RSN 99-03 August 26, 1998



Are Safety Corridors Really Safe?

Evaluation of the Corridor Safety Improvement Program

Notes

Speed is one of the largest contributors to vehicle crashes and fatalities. Nationwide, approximately half of fatalities and 30 percent of injuries occur on free-access, high-volume arterial highways adjacent to commercial strip developments at speeds of 65 kph (40 mph) or more. These safety problems often cannot be remedied by replacing these corridors with an expressway or freeway because of major financial, environmental or social impacts.

High accident frequencies on Oregon's highway corridors are of concern to the Oregon
Department of Transportation (ODOT).

ODOT adopted the Corridor Safety Improvement Program as part of an overall program of safety improvements using federal and state funds. The program uses a multi-disciplinary team approach with local safety, school, media and community groups. The goal is to integrate highway improvements, driver behavior, enforcement education and emergency medical initiatives into a unified safety effort. Some of the measures utilized by ODOT as part of the Corridor Safety Improvement Program include:

• variable message signs,

- oversized speed signs,
- orange diamonds on signs,
- flashing lights on intersection signs,
- additional illumination at selected intersections.
- stepped-up enforcement emphasis,
- mail-out brochures,
- realignment of intersections,
- "Lights On for Safety" signs, and
 - "Safety Corridor Next *xx* Miles" signs.

To measure the effectiveness of the Corridor Safety Improvement Program, ODOT studied the impacts on two highway segments: Oregon

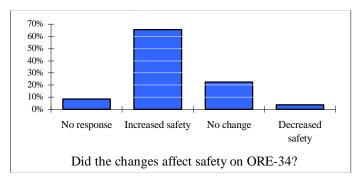
Route 34 between Corvallis and Interstate 5, and Oregon Route 22 west of Salem between Oregon Route 99W and the Willamette River. The ODOT Transportation Safety Section and the Transportation Research Institute at Oregon State University conducted a literature review and developed a survey to evaluate the effectiveness of the safety corridor program.

Over 1800 residents of communities along the corridor offered their perceptions of the effectiveness of safety improvement efforts in each corridor.

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Residents Say Program Works

The results showed that residents perceive the Safety Improvement Program as successful. Most respondents said the changes to the corridors have made drivers more aware of events going on around them, and this in turn has increased the overall safety of the corridor.



ODOT currently has 12 other active safety projects:

OR Route 62 (Medford to Eagle Point)

Interstate 84 (Cabbage Hill)

Century Drive (Bend)

OR Route 11 (Milton Freewater)

US Highway 101 (Coos Bay)

US Highway 199 (Grants Pass)

US Highway 101 (Depoe Bay to Newport)

OR Route 18 (Grande Ronde to Sheridan)

US Highway 26 (Mt. Hood area)

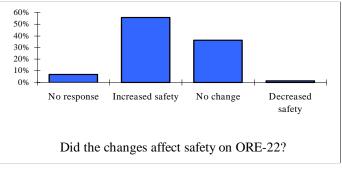
US Highway 395 (Hermiston)

OR Route 99E (Canby to Oregon City)

OR Route 38 (Reedsport to Drain)

A number of considerations were suggested by survey participants for further





improvement of high risk corridors. Besides the corridor safety tools already mentioned, safety improvement teams could consider:

- Increasing the level of traffic enforcement.
- Dividing the highway and limiting the number of access points along the corridor.
- Providing acceleration and deceleration lanes at major access points.
- Limiting the use of traffic signals.

For the two corridors in the study, extending the reduced speed zones and lowering speeds at a dangerous intersection were other areas for consideration.

An additional study has been proposed to review enforcement patterns, speed studies, accident histories and other engineering studies to help evaluate the overall effectiveness of the Corridor Safety Improvement Program on motorist behavior.

For a copy of the full report, call the Research Unit at 986-2700.

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