ORDINANCE: **24-11**
PREPARED BY: **Shipley**
REQUESTED BY: **Staff**
CERTIFIED BY FMPC: **June 20, 2024**
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2ND READING: _____**July 25, 2024**_____
PUBLISHED IN: _____
DATE: _____

AN ORDINANCE AMENDING THE FARRAGUT MUNICIPAL CODE, CHAPTER 22 – ARTICLE 5. DRIVEWAYS AND OTHER ACCESS WAYS, SECTION 22-147., TRAFFIC IMPACT STUDY REQUIREMENTS, TO PROVIDE FOR ADDITIONAL CONSIDERATIONS FOR PEDESTRIANS AND BICYCLISTS

BE IT ORDAINED by the Board of Mayor and Aldermen of the Town of Farragut, Tennessee, wishes to amend the Farragut Municipal Code, Chapter 22 – Article 5. Driveways and Other Access Ways, Section 22-147., Traffic Impact Study Requirements, to provide additional considerations for pedestrians and bicyclists.

NOW, THEREFORE, BE IT ORDAINED by the Board of Mayor and Aldermen of the Town of Farragut, Tennessee, that the Farragut Municipal Code is hereby amended as follows:

SECTION 1.

The Farragut Municipal Code, Chapter 22 – Article 5. Driveways and Other Access Ways, Section 22-147., Traffic Impact Study Requirements, is replaced in its entirety as follows:

Sec. 22-147. Traffic impact study requirements

(a) *Generally.*

(1) The submission of a traffic impact study shall be required with rezoning, site plan and preliminary plat requests in accordance with the following table:

24-Hour Trip Generation	Traffic Study Scope
0—750 ADT	Level I
750—6,000 ADT	Level II
> 6,000 ADT	Level III

(2) Trip generation rates for proposed uses shall be calculated using the ITE Trip Generation Manual, latest edition.

(3) Upon being provided proof by the developer's traffic engineer that a lower level traffic impact study would be adequate for a proposed development, or that a traffic study is

not warranted, the town engineering staff may reduce the level of study required or waive the requirement.

(b) *Traffic impact study guidelines and procedures.*

(1) These traffic impact study guidelines and procedures define when proposed rezoning, site plans and preliminary plat requests warrant a detailed traffic study and what information should be included in it. All applicants will be required to follow the town guidelines.

(2) The purpose of performing a traffic impact study, as defined by the institute of traffic engineers (ITE), is to:

a. Provide guidance for short term and long term planning of site access;

b. Provide guidance for on-site circulation and the interface between on-site circulation and off-site traffic;

c. Provide guidance for off-site improvements needed to permit the roadway system to function satisfactorily so as to accommodate site and non-site traffic;

d. Provide guidance on measures to improve the safety and efficiency of pedestrian and bicycle facilities impacted by the proposed action for which the traffic impact study is being prepared.

e. Assist developers and land owners in making land use site planning decisions regarding traffic;

f. Identify the contribution a particular development makes to roadway system traffic volumes;

g. Provide a basis for estimating roadway improvement requirements attributable to a particular project;

h. Assess the compatibility with local transportation plans;

i. Enable staff to better evaluate zoning changes and development plans; and

j. Allow appointed and elected officials to know implications of their voting decisions.

(c) *Scope of required traffic impact studies.* Three levels of study have been identified based on the number of trips that a development is projected to generate in a 24-hour period:

(1) Level I studies require analysis of each access, per engineering staff, that the development has to an existing roadway. Access points to be analyzed include public and private roads, joint permanent easements, and private drives.

(2) Level II studies require analysis of each access that the development has to an existing roadway, and to the first control point beyond those access points. A control point is an intersection controlled by a traffic signal or stop sign on the existing roadway onto which the development has access. For cases where a traffic control device does not exist, engineering staff will determine the extent of the study. If a freeway interchange is near the property to be developed and is not signalized, engineering staff will determine if the ramps need to be included in the study. This level of study is

commonly required for larger residential subdivisions, commercial developments, and office complexes.

(3) Level III studies require a complete traffic impact study. This study must address each access point, the first control point beyond each access point, and the nearest collector intersection or street of higher classification or as determined by the engineering staff. The exact area to be studied will be determined by the engineering staff with input from the study preparer. Level III studies are uncommon, as they are usually warranted only with very large mixed-use and commercial developments.

(d) *Submission and review procedures for traffic impact studies.*

(1) Applicants should conduct a preliminary trip generation assessment of any proposed rezoning, site plan or preliminary plat request to determine if a traffic impact study will be required. This preliminary assessment should be conducted well in advance of the actual submission of plans.

(2) If the preliminary assessment indicates that a traffic impact study will be required, the applicant should consult as early as possible in the plan-development process with the town's engineering staff to verify a development's projected trip generation, and to confirm whether or not a study will be required. If a study is required, the required level can be determined at that time.

(3) The applicant shall then select a licensed traffic or transportation engineer to prepare the study, who may need to consult with the engineering staff periodically to review the collected data and any assumptions made in the draft report.

(4) An electronic copy of the completed draft traffic impact study shall be submitted along with the development application and all other materials required for submission.

(5) The engineering staff shall review the draft traffic impact study in conjunction with the other elements of the development application. If the draft traffic impact study is not of the proper scope or is executed improperly, the applicant shall be notified of the deficiencies and be required to submit corrections on the same schedule that applies to the other elements of the development application. Failure to submit corrections in a timely manner may lead to a postponement of the application until the next regularly scheduled planning commission meeting.

Since a completed traffic impact study must be submitted at the same time as the application for a development, it is critical that the applicant conduct steps one through three early in their planning of a proposed development. Failure to submit a traffic impact study, or submission of an inadequate study, is likely to slow the review process and may lead to postponements.

(e) *Required qualifications for preparers of traffic impact studies.* Traffic impact studies shall be prepared under the supervision of a qualified engineer who has specific training in traffic and transportation engineering and experience related to preparing traffic studies for existing or proposed developments. The study shall be signed and sealed by the supervising engineer. The ability to forecast and analyze traffic needs for both developments and roadway systems is essential. All design work implementing the recommendations of the traffic impact study shall be completed under the supervision of a registered professional engineer.

(f) *Required specifications for traffic impact studies.*

(1) *Report requirements: Level I studies.*

a. *Intersection.*

1. Description of site including a location map.
2. Type of project.
    (i) If residential, number and type of units.
    (ii) If commercial or office, include square footage and occupancy.
3. Site plan with access points shown to scale.

b. *Existing conditions.*

1. Distance from nearest intersection in both directions.
2. Distance to nearest drive or access points in both directions.
3. Location shown relative to opposing street, driveways, or access points.
4. Existing pedestrian and bicycle facilities in the study area.

c. *Proposed conditions.*

1. Width, radius, and markings of proposed street, driveway, or access point.
2. Proposed improvements adjacent to access point, including, but not limited to, acceleration, deceleration lanes, and pavement marking adjustments.
3. Additional pedestrian and bicycle facilities or modifications to existing facilities to improve safety and/or user experience.
4. Improvements to pedestrian crossings to lessen potential conflicts with motorists.

(2) *Report requirements: Level II studies.*

a. *Introduction.*

1. Description of site including a location map.
2. Type of project.
    (i) If residential, number and type of dwelling units.
    (ii) If commercial or office, square footage and type of occupancy.
3. Map of project with proposed access points shown.

b. *Existing conditions.*

1. Directional traffic counts on roads adjacent to property with access to development: Traffic counts should be no more than one year old.
2. Level of service of intersections (if applicable):
    (i) Highway capacity software is recommended.

(ii) Other nationally recognized software can be used.

3. Existing pedestrian and bicycle facilities in the study area.

c. *Trip generation rates.*

1. Listing of trip generation rates.

2. Listing of sources for rates used.

(i) ITE Trip Generation Manual, latest edition.

(ii) If the type of proposed development is not addressed in the ITE manual, then other rates may be used as long as they are documented and have been approved by engineering staff.

3. Calculation of trip ends by type of generator.

(i) Traffic generated by phase.

(ii) 100 percent occupancy and development.

4. An assessment of whether site-generated traffic will have any adverse impacts to pedestrians and/or bicyclists.

d. *Trip distribution.*

1. Assumptions as to the directional distribution of traffic to and from the development.

2. Assumptions as to the peak hour percentages.

3. Assumptions as to the peak hour directional splits.

4. Assumptions as to the pass-by trips, if applicable, must be approved by engineering staff.

5. An assessment of whether modifications to site generated trip distribution will have any adverse impacts to pedestrians and/or bicyclists.

e. *Analysis.*

1. Level of service (LOS) and capacity analysis for peak periods.

(i) Compute the projected LOS and capacity analysis for each access point and control point to the adjacent road system based on the development by phase.

A. Highway capacity software is recommended.

B. Other nationally recognized software can be used.

(ii) Compare LOS before development to LOS after development if applicable.

(iii) Link analysis if applicable.

2. Intersection and roadway geometry; existing and proposed.

(i) Distances from existing streets, driveways, and/or median cuts.

(ii) Alignment with existing streets, driveways, and/or median cuts.

(iii) Intersection layouts.

(iv) Sight distance.

(v) Right-of-way width.

(vi) Lane width.

3. Site circulation.

4. Pedestrian facilities.

(i) Sidewalks, walking trails.

(ii) Crosswalks, crossing distance, pedestrian signals and associated timing.

(iii) Transit stops.

(iv) School bus stops.

5. Bicycle facilities.

f. *Recommendations.*

1. Site access.

2. Intersection improvements.

(i) Traffic control devices: modify existing or need for new.

(ii) Left and/or right turn lanes.

(iii) Acceleration and/or deceleration lanes.

(iv) Length of storage bays.

(v) Additional pedestrian and bicycle facilities or modifications to existing facilities to improve safety and/or user experience.

(vi) Improvements to pedestrian crossings to lessen potential conflicts with motorists.

3. Off-site improvements.

(i) Modification to existing traffic control devices.

(ii) Additional traffic control devices.

(iii) Additional lanes at major intersections.

(iv) Additional roads.

(v) Additional pedestrian and bicycle facilities or modifications to existing facilities to improve safety and/or user experience.

(vi) Improvements to pedestrian crossings to lessen potential conflicts with motorists.

4. Improvements by phasing (if applicable).

g. *Appendix.*

1. Raw traffic count data.
2. Documentation of analysis.

(3) *Report requirements: Level III studies.* In addition to the preceding information for Level I and II, the following information on trip assignment shall be provided in the report prior to the analysis and recommendation section:

Trip assignment.

1. Show existing ADTs, proposed development traffic, and total traffic for all affected links on map which identifies the project and surrounding roads.
2. Show a.m. and p.m. peak hour turning movements for the existing traffic, the proposed development traffic, and the combined traffic at all project entrance intersections, and effected intersections within the study area.
3. Discuss the effects of phasing of the proposed project.

(g) *Additional information.* Additional information on traffic impact studies can be obtained from the Institute of Transportation Engineers (ITE), among other reputable sources.

SECTION 2.

This ordinance shall take effect from and after its final passage and publication, the public welfare requiring it.

_____
Ron Williams, Mayor

_____
Allison Myers, Town Recorder

Certified to the Farragut Board of Mayor and Aldermen this _____ day of _____, 2024, with approval recommended by the Farragut Municipal Planning Commission (FMPC).

_____
Scott Russ, Chairman

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Shannon Preston, Secretary