

# TRANSPORTATION CONCURRENCY REVIEW APPLICATION

## Attachment B

### Application for Development Order (Site Plan Submittal) Traffic Impact Analysis Guidelines

The following are suggested guidelines to be followed when preparing a traffic impact analysis for an Application for Development Order. Upon approval of the Development Order, this concurrency analysis reserves capacity on the roadway network for the net new external project trips. The purpose of this traffic impact analysis is to identify the potential transportation deficiencies at the buildout year of the project. Should you have any questions regarding this analysis, please feel free to contact the Planning and Community Development Department at (850) 926-3695.

1. A roadway link PM peak hour, peak direction level of service analysis as well as intersection analyses in the AM and PM peak hours should be completed.
2. Trip generation rates and equations should be based on *Institute of Transportation Engineers' Trip Generation* (latest available edition). The AM/PM peak hour of adjacent street traffic trip generation equations (or rates), if available, should be used to calculate trip generation for the proposed development.
3. Methods and equations contained in the *ITE Trip Generation Handbook* should be used to calculate pass-by and internal capture, where appropriate.
4. Net new external project traffic should be distributed onto the surrounding study area roadway network. The distribution of traffic should be based upon travel patterns reflected in existing traffic volume data, an approved Florida Standard Urban Transportation Model Structure (FSUTMS) model, knowledge of the local development, and/or knowledge of local travel patterns.
5. The study area is defined by significantly impacted roadway links plus one link beyond. Roadway links are significantly impacted if the net new external PM peak hour project trips in the peak direction are five percent (5%) or more of the service volume (PM peak hour, peak direction) at the adopted level of service (LOS) standard.
6. The study area roadway network should consider all collectors and arterials within the study area, and any adjacent roads that connect the development to collectors and arterials.
7. Roadways should be segmented based upon Wakulla County Concurrency Management System or other appropriate sources.

8. A significance test should be completed to determine the study area. Alternative calculations for roadway link service volumes are permitted if justified and completed in accordance with Florida Department of Transportation (FDOT) guidelines. A roadway link within the study area is considered to be significantly impacted if the net new external project traffic during the PM peak hour on a roadway link in the peak direction is estimated to be five percent (5%) or more of the service volume (PM peak hour, peak direction) at the adopted LOS standard.
9. For roadway links that are determined to be significantly impacted by project traffic, an analysis of the major intersections along the links (including the intersections at the end of the study area) should be completed. Major intersections are defined as the crossings of Federal, State, or major County/City/Local roadways. Intersections at project entrances should be analyzed as well.
10. The intersections should be analyzed for both the background (estimated background traffic volume at year of project buildout) and total (background traffic plus project trips) traffic conditions.
11. Buildout year background traffic is typically estimated by applying an appropriate historical growth rate to existing, collected peak season traffic volumes. Growth rates from the Wakulla County Concurrency Management System shall be used if available.
12. Intersection analyses should be performed by using either Highway Capacity Software (HCS) or Synchro.
13. For intersections projected to operate below the adopted level of service standard at project buildout, recommendations for improvements should be made. These improvements should return the intersection to a satisfactory level of service with total traffic volumes.
14. Turn lanes (left and right) warrants should be evaluated at all site entrances. Turn lane warrant analyses should be conducted in accordance with National Research Council and Transportation Research Board guidelines, and as consistent with FDOT proceedings.
15. The traffic analysis prepared for the Application for Development Order is to be signed and sealed by a qualified professional engineer whose primary area of expertise is transportation engineering/planning.

The above suggested guidelines shall not be construed as a final methodology statement for all projects. The responsible professional transportation engineer should recommend technical analysis methodologies based upon the specific project being proposed.