Development of Road (Weather) Safety Audit for Wisconsin

Introduction
RSA is a formal examination of a future road or traffic project, or an existing road, in which an independent, qualified team reports on the project's crash potential and safety performance.
RWSA is the logical extension of conventional RSA with particular emphasis on highway safety from adverse weather impacts such as snow, ice, rain, wind, etc.

Objectives
- To develop a comprehensive and formalized Road (Weather) Safety Audit program for Wisconsin.
- Define and identify the key processes and procedures for Road Safety Audits (RSA) and Road Weather Safety Audits (RWSA) under the WisDOT organizational structure.
- Provide a framework for the implementation of audit procedures through designed audit checklists covering various/alls stages of a road project.
- To integrate RSA/RWSA process with current WisDOT policy by incorporating it into the WisDOT Facilities Development Manual (FDM).
- To identify and provide sources/procedures for basic information regarding the preparation of data for various stages of the audit process.

Organizational Structure for RSA/RWSA

RSA/RWSA Process and Procedure
1. Identify project to be audited
2. Select Audit Team
3. Pre-audit meeting to review project information and drawings
4. Perform field reviews under various conditions
5. Conduct audit analysis and prepare report of finding
6. Present audit findings to project management/design team
7. Prepare formal response
8. Incorporate findings into the project when appropriate
- Design Team/Project
- Audit Team

RSA/RWSA Integration into FDM

Audit Information Preparation
- Weather Data Collection and Processing
  - Road Weather Information System (RWIS)
  - National Weather Service (NWS) COOP Weather Data
  - Automated Weather Observing System (AWOS) Weather Data
- Crash Data Collection and Processing
  - WisDOT Crash Database from MV-4000
  - GIS Based Crash Data
  - Spatial Analysis of Weather-Related Crashes on Macroscopic and Microscopic Levels

Recommendations
- Need Intergovernmental Cooperation and Collaboration
- Maintain the RSA/RWSA Checklists as “Living Documents”
- Incorporate Extra Information from Local Resources