Evaluating State Safety Corridor Programs

Successful safety corridor programs use multidisciplinary measures to reduce crash frequencies and improve driver performance.

Objectives

- Synthesize 13 safety corridor programs across the United States and identify the characteristics common to successful programs
- Recommend ways for Federal Highway Administration (FHWA) Region 7 states (Missouri, Nebraska, Kansas, and Iowa) to establish successful safety corridor programs and select pilot corridors

Background

Safety corridor programs aim to improve particularly unsafe roadway segments within a state. These segments can vary considerably, extending anywhere from a few hundred feet to 50 miles, and programs have been established on both rural two-lane highways and in urban areas. Most safety corridors, however, tend to be homogenous, with reasonably uniform characteristics throughout. With the roadway segments selected, safety corridor programs identify and implement treatments—such as low-cost engineering solutions, enhanced enforcement, or public information campaigns—to help improve safety.

At the time of the study, the four FHWA Region 7 states (Missouri, Nebraska, Kansas, and Iowa) lacked state-level safety corridor programs. A comprehensive synthesis of established safety corridor programs throughout the United States can determine the features of successful programs and help the Region 7 states effectively implement programs and select pilot corridors.

Surveys and Field Visits

To identify the features of successful safety corridor programs, survey information was gathered from 13 state programs: Alaska, California, Florida, Kentucky, Minnesota, New Jersey, New Mexico, New York, Ohio, Oregon, Pennsylvania, Virginia, and Washington. Additionally, five individual corridors from among these state programs were visited.
Key Findings
Several characteristics of successful safety corridor programs were identified:

- Corridors are relatively homogenous throughout.
- Multidisciplinary safety improvement efforts combine engineering, education, and enforcement (3E) measures. Some states also consult emergency medical services (4E approach).
- Only 3 to 12 safety corridors per state are active at one time.
- Consistent, statistically rigorous measures of crash and fatal/injury data and measures of effectiveness (MOEs) help select, evaluate, and decommission corridors. A crash rate 10% greater than the statewide average for similar roadways is a common measure.
- A statewide champion can help select corridors and secure funding.
- A task force develops and monitors a corridor safety action plan, the steps needed to successfully implement and manage the corridor.
- Safety corridor legislation helps establish the corridor program and imposes enhanced fines for traffic-related offenses.
- Special signing in safety corridors advises drivers of the safety emphasis in the roadway section. “Enhanced Speed Limits” and “Lights on for Safety” are typical messages.
- An initial road safety audit or a detailed multidisciplinary safety review helps improve the safety-related practices, procedures, and standards.
- Low-cost engineering improvements, such as signing upgrades or rumble stripes/strips, help reduce common crash causes.
- Safety corridors are decommissioned after safety data have improved, according to the same criteria employed in selection and evaluation. Two to three consecutive years of safety improvements is a reasonable goal.

Implementation Benefits
- Safety and driver performance typically improve in selected roadway sections, particularly when coordinated with local safety professionals and when public awareness is emphasized.
- Responsiveness to public safety concerns can be demonstrated at a relatively low investment cost.
- Selected countermeasures can be implemented relatively quickly, while longer term, more costly solutions are developed and funded.

Implementation Readiness
Most safety corridor programs are similar, but no individual program can fit every state’s needs. States differ in terms of roadway and crash characteristics and the safety funds available.