

AASHTO/FHWA RSA Peer Exchange

**May 22-23, 2007
Charleston, SC**

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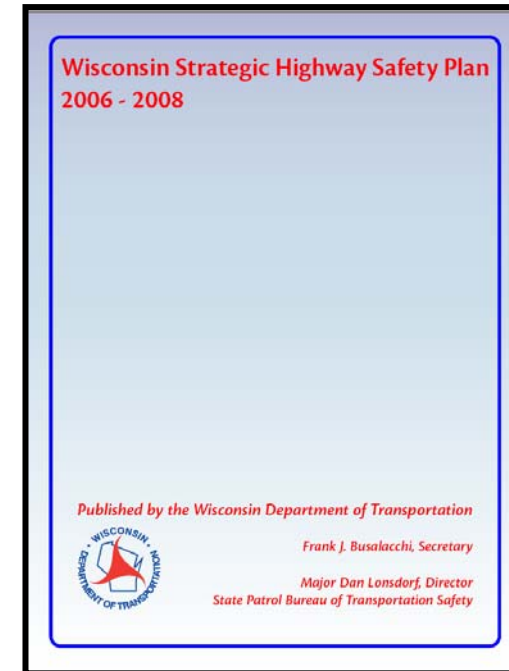


Agenda

- WisDOT Safety History
- WisDOT RSA History/Past Projects
- RSA Lessons Learned
- Current RSA Initiatives
- Current RSA Projects
- Future of RSAs in Wisconsin
- Questions

WisDOT Safety History

- 1990's: AASHTO NCHRP Projects
 - “Menu” of 22 Possible Safety Issue Areas
- 2000: Safety Summit
- 2001-2003: First Wisconsin SHSP
- 2005: SAFETEA-LU Requirements
 - Mandatory SHSP for Each State
 - 5% Lists
- 2005: Internal Update of SHSP for 2006-2008



WisDOT Safety History

2006-2008 SHSP Top 10 Issue Areas

1. Increase Safety Belt Use
- 2. *Improve Design/Operations of Intersections***
3. Create a More Effective Safety Management System
4. Reduce Speed-Related Crashes
5. Reduce Impaired Drivers
- 6. *Reduce Run off the road, Head-on and Median Crossover Crashes (Issue Areas 6, 8, 9)***
- 7. *Design Safer Work Zones***
10. Increase Driver Safety Awareness

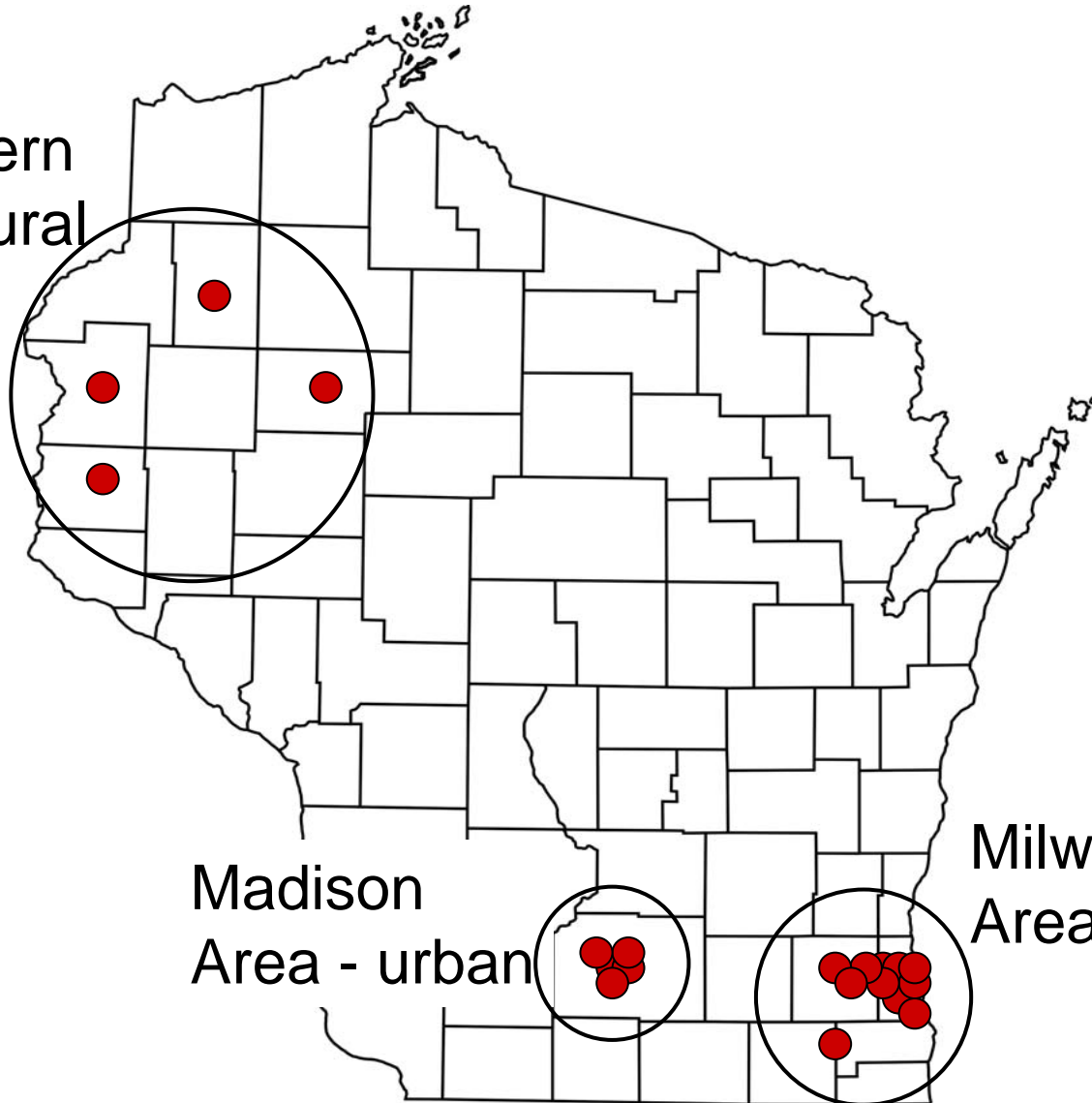
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RSA Past Projects

Northern
WI - rural



Madison
Area - urban

Milwaukee
Area - urban



RSA Past Projects

Existing Facilities

- FHWA Review of Wisconsin Bypass Road Design Practices
 - Analyzed four bypass segments in Wisconsin
 - Several improvements implemented
- US 151 Bypass (Fond du Lac) – used access management to improve safety
- US 18/Bluemound Road
 - used access management to improve safety



RSA Past Projects

Existing Facilities

- AAA Road Improvement Demonstration Program (RIDP) (on-going since 2004)
 - AAA funds high crash locations, often with HSIP funding
 - Recommends low-cost signing, marking, signal, and/or geometric improvements to reduce crashes
 - Audited > 50 intersections in Wisconsin



RSA Past Projects

Design Stage

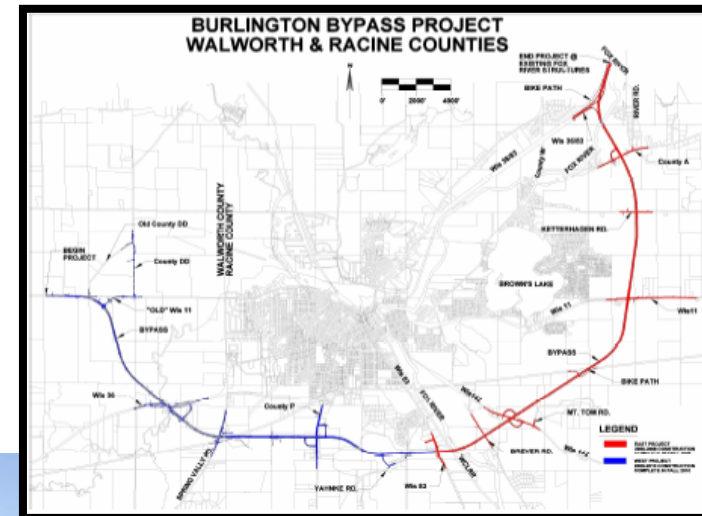
- Marquette Interchange
 - Mega project
 - RSA Performed at ~80-90% design completion



RSA Past Projects

Design/Construction Stage

- Burlington Bypass – additional intersection improvements implemented into design prior to construction



RSA Lessons Learned

- If RSAs are completed later in the design (60-90%), often hard to make changes
- If RSAs are completed earlier (planning or 0-30% design), not much detail provided
- RSA projects have helped reinforce traffic section recommendations
- RSAs provide flexibility at the regional and local levels, but yet provide consistency in documentation for statewide standards and policies

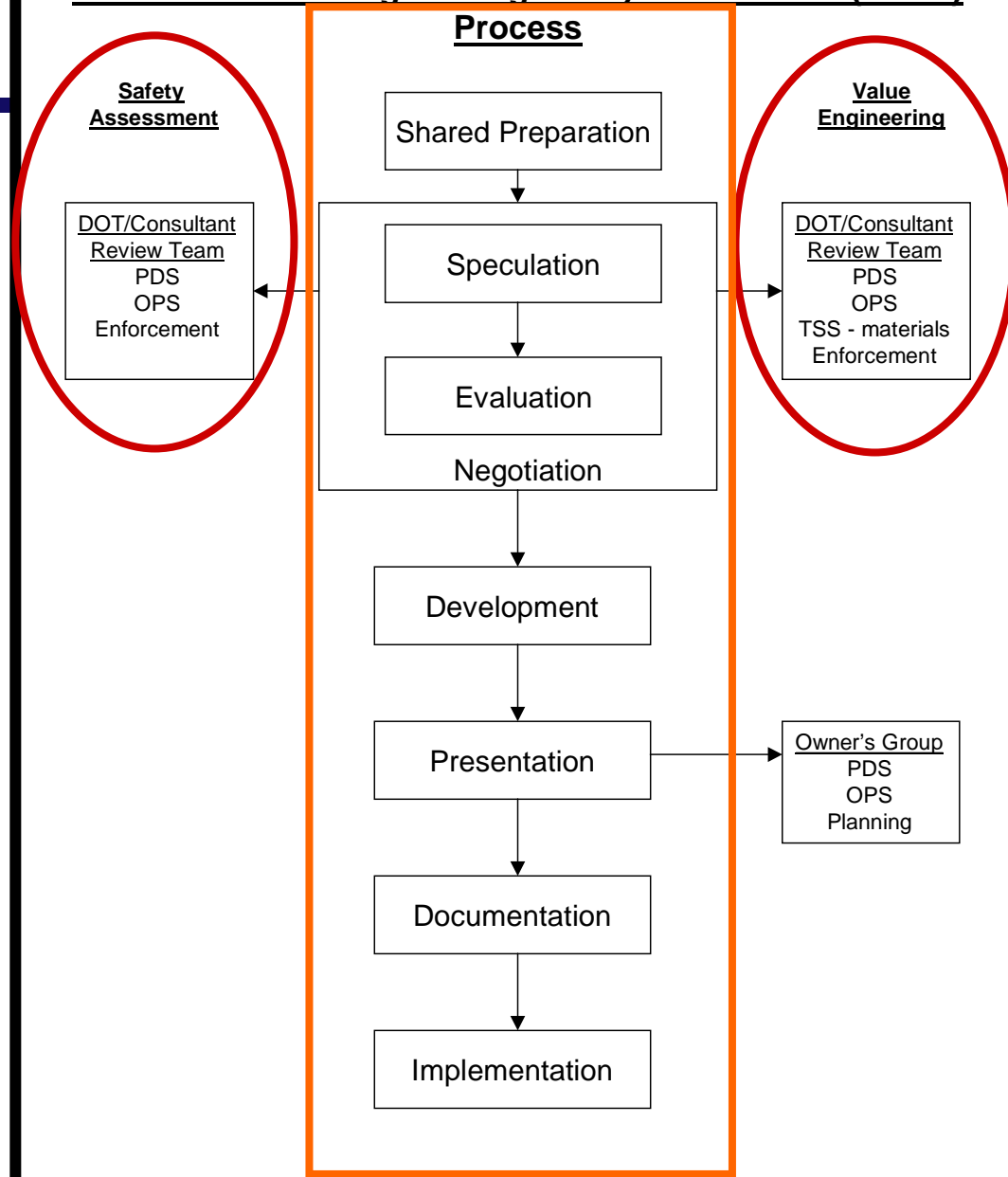
Current RSA Initiatives

- **Master Contracts with two consulting firms**
 - Developing RSA process for WisDOT
 - Pilot project(s) for RSA process
 - RSAs focusing on four areas of SHSP



- **Value Engineering Road Assessment (VESA) Process Development**
 - Incorporate RSA into VE process
 - Develop RSA parallel track to VE
 - RSA after VE

Strawman Value Engineering Safety Assessment (VESA)



Current RSA Projects

Existing Facilities

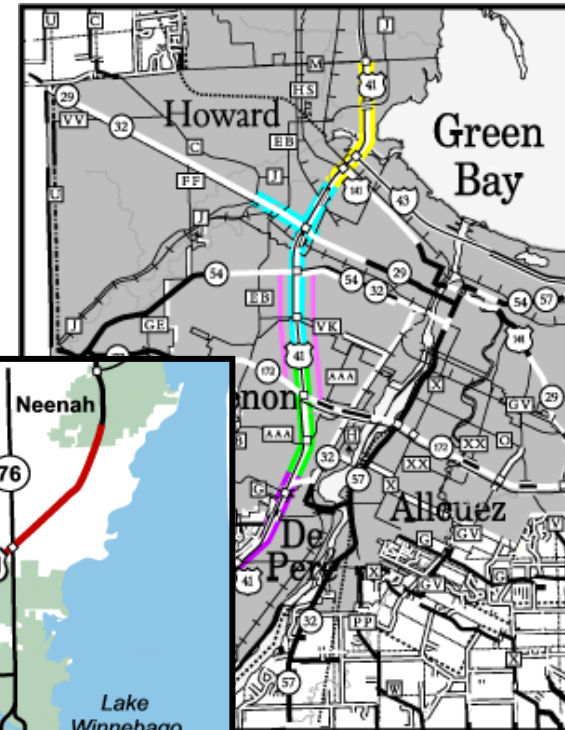
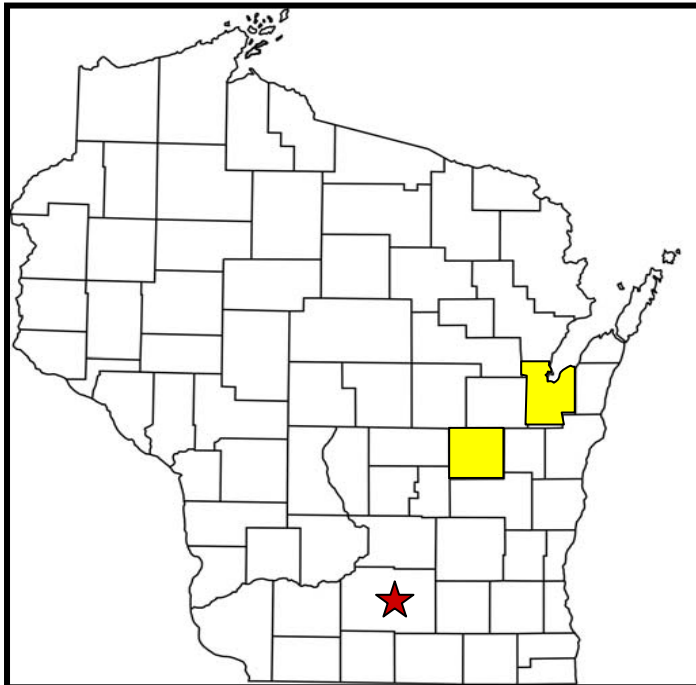
- AAA Road Improvement Demonstration Program (RIDP)
 - 4th Year – Started in 2004
 - Intersections with high crash rates in Milwaukee, Madison, and Green Bay
- US 8 – Four-lane undivided rural highway through village
- Crash-Median Crossovers



Current RSA Projects

Design Stage

- US 41 – Brown and Winnebago Counties
 - Four-lane to six-lane expansion
 - 30-60% Design Complete
 - RSAs Scheduled for June-July 2007



Future of RSAs in Wisconsin

- Develop Statewide RSA process/guidelines
 - Establish consistent RSAs within the state
 - Establish when to perform RSAs
 - Coordinate with value engineering
- Test RSA process with pilot projects (in accordance with SHSP issue areas)
- Incorporate RSA process into WisDOT policies and procedures

Future of RSAs in Wisconsin_(cont'd)

- Provide RSA training
- Establish annual RSA work plan
- Consider annual RSA project review process

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Questions

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