County Council of Beaufort County Planning Commission Meeting

Chairman
ED PAPPAS
Vice Chair
CECILY MCMILLAN

Commission Members
PETE COOK
JON HENNEY
EUGENE MEYERS
GLENN MILLER
GAIL MURRAY
DANIEL RIEDEL
DENNIS ROSS

Interim County Administrator
JOHN ROBINSON

Staff Support
ROBERT MERCHANT

Administration Building
Beaufort County Government
Robert Smalls Complex
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Planning Commission Agenda

Monday, June 3, 2024 at 6:00 PM
Council Chambers
County Administration Building, 100 Ribaut Road, Beaufort, SC

ALL OF OUR MEETINGS ARE AVAILABLE FOR VIEWING ONLINE AT WWW.BEAUFORTCOUNTYSC.GOV AND CAN ALSO BE VIEWED ON HARGRAY CHANNELS 9 AND 113, COMCAST CHANNEL 2, AND SPECTRUM CHANNEL 1304.

1. CALL TO ORDER
2. PLEDGE OF ALLEGIANCE
3. FOIA – PUBLIC NOTIFICATION OF THIS MEETING HAS BEEN PUBLISHED, POSTED, AND DISTRIBUTED IN COMPLIANCE WITH THE SOUTH CAROLINA FREEDOM OF INFORMATION ACT
4. APPROVAL OF MEETING MINUTES – May 6, 2024
5. APPROVAL OF AGENDA
6. CITIZEN COMMENTS – NON-AGENDA ITEMS
   (*Comments are limited to 3 minutes.)*

ACTION ITEMS

7. **CONSIDERATION OF AN ORDINANCE AMENDING THE COMMUNITY DEVELOPMENT CODE (CDC):** DIVISION 6.3 (TRAFFIC IMPACT ANALYSIS) TO UPDATE TRAFFIC IMPACT ANALYSIS STANDARDS**.**

DISCUSSION ITEMS

8. TRANSPORTATION SALES TAX PROJECTS PRESENTATION
9. CHAIRMAN'S REPORT
10. ADJOURNMENT

COUNTY COUNCIL OF BEAUFORT COUNTY
Beaufort County Planning and Zoning Department
Beaufort County Government Robert Smalls Complex
Physical: Administration Building, Room 115 100 Ribaut Road
Mailing: Post Office Drawer 1228, Beaufort, SC 29901-1228
Phone: 843-255-2140

The regular meeting of the Beaufort County Planning Commission (hereinafter "Commission") was held in Council Chambers on Monday, May 6, 2024 at 6:00 p.m.

MEMBERS PRESENT:
Mr. Ed Pappas, Chairman
Ms. Cecily McMillan, Vice Chair
Mr. Jon Henney
Mr. Gene Meyers
Mr. Glenn Miller
Mr. Dan Riedel
Mr. Dennis Ross

MEMBERS ABSENT:
Mr. Pete Cook
Ms. Gail Murray

STAFF PRESENT:
Mr. Rob Merchant, Planning and Zoning Director
Ms. Kristen Forbus, Long Range Planner

CALL TO ORDER: Chairman Ed Pappas called the meeting to order at 6:00 p.m.

PLEDGE OF ALLEGIANCE: Chairman Pappas led those assembled in the pledge of allegiance.

REVIEW OF MEETING MINUTES: The March 4th 2024 Planning Commission workshop and regular minutes were approved with no objections.

CITIZEN COMMENTS: Mr. Pappas asked if there were any non-agenda related citizen comments; there were none.

ACTION ITEMS:

CONSIDERATION OF AN ORDINANCE AMENDING THE ZONING MAP FOR 4.73 ACRES (R200 019 000 0076 0000) LOCATED AT 26 EUSTIS LANDING ROAD FROM T2 RURAL (T2R) AND T2 RURAL CENTER (T2RC) TO T2 RURAL CENTER (T2RC)

The Commission members received "Attachment A" from the community.

Ms. Forbus went over the staff report and explained that staff does not support the amendment.

The applicant, John Torrens, discussed his need to expand his boat business operation and the lack of these services in the area. There was discussion between the applicant and the Commission members regarding the RV repair portion of the proposed use, ingress/egress, storage, noise issues, and screening.

Mr. Merchant discussed with the Commission what the Rural zoning districts can accommodate. He stated that the current zoning already meets the intent of a Rural Crossroads and explained the background of the zoning boundary was to not create nonconformities in this area.

Chairman Pappas opened the meeting up for public comment.

Steve Dudley- spoke against the amendment

Karen Radford- spoke against the amendment

After much discussion, Mr. Ross made a motion to recommend denial of the CONSIDERATION OF AN ORDINANCE AMENDING THE ZONING MAP FOR 4.73 ACRES (R200 019 000 0076 0000) LOCATED AT 26 EUSTIS LANDING ROAD FROM T2 RURAL (T2R) AND T2 RURAL CENTER (T2RC) TO T2 RURAL CENTER (T2RC). Mr. Miller seconded the motion. The motion passed unanimously.

CONSIDERATION OF AN ORDINANCE AMENDING THE COMMUNITY DEVELOPMENT CODE (CDC): DIVISION 6.3 (TRAFFIC IMPACT ANALYSIS) TO UPDATE TRAFFIC IMPACT ANALYSIS STANDARDS.

Mr. Kevin Sullivan of the Engineering Department and Ms. Jennifer Biel presented the changes to the TIA ordinance.

The Commission members stated that they have concerns about: the change from 50 to 100 peak hour trips, the proposed escrow account, and lack of reference to the Comprehensive Plan.

Chairman Pappas opened the meeting up for public comment. There was none.

After much discussion, Mr. Ross made a motion to table the CONSIDERATION OF AN ORDINANCE AMENDING THE COMMUNITY DEVELOPMENT CODE (CDC): DIVISION 6.3 (TRAFFIC IMPACT ANALYSIS) TO UPDATE TRAFFIC IMPACT ANALYSIS STANDARDS. Mr. Miller seconded the motion. The motion passed unanimously.

DISCUSSSION ITEMS:

There was discussion regarding Commission members accessing the meetings virtually. Mr. Merchant will come back with more information.

ADJOURNMENT: Chairman Pappas adjourned the meeting at 7:55 p.m.

SUBMITTED BY: Kristen Forbus
Long Range Planner

_____
Ed Pappas
Beaufort County Planning Commission Chairman

Date: _____

Attachment A

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Robert Merchant, AICP

Planning and Zoning Department Director

The below Property Owners on and near Eustis Landing Road are AGAINST the CONSIDERATION OF AN ORDINANCE AMENDING THE ZONING MAP FOR 4.73 ACRES (R200 019 000 0076 000) LOCATED AT 26 EUSTIS LANDING ROAD changing the Existing Zoning T2R to the propsed zoning of T2RC. A rezone to TZRC would allow commercial development deeper into this longstanding residential neighborhood. The impacts would include a reduction in our property values, more noise, more lighting and possibly dust. Short term impacts would likely be construction noise, traffic increases and dust. Keeping the current zoning would at most allow a single family home, maintain much of the open spaces that exist now and essentially preserve our neighborhood.

Name	Address	Signature
Caroleen McKenzie-Dudley	34 Eustis Landing Rd.	
Steve Dudley	" " " "	
JAMES WATERS JR.	39 EUSTIS LANDING RD.	
JAMES WATERS SR.	41 EUSTIS LANDING RD.	
Sherry Waters	39 Eustis Landing Rd	
Aaron Crouse	39 Eustis Landing Rd	
Liane Crouse	39 Eustis Landing Rd	
Karen Radford	32 Eustis Landing Rd.	
Dorothy H Jama	15 Eustis Landing Rd	
Melvina Grant	33 Eustis Landing Rd	
Emily Grant	9 EUSTIS LANDING RD	
Joe Singleton	35 Eustis Landing	
Ida M. Singleton	35 Eustis Landing Rd.	
Betsy B Arrington	31 Eustis Landing Rd	
Barbara Gardner Hunter	360 Sea Isl. Pkwy. Beaufort 29907	
Jacqueline Mayor	9 Eustis Landing Rd	
Benji Simmons	Thomas Atkins Rd	
Rebecca Mayor	19 Eustis Landing Rd	

(over)

Brenda Morgan 348 Sea Island Pkwy 29907
Don Green 335 Sea Island Pkwy BFT 29907
Ann moe Bee 5 Paul Heyward Dr BFT SC. 29907
Thomas Morgan III 362 Sea Island Pkwy 29907
Teresa Wilson 1 EUSTIS Landing Rd
Raymond Wilson 1 EUSTIS Landing Rd

MEMORANDUM

TO: Beaufort County Planning Commission

FROM: Kevin Sullivan, Transportation Planner

DATE: May 29, 2024

SUBJECT: CONSIDERATION OF AN ORDINANCE AMENDING THE COMMUNITY DEVELOPMENT CODE (CDC): DIVISION 6.3 (TRAFFIC IMPACT ANALYSIS) TO UPDATE TRAFFIC IMPACT ANALYSIS STANDARDS.

STAFF REPORT:

A. BACKGROUND:

Case No.	CDPA-000037-2024
Applicant:	Engineering Department
Proposed Amendment:	Amendment to Division 6.3 (Traffic Impact Analysis) of the Community Development Code

B. SUMMARY AND BACKGROUND:

Beaufort County is one of the fastest growing regions in South Carolina. Over the last five years, our population has increased exponentially because of the high quality of life that the County offers. To meet the forecasted housing demands of the County's expanding population, new developments need to be built. A substantial percentage of these new developments require Traffic Impact Analysis (TIA) study, and our current code allows for this analysis to be conducted by the Developer's Traffic Engineer. This way of doing business has some inefficiencies which has led to issues in the consistency of the TIAs submitted to the County. The County's jurisdictions are all equally affected by this current trend, and as a result, understand how multi-jurisdictional coordination can create a Traffic Impact Analysis product that is more reliable, consistent, and quality assured.

The purpose of this amended TIA Ordinance is to establish a new methodology for the conduct, delivery, and review of TIAs to the County- a methodology that provides regional consistency in traffic study assumptions, ensures a quality assured TIA product across jurisdictional boundaries, and reinforces multi-jurisdictional coordination. To achieve this objective, a few changes including, but not limited to, the following have been made to the original ordinance.

Additional components will be added to the TIA, for example:

- Traffic signalization. If a traffic signal is proposed as a mitigation measure, a preliminary traffic signal warrant analysis based on the Manual on Uniform Traffic Control Devices shall be included in the study. While the installation of a traffic signal on projected volumes may not be able to be initially installed as the project traffic volumes are not yet realized, the Applicant shall provide funds for the future signal(s) to the County to deposit into an escrow or special account set up for this purpose if future installation of a traffic signal(s) approved.

- Traffic study preparation. At the sole expense of the Applicant, the TIA shall be prepared by a traffic engineer licensed in South Carolina who is experienced in the conduct of traffic analysis and whom is one of the consultants the County has previously-selected for On-Call traffic engineering services.

C. ZONING MAP AMENDMENT REVIEW STANDARDS: In determining whether to adopt or deny a proposed Zone Map Amendment, the County Council shall weigh the relevance of and consider whether and the extent to which the proposed amendment:

1. **Is consistent with and furthers the goals, and policies of the Comprehensive Plan and the purposes of this Development Code;**
   The County's comprehensive plan establishes an overarching goal of Level of Service D at signalized intersections. This ordinance update is consistent with that goal.

2. **Is not in conflict with any provision of this Development Code, or the Code of Ordinances;**
   The County's Development Code spans various topics that are interrelated with this ordinance update. The mitigation component of TIAs in this ordinance update identifies recommendations for the implementation of transportation improvements such as: new signals, roadway widening, turn lanes, etc., where appropriate.

3. **Addresses a demonstrated community need;**
   This ordinance update further identifies the requirements for a traffic impact analysis performed in the County and will be in coordination with municipalities in and around the County.

4. **Is required by changed conditions;**
   This ordinance update establishes a methodology that ensures that TIAs performed in the County will have a similar framework and use consistent assumptions in cooperation with the neighboring municipalities.

5. **Is consistent with the purpose and intent of the zones in this Development Code, or would improve compatibility among uses and ensure efficient development within the County;**

The County's Development Code establishes the intensity of land use through its zoning regulations. This amendment will continue to ensure that the TIA can be utilized as a reference to understand the impact that approved developments will have on the future build out of a new development.

6. **Would result in a logical and orderly development pattern; and**
   This ordinance update will identify existing and projected transportation conditions and identify recommended improvements associated with development.

7. **Would not result in adverse impacts on the natural environment, including but not limited to water, air, noise, stormwater management, wildlife, vegetation, wetlands, and the natural functioning of the environment.**
   The County's Development Code establishes the intensity of land use through zoning regulations. This ordinance update will continue to ensure that the TIA can be utilized as a reference to understand the potential transportation impacts of development.

D. RECOMMENDATION: Staff recommends approval.

E. ATTACHMENTS:

- Text Amendment Changes

Division 6.3: - Traffic Impact Analysis

6.3.10 – Purpose, ~~and~~ Intent, and Applicability

It is the purpose of this division to measure the effects of development against the County's traffic service level goals set forth in the Beaufort County Comprehensive Plan (2010) in order to ascertain road facilities and improvements needed as a result of new development. This section of the ordinance establishes requirements for the analysis and evaluation of traffic impacts associated with development. A traffic impact analysis (TIA) will be required with applications for rezoning, preliminary plans, single-site development site plans, and encroachment permit applications. The following provides the guidelines for the preparation of these TIAs. The estimate of the number of trips generated by proposed developments will be based on the Institute of Transportation Engineers (ITE) Trip Generation, 11th Edition, or latest edition at time of study. Other trip generation data collected locally may be used where approved by the Administrator/Manager or his/her designee.

A. A traffic impact analysis study will be required for new developments when the proposed development is projected to generate 50 or more trips during the peak hour of the traffic generator or the peak hour of the adjacent street traffic (7:00 - 9:00 a.m. or 4:00 - 6:00 p.m.). Proposed developments that do not meet this threshold may also be required to complete a traffic study as determined by the Administrator/Manager or his/her designee.

B. A traffic impact study will be required for a change or expansion at an existing site that results in an expected increase of 50 or more trips during the peak hour of the traffic generator or the peak hour of the adjacent street traffic (7:00 - 9:00 a.m. or 4:00 - 6:00 p.m.), or if the Administrator/Manager or his/her designee determines that the change or expansion of the existing site will have significant impact at the existing access points, proposed access points, or surrounding intersections.

C. A driveway traffic analysis may be required if trip generation is projected to be below the thresholds above at the request of the Administrator/Manager or his/her designee.

~~6.3.20 - Applicability~~

~~A. Any development that will generate more than 50 trips during the peak hour as determined by the County Traffic Engineer shall require a Traffic Impact Analysis (TIA) as part of the application for development plan or subdivision plat approval.~~

~~B. A second phase, second subdivision, or addition that takes a property over 50 trips during the peak hour when taken as a whole shall require a TIA as part of the application for development plan or subdivision plat approval even though the development does not qualify on its own.~~

~~C. A change of use to another use permitted in the zoning district shall require a TIA as part of the application for a change of use if the proposed use will generate over 50 trips during the peak hour, even if a TIA was conducted for the previous use.~~

~~D. An application for a rezoning shall include a TIA where the particular project or zoning district may result in a development that generates 50 trips during the peak hour or will change the level of service of the affected street.~~

6.3.~~3~~20 - ~~General~~ TIA Requirements

~~A. The TIA shall be conducted by an engineer registered in the state who is experienced in the conduct of traffic analyses and approved by the County Traffic Engineer.~~

~~B. The TIA shall indicate current conditions, the traffic generated by the subject site at full development, traffic generated by developments approved in the area that would affect future traffic flows, and an estimate of future traffic on the system at the time of buildout.~~

~~C. The TIA shall review access to the site. The adequacy of the entrance design shall be evaluated and recommendations made for acceleration and deceleration lanes, left turn lanes, or signalizations.~~

~~D. The TIA shall review the number and types of curb cuts that are permitted. In particular, the TIA shall assess the connection of the property to adjoining properties. Where the use, scale of development, or size of adjoining properties is such that trips would be anticipated between the proposed use and the other properties, the TIA shall make recommendations on interconnections to provide a smooth flow of traffic between uses along arterials and collector roads to ensure that as much traffic as possible uses secondary roads rather than major roads for short trips.~~

~~E. The TIA shall assess the adequacy of the roads from which the development takes access. Recommendations for improvements shall be made. The relative share of the capacity created shall be broken down as follows: development share, other developments share, any existing over capacity, and capacity available for future growth.~~

~~F. Residential development, residential care facilities, hospitals, hotels and resort-oriented developments shall submit an emergency evacuation analysis (EEA) as part of the TIA. The EEA shall indicate how the proposed development utilizes the county's prescribed evacuation routes and the effect of the proposed development upon existing evacuation times for that portion of the county. The EEA shall be reviewed and approved by the Director of Emergency Management prior to submittal as part of the TIA.~~

A. The following criteria shall be used to evaluate the findings of traffic impact analyses.

1) A traffic impact analysis study shall be prepared in accordance with SCDOT standards.

2) Level of service. The results of the TIA shall inform and contemplate the traffic mitigation measures necessary to ensure that the minimum service standards established herein are met during the required planning horizon. The Future No Build conditions levels of service (LOS) for study area intersections, measured using the latest Transportation Research Board's *Highway Capacity Manual* standards for LOS calculation, shall be maintained in the Future Build conditions. If a reduction in the level of service is unavoidable, required improvements shall be identified to most effectively and practically minimize the reduction in operational LOS. Post-development operational LOS shall meet a LOS D goal for study area intersections. If LOS for an unsignalized intersection is found to be LOS E or F, mitigation measures should be reviewed, and discussion included in the report on potential side street queuing.

3) Number of access points. The number and spacing of access points shall comply with applicable standards set forth in the *SCDOT Access and Roadside Management Standards* (ARMS manual) and any designated Access Management Plans in the County's Community Development Code or any other access management planning in development. This shall be coordinated with Beaufort County staff during the development of the TIA.

~~6.3.40 - Methodology~~

~~A. The applicant's engineer will rely on the most current edition ITE trip generation manual or any alternative acceptable to the County Traffic Engineer, and available information on land use, travel patterns and traffic conditions, and will supply in writing to the County Traffic Engineer for approval the~~

parameters to be followed in the TIA, including the directional split of driveway traffic, trip distribution, and background traffic growth rate. Previously approved but not completed projects and the intersections to be analyzed along with any associated and available turning movement counts will be provided by the Country Traffic Engineer.

B. The following elements shall be included in a TIA plan:

1. A conceptual site plan or subdivision plat identifying accesses to and from existing or proposed streets and intersection.

2. Description of the proposed development, including the type of proposed land use, the number of residential units by type, the number of existing and proposed lots, the type of proposed nonresidential development and the amount of such development measured by gross floor area or other appropriate unit of measurement, the general size and type of accessory development or facilities, and, for non-residential development, adequate information to identify the appropriate land use category for trip generation.

3. Projected vehicular trips to and from the completed development during a.m. and p.m. peak hour. The percentage of pass-by trips, if used in the plan, shall be included, as well as the source of this information. Trip rates shall be taken from the ITE manual provided, however, an applicant may elect to perform, at his own expense, a trip generation study that may be submitted as part of the traffic impact analysis plan. Such trip generation study shall be subject to the review and verification of the County Traffic Engineer. For proposed uses not specifically listed in the ITE manual, and for which a trip generation study has not been performed, the County Traffic Engineer, in consultation with the applicant's traffic engineer, shall determine the most appropriate trip generation rate.

4. A written narrative setting forth the assumptions upon which any projection made in developing the traffic analysis plan shall be included in the analysis. If the assumptions are derived from the ITE manual, the materials shall be referenced and properly cited. If the assumptions are not from the ITE manual, appropriate excerpts from other reliable transportation planning resources shall be stated in the narrative.

5. The traffic impact analysis shall be based on intersection analysis procedures for signalized and unsignalized intersections as identified in the most current edition of Transportation Research Board's Highway Capacity Manual and/or the last update that analyses and emulates these procedures by means of computer software, if available. The results of any required analysis/computer analysis shall, at a minimum, indicate compliance or variance from the traffic goals in the Beaufort County Comprehensive Plan (2010).

6. The intersections that must be analyzed in the study are as follows:

a. Any intersection that serves as a development's point of access. This will include intersections of public and/or private roads with arterials, and driveways offering direct access.

b. The first major intersection as identified by the County Traffic Engineer on either side of the development's point of access.

c. Other intersections on arterials if development generates more than 50 a.m. or p.m. peak hour trips to that intersection or when in the opinion of the County Traffic Engineer there is a potential for a significant impact to the intersection's level of service from site related traffic or intersection demand critical.

d. Unsignalized intersections and access drives shall be considered if development impacts are anticipated. The plan must include the results of an analysis of the operating conditions of critical intersections and/or all intersections identified in the concept plan. The analysis shall reflect the projected condition of these intersections and movements, based on the scheduled opening date of the development. Other phases of the development shall be considered as well.

7. Accident analysis for intersections identified to be included in the study shall be completed for the most recent three years of accident data available from the S.C. Department of Public Safety or the County Traffic Engineer.

8. The average stop time delay in seconds per vehicle for each intersection determined to be critical to the traffic impact analysis shall be compared to the County's adopted traffic service level goal of "D" for the average delay for all vehicles at any signalized intersection during the a.m. and p.m. peak hours.

6.3.50 Mitigation Plan

If the initial analysis indicates that the County's adopted traffic service level goal of "D" will be exceeded, a mitigation plan must be prepared based on additional analysis. The mitigation plan must show how the County's service level goals are addressed as mitigated. Applicants will be responsible to mitigate the traffic impacts at any intersection affected by a proposed development.

A. If a traffic signal is recommended, the analysis shall provide information that does the following:

1. Clearly indicates the need for a traffic signal.

2. Assesses the ability of other existing or planned or proposed public roads to accommodate the new traffic at a location other than the main highway in the vicinity of the proposed development.

3. Describes in detail how a specific development will affect the study area transportation system.

4. Provides documentation of appropriate South Carolina Manual of Uniform Traffic Control Devices (SCMUTCD) signal warrant satisfaction.

5. Gives design geometry of the private road that is consistent with that of public road intersections including curbs, appropriate lane widths, pavement markings and vertical alignment. Other roadway factors to be considered include, but are not limited to, speed, type of highway, grades, sight distance, existing level of service, conflicting accesses, and the effect of future traffic signal systems.

6. Provides an approach throat length for the road to guarantee the movement of vehicles entering the site will not be impeded by on site conditions, and insure that all signal spacing requirements are adequately met.

B. A traffic signal progression analysis is required if the proposed location is closer than the SCDOT standards given the presence of existing signals or the possible existence of future signals proposed as part of a highway signal system.

C. The desirable spacing of signalized intersections on principal arterials is the SCDOT standards or county standards. The County Transportation Engineer may recommend to SCDOT the installation of a traffic signal at locations where using SCDOT standards, spacing is inappropriate due to: topography, existing or proposed road layout; documented accident history; unique physical constraints; existing or proposed land use patterns; or requirements to achieve specific objectives for highway segment designations as shown in any locally adopted land use or transportation plan or approved County transportation plan or approved transportation policy.

D. Signal spacing concerns may be ameliorated in the following ways:

1. A proposed private road that may otherwise be considered for the installation of a traffic signal may be replaced by an onsite route or a frontage road that directs traffic to or from a nearby public road;

2. A private road that is being considered for traffic signal installation may be required to connect to the existing or planned local road system to allow uses of surrounding properties;

3. An existing or proposed intersection may be relocated; or

4. A shared private road may be required to serve the needs of the multiple properties.

E. A traffic signal progression analysis for all new, revised or planned traffic signal systems on state highways shall be performed using methods, models, computer software, data sources, roadway segment length, and assumptions approved by the County Traffic Engineer. The roadway segment, analyzed to the extent possible, shall include all traffic signals in the existing or future traffic signal system. The progression analysis shall:

1. Demonstrate acceptable existing and future traffic signal systems operation that may include the morning peak, evening peak, midday period, and other appropriate time period during any day of the week adjusted for peak season, for cycle lengths and travel speeds approved by the County Traffic Engineer;

2. Demonstrate sufficient vehicle storage is available at all locations within the traffic signal system without encroaching on the functional boundaries of adjacent lanes and signalized intersections. The functional boundary of an intersection shall be determined in discussion with the County Traffic Engineer based on existing or projected conditions;

3. Provide a common cycle length with adequate pedestrian crossing times at all signalized intersections; and

4. Provide a progression bandwidth as large as that required, or as presently exists, for through traffic on arterials & collectors at the most critical intersection within the roadway segment. The most critical intersection is the intersection carrying the highest through volume per lane at the lowest green time/cycle time (g/c) ratio.

F. The traffic signal progression analysis shall be supplemented by a traffic engineering report that also considers highway capacity and safety of the roadway segment under consideration. Traffic volumes, intersection geometry and lane balance considered at all locations shall be appropriate for the present and future conditions. Present and future conditions are usually considered to include the year of completion, and five years into the future.

G. A clear and concise summary of recommended improvements that can serve as an executive summary is required.

6.3.60– Review and Approval

A. **Traffic Impact Analysis Plan Submittal and Review.**

1. A traffic impact analysis plan (TIA) shall be submitted to the County Traffic Engineer for review as part of an application for a conceptual development plan or conceptual subdivision plat.

2. The County Traffic Engineer shall determine whether a TIA is complete and accurate. Failure by an applicant to provide a complete and accurate TIA where required by this Division may result in review delays for the accompanying plan or plat application.

3. TIA review coordination with other entities in the county and the South Carolina Department of Transportation (SCDOT) shall be the responsibility of the County Traffic Engineer.

B. **Action on Traffic Impact Analysis.** Based on the TIA findings and recommendations, as approved by the County Traffic Engineer, an applicant may be required to provide construction of recommended improvements, pay fees in lieu of construction, or phase or revise the proposed development to insure the County's adopted traffic service level goals are met.

C. **Timing of Implementation.** If a traffic mitigation program is part of an approved traffic impact analysis plan, the developer may be required to place a performance bond on all traffic mitigation improvements required as a result of the development. This requirement may arise if the timing of the improvements needs to be synchronized with other scheduled improvements anticipated for the area.

D. **Responsibility for Costs of Improvements.** The costs of implementation of an approved mitigation program shall be the responsibility of the applicant. No Certificates of Compliance or Building Permits shall be issued unless the traffic impact analysis recommendations are met.

6.3.30–*Traffic Study Preparation and/or Review*

A) At the sole expense of the Applicant, the TIA shall be prepared by a traffic engineer licensed in South Carolina who is experienced in the conduct of traffic analysis, and whom is one of the consultants the County has previously-selected for On-Call traffic engineering services.

Applicant shall coordinate with Beaufort County staff on details of the project to develop the scope of services for the TIA.

1.) The Applicant shall provide the following information to County staff as part of the Applicant's request for a TIA:

a. Total acreage for the project.

b. Description of the type of use(s) proposed and existing use or last known use.

c. Concept or sketch plan showing total square footage for the buildings (existing and proposed), the number and type of dwelling units proposed, square footages floor area by land use type, planned point(s) of access, proposed roads, internal accesses, bike/pedestrian facilities, and any other transportation infrastructure or facilities, and parking areas.

d. Projected buildout year when the site will be substantially occupied.

e. The project's civil engineer shall design on-site vehicle circulation, queuing and parking patterns so as not to interfere with the flow of traffic on any public street, including intersections and meets all SCDOT and Beaufort County driveway standards including sight distance requirements. The project's civil engineer shall ensure that no blocking of internal driveways shall occur. Cross access shall be required between parcels, where applicable.

f. The Applicant shall provide a site plan with driveway sight distance triangles, edge-to-edge distance to adjacent driveways and intersections, and a demonstration that the number of driveways proposed is the fewest necessary and that they provide safe and efficient traffic operations.

g. Documentation of any pre-coordination with the South Carolina Department of Transportation (SCDOT) regarding access location(s).

2.) After determination of the scope of services, the County's On-Call consultant shall provide a cost estimate of such services to the Administrator/Manager or his/her designee for review. An invoice shall be sent to the Applicant who shall provide payment in an amount equal to the estimated cost to the Administrator/Manager or his/her designee. The notice to proceed will be provided by staff to the County's On-Call consultant once the payment is received.

3.) Additional fees for services may be required if the Applicant substantially amends an application and/or the consultant's appearance is requested at meetings beyond what was anticipated in the initial scope of services. The Applicant shall remit payment to the Administrator/Manager or his/her designee for these costs before the services are provided.

6.3.40 – *TIA Required Components* The TIA shall include the following components unless otherwise coordinated with the Administrator/Manager or his/her designee.

A) Existing conditions. Description of existing traffic conditions, including existing peak-hour traffic volumes adjacent to the site and LOS for study area intersections. Existing traffic signal timings should be used. Morning (a.m.) and evening (p.m.) peak hour turning movement counts from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m., respectively, taken on a Tuesday, Wednesday, or Thursday when area K-12 public and private schools are in session shall be used.

Other peak periods may need to be counted, as determined by the Administrator/Manager or his/her designee, based on the specifics of the project. This would be determined during the TIA scoping process.

Seasonal data collection or conversion to represent seasonal conditions may be requested for TIAs on Hilton Head Island.

Existing counts may be used if taken within 12 months of the submittal of the TIA, unless authorized by the Administrator/Manager or his/her designee.

Other information that may be required to be collected may include, but is not limited to, crash data, stopping sight distances, and 50th and 85th percentile speeds.

B) Proposed land use. As provided by the Applicant, a description of the current and proposed land use including characteristics such as the number and type of dwelling units, square footage of the floor area, accompanied with a project site plan (with buildings identified as to proposed use) and a schedule for construction of the development and any proposed development stages should also be included in the TIA.

C) Estimate of trip generation. As noted previously, the projected trips for the development should be based on the most recent edition of *the ITE Trip Generation Manual.* Local trip generation studies may be conducted if previously approved by the Administrator/Manager or his/her designee. A table should be provided in the report outlining the categories and quantities of land uses, with the corresponding trip generation rates or equations, and the resulting number of trips. For large developments with multiple phases, the table should be divided based on the trip generation for each phase.

Any reductions due to internal trip capture (to a maximum of 20 percent) and pass-by trips (to a maximum of 10 percent of adjacent street traffic), and modal split should be justified and documented. All trip generation and trip reduction calculations and supporting documentation shall be included in the report appendix. Internal capture and pass-by should be based on *ITE* and National Cooperative Highway Research Program (*NCHRP)* methodologies.

For developments that do not have a final site plan, the highest and best use of the parcel shall be used in the TIA.

D) Trip distribution and traffic assignment. The trip distribution of the projected trip generation to the adjacent street network and study area intersections shall be included in the report and the basis should be explained.

E) Internal circulation, queuing and parking patterns. The TIA will generally review the on-site vehicle circulation, queuing and parking patterns to confirm that the flow of traffic is not impeded on any public street or surrounding intersections and the driveway design meets SCDOT and Beaufort County driveway standards for driveway width, throat, and sight distance requirements and cross access is included on the plan if applicable.

F) Planning horizon. The TIA shall be performed for the year the development will be substantially occupied. The buildout year for the development shall be provided by the Applicant. If the development is planned to be phased, the phase year shall be provided by the Applicant.

G) Growth and Approved developments. In addition to the non-specific yearly growth, approved yet not constructed developments within the vicinity of the site shall be included in the Future No Build and Build conditions. The approved developments to include in the study shall be coordinated with Administrator/Manager or his/her designee and SCDOT staff.

H) Future Year Analysis and Identification of Improvements. A capacity analysis should be performed at each of the intersections and driveways (signalized and unsignalized) in the study area. Intersection analysis shall include LOS determination for the overall intersection or approach depending on the type of control at the intersection in the No-Build (without the development) and Build (with the development) conditions based on the latest HCM methodologies.

If the capacity analysis indicates that an intersection does not meet the LOS standard, a mitigation analysis will be conducted to identify the improvements needed to meet the LOS standard.

If the capacity analysis indicates that an intersection does not meet the LOS standard for No-Build conditions, a mitigation analysis for Build conditions will be conducted to determine the improvements needed to be completed for the project to accomplish the level of service and delay in No-Build conditions or better.

I) Access management standards. The report shall include the Applicant provided site plan showing and description of the proposed access points and compare it to the applicable SCDOT and Beaufort County standards and/or plans.

J) Auxiliary turn lane requirements. TIAs shall evaluate the need for right- and left-turn lanes at all project driveways. Right- and left-turn lanes shall be installed in accordance with the criteria and warrants contained in SCDOT's ARMS Manual.

K) Traffic signalization. If a traffic signal is proposed as a mitigation measure, a preliminary traffic signal warrant analysis based on the Manual on Uniform Traffic Control Devices shall be included in the study. While the installation of a traffic signal on projected volumes may not be able to be initially installed as the project traffic volumes are not yet realized, the Applicant shall provide funds for the future signal(s) to the County to deposit into an escrow or special account set up for this purpose, if future installation of a traffic signal(s) approved. The Applicant is also responsible for conducting the future traffic signal warrant studies at the direction of the County.

The Applicant should make any laneage improvements during construction so that if in the horizon year a signal is warranted, one may be installed with little impact to the intersection.

L) *Mitigation and alternatives*. The TIA should include proposed improvements or access management techniques as necessary to meet the LOS standards. The Administrator/Manager or his/her designee will be responsible for final determination of mitigation improvements required to be constructed by the Applicant as a part of the development. Any improvements identified for the project, including any future traffic signal installations are above and beyond any transportation impact fees.

6.3.50 – *Coordination with SCDOT*

A) The draft TIA shall be submitted to SCDOT and other applicable municipalities for review and comment. Any SCDOT comments or requirements shall be incorporated in the study. These comments shall be coordinated with County staff and shall be addressed prior to the finalization of the traffic study.

6.3.60 – *Review and Acceptance of Traffic Impact Analysis*

A) The Administrator/Manager or his/her designee shall also review and approve the traffic study once all County and SCDOT comments are addressed. The Administrator/Manager or his/her designee shall issue a memo or similar documenting the approval of the traffic study and the required mitigation associated with the project.

6.3.70 – *Expiration Traffic Impact Analysis*

A) The Administrator/Manager or his/her designee may require an update to a previously approved TIA if any of the following criteria are met:

1) If a proposed development does not commence within 12 months of the traffic impact analysis.

2) If the scale, intensity, or phasing of the proposed development that were contemplated in the approved traffic impact analysis are modified.

3) If the number of access points, location of access points, or type of access points (right-in, right-out driveway, full access driveway, etc.) that were contemplated in the approved traffic impact analysis are modified.

4) If the built environment dictates a change in land use or traffic distribution from what was previously contemplated within an approved TIA.

5) If the proposed development is not completed within the proposed buildout date utilized in the TIA.