

Rural Intersection Collision Avoidance System (RICAS)



Project Briefing

presented to

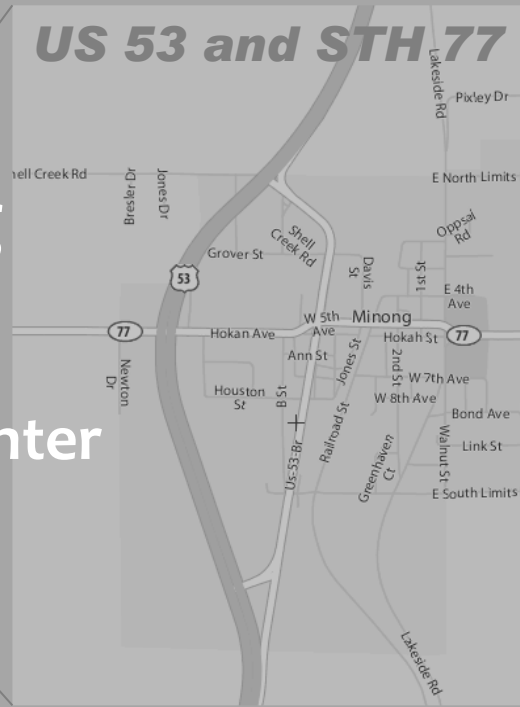
Minong Senior Center

presented by

RICAS Research Team

March 17, 2010

US 53 and STH 77

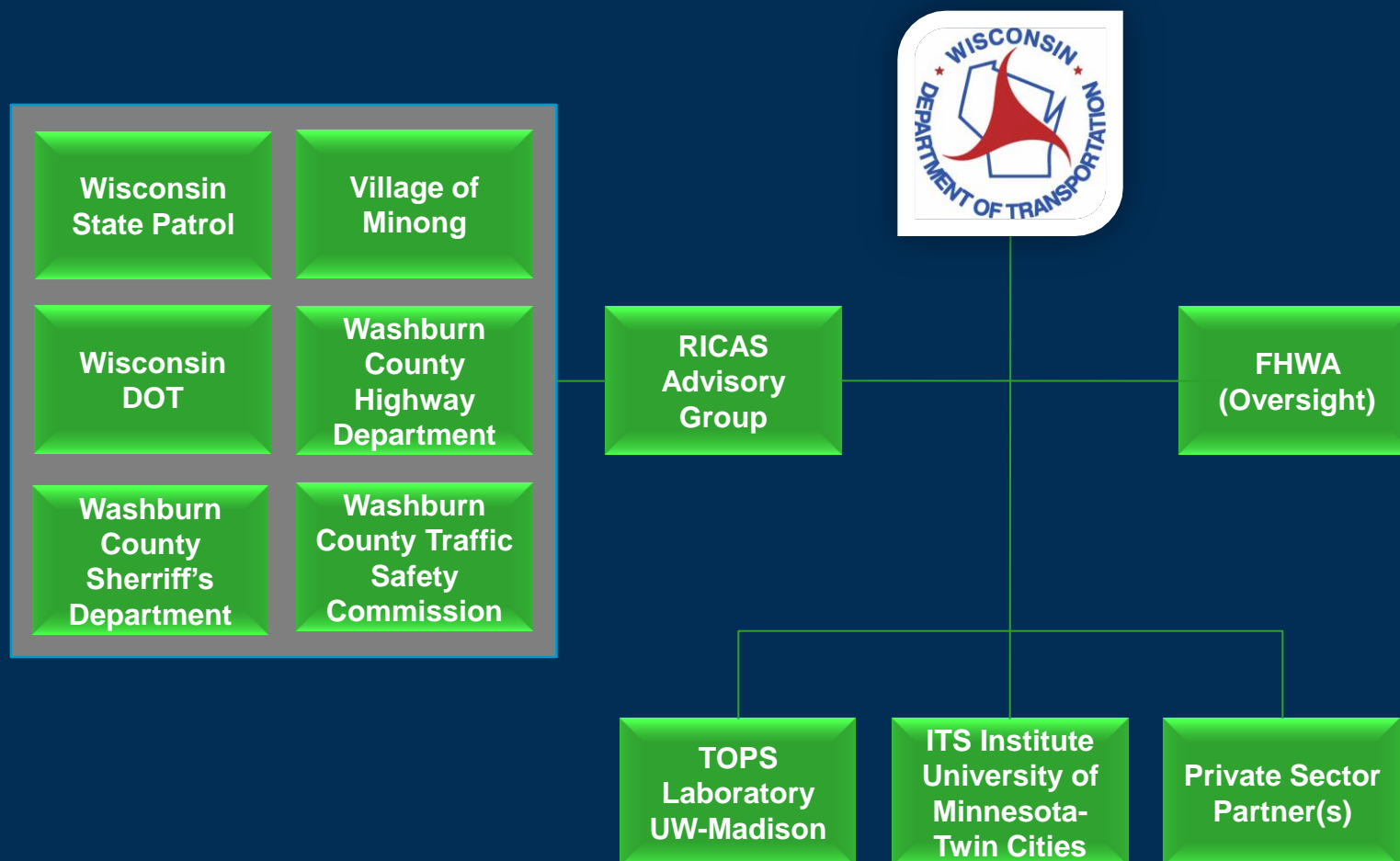


PRESENTATION AGENDA

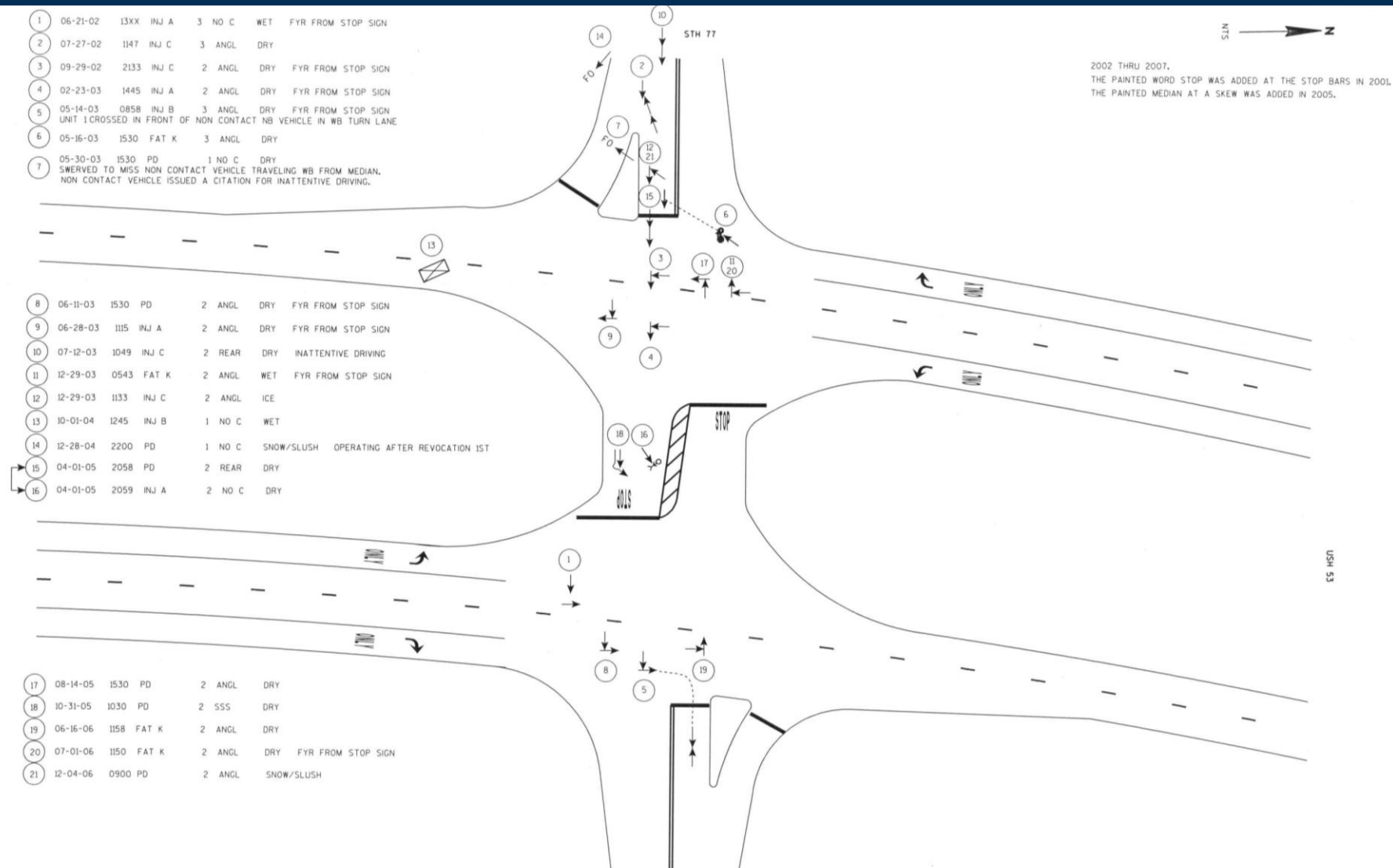
- RICAS Advisory Group
- US 53/STH 77 Intersection Safety Characteristics
- Development of RICAS in Minnesota
- System Overview
- Cannon Falls, MN Videos
- Example Intersection Scenarios
- Expected Project Benefits
- Project Schedule
- Questions



RICAS Advisory Group



US 53 and STH 77 Safety Characteristics



Development of RICAS in Minnesota

- Signing Studies



Simulator Studies

On-Road
Studies



RICAS COMPONENTS

- Electronic Message Signs – relay alerts and warnings to side-road drivers as determined by the computational system

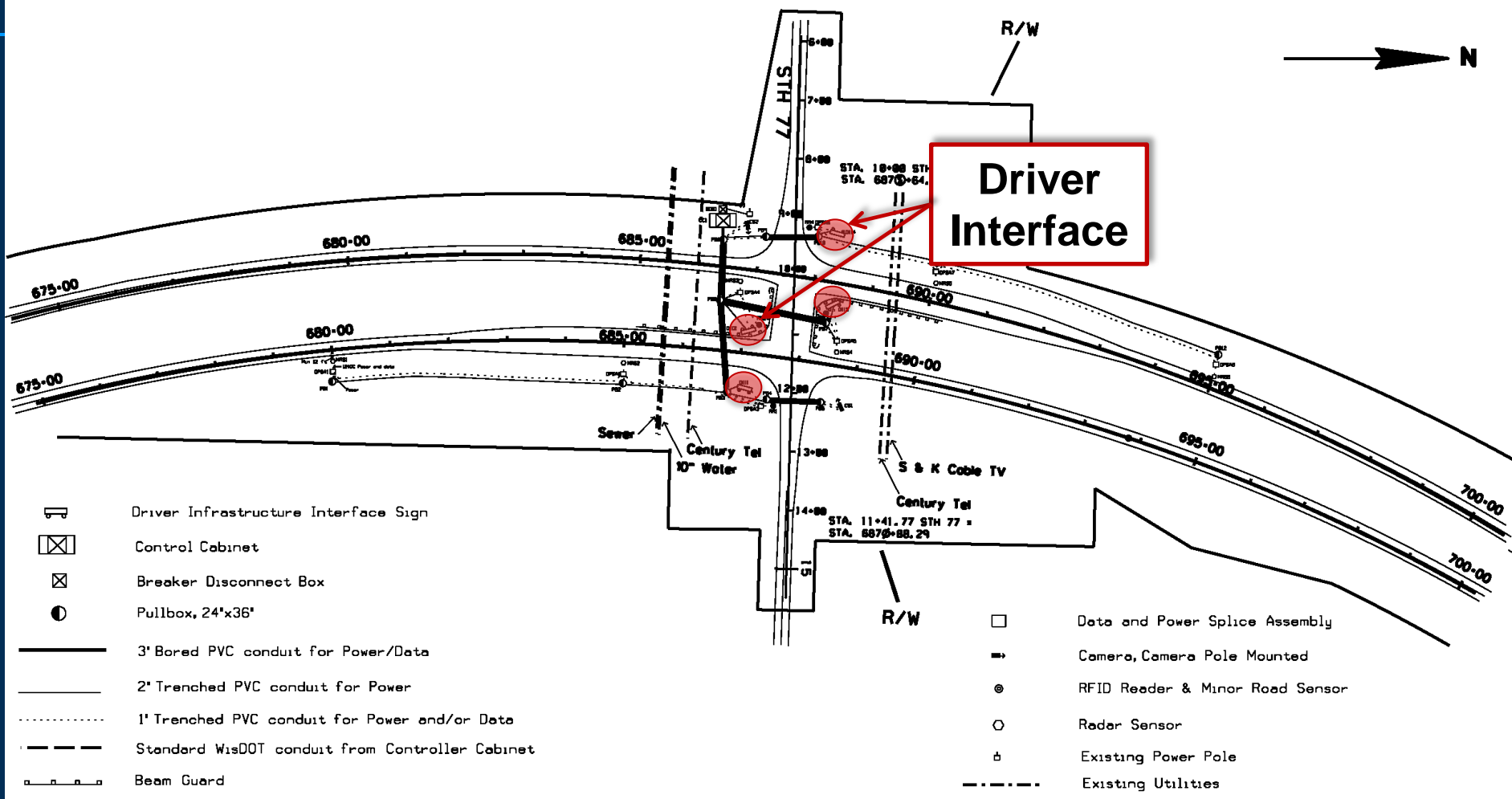


Actual sign: 66" x 92"; 80 x 112 pixels (20 mm pitch)

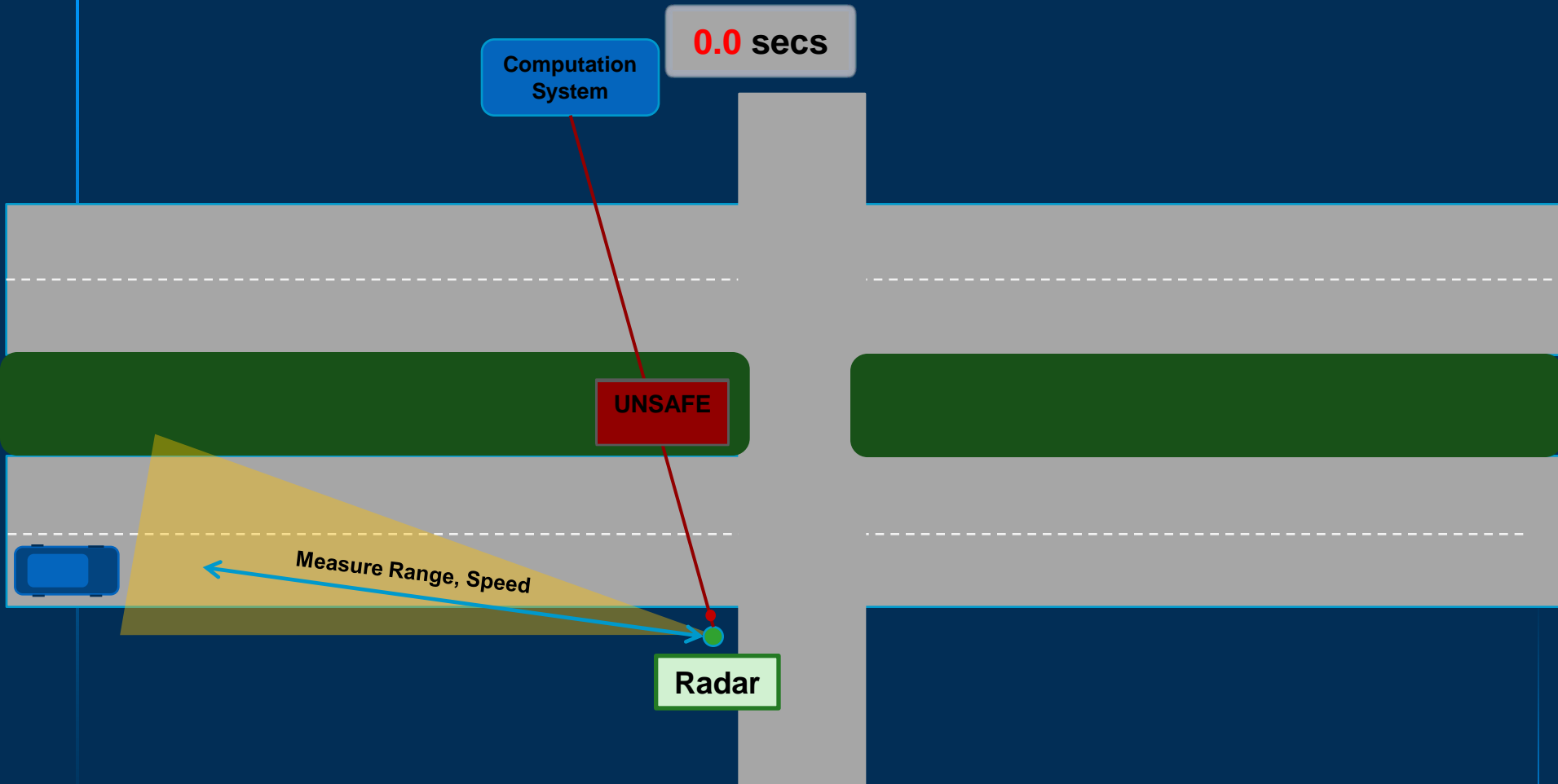


**View of the near-side sign.
Unsafe to cross.**

Mainline traffic on the left and right is less than 7.5 seconds away.



System Overview



Cannon Falls, MN Videos



Example Intersection Scenarios



Traffic From the Left: **No traffic, ok to cross**

Traffic From the Right: **Traffic Coming, Be Very Cautious**

Example Intersection Scenarios



Traffic From the Left: Traffic Coming, Be Very Cautious

Traffic From the Right: Traffic Coming, Do Not Cross

Example Intersection Scenarios



Traffic From the Left: **Traffic Coming, Do Not Cross**

Traffic From the Right: **No Traffic, Safe to Cross**









EXPECTED PROJECT BENEFITS

- **Reduce the frequency of crashes at the intersection of US 53 and STH 77 in Minong**
- **Better understanding of drive behavior, both by frequent and infrequent users of the intersection**
- **Documentation of the safety benefits to support a benefit-cost analysis**
- **Pending proper evaluation, provide motivation for further deployments throughout the U.S.**

QUESTIONS

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