South Carolina Department of Transportation

Engineering Directive

Directive Number: **ED-72** **Effective: September 1, 2026**

Subject: **Rural Road Safety Project Prioritization Process for Non-Interstate Routes**

References: **S.C. Code of Laws, Section 57-1-370, 1976, as amended; S.C. Code of Regulations 63-10, as amended**

Primary Department: **Traffic Engineering**

In 2007, the South Carolina General Assembly enacted Act 114. One of the landmark items in Act 114 was the requirement that the South Carolina Department of Transportation (SCDOT) establish a project prioritization process. In 2016, the General Assembly enacted Act 275. Act 275 eliminated some of Act 114's requirements but it retained the requirement for project prioritization. This requirement is codified in Section 57-1-370 of the South Carolina Code of Laws, 1976, as amended. Additional detail on the process is found in S.C. Code of Regulations 63-10, as amended.

This engineering directive details the process for prioritizing and selecting non-interstate projects for the **Rural Road Safety Program** using objective and quantifiable criteria. The process includes an analysis of up to five years of statewide crash data along all non-interstate roadways. Crash data for all non-interstate roadways are then prioritized and analyzed to produce the Rural Road Safety Project (RRSP) candidate list.

SCDOT currently maintains approximately 41,500 miles of roadways. The purpose of this program is to achieve a significant reduction in traffic fatalities and serious injuries on our rural roadways through the implementation of infrastructure-related improvements.

Crash data is received from South Carolina Department of Public Safety (SCDPS) on a regular basis. SCDPS is the official custodian of the state's master crash data file.

Locations of crashes are recorded by the investigating officer on the collision report and SCDPS records the crash details. The crash data from SCDPS is imported into SCDOT's Safety Management Software (SMS), which provides the total number of fatalities and serious injury crashes along with other associated crash factors within the candidate list.

Between 2021 and 2024, over 46% of all fatal crashes in South Carolina occurred in rural areas. Nearly 77% of all rural road crashes resulting in a fatality or serious injury occurred on 20% of the total mileage maintained by SCDOT. Lane departure was the leading factor in fatal and serious injury crashes. The Rural Road Safety Program focuses on the worst performing non-interstate, rural corridor segments that had at least five fatal and serious injury lane departure related crashes. Based on these criteria, approximately 4,500 miles are eligible for the project selection process of the program. The purpose of this program is to achieve a significant reduction in traffic fatalities and serious injuries on roadways in rural areas through the implementation of infrastructure-related improvements, with a focus on reducing lane departure crashes.

The following **relevant** criteria will be used when identifying the Rural Road Safety Program candidate list.

- **Public Safety** – The sole purpose and need of this program is to improve public safety by reducing the number and severity of highway related crashes.

- **Total Crashes** – The total number of crashes resulting in a fatality or serious injury within a selected corridor.

- **Type of Crash** – Lane departure crashes, which is defined by the vehicle leaving the travel lane.

- **Crash Rate** – AADT, roadway segment length, and the crash data is used to calculate the crash rate.

- **Financial Viability** – The financial viability is based on the consideration of project cost in comparison to the six-year Statewide Transportation Improvement Program (STIP) budget. This information is used to determine the number of projects considered in the candidate pool.

The following Act 114 criteria were considered but deemed **not relevant** as they relate to this program category priority list, as they do not support the **purpose and need** of the RRSP program:

- **Volume-to-Capacity Ratio** – Not relevant as part of the prioritization process since this criteria does not meet the program category "safety" purpose and need.

- **Truck Traffic** – Not relevant as part of the prioritization process since this criteria does not meet the program category "safety" purpose and need.

- **Pavement Condition** – Not relevant as part of the prioritization process since this criteria does not meet the program category "safety" purpose and need.

- **Environmental Impact** – Not relevant as part of the prioritization process since this criteria does not meet the program category "safety" purpose and need.

- **Potential for Economic Development** – Not relevant to the prioritization process since this program category consists of the rehabilitation and reconstruction of existing roads.

- **Alternative Transportation Solutions** – Not relevant as part of the prioritization process since this criteria does not meet the program category "safety" purpose and need.

- **Consistency with Local Land Use Plans** – Not relevant to the prioritization process since this program category consists of the rehabilitation and reconstruction of existing roads.

Criteria

A RRSP safety candidate list will be developed in the SMS database by using the latest available five (5) years of statewide crash data, through a sliding scale analysis of five (5) mile segment lengths with a segment tolerance of 0.5 miles, a minimum of at least five (5) reported F&SI lane departure crashes on Rural-Arterial or Rural Collector roadways. The RRSP safety candidate list will then be prioritized by total F&SI crashes. If a secondary prioritization is needed, total lane

departure crashes will be used. In the event an additional prioritization factor is required, crash rate will then be used.

RRSP safety candidate locations will then be analyzed in ranked order and screened for additional factors to ensure project viability including but not limited to; data accuracy, availability of engineering solutions to reasonably reduce crashes, project overlaps (past, present, and/or future), crash patterns, existing conditions, etc.

Final project list termini may be adjusted based on logical termini, if other segments from the ranked list appear adjacent to the initial location, or based on engineering judgement. Financial viability and available funding will be used to determine the extent of the candidate list.

The final RRSP candidate list along with a certification of Act 114 compliance shall be presented by the State Traffic Safety Engineer, reviewed by the Director of Traffic Engineering and Deputy Secretary for Engineering, and submitted to the Secretary of Transportation for approval.

SCDOT does not guarantee any future project, scheduling priority, nor any specific countermeasures as projects proceed. As scoping, designs, and budgets are proposed, projects may be altered, removed, or delayed based on updated design standards, funding, and engineering judgement.

All data used for project prioritization will be kept on file as required by Departmental Directive 51 and SCDOT's record retention schedules.

Recommended by: Duncan C. Smith, P.E.
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Approved by: Rob E. Perry, P.E.
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