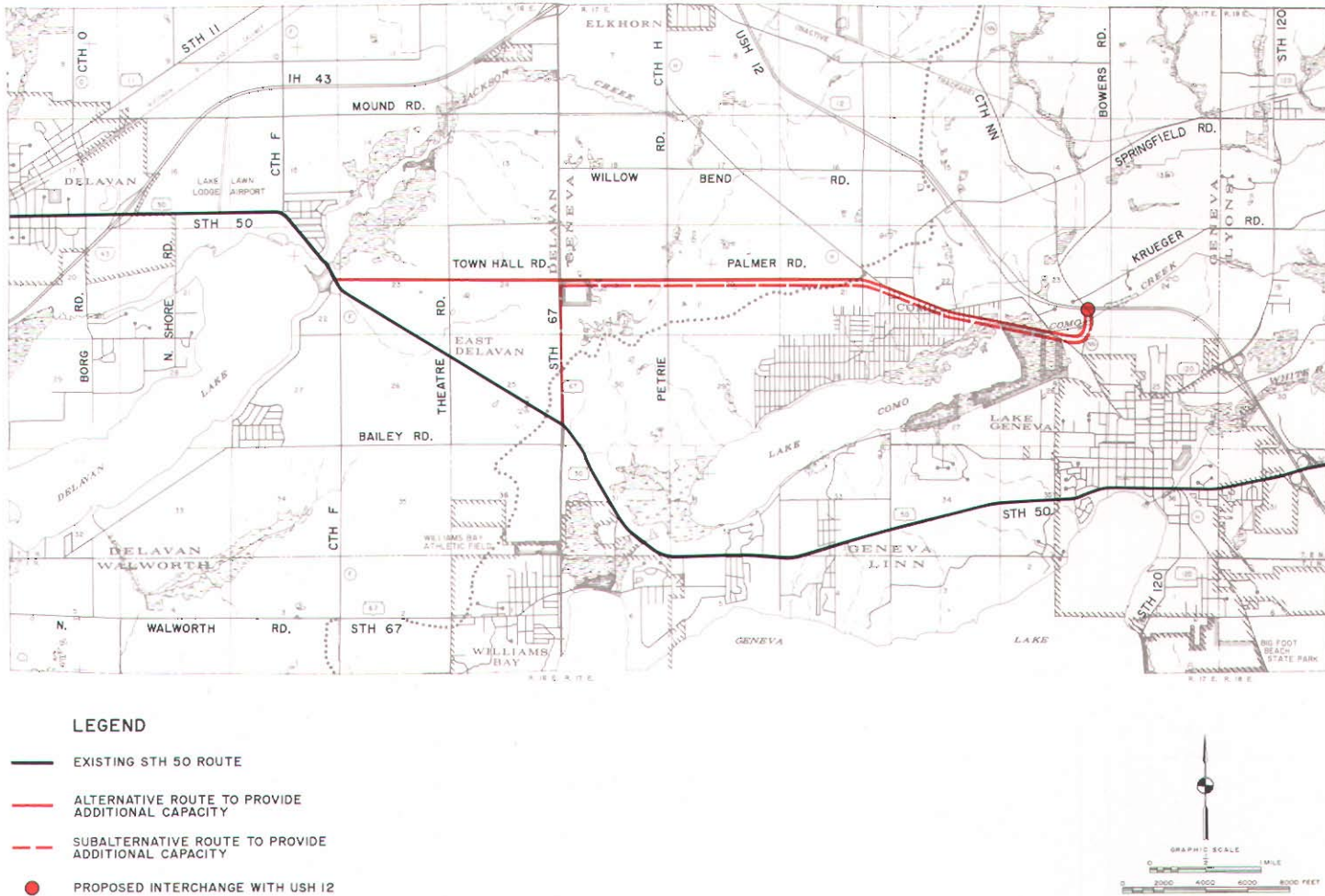
From IH 43 to N. Shore Road, STH 50 is a four-lane divided roadway with a design capacity of 25,000 vehicles per average weekday. This roadway segment carries an average weekday traffic volume of 9,700 vehicles, well below the design capacity of this section. The traffic volumes, however, are expected to approximate 24,000 vehicles per average weekday by the year 2010, nearly equal to the design capacity of a four-lane divided roadway.

Significant urban development not envisioned in the year 2000 land use plan has occurred in the STH 50 corridor, with significant additional development now proposed. This recently completed and proposed development includes the Geneva Lakes Kennel Club dog racing track in the southeast quadrant of the intersection of STH 50 and IH 43; the urban development which abuts the north and south sides of STH 50 just east of CTH F in the Town of Delavan; and the Geneva National development which includes a golf course, hotel, convention center, retail development, and 1,900 new housing units on the north side of STH 50 east of STH 67.

The alternative route proposed by the Advisory Committee to provide additional traffic carrying capacity in the STH 50 corridor is shown on Map 11, along with its subalternative also identified by the Committee. The subalternative proposed by the Advisory Committee is inferior to the original alternative route because the subalternative provides no traffic relief to the segment of STH 50 between STH 67 and CTH F. Also, the extent of traffic relief provided by the subalternative to the segment of STH 50

Map 11

EXISTING STH 50 AND ALTERNATIVE ROUTES TO
PROVIDE ADDITIONAL CAPACITY WITHIN THE STH 50 CORRIDOR



Source: SEWRPC.

between USH 12 and STH 67 may be expected to be less than that of the original alternative since it does not provide a direct route between Palmer Road at STH 67 and STH 50 at CTH F. The original county jurisdictional highway system plan recommended that both Palmer Road and Town Hall Road be developed as arterials and be classified as county trunk highways. Therefore, it is recommended that the subalternative be rejected.

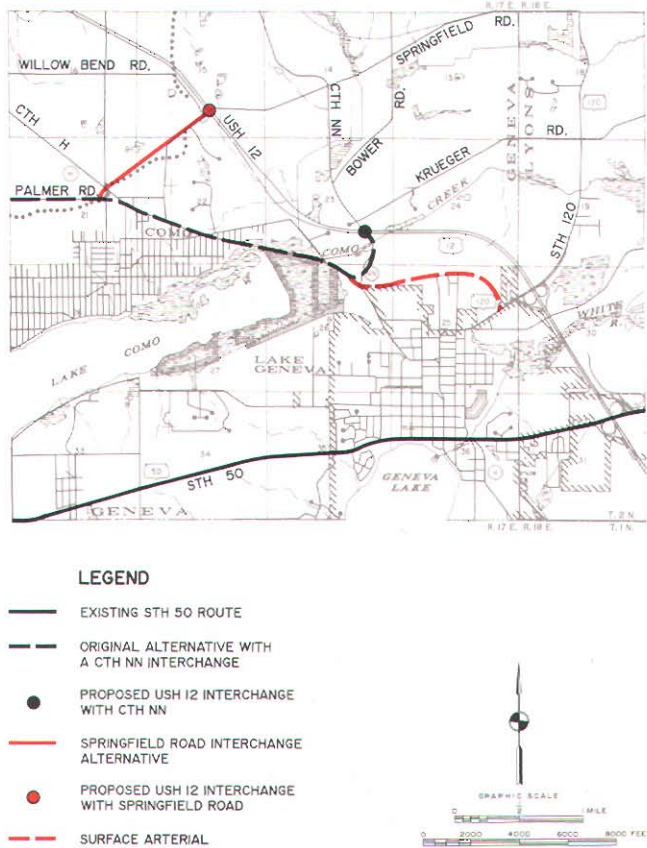
The Commission staff identified and evaluated two additional subalternatives to the alternative route proposed by the Advisory Committee to provide additional capacity in the STH 50 corridor. These subalternatives addressed the potential for connecting the alternative route to

USH 12, including an interchange at Springfield Road, approximately 1.5 miles northwest of the interchange proposed at CTH NN, and the provision of a new surface arterial parallel to USH 12 between CTH H and STH 120 to permit use of the existing STH 120 interchange with USH 12. These two subalternatives and the original alternative which would provide a new interchange at CTH NN are shown on Map 12.

The three identified alternative connections to USH 12, the original alternative connection at CTH NN, the subalternative connection at Springfield Road, and the subalternative connection at STH 120, may be combined with the original route proposing improvements to Town Hall Road and Palmer Road to provide three

Map 12

**SUBALTERNATIVE CONNECTIONS AT USH 12 TO AN
ALTERNATIVE ROUTE TO PROVIDE ADDITIONAL
CAPACITY WITHIN THE STH 50 CORRIDOR**



Source: SEWRPC.

alternatives for consideration and evaluation, as shown on Map 13. Table 8 compares the benefits and costs of the three alternatives. Each may be expected to provide the additional capacity needed in the STH 50 corridor and to carry similar traffic volumes by the year 2010, approximately 9,000 to 12,000 vehicles per average weekday. Each alternative route would thus provide similar traffic relief to the existing route of STH 50 between USH 12 and its intersection with Town Hall Road. Each alternative would remove about 5,000 to 6,000 vehicles per average weekday from STH 50 in the City of Lake Geneva central business district. Also, the additional traffic carrying capacity provided by each of the three alternatives, together with the STH 120 Lake Geneva bypass, may be expected to eliminate the need to provide four traffic lanes on STH 120 between CTH H and STH 50. Alternative 3, which provides for a surface arterial

connection between STH 120 just west of the STH 120-USH 12 interchange, may be expected to have a modest impact on the operation of the northbound off-ramp at STH 120 because of the expected left-turning volumes at this intersection resulting from the diversion of traffic from existing STH 50 to the alternative route. It may be expected that the provision of a traffic signal at this off-ramp would be warranted by the year 2010, along with the addition of a second left-turn lane at this intersection.

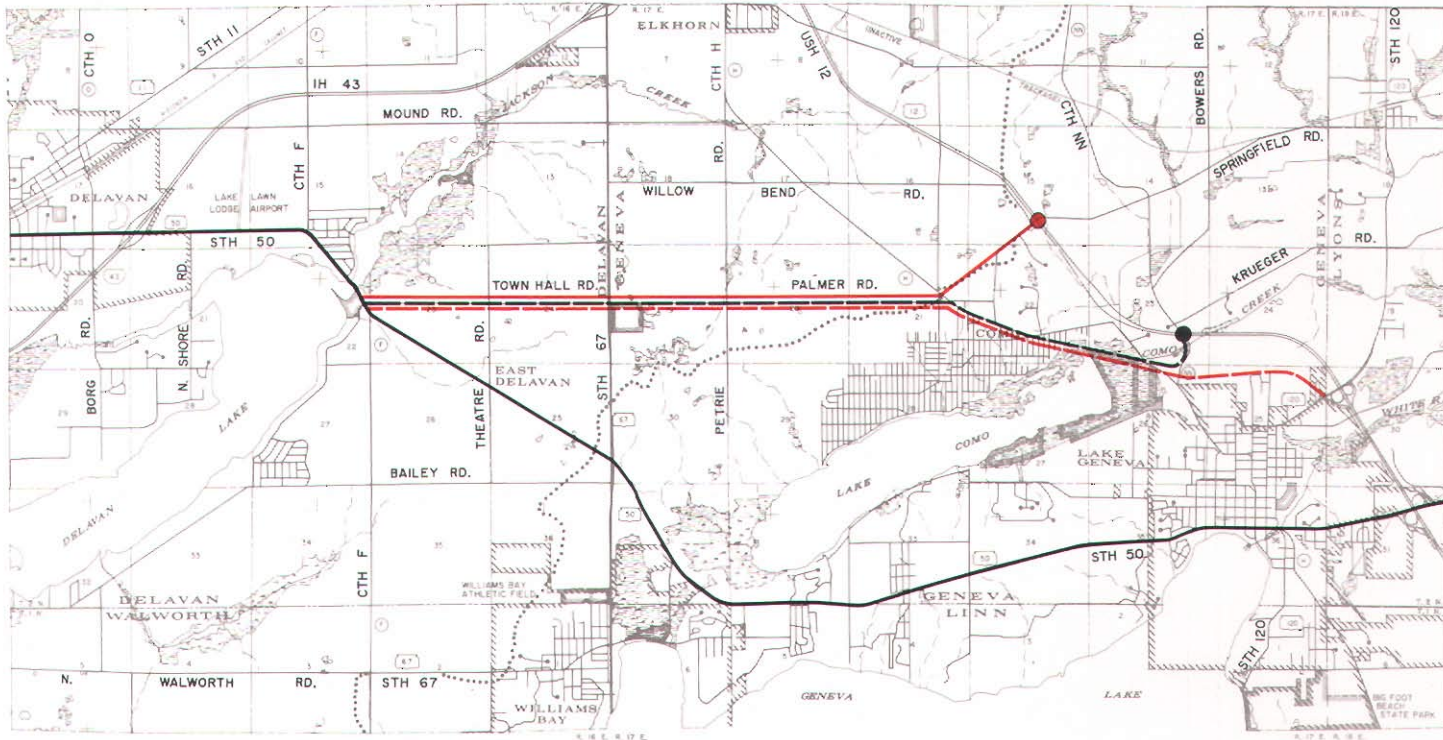
The cost of Alternative 1, the alternative route originally proposed for consideration by the Advisory Committee, including a new interchange on USH 12 at CTH NN, is estimated to total \$15.5 million, including \$4.9 million for right-of-way acquisition. This is somewhat less than the estimated cost of Alternative 3, which would include a surface arterial between STH 120 and CTH H, at an estimated cost of \$16.1 million, including \$4.8 million for right-of-way. The cost of Alternative 2, including a new interchange at Springfield Road, is estimated at \$13.5 million, including \$3.2 million for right-of-way.

With respect to disruption, Alternative 1 would cross approximately 500 feet of primary environmental corridor; approximately 800 feet of secondary corridor, of which 325 feet consists of wetlands; and cross an additional 260 feet of wetland. In addition, the acquisition of the 29 acres of right-of-way attendant to this alternative would involve taking of prime agricultural lands abutting the existing right-of-way over a length of 2.9 miles. This alignment may be expected to displace four residences and four businesses, and crosses the site containing the Town of Geneva municipal buildings, including the Town Hall building, probably requiring the demolition of the garage located near the northern boundary of that property. The proposed interchange between USH 12 and CTH NN would be located approximately 1.1 miles from the USH 12-STH 120 interchange, and about 5.2 miles from the USH 12-CTH NN interchange at Elkhorn. Thus, interchange spacing criteria would be generally met as the urban spacing standard should apply to the existing STH 120 interchange and the rural spacing standard to the existing CTH NN interchange.

Alternative 3, which includes the provision of a new surface arterial between STH 120 and CTH H and uses the existing STH 120 inter-

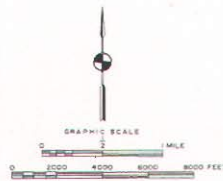
Map 13

**THREE ALTERNATIVE ROUTES CONSIDERED TO
PROVIDE ADDITIONAL CAPACITY WITHIN THE STH 50 CORRIDOR**



LEGEND

- EXISTING STH 50 ROUTE
- ALTERNATIVE ROUTES TO PROVIDE
ADDITIONAL CAPACITY IN THE
STH 50 CORRIDOR
- ALTERNATIVE ONE
- ALTERNATIVE TWO
- - - ALTERNATIVE THREE
- PROPOSED INTERCHANGE UNDER
ALTERNATIVE ONE
- PROPOSED INTERCHANGE UNDER
ALTERNATIVE TWO



Source: SEWRPC.

change, may be expected to displace three residences and four businesses. Like Alternative 1, it would cross the site of the Town of Geneva municipal buildings, including the Town Hall building, and would require the demolition of the garage located near the northern boundary of the property. The proposed alignment crosses approximately 2,250 feet of primary environmental corridor and approximately 800 feet of secondary environmental corridor, of which 325 feet comprises wetlands. The acquisition of the estimated 60 acres of right-of-way necessary for

this alternative would involve the taking of prime agricultural lands abutting the existing right-of-way over a length of approximately 2.9 miles and the acquisition of the necessary 130-foot-wide corridor for the new arterial between STH 120 and CTH H over a length of 8.4 miles.

Alternative 2, which includes a new interchange at Springfield Road, may be expected to displace six residences and one business. The proposed alignment crosses approximately 1,175 feet of

Table 8

**EVALUATION AND COMPARISON OF ALTERNATIVE ROUTES
TO PROVIDE ADDED CAPACITY IN THE STH 50 CORRIDOR**

Points of Comparison/Evaluation	Alternative 1 (new interchange on USH 12 at CTH NN)
Forecast Year 2010 Traffic Volumes	9,000 to 12,000
<u>Benefits</u>	
Forecast Year 2010 Traffic Diverted from Existing Routes	
STH 50	
USH 12 to STH 120	6,000
STH 120 to STH 67	5,000
STH 67 to Town Hall Road	4,000
STH 120	
CTH H to STH 50	1,000
CTH H	
STH 120 to Palmer Road	1,000
Reduced Need to Improve Existing Routes	
STH 50	
USH 12 to STH 120	Provision of four traffic lanes through the prohibition of parking, identified in current plan, would provide sufficient capacity to accommodate demand. Even if parking is not removed, the level of congestion is reduced
STH 120 to City of Lake Geneva West Corporate Limit	Provision of four traffic lanes necessary through parking prohibition and roadway improvement. If parking cannot be removed and roadway widened, the level of congestion is reduced
STH 120	
CTH H to STH 50	Elimination of the need to provide four traffic lanes through the prohibition of parking
Intangible Benefits	Improved access to the City of Delavan, Lake Lawn Lodge, Geneva Lakes Kennel Club, and Geneva National from the east; elimination of need to go through City of Lake Geneva
	Improved traffic operations and safety on the existing STH 50 route between Town Hall Road and USH 12
	Potential elimination of through truck traffic on the existing STH 50 route through the City of Lake Geneva central business district
	Potential to protect the roadway capacity and promote traffic safety through the control and acquisition of access rights, particularly at intersections
<u>Costs</u>	
Construction Cost (including right-of-way)	\$15,500,000
Right-of-Way Required	31 acres
Prime Agricultural Land Impacts	Right-of-way acquisition will involve a 3.8-mile-long strip taking of prime agricultural lands which abut the existing right-of-way
Residential and Business Displacement	Six residences and one business would be displaced
Interchange Spacing	The proposed interchange would be located about 1.1 miles from the USH 12-STH 120 interchange and about 5.2 miles from the USH 12-CTH NN interchange at Elkhorn

Table 8 (continued)

Points of Comparison/Evaluation	Alternative 2 (new interchange on USH 12 at Springfield Road)
Forecast Year 2010 Traffic Volumes Benefits Forecast Year 2010 Traffic Diverted from Existing Routes STH 50 USH 12 to STH 120 STH 120 to STH 67 STH 67 to Town Hall Road STH 120 CTH H to STH 50 CTH H STH 120 to CTH NN Reduced Need to Improve Existing Routes STH 50 USH 12 to STH 120 STH 120 to City of Lake Geneva West Corporate Limit STH 120 CTH H to STH 50 CTH H STH 120 to CTH NN Intangible Benefits	9,000 to 12,000 6,000 5,000 4,000 1,000 1,000 Provision of four traffic lanes through the prohibition of parking, identified in current plan, would provide sufficient capacity to accommodate demand. Even if parking is not removed, the level of congestion is reduced Provision of four traffic lanes necessary through parking prohibition and roadway improvement. If parking cannot be removed and the roadway widened, the level of congestion is reduced Elimination of the need to provide four traffic lanes through the prohibition of parking Improved access to the City of Delavan, Lake Lawn Lodge, Geneva Lakes Kennel Club, and Geneva National from the east; eliminates need to go through City of Lake Geneva Improved traffic operations and safety on the existing STH 50 route between Town Hall Road and USH 12 Potential elimination of through truck traffic on the existing STH 50 route through the City of Lake Geneva central business district Potential to protect the roadway capacity and promote traffic safety through the control and acquisition of access rights, particularly at intersections
Costs Construction Cost (including right-of-way) Right-of-Way Required Environmental Corridors Prime Agricultural Land Impacts Residential and Business Displacement Interchange Spacing	\$13,500,000 29 acres The proposed alignment crosses approximately 500 feet of primary environmental corridor The proposed alignment crosses approximately 800 feet of secondary environmental corridor, of which approximately 325 feet is wetland The proposed alignment crosses an additional 260 feet of wetland Right-of-way acquisition will involve a 2.9-mile-long strip taking of prime agricultural lands which abut the existing right-of-way Three residences and four businesses would be displaced The proposed interchange would be located about 3.0 miles from the USH 12-STH 120 interchange, and 3.3 miles from the USH 12-CTH NN interchange at Elkhorn

Table 8 (continued)

Points of Comparison/Evaluation	Alternative 3 (surface arterial between STH 120 and CTH H at CTH NN)
Forecast Year 2010 Traffic Volumes Benefits Forecast Year 2010 Traffic Diverted from Existing Routes STH 50 USH 12 to STH 120 STH 120 to STH 67 STH 67 to Town Hall Road Reduced Need to Improve Existing Routes STH 50 USH 12 to STH 120 STH 120 to City of Lake Geneva West Corporate Limit Intangible Benefits	9,000 to 12,000 6,000 5,000 4,000 Provision of four traffic lanes through the prohibition of parking, identified in current plan, would provide sufficient capacity to accommodate demand. Even if parking is not removed, the level of congestion is reduced Provision of four traffic lanes necessary through parking prohibition and roadway improvement. If parking cannot be removed and the road widened, the level of congestion is reduced Improved access to the City of Delavan, Lake Lawn Lodge, Geneva Lakes Kennel Club, and Geneva National from the east; elimination of need to go through City of Lake Geneva Improved traffic operations and safety on the existing STH 50 route between Town Hall Road and USH 12 Potential elimination of through truck traffic on the existing STH 50 route through the City of Lake Geneva central business district Potential to protect the roadway capacity and promote traffic safety through the control and acquisition of access rights, particularly at intersections
Costs Construction Cost (including right-of-way) Right-of-Way Required Environmental Corridors Prime Agricultural Land Impacts Residential and Business Displacement	\$16,100,000 60 acres The proposed alignment crosses approximately 2,250 feet of primary environmental corridor The proposed alignment crosses approximately 800 feet of secondary environmental corridor, of which 325 feet is wetland Right-of-way acquisition will involve a 2.9-mile-long strip taking of prime agricultural lands which abut the existing right-of-way Four residences and four businesses would be displaced Crosses Town of Geneva municipal property, taking the garage on the north side of the property, resulting in the loss of the garages on the north property boundary

Source: SEWRPC.

secondary environmental corridor, of which 325 feet are wetlands. The acquisition of the estimated 31 acres of right-of-way necessary for this alternative would include the taking of prime agricultural lands abutting the existing right-of-way over a length of approximately 3.8 miles. The proposed interchange would be located about three miles from the USH 12-STH 120 interchange and about 3.3 miles from the USH 12-CTH NN interchange at Elkhorn. The interchange spacing is adequate with respect to the STH 120 interchange, although it does not meet rural spacing standards with respect to the CTH NN interchange.

In summary, additional capacity is required in the STH 50 corridor from USH 12 to IH 43. All three of the alternatives considered would provide such capacity and may be expected to have similar benefits with respect to traffic impacts. The estimated construction costs of the three alternatives differ, ranging from a low of \$10.3 to a high of \$11.3 million. It is recommended by the Commission staff and the Advisory Committee that Alternative 2 be adopted and implemented. This would entail a new freeway interchange on the USH 12 freeway at Springfield Road; the extension of Springfield Road to Palmer Road initially as a high standard two-traffic-lane rural roadway; and the improvement of Springfield Road west of USH 12, of Palmer Road, and of Town Hall Road, also initially to high standard two-traffic-lane rural roadways. Sufficient right-of-way should be acquired not only to permit improvement of the existing roadway to a high standard two-traffic-lane rural roadways in the near future, but ultimately to provide a divided four-traffic-lane facility by the year 2010. Also, the intersections of Town Hall Road, CTH F, South Shore Drive, and STH 50 should be reconfigured.

Walworth County and the Town of Delavan have reached an agreement with the developer of the property which abuts both sides of STH 50 south of Town Hall Road east of CTH F which provides for the realignment of the segment of CTH F south of STH 50. A new right-angle intersection between STH 50 and a relocated CTH F is to be located approximately 1,100 feet southeast of the existing intersection of CTH F, Town Hall Road, and STH 50. The relocation of CTH F may be expected to improve the traffic safety at the intersection of Town Hall Road and S. Shore Drive with STH 50 because of the

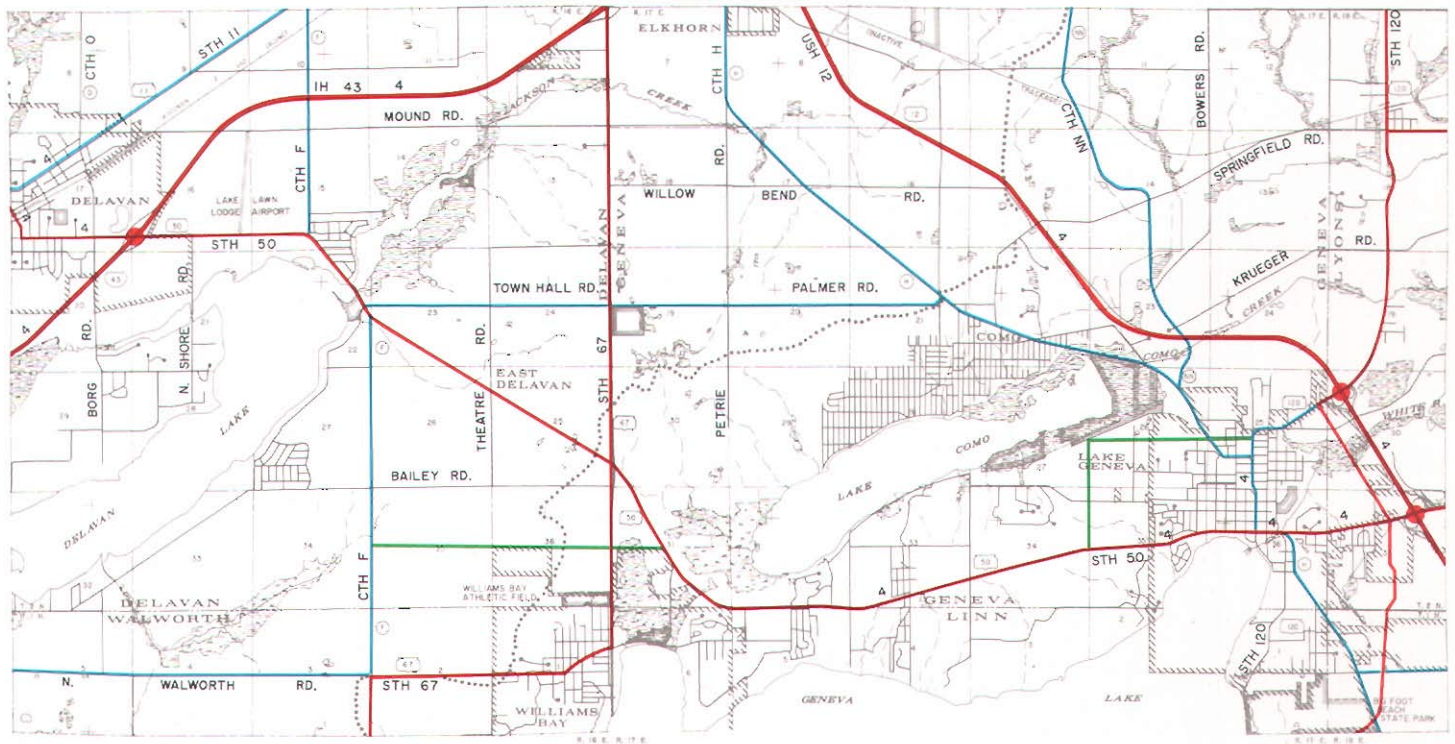
substantially increased distance between these two intersections. The new STH 50 and CTH F intersection would include exclusive left- and right-turn lanes as warranted. Control of access at the intersection should be required to ensure that no driveways are located within the minimum of about 250 feet of the intersection. Further, as the area surrounding the intersection develops and traffic volumes increase, consideration should be given to the installation of traffic signals at this intersection.

The attendant functional changes to the adopted Walworth County jurisdictional highway system plan include the addition of a new interchange on the USH 12 freeway at Springfield Road, the addition of Springfield Road as a four-lane arterial between the USH 12 freeway and Palmer Road, and the improvement of Town Hall Road and Palmer Road between CTH H and STH 50 to four traffic lanes. It is also recommended that the plan be amended to add Springfield Road as a two-traffic-lane arterial between STH 36 and USH 12.

Because the proposed changes to the plan provide an alternative route to existing STH 50 between USH 12 and CTH F, the current and planned jurisdictional classification of the segment of the existing route of STH 50 between USH 12 and CTH F were reviewed. Specifically, the existing route of STH 50 and the proposed alternative route were reviewed with respect to the adopted jurisdictional classification criteria, including traffic volume, trip length, and land use service. It should be noted that, due to the facility spacing criterion for jurisdictional classification, only one of these two facilities can be proposed as a state trunk highway. With respect to traffic volume, it is anticipated that, in the year 2010, traffic volumes on the existing route of STH 50 will still substantially exceed those on the route proposed to provide additional capacity within the corridor, 12,000 to 17,000 vehicles per average weekday on the current route compared to 9,000 to 12,000 on the relief route. Also, the average length of trips using the existing route of STH 50 may be expected to be longer than the average length of trips using the relief route. With respect to land use, the existing route of STH 50 would better serve and connect such special-use recreational areas as Geneva National and the Lake Geneva central business district. Because the existing route of STH 50 is

Map 14

CURRENTLY ADOPTED JURISDICTIONAL HIGHWAY SYSTEM PLAN

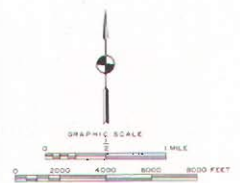


LEGEND

ARTERIAL STREET AND HIGHWAY SYSTEM

JURISDICTIONAL CLASSIFICATION

- STATE TRUNK - FREEWAY
- STATE TRUNK - NONFREEWAY
- COUNTY TRUNK
- LOCAL TRUNK
- FREEWAY - NONFREEWAY INTERCHANGE
- 4 NUMBER OF TRAFFIC LANES (TWO WHERE UNNUMBERED)



Source: SEWRPC.

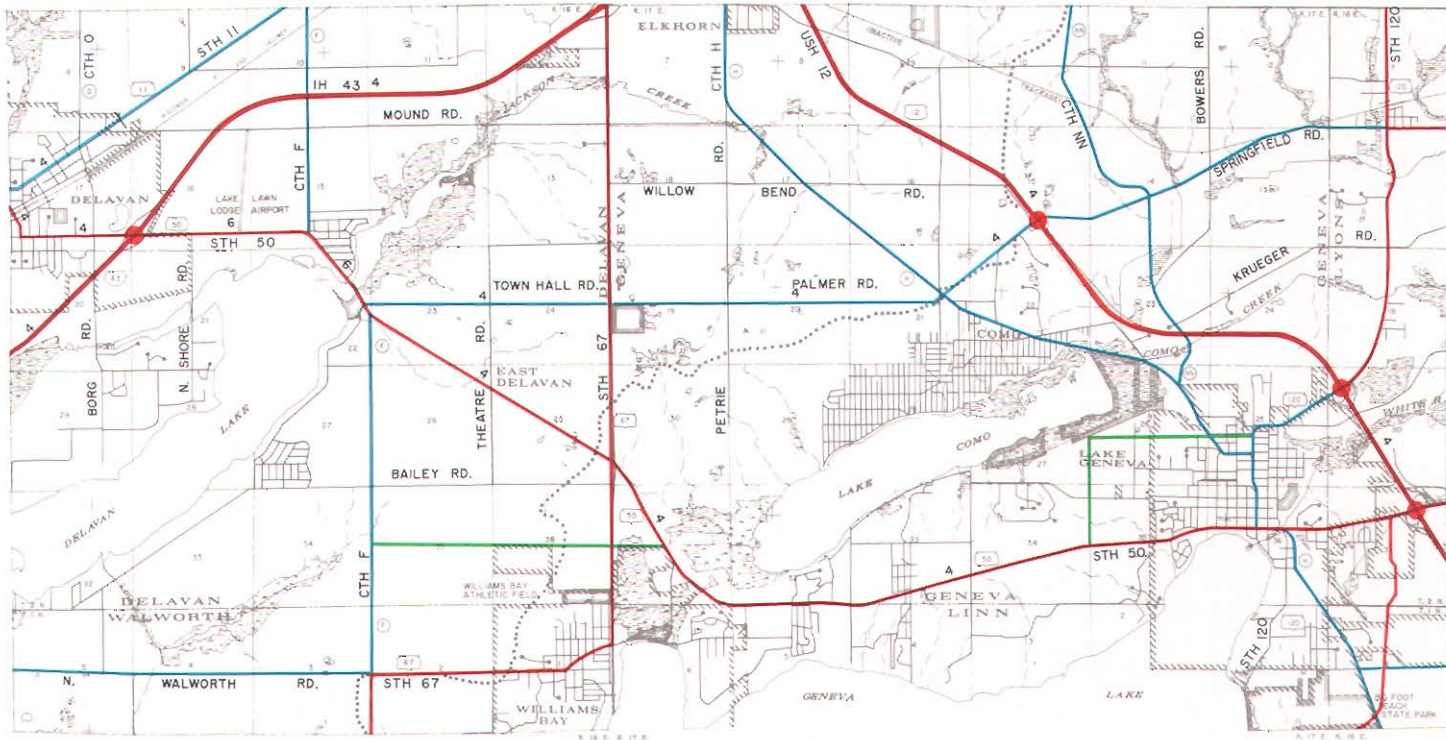
expected to carry higher traffic volumes, trips of substantially the same length, and better serve areas of special recreational use and commercial and service centers, it is recommended by the Commission staff and by the Advisory Committee that the existing route of STH 50 remain a part of the state trunk highway system and that the alternative route be a part of the planned county trunk highway system. The recommendation would require amendment of the adopted plan to add Springfield Road and its extension between CTH H and STH 36 as a county trunk highway.

Although the alternative route to provide additional capacity within the STH 50 corridor, including a proposed interchange between Springfield Road and USH 12, would be under

the jurisdiction of Walworth County, and thus require county funding for implementation, it is reasonable to assume that state and federal funding will be made available to construct the proposed interchange itself. If state and federal funds were available to construct the proposed interchange, the level of funding to be provided by Walworth County to implement the recommended alternative may be expected to be reduced by approximately \$1.5 million.

It is also recommended that the adopted plan for the STH 50 corridor be amended to recommend that the existing STH 50 between IH 43 and Town Hall Road be improved to provide six traffic lanes and that the existing STH 50 between Town Hall Road and Geneva Street at the Village of Williams Bay east corporate limits

RECOMMENDED AMENDED JURISDICTIONAL HIGHWAY SYSTEM PLAN



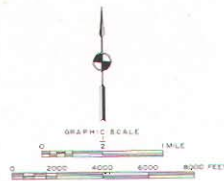
LEGEND

ARTERIAL STREET AND HIGHWAY SYSTEM

JURISDICTIONAL CLASSIFICATION

- STATE TRUNK - FREEWAY
- STATE TRUNK - NONFREEWAY
- COUNTY TRUNK
- LOCAL TRUNK
- FREEWAY - NONFREEWAY INTERCHANGE
- 6 NUMBER OF TRAFFIC LANES
(TWO WHERE UNNUMBERED)

Source: SEWRPC.



be improved to provide four traffic lanes. The recommended improvements on the existing route of STH 50 entail an estimated \$14.6 million of construction, including \$4.6 million in right-of-way costs. Maps 14 and 15 provide a comparison of the current adopted jurisdictional highway system plan for the STH 50 corridor and the plan as recommended to be amended for the STH 50 corridor.

The Completion of the Long-Proposed
USH 12 Freeway between STH 67
North of the City of Elkhorn and the
Northwest Corner of Walworth County

The Jurisdictional Highway System Planning Committee suggested that the need for the long-planned extension of the USH 12 freeway be reexamined and that consideration be given to

possible changes in the alignment of the proposed freeway. The reexamination of the need for the freeway extension was to include a comparison to the relative costs and benefits of providing additional traffic lanes on USH 12 along its existing route.

The existing route of USH 12 between the terminus of the USH 12 freeway and the Walworth County-Rock County line is predominantly developed with a two-traffic-lane rural cross-section, except for a 2.34-mile segment, which is constructed to a two-traffic-lane urban cross-section within the City of Whitewater. Existing 1990 traffic volumes on USH 12 range from 5,800 vehicles per average weekday east of the City of Whitewater to about 10,200 vehicles per average weekday just north of the USH 12

freeway terminus. Forecast year 2010 traffic volumes on existing USH 12 may be expected to range from 9,000 vehicles per average weekday east of the City of Whitewater to 14,000 vehicles per average weekday north of the USH 12 freeway terminus if the long-planned extension of the USH 12 freeway is not constructed. Substantial roadway capacity improvements will be needed to provide relief to the existing USH 12 route if relief is not provided by the completion of the USH 12 freeway. Existing and forecast average weekday traffic volumes both exceed the design capacity of a two-traffic-lane rural cross-section of 7,000 vehicles per day.

The extension of the USH 12 freeway from Elkhorn to an eventual connection through Jefferson and Dane Counties to IH 90 was recommended in the original Walworth County jurisdictional highway system plan adopted in 1973. That extension was originally proposed in the initial regional transportation system plan adopted in 1966 and reaffirmed in the second-generation regional plan adopted in 1978.

The long-planned alignment of the USH 12 freeway is also an officially mapped state trunk highway in Walworth County, as shown on Map 16. This officially mapped alignment includes a southern bypass of the City of Whitewater. The long-planned facility could be constructed initially as a two-lane rural cross-section with two 12-foot-wide traffic lanes and two 10-foot-wide shoulders on 300 feet of right-of-way, permitting the ready future expansion to a divided four-lane freeway by 2010. The construction cost of this initial stage without grade separations at cross streets is \$22.3 million, including \$2.5 million for right-of-way acquisition. About 22,000 vehicles may be expected to use the freeway on an average weekday in the design year 2010. The total cost of constructing the divided four-lane freeway with grade separations would be about \$59.3 million, or an incremental cost of about \$37 million over the cost of right-of-way acquisition and initial construction of the initial two lanes. Construction of a divided four-lane expressway could be another incremental stage in the ultimate development of the USH 12 freeway on new alignment. The expressway stage would have an estimated total cost of \$36.0 million or an incremental cost of \$13.7 million over the cost of right-of-way and initial construction of two lanes on new alignment.

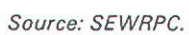
An option under the completion of the USH 12 freeway would be a northerly alignment, instead of the currently proposed southerly alignment, around the City of Whitewater, as shown on Map 16. This option could also provide for initially constructing the USH 12 freeway as a two-lane rural cross-section with two 12-foot-wide traffic lanes and two 10-foot-wide shoulders on 300 feet of right-of-way, permitting ready future expansion to a divided four-lane freeway by the year 2010. The estimated construction cost of the initial phase of this option would be \$23.3 million, including \$2.5 million for right-of-way acquisition.

Another option for the USH 12 freeway extension, which was considered but rejected, is a potential alternative alignment which crosses the Kettle Moraine State Forest along the existing USH 12 alignment, as shown on Map 16. In comparing the long-planned alignment with the potential alternative alignment, it may be concluded that the construction cost of the initial phase of this option would be \$1.7 million more than the long-planned alignment, about an 8 percent increase. The ultimate total cost of developing a four-lane freeway on the alternative alignment would be \$2.1 million more than on the long-planned alignment, about a 3 percent increase.

The disruption that would be attendant to construction on the potential alternative alignment is somewhat less than that of construction on the long-planned alignment. The potential alternative alignment would require acquisition of about 32 acres of primary environmental corridor, as compared to 63 acres on the long-planned alignment; about 22 acres of isolated natural area, as compared to 16 acres on the long-planned alignment; and about 403 acres of prime agricultural land, as compared to 417 acres on the long-planned alignment. The potential alternative alignment would require the acquisition of one more residence, increasing the number from two to three, and would require the acquisition of property used by Thompson's Stables, which may limit the operation of that business. Accordingly, this change in alignment is not recommended.

An alternative to the development of the long-planned USH 12 freeway is the construction of a four-lane surface arterial generally following the

ROADWAY IMPROVEMENT NECESSARY ON EXISTING USH 12 IF USH 12 FREEWAY IS NOT CONSTRUCTED



existing alignment of USH 12 between the current terminus of the USH 12 freeway and the Rock County-Jefferson County-Walworth County lines. This facility would be constructed as a four-lane divided facility with twin 24-foot-wide pavements on 130 feet of right-of-way. A four-lane undivided pavement would be constructed through parts of the City of Whitewater and Abel's Corners, as shown on Map 17. The proposed alternative would be on new alignment at the intersections with CTH A, STH 67, and CTH H. The construction cost of this alternative is estimated at \$31.7 million, including \$7.7 million for right-of-way acquisition. The traffic which may be expected to use this alternative would range from 8,000 vehicles per average weekday east of the City of Whitewater to 13,000 vehicles per average weekday just north of the USH 12 freeway terminus.

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 9 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 40 percent more than the cost of constructing the initial two lanes of a freeway. The potential next stage of improvement on new alignment to a four-lane expressway, however, would entail a total cost of \$36.0 million, or about 14 percent more than improvement on existing alignment. The completion to a freeway on new alignment would entail a total cost approximately 88 percent more than that of improvement on existing alignment.

The disruption that would be attendant to improvement on the existing alignment is somewhat 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 11 acres of primary corridor compared to 63 acres required for the freeway alignment. Improvement of USH 12 on the existing alignment would require acquisition of only 56 acres of prime agricultural land as compared to 417 acres of prime agricultural land required for the freeway. The improvement of USH 12 on existing alignment would require the acquisition of seven residences and two businesses, while the freeway alignment would require the acquisition of two 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 with 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 as well. 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, the number of accidents is 56 percent lower on freeways than on rural four-lane surface arterials. Furthermore, the initial development of the long-planned alignment as a two-lane facility, at an estimated cost of about \$22.3 million, would remove traffic from the existing USH 12 route and, thus, eliminate the need to make substantial improvements on the existing route, at an estimated cost of \$31.7 million. It should be noted that some improvements will be needed on Main Street within the City of Whitewater, even if the initial phase of the freeway is built. These improvements may be expected to cost about \$1.5 million. Based on the foregoing findings, it is recommended by the Commission staff and by the Advisory Committee that the long-planned USH 12 freeway extension be retained in the adopted Walworth County jurisdictional highway system plan. The long-planned USH 12 freeway alignment is recommended between the current USH 12 freeway terminus at STH 67 and the City of Whitewater except for a modest shift to the north in the Town of Whitewater to minimize impacts on the Kettle Moraine State

ROADWAY IMPROVEMENT NECESSARY ON EXISTING USH 12 IF USH 12 FREEWAY IS NOT CONSTRUCTED

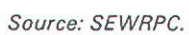


Table 9
EVALUATION OF USH 12 EXTENSIONS

Evaluation Measures	New Alignment Alternative		Existing Alignment Along USH 12 through City of Whitewater
	Long-Planned Alignment Around South Side of City of Whitewater	Potential Alignment Around North Side of City of Whitewater	
Benefits			
Traffic Impacts			
Estimated Forecast Average Daily Traffic Volume on Proposed USH 12 Alignment			
<u>Segments of Route</u>	<u>Forecast Year 2010</u>	<u>Forecast Year 2010</u>	<u>Forecast Year 2010</u>
USH 12 Freeway Terminus to CTH A	22,000	22,000	10,000-13,000
CTH A to CTH P	22,000	22,000	7,000-10,000
CTH P to City of Whitewater Western Corporate Limits	23,500	23,500	9,000-18,000
Estimated Forecast Average Weekday Daily Traffic Volume on Existing USH 12 Facility			
<u>Segments of Route</u>			
USH 12 Freeway Terminus to CTH A	6,000-9,000	6,000-9,000	--
CTH A to CTH P	3,000-6,000	3,000-6,000	--
CTH P to City of Whitewater Western Corporate Limits	5,000-18,000	5,000-18,000	--
Disruption (property taking)^a			
Right-of-Way	17.70-mile-long strip of right-of-way (300 feet wide)	18.09-mile-long strip of right-of-way (300 feet wide)	14.49-mile-long strip of right-of-way (64 feet wide); 3.15-mile-long strip of right-of-way (130 feet wide); 1.25-mile-long strip of right-of-way (seven to 17 feet wide)
Environmental Corridors	9,200-foot-long crossing of primary corridor, of which 2,200 feet consist of wetlands. This includes 7,100 feet in Kettle Moraine State Forest	9,200-foot-long crossing of primary corridor, of which 2,200 feet consist of wetlands. This includes 7,100 feet in Kettle Moraine State Forest	7,500-foot-long crossing (64 feet wide) of primary corridor, of which 4,000 feet consist of wetlands. This includes 1,100 feet in Kettle Moraine State Forest
	200-foot-long crossing of secondary corridor, largely consisting of wetlands; and a 2,300-foot-long crossing of isolated natural areas, of which 1,800 feet consist of wetlands	1,200-foot-long crossing of secondary corridor, largely consisting of wetlands; and a 2,300-foot-long crossing of isolated natural areas, of which 1,800 feet consist of wetlands	500-foot-long crossing (64 feet wide) of secondary corridor, consisting largely of wetlands; and a 700-foot-long crossing of isolated natural areas
Prime Agricultural Land Impacts	11.46 miles of roadway to be located on prime agricultural land, entailing acquisition of 416.7 acres	14.28 miles of roadway to be located on prime agricultural land, entailing acquisition of 519.3 acres	7.2 miles of roadway to be located on prime agricultural land, entailing acquisition of 55.9 acres
Property Acquisition	Two residences, one business (Whitewater Limestone, Inc.)	Two residences, one private airport	Seven residences, two businesses (Hilltop Inn, and Lakeside Pontiac, GMC, and Buick, Inc.), and two agricultural storage buildings

Table 9 (continued)

	Initial Two-Traffic- Lane Arterial without Grade Separations	Ultimate Four-Traffic- Lane Freeway with Grade Separations	Initial Two-Traffic- Lane Arterial without Grade Separations	Ultimate Four-Traffic- Lane Freeway with Grade Separations	Four-Traffic-Lane Arterial without Grade Separations
Costs					
Capital Costs					
Construction	\$19,770,000	\$56,800,000	\$20,800,000	\$57,420,000	\$24,020,000
Right-of-Way	2,520,000	2,520,000	2,540,000	2,540,000	7,660,000
Total	\$22,290,000	\$59,320,000	\$23,340,000	\$59,960,000	\$31,680,000

^aDisruption impacts on either new alternative alignment are the same whether construction is staged to build the two-traffic-lane arterial initially or the ultimate four-traffic-lane freeway is constructed immediately.

Source: SEWRPC.

Forest, in particular on the Department of Natural Resources' fishery located there. Two alternative alignments for the location of the USH 12 freeway around the City of Whitewater remain under consideration, the long-planned southern and potential alternative northern alignment, as presented in a previous section of this report.

Improvement of CTH D and STH 120 in Response to Growth in Average Weekday Traffic and/or in Response to the Traffic Generated by Events at the Alpine Valley Music Theatre in the Town of LaFayette

The Jurisdictional Highway Planning Committee suggested that consideration be given to the addition of travel lanes on CTH D between Bowers Road and STH 120 and on STH 120 between IH 43 and USH 12 in the Towns of East Troy, LaFayette, Spring Prairie, and Springfield to accommodate not only increasing average weekday travel demand, but the significant peaks in travel demand which accompany events held at the Alpine Valley Music Theatre. Currently, STH 120 is constructed as a two-lane rural cross-section between IH 43 and USH 12, with stop sign-controlled intersections at CTH D, STH 11, and STH 36. Between Bowers Road and STH 120, CTH D is constructed as a two-lane rural cross-section and has a separate westbound right-turn lane between the Music Theatre's marquee entrance and Bowers Road.

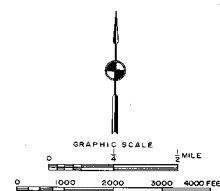
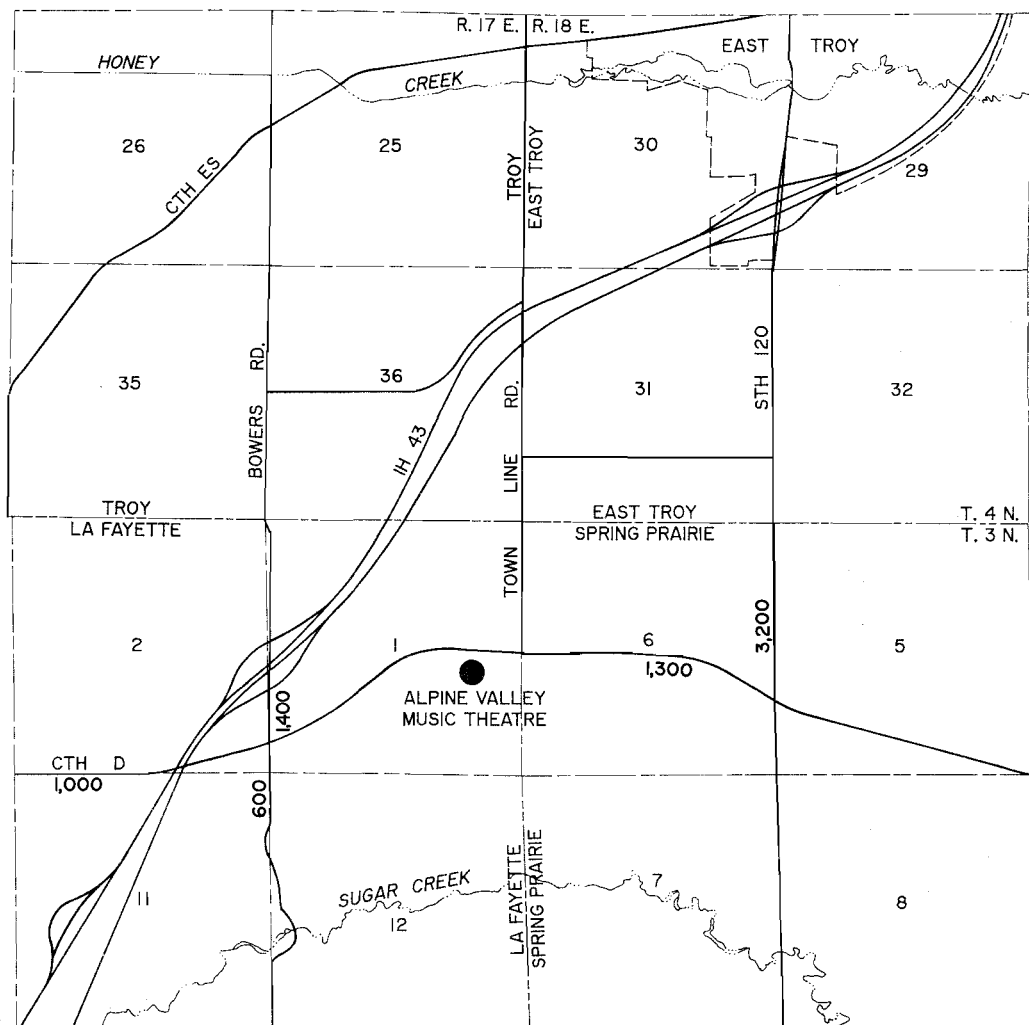
The Planning Commission staff conducted special-purpose traffic counts on Bowers Road, CTH D, and STH 120 in May, June, and July

1990. These traffic counts were conducted on weekdays; on weekends when an event was held at the Music Theatre; and on weekends when no event was held at the Music Theatre. As shown on Map 18 and in Table 10, average weekday traffic volumes were found to range between 3,200 and 6,020 vehicles per average weekday on STH 120 between the IH 43 and USH 12 freeways; to be about 1,300 vehicles per average weekday on CTH D west of STH 120; and to be about 1,400 vehicles per day on Bowers north of CTH D. The historic growth in average weekday traffic volume on STH 120, formerly CTH G, is shown in Table 10.

The forecast year 2010 average weekday traffic volumes may be expected to range between 4,500 and 5,100 vehicles on STH 120 between IH 43 and STH 36 and to approximate 8,500 vehicles per average weekday on STH 120 between STH 36 and the USH 12 freeway. The design capacity of a two-lane rural arterial is about 7,000 vehicles per average weekday. The forecast year 2010 average weekday traffic volumes on STH 120 are thus anticipated to exceed the design capacity between STH 36 and USH 12 by the year 2010, and will require four traffic lanes, at an estimated construction cost of \$4.8 million, including \$400,000 in right-of-way acquisition costs. The two traffic lanes on CTH D and the remainder of STH 120 may be expected to be sufficient to accommodate the current and forecast traffic volumes. It is recommended that the new jurisdictional highway system plan include the improvement of STH 120 between STH 36 and the USH 12 freeway to provide four traffic lanes.

Map 18

**AVERAGE WEEKDAY TRAFFIC VOLUMES AT SELECTED LOCATIONS
IN THE VICINITY OF ALPINE VALLEY MUSIC THEATRE: 1990**



Source: SEWRPC.

The peaks in travel demand accompanying events at the Alpine Valley Music Theatre were also examined. The Alpine Valley Music Theatre operations currently include about 25 events during the months of May through September, with the events usually being scheduled on Friday, Saturday, or Sunday afternoons or evenings. Table 11 shows the attendance and traffic volumes associated with the Alpine Valley Music Theatre through mid-August of 1990. Map 19 shows the expected traffic generation for various attendance sizes based on counts taken by the Commission. The map shows that, for a concert with an attendance of 40,000 persons,

about 11,500 vehicles may be expected to enter and leave the Theatre. Table 12 shows the hourly distribution of vehicles entering and exiting various attendance sizes of concerts. As shown in Table 12, a concert with an attendance of 40,000 persons was found to have 24 percent of the total associated vehicle traffic entering in the peak hour and 32 percent exiting in the peak hour.

The driveways currently used to access the Alpine Valley Music Theatre are located on CTH D between Bowers Road and STH 120. Figure 4 shows the site layout of the Alpine Valley Music Theatre and adjoining facilities. In

Table 10

**AVERAGE WEEKDAY TRAFFIC VOLUMES ON STH 120 IN
THE TOWNS OF EAST TROY, SPRING PRAIRIE, AND LYONS**

Location	1973	1975	1978	1981	1984	1987	1990	Total Percent Increase 1973-1990
STH 120								
North of CTH D	2,700	2,480	--	--	2,740	3,220	3,200	18.5
North of STH 11	2,300	1,940	2,370	2,170	2,520	2,520	--	9.6 ^a
South of STH 11	1,660	--	--	--	2,260	2,500	--	50.6 ^a
North of STH 36	1,500	1,550	--	--	--	2,930	3,900	160.0
South of STH 36	3,650	3,770	4,240	4,600	4,610	4,830	6,020	64.9

^aTotal percentage increase, 1973 to 1987.

Source: Wisconsin Department of Transportation and SEWRPC.

Table 11

**ATTENDANCE AND TRAFFIC VOLUMES ASSOCIATED WITH
ALPINE VALLEY MUSIC THEATRE: MAY THROUGH MID-AUGUST 1990**

Date	Time	Event	Attendance (number of persons)	Estimated Vehicle Traffic Volume	Estimated Vehicle Occupancy Rate
Saturday, May 26	3:00 p.m.	Whitesnake: World Series of Rock	20,000	-- ^a	-- ^a
Sunday, May 27	3:00 p.m.	Whitesnake: World Series of Rock	14,000	-- ^a	-- ^a
Saturday, June 2	8:00 p.m.	Steve Miller and Lou Gramm	14,700	5,700	2.6
Saturday, June 9	7:00 p.m.	Bob Dylan and Tracy Chapman	6,600	4,400	1.5
Saturday, June 16	8:00 p.m.	Rush: Presto Tour 1990	30,000	9,500	3.2
Sunday, June 17	8:00 p.m.	Rush: Presto Tour 1990	15,000	5,900	2.5
Sunday, June 24	8:00 p.m.	Heart: Brigade World Tour 1990	14,000	4,800	2.9
Saturday, June 30	7:00 p.m.	New Kids on the Block	40,000	-- ^a	-- ^a
Sunday, July 1	7:00 p.m.	New Kids on the Block	33,000	-- ^a	-- ^a
Saturday, July 7	3:00 p.m.	Motley Crue	27,000	-- ^a	-- ^a
Sunday, July 8	3:00 p.m.	Motley Crue	17,000	-- ^a	-- ^a
Saturday, July 21	8:00 p.m.	Aerosmith	40,000	11,500	3.5
Friday, July 27	8:00 p.m.	Hank Williams, Jr.	8,400	-- ^a	-- ^a
Saturday, July 28	8:00 p.m.	Robert Plant	36,000	-- ^a	-- ^a
Saturday, August 11	8:00 p.m.	Billy Joel	40,000	-- ^a	-- ^a
Sunday, August 12	4:00 p.m.	Jimmy Buffet	14,000	-- ^a	-- ^a
Average to Date	--	--	23,100 ^b	7,000	2.9

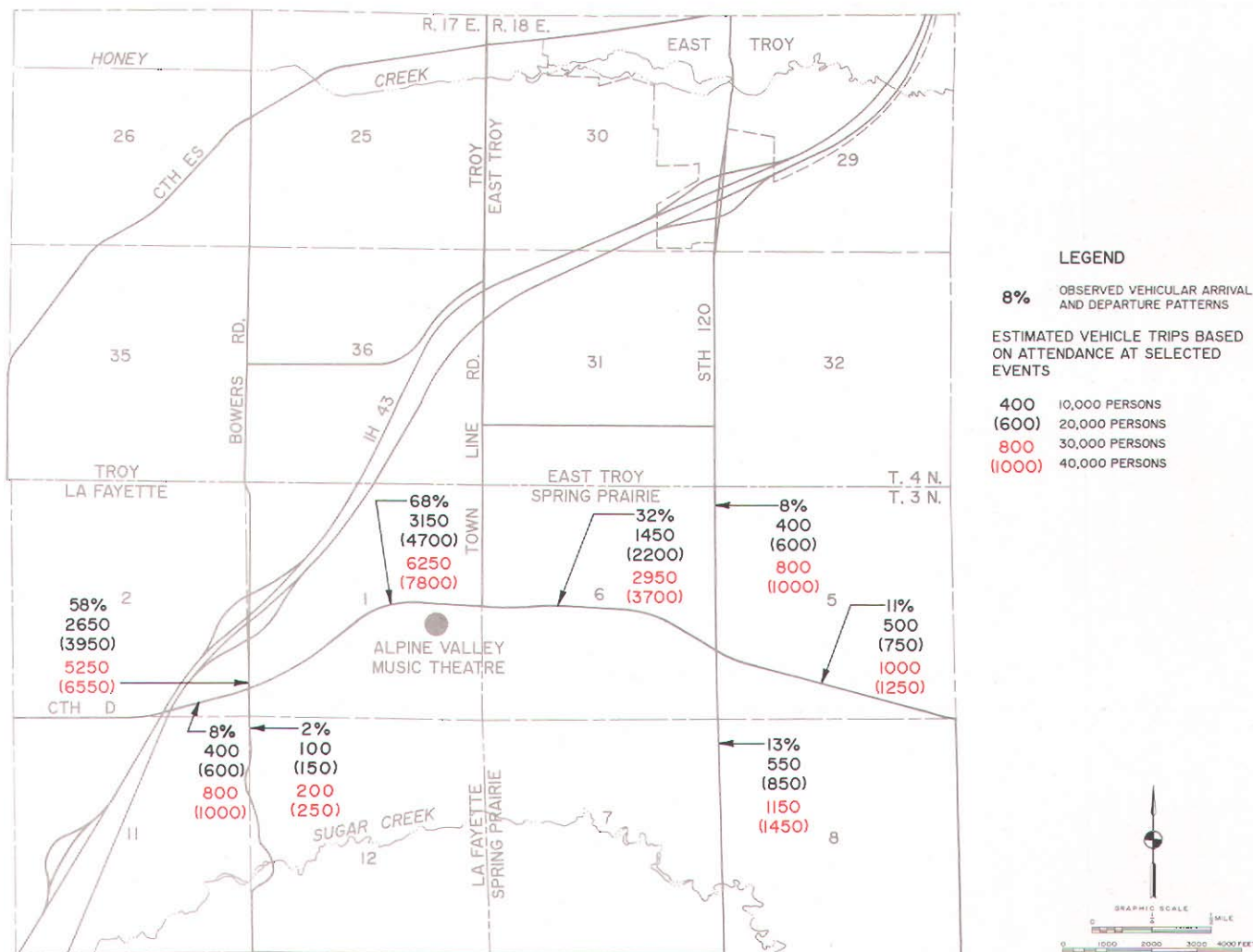
^aTraffic counts not conducted during this event.

^bTotal season attendance during 1989 was 516,377 persons for 25 events, or about 20,700 persons per event.

Source: Walworth County Sheriff's Department, the University of Wisconsin-Milwaukee, and SEWRPC.

Map 19

**OBSERVED ALPINE VALLEY MUSIC THEATRE TRAFFIC PATTERNS AND
ESTIMATED TRAFFIC VOLUMES FOR SELECTED LEVELS OF ATTENDANCE**



Source: SEWRPC.

1990, Alpine Valley Music Theatre had an estimated total parking capacity of about 12,000 vehicles. These parking spaces were distributed among two main parking lots, the west main lot and the east main lot, and three overflow parking lots, the west overflow lot, the airstrip lot, and the golf lot. The golf lot has its own separate entrance, while all the other lots have access from the marquee entrance. The golf lot is used only when concert attendance at events exceeds 30,000 persons. Buses and limousines providing service to the concerts park in the hotel-resort parking lot and enter this lot opposite Town Line Road. The Alpine Valley Music

Theatre currently has a policy of checking all entering vehicles to ensure that vehicle occupants have tickets; if tickets are still available, tickets are also sold at this time to the vehicle occupants. This policy attempts to reduce the number of persons who remain in the parking lots during the events, creating a safety and space problem there. The Commission staff in 1990 observed queues extending from the entrances of the Music Theatre onto CTH D, the IH 43 freeway, and STH 120 for several hours before well attended concerts at the Music Theatre. Table 13 shows several potential improvements which were considered to accommodate the peak

Table 12

PERCENT BY HOUR OF TRAFFIC ENTERING AND EXITING THE ALPINE VALLEY MUSIC THEATRE

	Time	Attendance						
		Fewer than 20,000				Fewer than 20,000 Average	30,000	40,000
		1990 Date					1990 Date	
		June 17	June 24	June 2	June 9		June 16	July 21
Entering	2:00-3:00 p.m.	0	0	0	0	0	4	0
	3:00-4:00	8	6	6	7	7	8	7
	4:00-5:00	11	6	11	10	9	12	12
	5:00-6:00	18	14	12	16	15	17	18
	6:00-7:00	25	26	25	28	26	25	24
	7:00-8:00	26	32	30	23	28	24	21
	8:00-9:00	10	14	14	12	13	9	16
	9:00-9:30	2	2	2	4	3	1	2
Total	--	100	100	100	100	100	100	100
Existing	9:30-10 p.m.	2	3	2	4	3	1	2
	10:00-11:00	11	26	10	9	14	6	10
	11:00-12:00 a.m.	48	61	44	25	45	34	32
	1:00-2:00	36	8	39	57	35	27	32
	2:00-3:00	2	1	3	2	2	26	21
	3:00-4:00	1	1	1	2	1	5	2
	4:00-5:00	0	0	1	1	1	1	1
Total	--	100	100	100	100	100	100	100

Source: SEWRPC.

traffic demand attendant to events at the Music Theatre. All the improvements considered would continue to require the assistance of police or other traffic control personnel.

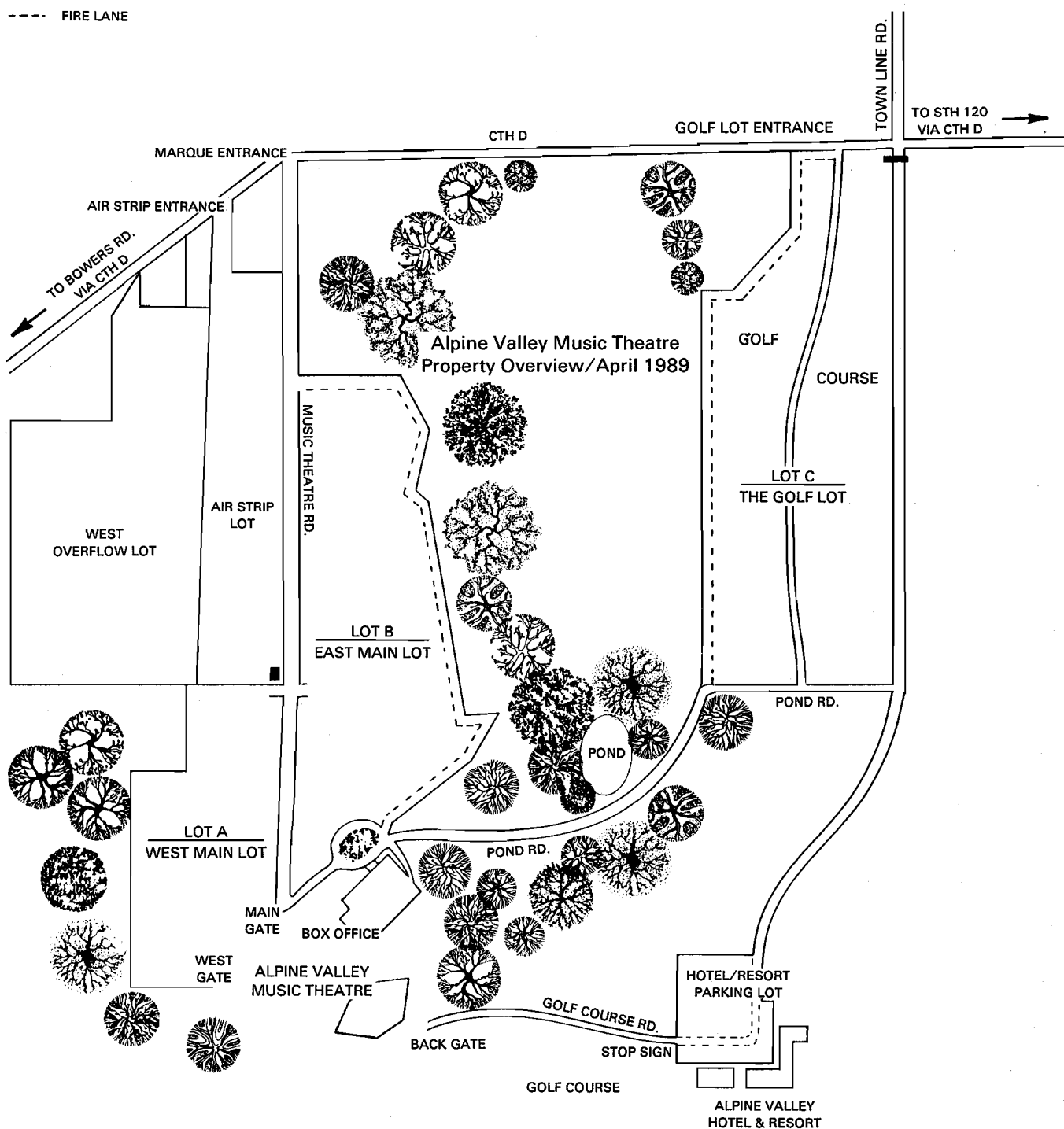
The first improvement that should be made may be expected to improve traffic conditions significantly at the entrance to the Alpine Valley Music Theatre during an event would concern the parking lot operation. Currently, the major delay for vehicles entering an event at the Alpine Valley Music Theatre occurs at the ticket search station located inside the Music Theatre parking lot. The capacity to conduct ticket searches should be increased by providing multiple stations, much like those of a toll plaza on a toll road. Also, an additional entrance-exit roadway should be provided at the airstrip

access. The advantage of this alternative would be a dramatic reduction in the queues currently caused by the capacity constraint of the ticket search. It is recommended by the Commission staff and by the Advisory Committee that expansion of the ticket search station and the additional entrance-exit be implemented as soon as possible.

Once the capacity constraint in the parking lots is removed, additional measures to increase the capacity of the arterial street system into and out of the Alpine Valley Music Theatre may be considered. The second potential improvement that would significantly enhance exiting conditions would entail the redelineation, or restriping, of traffic lanes across the Bowers Road bridge over IH 43 to provide two traffic lanes in the northbound direction. In addition the south-

Figure 4

ALPINE VALLEY MUSIC THEATRE ACCESS AND PARKING: 1990



Source: SEWRPC.

Table 13

**PERCENT OF CONCERT TRAFFIC VOLUME POTENTIALLY ENTERING THE ALPINE VALLEY
MUSIC THEATRE IN PEAK HOURS OF DEMAND FOR 40,000-PERSON CONCERT**

Implementation Sequence	Potential Improvement	West Approach ^a				East Approach ^a				Estimated Cost
		Percent of Vehicles Approaching from the West (7,800 vehicles) Which May Be Accommodated in an Hour		Location of Capacity Constraint		Percent of Vehicles Approaching from the East (3,700 vehicles) Which May Be Accommodated in an Hour		Location of Capacity Constraint		
		Enter	Exit	Enter	Exit	Enter	Exit	Enter	Exit	
Existing	Do nothing	22	29	Parking lot ticket search location	Left turn from north-bound Bowers Road to southbound IH 43 on-ramp	24	32	Parking lot ticket search location	Intersection of CTH D and STH 120	\$ - -
1	Improving parking lot operations (ticket search, and additional access point)	35	29	Left turn from south-bound Bowers Road to CTH D; north-bound off-ramp at Bowers Road	Left turn from north-bound Bowers Road to southbound IH 43 on-ramp	36	32	Intersection of CTH D and STH 120	Intersection of CTH D and STH 120	\$ - - ^b
2	Paving CTH D shoulder on south side to provide four traffic lanes west of marquee entrance and three traffic lanes east of marquee entrance; widening north, south, and east approaches at intersection of STH 120 and CTH D	35	29	Northbound off-ramp at Bowers Road	Right turn from westbound CTH D to Bowers Road	76	67	Intersection of CTH D and STH 120	Intersection of CTH D and STH 120	\$ 400,000
3	Restriping to provide two traffic lanes northbound on Bowers Road on bridge over IH 43; widening south-bound on-ramp to IH 43; providing auxiliary lane on freeway	35	38	Northbound off-ramp at Bowers Road	Right turn from westbound CTH D to Bowers Road	76	67	Intersection of CTH D and STH 120	Intersection of CTH D and STH 120	\$ 400,000
4	Constructing interchange ramps at Town Line Road-IH 43 overpass, and operating Town Line Road as a one-way facility with two lanes south-bound prior to concerts and two lanes northbound after concerts	69	61	Northbound off-ramp at Bowers Road	Right turn from westbound CTH D to Bowers Road	76	67	Intersection of CTH D and STH 120	Intersection of CTH D and STH 120	\$2,100,000

^aWhen concert attendance reaches capacity, 40,000 persons, approximately 11,500 vehicles can be expected. Based on traffic count data collected by the Commission staff, approximately 7,800 vehicles approach from the west, and approximately 3,700 vehicles approach from the east.

^bThere is no cost associated with this action; operating costs may escalate to provide the additional ticket search personnel recommended by the staff.

Source: SEWRPC.

bound on-ramp at Bowers Road would be widened to accommodate two traffic lanes onto the freeway, with an auxiliary lane 2,500 feet in length provided on the freeway. Figure 5 shows the potential improvement, which would remove the existing capacity constraint on exiting traffic at the intersection of the IH 43 southbound ramp with Bowers Road. The construction cost of this potential improvement is estimated at \$400,000. It is recommended that this improvement also be implemented.

The third potential improvement considered to accommodate the peak traffic demand at an event at the Music Theatre is the paving of the shoulder on the south side of CTH D between Bowers Road and the existing right-turn lane on the south side of CTH D at STH 120. In addition, the shoulders would be paved on the north, east, and south approaches to the intersection of STH 120 and CTH D for a distance of 1,200 feet from the intersection to accommodate additional lanes of traffic during an event at the Music Theatre. As shown on Figure 6, the advantage of this alternative with respect to entering traffic is the provision of three traffic lanes inbound on CTH D west of the marquee entrance and two lanes inbound on CTH D east of Town Line Road. One of these three inbound lanes would use the new airstrip driveway. As shown in Figure 7, this would also provide three traffic lanes for exiting traffic outbound on CTH D west of the marquee entrance and two traffic lanes outbound on CTH D east of Town Line Road. In addition, this improvement would allow one lane of traffic to remain open for local through traffic on CTH D, even during the entering and exiting times of an event at the Alpine Valley Music Theatre. The cost of this alternative is estimated at about \$400,000. It is recommended that this improvement be implemented.

A fourth potential improvement considered was the addition of a new interchange on IH 43 at Town Line Road, as shown on Map 20. This alternative would provide additional roadway capacity for vehicles entering or exiting an event and additional queueing capacity on Town Line Road between the freeway and CTH D.

The Federal Highway Administration has adopted policy guidelines for use in the consideration of the addition of new interchanges on the interstate system. The documentation sup-

porting this proposed additional interchange must include information on the purpose for the new interchange; a description of the existing and proposed access, including alternatives that have been considered; the distances to, and size of, communities and activities directly served; and, finally, the findings of the traffic and operational analyses for existing and proposed conditions with respect to the freeway and the crossroad, to assure the ability to effectively collect and distribute traffic from the new interchange. Accordingly, the staff analyses and evaluations of the potential interchange address these issues. It may be noted that provision of an interchange at Town Line Road would result in an interchange with a facility which is neither currently, nor recommended in the presently adopted county plan to be, an arterial. Thus, the current plan would have to be further amended to include a new surface arterial connection between the proposed interchange and the existing surface arterial network.

The primary purpose of the proposed interchange is clear, namely to provide improved access to the Alpine Valley Music Theatre. As shown in Table 13, the provision of a new interchange at Town Line Road would increase the percent of the total traffic demand able to enter or exit Alpine Valley Music Theatre during peak traffic periods.

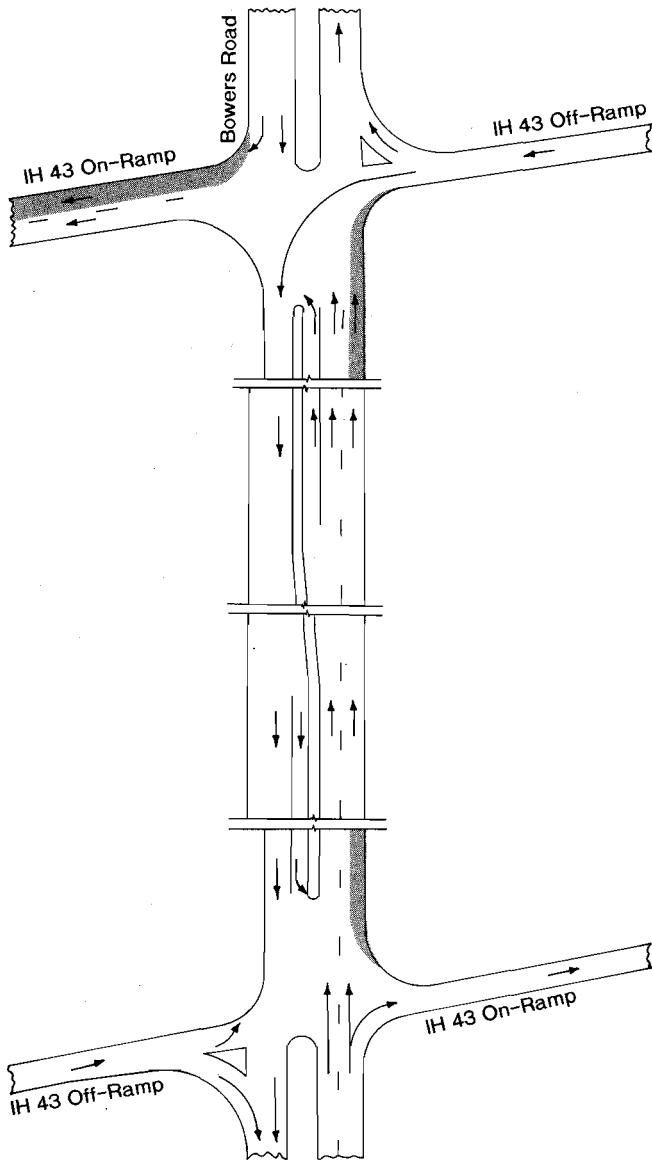
The provision of the proposed interchange as a diamond interchange with off-ramps in the southwest and northeast quadrants and on-ramps in the southeast and northwest quadrants would minimize disruption and costs. The ramps would require acquisition of 12 acres of prime agricultural land. It is not anticipated that any residential or commercial properties would be displaced as a result of the provision of a diamond interchange at this location. The on-ramp in the northwest quadrant would require the relocation of Friemoth Road. The construction cost of providing the new interchange and the surface arterial connection between the new interchange and CTH D is estimated at \$2.1 million, including \$160,000 for right-of-way acquisition.

The Federal Highway Administration standards for minimum freeway interchange spacing are one mile in urban areas and five to six miles in rural areas. The proposed interchange would be

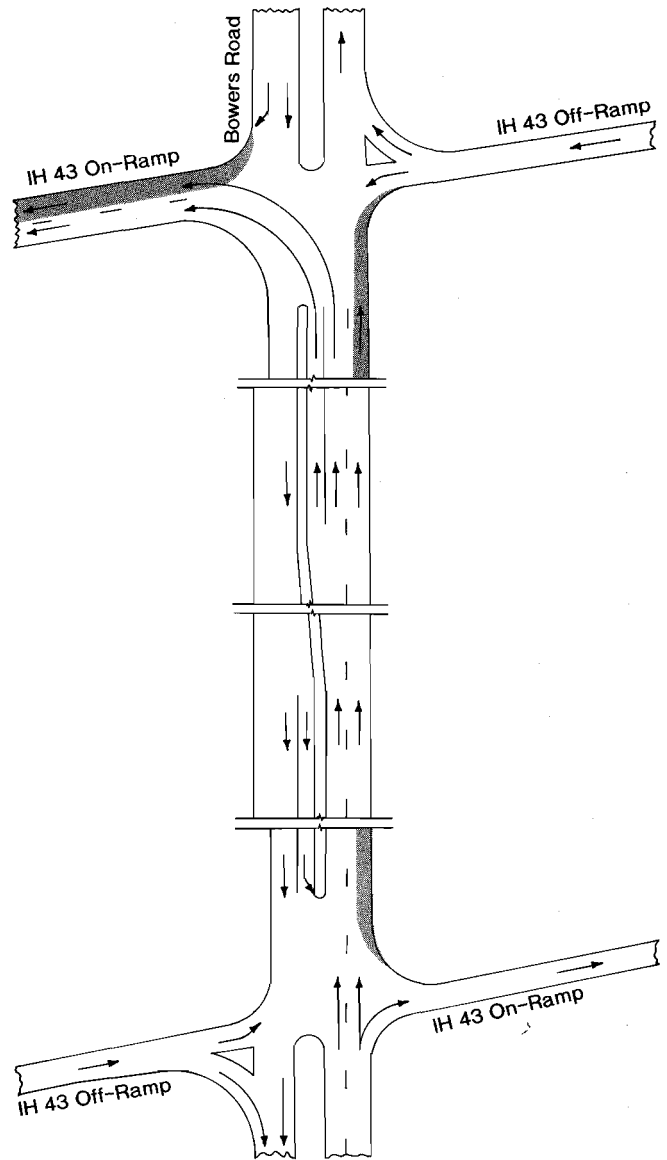
Figure 5

POTENTIAL ADDITIONAL TRAFFIC LANES ON BOWERS ROAD AND THE IH 43 SOUTHBOUND ON-RAMP FOR EXITING EVENTS AT ALPINE VALLEY MUSIC THEATRE: 1990

ENTERING TRAFFIC LANE CONFIGURATION



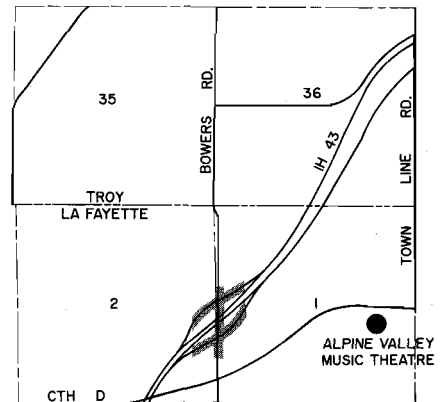
EXITING TRAFFIC LANE CONFIGURATION



LEGEND

- ← TRAFFIC LANE
- PROPOSED WIDENING

LOCATION



Source: SEWRPC.

Figure 6

**POTENTIAL ADDITIONAL TRAFFIC LANES ON CTH D AND STH 120
FOR ENTERING EVENTS AT ALPINE VALLEY MUSIC THEATRE: 1990**

ENTERING TRAFFIC LANE CONFIGURATION

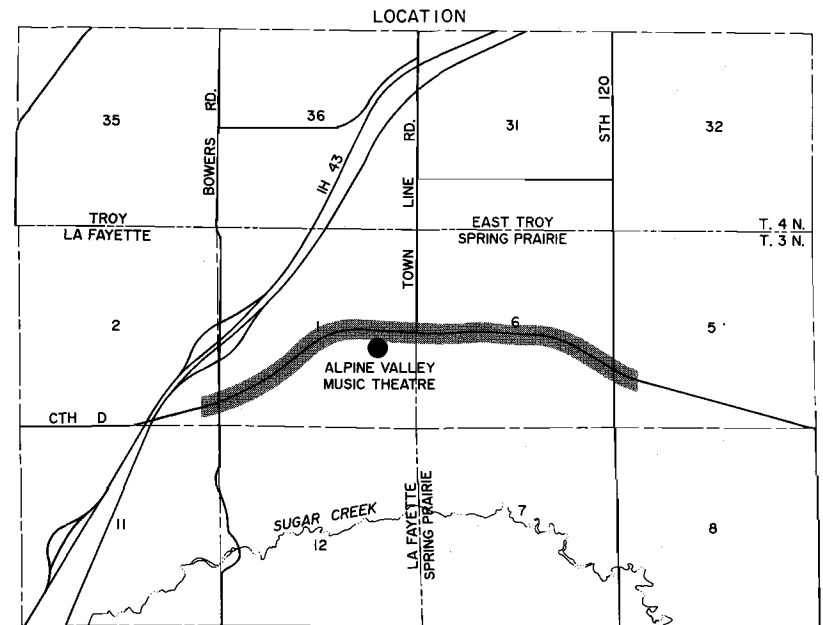
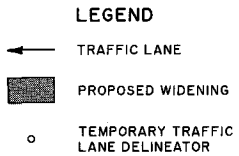
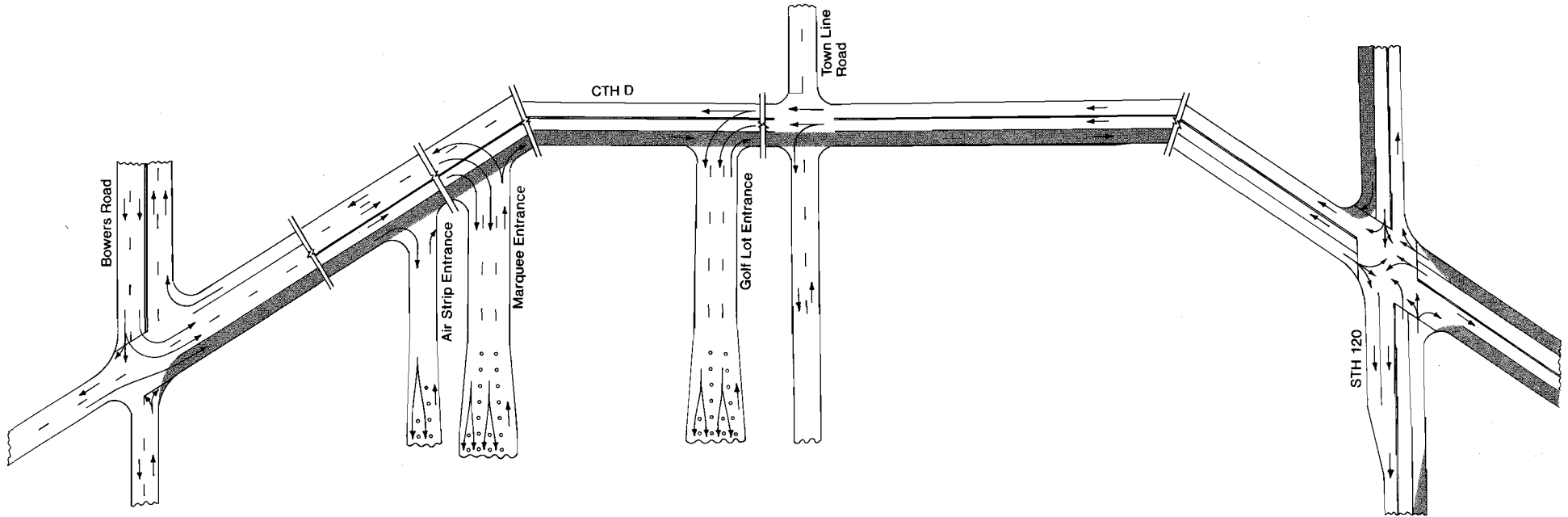
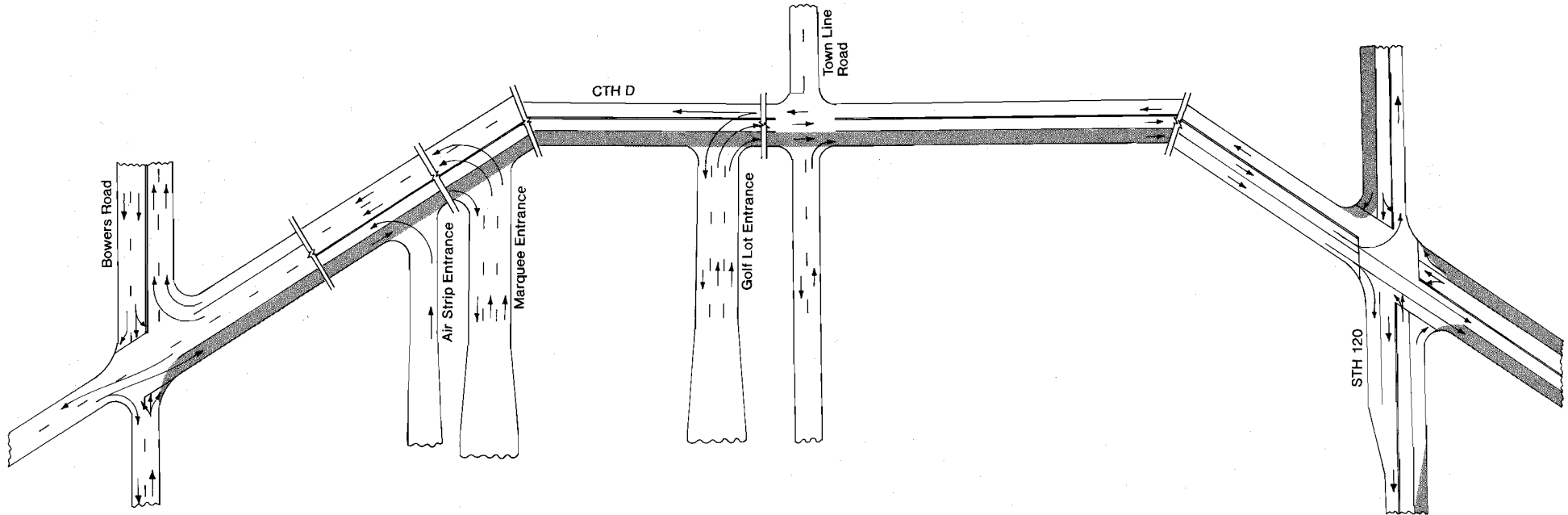


Figure 7

POTENTIAL ADDITIONAL TRAFFIC LANES ON CTH D FOR
EXITING EVENTS AT ALPINE VALLEY MUSIC THEATRE: 1990

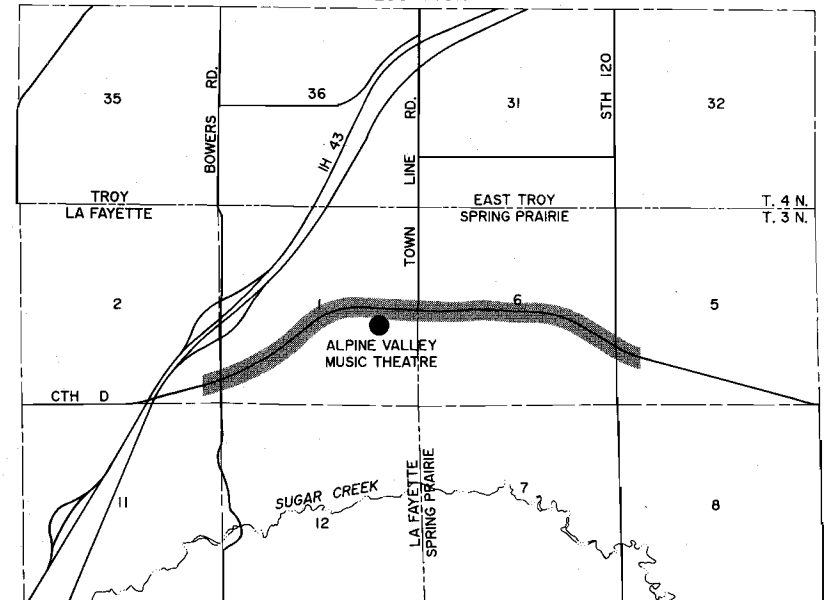
EXITING TRAFFIC LANE CONFIGURATION



LEGEND

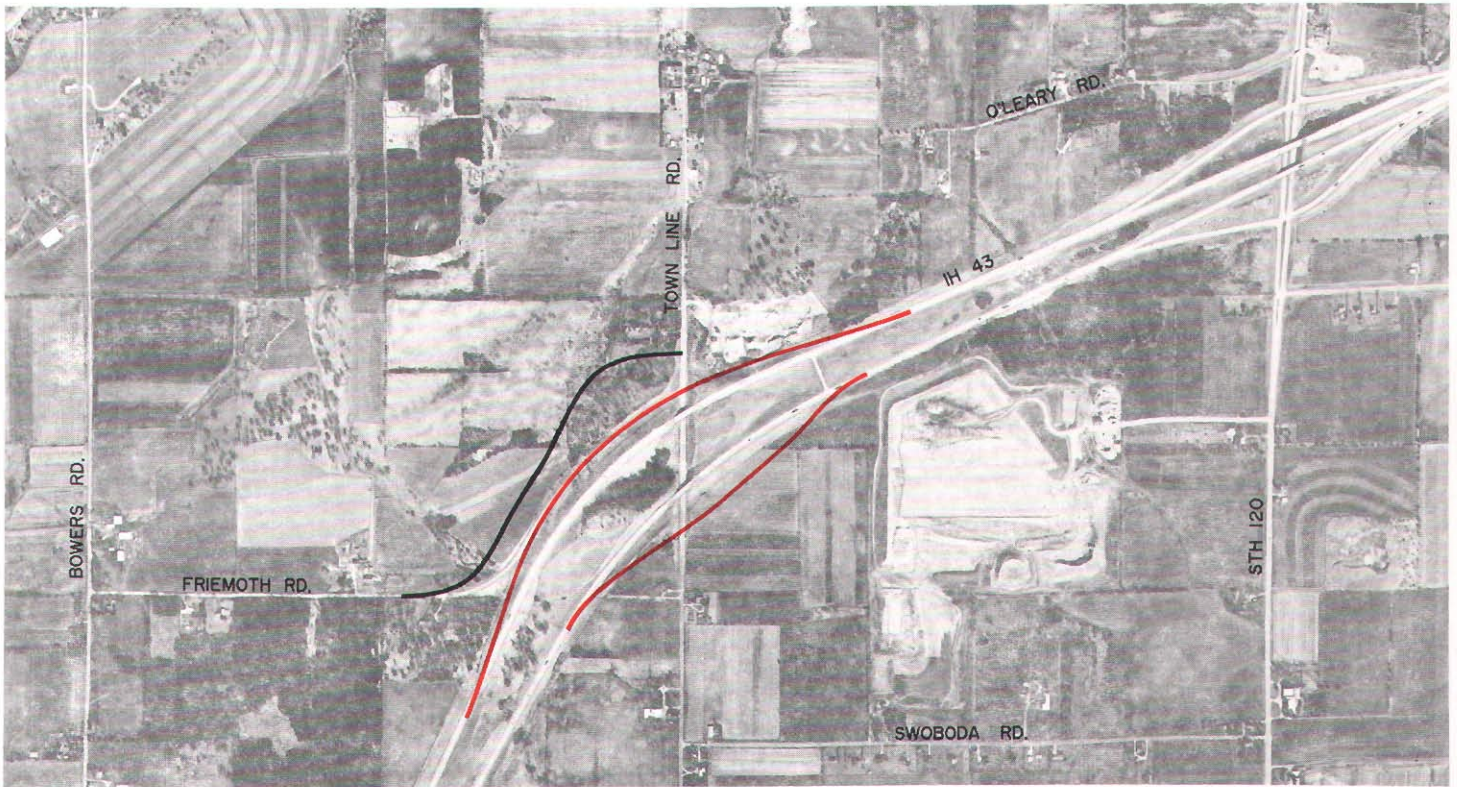
- ↑ TRAFFIC LANE
- PROPOSED WIDENING

LOCATION



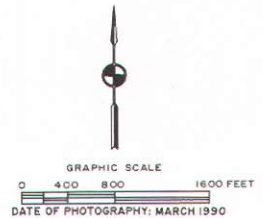
Map 20

POTENTIAL NEW INTERCHANGE AT TOWN LINE ROAD IN THE TOWNS OF TROY AND EAST TROY



LEGEND

- POTENTIAL NEW INTERCHANGE RAMPS
- EXISTING STREET RELOCATED



Source: SEWRPC.

located only approximately 0.4 mile south of the IH 43 interchange with STH 120, substantially less than the desired interchange spacing in rural areas. Further, the new interchange would be located only approximately 1.0 mile north of the IH 43 interchange with Bowers Road, also substantially less than the desired interchange spacing in rural areas.

The capacity of Town Line Road is about 7,000 vehicles per average weekday. That capacity is expected to be adequate for both the existing and forecast year 2010 average weekday traffic volumes. Average weekday traffic volumes on IH 43 are expected to be well below the design capacity of 51,500 vehicles per average weekday

in the year 2010. Thus, it may be concluded that there would be sufficient capacity available to meet traffic demand in the year 2010 at the proposed interchange. Indeed, because there is anticipated to be a substantial surplus capacity, no operational problems would be expected if the proposed interchange were constructed. It should be noted, however, that the proposed interchange is not necessary to alleviate any existing or future average weekday traffic problems at the Bowers Road or STH 120 interchanges. The potential interchange would only alleviate the peaks in traffic demand attendant to events at the Alpine Valley Music Theatre. An interchange on IH 43 at Town Line Road may be expected to have negative impacts on residents

of Town Line Road between CTH D and IH 43, including noise and impaired access to and egress from their homes during concert events. In order to gain the full benefit of an interchange at this location, it would be necessary to limit both lanes to a single direction of travel, that is, Town Line Road would have to be operated as a one-way facility during the hours immediately preceding and following a concert.

As shown in Table 13, the improvements described, not including the proposed interchange, would be able to increase the capacity into and out of the Music Theatre to about 50 percent of the total demand in the peak hour from the existing capacity of about 25 percent of total peak-hour demand. The proposed interchange could further increase the capacity into and out of the Theatre to about 67 percent of the total demand in the peak hour.

Because the proposed interchange would result in an undesirable interchange spacing on IH 43 and would serve only to facilitate the movement of traffic into and out of the Alpine Valley Music Theatre, because the interchange is not necessary to accommodate any existing or future problems under average weekday traffic conditions, and because the interchange and associated improvements to the crossroad would cost \$2 million, the construction of this interchange is not recommended by the Commission staff and by the Advisory Committee.

Because the improvements recommended to address the traffic generated by events held at the Alpine Valley Music Theatre are not necessary to address any traffic conditions other than those associated with those events, and because Alpine Valley Music Theatre may be expected to derive substantial benefit from an improvement in the traffic conditions on the facilities in the immediate area of the Music Theatre, the improvements should be funded by the Alpine Valley Music Theatre.

Construction of a New Interchange on IH 43 at CTH O in the Town of Delavan

The City of Delavan requested that consideration be given to the construction of a new interchange on IH 43 at CTH O to accommodate existing and potential business development. City officials and residents of the City of Delavan have expressed concerns that numerous trucks are traveling through the City of Delavan between CTH O and the city industrial park

located in the northeast corner of the City. In addition, numerous trucks serving Dean Foods, located on Geneva Street, travel between Delavan, Wisconsin, and Chemung, Illinois. The trucks travel through the central business district of the City on STH 11, STH 50, and CTH O, which provides access to USH 14. In addition, city officials perceive that traffic between USH 14 and the new Geneva Lakes Kennel Club is traveling through the City on CTH O. City officials have also expressed concern that fire and rescue vehicles from the Town of Delavan lose valuable time responding to calls because they must travel through the City of Delavan.

As already noted, the Federal Highway Administration has adopted policy guidelines for use in considering the addition of new interchanges to the interstate freeway system. The staff analyses and evaluations of the requested interchange address these guidelines.

The purpose of the new interchange at CTH O as envisioned by City of Delavan officials is primarily to allow IH 43 to function as a south bypass of the City of Delavan. If an interchange were provided, traffic on CTH O from the south of the City could access the City's industrial park, Geneva Lakes Kennel Club, the commercial district located between STH 50 and the industrial park adjacent to the northwest quadrant of the IH 43 and STH 50 intersection, and the Dean Foods trucking terminal without traveling through the City and particularly the central business district of the City. The municipal industrial park currently accommodates approximately 1,900 employees and is planned ultimately to accommodate an additional 2,500 employees on a total of 99 acres. The average weekday traffic volumes to and from the industrial park expected to be served by the proposed interchange is estimated at about 500 trips per average weekday at present and at about 1,000 trips per average weekday by the year 2010. It should also be noted that the currently adopted sanitary sewer service area plan for the City of Delavan envisions significant urbanization in the Towns of Delavan and Walworth south of IH 43.

Access to the industrial park, the commercial district, Dean Foods, and the Geneva Lakes Kennel Club from CTH O is currently provided through the City's central business district via

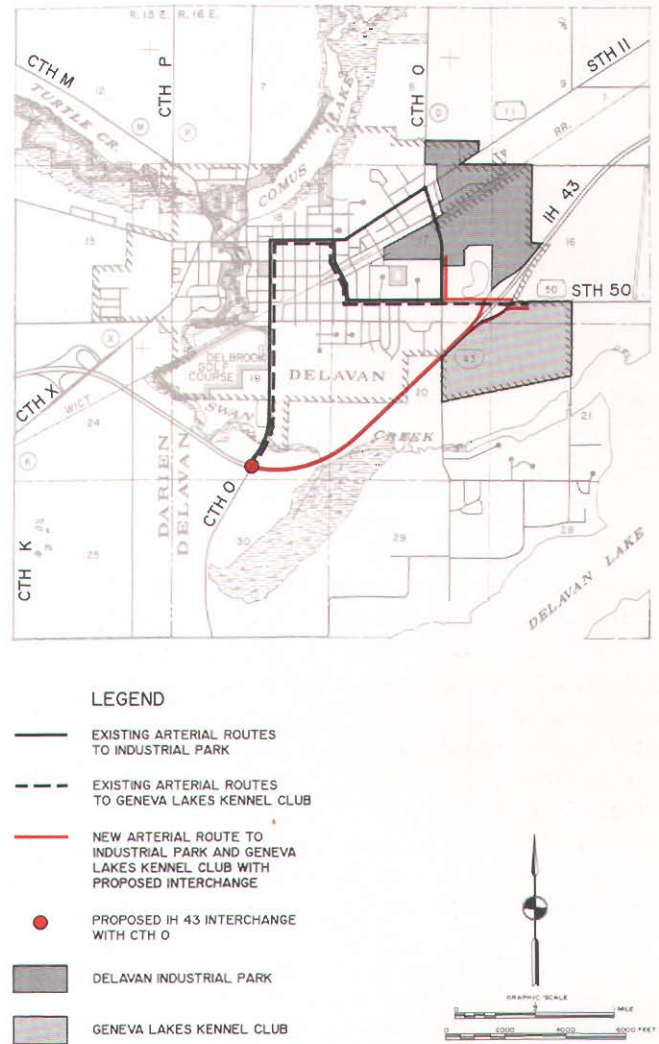
STH 11 and STH 50. Both STH 11 and STH 50 are recommended to remain state trunk highways under the adopted county jurisdictional highway system plan and, as such, their principal function should be to provide for the movement of through traffic. However, the routing which these highways provide is indirect and encourages through traffic to use local streets. Moreover, the traffic volumes which these routes carry may approach design capacity by the year 2010.

As shown on Map 21, the provision of a new interchange at CTH O would reduce the travel distance from CTH O at the IH 43 freeway to the City's industrial park from between 2.9 and 3.3 miles, all on standard surface arterials, to about 2.9 miles, 1.5 miles on the freeway and 1.4 miles on standard arterials and ramps. The travel distance from CTH O at IH 43 to Geneva Lakes Kennel Club would be reduced from 2.7 miles, all on standard arterials, to about 2.2 miles, 1.5 miles on the freeway and 0.7 mile on standard arterials and ramps. The travel distance from CTH O at IH 43 to Dean Foods on Geneva Street would, however, be increased, from 2.6 miles, all on standard arterials, to about 3.0 miles, 1.5 miles on the freeway and 1.5 miles on standard arterials and ramps.

The average weekday traffic volume on STH 11 between 2nd Street and 7th Street was about 10,600 vehicles in 1990; and existing average weekday traffic volume on STH 50 between Walworth Street and IH 43 ranged from about 6,900 vehicles to 12,300 vehicles. The adopted Walworth County jurisdictional highway system plan recommends that four traffic lanes be provided on STH 11 and STH 50 within the City of Delavan. Recently, STH 50 has been widened in the City of Delavan to provide four traffic lanes increasing the capacity to 17,000 vehicles per average weekday. As a result, STH 50 within the City of Delavan has sufficient design capacity to accommodate existing traffic volumes. However, by the plan design year 2010, traffic volumes on this facility may be expected to range from approximately 10,000 vehicles per average weekday at Walworth Street to approximately 19,000 vehicles per average weekday at IH 43 thus exceeding the design capacity of the roadway within the City of Delavan. Parking restrictions will be required on STH 11 between 4th Street and 7th Street, and conversion of angle to parallel parking will be required on

Map 21

**PROPOSED NEW INTERCHANGE ON IH 43
AT CTH O IN THE TOWN OF DELAVAN**



Source: SEWRPC.

STH 11 between 2nd Street and 4th Street. Such parking restrictions and modifications may be difficult to implement in the central business district. Without the parking restrictions and modifications, existing average weekday traffic volumes on STH 11 of about 10,600 vehicles are approaching design capacity and forecast year 2010 traffic volumes of about 16,000 vehicles may be expected to exceed the design capacity of about 13,000 vehicles per day. If the parking restrictions and modifications are implemented, existing average weekday traffic volumes on STH 11 would be less than design capacity and forecast year 2010 traffic volumes may be

expected to approach design capacity of about 17,000 vehicles per day. Thus, the provision of some traffic relief to STH 11 and STH 50 would be highly desirable. A new interchange at IH 43 and CTH O may be expected to divert both existing and future traffic from STH 11 and STH 50 through the central business district to IH 43. Moreover, it may be expected to significantly improve access to IH 43 for the expected residential development in the Towns of Delavan and Walworth south of IH 43.

The provision of the proposed interchange as a diamond interchange with off-ramps in the southwest and northeast quadrants, and on-ramps in the northwest and southeast quadrant would cross 800 feet of prime agricultural land. It is not anticipated that any residential or commercial properties would be displaced as a result of the provision of a diamond interchange at this location. The cost of providing the new interchange is estimated to be about \$1.3 million, including right-of-way acquisition. The proposed interchange would be spaced approximately 1.3 miles from the IH 43 interchange with STH 50, which would meet the spacing criteria for urban interchanges of one mile. The interchange would be located 0.7 mile from the IH 43 interchange with CTH X, somewhat less than the desired spacing. Thus, the provision of an interchange at this location would marginally meet interchange spacing criteria.

No problems may be expected with respect to the ability of CTH O to collect and distribute traffic effectively from a potential new interchange with IH 43. Existing traffic volumes of 3,200 vehicles per average weekday are well within the design capacity of CTH O and forecast traffic volumes with the potential interchange in place may also be expected to be well within the design capacity of CTH O. Similarly, an interchange at CTH O, although it would by design add traffic to IH 43 between CTH O and STH 50, would not be expected to result in any traffic congestion or operational problems on IH 43. Existing and forecast average weekday traffic volumes on IH 43 may be expected to be well below the freeway design capacity of about 51,500 vehicles per average weekday.

In summary, the proposed interchange would provide a more direct route to and from CTH O and the City's industrial park, the commercial district in the northwest quadrant of the IH 43

and STH 50 interchange, and the Geneva Lakes Kennel Club. In addition, the proposed interchange would provide traffic relief to STH 11 and STH 50. This may be expected to be important if long-proposed STH 11 parking restrictions cannot be implemented. Moreover, direct access to IH 43 would be provided for the anticipated residential development south of IH 43 in the Towns of Delavan and Walworth. The proposed interchange has an estimated construction cost of \$1.3 million and would result in marginally desirable interchange spacing. Because of the significant traffic benefits attendant to the proposed interchange, it is recommended by the Commission staff and by the Advisory Committee that a new interchange be constructed between IH 43 and CTH O in the Town of Delavan.

Jurisdiction of Fellows Road between the McHenry-Walworth County Line and CTH H

The Village of Genoa City representative on the Advisory Committee requested that consideration be given to adding Fellows Road to the arterial street and highway system as a county trunk highway between the Walworth-McHenry County line and CTH H in the Village of Genoa City. Analysis of the amount and type of existing and forecast year 2010 traffic carried by this segment of Fellows Road, as well as of the land use served by Fellows Road, indicates that the segment of Fellows Road between the county line and CTH B fully meets the adopted criteria for county trunk highways, including traffic volumes and trip length. The addition of this segment of Fellows Road would, in addition, provide continuity with the county trunk highway system in McHenry County. The segment of Fellows Road between CTH B and CTH H marginally meets the adopted criteria for county trunk highways with respect to traffic volume. However, this segment does not meet the other adopted criteria for county trunk highways and, as well, would violate the minimum one-mile county trunk highway spacing criterion. However, it may be noted that the segment of Fellows Road between CTH B and CTH H does meet the adopted criteria for a local trunk highway, including service to a community park, trip length, and overall travel speed. Therefore, it is recommended by the Commission staff and by the Advisory Committee that the jurisdictional highway system plan be amended to recommend that Fellows Road be added to the arterial street and highway system as a county trunk highway

between the Walworth-McHenry County line and CTH B and that Fellows Road between CTH B and CTH H be added to the arterial system as a local trunk highway.

Review of the Current Jurisdictional Highway System Plan in the Whitewater Area

Members of the Advisory Committee requested that the current jurisdictional highway system plan be reviewed with respect to the following facilities in the Whitewater area:

1. The planned transfer from the state trunk highway system to the local trunk highway system of STH 59 in the City of Whitewater;
2. The planned transfer of Fremont Street to the state trunk highway system in the City of Whitewater; and
3. The planned transfer of Howard Road and Warner Road to the county trunk highway system in the Town of Whitewater.

Each of these requested changes to the presently adopted plan as shown on Map 22 was reviewed with respect to the adopted jurisdictional classification criteria. The changes were considered with respect to the two alternative alignments currently under consideration for the location of the USH 12 bypass around the City of Whitewater: 1) the long-planned southerly alignment and 2) the potential alternative northerly alignment. Map 23 shows the recommended classifications in the area if the long-planned southerly alignment is adopted by the Advisory Committee; Map 24 shows the recommended classifications if the potential alternative northerly alignment is adopted.

The principal changes in the present jurisdictional highway system plan recommended by the Commission staff and by the Advisory Committee are as follows:

- The deletion of a planned local arterial which would result in the extension of Starin Road from its intersection with N. Tratt Street westerly for approximately 0.4 mile, and from that point south to a new planned intersection with USH 12. Deletion of this facility is recommended because land development has occurred in the corridor planned for this facility.

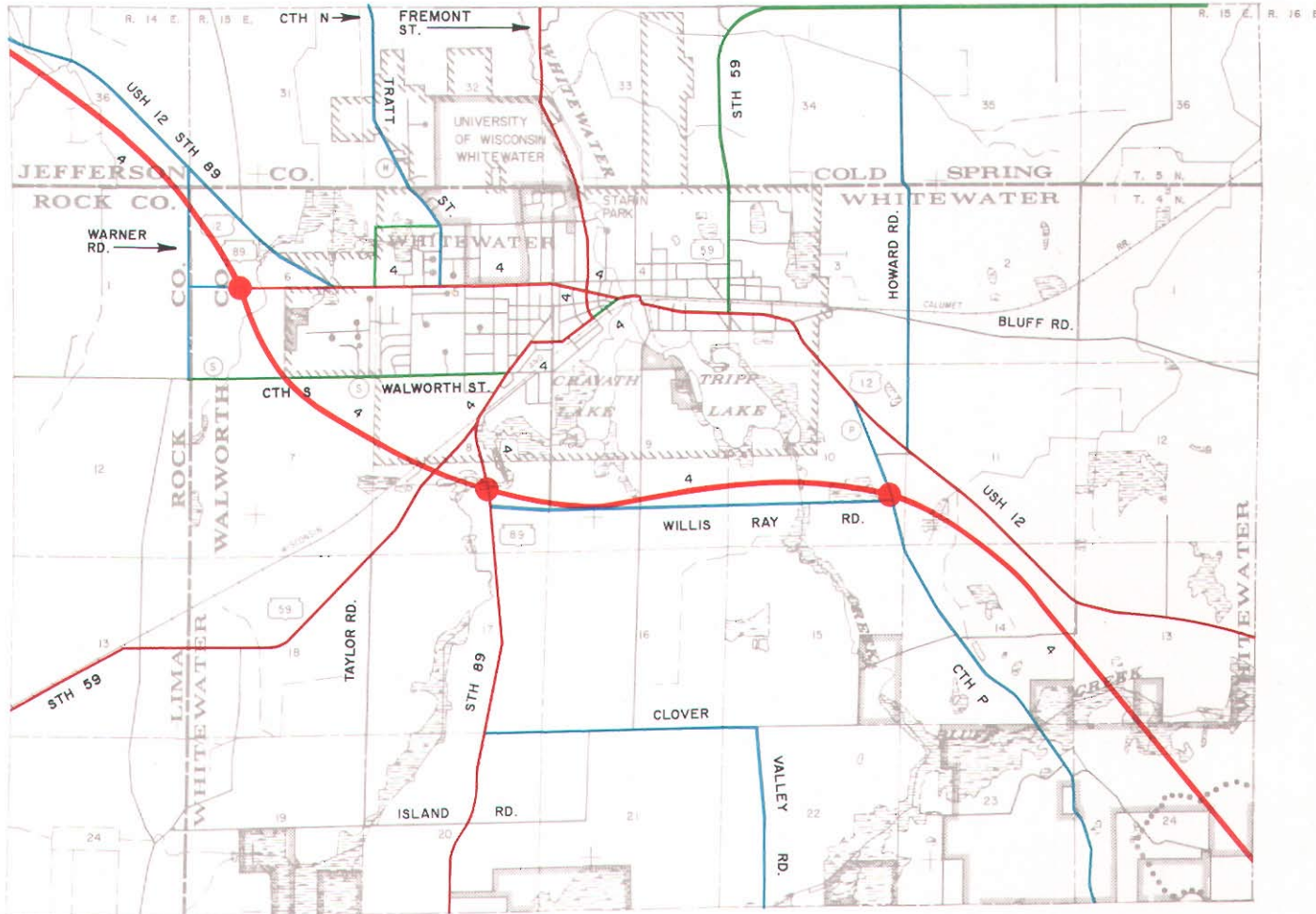
- The current route of STH 59 provides direct access to the City of Whitewater industrial park and is recommended to remain a state trunk highway. It should be noted that the City of Whitewater has recently acquired additional acreage to expand its industrial park at this location. Further, the City has indicated that improving Fremont Street to state trunk highway cross-section standards, as was recommended under the currently adopted jurisdictional highway system plan, would be difficult to implement, citing in particular the restricted right-of-way available on Fremont Street. Thus, it is recommended that the current route of STH 59 be retained on the state trunk highway system; and that Fremont Street between the Jefferson-Walworth County line and Whitewater Street would remain a part of the local trunk system.

In conjunction with these jurisdictional changes, it is also recommended that the current routing of STH 59 over Main Street from the intersection of Whitewater Street and Main Street to the intersection of Franklin Street and Main Street; then over Franklin Street from Main Street to Janesville Street; and then over Janesville Street from Franklin Street to Whitewater Street be eliminated and the route be relocated to Whitewater Street from the intersection of Whitewater Street and Main Street to the intersection of Janesville Street and Whitewater Street. This would provide a more direct routing of the highway through the City of Whitewater reducing travel time and circuitous travel. In addition, truck traffic on STH 59 would not be routed through the heart of the central business district.

- Howard Road is planned to provide a direct connection to the USH 12 freeway via one of three interchanges planned for the Whitewater area, irrespective of whether the USH 12 freeway ultimately bypasses the City of Whitewater to the north or the south. Therefore, upon the implementation of the USH 12 freeway, the amount and characteristics of traffic on Howard Road may be expected to change substantially. Also, the City of Whitewater has acquired property between its existing industrial park and Howard Road to provide for expansion of its

Map 22

CURRENTLY ADOPTED JURISDICTIONAL HIGHWAY SYSTEM PLAN IN THE WHITEWATER AREA

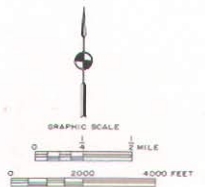


LEGEND

ARTERIAL STREET AND HIGHWAY SYSTEM

JURISDICTIONAL CLASSIFICATION

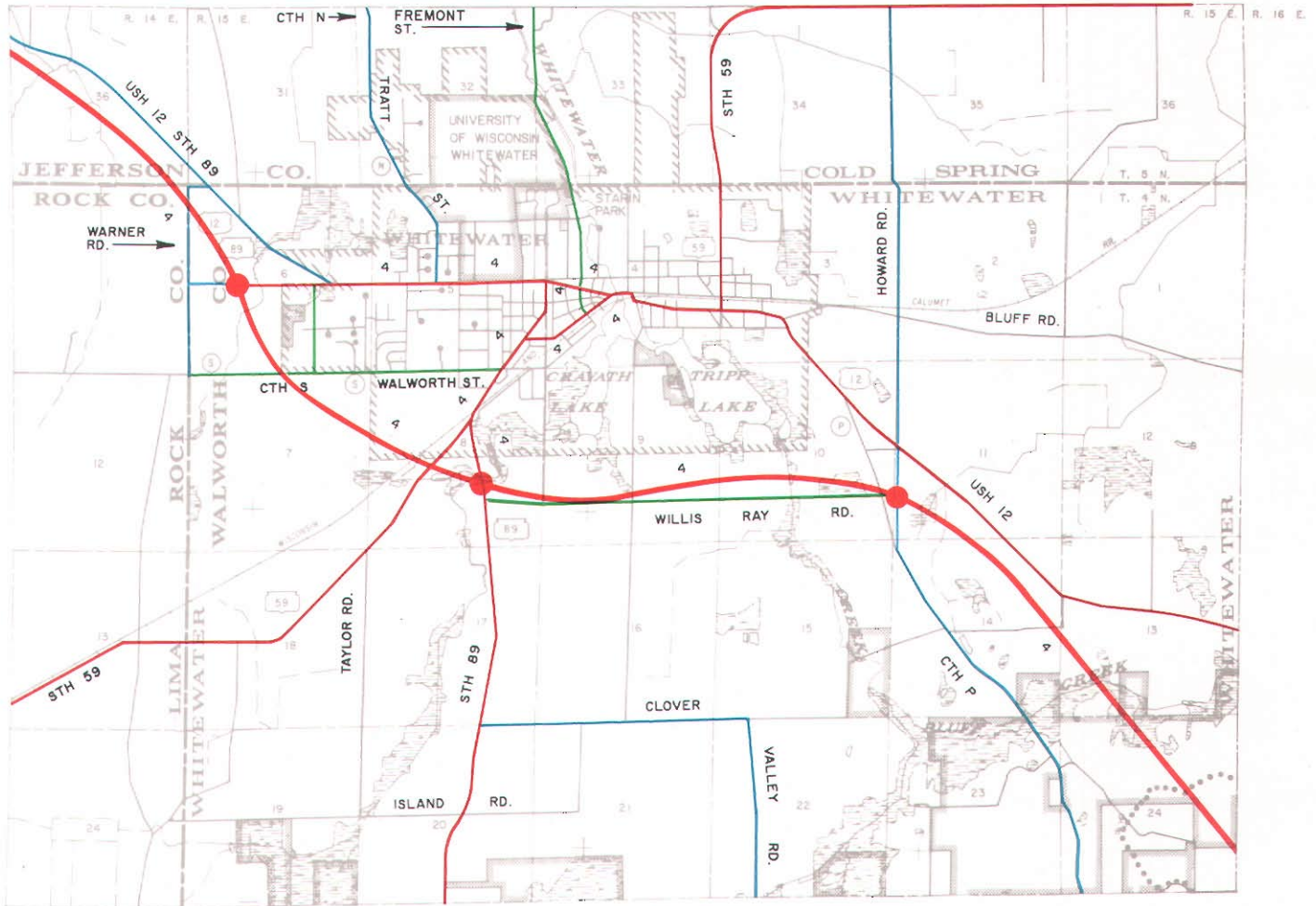
- STATE TRUNK - FREEWAY
- STATE TRUNK - NONFREEWAY
- COUNTY TRUNK
- LOCAL TRUNK
- FREEWAY - NONFREEWAY INTERCHANGE
- 4 NUMBER OF TRAFFIC LANES
(TWO WHERE UNNUMBERED)



Source: SEWRPC.

Map 23

POTENTIAL JURISDICTIONAL HIGHWAY SYSTEM PLAN TO BE IMPLEMENTED UPON COMPLETION OF ALTERNATIVE SOUTHERN FREEWAY BYPASS

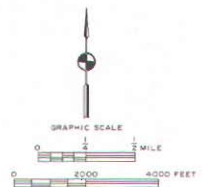


LEGEND

ARTERIAL STREET AND HIGHWAY SYSTEM

JURISDICTIONAL CLASSIFICATION

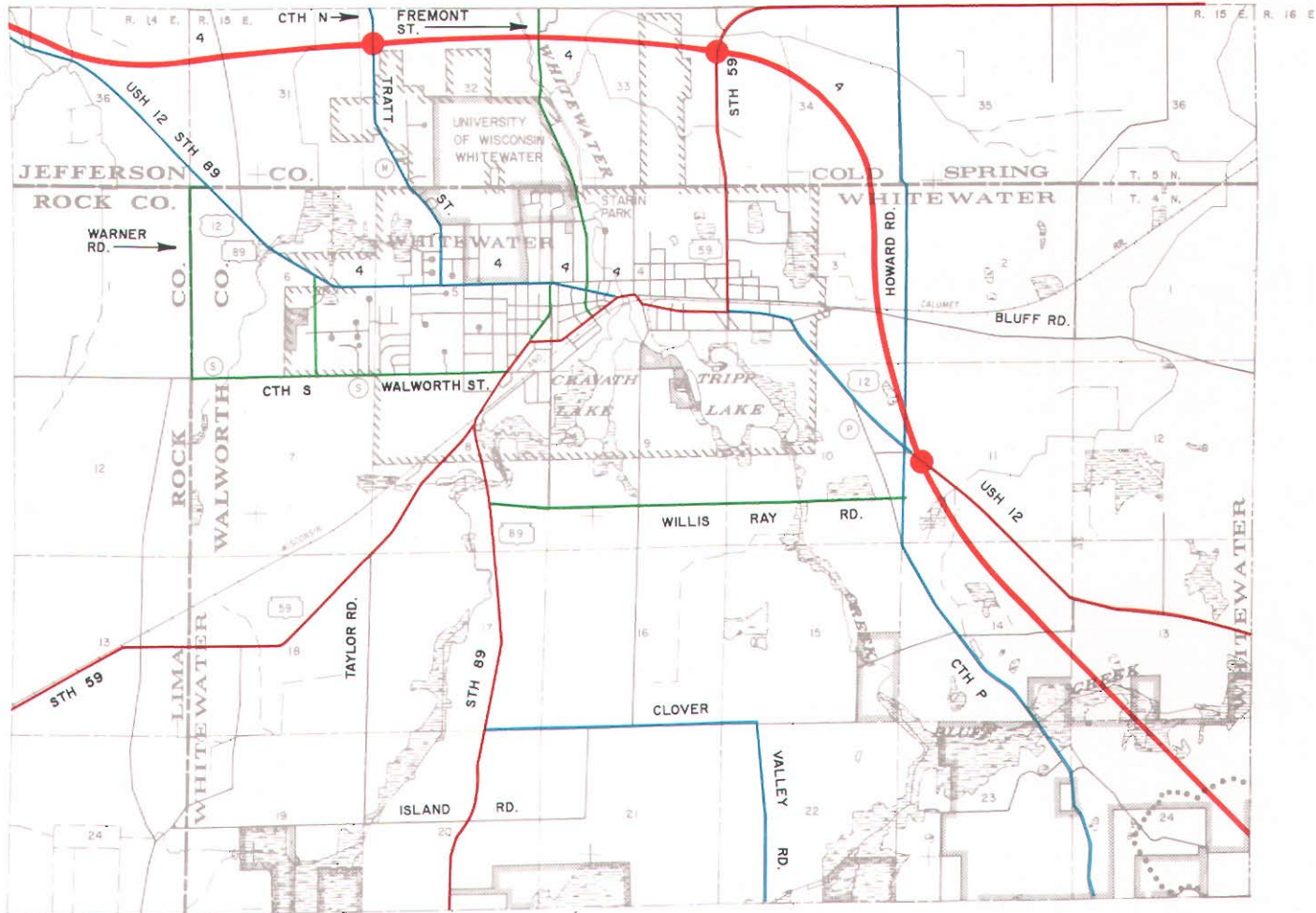
- STATE TRUNK - FREEWAY
- STATE TRUNK - NONFREEWAY
- COUNTY TRUNK
- LOCAL TRUNK
- FREEWAY - NONFREEWAY INTERCHANGE
- 4 NUMBER OF TRAFFIC LANES
(TWO WHERE UNNUMBERED)



Source: SEWRPC.

Map 24

POTENTIAL JURISDICTIONAL HIGHWAY SYSTEM PLAN TO BE
IMPLEMENTED UPON COMPLETION OF ALTERNATIVE NORTHERN FREEWAY BYPASS

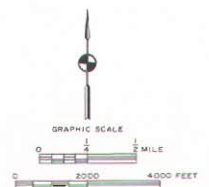


LEGEND

ARTERIAL STREET AND HIGHWAY SYSTEM

JURISDICTIONAL CLASSIFICATION

- STATE TRUNK - FREEWAY
- STATE TRUNK - NONFREEWAY
- COUNTY TRUNK
- LOCAL TRUNK
- FREEWAY - NONFREEWAY INTERCHANGE
- 4 NUMBER OF TRAFFIC LANES
(TWO WHERE UNNUMBERED)



Source: SEWRPC.

industrial park. Howard Road will provide direct access to the industrial park from both USH 12 and STH 59 and, as a result, the future development of the industrial park may be expected to also contribute to the change in the amount and character of the traffic on Howard Road. Therefore, it is recommended that the proposed change in the jurisdictional classification of Howard Road to a county trunk highway in the adopted plan be reaffirmed as, with the implementation of the USH 12 freeway and industrial park expansion, the adopted criteria for classification of Howard Road as a county trunk highway would be met: traffic volume, trip length, and land use service. Without this planned transfer of Howard Road to the county trunk highway system, the Town of Whitewater residents would be expected to fund the improvement of Howard Road necessary to accommodate future freeway-related traffic which is traveling through the Town of Whitewater and, as well, future city industrial park traffic. It may be noted that, under current traffic conditions, the transfer of Howard Road to the county trunk highway system is not warranted because such criteria are not met.

- Warner Road is also planned to provide a direct connection to the USH 12 freeway, on a southern alignment, via an interchange with the planned extension of Main Street between Frontage Road in the City of Whitewater and Warner Road, as shown on Map 23. Such a connection may be expected to dramatically increase the traffic volume and trip length on Warner Road compared to current traffic conditions, and the adopted criteria for classification as a county trunk highway facility would be met. Therefore, the planned jurisdictional transfer of Warner Road to the county trunk highway system is reaffirmed if the USH 12 freeway is constructed on a southern alignment.

If the USH 12 freeway is constructed on a northern alignment, no direct connection from the freeway to Warner Road would be provided. Thus, although traffic volumes may be expected to increase as the adjacent land use changes from agricultural to residential, the adopted criteria for classification as a county trunk highway may not be expected to be met. Warner Road may be expected to meet the adopted criteria for

classification as a local arterial. Thus, it is recommended that Warner Road be added to the local arterial system if the USH 12 freeway is constructed on a northern alignment around the City of Whitewater. It may be noted that, under current conditions, Warner Road does not meet the criteria for classification as either a county or local trunk arterial highway.

As discussed in a previous section of this report, the USH 12 freeway may be expected to be developed in stages. The initial stage of the USH 12 freeway development would probably be the construction of a Whitewater bypass as a two-lane surface arterial with at-grade intersections. This initial stage would warrant changes in arterial facility jurisdictional classification which are somewhat different than those recommended under the final plan, as was shown on Maps 23 and 24. As noted earlier, the final plan recommends extension of USH 12 as a freeway with access permitted only at a grade-separated interchange from its current terminus at STH 67 to the Madison area. Map 25 shows the recommended jurisdictional classification of the arterial facilities during the initial stage with the location of the two-lane, at-grade Whitewater bypass on the long-planned southern alignment. It is assumed that the initial stage is implemented in the short term prior to substantial development of the expanded Whitewater industrial park. The principal changes from the final recommended jurisdictional highway system plan include the reclassification of the existing route of USH 12 through the City of Whitewater as a county trunk highway and the reclassification of Howard Road as a local trunk highway. Also, Warner Road and Willis Ray Road would be recommended to be classified as nonarterial facilities. Map 26 shows the recommended jurisdictional classification under the initial stage of the USH 12 bypass on the potential alternative northern alignment. The principal changes from the final recommended jurisdictional highway system plan, which proposes completion of the USH 12 freeway on a northern alignment, include the reclassification of the existing route of USH 12 through the City of Whitewater as a county trunk highway and classification of Howard Road and Warner Road as nonarterial facilities.

STH 67 between USH 14 and IH 43

The Village of Fontana on Geneva Lake requested consideration of the relocation of

existing STH 67 to bypass the Village on the west. Village officials expressed concern over potential future increases in traffic volumes on the existing route of STH 67 through the Village, and the attendant potential increase in traffic congestion and decrease in traffic safety. The representative of the Village of Williams Bay, citing similar traffic and pedestrian safety concerns, requested consideration of a similar bypass of the Village of Williams Bay.

Through the Village of Fontana, STH 67 is a two-lane roadway with a design capacity of 13,000 vehicles per average weekday. In 1990, average weekday traffic volumes, as shown on Map 27, ranged between 5,300 and 6,300 on STH 67 through the Village and were, thus, well below the capacity of the existing roadway. Forecast year 2010 traffic volumes are expected to be approximately 10,000 vehicles per average weekday and, thus, will begin to approach the design capacity of the roadway.

Three alternative alignments which would locate STH 67 to the west of its current location in the Village of Fontana area were identified and are shown on Map 28. The costs and benefits of these three alternative alignments for the bypass were estimated and are compared in Table 14.

A bypass on either alternative alignment, No. 1 or No. 2, may be expected to remove approximately 5,000 vehicles per average weekday from the existing route of STH 67 through the Village of Fontana in the year 2010. A bypass on alternative alignment No. 3 may be expected to remove approximately 2,500 vehicles per average weekday from the existing route of STH 67 through the Village of Fontana by the year 2010. Thus, all three alternative bypass alignments may be expected to provide substantial relief to the existing route of STH 67 through the Village.

A bypass on alternative alignment No. 2 may also be expected to remove approximately 5,000 vehicles per average weekday from STH 67 between USH 14 and CTH B and between CTH B in the Village of Walworth and S. Main Street in the Village of Fontana. This segment of STH 67 between USH 14 and CTH B currently has two traffic lanes and two parking lanes, with a design capacity of 13,000 vehicles per average weekday. Design year 2010 forecast traffic volumes on this segment of STH 67 may be expected to range between 11,500 and 14,000

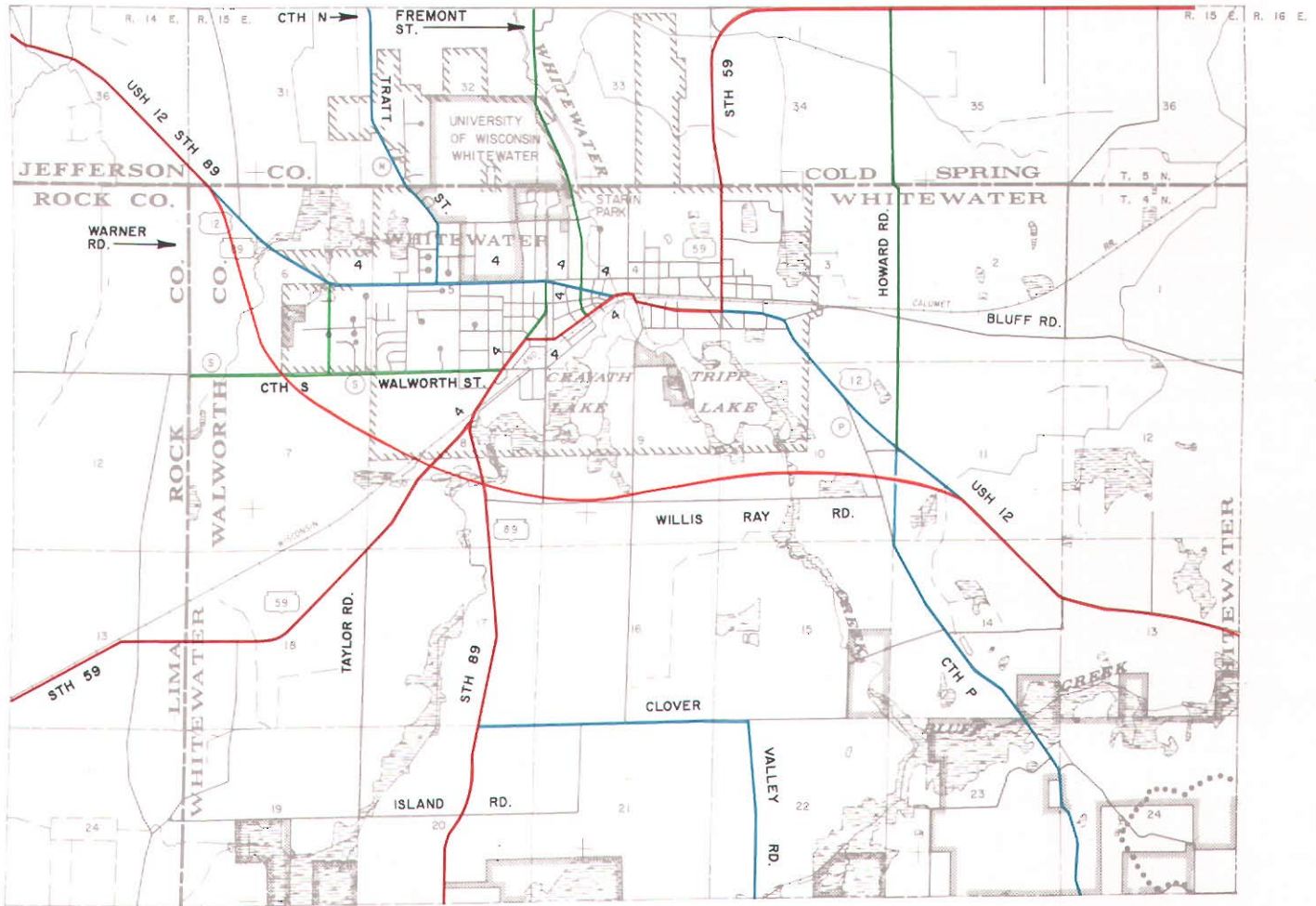
vehicles per average weekday, thus approaching or exceeding the design capacity. Without an increase in capacity, this segment of STH 67 may be expected to experience traffic congestion and a resultant decrease in traffic safety. The provision of four traffic lanes, with an approximate design capacity of 17,000 vehicles per average weekday, on this segment of STH 67 as proposed in the current jurisdictional highway system plan may be accomplished by prohibiting parking. However, provision of an STH 67 bypass on alignment No. 2 would divert an estimated 5,000 vehicles per average weekday by the design year 2010 from STH 67 between USH 14 and CTH B, resulting in forecast volumes ranging between 6,500 and 9,000 vehicles per average weekday, well below the existing design capacity of 13,000 vehicles. Thus, the need to prohibit parking on this segment would be eliminated.

A bypass route on alternative alignment No. 2 would provide direct state trunk arterial service to the Village of Walworth industrial park, thereby improving access to the park, particularly to and from those areas north of the Village. Further, this alternative alignment, particularly if provided with firm access control, may be expected to remain largely outside the urbanizing areas of the Village of Walworth and the Village of Fontana as defined by planned sanitary sewer service area, at least through the year 2010 and, as a result, higher travel speeds may be maintained on this facility in comparison to optional alignment No. 1, which is located within the area proposed to be urbanized.

A bypass on alternative alignment No. 2 may be expected to have a substantial impact on N. Main Street in the Village of Walworth and Town Hall Road in the Town of Walworth, adding about 5,000 vehicles per average weekday by the forecast year 2010 to this facility. The total design year 2010 forecast volume on the one-block segment of N. Main Street immediately north of the intersection of USH 14 and STH 67 in the Village of Walworth may be expected to range between 15,000 and 17,000 vehicles per average weekday. If STH 67 were rerouted on Main Street, the one-block segment immediately north of the intersection of USH 14 and STH 67 would be converted from its current one-way northbound operation to a two-way operation. The design year 2010 forecast traffic volumes on this one-block segment would

Map 25

POTENTIAL JURISDICTIONAL HIGHWAY SYSTEM PLAN TO BE IMPLEMENTED
UPON COMPLETION OF ALTERNATIVE SOUTHERN BYPASS INITIAL PHASE

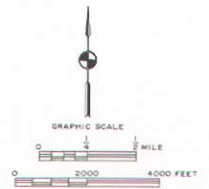


LEGEND

ARTERIAL STREET AND HIGHWAY SYSTEM

JURISDICTIONAL CLASSIFICATION

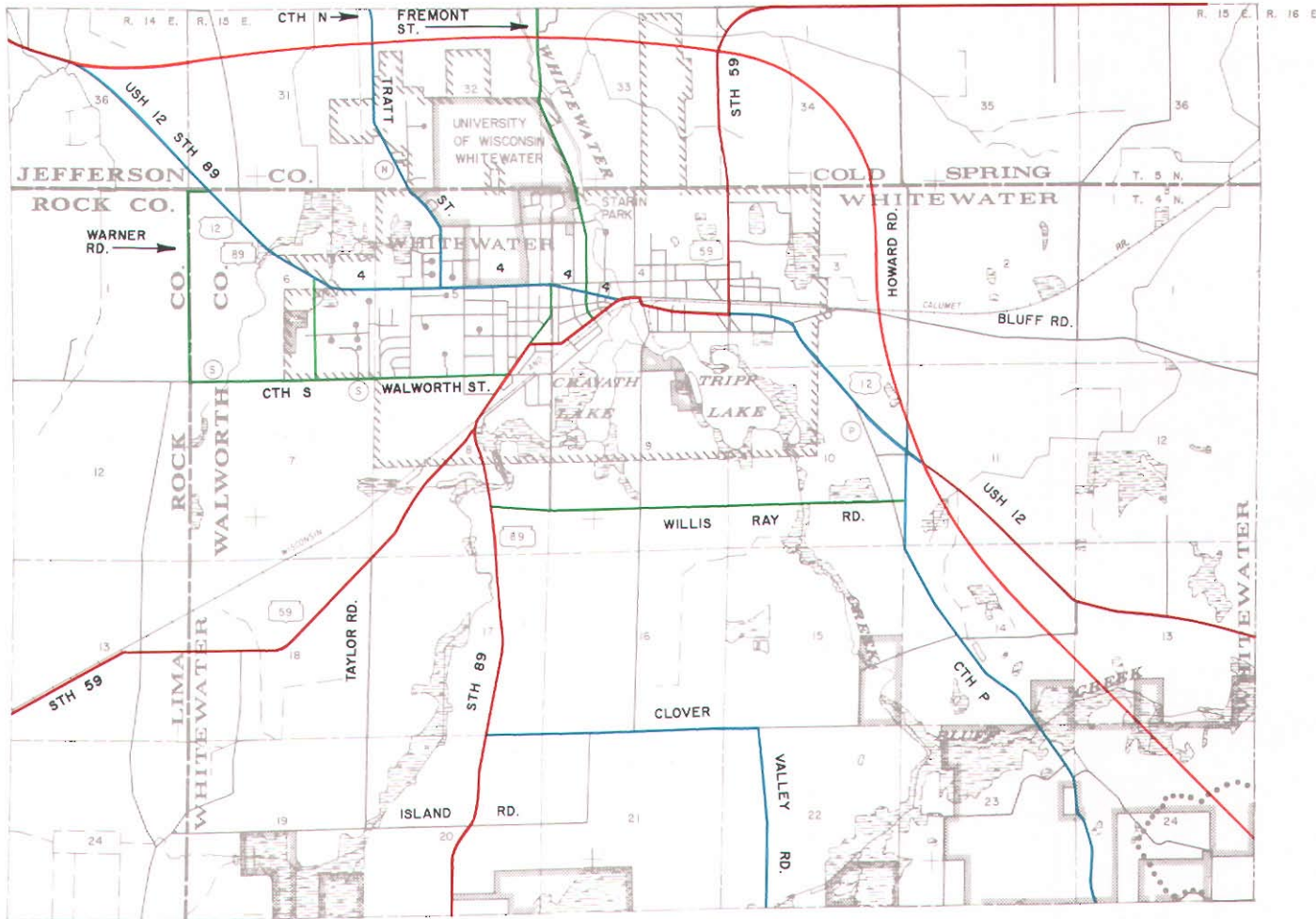
- STATE TRUNK
- COUNTY TRUNK
- LOCAL TRUNK
- 4 NUMBER OF TRAFFIC LANES
(TWO WHERE UNNUMBERED)



Source: SEWRPC.

Map 26

POTENTIAL JURISDICTIONAL HIGHWAY SYSTEM PLAN TO BE IMPLEMENTED
UPON COMPLETION OF ALTERNATIVE NORTHERN BYPASS INITIAL PHASE



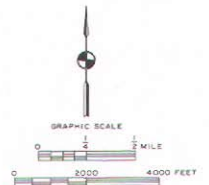
LEGEND

ARTERIAL STREET AND HIGHWAY SYSTEM

JURISDICTIONAL CLASSIFICATION

- STATE TRUNK
- COUNTY TRUNK
- LOCAL TRUNK

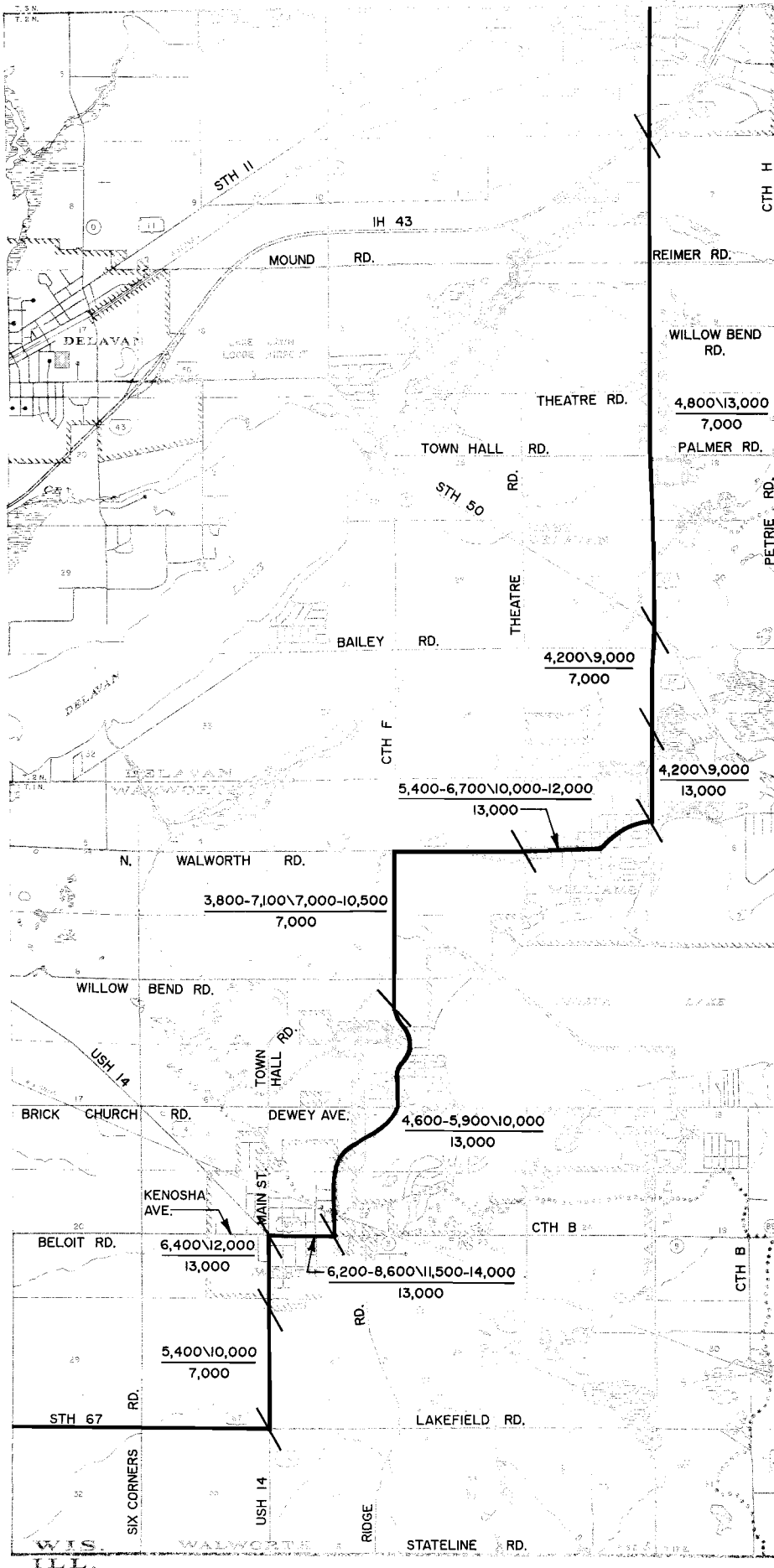
4 NUMBER OF TRAFFIC LANES
(TWO WHERE UNNUMBERED)



Source: SEWRPC.

Map 27

**CURRENT AND
FORECAST DESIGN YEAR
2010 AVERAGE WEEKDAY
TRAFFIC VOLUMES ON STH 67
BETWEEN USH 14 AND IH 43**



LEGEND

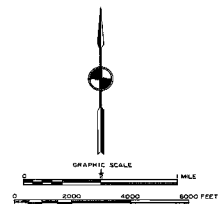
— EXISTING STH 67 ROUTE

AVERAGE WEEKDAY TRAFFIC VOLUMES

1990 AWDT

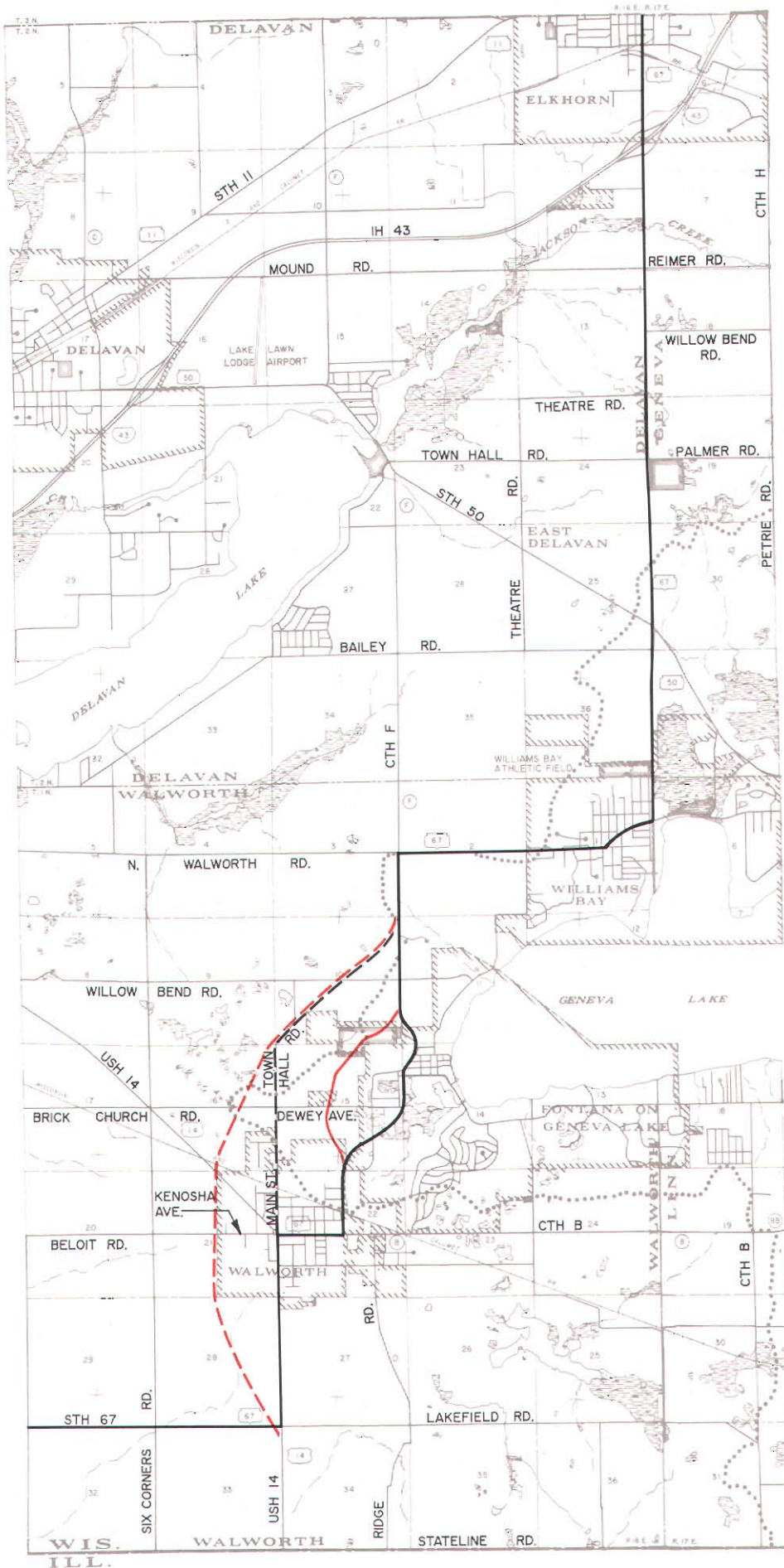
2010 AWDT

DESIGN CAPACITY



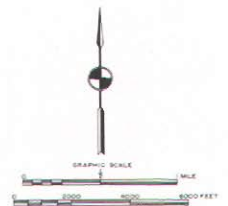
Map 28

**OPTIONAL ALIGNMENTS
EVALUATED FOR AN STH 67
BYPASS OF THE VILLAGE OF
FONTANA ON GENEVA LAKE**



LEGEND

- EXISTING STH 67 ROUTE
- ALTERNATIVE 1
- ALTERNATIVE 2
- ALTERNATIVE 3



Source: SEWRPC.

Table 14

EVALUATION OF OPTIONS FOR STH 67 BYPASS OF THE VILLAGE OF FONTANA ON GENEVA LAKE AND THE VILLAGE OF WALWORTH BETWEEN N. WALWORTH AND LAKEVILLE ROADS

Evaluation Measures	Option 1: Route on STH 67 to Willow Bend Road; then on New Alignment to STH 67—Valley View Drive; then on STH 67 to Kenosha Street ^{a,b,c}	Option 2: Route on STH 67 to 3,500 Feet South of N. Walworth Road; then on New Alignment to Town Hall Road; then on Town Hall Road/Main Street to Kenosha Street ^{a,c}	Option 3: Route on STH 67 to 3,500 Feet South of N. Walworth Road; then on New Alignment to the West of the Village of Walworth to Lakeville Road
Benefits			
Traffic Impacts			
Estimated Forecast Average Weekday Traffic on Proposed STH 67 Alignment	<u>Forecast Year 2010</u>	<u>Forecast Year 2010</u>	<u>Forecast Year 2010</u>
N. Walworth Road to New Alignment	10,500	10,500	10,500
Existing STH 67 Alignment to Kenosha Street-Beloit Street	6,000-12,000	7,000-14,000	4,000-7,500
STH 67 at CTH B to Main Street	11,500-14,000	--	--
Kenosha Street-Beloit Street to Lakeville Road	10,000-12,000	10,000-12,000	6,500-7,500
Estimated Forecast Average Weekday Traffic Volume on Existing STH 67 Facility			
N. Walworth Road to Intersection with Proposed Bypass near Willow Bend Road	10,500	10,500	10,500
From Its Intersection with the Proposed Bypass near Willow Bend Road to Main Street	6,000	6,000	8,500
Main Street to Kenosha Avenue-CTH B	12,000	7,000	9,500
STH 67 at CTH B to Main Street	11,500-14,000	6,500-9,000	9,000-11,500
Kenosha Avenue-Beloit Street to Lakeville Road	10,000-12,000	10,000-12,000	3,500-5,500
Other Benefits	Eliminates need to improve STH 67 from Main Street to a point near Willow Bend Road to a four-lane undivided facility	Eliminates need to prohibit parking on STH 67, Kenosha Street, from USH 14 to CTH B to provide four traffic lanes in the Village of Walworth Direct state trunk highway access to the Village of Walworth industrial park Eliminates the need to improve STH 67 from Kenosha Avenue to a point near Willow Bend Road to a four-lane undivided facility	Eliminates need to prohibit parking on STH 67, Kenosha Street, from USH 14 to CTH B to provide four traffic lanes in the Village of Walworth Eliminates need to improve or prohibit parking on USH 14 to provide four lanes in the Village of Walworth Direct state trunk highway access to the Village of Walworth industrial park could be provided if Wisconsin Street is extended to the bypass
Disruption (property taking)			
Right-of-Way	1.67-mile-long strip of right-of-way (130 feet wide); 1.08-mile-long strip of right-of-way (64 feet wide); 0.51-mile-long strip of right-of-way (14 feet wide)	1.08-mile-long strip of right-of-way (130 feet wide); 1.37-mile-long strip of right-of-way (64 feet wide); 0.63-mile-long strip of right-of-way (14 feet wide)	4.47-mile-long strip of right-of-way (130 feet wide); 0.87-mile-long strip of right-of-way (64 feet wide)
Environmental Corridors	Would require acquisition of 2.2 acres of primary corridor Would require acquisition of 0.1 acre of isolated natural area	Would require acquisition of 0.4 acre of primary corridor	Would require acquisition of 0.4 acre of primary corridor Would require acquisition of 0.6 acre of secondary corridor
Prime Agricultural Land Impacts	Would require acquisition of 11.5 acres of prime agricultural land	Would require acquisition of 21.3 acres of prime agricultural land	Would require acquisition of 54.7 acres of prime agricultural land
Property Acquisition	--	--	--

Table 14 (continued)

Evaluation Measures	Option 1: Route on STH 67 to Willow Bend Road; then on New Alignment to STH 67—Valley View Drive; then on STH 67 to Kenosha Street ^{a,b,c}	Option 2: Route on STH 67 to 3,500 Feet South of N. Walworth Road; then on New Alignment to Town Hall Road; then on Town Hall Road/Main Street to Kenosha Street ^{a,c}	Option 3: Route on STH 67 to 3,500 Feet South of N. Walworth Road; then on New Alignment to the West of the Village of Walworth to Lakeville Road
Capital Costs			
Construction	\$1,820,000 ^d	\$4,990,000 ^e	\$4,700,000 ^f
Right-of-Way	710,000	360,000	690,000
Total	\$2,530,000	\$3,410,000	\$5,390,000
Potential Disadvantages	--	Diverts an estimated 5,000 vehicles per average weekday from businesses near the intersection of STH 67 and CTH B in the Village of Walworth Would require prohibition of parking on a one-block segment of Main Street immediately north of the USH 14-STH 67 intersection in the Village of Walworth central business district	Diverts an estimated 6,500 vehicles per average weekday from the central business district, and 2,500 vehicles per average weekday from businesses near the intersection of STH 67 and CTH B in the Village of Walworth

^aAs discussed earlier in this report, USH 14 between the Walworth-McHenry County line and the Village of Walworth is recommended to be improved to a four-lane divided highway, at a cost of \$2,350,000.

^bThe currently adopted county jurisdictional highway system plan recommends that Kenosha Street between Main Street and STH 67 be improved to a four-lane roadway by prohibiting parking.

^cThe currently adopted county jurisdictional highway system plan recommends that S. Main Street between Kenosha Street and the Village of Walworth south corporate limits be improved to a four-lane roadway, at a cost of \$710,000.

^dCosts shown are for initial two-lane bypass; total cost for completion of ultimate four-lane bypass between N. Walworth Road and Kenosha Street is \$5,160,000.

^eCosts shown are for initial two-lane bypass; total cost for completion of ultimate four-lane bypass between N. Walworth Road and Beloit Street-Kenosha Street is \$5,350,000.

^fCosts shown are for initial two-lane bypass; total cost for completion of ultimate four-lane bypass between N. Walworth Road and Lakeville Road is \$8,010,000

Source: SEWRPC.

approximate the design capacity of a four-lane roadway of 17,000 vehicles per average weekday. Four traffic lanes could be provided if parking were prohibited. Because this segment of Main Street is in the central business district, it may be anticipated that implementation of a parking prohibition would be difficult.

The third alternative bypass alignment would bypass not only the Village of Fontana, but the Village of Walworth as well. A bypass on this alignment may be expected to divert approximately 2,500 vehicles per average weekday from the current route of STH 67 through the Villages of Walworth and Fontana in the year 2010. Further, an estimated 4,000 vehicles per average weekday would be diverted from the current route of USH 14 through the Village of Walworth. Average weekday traffic volumes by the design year 2010 on the bypass itself may be expected to range between 6,500 and 7,500

vehicles on the segment from the existing STH 67 and USH 14 intersection south of the Village of Walworth to USH 14. Average weekday traffic volumes on the bypass between USH 14 and STH 67 north of the Village of Fontana may be expected to range between 4,000 and 4,500 vehicles by the design year 2010. Direct service to and from the industrial park in the Village of Walworth could be provided through the extension of Wisconsin Street westerly to the bypass.

Construction of a bypass on alternative alignment No. 3 may be expected to result in a modest increase in design year 2010 traffic volumes compared to the current volumes, 8,500 vehicles per average weekday versus 4,600 to 5,900 vehicles, in the Village of Fontana. Similarly, the diversion of traffic from STH 67 between USH 14 and CTH B in the Village of Walworth is expected to be less if this alternative is

implemented. The resultant design year 2010 forecast average weekday traffic volumes of 9,000 to 11,500 vehicles would, however, be less than the existing design capacity of 13,000 vehicles per average weekday. Substantial traffic, 6,500 vehicles per average weekday, may be expected to be diverted from the existing route of USH 14 and STH 67 through the Village of Walworth. As a result, no changes in traffic patterns or parking prohibitions would need to be implemented.

The estimated cost of the STH 67 Fontana bypass on optional alignment No. 1 is \$2.5 million if two lanes are constructed initially, or \$5.2 million if four lanes are provided, including \$710,000 to acquire the necessary right-of-way. The estimated cost of optional alignment No. 2 is \$3.4 million if two lanes are constructed initially, or \$5.4 million if four lanes are provided, including an estimated \$360,000 to acquire the necessary right-of-way. The estimated cost of optional alignment No. 3 is \$5.4 million if two lanes are constructed initially, or \$8.0 million if four lanes are provided, including an estimated \$690,000 to acquire the necessary right-of-way.

It is anticipated that none of the optional alignments would require the acquisition and displacement of a residence or a business. Optional alignment No. 1 requires the acquisition of an estimated 2.2 acres of primary environmental corridor and about 11.5 acres of prime agricultural lands. Optional alignment No. 2 is estimated to require about 0.4 acre of prime environmental corridor and about 21.3 acres of prime agricultural land. Optional alignment No. 3 is estimated to require 0.4 acre and 0.6 acre of primary and secondary environmental corridor, respectively, and about 54.7 acres of prime agricultural land.

Optional alignments No. 1 and 2 provide substantial benefit in terms of traffic diversion to the Village of Fontana, but have some negative impacts on the Village of Walworth. The primary disadvantage of alignment No. 1 with respect to the Village of Walworth is that some land within the Village would have to be acquired to construct the bypass, and there would be no benefit to the Village of Walworth. The disadvantage of optional alignment No. 2 is the need to provide four traffic lanes on the one-block segment of Main Street just north of the existing USH 14 and STH 67 intersection in the

central business district through a parking prohibition. This disadvantage would be partially offset by the elimination of the need to prohibit parking on STH 67 from USH 14 to CTH B, and the provision of direct state trunk arterial service to the village industrial park. Optional alignment No. 3 provides benefits to both villages in terms of diverted traffic and an elimination of the need to prohibit parking on selected segments of the existing route to provide four lanes.

In order to alleviate the impact of the STH 67 bypass alignment option No. 3 on the prime agricultural lands located south of the Village of Walworth, the Commission staff analyzed a suboption to alignment option No. 3, as shown on Map 29.

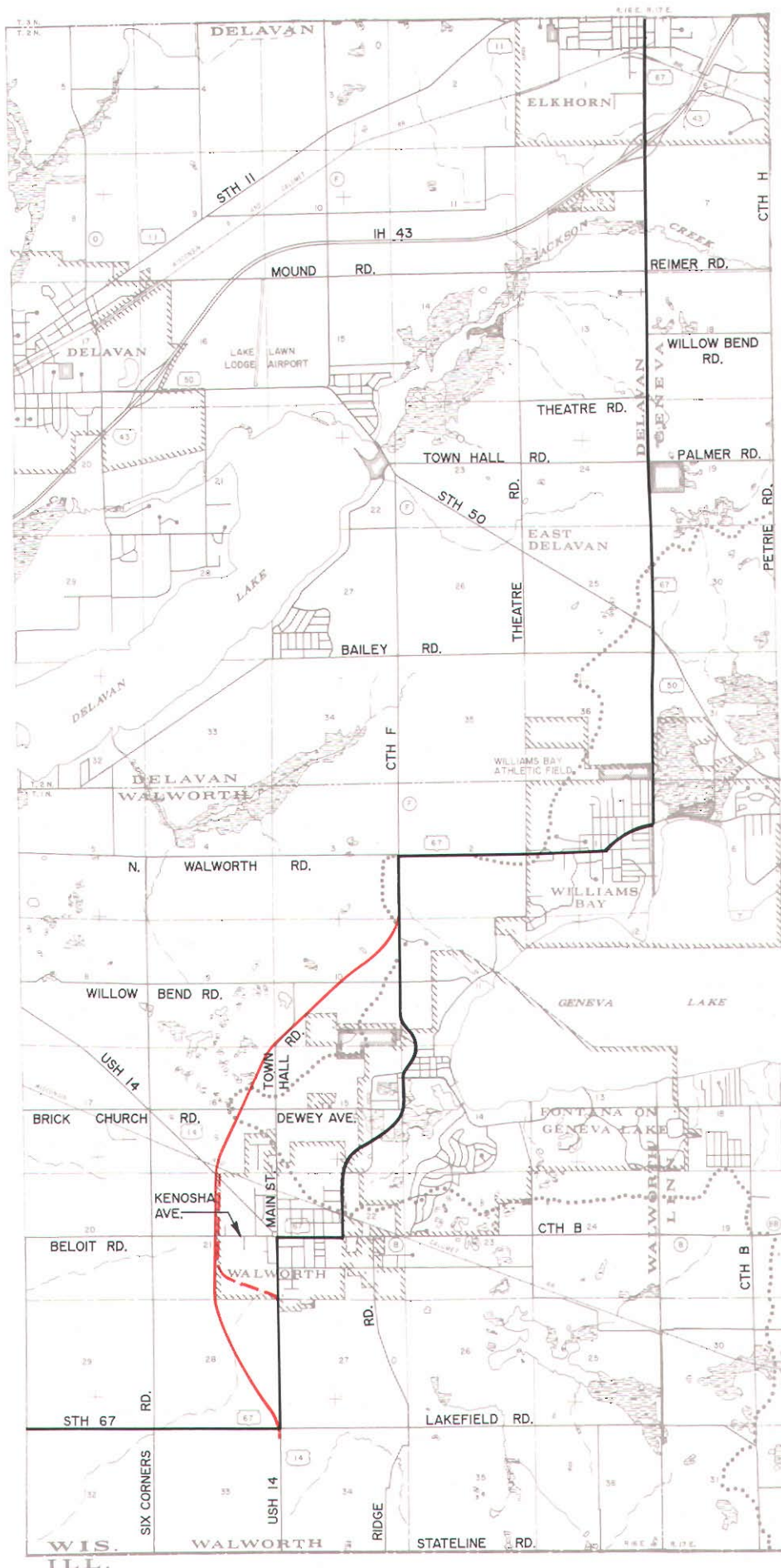
The suboption considered, No. 3A, would follow the alignment of the long-planned local arterial on the south and west corporate limits of the Village of Walworth. The traffic impacts and advantages and disadvantages identified for alignment option No. 3 may be expected to apply to this suboption as well. The primary advantage of this suboption compared to alignment option No. 3 is that it abates the impact on prime agricultural lands south of the Village of Walworth. It may be noted, however, that, even though the alignment is within the corporate boundaries of the Village, the land through which it would pass on the south side of the Village is currently being used for agricultural purposes. The estimated cost to implement this suboption between USH 14 at the south corporate limits and USH at the west corporate limits is approximately \$2.4 million, including \$0.2 million to acquire the necessary right-of-way.

Because an alignment on suboption No. 3A may be expected to abate the impact on prime agricultural lands attendant to the implementation of option No. 3 and to provide substantially the same traffic diversion as alignment option No. 3, it is recommended that an STH 67 bypass of the Village of Walworth and the Village of Fontana be aligned on suboption No. 3A from the south corporate limits of the Village of Walworth to USH 14 at the west corporate limits of the Village of Walworth and then continues to use the alignment of option No. 3 to the north.

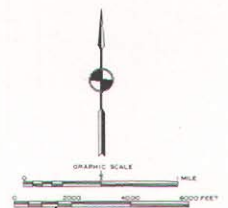
Because a combination of alignment option No. 3 and its suboptional alignment No. 3A provides substantial relief to the existing route

Map 29

**ALIGNMENT OPTION 3 AND ITS
SUBOPTIONAL ALIGNMENT 3A
FOR THE PROPOSED STH 67
BYPASS OF THE VILLAGES OF
WALWORTH AND FONTANA
ON GENEVA LAKE**



- LEGEND**
- EXISTING STH 67 ROUTE
 - ALTERNATIVE STH 67 BYPASS ALIGNMENTS
 - ALTERNATIVE 3
 - SUB-ALTERNATIVE 3A



of STH 67 through the Villages of Fontana and Walworth, eliminating the need to provide four lanes through these communities by prohibiting parking, it is recommended by the Commission staff and by the Advisory Committee that the existing jurisdictional highway system plan be amended to include an STH 67 bypass on a combination of these two alignments as a state trunk highway. It is further recommended that the current jurisdictional highway system plan be amended to transfer the existing route of USH 14 from the Village of Walworth south corporate limits to STH 67, Kenosha Avenue, to the local arterial system and to transfer the existing route of USH 14 from STH 67 to the Village of Walworth west corporate limits and STH 67 from USH 14 to CTH B to the county trunk system. STH 67 from CTH B through the Village of Fontana to the proposed bypass should be transferred to the local arterial system. The long-proposed new local arterial facility on the south and west corporate limits of the Village of Walworth should be deleted from the plan.

Between the Village of Fontana and the Village of Williams Bay, STH 67 is a two-lane rural roadway with a design capacity of approximately 7,000 vehicles per average weekday. Existing average weekday traffic volumes, shown on Map 27, range between 3,800 and 7,100 and, thus, approach or equal the design capacity of the roadway. Forecast year 2010 traffic volumes are expected to range between 7,000 and 10,500 vehicle per average weekday, which would exceed the design capacity of the existing two-lane roadway. Thus, the provision of a four-lane divided rural roadway is warranted to accommodate both existing average weekday traffic and estimated forecast year 2010 traffic volumes as well on the segment of STH 67 between the Village of Fontana and the Village of Williams Bay.

Through the Village of Williams Bay, STH 67 is a two-lane roadway with an estimated design capacity of approximately 13,000 vehicles per average weekday. Existing average weekday traffic volumes, shown on Map 27, range between 4,200 and 6,700 on STH 67 through the Village and are thus well below the design capacity of the roadway. Forecast year 2010 traffic volumes may be expected to range between 9,000 and 12,000 vehicles per average weekday, which will begin to approach the

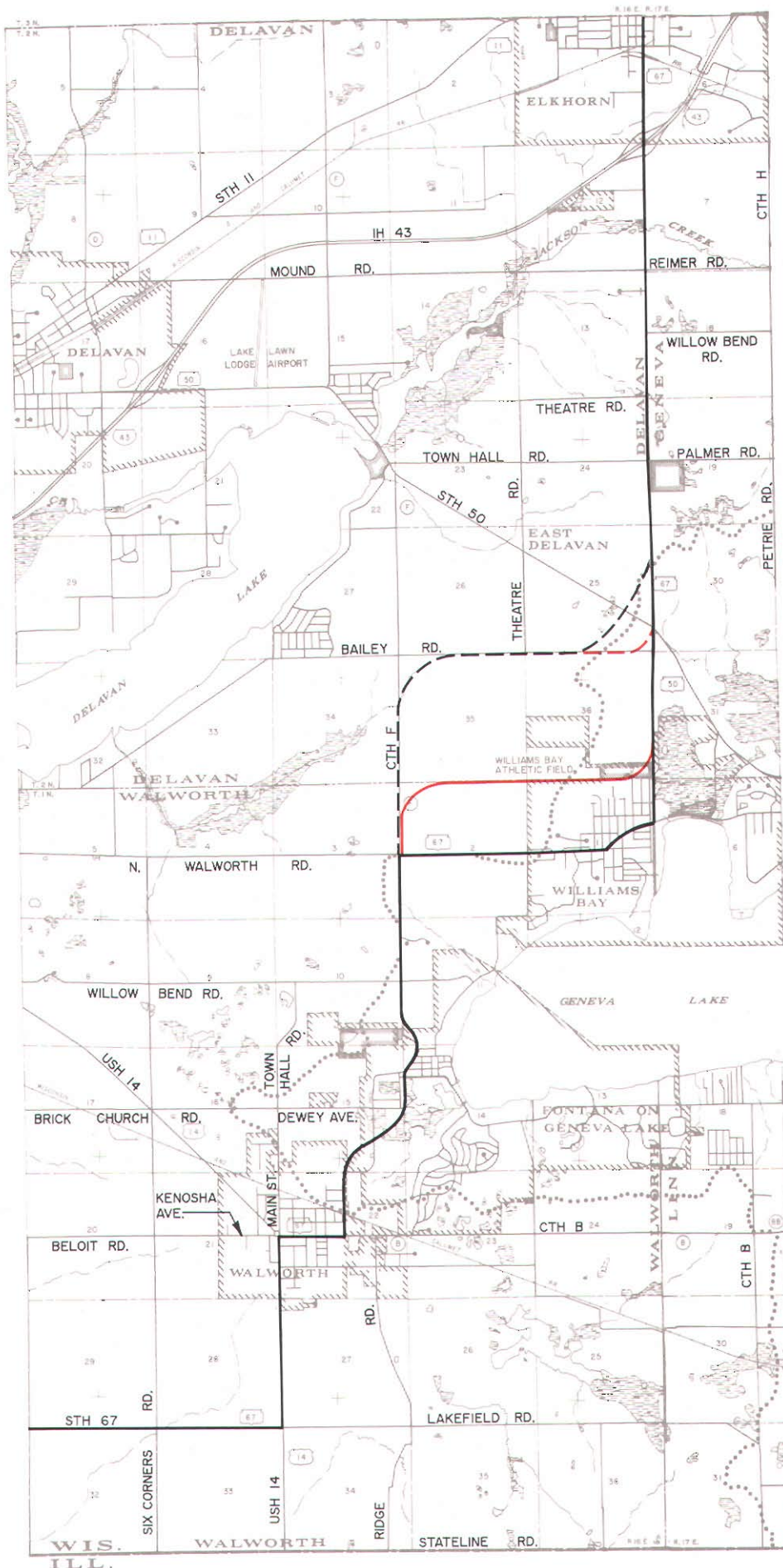
design capacity of the roadway. It may be noted that not only are the forecast year 2010 traffic volumes expected to be approaching the design capacity of the two-lane roadway, but that the Wisconsin Department of Transportation has a policy of providing four lanes through a community when four lanes are warranted in the rural areas adjacent to that community. Provision of four traffic lanes through the Village of Williams Bay may be possible through the prohibition of parking, although it may be noted that the existing pavement width on STH 67 is 44 feet, which would result in four 11-foot-wide lanes rather than four 12-foot-wide lanes as would be desirable.

The prohibition of parking within the Village of Williams Bay, particularly in the central business district, may be difficult to implement. Further, the provision of four traffic lanes does not address the abrupt change in alignment at the intersection of Elkhorn and Geneva Streets, regarded as a traffic safety problem by the Village of Williams Bay. At the request of the Village, and in recognition of the potential difficulty of prohibiting parking within the Village, the Commission staff considered three optional bypass alignments to route STH 67 to the west and north of the Village. Two of the optional bypass alignments are shown on Map 30, along with a suboption of one of the routes analyzed by the Commission staff.

A third optional alignment for the STH 67 bypass of the Village of Williams Bay was also considered, but not recommended for further consideration. Under this optional alignment, STH 67 would continued northerly on the current route of CTH F to STH 50, and be routed over Town Hall Road and STH 67. The primary disadvantage of this optional alignment is that its location is so far north of the Village of Williams Bay that it may not be anticipated to divert substantial traffic from the existing route of STH 67 through the Village. Thus, it may be anticipated that the provision of four traffic lanes through the Village would be necessary by the design year 2010. Because alignment option No. 3 for the STH 67 bypass of the Village of Williams Bay would not be expected to divert sufficient traffic from the existing route of STH 67 through the Village to eliminate the need to provide four traffic lanes, it is not recommended for further consideration at the present time.

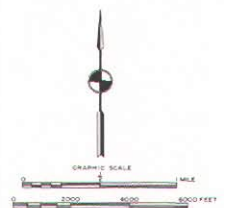
Map 30

**OPTIONAL ALIGNMENTS
EVALUATED FOR AN STH 67
BYPASS OF THE VILLAGE
OF WILLIAMS BAY**



LEGEND

- EXISTING STH 67 ROUTE
- ALTERNATIVE STH 67 BYPASS ALIGNMENTS
- ALTERNATIVE 1
- ALTERNATIVE 2
- SUB-ALTERNATIVE 2



The costs and benefits of the optional alignments retained for further consideration are compared in Table 15.

A bypass on either of the alternative alignments to the west and north of the Village of Williams Bay may be expected to divert approximately 2,500 vehicle per average weekday from the existing route of STH 67 through the Village of Williams Bay in the year 2010. The diversion of 2,500 vehicles per average weekday in the forecast year 2010 from STH 67 through the Village of Williams Bay may be expected to reduce average weekday traffic volumes in the design year 2010 from 9,000 to 12,000 vehicles per average weekday to 6,500 to 9,500 vehicles per average weekday. Thus, the estimated average weekday traffic volumes in the design year 2010 would be below the design capacity of 13,000 vehicles of the existing roadway. Average weekday traffic volumes in the design year 2010 on the north-south leg of the bypass may be expected to range between 7,500 and 8,000 vehicles and between 3,000 and 7,000 vehicles per average weekday on the east-west leg of optional alignment No. 1, or between 3,500 and 4,000 vehicles per average weekday on the east-west leg of alignment No. 2 and its suboption. Thus, the provision of four traffic lanes is warranted between N. Walworth Road and Bailey Road by the forecast traffic volumes, while two lanes are warranted between CTH F and STH 67.

The estimated cost of the STH 67 Village of Williams Bay bypass on alternative alignment No. 1 is \$3.8 million to construct two lanes initially, or \$5.6 million if four lanes are constructed, including \$380,000 to acquire the necessary right-of-way. The estimated cost of alternative alignment No. 2 is \$2.3 million to construct the initial two lanes, or \$5.2 million to construct four lanes, including an estimated \$300,000 to acquire the necessary right-of-way. The estimated cost of the suboption of alternative alignment No. 2 is \$1.6 million to construct the initial two lanes, or \$5.4 million to construct four lanes, including an estimated \$280,000 to acquire the necessary right-of-way. The disruption attendant to the construction of alternative alignment No. 1 includes the crossing of approximately 4.5 acres of isolated natural area including 0.6 acre of wetlands and approximately 29.6 acres of prime agricultural lands. Alternative alignment No. 2 crosses 1.1 acres of isolated

natural area and approximately 21.6 acres of prime agricultural land. In comparison, the suboption of alignment No. 2 crosses 3.6 acres of isolated natural area including 1.2 acres of wetlands and approximately 26.1 acres of prime agricultural lands. None of the optional alignments is expected to require the acquisition of any residences or any businesses. It may be noted, however, that the eastern portion of alignment No. 1 is in the sanitary sewer service area identified for the Village of Williams Bay. As this area urbanizes, it may be expected that the travel speed on this portion of the bypass route will be reduced. Further, a bypass on alternative alignment No. 1 would pass through Lions' Park. Shifting the alignment either to the north or the south to avoid crossing parkland would entail the acquisition and displacement of residences and/or businesses along STH 67. Therefore, optional alignment No. 1 was eliminated from further consideration.

Neither optional alternative alignment No. 2 nor its suboption falls within the area designated for sanitary sewer service and, thus, may be expected to permit higher speed travel. In addition, alignment No. 2 and its suboption both provide an opportunity to improve the geometrics at the intersection of STH 50 and STH 67. However, optional alignment No. 2 may be expected to more readily accommodate improvement in the intersection geometrics than its suboptional alignment.

All the optional alignments considered may be expected to provide the same benefits in terms of traffic diversion from the Village of Williams Bay in the design year 2010. Because optional alignment No. 2 may be expected to divert about 2,500 vehicles from the existing route of STH 67 through the Village of Williams Bay, eliminating the need to provide four traffic lanes within the Village through the prohibition of parking, and because this alignment may be anticipated to afford an opportunity to improve the geometrics of the intersection of STH 50 and STH 67 than the suboptional alignment, the staff recommends that the current jurisdictional highway system plan for Walworth County be amended to include an STH 67 bypass around the Village of Williams Bay on optional alignment No. 2. It is further recommended that the current jurisdictional highway system plan be amended with regard to the proposed jurisdiction of the existing route of STH 67 from its current intersection

Table 15

**EVALUATION OF OPTIONS FOR STH 67 BYPASS OF THE VILLAGE OF WILLIAMS BAY
BETWEEN N. WALWORTH ROAD AND A POINT 2,800 FEET NORTH OF STH 50^a**

Evaluation Measures	Option 1: Route Along STH 67 to Village of Williams Bay North Corporate Limits; then on New Alignment to CTH F; then on CTH F on N. Walworth Road	Option 2: Route on New Alignment to Bailey Road; then on Bailey Road to CTH F; then on CTH F to N. Walworth Road	Suboption 2: Route Along STH 67 to Bailey Road; then on Bailey Road to CTH F; then on CTH F to N. Walworth Road
Benefits			
Traffic Impacts			
Estimated Forecast Average Weekday Traffic on Proposed STH 67 Alignment	<u>Forecast Year 2010</u>	<u>Forecast Year 2010</u>	<u>Forecast Year 2010</u>
2,800 Feet North of STH 50 to STH 50	13,000	6,500	13,000
STH 50 to N. Walworth Road	3,000-9,000	3,500-8,000	3,500-8,000
Estimated Forecast Average Weekday Traffic Volume on Existing STH 67 Facility			
2,800 Feet North of STH 50 to STH 50	13,000	6,500	13,000
STH 50 to a Point 1.0 Mile South of STH 50	9,000	6,500	6,500
A Point 1.0 Mile South of STH 50 to Geneva Street	6,500	6,500	6,500
Elkhorn Road to CTH F at N. Walworth Road	4,500-9,500	4,500-9,500	4,500-9,500
Other Benefits	Eliminates need to prohibit parking to provide four traffic lanes within the Village of Williams Bay on the existing STH 67 alignment	Eliminates need to prohibit parking to provide four traffic lanes within the Village of Williams Bay on the existing STH 67 alignment	Eliminates need to prohibit parking to provide four traffic lanes within the Village of Williams Bay on the existing STH 67 alignment
Disruption (property taking)			
Right-of-Way	2.46-mile-long strip of right-of-way (130 feet wide); 1.61-mile-long strip of right-of-way (64 feet wide)	1.73-mile-long strip of right-of-way (130 feet wide); 1.99-mile-long strip of right-of-way (64 feet wide)	1.08-mile-long strip of right-of-way (130 feet wide); 2.92-mile-long strip of right-of-way (64 feet wide)
Environmental Corridors	Would require acquisition of 4.5 acres of isolated natural areas, of which 0.6 acre consists of wetlands	Would require acquisition of 3.6 acres of isolated natural areas, of which 1.2 acres consist of wetlands	Would require acquisition of 1.1 acres of isolated natural areas
Prime Agricultural Land Impacts	Would require acquisition of 29.6 acres of prime agricultural land	Would require acquisition of 26.1 acres of prime agricultural land	Would require acquisition of 21.6 acres of prime agricultural land
Property Acquisition	Requires acquisition of 5.7 acres from Lions Park in Village of Williams Bay, of which 2.7 acres are isolated natural areas, including 0.6 acre of wetlands	--	--
Capital Costs			
Construction	\$3,380,000 ^b	\$1,950,000 ^c	\$1,300,000 ^d
Right-of-Way	380,000	300,000	280,000
Total	\$3,760,000	\$2,250,000	\$1,580,000
Potential Disadvantage	Diverts an estimated 2,500 vehicles per average weekday from the Village of Williams Bay central business district	Diverts an estimated 2,500 vehicles per average weekday from the Village of Williams Bay central business district	Diverts an estimated 2,500 vehicles per average weekday from the Village of Williams Bay central business district

^aThe segment of STH 67 between IH 43 and a point 2,800 feet north of STH 50 may be expected to have a forecast year 2010 average weekday traffic volume of approximately 13,000 vehicles. This existing segment of STH 67 is a two-lane rural roadway with a design capacity of approximately 7,000 vehicles per day. Therefore, it is recommended that this segment be improved to four traffic lanes, at a cost of \$4,650,000.

^bCosts shown are for initial two-lane bypass. Total cost for completion of ultimate four-lane bypass between N. Walworth Road and 2,800 feet north of STH 50 is \$5,610,000.

^cCosts shown are for initial two-lane bypass. Total cost for completion of ultimate four-lane bypass between N. Walworth Road and 2,800 feet north of STH 50 is \$5,240,000.

^dCosts shown are for initial two-lane bypass. Total cost for completion of ultimate four-lane bypass between N. Walworth Road and 2,800 feet north of STH 50 is \$5,370,000.

Source: SEWRPC.

with CTH F and its intersection with the proposed bypass be transferred to the county arterial system. Finally, it is recommended that the local arterial facility proposed in the current jurisdictional highway system plan between CTH F and STH 50 north of the Village of Williams Bay be eliminated from the jurisdictional highway system plan as the proposed bypass route may be expected to serve the needs for an arterial in this corridor.

Finally, STH 67 from STH 50 to IH 43 currently has two traffic lanes with a design capacity of 13,000 vehicles per average weekday. This segment currently carries approximately 4,800 vehicles per average weekday, which is below the design capacity of the roadway. The forecast design year 2010 average weekday traffic volumes on this segment are expected to be approximately 13,000 vehicles, which would warrant the provision of a divided four-lane roadway from STH 67 to IH 43. Accordingly, it is recommended that the current jurisdictional highway system plan be amended to include the improvement of STH 67 between STH 50 and IH 43 to a four-lane divided roadway.

In summary, it is recommended by the Commission staff and by the Advisory Committee that the current jurisdictional highway system plan be amended to include a bypass of the Villages of Fontana on Geneva Lake, Walworth, and Williams Bay on the alignments shown on Map 31. The traffic volumes in the design year 2010 may be expected to warrant the provision of a four-lane divided roadway, with the exception of segments between USH 14 and existing STH 67 north of the Village of Fontana, and between existing CTH F and STH 50. However, for the purposes of system continuity, it is recommended that a four-lane divided roadway be provided from current intersection of USH 14 and STH 67 one mile south of the Village of Walworth to IH 43. It is further recommended that, as a result of the change in alignment of STH 67, a number of changes in the proposed jurisdiction of a number of facilities be effected, as shown on Map 32.

Following its recommendations for a STH 67 bypass at its October 4, 1990, meeting, the Advisory Committee requested that the staff analyze and evaluate an additional alternative route for the STH 67 bypass of the Village of Walworth and the Village of Fontana, as shown on Map 33. The alternative route recommended

by the Advisory Committee is also shown on Map 33. The route suggested by Village of Fontana officials was proposed to minimize the taking and dividing of agricultural lands and also to minimize environmental impacts by use of existing roadways. The route would utilize existing STH 67, Six Corners Road, and N. Walworth Road.

This new alternative route would be about 7.4 miles in length from Lakeville Road and USH 14 to Walworth Road and CTH F. This is about 2.2 miles longer than the bypass route preliminarily recommended by Commission staff and the Advisory Committee. Thus, the new alternative route incorporates about two mile of indirection compared to about 0.2 mile of indirection for the preliminary recommended route.

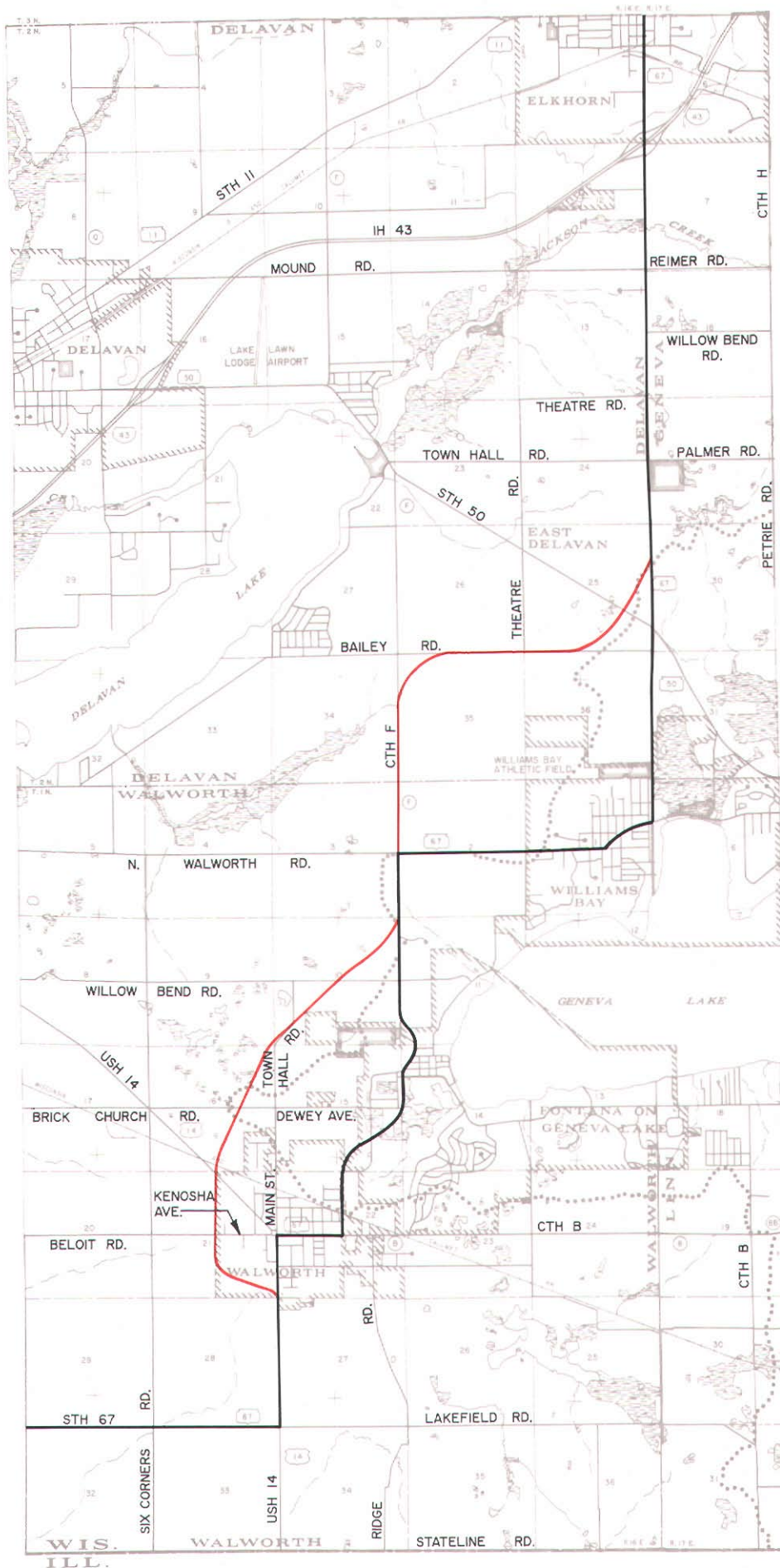
Due to this indirection, the new alternative may be expected to divert less traffic from the existing route of STH 67 and, therefore, do less to relieve traffic congestion and the need for improvements on the existing route of STH 67. The new alternative route may be expected to carry about 2,000 to 3,000 vehicle per average weekday, all of which would be removed from the existing route of STH 67. This is substantially less than the 4,000 to 7,500 vehicles per average weekday which would be removed from the existing route of STH 67 under the staff-recommended alternative. The preliminary recommended route would also provide better access to the Village of Walworth industrial park.

The construction cost, including right-of-way acquisition, of the new alternative is estimated at about \$8.1 million. This cost includes the improvements required to bring the existing roadways to the standards for two-lane rural state trunk highways. This cost is about the same as that estimated for constructing the route on new alignment under the preliminarily recommended alternative. In addition, it may be expected that under the new alternative some improvements to add traffic lanes to some segments of the existing route of STH 67 would also be required. Thus, the cost of the new alternative will be somewhat more in the long run as compared to the preliminarily recommended alternative.

With respect to impacts on primary environmental corridors and wetlands, neither the new alternative route nor the preliminarily recommended route would result in new crossings of

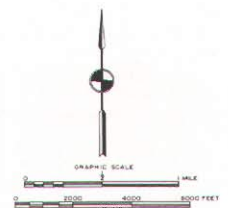
Map 31

**RECOMMENDED
STH 67 BYPASS IN THE
JURISDICTIONAL HIGHWAY
SYSTEM PLAN**

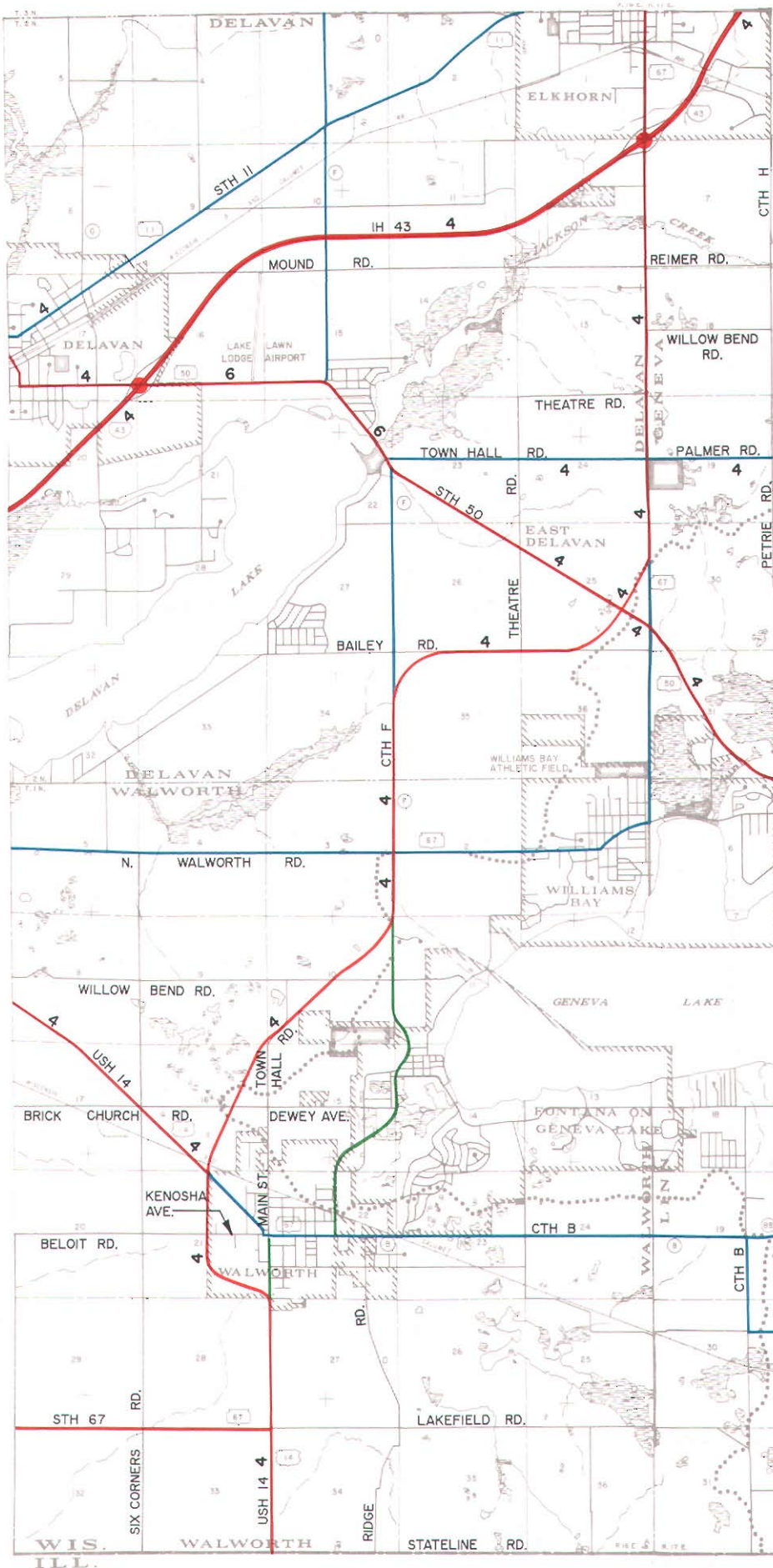


LEGEND

- EXISTING STH 67 ROUTE
- STAFF RECOMMENDED STH 67 ALIGNMENT



**RECOMMENDED
JURISDICTIONAL HIGHWAY
SYSTEM PLAN FOR THE
STH 67 CORRIDOR UPON
IMPLEMENTATION OF THE
PROPOSED STH 67
REALIGNMENT**



LEGEND

ARTERIAL STREET AND HIGHWAY SYSTEM

JURISDICTIONAL CLASSIFICATION

- STATE TRUNK-FREEWAY
- STATE TRUNK-NONFREEWAY
- COUNTY TRUNK HIGHWAY
- LOCAL TRUNK HIGHWAY
- FREEWAY-NONFREEWAY INTERCHANGE
- 4** NUMBER OF TRAFFIC LANES
(2 WHERE UNNUMBERED)



- | | | | |
|---|---|---|---|
|  | EXISTING STH 67 |  | ISOLATED NATURAL AREA |
|  | STH 67 BYPASS ROUTE PROPOSED BY VILLAGE OF FONTANA OFFICIALS |  | WETLANDS |
|  | STH 67 BYPASS ROUTE SELECTED FROM PREVIOUS EVALUATION OF ALTERNATIVES |  | GROSS SANITARY SEWER SERVICE AREA BOUNDARY (2000) |
|  | PRIMARY ENVIRONMENTAL CORRIDOR |  | GROSS SANITARY SEWER SERVICE AREA (2000) |
|  | SECONDARY ENVIRONMENTAL CORRIDOR | | |

primary or secondary environmental corridors or of isolated natural areas (see Map 33). Also, neither alternative would require substantial conversion of wetlands to roadway.

With respect to agricultural land impacts, the new alternative may be expected to have less impact. It would, however, entail acquisition of an estimated 45 acres of land as strip taking along the existing route and to eliminate right-angle turns at the intersection of Lakeville Road and Six Corners Road and the intersection of Six Corners Road and N. Walworth Road. The preliminarily recommended route would require acquisition of about 70 acres of land and entail some division of existing farm properties. However, it is proposed to be located largely along the boundary of the planned sewer service area for the Village, as shown on Map 33, and, as a result, much of the farmland divided has already been proposed for conversion to urban use.

Therefore, because the preliminarily recommended route, compared to the new alternative route, would divert substantially more traffic from the existing route of STH 67, have greater impact on traffic congestion and improvement needs on existing STH 67, entail approximately the same construction cost, including right-of-way, and not significantly increase environmental impacts, the staff and Advisory Committee continued to recommend that the preliminarily recommended bypass route remain in the preliminary plan to be taken to public hearing.

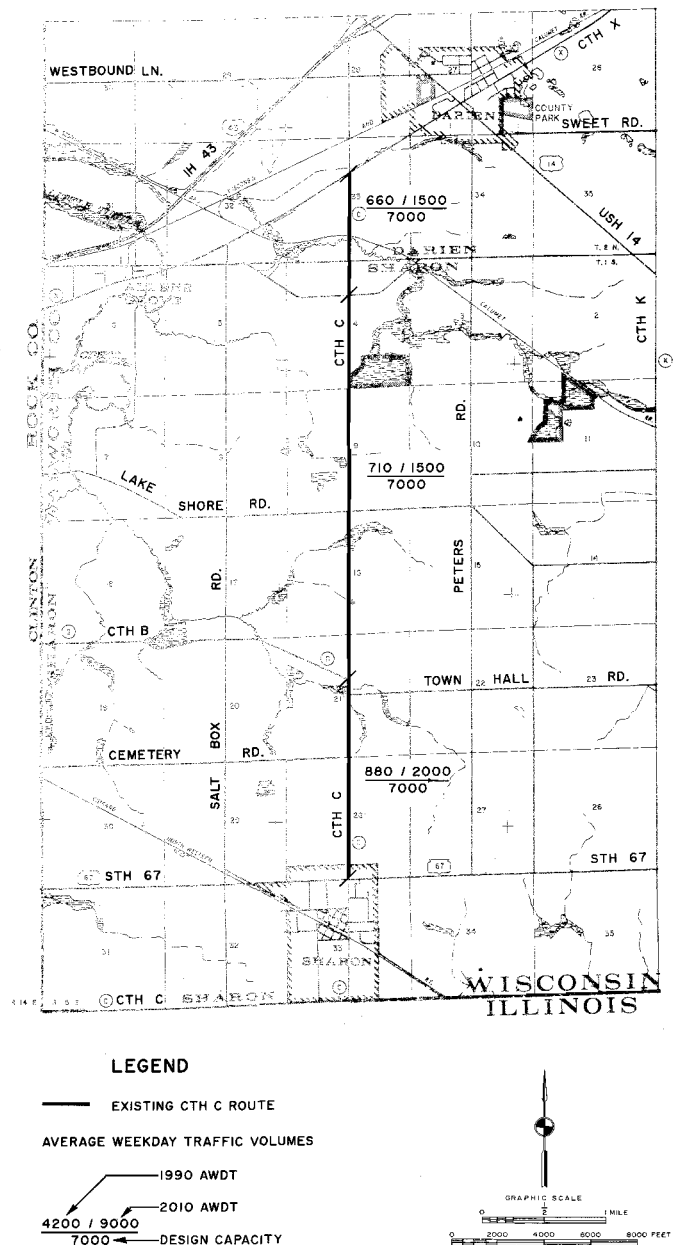
Jurisdiction and Alignment of CTH C between STH 67 and USH 14

The Village of Darien representative on the Advisory Committee requested that a potential change in the planned jurisdiction of CTH C between STH 67 and USH 14 be evaluated. He also requested that consideration be given to changing the recommended alignment identified in the current jurisdictional highway plan for the proposed extension of CTH C between CTH X and USH 14 to the proposed alignment identified in the original county jurisdictional highway system plan.

Analysis of the amount and type of existing and forecast year 2010 traffic, shown on Map 34, carried by this segment of CTH C and also the land use served by CTH C indicates that this segment of CTH C between STH 67 and USH 14 clearly meets the adopted criteria for a county

Map 34

EXISTING AND FORECAST YEAR 2010 AVERAGE WEEKDAY TRAFFIC VOLUMES ON CTH C BETWEEN STH 67 AND USH 14



Source: SEWRPC.

trunk highway, particularly in terms of land use served, connected traffic volume, and trip length. Therefore, it is recommended by the Commission staff that the recommendation of the adopted jurisdictional highway system plan be reaffirmed that CTH C between STH 67 and CTH X

remain a county trunk highway and that its extension between CTH X and USH 14 be part of the county trunk highway system.

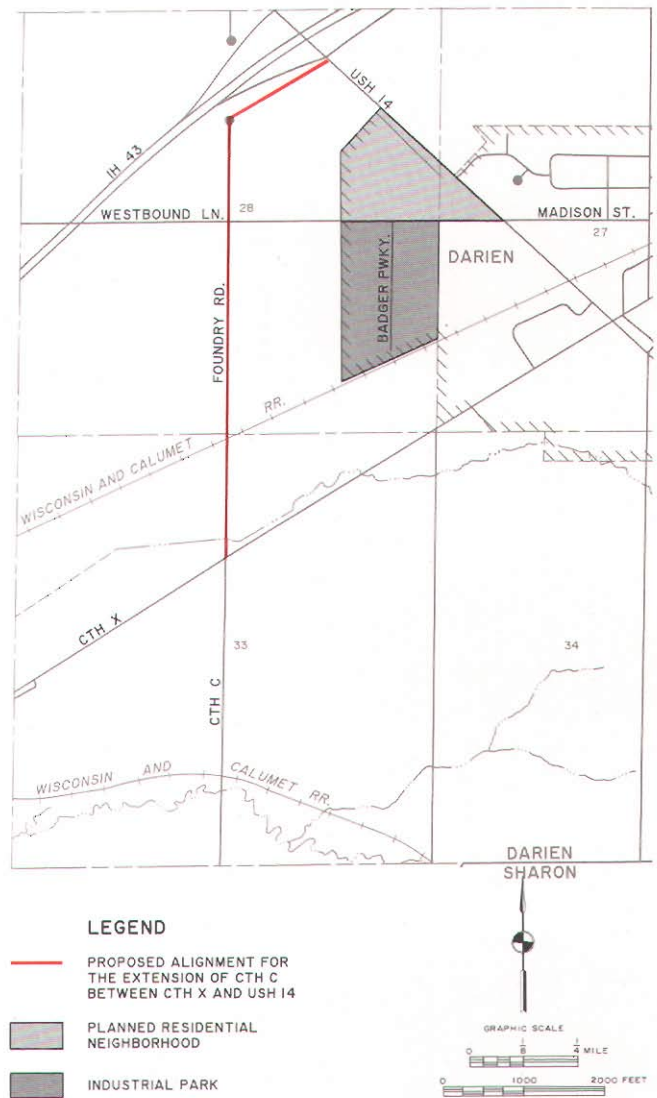
In the original county jurisdictional highway system plan CTH C was proposed to be extended between CTH X and USH 14 using Foundry Road north to IH 43, then a new alignment between Foundry Road and USH 14 roughly paralleling and adjacent to the IH 43 freeway, as shown on Map 35. While this initial alignment minimized the disruption attendant to the provision of a connection from Foundry Road to USH 14, it also resulted in spacing of approximately 125 feet between the intersection of the northeastbound off-ramp and USH 14 and the intersection of the proposed roadway and USH 14. A spacing of 125 feet is substantially less than the minimum desirable spacing of 300 feet. In order to alleviate this problem, when the current jurisdictional highway plan was being considered, alternative alignments were analyzed for the extension of CTH C between CTH X and USH 14. A new alignment using Foundry Road between CTH X and Westbound Lane; Westbound Lane in the Town of Darien and Madison Street in the Village of Darien between CTH X and Badger Parkway; and on new alignment from Madison Street northerly to USH 14, as shown on Map 36 was adopted.

The advantage of the alignment proposed in the current jurisdictional highway system plan is the provision of direct access from IH 43 to the industrial park in the Village of Darien which is served by Badger Parkway. Also, this alignment provides adequate spacing from the IH 43 interchange. The advantage of the alignment proposed in the original jurisdictional highway system plan is that it would avoid penetrating a planned residential neighborhood and also provide a direct route from CTH C to IH 43.

The staff defined a third alternative alignment for the proposed extension of CTH C between CTH X and USH 14 which attempted to provide the advantages of each of the other two alternatives. As shown on Map 37, the new, third alternative alignment considered by the staff would use Foundry Road from CTH X to a point approximately 400 feet north of Westbound Lane and be on new alignment to USH 14 at a point approximately 850 feet southeast of the IH 43 northbound on- and off-ramps. Thus, the alignment would provide adequate spacing with

Map 35

**PROPOSED ALIGNMENT FOR THE
EXTENSION OF CTH C BETWEEN CTH X AND
USH 14 IN THE ORIGINAL WALWORTH COUNTY
JURISDICTIONAL HIGHWAY SYSTEM PLAN**

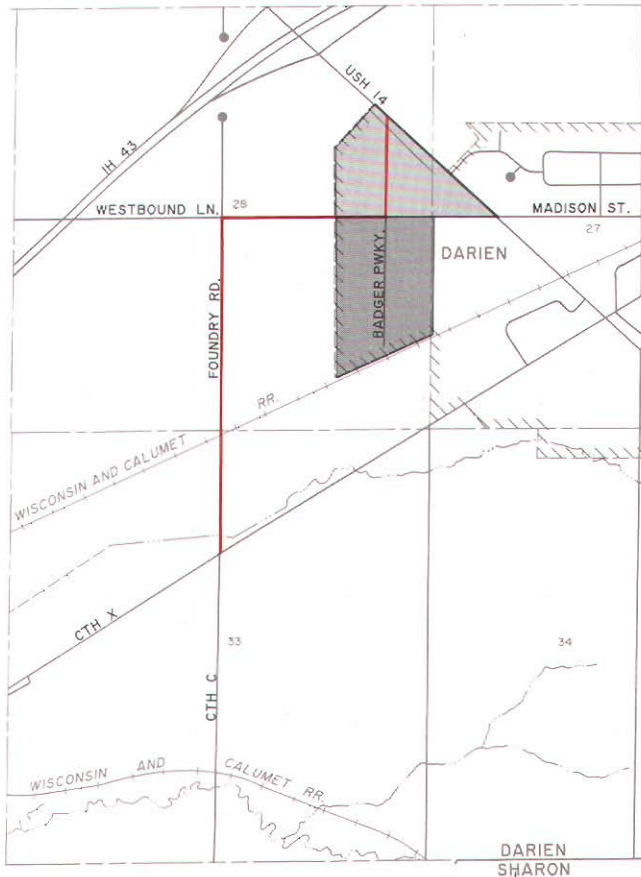


Source: SEWRPC.

respect to the IH 43 interchange. The alignment would not penetrate the planned residential neighborhood identified in the village land use plan. The alignment would also provide a direct alignment between CTH C and IH 43. Also, the new alignment is approximately 400 feet shorter than the alignment identified in the current jurisdictional highway system plan between the intersection of Foundry Road and Westbound Lane and USH 14. Because neither Foundry Road nor Westbound Lane are currently constructed to county arterial standards, it may be

Map 36

**PROPOSED ALIGNMENT FOR THE
EXTENSION OF CTH C BETWEEN CTH X AND
USH 14 IN THE CURRENT WALWORTH COUNTY
JURISDICTIONAL HIGHWAY SYSTEM PLAN**

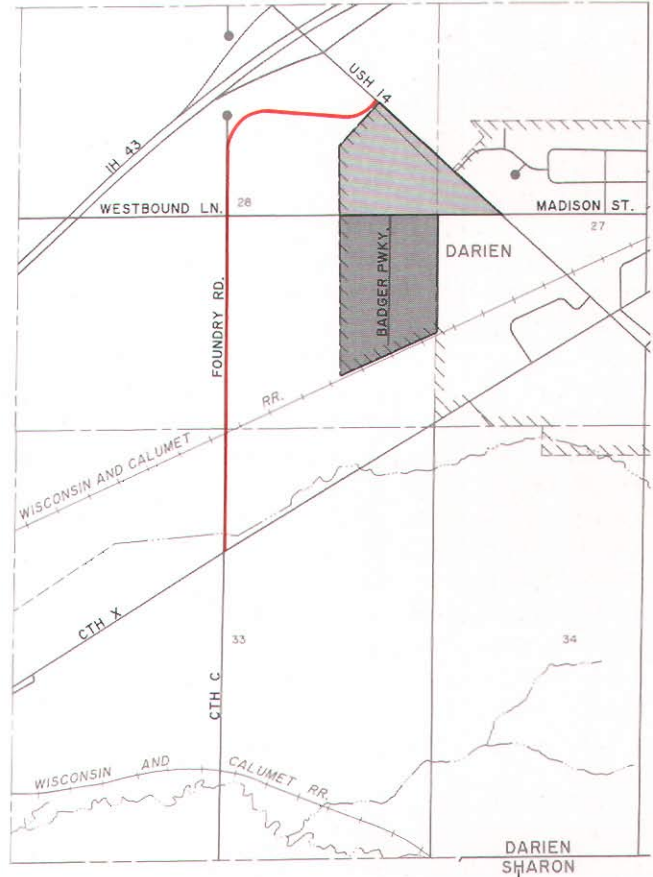
**LEGEND**

- PROPOSED ALIGNMENT FOR THE EXTENSION OF CTH C BETWEEN CTH X AND USH 14
- PLANNED RESIDENTIAL NEIGHBORHOOD
- INDUSTRIAL PARK

Source: SEWRPC.

Map 37

**STAFF-RECOMMENDED MODIFICATION
TO THE PROPOSED ALIGNMENT FOR THE
EXTENSION OF CTH C BETWEEN CTH X AND
USH 14 IN THE CURRENT WALWORTH COUNTY
JURISDICTIONAL HIGHWAY SYSTEM PLAN**

**LEGEND**

- STAFF RECOMMENDED ALIGNMENT FOR THE EXTENSION OF CTH C BETWEEN CTH X AND USH 14
- PLANNED RESIDENTIAL NEIGHBORHOOD
- INDUSTRIAL PARK

Source: SEWRPC.

anticipated that both these facilities would have to be reconstructed to a high standard two-lane cross-section between the intersection of Foundry Road and the Westbound Lane and USH 14. Thus, the alignment now proposed by the staff may be expected to result in a modest decrease in the cost to implement the extension of CTH C between CTH X and USH 14 compared to the alignment in the current jurisdictional highway system plan. The only

disadvantage of the new alignment is that access to the Village's industrial park would no longer be provided directly via a county trunk. Travel to the park would require use of Westbound Lane.

It is recommended by the Commission staff and by the Advisory Committee that the alignment of the proposed extension of CTH C be modified, as shown on Map 37, and that Westbound Lane

and Madison Street between the intersection of Foundry Road and USH 14 be added to the jurisdictional highway system plan as local arterial highways.

RECOMMENDED JURISDICTIONAL HIGHWAY SYSTEM PLAN TO BE TAKEN TO PUBLIC HEARING

The second-generation Walworth County jurisdictional highway system plan as recommended to be taken to public hearing by the Technical Coordinating and Advisory Committee on Jurisdictional Highway System Planning for Walworth County is shown on Map 38. The amendments to the currently adopted plan incorporated in the preliminary new plan are listed in Table 16. The plan envisions a system of arterial facilities in Walworth County that can meet existing and probable future traffic demands effectively and efficiently. The plan identifies the location and configuration of the various facilities constituting the arterial system and recommends the number of traffic lanes required on each segment of the system. The plan also recommends the level of government which should be responsible for the construction, operation, and maintenance of each facility making up the arterial system.

The major capacity improvements recommended under the new plan are shown on Map 39 and listed in Table 17. These improvements include widenings of existing facilities to provide additional traffic lanes and the construction of new arterial facilities. The recommended changes in jurisdictional responsibility are shown on Map 40 and are listed in Table 18.

The preliminary recommended arterial system would consist of 492 miles of streets and highways, or about 33 percent of the 1,475-mile total street and highway system expected to serve Walworth County by the year 2010. The recommended state trunk highway element of the preliminary plan would consist of 222 miles of arterial facilities, or about 45 percent of the 492-mile planned arterial system. The recommended county trunk element of the preliminary plan would consist of 250 miles of arterial facilities, or about 51 percent of the 492-mile planned arterial system. The recommended local trunk highway element of the plan would consist of 20 miles of arterial facilities, or about 4 percent of the 492-mile planned arterial system. Table 19 presents a summary of the mileage of the

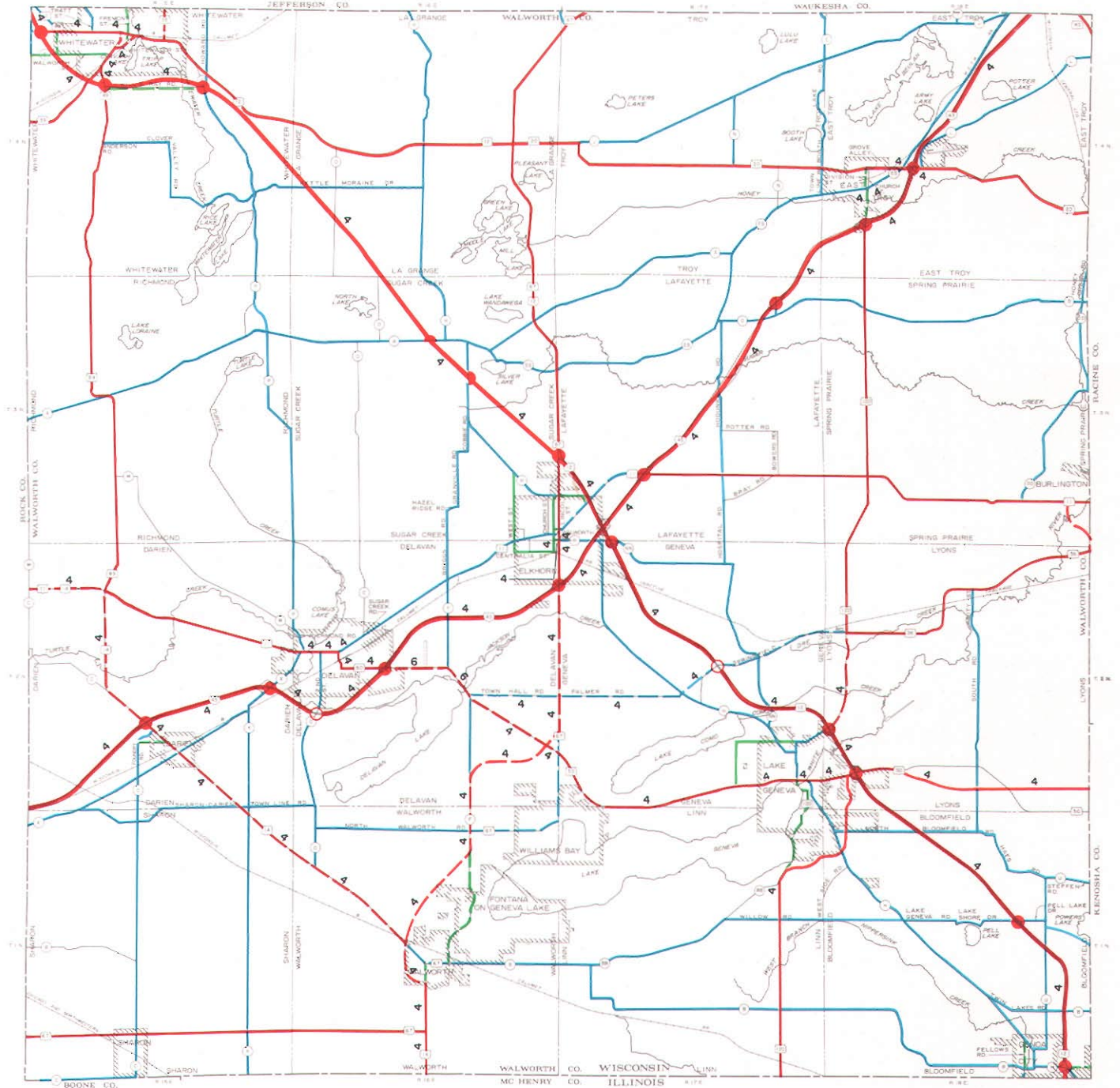
planned arterial street and highway system by proposed jurisdiction, state, county, and local, within each unit of government within Walworth County. It may be noted that, under the preliminary plan, the total mileage of state trunk highways in the County would decrease from about 224 miles to about 222 miles, or by about 1 percent. The total mileage of county trunk highways would increase from 244 to 250 miles, or by about 2 percent. The total local trunk highway mileage would increase from 18 to 20 miles, or by about 11 percent.

Of the total 492 miles of the arterial system in Walworth county under the preliminary plan, 409 miles, or 83 percent, would require only preservation or resurfacing and reconstruction; 47 miles, or 10 percent, would require improvement or widening to provide additional traffic lanes; and 36 miles, or 7 percent, would consist of new facilities. Of the 47 miles of proposed improvement projects, 37 miles, or 79 percent, would be on the planned state trunk highway system; 10 miles, or 20 percent, would be on the planned county trunk highway system; and 0.2 mile, or less than 1 percent, would be on the planned local trunk highway system. Of the 36 miles of proposed new arterial facilities, 26 miles, or 73 percent, would be on the state trunk highway system; 5 miles, or 14 percent, would be on the county trunk highway system; and 5 miles, or 13 percent, would be on the local arterial system.

Table 20 presents an estimate of the total costs of the preliminary recommended arterial system plan for Walworth County. This estimate assumes that all facilities requiring only preservation will be resurfaced once by the year 2010. In addition, it is assumed that all improvements on existing new locations will be implemented by the year 2010. The estimated costs are presented by recommended jurisdiction, state, county, or local. The estimated cost of the recommended system to the year 2010, including right-of-way acquisition, is \$254 million, including \$178 million for state trunk highways, \$65 million for county trunk highways, and \$11 million for local arterials.

PUBLIC REACTION TO THE AMENDED JURISDICTIONAL HIGHWAY SYSTEM PLAN

The preliminary draft of the new jurisdictional highway system plan for Walworth County was



LEGEND

CURRENT PLAN

FREEWAY

STATE TRUNK HIGHWAY

INTERCHANGE

STANDARD ARTERIAL

— STATE TRUNK HIGHWAY

 COUNTY TRUNK HIGHWAY LOCAL TRUNK HIGHWAY

NEW PLAN AMENDMENTS

— — STATE TRUNK HIGHWAY

— — COUNTY TRUNK HIGHWAY

— — LOCAL TRUNK HIGHWAY

INTERCHANGE

4 NUMBER OF TRAFFIC LANES
(2 WHERE UNNUMBERED)

NOTE: USH 12 BYPASS ALIGNMENT SHOWN TO SOUTH. A PRELIMINARY ENGINEERING STUDY WILL DETERMINE WHETHER THE ALIGNMENT WILL BE TO THE NORTH OR SOUTH OF WHITEWATER.



GRAPHIC SCALE

Table 16

**PRELIMINARY RECOMMENDED AMENDMENTS TO THE WALWORTH COUNTY
JURISDICTIONAL HIGHWAY SYSTEM PLAN AS TAKEN TO PUBLIC HEARING**

Functional Plan Amendments

- The improvement of STH 120 from STH 36 to USH 12 to provide four travel lanes
- The improvement of STH 50 from IH 43 to Town Hall Road to provide six travel lanes
- The improvement of STH 50 from Town Hall Road to Geneva Street to provide four travel lanes
- The improvement of USH 14 from the Rock-Walworth County line to the proposed STH 67 bypass to provide four travel lanes
- The improvement of STH 67 from IH 43 to USH 14 to provide four travel lanes
- The improvement of Town Hall Road from STH 50 to STH 67 to provide four travel lanes
- The improvement of Palmer Road from STH 67 to CTH H to provide four travel lanes
- The addition as a new local arterial of a new facility between Main Street—USH 12—and Walworth Street
- The addition as a new county arterial of Palmer Road extended from CTH H to the proposed Springfield Road interchange at USH 12
- The addition as a new county arterial of Foundry Road and its extension from Westbound Lane to USH 14
- The addition as a state trunk highway of the proposed western segment of the Burlington area outer bypass to provide four travel lanes
- The addition of the proposed STH 67 bypass of the Villages of Walworth and Fontana on Geneva Lake from USH 14 at the south corporate limits of the Village of Walworth to existing STH 67 at STH 50
- The addition of a new interchange on USH 12 at Springfield Road
- The addition of a new interchange on IH 43 at CTH O
- The addition as a county arterial of existing Fellows Road between CTH B and the Walworth-McHenry County line
- The addition as a local arterial of existing Fellows Road between CTH H and CTH B
- The addition as a county arterial of existing Springfield Road from USH 12 to STH 120
- The addition as a local arterial of existing Madison Street from Badger Parkway to USH 14
- The addition as a local arterial of existing Division Street from STH 20 to CTH ES
- The addition as a state arterial of existing Janesville Road and Franklin Street from Whitewater Street to USH 12
- The addition as a local arterial of existing STH 120 between Main Street and the proposed STH 120 bypass south of Big Foot Beach State Park
- The deletion of a segment of the planned STH 120 Lake Geneva bypass from Springfield Road to STH 50
- The deletion of a planned new local arterial facility from CTH F to STH 67
- The deletion of a planned new county arterial facility from USH 14 to Madison Street
- The deletion of a planned new local arterial facility between Main Street—USH 12—and Tratt Street
- The deletion as a proposed state trunk highway of Church Street and its extension from STH 20 to CTH ES

Table 16 (continued)

Jurisdictional Plan Amendments

- Change the recommended jurisdiction of South Road from CTH H to the Kenosha-Walworth County line from state to local trunk highway
- Change the recommended jurisdiction of Willis Ray Road from STH 89 to CTH P from county to local trunk highway
- Change the recommended jurisdiction of Fremont Street from the Jefferson-Walworth County line to Whitewater Street from state to local trunk highway
- Change the recommended jurisdiction of STH 59 from the Jefferson-Walworth County line to Milwaukee Street—USH 12—from local to state trunk highway
- Change the recommended jurisdiction of USH 14/STH 67 from Kenosha Avenue—STH 67—to the Village of Walworth south corporate limits from state to local trunk highway
- Change the recommended jurisdiction of USH 14 from the Village of Walworth west corporate limits to Kenosha Avenue—STH 67—from state to county trunk highway
- Change the recommended jurisdiction of STH 67 from the proposed Village of Fontana-Village of Walworth bypass to CTH B from state to local trunk highway
- Change the recommended jurisdiction of STH 67 from the proposed STH 67 bypass at STH 50 to the proposed STH 67 bypass at CTH F from state to county trunk highway
- Change the recommended jurisdiction of STH 67 from USH 14 to CTH B from state to county trunk highway
- Change the recommended jurisdiction of Westbound Lane from Foundry Road to Badger Parkway from county to local trunk highway
- Change the recommended jurisdiction of CTH G from CTH ES to IH 43 from state to local trunk highway
- Change the recommended jurisdiction of STH 11 from Lincoln Street to IH 43 from state to county trunk highway
- Change the recommended jurisdiction of Whitewater Street from Fremont Street to Main Street from local to state trunk highway

Source: SEWRPC.

presented for public review and comment at a public informational meeting and hearing held on March 7, 1991, at the Elkhorn Area Middle School, Elkhorn, Wisconsin. Prior to the hearing the Commission prepared and distributed SEWRPC Newsletter, Volume 31, No. 1 (January-February 1991), which described the original jurisdictional highway system plan for Walworth County and the amendments to that plan proposed in the preliminary draft of the new plan. The capacity improvements recommended under the proposed new jurisdictional highway system plan were described, including the recommended relative priority of those improvements, as were the proposed jurisdictional transfers. The estimated cost of the new plan was presented, along with a review of potential funding sources.

A record of the public comment received on the plan was prepared by the Commission staff for distribution to, and review by, the Advisory Committee. The record of the public comment included a summary of the statements made at the public hearing, along with attendance records, written comments submitted prior to and subsequent to the hearing, and pertinent newspaper articles. A total of 164 people attended the informational meeting and hearing, with 23 people speaking at the hearing.

The record of the public hearing on the preliminary plan indicates that comments were made in support of a number of the proposals in the preliminary draft of the new plan. More specifically, comments were made in support of the

following improvements: 1) the widening of STH 50 to provide four traffic lanes between IH 43 and Geneva Street in the City of Delavan, Town of Delavan, and Town of Geneva; 2) the extension of the USH 12 freeway from the City of Elkhorn to the City of Whitewater; 3) the proposed improvements to accommodate traffic attendant to events at the Alpine Valley Music Theatre; 4) the proposed bypass of STH 120; and 5) the proposed new interchange on IH 43 at CTH O. With respect to the proposed new interchange on IH 43 at CTH O, requests were made to identify this improvement as one of high priority for implementation based upon its potential to remove through traffic from City of Delavan residential neighborhoods and its potential to relieve existing and potential future arterial traffic congestion in the City of Delavan.

The record of the public comment on the preliminary plan also indicates that comments were made in opposition to a number of proposals in the preliminary plan. Comments were made in opposition to the following recommended improvements: 1) the improvement of Town Hall Road and Palmer Road to four traffic lanes and the extension of Palmer Road to a proposed new interchange on USH 12 at Springfield Road; 2) the improvement of STH 50 between IH 43 and Town Hall Road to six traffic lanes; 3) the proposed alignment for the recommended STH 120 bypass; 4) the proposed alignment for the extension of CTH C over Foundry Road extended from Westbound Lane to USH 14; 5) the proposed extension of Hodunk Road between Potters Road and Bray Road; and 6) the STH 67 bypass of the communities of Walworth, Williams Bay, and Fontana.

Many of the comments made at the hearing, and a large number of letters submitted after the hearing, opposed the proposed improvement of Town Hall Road and Palmer Road. Concern was expressed over the impacts of the proposed widening on existing residences and farms, as well as the potential of the improvement to promote additional urban development along Town Hall Road and Palmer Road. A number of suggestions were made with respect to alternatives to the proposed improvement of Town Hall Road and Palmer Road and the extension of Palmer Road to a new interchange on USH 12 at Springfield Road. One suggestion was that informational signs be placed on USH 12 and IH 43 encouraging travel to be made on USH 12

and IH 43 rather than STH 50. Another alternative proposed that STH 50 be routed along USH 12 and IH 43, and the existing route be converted to a county or local trunk highway. Another alternative proposed to relieve traffic on STH 50 rather than through the improvement of Town Hall Road and Palmer Road was the addition of an interchange on IH 43 at CTH F.

A number of comments were made in opposition to the proposed alignment for the STH 120 bypass. Generally, those opposing the proposed alignment for the STH 120 bypass supported the retention on the plan of the STH 120 bypass. Those expressing opposition to the alignment as shown on the preliminary plan suggested an alternative alignment be considered which would use existing Willow Road, West Side Road, and CTH H for the alignment of the STH 120 bypass. Concerns were expressed with respect to the alignment shown on the preliminary plan, which utilized all new alignment due to its impact on residences and wetlands.

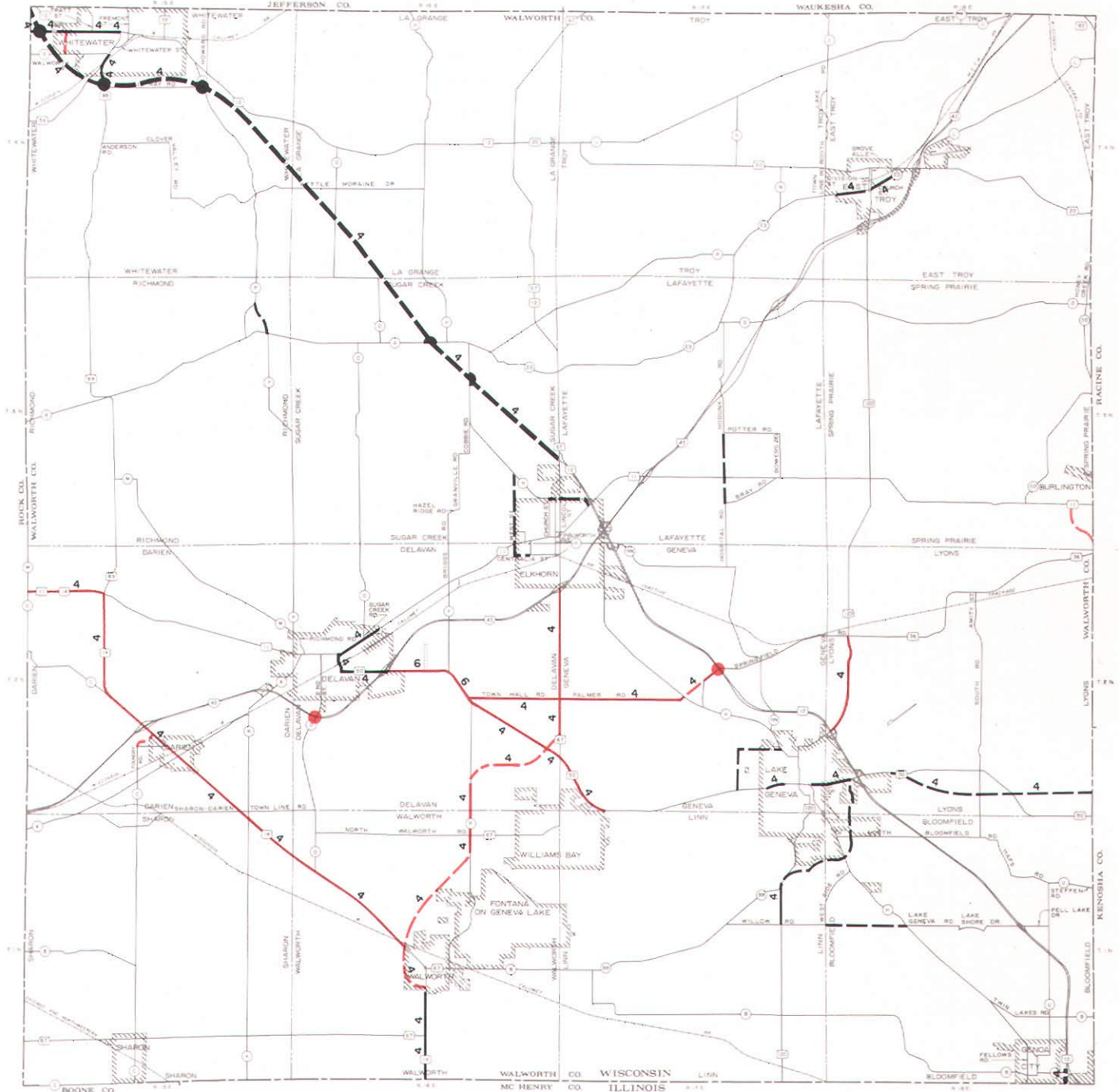
The one comment made in opposition to the proposed improvement of STH 50 to six traffic lanes between IH 43 and Town Hall Road noted the impact of the potential improvement on existing businesses at the Delavan inlet area.

The comments made in opposition to the proposed extension of CTH C along an extended Foundry Road cited its impacts on an existing truck stop facility and the potential expansion plans of that facility. It was suggested that, as an alternative to extending Foundry Road, existing Westbound Lane be utilized as the extension of CTH C.

A Supervisor from the Town of Lafayette Town Board and member of the Advisory Committee commented on the long-proposed extension of Hodunk Road, suggesting that the extension of Hodunk Road be deleted from the final plan. The proposed Hodunk Road extension is located within the Town of Lafayette. He indicated a lack of substantial need for the improvement and a concern that the estimated total cost of the plan exceeded available resources and also that the deletion of Hodunk Road would help bring the plan into conformance with available resources.

One comment was made in opposition to the proposed STH 67 bypass, citing questions concerning need and impact on existing land uses.

**CAPACITY IMPROVEMENTS RECOMMENDED UNDER THE PRELIMINARY
RECOMMENDED WALWORTH COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN**



LEGEND

4 NUMBER OF TRAFFIC LANES
(2 WHERE UNNUMBERED)

CURRENT PLAN

- INTERCHANGE
- EXISTING LOCATION (WIDENING)
- NEW LOCATION

NEW PLAN AMENDMENTS

- INTERCHANGE
- EXISTING LOCATION (WIDENING)
- NEW LOCATION

NOTE: USH 12 BYPASS ALIGNMENT SHOWN TO SOUTH. A PRELIMINARY ENGINEERING STUDY WILL DETERMINE WHETHER THE ALIGNMENT WILL BE TO THE NORTH OR SOUTH OF WHITEWATER.

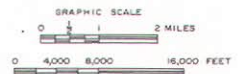


Table 17

**CAPACITY IMPROVEMENTS RECOMMENDED UNDER THE PRELIMINARY
WALWORTH COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN**

Jurisdiction	Facility	Termini	Description	Included in First Generation Plan	Implementation Priority ^a
Existing Location (additional traffic lanes) State	USH 12	Frontage Road to Fremont Street	Widen from two to four traffic lanes	Yes	High
	USH 14	Rock-Walworth County line to proposed STH 67 bypass	Widen from two to four traffic lanes	No	Medium
	USH 14	Proposed STH 67 bypass to McHenry-Walworth County line	Widen from two to four traffic lanes	Yes	Medium
	STH 50	IH 43 to Town Hall Road	Widen from two to six traffic lanes	No	High
	STH 50	Town Hall Road to Geneva Street	Widen from two to four traffic lanes	No	High
	STH 50	Pearson Drive to Madison Street	Widen from two to four traffic lanes	Yes	Medium
	STH 50	CTH H to Edwards Boulevard	Widen from two to four traffic lanes	Yes	Medium
	STH 67	IH 43 to the proposed STH 67 bypass at STH 50	Widen from two to four traffic lanes	No	Medium
	STH 120	STH 36 to USH 12	Widen from two to four traffic lanes	No	Medium
	STH 89	Willis Ray Road to Whitewater Street	Widen from two to four traffic lanes	Yes	Medium/Low
County	Palmer Road/ Town Hall Road ^b	STH 50 to CTH H	Widen from two to four traffic lanes	No	Medium
New Location (on new alignment) State	IH 43	CTH O	Construct new interchange	No	Low
	USH 12 ^c	Whitewater to Elkhorn	Construct four lanes on new alignment	Yes	High
	USH 12	Springfield Road/Palmer Road extended	Construct new interchange	No	Medium
	STH 50	USH 12 to the Kenosha-Walworth County line	Construct four lanes on new alignment	Yes	Medium
	STH 67 bypass (communities of Walworth, Fontana, and Williams Bay)	Existing STH 67 at Village of Walworth south corporate limits to existing STH 67 at STH 50	Construct four lanes on generally new alignment	No	Medium/Low
	STH 120 bypass	STH 50 to existing STH 120 south of Big Foot Beach State Park	Construct two lanes on new alignment	Yes	High
	Burlington bypass	STH 11 to Mormon Road	Construct four lanes on generally new alignment	Yes	High
	Palmer Road extension	CTH H to USH 12	Construct four lanes on new alignment	Yes	Medium
	CTH H extension	Church Street to STH 67	Construct two lanes on new alignment	Yes	Low
	Foundry Road extension	Foundry Road to USH 14	Construct two lanes on new alignment	Yes	Low
	Hodunk Road extension	Potters Road to Bray Road	Construct two lanes on new alignment	Yes	Low
	Willow Road extension	West Side Road to CTH H	Construct two lanes on new alignment	Yes	Low
	CTH P realignment	Territorial Road to CTH A	Construct two lanes on new alignment	Yes	Low
	Centralia Street extension	STH 11 to Devendorf Street	Construct two lanes on new alignment	Yes	Low
	Grant Street extension	CTH H to STH 50	Construct two lanes on new alignment	Yes	Low
	West Street extension	CTH H to STH 11	Construct two lanes on new alignment	Yes	Low
	New facility	STH 67 to STH 11	Construct two lanes on new alignment	Yes	Low
	New facility	USH 12 to CTH S	Construct two lanes on new alignment	No	Low
County	Palmer Road extension	CTH H to USH 12	Construct four lanes on new alignment	Yes	Medium
County	CTH H extension	Church Street to STH 67	Construct two lanes on new alignment	Yes	Low
County	Foundry Road extension	Foundry Road to USH 14	Construct two lanes on new alignment	Yes	Low
County	Hodunk Road extension	Potters Road to Bray Road	Construct two lanes on new alignment	Yes	Low
County	Willow Road extension	West Side Road to CTH H	Construct two lanes on new alignment	Yes	Low
County	CTH P realignment	Territorial Road to CTH A	Construct two lanes on new alignment	Yes	Low
Local	Centralia Street extension	STH 11 to Devendorf Street	Construct two lanes on new alignment	Yes	Low
Local	Grant Street extension	CTH H to STH 50	Construct two lanes on new alignment	Yes	Low
Local	West Street extension	CTH H to STH 11	Construct two lanes on new alignment	Yes	Low
Local	New facility	STH 67 to STH 11	Construct two lanes on new alignment	Yes	Low
Local	New facility	USH 12 to CTH S	Construct two lanes on new alignment	No	Low

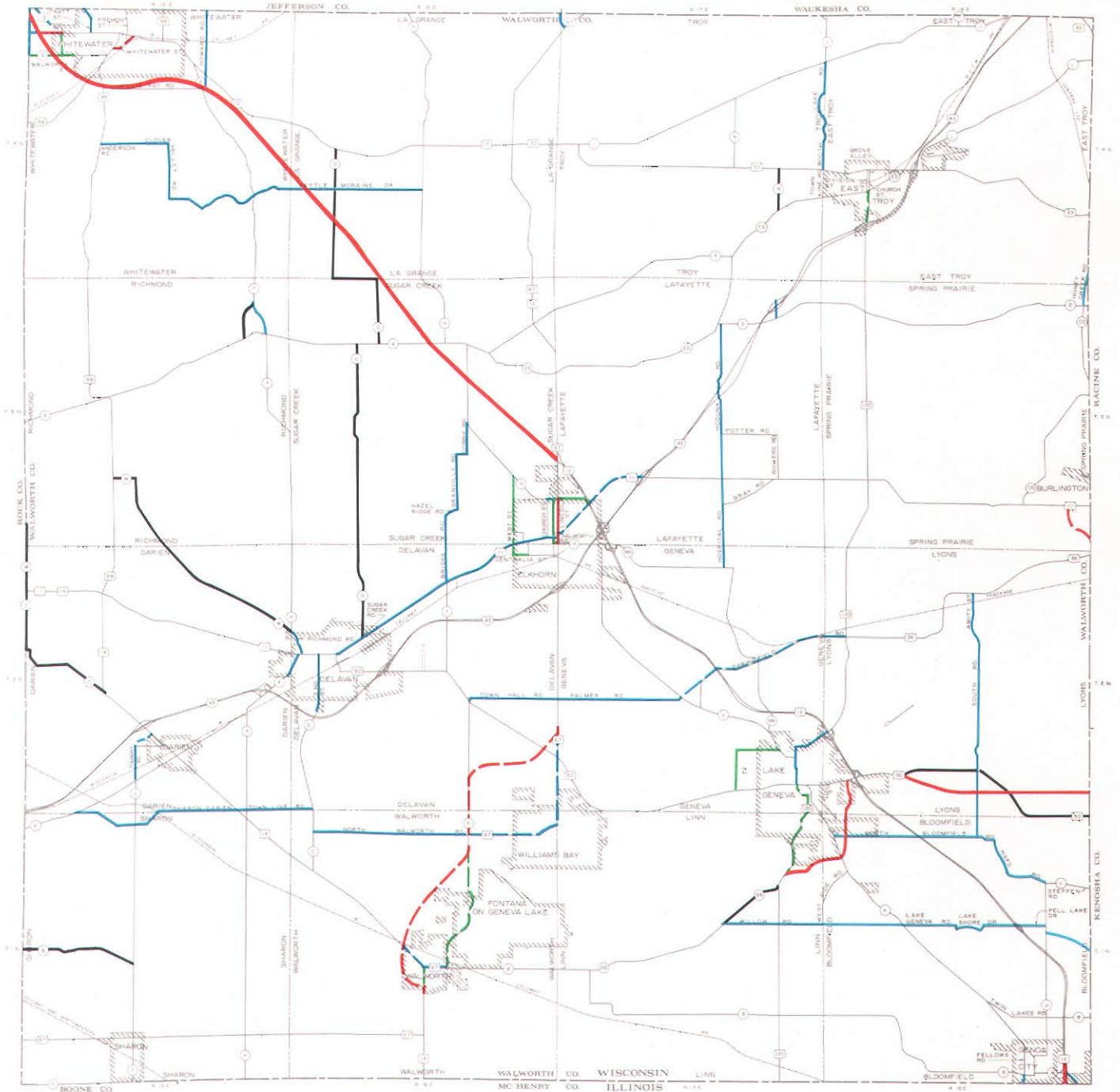
^aThe proposed implementation priority is dependent upon the need for the improvement to meet current traffic demand; the need for the improvement to meet future traffic demand and the anticipated timing of that demand; and the need for the improvement to provide an integrated traffic route.

^bFollowing construction of a new interchange at USH 12 and Springfield Road, implementation of this project may be staged with the initial stage being the reconstruction of the existing roadway to a high standard two-lane facility.

^cImplementation of this project may occur in several stages, with the initial stage being construction of the Whitewater bypass as a two-lane facility. Subsequent stages may include: 1) construction of the initial two lanes between Elkhorn and Whitewater; 2) provision of a four-lane expressway through the construction of two additional lanes with at-grade intersections at cross streets; and 3) up-grade to a four-lane freeway by eliminating the at-grade intersections and construction of grade-separated interchanges.

Source: SEWRPC.

CHANGES IN HIGHWAY SYSTEM JURISDICTIONAL RESPONSIBILITY UNDER THE PRELIMINARY WALWORTH COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN



LEGEND

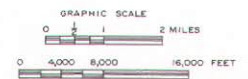
CURRENT PLAN TRANSFERS TO:

- STATE TRUNK HIGHWAY SYSTEM
- COUNTY TRUNK HIGHWAY SYSTEM
- LOCAL TRUNK HIGHWAY SYSTEM
- LOCAL (NON-ARTERIAL) SYSTEM

NEW PLAN AMENDMENTS TRANSFERS TO:

- STATE TRUNK HIGHWAY SYSTEM
- COUNTY TRUNK HIGHWAY SYSTEM
- LOCAL TRUNK HIGHWAY SYSTEM

NOTE: USH 12 BYPASS ALIGNMENT SHOWN TO SOUTH. A PRELIMINARY ENGINEERING STUDY WILL DETERMINE WHETHER THE ALIGNMENT WILL BE TO THE NORTH OR SOUTH OF WHITEWATER.



Source: SEWRPC.

Table 18

**CHANGES IN HIGHWAY SYSTEM JURISDICTIONAL RESPONSIBILITY UNDER THE
PRELIMINARY WALWORTH COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN^a**

Unit of Government	Planned	Existing	Facility	From	To	Distance (miles)	Included in First Generation Plan
Town of Bloomfield	State trunk highway	New facility	New facility	N. Bloomfield Road	Town of Linn	1.07	Yes
	County trunk highway	Local nonarterial	N. Bloomfield Road	CTH H	Hafs Road	3.43	Yes
	County trunk highway	Local nonarterial	Clover Road	Lake Geneva Road	Lake Shore Drive	0.10	Yes
	County trunk highway	Local nonarterial	Darling Road	CTH H	Twin Lakes Road	0.57	Yes
	County trunk highway	Local nonarterial	Hafs Road	N. Bloomfield Road	CTH U	1.72	Yes
	County trunk highway	Local nonarterial	Lake Geneva Road	CTH H	Clover Road	1.20	Yes
	County trunk highway	Local nonarterial	Lake Shore Drive	Clover Road	Orchid Drive	0.54	Yes
	County trunk highway	Local nonarterial	Orchid Drive	Lake Shore Drive	Pell Lake Drive	0.15	Yes
	County trunk highway	Local nonarterial	Pell Lake Drive	Orchid Drive	CTH U	1.40	Yes
	County trunk highway	Local nonarterial	Powers Lake Road	CTH U	Kenosha County	1.00	Yes
	County trunk highway	Local nonarterial	South Road	N. Bloomfield Road	Town of Lyons	0.52	Yes
	County trunk highway	Local nonarterial	Twin Lakes Road	Darling Road	CTH U	0.76	Yes
	County trunk highway	New facility	New facility	West Side Road	CTH H	1.90	Yes
	Local nonarterial	State trunk highway	STH 50	Mariondale Drive	Kenosha County	0.74	Yes
Town of Darien	County trunk highway	Local nonarterial	Darien-Sharon Town Line Road	CTH X	Town of Delavan	2.54	Yes
	County trunk highway	Local nonarterial	Foundry Road	CTH X	New facility	0.88	Yes
	County trunk highway	New facility	Foundry Road extension	Foundry Road	USH 14	0.47	Yes
	Local trunk highway	County trunk highway	CTH C	USH 14	Town of Richmond	3.45	Yes
	Local trunk highway	County trunk highway	CTH M	City of Delavan	Town of Richmond	3.47	Yes
	Local trunk highway	Local nonarterial	Westbound Lane	Foundry Road	Village of Darien	0.25	No
Town of Delavan	State trunk highway	New interchange	IH 43	CTH O	--	--	No
	State trunk highway	County trunk highway	CTH F	Bailey's Road	Town of Walworth	0.91	No
	State trunk highway	Local nonarterial	Bailey's Road	CTH F	New facility	1.32	No
	State trunk highway	New facility	Bailey's Road extension	Bailey's Road	STH 67	0.90	No
	County trunk highway	State trunk highway	STH 11	City of Delavan	City of Elkhorn	3.72	Yes
	County trunk highway	State trunk highway	STH 67	New facility	Village of Williams Bay	0.77	No
	County trunk highway	Local nonarterial	Briggs Road	Town of Sugar Creek	STH 11	0.87	Yes
	County trunk highway	Local nonarterial	Darien-Sharon Town Line Road	Town of Darien	CTH O	0.24	Yes
	County trunk highway	Local nonarterial	Town Hall Road	STH 50	Town of Geneva	2.06	Yes
	Local nonarterial	County trunk highway	CTH O	Town of Sugar Creek	City of Delavan	1.85	Yes
Town of East Troy	County trunk highway	Local nonarterial	Booth Lake Road	STH 20	New facility	0.22	Yes
	County trunk highway	New facility	Booth Lake Road extension	Booth Lake Road	St. Peter's Road	0.30	Yes
	County trunk highway	Local nonarterial	Booth Lake Road	CTH J	St. Peter's Road	0.57	Yes
	County trunk highway	Local nonarterial	Honey Creek Road	Racine County	Town of Spring Prairie	0.13	Yes
	Local trunk highway	County trunk highway	CTH G	Village of East Troy	IH 43	0.14	Yes
Town of Geneva	State trunk highway	New interchange	USH 12	Springfield Road	--	--	No
	County trunk highway	State trunk highway	STH 67	New facility	Village of Williams Bay	0.58	No
	County trunk highway	State trunk highway	STH 120	Sheridan Street	City of Lake Geneva	0.24	Yes
	County trunk highway	Local trunk highway	Hospital Road	Town of LaFayette	CTH NN	0.50	Yes
	County trunk highway	Local trunk highway	Palmer Road	STH 67	CTH H	2.80	Yes
	County trunk highway	Local trunk highway	Springfield Road	New facility	Town of Lyons	3.01	No
	County trunk highway	New facility	Springfield Road extension	CTH H	Springfield Road	0.55	No
	Local trunk highway	New facility	New facility	City of Lake Geneva	STH 50	1.42	Yes
Town of LaFayette	County trunk highway	State trunk highway	STH 11	IH 43	City of Elkhorn	1.22	No
	County trunk highway	Local trunk highway	Bowers Road	IH 43	CTH D	0.45	Yes
	County trunk highway	Local nonarterial	Hodunk Road	CTH D	Potters Road	2.56	Yes
	County trunk highway	Local nonarterial	Hospital Road	Bray Road	Town of Geneva	0.94	Yes
	County trunk highway	New facility	Hospital Road extension	Potters Road	Bray Road	1.56	Yes
Town of LaGrange	State trunk highway	New facility	USH 12 freeway	Town of Whitewater	Town of Sugar Creek	3.20	Yes
	County trunk highway	Local nonarterial	Kettle Moraine Drive	Town of Whitewater	CTH H	2.99	Yes
	County trunk highway	Local nonarterial	Palmyra Road	Jefferson County	STH 67	0.08	No
	Local nonarterial	County trunk highway	CTH O	USH 12	Jackson Road	3.45	Yes
Town of Linn	State trunk highway	New facility	STH 120 bypass	Town of Bloomfield	STH 120	1.00	Yes
	County trunk highway	Local nonarterial	Willow Road	CTH BB	Town of Bloomfield	2.27	Yes
	Local trunk highway	State trunk arterial	STH 120	City of Lake Geneva	STH 120 bypass	0.58	No
Town of Lyons	State trunk highway	New facility	STH 50	City of Lake Geneva	Kenosha County	4.05	Yes
	State trunk highway	New facility	STH 120 bypass	City of Lake Geneva	Town of Bloomfield	0.25	Yes
	County trunk highway	Local nonarterial	Amity Street	STH 36	Spring Valley Road	0.80	Yes
	County trunk highway	Local nonarterial	South Road	Spring Valley Road	Town of Bloomfield	4.28	Yes
	County trunk highway	Local nonarterial	Springfield Road	Town of Geneva	STH 120	0.49	No
	Local nonarterial	State trunk highway	STH 50	City of Lake Geneva	Kenosha County	4.24	Yes
Town of Richmond	County trunk highway	New facility	CTH P extension	Territorial Road	CTH A	0.85	Yes
	Local nonarterial	County trunk highway	CTH M	STH 89	Town of Darien	2.20	Yes
	Local nonarterial	County trunk highway	CTH M	Rock County	Town of Darien	0.20	Yes
	Local nonarterial	County trunk highway	CTH P	Territorial Road	CTH A	0.97	Yes
Town of Sharon	County trunk highway	Local nonarterial	Darien-Sharon Town Line Road	CTH X	Town of Walworth	2.53	Yes
	Local nonarterial	County trunk highway	CTH B	Rock County	CTH C	2.50	Yes
Town of Spring Prairie	State trunk highway	New facility	Burlington bypass	STH 11	STH 36	1.06	Yes
	County trunk highway	Local nonarterial	Honey Creek Road	Town of East Troy	CTH D	0.50	Yes

Table 18 (continued)

Unit of Government	Planned	Existing	Facility	From	To	Distance (miles)	Included in First Generation Plan
Town of Sugar Creek	State trunk highway	New facility	USH 12 freeway	Town of LaGrange	STH 67	5.91	Yes
	County trunk highway	Local nonarterial	Briggs Road	Hazel Ridge Road	Town of Delavan	0.66	Yes
	County trunk highway	Local nonarterial	Cobbie Road	CTH H	Sugar Creek Road	0.68	Yes
	County trunk highway	Local nonarterial	Granville Road	Sugar Creek Road	Hazel Ridge Road	1.25	Yes
	County trunk highway	Local nonarterial	Hazel Ridge Road	Briggs Road	Granville Road	0.28	Yes
	County trunk highway	Local nonarterial	Sugar Creek Road	Granville Road	Cobbie Road	0.26	Yes
	Local nonarterial	County trunk arterial	CTH O	Town of LaGrange	Town of Delavan	6.54	Yes
Town of Troy	County trunk highway	Local nonarterial	Booth Lake Road	CTH J	St. Peter's Road	1.28	Yes
	County trunk highway	Local nonarterial	Booth Lake Road	St. Peter's Road	STH 20	0.22	Yes
	County trunk highway	Local nonarterial	Palmyra Road	Waukesha County	STH 67	0.26	No
	County trunk highway	Local nonarterial	Town Line Road	STH 20	CTH ES	0.31	Yes
Town of Walworth	State trunk highway	New facility	STH 67 bypass	STH 67	USH 14	2.48	No
	State trunk highway	County trunk highway	CTH F	Town of Delavan	STH 67 bypass	0.57	No
	County trunk highway	State trunk highway	STH 67	CTH F	Theatre Road	1.01	No
	County trunk highway	Local nonarterial	N. Walworth Road	CTH O	STH 67	3.50	Yes
	Local trunk highway	State trunk highway	STH 67	Village of Walworth	Village of Fontana	0.13	No
	Local trunk highway	State trunk highway	STH 67	STH 67 bypass	Village of Fontana	0.74	No
	Local trunk highway	State trunk highway	STH 67	STH 67 bypass	Village of Fontana	0.74	No
Town of Whitewater	State trunk highway	New facility	USH 12 freeway	Rock County	Town of LaGrange	7.38	Yes
	County trunk highway	State trunk highway	USH 12	Jefferson County	CTH S	0.71	Yes
	County trunk highway	Local nonarterial	Anderson Road	STH 89	Clover Valley Road	0.83	Yes
	County trunk highway	Local nonarterial	Clover Valley Road	Anderson Road	Kettle Moraine Drive	2.81	Yes
	County trunk highway	Local nonarterial	Howard Road	Jefferson County	USH 12	1.48	Yes
	County trunk highway	Local nonarterial	Kettle Moraine Drive	Clover Valley Road	Town of LaGrange	2.30	Yes
	County trunk highway	New facility	Howard Road extension	USH 12	CTH P	0.53	Yes
	County trunk highway	New facility	Main Street extension	Rock County	USH 12 freeway	0.25	Yes
	County trunk highway	Local nonarterial	Warner Road	Jefferson County	CTH S	1.06	Yes
	Local trunk highway	County trunk highway	CTH S	Rock County	City of Whitewater	0.78	Yes
	Local trunk highway	County trunk highway	CTH S	Rock County	City of Whitewater	0.78	Yes
	Local trunk highway	County trunk highway	CTH S	Rock County	City of Whitewater	0.78	Yes
Village of Darien	Local trunk highway	Local nonarterial	Madison Street	Town of Darien	USH 14	0.35	No
Village of East Troy	County trunk highway	Local nonarterial	Town Line Road	STH 20	CTH ES	0.31	Yes
	Local trunk arterial	County trunk arterial	CTH G	CTH ES	Town of East Troy	0.60	No
	Local trunk arterial	Local nonarterial	Division Street	STH 20	CTH ES	0.46	No
Village of Fontana	Local trunk highway	State trunk highway	STH 67	Town of Walworth	Village of Walworth	1.13	No
Village of Genoa City	County trunk highway	Local nonarterial	Fellows Road	CTH B	McHenry County	0.20	No
	Local trunk highway	Local nonarterial	Fellows Road	CTH H	CTH B	0.68	No
	Local trunk highway	Local nonarterial	South Road	USH 12	Kenosha County	0.56	No
	County trunk highway	State trunk highway	USH 12	Freeway terminus	McHenry County	0.30	Yes
	State trunk highway	New facility	USH 12 freeway extension	CTH H	McHenry County	0.23	Yes
Village of Walworth	State trunk highway	New facility	STH 67 bypass	USH 14	Town of Walworth	1.48	No
	County trunk highway	State trunk highway	USH 14	Town of Walworth	STH 67	0.71	No
	County trunk highway	State trunk highway	STH 67	USH 14	CTH B	0.52	No
	Local trunk highway	State trunk highway	USH 14	STH 67	Town of Walworth	0.68	No
	Local trunk highway	State trunk highway	STH 67	Village of Fontana	CTH B	0.61	No
Village of Williams Bay	Local trunk highway	State trunk highway	STH 67	Town of Delavan	Theatre Road	1.66	No
City of Delavan	County trunk highway	State trunk highway	STH 11	STH 50	Town of Delavan	1.04	Yes
	County trunk highway	Local trunk highway	Beloit Street	STH 11	Creek Road	0.61	Yes
	County trunk highway	Local trunk highway	Richmond Road	Town of Delavan	STH 11	0.60	Yes
	County trunk highway	Local trunk highway	2nd Street	STH 11	Town of Delavan	10.1	Yes
	Local nonarterial	County trunk highway	CTH M	Town of Delavan	CTH P	0.03	Yes
	Local nonarterial	County trunk highway	CTH O	Town of Delavan	A point 0.01 mile north	0.01	Yes
	Local nonarterial	County trunk highway	CTH O	Town of Delavan	A point 0.01 mile north	0.01	Yes
City of Elkhorn	State trunk highway	Local trunk highway	Lincoln Street	Wisconsin Street	Geneva Street	0.97	Yes
	County trunk highway	State trunk highway	STH 11	Town of Delavan	STH 67	0.89	Yes
	County trunk highway	State trunk highway	STH 11	Lincoln Street	Town of Lafayette	1.13	Yes
	County trunk highway	New facility	CTH H extension	Church Street	STH 67	0.26	Yes
	Local trunk highway	State trunk highway	STH 11	STH 67	CTH H	1.15	Yes
	Local trunk highway	State trunk highway	STH 67	Lincoln Street	STH 11	0.79	Yes
	Local trunk highway	New facility	New facility	STH 67	STH 11	0.79	Yes
	Local trunk highway	New facility	Centralia Street extension	STH 11	Devendorf Street	0.57	Yes
	Local trunk highway	New facility	West Street extension	CTH H	Court Street	1.28	Yes
	Local trunk highway	New facility	West Street extension	CTH H	Court Street	1.28	Yes
City of Lake Geneva	State trunk highway	Local nonarterial	Edwards Boulevard	STH 50	End of Edwards Boulevard	0.05	Yes
	State trunk highway	New facility	STH 120 bypass	End of Edwards Boulevard	Town of Lyons	0.20	Yes
	State trunk highway	New facility	STH 120 bypass	Town of Bloomfield	N. Bloomfield Road	0.40	Yes
	County trunk highway	State trunk highway	STH 120	USH 12	STH 50	1.42	Yes
	Local trunk highway	State trunk highway	STH 120	STH 50	Town of Linn	1.83	No
	Local trunk highway	New facility	Grant Street extension	Town of Geneva	CTH H	0.50	Yes
City of Whitewater	State trunk highway	New facility	Main Street extension	USH 12 freeway	City of Whitewater	0.25	Yes
	State trunk highway	Local trunk facility	Whitewater Street	Fremont Street	USH 12	0.22	No
	County trunk highway	County trunk highway	Tratt Street	Jefferson County	USH 12	0.59	Yes
	Local trunk highway	County trunk highway	CTH S	Town of Whitewater	Pleasant Street	0.25	Yes
	Local trunk highway	New facility	New facility	USH 12	CTH S	0.28	Yes

^a The jurisdictional transfers recommended should all be initiated as soon as possible, as the transfers will promote implementation of the recommended plan improvement.

Source: SEWRPC.

Table 19

**ARTERIAL STREET MILEAGE BY JURISDICTION UNDER THE PRELIMINARY
WALWORTH COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN**

Civil Division	State Trunk Highway (miles)	County Trunk Highway (miles)	Local Trunk Highway (miles)	Total (miles)
City of Delavan	4.22	3.40	0.00	7.62
City of Elkhorn	5.70	4.44	4.59	14.73
City of Lake Geneva	4.76	3.64	2.71	11.11
City of Whitewater	6.13	0.57	2.00	8.70
Village of Darien	1.14	1.06	0.35	2.55
Village of East Troy	4.63	2.72	1.06	8.41
Village of Fontana	0.00	0.40	1.13	1.53
Village of Geneva City	0.23	3.11	1.24	4.58
Village of Sharon	0.90	1.37	0.00	2.27
Village of Walworth	1.51	1.50	1.29	4.30
Village of Williams Bay	0.00	1.36	0.00	1.36
Town of Bloomfield	8.70	29.40	0.00	38.10
Town of Darien	19.06	12.62	0.00	31.68
Town of Delavan	15.09	14.97	0.00	30.06
Town of East Troy	10.67	14.76	0.13	25.56
Town of Geneva	13.28	19.61	1.42	34.31
Town of LaFayette	14.55	15.02	0.00	29.57
Town of LaGrange	15.54	9.37	0.00	24.91
Town of Linn	6.22	12.50	0.58	19.30
Town of Lyons	18.03	5.56	0.00	23.59
Town of Richmond	6.39	11.36	0.00	17.75
Town of Sharon	6.71	12.94	0.00	19.65
Town of Spring Prairie	12.33	11.70	0.00	24.03
Town of Sugar Creek	9.21	18.29	0.00	27.50
Town of Troy	7.86	16.58	0.00	24.44
Town of Walworth	11.99	6.92	0.74	19.65
Town of Whitewater	16.85	14.71	2.97	34.53
Total	221.70	249.88	20.21	491.79
Percent of Total	45.08	50.81	4.11	100.00

Source: SEWRPC.

**ADVISORY COMMITTEE
REACTION TO PUBLIC COMMENTS**

Based upon review of the public reaction to the preliminary plan, the Advisory Committee at a meeting held on May 23, 1991, took the following actions to produce a recommended plan:

- The proposed new interchange on USH 12 with an extended Palmer Road; the improvement of Town Hall Road and Palmer Road to provide four traffic lanes; and the extension of Palmer Road as a four-traffic-lane roadway to connect to USH 12 were deleted

from the final system plan by the Advisory Committee. The proposed improvements to Town Hall Road and Palmer Road were intended to provide relief to STH 50 between Town Hall Road and USH 12, particularly within the City of Lake Geneva central business district, as shown on Map 41. With the proposed improvements to Town Hall and Palmer Road, the anticipated year 2010 average weekday traffic volume on existing STH 50 within the Lake Geneva central business district may be expected to exhibit only a marginal increase, from between 12,800 and 18,600 vehicles per average

Table 20

**ESTIMATED COST TO THE YEAR 2010 OF THE PRELIMINARY
WALWORTH COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN**

Item	Planned Arterial Mileage: Year 2010			
	State	County	Local	Total
Preservation	158.4	235.3	15.4	409.1
Improvement ^a	37.3	9.6	0.2	47.1
Expansion ^b	26.0	5.0	4.6	35.6
Total	221.7	249.9	20.2	491.8

	Estimated Construction Cost (includes right-of-way)			
Preservation	\$ 42,700,000	\$42,300,000	\$ 3,600,000	\$ 88,600,000
Improvement ^a	59,900,000	17,300,000	--	77,200,000
Expansion ^b	75,800,000	5,600,000	7,200,000	88,600,000
Total	\$178,400,000	\$65,200,000	\$10,800,000	\$254,400,000

^aWidening to provide additional traffic lanes on existing arterials.

^bConstruction of new facilities.

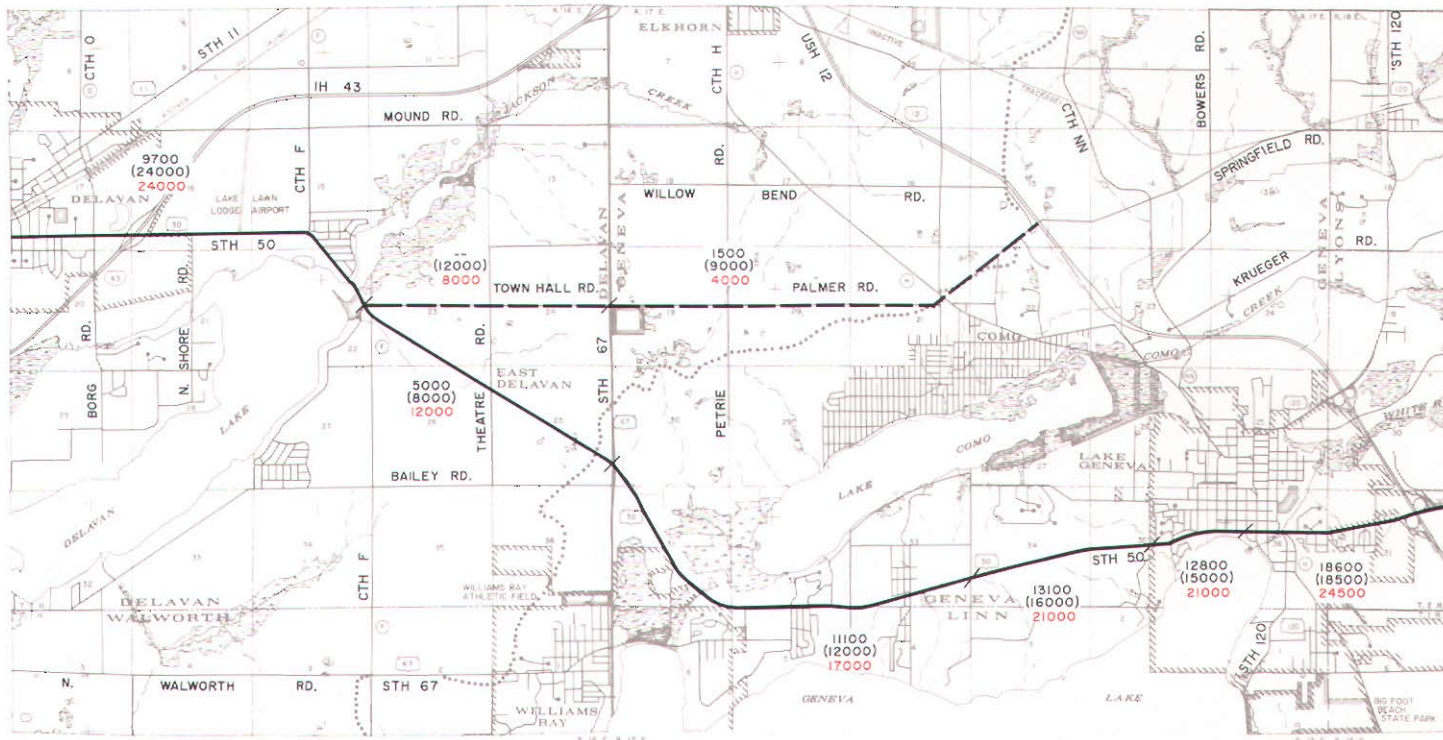
Source: SEWRPC.

weekday currently to between 15,000 and 18,500 vehicles per average weekday by the year 2010. As a result, if no improvements were made to STH 50 within the Lake Geneva central business district, and it continued to provide two traffic lanes with a design capacity of 13,000 vehicles per average weekday, average weekday traffic congestion would only marginally increase from current levels over a 20-year period. Alternatively, the conversion of angle to parallel parking within the City of Lake Geneva central business district to provide an undivided four traffic lane roadway cross-section with a design capacity of 17,000 vehicles per average weekday, together with the proposed improvement of Town Hall and Palmer Roads, may be expected to substantially reduce average weekday traffic congestion problems.

However, without the proposed improvement of Town Hall Road and Palmer Road, and assuming that informational signs are

posted on all STH 50, USH 12, and IH 43 approaches to the segment of STH 50 between Lake Geneva at USH 12 and the City of Delavan at IH 43, average weekday traffic volumes on STH 50 may be expected to increase substantially to the year 2010. Average weekday traffic volumes may be expected to increase to between 21,000 and 24,500 vehicles per average weekday by the year 2010 in the City of Lake Geneva central business district. Thus, year 2010 average weekday traffic volumes may be expected to be nearly double the design capacity of the existing two-traffic-lane route of STH 50 within the Lake Geneva central business district. If an undivided four-traffic-lane cross-section is provided on existing STH 50 within the City of Lake Geneva central business district through modification of parking, the forecast year 2010 average weekday traffic volumes of 21,000 to 24,500 vehicles per average weekday would still substantially exceed the design capacity of that four-lane roadway

COMPARISON OF EXISTING 1987 AND FORECAST 2010 AVERAGE WEEKDAY TRAFFIC VOLUMES ON THE STH 50 TRAVEL CORRIDOR



LEGEND

- EXISTING STH 50
- TOWN HALL ROAD AND PALMER ROAD
- AVERAGE WEEKDAY TRAFFIC VOLUME:
- 5000 1987
- (8000) 2010 WITH IMPROVED AND EXTENDED
TOWN HALL ROAD AND PALMER ROAD
INCLUDING NEW USH 12 INTERCHANGE
- 12000 2010 WITH NO IMPROVEMENT TO
TOWN HALL ROAD AND PALMER ROAD

Source: SEWRPC.

cross-section of 17,000 vehicles per average weekday. Nevertheless, given the strong public reaction, including the testimony of the Mayor of the City of Lake Geneva, at the hearing, the Advisory Committee acted to remove from the plan the proposed new interchange between USH 12 and Palmer Road extended at Springfield Road; the improvement of Town Hall and Palmer Roads to provide four traffic lanes between STH 50 and the proposed new interchange;

and the addition of Springfield Road between the proposed interchange and STH 120 to the county trunk highway system on a seven-to-five vote. It should be noted that average weekday traffic on Town Hall and Palmer Roads may be expected to increase from the current estimated 1,500 vehicles per average weekday to between 4,000 and 8,000 vehicles per average weekday by the year 2010, even with no improvement to Town Hall and Palmer Roads.

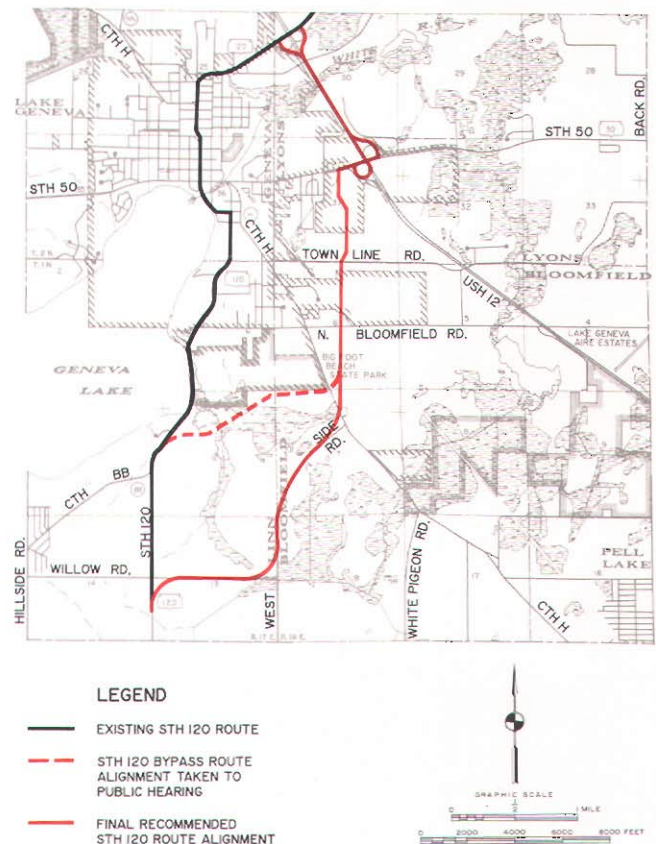
The Advisory Committee further recommended that informational signs be installed on the STH 50, USH 12 and IH 43 approaches to the segment of STH 50 between the Cities of Lake Geneva and Delavan, in an attempt to divert traffic from STH 50 to alternative routes.⁵ The Committee also recommended the provision of four traffic lanes on STH 50 through the City of Lake Geneva, which may entail widening the existing roadway between Edwards Boulevard and Willow Street from 22 feet to 44 feet; converting existing angle parking to parallel parking between Willow Street and Cook Street; prohibiting existing parking between Cook Street and Maxwell Street; and widening the existing roadway between Maxwell Street and Pearson Drive from 30 feet to to 44 feet. The provision of four traffic lanes on STH 50 through the City of Lake Geneva was recommended in the original Walworth County jurisdictional highway system plan.

- The long-planned STH 120 bypass was retained in the system plan by the Advisory Committee with the final alignment shown in the plan changed somewhat from the alignment as taken to public hearing. The alignment as shown on Map 42 would follow existing roads of Willow Road and West Side Road. This modified alignment would have the potential to minimize

⁵The Wisconsin Department of Transportation, however, has already installed guide signs with the message, "FREEWAY ROUTE TO DELAVAN" and the appropriate arrow at three locations: 1) USH 12 immediately south of its interchange with STH 50; 2) STH 50 immediately east of its interchange with USH 12; and 3) USH 12 and STH 67 immediately north of the USH 12 junction with STH 67. In addition, four signs, two each for north- and southbound USH 12 traffic, with the message "DELA VAN" with an appropriate arrow are installed in the IH 43 and USH 12 interchange. All signage directs traffic to Delavan via IH 43 and USH 12. Wisconsin Department of Transportation and the National Manual on Uniform Traffic Control Devices recommend that guide signage not be provided.

Map 42

ALTERNATIVE STH 120 BYPASS ROUTES



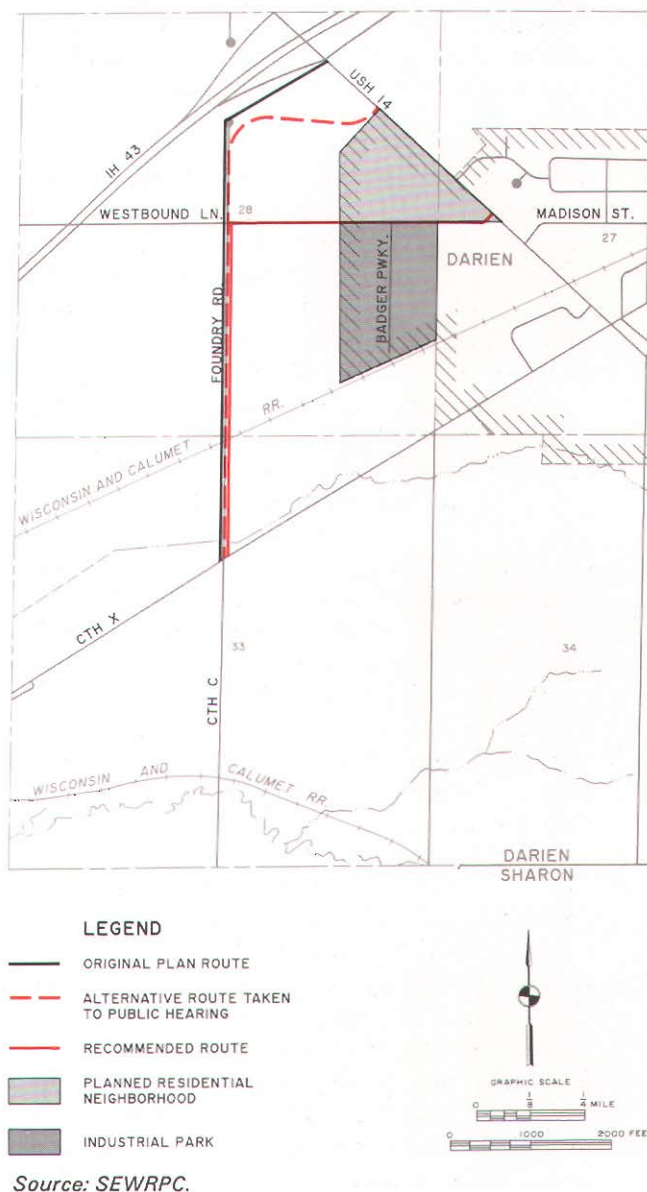
Source: SEWRPC.

impacts on wetlands and primary environmental corridors, and acquisition of residences. The Advisory Committee, recognizing the benefits to traffic safety as well as to the preservation of roadway capacity, further recommended that access to the long-planned STH 120 bypass be limited. Specifically, the access along Willow Road and West Side Road was recommended to be limited to the existing access locations. The Advisory Committee further recommended that, to address concerns regarding the specific alignment, a preliminary engineering study be conducted by the Wisconsin Department of Transportation to evaluate alternatives and select a final alignment. A final alignment for such a facility can only be properly established upon completion of such a preliminary engineering study. The Advisory Committee further recommended timely completion of the preliminary engi-

neering study to permit placement of the alignment on Walworth County's Official Map and thereby to discourage development within the mapped highway right-of-way.

- The proposed widening of STH 50 between IH 43 and Town Hall Road was modified from an improvement from two to six traffic lanes to an improvement to four traffic lanes. Review of the forecast year 2010 average weekday traffic volumes indicated that forecast year 2010 traffic volumes would approach the need for six traffic lanes, but not exceed the design capacity of four traffic lanes. The provision of six, rather than four, traffic lanes would likely entail in the Delavan inlet area location of the roadway within primary environmental corridor and wetlands or entail the dislocation of businesses or parking associated with businesses. Therefore, the final plan recommends that four traffic lanes be provided on STH 50 between IH 43 and Town Hall Road.
- The extension of CTH C between CTH X and USH 14 was recommended to be retained in the system plan by the Advisory Committee. The Advisory Committee also acted to modify the alignment taken to the public hearing in order to minimize impacts on existing businesses. The alignment identified by the Advisory Committee is shown on Map 43 and would make use of the existing Foundry Road between CTH X and Westbound Lane and Westbound Lane and Madison Street between Foundry Road and USH 14. The modified route may be expected to eliminate the estimated \$1.2 million cost of extending Foundry Road from its intersection with Westbound Lane to USH 14 on the alignment presented at the public hearing. The alignment shown on Map 43, however, would require the reconstruction of the intersection of Madison Street and USH 14 to provide a right-angle intersection exclusive turn lanes on all approaches at an estimated cost of \$250,000. It would entail traffic indirection of about 0.5 mile per vehicle compared to the route taken to the public hearing and be expected to require the acquisition of about one acre of right-of-way. It would not divide an existing property nor preclude expansion of an existing business.

Map 43
ALTERNATIVE CTH C EXTENSION ROUTES



The Advisory Committee further recommended that Walworth County conduct a preliminary engineering study to identify the location and configuration of the new intersection between Madison Street and USH 14. The final characteristics of the intersection can only be established upon completion of such a study. The proposed intersection realignment, as shown in Figure 8 may be expected to provide the minimum desirable spacing between the realigned intersections of Madison Street

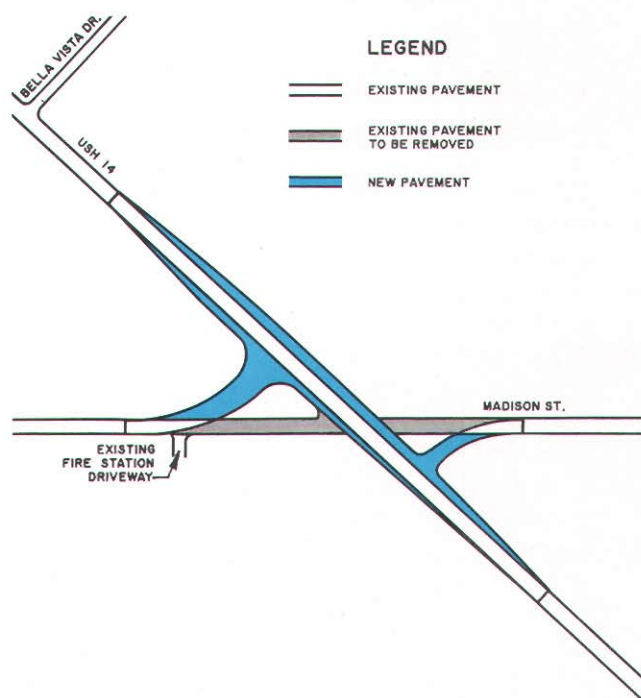
east and west of USH 14 and also to minimize the impacts of travel indirection and increased travel time for emergency response teams originating at the Village of Darien Fire Station, located on Madison Street approximately 300 feet west of USH 14.

- The planned extension of Hodunk Road between Potters Road and Bray Road was deleted from the final system plan by the Advisory Committee. Hodunk Road has long been proposed to serve the long-planned Sugar Creek Park site adjacent to Hodunk Road north of IH 43. The proposed park was reduced from a state- to a county-level park in the 1960s, and was greatly reduced in size. The scope of activities provided at this proposed park are further greatly reduced in the new Walworth County park plan presently under consideration, as the recommendations for a golf course at this site are eliminated from the plan. As a result, the need for the extension of Hodunk Road has been substantially diminished as well. In addition, the extension of Hodunk Road would be located in an area of prime agricultural lands which are recommended for preservation.

- The new proposed STH 67 bypass of the communities of Walworth, Fontana on Geneva Lake, and Williams Bay was retained in the system plan by the Advisory Committee. The only statement in opposition to this proposal was in response to the potential impacts on an existing farmhouse and farm structure along the route of the proposed bypass on the existing Town Hall Road. One segment of the proposed bypass in the preliminary system plan was proposed to be located on Town Hall Road. The final alignment chosen for the STH 67 bypass, however, could be located so that the farmhouse and farm structure would not be significantly affected. The nearest pavement edge of the proposed STH 67 bypass could be located further from the farmhouse and farm structure than the current Town Hall Road and could provide sufficient separation for landscaping and screening. The Advisory Committee recommended that a preliminary engineering study of this STH 67 bypass be conducted by the Wisconsin Department of Transportation. That

Figure 8

POTENTIAL REALIGNMENT OF THE INTERSECTION OF USH 14 AND MADISON STREET IN THE VILLAGE OF DARIEN FOR THE EXTENSION OF CTH C BETWEEN CTH X AND USH 14



Source: SEWRPC.

study would evaluate alternatives and identify a recommended alignment. The final alignment for such a facility can only be properly established upon completion of such a preliminary engineering study.

- The priority of the proposed new interchange on IH 43 at CTH O was changed from a low priority improvement in the plan to one of high priority by the Advisory Committee. The interchange would re-route traffic which currently uses congested STH 11 and STH 50 within the City of Delavan to provide for more direct travel between CTH O at IH 43 and STH 50 at IH 43, and remove through traffic from local residential streets within the City of Delavan which provide a more direct route today than existing arterial streets within the City of Delavan, including the extension of CTH O and STH 50 and STH 11.

- The Wisconsin Department of Transportation representative on the Advisory Committee requested that consideration be given to revising the recommendation for a proposed new interchange on IH 43 at CTH O to include ramps providing only for travel to and from the northeast. Analyses indicated, however, that forecast year 2010 traffic which may be expected to use the proposed interchange would total approximately 2,000 vehicle per average weekday, of which approximately 1,500 vehicles per average weekday may be expected to use ramps permitting travel to and from the northeast and 500 vehicles per average weekday may be expected to use ramps permitting travel to and from the southwest. The Advisory Committee, upon considering this matter further, recommended that a full interchange be provided on IH 43 at CTH O, but that implementation be staged, with the first stage having a high priority and providing for ramps permitting travel to and from the northeast via IH 43, with the second stage having a lower priority and providing ramps permitting travel to and from the southwest via IH 43. As part of the first stage of construction of the recommended interchange, adequate right-of-way should be acquired to permit construction of the complete interchange.
- A new interchange on IH 43 at CTH F was not added to the final system plan by the Advisory Committee. The purpose of such a proposed interchange would be to provide improved access to developing areas in the Delavan area and to potentially reduce the need for other arterial highway improvements. Construction costs to provide the new interchange are estimated at \$1 million. The proposed interchange would be located approximately 2.5 miles southwest of the existing STH 67 interchange, and approximately 1.95 miles northeast of the existing STH 50 interchange. Thus, it would meet urban spacing standards of one mile, but not rural spacing standards of five miles. The interchange would not be expected to cause any capacity problems on IH 43 or CTH F. However, as well it is not needed to resolve any capacity problems at the existing interchanges of STH 50 or STH 67 with IH 43. Provision of the inter-

change may not be expected to eliminate or substantially defer the need to improve STH 50 to four traffic lanes between IH 43 and Town Hall Road, as current traffic volumes warrant the provision of four traffic lanes. Improvement beyond four traffic lanes of this stretch of STH 50 is not recommended at this time.

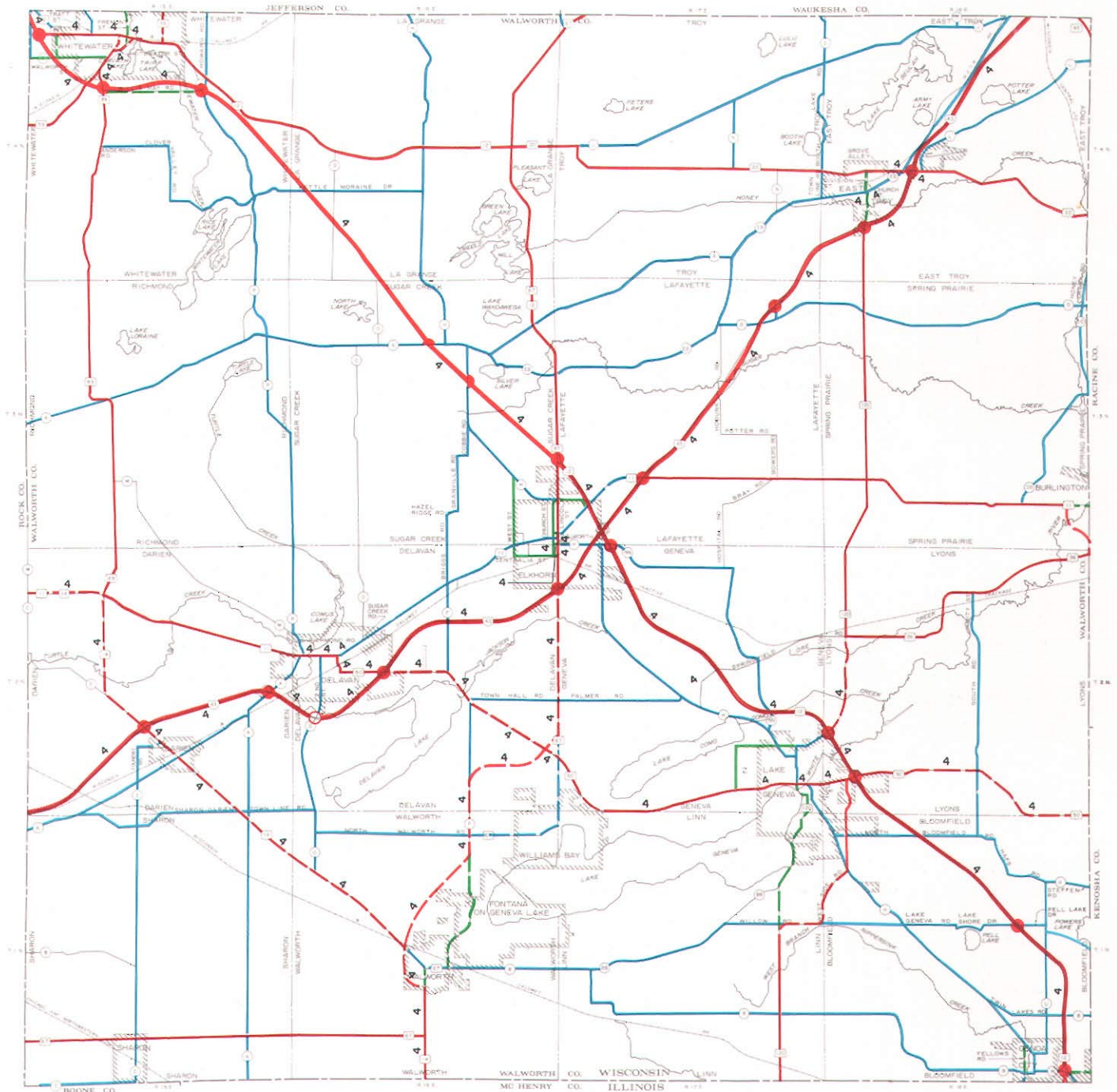
FINAL RECOMMENDED JURISDICTIONAL HIGHWAY SYSTEM PLAN

The final second-generation Walworth County jurisdictional highway system plan as recommended by the Technical Coordinating and Advisory Committee on Jurisdictional Highway System Planning for Walworth County is shown on Map 44. The plan identifies the location and configuration of the various facilities constituting the arterial system and recommends the number of traffic lanes required on each segment of the system. The plan also recommends the level of government which should be responsible for the construction, operation, and maintenance of each facility making up the arterial system. The plan envisions a system of arterial facilities in Walworth County that can meet existing and probable future traffic demands effectively and efficiently. It should be noted, however, that following the public hearing the Advisory Committee acted to remove from the plan the proposed improvement of Town Hall and Palmer Roads and their extension to a new interchange with USH 12 at Springfield Road. This improvement was proposed to relieve potential future long-term traffic problems on STH 50 between IH 43 and USH 12 which cannot be abated by the long-recommended improvements to the existing route of STH 50; that is, the provision of four traffic lanes from IH 43 to USH 12 through widening, parking prohibition, and/or conversion of angle parking to parallel parking. As a result, along this segment of STH 50, and particularly in the City of Lake Geneva, the planned system of arterial facilities will not provide the same level of service as arterial facilities will elsewhere in the County, and traffic congestion may be expected to be somewhat greater than experienced today.

The major capacity improvements recommended under the new plan are shown on Map 45 and listed in Table 21. These improvements include widenings of existing facilities to provide additional traffic lanes and the construction of new

Map 44

FINAL RECOMMENDED WALWORTH COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN



LEGEND

CURRENT PLAN

FREEWAY

- STATE TRUNK HIGHWAY
- INTERCHANGE

STANDARD ARTERIAL

- STATE TRUNK HIGHWAY
- COUNTY TRUNK HIGHWAY
- LOCAL TRUNK HIGHWAY

NEW PLAN AMENDMENTS

- STATE TRUNK HIGHWAY
- COUNTY TRUNK HIGHWAY
- LOCAL TRUNK HIGHWAY
- INTERCHANGE
- 4 NUMBER OF TRAFFIC LANES
(2 WHERE UNNUMBERED)

NOTE: USH 12 BYPASS ALIGNMENT SHOWN TO SOUTH. A PRELIMINARY ENGINEERING STUDY WILL DETERMINE WHETHER THE ALIGNMENT WILL BE TO THE NORTH OR SOUTH OF WHITEWATER.



arterial facilities. The recommended changes in jurisdictional responsibility are shown on Map 46 and are listed in Table 22.

The final recommended arterial system would consist of 484 miles of streets and highways, or about 33 percent of the 1,475-mile total street and highway system expected to serve Walworth County by the year 2010. The recommended state trunk highway element of the plan would consist of 223 miles of arterial facilities, or about 46 percent of the 484-mile planned arterial system. The recommended county trunk highway element of the plan would consist of 240 miles of arterial facilities, or about 50 percent of the 484-mile planned arterial system. The recommended local trunk highway element of the plan would consist of 21 miles of arterial facilities, or about 4 percent of the 484-mile planned arterial system. Table 23 presents a summary of the mileage of the planned arterial street and highway system by proposed jurisdiction, state, county, and local, within each unit of government within Walworth County. It may be noted that, under the plan, the total mileage of state trunk highways in the County would decrease from about 224 miles to about 223 miles, or less than 1 percent. The total mileage of county trunk highways would decrease from 244 to 240 miles, or by about 2 percent. The total local trunk highway mileage would increase from 18 to 21 miles, or by about 17 percent.

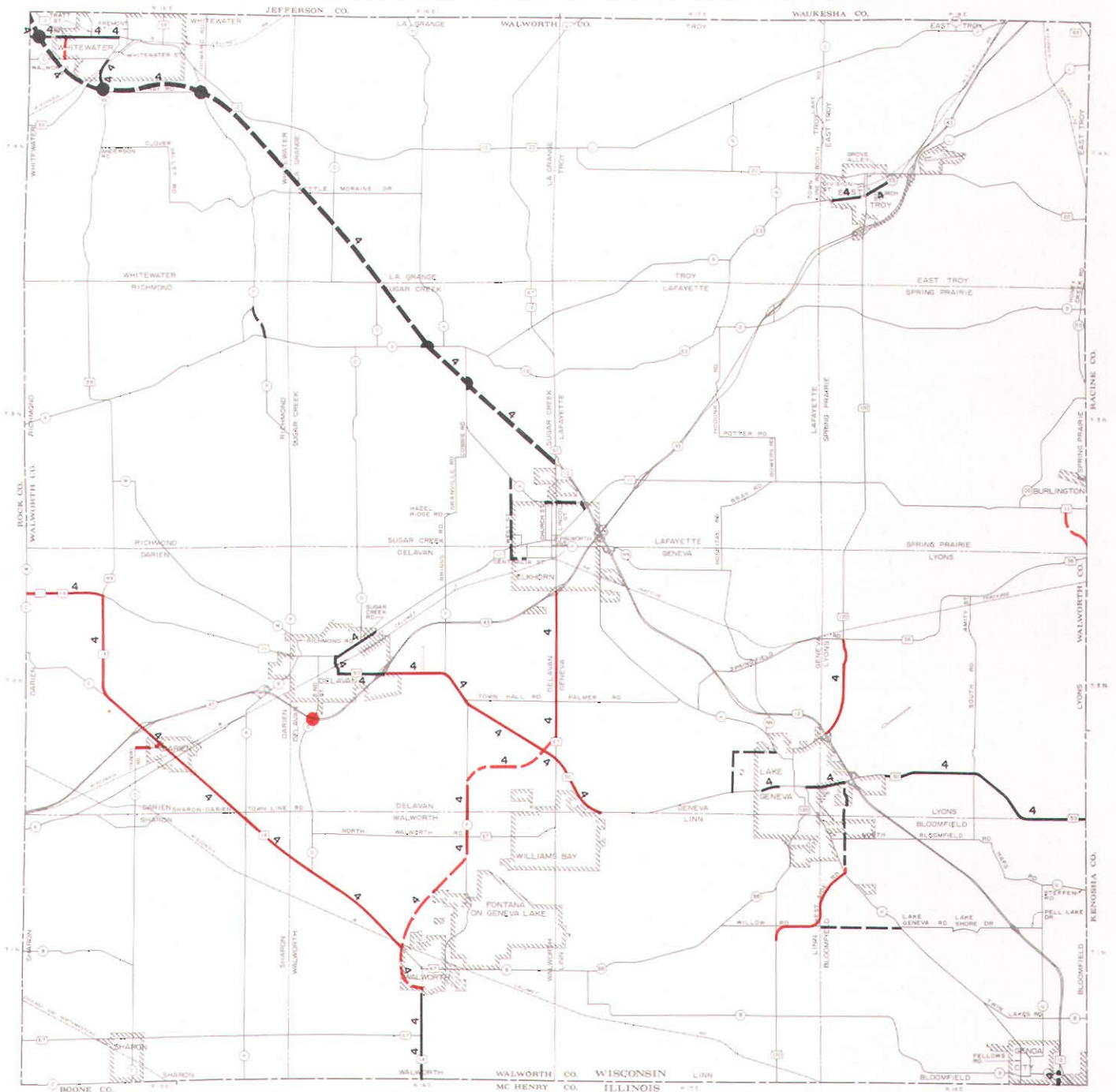
Of the total 484 miles of the planned arterial system in Walworth county, 408 miles, or 84 percent, would require only preservation or resurfacing and reconstruction; 43 miles, or 9 percent, would require improvement or widening to provide additional traffic lanes; and 33 miles, or 7 percent, would consist of new facilities (see Table 24). Of the 43 miles of proposed improvement projects, 39 miles, or 91 percent, would be on the planned state trunk highway system; four miles, or 9 percent, would be on the planned county trunk highway system; and 0.2 mile, or less than 1 percent, would be on the planned local trunk highway system. Of the 33 miles of proposed new arterial facilities, 26 miles, or 79 percent, would be on the state trunk highway system; two miles, or 6 percent, would be on the county trunk highway system; and five miles, or 15 percent, would be on the local arterial system.

About 3.56 million miles of travel may be expected to occur on an average weekday on all streets and highways within Walworth County

by the year 2010. Of this total, 3.24 million vehicle miles of travel, or 91 percent, may be expected to occur on the recommended arterial street system; the remainder on local, collector, and land access streets. Figures 9 and 10 indicate the proportion of total travel anticipated under the recommended plan expected to be carried on each element of the total street and highway system within Walworth County. The recommended state trunk highway system may be expected to carry 3.28 million of the total 3.24 million miles of travel anticipated to occur on the arterial system on an average weekday within Walworth County by the year 2010. Thus, approximately 46 percent of the total arterial street and highway system mileage may be expected to carry approximately 74 percent of the total arterial travel demand. The recommended county trunk highway system may be expected to carry an additional 0.79 million vehicle miles of travel. Thus, an additional 60 percent of the total arterial street and highway mileage may be expected to carry an additional 24 percent of the total arterial travel demand. The remaining 0.07 million miles of travel, or 2 percent of the total arterial travel, may be expected to be carried on the proposed local arterial system. It should be noted that the nonarterial portion of the total street and highway system in Walworth County, the local, collector, and land access streets, may be expected to carry only about 0.32 million vehicle miles on an average weekday by the year 2010, or about 9 percent of the vehicle miles of travel on the total street and highway system of the County. Thus, the nonarterial street system, representing about 67 percent of the mileage of the total street and highway system, may be expected to carry only 9 percent of the total travel demand in the year 2010.

Thus, it may be concluded that the plan properly identifies all the streets and highways in Walworth County which are now, and may be expected to be in the year 2010, the principal carriers of heavy traffic. In addition, the plan properly assigns to the State the responsibility for those facilities which may be expected to carry the heaviest volumes of through traffic and which will entail the most substantial need for, and costs of, improvement. The plan similarly assigns the responsibility for the next most important arterial facilities to the County. Implementation of the plan may be expected to promote a desirable land use pattern in the

**CAPACITY IMPROVEMENTS RECOMMENDED UNDER THE FINAL
NEW WALWORTH COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN**



LEGEND

4 NUMBER OF TRAFFIC LANES
(2 WHERE UNNUMBERED)

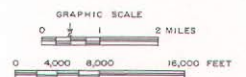
CURRENT PLAN

- INTERCHANGE
- EXISTING LOCATION (WIDENING)
- - - NEW LOCATION

NEW PLAN AMENDMENTS

- INTERCHANGE
- EXISTING LOCATION (WIDENING)
- - - NEW LOCATION

NOTE: USH 12 BYPASS ALIGNMENT SHOWN TO SOUTH. A PRELIMINARY ENGINEERING STUDY WILL DETERMINE WHETHER THE ALIGNMENT WILL BE TO THE NORTH OR SOUTH OF WHITEWATER.



Source: SEWRPC.

Table 21

**CAPACITY IMPROVEMENTS RECOMMENDED UNDER THE FINAL
NEW WALWORTH COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN**

Jurisdiction	Facility	Termini	Description	Included in First Generation Plan	Implementation Priority ^a
Existing Location (additional traffic lanes) State	USH 12	Frontage Road to Fremont Street	Widen from two to four traffic lanes	Yes	High
	USH 14	Rock-Walworth County line to proposed STH 67 bypass	Widen from two to four traffic lanes	No	Medium
	USH 14	Proposed STH 67 bypass to McHenry-Walworth County line	Widen from two to four traffic lanes	Yes	Medium
	STH 50	IH 43 to Geneva Street	Widen from two to four traffic lanes	No	High
	STH 50	Pearson Drive to Madison Street	Widen from two to four traffic lanes	Yes	Medium
	STH 50	CTH H to Edwards Boulevard	Widen from two to four traffic lanes	Yes	Medium
	STH 67	IH 43 to the proposed STH 67 bypass at STH 50	Widen from two to four traffic lanes	No	Medium
	STH 120	STH 36 to USH 12	Widen from two to four traffic lanes	No	Medium
	STH 89	Willis Ray Road to Whitewater Street	Widen from two to four traffic lanes	Yes	Medium/Low
New Location (on new alignment) State	IH 43	CTH O	Construct new interchange	No	High
	USH 12 ^b	Whitewater to Elkhorn	Construct four lanes on new alignment	Yes	High
	STH 50	USH 12 to the Kenosha-Walworth County line	Construct four lanes on new alignment	Yes	Medium
	STH 67 bypass (communities of Walworth, Fontana, and Williams Bay)	Existing STH 67 at Village of Walworth south corporate limits to existing STH 67 at STH 50	Construct four lanes on generally new alignment	No	Medium/Low
	STH 120 bypass	STH 50 to existing STH 120 south of Big Foot Beach State Park	Construct two lanes on existing and new alignment	Yes	High
	Burlington bypass	STH 11 to Mormon Road	Construct four lanes on generally new alignment	Yes	High
	County				
	CTH H extension	Church Street to STH 67	Construct two lanes on new alignment	Yes	Low
	Madison Street realignment	USH 14	Realignment to provide improved intersection	Yes	Low
	Willow Road extension	West Side Road to CTH H	Construct two lanes on new alignment	Yes	Low
	CTH P realignment	Territorial Road to CTH A	Construct two lanes on new alignment	Yes	Low
	Local				
	Centralia Street extension	STH 11 to Devendorf Street	Construct two lanes on new alignment	Yes	Low
	Grant Street extension	CTH H to STH 50	Construct two lanes on new alignment	Yes	Low
	West Street extension	CTH H to STH 11	Construct two lanes on new alignment	Yes	Low
	New facility	STH 67 to STH 11	Construct two lanes on new alignment	Yes	Low
	New facility	USH 12 to CTH S	Construct two lanes on new alignment	No	Low

^aThe proposed implementation priority is dependent upon the need for the improvement to meet current traffic demand; the need for the improvement to meet future traffic demand and the anticipated timing of that demand; and the need for the improvement to provide an integrated traffic route.

^bImplementation of this project may occur in several stages, with the initial stage being construction of the Whitewater bypass as a two-lane facility. Subsequent stages may include: 1) construction of the initial two lanes between Elkhorn and Whitewater; 2) provision of a four-lane expressway through the construction of two additional lanes with at-grade intersections at cross streets; and 3) up-grade to a four-lane freeway by eliminating the at-grade intersections and construction of grade-separated interchanges.

Source: SEWRPC.

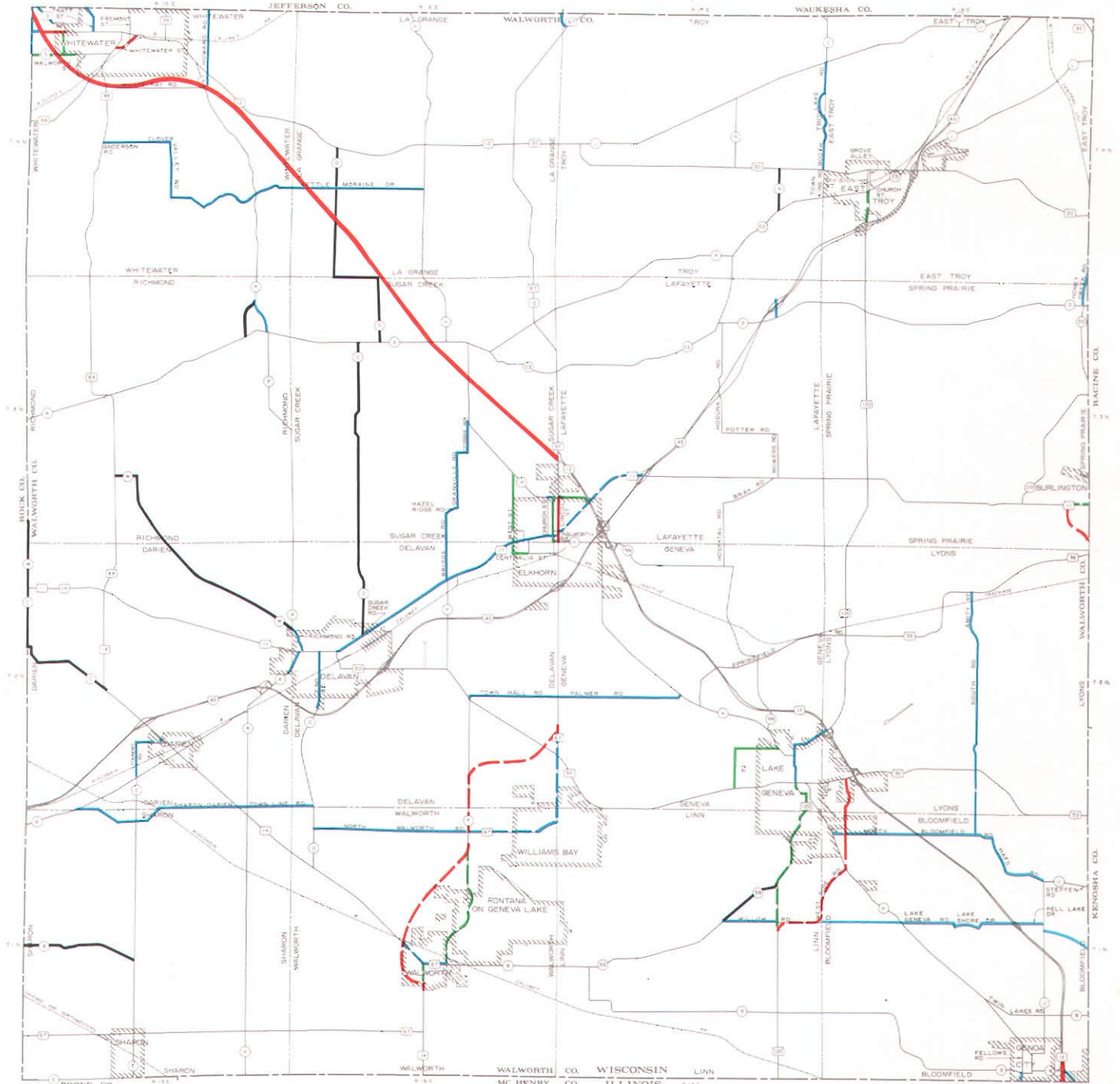
County, to abate traffic congestion, to reduce travel time and costs, to reduce accident exposure, and to help concentrate appropriate governmental resources and capabilities on corresponding areas of need, thus assuring the most effect use of public resources in the provision of highway transportation.

Table 24 presents an estimate of the total cost of the recommended jurisdictional highway

system plan for Walworth County. This estimate assumes that all facilities requiring only preservation will be resurfaced once by the year 2010. In addition, it is assumed that all improvements on existing or new locations will be implemented by the year 2010. The estimated costs are presented by recommended jurisdiction, state county, or local. The estimated cost of the recommended system to the year 2010, including right-of-way acquisition, is \$243 million, includ-

Map 46

CHANGES IN HIGHWAY SYSTEM JURISDICTIONAL RESPONSIBILITY RECOMMENDED UNDER THE FINAL NEW WALWORTH COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN



LEGEND

CURRENT PLAN TRANSFERS TO:

- STATE TRUNK HIGHWAY SYSTEM
- COUNTY TRUNK HIGHWAY SYSTEM
- LOCAL TRUNK HIGHWAY SYSTEM
- LOCAL (NON-ARTERIAL) SYSTEM

NEW PLAN AMENDMENTS TRANSFERS TO:

- STATE TRUNK HIGHWAY SYSTEM
- COUNTY TRUNK HIGHWAY SYSTEM
- LOCAL TRUNK HIGHWAY SYSTEM

NOTE: USH 12 BYPASS ALIGNMENT SHOWN TO SOUTH. A PRELIMINARY ENGINEERING STUDY WILL DETERMINE WHETHER THE ALIGNMENT WILL BE TO THE NORTH OR SOUTH OF WHITEWATER.



Source: SEWRPC.

Table 22

**CHANGES IN HIGHWAY SYSTEM JURISDICTIONAL RESPONSIBILITY UNDER
THE FINAL NEW WALWORTH COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN^a**

Unit of Government	Planned	Existing	Facility	From	To	Distance (miles)	Included in First Generation Plan
Town of Bloomfield	State trunk highway	New facility	New facility	N. Bloomfield Road	West Side Road	0.86	Yes
	State trunk highway	Local nonarterial	West Side Road	New Facility	Town of Linn	0.85	No
	County trunk highway	Local nonarterial	N. Bloomfield Road	CTH H	Hafs Road	3.43	Yes
	County trunk highway	Local nonarterial	Clover Road	Lake Geneva Road	Lake Shore Drive	0.10	Yes
	County trunk highway	Local nonarterial	Darling Road	CTH H	Twin Lakes Road	0.57	Yes
	County trunk highway	Local nonarterial	Hafs Road	N. Bloomfield Road	CTH U	1.72	Yes
	County trunk highway	Local nonarterial	Lake Geneva Road	CTH H	Clover Road	1.20	Yes
	County trunk highway	Local nonarterial	Lake Shore Drive	Clover Road	Orchid Drive	0.54	Yes
	County trunk highway	Local nonarterial	Orchid Drive	Lake Shore Drive	Pell Lake Drive	0.15	Yes
	County trunk highway	Local nonarterial	Pell Lake Drive	Orchid Drive	CTH U	1.40	Yes
	County trunk highway	Local nonarterial	Powers Lake Road	CTH U	Kenosha County	1.00	Yes
	County trunk highway	Local nonarterial	South Road	N. Bloomfield Road	Town of Lyons	0.52	Yes
	County trunk highway	Local nonarterial	Twin Lakes Road	Darling Road	CTH U	0.76	Yes
	County trunk highway	New facility	New facility	West Side Road	CTH H	1.90	Yes
Town of Darien	County trunk highway	Local nonarterial	Darien-Sharon Town Line Road	CTH X	Town of Delavan	2.54	Yes
	County trunk highway	Local nonarterial	Foundry Road	CTH X	Westbound lane	0.80	Yes
	County trunk highway	Local nonarterial	Westbound lane	Foundry Road	Village of Darien	0.25	No
	Local trunk highway	County trunk highway	CTH C	USH 14	Town of Richmond	3.45	Yes
	Local trunk highway	County trunk highway	CTH M	City of Delavan	Town of Richmond	3.47	Yes
Town of Delavan	State trunk highway	New interchange	IH 43	CTH O	--	--	No
	County trunk highway	County trunk highway	CTH F	Bailey's Road	Town of Walworth	0.91	No
	State trunk highway	Local nonarterial	Bailey's Road	CTH F	New facility	1.32	No
	State trunk highway	New facility	Bailey's Road extension	Bailey's Road	STH 67	0.90	No
	County trunk highway	State trunk highway	STH 11	City of Delavan	City of Elkhorn	3.72	Yes
	County trunk highway	State trunk highway	STH 67	New facility	Village of Williams Bay	0.77	No
	County trunk highway	Local nonarterial	Briggs Road	Town of Sugar Creek	STH 11	0.87	Yes
	County trunk highway	Local nonarterial	Darien-Sharon Town Line Road	Town of Darien	CTH O	0.24	Yes
	County trunk highway	Local nonarterial	Town Hall Road	STH 50	Town of Geneva	2.06	Yes
	Local nonarterial	County trunk highway	CTH O	Town of Sugar Creek	City of Delavan	1.85	Yes
Town of East Troy	County trunk highway	Local nonarterial	Booth Lake Road	STH 20	New facility	0.22	Yes
	County trunk highway	New facility	Booth Lake Road extension	Booth Lake Road	St. Peter's Road	0.30	Yes
	County trunk highway	Local nonarterial	Booth Lake Road	CTH J	St. Peter's Road	0.57	Yes
	County trunk highway	Local nonarterial	Honey Creek Road	Racine County	Town of Spring Prairie	0.13	Yes
	Local trunk highway	County trunk highway	CTH G	Village of East Troy	IH 43	0.14	Yes
Town of Geneva	County trunk highway	State trunk highway	STH 67	New facility	Village of Williams Bay	0.58	No
	County trunk highway	State trunk highway	STH 120	Sheridan Street	City of Lake Geneva	0.24	Yes
	County trunk highway	Local trunk highway	Palmer Road	STH 67	CTH H	2.80	Yes
	Local trunk highway	New facility	New facility	City of Lake Geneva	STH 50	1.42	Yes
Town of Lafayette	County trunk highway	State trunk highway	STH 11	IH 43	City of Elkhorn	1.22	No
	County trunk highway	Local trunk highway	Bowers Road	IH 43	CTH D	0.45	Yes
Town of Linn	State trunk highway	Local nonarterial	West Side Road	Town of Bloomfield	Willow Road	0.46	No
	State trunk highway	Local nonarterial	Willow Road	STH 120	West Side Road	1.05	No
	County trunk highway	Local nonarterial	Willow Road	CTH BB	STH 120 bypass	1.59	Yes
	Local trunk highway	State trunk arterial	STH 120	City of Lake Geneva	STH 120 bypass	1.78	No
Town of Lyons	State trunk highway	New facility	STH 120 bypass	City of Lake Geneva	Town of Bloomfield	0.25	Yes
	County trunk highway	Local nonarterial	Amity Street	STH 36	Spring Valley Road	0.80	Yes
	County trunk highway	Local nonarterial	South Road	Spring Valley Road	Town of Bloomfield	4.28	Yes
Town of Richmond	County trunk highway	New facility	CTH P extension	Territorial Road	CTH A	0.85	Yes
	Local nonarterial	County trunk highway	CTH M	STH 89	Town of Darien	2.20	Yes
	Local nonarterial	County trunk highway	CTH M	Rock County	Town of Darien	0.20	Yes
	Local nonarterial	County trunk highway	CTH P	Territorial Road	CTH A	0.97	Yes
Town of Sharon	County trunk highway	Local nonarterial	Darien-Sharon Town Line Road	CTH X	Town of Walworth	2.53	Yes
	Local nonarterial	County trunk highway	CTH B	Rock County	CTH C	2.60	Yes
Town of Spring Prairie	State trunk highway	New facility	Burlington bypass	STH 11	STH 36	1.06	Yes
	County trunk highway	Local nonarterial	Honey Creek Road	Town of East Troy	CTH D	0.50	Yes
	Local trunk highway	State trunk highway	STH 11	Burlington bypass	Racine County Line	0.50	Yes
Town of Sugar Creek	State trunk highway	New facility	USH 12 freeway	Town of LaGrange	STH 67	5.91	Yes
	County trunk highway	Local nonarterial	Briggs Road	Hazel Ridge Road	Town of Delavan	0.66	Yes
	County trunk highway	Local nonarterial	Cobbie Road	CTH H	Sugar Creek Road	0.68	Yes
	County trunk highway	Local nonarterial	Granville Road	Sugar Creek Road	Hazel Ridge Road	1.25	Yes
	County trunk highway	Local nonarterial	Hazel Ridge Road	Briggs Road	Granville Road	0.28	Yes
	County trunk highway	Local nonarterial	Sugar Creek Road	Granville Road	Cobbie Road	0.26	Yes
	Local nonarterial	County trunk arterial	CTH O	Town of LaGrange	Town of Delavan	6.54	Yes

Table 22 (continued)

Unit of Government	Planned	Existing	Facility	From	To	Distance (miles)	Included in First Generation Plan
Town of Troy	County trunk highway	Local nonarterial	Booth Lake Road	CTH J	St. Peter's Road	1.28	Yes
	County trunk highway	Local nonarterial	Booth Lake Road	St. Peter's Road	STH 20	0.22	Yes
	County trunk highway	Local nonarterial	Palmyra Road	Waukesha County	STH 67	0.26	No
	County trunk highway	Local nonarterial	Town Line Road	STH 20	CTH ES	0.31	Yes
Town of Walworth	State trunk highway	New facility	STH 67 bypass	STH 67	USH 14	2.48	No
	State trunk highway	County trunk highway	CTH F	Town of Delavan	STH 67 bypass	0.57	No
	County trunk highway	State trunk highway	STH 67	CTH F	Theatre Road	1.01	No
	County trunk highway	Local nonarterial	N. Walworth Road	CTH O	STH 67	3.50	Yes
	Local trunk highway	State trunk highway	STH 67	Village of Walworth	Village of Fontana	0.13	No
	Local trunk highway	State trunk highway	STH 67	STH 67 bypass	Village of Fontana	0.74	No
Town of Whitewater	State trunk highway	New facility	USH 12 freeway	Rock County	Town of LaGrange	7.38	Yes
	County trunk highway	State trunk highway	USH 12	Jefferson County	CTH S	0.71	Yes
	County trunk highway	Local nonarterial	Anderson Road	STH 89	Clover Valley Road	0.83	Yes
	County trunk highway	Local nonarterial	Clover Valley Road	Anderson Road	Kettle Moraine Drive	2.81	Yes
	County trunk highway	Local nonarterial	Howard Road	Jefferson County	USH 12	1.48	Yes
	County trunk highway	Local nonarterial	Kettle Moraine Drive	Clover Valley Road	Town of LaGrange	2.30	Yes
	County trunk highway	New facility	Howard Road extension	USH 12	CTH P	0.53	Yes
	County trunk highway	New facility	Main Street extension	Rock County	USH 12 freeway	0.25	Yes
	County trunk highway	Local nonarterial	Warner Road	Jefferson County	CTH S	1.06	Yes
	Local trunk highway	County trunk highway	CTH S	Rock County	City of Whitewater	0.78	Yes
Village of Darien	County trunk highway	Local nonarterial	Madison Street	Town of Darien	USH 14	0.32	No
Village of East Troy	County trunk highway	Local nonarterial	Town Line Road	STH 20	CTH ES	0.31	Yes
	Local trunk arterial	County trunk arterial	CTH G	CTH ES	Town of East Troy	0.60	No
	Local trunk arterial	Local nonarterial	Division Street	STH 20	CTH ES	0.46	No
Village of Fontana	Local trunk highway	State trunk highway	STH 67	Town of Walworth	Village of Walworth	1.13	No
Village of Genoa City	County trunk highway	Local nonarterial	Fellows Road	CTH B	McHenry County	0.20	No
	Local trunk highway	Local nonarterial	Fellows Road	CTH H	CTH B	0.68	No
	Local trunk highway	Local nonarterial	South Road	USH 12	Kenosha County	0.56	No
	County trunk highway	State trunk highway	USH 12	Freeway terminus	McHenry County	0.30	Yes
	State trunk highway	New facility	USH 12 freeway extension	CTH H	McHenry County	0.23	Yes
Village of Walworth	State trunk highway	New facility	STH 67 bypass	USH 14	Town of Walworth	1.46	No
	County trunk highway	State trunk highway	USH 14	Town of Walworth	STH 67	0.71	No
	County trunk highway	State trunk highway	STH 67	USH 14	CTH B	0.52	No
	Local trunk highway	State trunk highway	USH 14	STH 67	Town of Walworth	0.68	No
	Local trunk highway	State trunk highway	STH 67	Village of Fontana	CTH B	0.61	No
Village of Williams Bay	Local trunk highway	State trunk highway	STH 67	Town of Delavan	Theatre Road	1.66	No
City of Delavan	County trunk highway	State trunk highway	STH 11	STH 50	Town of Delavan	1.04	Yes
	County trunk highway	Local trunk highway	Beloit Street	STH 11	Creek Road	0.61	Yes
	County trunk highway	Local trunk highway	Richmond Road	Town of Delavan	STH 11	0.60	Yes
	County trunk highway	Local trunk highway	2nd Street	STH 11	Town of Delavan	10.1	Yes
	Local nonarterial	County trunk highway	CTH M	Town of Delavan	CTH P	0.03	Yes
	Local nonarterial	County trunk highway	CTH O	Town of Delavan	A point 0.01 mile north	0.01	Yes
City of Elkhorn	State trunk highway	Local trunk highway	Lincoln Street	Wisconsin Street	Geneva Street	0.97	Yes
	County trunk highway	State trunk highway	STH 11	Town of Delavan	STH 67	0.89	Yes
	County trunk highway	State trunk highway	STH 11	Lincoln Street	Town of Lafayette	1.13	Yes
	County trunk highway	New facility	CTH H extension	Church Street	STH 67	0.26	Yes
	Local trunk highway	State trunk highway	STH 11	STH 67	CTH H	1.15	Yes
	Local trunk highway	State trunk highway	STH 67	Lincoln Street	STH 11	0.79	Yes
	Local trunk highway	New facility	New facility	STH 67	STH 11	0.79	Yes
	Local trunk highway	New facility	Centralia Street extension	STH 11	Devendorf Street	0.57	Yes
	Local trunk highway	New facility	West Street extension	CTH H	Court Street	1.26	Yes
City of Lake Geneva	State trunk highway	Local nonarterial	Edwards Boulevard	STH 50	End of Edwards Boulevard	0.05	Yes
	State trunk highway	New facility	STH 120 bypass	End of Edwards Boulevard	Town of Lyons	0.20	Yes
	State trunk highway	New facility	STH 120 bypass	Town of Bloomfield	N. Bloomfield Road	0.40	Yes
	County trunk highway	State trunk highway	STH 120	USH 12	STH 50	1.42	Yes
	Local trunk highway	State trunk highway	STH 120	STH 50	Town of Linn	1.83	No
	Local trunk highway	New facility	Grant Street extension	Town of Geneva	CTH H	0.50	Yes
City of Whitewater	State trunk highway	New facility	Main Street extension	USH 12 freeway	City of Whitewater	0.25	Yes
	State trunk highway	Local trunk facility	Whitewater Street	Fremont Street	USH 12	0.22	No
	County trunk highway	Local trunk highway	Tratt Street	Jefferson County	USH 12	0.59	Yes
	Local trunk highway	County trunk highway	CTH S	Town of Whitewater	Pleasant Street	0.25	Yes
	Local trunk highway	New facility	New facility	USH 12	CTH S	0.28	Yes

^a The jurisdictional transfers recommended should all be initiated as soon as possible, as the transfers will promote implementation of the recommended plan improvement.

Source: SEWRPC.

Table 23

**ARTERIAL STREET MILEAGE BY JURISDICTION UNDER THE FINAL
NEW WALWORTH COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN**

Civil Division	State Trunk Highway (miles)	County Trunk Highway (miles)	Local Trunk Highway (miles)	Total (miles)
City of Delavan	4.22	3.40	0.00	7.62
City of Elkhorn	5.70	4.44	4.59	14.73
City of Lake Geneva	4.76	3.64	2.71	11.11
City of Whitewater	6.13	0.57	2.00	8.70
Village of Darien	1.14	1.38	0.00	2.52
Village of East Troy	4.63	2.72	1.06	8.41
Village of Fontana	0.00	0.40	1.13	1.53
Village of Geneva City	0.23	3.11	1.09	4.43
Village of Sharon	0.90	1.37	0.00	2.27
Village of Walworth	1.51	1.50	1.29	4.30
Village of Williams Bay	0.00	1.36	0.00	1.36
Town of Bloomfield	9.34	29.40	0.00	38.74
Town of Darien	19.06	12.32	0.00	31.38
Town of Delavan	15.09	14.97	0.00	30.06
Town of East Troy	10.67	14.76	0.13	25.56
Town of Geneva	13.28	15.56	1.42	30.25
Town of LaFayette	14.55	9.96	0.00	24.51
Town of LaGrange	15.54	9.37	0.00	24.91
Town of Linn	6.73	11.82	1.78	20.45
Town of Lyons	18.51	5.07	0.00	23.59
Town of Richmond	6.39	11.36	0.00	17.75
Town of Sharon	6.71	12.94	0.00	19.65
Town of Spring Prairie	11.83	11.70	0.50	24.03
Town of Sugar Creek	9.21	18.29	0.00	27.50
Town of Troy	7.86	16.58	0.00	24.44
Town of Walworth	11.99	6.92	0.74	19.65
Town of Whitewater	16.85	14.71	2.97	34.53
Total	223.04	239.62	21.41	484.07
Percent of Total	46.08	49.50	4.42	100.00

Source: SEWRPC.

ing \$177 million for state trunk highways, \$55 million for county trunk highways, and \$11 million for local arterials.

Table 25 presents an estimate of the total annual cost of implementing the state trunk highway element of the preliminary plan on 20-year schedule. The estimated total annual cost is \$8.9 million over a 20-year implementation period. Table 25 also presents an estimate of the future funding that may be available on an average annual basis for the improvement and recon-

struction of state trunk highways in Walworth County. As the potential funding includes discretionary funding, including Federal Aid Primary funds and state transportation funds, any estimate of future funding is necessarily uncertain. The estimate of \$3.8 million is the average annual funding provided for state trunk highway improvements in Walworth County over the past six years. The funding has ranged from \$2.2 million to \$6.6 million per year. If it is assumed that the average annual funding level will remain stable in constant dollars, the

Table 24

**ESTIMATED COST TO THE YEAR 2010 OF THE FINAL NEW
WALWORTH COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN**

Item	Planned Arterial Mileage: Year 2010			
	State	County	Local	Total
Preservation	159.7	233.1	16.6	407.6
Improvement ^a	39.1	4.2	0.2	43.5
Expansion ^b	26.0	2.3	4.6	32.9
Total	223.0	239.6	21.4	484.0

	Estimated Construction Cost (includes right-of-way)			
Preservation	\$ 42,600,000	\$46,300,000	\$ 3,800,000	\$ 92,700,000
Improvement ^a	59,600,000	6,200,000	--	65,800,000
Expansion ^b	75,000,000	2,200,000	7,200,000	84,400,000
Total	\$177,200,000	\$54,700,000	\$11,000,000	\$242,900,000

^aWidening to provide additional traffic lanes on existing arterials.

^bConstruction of new facilities.

Source: SEWRPC.

Table 25

**ESTIMATED ANNUAL COST AND LOCAL FUNDING REQUIRED BY LEVEL OF GOVERNMENT
OF THE FINAL NEW WALWORTH COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN**

Level of Government	Total Cost of Plan as Amended	Annual Cost (20-year schedule)	Annual Nonlocal Funding		Estimated Annual Local Funding Required (20-year schedule)	Historic Average Annual Local Street Construction Expenditures ^c
			Federal and State Aids ^a	State Aid Payments to Local Government ^b (20-year schedule)		
State	\$177,174,000	\$ 8,858,700	\$3,800,000	\$ --	\$ --	\$ --
County	54,717,000	2,735,800	310,000	885,300	1,440,500	378,000
Local	10,975,000	548,800	40,000	120,100	388,700	45,600
Total	\$242,866,000	\$12,143,300	\$4,350,000	\$1,005,400	\$1,829,200	\$423,600

^aFederal and state aids to the County assume an estimated \$3,000 per mile per year of Federal Aid Urban (FAU) funds for county trunk highways in urban areas; and \$135,000 per year in Federal Aid Secondary (FAS) funds for county trunk highways in rural areas. Federal and state aids to local governments assume \$3,000 per mile per year for local arterial highways. Federal and state aids assumed for state trunk highways is based on the average annual expenditures over the years 1984 to 1989.

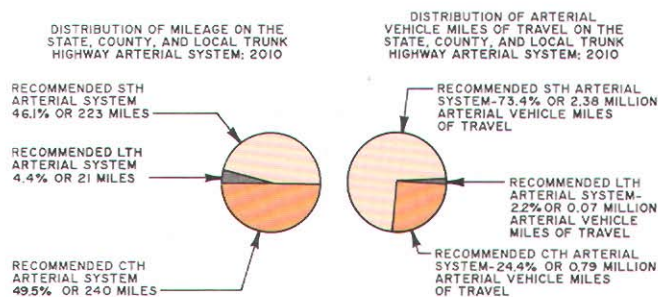
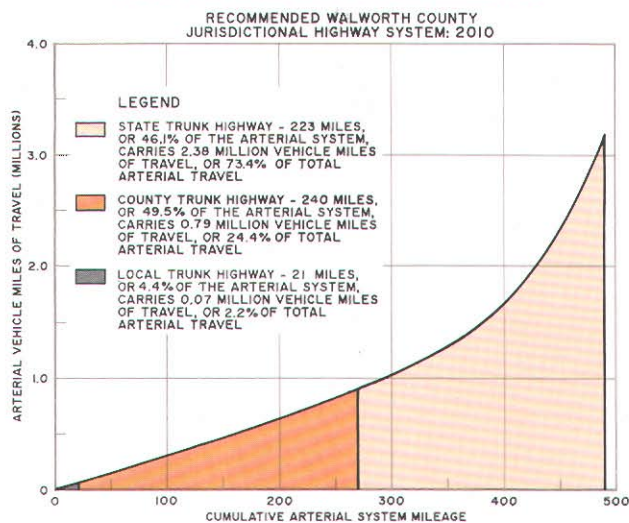
^bAnnual state aid payments assumed are based on current reimbursement formula of 30 percent of local transportation costs for counties and 24 percent of local transportation costs of cities, villages, and towns.

^cAverage local expenditures for years 1986 through 1988 as reported to Wisconsin Department of Revenue. Reduced by 30 percent for County and 24 percent for cities, villages, and towns to reflect state aid payment.

Source: SEWRPC.

Figure 9

RELATIONSHIP BETWEEN ARTERIAL VEHICLE MILES OF TRAVEL AND ARTERIAL SYSTEM MILEAGE



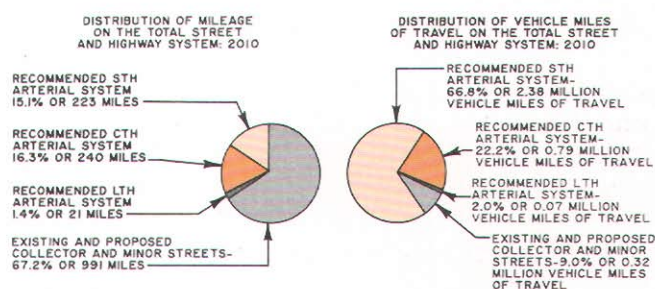
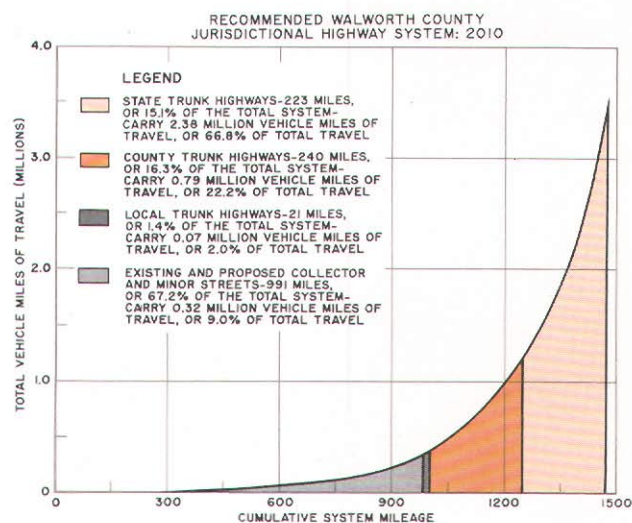
Source: SEWRPC.

estimated state trunk highway funding shortfall would approximate \$5.1 million per year over a 20-year schedule of completion.

Table 25 also presents an estimate of the total annual cost of implementing the county trunk highway element of the plan on a 20-year schedule. The estimated total annual cost is \$2.7 million over a 20-year implementation period. A potential source of funding for the improvement of county arterials in rural areas is the Federal Aid Secondary, or FAS, program; and for the improvement of county arterials in urban areas is the Federal Aid Urban, or FAU, program. Another potential source of funding is the State's reimbursement of county transportation costs which currently is established at 30 percent of county transportation costs and 24 percent of city, village, and town transportation costs. For analytical purposes, it has been assumed that the Federal Aid Secondary fund and Federal Aid

Figure 10

RELATIONSHIP BETWEEN TOTAL VEHICLE MILES OF TRAVEL AND TOTAL SYSTEM MILEAGE



Source: SEWRPC.

Urban fund allocations will remain stable in constant dollars at the 1990 level and that the state reimbursement of county transportation costs will also remain stable at the current percentages. It may thus be estimated that \$1.2 million annually in state and federal funds would be available to the County on a 20-year completion schedule. Thus, the county funding required would approximate \$1.5 million per year expressed in constant 1990 dollars over a 20-year completion schedule.

Table 25 also provides an estimate of the total costs of the local arterial element of the plan to the cities, villages, and towns within Walworth County. On a 20-year schedule, the local arterial total costs are estimated to be \$0.5 million per year. The principal sources of state and federal funding for local arterials are Federal Aid Urban and Federal Aid Secondary funds and state reimbursement of local transportation costs.

Assuming full use of estimated available federal and state aids, the estimated required local funding is \$0.4 million per year on a 20-year completion schedule.

The estimated required annual county and local funding for plan implementation is compared in Table 25 to the estimated average annual expenditures by county and local government in Walworth County for arterial street and highway construction in the years 1986 through 1988. The estimated county and local funding required for plan implementation on a 20-year schedule of \$1.8 million annually substantially exceeds the reported historic annual expenditure of \$0.4 million for road construction by county and local governments.

Potential funding sources to meet the estimated county and local costs of implementing the jurisdictional highway system plan were identified. One funding alternative is the property tax, which funds a substantial share of the County and the local highway construction costs in the County. As already noted, the estimated county and local costs of plan implementation on a 20-year completion schedule is \$1.8 million expressed in constant 1990 dollars. The equalized property value in Walworth County in 1989 was approximately \$3.1 billion, not including the value of property in tax incremental financing districts. To fully fund local and county costs of the plan, discounting for the purpose of this analysis costs currently incurred, would require a property tax levy for arterial highway improvements of \$0.58 per \$1,000 over the 20-year completion schedule. This may be compared to the total county property tax rate in Walworth County in 1989 of \$4.10 per 1,000 and the range of city, village, and town tax rates of \$0.92 to \$9.22 per \$1,000. Funding of the shortfall between current county and local expenditures and the estimated level of county and local expenditures necessary to implement the plan fully would require an annual property tax levy for arterial highway improvements of \$0.45 per \$1,000 over a 20-year implementation period.

An alternative funding source would be a "wheel tax," which represents an addition to the state vehicle registration fee of \$25. State law permits such an additional fee to be levied by counties and the fees collected may be shared by counties with local municipalities. In addition, cities, villages, and towns are permitted to levy an

additional wheel tax fee. The revenue that could be collected in Walworth County through additional automobile and truck registration fees of \$20, a fee which would result in a total \$45 state and county vehicle registration fee, would be \$1.1 million in 1990 dollars for the current level of 56,000 automobile and light truck registrations in Walworth County, and about \$1.5 million in the year 2010 based on the year 2010 forecast of 77,000 vehicle registrations. A \$20 wheel tax would generate about 72 percent of the total funding necessary to implement the plan on a 20-year schedule of completion.

Another alternative, but one which would require legislation, is the "add-on" motor fuel tax at the county level. The 1990 state motor fuel tax is \$0.209 per gallon and the federal motor fuel tax is \$0.14 per gallon. An add-on motor fuel tax of \$0.05 could be expected to generate approximately \$1.9 million annually within Walworth County under current conditions and, if indexed to general price inflation and vehicle motor fuel efficiency, may be expected to generate approximately \$2.6 million annually in the year 2010 expressed in constant 1990 dollars.⁶ This would represent about 128 percent of the total annual local and county funds necessary to implement the plan on a 20-year completion schedule.

Another alternative would be the use of a sales tax to fund capital expenditures within Walworth County, including those associated with highways. State law permits counties to levy a 0.5 percent sales tax. Walworth County currently levies such a tax and may be expected to generate approximately \$3.0 million per year expressed in constant 1990 dollars. Assuming such sales tax revenues would increase with the number of households residing within the County, the revenue in the year 2010 may be expected to approximate \$3.8 million expressed in constant 1990 dollars. Thus, an additional 0.5 percent sales tax would provide 211 percent

⁶*This estimate assumes that the tax is generated statewide by an add-on motor fuel tax to be distributed to local governments based on vehicle registration within their jurisdiction. Vehicle registrations may be expected to represent a reasonable estimate of the relative amount of motor fuel used and purchased within a subarea of the State.*

of the required county and local funding for capital expenditures for highways on a 20-year schedule of completion.

Another funding alternative would be the use of special assessments or impact fees. Impact fees are fees required from new land development that results in the need for additional transportation improvements. Generally, such fees can be imposed only if the improvement needed is directly a result of the new development. A similar type of funding source is a special assessment. Under this type of funding, those who benefit from an improvement can be assessed a portion of the improvement costs based upon the benefit received. Such a funding mechanism generally works well on local land access and collector streets, as each abutting property owner receives a similar benefit of access to the street system. However, for arterial streets, special assessments are difficult to apply because much of the benefit accrues primarily to through traffic and not to abutting property owners. To estimate the funding that may be developed from impact fees or special assessments would entail detailed land use and traffic studies on a quarter, subarea, or facility basis. It should be noted that such fees and assessments may have implications for the promotion of economic development, as they would entail fees required of new development. Such fees are typically applied only in those parts of the nation in which the entire metropolitan area is experiencing rapid growth.

The analysis of plan costs and potential funding by level of government indicates for the 20-year plan implementation potential funding shortfalls at the state, county, and municipal levels. Therefore, timely implementation of the plan may require that Walworth County and its municipalities work to reach consensus with respect to a specific funding mechanism to meet the growing highway needs in the County.

The Advisory Committee guiding the recently completed regional transportation authority study for southeastern Wisconsin, documented in SEWRPC Memorandum Report No. 38, A Regional Transportation Authority Feasibility Study for Southeastern Wisconsin, recommended that a regional transportation authority be created for the seven-county Southeastern Wisconsin Region. The regional transportation authority is recommended to have responsibili-

ties to raise non-property tax based revenues and distribute these revenues to existing county and local highway agencies. It is further recommended that the regional transportation authority funding levels be sufficient to implement the agreed upon regional plan, meeting the shortfall from current expenditures and, as well, to fully fund highway improvements to remove current expenditures from property taxes. Thus, if the State Legislature and Governor and the Region's counties and local governments act to create a regional transportation authority as recommended, sufficient funding may be provided to not only meet the identified \$1.4 million shortfall in county and local arterial costs in Walworth County, but also to remove the current \$0.4 million expenditure in Walworth County from property taxes.

PLAN IMPLEMENTATION

Recommended plan actions are listed below by level of government concerned.

Federal Government

U. S. Department of Transportation, Federal Highway Administration: It is recommended that the U. S. Department of Transportation, Federal Highway Administration:

1. Acknowledge the recommended amended jurisdictional highway system plan for Walworth County, and utilize the plan as a guide in the review of requests for realignment of the various federal aid systems and in the administration and granting of federal aids for highway improvement within the County.
2. Cooperate in, and approve, the adjustment of the federal aid systems in order to implement the recommended amended jurisdictional highway system plan.
3. Review and approve the request to add a new interchange to IH 43 at CTH O in the Town of Delavan.

State Level

Wisconsin Department of Transportation: It is recommended that the Wisconsin Department of Transportation:

1. Endorse the recommended jurisdictional highway system plan and integrate the plan into the state long-range highway

system plan, including the addition to the state trunk highway system of the STH 67 bypass, STH 120 bypass, and USH 12 freeway extension.

2. Seek, in cooperation with the Walworth County Board and appropriate local officials, the implementation of the jurisdictional transfers with respect to the state, county, and local trunk systems, as recommended in the jurisdictional highway system plan.
3. Proceed with preliminary engineering, right-of-way acquisition, and facility construction to implement the recommended jurisdictional highway system plan.
4. Seek, in cooperation with the Walworth County Board and appropriate local officials, the realignment of the federal aid systems, specifically, the designation of planned state trunk highway routes as Federal Aid Primary routes; the designation of planned county and local arterial routes in urban areas as Federal Aid Urban routes; and the designation of planned county arterial routes in rural areas as Federal Aid Secondary routes.

Regional Level

Southeastern Wisconsin Regional Planning Commission: It is recommended that the Southeastern Wisconsin Regional Planning Commission act formally to adopt the recommended jurisdictional highway system plan as an integral part of the master plan for the Region, constituting an amendment to the regional transportation plan and to the Walworth County jurisdictional highway system plan.

County Level

Walworth County: It is recommended that the Walworth County Board, upon recommendation of the Walworth County Highway Committee:

1. Adopt the recommended jurisdictional highway system plan as a guide to highway facility development within the County.
2. Seek, in cooperation with the Wisconsin Department of Transportation and local units of government, the implementation of the jurisdictional transfers with respect

to the state, county, and local trunk systems, as recommended in the jurisdictional highway system plan.

3. Proceed with preliminary engineering, right-of-way acquisition, and facility construction as necessary to implement the recommended jurisdictional highway system plan.
4. Seek, in cooperation with the Wisconsin Department of Transportation and appropriate local officials, the realignment of the federal aid systems.
5. Establish, with the approval of the municipalities as they are affected, a modified "official" map, pursuant to Section 80.64 of the Wisconsin Statutes, identifying the location and necessary right-of-way of all planned state and county trunk highways.
6. By resolution, ask the Wisconsin Department of Transportation to place the STH 67 bypass, the STH 120 bypass, and USH 12 Freeway extension on the official state trunk highway system; conduct necessary preliminary engineering; identify the extensions as candidate major projects; and enumerate, schedule, and fund the projects for construction.

Local Level

1. The city common councils, village boards, and town boards within Walworth County should act to adopt the recommended jurisdictional highway system plan as a guide to highway system development within their areas of jurisdiction. It is further suggested that the respective local planning commissions adopt and integrate the recommended jurisdictional highway system plan into the local master plans and certify such adoption to their local governing body.
2. The city common councils, village boards, and town boards within Walworth County should act to approve a county official map prepared in conformance with the recommended jurisdictional highway system plan, and establish local official maps including the state, county, and local trunk highway facilities.

3. The city common councils, village boards, and town boards within Walworth County should proceed with preliminary engineering, right-of-way acquisition, and facility construction to implement the recommended jurisdictional highway system plan.
4. The city common councils, village boards, and town boards within Walworth County should seek, in cooperation with the Walworth County Board and the Wisconsin Department of Transportation, the implementation of the jurisdictional transfers with respect to the state, county, and local trunk systems as recommended in the jurisdictional highway system plan.
5. The city common councils, village boards, and town boards within Walworth County should seek, in cooperation with the Walworth County Board and the Wisconsin Department of Transportation, the realignment of the federal aid systems in accordance with the plan.
6. The city councils, village boards, and town boards should, by resolution, ask the Wisconsin Department of Transportation to place the STH 67 bypass, the STH 120 bypass, and the USH 12 Freeway extension on the official state trunk highway system; conduct necessary preliminary engineering;

identify the improvements as candidate major projects; and enumerate, schedule, and fund the projects for construction.

SUMMARY

Adoption and implementation of the Walworth County jurisdictional highway system plan recommended in this report would provide the County with an integrated highway transportation system which will effectively serve the existing, and promote a desirable future, land use pattern; meet the anticipated future travel demand at an adequate level of service; abate traffic congestion; reduce travel time and costs between component parts of the County and the Region; and reduce accident exposure. It would serve to concentrate appropriate resources and capabilities on corresponding areas of need, assuring a more effective use of the total public resources in the provision of highway transportation and providing a sound basis for the establishment of long-range fiscal policies and for the systematic programming of arterial street and highway improvements within Walworth County. It would also provide a basis for the more efficient planning and design of the total arterial street and highway system, for the efficient multijurisdictional management of that system, and for the attainment of the intergovernmental coordination essential to the cooperative development of the system. Finally, it should provide a more equitable distribution of highway improvement, maintenance, and operating costs among the various levels and agencies of government concerned.