South Carolina Department of Transportation

Engineering Directive

Directive Number: **ED-75** **Effective: September 1, 2026**

Subject: **Safety – Vulnerable Road User Safety Program Project Prioritization Process**

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 57-13-70 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 projects for the Vulnerable Road User 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 highways. Crash data for all non-interstate highways are then prioritized and analyzed to produce the vulnerable road user (VRU) safety 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 roadways through the implementation of infrastructure-related improvements.

Crash data is received from South Carolina Department of Public Safety (SCDPS) on a quarterly 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 associated crash factors within the above defined corridors.

The following relevant criteria will be used when identifying the vulnerable road user safety 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.

- **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.

- **Total Pedestrian and Bicycle Crashes** – Crashes that involve a pedestrian and / or a bicycle.

- **Crash Density** – The total number of bicycle/pedestrian crashes divided by the corridor length.

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 Vulnerable Road User Safety 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 Vulnerable Road User (VRU) safety candidate list will be developed in the SMS database by using the latest five (5) years of statewide pedestrian and bicycle crash data, through a sliding scale analysis of one (1) mile segment lengths with a segment tolerance of 0.5 miles, with a minimum of at least five (5) reported crashes. The candidate list will then be prioritized by total bicycle and pedestrian crashes. If a secondary prioritization is needed, the highest fatal and / or serious injury involved crashes, also referred to as total F&SI, will be used. In the event an additional prioritization factor is required, the crash rate will then be used.

VRU 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), functional classifications, 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 candidate lists 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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Submitted by: Jae Mattox, P.E.
Director of Traffic Engineering

Approved by: Rob E. Perry, P.E.
Deputy Secretary for Engineering

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