

SECTION B(1) – 2 – DESIGN REQUIREMENTS

PROJECTED TRAFFIC / OPERATIONAL / CAPACITY ANALYSIS*

For the purposes of these requirements, "projected traffic" includes the traffic resulting from the complete development of all land to be served by the subject roadway facility, including traffic forecast to be generated by development, both internal and external, to the site under consideration.

Traffic generation developed to meet Chapter 527 (Traffic Impact Analysis Regulations) may be utilized to meet this requirement, at the engineer of record's discretion. The basis for this forecast will be the governing body's current comprehensive plan or other available information pertinent to the permitted land use and transportation planning for the site and adjacent properties. The trip generation rates in the current version of Trip Generation, published by the Institute of Transportation Engineers (ITE) should be utilized in determining the projection of traffic. The ITE trip generation rate for a single-family detached residential dwelling unit is currently 10 vehicle trips per day. The use of other bona fide traffic studies in determining projected traffic for all types of land development may be considered, subject to their submission for review and approval by the Department.

As an alternative to the application of the projected traffic to the applicable geometric design criteria of these requirements, the Department will consider secondary street design based on a capacity analysis concept provided:

1. The governing body permits the utilization of this concept in the design of subdivision streets in the county, city or town.
2. The developer furnishes full rationale, to support the recommendations of this analysis. The submission should include all pertinent traffic data and computations affecting the design proposal for the streets involved.
3. An acceptable level of service should be accommodated in the street design proposed under the capacity analysis concept. A minimum level of service "D" as defined by the Highway Capacity Manual is generally acceptable for the design of local streets. To maintain an acceptable level of service, additional travel lanes, channelized roadways, etc., may be required.

FUNCTIONAL CLASSIFICATION

The characteristics and magnitude of the service to be provided will be the basis for the Department's determination of the functional classification for each subdivision street intended for acceptance into the secondary system. AASHTO's Geometric Design of Highways and Streets provides guidance in the classification of roads.

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