AGENDA REQUEST

AGENDA HEADING:	COMMISSION MEETING DATE:	AGENDA ITEM NO:
Legislative Public Hearings	February 21, 2017	XII.A.4.

BY	Timothy Litchet	City Engineer DavisShaw, Assistant City Engineer Ohrenstein, and Neighborhoods, Redevelopment, and Special Projects Manager Chapdelain
Originating Department	Department Head	Presenter

SUBJECT:

Public Hearing Re: Multimodal Transportation Impact Fee Ordinance 17-5202

COMMISSION PRIORITIES:

Infrastructure

EXPLANATION: (see next page for additional explanation)

On May 2, 2016, the City Commission requested staff update the 2012 Multimodal Fee Calculation Technical Report, explore a tiered fee system, consider reduced fees for affordable housing, redevelopment areas, and daycare facilities, and advertise the revised fees at the highest calculated rate to provide the City Commission with the greatest flexibility. The City Commission can approve a rate lower than the advertised rate, but not higher than that rate.

As Florida Statute 163.31801 requires a 90 day notice for the effective date of an impact fee increase, the ordinance as drafted sets the effective date for July 1, 2017. However, those developments with a building permit applied for prior to July 1, 2017, would be classified within the currently adopted impact fee rate.

ADMINISTRATION'S RECOMMENDATION:

Pass on first reading proposed Ordinance No. 17-5202 with any agreed upon rate reductions and bring back for second reading.

APPROVAL SUMMARY:

Approval	Required	Date Completed	Completed By	Status
Department Head Approval	Y	02/08/2017	Timothy Litchet	APPROVED
Legal Review / Approval	Y	02/08/2017	Robert Fournier	APPROVED
Deputy City Manager Approval	Y	02/09/2017	Marlon Brown	APPROVED
City Manager Approval	Y	02/09/2017	Marlon Brown	APPROVED
City Auditor and Clerk Approval	Y	02/10/2017	Pamela Nadalini	APPROVED

AGENDA REQUEST

ADDITIONAL EXPLANATION:

A presentation of the background, methodology and findings of the updated Multimodal Transportation Impact Fee Study will be given followed by a discussion regarding which land use categories may be appropriate for rate reductions, especially within the Newtown and North Trail redevelopment areas, in an effort to encourage economic development.

ADDITIONAL ADMIN RECOMMENDATION:

FUNDING SOURCE: **AMOUNT:**

HOUSING IMPACT (Per House):

NEW CONSTRUCTION:	REHABILITATION:
$ 0	$ 0

SUPPORT DEPARTMENTS:

Financial Administration - Kelly Strickland

AGENDA DISPOSITION

COMMISSION ACTION:

Final Action Motion: _____

Motion By: _____ Second By: _____

Vote: _____

ORDINANCE 17-5202

AN ORDINANCE OF THE CITY OF SARASOTA, FLORIDA, AMENDING THE SARASOTA CITY CODE, CHAPTER 25, PLANNING, ARTICLE II, MULTIMODAL TRANSPORTATION IMPACT FEE, DIVISION 2, MULTIMODAL TRANSPORTATION IMPACT FEES BY PUBLIC FACILITY, SECTION 25-49, MULTIMODAL TRANSPORTATION IMPACT FEES SCHEDULE, SO AS TO INCREASE SAID IMPACT FEES TO BE IMPOSED UPON NEW DEVELOPMENT BY A TIERED SCHEDULE UP TO THE HIGHEST CALCULATED RATE SUPPORTED BY THE CITY OF SARASOTA MULTI-MODAL TRANSPORTATION IMPACT FEE STUDY DATED DECEMBER 9, 2016; RECITING FINDINGS AND INTENT AS WELL AS THE AUTHORITY OF THE CITY OF SARASOTA TO ENACT A MULTIMODAL TRANSPORTATION IMPACT FEE ORDINANCE; MAKING CONCURRENT MODIFICATIONS TO DIVISION 1, PROCEDURAL AND ADMINISTRATIVE REQUIREMENTS, TO SECTION 25-16, PURPOSE AND AUTHORITY, TO SECTION 25-17, ADOPTION OF TECHNICAL REPORT AS BASIS OF IMPACTS FEES, TO SECTION 25-20, DEFINITIONS, TO SECTION 25-21, APPLICABILITY OF THIS ARTICLE, AND TO SECTION 25-23, ALTERNATIVE CALCULATION OF IMPACT FEES; PROVIDING FOR THE SEVERABILITY OF THE PARTS HEREOF IF DECLARED INVALID; PROVIDING FOR THE REPEALING OF ORDINANCES IN CONFLICT; PROVIDING FOR READING BY TITLE ONLY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City Commission finds that new growth and development must be accompanied and supported by adequate multimodal transportation facilities in order to maintain the level of transportation services specified in the *Sarasota City Plan (2030)*; and

WHEREAS, the *Sarasota City Plan (2030)*, Capital Improvements Chapter, includes fiscal proposals for the expenditure of public funds for capital improvements, revenue sources, cost estimates and timing and sequencing of capital improvements; and

WHEREAS, the *Sarasota City Plan (2030)*, Capital Improvements Chapter, includes multimodal transportation facility projects necessary to correct existing deficiencies as well as projects whose need is attributable to anticipated new growth and development; and

WHEREAS, the *Sarasota City Plan (2030),* Housing Chapter, encourages the modification of multimodal transportation impact fee rates for attainable housing; and

WHEREAS, the *Sarasota City Plan (2030),* Future Land Use Chapter, encourages the use of financial incentives for new investment to eliminate blight and slum; and

WHEREAS, it is the intent of this Ordinance that, by increasing multimodal transportation impact fees by a tiered schedule up to the highest calculated rate supported by the City of Sarasota Multi-Modal Transportation Impact Fee Study dated December 9, 2016, new growth and development within the City will pay its fair and equitable share of the additional multimodal transportation facility costs which such new growth and development contributes to the City; and

WHEREAS, the City Commission has considered the matter of financing new multimodal transportation facilities, the need for which is necessitated by new development. The City Commission hereby finds and declares that a multimodal transportation impact fee imposed upon residential and non-residential development to finance multimodal transportation projects, the need for which is reasonably related to new development, furthers the public health, safety and welfare of the City of Sarasota. Therefore, the City Commission deems it advisable to increase its multimodal transportation impact fee; and

WHEREAS, the City retained the firm of Tindale Oliver to study the need to develop the City's multimodal transportation impact fee program; and

WHEREAS, Tindale Oliver prepared and presented to the City Commission a report titled, "City of Sarasota Multi-Modal Transportation Impact Fee Study," dated December 9, 2016 (referred to herein as the "Technical Report") which establishes the proportionate share of new development's impacts on the City's multimodal transportation system for which impact fees are collected pursuant to Chapter 25, Article II, Sarasota City Code; and

WHEREAS, the Technical Report has been presented to and reviewed by the City Commission, which has determined: (1) that multimodal transportation impact fees are necessary to offset the costs to the City associated with meeting the necessary public service and facility demand created by projected new residential and non-residential development; (2) that the amount of the impact fees bears a reasonable relationship to the burden imposed upon the City to provide the new public facilities addressed in the Technical Report to new development, (3) the expenditure of impact fees, pursuant to the terms of this Ordinance, will result in a beneficial use to such new development reasonably related to the impact fees, per dwelling unit, by type and per increment of non-residential development; (4) that an "essential nexus" exists between the projected new development and the need for additional public facilities to be funded via the development fees; and (5) that the amount of the development fees is "roughly proportional" to the fair share of the additional public facilities needed to provide adequate service to new development; and,

WHEREAS, each year the City Commission will amend the *Sarasota City Plan (2030)*, Capital Improvements Chapter, to include public facility improvements to serve new development subject to the payment of impact fees, based on the Technical Report; and

WHEREAS, pursuant to § 163.31801, Fla. Stat.:

(a) the Technical Report, and the impact fees recommended therein, are based on the most recent and localized data;

(b) Chapter 25, Article II, Sarasota City Code includes procedures for accounting and reporting of impact fee collections and expenditures in order to assure compliance with applicable legal standards;

(c) Chapter 25, Article II, Sarasota City Code provides for a separate accounting fund for multimodal transportation impact fees collected;

(d) administrative fees charged pursuant to Chapter 25, Article II, Sarasota City Code for the collection of impact fees are limited to actual costs;

(e) the City has provided Sarasota County and the public adequate notice and time for review, comments and public hearings regarding the City's intent to increase its multimodal transportation impact fee. The City has published notice in the Sarasota Herald Tribune at least ten (10) days in advance of first reading and public hearing of this Ordinance No. 17-5202. Furthermore, the City has provided at least ninety (90) days notice to Sarasota County and the public prior to the effective date of this Ordinance by completing the second reading and final adoption of this Ordinance on March 6, 2017 with an effective date of July 1, 2017; and

(f) Chapter 25, Article II, Sarasota City Code, requires audits of the City's financial statements to include an affidavit of the City's chief financial officer stating that the requirements of § 163.31801, Fla. Stat. have been complied with; and

WHEREAS, the Community Planning Act requires local governments to adopt, and the City has adopted, a Transportation Chapter of the *Sarasota City Plan (2030)* addressing multimodal issues and planning for a multimodal transportation system that emphasizes public transportation, where feasible; and

WHEREAS, Objective 3 of the Transportation Chapter of the *Sarasota City Plan (2030)* provides for continued support and promotion of a citywide multimodal transportation system; and

WHEREAS, the Community Planning Act encourages local governments to develop tools and techniques to complement the application of transportation concurrency, including those that assign secondary priority to vehicle mobility and primary priority "to ensuring a safe, comfortable, and attractive pedestrian environment, with convenient interconnection to transit;" and

WHEREAS, the Community Planning Act further encourages local governments to establish "multimodal level of service standards that rely primarily on non-vehicular modes of transportation where existing or planned community design will provide adequate level of mobility;" and

WHEREAS, the impact fees assessed pursuant to this Ordinance are necessary to ensure the public health, safety, and welfare of the residents of the City of Sarasota.

NOW THEREFORE, BE IT ENACTED BY THE PEOPLE OF THE CITY OF SARASOTA, FLORIDA:

SECTION 1. LEGISLATIVE FINDINGS, NOTICE AND INTENT. The City Commission of the City of Sarasota hereby adopts and incorporates into this Ordinance the recitals (whereas clauses) to this Ordinance and the City staff reports relating to this Ordinance as the legislative findings and intent of the City Commission. Pursuant to Section 163.31801, Florida Statutes, on February 10, 2017 the City published notice of the scheduling of a public hearing on February 21, 2017 at which the City Commission would consider this Ordinance No. 17-5202 intending to increase an impact fee. The specified effective date for this Ordinance No. 17-5202 is July 1, 2017 which is more than ninety (90) days after the date of said publication and public hearing for this Ordinance No. 17-5202. Furthermore, second reading and final adoption of this Ordinance No. 17-5202 occurred on March 6, 2017 which is also more than ninety (90) days prior to the July 1, 2017 effective date of this Ordinance No. 17-5202.

SECTION 2. The Sarasota City Code, Chapter 25, Planning, Article II, Multimodal Transportation Impact Fee, Division 2, Multimodal Transportation Impact Fees by Public Facility, Section 25-49, Multimodal Transportation Impact Fee Schedule, is hereby amended so as to increase said impact fees to be imposed upon new development by a tiered schedule up to the highest calculated rate supported by the Technical Report. As amended, said Section 25-49 shall provide as follows:

Division 2 – MULTIMODAL TRANSPORTATION IMPACT FEES BY PUBLIC FACILITY

25-49 Multimodal Transportation Impact Fee Schedule

(a) *Multimodal fee schedule*: A multimodal fee shall be assessed and collected from new development, pursuant to all applicable provisions of this Article, in accordance with the following fee schedule:

Multi-Modal Transportation Impact Fee Schedule

ITE LUC	Land Use	Unit	Current Adopted Rate	City-Wide Rate	Downtown		Newtown CRA	North Trail
					<10,000 sf	>=10,000 sf		
	RESIDENTIAL:							
210	Single Family (Detached) - Qualifies Under Very Low Income, Low Income, and/or Attainable Housing Criteria	du	$2,887	$0	$0		$0	$0
	Single Family (Detached) - Less than 1,500 sf	du	$2,887	$5,423	$5,423		$2,712	$2,712
	Single Family (Detached) - 1,500 to 3,499 sf	du	$2,887	$7,340	$7,340		$3,670	$3,670
	Single Family (Detached) - 3,500 sf and greater	du	$2,887	$8,161	$8,161		$8,161*	$8,161*
220	Multi-Family (Apartment) - Qualifies Under Very Low Income, Low Income, and/or Attainable Housing Criteria	du	$1,861	$0	$0		$0	$0
	Multi-Family (Apartment) - Less than 800 sf	du	$1,861	$3,375	$3,375		$1,688	$1,688
	Multi-Family (Apartment) - 800 sf or and greater	du	$1,861	$4,738	$4,738		$2,369	$2,369
230	Residential Condo/Townhouse - Qualifies Under Very Low Income, Low Income, and/or Attainable Housing Criteria	du	$1,628	$0	$0		$0	$0
	Residential Condo/Townhouse - Less than 1,000 sf	du	$1,628	$3,574	$3,574		$1,787	$1,787
	Residential Condo/Townhouse - 1,000 to 1,399 sf	du	$1,628	$4,139	$4,139		$2,070	$2,070
	Residential Condo/Townhouse - 1,400 sf and greater	du	$1,628	$5,220	$5,220		$2,610	$2,610
240	Mobile Home Park/RV Park	du	$1,059	$2,687	$2,687		$1,344	$1,344
251	Retirement Community/Age-Restricted Single-Family	du	$576	$2,385	$2,385		$1,193	$1,193
253	Assisted Living Facility (ALF)/Congregate Care Facility	du	$271	$679	$679		$340	$340
	LODGING:							
310/320	Hotel/Motel	room	$1,026	$2,629	$2,629		$2,629	$2,629
	RECREATION:							
420	Marina	berth	$487	$2,501	$2,501		$2,501	$2,501
430	Golf Course	acres	$830	$4,273	$4,273		$4,273	$4,273
443	Movie Theater	1,000 sf	$3,055	$7,802	$7,802		$7,802	$7,802
492	Health/Fitness/Athletic Club	1,000 sf	n/a	$22,443	$22,443		$22,443	$22,443
495	Recreational/Community Center	1,000 sf	$3,769	$18,281	$18,281		$18,281	$18,281
	INSTITUTIONS:							
520/522	Elementary/Middle School (Private)	1,000 sf	$2,292	$6,622	$6,622		$6,622	$6,622
530	High School (Private)	1,000 sf	$2,039	$6,966	$6,966		$6,966	$6,966
540	University/Junior College (7,500 or fewer students) (Private)	student	$661	$1,690	$1,690		$1,690	$1,690
540	University/Junior College (more than 7,500 students) (Private)	student	$496	$1,276	$1,276		$1,276	$1,276
560	Church	1,000 sf	$1,742	$4,442	$4,442		$4,442	$4,442
565	Day Care	1,000 sf	$3,955	$0	$0		$0	$0
610	Hospital	1,000 sf	$3,769	$9,573	$9,573		$9,573	$9,573
620	Nursing Home	1,000 sf	$932	$2,362	$2,362		$2,362	$2,362
	OFFICE:							
710	General Office 6,000 sf or less	1,000 sf	$2,134	$7,346	$7,346		$7,346	$7,346
710	General Office 6,001-50,000 sf	1,000 sf	$3,004	$10,338	$10,338		$10,338	$10,338
710	General Office 50,001-100,000 sf	1,000 sf	$3,004	$8,757	$8,757		$8,757	$8,757
710	General Office 100,001-200,000 sf	1,000 sf	$2,918	$7,410	$7,410		$7,410	$7,410
710	General Office 200,001-400,000 sf	1,000 sf	$2,471	$6,274	$6,274		$6,274	$6,274
710	General Office greater than 400,000 sf	1,000 sf	$2,242	$5,690	$5,690		$5,690	$5,690
720	Medical Office (0-10,000 sf)	1,000 sf	$3,004	$16,613	$16,613		$16,613	$16,613
720	Medical Office (>10,000 sf)	1,000 sf	$3,004	$24,217	$24,217		$24,217	$24,217
770	Business Park (Flex Space)	1,000 sf	$3,004	$8,535	$8,535		$8,535	$8,535
	RETAIL:							
812	Building Materials/Lumber Store	1,000 sf	$6,612	$29,705	$29,705		$29,705	$29,705
813	Discount Superstore, Free-Standing	1,000 sf	n/a	$15,105	$15,105		$15,105	$15,105
814	Variety Store	1,000 sf	n/a	$8,763	$3,908	$8,763	$8,763	$8,763
815	Discount Store, Free-Standing	1,000 sf	n/a	$7,846	$7,846		$7,846	$7,846
816	Hardware/Paint	1,000 sf	$2,752	$7,027	$3,129	$7,027	$7,027	$7,027
820	Retail 6,000 sfgla or less	1,000 sfgla	$1,762	$4,552	$2,918	$4,552	$4,552	$4,552
820	Retail/Shopping Center 6,001-50,000 sfgla	1,000 sfgla	$4,632	$11,845	$11,845		$11,845	$11,845
820	Retail/Shopping Center greater than 50,000 sfgla	1,000 sfgla	$4,234	$10,778	$10,778		$10,778	$10,778
841	New/Used Auto Sales	1,000 sf	$2,685	$13,642	$13,642		$13,642	$13,642
843	Automobile Parts Store	1,000 sf	n/a	$31,527	$31,527		$31,527	$31,527
848	Tire Store	1,000 sf	$3,527	$8,963	$8,963		$8,963	$8,963
850	Supermarket	1,000 sf	$5,659	$15,933	$15,933		$15,933	$15,933
854	Discount Supermarket	1,000 sf	n/a	$26,995	$26,995		$26,995	$26,995
857	Discount Club	1,000 sf	n/a	$12,415	$12,415		$12,415	$12,415
862	Home Improvement Superstore	1,000 sf	$3,580	$9,141	$9,141		$9,141	$9,141
880/881	Pharmacy/Drug Store with and without Drive-Thru	1,000 sf	$3,308	$8,455	$6,607	$8,455	$8,455	$8,455
890	Furniture Store	1,000 sf	$741	$2,363	$2,363		$2,363	$2,363
912	Bank/Savings w/Drive-In	1,000 sf	$6,091	$24,263	$24,263		$24,263	$24,263
931	Sit-Down Restaurant	1,000 sf	$6,257	$30,212	$9,810	$30,212	$30,212	$30,212
932	High-Turnover Restaurant	1,000 sf	$6,257	$33,578	$11,829	$33,578	$33,578	$33,578
934	Fast Food Restaurant w/Drive-Thru	1,000 sf	$13,621	$80,282	$80,282		$80,282	$80,282
941	Quick Lube	bays	$5,659	$14,427	$14,427		$14,427	$14,427
942	Automobile Repair Shop	1,000 sf	$2,685	$10,164	$10,164		$10,164	$10,164
945	Gasoline/Service Station/Conv. Mart; 0 to 6 vfp	fuel pos.	$1,958	$10,732	$10,732		$10,732	$10,732
	Gasoline/Service Station/Conv. Mart; 7 to 10 vfp	fuel pos.	$1,958	$9,295	$9,295		$9,295	$9,295
	Gasoline/Service Station/Conv. Mart; 11 or more vfp	fuel pos.	$1,958	$8,585	$8,585		$8,585	$8,585
947	Self-Service Car Wash	bays	$3,393	$8,665	$8,665		$8,665	$8,665
n/a	Convenience/Gasoline/Fast Food Store	1,000 sf	$10,806	$113,038	$113,038		$113,038	$113,038
	INDUSTRIAL:							
110/130	General Light Industrial/Industrial Park	1,000 sf	$1,829	$4,657	$4,657		$4,657	$4,657
120	General Heavy Industrial	1,000 sf	$395	$999	$999		$999	$999
140	Manufacturing	1,000 sf	$1,000	$2,548	$2,548		$2,548	$2,548
150	Warehouse	1,000 sf	$929	$2,377	$2,377		$2,377	$2,377
151	Mini-Warehouse/Storage	1,000 sf	$325	$806	$806		$806	$806

Note: "n/a" for the current fee reflects that this land use is not specifically detailed in the current fee schedule. Under the current adopted impact fee schedule, these land uses are charged at the rate of a similar land use in the schedule

*The Single Family land use (3,500 sf and greater) does not receive a discount in the Newtown CRA and North Trail areas.

(b) *Multimodal Transportation Impact Fee Account:* There is hereby established the Multimodal Transportation Impact Fee Fund into which all multimodal transportation impact fees collected shall be deposited. Multimodal transportation impact fee revenues shall be spent only on multimodal facilities and multimodal capital costs as provided in this Article.

(c) As used in the fee schedule set forth in Subsection (a), above, the following terms shall have the following meanings:

(1) *Downtown* shall mean the geographic area within the former Downtown Community Redevelopment Agency (CRA) of the City;

(2) *Newtown CRA* shall mean the Newtown Community Redevelopment Agency (CRA) which was established for the purpose of implementing redevelopment activities that include eliminating "blight and slum" conditions, increasing the tax base and encouraging private and public investments. The Newtown CRA is bordered to the north by Myrtle Street, to the east by the Seminole Gulf Railroad right of way, to the west by N. Tamiami Trail (U.S. 41) and to the south by 17th Street;

(3) *North Trail* shall mean those parcels which have frontage along the North Trail corridor between 10th Street and the City limit line. This area generally includes those North Trail parcels identified in the former Sarasota Enterprise Zone;

(4) *Very Low Income Housing (eligibility)* shall mean a household with an income up to fifty percent (50%) of the Area Median Income;

(5) *Low Income Housing (eligibility)* shall mean a household with an income greater than fifty percent (50%) but no more than eighty percent (80%) of the Area Median Income; and

(6) *Attainable Housing (eligibility)* shall mean housing affordable to households with an income between sixty percent (60%) to one hundred twenty (120%) of the Area Median Income."

SECTION 3. The Sarasota City Code, Chapter 25, Planning, Article II, Multi-Modal Transportation Impact Fee, Division 1, Procedural and Administrative Requirements, Section 25-16, Purpose and Authority, Section 25-17, Adoption of Technical Report as Basis of Impact Fee, Section 25-20, Definitions, Section 25-21, Applicability of this Article, and Section 25-23, Alternative Calculation of Impact Fees, are hereby amended so as to change the definition of the Technical Report and demand component of the impact fee, to delete the exemption regarding the Sarasota County/City of Sarasota Enterprise Zone which has terminated, and to add clarification to the alternative calculation of impact fees as it relates to the demand component variable. As amended, said Sections shall provide as follows:

"Sec. 25-16. – Purpose and Authority.

* * *

e)

The technical data, findings and conclusions herein are based on the report entitled "City of Sarasota Multi-Modal Transportation Impact Fee Study" dated December 9, 2016 prepared by Tindale Oliver" ~~"City of Sarasota Multimodal Fee Calculation Technical Report," pared by Tindale-Oliver & Associates, and dated November 2012~~ (referred to herein as the "Technical Report).

Sec. 25-17. - Adoption of technical report as basis of impact fees.

The city hereby adopts and incorporates by reference, the report entitled "City of Sarasota Multi-Modal Transportation Impact Fee Study" dated December 9, 2016 prepared by Tindale Oliver" ~~"City of Sarasota Multimodal Fee Calculation Technical Report," prepared by Tindale-Oliver & Associates, and dated November 2012~~ (referred to herein as the "Technical Report"), which, among other things, supports the rates and reasonableness of the impact fees imposed by this article.

* * *

Sec. 25-20. - Definitions.

The following words, terms, and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

* * *

Demand component of the impact fee means the ~~vehicle~~ person miles traveled calculated for each land use, which is comprised of ~~three (3)~~ four (4) components: the trip generation rate; trip length; ~~and~~ percent new trips~~.~~; and vehicle trips to person trips factor. The demand component for each land use can be found in the fee scheduled included in Appendix D of the technical

report. Additional back-up data and information on the demand component can be found in Appendix A of the technical report."

* * *

Technical report means the "City of Sarasota Multi-Modal Transportation Impact Fee Study" dated December 9, 2016 prepared by Tindale Oliver." ~~"City of Sarasota Multimodal Fee Calculation Technical Report," prepared by Tindale-Oliver & Associates, and dated November 2012~~.

* * *

"Sec. 25-21. - Applicability of this article.

* * *

~~e)~~

~~*Exemptions.* All new development within the portion of the Sarasota County/City of Sarasota Enterprise Zone located within the municipal limits of the City of Sarasota shall be exempt from, and shall not be obligated to pay, the multimodal transportation impact fee levied pursuant to this Article. This exemption shall automatically cease upon the date that said Enterprise Zone terminates."~~

* * *

"Sec. 25-23. - Alternative calculation of impact fees.

(a)

Any person who initiates any development may choose to provide an alternative calculation of the public facilities impacts of the proposed development. The alternative calculation study may be used to determine whether a fair share of the public facilities costs necessitated by the proposed development should be less than the fees set forth in this article or, if a particular use or combination of uses is not identified in this article, what fee the use should pay. Only the demand component of the technical calculation of the impact fee can be challenged during the alternative calculation study. Of the four demand component variables, vehicle trips to person trips factor is a citywide average, which will not be altered, while the other three components can be reviewed as part of the alternative calculation study. Technical details of approach, methodology, procedures and other matters relating to the alternative fee calculation shall be discussed with and approved by the director prior to proceeding with the study."

SECTION 4. CONFLICT. To the extent of any conflict between any other City regulations and ordinances and this Ordinance, this Ordinance shall be deemed to control.

Provided, however, that this Ordinance is not intended to amend or repeal any existing chapter or regulation, unless expressly set forth in this Ordinance.

SECTION 5. SEVERABILITY. It is hereby declared to be the intention of the City Commission that the sections, paragraphs, sentences, clauses and phrases of this Ordinance be deemed severable and if any phrase, clause, sentence, paragraph, or section of this Ordinance is declared unconstitutional or otherwise invalid by the valid judgment of a court of competent jurisdiction, such unconstitutionality or invalidity shall not affect any of the remaining phrases, clauses, sentences, paragraph or sections of this Ordinance.

SECTION 6. EFFECTIVE DATE. This Ordinance shall become effective on July 1, 2017. The following transitional rules shall apply with regard to the effective date of this Ordinance No. 17-5202. Where a complete application for a building permit has been submitted prior to July 1, 2017, the previous Sarasota County Road Impact Fee or the previous Multimodal Transportation Impact Fee shall apply. Otherwise, the regulations set forth in this Ordinance No. 17-5202 shall apply to any project for which an application for a building permit occurs on or after July 1, 2017.

PASSED on first reading by title only, after posting on the bulletin board at City Hall for at least three (3) days prior to first reading, as authorized by Article IV, Section 2, Charter of the City of Sarasota, Florida this ___ day of _____, 2017.

PASSED on second reading and finally adopted this ___ day of _____, 2017.

_____
Willie Charles Shaw, Mayor

ATTEST:

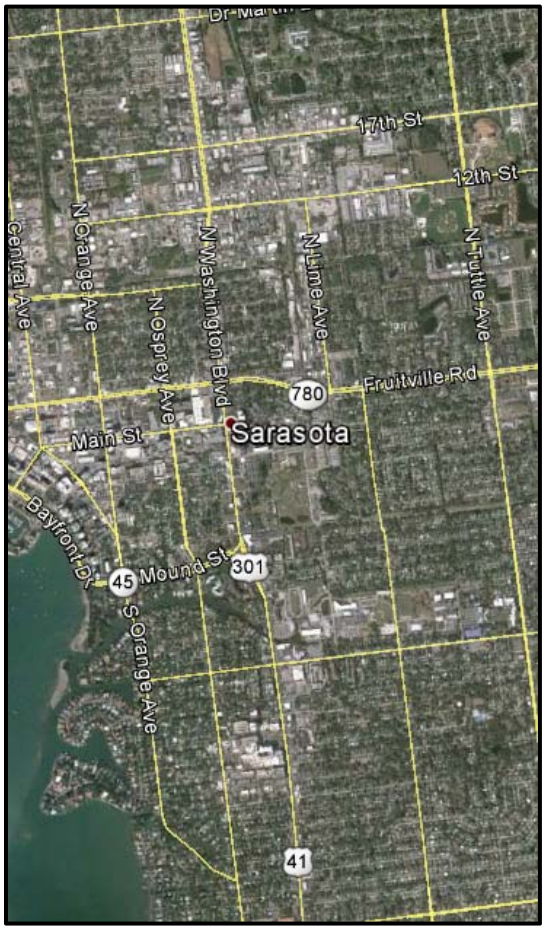
_____
Pamela M. Nadalini, MBA, CMC
City Auditor and Clerk

____ Mayor Willie Charles Shaw
____ Vice Mayor Shelli Freeland Eddie
____ Commissioner Liz Alpert
____ Commissioner Suzanne Atwell
____ Commissioner Susan Chapman

CITY OF SARASOTA MULTI-MODAL TRANSPORTATION IMPACT FEE STUDY

FINAL REPORT

December 9, 2016



Prepared for:

City of Sarasota
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December 9, 2016

Ms. Alexandrea DavisShaw, P.E., PTOE, F.FES
City Engineer
City of Sarasota Neighborhood and Development Services
1565 1st Street
Sarasota, FL 34236

Re: City of Sarasota Multi-Modal Transportation Impact Fee Study

Dear Ms. DavisShaw:

Enclosed is the Final Technical Report of the City of Sarasota Multi-Modal Transportation Impact Fee Study for your review. If you have any questions or comments concerning this report, please do not hesitate to contact me or Nilgün Kamp.

It has been our pleasure to have worked with the City staff on this important project.

Sincerely,

Steven A. Tindale, P.E., AICP
President

City of Sarasota
Multi-Modal Transportation Impact Fee Study
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Introduction

The City of Sarasota's multi-modal transportation impact fee schedule is based on a technical study that was last updated in 2012. The 2012 update established a separate impact fee program for the City (previously the City had been part of the County's program) and converted it from a roadway-based fee to a multi-modal impact fee. The conversion to a multi-modal impact fee provided the City with the flexibility to fund capacity expansion projects for stand-alone sidewalks, bicycle lanes, and transit facilities in addition to roadway improvements. To reflect the changes to the impact fee variables since 2012, the City of Sarasota has retained Tindale Oliver to prepare an update study, consistent with the City's impact fee ordinance requirement of an update every five years. In addition, the City is interested in providing incentives for certain types of development in targeted geographic areas.

The methodology used for the multi-modal transportation impact fee study follows a consumption-driven approach in which new development is charged based upon the proportion of person-miles of travel (PMT) that each unit of new development is expected to consume of a lane-mile of the transportation network. A consumption-based fee charges new growth the proportionate share of the cost of providing additional infrastructure available for use by new growth. In addition, per legal requirements, a credit is subtracted from the total cost to account for the value of future tax contributions of new development toward capacity expansion projects through other revenue sources. In other words, case law requires that the new development should not be charged twice for the same service.

The multi-modal fees developed in this report assess a proportionate share cost for the entire transportation network in the city, including multi-modal facilities located on classified City, County and State roadways, with the exception of local/neighborhood roads, limited access facilities, and rail.

Legal Standard Overview

In Florida, legal requirements related to impact fees have primarily been established through case law since the 1980's. Generally speaking, impact fees must comply with the "dual rational nexus" test, which requires that they:

- Be supported by a study demonstrating that the fees are proportionate in amount to the need created by new development paying the fee; and
- Be spent in a manner that directs a proportionate benefit to new development, typically accomplished through establishment of benefit districts and a list of capacity-adding projects included in the City's Capital Improvement Plan, Capital Improvement Element, or another planning document/Master Plan.

In 2006, the Florida legislature passed the "Florida Impact Fee Act," which recognized impact fees as "an outgrowth of home rule power of a local government to provide certain services within its jurisdiction." § 163.31801(2), Fla. Stat. The statute – concerned with mostly procedural and methodological limitations – did not expressly allow or disallow any particular public facility type from being funded with impact fees. The Act did specify procedural and methodological prerequisites, such as the requirement of the fee being based on most recent and localized data, a 90-day requirement for fee changes, and other similar requirements, most of which were common to the practice already.

More recent legislation further affected the impact fee framework in Florida, including the following:

- **HB 227 in 2009:** The Florida legislation statutorily clarified that in any action challenging an impact fee, the government has the burden of proving by a preponderance of the evidence that the imposition or amount of the fee meets the requirements of state legal precedent or the Impact Fee Act and that the court may not use a deferential standard.
- **SB 360 in 2009:** Allowed fees to be decreased without the 90-day notice period required to increase the fees and purported to change the standard of legal review associated with impact fees. SB 360 also required the Florida Department of Community Affairs (now the Department of Economic Opportunity) and Florida Department of Transportation (FDOT) to conduct studies on "mobility fees," which were completed in 2010.

- **HB 7207 in 2011:** Required a dollar-for-dollar credit, for purposes of concurrency compliance, for impact fees paid and other concurrency mitigation required. The payment must be reduced by the percentage share the project's traffic represents of the added capacity of the selected improvement (up to a maximum of 20 percent or to an amount specified by ordinance, whichever results in a higher credit).
- **HB 319 in 2013:** Applied mostly to concurrency management authorities, but also encouraged local governments to adopt alternative mobility systems using a series of tools identified in section 3180(5)(f), Florida Statutes, including:

    1. Adoption of long-term strategies to facilitate development patterns that support multi-modal solutions, including urban design, and appropriate land use mixes, including intensity and density;
    2. Adoption of an area-wide level of service not dependent on any single road segment function;
    3. Exempting or discounting impacts of locally desired development, such as development in urban areas, redevelopment, job creation, and mixed use on the transportation system;
    4. Assigning secondary priority to vehicle mobility and primary priority to ensuring a safe, comfortable, and attractive pedestrian environment, with convenient interconnection to transit;
    5. Establishing multi-modal level of service standards that rely primarily on non-vehicular modes of transportation where existing or planned community design will provide adequate level of mobility; and
    6. Reducing impact fees or local access fees to promote development within urban areas, multi-modal transportation districts, and a balance of mixed-use development in certain areas or districts, or for affordable or workforce housing.

Also, under HB 319, a mobility fee funding system expressly must comply with the dual rational nexus test applicable to traditional impact fees. Furthermore, any mobility fee revenues collected must be used to implement the local government's plan, which served as the basis for the fee. Finally, under HB 319, an alternative mobility system, that is not mobility fee-based, must not impose upon new development any responsibility for funding an existing transportation deficiency.

The following paragraphs provide further detail on the generally applicable legal standards for impact fees.

Impact Fee Definition

- An impact fee is a one-time capital charge levied against new development.
- An impact fee is designed to cover the portion of the capital costs of infrastructure capacity consumed by new development.
- The principle purpose of an impact fee is to assist in funding the implementation of projects identified in the Capital Improvements Element (CIE) and other capital improvement programs for the respective facility/service categories.

Impact Fee vs. Tax

- An impact fee is generally regarded as a regulatory function established as a condition for improving property and is not established for the primary purpose of generating revenue, as are taxes.
- Impact fee expenditures must convey a proportional benefit to the fee payer. This is accomplished through the establishment of benefit districts, where fees collected in a benefit district are spent in the same benefit district.

An impact fee must be tied to a proportional need for new infrastructure capacity created by new development.

Included in this document is the necessary support material used in the calculation of the multi-modal transportation impact fees. The general equation used to compute the impact fee for a given land use is:

[Demand x Cost] – Credit = Fee

The demand for travel placed on the multi-modal transportation system is expressed in units of PMT (daily trip generation rate x the trip length x the percent new trips [of total trips] x the person-mile conversion factor) for each land use contained in the impact fee schedule. The trip generation is expressed in terms of average daily rates since new development consumes trips on a daily basis. The cost of building new capacity typically is expressed in units of dollars per person-mile or lane-mile of transportation system capacity. The credit is an estimate of the future non-impact fee revenues generated by new development that are allocated to transportation system capacity expansion. Thus, the multi-modal transportation impact fee is an "up front" payment for a portion of the cost associated with the multi-modal transportation facilities (excluding rail and limited-access facilities) consumed by the development.

It should be noted that, consistent with the State Impact Fee Act requirements, the information used to develop the impact fee schedule was based on the most recent and localized data available. The input variables used in the fee equation are as follows:

Demand Variables:

- Trip generation rate
- Trip length
- Percent new trips
- Vehicle-trips to person-trips factor

Cost Variables:

- Roadway cost per lane mile
- Roadway capacity per lane mile
- Bicycle and pedestrian facilities capital costs
- Transit capital cost per person-mile of travel

Credit Variables:

- Capital Improvement Credit
    - Present worth
    - Fuel efficiency
    - Effective days per year

A review of each of these multi-modal transportation impact fee variables and corresponding calculations and estimates are presented in the following sections.

Demand Component

Travel Demand

The amount of road system consumed by a unit of new land development is calculated using the following variables and is a measure of the person miles of new travel a unit of development places on the existing roadway system:

- Number of daily person-trips generated
- Average length of those trips
- Proportion of travel that is new travel, rather than travel that is already on the transportation system

As part of this update, the trip characteristics variables were obtained primarily from two sources: (1) similar studies conducted throughout Florida (Florida Studies Database) and (2) the Institute of Transportation Engineers' (ITE) Trip Generation reference report (9th edition). The Florida Trip Characteristics Studies Database is included in Appendix A. This database was used to determine trip length, percent new trips, and trip rate for the land uses included in the fee schedule.

Interstate &Toll Facility Adjustment Factor

This variable was used to recognize that interstate highway and toll facility improvements are funded by the State (specifically, the Florida Department of Transportation) using earmarked State and Federal funds. Typically, impact fees are not used to pay for these improvements and the portion of travel occurring on the interstate/toll facility system is usually eliminated from the total travel for each use.

To calculate the interstate and toll (I/T) facility adjustment factor, the loaded highway network file was generated for the District 1 Regional Planning Model (D1RPM v1.0.3). A select link analysis was run for all traffic analysis zones located within the City of Sarasota in order to differentiate trips with an origin and/or destination within the city versus trips with no origin or destination within the city.

Currently, I-75 is the only interstate/toll facility going through Sarasota County. Therefore, the limited access vehicle-miles of travel (Limited Access VMT) for trips with an origin and/or

destination within the City of Sarasota was calculated for I-75. This figure was compared to the total City of Sarasota VMT for all trips with an origin and/or destination within the City of Sarasota. The I/T adjustment factor of 7 percent was determined by dividing the total limited access VMT by the total City of Sarasota VMT. By applying this factor to the total City of Sarasota VMT, the reduced VMT is then representative of only the travel on roadways which are funded by impact fees. Appendix A, Table A-1 provides further detail on this calculation.

Conversion of Vehicle-Trips to Person-Trips

In the case of the multi-modal approach, it is necessary to estimate travel in units of person-miles. Vehicle-trips were converted to person-trips by applying a vehicle-trip to person-trip conversion factor of 1.40. This value was derived from a review of the District 1 Regional Planning Model, nationwide travel data, and vehicle occupancy levels observed in other communities throughout Florida. Given that a large portion of travel occurs via automobile, this approach is found to be reasonable.

Downtown District Demand Adjustment

Previous trip characteristic studies conducted by Tindale Oliver suggested that certain establishments, such as retail, restaurants, and recreational uses, in a downtown/Central Business District (CBD) setting have travel characteristics that are different than those located in suburban/rural areas. In many cases, these establishments do not offer on-site parking and used shared street parking. Visitors to the area tend to link trips by walking from one establishment to another as opposed to traveling by vehicle. The local Florida studies conducted by Tindale Oliver, as well as those conducted in other states, suggest that captured trips increase from 70 percent to 80 percent for non-office and non-residential land uses. Given this, a capture rate of 75 percent is suggested for the multi-modal fee for certain uses located in the downtown district, which results in a percent-new trips factor of 25 percent.

This capture rate adjustment will apply to select small retail development (shops, sit-down restaurants, high-turnover restaurants, variety stores, hardware/paint stores, and pharmacies) that have less than 10,000 square feet of space. Table 7 and Appendix D provide the resulting fees for these land uses.

Cost Component

Cost information from the City of Sarasota, Sarasota County, other counties in Florida, and the State of Florida was reviewed to develop a unit cost for all phases involved in the construction of one lane mile of roadway capacity. Additionally, cost information for bicycle/pedestrian and transit facilities was reviewed and included in the cost component calculations for the multi-modal transportation impact fee rate. The following sections summarize the methodology and findings of the total unit cost analysis for all modes of travel. Appendix B provides the data and other support information utilized in these analyses.

City/County Roadway Cost

This section examines the right-of-way (ROW), construction and other cost components associated with city and county roads with respect to transportation capacity expansion improvements in the City of Sarasota and Sarasota County. For this purpose, recent bid data for completed/ongoing local projects and projects throughout Florida were used to identify and provide supporting cost data for City/County roadway improvements. The cost for each roadway capacity project was separated into four phases: design, construction/engineering inspection (CEI), ROW, and construction.

Design and CEI

Design costs for city/county roads were estimated at 10 percent of the construction phase costs based on a review of recent transportation impact fee studies throughout Florida. Additional detail is provided in Appendix B, Table B-1 (Item a).

CEI costs for city/county roads were estimated at 9 percent of the construction phase costs based on a review of recent transportation impact fee studies throughout Florida. Additional detail is provided in Appendix B, Table B-6 (Item a).

Right-of-Way

The ROW cost reflects the total cost of the acquisitions along a corridor that were necessary to have sufficient cross-section width to widen an existing road or, in the case of new construction, to build a new road. Due to a lack of local ROW data, ROW-to-construction cost ratios utilized in recent impact fee studies throughout Florida were reviewed. Based on these

studies, a ROW-to-construction factor of 41 percent was used in the multi-modal impact fee calculation. Additional detail is included in Appendix B, Table B-2 (Item a).

Construction

The construction cost for city/county roads was based on a review of local and statewide projects. A review of recent construction cost data for Sarasota County identified five capacity-expansion improvements averaging approximately $2.51 million per lane mile, as shown in Appendix B, Table B-3.

- Fruitville Road from Tatum Road to Debrecen Road
- Fruitville Road from Coburn Road to Tatum Road
- North Cattlemen Road from Richardson Road to Desoto Road
- Honore Avenue/Pinebrook Road Extension from SR 681 to Laurel Road
- Bee Ridge Road from Mauna Loa Boulevard to Iona Road

In addition to local improvements, recent bids from multiple communities throughout the state were also reviewed. This review included approximately 330 lane miles of urban-design roadway improvements from 17 counties and calculated an average cost of $2.15 million per lane mile. Appendix B, Table B-3 provides additional detail on the projects reviewed.

Based on this review, a city/county roadway construction cost of **$2.20 million** per lane mile was used in the multi-modal transportation impact fee calculation for city/county roads with urban-design characteristics. This cost reflects a blending of the local and statewide data to increase the sample size. It should be noted that future improvements in Sarasota County are expected to be of urban-design, as indicated in the Long Range Transportation Plan.

Table 1
Cost per Lane Mile for City/County Roads

Cost Phase	Urban Design
Design[(1)]	$220,000
Right-of-Way[(2)]	$902,000
Construction[(3)]	$2,200,000
CEI[(4)]	$198,000
Total Cost	**$3,520,000**

1) Design is estimated at 10% of construction
2) ROW is estimated at 41% of construction
3) Source: Appendix B, Table B-3
4) CEI is estimated at 9% of construction

All figures rounded to nearest $1,000

State Roadway Cost

This section examines the costs associated with state roads with respect to transportation capacity-expansion improvements in the City of Sarasota and Sarasota County. For this purpose, recent bid data from state roadway projects in Sarasota County and throughout Florida, as well as FDOT's Long Range Estimates (LRE) were used to identify and provide supporting cost data for state roadway improvements. The cost for each roadway capacity-expansion project was separated into four phases: design, construction/engineering inspection, ROW, and construction.

Design and CEI

Design and CEI costs for state roads were each estimated at 11 percent of construction phase costs based on a review of recent transportation impact fee studies throughout Florida. Additional detail is provided in Appendix B, Table B-1 (Item b) and Table B-6 (Item b).

Right-of-Way

The ROW cost factor for state roads was estimated as a percentage of the construction cost per lane mile. This factor was determined through a review of the ROW-to-construction cost ratios for state road unit costs in previously completed impact fee studies throughout Florida. For state roadways, the ROW factors ranged from 20 to 71 percent with a weighted average of 44 percent. For purposes of this update study, the ROW cost for state roads was calculated at 44 percent of the construction cost per lane mile. Additional detail is provided in Appendix B, Table B-2 (Item b).

Construction

The construction cost for state roads was based on a review of local and statewide projects. A review of recent construction cost data for Sarasota County identified two capacity-expansion improvements averaging approximately $4.18 million per lane mile, as shown in Appendix B, Table B-4.

- US 301 from Wood Street to Myrtle Avenue
- SR 45A (US 41/Venice Bypass) from Gulf Coast Boulevard to Bird Bay Drive West

In addition to local improvements, recent bids from multiple communities throughout the state were also reviewed. This review included approximately 415 lane miles of urban-design roadway improvements from 34 counties and calculated and average cost of $3.20 million per lane mile. Appendix B, Table B-4 provides additional detail on the projects reviewed.

Based on this review, a state roadway cost of **$3.20 million** per lane mile was used in the transportation impact fee calculation for state roads with urban-design characteristics. This cost reflects a blending of the local and statewide data to increase the sample size. It should be noted that future improvements in Sarasota County are expected to be of urban-design, as indicated in the Long Range Transportation Plan.

Table 2
Cost per Lane Mile for State Roads

Cost Phase	Urban Design
Design[(1)]	$352,000
Right-of-Way[(2)]	$1,408,000
Construction[(3)]	$3,200,000
CEI[(4)]	$352,000
Total Cost	**$5,312,000**

1) Design is estimated at 11% of construction
2) ROW is estimated at 44% on construction
3) Source: Appendix B, Table B-4
4) CEI is estimated at 11% on construction

All figures rounded to nearest $1,000

Summary of Costs (Blended Cost Analysis)

The weighted average cost per lane mile for city/county and state roads is presented in Table 3. The resulting weighted average cost of approximately $3.84 million per lane mile was utilized as the roadway cost input in the calculation of the impact fee schedule. The weighted average cost per lane mile includes city/county and state roads and is based on weighting the lane miles of roadway improvements in the Sarasota/Manatee 2040 LRTP.

Table 3
Estimated Cost per Lane Mile for City/County and State Roadway Projects

Cost Type	City/County Roads[1]	State Roads[2]	City/County and State Roads[3]
Design	$220,000	$352,000	$244,000
Right-of-Way	$902,000	$1,408,000	$993,000
Construction	$2,200,000	$3,200,000	$2,380,000
CEI	$198,000	$352,000	$226,000
Total	**$3,520,000**	**$5,312,000**	**$3,843,000**
Lane Mile Distribution[4]	82%	18%	100%

1) Source: Table 1
2) Source: Table 2
3) Lane mile distribution (Item 4) multiplied by the design, ROW, construction, and CEI phase costs by jurisdiction to develop a weighted average cost per lane mile
4) Source: Appendix B, Table B-7 (Items a and b)

Person-Miles of Capacity Added per Lane Mile (Roadways)

An additional component of the multi-modal transportation impact fee equation is the capacity added per lane mile (also known as the maximum service volume added per mile) of roadway constructed. To calculate the vehicle miles of capacity (VMC) per lane mile of constructed future roadway, an analysis of the Sarasota/Manatee 2040 Long Range Transportation Plan was conducted to review improvements that will be built in Sarasota County in the future. As shown in Table 4, the VMC was then converted to person-miles of capacity (PMC) using the person-trip factor (1.40 persons per vehicle) previously referenced.

Table 4
Weighted Average Capacity Added per Lane Mile

Source	Lane Mile Added[1]	Vehicle-Miles of Capacity Added[1]	VMC Added per Lane Mile[2]	Vehicle-Trip to Person-Trip Factor[3]	PMC Added per Lane Mile[4]
City/County Roads	206.94	1,668,748	8,064	1.40	11,290
State Roads	45.76	530,224	11,587	1.40	16,222
Total	**252.70**	**2,198,972**			
Weighted Average VMC/PMC Added per Lane Mile[5]			**8,700**	**1.40**	**12,180**

1) Source: Appendix B, Table B-7
2) Vehicle-miles of capacity added divided by lane mile added (Item 1)
3) Source: Based on a review of the District 1 Regional Planning Model
4) VMC added per lane mile (Item 3) multiplied by the vehicle-trip to person-trip factor (Item 4)
5) Total vehicle miles of capacity added for city/county and state roads (Item 2) divided by the total lane miles added (Item 1)

Cost per Person-Mile of Capacity Added (Roadways)

The multi-modal transportation cost per unit of development is assessed based on the cost per person-mile of capacity. As shown in Tables 3 and 4, the cost and capacity for roadways in the City of Sarasota have been calculated based on typical roadway improvements. As shown in Table 5, the cost per PMC for travel within Sarasota is $315.

The cost per PMC figure is used in the multi-modal transportation impact fee calculation to determine the total impact cost per unit of development based on the person-miles of travel consumed. For each person-mile of travel that is added to the road system, approximately $316 of transportation capacity is consumed.

Table 5
Cost per Person-Mile of Capacity Added (Roadways)

Source	Cost per Lane Mile[(1)]	Average PMC Added per Lane Mile[(2)]	Cost per PMC[(3)]
City/County Roads	$3,520,000	11,290	$311.78
State Roads	$5,312,000	16,222	$327.46
Weighted Average	**$3,843,000**	**12,180**	**$315.52**

1) Source: Table 3
2) Source: Table 4
3) Cost per lane mile (Item 1) divided by PMC added per lane mile (Item 2)

Bicycle and Pedestrian Facility Costs

Bicycle and pedestrian facilities provide for relatively small quantities of the total vehicle-miles of travel due to the difference in the average distance traveled by a car trip versus pedestrian/bicycle trips. Because of their relatively small role in the urban travel scheme, they do not have a significant effect on evaluating the costs of providing for mobility. However, bike and pedestrian facilities provide an important alternative source of travel. For safety and mobility reasons, they are a standard part of the urban street and sometimes included in rural roadways. They typically are an integral part of the standard roadway cross-sections for which costs are estimated. Thus, the cost of these facilities on major roads are included in the multi-modal transportation impact fee. The multi-modal transportation impact fee provides funding for only those bike and pedestrian facilities associated with roadways on the classified road system (excluding local/neighborhood roads), and allows for

facilities to be added to existing classified roadways or included in the construction of a new classified roadway or lane addition improvement.

Transit Capital Cost per Person-Mile of Travel

A model for transit service and cost was developed to establish both the capital cost per person-mile of capacity and the system operating characteristics in terms of system coverage, hours of service, and headways. The model developed for the City of Sarasota was based on information from Sarasota County Area Transit (SCAT). Components of the transit capital cost include:

- Vehicle acquisition tied to new routes
- Bus stops, shelters, and benches
- Cost of road network used by transit vehicles

Transit capital costs are computed as the cost of capital features needed to expand the transit system, as follows:

Transit Capital Cost = Bus Infrastructure Cost + Road Capacity Cost

Taking into account the infrastructure costs and the decline in potential vehicle-capacity that comes with adding transit, it was determined that the difference between constructing a lane mile of roadway (for cars only) versus constructing a roadway with transit is not significant. The roadway with transit cost per PMC is within four (4) percent of the cost to construct a road without transit amenities. In addition, although the marginal cost of providing transit capital improvements (buses, shelters, etc.), without adding roadway capacity, in relation to transit utilization tends to be high in most communities, as transit utilization increases with additional investment and improved/more frequent service, the cost per PMC approaches to that of adding roadway capacity. Therefore, for the multi-modal transportation impact fee calculation, the previously calculated roadway cost per VMC/PMC is representative of the cost to provide transportation capacity for all modes of travel. Additional information regarding the transit capital cost calculation is included in Appendix B, Tables B-8 and B-9.

Credit Component

The credit component of the multi-modal transportation impact fee accounts for the existing City, County, and State funding sources that are being expended on transportation (roads, bicycle/pedestrian, transit) capacity expansion (excluding impact/mobility fee funds). This section summarizes the calculations utilized in the credit for non-impact fee contributions. Additional details are provided in Appendix C.

Capital Improvement Credit

The present value of the portion of non-impact fee funding generated by new development over a 25-year period that is expected to be expended on capacity expansion projects was credited against the cost of the system consumed by travel associated with new development. In order to provide a connection to the demand component, which is measured in terms of travel, the non-impact fee dollars are converted to a gas tax equivalency.

City

As show in Table 6, the City of Sarasota spends the equivalent of 3.8 pennies on transportation capacity-expansion projects funded with non-impact fee revenues (sales tax, Federal/State grants, fuel tax, utility fees).

County

As show in Table 6, Sarasota County spends the equivalent of 7.1 pennies on transportation capacity-expansion projects funded with non-impact fee revenues (sales tax, Federal/State grants, fuel tax). In addition, the County uses an equivalent of 10.5 pennies for debt service associated with roadway capacity improvements.

State

As show in Table 6, State expenditures on state roads were reviewed, and a credit for the capacity-expansion portion attributable to state projects was estimated (excluding expenditures on limited access facilities). The review, which included 10 years of historical expenditures, as well as 5 years of planned expenditures, indicated that FDOT spending generates an equivalent gas tax credit of 14.2 pennies annually. The use of a 15-year period for developing the State credit results in a reasonably stable credit for the City of

Sarasota/Sarasota County, since it accounts for the volatility in FDOT spending over short time periods.

In summary, the City of Sarasota contributes approximately 3.8 equivalent pennies of gas tax and Sarasota County contributes approximately 17.6 equivalent pennies of gas tax toward transportation capacity expansion projects, while FDOT is spending an average of 14.2 equivalent pennies for state transportation projects in the Sarasota County. Therefore, a total of 35.6 pennies of credit were included in the multi-modal impact fee equation to recognize the future capital revenue that is expected to be generated by new development from all non-impact fee revenues, as shown in Table 6.

Table 6
Equivalent Pennies of Gas Tax Revenue

Credit	Equivalent Pennies per Gallon
City Revenues[1]	$0.038
County Revenues[2]	$0.071
County Debt Service[3]	$0.105
State Revenues[4]	$0.142
Total	**$0.356**

1) Source: Appendix C, Table C-2
2) Source: Appendix C, Table C-3
3) Source: Appendix C, Table C-4
4) Source: Appendix C, Table C-5

Present Worth Variables

Facility Life

The facility life used in the impact fee analysis is 25 years, which represents the reasonable life of a transportation structure.

Interest Rate

This is the discount rate at which gasoline tax revenues might be bonded. It is used to compute the present value of the gasoline taxes generated by new development. The discount rate of 3.5 percent was used in the multi-modal transportation impact fee calculation based on the interest rate provided by the bond counsel of the City of Sarasota.

Fuel Efficiency

The fuel efficiency (i.e., the average miles traveled per gallon of fuel consumed) of the fleet of motor vehicles was estimated using the quantity of gasoline consumed by travel associated with a particular land use.

Appendix C, Table C-16 documents the calculation of the fuel efficiency value based on the following equation, where "VMT" is vehicle miles of travel and "MPG" is fuel efficiency in terms of miles per gallon.

$$Fuel\ Efficiency = \sum VMT_{Roadway\ Type} \div \sum \left(\frac{VMT_{Vehicle\ Type}}{MPG_{Vehicle\ Type}} \right)_{Roadway\ Type}$$

The methodology uses non-interstate VMT and average fuel efficiency data for passenger vehicles (i.e., passenger cars and other 2-axle, 4-tire vehicles, such as vans, pickups, and SUVs) and large trucks (i.e., single-unit, 2-axle, 6-tire or more trucks and combination trucks) to calculate the total gallons of fuel used by each of these vehicle types.

The combined total VMT for the vehicle types is then divided by the combined total gallons of fuel consumed to calculate, in effect, a "weighted" fuel efficiency value that appropriately accounts for the existing fleet mix of traffic on non-interstate roadways. The VMT and average fuel efficiency data were obtained from the most recent *Highway Statistics 2014* (Federal Highway Administration). Based on the calculation completed in Appendix C, Table C-16, the fuel efficiency rate to be used in the updated impact fee equation is 18.18 miles per gallon.

Effective Days per Year

An effective 365 days per year of operation was assumed for all land uses in the proposed fee. However, this will not be the case for all land uses since some uses operate only on weekdays (e.g., office buildings) and/or only seasonally (e.g., schools). The use of 365 days per year, therefore, provides a conservative estimate, ensuring that non-impact fee contributions are adequately credited against the fee.

Calculated Multi-Modal Transportation Impact Fee Schedule

The multi-modal transportation impact fee calculations for each land use are included in Appendix D, which includes the major land use categories and the multi-modal transportation impact fees for the individual land uses contained in each of the major categories. For each land use, Appendix D illustrates the following:

- Demand component variables (trip rate, trip length, percent new trips, and person-trip factor);
- Total impact cost;
- Annual revenue credit;
- Present value of the credit;
- Net multi-modal fee;
- Current City of Sarasota multi-modal transportation impact fee; and
- Percent difference between the calculated fee and the current impact fee.

It should be noted that the net multi-modal transportation impact fee illustrated in Appendix D is not necessarily a recommended fee, but instead represents a technically documented multi-modal fee per unit of land use that could be charged in the City of Sarasota.

For clarification purposes, it may be useful to walk through the calculation of the impact fee for one of the land use categories. In the following example, the net multi-modal transportation impact fee rate is calculated for the single-family residential land use category (ITE LUC 210) using information from the calculated impact fee schedule included in Appendix D, Table D-1. For each land use category, the following equations are utilized to calculate the net multi-modal fee:

Net Multi-Modal Impact Fee = Total Multi-Modal Cost – Capital Improvement Credit

Where:

Total Mobility Cost = ([Trip Rate x Assessable Trip Length x % New Trips] / 2) x (1 – Interstate/Toll Facility Adjustment Factor) x (Person-Trip Factor) * (Cost per Person-Mile of Capacity)

Capital Improvement Credit = Present Value (Annual Gas Tax), given a 3.5% interest rate & a 25-year facility life

Annual Gas Tax = ([Trip Rate x Total Trip Length x % New Trips] / 2) x (Effective Days per Year x $/Gallon to Capital) / Fuel Efficiency

Each of the inputs has been discussed previously in this document; however, for purposes of this example, brief definitions for each input are provided in the following paragraphs, along with the actual inputs used in the calculation of the fee for the single-family detached residential (2,000 sq ft) land use category:

- *Trip Rate* = the average daily trip generation rate, in vehicle-trips/day (7.81)
- *Assessable Trip Length* = the actual average trip length for the category, in vehicle-miles (6.62)
- *Total Trip Length* = the assessable trip length plus an adjustment factor of half a mile, which is added to the trip length to account for the fact that gas taxes are collected for travel on all roads including local roads (6.62 + 0.50 = 7.12)
- *% New Trips* = adjustment factor to account for trips that are already on the roadway (100%)
- *Divide by 2* = the total daily miles of travel generated by a particular category (i.e., rate*length*% new trips) is divided by two to prevent the double-counting of travel generated among land use codes since every trip has an origin and a destination
- *Person-Trip Factor* = Converts vehicle-miles of travel to person-miles of travel (1.40)
- *Interstate/Toll Facility Adjustment Factor* = adjustment factor to account for the travel demand occurring on interstate highways and/or toll facilities (7.0%)
- *Cost per Person-Mile of Capacity* = unit of person-miles of capacity consumed per unit of development ($315.52)
- *Effective Days per Year* = 365 days
- *$/Gallon to Capital* = the amount of non-impact fee revenue per gallon of fuel that is used for capital improvements, in $/gallon ($0.356)
- *Fuel Efficiency* = average fuel efficiency of vehicles, in vehicle-miles/gallon (18.18)
- *Present Value* = calculation of the present value of a uniform series of cash flows, gas tax payments in this case, given an interest rate, “i,” and a number of periods, “n;” for 3.5% interest and a 25-year facility life, the uniform series present worth factor is 16.4815

Multi-Modal Transportation Impact Fee Calculation

Using these inputs, a net multi-modal fee can be calculated for the single-family residential detached land use category:

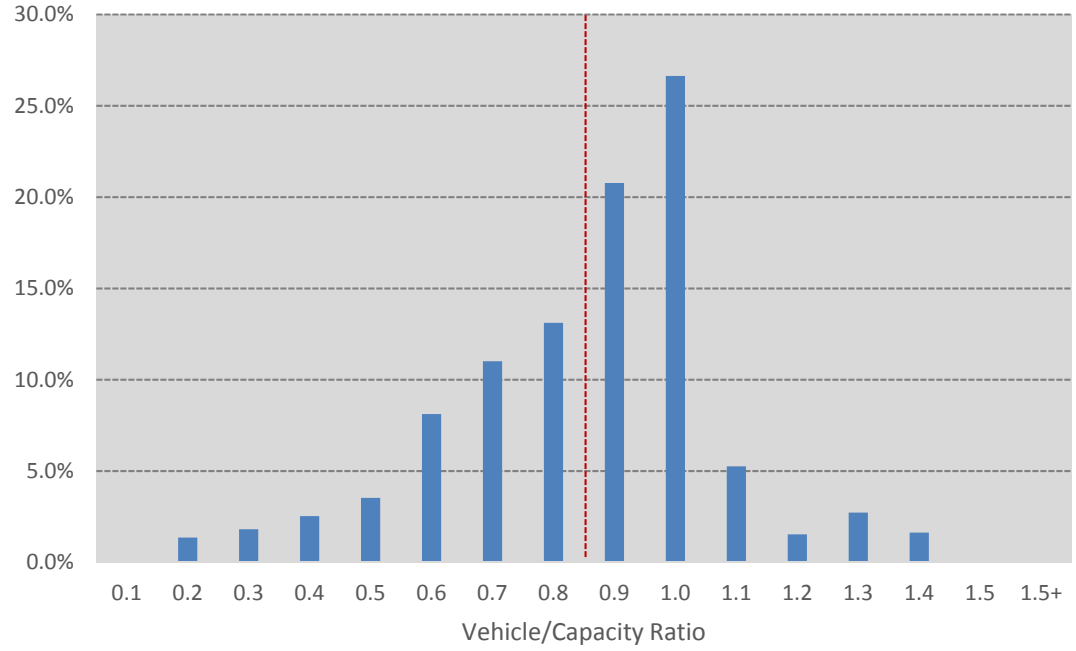
Total Multi-Modal Cost = ([7.81 * 6.62 * 1.0] /2) * (1 – 0.07) * 1.40 * ($315.52) = $10,620
Annual Gas Tax = ([7.81 * 7.12 * 1.0] /2) * 365 * ($0.356 /18.18) = $199
Capital Improvement Credit = $199 * 16.4815 = $3,280
Net Multi-Modal Fee = $10,620 - $3,280 = **$7,340 per dwelling unit**

Targeted Incentives

In addition to documenting the full multi-modal transportation impact fee levels citywide and within the downtown district, this study also provides an approach to discount select land uses and geographic areas based on the City's economic development and growth management goals. In terms of discounting the fees, it is important to note the following:

- Consistent with the methodology used by many Florida jurisdictions, multi-modal transportation impact fee calculations are based on the adopted LOS standard, which tends to be lower than the current achieved LOS countywide. **The current level of service standard is a minimum standard to be achieved for individual roadways and does not reflect the overall achieved level of service of the existing system**. In addition, while adopted LOS standards apply to each individual road's performance at peak traffic, multi-modal fee calculations apply this standard on a daily basis countywide, resulting in a conservative fee. In other words, under the current methodology, even with the full impact fee, unless the City uses other revenue sources, the current achieved LOS for the system will deteriorate and more congestion will be experienced. As such, the standard methodology used for multi-modal transportation impact fees results in fee levels that slow down the degradation of the system, but does not generate sufficient revenues to maintain the existing conditions when they are better than the adopted LOS standard. As shown in Figure 1, the City of Sarasota's current achieved system-wide level of service, measured in terms of the ratio of traffic volume to available capacity is better at 0.85 than the adopted LOS standard for individual roadways of 1.00.

Figure 1
City of Sarasota 2015 Volume/Capacity Ratio Distribution



Source: City of Sarasota 2015 traffic counts

- Florida impact fee case law and legislation require that the fee be proportional to the impact and that the fee payer receive the benefit. Given this, although local governments have been able to discount the fees for all land use categories equally, there are some concerns when only a select few land uses or subareas receive a discount. More specifically, this approach creates concerns because those who pay their full share or a larger portion of their share than incentivized uses/areas do not necessarily receive an equivalent benefit. There is also a concern that this discount will not allow the community to achieve the LOS that many land use are being charged for. To address this concern, the following approach has been used in Florida:

    - Discounting land uses/geographic areas that are de-minimis in terms of impact fee revenue generation. For example, development activity within Community Redevelopment Areas (CRAs) tends to be limited. As long as revenue generation is below a 5-percent threshold, the fees for these land uses are considered to have a de-minimis impact on the revenues and can be discounted. This approach ensures that the discounts do not significantly affect funding ability and that the level of service that is being charged for can be achieved even with these discounts.

- In the case of land uses that generate more than 5 percent of the revenues, an acceptable practice is for the City to "buy down" the fees using tax or other non-impact fee revenues. This type of buy-down needs to be supported by Comprehensive Plan language in terms of the Community goals and initiatives related to economic development, growth management, sustainability, etc.

- Finally, this study also includes an economic growth strategy approach to impact fee calculations, which takes into account the existing development's ability to absorb new growth and calculates the levels of possible policy discounts without reducing the level of service used in the calculation of the multimodal transportation impact fees.

  As presented in Appendix C, in addition to impact fees, other revenue sources such as fuel tax, sales tax, and grants are also being used to fund the countywide transportation system. The economic growth strategy calculations are based on the historical and future estimated fuel and sales tax funding toward countywide transportation capital capacity projects as well as a portion of funding from the State. The calculations exclude any funding dedicated toward paying the debt service since the dollar amount cannot be available for absorbing the future growth. These future contributions for non-debt payments amount to approximately $35 million per year. If other revenue sources become available, these calculations will need to be revised.

  Based on the socio-economic data and projections obtained from the District 1 Regional Planning Model, an average annual growth rate of 0.8 percent was calculated for the City of Sarasota between 2016 and 2040. This growth projection is slightly higher than estimates published by the Bureau of Business and Economic Research and is used in the calculations associated with the economic growth strategy.

  Given this growth rate, and the amount of non-impact fee investment, the City is able to reduce fees for select land uses or in targeted areas without impacting the LOS used in the calculation of multi-modal fees. At this time, the City is considering the following incentives:

- City-wide, 100 percent discount for very low income, low income, attainable housing and day care land uses, eliminating the multi-modal impact fee for these land uses.

  The Housing Element of the City of Sarasota's Comprehensive Plan outlines the City's parameters for defining very low income, low income, and attainable housing as follows:

  Very Low Income: Having a household income at or below 50% of the Area Median Income (AMI).

  Low Income: Having a household income at or below 80% of the AMI.

  Attainable housing: Affordable to households earning from sixty (60.0) percent to one-hundred-twenty (120.0) percent of the AMI in the Sarasota-Bradenton MSA. The attainable housing income range shall be updated annually by the City based on U.S. Housing and Urban Development Department (HUD) data and existing mortgage financing conditions. This definition shall be used in conjunction with the City's attainable housing policies. (Amended by Ordinance No. 16-5172).

- To encourage development within the Newtown CRA and North Trail geographic boundaries (shown on Map 1), a 50-percent discount for residential land uses (except Single Family 3,500 sf and greater), resulting in 50 percent of the full calculated multi-modal impact fee rates.

Table 7 presents the current adopted fee, full calculated fee, and potential incentives for select land uses and areas, which could be revised based on direction from the City Commission.

Map 1
City of Sarasota Economic Growth Areas

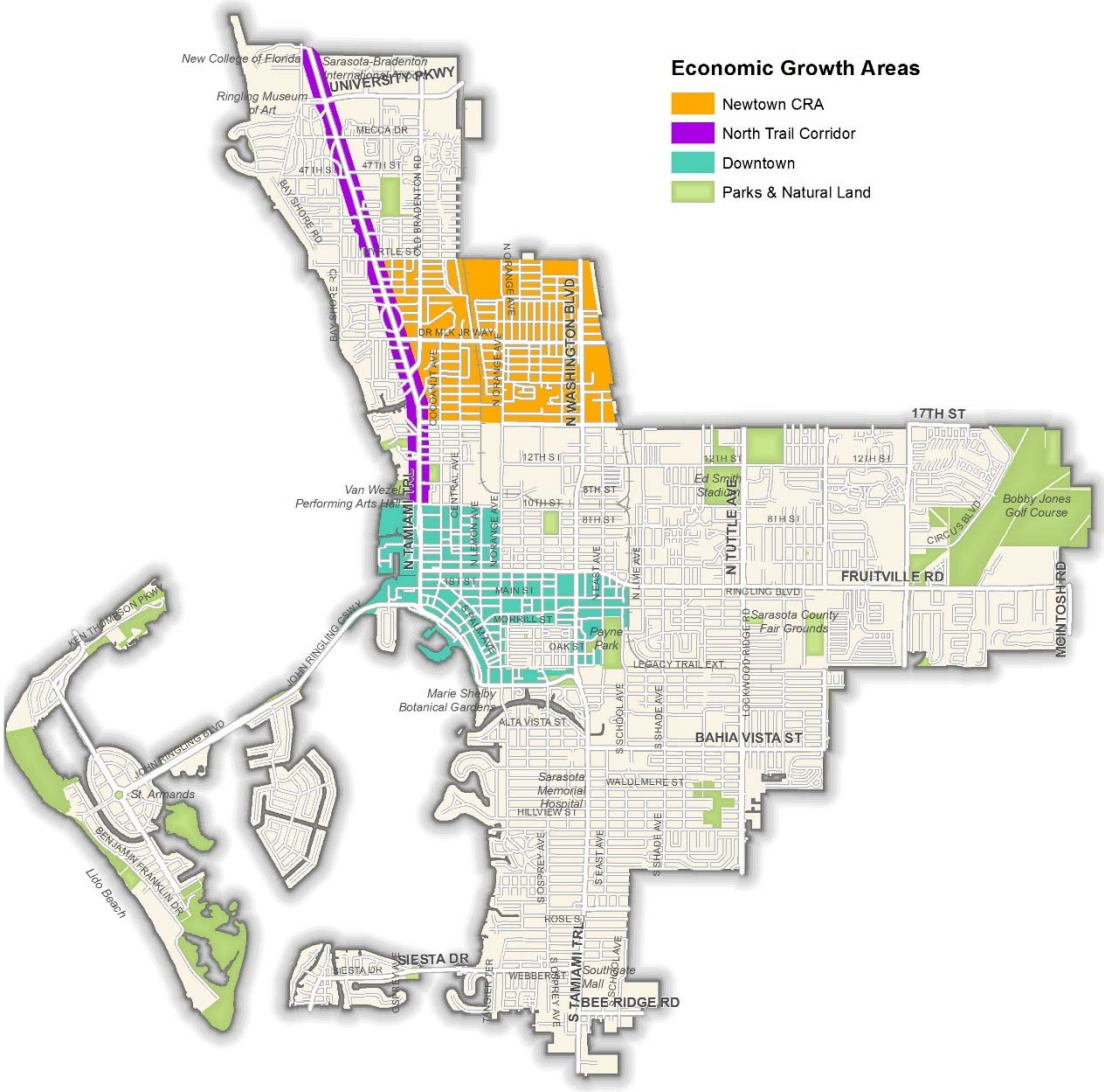


Table 7
Multi-Modal Transportation Impact Fee Schedule

ITE LUC	Land Use	Unit	Current Adopted Rate[1]	Full Calculated Rate[2]	City-Wide Rate[3]	Downtown		Newtown CRA[6]	North Trail[7]
						<10,000 sf[4]	>=10,000 sf[5]		
	RESIDENTIAL:								
210	Single Family (Detached) - Qualifies Under Very Low Income, Low Income, and/or Attainable Housing Criteria	du	$2,887	**	$0	$0		$0	$0
	Single Family (Detached) - Less than 1,500 sf	du	$2,887	$5,423	$5,423	$5,423		$2,712	$2,712
	Single Family (Detached) - 1,500 to 3,499 sf	du	$2,887	$7,340	$7,340	$7,340		$3,670	$3,670
	Single Family (Detached) - 3,500 sf and greater	du	$2,887	$8,161	$8,161	$8,161		$8,161*	$8,161*
220	Multi-Family (Apartment) - Qualifies Under Very Low Income, Low Income, and/or Attainable Housing Criteria	du	$1,861	**	$0	$0		$0	$0
	Multi-Family (Apartment) - Less than 800 sf	du	$1,861	$3,375	$3,375	$3,375		$1,688	$1,688
	Multi-Family (Apartment) - 800 sf or and greater	du	$1,861	$4,738	$4,738	$4,738		$2,369	$2,369
230	Residential Condo/Townhouse - Qualifies Under Very Low Income, Low Income, and/or Attainable Housing Criteria	du	$1,628	**	$0	$0		$0	$0
	Residential Condo/Townhouse - Less than 1,000 sf	du	$1,628	$3,574	$3,574	$3,574		$1,787	$1,787
	Residential Condo/Townhouse - 1,000 to 1,399 sf	du	$1,628	$4,139	$4,139	$4,139		$2,070	$2,070
	Residential Condo/Townhouse - 1,400 sf and greater	du	$1,628	$5,220	$5,220	$5,220		$2,610	$2,610
240	Mobile Home Park/RV Park	du	$1,059	$2,687	$2,687	$2,687		$1,344	$1,344
251	Retirement Community/Age-Restricted Single-Family	du	$576	$2,385	$2,385	$2,385		$1,193	$1,193
253	Assisted Living Facility (ALF)/Congregate Care Facility	du	$271	$679	$679	$679		$340	$340
	LODGING:								
310/320	Hotel/Motel	room	$1,026	$2,629	$2,629	$2,629		$2,629	$2,629
	RECREATION:								
420	Marina	berth	$487	$2,501	$2,501	$2,501		$2,501	$2,501
430	Golf Course	acres	$830	$4,273	$4,273	$4,273		$4,273	$4,273
443	Movie Theater	1,000 sf	$3,055	$7,802	$7,802	$7,802		$7,802	$7,802
492	Health/Fitness/Athletic Club	1,000 sf	n/a	$22,443	$22,443	$22,443		$22,443	$22,443
495	Recreational/Community Center	1,000 sf	$3,769	$18,281	$18,281	$18,281		$18,281	$18,281
	INSTITUTIONS:								
520/522	Elementary/Middle School (Private)	1,000 sf	$2,292	$6,622	$6,622	$6,622		$6,622	$6,622
530	High School (Private)	1,000 sf	$2,039	$6,966	$6,966	$6,966		$6,966	$6,966
540	University/Junior College (7,500 or fewer students) (Private)	student	$661	$1,690	$1,690	$1,690		$1,690	$1,690
540	University/Junior College (more than 7,500 students) (Private)	student	$496	$1,276	$1,276	$1,276		$1,276	$1,276
560	Church	1,000 sf	$1,742	$4,442	$4,442	$4,442		$4,442	$4,442
565	Day Care	1,000 sf	$3,955	$14,067	$0	$0		$0	$0
610	Hospital	1,000 sf	$3,769	$9,573	$9,573	$9,573		$9,573	$9,573
620	Nursing Home	1,000 sf	$932	$2,362	$2,362	$2,362		$2,362	$2,362
	OFFICE:								
710	General Office 6,000 sf or less	1,000 sf	$2,134	$7,346	$7,346	$7,346		$7,346	$7,346
710	General Office 6,001-50,000 sf	1,000 sf	$3,004	$10,338	$10,338	$10,338		$10,338	$10,338
710	General Office 50,001-100,000 sf	1,000 sf	$3,004	$8,757	$8,757	$8,757		$8,757	$8,757
710	General Office 100,001-200,000 sf	1,000 sf	$2,918	$7,410	$7,410	$7,410		$7,410	$7,410
710	General Office 200,001-400,000 sf	1,000 sf	$2,471	$6,274	$6,274	$6,274		$6,274	$6,274
710	General Office greater than 400,000 sf	1,000 sf	$2,242	$5,690	$5,690	$5,690		$5,690	$5,690
720	Medical Office (0-10,000 sf)	1,000 sf	$3,004	$16,613	$16,613	$16,613		$16,613	$16,613
720	Medical Office (>10,000 sf)	1,000 sf	$3,004	$24,217	$24,217	$24,217		$24,217	$24,217
770	Business Park (Flex Space)	1,000 sf	$3,004	$8,535	$8,535	$8,535		$8,535	$8,535
	RETAIL:								
812	Building Materials/Lumber Store	1,000 sf	$6,612	$29,705	$29,705	$29,705		$29,705	$29,705
813	Discount Superstore, Free-Standing	1,000 sf	n/a	$15,105	$15,105	$15,105		$15,105	$15,105
814	Variety Store	1,000 sf	n/a	$8,763	$8,763	$3,908	$8,763	$8,763	$8,763
815	Discount Store, Free-Standing	1,000 sf	n/a	$7,846	$7,846	$7,846		$7,846	$7,846
816	Hardware/Paint	1,000 sf	$2,752	$7,027	$7,027	$3,129	$7,027	$7,027	$7,027
820	Retail 6,000 sfgla or less	1,000 sfgla	$1,762	$4,552	$4,552	$2,918	$4,552	$4,552	$4,552
820	Retail/Shopping Center 6,001-50,000 sfgla	1,000 sfgla	$4,632	$11,845	$11,845	$11,845		$11,845	$11,845
820	Retail/Shopping Center greater than 50,000 sfgla	1,000 sfgla	$4,234	$10,778	$10,778	$10,778		$10,778	$10,778
841	New/Used Auto Sales	1,000 sf	$2,685	$13,642	$13,642	$13,642		$13,642	$13,642
843	Automobile Parts Store	1,000 sf	n/a	$31,527	$31,527	$31,527		$31,527	$31,527
848	Tire Store	1,000 sf	$3,527	$8,963	$8,963	$8,963		$8,963	$8,963
850	Supermarket	1,000 sf	$5,659	$15,933	$15,933	$15,933		$15,933	$15,933
854	Discount Supermarket	1,000 sf	n/a	$26,995	$26,995	$26,995		$26,995	$26,995
857	Discount Club	1,000 sf	n/a	$12,415	$12,415	$12,415		$12,415	$12,415
862	Home Improvement Superstore	1,000 sf	$3,580	$9,141	$9,141	$9,141		$9,141	$9,141
880/881	Pharmacy/Drug Store with and without Drive-Thru	1,000 sf	$3,308	$8,455	$8,455	$6,607	$8,455	$8,455	$8,455
890	Furniture Store	1,000 sf	$741	$2,363	$2,363	$2,363		$2,363	$2,363
912	Bank/Savings w/Drive-In	1,000 sf	$6,091	$24,263	$24,263	$24,263		$24,263	$24,263
931	Sit-Down Restaurant	1,000 sf	$6,257	$30,212	$30,212	$9,810	$30,212	$30,212	$30,212
932	High-Turnover Restaurant	1,000 sf	$6,257	$33,578	$33,578	$11,829	$33,578	$33,578	$33,578
934	Fast Food Restaurant w/Drive-Thru	1,000 sf	$13,621	$80,282	$80,282	$80,282		$80,282	$80,282
941	Quick Lube	bays	$5,659	$14,427	$14,427	$14,427		$14,427	$14,427
942	Automobile Repair Shop	1,000 sf	$2,685	$10,164	$10,164	$10,164		$10,164	$10,164
945	Gasoline/Service Station/Conv. Mart; 0 to 6 vfp	fuel pos.	$1,958	$10,732	$10,732	$10,732		$10,732	$10,732
	Gasoline/Service Station/Conv. Mart; 7 to 10 vfp	fuel pos.	$1,958	$9,295	$9,295	$9,295		$9,295	$9,295
	Gasoline/Service Station/Conv. Mart; 11 or more vfp	fuel pos.	$1,958	$8,585	$8,585	$8,585		$8,585	$8,585
947	Self-Service Car Wash	bays	$3,393	$8,665	$8,665	$8,665		$8,665	$8,665
n/a	Convenience/Gasoline/Fast Food Store	1,000 sf	$10,806	$113,038	$113,038	$113,038		$113,038	$113,038
	INDUSTRIAL:								
110/130	General Light Industrial/Industrial Park	1,000 sf	$1,829	$4,657	$4,657	$4,657		$4,657	$4,657
120	General Heavy Industrial	1,000 sf	$395	$999	$999	$999		$999	$999
140	Manufacturing	1,000 sf	$1,000	$2,548	$2,548	$2,548		$2,548	$2,548
150	Warehouse	1,000 sf	$929	$2,377	$2,377	$2,377		$2,377	$2,377
151	Mini-Warehouse/Storage	1,000 sf	$325	$806	$806	$806		$806	$806

1) Source: City of Sarasota Neighborhood and Development Services Department. "n/a" for the current fee reflects that this land use is not specifically detailed in the current fee schedule. Under the current adopted impact fee schedule, these land uses are charged at the rate of a similar land use in the schedule.
2) Source: Appendix D, Table D-1
   **The full rate for very low, low, and attainable housing depends upon which tier the development falls under for single family, multi-family, and condo/townhouse land uses
3) Reflects policy discounts to day care and attainable housing, city-wide
4) Source: Appendix D, Table D-2 for select uses. Reflects trip capture adjustment for select downtown uses less than 10,000 sq ft
5) Reflects the city-wide rate for all uses and select retail uses in downtown greater than 10,000 sq ft
6) Reflects a 50 percent economic growth policy discount recommended for residential land uses in the Newtown CRA
7) Reflects a 50 percent economic growth policy discount recommended for residential land uses in the North Trail (US 41) corridor
   *Within the Newtown CRA and North Trail corridor a discount for the Single Family (3,500 sf and greater) use is not recommended

Multi-Modal Transportation Impact Fee Comparison

Table 8 presents City of Sarasota calculated multi-modal impact fee and a comparison to transportation impact fees in the surrounding and other jurisdictions in Florida.

It should be noted that the differences in fee levels for a given land use can be caused by several factors, including the year of the technical study, adoption percentage, study methodology including variations in costs, credits and travel demand, land use categories included in the fee schedule, etc.

Table 8
Multi-Modal Transportation Impact Fee Comparison

Land Use	Unit[2]	City of Sarasota		Sarasota County[5]			Manatee County[6]	Charlotte County[7]	City of Punta Gorda[8]	City of Lakeland[9]	City of Bradenton[10]
		Calculated[3]	Existing[4]	Full	Mixed-Use	Urban Infill					
Date of Last Update		**2016**	2012	2015	2015	2015	2015	2013	n/a	2015	-
Assessed Portion of Calculated[1]		**100%**	14%-58%	100%	100%	100%	80%	40%	n/a	50%/100%	-
Residential:											
Single Family Detached (2,000 sq ft)	du	**$7,340**	$2,887	$4,734	$3,551	$2,485	$3,560	$2,389	$1,409	$3,916	$2,195
Non-Residential:											
Light Industrial	1,000 sf	**$4,657**	$1,829	$1,984	$1,488	$1,042	$1,846	$1,518	$868	$783	$816
Office (50,000 sq ft)	1,000 sf	**$10,338**	$3,004	$4,327	$3,245	$2,272	$2,921	$2,856	$1,587	$3,619	$1,824
Retail/Shopping Center (125,000 sq ft)	1,000 sf	**$10,778**	$4,234	$9,365	$7,024	$4,917	$7,464	$3,793	$2,439	$6,740	$2,784
Bank w/Drive-In	1,000 sf	**$24,263**	$6,091	$8,598	$6,448	$4,514	$7,464	$8,003	$4,291	$6,740	$4,709
Fast Food w/Drive-Thru	1,000 sf	**$80,282**	$13,621	$17,867	$13,400	$9,380	$7,464	$26,595	$12,472	$36,855	$4,709

1) Fees shown may reflect discounts or increases due to indexing, policy discounts, etc.
2) du = Dwelling unit
3) Source: Appendix D, Table D-1
4) Source: City of Sarasota Neighborhood and Development Services Department
5) Source: Sarasota County Planning & Development Services Department
6) Source: Manatee County Financial Management Department, Impact Fee Administration. SW district is shown.
7) Source: Charlotte County Planning & Zoning Apartment
8) Source: City of Punta Gorda Zoning Department; includes City fee and portion of the County fee
9) Source: City of Lakeland Community Development Department; includes City fee and portion of the County fee; County portion of the fees and the City's fee for industrial land use are adopted at 50% and the City fee for remaining land uses is adopted at 100%.
10) Source: City of Bradenton Planning & Community Development Department. Average of 3 bedroom options

Appendix A
Demand Component Calculations

Demand Component

This appendix presents the detailed calculations for the demand component of the multi-modal transportation impact fee update.

Interstate & Toll Facility Adjustment Factor

Table A-1 presents the interstate and toll facility adjustment factor used in the calculation of the transportation impact fee. This variable is based on data from the District 1 Regional Planning Model, v1.0.3, specifically the 2040 projected vehicle-miles of travel, accounting for roadway improvements included in the 2040 Long Range Transportation Plan. It should be noted that adjustment factor excludes all external-to-external trips, which represent traffic that goes through the City of Sarasota, but does not necessarily stop in the city. This traffic is excluded from the analysis since it does not come from development within the city. The I/T adjustment factor is used to reduce the VMT that the impact fee charges for each land use.

Table A-1
Interstate/Toll Facility Adjustment Factor

Roadway	VMT (2040)	% VMT
Interstate/Toll Facilities	188,922	7.0%
Other Roads	2,525,419	93.0%
Total (All Roads)	**2,714,341**	**100.0%**
Total (Interstate/Toll Roads)	**188,922**	**7.0%**

Source: District 1 Regional Planning Model (D1RPM) v1.0.3
Excludes EE Travel

Single Family Residential Trip Generation Rate Tiering

As part of this study, the single family residential trip generation rate tiering was included to reflect a three-tier analysis to ensure equity by the size of a home. To facilitate this, an analysis was completed on the comparative relationship between housing size and household travel behavior. This analysis utilized data from the 2009 National Household Travel Survey (NHTS) and the 2013 American Housing Survey (AHS) to examine overall trip-making characteristics of households in the United States.

Table A-2 presents the trip characteristics being utilized in the proposed mobility fee schedule for the single family (detached) land use. The 2009 NHTS database was used to assess average annual household vehicle miles of travel (VMT) for various annual household income

levels. In addition, the 2013 AHS database was used to compare median annual family/household incomes with housing unit size. It is important to recognize that the use of the income variable in each of these databases is completed simply to provide a convenient linking mechanism between household VMT from the NHTS and housing unit size from the AHS.

Table A-2
Calculated Single Family Trip Characteristics

Calculated Values Excluding Tiering	Trip Rate	Assessable Trip Length	Daily VMT
Single Family (Detached)	7.81	6.62	51.70

Source: Florida Studies for LUC 210 included in this Appendix

The results of the NHTS and AHS analyses are included in Tables A-3 and A-4. First, the data shown in Table A-3 presents the average income in the U.S. for families/households living in the three housing tiers. As shown, the average income for housing units between 1,500 and 3,499 square feet in size ($66,870) is higher than the overall average income for the U.S. ($54,737). Next, in Table A-4, the annual average household VMT was calculated from the NHTS database for a number of different income levels and ranges related to the resulting AHS income data from Table A-3.

Table A-3
Annual Income by Housing Size

2013 AHS Average Income Data by Housing Size	Annual Income[(1)]
Less than 1,500 sf	$41,503
1,500 to 3,499 sf	$66,870
3,500 sf or more	$79,442
Average of All Houses	$54,737

Source: American Housing Survey for the United States in 2013
1) Weighted average of annual income for each tier

To calculate a corresponding trip rate for the new tiers it was necessary to rely on comparative ratios. As an example, consider the $41,503 annual income category. First, it was determine that the average annual household VMT for this income level is 18,852 miles. This figure was then compared to the overall average annual VMT per household in the U.S. and normalized to the average of the $54,737 (23,020 miles) category to derive a ratio of 0.739 as shown in Table A-4.

Next, the normalized ratio was applied to the daily VMT for the average single family housing unit size (less than 1,500 sf) to generate a daily VMT of 38.21 for the new tier, as shown in Table A-5. This daily VMT figure was then divided by the proposed assessable trip length of 6.62 miles to obtain a typical trip rate of 5.77 trips per day.

Table A-4
NHTS Annual VMT by Income Category

2009 NHTS Travel Data by Annual HH Income	Annual VMT/HH	Days	Daily VMT	Ratio to Mean	Normalized to 1.108
Average of $41,503	18,852	365	51.65	0.819	0.739
Total (All Homes)	23,020	365	63.07	1.000	
Average of $66,870	25,501	365	69.87	1.108	1.000
Average of $79,442	28,349	365	77.67	1.231	1.111

Source: 2009 National Household Travel Survey Database, Federal Highway Administration

Table A-5
Trip Generation Rate by Single Family Land Use Tier

Estimation of Trip Rate by Tier	Trip Rate[1]	Assessable Trip Length[2]	Daily VMT[3]	Ratio to Mean[4]
Single Family (Detached)				
Less than 1,500 sf	**5.77**	6.62	38.21	0.739
1,500 to 3,499 sf	**7.81**	6.62	51.70	1.000
3,500 sf or larger	**8.68**	6.62	57.44	1.111

1) Daily VMT (Item 3) divided by assessable trip length (Item 2) for each tiered single family land use category
2) Source: Table A-2
3) Ratio to the mean (Item 4) divided by total daily VMT for the 1,500 to 3,499 sf tier for each tiered single family land use category
4) Source: Table A-4

Table A-6 illustrates the impact that the incorporation of the trip generation rate tiers for the single family (detached) land use have on the City's calculated mobility fee schedule.

Table A-6
Net Mobility Fee by Single Family Land Use Tier

Impact of Tiering on Fee Schedule	Trip Rate[1]	Assessable Trip Length	Daily VMT	Net Fee[2]
Single Family (Detached)				
Less than 1,500 sf	**5.77**	6.62	38.21	**$5,423**
1,500 to 3,499 sf	**7.81**	6.62	51.70	**$7,340**
3,500 sf or larger	**8.68**	6.62	57.44	**$8,161**

1) Source: Table A-5
2) Source: Appendix D, Table D-1

Multi-Family Residential Trip Generation Rate Tiering

Similar to the single family residential land use, tiers by unit size were developed for the multi-family residential (apartment) land use and the Residential Condominium/Townhouse land use in the City of Sarasota. Tables A-7 through A-16 detail these calculations for both land uses.

Table A-7
Calculated Multi-Family (Apartment) Trip Characteristics

Calculated Values Excluding Tiering	Trip Rate	Assessable Trip Length	Daily VMT
Multi-Family (Apartment)	6.60	5.10	33.66

Source: Florida Studies for LUC 220 included in this Appendix

Table A-8
Annual Income by Housing Size

2013 AHS Average Income Data by Housing Size	Annual Income[(1)]
Less than 800 sf	$31,120
800 sf or more	$58,887
Average of All Houses	$54,737

Source: American Housing Survey for the United States in 2013

1) Weighted average of annual income for each tier

Table A-9
NHTS Annual VMT by Income Category

2009 NHTS Travel Data by Annual HH Income	Annual VMT/HH	Days	Daily VMT	Ratio to Mean	Normalized to 1.026
Average of $31,120	16,833	365	46.12	0.731	0.712
Total (All Homes)	23,020	365	63.07	1.000	
Average of $58,887	23,629	365	64.74	1.026	1.000

Source: 2009 National Household Travel Survey Database, Federal Highway Administration

Table A-10
Trip Generation Rate by Multi-Family (Apartment) Income Level

Estimation of Trip Rate by Tier	Trip Rate[(1)]	Assessable Trip Length[(2)]	Daily VMT[(3)]	Ratio to Mean[(4)]
Multi-Family (Apartment)				
Less than 800 sf	**4.70**	5.10	23.97	0.712
800 sf or larger	**6.60**	5.10	33.66	1.000

1) Daily VMT (Item 3) divided by assessable trip length (Item 2)
2) Source: Table A-7
3) Ratio to the mean (Item 4) divided by total daily VMT for the standard multi-family
4) Source: Table A-9

Table A-11
Net Mobility Fee by Multi-Family (Apartment) Income Level

Impact of Tiering on Fee Schedule	Trip Rate[1]	Assessable Trip Length	Daily VMT	Net Fee[2]
Multi-Family (Apartment)				
Less than 800 sf	**4.70**	5.10	23.97	**$3,375**
800 sf or larger	**6.60**	5.10	33.66	**$4,738**

1) Source: Table A-10
2) Source: Appendix D, Table D-1

Table A-12
Calculated Residential Condo/Townhouse Trip Characteristics

Calculated Values Excluding Tiering	Trip Rate	Assessable Trip Length	Daily VMT
Residential Condominium/Townhouse	5.76	5.10	29.38

Source: Florida Studies for LUC 230 included in this Appendix

Table A-13
Annual Income by Housing Size

2013 AHS Average Income Data by Housing Size	Annual Income[1]
Less than 1,000 sf	$34,631
1,000 to 1,399 sf	$47,771
1,400 sf or more	$69,498
Average of All Houses	$54,737

Source: American Housing Survey for the United States in 2013
1) Weighted average of annual income for each tier

Table A-14
NHTS Annual VMT by Income Category

2009 NHTS Travel Data by Annual HH Income	Annual VMT/HH	Days	Daily VMT	Ratio to Mean	Normalized to 0.889
Average of $34,631	17,658	365	48.38	0.767	0.863
Total (All Homes)	23,020	365	63.07	1.000	
Average of $47,771	20,454	365	56.04	0.889	1.000
Average of $69,498	25,855	365	70.84	1.123	1.263

Source: 2009 National Household Travel Survey Database, Federal Highway Administration

Table A-15
Trip Generation Rate by Residential Condo/Townhouse Income Level

Estimation of Trip Rate by Tier	Trip Rate[1]	Assessable Trip Length[2]	Daily VMT[3]	Ratio to Mean[4]
Residential Condominium/Townhouse				
Less than 1,000 sf	**4.97**	5.10	25.35	0.863
1,000 to 1,399 sf	**5.76**	5.10	29.38	1.000
1,400 sf or larger	**7.28**	5.10	37.11	1.263

1) Daily VMT (Item 3) divided by assessable trip length (Item 2)
2) Source: Table A-12
3) Ratio to the mean (Item 4) divided by total daily VMT for the standard multi-family
4) Source: Table A-14

Table A-16
Net Mobility Fee by Residential Condo/Townhouse Income Level

Impact of Tiering on Fee Schedule	Trip Rate[1]	Assessable Trip Length	Daily VMT	Net Fee[2]
Residential Condominium/Townhouse				
Less than 1,000 sf	**4.97**	5.10	25.35	**$3,574**
1,000 to 1,399 sf	**5.76**	5.10	29.38	**$4,139**
1,400 sf or larger	**7.28**	5.10	37.11	**$5,220**

1) Source: Table A-15
2) Source: Appendix D, Table D-1

Demand Variable Changes

Since the last demand component update in 2006 the trip generation rate (TGR), trip length (TL), and percent new trips (PNT) has changed for several land uses. Each land use was updated based on additional data included in the Florida Studies Database and the use of the ITE 9th Edition Trip Generation Reference Report. Table A-17 presents the percent changes in gross VMT (the product of TGR, TL, and PNT, divided by 2) for each land use where the demand component was updated.

Table A-17
Demand Variable Changes

ITE LUC	Land Use	Unit	Trip Generation Rate			Trip Length			Percent New Trips			Gross VMT			Explanation for VMT Change
			2012	2016	%	2012	2016	%	2012	2016	%	2012	2016	%	
	RESIDENTIAL:														
210	Single Family, less than 1,500 sf	du	7.81	5.77	-26%	6.62	6.62	0%	100%	100%	0%	25.85	19.10	-26%	New tier with TGR reduction
	Single Family, 1,500 to 3,499 sf	du	7.81	7.81	0%	6.62	6.62	0%	100%	100%	0%	25.85	25.85	0%	No change
	Single Family, 3,500 sf or more	du	7.81	8.68	11%	6.62	6.62	0%	100%	100%	0%	25.85	28.73	11%	New tier with TGR change
220	Multi-Family, less than 1,000 sf	du	6.60	4.70	-29%	5.10	5.10	0%	100%	100%	0%	16.83	11.99	-29%	No change
	Multi-Family, 1,000 sf or more	du	6.60	6.60	0%	5.10	5.10	0%	100%	100%	0%	16.83	16.83	0%	New tier with TGR change
230	Residential Condo/Townhouse, less than 1,500 sf	du	5.76	4.97	-14%	5.10	5.10	0%	100%	100%	0%	14.69	12.67	-14%	New tier with TGR reduction
	Residential Condo/Townhouse, 1,500 to 3,499 sf	du	5.76	5.76	0%	5.10	5.10	0%	100%	100%	0%	14.69	14.69	0%	No change
	Residential Condo/Townhouse, 3,500 sf or more	du	5.76	7.28	26%	5.10	5.10	0%	100%	100%	0%	14.69	18.56	26%	New tier with TGR reduction
240	Mobile Home Park/RV Park	du	4.17	4.17	0%	4.60	4.60	0%	100%	100%	0%	9.59	9.59	0%	No change
251	Retirement Community/Age-Restricted Single-Family	du	3.12	3.12	0%	5.42	5.42	0%	100%	100%	0%	8.46	8.46	0%	No change
253	Assisted Living Facility (ALF)/Congregate Care Facility	du	2.25	2.25	0%	3.08	3.08	0%	72%	72%	0%	2.49	2.49	0%	No change
	LODGING:														
310/320	Hotel/Motel	room	5.63	5.63	0%	4.34	4.34	0%	77%	77%	0%	9.41	9.41	0%	No change
	RECREATION:														
420	Marina	berth	2.96	2.96	0%	6.62	6.62	0%	90%	90%	0%	8.82	8.82	0%	No change
430	Golf Course	acre	5.04	5.04	0%	6.62	6.62	0%	90%	90%	0%	15.01	15.01	0%	No change
443	Movie Theater	1,000 sf	30.00	30.00	0%	2.22	2.22	0%	88%	88%	0%	29.30	29.30	0%	No change
492	Health/Fitness/Athletic Club	1,000 sf	-	32.93	-	-	5.15	-	-	94%	-	-	79.71	-	New land use
495	Recreational/Community Center	1,000 sf	33.82	33.82	0%	4.50	4.30	-4%	90%	90%	0%	68.49	65.44	-4%	TL decreased by 4% due to an update to the TL for LUC 520, which is used as a proxy
	INSTITUTIONS:														
520/522	Elementary/Middle School (Private)	1,000 sf	13.78	13.78	0%	4.50	4.30	-4%	80%	80%	0%	24.80	23.70	-4%	TL decreased by 4% due to an update to the model trip length analysis
530	High School (Private)	1,000 sf	12.89	12.89	0%	4.50	4.30	-4%	90%	90%	0%	26.10	24.94	-4%	TL decreased by 4% due to an update to the model trip length analysis
540	University/Junior College (7,500 or fewer students) (Private)	student	2.00	2.00	0%	6.62	6.62	0%	90%	90%	0%	5.96	5.96	0%	No change
540	University/Junior College (more than 7,500 students) (Private)	student	1.50	1.50	0%	6.62	6.62	0%	90%	90%	0%	4.47	4.47	0%	No change
560	Church/Place of Assembly	1,000 sf	9.11	9.11	0%	3.90	3.90	0%	90%	90%	0%	15.99	15.99	0%	No change
565	Day Care	1,000 sf	71.88	71.88	0%	2.03	2.03	0%	73%	73%	0%	53.26	53.26	0%	No change
610	Hospital	1,000 sf	13.22	13.22	0%	6.62	6.62	0%	77%	77%	0%	33.69	33.69	0%	No change
620	Nursing Home	1,000 sf	7.60	7.60	0%	2.59	2.59	0%	89%	89%	0%	8.76	8.76	0%	No change
	OFFICE:														
710	General Office 6,000 sf or less	1,000 sf	11.02	11.02	0%	5.15	5.15	0%	92%	92%	0%	26.11	26.11	0%	No change
710	General Office 6,001-50,000 sf	1,000 sf	15.50	15.50	0%	5.15	5.15	0%	92%	92%	0%	36.72	36.72	0%	No change
710	General Office 50,001-100,000 sf	1,000 sf	13.13	13.13	0%	5.15	5.15	0%	92%	92%	0%	31.10	31.10	0%	No change
710	General Office 100,001-200,000 sf	1,000 sf	11.12	11.12	0%	5.15	5.15	0%	92%	92%	0%	26.34	26.34	0%	No change
710	General Office 200,001-400,000 sf	1,000 sf	9.41	9.41	0%	5.15	5.15	0%	92%	92%	0%	22.29	22.29	0%	No change
710	General Office greater than 400,000 sf	1,000 sf	8.54	8.54	0%	5.15	5.15	0%	92%	92%	0%	20.23	20.23	0%	No change
720	Medical Office (0-10,000 sf)	1,000 sf	23.83	23.83	0%	5.55	5.55	0%	89%	89%	0%	58.85	58.85	0%	No change
720	Medical Office (>10,000 sf)	1,000 sf	34.72	34.72	0%	5.55	5.55	0%	89%	89%	0%	85.75	85.75	0%	No change
770	Business Park (Flex Space)	1,000 sf	12.65	12.65	0%	5.38	5.38	0%	89%	89%	0%	30.29	30.29	0%	No change
	RETAIL:														
812	Building Materials/Lumber Store	1,000 sf	45.16	45.16	0%	6.27	6.27	0%	74%	74%	0%	104.77	104.77	0%	No change
813	Discount Superstore, Free-Standing	1,000 sf	-	50.82	-	-	2.87	-	-	76%	-	-	55.42	-	New land use
814	Variety Store	1,000 sf	-	64.03	-	-	1.87	-	-	56%	-	-	33.53	-	New land use
815	Discount Store, Free-Standing	1,000 sf	-	57.24	-	-	1.87	-	-	56%	-	-	29.97	-	New land use
816	Hardware/Paint	1,000 sf	51.29	51.29	0%	1.87	1.87	0%	56%	56%	0%	26.86	26.86	0%	No change
820	Retail 6,000 sfgla or less	1,000 sfgla	86.56	86.56	0%	1.12	1.12	0%	39%	39%	0%	18.90	18.90	0%	No change
820	Retail/Shopping Center 6,001-50,000 sfgla	1,000 sfgla	86.56	86.56	0%	1.87	1.87	0%	56%	56%	0%	45.32	45.32	0%	No change
820	Retail/Shopping Center greater than 50,000 sfgla	1,000 sfgla	36.27	36.27	0%	2.87	2.87	0%	76%	76%	0%	39.56	39.56	0%	No change
841	New/Used Auto Sales	1,000 sf	27.12	26.80	-1%	4.60	4.60	0%	79%	79%	0%	49.28	48.70	-1%	TGR decreased by 1% due to an update to the ITE and FL Studies blending analysis

Table A-17 (continued)
Demand Variable Changes

ITE LUC	Land Use	Unit	Trip Generation Rate			Trip Length			Percent New Trips			Gross VMT			Explanation for VMT Change
			2012	2016	%	2012	2016	%	2012	2016	%	2012	2016	%	
	RETAIL:														
843	Automobile Parts Sales	1,000 sf	-	61.91	-	-	4.60	-	-	79%	-	-	112.49	-	New land use
848	Tire Store	1,000 sf	24.87	24.87	0%	3.62	3.62	0%	72%	72%	0%	32.41	32.41	0%	No change
850	Supermarket/Grocery Store	1,000 sf	103.38	103.38	0%	2.08	2.08	0%	56%	56%	0%	60.21	60.21	0%	No change
854	Discount Supermarket	1,000 sf	-	90.86	-	-	2.87	-	-	76%	-	-	99.09	-	New land use
857	Discount Club	1,000 sf	-	41.80	-	-	2.87	-	-	76%	-	-	45.59	-	New land use
862	Home Improvement Superstore	1,000 sf	30.74	30.74	0%	2.87	2.87	0%	76%	76%	0%	33.53	33.53	0%	No change
880/881	Pharmacy/Drug Store with and without Drive-Thru	1,000 sf	95.96	95.96	0%	2.08	2.08	0%	32%	32%	0%	31.94	31.94	0%	No change
890	Furniture Store	1,000 sf	5.06	5.06	0%	6.09	6.09	0%	54%	54%	0%	8.32	8.32	0%	No change
912	Bank/Savings w/Drive-In	1,000 sf	159.34	159.34	0%	2.46	2.46	0%	46%	46%	0%	90.15	90.15	0%	No change
931	Sit-Down Restaurant	1,000 sf	91.10	91.10	0%	3.14	3.14	0%	77%	77%	0%	110.13	110.13	0%	No change
932	High-Turnover Restaurant	1,000 sf	116.60	108.71	-7%	3.17	3.17	0%	71%	71%	0%	131.22	122.34	-7%	TGR decrease by 7% due to four additional FL Studies being added to the database since the previous study
934	Fast Food Restaurant w/Drive-Thru	1,000 sf	511.00	511.00	0%	2.05	2.05	0%	58%	58%	0%	303.79	303.79	0%	No change
941	Quick Lube	bays	40.00	40.00	0%	3.62	3.62	0%	72%	72%	0%	52.13	52.13	0%	No change
942	Automobile Repair Shop	1,000 sf	31.43	28.19	-10%	3.62	3.62	0%	72%	72%	0%	40.96	36.74	-10%	TGR decrease by 10% due to two additional FL Studies being added to the database since the previous study
945	Gasoline/Service Station/Conv. Mart; 0 to 6 vfp	fuel pos.	162.78	187.50	15%	1.90	1.90	0%	23%	23%	0%	35.57	40.97	15%	New tier with TGR change
	Gasoline/Service Station/Conv. Mart; 7 to 10 vfp	fuel pos.	162.78	162.50	0%	1.90	1.90	0%	23%	23%	0%	35.57	35.51	0%	New tier with TGR change
	Gasoline/Service Station/Conv. Mart; 11 or more vfp	fuel pos.	162.78	150.00	-8%	1.90	1.90	0%	23%	23%	0%	35.57	32.78	-8%	New tier with TGR change
947	Self-Service Car Wash	bays	43.90	43.94	0%	2.18	2.18	0%	68%	68%	0%	32.54	32.57	0%	No change
n/a	Convenience/Gasoline/Fast Food Store	1,000 sf	984.59	984.59	0%	2.65	2.65	0%	32%	32%	0%	417.47	417.47	0%	No change
	INDUSTRIAL:														
110/130	General Light Industrial/Industrial Park	1,000 sf	6.97	6.97	0%	5.15	5.15	0%	92%	92%	0%	16.51	16.51	0%	No change
120	General Heavy Industrial	1,000 sf	1.50	1.50	0%	5.15	5.15	0%	92%	92%	0%	3.55	3.55	0%	No change
140	Manufacturing	1,000 sf	3.82	3.82	0%	5.15	5.15	0%	92%	92%	0%	9.05	9.05	0%	No change
150	Warehouse	1,000 sf	3.56	3.56	0%	5.15	5.15	0%	92%	92%	0%	8.43	8.43	0%	No change
151	Mini-Warehouse/Storage	1,000 sf	2.15	2.08	-3%	3.10	3.10	0%	92%	92%	0%	3.07	2.97	-3%	TGR decrease by 3% due to one additional FL Studies being added to the database since the previous study

Gross VMT = Trip Generation Rate x Trip Length x Percent New Trips / 2

Florida Studies Trip Characteristics Database

The Florida Studies Trip Characteristics Database includes over 200 studies on 40 different residential and non-residential land uses collected over the last 25 years. Data from these studies include trip generation, trip length, and percent new trips for each land use. This information has been used in the development of impact fees and the creation of land use category trip characteristics for communities throughout Florida and the U.S.

Tindale Oliver estimates trip generation rates for all land uses in a transportation impact fee schedule using data from studies in the Florida Studies Database and the Institute of Transportation Engineers' (ITE) *Trip Generation* reference report (9th edition). In instances, when both ITE *Trip Generation* reference report (9th edition) and Florida Studies trip generation rate (TGR) data are available for a particular land use, the data is typically blended together to increase the sample size and provide a more valid estimate of the average number of trips generated per unit of development. If no Florida Studies data is available, only TGR data from the ITE reference report is used in the fee calculation.

The trip generation rate for each respective land use is calculated using machine counts that record daily traffic into and out of the site studied. The traffic count hoses are set at entrances to residential subdivisions for the residential land uses and at all access points for non-residential land uses.

The trip length information is obtained through origin-destination surveys that ask respondents where they came from prior to arriving at the site and where they intended to go after leaving the site. The results of these surveys were used to estimate average trip length by land use.

The percent new trip variable is based on assigning each trip collected through the origin-destination survey process a trip type (primary, secondary, diverted, and captured). The percent new trip variable is then calculated as 1 minus the percentage of trips that are captured.

Table A-18
Florida Trip Characteristics Studies by Land Use Category

Mini-Warehouse (ITE LUC 151)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Orange Co, FL	89.6	-	-	-	1.23	-	-	-	-	Orange County
Orange Co, FL	84.7	-	-	-	1.39	-	-	-	-	Orange County
Orange Co, FL	93.0	-	-	-	1.51	-	-	-	-	Orange County
Orange Co, FL	107.0	-	-	-	1.45	-	-	-	-	Orange County
Orange Co, FL	77.0	-	-	-	2.18	-	-	-	-	Orange County
Orange Co, FL	93.7	-	-	-	1.15	-	-	-	-	Orange County
Total Size	545.0	6					**Average Trip Length:**	**n/a**		
ITE	784.0	14					**Weighted Average Trip Length:**	**n/a**		
Blended total	1,329.0									

Weighted Percent New Trip Average: -

Weighted Average Trip Generation Rate: 1.47

ITE Average Trip Generation Rate: 2.50

Blend of FL Studies and ITE Average Trip Generation Rate: 2.08

Single-Family Detached Housing (ITE LUC 210)

Location	Size / Units	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Gwinnett Co, GA	-	12/13-18/92	-	-	5.80	-	5.40	N/A	31.32	Street Smarts
Gwinnett Co, GA	-	12/13-18/92	-	-	5.40	-	6.10	N/A	32.94	Street Smarts
Sarasota Co, FL	76	Jun-93	70	70	10.03	-	6.00	N/A	60.18	Sarasota County
Sarasota Co, FL	79	Jun-93	86	86	9.77	-	4.40	N/A	42.99	Sarasota County
Sarasota Co, FL	135	Jun-93	75	75	8.05	-	5.90	N/A	47.50	Sarasota County
Sarasota Co, FL	152	Jun-93	63	63	8.55	-	7.30	N/A	62.42	Sarasota County
Sarasota Co, FL	193	Jun-93	123	123	6.85	-	4.60	N/A	31.51	Sarasota County
Sarasota Co, FL	97	Jun-93	33	33	13.20	-	3.00	N/A	39.60	Sarasota County
Sarasota Co, FL	282	Jun-93	146	146	6.61	-	8.40	N/A	55.52	Sarasota County
Sarasota Co, FL	393	Jun-93	207	207	7.76	-	5.40	N/A	41.90	Sarasota County
Hernando Co, FL	76	May-96	148	148	10.01	9a-6p	4.85	N/A	48.55	Tindale Oliver
Hernando Co, FL	128	May-96	205	205	8.17	9a-6p	6.03	N/A	49.27	Tindale Oliver
Hernando Co, FL	232	May-96	182	182	7.24	9a-6p	5.04	N/A	36.49	Tindale Oliver
Hernando Co, FL	301	May-96	264	264	8.93	9a-6p	3.28	N/A	29.29	Tindale Oliver
Charlotte Co, FL	135	Oct-97	230	-	5.30	9a-5p	7.90	N/A	41.87	Tindale Oliver
Charlotte Co, FL	142	Oct-97	245	-	5.20	9a-5p	4.10	N/A	21.32	Tindale Oliver
Charlotte Co, FL	150	Oct-97	160	-	5.00	9a-5p	10.80	N/A	54.00	Tindale Oliver
Charlotte Co, FL	215	Oct-97	158	-	7.60	9a-5p	4.60	N/A	34.96	Tindale Oliver
Charlotte Co, FL	257	Oct-97	225	-	7.60	9a-5p	7.40	N/A	56.24	Tindale Oliver
Charlotte Co, FL	345	Oct-97	161	-	7.00	9a-5p	6.60	N/A	46.20	Tindale Oliver
Charlotte Co, FL	368	Oct-97	152	-	6.60	9a-5p	5.70	N/A	37.62	Tindale Oliver
Charlotte Co, FL	383	Oct-97	516	-	8.40	9a-5p	5.00	N/A	42.00	Tindale Oliver
Charlotte Co, FL	441	Oct-97	195	-	8.20	9a-5p	4.70	N/A	38.54	Tindale Oliver
Charlotte Co, FL	1,169	Oct-97	348	-	6.10	9a-5p	8.00	N/A	48.80	Tindale Oliver
Collier Co, FL	90	Dec-99	91	-	12.80	8a-6p	11.40	N/A	145.92	Tindale Oliver
Collier Co, FL	400	Dec-99	389	-	7.80	8a-6p	6.40	N/A	49.92	Tindale Oliver
Lake Co, FL	49	Apr-02	170	-	6.70	7a-6p	10.20	N/A	68.34	Tindale Oliver
Lake Co, FL	52	Apr-02	212	-	10.00	7a-6p	7.60	N/A	76.00	Tindale Oliver
Lake Co, FL	126	Apr-02	217	-	8.50	7a-6p	8.30	N/A	70.55	Tindale Oliver
Pasco Co, FL	55	Apr-02	133	-	6.80	8a-6p	8.12	N/A	55.22	Tindale Oliver
Pasco Co, FL	60	Apr-02	106	-	7.73	8a-6p	8.75	N/A	67.64	Tindale Oliver
Pasco Co, FL	70	Apr-02	188	-	7.80	8a-6p	6.03	N/A	47.03	Tindale Oliver
Pasco Co, FL	74	Apr-02	188	-	8.18	8a-6p	5.95	N/A	48.67	Tindale Oliver
Pasco Co, FL	189	Apr-02	261	-	7.46	8a-6p	8.99	N/A	67.07	Tindale Oliver
Marion Co, FL	102	Apr-02	167	-	8.02	7a-6p	5.10	N/A	40.90	Kimley-Horn & Associates
Marion Co, FL	105	Apr-02	169	-	7.23	7a-6p	7.22	N/A	52.20	Kimley-Horn & Associates
Marion Co, FL	124	Apr-02	170	-	6.04	7a-6p	7.29	N/A	44.03	Kimley-Horn & Associates
Marion Co, FL	132	Apr-02	171	-	7.87	7a-6p	7.00	N/A	55.09	Kimley-Horn & Associates
Marion Co, FL	133	Apr-02	209	-	8.04	7a-6p	4.92	N/A	39.56	Kimley-Horn & Associates
Citrus Co, FL	111	Oct-03	273	-	8.66	7a-6p	7.70	N/A	66.68	Tindale Oliver
Citrus Co, FL	231	Oct-03	155	-	5.71	7a-6p	4.82	N/A	27.52	Tindale Oliver
Citrus Co, FL	306	Oct-03	146	-	8.40	7a-6p	3.94	N/A	33.10	Tindale Oliver
Citrus Co, FL	364	Oct-03	345	-	7.20	7a-6p	9.14	N/A	65.81	Tindale Oliver
Citrus Co, FL	374	Oct-03	248	-	12.30	7a-6p	6.88	N/A	84.62	Tindale Oliver
Lake Co, FL	42	Dec-06	122	-	11.26	-	5.56	N/A	62.61	Tindale Oliver
Lake Co, FL	51	Dec-06	346	-	18.22	-	9.46	N/A	172.36	Tindale Oliver
Lake Co, FL	59	Dec-06	144	-	12.07	-	10.79	N/A	130.24	Tindale Oliver
Lake Co, FL	90	Dec-06	194	-	9.12	-	5.78	N/A	52.71	Tindale Oliver
Lake Co, FL	239	Dec-06	385	-	7.58	-	8.93	N/A	67.69	Tindale Oliver
Hernando Co, FL	232	Apr-07	516	-	8.02	7a-6p	8.16	N/A	65.44	Tindale Oliver
Hernando Co, FL	95	Apr-07	256	-	8.08	7a-6p	5.88	N/A	47.51	Tindale Oliver
Hernando Co, FL	90	Apr-07	338	-	7.13	7a-6p	5.86	N/A	41.78	Tindale Oliver
Hernando Co, FL	58	Apr-07	153	-	6.16	7a-6p	8.39	N/A	51.68	Tindale Oliver
Collier Co, FL	74	Mar-08	503	-	12.81	7a-6p	3.05	N/A	39.07	Tindale Oliver
Collier Co, FL	97	Mar-08	512	-	8.78	7a-6p	11.29	N/A	99.13	Tindale Oliver
Collier Co, FL	315	Mar-08	1,347	-	6.97	7a-6p	6.55	N/A	45.65	Tindale Oliver
Collier Co, FL	42	Mar-08	314	-	9.55	7a-6p	10.98	N/A	104.86	Tindale Oliver
Total Size	10,380	55	13,130				**Average Trip Length:**	**6.79**		
							Weighted Average Trip Length:	**6.62**		

Note: Georgia studies are not included in summary statistics.

Weighted Average Trip Generation Rate: 7.81

Multi-Family/Apartment and Residential Condo/Townhouse (ITE LUC 220/230)

Location	Size / Units	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Sarasota Co, FL	212	Jun-93	42	42	5.78	-	5.20	N/A	30.06	Sarasota County
Sarasota Co, FL	243	Jun-93	36	36	5.84	-	-	N/A	-	Sarasota County
Marion Co, FL	214	Apr-02	175	175	6.84	-	4.61	N/A	31.53	Kimley-Horn & Associates
Marion Co, FL	240	Apr-02	174	174	6.96	-	3.43	N/A	23.87	Kimley-Horn & Associates
Marion Co, FL	288	Apr-02	175	175	5.66	-	5.55	N/A	31.41	Kimley-Horn & Associates
Marion Co, FL	480	Apr-02	175	175	5.73	-	6.88	N/A	39.42	Kimley-Horn & Associates
Marion Co, FL	500	Apr-02	170	170	5.46	-	5.94	N/A	32.43	Kimley-Horn & Associates
Lake Co, FL	250	Dec-06	135	135	6.71	-	5.33	N/A	35.76	Tindale Oliver
Lake Co, FL	157	Dec-06	265	265	13.97	-	2.62	N/A	36.60	Tindale Oliver
Lake Co, FL	169	Dec-06	212	-	8.09	-	6.00	N/A	48.54	Tindale Oliver
Lake Co, FL	226	Dec-06	301	-	6.74	-	2.17	N/A	14.63	Tindale Oliver
Hernando Co, FL	312	Apr-07	456	-	4.09	-	5.95	N/A	24.34	Tindale Oliver
Hernando Co, FL	176	Apr-07	332	-	5.38	-	5.24	N/A	28.19	Tindale Oliver
Hernando Co, FL	31	May-96	31	31	6.12	9a-6p	4.98	N/A	30.48	Tindale Oliver
Hernando Co, FL	128	May-96	128	128	6.47	9a-6p	5.18	N/A	33.51	Tindale Oliver
Pasco Co, FL	229	Apr-02	198	198	4.77	9a-6p	-	N/A	-	Tindale Oliver
Pasco Co, FL	248	Apr-02	353	353	4.24	9a-6p	3.53	N/A	14.97	Tindale Oliver
Total Size	4,103						**Average Trip Length:**	**4.84**		
Total Size (TL)	3,631						**Weighted Average Trip Length:**	**5.10**		

LUC 220: Multi-Family

Total Size	3,467	13	Weighted Average Trip Generation Rate:	6.31
ITE	18,480	88	ITE Average Trip Generation Rate:	6.65
Blended total	21,947		**Blend of FL Studies and ITE Average Trip Generation Rate:**	**6.60**

LUC 230 Studies are highlighted

LUC 230: Condo/Townhouse

Total Size	636	4	Weighted Average Trip Generation Rate:	4.97
ITE	10,024	56	ITE Average Trip Generation Rate:	5.81
Blended total	10,660		**Blend of FL Studies and ITE Average Trip Generation Rate:**	**5.76**

Mobile Home Park (ITE LUC 240)

Location	Size / Units	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Marion Co, FL	67	Jul-91	22	22	5.40	48hrs.	2.29	N/A	12.37	Tindale Oliver
Marion Co, FL	82	Jul-91	58	58	10.80	24hr.	3.72	N/A	40.18	Tindale Oliver
Marion Co, FL	137	Jul-91	22	22	3.10	24hr.	4.88	N/A	15.13	Tindale Oliver
Sarasota Co, FL	996	Jun-93	181	181	4.19	-	4.40	N/A	18.44	Sarasota County
Sarasota Co, FL	235	Jun-93	100	100	3.51	-	5.10	N/A	17.90	Sarasota County
Marion Co, FL	188	Apr-02	147	-	3.51	24hr.	5.48	N/A	19.23	Kimley-Horn & Associates
Marion Co, FL	227	Apr-02	173	-	2.76	24hr.	8.80	N/A	24.29	Kimley-Horn & Associates
Marion Co, FL	297	Apr-02	175	-	4.78	24hr.	4.76	N/A	22.75	Kimley-Horn & Associates
Hernando Co, FL	1,892	May-96	425	425	4.13	9a-6p	4.13	N/A	17.06	Tindale Oliver
Total Size	4,121	9	1,303				**Average Trip Length:**	**4.84**		
							Weighted Average Trip Length:	**4.60**		

Weighted Average Trip Generation Rate: 4.17

Retirement Community/Age-Restricted Single Family (ITE LUC 251)

Location	Size / Units	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Lakeland, FL	67	3/28-4/2/90	26	24	3.50	9am-4pm	2.44	N/A	8.54	Tindale Oliver
Marion Co, FL	778	Apr-02	175	-	2.96	24hr.	3.49	N/A	10.33	Kimley-Horn & Associates
Marion Co, FL	877	Apr-02	209	-	2.91	24hr.	5.90	N/A	17.17	Kimley-Horn & Associates
Marion Co, FL	1,054	Apr-02	173	-	3.65	24hr.	6.00	N/A	21.90	Kimley-Horn & Associates
Marion Co, FL	3,076	Apr-02	198	-	2.63	24hr.	5.16	N/A	13.57	Kimley-Horn & Associates
Marion Co, FL	3,625	Apr-02	164	-	2.50	24hr.	5.83	N/A	14.58	Kimley-Horn & Associates
Total Size	9,477	6	945				**Average Trip Length:**	**4.80**		
ITE	6,240	8					**Weighted Average Trip Length:**	**5.42**		
Blended total	15,717							Weighted Average Trip Generation Rate:		2.75
								ITE Average Trip Generation Rate:		3.68
								Blend of FL Studies and ITE Average Trip Generation Rate:		**3.12**

Congregate Care Facility (ITE LUC 253)

Location	Size / Units	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Pinellas Park, FL	72	Aug-89	25	19	3.50	9am-5pm	2.20	79.0	7.70	Tindale Oliver
Palm Harbor, FL	200	Oct-89	58	40	-	9am-5pm	3.40	69.0	-	Tindale Oliver
Total Size	272	2	83				**Average Trip Length:**	**2.80**		
ITE	388	2					**Weighted Average Trip Length:**	**3.08**		
Blended total	660						Weighted Percent New Trip Average:	71.6		
	460							Weighted Average Trip Generation Rate:		3.50
								ITE Average Trip Generation Rate:		2.02
								Blend of FL Studies and ITE Average Trip Generation Rate:		**2.25**

Motel (ITE LUC 320)

Location	Size (Rooms)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Pinellas Co, FL	48	Oct-89	46	24	-	10a-2p	2.80	65.0	-	Tindale Oliver
Pinellas Co, FL	54	Oct-89	32	22	-	12p-7p	3.80	69.0	-	Tindale Oliver
Pinellas Co, FL	120	Oct-89	26	22	-	2p-7p	5.20	84.6	-	Tindale Oliver
Total Size	222	3	104				**Average Trip Length:**	**3.93**		
ITE	2,160	10					**Weighted Average Trip Length:**	**4.34**		
							Weighted Percent New Trip Average:	76.6		
								ITE Average Trip Generation Rate:		**5.63**

Movie Theater with Matinee (ITE LUC 444)

Location	Size (Screens)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Pinellas Co, FL	8	Oct-89	151	116	113.10	2p-8p	2.70	77.0	235.13	Tindale Oliver
Pinellas Co, FL	12	Sep-89	122	116	63.40	2p-8p	1.90	95.0	114.44	Tindale Oliver
Total Size	20		273			Average Trip Length:	2.30			
ITE	10 estimated					Weighted Average Trip Length:	2.22			
Blended total	30					Weighted Percent New Trip Average:		87.8		

Health/Fitness Club (ITE LUC 492)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Tampa, FL	-	Mar-86	33	31	-	-	7.90	94.0	-	Kimley-Horn & Associates
Total Size	-	-	33			Average Trip Length:	n/a			
ITE	15	1				Percent New Trip Average:		94.0		
								ITE Average Trip Generation Rate:		32.93

Day Care Center (ITE LUC 565)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Pinellas Co, FL	5.6	Aug-89	94	66	66.99	7a-6p	1.90	70.0	89.10	Tindale Oliver
Pinellas Co, FL	10.0	Sep-89	179	134	66.99	7a-6p	2.10	75.0	105.51	Tindale Oliver
Tampa, FL	-	Mar-86	28	25	-	-	2.60	89.0	-	Kimley-Horn & Associates
Total Size	15.6	2	301			Average Trip Length:	2.20			
ITE	35.0	7				Weighted Average Trip Length:	2.03			
Blended total	50.6					Weighted Percent New Trip Average:		73.2		
								Weighted Average Trip Generation Rate:		66.99
								ITE Average Trip Generation Rate:		74.06
								Blend of FL Studies and ITE Average Trip Generation Rate:		71.88

Nursing Home (ITE LUC 620)

Location	Size (Beds)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Lakeland, FL	120	Mar-90	74	66	2.86	11a-4p	2.59	89.0	6.59	Tindale Oliver
Total Size	120	1	74			Average Trip Length:	2.59			
ITE	714	6				Weighted Average Trip Length:	2.59			
Blended total	834					Weighted Percent New Trip Average:		89.0		

General Office Building (ITE LUC 710)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Sarasota Co, FL	14.3	Jun-93	14	14	46.85	-	11.30	-	529.41	Sarasota County
Gwinnett Co, GA	98.0	Dec-92	-	-	4.30	-	5.40	-	-	Street Smarts
Gwinnett Co, GA	180.0	Dec-92	-	-	3.60	-	5.90	-	-	Street Smarts
Pinellas Co, FL	187.0	Oct-89	431	388	18.49	7a-5p	6.30	90.0	104.84	Tindale Oliver
St. Petersburg, FL	262.8	Sep-89	291	274	-	7a-5p	3.40	94.0	-	Tindale Oliver
Total Size	742.1	5	736			Average Trip Length:	6.46			
ITE	15,522.0	78				Weighted Average Trip Length:	5.15			
						Weighted Percent New Trip Average:		92.3		

Medical-Dental Office Building (ITE LUC 720): 10,000 sf or Less

Site	Size (1,000 sf)	Tues., Jan 11		Wedn., Jan 12		Thur., Jan 13		TOTAL		AVERAGE		AVERAGE (per 1,000 sf)		
		IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	TOTAL
Site 1	2.100	35	35	22	22	13	13	70	70	23.33	23.33	**11.11**	**11.11**	**22.22**
Site 2	3.000	40	40	52	52	53	53	145	145	48.33	48.33	**16.11**	**16.11**	**32.22**
Site 3	2.000	28	28	19	21	24	26	71	75	23.67	25.00	**11.84**	**12.50**	**24.34**
Site 4	1.000	30	30	52	52	57	57	139	139	46.33	46.33	**46.33**	**46.33**	**92.66**
Site 5	3.024	31	32	43	43	24	24	98	99	32.67	33.00	**10.80**	**10.91**	**21.71**
Site 6	1.860	22	24	19	17	11	11	52	52	17.33	17.33	**9.32**	**9.32**	**18.64**
Average												**17.59**	**17.71**	**35.30**
Average (excluding Site 4)												**11.84**	**11.99**	**23.83**

Medical-Dental Office Building (ITE LUC 720): >10,000 sf

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Tampa, FL	-	Mar-86	33	26	-	-	6.00	79.0	-	Kimley-Horn & Associates
Palm Harbor, FL	14.6	Oct-89	104	76	33.98	9a-5p	6.30	73.0	156.27	Tindale Oliver
St. Petersburg, FL	-	Nov-89	34	30	57.20	9a-4p	1.20	88.0	-	Tindale Oliver
Hernando Co, FL	58.4	May-96	390	349	28.52	9a-6p	6.47	89.5	165.09	Tindale Oliver
Hernando Co, FL	28.0	May-96	202	189	49.75	9a-6p	6.06	93.8	282.64	Tindale Oliver
Charlotte Co, FL	11.0	Oct-97	-	186	49.50	9a-5p	4.60	92.1	209.67	Tindale Oliver
Charlotte Co, FL	28.0	Oct-97	-	186	31.00	9a-5p	3.60	81.6	91.04	Tindale Oliver
Charlotte Co, FL	30.4	Oct-97	-	324	39.80	9a-5p	3.30	83.5	109.68	Tindale Oliver
Citrus Co, FL	38.9	Oct-03	-	168	32.26	8-6p	6.80	97.1	213.03	Tindale Oliver
Citrus Co, FL	10.0	Nov-03	-	340	40.56	8-630p	6.20	92.4	232.33	Tindale Oliver
Citrus Co, FL	5.3	Dec-03	-	20	29.36	8-5p	5.25	95.2	146.78	Tindale Oliver
Orange Co, FL	50.6	-	-	-	26.72	-	-	-	-	Orange County
Orange Co, FL	23.5	-	-	-	16.58	-	-	-	-	Tindale Oliver
Total Size	298.6	11	763			Average Trip Length:	5.07			
ITE	450.0	10				Weighted Average Trip Length:	5.55			
Blended total	748.6					Weighted Percent New Trip Average:		88.9		
								Average Trip Generation Rate:		32.59
								ITE Average Trip Generation Rate:		36.13
								Blend of FL Studies and ITE Average Trip Generation Rate:		34.72

Business Park (ITE LUC 770)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Collier Co, FL	14.1	May-99	-	55	33.48	8a-6p	3.60	72.7	87.62	Tindale Oliver
Collier Co, FL	66.0	May-99	-	43	11.53	8a-6p	5.70	79.0	51.92	Tindale Oliver
Collier Co, FL	211.1	May-99	-	284	17.91	8a-6p	5.40	93.0	89.94	Tindale Oliver
Total Size	291.2	3				**Average Trip Length:**	**4.90**			
ITE	6,288.0	16				**Weighted Average Trip Length:**	**5.38**			
Blended total	6,579.2					Weighted Percent New Trip Average:		88.8		
								Weighted Average Trip Generation Rate:		17.22
								ITE Average Trip Generation Rate:		12.44
								Blend of FL Studies and ITE Average Trip Generation Rate:		**12.65**

Building Materials and Lumber Store (ITE LUC 812)

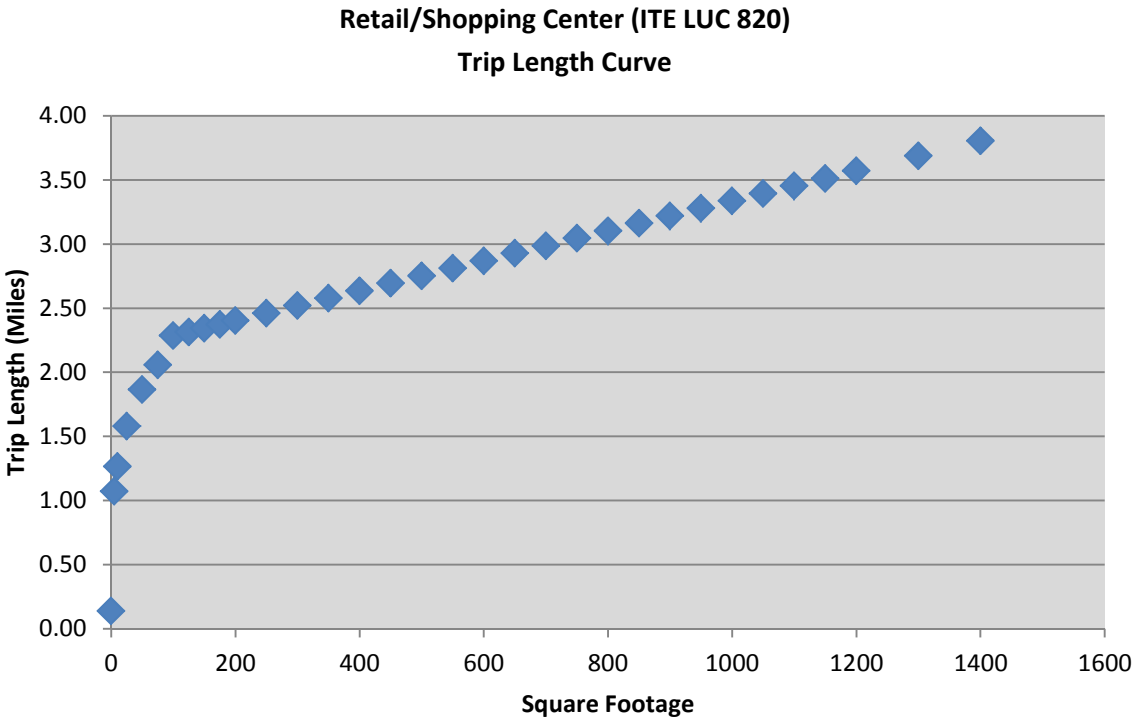
Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Tampa, FL	86.9	Jun-93	40	-	-	7a-430p	6.58	73.0	-	Tindale Oliver
Tampa, FL	98.5	Jun-93	40	-	-	7a-430p	6.00	-	-	Tindale Oliver
Tampa, FL	-	Jun-93	40	-	-	7a-430p	5.87	75.7	-	Tindale Oliver
Total Size	185.4	2	120			**Average Trip Length:**	**6.15**			
ITE	36.0	4				**Weighted Average Trip Length:**	**6.27**			
						Weighted Percent New Trip Average:		74.4		
								ITE Average Trip Generation Rate:		**45.16**

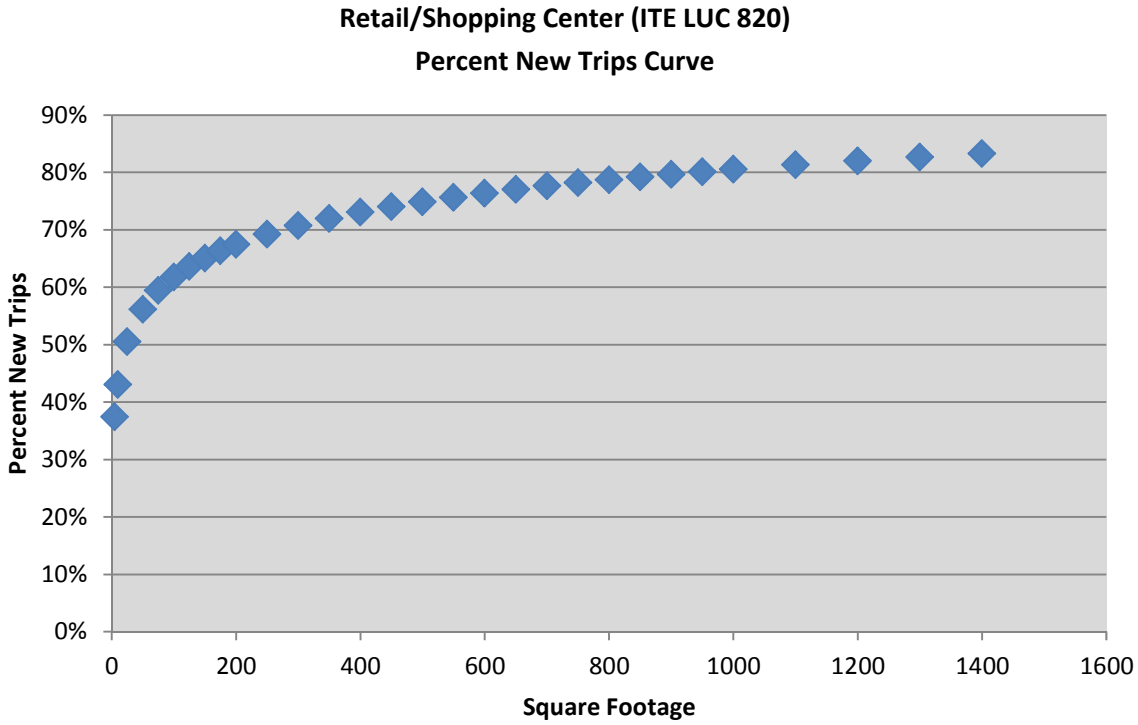
Discount Superstore (ITE LUC 813)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Citrus Co, FL	203.6	Nov-03	-	236	55.01	8a-6p	-	91.8	0.0	Tindale Oliver
Total Size	203.6	1				**Average Trip Length:**	**-**			
ITE	12,740.0	65				**Weighted Average Trip Length:**	**-**			
Blended total	12,943.6					Weighted Percent New Trip Average:		91.8		
								Average Trip Generation Rate:		55.01
								ITE Average Trip Generation Rate:		50.75
								Blend of FL Studies and ITE Average Trip Generation Rate:		**50.82**

Retail/Shopping Center (ITE LUC 820)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Tampa, FL	-	Mar-86	527	348	-	-	-	66.0	-	Kimley-Horn & Associates
Tampa, FL	-	Mar-86	170	-	-	-	1.70	-	-	Kimley-Horn & Associates
Tampa, FL	-	Mar-86	354	269	-	-	-	76.0	-	Kimley-Horn & Associates
Tampa, FL	-	Mar-86	144	-	-	-	2.50	-	-	Kimley-Horn & Associates
St. Petersburg, FL	1,192.0	Aug-89	384	298	-	11a-7p	3.60	78.0	-	Tindale Oliver
St. Petersburg, FL	132.3	Sep-89	400	368	77.00	10a-7p	1.80	92.0	127.51	Tindale Oliver
Largo, FL	425.0	Aug-89	160	120	26.73	10a-6p	2.30	75.0	46.11	Tindale Oliver
Dunedin, FL	80.5	Sep-89	276	210	81.48	9a-5p	1.40	76.0	86.69	Tindale Oliver
Pinellas Park, FL	696.0	Sep-89	485	388	-	9a-6p	3.20	80.0	-	Tindale Oliver
Seminole, FL	425.0	Oct-89	674	586	-	-	-	87.0	-	Tindale Oliver
Hillsborough Co, FL	134.0	Jul-91	-	-	-	-	1.30	74.0	-	Tindale Oliver
Hillsborough Co, FL	151.0	Jul-91	-	-	-	-	1.30	73.0	-	Tindale Oliver
Collier Co, FL	-	Aug-91	68	64	-	-	3.33	94.1	-	Tindale Oliver
Collier Co, FL	-	Aug-91	208	154	-	-	2.64	74.0	-	Tindale Oliver
Sarasota/Bradenton, FL	109.0	Sep-92	300	185	-	12a-6p	-	61.6	-	King Engineering Associates, Inc.
Ocala, FL	133.4	Sep-92	300	192	-	12a-6p	-	64.0	-	King Engineering Associates, Inc.
Gwinnett Co, GA	99.1	Dec-92	-	-	46.00	-	3.20	70.0	103.04	Street Smarts
Gwinnett Co, GA	314.7	Dec-92	-	-	27.00	-	8.50	84.0	192.78	Street Smarts
Sarasota Co, FL	110.0	Jun-93	58	58	122.14	-	3.20	-	-	Sarasota County
Sarasota Co, FL	146.1	Jun-93	65	65	51.53	-	2.80	-	-	Sarasota County
Sarasota Co, FL	157.5	Jun-93	57	57	79.79	-	3.40	-	-	Sarasota County
Sarasota Co, FL	191.0	Jun-93	62	62	66.79	-	5.90	-	-	Sarasota County
Hernando Co, FL	107.8	May-96	608	331	77.60	9a-6p	4.68	54.5	197.85	Tindale Oliver
Charlotte Co, FL	88.0	Oct-97	-	-	73.50	9a-5p	1.80	57.1	75.56	Tindale Oliver
Charlotte Co, FL	191.9	Oct-97	-	-	72.00	9a-5p	2.40	50.9	87.97	Tindale Oliver
Charlotte Co, FL	51.3	Oct-97	-	-	43.00	9a-5p	2.70	51.8	60.08	Tindale Oliver
Lake Co, FL	67.8	Apr-01	246	177	102.60	-	3.40	71.2	248.37	Tindale Oliver
Lake Co, FL	72.3	Apr-01	444	376	65.30	-	4.50	59.0	173.37	Tindale Oliver
Pasco Co, FL	65.6	Apr-02	222	-	145.64	9a-5p	1.46	46.9	99.62	Tindale Oliver
Pasco Co, FL	75.8	Apr-02	134	-	38.23	9a-5p	2.36	58.2	52.52	Tindale Oliver
Citrus Co, FL	185.0	Oct-03	-	784	55.84	8a-6p	2.40	88.1	118.05	Tindale Oliver
Citrus Co, FL	91.3	Nov-03	-	390	54.50	8a-6p	1.60	88.0	76.77	Tindale Oliver
Bozeman, MT	104.3	Dec-06	359	359	46.96	-	3.35	49.0	77.08	Tindale Oliver
Bozeman, MT	159.9	Dec-06	502	502	56.49	-	1.56	54.0	47.59	Tindale Oliver
Bozeman, MT	35.9	Dec-06	329	329	69.30	-	1.39	74.0	71.28	Tindale Oliver
Total Size	5,757.5		7,536			**Average Trip Length:**	**n/a**			
						Weighted Average Trip Length:	**n/a**			


Retail/Shopping Center (ITE LUC 820)
Trip Length Curve
Trip Length (Miles)
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0
200
400
600
800
1000
1200
1400
1600
Square Footage


Retail/Shopping Center (ITE LUC 820)
Percent New Trips Curve
Percent New Trips
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
0
200
400
600
800
1000
1200
1400
1600
Square Footage

New/Used Auto Sales (ITE LUC 841)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
St.Petersburg, FL	43.0	Oct-89	152	120	-	9a-5p	4.70	79.0	-	Tindale Oliver
Clearwater, FL	43.0	Oct-89	136	106	29.40	9a-5p	4.50	78.0	103.19	Tindale Oliver
Orange Co, FL	116.7	-	-	-	22.18	-	-	-	-	Orange County
Orange Co, FL	39.1	-	-	-	10.48	-	-	-	-	Orange County
Orange Co, FL	66.3	-	-	-	28.50	-	-	-	-	Orange County
Orange Co, FL	34.4	-	-	-	23.45	-	-	-	-	Orange County
Orange Co, FL	13.8	-	-	-	35.75	-	-	-	-	Orange County
Orange Co, FL	51.7	-	-	-	40.34	-	-	-	-	Orange County
Orange Co, FL	216.4	-	-	-	13.45	-	-	-	-	Orange County
Total Size	581.4	8	288				**Average Trip Length:**	**4.60**		
ITE	570.0	15					**Weighted Average Trip Length:**	**4.60**		
Blended total	1,151.4						Weighted Percent New Trip Average:	78.5		
								Weighted Average Trip Generation Rate:		21.41
								ITE Average Trip Generation Rate:		32.30
								Blend of FL Studies and ITE Average Trip Generation Rate:		**26.80**

Note: The same number of units was assumed for the Clearwater location as the St. Pete facility

Supermarket (ITE LUC 850)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Palm Harbor, FL	62.0	Aug-89	163	62	106.26	9a-4p	2.08	56.0	123.77	Tindale Oliver
Total Size	62.0	1	163				**Average Trip Length:**	**2.08**		
ITE	156.0	4					**Weighted Average Trip Length:**	**2.08**		
Blended total	218.0						Weighted Percent New Trip Average:	56.0		
								Weighted Average Trip Generation Rate:		106.26
								ITE Average Trip Generation Rate:		102.24
								Blend of FL Studies and ITE Average Trip Generation Rate:		**103.38**

Pharmacy/Drugstore with or w/o Drive-Thru (ITE LUC 880 & 881)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Pasco Co, FL	11.1	Apr-02	138	38	88.97	-	2.05	27.5	50.23	Tindale Oliver
Pasco Co, FL	12.0	Apr-02	212	90	122.16	-	2.04	42.5	105.79	Tindale Oliver
Pasco Co, FL	15.1	Apr-02	1192	54	97.96	-	2.13	28.1	58.69	Tindale Oliver
Total Size	38.2	3	1,542				**Average Trip Length:**	**2.07**		
ITE	196.0	16					**Weighted Average Trip Length:**	**2.08**		
Blended total	234.2						Weighted Percent New Trip Average:	32.4		
								Average Trip Generation Rate:		103.03
								ITE Average Trip Generation Rate (LUC 880 / 881):		90.06 / 96.91
								Blend of FL Studies and ITE Average Trip Generation Rate:		**95.96**

Furniture Store (ITE LUC 890)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Largo, FL	15.0	7/28-30/92	64	34	-	-	4.63	52.5	-	Tindale Oliver
Tampa, FL	16.9	Jul-92	68	39	-	-	7.38	55.7	-	Tindale Oliver
Total Size	31.9	2	132				**Average Trip Length:**	**6.01**		
ITE	897.0	13					**Weighted Average Trip Length:**	**6.09**		
							Weighted Percent New Trip Average:	54.2		
								ITE Average Trip Generation Rate:		**5.06**

Drive-In Bank (ITE LUC 912)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Tampa, FL	-	Mar-86	77	-	-	-	2.40	-	-	Kimley-Horn & Associates
Tampa, FL	-	Mar-86	211	-	-	-	-	54.0	-	Kimley-Horn & Associates
Clearwater, FL	0.4	Aug-89	113	52	-	9a-6p	5.20	46.0	-	Tindale Oliver
Largo, FL	2.0	Sep-89	129	94	-	-	1.60	73.0	-	Tindale Oliver
Seminole, FL	4.5	Oct-89	-	-	-	-	-	-	-	Tindale Oliver
Marion Co, FL	2.3	Jun-91	69	29	-	24hr.	1.33	42.0	-	Tindale Oliver
Marion Co, FL	3.1	Jun-91	47	32	-	24hr.	1.75	68.1	-	Tindale Oliver
Marion Co, FL	2.5	Jul-91	57	26	-	48hrs.	2.70	45.6	-	Tindale Oliver
Collier Co, FL	-	Aug-91	162	96	-	24hr.	0.88	59.3	-	Tindale Oliver
Collier Co, FL	-	Aug-91	116	54	-	-	1.58	46.6	-	Tindale Oliver
Collier Co, FL	-	Aug-91	142	68	-	-	2.08	47.9	-	Tindale Oliver
Hernando Co, FL	5.4	May-96	164	41	-	9a-6p	2.77	24.7	-	Tindale Oliver
Marion Co, FL	2.4	Apr-02	70	-	-	24hr.	3.55	54.6	-	Kimley-Horn & Associates
Marion Co, FL	2.7	May-02	50	-	246.66	24hr.	2.66	40.5	265.44	Kimley-Horn & Associates
Total Size	25.2	9	1,407				**Average Trip Length:**	**2.38**		
ITE	21.0	7					**Weighted Average Trip Length:**	**2.46**		
Blended total	46.2						Weighted Percent New Trip Average:	46.2		
	23.7							Weighted Average Trip Generation Rate:		246.66
								ITE Average Trip Generation Rate:		148.15
								Blend of FL Studies and ITE Average Trip Generation Rate:		**159.34**

Sit-Down Restaurant (ITE LUC 931)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Tampa, FL	-	Mar-86	76	62	-	-	2.10	82.0	-	Kimley-Horn & Associates
St. Petersburg, FL	7.5	Oct-89	177	154	-	11a-2p/4-8p	3.50	87.0	-	Tindale Oliver
Clearwater, FL	8.0	Oct-89	60	40	110.63	10a-2p/5-9p	2.80	67.0	207.54	Tindale Oliver
Total Size	15.5	2	313				**Average Trip Length:**	**2.80**		
ITE	135.0	15					**Weighted Average Trip Length:**	**3.14**		
Blended total	150.5						Weighted Percent New Trip Average:	76.7		
	143.0							Weighted Average Trip Generation Rate:		110.63
								ITE Average Trip Generation Rate:		89.95
								Blend of FL Studies and ITE Average Trip Generation Rate:		**91.10**

High-Turnover Restaurant (ITE LUC 932)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Hernando Co, FL	6.2	May-96	242	175	187.51	9a-6p	2.76	72.5	375.00	Tindale Oliver
Hernando Co, FL	8.2	May-96	154	93	102.71	9a-6p	4.15	60.2	256.43	Tindale Oliver
St. Petersburg, FL	5.0	Oct-89	74	68	132.60	1130-7p	2.00	92.0	243.98	Tindale Oliver
Kenneth City, FL	5.2	Oct-89	236	176	127.88	4p-730p	2.30	75.0	220.59	Tindale Oliver
Pasco Co, FL	5.2	Apr-02	114	88	82.47	9a-6p	3.72	77.2	236.81	Tindale Oliver
Pasco Co, FL	5.8	Apr-02	182	102	116.97	9a-6p	3.49	56.0	228.77	Tindale Oliver
Orange Co, FL	11.2	-	-	-	18.76	-	-	-	-	Orange County
Orange Co, FL	10.4	-	-	-	31.77	-	-	-	-	Orange County
Orange Co, FL	8.9	-	-	-	52.69	-	-	-	-	Orange County
Orange Co, FL	11.3	-	-	-	62.12	-	-	-	-	Orange County
Orange Co, FL	6.7	-	-	-	82.58	-	-	-	-	Orange County
Orange Co, FL	11.4	-	-	-	91.67	-	-	-	-	Orange County
Orange Co, FL	11.3	-	-	-	95.33	-	-	-	-	Orange County
Orange Co, FL	7.2	-	-	-	98.06	-	-	-	-	Orange County
Orange Co, FL	5.5	-	-	-	100.18	-	-	-	-	Orange County
Orange Co, FL	9.7	-	-	-	105.84	-	-	-	-	Orange County
Orange Co, FL	4.6	-	-	-	129.23	-	-	-	-	Orange County
Orange Co, FL	7.0	-	-	-	126.40	-	-	-	-	Orange County
Orange Co, FL	9.7	-	-	-	132.32	-	-	-	-	Orange County
Orange Co, FL	5.0	-	-	-	135.68	-	-	-	-	Orange County
Orange Co, FL	5.6	-	-	-	145.59	-	-	-	-	Orange County
Orange Co, FL	7.4	-	-	-	147.44	-	-	-	-	Orange County
Orange Co, FL	5.9	-	-	-	147.74	-	-	-	-	Orange County
Orange Co, FL	11.0	Nov-15	-	-	138.39	-	-	-	-	Tindale Oliver
Orange Co, FL	8.9	-	-	-	52.69	-	-	-	-	Tindale Oliver
Total Size	194.3	25	1,002				**Average Trip Length:**	**3.07**		
ITE	98.0	14					**Weighted Average Trip Length:**	**3.17**		
Blended total	292.3									

Weighted Percent New Trip Average: 70.8

Weighted Average Trip Generation Rate: 99.40

ITE Average Trip Generation Rate: 127.15

Blend of FL Studies and ITE Average Trip Generation Rate: 108.71

Fast Food Restaurant w/Drive Thru (ITE LUC 934)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Tampa, FL	-	Mar-86	61	-	-	-	2.70	-	-	Kimley-Horn & Associates
Tampa, FL	-	Mar-86	306	-	-	-	-	65.0	-	Kimley-Horn & Associates
Pinellas Co, FL	2.20	Aug-89	81	48	502.80	11a-2p	1.70	59.0	504.31	Tindale Oliver
Pinellas Co, FL	4.30	Oct-89	456	260	660.40	1 day	2.30	57.0	865.78	Tindale Oliver
Tarpon Springs, FL	-	Oct-89	233	114	-	7a-7p	3.60	49.0	-	Tindale Oliver
Marion Co, FL	1.60	Jun-91	60	32	962.50	48hrs.	0.91	53.3	466.84	Tindale Oliver
Marion Co, FL	4.00	Jun-91	75	46	625.00	48hrs.	1.54	61.3	590.01	Tindale Oliver
Collier Co, FL	-	Aug-91	66	44	-	-	1.91	66.7	-	Tindale Oliver
Collier Co, FL	-	Aug-91	118	40	-	-	1.17	33.9	-	Tindale Oliver
Hernando Co, FL	5.43	May-96	136	82	311.83	9a-6p	1.68	60.2	315.27	Tindale Oliver
Hernando Co, FL	3.13	May-96	168	82	547.34	9a-6p	1.59	48.8	425.04	Tindale Oliver
Lake Co, FL	2.20	Apr-01	376	252	934.30	-	2.50	74.6	1742.47	Tindale Oliver
Lake Co, FL	3.20	Apr-01	171	182	654.90	-	-	47.8	-	Tindale Oliver
Lake Co, FL	3.80	Apr-01	188	137	353.70	-	3.30	70.8	826.38	Tindale Oliver
Pasco Co, FL	2.66	Apr-02	100	46	283.12	9a-6p	-	46.0	-	Tindale Oliver
Pasco Co, FL	2.96	Apr-02	486	164	515.32	9a-6p	2.72	33.7	472.92	Tindale Oliver
Pasco Co, FL	4.42	Apr-02	168	120	759.24	9a-6p	1.89	71.4	1024.99	Tindale Oliver
Orange Co, FL	8.93	-	-	-	377.00	-	-	-	-	Orange County
Total Size	48.8	13	4,463				**Average Trip Length:**	**2.11**		
ITE	63.0	21					**Weighted Average Trip Length:**	**2.05**		
Blended total	111.8									
	34.0									

Weighted Percent New Trip Average: 57.9

Weighted Average Trip Generation Rate: 530.19

ITE Average Trip Generation Rate: 496.12

Blend of FL Studies and ITE Average Trip Generation Rate: 511.00

Automobile Care Center (ITE LUC 942)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Jacksonville, FL	2.3	2/3-4/90	124	94	-	9a-5p	3.07	76.0	-	Tindale Oliver
Jacksonville, FL	2.3	2/3-4/90	110	74	-	9a-5p	2.96	67.0	-	Tindale Oliver
Jacksonville, FL	2.4	2/3-4/90	132	87	-	9a-5p	2.32	66.0	-	Tindale Oliver
Lakeland, FL	5.2	Mar-90	24	14	-	9a-4p	1.36	59.0	-	Tindale Oliver
Largo, FL	5.5	Sep-89	34	30	37.64	9a-5p	2.40	88.0	79.50	Tindale Oliver
Orange Co, FL	25.0	Nov-92	41	39	-	2-6p	4.60	-	-	LCE, Inc.
Lakeland, FL	-	Mar-90	54	42	-	9a-4p	2.44	78.0	-	Tindale Oliver
Orange Co, FL	36.6	-	-	-	15.17	-	-	-	-	Orange County
Orange Co, FL	7.0	-	-	-	46.43	-	-	-	-	Orange County
Total Size	86.2	6	519				**Average Trip Length:**	**2.74**		
ITE	102.0	6					**Weighted Average Trip Length:**	**3.62**		
Blended total	188.2									
	151.1									

Weighted Percent New Trip Average: 72.2

Weighted Average Trip Generation Rate: 22.14

ITE Average Trip Generation Rate: 31.10

Blend of FL Studies and ITE Average Trip Generation Rate: 28.19

Service Station (ITE LUC 944)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Largo, FL	0.6	Nov-89	70	14	-	8am-5pm	1.90	23.0	-	Tindale Oliver
Collier Co, FL	-	Aug-91	168	40	-	-	1.01	23.8	-	Tindale Oliver
Total Size	0.6	1	238				**Average Trip Length:**	**1.46**		
ITE (vfp)	48.0	6					**Weighted Average Trip Length:**	**1.90**		

Weighted Percent New Trip Average: 23.0

Self-Service Car Wash (ITE LUC 947)

Location	Size (Bays)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Largo, FL	10	Nov-89	111	84	-	8am-5pm	2.00	76.0	-	Tindale Oliver
Clearwater, FL	-	Nov-89	177	108	-	10am-5pm	1.30	61.0	-	Tindale Oliver
Collier, FL	11	Dec-09	304	-	30.24	-	2.50	57.0	-	Tindale Oliver
Collier, FL	8	Jan-09	186	-	22.75	-	1.96	72.0	-	Tindale Oliver
Total Size	29	3	778			**Average Trip Length:**	**1.94**			
Total Size (TGR)	19	2				**Weighted Average Trip Length:**	**2.18**			
ITE	5	1				Weighted Percent New Trip Average:		67.7		
Blended total	24									

Weighted Average Trip Generation Rate:	27.09
ITE Average Trip Generation Rate:	108.00
Blend of FL Studies and ITE Average Trip Generation Rate:	**43.94**

Gasoline/Fast Food/Convenience Store (ITE LUC -)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Volusia Co, FL	-	-	-	-	918.00	-	2.40	33.0	727.06	Tindale Oliver
Collier Co, FL	2.4	Nov-99	-	128	1399.58	8a-6p	4.10	13.3	763.19	Tindale Oliver
Indian River Co, FL	2.5	Mar-98	132	52	748.30	8a-6p	3.70	19.7	545.44	Tindale Oliver
Indian River Co, FL	3.0	Mar-98	107	84	563.10	8a-6p	2.00	39.3	442.60	Tindale Oliver
Indian River Co, FL	3.1	Mar-98	132	110	1396.00	8a-6p	1.80	41.7	1,047.84	Tindale Oliver
Collier Co, FL	3.3	Nov-99	-	144	862.56	8a-6p	2.20	39.6	751.46	Tindale Oliver
Total Size	14.3	5	371			**Average Trip Length:**	**2.70**			
						Weighted Average Trip Length:	**2.65**			
						Weighted Percent New Trip Average:		32.1		

Weighted Average Trip Generation Rate:	**984.59**

Appendix B
Cost Component Calculations

Cost Component

This appendix presents the detailed calculations for the cost component of the multi-modal transportation impact fee update. Backup data and assumptions are provided for all cost variables, including:

- Design
- Right-of-Way
- Construction
- Construction engineering/inspection
- Roadway capacity
- Transit capital costs

Design

City/County Roadways

The design cost factor for city/county roads was estimated as a percentage of the construction cost per lane mile. This factor was determined through a review of the design-to-construction cost ratios from previously completed transportation impact studies throughout Florida. The design factors from other studies ranged from 6 percent to 14 percent, with a weighted average of 10 percent. For purposes of this study, the design cost for city/county roads was calculated at 10 percent of the construction cost per lane mile. See Table B-1.

State Roadways

The design cost factor for state roads was estimated as a percentage of the construction cost per lane mile. This factor was determined through a review of the design-to-construction cost ratios for state road unit costs in previously completed transportation impact studies throughout Florida. For state roadways, the design factors ranged from 10 percent to 14 percent, with a weighted average of 11 percent. For purposes of this study, the design cost for state roads was calculated at 11 percent of the construction cost per lane mile. See Table B-1 for additional information.

Table B-1
Design Cost Factor for City/County & State Roads – Recent Impact Fee Studies

Year	County	City/County Roadways (Cost per Lane Mile)			State Roadways (Cost per Lane Mile)		
		Design	Constr.	Design Ratio	Design	Constr.	Design Ratio
2006	Collier	$323,639	$2,558,546	13%	$349,643	$3,385,978	10%
2006	Citrus	$361,774	$2,584,099	14%	$400,432	$2,860,227	14%
2006	Highlands	$235,030	$1,678,785	14%	$347,326	$2,480,900	14%
2006	Marion	$185,333	$1,941,244	10%	$154,643	$1,430,919	11%
2007	Pasco	$246,324	$3,079,051	8%	$427,112	$3,050,799	14%
2007	Lake	$232,882	$2,911,021	8%	$318,412	$3,184,125	10%
2007	Flagler	$174,000	$1,740,000	10%	-	-	n/a
2007	Volusia	$291,696	$2,651,778	11%	$309,526	$3,095,258	10%
2008	Leon	$212,800	$2,660,000	8%	$372,130	$3,383,000	11%
2008	Sumter	$178,960	$2,237,000	8%	$238,000	$2,380,000	10%
2009	Collier	$217,000	$3,100,000	7%	$320,000	$3,200,000	10%
2009	Polk	$95,400	$1,590,000	6%	$217,000	$2,170,000	10%
2009	Hillsborough/Tampa	$308,000	$2,800,000	11%	$420,000	$3,500,000	12%
2010	Collier	$119,560	$1,708,000	7%	$241,800	$2,418,000	10%
2011	Sarasota/North Port	$240,000	$2,400,000	10%	$200,000	$2,000,000	10%
2012	Osceola	$371,196	$2,651,400	14%	$313,258	$2,847,800	11%
2012	Orange	$264,000	$2,400,000	11%	-	-	n/a
2012	City of Orlando	$288,000	$2,400,000	12%	$319,000	$2,900,000	11%
2012	City of Sarasota	$240,000	$2,400,000	10%	$286,000	$2,600,000	11%
2013	Hernando	$198,000	$1,980,000	10%	$222,640	$2,024,000	11%
2013	Charlotte	$220,000	$2,200,000	10%	$240,000	$2,400,000	10%
2014	Indian River	$159,000	$1,598,000	10%	$196,000	$1,776,000	11%
2015	Collier	$270,000	$2,700,000	10%	$270,000	$2,700,000	10%
2015	Brevard	$242,000	$2,023,000	12%	$316,000	$2,875,000	11%
2015	Sumter	$210,000	$2,100,000	10%	$276,000	$2,505,000	11%
2015	Marion	$167,000	$2,668,000	6%	$227,000	$2,060,000	11%
2015	Palm Beach	$224,000	$1,759,000	13%	$333,000	$3,029,000	11%
2016	Hillsborough	$348,000	$2,897,000	12%	$319,000	$2,897,000	11%
2016	St. Lucie County	$220,000	$2,200,000	10%	$341,000	$3,100,000	11%
Average		**$235,986**	**$2,331,584**	**10%**	**$295,367**	**$2,676,037**	**11%**
				(a)			(b)

Source: Individual jurisdictions and recent impact fee studies throughout Florida
Note: Letter references (e.g., "a") are used to assist with footnotes and sourcing

Right-of-Way

The ROW cost reflects the total cost of the acquisitions along a corridor that was necessary to have sufficient cross-section width to widen an existing road or, in the case of new construction, build a new road.

City/County Roadways

With no recent local ROW acquisition cost data available, Tindale Oliver reviewed ROW estimates from recent transportation impact fee studies from other counties in Florida. For impact fee purposes, the ROW cost for city/county roads was estimated as a percentage of the construction cost per lane mile. A review of recent cost data from other Florida jurisdictions indicated an average ROW-to-construction cost of approximately 41 percent for city/county roadways (see Table B-2). Based on this ratio, a ROW factor of 41 percent was used in the multi-modal impact fee calculation.

State Roadways

Similar to city/county roads, the ROW cost of state roads was estimated as a percentage of the construction cost per lane mile. Given the lack of ROW cost data for state roads in Sarasota County, this factor was determined through a review of the ROW-to-construction cost ratios for state road costs in previously completed impact fee studies throughout Florida. For state roadways, the ROW factors ranged from 20 percent to 71 percent with a weighted average of 44 percent. For purposes of this update study, the ROW cost for state roads was calculated at 44 percent of the construction cost per lane mile. See Table B-2 for additional information.

Table B-2
ROW Cost Factor for City/County & State Roads – Recent Impact Fee Studies

Year	County	City/County Roadways (Cost per Lane Mile)			State Roadways (Cost per Lane Mile)		
		ROW	Constr.	ROW Ratio	ROW	Constr.	ROW Ratio
2006	Collier	$1,751,790	$2,558,546	68%	$1,751,790	$3,385,978	52%
2006	Citrus	$784,599	$2,584,099	30%	$949,979	$2,860,227	33%
2006	Highlands	$468,853	$1,678,785	28%	$507,500	$2,480,900	20%
2006	Marion	$1,005,123	$1,941,244	52%	$868,908	$1,430,919	61%
2007	Pasco	$814,517	$3,079,051	26%	$1,560,714	$3,050,799	51%
2007	Lake	$599,185	$2,911,021	21%	$1,462,133	$3,184,125	46%
2007	Flagler	$460,000	$1,740,000	26%	-	-	n/a
2007	Volusia	$858,109	$2,651,778	32%	$954,543	$3,095,258	31%
2008	Leon	$1,120,000	$2,660,000	42%	$1,363,000	$3,383,000	40%
2008	Sumter	$802,000	$2,237,000	36%	$1,400,000	$2,380,000	59%
2009	Collier	$1,300,000	$3,100,000	42%	$1,300,000	$3,200,000	41%
2009	Polk	$1,491,000	$1,590,000	94%	$550,000	$2,170,000	25%
2009	Hillsborough/Tampa	$1,500,000	$2,800,000	54%	$2,500,000	$3,500,000	71%
2010	Collier	$901,000	$1,708,000	53%	$901,000	$2,418,000	37%
2011	Sarasota/North Port	$620,000	$2,400,000	26%	$800,000	$2,000,000	40%
2012	Osceola	$1,087,074	$2,651,400	41%	$1,167,598	$2,847,800	41%
2012	Orange	$1,080,000	$2,400,000	45%	-	-	n/a
2012	City of Orlando	$1,080,000	$2,400,000	45%	$1,305,000	$2,900,000	45%
2012	City of Sarasota	$620,000	$2,400,000	26%	$1,144,000	$2,600,000	44%
2013	Hernando	$811,800	$1,980,000	41%	$890,560	$2,024,000	44%
2013	Charlotte	$1,034,000	$2,200,000	47%	$1,128,000	$2,400,000	47%
2014	Indian River	$656,000	$1,598,000	41%	$781,000	$1,776,000	44%
2015	Collier	$863,000	$2,700,000	32%	$863,000	$2,700,000	32%
2015	Brevard	$708,000	$2,023,000	35%	$1,006,000	$2,785,000	36%
2015	Sumter	$945,000	$2,100,000	45%	$1,127,000	$2,505,000	45%
2015	Marion	$1,001,000	$1,668,000	60%	$1,236,000	$2,060,000	60%
2015	Palm Beach	$721,000	$1,759,000	41%	$1,333,000	$3,029,000	44%
2016	Hillsborough	$1,448,000	$2,897,000	50%	$1,448,000	$2,897,000	50%
2016	St. Lucie	$990,000	$2,200,000	45%	$1,395,000	$3,100,000	45%
Average		**$949,002**	**$2,297,101**	**41%**	**$1,173,842**	**$2,672,704**	**44%**
				(a)			(b)

Source: Individual jurisdictions and recent impact fee studies throughout Florida
Note: Letter references (e.g., "a") are used to assist with footnotes and sourcing

Construction

City/County Roadways

Five recent improvements in Sarasota County were identified and reviewed:

- Fruitville Road from Tatum Road to Debrecen Road
- Fruitville Road from Coburn Road to Tatum Road
- North Cattlemen Road from Richardson Road to Desoto Road
- Honore Avenue/Pinebrook Road Extension from SR 681 to Laurel Road
- Bee Ridge Road from Mauna Loa Boulevard to Iona Road

As shown in Table B-3, these five improvements have a weighted average construction cost of approximately $2.51 million per lane mile.

In addition to local data, a review of recently bid projects throughout the state of Florida was conducted. As shown in Table B-3, a total of 66 projects from 17 different counties were identified with a weighted average construction cost of approximately $2.15 million per lane mile. When compared to the statewide bids, the local improvements average a slightly higher cost per lane mile.

For purposes of the multi-modal impact fee, a construction cost of $2.20 million was applied. This construction cost was based on a blending of the local improvements with the statewide data presented in Table B-3.

State Roadways

A review of construction cost data for recent local state roadway capacity expansion projects identified two improvements in Sarasota County:

- US 301 from Wood Street to Myrtle Avenue
- SR 45A (US 41/Venice Bypass) from Gulf Coast Boulevard to Bird Bay Drive West

As shown in Table B-4, these improvements had a weighted average construction cost of approximately $4.18 million. There is a significance cost difference in these two bids, with the US 301 improvement at $2.18 million per lane mile and the SR 45A improvement at $7.27 million per lane mile. SR 45A included high costs for maintenance of traffic, base, and drainage.

In addition to local data, a review of recently bid projects located throughout the state of Florida was conducted. As show in Table B-4, a total of 78 projects from 34 different counties were identified with a weighted average cost of approximately $3.20 million per lane mile (all improvements are urban-design). The FDOT District 7 Long Range Estimates were also reviewed (shown in Table B-5) and provided an average construction cost of approximately $3.47 million per lane mile for urban-design projects (this data was not available for FDOT District 1).

For purposes of the multi-modal impact fee, a construction cost of $3.20 million was applied. This construction cost was based on a blending of the local improvements with the statewide data presented in Table B-4.

Table B-3
Construction Cost – County Road Improvements throughout Florida

County	District	Description	From	To	Year	Status	Feature	Design	Length	Lanes Added	Lane Miles Added	Construction Cost	Construction Cost per Lane Mile
Orange	5	Clarcona-Ocoee Rd	Hiawassee Rd	Clark	2009	Bid	2 to 4	Urban	2.50	2	5.00	$10,182,738	$2,036,548
Orange	5	Woodbury Rd	S. of SR 50	Challenger Pkwy	2009	Bid	2 to 4	Urban	0.65	2	1.30	$4,088,942	$3,145,340
Orange	5	Sand Lake Rd	President's Dr	FL Mall	2009	Bid	2 to 4	Urban	1.00	2	2.00	$6,020,755	$3,010,378
Orange	5	Taft-Vineland Road Extension	Central Florida Pkwy	John Young Pkwy	2009	Bid	2 to 4	Urban	0.70	2	1.40	$4,462,535	$3,187,525
Osceola	5	Narcoossee Rd	US 192	Orange Co. Line	2009	Bid	2 to 4	Urban	7.40	2	14.80	$47,360,000	$3,200,000
Osceola	5	Osceola Pkwy (Ph. I)	FL Turnpike	Buenaventura Blvd	2009	Bid	4 to 6	Urban	1.57	2	3.14	$5,966,000	$1,900,000
Osceola	5	Poinciana Blvd (Ph. II)	Crescent Lakes	US 17/92	2009	Bid	2 to 4	Urban	2.50	2	5.00	$16,000,000	$3,200,000
Osceola	5	Old Lake Wilson Rd (Ph. I)	Livingston Rd	Sinclair Rd	2009	Bid	2 to 4	Urban	2.30	2	4.60	$14,720,000	$3,200,000
Hillsborough	7	Boyette Rd, Ph. III	Donneymoor Dr	Bell Shoals Rd	2009	Bid	2 to 4	Urban	1.84	2	3.68	$20,814,450	$5,656,101
Hillsborough	7	Race Track Rd, Ph. IV	Douglas Rd	Hillsborough Ave	2009	Bid	2 to 6	Urban	0.69	4	2.76	$5,375,855	$1,947,774
Sarasota	1	Fruitville Rd (Ph. I)	Tatum Rd	Debrecen Rd	2009	Bid	2 to 4	Urban	0.72	2	1.44	$4,355,796	$3,024,858
Sarasota	1	Fruitville Rd (Ph. II)	Coburn Rd	Tatum Rd	2009	Bid	2 to 4	Urban	1.26	2	2.52	$8,557,904	$3,395,994
Lee	1	Colonial Blvd (CR 884)	I-75	SR 82	2009	Bid	4 to 6	Urban	2.70	2	5.40	$14,576,393	$2,699,332
Indian River	4	College Lane Rd	Extension IRSC	66th Ave	2009	Bid	0 to 2	Urban	0.50	2	1.00	$1,700,000	$1,700,000
Indian River	4	16th St	66th Ave	74th Ave	2009	Bid	0 to 2	Urban	1.27	2	2.54	$3,109,321	$1,224,142
Polk	1	Pine Tree Trail	Ernie Caldwell Blvd	CR 54/Reagan Pkwy	2009	Bid	0 to 2	Urban	1.40	2	2.80	$3,442,332	$1,229,404
Polk	1	Lakeland Highlands Rd	Polk Pkwy	CR 540A	2009	Bid	2 to 4	Urban	3.01	2	6.02	$13,603,672	$2,259,746
Palm Beach	4	Alt. A1A	S. of Frederick Small Rd	Center St	2009	Bid	4 to 6	Urban	4.40	2	8.80	$6,364,139	$723,198
Palm Beach	4	Lyons Rd	Glades Rd	Yamato Rd	2009	Bid	4 to 6	Urban	1.80	2	3.60	$5,967,464	$1,657,629
Palm Beach	4	Hypoluxo Rd	Jog Rd	Military Tr	2009	Bid	4 to 6	Urban	2.00	2	4.00	$4,054,386	$1,013,597
Palm Beach	4	Lawrence Rd	S. of C. Stanley Weaver Canal	N. of C. Stanley Weaver Canal	2009	Bid	2 to 4	Urban	0.20	2	0.40	$1,051,680	$2,629,200
Collier	1	Oil Well Rd (Segment 2)	Immokalee Rd	E. of Everglades Blvd	2009	Bid	2 to 4/6	Urban	5.05	2/4	10.92	$15,091,068	$1,381,966
Collier	1	Oil Well Rd (Segment 4A)	W. of Oil Well Grade Rd	W. of Camp Keais Rd	2009	Bid	2 to 6	Urban	4.72	4	18.88	$15,875,782	$840,878
Marion	5	CR 200A	US 441	NE 35th St	2009	Bid	2 to 4	Urban	1.73	2	3.46	$6,451,296	$1,864,536
Marion	5	NW 44th Ave	US 27	NW 60th St	2009	Bid	2 to 4	Urban	2.63	2	5.26	$5,910,189	$1,123,610
Marion	5	SE 31st St	SE 19th Ave	SE 36th Ave	2009	Bid	2 to 4	Urban	1.50	2	4.20	$5,544,524	$1,320,125
Marion	5		SE 36th Ave	SR 464	2009	Bid	0 to 4	Urban	0.30	4			
Orange	5	Alafaya Tr	Avalon Park Blvd	Mark Twain Blvd	2010	Bid	2 to 4	Urban	3.83	2	7.66	$18,918,599	$2,469,791
Broward	4	Bailey Rd	NW 64th Ave / SW 81st Ave	SR 7 (US 441)	2010	Bid	2 to 4	Urban	2.00	2	4.00	$6,330,297	$1,582,574
Lee	1	Six Mile Cypress Pkwy	Daniels Pkwy	S. of Winkler Rd Ext.	2010	Bid	2 to 4	Urban	3.09	2	6.18	$6,711,242	$1,085,961
Charlotte	1	Piper Rd	Henry St	Jones Loop Rd	2010	Bid	2 to 4	Sub-Urb	2.10	2	4.20	$8,627,803	$2,054,239
Indian River	4	53rd St	Kings Hwy	Lateral H Canal	2010	Bid	0 to 4	Urban	2.04	4	8.16	$7,000,000	$857,843
Indian River	4	53rd St	Lateral H Canal	Indian River Blvd	2010	Bid	0 to 4	Urban	0.50	4	2.00	$7,605,993	$3,802,997
Palm Beach	4	45th St	Jog Rd	E. of Haverhill Rd	2010	Bid	2 to 4	Urban	1.50	2	3.00	$12,423,103	$4,141,034
Palm Beach	4	Jog Rd	S. of 45th St	N. of 45th St	2010	Bid	0 to 4	Urban	0.50	4	2.00	$4,960,399	$2,480,200
Palm Beach	4	Congress Ave	Lantana Rd	Melaluca Ln	2010	Bid	4 to 6	Urban	1.30	2	2.60	$6,130,698	$2,357,961
Palm Beach	4	Seminole Pratt Whitney Rd	SR 80	Sycamore Dr	2010	Bid	2 to 4	Urban	4.20	2	8.40	$9,930,460	$1,182,198
Palm Beach	4	Seminole Pratt Whitney Rd	S. of M Canal	S. of Orange Blvd	2010	Bid	2 to 4	Urban	1.40	2	2.80	$2,820,892	$1,007,461
Citrus	7	CR 486	SR 44	Forest Ridge Blvd	2010	Bid	2 to 4	Urban	6.30	2	12.60	$26,614,211	$2,112,239
Brevard	5	Pineda Cswy Extension	I-95	W. of Wickham Rd	2010	Bid	0 to 4	Urban	2.10	4	8.40	$17,238,865	$2,052,246
Sarasota	1	North Cattlemen Rd	Richardson Rd	Desoto Rd	2011	Bid	2 to 4	Urban	2.55	2	5.10	$11,101,990	$2,176,861
Lee	1	Daniels Pkwy	Chamberlin Pkwy	Gateway Blvd	2011	Bid	4 to 6	Urban	2.05	2	4.10	$2,906,553	$708,915
Orange	5	Rouse Rd	SR 50	Corporate Blvd	2011	Bid	2 to 4	Urban	2.60	2	5.20	$29,380,249	$5,650,048
Orange	5	CR 535 Seg. A	Magnolia Park Ct	SR 429	2011	Bid	2 to 4	Urban	1.37	2	2.74	$8,390,570	$3,062,252
Osceola	5	Goodman Rd	Tri-County	Sand Mine Rd	2011	Bid	0 to 2	Urban	3.53	2	7.06	$7,060,000	$1,000,000
Pinellas	1	Bryan Dairy Rd	Starkey Rd (CR 1)	72nd St	2011	Bid	4 to 6	Urban	1.47	2	2.94	$10,327,383	$3,512,715
Hernando	7	Elgin Blvd	Mariner Blvd	East 3900'	2011	Bid	2 to 4	Urban	0.74	2	1.48	$2,684,566	$1,813,896

Table B-3 (continued)
Construction Cost – County Road Improvements throughout Florida

County	District	Description	From	To	Year	Status	Feature	Design	Length	Lanes Added	Lane Miles Added	Construction Cost	Construction Cost per Lane Mile
Hernando	7	Sunshine Grove Rd	SR 50	Ken Austin Pkwy	2011	Bid	2 to 4	Urban	2.10	2	4.20	$4,646,801	$1,106,381
Palm Beach	4	Lyons Rd	N. of West Atlantic Ave	S. of Boynotno Beach Blvd	2011	Bid	0 to 2	Urban	3.20	2	6.40	$5,329,359	$832,712
Charlotte	1	Burnt Store Rd (Ph. I)	US 41	Notre Dame Blvd	2011	Bid	2 to 4	Urban	2.40	2	4.80	$13,512,394	$2,815,082
Hillsborough	7	Madison Ave	US 41	78th St	2011	Bid	2 to 4	Urban	2.29	2	4.58	$7,000,000	$1,528,384
Indian River	4	Oslo Rd Ph. II	43rd Ave	27th Ave	2011	Bid	2 to 4D	Urban	1.20	3	3.60	$4,531,822	$1,258,839
Indian River	4	Oslo Rd Ph. III	43rd Ave	58th Ave	2012	Bid	2 to 4	Urban	1.15	2	2.30	$3,812,202	$1,657,479
Indian River	4	66th Ave	SR 60	49th St	2012	Bid	2 to 4	Urban	3.05	2	6.10	$20,773,389	$3,405,474
Polk	1	Kathleen Rd (CR35A) Ph. II	Galloway Rd	Duff Rd	2012	Bid	2 to 4	Urban	3.00	2	6.00	$17,813,685	$2,968,948
Polk	1	Bartow Northern Connector Ph. I	US 98	US 17	2012	Bid	0 to 4	Urban	2.00	4	8.00	$11,255,736	$1,406,967
Volusia	5	Tymber Creek Rd	SR 40	Peruvian Ln	2012	Bid	2 to 4	Urban	0.75	2	1.50	$5,276,057	$3,517,371
Palm Beach	4	Jog Rd	N. of SR 710	N. of Florida's Turnpike	2012	Bid	0 to 4	Urban	0.70	4	2.80	$3,413,874	$1,219,241
Palm Beach	4	West Atlantic Ave	W. of Lyons Rd	Starkey Rd	2012	Bid	2 to 4	Urban	0.80	2	1.60	$8,818,727	$5,511,704
Palm Beach	4	60th St N & SR 7 Ext.	E. of Royal Palm Beach Blvd	SR 7	2012	Bid	0 to 2	Urban	1.50	2	3.00	$3,821,404	$1,273,801
Brevard	5	Babcock St	S. of Foundation Park Blvd	Malabar Rd	2013	Bid	2 to 4	Urban	12.40	2	24.80	$56,000,000	$2,258,065
Collier	1	Collier Blvd (CR 951)	Golden Gate Blvd	Green Blvd	2013	Bid	4 to 6	Urban	2.74	2	5.48	$23,295,924	$4,251,081
Marion	5	SW 110th St	US 41	SW 200th Ave	2013	Bid	0 to 2	Urban	0.11	2	0.22	$438,765	$1,994,386
Marion	5	NW 35th St	NW 35th Avenue Rd	NW 27th Ave	2013	Bid	0 to 4	Urban	0.50	4	4.60	$8,616,236	$1,873,095
Marion	5	NW 35th St	NW 27th Ave	US 441	2013	Bid	2 to 4	Urban	1.30	2			
Sumter	5	C-466A, Ph. III	US 301 N	Powell Rd	2013	Bid	2 to 3/4	Urban	1.10	2	2.20	$4,283,842	$1,947,201
Sarasota	1	Honore Ave/Pinebrook Rd Ext.	SR 681	Laurel Rd	2013	Bid	0 to 2	Rural	2.70	2	5.40	$11,699,059	$2,166,492
Collier	1	Golden Gate Blvd	Wilson Blvd	Desoto Blvd	2014	Bid	2 to 4	Urban	5.71	2	11.42	$51,402,161	$4,501,065
Brevard	5	St. Johns Heritage Pkwy	SE of I-95 Intersection	US 192 (Space Coast Pkwy)	2014	Bid	0 to 2	Sub-Urb	3.11	2	6.22	$16,763,567	$2,695,107
Hillsborough	7	Turkey Creek Rd	Dr. MLK Blvd	Sydney Rd	2014	Bid	2 to 4	Urban	1.40	2	2.80	$3,166,000	$1,130,714
Sarasota	1	Bee Ridge Rd	Mauna Loa Blvd	Iona Rd	2014	Bid	2 to 4	Urban	2.68	2	5.36	$14,066,523	$2,624,351
Total									**Count:**	**71**	**348.92**	**$757,548,621**	**$2,171,124**
Total (Sarasota Only)									**Count:**	**5**	**19.82**	**$49,781,272**	**$2,511,669**
Total (Excluding Sarasota)									**Count:**	**66**	**329.10**	**$707,767,349**	**$2,150,615**
Total - Used in Impact Fee													**$2,200,000**

Source: Roadway bids from recent impact fee studies throughout Florida as well as recent bids from the Tindale Oliver Cost Database, with information having been provided by each respective County

Table B-4
Construction Cost – State Road Improvements from Other Jurisdictions throughout Florida

County	District	Description	From	To	Year	Status	Feature	Design	Length	Lanes Added	Lane Miles Added	Construction Cost	Construction Cost per Lane Mile
Leon	3	SR 10 (Mahan Drive)	Dempsey Mayo Rd	Walden Rd	2009	Bid	2 to 4	Urban	3.10	2	6.20	$18,083,410	$2,916,679
Indian River	4	SR 60 (Osceola Blvd)	W. of I-95	W. of 82nd Ave/CR 609	2009	Bid	4 to 6	Urban	3.07	2	6.14	$7,134,452	$1,161,963
Sarasota	1	US 301	Wood St	Myrtle Ave	2009	Bid	4 to 6	Urban	2.60	2	5.20	$14,666,593	$2,820,499
Pasco	7	US 41 (SR 45)	Tower Rd	Ridge Rd	2009	Bid	2 to 4	Urban	2.84	2	5.68	$12,685,027	$2,233,279
Lee	1	SR 739	US 41 (S. of Alico)	Six Mile Cypress Pkwy	2009	Bid	0 to 6	Urban	2.77	6	16.62	$20,552,627	$1,236,620
Marion	5	SR 35 (US 301)	Sumter County Line	529' S. of CR 42	2009	Bid	2 to 4	Urban	1.40	2	2.80	$3,596,000	$1,284,286
Miami-Dade	6	Perimeter Rd	NW 72 Avenue	NW 57 Avenue	2009	Bid	2 to 4	Urban	1.50	2	3.00	$4,855,070	$1,618,357
Polk	1	US 27	N. of CR 546	S. of SR 544	2009	Bid	2 to 4	Urban	1.56	2	3.12	$4,100,069	$1,314,125
Santa Rosa	3	SR 281 (Avalon Blvd)	N. of CSX R/R Bridge	S. of Commerce Rd	2009	Bid	2 to 4	Urban	0.98	2	1.96	$5,621,006	$2,867,860
Santa Rosa	3	SR 281 (Avalon Blvd)	Gulf Rd	SR 10 (US 90)	2009	Bid	2 to 4	Urban	1.78	2	3.56	$9,150,583	$2,570,388
St. Lucie	4	SR 70	MP 5.860	MP 10.216	2009	Bid	2 to 4	Urban	4.36	2	8.72	$12,426,020	$1,425,002
Sumter	5	SR 35 (US 301)	N. of CR 204	Marion County Line	2009	Bid	2 to 4	Urban	1.51	2	3.02	$3,856,688	$1,277,049
Washington	3	SR 79	N. Environmental Rd	Strickland Rd	2009	Bid	2 to 4	Sub-Urb	1.72	2	3.44	$8,877,323	$2,580,617
Lake	5	SR 50	E. of Grand Hwy	W. of Hancock Rd	2010	Bid	4 to 6	Urban	1.30	2	2.60	$4,689,633	$1,803,705
Polk	1	SR 559 Extension	SR 655 (Recker Hwy)	Derby Ave	2010	Bid	0 to 2	Urban	0.69	2	1.38	$2,751,592	$1,993,907
Santa Rosa	3	SR 281 (Avalon Blvd)	SR 8 (I-10)	S. of Moor's Lodge	2010	Bid	2 to 4	Urban	0.85	2	1.70	$5,378,226	$3,163,662
Santa Rosa	3	SR 281 (Avalon Blvd)	S. of Moor's Lodge	N. of CSX R/R Bridge	2010	Bid	2 to 4	Urban	1.48	2	2.96	$7,120,212	$2,405,477
Lee	1	US 41	Corkscrew Rd	San Carlos Blvd	2010	Bid	4 to 6	Urban	4.48	2	8.96	$12,468,224	$1,391,543
Polk	1	US 98	S. of Manor Dr	N. of CR 540A	2010	Bid	4 to 6	Urban	3.32	2	6.64	$11,092,909	$1,670,619
St. Lucie	4	SR 70	Okeechobee County Line	MP 5.871	2010	Bid	2 to 4	Urban	5.87	2	11.74	$18,782,629	$1,599,883
Polk	1	US 98 (Bartow Hwy)	Brooks St	Edgewood Dr	2011	Bid	4 to 6	Urban	0.72	2	1.44	$4,341,917	$3,015,220
Hillsborough	7	CR 39/Alexander St	N. of I-4	N. of Knights Griffin	2011	Bid	0 to 4	Urban	3.19	4	12.76	$14,782,862	$1,158,532
Pinellas	7	SR 688 (Ulmerton Rd)	E. of 119th St	W. of Seminole Bypass	2011	Bid	4 to 6	Urban	1.50	2	3.00	$16,908,928	$5,636,309
Polk	1	SR 60 (Van Fleet)	W. of US 98/Broadway	W. of US 17 (SR 555)	2011	Bid	2 to 4	Urban	0.86	2	1.72	$9,460,591	$5,500,344
Lake	5	SR 500 (US 441)	Martin Luther King Jr. Blvd	Lake Ella Rd	2011	Bid	4 to 6	Urban	3.25	2	6.50	$16,278,889	$2,504,444
Hillsborough	7	SR 574 (MLK Jr. Blvd)	W. of Highview Rd	E. of Parsons Ave	2011	Bid	3 to 5	Urban	0.91	2	1.82	$7,147,510	$3,927,203
Collier	1	SR 84 (Davis Blvd)	E. of Santa Barbara Blvd	W. of Radio Rd	2012	Bid	2 to 6	Urban	1.77	4	7.08	$10,663,287	$1,506,114
Volusia	5	SR 415	Seminole Co. Line	Reed Ellis Rd	2012	Bid	2 to 4	Urban	2.26	2	4.53	$18,718,637	$4,132,149
Volusia	5	SR 415	Reed Ellis Rd	0.3 miles N. of Acorn Lake	2012	Bid	2 to 4	Urban	5.07	2	10.13	$18,388,845	$1,815,286
Pinellas	7	US 19 (SR 55)	N. of CR 576/Sunset Pnt	S. of Countryside Blvd	2012	Bid	4 to 6	Urban	1.76	2	3.52	$17,196,050	$4,885,241
Miami-Dade	6	SR 823/NW 57th Ave	W. 23rd St	W. 46th St	2012	Bid	4 to 6	Urban	1.48	2	2.96	$13,942,533	$4,710,315
Hernando	7	SR 50 (Cortez Blvd)	US 19 (SR 55)	W. of CR 587/Mariner Blvd	2012	Bid	4 to 6	Urban	6.02	2	12.04	$39,444,222	$3,276,098
Orange	5	SR 50	E. of West Oaks Mall	W. of Good Homes Rd	2012	Bid	4 to 6	Urban	0.45	2	0.90	$8,694,472	$9,660,524
Clay	2	SR 23	Oakleaf Plantation Pkwy	Old Jennings	2012	Bid	0 to 2	Urban	3.14	2	6.28	$13,231,111	$2,106,865
Hendry	1	SR 80	Birchwood Pkwy	Dalton Lane	2012	Bid	2 to 4	Urban	5.00	2	10.00	$12,855,092	$1,285,509
Hendry	1	SR 80	CR 833	US 27	2012	Bid	2 to 4	Urban	2.90	2	5.80	$8,117,039	$1,399,489
Lee	1	SR 739	Winkler Ave	Hanson St	2012	Bid	0 to 6	Urban	1.34	6	8.04	$14,025,932	$1,744,519
Seminole	5	SR 434	I-4	Rangeline Rd	2012	Bid	4 to 6	Urban	1.80	2	3.60	$10,111,333	$2,808,704
Palm Beach	4	SR 710/Beeline Hwy	W. of Congress Ave	W. of Australian Ave	2012	Bid	2 to 4	Urban	0.84	2	1.68	$12,189,533	$7,255,674
Polk	1	US 27	N. of Ritchie Rd	S. of Barry Rd	2012	Bid	4 to 6	Urban	3.20	2	6.40	$14,242,918	$2,225,456
Polk	1	US 98 (SR 35/SR 700)	N. of CR 540A	SR 540	2012	Bid	4 to 6	Urban	3.45	2	6.90	$17,707,436	$2,566,295
Brevard	5	SR 5 (US 1)	N. of Pine St	N. of Cidco Rd	2012	Bid	4 to 6	Urban	3.84	2	7.68	$28,089,660	$3,657,508
Broward	4	Andrews Ave Ext.	NW 18th St	Copans Rd	2013	Bid	2 to 4	Urban	0.50	2	1.00	$6,592,014	$6,592,014
Lee	1	SR 78 (Pine Island)	Burnt Store Rd	W of Chiquita Blvd	2013	Bid	2 to 4	Urban	1.94	2	3.88	$8,005,048	$2,063,157
Brevard	5	SR 507 (Babcock St)	Melbourne Ave	Fee Ave	2013	Bid	2 to 4	Urban	0.55	2	1.10	$5,167,891	$4,698,083
Hillsborough	7	SR 41 (US 301)	S. of Tampa Bypass Canal	N. of Fowler Ave	2013	Bid	2 to 4	Sub-Urb	1.81	2	3.62	$15,758,965	$4,353,305
Lee	1	US 41 Business	Littleton Rd	SR 739	2013	Bid	2 to 4	Urban	1.23	2	2.46	$8,488,393	$3,450,566

Table B-4 (continued)
Construction Cost – State Road Improvements from Other Jurisdictions throughout Florida

County	District	Description	From	To	Year	Status	Feature	Design	Length	Lanes Added	Lane Miles Added	Construction Cost	Construction Cost per Lane Mile
Brevard	5	Apollo Blvd	Sarno Rd	Eau Gallie Blvd	2013	Bid	2 to 4	Urban	0.74	2	1.48	$10,318,613	$6,972,036
Orange	5	SR 50 (Colonial Dr)	E. of CR 425 (Dean Rd)	E. of Old Cheney Hwy	2013	Bid	4 to 6	Urban	4.91	2	9.82	$66,201,688	$6,741,516
Okeechobee	1	SR 70	NE 34th Ave	NE 80th Ave	2014	Bid	2 to 4	Urban	3.60	2	7.20	$23,707,065	$3,292,648
Martin	4	CR 714/Indian St	Turnpike/Martin Downs Blvd	W. of Mapp Rd	2014	Bid	2 to 4	Urban	1.87	2	3.74	$14,935,957	$3,993,571
Pinellas	7	43rd St Extension	S. of 118th Ave	40th St	2014	Bid	0 to 4	Urban	0.49	4	1.96	$4,872,870	$2,486,158
Broward	4	SR 7 (US 441)	N. of Hallendale Beach	N. of Fillmore St	2014	Bid	4 to 6	Urban	1.79	2	3.58	$30,674,813	$8,568,384
Nassau	2	SR 200 (A1A)	W. of Still Quarters Rd	W. of Ruben Ln	2014	Bid	4 to 6	Urban	3.05	2	6.10	$18,473,682	$3,028,472
Broward	4	Andrews Ave Ext.	Pompano Park Place	S. of Atlantic Blvd	2014	Bid	2 to 4	Urban	0.36	2	0.72	$3,177,530	$4,413,236
Miami-Dade	6	SR 823/NW 57th Ave	W. 65th St	W. 84th St	2014	Bid	4 to 6	Urban	1.00	2	2.00	$17,896,531	$8,948,266
Miami-Dade	6	SR 823/NW 57th Ave	W. 53rd St	W. 65th St	2014	Bid	4 to 6	Urban	0.78	2	1.56	$14,837,466	$9,511,196
Charlotte	1	US 41 (SR 45)	Enterprise Dr	Sarasota County Line	2014	Bid	4 to 6	Urban	3.62	2	7.24	$31,131,016	$4,299,864
Duval	2	SR 243 (JIA N Access)	Airport Rd	Pelican Park (I-95)	2014	Bid	0 to 2	Urban	2.60	2	5.20	$14,205,429	$2,731,813
Desoto	1	US 17	CR 760A (Nocatee)	Heard St	2014	Bid	2 to 4	Urban	4.40	2	8.80	$29,584,798	$3,361,909
Pinellas	7	SR 688 (Ulmerton Rd)	E. of 49th St	W. of 38th St N	2014	Bid	4 to 6	Urban	0.76	2	1.52	$19,306,771	$12,701,823
Orange	5	SR 50	SR 429 (Western Beltway)	E. of West Oaks Mall	2014	Bid	4 to 6	Urban	2.56	2	5.12	$34,275,001	$6,694,336
Hendry	1	SR 82 (Immokalee Rd)	Lee County Line	Collier County Line	2015	Bid	2 to 4	Urban	1.27	2	2.54	$7,593,742	$2,989,662
Sarasota	1	SR 45A (US 41) (Venice Bypass)	Gulf Coast Blvd	Bird Bay Dr W	2015	Bid	4 to 6	Urban	1.14	2	2.28	$16,584,224	$7,273,782
Clay	2	SR 21	S. of Branan Field	Old Jennings Rd	2015	Bid	4 to 6	Urban	1.45	2	2.90	$15,887,487	$5,478,444
Putnam	2	SR 15 (US 17)	Horse Landing Rd	N Boundary Rd	2015	Bid	2 to 4	Urban	1.99	2	3.98	$13,869,804	$3,484,875
Palm Beach	4	SR 710 (Beeline Hwy)	W. of Australian Ave	Old Dixie Hwy	2015	Bid	2 to 4	Urban	0.82	2	1.64	$17,423,228	$10,623,920
Osceola	5	SR 500 (US 192/441)	Eastern Ave	Nova Rd	2015	Bid	4 to 6	Urban	3.18	2	6.36	$16,187,452	$2,545,197
Orange	5	SR 15 (Hofner Rd)	Lee Vista Blvd	Conway Rd	2015	Bid	2 to 4	Urban	3.81	2	7.62	$37,089,690	$4,867,413
Osceola	5	SR 500 (US 192/441)	Aeronautical Blvd	Budinger Ave	2015	Bid	4 to 6	Urban	3.94	2	7.88	$34,256,621	$4,347,287
Lake	5	SR 25 (US 27)	N of Boggy Marsh Rd	N of Lake Louisa Rd	2015	Bid	4 to 6	Sub-Urb	6.52	2	13.04	$37,503,443	$2,876,031
Seminole	5	SR 15/600	Shepard Rd	Lake Mary Blvd	2015	Bid	4 to 6	Urban	3.63	2	7.26	$42,712,728	$5,883,296
St. Lucie	4	SR 614 (Indrio Rd)	W of SR 9 (I-95)	E of SR 607 (Emerson Ave)	2016	Bid	2 to 4	Urban	3.80	2	7.60	$22,773,660	$2,996,534
Seminole	5	SR 46	Mellonville Ave	E of SR 415	2016	Bid	2 to 4	Urban	2.83	2	5.66	$26,475,089	$4,677,578
Miami-Dade	6	SR 977/Krome Ave/SW 177th Ave	S of SW 136th St	S of SR 94 (SW 88th St/Kendall Dr	2016	Bid	0 to 4	Urban	3.50	4	14.00	$32,129,013	$2,294,930
Hillsborough	7	SR 574 (MLK Blvd)	E. of Parsons Ave	E. of Kingsway Rd	2016	Bid	3 to 4	Urban	0.69	1	0.69	$4,590,182	$6,652,437
St. Lucie	4	CR 712 (Midway Rd)	W. of S. 25th St	E. of SR 5 (US 1)	2016	Bid	2 to 4	Urban	1.77	2	3.54	$24,415,701	$6,897,091
Hillsborough	7	SR 43 (US 301)	SR 674	S. of CR 672 (Balm Rd)	2016	Bid	2 to 6	Urban	3.77	4	15.08	$43,591,333	$2,890,672
Citrus	7	SR 55 (US 19)	W. Green Acres St	W. Jump Ct	2016	Bid	4 to 6	Urban	2.07	2	4.14	$27,868,889	$6,731,616
Walton	3	SR 30 (US 98)	Emerald Bay Dr	Tang-o-mar Dr	2016	Bid	4 to 6	Urban	3.37	2	6.74	$42,140,000	$6,252,226
Total									**Count:**	**80**	**421.27**	**$1,355,130,917**	**$3,216,775**
Total (Sarasota Only)									**Count:**	**2**	**7.48**	**$31,250,817**	**$4,177,917**
Total (Excluding Sarasota)									**Count:**	**78**	**413.79**	**$1,323,880,100**	**$3,199,401**
Total - Used in Impact Fee													**$3,200,000**

Source: Florida Department of Transportation

Table B-5
Construction Cost – Florida Department of Transportation

Improvement	Cost per Lane Mile	
	Rural Design	Urban Design
0-2 Lanes	$2,650,303	$4,011,200
0-4 Lanes	$2,160,916	$2,860,492
0-6 Lanes	$1,833,574	$2,318,607
2-4 Lanes	$3,135,005	$3,817,910
4-6 Lanes	$3,494,392	$4,322,016
Average	**$2,654,838**	**$3,466,045**

Source: FDOT District 7 Long Range Estimates, 2016

Construction Engineering/Inspection

City/County Roadways

The CEI cost factor for city/county roads was estimated as a percentage of the construction cost per lane mile. This factor was determined through a review of the CEI-to-construction cost ratios from previously completed transportation impact studies throughout Florida. The CEI factors from other studies ranged from three (3) percent to 17 percent, with a weighted average of nine (9) percent. For purposes of this study, the CEI cost for city/county roads was calculated at nine percent of the construction cost per lane mile. Table B-6 provides additional information.

State Roadways

The CEI cost factor for state roads was estimated as a percentage of the construction cost per lane mile. This factor was determined through a review of the CEI-to-construction cost ratios for state road unit costs in previously completed transportation impact studies throughout Florida. For state roadways, the CEI factors ranged from eight (8) percent to 17 percent, with a weighted average of 11 percent. For purposes of this study, the CEI cost for state roads was calculated at 11 percent of the construction cost per lane mile. See Table B-6 for additional information.

Table B-6
CEI Cost Factor for City/County & State Roads – Recent Impact Fee Studies

Year	County	City/County Roadways (Cost per Lane Mile)			State Roadways (Cost per Lane Mile)		
		CEI	Constr.	CEI Ratio	CEI	Constr.	CEI Ratio
2006	Collier	$294,054	$2,558,546	11%	$354,442	$3,385,978	10%
2006	Citrus	$180,887	$2,584,099	7%	$474,464	$2,860,227	17%
2007	Pasco	$215,534	$3,079,051	7%	$442,849	$3,050,799	15%
2007	Lake	$116,441	$2,911,021	4%	$318,412	$3,184,125	10%
2007	Flagler	$174,000	$1,740,000	10%	-	-	n/a
2007	Volusia	$238,660	$2,651,778	9%	$309,526	$3,095,258	10%
2008	Leon	$372,400	$2,660,000	14%	$270,640	$3,383,000	8%
2008	Sumter	$223,700	$2,237,000	10%	$238,000	$2,380,000	10%
2009	Collier	$186,000	$3,100,000	6%	$320,000	$3,200,000	10%
2009	Polk	$111,300	$1,590,000	7%	$217,000	$2,170,000	10%
2009	Hillsborough/Tampa	$308,000	$2,800,000	11%	$315,000	$3,500,000	9%
2010	Collier	$119,560	$1,708,000	7%	$241,800	$2,418,000	10%
2011	Sarasota/North Port	$216,000	$2,400,000	9%	$180,000	$2,000,000	9%
2012	Osceola	$265,140	$2,651,400	10%	$313,258	$2,847,800	11%
2012	City of Sarasota	$216,000	$2,400,000	9%	$286,000	$2,600,000	11%
2013	Hernando	$178,200	$1,980,000	9%	$222,640	$2,024,000	11%
2013	Charlotte	$220,000	$2,200,000	10%	$240,000	$2,400,000	10%
2014	Indian River	$143,000	$1,598,000	9%	$196,000	$1,776,000	11%
2015	Collier	$270,000	$2,700,000	10%	$270,000	$2,700,000	10%
2015	Brevard	$344,000	$2,023,000	17%	$316,000	$2,875,000	11%
2015	Sumter	$147,000	$2,100,000	7%	$250,000	$2,505,000	10%
2015	Marion	$50,000	$1,668,000	3%	$227,000	$2,060,000	11%
2015	Palm Beach	$108,000	$1,759,000	6%	$333,000	$3,029,000	11%
2016	Hillsborough	$261,000	$2,897,000	9%	$319,000	$2,897,000	11%
2016	St. Lucie	$198,000	$2,200,000	9%	$341,000	$3,100,000	11%
Average		**$206,275**	**$2,327,836**	**9%**	**$6,996,031**	**$65,441,187**	**11%**
				(a)			(b)

Source: Individual jurisdictions and recent impact fee studies throughout Florida
Note: Letter references (e.g., "a") are used to assist with footnotes and sourcing

Roadway Capacity

As shown in Table B-7, the average capacity per lane mile was based on the projects in the Sarasota/Manatee 2040 Long Range Transportation Plan (Needs Plan projects for Sarasota County). This listing of projects reflects the mix of improvements that will yield the vehicle-miles of capacity (VMC) that will be built in the City of Sarasota and Sarasota County. The resulting weighted average capacity per lane mile of approximately 8,700 was used in the multi-modal impact fee calculation.

Table B-7
Sarasota/Manatee 2040 Long Range Transportation Plan – Sarasota County Needs

Jurisdiction	Description	From	To	Section Design	Improvements	Length	Lanes Added	Lane Miles Added	Initial Capacity	Future Capacity	Added Capacity	Vehicle Miles of Capacity Added	VMC Added per Lane Mile
State Roads:													
State	Bee Ridge Rd (SR 758)	Bond Pl	I-75	Urban	4 to 6 Lanes	1.47	2	2.94	39,800	59,900	20,100	29,547	10,050
State	US 41/Tamiami Tr	Stickney Point Rd	SR 681	Urban	4 to 6 Lanes	8.85	2	17.70	39,800	59,900	20,100	177,885	10,050
State	US 41/Tamiami Tr	Englewood Rd	Hillsborough Blvd	Urban	4 to 6 Lanes	12.56	2	25.12	51,000	76,700	25,700	322,792	12,850
City/County Roads:													
Sarasota	12th St	Tuttle Ave	Beneva Rd	Urban	2 to 4 Lanes	1.02	2	2.04	15,930	35,820	19,890	20,288	9,945
County	Bee Ridge Extension	Bee Ridge Rd	SR 72	Urban	2 to 4 Lanes	2.92	2	5.84	14,760	36,630	21,870	63,860	10,935
County	Bee Ridge Rd	Bent Tree Rd	Bee Ridge Extension	Urban	2 to 4 Lanes	0.96	2	1.92	14,760	36,630	21,870	20,995	10,935
County	Cattlemen Rd	Fruitville Rd	Palmer Blvd	Urban	2 to 4 Lanes	1.04	2	2.08	6,570	13,050	6,480	6,739	3,240
County	Desoto Rd	US 301	University Pkwy	Urban	2 to 4 Lanes	1.27	2	2.54	6,570	13,050	6,480	8,230	3,240
County	Fruitville Rd	Debrecen Rd	New Rd (Iona Rd)	Urban	2 to 4 Lanes	1.29	2	2.58	15,120	34,110	18,990	24,497	9,495
County	Honore Ave	University Pkwy	17th St	Urban	2 to 4 Lanes	3.09	2	6.18	6,570	13,050	6,480	20,023	3,240
County	Iona Rd	Fruitville Rd	Palmer Blvd	Urban	0 to 4 Lanes	1.92	4	7.68	0	13,050	13,050	25,056	3,263
County	Iona Rd	Palmer Blvd	Bee Ridge Rd	Urban	2 to 4 Lanes	1.05	2	2.10	6,570	13,050	6,480	6,804	3,240
Venice	Jacaranda Blvd	Laurel Rd E	Border Rd	Urban	2 to 4 Lanes	1.10	2	2.20	15,930	35,820	19,890	21,879	9,945
County	Keyway Rd	SR 776	River Rd	Urban	0 to 4 Lanes	3.80	4	15.20	0	34,110	34,110	129,618	8,528
Venice	Knights Trail Rd	North-South Roadway A	Laurel Rd	Urban	0 to 4 Lanes	5.00	4	20.00	0	35,820	35,820	179,100	8,955
County	Lakewood Ranch	Communications Pkwy	Fruitville Rd	Urban	0 to 4 Lanes	4.48	4	17.92	0	34,110	34,110	152,813	8,528
County	Laurel Rd	Haul Rd	Jacaranda Blvd	Urban	2 to 4 Lanes	1.37	2	2.74	15,120	34,110	18,990	26,016	9,495
County	Lorraine Rd	University Pkwy	Fruitville Rd	Urban	0 to 4 Lanes	3.55	4	14.20	0	13,050	13,050	46,328	3,263
County	Manasota Beach Rd	SR 776	Sarasota County/North Po	Urban	0 to 2 Lanes	2.62	2	5.24	0	15,120	15,120	39,614	7,560
County	Manasota Beach Rd	Sarasota County/North Port B	River Rd	Urban	0 to 4 Lanes	3.66	4	14.64	0	34,110	34,110	124,843	8,528
County	McIntosh Rd	Fruitville Rd	Bahia Vista St	Urban	2 to 4 Lanes	1.02	2	2.04	6,570	13,050	6,480	6,610	3,240
County	McIntosh Rd	Proctor Rd	US 41/Tamiami Tr	Urban	2 to 4 Lanes	5.82	2	11.64	15,120	34,110	18,990	110,522	9,495
County	North-South Roadway A	SR 72	I-75	Urban	0 to 4 Lanes	5.07	4	20.28	0	36,630	36,630	185,714	9,157
Venice	Pinebrook Rd	Venice Ave	Center Rd	Urban	2 to 4 Lanes	1.48	2	2.96	13,320	29,160	15,840	23,443	7,920
North Port	Price Blvd	Hillsborough Blvd	Toledo Blade Blvd	Urban	2 to 4 Lanes	6.80	2	13.60	15,930	35,820	19,890	135,252	9,945
North Port	Price Blvd	Toledo Blade Blvd	Cranberry Blvd	Urban	2 to 4 Lanes	1.70	2	3.40	15,930	35,820	19,890	33,813	9,945
North Port	Price Blvd	Cranberry Blvd	Sumter Blvd	Urban	2 to 4 Lanes	1.50	2	3.00	15,930	35,820	19,890	29,835	9,945
North Port	Price Blvd	Sumter Blvd	Biscayne Dr	Urban	2 to 4 Lanes	2.50	2	5.00	15,930	35,820	19,890	49,725	9,945
County	River Rd	Winchester Blvd	US 41/Tamiami Tr	Urban	2 to 4 Lanes	0.96	2	1.92	15,120	34,110	18,990	18,230	9,495
County	River Rd	US 41/Tamiami Tr	West Villages Pkwy	Urban	2 to 4 Lanes	1.40	2	2.80	15,120	34,110	18,990	26,586	9,495
County	River Rd	West Villages Pkwy	Center Rd	Urban	2 to 4 Lanes	1.80	2	3.60	15,120	34,110	18,990	34,182	9,495
County	River Rd	Center Rd	I-75	Urban	2 to 4 Lanes	2.39	2	4.78	15,120	34,110	18,990	45,386	9,495
County	Winchester Blvd	SR 776	River Rd	Urban	2 to 4 Lanes	0.96	2	1.92	6,570	13,050	6,480	6,221	3,240
County	Venice Ave	Jacaranda Blvd	River Rd	Urban	2 to 4 Lanes	2.45	2	4.90	15,120	34,110	18,990	46,526	9,495
Total:						**98.87**		**252.70**	**429,400**	**1,081,020**	**651,620**	**2,198,972**	**8,702**
Total - Used in Impact Fee													**8,700**
State Roads						22.88		45.76	18%	(a)		530,224	11,587
City/County Roads						75.99		206.94	82%	(b)		1,668,748	8,064
New Roads								115.16	46%	(c)			
Lane Additions								137.54	54%	(d)			

Source: Sarasota/Manatee 2040 LRTP; December 2015, Modified April 2016

Transit Capital Costs

To convert the roadway impact fee into a multi-modal transportation impact fee, the marginal cost of adding transit infrastructure needs to be considered. This section details the difference in cost per person-mile of capacity between expanding a roadway without transit amenities versus expanding a roadway with transit amenities. This calculation also accounts for the change in roadway PMC that occurs when a bus is on the road.

First, Table B-8 calculates the person-miles of capacity added for each new transit vehicle on the road. This calculation adjusts for the fact that buses have a much higher person-capacity than passenger vehicles. This table also identifies transit capital cost variables that will be used to calculate the added capital cost of constructing/expanding a roadway with transit facilities.

Next, Table B-9 combines the roadway VMC and the transit PMC to calculate the marginal change in cost per PMC. First, the roadway characteristics, including cost and capacity, were used to calculate the roadway cost per VMC for a generic 30-mile roadway segment. Then, an adjustment factor was applied to recognize that incorporating transit along a segment of roadway decreases the vehicle-capacity as the bus makes intermittent stops and interrupts the free-flowing traffic. As shown in Table B-9, the bus blockage adjustment factor is much higher for a 2-lane roadway than for a 4-lane roadway. On a 2-lane road, all cars get caught behind the bus during a stop, while on a 4-lane roadway, there is an unobstructed travel lane that cars can use to pass-by or maneuver around the slower transit vehicle. This adjusted VMC was then converted to PMC using the vehicle-miles to person-miles adjustment factor previously discussed in this report. The additional person-capacity from the buses was added to the adjusted roadway PMC. The person-miles of capacity that a transit system would add to the stretch of roadway (Table B-8) mitigates the decrease in vehicle-miles of capacity due to the bus blockage adjustments.

Next, the capital cost of transit infrastructure was added to the capital cost of the roadway expansion for both new road construction (0 to 2 lanes) and lane addition (2 to 4 lanes). With the transit infrastructure included, the updated cost per PMC was calculated, which now reflects the total cost of building a new road with transit, or expanding a roadway and adding transit amenities. When compared to the cost per PMC for simply building/expanding a roadway without transit, the added cost of transit is between 4 percent and 5 percent.

As a final step, the increased costs were then weighted by the lane mile distribution of new road construction and lane addition improvements in Sarasota County based on the Sarasota/Manatee 2040 LRTP. As shown, the plan calls for a relatively even split of improvement types through 2040. When the marginal cost increase for including transit is included and weighted by this ratio, the resulting percent change is approximately 4.2 percent. Essentially, adding transit does not have a significant effect on the cost per person-mile of capacity for new road construction and lane addition improvements.

However, this is not the case if transit infrastructure is being added to an existing roadway. In a transit system with long headways/infrequent service, the marginal cost of adding transit capital facilities without adding roadway capacity is much higher per person-mile of capacity. As the transit system matures due to additional investment, headways are reduced, ridership increases, and the marginal cost decreases and approaches to the roadway cost per PMC.

Table B-8
Transit Capacity Calculation

Input	Local Transit
Transit Person-Miles of Capacity Calculation	
Vehicle Capacity[1]	42
Number of Vehicles (20% fleet margin)[2]	2
Service Span (hours)[3]	15
Cycles/Hour (aka Peak Vehicles)[4]	1.00
Cycles per Day[5]	15
Headway Time (minutes)[6]	60
Speed (mph)[7]	15
Round Trip Length (miles)[8]	24.00
Cycle Time (minutes)[9]	96
Total Person-Miles of Capacity[10]	15,120
Load Factor/System Capacity[11]	30%
Adjusted Person-Miles of Capacity[12]	**4,536**
Capital Cost Variables	
Stops per Mile (w/o Shelter)[13]	3
Shelters per Mile[14]	1
Vehicle Cost[15]	$500,000
Simple Bus Stop[16]	$15,000
Sheltered Bus Stop[17]	$32,000

Source:

1) Source: Local transit is assumed to have 30 seats with a 40 percent standing room capacity equivalent

2) Cycle time (Item 9) divided by headway time (Item 6) increased by 20 percent to accommodate the required fleet margin

3) Source: Assumption based on current SCAT routes

4) Headway time (Item 6) divided by 60

5) Service span (Item 3) multiplied by the cycles/hour (Item 4)

6) Source: Assumption based current SCAT routes

7) Source: Urban Integrated National Transit Database (Urban iNTD). 6-yr average

8) Source: Average trip length (2-way) for SCAT routes

9) Round trip length (Item 8) divided by speed (Item 7) multiplied by 60

10) Vehicle capacity (Item 1) multiplied by the cycles per day (Item 5) multiplied by the round trip length (Item 8)

11) Source: Optimistic assumption based on future goals

12) Total person-miles of capacity (Item 10) multiplied by the load factor (Item 11)

13) Source: Model assumes 3 bench stops per mile

14) Source: Model assumes 1 shelter stop per mile

15) Source: Sarasota County Area Transit; 35 ft Clean Diesel Gillig Buses

16) Source: Sarasota County Area Transit; includes design, project management, construction

17) Source: Sarasota County Area Transit; includes design, project management, construction

Table B-9
Multi-Modal Cost per Person-Mile of Capacity

Item	New Road Construction		Lane Additions		
	Roadway	Transit	Roadway	Transit	
Roadway Characteristics:					**Source:**
Roadway Cost per Mile[(1)]	$7,686,000		$7,686,000		1) Source: Table 3, adjusted to cost "per mile"
Roadway Segment Length (miles)[(2)]	24.00		24.00		2) Source: Average length of Link 10 (2-way)
Roadway Segment Cost[(3)]	$184,464,000	**PMC**	$184,464,000	**PMC**	3) Roadway cost per mile (Item 1) multiplied by the roadway segment length (Item 2)
Average Capacity Added (per mile)[(4)]	17,400	24,360	17,400	24,360	4) Source: Table 4, adjusted to capacity "per mile"
VMC/PMC Added (entire segment)[(5)]	417,600	584,640	417,600	584,640	5) Roadway segment length (Item 2) multiplied by the average capacity added (Item 4) for both VMC and PMC
Roadway Cost per VMC/PMC[(6)]	$441.72	**$315.52**	$441.72	**$315.52**	6) Roadway segment cost (Item 3) divided by the VMC/PMC added (Item 5) individually
Transit Capacity:					
Adjustment for Bus Blockage[(7)]	3.2%	-	1.6%	-	7) Source: 2010 Highway Capacity Manual, Equation 18-9
VMC/PMC Added (transit deduction)[(8)]	13,363	18,708	6,682	9,355	8) VMC added (Item 5) multiplied by the adjustment for bus blockage (Item 7). For PMC, multiply the VMC by 1.40 persons per vehicle
VMC/PMC Added (less transit deduction)[(9)]	404,237	565,932	410,918	575,285	9) VMC/PMC added (entire segment) (Item 5) less the VMC/PMC added (transit deduction) (Item 8) for VMC and PMC individually
PMC Added (transit addition ONLY)[(10)]		4,536		4,536	10) Source: Table B-8, Adjusted Person-Miles of Capacity (Item 12)
Net PMC Added (transit effect included)[(11)]		570,468		579,821	11) PMC added (less transit deduction) (Item 9) plus the PMC added (transit addition ONLY) (Item 10)
Road/Transit Cost per PMC (Road Capital)[(12)]		$323.36		$318.14	12) Road segment cost (Item 3) divided by the net PMC added (transit effect included) (Item 11)
Transit Infrastructure:					
Buses Needed[(13)]	2	$1,000,000	2	$1,000,000	13) Number of vehicles (see Table B-8, Item 2) multiplied by the vehicle cost (see Table B-8, Item 15)
Stops per mile (both sides of street)[(14)]	3	$2,160,000	3	$2,160,000	14) Stops per mile (3) multiplied by the roadway segment length (Item 2) multiplied by the cost per stop (Table B-20, Item 16)
Shelters per mile (both sides of street)[(15)]	1	$1,536,000	1	$1,536,000	15) Shelters per mile (1) multiplied by the roadway segment length (Item 2) multiplied by the cost per shelter (Table B-20, Item 17)
Total infrastructure[(16)]		$4,696,000		$4,696,000	16) Sum of buses needed (Item 13), stops needed (Item 14), and shelters needed (Item 15)
Multi-Modal Cost per PMC:					
Road/Transit Cost per PMC[(17)]		**$331.59**		**$326.24**	17) Sum of the roadway segment cost (Item 3) and the total transit infrastructure cost (Item 16) divided by the net PMC added (Item 11)
Percent Change[(18)]		**5.09%**		**3.40%**	18) Percent difference between the road/transit cost per PMC (Item 17) and the Roadway cost per PMC (Item 6)
Weighted Multi-Modal Cost per PMC:					
Lane Mile Distribution[(19)]		46%		54%	19) Source: Appendix B, Table B-7, Items (c) and (d). Lane mile distribution of new road construction versus lane addition
Weighted Roadway Cost per PMC[(20)]		$145.14		$170.38	20) Roadway cost per PMC (Item 6) multiplied by the lane mile distribution (Item 19)
Weighted Road/Transit Cost per PMC[(21)]		$152.53		$176.17	21) Road/Transit cost per PMC (Item 17) multiplied by the lane mile distribution (Item 19)
Weighted Average Multi-Modal Cost per PMC:					
Weighted Average Roadway Cost per PMC (new road construction and lane additions)[(22)]				$315.52	22) Sum of the weighted roadway cost per PMC (Item 20) for new road construction and lane additions
Weighted Average Road/Transit Cost per PMC (new road construction and lane additions)[(23)]				$328.70	23) Sum of the weighted road/transit cost per PMC (Item 21) for new road construction and lane additions
Percent Change[(24)]				**4.18%**	24) Percent difference between the weighted average road/transit cost per PMC (Item 23) and the weighted average roadway cost per PMC (Item 22)

Appendix C
Credit Component Calculations

Credit Component

This appendix presents the detailed calculations for the credit component. Currently, in addition to the capital support that ultimately results from State fuel tax revenue, the City of Sarasota and Sarasota County also receive financial benefit from several other funding sources including sales tax, Federal/State grant funding, mobility/impact fees, and fuel taxes. The fuel taxes collected in Sarasota County are listed below, along with a few pertinent characteristics of each.

1. **Constitutional Fuel Tax (2¢/gallon)**
   - Tax applies to every net gallon of motor and diesel fuel sold within a county. Collected in accordance with Article XII, Section 9 (c) of the Florida Constitution
   - The State allocated 80 percent of this tax to Counties after withholding amounts pledged for debt service on bonds issued pursuant to provisions of the State Constitution for road and bridge purposes
   - The 20 percent surplus can be used to support the road construction program within the county
   - Counties are not required to share the proceeds of this tax with their municipalities

2. **County Fuel Tax (1¢/gallon)**
   - Tax applies to every net gallon of motor and diesel fuel sold within a county
   - Primary purpose of these funds is to help reduce a County's reliance on ad valorem taxes
   - Proceeds are to be used for transportation-related expenses, including the reduction of bond indebtedness incurred for transportation purposes. Authorized uses include acquisition of rights-of-way; the construction, reconstruction, operation, maintenance, and repair of transportation facilities, roads, bridges, bicycle paths, and pedestrian pathways; or the reduction of bond indebtedness incurred for transportation purposes
   - Counties are not required to share the proceeds of this tax with their municipalities

3. **Municipal Fuel Tax (1¢/gallon)**
   - Tax applies to every net gallon of motor fuel sold within a county
   - Primary purpose of the municipal revenue sharing program is to ensure a minimum level of parity across units of local government

- Proceeds may be used to fund purchase of transportation facilities and road and street rights-of-way; construction, reconstruction, and maintenance of roads, streets, bicycle paths, and pedestrian pathways; adjustments of city-owned utilities as required by road and street construction; and construction, reconstruction, transportation-related public safety activities, maintenance, and operation of transportation facilities
- City of Sarasota receives approximately 41 percent of the proceeds, while North Port receives approximately 44 percent and Venice receives approximately 15 percent.

4. Ninth-Cent Fuel Tax (1¢/gallon)

- Tax applies to every net gallon of motor and diesel fuel sold within a county
- Proceeds may be used to fund transportation expenditures including public transportation operations and maintenance, roadway and right-of-way maintenance and drainage, street lighting, traffic signs, bridge maintenance, debt service and current expenditures for transportation capital projects (construction/reconstruction of roads and sidewalks)
- To accommodate statewide equalization, this tax is automatically levied on diesel fuel in every county, regardless of whether a County is levying the tax on motor fuel at all
- Counties are not required to share the proceeds of this tax with their municipalities

5. 1st Local Option Tax (6¢/gallon)

- Tax applies to every net gallon of motor and diesel fuel sold within a county
- Proceeds may be used to fund transportation expenditures
- To accommodate statewide equalization, all six cents are automatically levied on diesel fuel in every county, regardless of whether a County is levying the tax on motor fuel at all or at the maximum rate
- Proceeds are distributed to a county and its municipalities according to a mutually agreed upon distribution ratio, or by using a formula contained in the Florida Statutes

6. 2nd Local Option Tax (5¢/gallon)

- Tax applies to every net gallon of motor and diesel fuel sold within a county
- Proceeds may be used to fund transportation expenditures needed to meet requirements of the capital improvements element of an adopted Local Government Comprehensive Plan

- Proceeds are distributed to a county and its municipalities according to a mutually agreed upon distribution scheme, or by using a formula contained in the Florida Statutes

Each year, the Florida Legislature's Office of Economic and Demographic Research produces the *Local Government Financial Information Handbook*, which details the estimated local government revenues for the upcoming fiscal year. Included in this document are the estimated distributions of the various fuel tax revenues for each county in the state. The 2015-16 data represent projected fuel tax distributions to Sarasota County for the current fiscal year. In the table, the fuel tax revenue data are used to calculate the value per penny (per gallon of fuel) that should be used to estimate the "equivalent pennies" of other revenue sources. Table C-1 shows the distribution per penny for each of the fuel levies, and then the calculation of the weighted average for the value of a penny of fuel tax. The weighting procedure takes into account the differing amount of revenues generated for the various types of gas tax revenues. The weighted average figure of approximately $1.68 million estimates the annual revenue that one penny of gas tax generates in Sarasota County.

Table C-1
Estimated Fuel Tax Distribution Allocated to Capital Programs for Sarasota County & Municipalities, FY 2015-16[1]

Tax	Amount of Levy per Gallon	Total Distribution	Distribution per Penny
Constitutional Fuel Tax	$0.02	$3,246,721	$1,623,361
County Fuel Tax	$0.01	$1,440,243	$1,440,243
Municipal Fuel Tax	$0.01	$1,066,234	$1,066,234
9th Cent Fuel Tax	$0.01	$1,662,743	$1,662,743
1st Local Option (1-6 cents)	$0.06	$9,383,037	$1,563,840
2nd Local Option (1-5 cents)	$0.05	$7,031,855	$1,406,371
Total	**$0.16**	**$23,830,833**	
Weighted Average per Penny[2]			**$1,489,427**

1) Source: Florida Legislative Committee on Intergovernmental relations, www.floridacir.gov/revenue_estimates.cfm
2) The weighted average distribution per penny is calculated by taking the sum of the total distribution and dividing that value by the sum of the total levies per gallon (multiplied by 100).

Capital Improvement Credit

A revenue credit for the annual expenditures on roadway capacity expansion projects in the City of Sarasota and Sarasota County is presented below. The three components of the credit are as follows:

- City capital project funding
- County capital project funding
- State capital project funding

The annual expenditures from each revenue source are converted to gas tax pennies to be able to create a connection between travel by each land use and non-impact fee revenue contributions.

City Capital Project Funding

A review of the City's FY 2017 Capital Improvement Plan shows that transportation projects are being funded by a combination of impact fees, sales tax, fuel tax, utility fees, and grant revenues. As shown in Table C-2, a total gas tax equivalent revenue credit of 3.8 pennies was given for transportation capacity-expansion projects funded with non-impact fee revenues.

Table C-2
City Fuel Tax Equivalent Pennies

Source	Cost of Projects	Number of Years	Revenue from 1 Penny[2]	Equivalent Pennies[3]
Projected City Expenditures (FY 2017-2021)[1]	$28,658,000	5	$1,489,427	$0.038
Total	**$28,658,000**	**5**	**$1,489,427**	**$0.038**

1) Source: Table C-6
2) Source: Table C-1
3) Cost of projects divided by number of years divided by revenue from 1 penny (Item 4) divided by 100

County Capital Project Funding

A review of historical expenditures and Sarasota County's FY 2016 Capital Improvement Plan shows that transportation projects are being funded by a combination of mobility fees, fuel tax, sales tax, and grant revenues. As shown in Table C-3, a total gas tax equivalent revenue credit of 7.1 pennies was given for transportation capacity-expansion projects funded with non-impact fee revenues. Additional detail is provided in Tables C-7 and C-8.

Table C-3
County Fuel Tax Equivalent Pennies

Source	Cost of Projects	Number of Years	Revenue from 1 Penny[3]	Equivalent Pennies[4]
Historical County Expenditures (FY 2012-2016)[1]	$71,759,980	5	$1,489,427	$0.096
Projected County Expenditures (FY 2017-2021)[2]	$34,677,408	5	$1,489,427	$0.047
Total	**$106,437,388**	**10**	**$1,489,427**	**$0.071**

1) Source: Table C-7
2) Source: Table C-8
3) Source: Table C-1
4) Cost of projects divided by number of years divided by revenue from 1 penny (Item 4) divided by 100

In addition, the County uses an equivalent credit of 10.5 pennies for debt service associated with the following bonds (additional detail in Tables C-6 through C-10):

- Communication Services Tax Bond, Series 2014
- Communication Services Tax Bond, Series 2015
- 2nd Local Option Fuel Tax Bond, Series 2014
- Infrastructure Surtax Bond, Series 2014
- Infrastructure Surtax Bond, Series 2015
- Revenue Note, Series 2014

Table C-4
County Debt Service Equivalent Pennies

Source	Outstanding Debt Service (Capacity)	Number of Years	Revenue from 1 Penny[7]	Equivalent Pennies[8]
Communication Services Tax Bond, Series 2014[1]	$17,935,320	9	$1,489,427	$0.013
Communication Services Tax Bond, Series 2015[2]	$12,706,410	10	$1,489,427	$0.009
2nd Local Option Fuel Tax Bond, Series 2014[3]	$9,323,328	9	$1,489,427	$0.007
Instrastructure Surtax Bond, Series 2014[4]	$43,293,360	8	$1,489,427	$0.036
Instrastructure Surtax Bond, Series 2015[5]	$38,895,438	8	$1,489,427	$0.033
Revenue Note, Series 2014[6]	$8,548,116	8	$1,489,427	$0.007
Total	**$130,701,972**			**$0.105**

1) Source: Table C-9
2) Source: Table C-10
3) Source: Table C-11
4) Source: Table C-12
5) Source: Table C-13
6) Source: Table C-14
7) Source: Table C-1
8) Cost of projects divided by number of years divided by revenue from 1 penny (Item 4) divided by 100

State Capital Project Funding

In the calculation of the equivalent pennies of gas tax from the State, funding sources used for multi-modal capacity expansion projects during a 15-year period (from FY 2007 to FY 2021) were reviewed. This period represents past FDOT expenditures from FY 2007-2016 and also includes the projected FDOT Work Program estimates for 2017 through 2021. From these, funding for capacity-adding improvements, including (but not limited to) lane additions, new road construction, intersection improvements, interchanges, traffic signal projects, bike paths, sidewalks, capital for fixed-route service, was identified. The use of a 15-year period, for purposes of developing a State credit for multi-modal capacity expansion projects, results in a stable credit, as it accounts for the volatility in FDOT spending in a county over short periods of time.

The total cost of the capacity-adding projects for the "historical" periods and projected in the "future" period are as follows:

- FY 2007-2011: 14.0 pennies
- FY 2012-2016: 13.1 pennies
- FY 2017-2021: 15.4 pennies

The combined weighted average over the 15-year period of state expenditure for capacity-adding multi-modal projects results in a total of 14.2 equivalent pennies. Table C-5 documents this calculation. The specific projects that were used in the equivalent penny calculations are summarized in Table C-15.

Table C-5
State Fuel Tax Equivalent Pennies

Source	Cost of Projects	Number of Years	Revenue from 1 Penny[4]	Equivalent Pennies[5]
Historical Work Program (FY 2007-2011)[1]	$103,925,675	5	$1,489,427	$0.140
Historical Work Program (FY 2012-2016)[1]	$97,924,527	5	$1,489,427	$0.131
Projected Work Program (FY 2017-2021)[2]	$115,029,338	5	$1,489,427	$0.154
Total	**$316,879,540**	**15**	**$1,489,427**	**$0.142**

1) Source: Table C-15
2) Source: Table C-15
3) Source: Table C-15
4) Source: Table C-1
5) Cost of projects divided by number of years divided by revenue from 1 penny (Item 4) divided by 100

Table C-6

FY 2017-2021 City of Sarasota Capital Improvement Plan – Capacity Expansion

ID	Description	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
CI-15A	10th & US 41 Mobility Project	$0	$750,000	$0	$0	$0	**$750,000**
CI-15B	14th & US 41 Mobility Project	$0	$0	$750,000	$0	$0	**$750,000**
CI-15C	Ringling & Orange Avenue Mobility Project	$750,000	$0	$0	$0	$0	**$750,000**
CI-17B	US 41 & 10th Street Roundabout	$1,110,000	$0	$0	$0	$0	**$1,110,000**
CI-17C	US 41 & 14th Street Roundabout	$1,110,000	$0	$0	$0	$0	**$1,110,000**
CI-17D	US 41 & Fruitville Road Roundabout	$0	$0	$0	$950,000	$750,000	**$1,700,000**
CI-17E	US 41 & Gulfstream Roundabout	$0	$300,000	$1,850,000	$0	$0	**$2,150,000**
CI-17F	US 41 & Orange Avenue Roundabout	$0	$50,000	$0	$575,000	$1,000,000	**$1,625,000**
CI-17G	US 41 & Main Street Roundabout & MURT	$0	$4,370,000	$1,810,000	$0	$0	**$6,180,000**
CI-31	Myrtle Street - Osprey to US 41	$0	$0	$243,000	$0	$0	**$243,000**
CI-33	US 41 & Myrtle Street Roundabout	$0	$495,000	$0	$0	$0	**$495,000**
CI-34	US 41 & Dr. Martin Luther King, Jr. Way Roundabout	$0	$495,000	$0	$0	$0	**$495,000**
CI-47	Ringling & Orange Avenue Roundabout	$1,282,000	$0	$0	$0	$0	**$1,282,000**
CI-50	Ringling Boulevard & Pine Place Roundabout	$0	$0	$770,000	$980,000	$0	**$1,750,000**
CI-78	Intersection Improvements	$200,000	$500,000	$500,000	$500,000	$500,000	**$2,200,000**
CI-79	Traffic Signal Re-Builds	$100,000	$100,000	$100,000	$100,000	$0	**$400,000**
CI-11	Sidewalk Construction Program	$330,000	$300,000	$575,000	$450,000	$475,000	**$2,130,000**
CI-24	Bicycle Route Improvements	$0	$50,000	$50,000	$0	$0	**$100,000**
CI-25	Traffic Signalization/Intersection Upgrades - Citywide	$60,000	$60,000	$60,000	$60,000	$0	**$240,000**
Q-24	Citywide Traffic Calming	$100,000	$100,000	$100,000	$100,000	$100,000	**$500,000**
Q-29	General MURT Project Funding	$1,738,000	$530,000	$0	$0	$0	**$2,268,000**
Q-60	Ringling/South Jefferson Improvements	$0	$0	$0	$0	$430,000	**$430,000**
Total		**$6,780,000**	**$8,100,000**	**$6,808,000**	**$3,715,000**	**$3,255,000**	**$28,658,000**

Source: FY 2017-2021 City of Sarasota Capital Improvement Program

Table C-7

FY 2012-2016 Sarasota County Transportation Expenditures – Capacity Expansion

ID	Description	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Total
75830	Bee Ridge Rd Extension	$1,952,044	$2,248,522	$1,541,623	$291,415	$5,806,243	**$11,839,847**
85762	Fruitville Rd (Coburn to Sarasota Center)	$97,256	$0	$0	$0	$0	**$97,256**
85763	Honore Bee Ridge to Fruitville	$1,368,567	$367	$7,150	$429	$0	**$1,376,513**
85785	Sidewalks North Sarasota	$48,628	$0	$0	$0	$0	**$48,628**
85829	N Cattlemen Richardson to Univ	$10,218,093	$5,192,364	$779,765	$637	$3,205	**$16,194,064**
85831	Bay Street ROW	$80	$0	$0	$9,311	$0	**$9,391**
95700	Signals & Intersections	$744,900	$1,366,537	$1,493,008	$918,829	$1,062,416	**$5,585,690**
95703	Sidewalk Program	$49,110	$81,219	$425,270	$573,710	$355,321	**$1,484,630**
95713	Advanced ROW Acquisition	$26,889	$319,790	$357	$38,747	$22,636	**$408,419**
95766	Proctor Rd McIntosh and Honore	$580	$6,500	$0	$0	$0	**$7,080**
95771	McIntosh Rd	$250	$0	$0	$0	$0	**$250**
95773	Venice Ave/Jacaranda Intersection	$158,413	$16,760	$0	$0	$0	**$175,173**
95786	Honore Ave	$100,623	$0	$63,417	$161,816	$0	**$325,856**
95790	Signals, Intersections and Safety	$5,815,970	$1,518,516	$1,239,551	$6,352,734	$1,830,323	**$16,757,094**
95793	Sidewalk Program	$202,072	$111,435	$0	$0	$0	**$313,507**
95798	Honore Ave - Pinebrook Ext	$304,860	$104,315	$4,423,224	$7,324,916	$1,629,469	**$13,786,784**
95804	Cattlemen Rd, Ph. 2	$80	$0	$0	$0	$0	**$80**
95805	Cattlemen Rd, Ph. 5	$1,466	$0	$0	$0	$0	**$1,466**
95806	Center Rd, Ph. 2	$16,783	$3,235	$0	$0	$0	**$20,018**
95812	McIntosh Rd, Ph. 2	$3,367	$52,856	$0	$0	$0	**$56,223**
95823	Honore Ave (Clark to Proctor)	$14,854	$175,079	$0	$0	$143,950	**$333,883**
95871	Myrtle St, Ph. 2	$0	$291,619	$738,045	$439,143	$1,466,432	**$2,935,239**
95876	Desoto Rd (Harold - N Cattlemen)	$0	$0	$0	$1,225	$1,664	**$2,889**
Total		**$21,124,885**	**$11,489,114**	**$10,711,410**	**$16,112,912**	**$12,321,659**	**$71,759,980**

Source: Sarasota County IFAS Reports

Table C-8
FY 2017-2021 Sarasota County Capital Improvement Plan – Capacity Expansion

ID	Description	Improvement	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
95723	Cattlemen Road (N. of Bahia Vista St to Packinghouse Rd)	Lane Addition	$1,450,000	$750,000	$0	$0	$0	**$2,200,000**
95713	Countywide ROW Acquisition	ROW Acquisition	$327,784	$400,472	$483,994	$552,994	$612,073	**$2,377,317**
95753	Alignment and Small Area Traffic Studies Program	Traffic Circulation	$80,000	$0	$0	$0	$0	**$80,000**
85760	Bicycle and Pedestrian Master Plan Program	Bike/Ped	$199,568	$74,925	$74,925	$74,925	$74,925	**$499,268**
95843	Future Design Program	Traffic Circulation	$30,000	$0	$0	$0	$0	**$30,000**
95823	Honore Ave (Clark Rd to Proctor Rd)	ROW Acquisition	$271,714	$0	$0	$0	$0	**$271,714**
95871	Myrtle Street Phase II (US 41 to US 301)	Bike/Ped	$273,880	$0	$0	$0	$0	**$273,880**
85829	North Cattlemen Rd (Richardson Rd to University Pkwy)	New Road Construction	$238,176	$0	$0	$0	$0	**$238,176**
95700	Operations, Safety, and Signalization Program	Traffic Signals	$1,500,000	$1,500,000	$1,000,000	$1,000,000	$1,000,000	**$6,000,000**
95703	Countywide Sidewalks	Bike/Ped	$880,828	$1,009,042	$1,193,078	$1,353,688	$1,477,324	**$5,913,960**
74502	Transit Stop and Shelter Improvements	Transit	$518,421	$449,918	$449,918	$449,918	$449,918	**$2,318,093**
74501	Transit Vehicle Purchases	Transit	$3,200,000	$2,900,000	$2,900,000	$2,900,000	$2,575,000	**$14,475,000**
Total			**$8,970,371**	**$7,084,357**	**$6,101,915**	**$6,331,525**	**$6,189,240**	**$34,677,408**

Source: Sarasota County Public Works Department; FY 2017 Preliminary Budget

Table C-9
Sarasota County – CST Revenue Bond, Series 2014

Date	Coupon	Principal Amount	Annual Interest	Annual Debt Service
10/01/15	2.400%	$160,000	-	$160,000
10/01/16	2.400%	$1,570,000	$420,720	$1,990,720
10/01/17	2.400%	$1,610,000	$383,040	$1,993,040
10/01/18	2.400%	$1,650,000	$344,400	$1,994,400
10/01/19	2.400%	$1,690,000	$304,800	$1,994,800
10/01/20	2.400%	$1,730,000	$264,240	$1,994,240
10/01/21	2.400%	$1,770,000	$222,720	$1,992,720
10/01/22	2.400%	$1,810,000	$180,240	$1,990,240
10/01/23	2.400%	$1,855,000	$136,800	$1,991,800
10/01/24	2.400%	$1,895,000	$92,280	$1,987,280
10/01/25	2.400%	$1,950,000	$46,800	$1,996,800
Total Debt Service Payments Remaining (2017-2025)				**$17,935,320**
Number of Years of Remaining Payments				**9**

Source: Sarasota County Debt Report, 2015

Table C-10
Sarasota County – CST Revenue Bond, Series 2015

Date	Coupon	Principal Amount	Annual Interest	Annual Debt Service
10/01/16	2.200%	$135,000	$251,460	$386,460
10/01/17	2.200%	$1,020,000	$248,490	$1,268,490
10/01/18	2.200%	$1,045,000	$226,050	$1,271,050
10/01/19	2.200%	$1,070,000	$203,060	$1,273,060
10/01/20	2.200%	$1,090,000	$179,520	$1,269,520
10/01/21	2.200%	$1,115,000	$155,540	$1,270,540
10/01/22	2.200%	$1,140,000	$131,010	$1,271,010
10/01/23	2.200%	$1,165,000	$105,930	$1,270,930
10/01/24	2.200%	$1,190,000	$80,300	$1,270,300
10/01/25	2.200%	$1,215,000	$54,120	$1,269,120
10/01/26	2.200%	$1,245,000	$27,390	$1,272,390
Total Debt Service Payments Remaining (2017-2026)				**$12,706,410**
Number of Years of Remaining Payments				**10**

Source: Sarasota County Debt Report, 2015

Table C-11
Sarasota County – 2nd LOFT Revenue Bond, Series 2014

Date	Coupon	Principal Amount	Annual Interest	Annual Debt Service
10/01/15	2.290%	$90,000	-	$90,000
10/01/16	2.290%	$825,000	$209,879	$1,034,879
10/01/17	2.290%	$845,000	$190,986	$1,035,986
10/01/18	2.290%	$865,000	$171,636	$1,036,636
10/01/19	2.290%	$885,000	$151,827	$1,036,827
10/01/20	2.290%	$905,000	$131,561	$1,036,561
10/01/21	2.290%	$925,000	$110,836	$1,035,836
10/01/22	2.290%	$950,000	$89,654	$1,039,654
10/01/23	2.290%	$965,000	$67,899	$1,032,899
10/01/24	2.290%	$990,000	$45,800	$1,035,800
10/01/25	2.290%	$1,010,000	$23,129	$1,033,129
Total Debt Service Payments Remaining (2017-2025)				**$9,323,328**
Number of Years of Remaining Payments				**9**

Source: Sarasota County Debt Report, 2015

Table C-12
Sarasota County – Infrastructure Surtax Revenue Bond, Series 2014

Date	Coupon	Principal Amount	Annual Interest	Annual Debt Service
10/01/16	5.000%	-	$1,867,750	$1,867,750
10/01/17	5.000%	-	$1,867,750	$1,867,750
10/01/18	5.000%	$4,590,000	$1,867,750	$6,457,750
10/01/19	5.000%	$4,815,000	$1,638,250	$6,453,250
10/01/20	5.000%	$5,055,000	$1,397,500	$6,452,500
10/01/21	5.000%	$5,310,000	$1,144,750	$6,454,750
10/01/22	5.000%	$5,580,000	$879,250	$6,459,250
10/01/23	5.000%	$5,855,000	$600,250	$6,455,250
10/01/24	5.000%	$6,150,000	$307,500	$6,457,500
Total Debt Service Payments Remaining (2017-2024)				**$47,058,000**
Total Debt Service Payments (Adjusted)*				**$43,293,360**
Number of Years of Remaining Payments				**8**

Source: Sarasota County Debt Report, 2015

*Adjusted to reflect the portion of revenues dedicated to capacity-expansion

Table C-13
Sarasota County – Infrastructure Surtax Revenue Bond, Series 2015

Date	Coupon	Principal Amount	Annual Interest	Annual Debt Service
10/01/16	4.000%	-	$1,517,700	$1,517,700
10/01/17	4.000%	-	$1,517,700	$1,517,700
10/01/18	4.000%	-	$1,517,700	$1,517,700
10/01/19	4.000%	$5,020,000	$1,517,700	$6,537,700
10/01/20	4.000%	$5,225,000	$1,316,900	$6,541,900
10/01/21	4.000%	$5,435,000	$1,107,900	$6,542,900
10/01/22	4.000%	$5,650,000	$890,500	$6,540,500
10/01/23	4.000%	$5,935,000	$608,000	$6,543,000
10/01/24	4.000%	$6,225,000	$311,250	$6,536,250
Total Debt Service Payments Remaining (2017-2024)				**$42,277,650**
Total Debt Service Payments (Adjusted)*				**$38,895,438**
Number of Years of Remaining Payments				**8**

Source: Sarasota County Debt Report, 2015

*Adjusted to reflect the portion of revenues dedicated to capacity-expansion

Table C-14
Sarasota County – Revenue Note, Series 2014

Date	Coupon	Principal Amount	Annual Interest	Annual Debt Service
10/01/14	2.180%	$536,000	-	$536,000
10/01/15	2.180%	$861,000	-	$861,000
10/01/16	2.180%	$880,000	$188,505	$1,068,505
10/01/17	2.180%	$899,000	$169,321	$1,068,321
10/01/18	2.180%	$919,000	$149,722	$1,068,722
10/01/19	2.180%	$939,000	$129,688	$1,068,688
10/01/20	2.180%	$959,000	$109,218	$1,068,218
10/01/21	2.180%	$980,000	$88,312	$1,068,312
10/01/22	2.180%	$1,002,000	$66,948	$1,068,948
10/01/23	2.180%	$1,023,000	$45,104	$1,068,104
10/01/24	2.180%	$1,046,000	$22,803	$1,068,803
Total Debt Service Payments Remaining (2017-2024)				**$8,548,116**
Number of Years of Remaining Payments				**8**

Source: Sarasota County Debt Report, 2015

Table C-15
FY 2007-2021 FDOT Work Program for Sarasota County – Capacity Expansion

ITEM #	PROJECT DESCRIPTION	WORK TYPE	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
197988-1	US 41 FROM VENICE CONN (SR 681) TO OSCAR SCHERER PK ENT	ADD LANES & RECONSTRUCT	$35	$195	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$230
198005-1	US 41 BUS FROM PALERMO PLACE TO US 41 BUS (BYPASS N)	NEW ROAD CONSTRUCTION	$31	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$31
198010-1	US 301 FROM WOOD STREET TO S OF UNIVERSITY PKWY	PRELIM ENG FOR FUTURE CAPACITY	$605,982	$3,070,159	$2,051,280	$8,489	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$5,735,910
198010-3	US 301 FROM WOOD STREET TO MYRTLE STREET	ADD LANES & RECONSTRUCT	$0	$0	$17,982,651	$226,980	$3,009,326	$187	$0	$0	$0	$0	$0	$0	$0	$0	$0	$21,219,144
198010-4	US 301 FROM MYRTLE STREET TO DESOTO ROAD	ADD LANES & RECONSTRUCT	$0	$0	$0	$9,787,812	$142,625	$256,250	$1,577	$0	$0	$0	$0	$0	$0	$0	$0	$10,188,264
198017-2	US 41(VENICE BYPASS) FROM CENTER ROAD TO S OF US BUS 41 NORTH	PRELIM ENG FOR FUTURE CAPACITY	$22,660	$51,598	$9,180	$678,872	$803,035	$69,575	$804,010	$285,578	$134,718	$422,150	$198,293	$0	$0	$0	$0	$3,479,669
198017-4	SR 45/US 41 (VENICE BYPASS) FROM GULF COAST BLVD TO BIRD BAY DR WEST	ADD LANES & RECONSTRUCT	$0	$0	$0	$0	$306	$181,571	$1,129,252	$12,391,997	$20,304,748	$911,797	$865,310	$0	$0	$0	$0	$35,784,981
198017-6	US 41 -VENICE BYPASS FROM CENTERROAD TO GULF COAST BLVD	ADD LANES & RECONSTRUCT	$0	$0	$0	$0	$0	$0	$0	$0	$922,180	$1,729,193	$10,326,138	$8,636,455	$14,044,668	$0	$0	$35,658,634
198018-1	US 41 FROM US 41 BUS (SR 45A N) TO VENICE CONN (SR 681)	ADD LANES & RECONSTRUCT	$697,711	$3,735,616	$1,964,110	$290,325	$103,620	$0	$108,933	$0	$0	$0	$0	$0	$0	$0	$0	$6,900,315
198026-1	US 41 BUS FROM SHAMROCK BLVD TO PALERMO PLACE	ADD LANES & RECONSTRUCT	$1,440	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,440
200610-2	ENGLEWOOD/INT/CONN FROM US 41 TO CENTER ROAD	PRELIM ENG FOR FUTURE CAPACITY	$0	$129,723	$371,264	$19,896	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$520,883
200610-3	ENGLEWOOD/INT/CONN FROM CENTER ROAD TO I-75	PRELIM ENG FOR FUTURE CAPACITY	$318	$275,832	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$276,150
200610-5	ENGLEWOOD/INT/CONN FROM S OF VENICE AVENUE TO N OF CENTER ROAD	RIGHT OF WAY - FUTURE CAPACITY	$0	$0	$2,729,181	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,729,181
200617-1	DEARBORN STREET FROM W OF PINE STREET TO SR 776	ADD LANES & RECONSTRUCT	$3,575,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,575,000
205807-1	SARASOTA/MANATEE FTA SECTION 5303	MODAL SYSTEMS PLANNING	$184,333	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$184,333
404600-1	SARASOTA CO - SCAT FTA 5307	CAPITAL FOR FIXED ROUTE	$0	$0	$56,020	$1,950,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,006,020
407113-1	SARASOTA CO - SCAT FTA SECTION 5307	CAPITAL FOR FIXED ROUTE	$2,746,589	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,746,589
408088-1	SARASOTA COUNTYWIDE AT VARIOUS LOCATIONS	SIDEWALK	$0	$87,195	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$87,195
410117-1	SARASOTA-MANATEE MPO TRANSIT PLANNING -5305(D)	MODAL SYSTEMS PLANNING	$0	$195,818	$204,741	$222,062	$225,488	$234,267	$235,245	$282,402	$278,836	$275,934	$196,080	$201,961	$201,961	$205,165	$197,329	$3,157,289
410151-1	SARASOTA COUNTY-SCAT FTA 5309	CAPITAL FOR FIXED ROUTE	$200,000	$200,000	$690,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,090,000
410152-1	SARASOTA COUNTY FTA SECTION 5307 CAPITAL ASSISTANCE	CAPITAL FOR FIXED ROUTE	$1,580,000	$1,500,000	$1,500,000	$1,600,000	$0	$0	$10,853,489	$3,693,934	$3,752,710	$3,807,530	$3,693,934	$3,693,934	$3,693,934	$3,752,710	$3,807,530	$46,929,705
411738-1	US 41(SR 45 TAMIAMI) AT 10TH STREET	ADD LEFT TURN LANE(S)	$2,727	$442	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,169
412247-1	SARASOTA COUNTY SCAT	CAPITAL FOR FIXED ROUTE	$0	$0	$128,205	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$128,205
412257-1	SARASOTA COUNTY SCAT	PUBLIC TRANSPORTATION SHELTER	$215,621	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$215,621
412571-1	SARASOTA COUNTY AT VARIOUS LOCATIONS	SIDEWALK	$11,732	$0	$178,858	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$190,590
412622-1	US 41 (NORTH PORT) AT VARIOUS LOCATION	SIDEWALK	$141,493	$157,386	$5,499	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$304,378
412676-1	SARASOTA COUNTY TRAFFIC SIGNALS REIMBURSEMENT	TRAFFIC SIGNALS	$123,536	$126,648	$130,447	$133,028	$137,327	$141,464	$145,243	$149,576	$159,698	$301,416	$449,429	$482,421	$501,668	$516,718	$532,219	$4,030,838
413657-1	LONGBOAT KEY TRAFFIC SIGNALS REIMBURSEMENT	TRAFFIC SIGNALS	$3,122	$3,216	$3,312	$2,970	$3,059	$3,151	$3,245	$3,342	$4,672	$8,208	$10,958	$12,528	$12,904	$13,291	$13,690	$101,668
413658-1	NORTH PORT TRAFFIC SIGNALS REIMBURSEMENT	TRAFFIC SIGNALS	$6,990	$8,016	$7,836	$8,062	$9,614	$9,453	$9,737	$10,027	$10,328	$21,280	$32,000	$24,244	$24,971	$25,720	$26,492	$234,770
413659-1	SARASOTA CITY TRAFFIC SIGNALS REIMBURSEMENT	TRAFFIC SIGNALS	$45,435	$48,000	$49,440	$51,556	$53,423	$55,032	$58,074	$59,806	$63,815	$121,448	$177,601	$204,304	$210,433	$216,746	$223,248	$1,638,361
413660-1	VENICE TRAFFIC SIGNALS REIMBURSEMENT	TRAFFIC SIGNALS	$10,485	$10,800	$11,124	$11,457	$11,799	$12,154	$12,519	$12,892	$13,279	$27,968	$42,652	$44,478	$45,812	$47,186	$48,602	$363,207
414546-1	SARASOTA COUNTY AT BUS STOPS	SIDEWALK	$0	$67,203	$0	$0	$198,647	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$265,850
416116-1	BAHIA VISTA AT US 41 (SR 45)	INTERSECTION IMPROVEMENT	$227	$109,739	$35,304	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$145,270
416118-1	SR 789 (GULF STREAM) FROM US 41 TO E OF SUNSET STREET	TRAFFIC OPS IMPROVEMENT	$624,951	$61,252	$6,014	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$692,217
416235-1	AUBURN ROAD	SIDEWALK	$0	$0	$18,572	$80,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$98,572
417577-1	US 41 AT MAIN STREET	ADD LEFT TURN LANE(S)	$679,054	$96,392	$27,292	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$802,738
417948-1	NORTH PORT CITYWIDE SIDEWALKS TO SCHOOLS	SIDEWALK	$4,322	$154,648	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$158,970
417949-1	TRAILHEADS ALONG ALLIGATOR CREEK	SIDEWALK	$75,000	$0	$0	$0	$0	$128,170	$0	$0	$0	$0	$0	$0	$0	$0	$0	$203,170
417984-1	SARASOTA COUNTY (SCAT) CAPITAL IMPROVEMENTS	INTERMODAL HUB CAPACITY	$0	$0	$0	$318,512	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$318,512
420877-1	WEST PRICE BLVD AT CRANBERRY BOULEVARD	ADD TURN LANE(S)	$0	$0	$711,355	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$711,355
420889-1	WEST BAYFRONT SIDEWALKS AT VARIOUS LOCATIONS	SIDEWALK	$0	$0	$0	$0	$600,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$600,000
420974-1	AUTOMATED TRAFFIC MANAGEMENT SYSTEM	TRAFFIC CONTROL DEVICES/SYSTEM	$4,553,677	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$4,553,677
420974-2	AUTOMATED TRAFFIC MANAGEMENT SYSTEM	TRAFFIC CONTROL DEVICES/SYSTEM	$2,250,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,250,000
420974-3	SARASOTA ATMS PHASE III	ATMS - ARTERIAL TRAFFIC MGMT	$0	$0	$0	$0	$0	$471,609	$0	$0	$0	$0	$0	$0	$0	$0	$0	$471,609
420974-4	SARASOTA ATMS PHASE IV - COUNTYWIDE	ATMS - ARTERIAL TRAFFIC MGMT	$0	$0	$0	$0	$0	$0	$8,108,800	$498	$2,531	$602	$8,731	$0	$0	$0	$0	$8,121,162
422623-1	RINGLING BOULEVARD AT PALM AVENUE	INTERSECTION IMPROVEMENT	$0	$0	$0	$727,720	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$727,720
422710-5	US 41 (SR 45) FROM SALFORD BLVD TO SUMTER BLVD	ADD LANES & RECONSTRUCT	$0	$0	$0	$0	$8,895	$29,977	$44,877	$89,906	$29,169	$64,968	$11,811,528	$470,000	$0	$0	$0	$12,549,320
423129-1	UNIVERSITY PKWY AT WEST OF I-75	TRAFFIC OPS IMPROVEMENT	$0	$220,469	$19,780	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$240,249
423148-1	US 41(TAMIAMI TRAIL) FROM VENITIAN BAY BLVD TO EAGLE POINT CIRCLE	TRAFFIC CONTROL DEVICES/SYSTEM	$0	$255	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$255
423274-1	US 41 AT SOUTH BISCAYNE DR	INTERSECTION IMPROVEMENT	$0	$0	$0	$43,567	$2,578	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$46,145
423527-1	BRENTWOOD AREA	TRAFFIC OPS IMPROVEMENT	$0	$27,939	$253,312	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$281,251
423667-1	SR 789 (GULFSTREAM) FROM WEST OF SUNSET TO WEST OF US 41	ADD RIGHT TURN LANE(S)	$0	$0	$0	$192	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$192
424191-1	SARASOTA COUNTY TRANSIT - NORTH PORT TRANSIT CENTER	PARK AND RIDE LOTS	$0	$0	$902	$0	$0	$0	$75,000	$0	$24,097	$0	$0	$0	$0	$0	$0	$99,999
424724-1	SR 72 AT PROCTOR ROAD	INTERSECTION IMPROVEMENT	$0	$0	$0	$112,773	$309,421	$101,378	$41,218	$239	$0	$0	$0	$0	$0	$0	$0	$565,029
425733-1	17TH STREET AT US 301	ADD RIGHT TURN LANE(S)	$0	$0	$0	$62,479	$3,016	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$65,495
426461-1	US 41 (SR 45) FROM N OF CARMALITA WAY TO S OF PHILLIPPI STREET	LAND ACQUISTION	$0	$0	$2,934	$79,769	$43	$2,388	$985	$20,158	$0	$0	$0	$0	$0	$0	$0	$106,277
426463-1	SARASOTA COUNTY AREA TRANSIT FTA 5339	FIXED GUIDEWAY IMPROVEMENTS	$0	$0	$1,009,375	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,009,375
426567-1	SARASOTA COUNTY AREA TRANSIT CAPITAL IMPROVEMENT FTA 5307	PURCHASE VEHICLES/EQUIPMENT	$0	$0	$4,618,693	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$4,618,693
426758-1	SARASOTA COUNTY AREA TRANSIT CAPITAL IMPROVEMENT	PURCHASE VEHICLES/EQUIPMENT	$0	$0	$270,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$270,000
426763-1	SUMTER BOULEVARD FROM CITY CENTER BLVD TO HANSARD AVENUE	BRIDGE-REHAB AND ADD LANES	$0	$0	$0	$1,463,097	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,463,097
426765-1	VENICE AVENUE AT HARBOR DRIVE	INTERSECTION IMPROVEMENT	$0	$0	$332,521	$3,051	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$335,572
427792-1	ITS DEVICES ELECTRIC	OTHER ITS	$0	$0	$0	$0	$0	$0	$0	$0	$14,772	$25,024	$90,000	$90,000	$90,000	$90,000	$0	$399,796
427935-1	RINGLING BLVD AT PINEAPPLE AVENUE	ROUNDABOUT	$0	$0	$0	$0	$0	$638,649	$0	$0	$0	$0	$0	$0	$0	$0	$0	$638,649
427939-1	US 41 AT SUMTER BLVD	ADD RIGHT TURN LANE(S)	$0	$0	$0	$0	$0	$108,451	$0	$0	$0	$0	$0	$0	$0	$0	$0	$108,451
427940-1	PRICE BLVD AT HABERLAND BLVD	INTERSECTION IMPROVEMENT	$0	$0	$0	$0	$0	$0	$1,084,351	$472	$193	$51	$0	$0	$0	$0	$0	$1,085,067
428150-1	HONORE AVE AT RICHARDSON ROAD	INTERSECTION IMPROVEMENT	$0	$0	$0	$0	$0	$0	$0	$740,597	$0	$0	$0	$0	$0	$0	$0	$740,597
428236-1	CATTLEMEN ROAD FROM RICHARDSON ROAD TO DESOTO ROAD	NEW ROAD CONSTRUCTION	$0	$0	$0	$0	$13,982,619	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$13,982,619
428249-1	ALTA VISTA ELEMENTARY SAFE ROUTES TO SCHOOL	SIDEWALK	$0	$0	$0	$0	$0	$0	$741	$751	$0	$0	$0	$0	$0	$0	$0	$1,492

Table C-15 (continued)
FY 2007-2021 FDOT Work Program for Sarasota County – Capacity Expansion

ITEM #	PROJECT DESCRIPTION	WORK TYPE	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
428261-1	SARASOTA COUNTY SCHOOLS BICYCLE EQUIPMENT	PURCHASE VEHICLES/EQUIPMENT	$0	$0	$0	$9,560	$20,420	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$29,980
428383-1	SR45 (US 41) FROM 10TH STREET TO 14TH STREET	ROUNDABOUT	$0	$0	$0	$0	$763,731	$34,327	$1,522,488	$161,948	$38,721	$119,107	$5,863,390	$265,000	$0	$0	$0	$8,768,712
428923-1	SOUTH NOKOMIS AVE AT VENICE PUBLIC LIBRARY	PUBLIC TRANSPORTATION SHELTER	$0	$0	$0	$0	$0	$169,470	$0	$0	$0	$0	$0	$0	$0	$0	$0	$169,470
428940-1	HONORE AVE EXTENSION FROM LAUREL ROAD TO SR 681	NEW ROAD CONSTRUCTION	$0	$0	$0	$0	$0	$0	$0	$5,005,510	$0	$0	$0	$0	$0	$0	$0	$5,005,510
429238-1	PHILLIPPI SHORES ELEMENTARY SCHOOL SRTS SIDEWALK	SIDEWALK	$0	$0	$0	$0	$77,126	$243,913	$17,153	$0	$0	$0	$0	$0	$0	$0	$0	$338,192
429775-1	US 41 / SR 45 FROM S OF BEE RIDGE RD TO S OF SIESTA DRIVE	INTERSECTION IMPROVEMENT	$0	$0	$0	$0	$756,141	$97,552	$12,439	$0	$0	$0	$0	$0	$0	$0	$0	$866,132
429778-1	SR 72 AT GANTT RD	INTERSECTION IMPROVEMENT	$0	$0	$0	$0	$532,598	$8,523	$776	$0	$0	$0	$0	$0	$0	$0	$0	$541,897
429831-1	SR 780 (FRUITVILLE) FROM HONORE AVE TO CATTLEMEN ROAD	SIDEWALK	$0	$0	$0	$0	$0	$0	$54,896	$1,627	$5,235	$239,824	$0	$0	$0	$0	$0	$301,582
429872-1	US 41 AT BISCAYNE DRIVE	INTERSECTION IMPROVEMENT	$0	$0	$0	$0	$0	$0	$0	$653,403	$3,424	$129	$1,380	$0	$0	$0	$0	$658,336
430042-1	HONORE AVE AT SR 758 (BEE RIDGE)	INTERSECTION IMPROVEMENT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$926,388	$0	$0	$0	$0	$926,388
430138-1	SR 776 MAST ARM REPAIRS	TRAFFIC SIGNAL UPDATE	$0	$0	$10,287	$0	$45,121	$872,043	$23,872	$112	$0	$0	$0	$0	$0	$0	$0	$951,435
430139-1	US 41 MAST ARM REPAIRS	TRAFFIC SIGNAL UPDATE	$0	$0	$7,803	$0	$27,948	$609,310	$30,724	$22,542	$2,543	$0	$0	$0	$0	$0	$0	$700,870
430143-1	SR 72 MAST ARM REPAIRS AT VARIOUS LOCATIONS	TRAFFIC SIGNAL UPDATE	$0	$0	$1,712	$0	$17,926	$419,116	$8,180	$6,269	$0	$0	$0	$0	$0	$0	$0	$453,203
430143-2	SR 72 (CLARK RD) AT HONORE REPLACE MAST ARM SIGNALS	TRAFFIC SIGNAL UPDATE	$0	$0	$0	$0	$0	$221,309	$0	$0	$0	$0	$0	$0	$0	$0	$0	$221,309
430145-1	SR 758 MAST ARM REPAIRS AT VARIOUS LOCATIONS	TRAFFIC SIGNAL UPDATE	$0	$0	$3,013	$0	$9,735	$104,560	$8,555	$4,231	$0	$0	$0	$0	$0	$0	$0	$130,094
430162-1	US 41 BUS AT MIAMI AVE, VENICE AVE, AND TAMPA AVE	SIDEWALK	$0	$0	$0	$0	$0	$0	$484,465	$170	$0	$0	$0	$0	$0	$0	$0	$484,635
430744-1	SARASOTA COUNTY SCAT FTA SECTION 5317 CAPITAL ASSISTANCE	CAPITAL FOR FIXED ROUTE	$0	$0	$0	$0	$0	$169,352	$0	$0	$0	$0	$0	$0	$0	$0	$0	$169,352
430863-1	SR 72 (STICKNEY POINT RD) AT SWIFT ROAD	INTERSECTION IMPROVEMENT	$0	$0	$0	$0	$0	$1,447	$111,206	$871,019	$30,817	$0	$0	$0	$0	$0	$0	$1,014,489
431041-1	PRICE BLVD AT BISCAYNE DRIVE	ADD RIGHT TURN LANE(S)	$0	$0	$0	$0	$0	$0	$0	$137,143	$285	$305	$376	$0	$0	$0	$0	$138,109
432010-1	SARASOTA COUNTY TRANSPORTATION AUTHORITY CAPITAL ASSISTANCE	CAPITAL FOR FIXED ROUTE	$0	$0	$0	$0	$0	$257,684	$0	$0	$0	$0	$0	$0	$0	$0	$0	$257,684
432753-1	US 41 FROM BISPHAM ROAD TO GULF GATE DRIVE	INTERSECTION IMPROVEMENT	$0	$0	$0	$0	$74,830	$0	$6,181	$357,742	$30,933	$72	$449	$0	$0	$0	$0	$470,207
432754-1	US 41 FROM VENETIAN DRIVE TO PALM DRIVE	SIDEWALK	$0	$0	$0	$0	$0	$0	$0	$51,190	$378,018	$37,025	$0	$0	$0	$0	$0	$466,233
432840-1	SARASOTA COUNTY TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT	CAPITAL FOR FIXED ROUTE	$0	$0	$0	$0	$0	$0	$237,918	$0	$0	$50,000	$0	$0	$0	$0	$0	$287,918
433216-1	CRANBERRY BLVD AT HILLSBOROUGH AVENUE	INTERSECTION IMPROVEMENT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$865,515	$0	$0	$0	$865,515
433219-1	US 41 AT ORANGE AVE	ROUNDABOUT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$645,000	$0	$1,420,000	$0	$0	$2,065,000
433225-1	US 41 FROM RINGLING BLVD TO MAIN STREET	ROUNDABOUT	$0	$0	$0	$0	$0	$0	$0	$0	$710,271	$19,535	$6,978	$200,000	$0	$0	$0	$936,784
433276-1	US 41 AT MYRTLE STREET & MARTIN LUTHER KING JR WAY	INTERSECTION IMPROVEMENT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,245,000	$0	$0	$0	$2,820,000	$4,065,000
433279-1	OSPREY AVE CORRIDOR	ATMS - ARTERIAL TRAFFIC MGMT	$0	$0	$0	$0	$0	$0	$0	$252,800	$81	$51	$676	$0	$0	$0	$0	$253,608
433373-1	SR 72 AT MYAKKA VALLEY TRAIL	INTERSECTION IMPROVEMENT	$0	$0	$0	$0	$0	$0	$88	$53,813	$323,514	$47,013	$6,027	$0	$0	$0	$0	$430,455
433548-1	CATTLEMEN ROAD AT VARIOUS INTERSECTIONS	ADD TURN LANE(S)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,862,003	$0	$0	$0	$0	$1,862,003
433550-1	US 41 FROM BLACKBURN POINT ROAD TO STICKNEY PT ROAD	BIKE LANE/SIDEWALK	$0	$0	$0	$0	$0	$0	$80,060	$0	$0	$1,254,283	$108,343	$0	$0	$0	$0	$1,442,686
433550-2	SR 45 (US 41) FROM MCINTOSH ROAD TO BENEVA ROAD	BIKE LANE/SIDEWALK	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,714,059	$0	$0	$0	$1,714,059
433550-3	SR 45 (US 41) FROM BLACKBURN POINT ROAD TO MCINTOSH ROAD	BIKE LANE/SIDEWALK	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,065,701	$0	$3,065,701
433608-1	MYRTLE STREET	SIDEWALK	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$243,149	$0	$0	$0	$243,149
433608-2	MYRTLE STREET	SIDEWALK	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,000	$40,000	$0	$0	$0	$50,000
434491-1	SR 758 AT BEACH ROAD INTERSECTION IMPROVEMENT	INTERSECTION IMPROVEMENT	$0	$0	$0	$0	$0	$0	$0	$88,724	$448,256	$4,257	$15,145	$1,591,156	$0	$0	$0	$2,147,538
434504-1	SR 72 AT BEE RIDGE ROAD	ROUNDABOUT	$0	$0	$0	$0	$0	$0	$0	$0	$264,637	$12,488	$2,180,083	$0	$0	$0	$0	$2,457,208
434528-1	SARASOTA CO/SAR-BRADENTON UZA FTA SECTION 5339 CAPITAL ASSISTANCE	CAPITAL FOR FIXED ROUTE	$0	$0	$0	$0	$0	$0	$0	$404,137	$408,943	$416,325	$408,943	$408,943	$408,943	$408,943	$413,325	$3,278,502
434610-2	SARASOTA COUNTY FTA SECTION 5307 CAPITAL ASSISTANCE	CAPITAL FOR FIXED ROUTE	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,560,815	$313,000	$313,000	$313,000	$769,650	$791,165	$4,060,630
434728-1	US 41 AT HANSEN STREET	INTERSECTION IMPROVEMENT	$0	$0	$0	$0	$0	$0	$0	$0	$76,827	$246,125	$36,559	$0	$0	$0	$0	$359,511
435092-1	VENICE/MIA/TAMPA AVE FROM HARBOR DR TO BUSINESS US 41	SIDEWALK	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$778,723	$0	$0	$778,723
435345-1	SIGNAL RETIMING CITY OF SARASOTA/SARASOTA COUNTY	TRAFFIC SIGNAL UPDATE	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$410,000	$0	$0	$0	$0	$410,000
435345-2	SIGNAL RETIMING SARASOTA COUNTY VARIOUS LOCATIONS	TRAFFIC SIGNAL UPDATE	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,411,286	$0	$0	$0	$0	$1,411,286
435451-1	RINGLING BLVD AND ORANGE AVE ROUNDABOUTS	ROUNDABOUT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$884,523	$0	$0	$0	$0	$884,523
435833-1	UNIVERSITY PARKWAY FROM LAKEWOOD RANCH TO SARASOTA AIRPORT ENTRANCE	TRAFFIC OPS IMPROVEMENT	$0	$0	$0	$0	$0	$0	$0	$0	$496,700	$0	$0	$0	$0	$0	$0	$496,700
436191-1	BRIDGE REPLACEMENT ON SR 72 OVER COW PEN SLOUGH IN SARASOTA COUNTY	PD&E/EMO STUDY	$0	$0	$0	$0	$0	$0	$0	$0	$5,202	$2,118	$5,881	$0	$0	$0	$0	$13,201
436680-1	SR 789 (RINGLING) FROM BIRD KEY DRIVE TO SARASOTA HARBOR WEST	PD&E/EMO STUDY	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,325,000	$0	$2,325,000
436974-1	ATMS NEW CONTROLLERS & CCTV'S AT VARIOUS LOCATIONS IN SARASOTA COUNTY	ATMS - ARTERIAL TRAFFIC MGMT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,751,053	$0	$0	$0	$0	$2,751,053
436979-1	SR 45 (US 41) FROM RIVER TO WOODMERE PARK BLVD	SIDEWALK	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$610,000	$0	$2,072,363	$0	$2,682,363
436987-1	EDMONDSON ROAD (CITY OF VENICE) FROM PINEBROOK ROAD TO AUBURN ROAD	SIDEWALK	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$336,082	$0	$0	$0	$0	$336,082
438137-1	US 41 AT GULFSTREAM	ROUNDABOUT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$22,188	$78,695	$0	$0	$0	$0	$100,883
438341-1	RINGLING BLVD AT PINE PLACE INTERSECTION	INTERSECTION IMPROVEMENT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$451,961	$14,784	$0	$0	$1,420,000	$0	$1,886,745
438371-1	US 301 FROM FRUITVILLE RD TO 10TH ST	SAFETY PROJECT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$185,000	$0	$366,683	$0	$0	$551,683
439025-1	US 41 AT FRUITVILLE	INTERSECTION IMPROVEMENT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,245,000	$0	$0	$0	$0	$1,245,000
439397-1	SARASOTA COUNTY	PARK AND RIDE LOTS	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$132,000	$0	$0	$0	$0	$132,000
439590-1	SR 72 FROM IBIS STREET TO BEE RIDGE ROAD	INTERSECTION IMPROVEMENT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$15,000	$0	$0	$0	$0	$15,000
Total			**$18,362,471**	**$10,338,541**	**$35,402,017**	**$17,892,229**	**$21,930,417**	**$5,652,332**	**$25,316,297**	**$25,814,555**	**$28,940,153**	**$12,201,190**	**$49,001,698**	**$20,111,147**	**$22,113,700**	**$14,929,193**	**$8,873,600**	**$316,879,540**

Source: Florida Department of Transportation, District 1 Office

Table C-16
Average Motor Vehicle Fuel Efficiency – Excluding Interstate Travel

Travel Vehicle Miles of Travel (VMT) @			
	21.4	6.3	
Other Arterial Rural	304,792,000,000	45,625,000,000	350,417,000,000
Other Rural	299,027,000,000	30,471,000,000	329,498,000,000
Other Urban	1,476,377,000,000	89,623,000,000	1,566,000,000,000
Total	***2,080,196,000,000***	***165,719,000,000***	***2,245,915,000,000***

Percent VMT	
@ 21.4 mpg	@ 6.3 mpg
87%	13%
91%	9%
94%	6%
93%	**7%**

Fuel Consumed			
	Gallons @ 21.4 mpg	Gallons @ 6.3 mpg	
Other Arterial Rural	14,242,616,822	7,242,063,492	21,484,680,314
Other Rural	13,973,224,299	4,836,666,667	18,809,890,966
Other Urban	68,989,579,439	14,225,873,016	83,215,452,455
Total	***97,205,420,560***	***26,304,603,175***	***123,510,023,735***

Total Mileage and Fuel	
2,245,915	**miles (millions)**
123,510	**gallons (millions)**
18.18	**mpg**

Source: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics 2014* , Section V, Table VM-1
Annual Vehicle Distance Traveled in Miles and Related Data - 2014 by Highway Category and Vehicle Type
http://www.fhwa.dot.gov/policyinformation/statistics.cfm

See Table C-17 for additional detail

Table C-17
Annual Vehicle Distance Traveled in Miles and Related Data – By Highway Category and Vehicle Type

Published December 2015 — TABLE VM-1

YEAR	ITEM	LIGHT DUTY VEHICLES SHORT WB[2]	MOTOR-CYCLES	BUSES	LIGHT DUTY VEHICLES LONG WB[2]	SINGLE-UNIT TRUCKS[3]	COMBINATION TRUCKS	SUBTOTALS		ALL MOTOR VEHICLES
								ALL LIGHT VEHICLES[2]	SINGLE-UNIT 2-AXLE 6-TIRE OR MORE AND COMBINATION TRUCKS	
	Motor-Vehicle Travel: (millions of vehicle-miles)									
2014	Interstate Rural	130,679	1,114	1,533	42,020	9,255	46,770	**172,699**	**56,026**	231,372
2014	Other Arterial Rural	217,799	2,681	2,022	86,993	16,330	29,295	**304,792**	**45,625**	355,119
2014	Other Rural	210,090	2,953	1,986	88,936	17,076	13,395	**299,027**	**30,471**	334,436
2014	All Rural	558,569	6,748	5,540	217,949	42,661	89,461	776,517	132,122	920,928
2014	Interstate Urban	364,071	2,422	2,373	93,591	16,498	40,889	**457,661**	**57,387**	519,843
2014	Other Urban	1,149,432	10,800	8,085	326,945	50,143	39,480	**1,476,377**	**89,623**	1,584,885
2014	All Urban	1,513,503	13,221	10,458	420,536	66,641	80,369	1,934,038	147,010	2,104,728
2014	Total Rural and Urban[5]	2,072,071	19,970	15,999	638,484	109,301	169,830	2,710,556	279,132	3,025,656
2014	Number of motor vehicles registered[2]	187,554,928	8,417,718	872,027	52,600,309	8,328,759	2,577,197	240,155,238	10,905,956	260,350,938
2014	Average miles traveled per vehicle	11,048	2,372	18,347	12,138	13,123	65,897	11,287	25,594	11,621
2014	Person-miles of travel[4] (millions)	2,878,905	21,510	339,177	852,983	109,301	169,830	3,731,888	279,132	4,371,706
2014	Fuel consumed (thousand gallons)	89,300,790	458,628	2,233,219	37,342,987	14,893,865	29,117,656	126,643,778	44,011,521	173,347,146
2014	Average fuel consumption per vehicle (gallons)	476	54	2,561	710	1,788	11,298	527	4,036	666
2014	Average miles traveled per gallon of fuel consumed	23.2	43.5	7.2	17.1	7.3	5.8	**21.4**	**6.3**	17.5

(1) The FHWA estimates national trends by using State reported Highway Performance and Monitoring System (HPMS) data, fuel consumption data (MF-21 and MF-27), vehicle registration data (MV-1, MV-9, and MV-10), other data such as the R.L. Polk vehicle data, and a host of modeling techniques. Starting with the 2009 VM-1, an enhanced methodology was used to provide timely indicators on both travel and travel behavior changes.

(2) Light Duty Vehicles Short WB - passenger cars, light trucks, vans and sport utility vehicles with a wheelbase (WM) equal to or less than 121 inches. Light Duty Vehicles Long WB - large passenger cars, vans, pickup trucks, and sport/utility vehicles with wheelbases (WB) larger than 121 inches. All Light Duty Vehicles - passenger cars, light trucks, vans and sport utility vehicles regardless of

(3) Single-Unit - single frame trucks that have 2-Axles and at least 6 tires or a gross vehicle weight rating exceeding 10,000 lbs.

(4) Vehicle occupancy is estimated by the FHWA from the 2009 National Household Travel Survey (NHTS); For single unit truck and heavy trucks, 1 motor vehicle mile travelled = 1 person-mile traveled.

(5) VMT data are based on the latest HPMS data available; it may not match previous published results.

APPENDIX D
Multi-Modal Transportation
Impact Fee Schedule

Multi-Modal Transportation Impact Fee Schedule

This Appendix includes the detailed multi-modal transportation impact fee rate schedule. Table D-1 includes the input variables used in the calculation of each land use included in the City of Sarasota's impact fee schedule. Table D-2 presents the discounted rates for select uses, if the development is less than 10,000 sq ft and located within the City's Downtown District.

Table D-1
City of Sarasota Multi-Modal Transportation Impact Fee Schedule

Gasoline Tax					Unit Cost per Lane Mile:	$3,843,000								Interstate/Toll Facility Adjustment Factor:	7.0%			
$$ per Gallon to Capital:	$0.356		City Revenues:	$0.038	Average PMC per Lane Mile:	12,180								Transportation Cost per PMC:	$315.52			
Facility Life (Years):	25		County Revenues:	$0.176	Fuel Efficiency:	18.18 mpg												
Interest Rate:	3.5%		State Revenues:	$0.142	Effective Days per Year:	365												

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	% New Trips	% New Trips Source	Net VMT[1]	Person-Trip Factor	Net PMT	Total Impact Cost	Annual Gas Tax	Gas Tax Credit	Net Multi-Modal Impact Fee	Current Impact Fee	% Change
	RESIDENTIAL:																	
210	Single Family (Detached) - Less than 1,500 sf	du	5.77	Tiering Analysis (Appendix A)	6.62	7.12	FL Studies	100%	n/a	17.76	1.40	24.86	$7,846	$147	$2,423	**$5,423**	$2,887	88%
	Single Family (Detached) - 1,500 to 3,499 sf	du	7.81	Tiering Analysis (Appendix A)	6.62	7.12	FL Studies	100%	n/a	24.04	1.40	33.66	$10,620	$199	$3,280	**$7,340**	$2,887	154%
	Single Family (Detached) - 3,500 sf and greater	du	8.68	Tiering Analysis (Appendix A)	6.62	7.12	FL Studies	100%	n/a	26.72	1.40	37.41	$11,803	$221	$3,642	**$8,161**	$2,887	183%
220	Multi-Family (Apartment) - Less than 800 sf	du	4.70	Tiering Analysis (Appendix A)	5.10	5.60	FL Studies (LUC 220/230)	100%	n/a	11.15	1.40	15.61	$4,924	$94	$1,549	**$3,375**	$1,861	81%
	Multi-Family (Apartment) - 800 sf or and greater	du	6.60	Tiering Analysis (Appendix A)	5.10	5.60	FL Studies (LUC 220/230)	100%	n/a	15.65	1.40	21.91	$6,914	$132	$2,176	**$4,738**	$1,861	155%
230	Residential Condo/Townhouse - Less than 1,000 sf	du	4.97	Tiering Analysis (Appendix A)	5.10	5.60	FL Studies (LUC 220/230)	100%	n/a	11.79	1.40	16.51	$5,206	$99	$1,632	**$3,574**	$1,628	120%
	Residential Condo/Townhouse - 1,000 to 1,399 sf	du	5.76	Tiering Analysis (Appendix A)	5.10	5.60	FL Studies (LUC 220/230)	100%	n/a	13.66	1.40	19.12	$6,034	$115	$1,895	**$4,139**	$1,628	154%
	Residential Condo/Townhouse - 1,400 sf and greater	du	7.28	Tiering Analysis (Appendix A)	5.10	5.60	FL Studies (LUC 220/230)	100%	n/a	17.26	1.40	24.16	$7,626	$146	$2,406	**$5,220**	$1,628	221%
240	Mobile Home Park/RV Park	du	4.17	Florida Studies	4.60	5.10	FL Studies	100%	n/a	8.92	1.40	12.49	$3,940	$76	$1,253	**$2,687**	$1,059	154%
251	Retirement Community/Age-Restricted Single-Family	du	3.12	Blend ITE 9th & FL Studies	5.42	5.92	FL Studies	100%	n/a	7.86	1.40	11.00	$3,473	$66	$1,088	**$2,385**	$576	314%
253	Assisted Living Facility (ALF)/Congregate Care Facility	du	2.25	Blend ITE 9th & FL Studies	3.08	3.58	FL Studies	72%	FL Studies	2.32	1.40	3.25	$1,025	$21	$346	**$679**	$271	151%
	LODGING:																	
310/320	Hotel/Motel	room	5.63	ITE 9th Edition (LUC 320)	4.34	4.84	FL Studies	77%	FL Studies	8.75	1.40	12.25	$3,865	$75	$1,236	**$2,629**	$1,026	156%
	RECREATION:																	
420	Marina	berth	2.96	ITE 9th Edition	6.62	7.12	Same as LUC 210	90%	FL Studies (Pinellas County)	8.20	1.40	11.48	$3,622	$68	$1,121	**$2,501**	$487	414%
430	Golf Course	acres	5.04	ITE 9th Edition	6.62	7.12	Same as LUC 210	90%	FL Studies (Pinellas County)	13.96	1.40	19.54	$6,168	$115	$1,895	**$4,273**	$830	415%
443	Movie Theater[2]	1,000 sf	30.00	ITE 6th and 9th Editions (Adjusted)	2.22	2.72	FL Studies (LUC 444)	88%	FL Studies (LUC 444)	27.25	1.40	38.15	$12,038	$257	$4,236	**$7,802**	$3,055	155%
492	Health/Fitness/Athletic Club	1,000 sf	32.93	ITE 9th Edition	5.15	5.65	Same as LUC 710	94%	FL Studies	74.13	1.40	103.78	$32,744	$625	$10,301	**$22,443**	n/a	n/a
495	Recreational/Community Center	1,000 sf	33.82	ITE 9th Edition	4.30	4.80	Same as LUC 530	90%	Same as LUC 530	60.86	1.40	85.20	$26,884	$522	$8,603	**$18,281**	$3,769	385%
	INSTITUTIONS:																	
520/522	Elementary/Middle School (Private)	1,000 sf	13.78	ITE 9th Edition	4.30	4.80	FL Studies (Pinellas County)	80%	FL Studies (Pinellas County)	22.04	1.40	30.86	$9,737	$189	$3,115	**$6,622**	$2,292	189%
530	High School (Private)	1,000 sf	12.89	ITE 9th Edition	4.30	4.80	FL Studies (Pinellas County)	90%	FL Studies (Pinellas County)	23.20	1.40	32.48	$10,246	$199	$3,280	**$6,966**	$2,039	242%
540	University/Junior College (7,500 or fewer students) (Private)	student	2.00	ITE Regression Analysis	6.62	7.12	Same as LUC 210	90%	FL Studies (Pinellas County)	5.54	1.40	7.76	$2,448	$46	$758	**$1,690**	$661	156%

Table D-1 (continued)
City of Sarasota Multi-Modal Transportation Impact Fee Schedule

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	% New Trips	% New Trips Source	Net VMT[1]	Person-Trip Factor	Net PMT	Total Impact Cost	Annual Gas Tax	Gas Tax Credit	Net Multi-Modal Impact Fee	Current Impact Fee	% Change
	INSTITUTIONS:																	
540	University/Junior College (more than 7,500 students) (Private)	student	1.50	ITE Regression Analysis	6.62	7.12	Same as LUC 210	90%	FL Studies (Pinellas County)	4.16	1.40	5.82	$1,836	$34	$560	**$1,276**	$496	157%
560	Church	1,000 sf	9.11	ITE 9th Edition	3.90	4.40	FL Studies (Pinellas County)	90%	FL Studies (Pinellas County)	14.87	1.40	20.82	$6,568	$129	$2,126	**$4,442**	$1,742	155%
565	Day Care	1,000 sf	71.88	Blend ITE 9th & FL Studies	2.03	2.53	FL Studies	73%	FL Studies	49.53	1.40	69.34	$21,879	$474	$7,812	**$14,067**	$3,955	256%
610	Hospital	1,000 sf	13.22	ITE 9th Edition	6.62	7.12	Same as LUC 210	77%	FL Studies (Pinellas County)	31.34	1.40	43.88	$13,842	$259	$4,269	**$9,573**	$3,769	154%
620	Nursing Home	1,000 sf	7.60	ITE 9th Edition	2.59	3.09	FL Studies	89%	FL Studies	8.15	1.40	11.41	$3,598	$75	$1,236	**$2,362**	$932	153%
	OFFICE:																	
710	General Office 6,000 sf or less[3]	1,000 sf	11.02	ITE 9th equation	5.15	5.65	FL Studies	92%	FL Studies	24.28	1.40	33.99	$10,725	$205	$3,379	**$7,346**	$2,134	244%
710	General Office 6,001-50,000 sf[3]	1,000 sf	15.50	ITE 9th equation	5.15	5.65	FL Studies	92%	FL Studies	34.15	1.40	47.81	$15,085	$288	$4,747	**$10,338**	$3,004	244%
710	General Office 50,001-100,000 sf[3]	1,000 sf	13.13	ITE 9th equation	5.15	5.65	FL Studies	92%	FL Studies	28.93	1.40	40.50	$12,778	$244	$4,021	**$8,757**	$3,004	192%
710	General Office 100,001-200,000 sf[3]	1,000 sf	11.12	ITE 9th equation	5.15	5.65	FL Studies	92%	FL Studies	24.50	1.40	34.30	$10,822	$207	$3,412	**$7,410**	$2,918	154%
710	General Office 200,001-400,000 sf[3]	1,000 sf	9.41	ITE 9th equation	5.15	5.65	FL Studies	92%	FL Studies	20.73	1.40	29.02	$9,158	$175	$2,884	**$6,274**	$2,471	154%
710	General Office greater than 400,000 sf[3]	1,000 sf	8.54	ITE 9th equation	5.15	5.65	FL Studies	92%	FL Studies	18.82	1.40	26.35	$8,311	$159	$2,621	**$5,690**	$2,242	154%
720	Medical Office (0-10,000 sf)	1,000 sf	23.83	FL Studies	5.55	6.05	FL Studies	89%	FL Studies	54.73	1.40	76.62	$24,178	$459	$7,565	**$16,613**	$3,004	453%
720	Medical Office (>10,000 sf)	1,000 sf	34.72	Blend ITE 9th & FL Studies	5.55	6.05	FL Studies	89%	FL Studies	79.75	1.40	111.65	$35,227	$668	$11,010	**$24,217**	$3,004	706%
770	Business Park (Flex Space)	1,000 sf	12.65	Blend ITE 9th & FL Studies	5.38	5.88	FL Studies	89%	FL Studies	28.17	1.40	39.44	$12,441	$237	$3,906	**$8,535**	$3,004	184%
	RETAIL:																	
812	Building Materials / Lumber Store	1,000 sf	45.16	ITE 9th Edition	6.27	6.77	FL Studies	74%	FL Studies	97.43	1.40	136.40	$43,039	$809	$13,334	**$29,705**	$6,612	349%
813	Discount Superstore, Free-Standing	1,000 sf	50.82	Blend ITE 9th & FL Studies	2.87	3.37	Same as LUC 820 (>50k sfgla)	76%	Same as LUC 820 (>50k sfgla)	51.54	1.40	72.16	$22,769	$465	$7,664	**$15,105**	n/a	n/a
814	Variety Store	1,000 sf	64.03	ITE 9th Edition	1.87	2.37	Same as LUC 820 (6k-50k sfgla)	56%	Same as LUC 820 (6k-50k sfgla)	31.18	1.40	43.65	$13,773	$304	$5,010	**$8,763**	n/a	n/a
815	Discount Store, Free-Standing	1,000 sf	57.24	ITE 9th Edition	1.87	2.37	Same as LUC 820 (6k-50k sfgla)	56%	Same as LUC 820 (6k-50k sfgla)	27.87	1.40	39.02	$12,312	$271	$4,466	**$7,846**	n/a	n/a
816	Hardware/Paint	1,000 sf	51.29	ITE 9th Edition	1.87	2.37	Same as LUC 820 (6k-50k sfgla)	56%	Same as LUC 820 (6k-50k sfgla)	24.98	1.40	34.97	$11,032	$243	$4,005	**$7,027**	$2,752	155%
820	Retail 6,000 sfgla or less[3]	1,000 sfgla	86.56	ITE 9th equation	1.12	1.62	FL Curve	39%	FL Curve	17.58	1.40	24.61	$7,766	$195	$3,214	**$4,552**	$1,762	158%
820	Retail/Shopping Center 6,001-50,000 sfgla[3]	1,000 sfgla	86.56	ITE 9th equation	1.87	2.37	FL Curve	56%	FL Curve	42.15	1.40	59.01	$18,619	$411	$6,774	**$11,845**	$4,632	156%
820	Retail/Shopping Center greater than 50,000 sfgla[3]	1,000 sfgla	36.27	ITE 9th equation	2.87	3.37	FL Curve	76%	FL Curve	36.79	1.40	51.51	$16,250	$332	$5,472	**$10,778**	$4,234	155%

Table D-1 (continued)
City of Sarasota Multi-Modal Transportation Impact Fee Schedule

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	% New Trips	% New Trips Source	Net VMT[1]	Person-Trip Factor	Net PMT	Total Impact Cost	Annual Gas Tax	Gas Tax Credit	Net Multi-Modal Impact Fee	Current Impact Fee	% Change
	RETAIL:																	
841	New/Used Auto Sales	1,000 sf	26.80	Blend ITE 9th & FL Studies	4.60	5.10	FL Studies	79%	FL Studies	45.29	1.40	63.41	$20,004	$386	$6,362	**$13,642**	$2,685	408%
843	Automobile Parts Store	1,000 sf	61.91	ITE 9th Edition	4.60	5.10	Same as LUC 841	79%	Same as LUC 841	104.62	1.40	146.47	$46,212	$891	$14,685	**$31,527**	n/a	n/a
848	Tire Store	1,000 sf	24.87	ITE 9th Edition	3.62	4.12	Same as LUC 942	72%	Same as LUC 942	30.14	1.40	42.20	$13,314	$264	$4,351	**$8,963**	$3,527	154%
850	Supermarket	1,000 sf	103.38	Blend ITE 9th & FL Studies	2.08	2.58	FL Studies	56%	FL Studies	55.99	1.40	78.39	$24,734	$534	$8,801	**$15,933**	$5,659	182%
854	Discount Supermarket	1,000 sf	90.86	ITE 9th Edition	2.87	3.37	Same as LUC 820 (>50k sfgla)	76%	Same as LUC 820 (>50k sfgla)	92.16	1.40	129.02	$40,708	$832	$13,713	**$26,995**	n/a	n/a
857	Discount Club	1,000 sf	41.80	ITE 9th Edition	2.87	3.37	Same as LUC 820 (>50k sfgla)	76%	Same as LUC 820 (>50k sfgla)	42.40	1.40	59.36	$18,727	$383	$6,312	**$12,415**	n/a	n/a
862	Home Improvement Superstore	1,000 sf	30.74	ITE 9th Edition	2.87	3.37	Same as LUC 820 (>50k sfgla)	76%	Same as LUC 820 (>50k sfgla)	31.18	1.40	43.65	$13,772	$281	$4,631	**$9,141**	$3,580	155%
880/881	Pharmacy/Drug Store with and without Drive-Thru	1,000 sf	95.96	Blend ITE 9th & FL Studies	2.08	2.58	FL Studies	32%	FL Studies	29.70	1.40	41.58	$13,119	$283	$4,664	**$8,455**	$3,308	156%
890	Furniture Store	1,000 sf	5.06	ITE 9th Edition	6.09	6.59	FL Studies	54%	FL Studies	7.74	1.40	10.84	$3,418	$64	$1,055	**$2,363**	$741	219%
912	Bank/Savings w/Drive-In	1,000 sf	159.34	Blend ITE 9th & FL Studies	2.46	2.96	FL Studies	46%	FL Studies	83.84	1.40	117.38	$37,036	$775	$12,773	**$24,263**	$6,091	298%
931	Sit-Down Restaurant	1,000 sf	91.10	Blend ITE 9th & FL Studies	3.14	3.64	FL Studies	77%	FL Studies	102.42	1.40	143.39	$45,243	$912	$15,031	**$30,212**	$6,257	383%
932	High-Turnover Restaurant	1,000 sf	108.71	Blend ITE 9th & FL Studies	3.17	3.67	FL Studies	71%	FL Studies	113.77	1.40	159.28	$50,257	$1,012	$16,679	**$33,578**	$6,257	437%
934	Fast Food Restaurant w/Drive-Thru	1,000 sf	511.00	Blend ITE 9th & FL Studies	2.05	2.55	FL Studies	58%	FL Studies	282.52	1.40	395.53	$124,799	$2,701	$44,517	**$80,282**	$13,621	489%
941	Quick Lube	bays	40.00	ITE 9th Edition	3.62	4.12	Same as LUC 942	72%	Same as LUC 942	48.48	1.40	67.87	$21,415	$424	$6,988	**$14,427**	$5,659	155%
942	Automobile Repair Shop	1,000 sf	28.19	Blend ITE 9th & FL Studies	3.62	4.12	FL Studies	72%	FL Studies	34.17	1.40	47.84	$15,092	$299	$4,928	**$10,164**	$2,685	279%
945	Gasoline/Service Station/Conv. Mart; 0 to 6 vfp	fuel pos.	187.50	ITE 9th Edition (Adjusted)	1.90	2.40	Same as LUC 944 (see Appendix A)	23%	Same as LUC 944 (see Appendix A)	38.10	1.40	53.34	$16,830	$370	$6,098	**$10,732**	$1,958	448%
	Gasoline/Service Station/Conv. Mart; 7 to 10 vfp	fuel pos.	162.50	ITE 9th Edition (Adjusted)	1.90	2.40	Same as LUC 944 (see Appendix A)	23%	Same as LUC 944 (see Appendix A)	33.02	1.40	46.23	$14,586	$321	$5,291	**$9,295**	$1,958	375%
	Gasoline/Service Station/Conv. Mart; 11 or more vfp	fuel pos.	150.00	ITE 9th Edition (Adjusted)	1.90	2.40	Same as LUC 944 (see Appendix A)	23%	Same as LUC 944 (see Appendix A)	30.48	1.40	42.67	$13,464	$296	$4,879	**$8,585**	$1,958	339%
947	Self-Service Car Wash	bays	43.94	Blend ITE 9th & FL Studies	2.18	2.68	FL Studies	68%	FL Studies	30.29	1.40	42.41	$13,379	$286	$4,714	**$8,665**	$3,393	155%
n/a	Convenience/Gasoline/Fast Food Store	1,000 sf	984.59	FL Studies	2.65	3.15	FL Studies	32%	FL Studies	388.24	1.40	543.54	$171,498	$3,547	$58,460	**$113,038**	$10,806	946%
	INDUSTRIAL:																	
110/130	General Light Industrial/Industrial Park	1,000 sf	6.97	ITE 9th Edition (LUC 110)	5.15	5.65	Same as LUC 710	92%	Same as LUC 710	15.36	1.40	21.50	$6,783	$129	$2,126	**$4,657**	$1,829	155%
120	General Heavy Industrial	1,000 sf	1.50	ITE 9th Edition	5.15	5.65	Same as LUC 710	92%	Same as LUC 710	3.30	1.40	4.62	$1,460	$28	$461	**$999**	$395	153%

Table D-1 (continued)
City of Sarasota Multi-Modal Transportation Impact Fee Schedule

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	% New Trips	% New Trips Source	Net VMT[1]	Person-Trip Factor	Net PMT	Total Impact Cost	Annual Gas Tax	Gas Tax Credit	Net Multi-Modal Impact Fee	Current Impact Fee	% Change
	INDUSTRIAL:																	
140	Manufacturing	1,000 sf	3.82	ITE 9th Edition	5.15	5.65	Same as LUC 710	92%	Same as LUC 710	8.42	1.40	11.79	$3,718	$71	$1,170	**$2,548**	$1,000	155%
150	Warehouse	1,000 sf	3.56	ITE 9th Edition	5.15	5.65	Same as LUC 710	92%	Same as LUC 710	7.84	1.40	10.98	$3,465	$66	$1,088	**$2,377**	$929	156%
151	Mini-Warehouse/Storage	1,000 sf	2.08	Blend ITE 9th & FL Studies	3.10	3.60	FL Studies (Pinellas County)	92%	Same as LUC 710	2.76	1.40	3.86	$1,218	$25	$412	**$806**	$325	148%

1) Net VMT is calculated using the formula: ((Trip Generation Rate * Trip Length * % New Trips)*(1-Interstate/Toll Adjustment Factor)/2). This reflects the unit of vehicle miles of capacity consumed per unit of development and is multiplied by the cost per vehicle.
2) The trip generation rate of the "Movie Theater" land use was adjusted to reflect lower trip generation rates observed in the FL Studies database for the similar land use, "Movie Theater w/Matinee" (LUC 4440
3) The trip generation rate recommended for the office and shopping center uses the end-point regression value

Table D-2
City of Sarasota Multi-Modal Transportation Impact Fee Schedule – Downtown District (less than 10,000 sq ft)

ITE LUC	Land Use	Unit	Trip Rate	Assessable Trip Length	Total Trip Length	% New Trips (Downtown)	Net VMT	Person-Trip Factor	Net PMT	Total Impact Cost	Annual Gas Tax	Gas Tax Credit	Net Multi-Modal Impact Fee
	RETAIL:												
814	Variety Store	1,000 sf	64.03	1.87	2.37	**25%**	13.92	1.40	19.49	$6,149	$136	$2,241	**$3,908**
816	Hardware/Paint	1,000 sf	51.29	1.87	2.37	**25%**	11.15	1.40	15.61	$4,925	$109	$1,796	**$3,129**
820	Retail 6,000 sfgla or less	1,000 sfgla	86.56	1.12	1.62	**25%**	11.27	1.40	15.78	$4,978	$125	$2,060	**$2,918**
880/881	Pharmacy/Drug Store without Drive-Thru	1,000 sf	95.96	2.08	2.58	**25%**	23.20	1.40	32.48	$10,249	$221	$3,642	**$6,607**
931	Sit-Down Restaurant	1,000 sf	91.10	3.14	3.64	**25%**	33.25	1.40	46.55	$14,689	$296	$4,879	**$9,810**
932	High-Turnover Restaurant	1,000 sf	108.71	3.17	3.67	**25%**	40.06	1.40	56.08	$17,696	$356	$5,867	**$11,829**

City of Sarasota

Multi-Modal Transportation Impact Fee Update Study

City Commission Workshop

February 21, 2017

Tindale Oliver

planning | design | engineering

Presentation Overview

1. **Background/Purpose**
2. **Methodology**
3. **Findings of Technical Study**

Background/Purpose

Transportation impact fees in the City of Sarasota:

- Historically part of the County program
- Transitioned to multi-modal fee in 2014
- Separated from County program in 2014
- Adopted multi-modal rates comparable to Sarasota County's rates

Background/Purpose

Multi-Modal Impact Fee Update Study

- Update input variables to ensure the fees are based on most **current and localized data**
- Meet requirements of **burden of proof** for Public Agencies
- Calculate separate fees for development in the **Downtown District**
- Provide **incentives** for certain types of development in targeted geographic areas

Background/Purpose

Impact Fee Definition:

- One-time capital charge to new development
  - ✓ Paid at time of Certificate of Occupancy
- Covers the cost of new capital facility capacity
- Implements the CIE and CIP

Presentation Overview

1. Background/Purpose
2. Methodology
3. Findings of Technical Study

Methodology

Basic Impact Fee Formula:

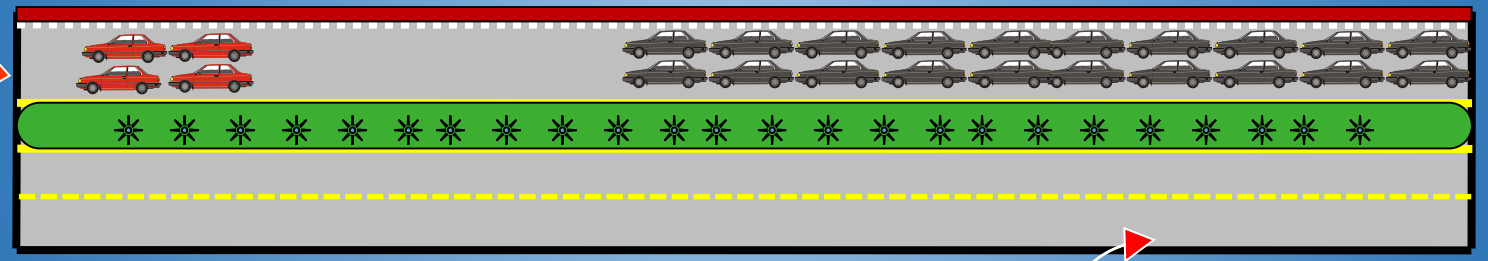
Net Impact Fee =

(Cost – Credit) x Demand

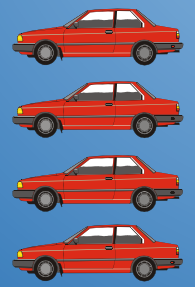
- Cost to add multi-modal capacity
- Non-impact fee revenue from future development
- Person-Miles of Travel

Methodology

One Lane Mile ~$3.8 M ÷ Capacity ~12,200 = Person-miles of capacity ~$311



Total Credit (Future Taxes) ~$3,200



Total Impact Cost ~ $10,500 = 34 person-miles of daily travel x

Fee ≈ $7,300

Capacity Consumed by One Home

Presentation Overview

1. Background/Purpose
2. Methodology
3. Findings of Technical Study

Findings of Technical Study

Transportation Impact Fee Variables:

- Demand Component
  - Trip Generation Rate, Trip Length, % New Trips
- Cost Component
  - City/County and State Roads, Bike/Ped, Transit, Transportation Capacity
- Credit Component
  - Non-impact fee transportation capacity expansion expenditures

Findings of Technical Study

Demand Component

- Sources:
  - National ITE Reference
  - Florida Studies Database
- Demand Calculation:
  - Trip Gen. Rate x Trip Length x % New Trips

Findings of Technical Study

Demand per Unit of Development:

- Trip Generation Rate = Number per day
- Trip Length = Travel distance from origin to destination
- % New Trips = Accounts for trips already on the roadway
- Interstate/Toll Adjustment = Accounts for interstate & toll trips (not charged)
- Person-Trip Factor = Converts vehicle-miles to person-miles

Findings of Technical Study

Single Family Residential (2,000 sq ft) Example:

- Trip Generation Rate = 7.81
- Trip Length = 6.62
- % New Trips = 100%
- Interstate/Toll Adjustment = 7.0%
- Person-Trip Factor = 1.40

(7.81 * 6.62 * 100% / 2) * (1 – 7.0%) * 1.40 = 33.66

Findings of Technical Study

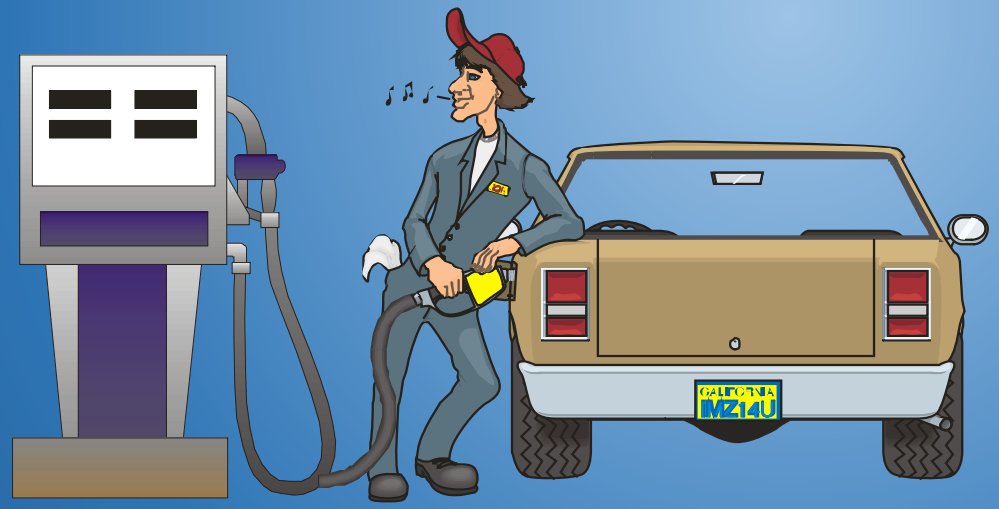
Estimated Cost per Lane Mile

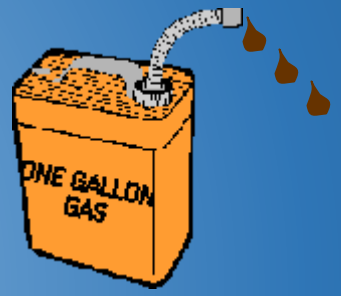
Phase	City/County Roads	State Roads	City/County & State Roads
Design (≈10%)	$220,000	$352,000	$244,000
Right-of-Way (≈42%)	$902,000	$1,408,000	$993,000
Construction	$2,200,000	$3,200,000	$2,380,000
CEI (≈9%)	$198,000	$352,000	$226,000
Total	**$3,520,000**	**$5,312,000**	**$3,843,000**
Lane Mile Distribution*	82%	18%	100%

*Based on Sarasota/Manatee 2040 Long Range Transportation Plan

Findings of Technical Study

Credit Component:





$.01 penny

1 CENT
GAS TAX
PER GALLON

Findings of Technical Study

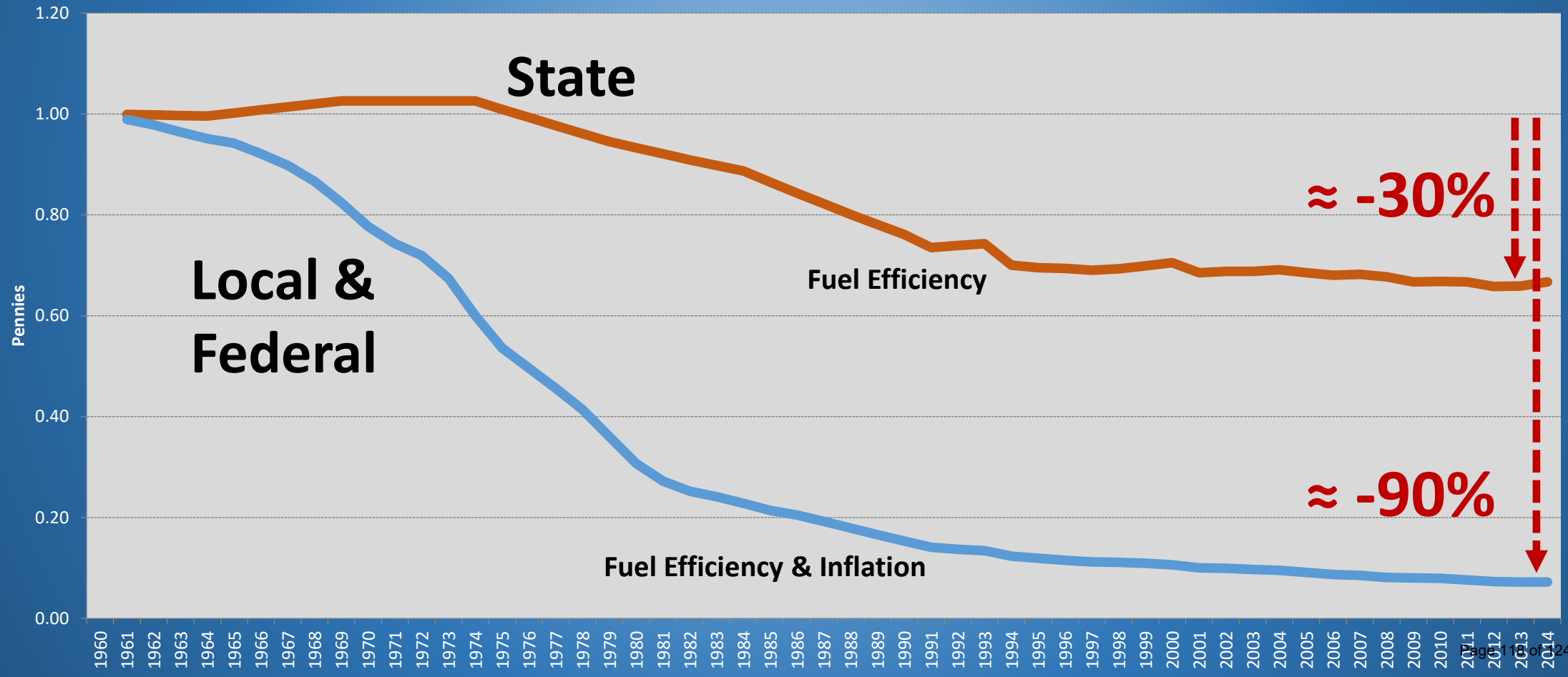
Credit Component

- Revenue Sources
  - ✓State funding
  - ✓County funding
  - ✓City funding
  - ✓This is NOT a developer credit for construction

Findings of Technical Study

- Fuel Taxes:
  - ✓State tax indexed
  - ✓Local tax NOT indexed
- Other revenue sources are indexed

Findings of Technical Study



Findings of Technical Study

Revenue Credit Summary

Single Family, 2,000 sq ft (per du)

Variable	Credit
City Revenues	$350
County Revenues	$655
County Debt Service	$967
State Revenues	$1,308
Total Revenue Credit	**$3,280**

Findings of Technical Study

Fully Calculated MMTIF – Variable Comparison

Single Family, 2,000 sq ft (per du)

Variable	2012/14 Study	2016 Study	%
Cost per PMC	≈$320	≈$316	-1%
Demand (Net PMT)	*23.11*	*33.66*	+46%
Cost per Home (Cost x Demand)	$7,400	$10,620	+44%
Less: Credit per Home	($2,386)	($3,280)	+37%
Calculated Single Family Fee	**$5,014**	**$7,340**	**+46%**
Adopted Fee	$2,887	$7,340	+154%

Findings of Technical Study

Transportation Impact Fee

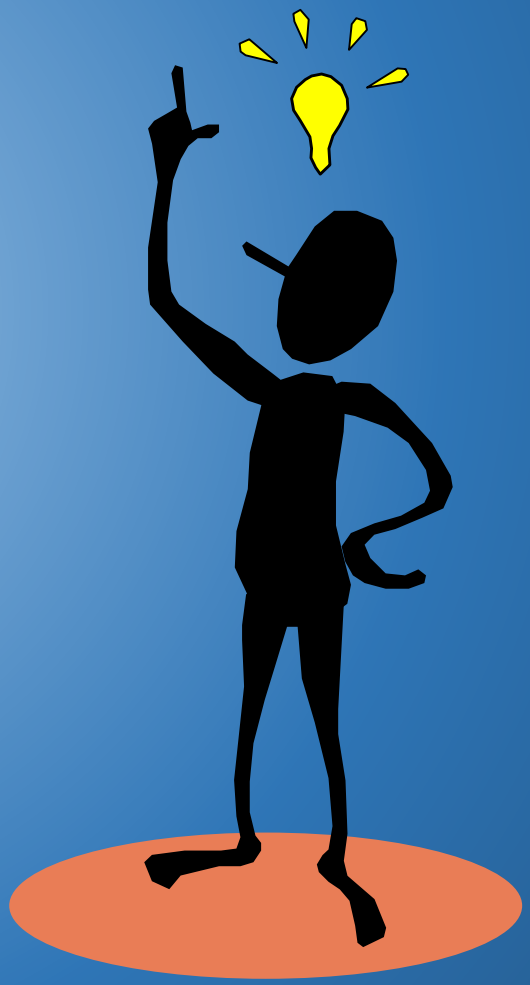
Land Use	Unit	City of Sarasota		Sarasota County			Manatee County*	Charlotte County	City of Punta Gorda**
		Calculated	Existing	Full	Mixed-Use	Urban Infill			
Study Date		**2016**	2014	2015	2015	2015	2015	2013	n/a
Assessed Portion		**100%**	14% - 58%	100%	100%	100%	80%	40%	n/a
Single Family (2,000 sf)	du	**$7,340**	$2,887	$4,734	$3,551	$2,485	$3,560	$2,389	$1,409
Light Industrial	1,000 sf	**$4,657**	$1,829	$1,984	$1,488	$1,042	$1,846	$1,518	$868
Office (50k sf)	1,000 sf	**$10,338**	$3,004	$4,327	$3,245	$2,272	$2,921	$2,856	$1,587
Retail (125k sf)	1,000 sf	**$10,778**	$4,234	$9,365	$7,024	$4,917	$7,464	$3,793	$2,439
Bank w/Drive-In	1,000 sf	**$24,263**	$6,091	$8,598	$6,448	$4,514	$7,464	$8,003	$4,291
Fast Food w/Drive-Thru	1,000 sf	**$80,282**	$13,621	$17,867	$13,400	$9,380	$7,464	$26,595	$12,472

*Southwest District

**Includes City fee and portion of the County fee

Questions?

Thank You



NOTICE OF PUBLIC HEARING

Notice is hereby given that the **CITY COMMISSION** of the City of Sarasota, Florida will meet on **Tuesday, February 21, 2017, at 6:00 p.m.** in the Commission Chambers, City Hall, 1565 First Street, Sarasota, Florida. **Starting at 6:00 p.m. or as soon thereafter as possible, the Commission will open the scheduled Public Hearings in the order they appear on the Agenda**. The following ordinance will be considered at the above scheduled meeting:

ORDINANCE NO. 17-5202

AN ORDINANCE OF THE CITY OF SARASOTA, FLORIDA, AMENDING THE SARASOTA CITY CODE, CHAPTER 25, PLANNING, ARTICLE II, MULTIMODAL TRANSPORTATION IMPACT FEE, DIVISION 2, MULTIMODAL TRANSPORTATION IMPACT FEES BY PUBLIC FACILITY, SECTION 25-49, MULTIMODAL TRANSPORTATION IMPACT FEES SCHEDULE, SO AS TO INCREASE SAID IMPACT FEES TO BE IMPOSED UPON NEW DEVELOPMENT BY A TIERED SCHEDULE UP TO THE HIGHEST CALCULATED RATE SUPPORTED BY THE CITY OF SARASOTA MULTI-MODAL TRANSPORTATION IMPACT FEE STUDY DATED DECEMBER 9, 2016; RECITING FINDINGS AND INTENT AS WELL AS THE AUTHORITY OF THE CITY OF SARASOTA TO ENACT A MULTIMODAL TRANSPORTATION IMPACT FEE ORDINANCE; MAKING CONCURRENT MODIFICATIONS TO DIVISION 1, PROCEDURAL AND ADMINISTRATIVE REQUIREMENTS, TO SECTION 25-16, PURPOSE AND AUTHORITY, TO SECTION 25-17, ADOPTION OF TECHNICAL REPORT AS BASIS OF IMPACTS FEES, TO SECTION 25-20, DEFINITIONS, TO SECTION 25-21, APPLICABILITY OF THIS ARTICLE, AND TO SECTION 25-23, ALTERNATIVE CALCULATION OF IMPACT FEES; PROVIDING FOR THE SEVERABILITY OF THE PARTS HEREOF IF DECLARED INVALID; PROVIDING FOR THE REPEALING OF ORDINANCES IN CONFLICT; PROVIDING FOR READING BY TITLE ONLY; AND PROVIDING FOR AN EFFECTIVE DATE.

Said proposed ordinance is on file in the Office of the City Auditor and Clerk at City Hall at the above address for public inspection from 8:00 a.m. to 5:00 p.m. Monday through Friday.

Interested persons are welcome to attend and may register to speak in respect to the above-proposed ordinance.

If a person decides to appeal any decision made by the board, agency, or commission with respect to any matter considered at such meeting or hearing, he or she will need a record of the proceedings, and, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

In accordance with the Americans with Disabilities Act of 1990 and Section 286.26, Florida Statutes, persons with disabilities needing special accommodation to participate in such public hearing should contact the Office of the City Auditor and Clerk at (941) 954-4160 at least two (2) business days prior to the date of the public hearing as to the nature of the aid and/or service desired. Reasonable auxiliary aids and services will be made available to qualified disabled individuals to the extent that no undue financial or administrative burden results. For the benefit of individuals utilizing hearing aids with a T-coil, the City Commission Chambers and SRQ Media Studio are outfitted

with a Hearing Induction Loop for enhanced hearing assistance.

CITY OF SARASOTA

By: Pamela M. Nadalini, MBA, BBA, CMC
City Auditor and Clerk / Chief Audit Executive

Legal Date: February 10, 2017