

8.3 Safety

The conceptual design plans for the proposed I-95 corridor improvements were developed in accordance with the FDOT's Design Standards, Plans Preparation Manual and FHWA's Policy on Geometric Design of Highways and Streets. Adherence to these standards will facilitate safety and efficient traffic operations along the corridor. As discussed under Section 3.4 of the report, a large proportion of the crashes experienced along the existing I-95 interchange were associated with nighttime driving, wet road surface conditions, fixed objects and traffic congestion. Improvements considered to reduce these crash patterns include:

- Improving skid resistance for the pavement surface through reconstruction and/or replacement of existing pavement;
- Improve drainage to quickly remove surface run-off and standing water;
- Improve roadway lighting;
- Remove/relocate the fixed objects located within the clear zone.

In addition to the above safety considerations, the proposed improvements will enhance capacity at the I-95/Southern Boulevard Interchange and address existing and future traffic demand needs within the study area. This will alleviate traffic congestion which will yield a corresponding reduction in crash risk at the interchange. The planned improvements in roadway capacity, skid resistance, drainage, lighting and removal/relocation of fixed objects will all contribute to a substantial reduction in crashes at the interchange.

One of the most significant safety concerns, which the proposed capacity improvements will address, is the risk for queue spillback from the terminal intersections onto the I-95 mainline. Under the existing conditions, during the PM peak period queues on the NB off-ramp at Southern Boulevard spillback onto I-95 mainline. This condition creates a major safety concern with standing queues on I-95 mainline adjacent to high speed traffic. Safety conditions at the off-ramp will further deteriorate in the future if no corrective action is taken. The proposed improvements will address this safety concern by providing ample capacity and storage to accommodate queues at the off-ramp.