

## Intelligent Work Zone Research Project

### Introduction

The ENTERPRISE Pooled Fund has initiated a research project to document the best practices and lessons learned regarding Intelligent Work Zone (IWZ) technologies. While there is a wide range of technologies and strategies for ITS in work zones, this ENTERPRISE Pooled Fund has decided to focus efforts in this project on the following:

- Dynamic merge (e.g. late and early merge messages);
- End of queue warning systems;
- Information describing conditions on alternate routes through work zones; and
- Variable speed limits within work zones.

### Project Summary

The ENTERPRISE members recognize there has been considerable research and documentations of IWZ. The intent is not to duplicate or repeat this research. The ENTERPRISE IWZ Project will include a literature review of existing research and documentation. Beyond the literature review and synthesis, the project will coordinate with DOTs deploying work zone technologies during the 2013 work zone season. The coordination with DOTs will effectively create a ‘test bed’ of IWZ deployments.

The overall goal of the ‘test bed’ approach is to document the different uses and configurations, learning lessons whenever possible about preferred approaches.

After the 2013 work zone season, the project will combine these efforts with literature review results and prepare a matrix summarizing the four IWZ technologies, examples of successes, and any guidance possible describing when technologies are most effective and the configurations that demonstrated the best results.

### 2013 Work Zone Test Bed

During the initial months of this project, efforts will focus on identifying as many active IWZ deployments of the four IWZ technologies as possible. For each deployment, this project will:

- Track the deployment and operation of these systems during the 2013 work zone season;
- Document the locations of signs and sensors in relation to the work zone and/or closure point;
- Document the configurations of the technologies (e.g. messages (text) used on signs, thresholds used to activate sign messages), including any local laws that prevented (or encouraged) the use of such messages or configurations;
- Document any adjustments made to configurations or locations of signs over the summer season and reasons for the adjustments;
- Document each agencies’ approach to public outreach (e.g. was any media marketing used, how did the public react); and
- Document any evaluations or documented benefits and costs of the systems deployed.

