Implementation and Evaluation of FHWA RWIS ESS Siting Guidelines

RWIS ESS Siting Guidelines
- Developed in 2005 in partnership with AASHTO and Aurora Pooled Fund Program
- Provide sensor siting criteria and checklist based on research and interviews (not standards)
- Address local and regional considerations for road weather data

Project Objectives
- Work with agencies to evaluate the usefulness and practicality of the ESS Guidelines in field deployment experience
- Assist agencies with implementation
- Identify and fill gaps in the ESS Guidelines
- Provide implementation examples
- Update the Guidelines accordingly

Implementation with Michigan DOT
- Providing assistance to MDOT in siting of six RWIS ESS in the upper peninsula
- The Guidelines are being used by MDOT and its contractors
- Preliminary suggestions for enhancements
  - Include siting scenarios
  - Discuss integrations with DMS and other ITS components

Evaluation with New Hampshire DOT
- Guidelines had not yet been issued when sites were planned in 2004
- Planning involved multiple NHDOT groups, FHWA, NH Highway Patrol, and meteorological support from Plymouth State University
- Guidelines would have helped at two particular sites
  - Not representative of roadway conditions
  - In the median, subject to turbulence and spray

Evaluation with Idaho Transportation Department
- Used the Guidelines extensively in ESS deployment planning and procurement
- Developed a Location Data Collection Checklist Preliminary suggestions for enhancements
  - Provide RFP preparation guidance
  - Recommend site environmental assessment
  - Guidance on clear zones and storm water

Coming Soon...
- Monitor and assist implementation in Michigan
- Prepare and issue Evaluation and Implementation Report
- Revise Guidelines in consideration of recommendations from the Report