

AN ORDINANCE AMENDING ARTICLES 6-1 and 21-4 OF THE ZONING ORDINANCE TO SIMPLIFY AND MODERNIZE REGULATIONS RELATED TO TRAFFIC IMPACT STUDIES. (PLANNING COMMISSION).

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WHEREAS, the Lexington-Fayette Urban County Planning Commission has initiated a text amendment to Articles 6-1 and 21-4 of the Zoning Ordinance to simplify and modernize regulations related to Traffic Impact Studies; and

WHEREAS, the Planning Commission has considered a text amendment to Articles 6-1 and 21-4 of the Zoning Ordinance to simplify and modernize regulations related to Traffic Impact Studies. The Planning Commission did recommend APPROVAL of the staff alternative text by a vote of 11-0; and

WHEREAS, this Council agrees with the recommendation of the Planning Commission; and

WHEREAS, the recommendation form of the Planning Commission is attached hereto and incorporated by reference herein.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT:

Section 1 – That Article 6-1 of the Zoning Ordinance of the Lexington-Fayette Urban County Government is hereby amended to read as follows:

Sec. 6-1. - Application for Zoning Map Amendment. A proposal for amendment to the zoning map may originate only with the Commission, the LexingtonFayette Urban County Council, the owner of the subject property, or by a person having written authorization from the owner of the subject property. Regardless of the origin of the proposed amendment, an application must be filed with the Commission requesting the proposed amendment in such form and accompanied by such information as required by this Zoning Ordinance and the by-laws of the Commission. At the time of filing an application, a non-returnable filing fee shall be paid according to the schedule of fees as established by the Commission, however, there shall be no filing fee for an amendment requested by the Lexington-Fayette Urban County Council, the Commission, or any other governmental agency. Upon the filing of an application for a map amendment by a governmental body, the Commission shall promptly notify the owner of the subject property as required by KRS 100.

(a)Traffic Impact Studies. All significant developments requiring a Zoning Map Amendment shall submit a Traffic Impact Study. As used herein, the term "significant developments" shall mean any development which will generate more than one hundred (100) new trips and will have a potential impact on areas of congestion bottle-necks and high crash areas as identified by Transportation Planning staff; or alternatively, two hundred (200) or more additional (new) peak trips during the adjacent roadway's peak hour or the development's peak hour. The applicant shall have the responsibility of conducting and paying for the study.

The Urban-County Government will cooperate and coordinate with the

applicant's team to provide any available data. To the extent that the Urban-County Government has done any independent traffic study pertinent to the proposed development, the results of such study shall be made available to the applicant.

Anticipated roadway improvements shall be determined by a review of the Transportation Improvement Program and in consultation with staff from the Divisions of Planning, Traffic Engineering, the Kentucky Transportation Cabinet, and other agencies as deemed appropriate. If the proposed development is within one (1) mile of any county boundary line, then any proposed roadway improvements in the adjoining county shall be included in the study.

The Transportation Planning staff shall review, analyze, and make recommendations on any Traffic Impact study to be submitted as evidence in a rezoning hearing regardless of whether or not such study is required by this Zoning Ordinance.

(b) The following are the requirements of a traffic impact study:

1. The analysis should be presented in a straightforward and logical sequence, and should begin with study purpose and objectives. If the development proposal will likely result in a future Subdivision Regulation waiver request of any part of the transportation infrastructure, then additional development scenarios which meet the regulations will also need to be modeled and/or evaluated in addition to the applicant's proposal, as determined by the Transportation Planning staff.
2. Description of the site and study area. Care should be taken to include all known congested locations that may be impacted by the proposed development. The scope of the study area should be measured from the boundary of the property to the arterial intersections in all directions within one (1) mile, or as otherwise necessary as agreed to with Transportation Planning staff.
3. Existing conditions in the area of the development to include current AADT and Peak Hour traffic volume counts on the adjacent road or roads and intersections (including turning movements), existing level of service on roadways and physical characteristics of the subject roadways. Average peak hour traffic volume shall be the highest average peak hour volume for any weekday 24-hour period.
4. Anticipated nearby development, to the extent that the information can be obtained from existing data compiled by the Transportation Planning staff.
5. A plan of the proposed development.
6. The proposed number and type of dwelling units for residential development and for nonresidential developments, the square footage, employees or other relevant trip generation variables of all buildings and a description of their use.
7. Documented trip generation for each land use and total trip generation, including assumptions and reasoning and the source(s) of trip generation. Additionally, any adjustments to trip generation rates to reflect pass-by trips captured, mixed use, walk-ins, etc., should be justified in the study report.
8. Trip distribution and assignment, including methodology, assumptions, and reasoning underlying the distribution and assignment. Additional assessment of anticipated commercial vehicles will be necessary if a proposed non-residential use is defined in the ITE industrial category (100 series) for FHWA Class 7 or above.
9. Full development year traffic volumes (assuming full buildout and occupancy) composed of all of the following:
  - (a) Existing traffic volumes.
  - (b) Non-site traffic volume growth in the corridor between the existing year and the full development year.
  - (c) The traffic volume added by the proposed development.
10. A description of any government initiated roadway/intersection improvements which have been assumed as being in place at full development.

11. Capacity, queue lengths, functional area of operation of intersections, and level of service determination during the peak or critical period(s) for the full development year for all affected streets/roads and all intersections, within the study boundary.
12. An assessment of the change in roadway and intersection operating conditions resulting from the development traffic.
13. Recommendations, if any, for site access and public transportation improvements needed to maintain traffic flow to, from, within, and past the site at an acceptable and safe level of service (level of service D or E, if agreed to by Transportation Planning staff).
14. An assessment of and recommendations regarding any concerns in the study area related to safety, neighborhood traffic calming techniques, and multi-modal improvements to encourage a mode-shift from single-occupancy vehicles including, but not limited to, pedestrian, bicycle, transit, or ride-sharing programs.
15. If the proposed use will generate 600 or more peak hour trips, then a mapped assessment of the access to opportunity shall be provided. The mapped assessment shall demonstrate access to the number of households, employment, schools, parks, public amenities and shopping available within a 15-minute walk and bicycle route, and a 30-minute transit mode from the subject property. If necessary, include any recommendations to improve equitable transportation options and/or priorities to increase access to opportunities in the study area.
16. Recommendations for all public infrastructure improvements and noting which are proposed as part of the development at the developer's expense.

Section 2 – That Article 21-4 of the Zoning Ordinance of the Lexington-Fayette

Urban County Government is hereby amended to read as follows:

Article 21-4 (c)

(Development Plan) Review. The Division of Planning and concerned agencies shall review the development plan, and then meet together as a Technical Committee to try to resolve all differences and to make recommendations to the Commission's Subdivision Committee. The Subdivision Committee will review all recommendations, and then forward their recommendations to the Commission. The Subdivision Committee shall have the authority to require an applicant to prepare a traffic impact study for significant developments per Article 6-1(a). These Committee meetings shall be open to the developer and to any interested citizen, however, each Committee may impose rules which control participation by non-members in attendance. The developer may secure recommendations from the staff at any of the review checkpoints, and proceed to make plan changes so that revised plans may be submitted to the remaining review groups.

Section 3 - That this Ordinance shall become effective on the date of its passage.

PASSED URBAN COUNTY COUNCIL: August 26, 2021

  
MAYOR

ATTEST:

  
Clerk of Urban County Council

Published: September 2, 2021-1t

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Recd by \_\_\_\_\_

Date: \_\_\_\_\_

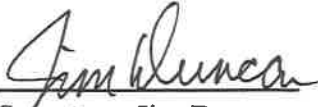
**RECOMMENDATION OF THE**  
**URBAN COUNTY PLANNING COMMISSION**  
**OF LEXINGTON AND FAYETTE COUNTY, KENTUCKY**

**IN RE: PLN-ZOTA-21-00003: AMENDMENT TO ARTICLE 6-1 AND ARTICLE 21-4: TRAFFIC IMPACT STUDIES** –a Zoning Ordinance text amendment to Articles 6-1 and 21-4 of the Zoning Ordinance in an effort to simplify and modernize regulations related to Traffic Impact Studies.

Having considered the above matter on June 24, 2021, at a Public Hearing and having voted 11-0 that this Recommendation be submitted to the Lexington-Fayette Urban County Council, the Urban County Planning Commission does hereby recommend **APPROVAL of the Staff Alternative text** for this matter for the following reason:

1. The proposed update to Article 6 and 21 of the Zoning Ordinance accomplishes the goals to modernize the Traffic Impact Study requirements, to increase both the predictability and flexibility in the process, and to remove standards and data references that are no longer applicable.
2. The proposed text amendment increases the focus on multi-modal opportunities - such as pedestrian, bicycle, and transit ridership - while still analyzing the necessary vehicular infrastructure needs for a complete, safe and efficient transportation system for all. This is consistent with and directly related to the following Goals, Objectives, and Policies of the adopted 2018 Comprehensive Plan:
  - a. Establish and promote road network connections in order to reduce police, EMS, and fire response times (Theme A, Goal #4.c).
  - b. Prioritize multimodal options that de-emphasize single occupancy vehicle dependence (Theme B, Goal #2.d).
  - c. Support the Complete Streets Concept, prioritizing a pedestrian first design that also accommodates the needs of bicycles, transit, and other vehicles (Theme D, Goal #1.a).
  - d. Develop a viable network of accessible transportation alternatives for residents and commuters, which may include the use of mass transit, bicycles, walkways, ride-sharing, greenways, and other strategies (Theme D, Goal #1.b).
  - e. Concentrate efforts to enhance mass transit along our corridors in order to facilitate better service for our growing population, as well as efficiencies in our transit system (Theme D, Goal #1.c).
  - f. Improve traffic operation strategies (Theme D, Goal #1.d).

**ATTEST:** This 30<sup>th</sup> day of July, 2021.

  
Secretary, Jim Duncan

LARRY FORESTER  
CHAIR

At the Public Hearing before the Urban County Planning Commission, this petition was represented by **Jimmy Emmons, Planner Senior, Division of Planning, Transportation Planning Section.**

**OBJECTORS**

- None
- None

**VOTES WERE AS FOLLOWS:**

AYES: (11) Barksdale, Bell, Davis, de Movellan, Forester, Meyer, Nicol, Penn, Plumlee, Pohl, and Wilson

NAYS: (0)

ABSENT: (0)

ABSTAINED: (0)

DISQUALIFIED: (0)

Motion for Approval of the staff alternative text of PLN-ZOTA-21-00003 carried.

- Enclosures:
- Initiation Minutes – April 8, 2021
  - Staff Report
  - Revised Staff Report
  - Recommended Text
  - Applicable excerpts of minutes of above meeting

## GENERAL INFORMATION - Zoning Ordinance Text Amendment Application

1. **APPLICANT INFORMATION:**

**Name:** Urban County Planning Commission  
**Address:** 200 E. Main Street  
**City, State, Zip Code:** Lexington, KY 40507  
**Phone Number:** 859-258-3160

2. **ATTORNEY (Or Other Representative) INFORMATION:**

**Name:** Tracy Jones  
**Address:** 200 E. Main Street  
**City, State, Zip Code:** Lexington, KY 40507  
**Phone Number:** 859-258-3500

3. **REQUESTED TEXT CHANGE:** Date of Pre-application Conference: NA

**Zoning Ordinance Article 6-1 and 21-4 Specific text change proposed:**  
Found on associated documentation.

4. **DESCRIBE THE JUSTIFICATION FOR MAKING THIS CHANGE: (Use attachment if necessary.)**

An update to Articles 6-1 and 21-4 in order to simplify and modernize regulations related to Traffic Impact Studies. See associated documentation.

VI. STAFF ITEMS

1. INITIATION OF A ZONING ORDINANCE TEXT AMENDMENT FOR TRAFFIC IMPACT STUDIES – Mr. Emmons requested that the Planning Commission initiate an amendment to update Articles 6-1 and 21-4 to modernize and simplify Traffic Impact Studies. He noted that proposed draft language had been provided to the Planning Commission members as part of his presentation at their most recent work session, and added that, unlike other text amendments, this was not initiated as part of the 2018 Comprehensive Plan.

Citizen Comments: There were none.

Action: A motion was made by Mr. Penn, seconded by Mr. de Movellan, and carried 10-0 (Nicol absent) to initiate a Zoning Ordinance text amendment to Articles 6 and 21 to modernize and simplify Traffic Impact Studies.

| Existing language, <del>Deleted language</del> , <b>Added Language</b> to Article 6-1 per section  | Explanation of provisions and staff commentary  |
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| <p>Sec. 6-1. - Application for Zoning Map Amendment.</p> <p>A proposal for amendment to the zoning map may originate only with the Commission, the Lexington-Fayette Urban County Council, the owner of the subject property, or by a person having written authorization from the owner of the subject property. Regardless of the origin of the proposed amendment, an application must be filed with the Commission requesting the proposed amendment in such form and accompanied by such information as required by this Zoning Ordinance and the by-laws of the Commission. At the time of filing an application, a non-returnable filing fee shall be paid according to the schedule of fees as established by the Commission, however, there shall be no filing fee for an amendment requested by the Lexington-Fayette Urban County Council, the Commission, or any other governmental agency. Upon the filing of an application for a map amendment by a governmental body, the Commission shall promptly notify the owner of the subject property as required by KRS 100.</p> | <p>No changes necessary. We are not changing the basic requirements for when a traffic impact study is triggered or the basic process of preparing and submitting such study.</p>   |
| <p>(a) <i>Traffic Impact Studies.</i> All significant developments <del>proposed within the Urban Services Area or Rural Activity Center and</del> requiring a Zoning Map Amendment shall submit a Traffic Impact Study. As used herein, the term "significant developments" shall mean any development which will generate one hundred (100) or more additional (new) peak direction (inbound or outbound) trips to or from the site during the adjacent roadway's peak hour or the development's peak hour. <u>Regardless of the trip generation a development may also be considered a significant development by the Transportation Planning section if it will have a potential impact on areas of identified congestion bottle-necks or areas considered under the KYTC Highway Safety Improvement Program (HSIP).</u> The applicant shall have the responsibility of conducting and paying for the study. <del>The Urban County Government will make</del></p>  | <p>Purpose of changes:</p> <p>Simplify – All significant developments applying for a zone change will be subject to TIS requirements regardless of location in the community.</p> <p>Modernize - “Significant developments”, the trip threshold for whether a TIS is <u>required</u> of applicants or not is not proposed for change at this time. Other parameters, such as identified congestion bottlenecks and/or identified in the HSIP are proposed to be added if the development could have an impact on these known areas of concern. As the community continues to focus on redevelopment there may be a time in the future that the community should re-consider what qualifies as a significant</p> |



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| <p><del>available to interested parties existing traffic count data needed to complete such studies. Those residential developments in conformance with the Comprehensive Plan shall be required to submit a Traffic Study consisting of those requirements contained in Subsection (b) of this section. Requests for all other types of zoning, whether or not in conformance with the Comprehensive Plan, shall submit a Traffic Impact Study consisting of those requirements contained in Subsection (c) of this section.</del></p> <p><u>The Urban-County Government will cooperate and coordinate with the applicant's team to provide any available data that the government has access to.</u> To the extent that the <u>Urban-County Government</u> has done any independent traffic study pertinent to the proposed development, the results of such study shall be made available to the applicant.</p> <p>Anticipated roadway improvements shall be determined by a review of the <del>Urban County Government Capital Improvement Plan and Transportation Improvement Program</del> <u>and in consultation with staff from the Divisions of Planning, Traffic Engineering, the KY Transportation Cabinet, and other agencies as deemed appropriate.</u> If the proposed development is within one (1) mile of any county boundary line, then any proposed roadway improvements in the adjoining county shall be included in the study.</p> <p>The Transportation Planning staff shall review, analyze, and make recommendations on any Traffic Impact study to be submitted as evidence in a rezoning hearing regardless of whether or not such study is required by this Zoning Ordinance.</p> | <p>development from a trip perspective, but no change is recommended at the present time.</p> <p>Modernize – When the TIS regulations were originally passed in 1983, the Comprehensive Plan was significantly tied to the summary land use map, and thus many decisions about when to require a traffic impact study and deference to make single-family residential traffic impact studies slightly easier led to a two-tier system of studies. This amendment will simply make all TIS subject to the same requirements and reporting responsibilities.</p> <p>Modernize &amp; Simplify – Good data leads to better studies, and cooperation amongst all entities at the beginning of the process usually leads to better results. Setting a simple goal that it is the intention and responsibility of the Urban-County government to share any and all available and pertinent data is an important first step in the process. Furthermore, the Urban-County government no longer keeps the same types of data that we did in 1983 when this regulation was first adopted, but we now have access to other types of data, which will likely rapidly evolve as traffic monitoring relies more on “Big Data” sources now and in the future. The proposed language sets the goal of cooperation rather than the specifics of which data is to be shared.</p> |
| <p><del>(b) Residential Requests in Conformance with Comprehensive Plan. Those significant zone map amendment requests for residential zoning in conformance with the Comprehensive Plan shall file a traffic impact study along with all other application materials for the</del></p>  | <p>Modernize and Simplify – by removing the references to the Comprehensive Plan’s summary land use map, and clarifying that all significant developments are required to follow the same rules for preparation of the TIS, this entire</p>  |

~~zone change. The traffic impact study shall contain the following information:~~

- ~~(i) Study purpose and objectives.~~
- ~~(ii) Description of the site and study area. Care should be taken to include all known congested locations that may be impacted by the proposed development.~~
- ~~(iii) Anticipated nearby development, to the extent that the information can be obtained from existing data compiled by the Transportation Planning Section of the Division of Planning.~~
- ~~(iv) Documented trip generation for each land use and total trip generation, including assumptions and reasoning and the sources of trip generation estimates for residential developments.~~
- ~~(v) Trip distribution and assignment, including methodology, assumptions, and reasoning underlying the distribution and assignment.~~
- ~~(vi) Capacity and level of service determination during the peak or critical periods for the full development year for all affected streets/roads as measured from the boundary of the property to the first collector or arterial intersection in both directions.~~
- ~~(vii) Recommendations, if any, for site access and public transportation improvements needed to maintain traffic flow to, from, within and past the site at an acceptable and safe level of service D.~~

section of the ZO is obsolete and should be removed.

~~(c) Requests for Nonresidential Zoning, Mixed use Developments and Requests not in Conformance with Comprehensive Plan. Those significant zone map amendment requests for nonresidential zoning, mixed use developments and requests not in conformance with the Comprehensive Plan shall file a traffic impact study along with all other application materials for the zone change. All such studies shall be~~

Simplify - as with the previous deletion, this change reflects that all traffic impact studies required of applicants will be subject to the same requirements.

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| <p><del>complete and shall meet the requirements set forth herein below.</del></p> <p>(b) The following are the requirements of an <b>applicant's</b> traffic impact study under this subsection:</p>  |   |
| <p>1. Study purpose and objectives. <b><u>If the development proposal will likely result in a future Subdivision Regulation waiver request of any part of the transportation infrastructure, then additional development scenarios which meet the regulations will also need to be modeled and/or evaluated in addition to the applicant's proposal, as determined by the Division of Planning.</u></b></p>        | <p>Modernize – While study purpose and objectives are important, it is also important to realize that the current regulations <u>only</u> require applicants to evaluate their own proposal and not to weigh their proposal against other possible options. This new provisions will make it clear that if it is apparent at the beginning of the process that a waiver to any of the Land Subdivision Regulations will likely be the result of the proposed development, then the applicant must <u>also</u> evaluate a development scenario (or scenarios, if necessary) that would be compliant with the Subdivision Regulations, giving the Planning Commission additional information about the pros and cons of the applicant's development proposal.</p> |
| <p>2. Description of the site and study area. Care should be taken to include all known congested locations that may be impacted by the proposed development.</p>  | <p>No changes are necessary. Applicant and staff coordination and communication is a key factor to developing a successful TIS.</p>   |
| <p>3. Existing conditions in the area of the development to include current AADT and Peak Hour traffic volume counts on the adjacent road or roads and intersections (including turning movements), existing level of service on roadways and physical characteristics of the subject roadways. Average peak hour traffic volume shall be the highest average peak hour volume for any weekday 24-hour period.</p> | <p>No changes are necessary. Applicant and staff coordination and communication is a key factor to developing a successful TIS.</p>   |

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| <p>4. Anticipated nearby development, to the extent that the information can be obtained from existing data compiled by the Transportation Planning Section of the Division of Planning.</p>  | <p>No changes are necessary. Applicant and staff coordination and communication is a key factor to developing a successful TIS.</p>  |
| <p>5. A plan of the proposed development.</p>   | <p>No change necessary. Still an important component of any TIS.</p>   |
| <p>6. The proposed number and type of dwelling units for residential development and for nonresidential developments, the square footage, employees or other relevant trip generation variables of all buildings and a description of their use.</p>  | <p>No change necessary. Still an important component of any TIS.</p>   |
| <p>7. Documented trip generation for each land use and total trip generation, including assumptions and reasoning and the source(s) of trip generation <del>estimates for residential developments.</del> Additionally <del>for nonresidential development</del>, any adjustments to trip generation rates to reflect pass-by trips captured, mixed use, walk-ins, etc., should be justified in the study report.</p> | <p>Simplify - as with the previous deletions, this change reflects that all traffic impact studies required of applicants will be subject to the same requirements.</p>  |
| <p>8. Trip distribution and assignment, including methodology, assumptions, and reasoning underlying the distribution and assignment. <b><u>Additional assessment of commercial vehicles will be</u></b></p>  | <p>Modernization – A typical traffic impact study does not differentiate between types of traffic, and yet a commercial semi-tractor trailer has the equivalent impact on the transportation system of about 3 automobiles. The distinction of utilizing a) non-residential and b) more than 3</p> |

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| <p><u>necessary if a proposed non-residential use is expected to have more than three (3) truck trips per day.</u></p>  | <p>truck trips a day is intended to highlight those uses that will have an abnormally higher impact on the transportation system and weed out the most common practices as an expected outcome of the development.</p>  |
| <p>9. Full development year traffic volumes (assuming full buildout and occupancy) composed of all of the following:</p> <ul style="list-style-type: none"> <li>(a) Existing traffic volumes.</li> <li>(b) Non-site traffic volume growth in the corridor between the existing year and the full development year.</li> <li>(c) The traffic volume added by the proposed development.</li> </ul>  | <p>No change necessary. Still an important component of any TIS.</p>  |
| <p>10. A description of any government initiated roadway/intersection improvements which have been assumed as being in place at full development.</p>   | <p>No change necessary. Still an important component of any TIS.</p>  |
| <p>11. Capacity, <b><u>functional area of operation</u></b>, and level of service determination during the peak or critical period(s) for the full development year for all affected streets/roads and all intersections, as measured from the boundary of the property to the first collector or arterial intersection in <del>both</del> <b><u>all directions, or as otherwise necessary as agreed to with Transportation Planning staff.</u></b></p> | <p>Modernize – The functional area of operation of an intersection is a key decision making point when evaluating the appropriateness and effectiveness of access management to roadways. It is intended that the applicant will graphically show the functional area of operation of all intersections studied. See graphic at the end of this document for an explanation of the functional area of operation.</p> <p>While most of the time we need to make a decision to go right or left, there are cases where we can also move straight through an intersection, this change will make it clear that</p> |

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|  | the boundaries of the TIS will encompass the necessary geographical area.   |
| 12. An assessment of the change in roadway and intersection operating conditions resulting from the development traffic.   | No change necessary. Still an important component of any TIS.   |
| 13. Recommendations, if any, for site access and public transportation improvements needed to maintain traffic flow to, from, within, and past the site at an acceptable and safe level of service (level of service D).   | No change necessary for most intersections in the TIS, although it should be noted that in situations with very low traffic speeds, such as the downtown core, other levels of service, such as LOS E, may be acceptable outcomes. Professional judgement and situational recommendations to the Planning Commission are still key factors for both the applicant's engineer and staff.   |
| 14. <del>If necessary, other factors should be analyzed: safety, neighborhood impacts, service and delivery access, pedestrian and bicycle movements, adequacy of parking, traffic control needs, circulation patterns, transit needs or impacts, and so forth.</del> <u>An assessment of and recommendations regarding any safety concerns in the area of the study, neighborhood traffic calming techniques, multi-modal improvements to encourage a mode-shift from single-occupancy vehicles including, but not limited to, pedestrian, bike, transit, or ride-sharing programs.</u> | <p>Modernize – When the regulations were first passed in 1983, they were heavily weighted toward evaluating an auto-dependent and auto-centric society. Still, original framers of our Zoning Ordinance provision foresaw the needs for a multi-modal analysis so that a TIS might have the opportunity to analyze all forms of transportation impacts.</p> <p>Today, these “other factors” are always considered a necessary and an important part of any transportation analysis. Safety and multi-modal improvements are extremely important priorities to recognize for any sustainable transportation system, today and in the future.</p> <p>Furthermore, viable alternative modes of transportation, such as biking and walking will have a huge impact on reducing short trips for automobiles and thus improve the long-term use and capacity of the vehicular portions of the roadway system.</p> |
| 15. <u>A mapped assessment of the access to opportunity, demonstrating access to the number of households,</u>   | Modernize – This would be a completely new section of the TIS regulations. At its core the entire purpose of the transportation system is to  |

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| <p><u>employment, schools, parks, public amenities and shopping that is available within a 15 minute walk and bike route and a 30 minute transit mode. If necessary, include any recommendations to improve equitable transportation options and/or priorities to increase access to opportunities in the study area.</u></p> | <p>move people and goods. A clear understanding of the benefits and access to opportunities that are available to people is the primary purpose of any analysis of the transportation system. It is especially important for equitable decision making for those persons that do not have ready access to an automobile. A mapped assessment of access to opportunity can quickly identify how many more people would have the access to jobs/education/shopping/recreational opportunities if the recommended changes to the system (and land uses) are implemented. See the graphic at the end of this document for an example of what this new requirement could look like in a new TIS.</p>  |
| <p><b>16.</b> Statement as to the proposed improvements which will be at the developer's expense.</p>   | <p>No change necessary, only renumbered to accommodate the new #15 above.</p> <p>Note: there is not a legal prohibition for the developer and the government to enter into a cost-sharing agreement, but there is not a requirement that they do so either. Currently, the system is set up so that if the systemic change is necessary for the development to operate, then it is the applicant's responsibility to either provide the transportation improvement or wait to begin development until the government has completed the upgrades. It is beyond the scope of this text amendment to address at this time, but should the Planning Commission wish to explore such a comprehensive change to the system in the future</p> |
| <p>The analysis should be presented in a straightforward and logical sequence.</p>  | <p>No change necessary. It is still an important part of any TIS.</p>  |
| <p style="background-color: #cccccc;"> </p>   | <p style="background-color: #cccccc;"> </p>  |
| <p>Article 21-4 (c)<br/><i>(Development Plan) Review.</i> The Division of Planning and concerned</p>  | <p>Note: There have been several cases where a final development plan is substantially different than the anticipated development that was</p>   |

agencies shall review the development plan, and then meet together as a Technical Committee to try to resolve all differences and to make recommendations to the Commission's Subdivision Committee. The Subdivision Committee will review all recommendations, and then forward their recommendations to the Commission. The Subdivision Committee shall have the authority to require an applicant to prepare a traffic impact study for significant developments per Article 6-1(a), or an alternative traffic analysis as jointly determined appropriate by the Divisions of Traffic Engineering and the Division of Planning. These Committee meetings shall be open to the developer and to any interested citizen, however, each Committee may impose rules which control participation by non-members in attendance. The developer may secure recommendations from the staff at any of the review checkpoints, and proceed to make plan changes so that revised plans may be submitted to the remaining review groups.

proposed at the time of the rezoning, or several years may have passed and the circumstances of the nearby developments may not have been accurately reflected in the original TIS. The proposed changes would specifically denote the Subdivision Committee's authority to require a new or updated traffic impact study outside of the zone change process. It would set the same standard for a "significant development" and require the same thorough investigation and analysis as required with a zone change application.

Oftentimes, traffic is an issue with final development plans, but a full traffic impact study as required by Article 6-1 would not meet the "significant development" threshold, or the issue at hand is specific in nature and would not benefit from a full traffic impact study; therefore the staff proposes the additional language offering an "alternative traffic analysis" as an option to the Subdivision Committee.

It is the staff's opinion that the Subdivision Committee inherently already has this authority to request such studies, but we wanted to offer this amendment to Article 21 at this time should the Planning Commission wish to formalize these powers in the Zoning Ordinance, or alternatively add similar language to the Planning Commission's by-laws.

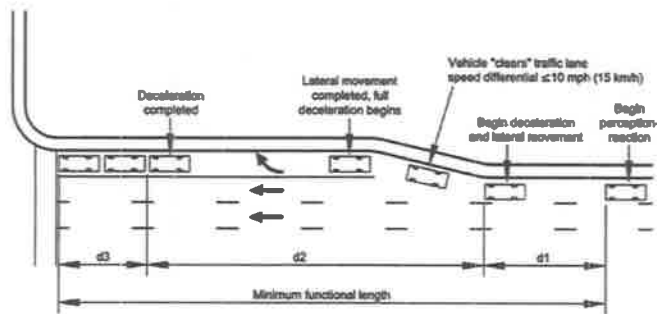


**Graphic 1: Functional Area of Operation as depicted in *Signalized Intersections Informational Guide*, Second Edition, Publication No. FHWA-SA-13-027, July 2013**

- Distance  $d_1$ : Distance traveled during perception-reaction time as a driver approaches the intersection, assuming 1.5 s for urban and suburban conditions and 2.5 s for rural conditions
- Distance  $d_2$ : Deceleration distance while the driver maneuvers to a stop upstream of the intersection.
- Distance  $d_3$ : Queue storage at the intersection.
- Distance immediately downstream of the intersection so that a driver can completely clear the intersection before needing to react to something downstream (stopping sight distance is often used for this).

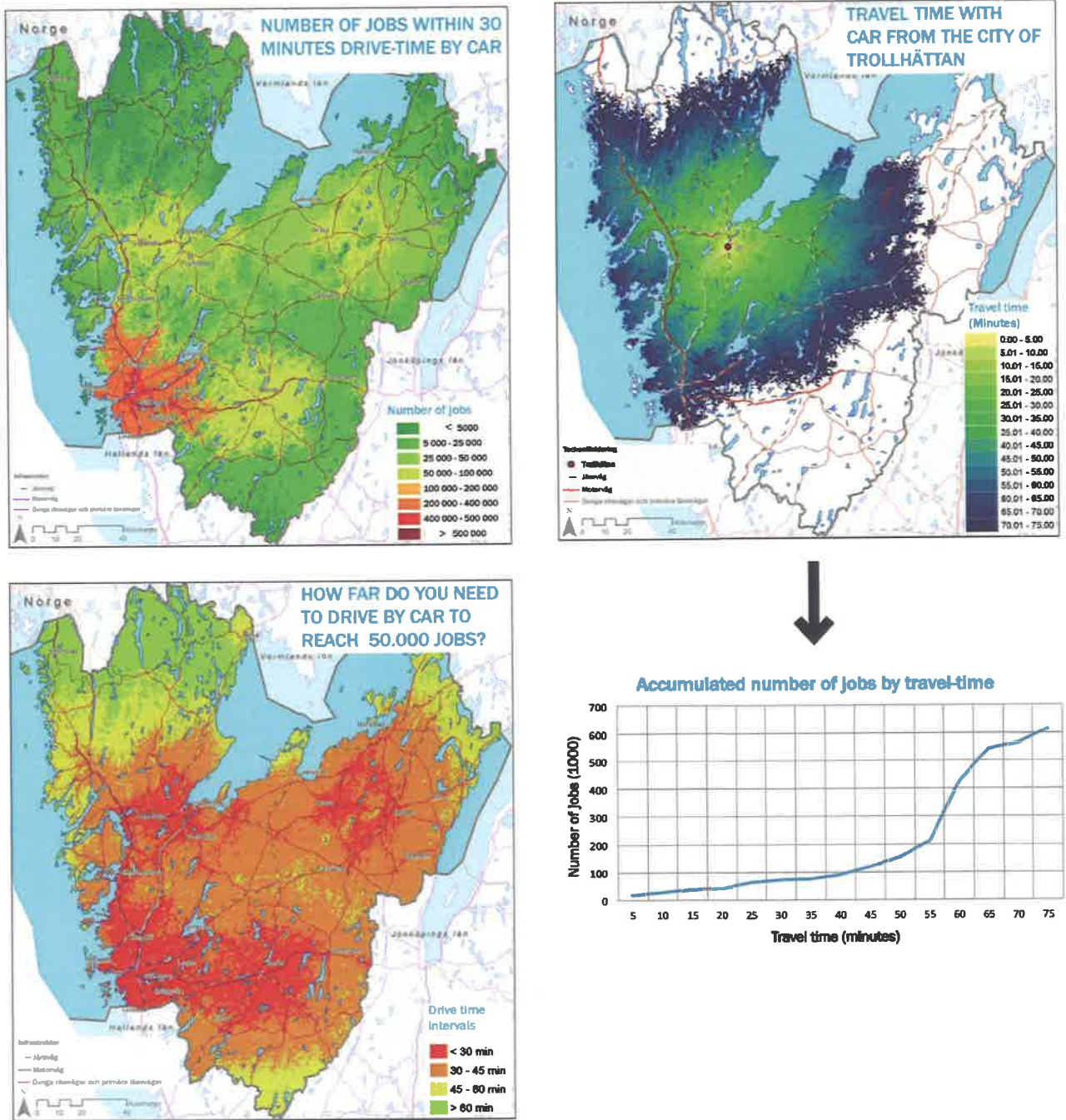


**Figure 62. Comparison of physical and functional areas of an intersection.<sup>(87)</sup>**



**Figure 63. Diagram of the upstream functional area of an intersection.<sup>(87)</sup>**

**Graphic 2:** Example of an access to opportunity map as depicted in [https://openjournals.wu.ac.at/region/paper\\_172/172.html](https://openjournals.wu.ac.at/region/paper_172/172.html)



Source: sources: authors' calculations; road network, Swedish Transport Administration; other map data, Swedish Land Survey; socio-demographic data, Statistics Sweden

Figure 2: Illustrations of different accessibility measures using the same data: fixed cost (top left), constant target points (bottom left), constant starting point (top right), and potential jobs by travel time (bottom right)

**STAFF REPORT ON PETITION FOR ZONING ORDINANCE TEXT AMENDMENT**

**PLN-ZOTA-21-00003: AMENDMENT TO ARTICLES 6-1 & 21-4: TRAFFIC IMPACT STUDIES**

INITIATED BY: Urban County Planning Commission on April 8, 2021

PROPOSED TEXT: See attached. Amendments to Articles 6-1 & 21-4(c) are shown as ~~Deleted language~~ and **Added Language**

**STAFF REVIEW:**

On April 8<sup>th</sup> of this year, the Division of Planning requested that the Planning Commission initiate a text amendment to the current regulations regarding Traffic Impact Studies (TIS) in order to modernize and strengthen the requirements. The current regulations were originally adopted in 1983, and with a few exceptions, have remained relatively unchanged for the past 38 years. However, the community's goals, the availability of modern transportation data, and best practices for studies have changed over this time period.

The primary intent of these revisions is to provide more effective information to the Planning Commission and the public for consideration during the decision making process at the time of a zone change. At the heart of any TIS, the objective is to understand the existing transportation system, and how it may change as a result of a proposed development. This is an important process and the TIS is a valuable tool as the mobility needs are assessed with the ultimate goal of providing an effective and comprehensive transportation system as envisioned in the 2018 Comprehensive Plan.

The proposed amendments to the Zoning Ordinance are consistent with the vision, Goals, Objectives, and Policies of the 2018 Comprehensive Plan. Specifically, these amendments are supported by the following Goals and Objectives:

- Theme A "Growing Successful Neighborhoods"
  - Goal 4 – Address Community Facilities at a Neighborhood Scale
    - Objective C – Establish and promote road network connections in order to reduce police, EMS, and fire response times
- Theme B "Protecting the Environment"
  - Goal 2 – Reduce Lexington-Fayette County's Carbon Footprint
    - Objective D – Prioritize multimodal options that de-emphasize single occupancy vehicle dependence
- Theme D "Improving a Desirable Community"
  - Goal 1 – Work to Achieve an Effective & Comprehensive Transportation System
    - Objective A – Support the Complete Streets Concept, prioritizing a pedestrian first design that also accommodates the needs of bicycles, transit, and other vehicles
    - Objective B – Develop a viable network of accessible transportation alternatives for residents and commuters, which may include the use of mass transit, bicycles, walkways, ride-sharing, greenways, and other strategies
    - Objective C – Concentrate efforts to enhance mass transit along our corridors in order to facilitate better service for our growing population, as well as efficiencies in our transit system
    - Objective D – Improve traffic operation strategies

Many of the specific changes in the proposed text amendment are related directly to analyzing pedestrian, bicycle, and transit opportunities in the study area, which is a product of the adopted community priorities set forth in the Comprehensive Plan. The current regulations are also intricately tied to the land use maps of previously adopted Comprehensive Plans. Most of the text proposed for deletion is aimed at removing the standards for Traffic Impact Studies based on those land use maps, which no longer exist. The new standards will apply to all studies regardless of the proposed zoning category. Finally, the proposed text establishes a new standard for the coordination and cooperation between the applicant's traffic engineer and staff in the production of the study. The need for clear communication is critical during the early stages of setting the scope and area of the study.

Article 6-1 of the Zoning Ordinance applies only to Zoning Map Amendments, otherwise known as a zone change. There are times, especially early in the development process, that the exact nature of the proposed uses are not known when a developer requests a zone change. It may be several years, or even decades, between the time that the zoning was granted for a property and final development plan is submitted for review. For these and other reasons, it is possible

that a TIS may not have been required with a zone change or that the information in the study is out of date. In these situations, an updated study and/or review would be warranted. As such, the staff has recommended an additional change to Article 21-4(c) of the Zoning Ordinance that would give the Planning Commission's Subdivision Committee the authority to require a TIS if it were to otherwise meet the threshold requirements of Article 6-1. A TIS would not automatically be required, but this new section would give the Planning Commission the authority to do so, if the circumstances warrant it.

The Transportation Section/MPO staff recently formulated a volunteer workgroup of transportation professionals from around the State to review and recommend ways in which the LFUCG can improve upon the current regulations. Although only one meeting has occurred thus far, several ideas and themes have begun to emerge that deserve additional review. One of the workgroup's primary concerns was about certain portions of the regulations that were considered ambiguous. Edits to reduce ambiguity would create more predictability for both the practitioner, the public, and the government. Another potential modification identified by the workgroup was to look for opportunities to create synergies between the Kentucky Transportation Cabinet's TIS review requirements and Lexington's regulations. The workgroup noted that in most cases, a development that is large enough to require a Traffic Impact Study would likely also require a new access permit to a State route.

The workgroup has agreed to continue meeting with staff to work on possible revisions to the proposed text amendment in the coming weeks. This additional review will likely result in a staff revised text, which will strengthen the current proposal while keeping the focus on a complete transportation system review that will serve the Planning Commission and the public long into the future.

The Staff Recommends: Postponement of the Staff Recommended Text, for the following reason:

1. Although the proposed text accomplishes many of the initial goals to modernize the Traffic Impact Study requirements, additional time is needed to explore options to strengthen the proposal by addressing potential ways to increase both predictability and flexibility in the process, and to explore possible synergies between LFUCG regulations and Kentucky Transportation Cabinet requirements for Traffic Impact Studies.

JWE/JD/HB/TLW

05/05/2021

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**REVISED STAFF REPORT ON PETITION FOR ZONING ORDINANCE TEXT AMENDMENT**

**PLN-ZOTA-21-00003: AMENDMENT TO ARTICLES 6-1 & 21-4: TRAFFIC IMPACT STUDIES**

INITIATED BY: Urban County Planning Commission on April 8, 2021

PROPOSED TEXT: See attached. Amendments to Articles 6-1 & 21-4(c) are shown as **Deleted language** and **Added Language**

**STAFF REVIEW:**

On April 8<sup>th</sup>, 2021, the Planning Commission initiated a text amendment to the current regulations regarding Traffic Impact Studies (TIS) in order to modernize and strengthen the requirements. The current regulations were originally adopted in 1983, and with a few exceptions, have remained relatively unchanged for the past 38 years. However, the community's goals, the availability of modern transportation data, and best practices for studies have changed over this time period.

The primary intent of these revisions is to provide more effective information to the Planning Commission and the public for consideration during the decision making process at the time of a zone change. At the heart of any TIS, the objective is to understand the existing transportation system, and how it may change as a result of a proposed development. This is an important process and the TIS is a valuable tool as the mobility needs are assessed with the ultimate goal of providing an effective and comprehensive transportation system as envisioned in the 2018 Comprehensive Plan.

The proposed amendments to the Zoning Ordinance are consistent with the vision, Goals, Objectives, and Policies of the 2018 Comprehensive Plan. Specifically, these amendments are supported by the following Goals and Objectives:

- Theme A "Growing Successful Neighborhoods"
  - Goal 4 – Address Community Facilities at a Neighborhood Scale
    - Objective C – Establish and promote road network connections in order to reduce police, EMS, and fire response times
- Theme B "Protecting the Environment"
  - Goal 2 – Reduce Lexington-Fayette County's Carbon Footprint
    - Objective D – Prioritize multimodal options that de-emphasize single occupancy vehicle dependence
- Theme D "Improving a Desirable Community"
  - Goal 1 – Work to Achieve an Effective & Comprehensive Transportation System
    - Objective A – Support the Complete Streets Concept, prioritizing a pedestrian first design that also accommodates the needs of bicycles, transit, and other vehicles
    - Objective B – Develop a viable network of accessible transportation alternatives for residents and commuters, which may include the use of mass transit, bicycles, walkways, ride-sharing, greenways, and other strategies
    - Objective C – Concentrate efforts to enhance mass transit along our corridors in order to facilitate better service for our growing population, as well as efficiencies in our transit system
    - Objective D – Improve traffic operation strategies

Many of the specific changes in the proposed text amendment are related directly to analyzing pedestrian, bicycle, and transit opportunities in the study area, which is a product of the adopted community priorities set forth in the 2018 Comprehensive Plan. The current regulations are also tied to the land use maps of previously



adopted Comprehensive Plans. Most of the text proposed for deletion is aimed at removing the standards for a TIS based on the land use maps, which no longer exist. The new standards will apply to all studies regardless of the proposed zoning category. Finally, the proposed text establishes a new standard for the coordination and cooperation between the applicant's traffic engineer and staff in the production of the study. The need for clear communication is critical during the early stages of setting the scope and area of the study.

Article 6-1 of the Zoning Ordinance applies only to Zoning Map Amendments, otherwise known as a zone change. There are times, especially early in the development process, that the exact nature of the proposed uses are not known when a developer requests a zone change. It may be several years, or even decades, between the time that the zoning was granted for a property and final development plan is submitted for review. For these and other reasons, it is possible that a TIS may not have been required with a zone change or that the information in the study is out of date. In these situations, an updated study and/or review would be warranted. As such, the staff recommends an additional change to Article 21-4(c) of the Zoning Ordinance that would give the Planning Commission's Subdivision Committee the authority to require a TIS, if it were to otherwise meet the threshold requirements of Article 6-1. A TIS would not automatically be required, but this new section would give the Subdivision Committee the authority to do so, if the circumstances warrant.

Last month the Transportation Section/MPO staff organized a workgroup of transportation professionals from around the State to review and recommend ways in which the LFUCG can improve the current regulations. Following the group meeting, staff worked with individual members and communicated via email regarding the development of the draft text. The primary concerns expressed by the group were focused on possible ambiguities in the proposed standards and potential synergies between KYTC traffic impact studies and LFUCG requirements.

In response to those concerns the staff has clarified several items in the revised text and is developing policies for guidance on the implementation of the new TIS standards. In particular, the revised text sets a new standard for the scope of the study area, with the ability for the Transportation Planning staff to modify the geographic area of the study in consultation of the applicant's traffic engineer. It also creates a tiered system of traffic studies based on the infrastructure needs of the area and the anticipated intensity of the proposed development. The last major change is to simplify and narrow the language related to the Subdivision Committee's ability to require a TIS in conjunction with a final development plan. All of these recent changes strengthen the proposed text and help focus the use of the TIS as an analysis tool for the Planning Commission, staff, and the public.

**The Staff Recommends: Approval of the Staff Recommended Revised Text, for the following reason:**

1. The proposed update to Article 6 and 21 of the Zoning Ordinance accomplishes the goals to modernize the Traffic Impact Study requirements, to increase both the predictability and flexibility in the process, and to remove standards and data references that are no longer applicable.
2. The proposed text amendment increases the focus on multi-modal opportunities - such as pedestrian, bicycle, and transit ridership - while still analyzing the necessary vehicular infrastructure needs for a complete, safe and efficient transportation system for all. This which is consistent with and directly related to the following Goals, Objectives, and Policies of the adopted 2018 Comprehensive Plan:
  - a. Establish and promote road network connections in order to reduce police, EMS, and fire response times (Theme A, Goal #4.c)
  - b. Prioritize multimodal options that de-emphasize single occupancy vehicle dependence (Theme B, Goal #2.d)
  - c. Support the Complete Streets Concept, prioritizing a pedestrian first design that also accommodates the needs of bicycles, transit, and other vehicles (Theme D, Goal #1.a)
  - d. Develop a viable network of accessible transportation alternatives for residents and commuters, which may include the use of mass transit, bicycles, walkways, ride-sharing, greenways, and other strategies (Theme D, Goal #1.b)
  - e. Concentrate efforts to enhance mass transit along our corridors in order to facilitate better service for our growing population, as well as efficiencies in our transit system (Theme D, Goal #1.c)
  - f. Improve traffic operation strategies (Theme D, Goal #1.d)

**C. PUBLIC HEARINGS ON ZONING ORDINANCE TEXT AMENDMENTS**

1. **PLN-ZOTA-21-00003: AMENDMENT TO ARTICLE 6-1 AND ARTICLE 21-4: TRAFFIC IMPACT STUDIES (10/15/21)\*** – a petition for a Zoning Ordinance text amendment to Articles 6-1 and 21-4 of the Zoning Ordinance in an effort to simplify and modernize regulations related to Traffic Impact Studies.

INITIATED BY: URBAN COUNTY PLANNING COMMISSION

PROPOSED TEXT: Copies are available from the staff.

The Zoning Committee Recommended: **Approval.**

The Staff Recommends: **Approval of the Staff Revised Text.** for the following reason:

1. The proposed update to Article 6 and 21 of the Zoning Ordinance accomplishes the goals to modernize the Traffic Impact Study requirements, to increase both the predictability and flexibility in the process, and to remove standards and data references that are no longer applicable.
2. The proposed text amendment increases the focus on multi-modal opportunities - such as pedestrian, bicycle, and transit ridership - while still analyzing the necessary vehicular infrastructure needs for a complete, safe and efficient transportation system for all. This is consistent with and directly related to the following Goals, Objectives, and Policies of the adopted 2018 Comprehensive Plan:
  - a. Establish and promote road network connections in order to reduce police, EMS, and fire response times (Theme A, Goal #4.c).
  - b. Prioritize multimodal options that de-emphasize single occupancy vehicle dependence (Theme B, Goal #2.d).
  - c. Support the Complete Streets Concept, prioritizing a pedestrian first design that also accommodates the needs of bicycles, transit, and other vehicles (Theme D, Goal #1.a).
  - d. Develop a viable network of accessible transportation alternatives for residents and commuters, which may include the use of mass transit, bicycles, walkways, ride-sharing, greenways, and other strategies (Theme D, Goal #1.b).
  - e. Concentrate efforts to enhance mass transit along our corridors in order to facilitate better service for our growing population, as well as efficiencies in our transit system (Theme D, Goal #1.c).
  - f. Improve traffic operation strategies (Theme D, Goal #1.d).

Staff Text Amendment Presentation – Mr. Emmons presented and summarized the staff report and recommendations for this text amendment, and said that the Urban County Planning Commission initiated this Zoning Ordinance text amendment to modify the regulations for Traffic Impact Studies. He said that the requirements were originally passed in 1983, with very few amendments since that time and need to be modernized. He said that the proposed text is in agreement with the Goals and Objectives of the 2018 Comprehensive Plan. He said that current Traffic Impact Studies are heavily focused on vehicular traffic and improvements and that the proposed amendment will elevate the analysis of multi-modal improvements (pedestrians, bike, and transit) to be on the same level as traditional vehicular operations.

Mr. Emmons said that this amendment will create tiers of traffic studies based on the infrastructure needs of the areas and the proposed intensity of the use. These tiers will simplify the thresholds of when a Traffic Impact Study is required. The tiers include: a) 100 new peak hour vehicular trips, if the proposed development will impact congestion bottlenecks and known safety areas; b) 200 new peak hour vehicular trips, will require a study, regardless of location; and c) 600 new peak hour vehicular trips, will require an increased analysis of the regional impact of travel times and demographic data.

Mr. Emmons said that Traffic Impact Studies are only currently required with Map Amendment Requests (zone changes). He said that most of the concerns that the Planning Commission receives about development are in regards to traffic and stormwater conditions on final development plans. If a final plan has a very different traffic impact than the preliminary plan when the original traffic study was completed with the zone change, then the Subdivision Committee could require a new study. He said that the proposed amendment to Article 21-4(c) is proposing to give the Subdivision Committee the authority to require a Traffic Impact Study along with the final development plan, but only if the proposed development plan would otherwise qualify for one per Article 6-1.

Mr. Emmons also said that the Urban County Government will cooperate and coordinate with the applicant's team to provide any available information that the government has. He said that the LFUCG is also trying to improve predictability and flexibility, because standards can be tailored to the needs of a particular site based on the professional judgment of both the applicant's engineer and the Planning Commission's staff, which leads to better outcomes. Some of these areas will have defined characteristics measured from the boundary of the property to the arterial intersections in all directions within one mile, or otherwise necessary as agreed to with the Transportation Planning staff. Another proposed update is to change the acceptable and safe level of service from D to E, if agreed to with the Transportation Planning staff.

\* - Denotes date by which Commission must either approve or disapprove request, unless agreed to a longer time by the applicant.

Mr. Emmons said that there are also new requirements being added to this amendment. The first is that if the development proposal will likely result in a future Subdivision Regulation waiver request of any part of the transportation infrastructure, then additional development scenarios which meet the regulations will also need to be modeled and/or evaluated in addition to the applicant's proposal, as determined by the Division of Planning. The second is that an additional assessment of anticipated commercial vehicles will be necessary if a proposed non-residential use is defined in the ITE industrial category 100 series (industrial uses) for FHWA Class 7 (semi tractor-trailers) or above. A third is that an assessment of and recommendations regarding any concerns in the study area related to safety, neighborhood traffic calming techniques, and multi-modal improvements to encourage a mode-shift from single-occupancy vehicles including, but not limited to, pedestrian, bike, transit, or ride-sharing programs. Also being included in the capacity requirements is queue lengths, functional area of operation of intersections, and level of service determination during the peak or critical period(s) for the full development year for all affected streets/roads and all intersections, within the study boundary. The last additional requirement is if the proposed use will generate 600 or more peak hour trips, then a mapped assessment of the access to opportunity shall be provided. The mapped assessment shall demonstrate access to the number of households, employment, schools, parks, public amenities and shopping available within a 15-minute walk and bicycle route, and a 30-minute transit mode from the subject property. If necessary, the study will include any recommendations to improve equitable transportation options and/or priorities to increase access to opportunities in the study area. He said that the staff is recommending approval of this revised text amendment.

Citizen Comment – There were no citizens present to speak to this application.

Motion – A motion was made by Ms. Plumlee, seconded by Ms. Barksdale, and carried 11-0 to approve PLN-ZOTA-21-00003: AMENDMENT TO ARTICLE 6-1 AND ARTICLE 21-4: TRAFFIC IMPACT STUDIES, for the reasons provided by the staff.