

Research at a Glance

# Technical Brief

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## Updating 2019 Safe Corridors Reports

The New Jersey Department of Transportation (NJDOT) engaged Cambridge Systematics (CS) to complete the NJDOT Safe Corridors Program Report utilizing the existing methodology, as well as develop a new selection methodology consistent with current safety practices and NJDOT offices.

### Research Problem Statement

NJDOT, in conjunction with the Division of State Police, is required to submit a Safe Corridors Program Assessment Report annually under N.J.S.A. 39:3-20.4. Therefore, there is a need to provide assessments of the safe corridor areas, as well as the highway safety projects and programs paid for by the fund, within the past year to the Senate Transportation Committee and the Assembly Transportation Committee, the President and minority leader of the Senate, and the Speaker and the minority leader of the General Assembly.

### Research Objectives

The goal of the Safe Corridor Program is to identify corridors with high rates of serious and fatal injury crashes and reduce these crashes in the short-term through the use enforcement and engineering. Both components contribute to the goal of reducing serious injury crashes by encouraging drivers to change poor behaviors within safety corridors and drive safely. The second goal was to assess the current corridor selection methodology and update the methodology according to best practices.

### Methodology

This research was conducted in two phases. The first phase consisted of trend analysis for overall crashes within these designated areas, changes in fatal crashes and crash rates, and how that relates to the enforcement of stricter penalties associated with various traffic violations. The second phase provided an update to the selection methodology which is driven by Equivalent Property Damage Only (EPDO) values and crash thresholds. The selection process is based on prioritizing corridors with the highest crash costs, as well as crash thresholds consistent with various department priority lists and standards. The Equivalent Property Damage Only (EPDO) crash methodology is consistent with the grant program's method for distributing funds to municipalities through which the corridors pass.

## Research Project Manager

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### Results

The results of reviewing the trend analysis (13 years of crash and citation data), current assessment methodologies, and program practices produced a series of findings. While there is value in the current program's attention to corridors with high crash totals, limitations exist in regard to validity of the selection and evaluation methodology, assessment of direct impacts of citations and enforcement efforts without time and location details, citation and revenue flow, and connections between revenues and expenditures. Overall, this report found that the Safe Corridor Program has not met its goals because raised fines in high-risk travel corridors have not correlated with a decrease in crashes and fatalities.

In the interest of improving the Safe Corridor Program, this report recommended the following programmatic changes and considerations:

- Adjust corridor selection and assessment to utilize a severity-based methodology.
- Track citation types, details, and times to help compare enforcement actions versus crash data changes to better evaluate effectiveness of enforcement efforts.
- Increase and improve outreach and training for tracking, improving, and evaluating the corridors.
- Engage the Safe Corridor Coordinator to review flow of citation revenue going toward Highway Safety Funds and identify barriers to correct data entry and submission errors.
- Develop improved understanding between the revenues and funding allocations for the program.

The proposed corridor analysis, by Total Crashes, Fatal Crashes, Serious Injury Crashes, and EPDO, provide a benchmark for annual evaluation and comparative analyses, leading to effective assessments of the improvements, enforcement activities, and the program as a whole. The updated methodology is consistent with the grant program's method for distributing funds to municipalities through which the corridors pass.

It is recommended that the corridor selection process be updated at least once every five years to ensure the Safe Corridor Program is considering the most costly crash locations, as well as utilizing methodologies consistent with state priorities and national best practices.