

## **SECTION B – 2 – DESIGN REQUIREMENTS**

### **PROJECTED TRAFFIC/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 subdivision under consideration.

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 subdivision 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. In PUD developments, trip generation rates should be developed for each type of land use and combined to determine projected traffic for each of the subdivision streets.

As an alternative to the application of the projected traffic to the applicable geometric design criteria of these requirements, the department will consider subdivision 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.
2. The developer furnishes full rationale, from an engineer licensed by the Commonwealth to perform such studies, to support the recommendations of this analysis. The submission should include all pertinent traffic data and computations affecting the design proposal for the subdivision 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 subdivision streets. To maintain an acceptable level of service, additional travel lanes, channelized roadways, etc., may be required.