

RESOLUTION NO. 2017-___

A RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF SARASOTA COUNTY, FLORIDA PROVIDING FINDINGS OF FACT; ESTABLISHING A UNIFORM METHODOLOGY FOR MULTIMODAL MOBILITY ANALYSES ; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, during the 2011 legislative session the Florida State Legislature passed House Bill 7207 which amended Chapter 163 of the Florida Statutes which required local governments to consider backlogged transportation facilities as preexisting conditions and thus proposed developments impacting those transportation facilities cannot be required to resolve the preexisting deficiencies; and

WHEREAS, House Bill 7207 also promoted the creation of a multimodal transportation system that placed emphasis on alternative modes of travel, such as public transportation, pedestrian and bicycle travel; and

WHEREAS, Sarasota County adopted Ordinance No. 2015-051 on September 8, 2015, which repealed the road impact fee ordinance (Ordinance No. 89-97) and created the Sarasota County Mobility Fee Ordinance, which allows for the collection of Mobility Fees to fund capacity adding transportation improvements for all modes of travel; and

WHEREAS, Sarasota County adopted an update to the Sarasota County Comprehensive Plan on October 25, 2016, which eliminated transportation concurrency as a consideration for evaluation of proposed developments with the exception of Comprehensive Plan Amendment and Critical Area Plan applications; and

WHEREAS, it is desirable for Sarasota County to establish a methodology for developer prepared Multimodal Mobility Analyses.

NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of Sarasota County, Florida, as follows:

Section I. Findings of Fact

- A. It is desirable to establish uniform criteria for requiring Multimodal Mobility Analyses; and
- B. It is desirable to collect transportation data which assists Sarasota County with the evaluation of safety and operations considerations; and
- C. It is desirable to collect network and intersection data to assist Sarasota County with the timing and programming of future transportation improvements; and

- D. It is desirable to identify the analysis techniques and procedures employed in the development of a Transportation Methodology Statement; and
- E. It is desirable to identify the acceptable sources of data and factors; and
- F. It is desirable to consider multimodal transportation infrastructure/facilities and services when analyzing project related transportation impacts; and-
- ~~F.G.~~ That the multimodal mobility analysis be signed as sealed by a Florida registered Professional Engineer.

Section II. Adoption of the Multimodal Mobility Analysis Criteria and Methodology

Based on the testimony provided by the Transportation Planning Division, the Board of County Commissioners adopts the Multimodal Mobility Analysis Criteria and Methodology attached as Exhibit A.

Section III. Construction and Interpretation

This Resolution in no way amends or modifies any term or condition of the Sarasota County Code of Ordinances, Chapter 94, Article VII which remains in full force and effect. If conflict occurs between any portion of this Resolution and the Sarasota County Code of Ordinances, Chapter 94, Article VII, the provisions of the Sarasota County Code of Ordinances shall supersede.

Section IV. Effective Date

This Resolution shall be effective immediately upon adoption.

PASSED AND DULY ADOPTED BY THE BOARD OF COUNTY COMMISSIONERS OF SARASOTA COUNTY, FLORIDA, this _____ day of _____, 2017.

BOARD OF COUNTY COMMISSIONERS

Chairman

ATTEST:

KAREN E. RUSHING, Clerk of the Circuit Court and Ex-officio Clerk of the Board of County Commissioners of Sarasota County, Florida

By: _____
Deputy Clerk

Exhibit A

Multimodal Analysis Criteria and Methodology

Required Information

Prior to the preparation of a Multimodal Analysis, discussions will be held with the Transportation Planning Division and a methodology shall be established as approved.

A Multimodal Analysis shall be required when: 100 or more net new trips during the adjacent roadway's peak hour or the development's peak hour is generated and/or there is an existing safety issue (i.e. high crash location, complex intersection geometry). The following information is required as part of the analysis:

- 1) Trip Generation
- 2) Trip Distribution
- 3) Modal Split
- 4) Study Area
- 4)5) Segment Analysis
- 5)6) Segment Endpoints Analysis
- 6)7) Crash Data Analysis
- 8) Project Access Analysis
- 7)9) Turn lanes Analysis

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As a cursory planning tool, the Transportation Planning Department will use ~~the table~~ [Table 1](#) below to evaluate land uses requiring the submittal of a Multimodal Analysis. ~~This table is taken from Table 2-2. Land Use Thresholds Based Upon Weekday Trip Generation Characteristics for Transportation Impact Analyses in ITE's Transportation Impact Analyses for Site Development publication.~~

Table 2-21: Land Use Thresholds Based Upon Weekday Trip Generation Characteristics

<u>Land Use</u>	<u>≤ 100 Peak-Hour Trips</u>	<u>≤ 500 Peak-Hour Trips</u>
<u>Residential:</u>		
<u>Single-Family Home</u>	<u>95 units</u>	<u>565 units</u>
<u>Apartment</u>	<u>150 units</u>	<u>880 units</u>
<u>Condominium/Townhouse</u>	<u>190 units</u>	<u>1,320 units</u>
<u>Mobile Home Park</u>	<u>170 units</u>	<u>N/A</u>
<u>Shopping Center (GLA)</u>	<u>6,000 sq. ft.</u>	<u>70,000 sq. ft.</u>
<u>Fast-Food Restaurant with Drive-in (GFA)</u>	<u>3,000 sq. ft.</u>	<u>N/A</u>
<u>Gas Station with Convenience Store (Fueling Positions)</u>	<u>7 fueling positions</u>	<u>N/A</u>
<u>Bank with Drive-in (GFA)</u>	<u>3,900 sq. ft.</u>	<u>N/A</u>
<u>General Office (GFA)</u>	<u>67,000 sq. ft.</u>	<u>376,000 sq. ft.</u>
<u>Medical/Dentist Office (GFA)</u>	<u>31,000 sq. ft.</u>	<u>N/A</u>
<u>Research and Development Facility (GFA)</u>	<u>73,000 sq. ft.</u>	<u>518,000 sq. ft.</u>
<u>Light Industrial/Warehousing (GFA)</u>	<u>180,000 sq. ft.</u>	<u>460,000 sq. ft.</u>
<u>Manufacturing Plant (GFA)</u>	<u>149,000 sq. ft.</u>	<u>661,000 sq. ft.</u>
<u>Park-and-Ride Lot with Bus Service</u>	<u>170 parking spaces</u>	<u>655 parking spaces</u>

sq. ft. = square feet, _____

GLA = gross leasable area,

GFA = gross floor area,

N/A = not available

Source: ~~Stover and Koepke, 2002 (adjusted to reflect rates and equations in Trip Generation, 2008)~~ [Transportation Impact Analyses for Site and Development, An ITE Recommended Practice, 2010, table 2-2.](#)

Trip Generation

Daily and AM and/or PM peak hour trip generation and directional split for project traffic shall be estimated using the rates and equations contained in the latest edition of the Institute of Transportation Engineers' *Trip Generation*.

Transportation Planning Staff may allow internal capture and/or diverted trip capture based upon proposed land uses and support documentation. –Specific capture rates and their application shall be established during development of the detailed methodology.

Other sources of trip generation data may be used, as approved by Transportation Planning staff during development of the formal methodology.

Trip Distribution

Project traffic shall be assigned to the road network using an acceptable software platform adopted by the Florida Department of Transportation (FDOT) District 1 in conjunction with the most current socio-economic and network data sets maintained by FDOT District 1 for modeling.

The network and socio-economic data may require modification prior to being found suitable for a specific project. Therefore, the applicant shall submit for Transportation Planning's review any proposed or required modifications to modeling data. The applicant shall not proceed to portions of the analysis that rely on the trip distribution prior to receiving Transportation Planning's approval of the modeling data and the project trip distribution.

Other methods of distributing project traffic may be used as approved by Transportation Planning during development of the formal methodology.

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Modal Split

Project traffic shall be split amongst mode choices based upon reasonable assumptions related to land use patterns, available alternative transportation infrastructure and frequency of transit services.

The applicant shall submit for Transportation Planning's review any proposed modal split at the time of the formal methodology meeting. The applicant shall not proceed to portions of the analysis that rely on the modal split prior to receiving Transportation Planning's approval for the modal split assumptions.

The Multimodal Mobility Analysis shall include an analysis of the four (4) modes of transportation in the County (i.e. walking, biking, transit, and vehicular) within the designated study area. Quality of service methodologies shall be consistent with the Highway Capacity Manual, latest edition.

Additional support documentation may be required when applicant assumes a high alternative transportation modal split for project traffic.

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Study Area

The study area of review shall be calculated based on ~~the table~~ [Table 2 below](#). ~~This table is taken from Table 2-3. Suggested Study Area Limits for Transportation Impact Analyses in ITE's Transportation Impact Analyses for Site Development publication.~~ ~~the net new AM or PM peak hour trips, whichever are higher, multiplied by 10 feet for the first accessed thoroughfare facility.~~ ~~In addition, the study area shall include the two segment endpoints (closest major intersections), even if the endpoints are beyond the calculated study area.~~ ~~For example, the study area for a development generating 200 net new peak hour trips will be 2,000 feet or 0.38 miles.~~ The study area distance shall be measured from the project boundary along all adjacent roadways. Endpoints ~~shall be defined as:~~ ~~stop controlled,~~ ~~controlled intersections,~~ ~~signalized intersections~~ or roundabouts.

Table 2-3: Suggested Study Area Limits for Transportation Impact Analyses

<u>Development</u>	<u>Study Area</u>
Fast-food restaurant Service station, with or without fast-food counter Mini-mart or convenience grocery with or without gas pumps Other development with fewer than 200 trips during any peak hour	Adjacent intersection if corner location Adjacent intersection if corner location 660 ft. from access drive 1,000 ft. from access drive
Shopping center less than 70,000 sq. ft. or Development w/peak-hour trips between 200 and 500 during peak hour	All signalized intersections and access drives within 0.5 miles from a property line of the site and all major unsignalized intersections and access drives within 0.25 miles
Shopping center between 70,000 sq. ft. and 100,000 sq. ft. GLA or Office or industrial park with between 300 and 500 employees or Well-balanced, mixed-use development with more than 500 peak-hour trips	All signalized and major unsignalized intersections and freeway ramps within 1 mile of a property line of the site.
Shopping center greater than 100,000 sq. ft. GLA or Office or industrial park with more than 500 employees or All other developments with more than 500 peak-hour trips	All signalized intersections and freeway ramps within 2 miles of a property line and all major unsignalized access (streets and driveways) within 1 mile of a property line of the site
Transit Station	0.5-mile radius

[ft. =feet.](#)

[sq. ft. = square feet.](#)

[GLA = gross leasable area](#)

[Source: Transportation Impact Analyses for Site and Development, An ITE Recommended Practice, 2010, table 2-3.](#)

[Source: Adopted from Stover and Koepke 2002 and Barbara M. Schroeder.](#)

The Multimodal Analysis shall include the following within the study area: 1) existing/programmed sidewalks; 2) existing/programmed transit stops and routes; 3) existing/programmed bicycle facilities.

The Multimodal Analysis shall also include an inventory of sidewalk gaps. Segment endpoints are to be considered as part of the study area.

Operational Analysis

Turning movement counts will be collected at the segment endpoints. An acceptable software simulation (approved at the time of formal methodology approval) will be used to model the operation of each endpoint based upon the type of intersection (i.e. roundabout, signalized, two-way stop control, etc.).

Existing traffic conditions shall be established by use of road segment counts and turning movement counts not more than one year old at the time the detailed methodology is approved.

Transportation Planning shall provide a list of developments with final development orders (final subdivision plan approval or construction plan approval) and development agreements, their projected trip generation, and their trip distributions.

For specific projects, background traffic and future traffic conditions may require adjustment (growth factors). The need for growth factors and the appropriate factors are sensitive to geographical location and therefore shall be established during development of the detailed methodology.

The analysis shall be conducted for the ~~100th highest hour of traffic~~ peak hour of traffic. This approximates the average AM and/or PM peak hour during the peak season of traffic in Sarasota County. The following scenarios shall be analyzed for the development under consideration:

- (i) Existing conditions
- (ii) Existing plus reserved/background conditions
- (iii) Existing plus reserved/background conditions plus project traffic

Safety and operational evaluation are of critical concern for these types of analyses. The analysis shall consider the applicable volume to capacity ratios.

Crash Data

The Multimodal Mobility Analysis shall include a minimum of three (3) years relevant crash data obtained from Sarasota County.

Turn Lane Warrant Analysis

Turn lane warrant analysis shall be conducted for project, when applicable. [Queueing and weaving analyses will also be required when applicable.](#)

Comprehensive Plan Amendments and Critical Area Plans

For Comprehensive Plan Amendments and Critical Area Plan applications, a Multimodal Analysis will be required that considers transportation concurrency.

The concurrency analysis shall consider the following:

1. ~~a. Level~~ Level of Service standards. The following policies of the Sarasota County Comprehensive Plan's Transportation Circulation Plan shall serve as the minimum criteria for determining that adequate Capacity or service Volume exists on Arterial, Collector and

Significant Local Roads which are impacted by a proposed Development and which are maintained by either the county or the Florida Department of Transportation (FDOT):

a. ~~Tran Policy 1.3.2.: Sarasota County, within the Urban Service Boundary, shall adopt and maintain a level of Service (LOS) standard of "D" peak-hour, based on a 100th hour design criteria (hereafter referred to as "LOS "D"")~~, for all County maintained arterial and collectors.

~~(1) Tran Policy 1.3.2.: Sarasota County, within the Urban Service Boundary, shall adopt and maintain a Level of Service (LOS) standard of "D" peak hour, based on a 100th hour design criteria (hereafter referred to as "LOS "D"")~~, for all County maintained arterial and collectors.

_____Sarasota County shall adopt and maintain a Level of Service (LOS) standard of "C" peak-hour, based on a 100th hour design criteria (hereafter referred to as "LOS "C""), for all County maintained arterial and collectors outside the Urban Service Boundary. The noted LOS standard applies to roadways that are not designated as constrained or backlogged facilities as shown on Table 10-4 in the Comprehensive Plan.

b. ~~(2)~~Tran Policy 1.3.3.: Sarasota County shall adopt and maintain a Level of Service (LOS) standard of "C" (hereafter referred to as LOS "C"), for all county maintained significant local roads. For significant local roads operating below LOS C, the County shall identify and program improvements that will minimize the impacts of motorized vehicular traffic on bicycle and pedestrian quality of service.

c. ~~(2)~~Tran Policy 1.3.4.: The minimum level of service standards adopted by Sarasota County for roads designed on the State Highway System and under the jurisdictional responsibility of the Florida Department of Transportation shall be based on and consistent with the statewide minimum level of service standards.

There shall be a short term (five year) and a long term (latest District One Regional Planning Model future year) analysis of the study area roadway network. A detailed short term analysis will be required if the LOS falls below the adopted LOS. The long term analysis will be a generalized analysis.

2. Proposed Comprehensive Plan Amendments and Critical Area Plan applications shall be evaluated in terms of potential Development generated traffic impacts on those roadways serving said Development. . A determination shall be made as to whether or not sufficient service volume is available to support said Development at or above the Adopted Level of Service for those roadways. Such a determination shall be made through the utilization of the following information: (1) An inventory of all Arterial, Collector and Significant Local Roads, including at a minimum, the following data for each road:

a. ~~(a)~~Existing service volume based on the Adopted Level of Service, the existing Level of Service designation, and the existing service volume reserve;

~~(b)~~Additional service volume to be added through the following:

b.

- i. ~~(i)~~ The construction/implementation of roadway improvements for which a funding commitment has been included in the county capital budget for the current fiscal year; or
- ii. Roadway improvements which are guaranteed in an Enforceable Development Agreement where the necessary roadway improvement(s) are required to be completed during the current fiscal year; or
- iii. Roadway improvements for which a funding commitment has been included in the first three years of the county's Five-Year Schedule of Capital Improvements for Targeted Business for Economic Development within Major Employment Centers and Major Employment Center/Interstate Regional Office Park as designated on the Future Land Use Map; provided that:

~~(ii) Roadway improvements which are guaranteed in an Enforceable Development Agreement where the necessary roadway improvement(s) are required to be completed during the current fiscal year; or~~

~~—(iii) Roadway improvements for which a funding commitment has been included in the first three years of the county's Five Year Schedule of Capital Improvements for Targeted Business for Economic Development within Major Employment Centers and Major Employment Center/Interstate Regional Office Park as designated on the Future Land Use Map; provided that:~~

~~a. a. The estimated date of commencement of actual construction and the estimated date of project completion are provided in the Capital Improvements Program~~

c. ~~(e)~~ Existing daily and peak-hour (design hour) Traffic Volume;

d. Traffic volumes projected to be added by approved Development having a Final Development Order or binding Development Agreement which consigns a portion of the available service volume reserve for said Development; and

e. The available service volume reserve equals the adopted level of service volume minus the sum of existing traffic plus reserved trips for approved projects.

~~—(d) Traffic volumes projected to be added by approved Development having a Final Development Order or binding Development Agreement which consigns a portion of the available service volume reserve for said Development; and~~

~~—(e) The available service volume reserve equals the adopted level of service volume minus the sum of existing traffic plus reserved trips for approved projects.~~

f. ~~(2)~~ A trip distribution table which will be used to identify those roadway segments which can be expected to be significantly impacted by Development generated traffic for any given Development, and the percentage of total generated trips each roadway segment can be expected to receive, where significant impact is defined as thoroughfare roadway segments with any of the following characteristics:

i. ~~(a)~~ Carrying development traffic equal to or greater than five percent of the segment's maximum service volume at Level of Service standard for development projects located within the Urban Service Boundary; or carrying development traffic equal to or greater than five percent of the segment's maximum service volume at Level of Service "C" for development projects located outside the Urban Service Boundary; or

ii. An initial thoroughfare road segment carrying Development traffic accessed either directly or through any intervening private or local roads.

~~(b) An initial thoroughfare road segment carrying Development traffic accessed either directly or through any intervening private or local roads.~~

g. ~~(3)~~ An inventory of thoroughfare roadway segments identified in the Comprehensive Plan as being "backlogged" or "constrained" containing the following data:

i. Existing service volume based on Adopted Level of Service, and, existing Level of Service designation;

ii. Existing daily and peak-hour (design hour) Traffic Volume; and

iii. Existing average travel speed.

h. Information regarding the proposed Development for which issuance of an Approval has been requested shall be provided by the Developer, subject to verification by the Transportation Planning Division, and shall contain at a minimum:

i. Project location;

ii. Type and quantity of proposed land use(s) (i.e., number of dwelling units, square footage, etc.);

iii. Project phasing;

iv. Expected trip generation by trip type (primary, diverted and captured, etc.) estimates for the proposed land use(s) by project phase. Trip generation shall be determined in accordance with the latest available Institute of Transportation Engineers (ITE) Trip Generation Manual, or with locally derived trip generation rates based on studies performed, or approved and verified, by the Transportation Planning Division;

v. Trip Distribution;

vi. Modal Choice selection for project trips;

vii. Inventory of existing and committed mode choice options (i.e. sidewalks, bicycle lanes, transit routes, multimodal pathways, etc.); and

viii. Generalized analysis of the LOS for alternative transportation mode facilities impacted by project trips.

3. The Public Works Transportation Planning Division shall be the agency responsible for determining whether adequate service volume is available to support expected development generated traffic from a given proposed Development such that a finding of concurrency may be rendered.

a. A finding of concurrency shall be made for a given proposed Development only in the event that expected Development generated traffic for the proposed Development is less than or equal to the available service volume reserve on each significantly impacted roadway segment, or in the case of backlogged and constrained roadways, does not result in a further degradation of the Adopted Level of Service for that roadway.

b. In the case of designated backlogged or constrained roadways operating at a Level of Service "F," the Adopted Level of Service shall be defined as the average peak-hour travel speed existing at the time the Development Order application is made, where peak-hour shall be as stated in Section 1.b(1) through 1.b(3) above. If the data requirements described in Sections 1.b(1) through 1.b(3) are not available in their entirety at the time the Development Order is being considered, the required data may be provided by the Developer subject to verification by the County Public Works Transportation Planning Division.

~~(a) Existing service volume based on Adopted Level of Service, and, existing Level of Service designation;~~

~~(b) Existing daily and peak hour (design hour) Traffic Volume; and~~

~~(c) Existing average travel speed.~~

~~(4) Information regarding the proposed Development for which issuance of an Approval has been requested shall be provided by the Developer, subject to verification by the Transportation Planning Division, and shall contain at a minimum:~~

~~(a) Project location;~~

~~(b) Type and quantity of proposed land use(s) (i.e., number of dwelling units, square footage, etc.);~~

~~(c) Project phasing;~~

~~(d) Expected trip generation by trip type (primary, diverted and captured, etc.) estimates for the proposed land use(s) by project phase. Trip generation shall be determined in accordance with the latest available Institute of Transportation Engineers (ITE) Trip Generation Manual, or with locally derived trip generation rates based on studies performed, or approved and verified, by the Transportation Planning Division;~~

~~(e) Trip Distribution;~~

~~(f) Modal Choice selection for project trips;~~

~~(g) Inventory of existing and committed mode choice options (i.e. sidewalks, bicycle lanes, transit routes, multimodal pathways, etc.);~~

~~(h) Generalized analysis of the LOS for alternative transportation mode facilities impacted by project trips.~~

~~c. The Public Works Transportation Planning Division shall be the agency responsible for determining whether adequate service volume is available to support expected development generated traffic from a given proposed Development such that a finding of concurrency may be rendered.~~

~~(1) A finding of concurrency shall be made for a given proposed Development only in the event that expected Development generated traffic for the proposed Development is less than or equal to the available service volume reserve on each significantly impacted roadway segment, or in the case of backlogged and constrained roadways, does not result in a further degradation of the Adopted Level of Service for that roadway.~~

~~(2) In the case of designated backlogged or constrained roadways operating at a Level of Service "F," the Adopted Level of Service shall be defined as the average peak-hour travel speed existing at the time the Development Order application is made, where peak-hour shall be as stated in Section 1.b(1) through 1.b(3) above. If the data requirements described in Sections 1.b(1) through 1.b(3) are not available in their entirety at the time the Development Order is being considered, the required data may be provided by the Developer subject to verification by the County Public Works Transportation Planning Division.~~

In the event that Development generated traffic assigned to one or more of the significantly impacted roadway segments exceed the available service volume reserve, the report issued by the Transportation Planning Division to the appropriate coordinating agency shall identify and discuss the specific circumstances surrounding each occurrence.

~~c. [If a deficiency is identified in the network within the study area, an improvement must be proposed identified to mitigate the deficient condition.](#)~~

Multimodal Analysis Document Deliverables

The Multimodal Mobility Analysis shall include, but is not limited to the following items:

Project location map

Trip generation data in tabular form

Project traffic distribution in map form

Project traffic distribution and identification of significantly impacted road segments in tabular form

Traffic “buildup” in tabular form (or corresponding table if an alternative method is used for determining total traffic).

Generalized LOS analysis results in tabular form (Comprehensive Plan and Critical Area Plan only)

All improvements necessary to mitigate transportation impacts listed in tabular form in the conclusion.

Detailed reports for all applicable Highway Capacity Software, SYNCHRO, and/or SIDRA analyses, including electronic files

Electronic files supporting the FDOT District 1 model analysis/output and other applicable electronic files

Modal Choice selection for project trips;

Inventory of existing and committed mode choice facilities/services (i.e. sidewalks, bicycle lanes, transit routes, multimodal pathways, etc.) in the study area

List of references to the sources of all county counts, factors, and assumptions

Complete documentation for counts, factors and assumptions from other sources

Queue length analysis, turn lane analysis and warrants for both on and off site improvements

Intersection Analyses including the v/c ratio

Include applicable crash related data obtained from the Sarasota County Crash Management Database System consistent with Tran Policy 1.3.11

[Engineer's Methodology letter and approved methodology letter](#)

[Final report signed and sealed by Florida registered Professional Engineer](#)