Analysis of Alternative Bypass Routes for STH 50 Between CTH F and STH 67

October 13, 2010
Recommended Functional Improvements along STH 50 in the Delavan Area

- Preliminary Recommended Year 2035 Walworth County Jurisdictional Highway System Plan recommends:
  - Widening of STH 50 to provide four traffic lanes between North Shore Road and CTH F (south); and
  - Reservation of right-of-way along STH 50 between CTH F (south) and STH 67 to accommodate future widening to four traffic lanes which may be needed beyond the plan design year 2035.
Existing and Forecast Traffic Volumes on STH 50 Between North Shore Road and STH 67

- Between North Shore Road and CTH F (south)
  - Existing traffic volumes exceed the design capacity of the existing two-lane roadway.

- Between CTH F (south) and STH 67
  - Future forecast traffic volumes approaching, but not exceeding the design capacity of the existing two-lane roadway.
**STH 50 Between CTH F (north) and STH 67**

- Requested by Town of Delavan Representative and Committee that Commission Staff consider alternative routes that would potentially divert traffic from STH 50 between CTH F (north) and STH 67 to eliminate need for widening to four traffic lanes.

- Two possible routes north of STH 50 were identified, tested, and evaluated.

- Potential routes south of STH 50 were not considered as Delavan Lake precludes such potential routes of STH 50.
Potential Northern Alternative Route of STH 50 Between North Shore Road and STH 67

- Suggested by Town of Delavan representative
- Not envisioned to be route for STH 50.
- Longer travel distance and travel time than existing route of STH 50.
- Estimated to divert 1,500 vehicles per average weekday from existing route of STH 50.
- Alternative rejected based on not being expected to eliminate the need of four traffic lanes on STH 50 between CTH F (north) and CTH F (south).
Potential Realignment of STH 50 Between North Shore Road and STH 67 Near Existing Alignment

- Construction of new alignment.
- Longer travel distance, but shorter travel time.
- Expected to divert about 10,000 vehicles per average weekday, enough to eliminate the need for four traffic lanes on STH 50 between CTH F (north) and CTH F (south).
- Alternative route dismissed due to the cost and potential environmental impacts in crossing Delavan Lake.
Commission Staff recommends that the Walworth County Jurisdictional Highway System Plan recommend:

- **Between CTH F (north) and CTH F (south):**
  - Widen STH 50 to provide four traffic lanes; and
  - Wisconsin Department of Transportation to work with local governments to develop location and right-of-way of widened STH 50 to minimize acquisition of, and impacts on, existing residences and businesses.

- **Between CTH F (south) and STH 67**
  - Reserve right-of-way along STH 50 to accommodate future widening to four traffic lanes which may be needed beyond the plan design year of the plan.
STH 50 Reconstruction Project Between IH 43 and STH 67

- Wisconsin Department of Transportation currently performing preliminary engineering and environmental study for the reconstruction of STH 50 between IH 43 and STH 67.
  - A number of alternatives will be considered by the Department.
  - At the conclusion of their study, a determination will be made by the Department as to how this segment of STH 50 would be reconstructed.