

Planning & Research Problem Statement Traffic & Safety

**Problem Title :** A Study of Real Time Advance Warning of Highway Speed Conditions via Multi-Color Dynamic Roadside Map Display

## **Problem Statement:**

Investigate the feasibility of using a real time advance warning of highway speed conditions via a multi-color dynamic roadside map display. Develop software and a virtual, yet portable, display to be used in a survey of the driving public as to the most effective map scenario for using different colors in flashing and non-flashing line segments representing various traffic speeds. The survey may possible be conducted through a kiosk at Oklahoma's Tourist Information Centers or other tourist stops. The map model would be designed to emulate a future network of highway sensors measuring real time speed conditions. The speed of each segment would be transmitted to a centrally located computer where a color map would be generated. The site specific map would then be displayed on a roadside map display located in advance of each major interchange. Each map generated would only display the speed conditions for the general highway direction beyond each interchange. The goal would be to provide information to enhance, but not replace, the existing 3-line dynamic message signs in Oklahoma City and Tulsa.

This should provide the traveling public advance warnings of reductions in normal traffic speeds in a more internationally understood format. One scenario could be to generate a map which would display road segment conditions in highly contrasting colors for stopped-35mph, 36-50mph and over 50mph, respectively.

Contact:

Oklahoma Department of Transportation Planning & Research Division 200 N. E. 21<sup>st</sup> Street, Room 3-A7 Oklahoma City, Oklahoma 73105-3204 Phone (405) 521-2671, (405) 521-6917 fax E-Mail spr@odot.org