

Project Title: **C-06-36 : Using Lighting to Alter Driver Behavior**

PIN:

Responsible Unit: Office of Operations Management

Project Manager: Hosley, Rochelle

Project Goal:

This project will plan and research the use of lighting systems to alter driver behavior and improve safety and traffic flows. The project will include researching appropriate lighting techniques for traffic control; identifying and selecting the most appropriate lighting techniques; planning the installation, including traffic engineering analyses; design, development, and installation of lighting for testing; monitoring the performance of vehicles and the lighting systems; evaluating and reporting on the results of the lighting system's effectiveness in altering the driver's behavior.

Actions Proposed:

By using the correct lighting design to impart information to drivers, light can convey the impressions of lane width and speed change. Drivers are expected to respond to these impressions by maintaining speed or slowing down, depending on the impression imparted. These changes in driver behavior can increase the safety of traffic operations and improve traffic flow. The proposed project will be accomplished under two phases. Phase I of the proposed project will address the need for drivers to reduce speeds when appropriate, such as on ramps. The results may increase safety by reducing the number of incidents such as truck roll-overs and thus reduce the congestions caused by such crashes. Phase II will involve encouraging drivers to maintain speed, at appropriate times of the day, which in turn may reduce chronic congestion in areas prone to traffic back-ups. It is anticipated that Phases I and II will be run concurrently.

Anticipated Work Products and Accomplishments:

- Successful demonstration of the effectiveness of using lighting techniques to alter drivers' behavior.

- Final report evaluation of the demonstration and its potential for wide spread application.

Proposed Budget: \$210,000