

South Carolina Department of Transportation
Traffic Engineering Guidelines

NUMBER: TG-21

SUBJECT: Mitigation of Traffic Impacts

BACKGROUND: The Department's Access and Roadside Management Standards (ARMS) Manual (October, 1996 edition) was revised in 2008 by Traffic Engineering with several updates being made, including the addition of a chapter on traffic impact studies. This chapter provides guidance in determining when a traffic impact study is required and what should be included in the study. Since the updated ARMS manual became effective on July 1, 2008, the Department has received inquiries about specific criteria for determining when mitigation of traffic impacts is required. The manual provides no specific criteria for determining when mitigation improvements are required and places this responsibility upon the District Traffic Engineer. This guideline provides criteria for determining when mitigation of traffic impacts is necessary.

GUIDELINE: Based on geometric design criteria provided in the SCDOT Roadway Design Manual (SCRDM) for various roadway types, the acceptable LOS shall be C (or better) for the peak traffic (design) hour of the study area roadway system in lieu of other locally preferred thresholds. For the purpose of this guideline, the acceptable LOS C shall apply to all roadway types, including rural arterials regardless of terrain, and local roads and streets.

In areas where baseline, or existing, levels of service are at or below the acceptable LOS, the baseline LOS shall be maintained or improved after development. If the baseline LOS is F and the location is in a congested urban area, the District Traffic Engineer shall determine the mitigation. The baseline LOS shall include all committed (funded) road improvements and all non-site traffic, but exclude the traffic to be generated by new development.

For mitigation at a development's direct access points, turn lane requirements shall be determined by using Chapter 5 of the ARMS manual and Chapter 9 of the SCRDM. Also, consideration should be given to any intersection where the crash experience, existing traffic operations, sight distance restrictions (e.g., intersection beyond a crest vertical curve), or engineering judgment indicates a significant conflict related to turning vehicles.

Approved: 

Director of Traffic Engineering

12-21-2018

Date