



# *Preliminary Recommended Jurisdictional Highway System Plan for Walworth County*



March 25, 2010



# *Introduction*

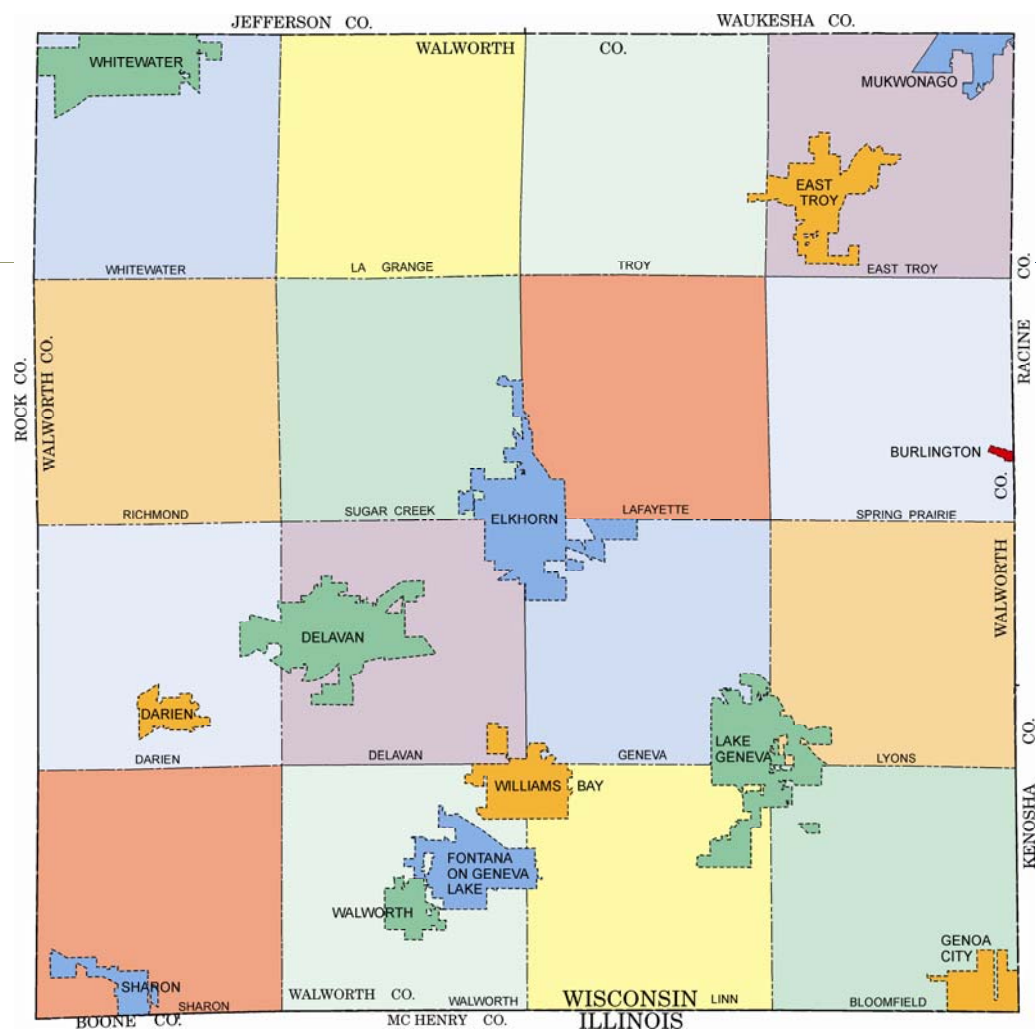
## Walworth County Jurisdictional Highway System Plan

- Update to original plan prepared in 1973, and reviewed and updated four times over past 35 years
- Long-range plan considering both existing and future needs
- Two types of recommendations
  - Level of government—state, county, or local—which should have jurisdictional responsibility for each arterial street and highway in Walworth County
  - New arterial facilities and widening of existing facilities with additional traffic lanes
- Advisory plan



# *Walworth County Jurisdictional Highway Planning Committee*

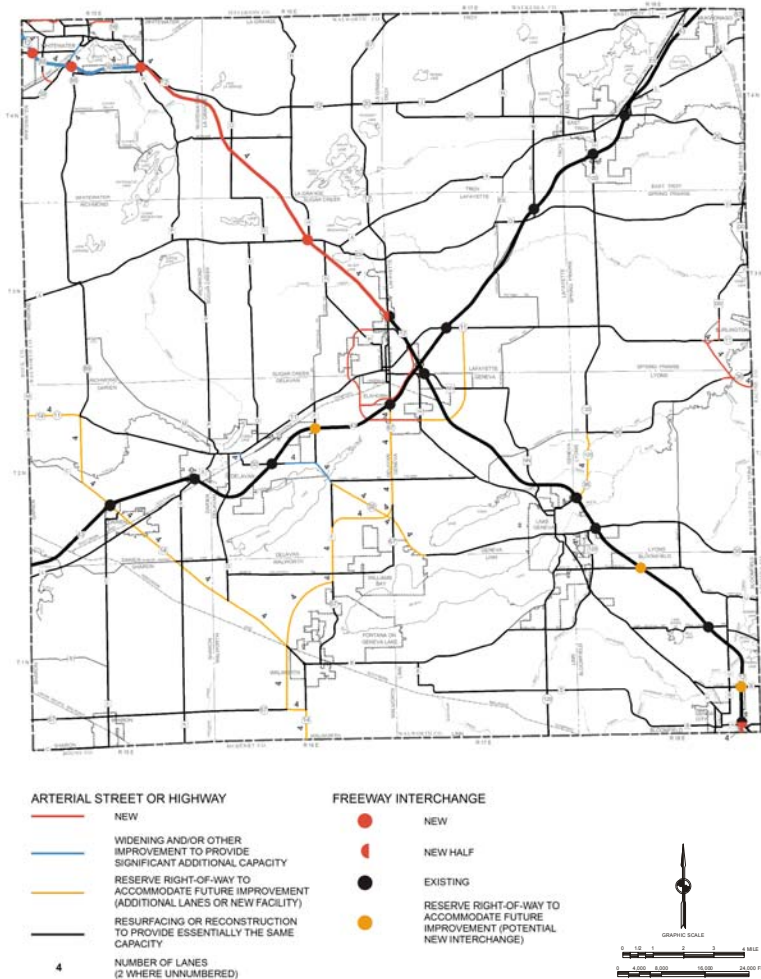
- Guides planning effort
- Liaison to the governments responsible for implementing plan
- Representatives from:
  - Each of the 28 cities, villages, and towns in the County
  - Walworth County
  - Wisconsin Department of Transportation
  - U.S. Department of Transportation





# *Preliminary Recommended Functional Improvements Under the Year 2035 Walworth County Jurisdictional Highway System Plan*

**FUNCTIONAL IMPROVEMENTS PRELIMINARY RECOMMENDED IN THE YEAR 2035 WALWORTH COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN**



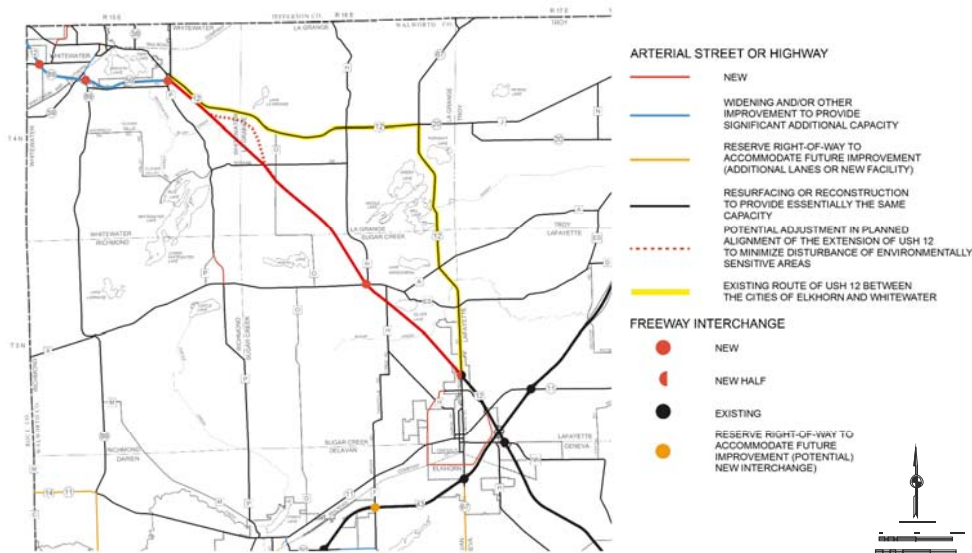
- New arterial facilities and widened existing arterial facilities.
- Preliminary recommended by the Walworth County Jurisdictional Highway Planning Committee.
- 485 miles of planned arterials
  - 450 miles will require only preservation, or resurfacing and reconstruction
  - Eight miles will require widening to provide additional traffic lanes
  - 27 miles of new facilities



# 

- Two alternative improvements to USH 12 were considered:
  - The long planned extension of the USH 12 freeway between the Cities of Elkhorn and Whitewater.

### 



- The widening of the existing surface arterial route of USH 12 to four traffic lanes between the Cities of Elkhorn and Whitewater.



## *Need for Improvement of USH 12*

Segments of USH 12 are approaching design capacity.

- Between USH 12 freeway in the City of Elkhorn and a point north of CTH A:
  - Current average weekday traffic volumes on this segment of USH 12 are approaching the design capacity of the existing two lane facility.
  - Additional capacity would potentially be needed in the short term.
- For the remainder of USH 12 to the City of Whitewater.
  - Forecast long term future average weekday traffic volumes are expected to approach or exceed the design capacity of the existing two lane facility.
  - Additional capacity would potentially be needed in the long term (20 to 30 years in the future).



## *USH 12 Alternative—Freeway Extension*

The long-planned and officially mapped alignment of the USH 12 freeway extension.

- Recommended in State and regional plans in the mid-1960's, and in the original Walworth County jurisdictional highway system plan adopted in 1973.
- Portion of the right-of-way officially mapped by the Wisconsin Department of Transportation in 1967.
- Could be implemented in stages.





## *USH 12 Alternative—Widen to 4 lanes existing USH 12*

The reconstruction and widening of the existing route of USH 12 from two to four traffic lanes

- Reconstruct as a surface arterial (not as a freeway) maintaining at grade intersections.
- This facility would be constructed as a four-lane divided facility (some stretches could be undivided).
- Speed limits could range from 45 to 55 miles per hour.





## *Comparison of USH 12 Alternative Improvements*

### Advantages – Widening Existing USH 12 to Four Lane Surface Arterial

- Lower construction costs.
- Potentially less property acquisition.

### Advantages – Extending USH 12 Freeway

- Higher speed facility providing greater accessibility.
- Safer facility (Freeway crash rates are one-half that of four lane arterials).



## *Walworth County Jurisdictional Highway Planning Committee Preliminary Recommendation*

- Continue to recommend the long planned extension of the USH 12 freeway between the Cities of Elkhorn and Whitewater.
- WisDOT should conduct as soon as possible the necessary preliminary engineering and environmental impact study of the USH 12 corridor between the Cities of Elkhorn and Whitewater.
  - WisDOT would consider a number of alternative improvements, including these two alternatives.
  - Decision as to what would be built to be made by WisDOT following preliminary engineering and environmental impact statement.



## *Preliminary Recommendations for Street and Highway System Jurisdictional Responsibility*

- Recommendations for the level of government—state, county, or local—which should be responsible for each street and highway.
  - Changes in land use, traffic volumes, and traffic patterns.



## *Jurisdictional Responsibility Classification Criteria*

- Trips served – the average trip length on each segment of the planned arterial street and highway system.
- Land uses served – the areawide significance of land uses connected and served by the planned arterial street and highway system.
- Operational characteristics – traffic volumes, travel speed, land access, system continuity, and facility spacing.



## *Jurisdictional Responsibility Classification Criteria—continued*

### State Trunk Arterials

- Serve routes of statewide and regionwide importance.
- Serve the longest trips, particularly trips through Walworth County and between Walworth County and other counties.
- Connect land uses of statewide and regionwide significance.
- Provide highest level of mobility (highest speed and lowest land access).
- Regional or interregional continuity.



## *Jurisdictional Responsibility Classification Criteria—continued*

### County Trunk Arterials

- Serve travel between the communities of Walworth County.
- Serve land uses of countywide importance.
- Provide intermediate level of traffic mobility.
- Provide intermediate level of land access service, and intercommunity system continuity.



## *Jurisdictional Responsibility Classification Criteria—continued*

### Local Trunk Arterials

- Serve predominately travel within the communities of Walworth County.
- Provide the lowest level of arterial traffic mobility.
- Provide highest degree of arterial land access service.
- Intracommunity system continuity.





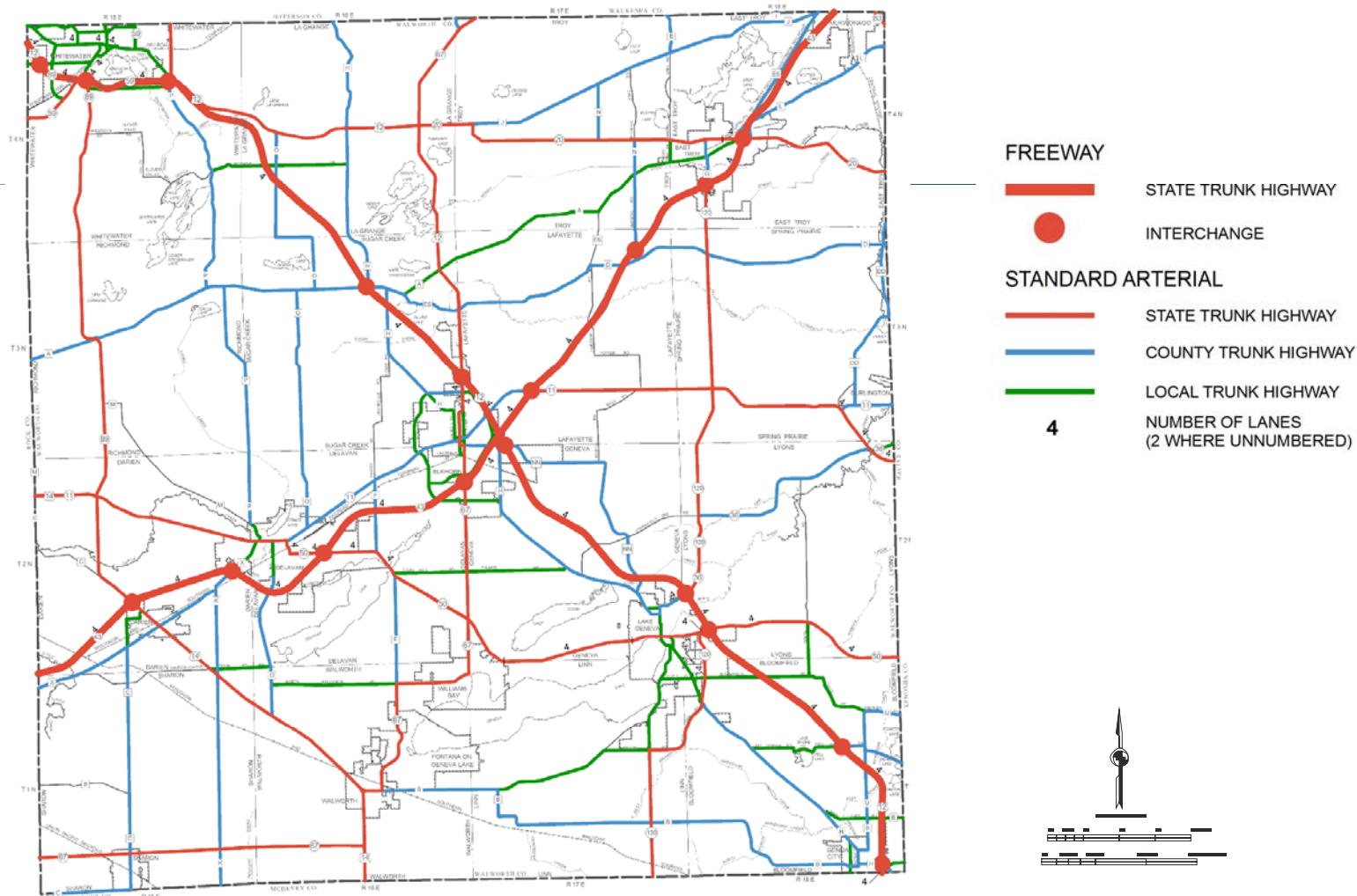
## *Development of Preliminary Recommended Jurisdictional Classification*

- The classification of each arterial facility in terms of trip service criteria (trip length).
- The classification of each arterial facility in terms of land use criteria.
- The classification of each arterial facility in terms of traffic volume.
- The combining and refinement of these three criteria and the application of the remaining criteria, including travel speed, system continuity, and facility spacing.



# Preliminary Recommended Year 2035 Walworth County Jurisdictional Highway System Plan

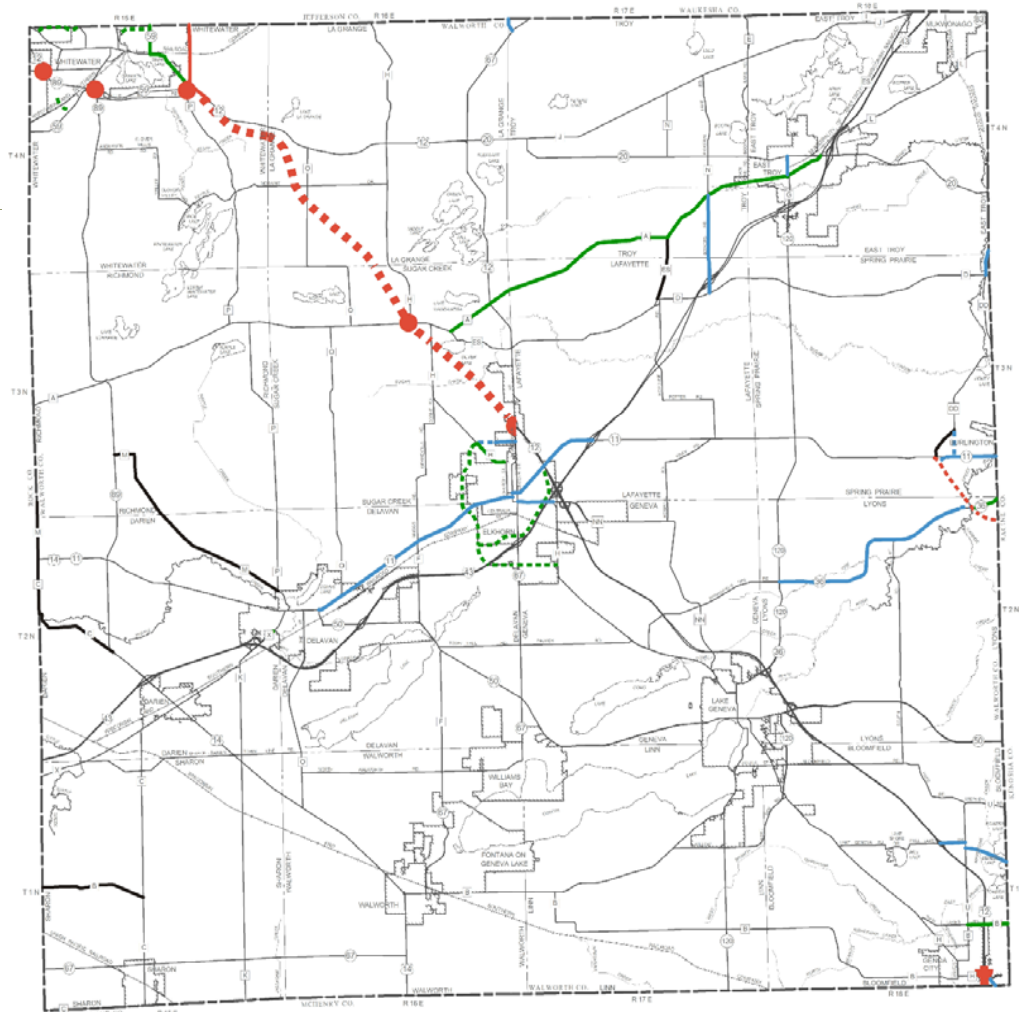
PRELIMINARY YEAR 2035 WALWORTH COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN





# Preliminary Recommended Year 2035 Walworth County Jurisdictional Highway System Plan—continued

## CHANGES IN JURISDICTIONAL RESPONSIBILITY UNDER THE PRELIMINARY RECOMMENDED YEAR 2035 WALWORTH COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN

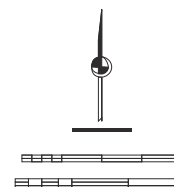


### TRANSFER TO:

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

### NEW FACILITY:

- - - STATE TRUNK HIGHWAY SYSTEM
- - - COUNTY TRUNK HIGHWAY SYSTEM
- - - LOCAL TRUNK HIGHWAY SYSTEM
- FULL INTERCHANGE
- ◐ HALF INTERCHANGE





## *Next Steps*

- Prepare a record of the public comments.
- Advisory Committee to consider public comment and recommend final year 2035 Walworth County jurisdictional highway system plan.
- Final recommended year 2035 Walworth County jurisdictional highway system plan would then be considered by the Walworth County Board of Supervisors, and subsequently by the Southeastern Wisconsin Regional Planning Commission and each city, village and town within Walworth County.