Marion County Transportation Impact Fee Update Study

Final Report
February 28, 2025

Prepared for:

Marion County
Planning Department
2710 E. Silver Springs Blvd
Ocala, Florida 34470
ph (352) 438-2601

Prepared by:

Benesch
1000 N. Ashley Dr., #400
Tampa, Florida 33602
ph (813) 224-8862
E-mail: nkamp@benesch.com

Marion County
Transportation Impact Fee Update Study

Table of Contents

Appendices:

Appendix A: Demand Component

Appendix B: Cost Component

Appendix C: Credit Component

Appendix D: Calculated Transportation Impact Fee Schedule

Introduction

Marion County is continuing to experience population growth, with a projected countywide increase of 107,000 persons by 2050, or an average annual growth rate of 0.9 percent as estimated by the Bureau of Business & Economic Research (BEBR), ranking in the top third of Florida counties (17th out of 67 counties). Marion County ranked 15th for residential permitting in 2023, indicating high levels of new development. This continuing growth requires additional capital facilities. Marion County's Transportation Impact Fee was most recently updated in 2015 with the calculated rates being discounted before adoption. In accordance with the County's impact fee ordinance requirements and to reflect most recent and localized data, the County retained Benesch to update the technical study that will be the basis for the updated fee schedule. This report serves as the technical study to support the calculation of the updated impact fees. Data presented in this report represents the most recent and localized data available at the time of this update study. All data and support material used in this analysis are incorporated by reference as set forth in this document.

This report serves as the technical study to support the calculation of the updated impact fees. Data presented in this report represents the most recent and localized data available at the time of this update study. All data and support material used in this analysis are incorporated by reference as set forth in this document.

The figures calculated in this study represent the technically defensible level of impact fees that the County could charge; however, the Board of County Commissioners may choose to discount the fees as a policy decision.

Methodology

The methodology used for the transportation impact fee study continues to follow a consumption-based impact fee approach in which new development is charged based upon the proportion of vehicle-miles of travel (VMT) that each unit of new development is estimated to consume of a lane mile of roadway network.

Under this methodology, the fees assess a proportionate share cost for the entire transportation network in the county, including classified City, County and State roadways, with the exception of local/neighborhood roads and interstate highways/toll facilities. Generally, neighborhood

roads are the obligation of the developers and are part of the site/subdivision approvals. Toll facilities are funded by toll revenues through Florida Turnpike Enterprise or local toll authorities and interstate highways are funded with earmarked federal and statewide strategic intermodal systems funds and planned for at the state level with minimal local input and minimum or no local funding.

Included in this document is the necessary support material used in the calculation of the transportation impact fee. 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 a transportation system is expressed in units of Vehicle-Miles of Travel (daily vehicle-trip generation rate x the trip length x the percent new trips [of total trips]) for each land use contained in the impact fee schedule. Trip generation represents the 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 vehicle-mile of roadway capacity.

The "credit" is an estimate of future non-impact fee revenues generated by new development that are allocated to provide roadway capacity expansion. The impact fee is considered to be an "up front" payment for a portion of the cost of building a vehicle-mile of capacity that is directly related to the amount of capacity consumed by each unit of land use contained in the impact fee schedule, that is not paid for by future tax revenues generated by the new development activity. These credits are required under the supporting case law for the calculation of impact fees where a new development activity must be reasonably assured that they are not being charged twice for the same level of service. More specifically, the input variables used in the fee equation are as follows:

Demand Variables:

- Trip generation rate
- Trip length
- Trip length adjustment factor
- Percent new trips
- Interstate & toll facility adjustment factor

Cost Variables:

- Roadway cost per lane-mile
- Roadway capacity added per lane mile constructed

Credit Variables:

- Equivalent gas tax credit (pennies)
- Present worth
- Fuel efficiency
- Effective days per year

Legal Overview

In Florida, legal requirements related to impact fees have primarily been established through case law since the 1980's. 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 County'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 Commerce) 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.
- **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 163.3180(5)(f), Florida Statutes, including:
    - 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.
    - Adoption of an area-wide level of service not dependent on any single road segment function.
    - Exempting or discounting impacts of locally desired development, such as development in urban areas, redevelopment, job creation, and mixed use on the transportation system.
    - Assigning secondary priority to vehicle mobility and primary priority to ensuring a safe, comfortable, and attractive pedestrian environment, with convenient interconnection to transit.
    - 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.
    - 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 serves as the basis to demonstrate the need 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.

- **HB 207 in 2019:** Included the following changes to the Impact Fee Act along with additional clarifying language:
    - Impact fees cannot be collected prior to building permit issuance; and
    - Impact fee revenues cannot be used to pay debt service for previously approved projects unless the expenditure is reasonably connected to, or has a rational nexus with, the increased impact generated by the new residential and commercial construction.
- **HB 7103 in 2019:** Addressed multiple issues related to affordable housing/linkage fees, impact fees, and building services fees. In terms of impact fees, the bill required that when local governments increase their impact fees, the outstanding impact fee credits for developer contributions should also be increased. This requirement was to operate prospectively; however, HB 337 that was signed in 2021 deleted this clause and making all outstanding credits eligible for this adjustment. This bill also allowed local governments to waive/reduce impact fees for affordable housing projects without having to offset the associated revenue loss.
- **SB 1066 in 2020:** Added language allowing impact fee credits to be assignable and transferable at any time after establishment from one development or parcel to another that is within the same impact fee zone or impact fee district or that is within an adjoining impact fee zone or district within the same local government's jurisdiction. In addition, added language indicating any new/increased impact fee not being applicable to current or pending permit applications submitted prior to the effective date of an ordinance or resolution imposing new/increased fees.
- **HB 1339 in 2020:** Required reporting of various impact fee related information within the annual financial audit report submitted to the Department of Financial Services.
- **HB 337 in 2021:** Placed limits on the amount and frequency of fee increases, but also included a clause to exceed these restrictions if the local governments can demonstrate extraordinary circumstances, hold two public workshops discussing these circumstances and the increases are approved by two-thirds of the governing body.
- **HB 479 in 2024:** Required interlocal agreements between counties and municipalities when both entities collect a transportation impact fee in a municipality. Placed limits on timing of impact fee study completion and adoption and data used in the studies.

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

<u>Impact Fee Definition</u>

- 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 principal 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.
- Examples of impact fee eligible projects include new road construction, lane addition projects, turn lane additions/intersection improvements.

Impact Fee vs. Tax

- An impact fee is generally regarded as a regulatory function established based upon the specific benefit to the user related to a given infrastructure type and is not established for the primary purpose of generating revenue for the general benefit of the community, 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.

This technical report has been prepared to support legal compliance with existing case law and statutory requirements.

Demand Component

Travel Demand

The amount of transportation system consumed by a unit of new development is calculated using the following variables and is a measure of the vehicle-miles of new travel a unit of development places on the roadway system:

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

The trip characteristics variables were primarily obtained from two sources: (1) similar studies conducted throughout Florida (Florida Studies Database) and (2) the Institute of Transportation Engineers' (ITE) Trip Generation Handbook (11th Edition). The Florida Trip Characteristics Studies Database is included in Appendix A and contains several studies conducted in Marion County. This database was used to determine trip length, percent new trips, and the trip generation rate for several land uses.

Trip Length Adjustment Factor

This variable is used to adjust the average trip length obtained from the Florida Studies Database when the trip lengths in a jurisdiction appear significantly different that the average trip lengths observed in other jurisdictions. Using the Central Florida Regional Planning Model (CFRPM v7), the average trip lengths for Marion County were calculated for different trip types, including home-based work, home-based shopping, and home-based social/recreation, among others. These model trip lengths suggested that trip lengths in Marion County are typically longer than trip lengths observed in other counties throughout Florida. As such, the trip lengths for residential land uses (including hotels and motels) were increased by 15 percent and the trip lengths for non-residential uses were increased by five (5) percent.

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 or through toll revenues. Typically, impact fees are not used to pay for these improvements and the portion of travel occurring on the interstate/toll facility system is subtracted 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 CFRPM v7. A select zone analysis was run for all traffic analysis zones located within the Marion County in order to differentiate trips with an origin and/or destination within the county versus trips that simply passed through the county.

The analysis reviewed trips on all interstate and toll facilities within Marion County (Interstate 75). The limited access vehicle-miles of travel (Limited Access VMT) for county-generated trips with an origin and/or destination within county was calculated for the identified limited access facilities. Next, the total VMT was calculated for all county-generated trips with an origin and/or destination within Marion County for all roads, including limited access facilities.

The I/T adjustment factor of 13.5 percent was determined by dividing the total limited access VMT by the total County VMT. Total County VMT reduced by this factor is representative of only the roadways that are eligible to be funded with transportation impact fee revenues. Appendix A, Table A-1 provides further detail on this calculation.

Land Use Changes

As part of this update study, the following land uses were revised/added to the County's fee schedule to better reflect type of uses being developed in Marion County.

<u>Single Family (Attached) and Multi-Family Housing</u>

The current transportation impact fee schedule includes "multi-family (1 & 2 stories)" and "multi-family (3 & more stories)" land uses. Due to changes included in the ITE 11th Edition Handbook these uses were re-organized as the following:

- **LUC 215: Single Family (Attached), measured per "dwelling unit"**
- **LUC 220: Multi-Family (Low-Rise, 1-3 Floors), measured per "dwelling unit"**
- **LUC 221/222: Multi-Family (Mid/High-Rise, 4+ Floors), measured per "dwelling unit"**

Gas Station w/Convenience Re-Alignment

Consistent with the updated data in the ITE 11th Edition Handbook, the existing LUC 853 (Convenience Market w/Gasoline, per 1,000 sf) was removed from the County's transportation impact fee schedule and replaced with the following uses:

- **LUC 944: Gas Station w/Conv. Store <2,000 sq ft, measured per "fuel position"**
- **LUC 945: Gas Station w/Conv. Store 2,000-5,499 sq ft, measured per "fuel position"**
- **LUC 945: Gas Station w/Conv. Store 5,500+ sq ft, measured per "fuel position"**

Staff Recommendations

The following land uses were added to the transportation impact fee schedule at the request of County staff to reflect recent development trends:

- **LUC 251: Senior Adult Housing (Detached), measured per "dwelling unit"**
    - This land use was added to differentiate between regular single family (LUC 210) and single family development that is age-restricted
- **LUC 416: RV Park/Campground, measured per "site"**
- **LUC 420: Marina, measured per "berth"**
- **LUC 435: Recreational Community Center, measured per "1,000 sf"**
- **LUC 445: Movie Theater, measured per "screen"**
- **LUC 948: Automated Car Wash, measured per "car tunnel"**
- **LUC n/a: Mining Excavation, measured per "1,000 cy"**

Cost Component

Cost information from Marion County and other counties in Florida was reviewed to develop a unit cost for all phases involved in the construction of one lane-mile of roadway capacity. Appendix B provides the data and other supporting information utilized in this analysis.

County Roadway Costs

This section examines the right-of-way (ROW), construction, and other cost components associated with county roads with respect to transportation capacity expansion improvements in Marion County. In addition to local data, cost data for recently bid/completed/ongoing roadway projects throughout Florida was used to supplement the cost data for county roadway improvements. The roadway cost was separated into four components: design, right-of-way (ROW), construction, and construction engineering/inspection (CEI).

Design and CEI

The design cost factor for county roads is estimated as a percentage of the construction cost per lane mile. This factor was determined based on a review of design-to-construction cost ratios from local improvements and from other jurisdictions throughout Florida. For purposes of this study, the design cost for county roads is estimated as **11 percent** of the construction cost per lane mile. Additional details are provided in Appendix B, Tables B-2 and B-3.

The CEI cost factor for county roads is estimated as a percentage of the construction cost per lane mile. This factor is determined based on a review of CEI-to-construction cost ratios from other jurisdictions throughout Florida. For purposes of this study, the CEI cost for county roads is estimated as **nine (9) percent** of the construction cost per lane mile. Additional details are provided in Appendix B, Table B-11.

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. Similar to design and CEI, The ROW cost factor for county roads is estimated as a percentage of the construction cost per lane mile. This factor was determined based on a review of estimated cost for planned projects in Marion County and a review of the ROW-to-construction ratios observed in other jurisdictions throughout Florida. Estimated cost for planned projects in Marion County indicate ROW ratios ranging from three (3) percent to 132

percent of construction cost, with an average of 45 percent. In the case of other Florida jurisdictions, the ROW factors range from 10 percent to 60 percent of construction, with an average of 35 percent. For impact fee calculations, a factor of **40 percent** was estimated. Additional details are provided in Appendix B, Tables B-4 and B-5.

Construction Cost

The construction cost for county roads was based on a review of recent local improvements, estimate costs for upcoming projects in Marion County, and projects from other jurisdictions in Florida. Recent local improvements (from FY 2020) included the following improvements:

- SW 49th Avenue (South Seg. A & E) from 0.7 miles S of CR 484 to Marion Oaks Trail
- Florida Crossroads Commerce Park Road from south terminus to Highway 484
- CR 484 from Marion Oaks Pass to Marion Oaks Course

Costs for these local improvements ranged from $1.2 million to $2.2 million per lane mile with a weighted average cost of $1.5 million per lane mile. When indexed to current dollars, this figure increases to approximately $2.4 million per lane mile.

Estimated construction cost for planned improvements in Marion County ranges from $1.4 million per lane mile to $4.8 million per lane mile with a weighted average construction cost of $2.7 million per lane mile.

In addition to local improvements, a review of recently bid projects located throughout Florida was conducted. From this dataset, the counties that are more suburban/rural in nature (similar to Marion County) were separated and this subset of counties had a weighted average construction cost of $3.3 million per lane mile for projects since FY 2020.

Based on a review of the local historical and planned projects and statewide projects, construction cost was estimated at **$2.7 million per lane mile** for county roads (curb & gutter) for the transportation impact fee calculations. Additional information is presented in Appendix B, Tables B-6 through B-8.

To determine the cost per lane mile for county roads with rural-design characteristics (open drainage), the relationship between urban and rural-designed roadway costs from the FDOT District 7 Long Range Estimates (LRE)[1] was reviewed. Based on these cost estimates, the costs for rural roadways are estimated at approximately 76 percent of the costs for urban roadways.

[1] This data was not available for FDOT District 5

Additional detail is provided in Appendix B, Table B-1.

As shown in Table 1, a total cost of **$4.3 million per lane mile** for county roads was used in the transportation impact fee calculation.

Table 1

Estimated Total Cost per Lane Mile for County Roads

Cost Phase	Cost per Lane Mile		
	Curb & Gutter (Urban) Design	Open Drainage (Rural) Design[5]	Weighted Average[6]
Design[1]	$297,000	$226,000	$293,000
Right-of-Way[2]	$1,080,000	$821,000	$1,067,000
Construction[3]	$2,700,000	$2,052,000	$2,668,000
CEI[4]	$243,000	$185,000	$240,000
Total Cost	**$4,320,000**	**$3,284,000**	**$4,268,000**
Lane Mile Distribution[7]	95%	5%	100%

1) Design is estimated at 11% of construction costs.
2) Right-of-Way cost is estimated at 40% of construction costs
3) Source: Based on a review of local projects (Appendix B, Tables B-6 and B-7) and statewide capacity expansion projects (Appendix B, Table B-8)
4) CEI cost is estimated at 9% of construction costs
5) Rural design (open drainage) costs are estimated at 76% of the urban (curb & gutter) costs (Appendix B, Table B-1)
6) Lane mile distribution (Item 7) multiplied by the design, ROW, construction, and CEI phase cost by improvement type to develop a weighted average cost per lane mile
7) Source: Appendix B, Table B-12, Items (c) and (d)

Note: All figures rounded to nearest $000

State Roadway Costs

This section examines the right-of-way, construction and other cost components associated with state roads with respect to transportation capacity expansion improvements in Marion County. For this purpose, recent data from state roadway projects bid in Marion County and throughout Florida and FDOT's Long Range Estimates were used to identify and provide supporting cost data for state improvements. The cost for each roadway capacity-expansion project was separated into four phases: design, CEI, ROW, and construction.

Design and CEI

Similar to the county roads, the design and CEI cost factors for state roads were estimated as a percentage of the construction cost per lane mile. These factors were determined based on a

review of design/CEI-to-construction cost ratios from other jurisdictions throughout Florida. For purposes of this study, design and CEI costs for state roads were each estimated at **11 percent** of construction phase costs. Additional details are provided in Appendix B, Table B-3 (design) and Table B-11 (CEI).

Right-of-Way

Given the limited data on ROW costs for state roads in Marion County and based on experience in other jurisdictions, the ROW cost ratio calculation for county roads was also applied to state roads. Using this ROW-to-construction ratio of **40 percent**, the ROW cost for state roads (urban design) is approximately $1.6 million per lane mile.

Construction

The construction cost for state roads was based on a review of recent local improvements, local estimates, and projects from other jurisdictions in Florida. Recent local improvements (from FY 2015) included the following project:

- SR 35 (Baseline Rd) from SE 96th Place Rd to SR 464 (SE Maricamp Rd); Construction cost per lane mile of $2.7 million.

Recent local estimates included the following projects:

- SR 40 from E. of CR 314 to E. of CR 314A
- SR 40 from E. of CR 314A to Levy Hammock Rd

Cost estimates for these future improvements ranges from $5.3 million to $8.0 million per lane mile.

With limited recent local state road cost data available, historical data from the 2015 Marion County Transportation Impact Fee Update Study was also reviewed to estimate the state road construction cost per lane mile. During the 2015 study period, local state road improvements averaged **80 percent** of the average cost of the statewide database ($2.7 million per lane mile).

Similar to the 2015 update, the state roadway projects costs in other Florida jurisdictions were reviewed. The cost database (which dates back to 2014) includes a total of 67 projects from 32 different counties with a weighted average cost of approximately $4.4 million per lane mile (all improvements have urban-design characteristics). In the case of counties that are more suburban/rural in nature (similar to Marion County), the construction cost averages $4.5 million

per lane mile. When more recent projects are considered (2017+), the average construction cost increases to approximately $5.1 million per lane mile.

Considering all datasets, the construction cost for state roads was estimated at $5.0 million per lane mile to be representative of current costs. This figure was adjusted by 20 percent to reflect the lower local bid and the approach used in the 2015 Study, which resulted in a construction cost of **$4.0 million per lane mile** ($5.0 million × 80%) for state roads (urban; curb & gutter design) for purposes of the impact fee calculations. Additional information is provided in Appendix B, Tables B-9 and B-10.

To determine the cost per lane mile for state roads with rural-design characteristics (open drainage), the relationship between urban and rural-designed roadway costs from the FDOT District 7 Long Range Estimates (LRE) was reviewed. As mentioned previously, the costs for rural roadways are estimated at approximately 76 percent of the costs for urban roadways. Additional details are provided in Appendix B, Table B-1.

As shown in Table 2, a total cost of **$5.2 million per lane mile** for state roads was used in the transportation impact fee calculations.

Table 2

Estimated Total Cost per Lane Mile for State Roads

Cost Phase	Cost per Lane Mile		
	Curb & Gutter (Urban) Design	Open Drainage (Rural) Design[5]	Weighted Average[6]
Design[1]	$440,000	$334,000	$350,000
Right-of-Way[2]	$1,600,000	$1,216,000	$1,274,000
Construction[3]	$4,000,000	$3,040,000	$3,184,000
CEI[4]	$440,000	$334,000	$350,000
Total Cost	**$6,480,000**	**$4,924,000**	**$5,158,000**
Lane Mile Distribution[7]	15%	85%	100%

1) Design is estimated at 11% of construction costs.
2) Right-of-way cost is estimated at 40% of construction costs
3) Source: Based on Appendix B, Tables B-9 and B-10, adjusted to 80% based on 2015 report findings
4) CEI cost is estimated at 11% of construction costs
5) Rural design (open drainage) costs are estimated at 76% of the urban (curb & gutter) costs
6) Lane mile distribution (Item 7) multiplied by the design, ROW, construction, and CEI phase cost by improvement type to develop a weighted average cost per lane mile
7) Source: Appendix B, Table B-12, Items (e) and (f)

Note: All figures rounded to nearest $000

Summary of Costs (Blended Cost Analysis)

The weighted average cost per lane mile for county and state roads is presented in Table 3. The resulting weighted average cost of approximately $4.72 million per lane mile was utilized as the unit cost input in the calculation of the transportation impact fee schedule. The weighted average cost per lane mile includes county and state roads and is based on weighting the lane miles of roadway improvements in Marion County's 2045 Long Range Transportation Plan (Cost Feasible Plan).

It should be noted that the cost estimates developed for this impact fee study reflect a large sample size from several communities over the last several years. When compared to the smaller sample of improvements observed over the last two to three years along with significant cost increases since the pandemic, the data and estimates used in this study represent a conservative approach. Additionally, these estimates account for Marion County's suburban/rural nature, which tends to moderate roadway costs compared to some of the larger, more urbanized counties that are experiencing higher construction and land acquisition costs.

Table 3

Estimated Cost per Lane Mile for County and State Roadway Projects

Cost Type	County Roads[1]	State Roads[2]	County and State Roads[3]
Design	$293,000	$350,000	$322,000
Right-of-Way	$1,067,000	$1,274,000	$1,173,000
Construction	$2,668,000	$3,184,000	$2,931,000
CEI	$240,000	$350,000	$296,000
Total	**$4,268,000**	**$5,158,000**	**$4,722,000**
Lane Mile Distribution[4]	49%	51%	100%

1) Source: Table 1
2) Source: Table 2
3) Lane mile distribution (Item 4) multiplied by the individual component costs for county and state roads and added together to develop a weighted average cost per lane-mile
4) Source: Appendix B, Table B-12; Items (a) and (b)

Vehicle-Miles of Capacity Added per Lane Mile

An additional component of the transportation impact fee equation is the capacity added per lane-mile of roadway constructed (also known as the maximum service volume added per lane mile). To calculate the vehicle-miles of capacity (VMC) per lane mile of constructed future

roadway, an analysis of the Marion County 2045 LRTP's Cost Feasible Plan was conducted to summarize improvements that will be built in Marion County in the future.

Table 4

Weighted Average Capacity Added per Lane Mile

Source	Lane Mile Added[1]	Vehicle-Miles of Capacity Added[2]	VMC Added per Lane Mile[3]
County Roads	76.62	976,563	12,700
State Roads	80.32	1,408,145	17,500
Total	**156.94**	**2,384,708**	
Weighted Average VMC Added per Lane Mile[4]			**15,200**

1) Source: Appendix B, Table B-12
2) Source: Appendix B, Table B-12
3) Vehicle-miles of capacity added (Item 2) divided by lane miles added (Item 1), rounded to nearest '00
4) Total VMC added (Item 2) divided by total lane miles added (Item 1), rounded to nearest '00

Cost per Vehicle-Mile of Capacity

The transportation cost per unit of development is assessed based on the cost per vehicle-mile of capacity. As shown in Tables 3 and 4, the cost and capacity for roadways in Marion County have been calculated based on typical roadway improvements.

The cost per VMC figure is used in the transportation impact fee calculation to determine the total cost per unit of development based on vehicle-miles of travel consumed. For each vehicle-mile of travel that is added to the transportation system, approximately $311 of capacity is consumed.

Table 5

Cost per Vehicle-Mile of Capacity Added

Source	Cost per Lane Mile[1]	Average VMC Added per Lane Mile[2]	Cost per VMC[3]
County Roads	$4,268,000	12,700	$336.06
State Roads	$5,158,000	17,500	$294.74
Weighted Average	**$4,722,000**	**15,200**	**$310.66**

1) Source: Table 3
2) Source: Table 4
3) Average VMC added per lane mile (Item 2) divided by cost per lane mile (Item 1)

Credit Component

Capital Improvement Credit

The credit component of the impact fee accounts for the existing funding sources that are being allocated to roadway capacity expansion projects (excluding impact fee funds). This section summarizes the credit calculations for non-impact fee contributions. Additional details are provided in Appendix C.

The present value of the portion of non-impact fee funding generated by new development over a 25-year period that is allocated to 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 were converted to a fuel tax equivalency.

County Credit

A review of the County's FY 2019-2024 historical expenditures and the FY 2025-2029 Transportation Improvement Program (TIP) indicated that a combination of sales tax, impact fees, fuel tax, and grants are used to fund roadway capacity expansion. Based on this review, a credit of 14.8 equivalent pennies of fuel tax was included in the transportation impact fee calculation. This credit excludes the portion of expenditures funded with impact fee revenues.

Additionally, the County is using fuel tax revenues to retire debt service used to fund roadway capacity expansion improvements. The fuel tax dedication for the Public Improvement Bond, Series 2016, totals approximately 1.8 pennies of additional county credit. As shown in Table 6, a total fuel tax equivalent revenue credit of 16.6 pennies is recognized for county expenditures.

State Credit

As shown in Table 6, State expenditures in Marion County were reviewed, and a credit for the transportation capacity-expansion portion attributable to state projects was estimated (excluding expenditures on limited access facilities). This review, which included 10 years of historical expenditures and five (5) years of planned expenditures, indicated that FDOT spending amounts to an average of $16.8 million per year and generates an equivalent gas tax credit of 7.6 pennies annually. The use of a 15-year period results in a reasonably stable state revenue credit, since it accounts for the volatility in FDOT spending in a given county over short time periods.

In summary, for transportation improvements, Marion County is allocating an average of 16.6 equivalent pennies, while FDOT is contributing an average of 7.6 equivalent pennies, annually. A total credit of **24.2 equivalent pennies** was included in the transportation impact fee calculations to recognize future capital revenues that are expected to be generated by new development from all non-impact fee revenues.

Table 6

Equivalent Pennies of Gas Tax Revenue

Credit	Average Annual Expenditures	Value per Penny[4]	Equivalent Pennies per Gallon[5]
County Revenues[1]	$32,765,267	$2,212,871	$0.148
County Debt Service[2]	$3,963,454	$2,212,871	$0.018
State Revenues[3]	$16,845,006	$2,212,871	$0.076
Total	**$53,573,727**		**$0.242**

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-1
5) Average annual expenditures divided by the value per penny (Item 4) divided by 100

Present Worth Variables

- Facility Life: The roadway facility life used in the impact fee analysis is 25 years, which represents the reasonable life of a roadway.

- 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 2.45 percent was used in the impact fee calculation based on recent interest rates provided by Marion County.

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-9 documents the calculation of 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 reflects the existing fleet mix of traffic on non-interstate roadways. The VMT and average fuel efficiency data were obtained from the most recent Federal Highway Administration's *Highway Statistics 2022*. Based on the calculation completed in Appendix C, Table C-9, the fuel efficiency rate to be used in the updated impact fee equation is 19.47 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 Transportation Impact Fee Schedule

Detailed impact fee calculations for each land use are included in Appendix D, which includes the major land use categories and the 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, and percent of new trips);
- Total impact fee cost;
- Annual capital improvement credit;
- Present value of the capital improvement credit; and
- Net transportation impact fee.

It should be noted that the net impact fee illustrated in Appendix D is not necessarily a recommended fee, but instead represents the technically calculated impact fee per unit of land use that could be charged in Marion County.

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

Net Impact Fee = Total Impact Cost – Capital Improvement Credit

Where:

Total Transportation Impact Cost = ([Trip Rate × Adjusted Trip Length × % New Trips] / 2) × (1 – Interstate/Toll Facility Adjustment Factor) x (Cost per Vehicle-Mile of Capacity)

Capital Improvement Credit = Present Value (Annual Capital Improvement Credit), given 2.45% interest rate & a 25-year facility life

Annual Capital Improvement Credit = ([Trip Rate × Total Trip Length × % New Trips] / 2) × (Effective Days per Year × $/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 land use category (1,500 to 2,499 sq ft):

- *Trip Rate* = the average daily trip generation rate, in vehicle-trips/day (7.81)
- *Assessable Trip Length* = the average trip length on collector roads or above, for the category, in vehicle-miles (6.62) (excluding local neighborhood roads)
- *Trip Length Adjustment Factor* = used to adjust the trip length for local conditions (+15%)
- *Adjusted Trip Length* = the assessable trip length multiplied by the trip length adjustment factor (6.62 * (1+15%) = 7.61)
- *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 (7.61 + 0.50 = 8.11)
- *% 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 between two land use codes since every trip has an origin and a destination
- *Interstate/Toll Facility Adjustment Factor* = discount factor to account for travel demand occurring on interstate highways and/or toll facilities (13.5%)
- *Cost per Lane* Mile = unit cost to construct one lane mile of roadway, in $/lane-mile ($4,722,000)
- *Average Capacity Added per Lane* Mile = represents the average daily traffic on one travel lane at capacity for one lane mile of roadway, in vehicles/lane-mile/day (15,200)
- Cost *per Vehicle-Mile of Capacity* = unit of vehicle-miles of capacity consumed per unit of development ($310.66)
- *Present Value* = calculation of the present value of a uniform series of cash flows, gas tax payments in this case, given an interest rate, “i,” and a number of periods, “n;” for 2.45% interest and a 25-year facility life, the uniform series present worth factor is 18.5302
- *Effective Days per Year* = 365 days
- *$/Gallon to Capital* = the amount of equivalent gas tax revenue per gallon of fuel that is used for capital improvements, in $/gallon ($0.242)
- *Fuel Efficiency* = average fuel efficiency of vehicles, in vehicle-miles/gallon (19.47)

Transportation Impact Fee Calculation

Using these inputs, a net impact fee can be calculated for the single-family residential detached (1,500 to 2,499 sf) land use category as follows:

Transportation Impact Fee:

Total Impact Cost = ([7.81 * 7.61 * 1.0] /2) * (1 - 0.135) * ($310.66) = **$7,986**

Annual Cap. Improv. Credit = ([7.81 * 8.11 * 1.0] /2) * 365 * ($0.242 /19.47) = $144
Capital Improvement Credit = $144 * 18.5302 = $2,668

Net Impact Fee = $7,986 – $2,668 = **$5,318**

Table 7 presents the full list of calculated transportation impact fee rates as well as the rates calculated in the *2015 Marion County Transportation Impact Fee Update Study* and the current adopted impact fee rates.

Transportation Impact Fee Comparison

As part of the work effort in developing Marion County's transportation impact fee program, a comparison of calculated fees to transportation impact fee schedules adopted in other jurisdictions was completed, as shown in Table 8.

Note that 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 variation in costs, credits, and travel demand, land use categories included in the fee schedule, etc.

Table 7

Calculated Transportation Impact Fee Rates

ITE LUC	Land Use	Unit	Calculated Impact Fee (2015)	Current Impact Fee (2025)	Calculated Impact Fee (2025)	Calculated (2015) to Calc. (2025)	Current (2025) to Calc. (2025)
	RESIDENTIAL:						
210	Single Family (Detached) - 1,500 sf or less	du	$5,473	$1,093	**$4,388**	-20%	301%
	Single Family (Detached) - 1,501 to 2,499 sf	du	$6,994	$1,397	**$5,318**	-24%	281%
	Single Family (Detached) - 2,500 sf and greater	du	$7,821	$1,562	**$5,855**	-25%	275%
215	Single Family (Attached)*	du	$4,520	$903	**$4,606**	2%	410%
220	Multi-Family Housing (Low-Rise, 1-3 floors)	du	$4,520	$903	**$3,590**	-21%	298%
221/222	Multi-Family Housing (Mid/High-Rise, 4+ floors)	du	$2,844	$568	**$2,412**	-15%	325%
240	Mobile Home Park	du	$2,575	$514	**$1,945**	-24%	278%
251	Senior Adult Housing - Detached*	du	$5,473	$1,093	**$1,962**	-64%	80%
252	Senior Adult Housing - Attached*	du	$4,520	$903	**$1,319**	-71%	46%
253	Congregate/Assisted Care Facility	du	$921	$185	**$520**	-44%	181%
	LODGING:						
310	Hotel	room	$3,544	$375	**$2,364**	-33%	530%
320	Motel	room	$2,525	$267	**$1,136**	-55%	325%
	RECREATION:						
411	Public Park	acre	$1,286	$136	**$343**	-73%	152%
416	RV Park/Campground*	site	n/a	$514	**$680**	n/a	32%
420	Marina*	berth	n/a	$427	**$1,339**	n/a	214%
430	Golf Course	hole	$26,228	$2,774	**$16,971**	-35%	512%
445	Movie Theater*	screen	n/a	$2,610	**$19,609**	n/a	651%
492	Racquet Club/Health Spa	1,000 sf	$19,530	$2,065	**$15,512**	-21%	651%
495	Recreational Community Center*	1,000 sf	n/a	$2,065	**$12,405**	n/a	501%
	INSTITUTIONS:						
520	Elementary School (Private)	student	$516	$55	**$678**	31%	1133%
522	Middle School (Private)	student	$721	$76	**$637**	-12%	738%
525	High School (Private)	student	$759	$80	**$657**	-13%	721%
540	University/Junior College (7,500 or fewer students) (Private)	student	$1,471	$156	**$1,125**	-24%	621%
550	University/Junior College (more than 7,500 students) (Private)	student	$1,095	$116	**$835**	-24%	620%
560	Church	1,000 sf	$3,880	$410	**$2,462**	-37%	500%
565	Day Care Center	1,000 sf	$12,463	$1,318	**$6,365**	-49%	383%
590	Library	1,000 sf	$22,482	$2,377	**$21,904**	-3%	821%
	MEDICAL:						
610	Hospital	1,000 sf	$8,310	$879	**$5,213**	-37%	493%
620	Nursing Home	bed	$753	$80	**$611**	-19%	664%
640	Animal Hospital/Veterinary Clinic	1,000 sf	$5,094	$539	**$2,773**	-46%	414%
	OFFICE:						
710	Office	1,000 sf	$6,391	$676	**$4,766**	-25%	605%
720	Medical Office/Clinic	1,000 sf	$14,444	$1,528	**$10,961**	-24%	617%
770	Business Park	1,000 sf	$7,420	$785	**$5,638**	-24%	618%
	RETAIL:						
822	Retail 6,000 sfgla or less	1,000 sfgla	$4,177	$442	**$1,866**	-55%	322%
822	Retail 6,001 to 40,000 sfgla	1,000 sfgla	$9,592	$1,014	**$3,182**	-67%	214%
821	Retail 40,001 to 150,000 sfgla	1,000 sfgla	$9,592	$1,014	**$6,435**	-33%	535%
820	Retail greater than 150,000 sfgla	1,000 sfgla	$9,592	$1,014	**$6,944**	-28%	585%
840/841	New/Used Auto Sales	1,000 sf	$12,532	$1,325	**$8,247**	-34%	522%
850	Supermarket	1,000 sf	$14,089	$1,490	**$9,530**	-32%	540%
862	Home Improvement Superstore	1,000 sf	$5,851	$619	**$4,030**	-31%	551%
880/881	Pharmacy/Drug Store with or w/o Drive-Thru	1,000 sf	$7,475	$791	**$5,992**	-20%	658%
890	Furniture Store	1,000 sf	$2,050	$217	**$1,939**	-5%	794%
	SERVICES:						
911	Bank/Savings Walk-In	1,000 sf	$16,265	$1,720	**$5,792**	-64%	237%
912	Bank/Savings Drive-In	1,000 sf	$21,367	$2,260	**$10,370**	-51%	359%
931	Restaurant	1,000 sf	$26,502	$2,803	**$18,790**	-29%	570%
n/a	Small Local Restaurant	1,000 sf	$12,668	$1,340	**$8,855**	-30%	561%
941	Quick Lube	service bay	$12,613	$1,334	**$9,497**	-25%	612%
942	Automobile Care Center	1,000 sf	$9,902	$1,047	**$6,694**	-32%	539%
944	Gas Station w/Convenience Store <2,000 sq ft	fuel pos.	$8,033	$850	**$6,480**	-19%	662%
945	Gas Station w/Convenience Store 2,000 to 5,499 sq ft	fuel pos.	$8,033	$850	**$9,947**	24%	1070%
	Gas Station w/Convenience Store 5,500+ sq ft	fuel pos.	$8,033	$850	**$13,012**	62%	1431%
947	Self-Service Car Wash	service bay	$7,674	$811	**$5,691**	-26%	602%
948	Automated Car Wash*	car tunnel	n/a	$811	**$100,351**	-	12274%
	INDUSTRIAL:						
110	General Light Industrial	1,000 sf	$4,048	$428	**$2,145**	-47%	401%
140	Manufacturing	1,000 sf	$2,212	$234	**$2,083**	-6%	790%
150	Warehousing	1,000 sf	$2,058	$218	**$755**	-63%	246%
151	Mini-Warehouse	1,000 sf	$733	$78	**$425**	-42%	445%
154	High-Cube Transload and Short-Term Warehouse	1,000 sf	$967	$102	**$621**	-36%	509%
n/a	Mine/Commercial Excavation	1,000 cy	n/a	n/a	**$2.86**	n/a	n/a

*current rate shown is based on similar land use in the County's impact fee schedule; in certain cases, rates have been adjusted to account for a change in the unit of measure

Table 8

Transportation Impact Fee Comparison

Land Use	Unit[2]	Marion County		Levy County[5]	Citrus County[6]	Sumter County[7]	Pasco County[8]			Lake County[9]		Volusia County[10]	Alachua County[11]
		Calculated[3]	Existing[4]				Urban	Suburban	Rural	North/Central	NE/Wekiva/S		
Date of Last Update		**2025**	2015	2014	2021	2024	2021	2021	2021	2022	2022	2022	2007
Assessed Portion of Calculated[1]		**100%**	11-20%	40%	100%	SFR@79%	100%	100%	100%	SFR@57%	SFR@74%	100%	85%
Residential:													
Single Family (2,000 sf)	du	**$5,318**	$1,397	$1,410	$3,864	$2,999	$6,384	$9,377	$10,722	$2,952	$3,806	$5,464	$4,146
Non-Residential:													
Light Industrial	1,000 sf	**$2,145**	$428	$640	$858	$1,355	$0	$0	$0	$1,306	$1,850	$2,418	$2,857
Office (50,000 sq ft)	1,000 sf	**$4,766**	$676	$1,481	$2,368	$2,663	$0	$0	$0	$2,709	$3,507	$5,396	$4,275
Retail (125,000 sq ft)	1,000 sfgla	**$6,435**	$1,014	$1,710	$2,320	$4,246	$7,756	$9,695	$12,118	$3,167	$4,102	$6,324	$6,062

1) Represents the portion of the maximum calculated fee for each respective county that is actually charged. Fees may have been lowered/raised through indexing or policy discounts. Does not account for moratoriums/suspensions
2) Du = dwelling unit
3) Source: Appendix D, Table D-1
4) Source: Marion County Growth Services Department, Planning Division
5) Source: Levy County Community Development Department
6) Source: Citrus County Growth Management Department, Land Development Division
7) Source: Sumter County Planning & Development Services Department. Fees shown were adopted in 2024 in compliance with the 50% increase limit for F.S. 163.31801
8) Source: Pasco County Planning & Development Department
9) Source: Lake County Office of Planning and Zoning & Municode. Fees shown will be phased in annually to 95% of the full calculated rates by January 2027
10) Source: Volusia County Growth and Resource Management Department
11) Source: Alachua County Growth Management Department, Building Division

Transportation Impact Fee Benefit Districts

As part of the update of the transportation impact fee program, the existing impact fee benefit districts (illustrated in Map 1) were reviewed. As discussed previously, the dual rational nexus test requires that the fee payer receives a proportionate benefit. Establishing benefit districts enhances the County's ability to meet this requirement, showing a close connection to the fee-payer and their resulting benefit, by restricting revenues to specific areas of the county where the fee is collected. Benefit district boundaries are typically influenced by geographic (i.e., lakes and rivers) or man-made boundaries/barriers (i.e., roads, highways, municipal limits) which in some way restrict traffic, travel patterns, growth patterns and other similar variables.

District Boundaries

Currently, Marion County has two transportation impact fee districts, east and west, with Interstate 75 dividing the county. As shown in Table 9, this alignment results in an even split of developable land within each benefit district. Developable land is defined as the total land area less bodies of water and conservation land.

Table 9

Marion County Developable Land

Item	D1: West	D2: East	Total
Total Area	532.34	1,130.20	1,662.54
Water Area	14.07	152.04	166.11
Conservation Area	40.25	503.97	544.22
Developable Area	**478.02**	**474.19**	**952.21**
Developable %	50.2%	49.8%	100.0%

Source: Marion County Open Data Portal; GIS

As shown in Table 10, the existing benefit district alignment has also resulted in a relatively even split of transportation impact fee revenue collections. This indicates that both districts have experienced similar growth levels and are generating similar levels of revenue. If a jurisdiction has too many benefit districts, a situation can occur where projects in certain districts cannot be funded for long periods of time until sufficient impact fee revenues accumulate. The revenues from the current alignment show that this is not the case in Marion County, though recent years show increased development in the west.

Table 10

Transportation Impact Fee Revenues by Benefit District

Year	West	East	Total
FY 2016/17	$224,450	$293,829	$518,279
FY 2017/18	$1,376,368	$1,651,761	$3,028,128
FY 2018/19	$1,769,077	$2,058,738	$3,827,814
FY 2019/20	$2,142,031	$2,333,616	$4,475,647
FY 2020/21	$3,581,609	$3,040,116	$6,621,725
FY 2021/22	$5,732,631	$3,624,372	$9,357,003
FY 2022/23	$6,754,394	$3,001,449	$9,755,844
FY 2023/24	$10,013,598	$3,442,584	$13,456,182
Total	**$31,594,158**	**$19,446,465**	**$51,040,623**
%	62%	38%	100%

Source: Marion County Planning Department

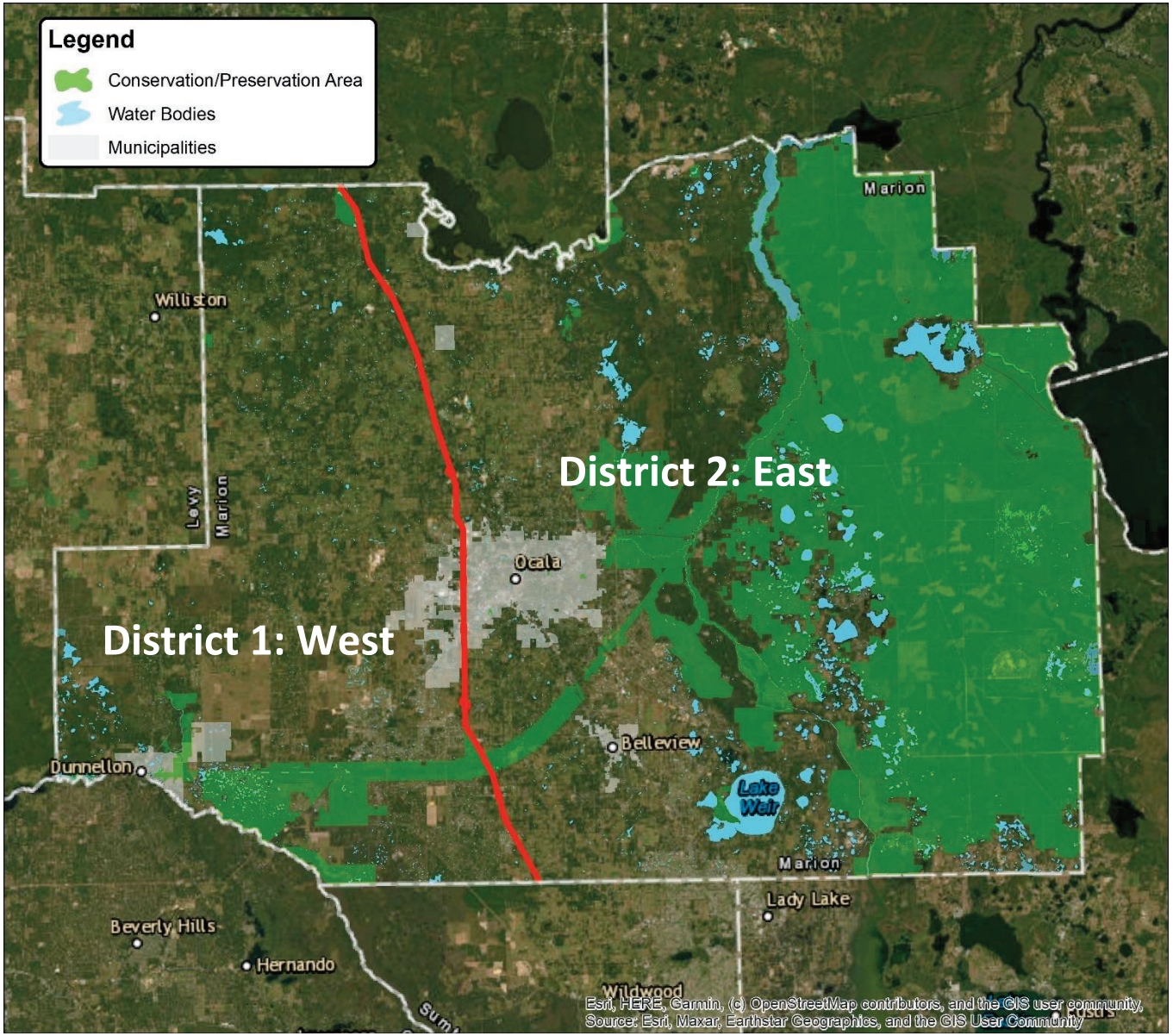
Impact Fee Revenue Use Across Districts

For certain projects, revenues from adjacent districts can be pooled together. Although this approach creates some flexibility, it requires an evaluation of each project on a case-by-case basis. Generally, any improvement that extends into both the east and west benefit districts would be eligible for transportation impact fee revenues from either district.

Benefit Districts Recommendations

Based on a review of geographic characteristics, historical impact fee revenue collections, and discussions with County staff, no changes are recommended to the existing benefit district boundaries.

Map 1: Existing Transportation Impact Fee Benefit Districts



Economic Growth Strategy

In addition to calculating the full transportation impact fee levels, this study also updates the economic growth strategy approach to impact fee calculations, which was developed in 2015 and considers the existing development's ability to absorb new growth.

As presented in Appendix C, in addition to impact fees, the County uses sales and fuel tax revenues and grants to fund the transportation system. In terms of the economic growth strategy calculations, it is important to note the following:

Consistent with the methodology used by many Florida jurisdictions, impact fee calculations are based on the adopted LOS standard, which is lower than the current achieved LOS. In other words, under the current methodology, even with the full impact fee, unless the County 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 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.

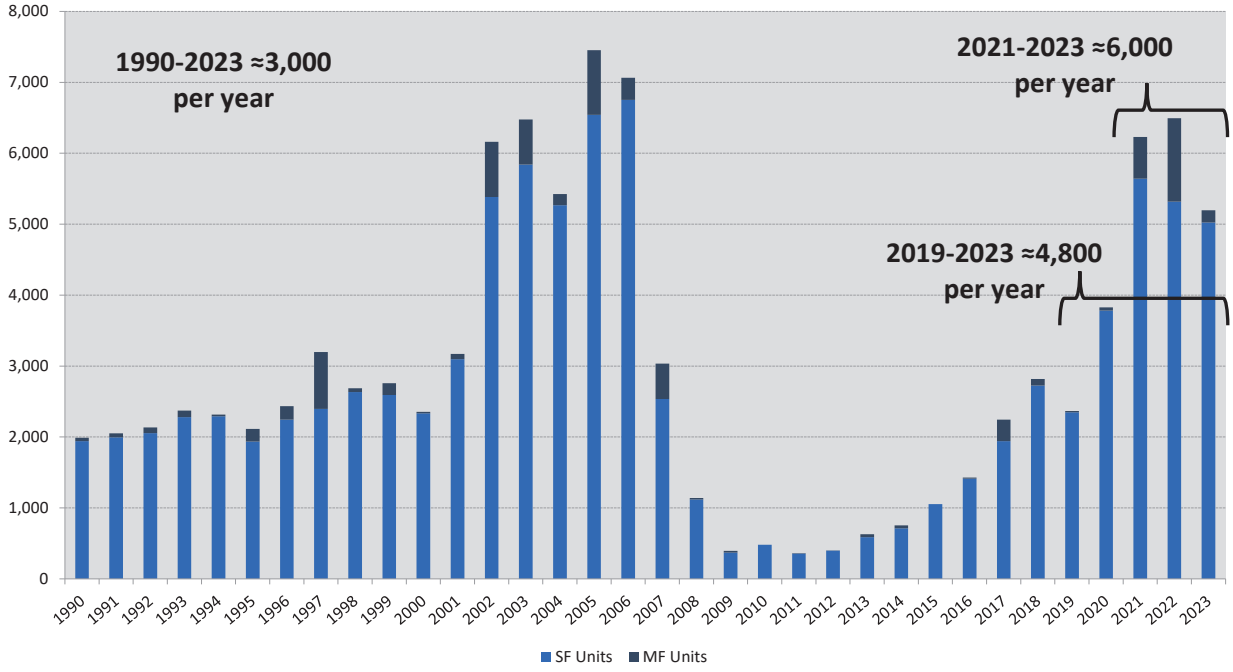
The economic growth strategy calculations are based on the County's historical and future estimated non-impact fee funding toward transportation capital capacity projects including funding from the State. Excluding funding dedicated toward paying the debt service, the County could provide discounts up to $50 million per year and still maintain the adopted LOS standards on a countywide average. If other revenue sources become available or allocation from the current funding sources are reduced, this figure will need to be revised.

As mentioned, even at full maximum calculated impact fee levels, impact fee revenues will not be sufficient to maintain the County's current LOS, which is better than the adopted LOS standard. Providing any level of impact fee discount, without utilizing any additional/alternative revenue sources, is likely to increase the deterioration of the current LOS.

Revenue Projections

The transportation impact fee projections in this report are based on recent permitting levels in Marion County. Figure 1 presents residential permitting figures since 1990.

Figure 1
Residential Permitting



Source: U.S. Census Bureau

Given fluctuations in permitting levels, a range of revenue scenarios were developed. For the low-end, residential permitting was based on the average permitting levels between 2019 and 2023 in the County (approximately 4,800 units). For the high-end, residential permitting was based on the activity between 2021 and 2023 (approximately 6,000 units).

The following additional assumptions/estimates are incorporated into the projections:

- One option for impact fees implemented at the full calculated rate (extraordinary circumstances qualification would need to be adopted);
- One option for impact fees implemented at the 50 percent capped rates, pursuant to F.S. 163.31801. Resulting rates are presented in Appendix D, Table D-2;
- Residential permitting consists primarily of the "Single Family Detached" land use;

- Non-residential revenues account for approximately 15 percent of the total revenue collected based on historical road impact fee revenue distribution; and
- Benesch validated the revenue model by comparing the transportation revenue estimates to actual collections over the past five years. This resulted in an adjustment factor of 80 percent to the revenue projections.

As shown in Table 11, Marion County has the potential to generate between $117 million and $144 million in transportation impact fee revenues over the next five years if the impact fee rates are adopted as 100 percent. If the capped rates are adopted, the revenue potential is between $46 million and $57 million over the next five years.

Table 11

Transportation Impact Fee Revenue Projections

Rates	Annual (Low-End)	Annual (High-End)		5-Yr Estimate (Low-End)	5-Yr Estimate (High-End)
Full Calculated	$23,474,000	$28,874,000		$117,370,000	$144,370,000
F.S. 163.31801 Capped	$9,225,000	$11,338,000		$46,125,000	$56,690,000

Source: Based on recent permitting levels and calculated fee rates from this report

For impact fee purposes, revenue projections serve only as an overall guideline in planning future infrastructure needs. In their simplest form, impact fees charge each unit of new growth for the net cost (total cost less credits) of infrastructure needed to serve that unit of growth. If the growth rates remain high, the County will have more impact fee revenues to fund growth related projects sooner rather than later. If the growth rate slows down, less revenue will be generated and the timing and need for future infrastructure improvements will be later rather than sooner.

Appendix A
Demand Component

Appendix A: Demand Component

This appendix presents detailed calculations for the demand component of the transportation impact fee study.

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 Central Florida Regional Planning Model v7, specifically the 2045 projected vehicle-miles of travel of all county-generated trips on all in-county roadways. It should be noted that the adjustment factor excludes all external-to-external trips, which represent traffic that goes through Marion County, but does not necessarily stop in the county. This traffic is excluded from the analysis since it does not come from development within the county. 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

Facility Type	Total	
	VMT	%
Interstate/Toll	1,446,243	**13.5%**
Other Roads	9,274,914	86.5%
Total	**10,721,157**	**100.0%**

Source: CFRPM v7, 2045

Florida Studies Trip Characteristics Database

The Florida Studies Trip Characteristics Database includes approximately 345 studies on 40 different residential and non-residential land uses collected over the last 30 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/multi-modal/mobility fees and the creation of land use plan category trip characteristics for communities throughout Florida and the U.S.

Benesch estimates trip generation rates for all land uses in an impact fee schedule using data from studies in the Florida Studies Database and the Institute of Transportation Engineers' (ITE) *Trip Generation* reference report (11th edition). In instances, when both ITE *Trip Generation*

reference report (11th 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 or video cameras are set at entrances to residential subdivisions for residential land uses and at all access points for non-residential land uses. Trip generation data were collected during specific weekdays for a period of 72 consecutive hours, or three days. In some cases, manual counts were also collected periodically during the week to verify the accuracy of the machine traffic counts.

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. For residential study sites, the data were collected through road-side patron interviews. For non-residential study sites, the data was collected through on-site patron interviews. The interviews were generally conducted between 7:00 a.m. and 6:00 p.m. allowing for data to be collected for both work and non-work type trips. 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. Benesch has published an article entitled, *Measuring Travel Characteristics for Transportation Impact Fees*, ITE Journal, April 1991, on the data collection methodology for trip characteristics studies.

Table A-2

Land Use 151: Mini-Warehouse

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	2006	-	-	1.23	-	-	-	-	Orange County
Orange Co, FL	84.7	2006	-	-	1.39	-	-	-	-	Orange County
Orange Co, FL	93.0	2006	-	-	1.51	-	-	-	-	Orange County
Orange Co, FL	107.0	2007	-	-	1.45	-	-	-	-	Orange County
Orange Co, FL	77.0	2009	-	-	2.18	-	-	-	-	Tindale Oliver
Orange Co, FL	93.7	2012	-	-	1.15	-	-	-	-	Tindale Oliver
Total Size	545.0	6				**Average Trip Length:**	**n/a**			
ITE	880.0	16				**Weighted Average Trip Length:**	**n/a**			
Blended total	1,425.0					Weighted Percent New Trip Average:		-		
								Weighted Average Trip Generation Rate:		1.47
								ITE Average Trip Generation Rate:		1.45
								Blend of FL Studies and ITE Average Trip Generation Rate:		**1.46**

Table A-3

Land Use 210: Single Family - Detached

Location	Size / Units	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Sarasota Co, FL	76	Jun-93	70	70	10.03	-	6.00	-	60.18	Sarasota County
Sarasota Co, FL	79	Jun-93	86	86	9.77	-	4.40	-	42.99	Sarasota County
Sarasota Co, FL	135	Jun-93	75	75	8.05	-	5.90	-	47.50	Sarasota County
Sarasota Co, FL	152	Jun-93	63	63	8.55	-	7.30	-	62.42	Sarasota County
Sarasota Co, FL	193	Jun-93	123	123	6.85	-	4.60	-	31.51	Sarasota County
Sarasota Co, FL	97	Jun-93	33	33	13.20	-	3.00	-	39.60	Sarasota County
Sarasota Co, FL	282	Jun-93	146	146	6.61	-	8.40	-	55.52	Sarasota County
Sarasota Co, FL	393	Jun-93	207	207	7.76	-	5.40	-	41.90	Sarasota County
Hernando Co, FL	76	May-96	148	148	10.01	9a-6p	4.85	-	48.55	Tindale Oliver
Hernando Co, FL	128	May-96	205	205	8.17	9a-6p	6.03	-	49.27	Tindale Oliver
Hernando Co, FL	232	May-96	182	182	7.24	9a-6p	5.04	-	36.49	Tindale Oliver
Hernando Co, FL	301	May-96	264	264	8.93	9a-6p	3.28	-	29.29	Tindale Oliver
Charlotte Co, FL	135	Oct-97	230	-	5.30	9a-5p	7.90	-	41.87	Tindale Oliver
Charlotte Co, FL	142	Oct-97	245	-	5.20	9a-5p	4.10	-	21.32	Tindale Oliver
Charlotte Co, FL	150	Oct-97	160	-	5.00	9a-5p	10.80	-	54.00	Tindale Oliver
Charlotte Co, FL	215	Oct-97	158	-	7.60	9a-5p	4.60	-	34.96	Tindale Oliver
Charlotte Co, FL	257	Oct-97	225	-	7.60	9a-5p	7.40	-	56.24	Tindale Oliver
Charlotte Co, FL	345	Oct-97	161	-	7.00	9a-5p	6.60	-	46.20	Tindale Oliver
Charlotte Co, FL	368	Oct-97	152	-	6.60	9a-5p	5.70	-	37.62	Tindale Oliver
Charlotte Co, FL	383	Oct-97	516	-	8.40	9a-5p	5.00	-	42.00	Tindale Oliver
Charlotte Co, FL	441	Oct-97	195	-	8.20	9a-5p	4.70	-	38.54	Tindale Oliver
Charlotte Co, FL	1,169	Oct-97	348	-	6.10	9a-5p	8.00	-	48.80	Tindale Oliver
Collier Co, FL	90	Dec-99	91	-	12.80	8a-6p	11.40	-	145.92	Tindale Oliver
Collier Co, FL	400	Dec-99	389	-	7.80	8a-6p	6.40	-	49.92	Tindale Oliver
Lake Co, FL	49	Apr-02	170	-	6.70	7a-6p	10.20	-	68.34	Tindale Oliver
Lake Co, FL	52	Apr-02	212	-	10.00	7a-6p	7.60	-	76.00	Tindale Oliver
Lake Co, FL	126	Apr-02	217	-	8.50	7a-6p	8.30	-	70.55	Tindale Oliver
Pasco Co, FL	55	Apr-02	133	-	6.80	8a-6p	8.12	-	55.22	Tindale Oliver
Pasco Co, FL	60	Apr-02	106	-	7.73	8a-6p	8.75	-	67.64	Tindale Oliver
Pasco Co, FL	70	Apr-02	188	-	7.80	8a-6p	6.03	-	47.03	Tindale Oliver
Pasco Co, FL	74	Apr-02	188	-	8.18	8a-6p	5.95	-	48.67	Tindale Oliver
Pasco Co, FL	189	Apr-02	261	-	7.46	8a-6p	8.99	-	67.07	Tindale Oliver
Marion Co, FL	102	Apr-02	167	-	8.02	7a-6p	5.10	-	40.90	Kimley-Horn & Associates
Marion Co, FL	105	Apr-02	169	-	7.23	7a-6p	7.22	-	52.20	Kimley-Horn & Associates
Marion Co, FL	124	Apr-02	170	-	6.04	7a-6p	7.29	-	44.03	Kimley-Horn & Associates
Marion Co, FL	132	Apr-02	171	-	7.87	7a-6p	7.00	-	55.09	Kimley-Horn & Associates
Marion Co, FL	133	Apr-02	209	-	8.04	7a-6p	4.92	-	39.56	Kimley-Horn & Associates
Citrus Co, FL	111	Oct-03	273	-	8.66	7a-6p	7.70	-	66.68	Tindale Oliver
Citrus Co, FL	231	Oct-03	155	-	5.71	7a-6p	4.82	-	27.52	Tindale Oliver
Citrus Co, FL	306	Oct-03	146	-	8.40	7a-6p	3.94	-	33.10	Tindale Oliver
Citrus Co, FL	364	Oct-03	345	-	7.20	7a-6p	9.14	-	65.81	Tindale Oliver
Citrus Co, FL	374	Oct-03	248	-	12.30	7a-6p	6.88	-	84.62	Tindale Oliver
Lake Co, FL	42	Dec-06	122	-	11.26	-	5.56	-	62.61	Tindale Oliver
Lake Co, FL	51	Dec-06	346	-	18.22	-	9.46	-	172.36	Tindale Oliver
Lake Co, FL	59	Dec-06	144	-	12.07	-	10.79	-	130.24	Tindale Oliver
Lake Co, FL	90	Dec-06	194	-	9.12	-	5.78	-	52.71	Tindale Oliver
Lake Co, FL	239	Dec-06	385	-	7.58	-	8.93	-	67.69	Tindale Oliver
Hernando Co, FL	232	Apr-07	516	-	8.02	7a-6p	8.16	-	65.44	Tindale Oliver
Hernando Co, FL	95	Apr-07	256	-	8.08	7a-6p	5.88	-	47.51	Tindale Oliver
Hernando Co, FL	90	Apr-07	338	-	7.13	7a-6p	5.86	-	41.78	Tindale Oliver
Hernando Co, FL	58	Apr-07	153	-	6.16	7a-6p	8.39	-	51.68	Tindale Oliver
Collier Co, FL	74	Mar-08	503	-	12.81	7a-6p	3.05	-	39.07	Tindale Oliver
Collier Co, FL	97	Mar-08	512	-	8.78	7a-6p	11.29	-	99.13	Tindale Oliver
Collier Co, FL	315	Mar-08	1,347	-	6.97	7a-6p	6.55	-	45.65	Tindale Oliver
Collier Co, FL	42	Mar-08	314	-	9.55	7a-6p	10.98	-	104.86	Tindale Oliver
Total Size	10,380	55	13,130				**Average Trip Length:**	**6.83**		
							Weighted Average Trip Length:	**6.62**		

Weighted Average Trip Generation Rate: **7.81**

Table A-4

LUC 215: Single Family Attached Housing

Location	Size / Units	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Hernando Co, FL	31	May-96	31	31	6.12	9a-6p	-	-	-	Tindale Oliver
Hernando Co, FL	128	May-96	198	198	6.47	9a-6p	-	-	-	Tindale Oliver
Pasco Co, FL	229	Apr-02	198	198	4.77	9a-6p	-	-	-	Tindale Oliver
Pasco Co, FL	248	Apr-02	353	353	4.24	9a-6p	-	-	-	Tindale Oliver
Total Size	636	4	780				**Average Trip Length:**	**-**		
ITE	2,640	22					**Weighted Average Trip Length:**	**-**		
Blended total	3,276									

Weighted Average Trip Generation Rate: 4.97

ITE Average Trip Generation Rate: 7.20

Blend of FL Studies and ITE Average Trip Generation Rate: **6.77**

Table A-5

LUC 220/221/222: Multi-Family/Apartment

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	-	30.06	Sarasota County
Sarasota Co, FL	243	Jun-93	36	36	5.84	-	-	-	-	Sarasota County
Marion Co, FL	214	Apr-02	175	175	6.84	-	4.61	-	31.53	Kimley-Horn & Associates
Marion Co, FL	240	Apr-02	174	174	6.96	-	3.43	-	23.87	Kimley-Horn & Associates
Marion Co, FL	288	Apr-02	175	175	5.66	-	5.55	-	31.41	Kimley-Horn & Associates
Marion Co, FL	480	Apr-02	175	175	5.73	-	6.88	-	39.42	Kimley-Horn & Associates
Marion Co, FL	500	Apr-02	170	170	5.46	-	5.94	-	32.43	Kimley-Horn & Associates
Lake Co, FL	250	Dec-06	135	135	6.71	-	5.33	-	35.76	Tindale Oliver
Lake Co, FL	157	Dec-06	265	265	13.97	-	2.62	-	36.60	Tindale Oliver
Lake Co, FL	169	Dec-06	212	-	8.09	-	6.00	-	48.54	Tindale Oliver
Lake Co, FL	226	Dec-06	301	-	6.74	-	2.17	-	14.63	Tindale Oliver
Hernando Co, FL	312	Apr-07	456	-	4.09	-	5.95	-	24.34	Tindale Oliver
Hernando Co, FL	176	Apr-07	332	-	5.38	-	5.24	-	28.19	Tindale Oliver
Total Size	3,467	13	2,648			**Average Trip Length:**	**4.91**			
						Weighted Average Trip Length:	**5.21**			

Table A-6

Land Use 240: Mobile Home Park

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	-	12.37	Tindale Oliver
Marion Co, FL	82	Jul-91	58	58	10.80	24hr.	3.72	-	40.18	Tindale Oliver
Marion Co, FL	137	Jul-91	22	22	3.10	24hr.	4.88	-	15.13	Tindale Oliver
Sarasota Co, FL	996	Jun-93	181	181	4.19	-	4.40	-	18.44	Sarasota County
Sarasota Co, FL	235	Jun-93	100	100	3.51	-	5.10	-	17.90	Sarasota County
Marion Co, FL	188	Apr-02	147	-	3.51	24hr.	5.48	-	19.23	Kimley-Horn & Associates
Marion Co, FL	227	Apr-02	173	-	2.76	24hr.	8.80	-	24.29	Kimley-Horn & Associates
Marion Co, FL	297	Apr-02	175	-	4.78	24hr.	4.76	-	22.75	Kimley-Horn & Associates
Hernando Co, FL	1,892	May-96	425	425	4.13	9a-6p	4.13	-	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**

Table A-7

Land Use 251: Senior Adult Housing - Detached

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	-	8.54	Tindale Oliver
Marion Co, FL	778	Apr-02	175	-	2.96	24hr.	3.49	-	10.33	Kimley-Horn & Associates
Marion Co, FL	877	Apr-02	209	-	2.91	24hr.	5.90	-	17.17	Kimley-Horn & Associates
Marion Co, FL	1,054	Apr-02	173	-	3.65	24hr.	6.00	-	21.90	Kimley-Horn & Associates
Marion Co, FL	3,076	Apr-02	198	-	2.63	24hr.	5.16	-	13.57	Kimley-Horn & Associates
Marion Co, FL	3,625	Apr-02	164	-	2.50	24hr.	5.83	-	14.58	Kimley-Horn & Associates
Total Size	9,477	6	945			**Average Trip Length:**	**4.80**			
ITE	9,690	15				**Weighted Average Trip Length:**	**5.42**			
Blended total	19,167							Weighted Average Trip Generation Rate:		2.75
								ITE Average Trip Generation Rate:		4.31
								Blend of FL Studies and ITE Average Trip Generation Rate:		**3.54**

Table A-8

Land Use 252: Senior Adult Housing - Attached

Location	Size / Units	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Sun City Center, FL	208	Oct-91	726	726	2.46	24hr.	-	-	-	Tindale Oliver
Total Size	208	1				**Average Trip Length:**	**-**			
ITE	432	6				**Weighted Average Trip Length:**	**-**			
Blended total	640							Weighted Average Trip Generation Rate:		2.46
								ITE Average Trip Generation Rate:		3.24
								Blend of FL Studies and ITE Average Trip Generation Rate:		**2.99**

Table A-9

Land Use 253: Congregate Care Facility

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	720	4				**Weighted Average Trip Length:**	**3.08**			
Blended total	992							Weighted Percent New Trip Average:	71.6	

Table A-10

Land Use 310: Hotel

Location	Size (Rooms)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Pinellas Co, FL	174	Aug-89	134	106	12.50	7-11a/3-7p	6.30	79.0	62.21	Tindale Oliver
Pinellas Co, FL	114	Oct-89	30	14	7.30	12-7p	6.20	47.0	21.27	Tindale Oliver
Orange Co, FL	123	1997	-	-	6.32	-	-	-	-	Orange County
Orange Co, FL	120	1997	-	-	5.27	-	-	-	-	Orange County
Orange Co, FL	146	1997	-	-	7.61	-	-	-	-	Orange County
Orange Co, FL	252	1997	-	-	5.63	-	-	-	-	Orange County
Orange Co, FL	172	1997	-	-	6.36	-	-	-	-	Orange County
Orange Co, FL	170	1997	-	-	6.06	-	-	-	-	Orange County
Orange Co, FL	128	1997	-	-	6.10	-	-	-	-	Orange County
Orange Co, FL	200	1997	-	-	4.56	-	-	-	-	Orange County
Orange Co, FL	112	1998	-	-	2.78	-	-	-	-	Orange County
Orange Co, FL	130	1998	-	-	9.12	-	-	-	-	Orange County
Orange Co, FL	106	1998	-	-	7.34	-	-	-	-	Orange County
Orange Co, FL	98	1998	-	-	7.32	-	-	-	-	Orange County
Orange Co, FL	120	1998	-	-	5.57	-	-	-	-	Orange County
Orange Co, FL	70	1999	-	-	1.85	-	-	-	-	Orange County
Orange Co, FL	123	1999	-	-	4.81	-	-	-	-	Orange County
Orange Co, FL	123	1999	-	-	3.70	-	-	-	-	Orange County
Orange Co, FL	211	2000	-	-	2.23	-	-	-	-	Orange County
Orange Co, FL	144	2000	-	-	7.32	-	-	-	-	Orange County
Orange Co, FL	105	2001	-	-	5.25	-	-	-	-	Orange County
Orange Co, FL	891	2005	-	-	5.69	-	-	-	-	Orange County
Orange Co, FL	1,584	2005	-	-	5.88	-	-	-	-	Orange County
Orange Co, FL	210	2006	-	-	4.88	-	-	-	-	Orange County
Orange Co, FL	1,499	2006	-	-	4.69	-	-	-	-	Orange County
Orange Co, FL	144	-	-	-	4.74	-	-	-	-	Orange County
Orange Co, FL	148	-	-	-	7.61	-	-	-	-	Orange County
Orange Co, FL	160	-	-	-	6.19	-	-	-	-	Orange County
Orange Co, FL	130	-	-	-	4.29	-	-	-	-	Orange County
Orange Co, FL	130	-	-	-	3.40	-	-	-	-	Orange County
Orange Co, FL	144	-	-	-	7.66	-	-	-	-	Orange County
Orange Co, FL	100	-	-	-	7.37	-	-	-	-	Orange County
Orange Co, FL	190	-	-	-	4.71	-	-	-	-	Orange County
Orange Co, FL	1,501	2011	-	-	3.50	-	-	-	-	Tindale Oliver
Orange Co, FL	174	2011	-	-	7.03	-	-	-	-	Tindale Oliver
Orange Co, FL	238	2014	-	-	4.05	-	-	-	-	Tindale Oliver
Total Size	10,184	36	164				**Average Trip Length:**	**6.25**		
ITE	1,036	7					**Weighted Average Trip Length:**	**6.26**		
Blended total	11,220									

Weighted Percent New Trip Average: 66.3

Weighted Average Trip Generation Rate: 5.31

ITE Average Trip Generation Rate: 7.99

Blend of FL Studies and ITE Average Trip Generation Rate: 5.56

Table A-11

Land Use 320: Motel

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	654	6					**Weighted Average Trip Length:**	**4.34**		

Weighted Percent New Trip Average: 76.6

Table A-12

Land Use 445: Movie Theater

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	2	273				**Average Trip Length:**	**2.30**		
							Weighted Average Trip Length:	**2.22**		

Weighted Percent New Trip Average: 87.8

Weighted Average Trip Generation Rate: 83.28

ITE Average Trip Generation Rate: 220.00

Blend of FL Studies and ITE Average Trip Generation Rate: 114.83

Table A-13

Land Use 565: Day Care Center

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	3	301				**Average Trip Length:**	**2.20**		
ITE	135.0	27					**Weighted Average Trip Length:**	**2.03**		
Blended total	150.6									

Weighted Percent New Trip Average: 73.2

Weighted Average Trip Generation Rate: 66.99

ITE Average Trip Generation Rate: 47.62

Blend of FL Studies and ITE Average Trip Generation Rate: 49.63

Table A-14

Land Use 620: Nursing Home

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
		1	74				**Average Trip Length:**	**2.59**		
							Weighted Average Trip Length:	**2.59**		

Weighted Percent New Trip Average: 89.0

Weighted Average Trip Generation Rate: 2.86

ITE Average Trip Generation Rate: 3.06

Blend of FL Studies and ITE Average Trip Generation Rate: 3.02

Table A-15

Land Use 640: Animal Hospital/Veterinary Clinic

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	4.0	-	-	-	21.50	-	-	-	-	Tindale Oliver
Clearwater, FL	3.0	Sep-89	-	-	44.00	-	1.90	70.0	-	Tindale Oliver
Clearwater, FL	2.0	Aug-89	-	-	-	-	1.90	70.0	-	Tindale Oliver
Total Size	7.0	3	0				**Average Trip Length:**	**1.90**		
ITE	18.0	6					**Weighted Average Trip Length:**	**1.90**		
	25.0									

Weighted Percent New Trip Average: 70.0

Weighted Average Trip Generation Rate: 31.14

ITE Average Trip Generation Rate: 21.50

Blend of FL Studies and ITE Average Trip Generation Rate: 24.20

Table A-16

Land Use 710: General Office Building

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
		5	736				**Average Trip Length:**	**6.46**		
							Weighted Average Trip Length:	**5.15**		

Weighted Percent New Trip Average: 92.3

Table A-17

LUC 720: Small Medical/Dental Office Building: 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**

Table A-18

Land Use 720: Medical-Dental Office Building

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	2009	-	-	26.72	-	-	-	-	Orange County
Orange Co, FL	23.5	2010	-	-	16.58	-	-	-	-	Tindale Oliver
		13	763				**Average Trip Length:**	**5.07**		
							Weighted Average Trip Length:	**5.55**		

Weighted Percent New Trip Average: 88.9

Table A-19

Land Use 770: Business Park

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**

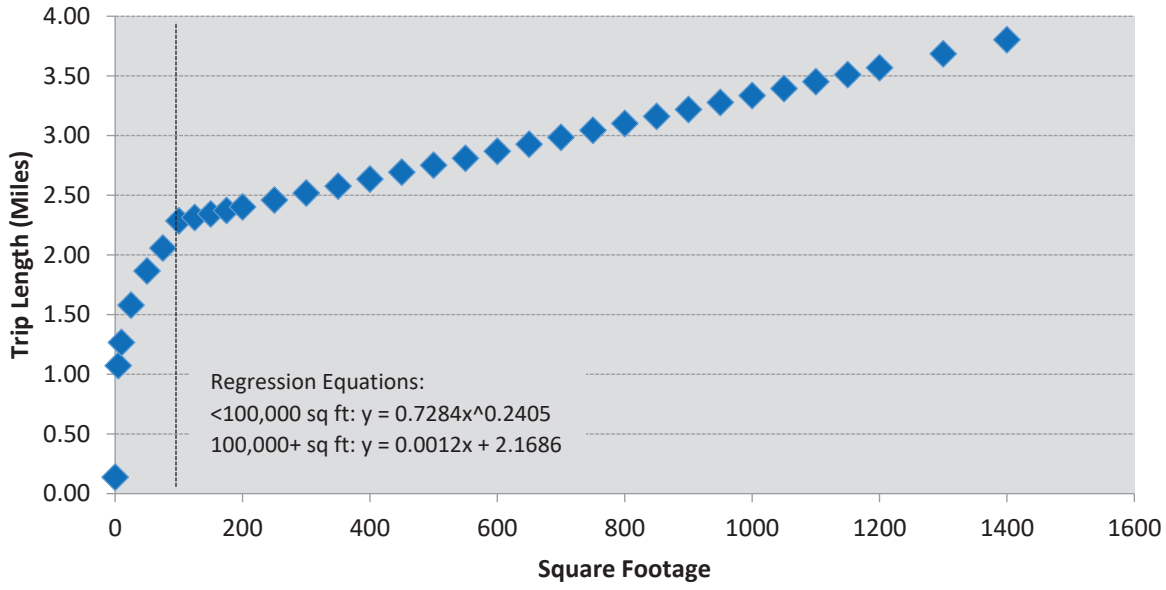
Table A-20

Land Use 820/821/822: Retail/Shopping Center

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.
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
			30	6,346			**Average Trip Length:**	**2.71**		

Figure A-1

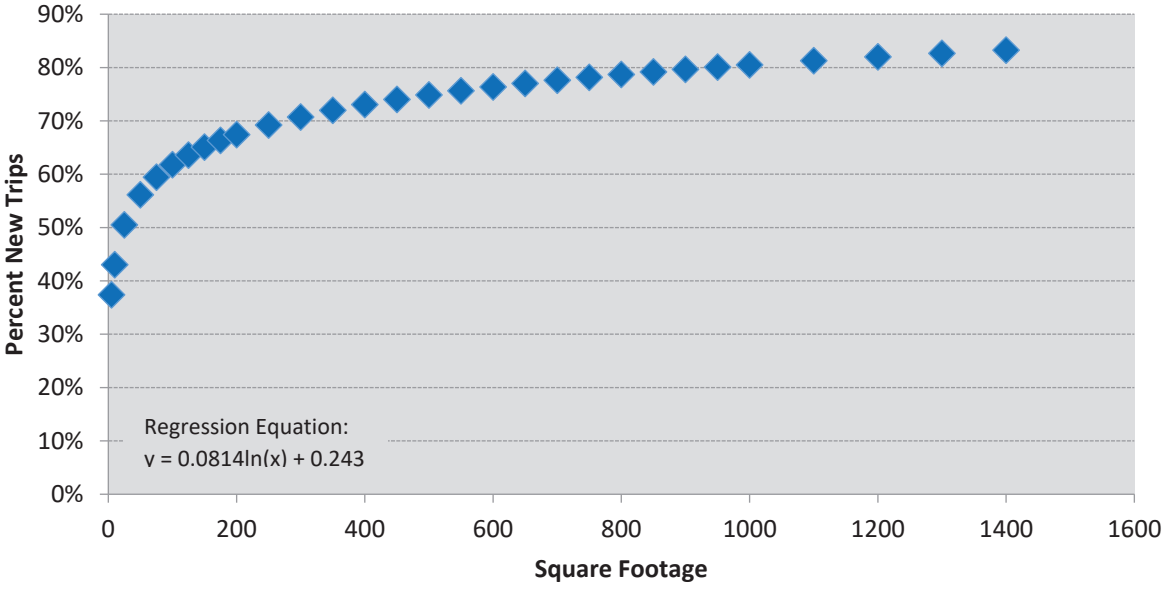
LUC 820-822: Retail/Shopping Center – Florida Curve Trip Length Regression



Source: Regression analysis based on FL Studies data for LUC 820-822. This curve, along with the average development size presented in the ITE 11th Edition Handbook, was used to estimate the trip length for retail land uses

Figure A-2

LUC 820-822: Retail/Shopping Center – Florida Curve Percent New Trips Regression



Source: Regression analysis based on FL Studies data for LUC 820-822. This curve, along with the average development size presented in the ITE 11th Edition Handbook, was used to estimate the percent new trips for retail land uses

Table A-21

Land Use 840/841: New/Used Automobile Sales

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	13.8	1997	-	-	35.75	-	-	-	-	Orange County
Orange Co, FL	34.4	1998	-	-	23.45	-	-	-	-	Orange County
Orange Co, FL	66.3	2001	-	-	28.50	-	-	-	-	Orange County
Orange Co, FL	39.1	2002	-	-	10.48	-	-	-	-	Orange County
Orange Co, FL	116.7	2003	-	-	22.18	-	-	-	-	Orange County
Orange Co, FL	51.7	2007	-	-	40.34	-	-	-	-	L-TEC
Orange Co, FL	36.6	-	-	-	15.17	-	-	-	-	Orange County
Orange Co, FL	216.4	2008	-	-	13.45	-	-	-	-	Orange County

Total Size	618.0	10	288	**Average Trip Length:**	**4.60**	
ITE (840)	648.0	18		**Weighted Average Trip Length:**	**4.60**	
ITE (841)	28.0	14		Weighted Percent New Trip Average:	78.5	
Blended total	1,294.0			Weighted Average Trip Generation Rate:		21.04
				ITE Average Trip Generation Rate (LUC 840):		27.84
				ITE Average Trip Generation Rate (LUC 841):		27.06
				Blend of FL Studies and ITE Average Trip Generation Rate:		**24.58**

Table A-22

Land Use 850: Supermarket

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	1,144.0	22		**Weighted Average Trip Length:**	**2.08**	
Blended total	1,206.0			Weighted Percent New Trip Average:	56.0	
				Weighted Average Trip Generation Rate:		106.26
				ITE Average Trip Generation Rate:		93.84
				Blend of FL Studies and ITE Average Trip Generation Rate:		**94.48**

Table A-23

Land Use 880/881: Pharmacy with and without Drive-Through Window

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 (LUC 880)	66.0	6		**Weighted Average Trip Length:**	**2.08**	
ITE (LUC 881)	208.0	16		Weighted Percent New Trip Average:	32.4	
Blended total	312.2			Average Trip Generation Rate:		103.03
				ITE Average Trip Generation Rate (LUC 880):		90.08
				ITE Average Trip Generation Rate (LUC 881):		108.40
				Blend of FL Studies and ITE Average Trip Generation Rate:		**103.86**

Table A-24

Land Use 890: Furniture Store

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	31.90	2	132	**Average Trip Length:**	**6.01**	
ITE	779.0	19		**Weighted Average Trip Length:**	**6.09**	
Blended total	810.90			Weighted Percent New Trip Average:	54.2	

Table A-25

Land Use 912: Bank/Savings w/Drive-Thru

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	14	1,407	**Average Trip Length:**	**2.38**	
ITE	114.0	19		**Weighted Average Trip Length:**	**2.46**	
Blended total	139.2			Weighted Percent New Trip Average:	46.2	
	116.7			Weighted Average Trip Generation Rate:		246.66
				ITE Average Trip Generation Rate:		100.35
				Blend of FL Studies and ITE Average Trip Generation Rate:		**103.73**

Table A-26

Land Use 931: Fine Dining Restaurant

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	3	313				**Average Trip Length:**	**2.80**		
ITE	90.0	10					**Weighted Average Trip Length:**	**3.14**		
Blended total	105.5						Weighted Percent New Trip Average:	76.7		
	98.0							Weighted Average Trip Generation Rate:		110.63
								ITE Average Trip Generation Rate:		83.84
								Blend of FL Studies and ITE Average Trip Generation Rate:		**86.03**

Table A-27

Land Use 934: Fast Food Restaurant with Drive-Through Window

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
Orange Co, FL	8.93	1996	-	-	377.00	-	-	-	-	Orange County
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
Total Size	48.8	18	4,463				**Average Trip Length:**	**2.11**		
ITE	213.0	71					**Weighted Average Trip Length:**	**2.05**		

Table A-28

Land Use 942: Automobile Care Center

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	5.5	Sep-89	34	30	37.64	9a-5p	2.40	88.0	79.50	Tindale Oliver
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
Lakeland, FL	-	Mar-90	54	42	-	9a-4p	2.44	78.0	-	Tindale Oliver
Orange Co, FL	25.0	Nov-92	41	39	-	2-6p	4.60	-	-	LCE, Inc.
Orange Co, FL	36.6	-	-	-	15.17	-	-	-	-	Orange County
Orange Co, FL	7.0	-	-	-	46.43	-	-	-	-	Orange County
Total Size	86.2	9	519				**Average Trip Length:**	**2.74**		
ITE	102.0	6					**Weighted Average Trip Length:**	**3.62**		
Blended total	188.2						Weighted Percent New Trip Average:	72.2		
	151.1							Weighted Average Trip Generation Rate:		22.14
								ITE Average Trip Generation Rate (adjusted):		31.10
								Blend of FL Studies and ITE Average Trip Generation Rate:		**28.19**

Table A-29

Land Use 944: Gasoline/Service Station

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)	144.0	18					**Weighted Average Trip Length:**	**1.90**		
							Weighted Percent New Trip Average:	23.0		

Land Use 945: Convenience Store/Gas Station - Mid-Size Blend

ITE	48		Conv. Store 2,000 to 3,999 sf:	265.12
ITE	5		Conv. Store 4,000 to 5,499 sf:	257.13
	53		**Blend of ITE Average Trip Generation Rates for Convenience Store/Gas Station 2,000 to 5,499 sf:**	**264.38**

Table A-30

Land Use 947: Self-Service Car Wash

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 Co, FL	11	Dec-09	304	-	30.24	-	2.50	57.0	-	Tindale Oliver
Collier Co, FL	8	Jan-09	186	-	22.75	-	1.96	72.0	-	Tindale Oliver
Total Size	29	4	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**

Single Family Residential Trip Generation Rate Tiering

As part of this study, the single family residential trip generation rate tiering was prepared. An analysis was completed on the comparative relationship between housing size and household travel behavior. This analysis utilized data from the 2022 National Household Travel Survey (NHTS) and the 2021 American Housing Survey (AHS) to examine overall trip-making characteristics of households in the United States.

Table A-31 presents that trip characteristics being utilized in the calculated transportation impact fee schedule for the single family (detached) land use. The 2022 NHTS database was used to assess average annual household vehicle miles of travel (VMT) for various annual household income levels. In addition, the 2021 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 simply to provide a convenient linking mechanism between household VMT from the NHTS and housing unit size from the AHS.

Table A-31

Calculated Single Family Trip Characteristics

Calculated Values Excluding Tiering	Trip Rate	Assessable Trip Length	Daily VMT
Single Family (Detached)	7.81	7.61	59.43

Source: Appendix A, Table A-4; Trip length includes 15% adjustment factor

The results of the NHTS and AHS analyses are included in Tables A-32 and A-33. First, the data shown in Table A-32 indicates that the average income in the U.S. for families/households living in housing units between 1,501 and 2,499 sq ft in size ($74,416) is higher than the overall average income for the U.S. ($66,289). In Table A-33, annual average household VMT was calculated from the NHTS database for several different income levels and ranges related to the resulting AHS income data in Table A-32.

Table A-32

Annual Income by Housing Size

2021 AHS Average Income Data by Housing Size	Annual Income[(1)]
1,500 sf or less	$51,697
1,501 to 2,499 sf	$74,416
2,500 sf or more	$90,699
Average of All Houses	$66,289

Source: American Housing Survey for the United States in 2021

1) Weighted average of annual income for each tier

Table A-33

NHTS VMT Annual VMT by Income Category

2022 NHTS Travel Data by Annual HH Income	Annual VMT/HH	Days	Daily VMT	Ratio to Mean	Normalized to 1.055
Total (All Homes)	15,634	365	42.83	1.000	-
Average of $51,697	13,594	365	37.24	0.869	0.824
Average of $74,416	16,496	365	45.19	1.055	1.000
Average of $90,699	18,138	365	49.69	1.160	1.100

Source: 2022 National Household Travel Survey Database, Federal Highway Administration

To calculate a corresponding trip rate for the new tiers it was necessary to rely on comparative ratios. As an example, consider the $51,697 annual income category. First, it was determined that the average annual household VMT for this income level is 13,594 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 $74,416 (16,496 miles) category to derive a ratio of 0.824.

Next, the normalized ratio was applied to the daily VMT for the average single family housing unit size (1,500 sq ft or less) to generate a daily VMT of 48.97 for the tier, as shown in Table A-34. This daily VMT figure was then divided by the proposed assessable trip length of 7.61 miles to obtain a trip generation rate of 6.43 trips per day.

Table A-34

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)				
1,500 sf or less	**6.43**	7.61	48.97	0.824
1,501 to 2,499 sf	**7.81**	7.61	59.43	1.000
2,500 sf or larger	**8.59**	7.61	65.37	1.100

1) Daily VMT (Item 3) divided by assessable trip length (Item 2) for each tier
2) Source: Table A-31
3) Ratio to the mean (Item 4) multiplied by the total daily VMT for the 1,501 to 2,499 sq tier
4) Source: Table A-33

Table A-35 illustrates the impact that the trip generation rate tiers for the single family (detached) land use have on the County's calculated transportation impact fee rate.

Table A-35

Net Impact Fee by Single Family Land Use Tier

Impact of Tiering on Fee Schedule	Trip Rate[1]	Assessable Trip Length[2]	Daily VMT[3]	Net Fee[4]
Single Family (Detached)				
1,500 sf or less	**6.43**	7.61	48.97	**$4,388**
1,501 to 2,499 sf	**7.81**	7.61	59.43	**$5,318**
2,500 sf or larger	**8.59**	7.61	65.37	**$5,855**

1) Source: Table A-34, Item 1
2) Source: Table A-31
3) Source: Table A-34, Item 3
4) Source: Appendix D, Table D-1

Trip Length Adjustment

Table A-36 details the base trip length, trip length data source, and the adjusted trip length value for each land use in the transportation impact fee schedule. As discussed previously, trip lengths for residential and hotel/motel land uses were increased by 15 percent and for non-residential land uses by 5 percent.

Table A-36
Trip Length Adjustment Calculation

ITE LUC	Land Use	Base Trip Length	Trip Length Source	Trip Length Adjustment Factor	Assessable Trip Length[1]
	RESIDENTIAL:				
210	Single Family (Detached) - 1,500 sf or less	6.62	Appendix A, Table A-3	1.15	**7.61**
	Single Family (Detached) - 1,501 to 2,499 sf	6.62	Appendix A, Table A-3	1.15	**7.61**
	Single Family (Detached) - 2,500 sf and greater	6.62	Appendix A, Table A-3	1.15	**7.61**
215	Single Family (Attached)	6.62	Same as LUC 210	1.15	**7.61**
220	Multi-Family Housing (Low-Rise, 1-3 floors)	5.21	Appendix A, Table A-5	1.15	**5.99**
221/222	Multi-Family Housing (Mid/High-Rise, 4+ floors)	5.21	Appendix A, Table A-5	1.15	**5.99**
240	Mobile Home Park	4.60	Appendix A, Table A-6	1.15	**5.29**
251	Senior Adult Housing - Detached	5.42	Appendix A, Table A-7	1.15	**6.23**
252	Assisted Care Living Facility (ACLF)	4.34	Based on LUC 251 (adjusted)[2]	1.15	**4.99**
	LODGING:				
310	Hotel	6.26	Appendix A, Table A-10	1.15	**7.20**
320	Motel	4.34	Appendix A, Table A-11	1.15	**4.99**
	RECREATION:				
411	Public Park	5.15	Same as LUC 710	1.05	**5.41**
416	RV Park/Campground	4.60	Same as LUC 240	1.05	**4.83**
420	Marina	6.62	Same as LUC 210	1.05	**6.95**
430	Golf Course	6.62	Same as LUC 210	1.05	**6.95**
445	Movie Theater	2.22	Appedix A, Table A-12	1.05	**2.33**
492	Racquet Club/Health Spa	5.15	Same as LUC 710	1.05	**5.41**
495	Recreational Community Center	5.15	Same as LUC 710	1.05	**5.41**
	INSTITUTIONS:				
520	Elementary School (Private)	3.31	Based on LUC 210 (adjusted)[3]	1.05	**4.30**
522	Middle School (Private)	3.31	Based on LUC 210 (adjusted)[3]	1.05	**4.30**
525	High School (Private)	3.31	Based on LUC 210 (adjusted)[3]	1.05	**4.30**
540	University/Junior College (7,500 or fewer students) (Private)	6.62	Same as LUC 210	1.05	**6.95**
550	University/Junior College (more than 7,500 students) (Private)	6.62	Same as LUC 210	1.05	**6.95**
560	Church	3.93	Midpoint of LUC 710 & LUC 820 (Table A-20)	1.05	**4.13**
565	Day Care Center	2.03	Appendix A, Table A-13	1.05	**2.13**
590	Library	6.62	Same as LUC 210	1.05	**6.95**
	MEDICAL:				
610	Hospital	6.62	Same as LUC 210	1.05	**6.95**
620	Nursing Home	2.59	Appendix A, Table A-14	1.05	**2.72**
640	Animal Hospital/Veterinary Clinic	1.90	Appendix A, Table A-15	1.05	**2.00**
	OFFICE:				
710	Office	5.15	Appendix A, Table A-16	1.05	**5.41**
720	Medical Office/Clinic	5.55	Appendix A, Table A-18	1.05	**5.83**
770	Business Park	5.38	Appendix A, Table A-19	1.05	**5.65**
	RETAIL:				
822	Retail 6,000 sfgla or less	1.12	Appendix A: Fig. A-1 (6k sfgla)	1.05	**1.18**
822	Retail 6,001 to 40,000 sfgla	1.48	Appendix A: Fig. A-1 (19k sfgla)	1.05	**1.55**
821	Retail 40,001 to 150,000 sfgla	1.94	Appendix A: Fig. A-1 (59k sfgla)	1.05	**2.04**
820	Retail greater than 150,000 sfgla	2.80	Appendix A: Fig. A-1 (538k sfgla)	1.05	**2.94**
840/841	New/Used Auto Sales	4.60	Appendix A, Table A-21	1.05	**4.83**
850	Supermarket	2.08	Appendix A, Table A-22	1.05	**2.18**
862	Home Improvement Superstore	2.33	Appendix A: Fig. A-1 (135k sfgla)	1.05	**2.45**
880/881	Pharmacy/Drug Store with or w/o Drive-Thru	2.08	Appendix A, Table A-23	1.05	**2.18**
890	Furniture Store	6.09	Appendix A, Table A-24	1.05	**6.39**
	SERVICES:				
911	Bank/Savings Walk-In	2.46	Same as LUC 912	1.05	**2.58**
912	Bank/Savings Drive-In	2.46	Appendix A, Table A-25	1.05	**2.58**
931	Restaurant	3.14	Appendix A, Table A-26	1.05	**3.30**
n/a	Small Local Restaurant	2.05	Same as LUC 934 (Table A-27)	1.05	**2.15**
941	Quick Lube	3.62	Same as LUC 942	1.05	**3.80**
942	Automobile Care Center	3.62	Appendix A, Table A-28	1.05	**3.80**
944	Gas Station w/Convenience Store <2,000 sq ft	1.90	Appendix A, Table A-29	1.05	**2.00**

Table A-36 (continued)

Trip Length Adjustment Calculation

ITE LUC	Land Use	Base Trip Length	Trip Length Source	Trip Length Adjustment Factor	Assessable Trip Length[1]
	SERVICES:				
945	Gas Station w/Convenience Store 2,000 to 5,499 sq ft	1.90	Same as LUC 944	1.05	**2.00**
	Gas Station w/Convenience Store 5,500+ sq ft	1.90	Same as LUC 944	1.05	**2.00**
947	Self-Service Car Wash	2.18	Appendix A, Table A-30	1.05	**2.29**
948	Automated Car Wash	2.18	Same as LUC 947	1.05	**2.29**
	INDUSTRIAL:				
110	General Light Industrial	5.15	Same as LUC 710	1.05	**5.41**
140	Manufacturing	5.15	Same as LUC 710	1.05	**5.41**
150	Warehousing	5.15	Same as LUC 710	1.05	**5.41**
151	Mini-Warehouse	3.51	Midpoint of LUC 710 & LUC 820 (<50k sq ft)	1.05	**3.69**
154	High-Cube Transload and Short-Term Warehouse	5.15	Same as LUC 710	1.05	**5.41**
n/a	Mine/Commercial Excavation	14.82	Collier County Mines TCS Study, 2009	1.05	**15.56**

1) Assessable trip length calculated as (Base Trip Length * Trip Length Adjustment Factor)
2) The trip length was based on LUC 251 base trip length (5.42) but adjusted by the ratio of the single family (LUC 210) base trip length (6.62) to the multi-family (LUC 220) base trip length (5.21). Adj = 5.21 / 6.62 = 80%. TL = 80% × 5.42 = 4.34 (base TL)
3) The trip length for schools was estimated at 50% of the LUC 210 base trip length (6.62 / 2 = 3.31), based on travel demand modeling throughout Florida

Appendix B
Cost Component

Appendix B: Cost Component

This appendix presents detailed calculations for the cost component of the transportation impact fee update. Supporting data and estimates are provided for all cost variables, including:

- Design
- Right-of-Way
- Construction
- Construction Engineering/Inspection
- Roadway Capacity

Urban-Design vs. Rural-Design

Due to limited construction data for roadways with rural-design (open drainage) characteristics, the cost per lane mile for these types of roads was calculated using an adjustment factor. This factor was based on the rural-to-urban (curb & gutter) cost ratio from the most recent District 7 Long Range Estimates (LRE) provided by FDOT[2]. As shown in **Table B-1**, the costs for rural-design roadway capacity expansion (new road construction or lane addition) is approximately **76 percent** of the construction costs for urban-design roadway improvements.

Table B-1

Urban/Rural-Design Cost Factor

Improvement	Construction Cost per Lane Mile		
	Open Drainage Rural Design	Curb & Gutter Urban Design	Ratio
0-2 Lanes	$5,730,246	$8,819,029	65%
0-4 Lanes	$4,620,100	$6,191,312	75%
0-6 Lanes	$3,937,944	$5,027,827	78%
2-4 Lanes	$6,427,040	$7,810,495	82%
4-6 Lanes	$6,732,892	$8,426,464	80%
Average	**$5,489,644**	**$7,255,025**	**76%**

Source: FDOT District 7 Long Range Estimates, 2024; this data was not available for FDOT District 5

[2] This data was not available for FDOT District 5

Design

County Roadways

The design cost factor for county roads is estimated as a percentage of the construction cost per lane mile. This factor is determined based on a review of design-to-construction cost ratios from local future improvements and from other jurisdictions throughout Florida. As shown in **Table B-2**, design cost estimates for local planned improvements range from one (1) percent to 38 percent with a weighted average of 11 percent. As shown in **Table B-3**, the design factors for other communities throughout Florida ranged from six (6) percent to 14 percent with a weighted average of 11 percent. For purposes of this study, the design cost for county roads is estimated at **11 percent** of the construction cost per lane mile.

State Roadways

Similar to the county roads, the design cost factor for state roads is estimated as a percentage of the construction cost per lane mile. As shown in **Table B-3**, the design factors obtained from other Florida jurisdictions ranged from 10 percent to 11 percent with a weighted average of 11 percent. The design cost for state roads is estimated at **11 percent** of the construction cost per lane mile for impact fee calculation purposes.

Table B-2

Design Cost Factor for County Roads – Planned Improvements in Marion County

Road	Scope	Improv.	Length	Lanes Added	Lane Miles Added	Design	Construction/ CEI	Construction Only	Design-to-Construction Ratio
EMERALD RD EXTENSION	From SE 92nd Loop to Florida Northern Railroad	New 2-Lane	1.80	2	3.60	$200,000	$15,117,800	$13,757,198	1%
NW 49TH/35TH ST PH 3 (FKA 3A & 3B)	From NE 35th St to N End of Limerock Pit	New 4-Lane	3.40	4	13.60	$501,871	$27,329,248	$24,869,616	2%
SW 90TH ST	From SW 60th Ave to 0.8 mi E of SW 60th Ave	New 2-Lane	0.80	2	1.60	$450,000	$2,500,000	$2,275,000	20%
CR 484 WIDENING PH 1	From Marion Oaks Blvd to CR 475A	4 to 6 Lanes	1.80	2	3.60	$2,500,000	$12,540,000	$11,411,400	22%
MARION OAKS MANOR EXTENSION PH 1	From SW 49th Ave to Marion Oaks Ln	Add 2 Lanes	3.00	2	6.00	$3,243,095	$15,300,000	$13,923,000	23%
NE 35TH ST PH 2	From CR 200A to NE 25th Ave	Add 2 Lanes	1.20	2	2.40	$200,000	$6,000,000	$5,460,000	4%
NE 35TH ST PH 3	From NE 25th Ave to NE 36th Ave	Add 2 Lanes	1.00	2	2.00	$345,000	$5,000,000	$4,550,000	8%
NW 44TH AVE	From NW 63rd St to CR 326	Add 2 Lanes	1.40	2	2.80	$840,000	$8,200,000	$7,462,000	11%
NW 60TH AVE EXTENSION	From US 27 to NW 49th St	New 4-Lane	0.90	4	3.60	$720,000	$7,000,000	$6,370,000	11%
SW 38TH/40TH ST PH A	From SW 80th Ave to SW 60th Ave	Add 2 Lanes	1.90	2	3.80	$3,265,019	$20,000,000	$18,200,000	18%
SW 38TH/40TH ST PH B	From SW 60th Ave to SW 43rd Ct	Add 2 Lanes	1.90	2	3.80	$3,310,000	$9,500,000	$8,645,000	38%
SW 49TH AVE - NORTH	From Marion Oaks Trail to SW 95th St	New 4-Lane	3.40	4	13.60	$1,700,000	$36,000,000	$32,760,000	5%
SW 80TH AVE - SEGMENT 1	From SW 90th St to 1/2 mi N of SW 38th St	Add 2 Lanes	4.50	2	9.00	$3,174,630	$24,350,000	$22,158,500	14%
SW 80TH AVE - SEGMENT 2	From 0.5 mi N of SW 38th St to 0.25 mi S of SR 40	Add 2 Lanes	1.75	2	3.50	$1,300,000	$9,000,000	$8,190,000	16%
CR 484 WIDENING PH 2	From CR 475A to CR 475	4 to 6 Lanes	2.00	2	4.00	$800,000	$9,600,000	$8,736,000	9%
CR 484 WIDENING PH 3	From SR 200 to Marion Oaks Pass	Add 2 Lanes	5.30	2	10.60	$4,242,400	$45,000,000	$40,950,000	10%
SE 92ND LOOP EXTENSION	From US Hwy 441 to SE 36th Ave	New 2-Lane	0.50	2	1.00	$350,000	$2,500,000	$2,275,000	15%
NE 35TH ST PH 4	From NE 36th Ave to SR 40	Add 2 Lanes	2.60	2	5.20	$1,300,000	$13,000,000	$11,830,000	11%
CR 475	From SE 32nd St to SE 59th St	Add 2 Lanes	1.90	2	3.80	$1,320,000	$13,200,000	$12,012,000	11%
CR 35	From SR 40 to NE 35th St	Add 2 Lanes	0.40	2	0.80	$500,000	$3,900,000	$3,549,000	14%
CR 42 WIDENING	From SE 36th Ave to US 301	Add 2 Lanes	2.75	2	5.50	$1,650,000	$13,750,000	$12,512,500	13%
SW 60TH AVE	From SR 200 to N of US 27	4 to 6 Lanes	7.30	2	14.60	$4,380,000	$43,800,000	$39,858,000	11%
SE 92ND LOOP	From US Hwy 441 to SR 35	Add 2 Lanes	1.60	2	3.20	$984,000	$8,200,000	$7,462,000	13%
BANYAN RD EXTENSION	From Pecan Pass to Almond Rd	New 2-Lane	0.70	2	1.40	$500,000	$7,000,000	$6,370,000	8%
CR 42 WIDENING	From CR 475 to SE 36th Ave	Add 2 Lanes	2.00	2	4.00	$1,200,000	$10,000,000	$9,100,000	13%
SW 80TH ST	From SW 80th Ave to SR 200	Add 2 Lanes	1.50	2	3.00	$900,000	$9,000,000	$8,190,000	11%
SE MARICAMP RD	From SE 31st St to Midway Rd	4 to 6 Lanes	4.40	2	8.80	$3,062,000	$38,276,000	$34,831,160	9%
Total					**138.80**	**$42,938,015**	**$415,063,048**	**$377,707,374**	**11%**

Source: Marion County

Table B-3

Design Cost Factor for County & State Roads – Other Florida Jurisdictions

Year	County	County Roadways (Cost per Lane Mile)			State Roadways (Cost per Lane Mile)		
		Design	Constr.	Design Ratio	Design	Constr.	Design Ratio
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%
2017	St. Lucie	$220,000	$2,200,000	10%	$341,000	$3,100,000	11%
2017	Clay	$239,000	$2,385,000	10%	-	-	-
2019	Collier	$385,000	$3,500,000	11%	-	-	-
2019	Sumter	$315,000	$2,862,000	11%	$370,000	$3,365,000	11%
2020	Indian River	$291,000	$2,647,000	11%	$395,000	$3,593,000	11%
2020	Hillsborough	$484,000	$4,036,000	12%	$486,000	$4,421,000	11%
2020	Hernando	$232,000	$2,108,000	11%	$348,000	$3,163,000	11%
2021	Manatee	$308,000	$2,800,000	11%	-	-	-
2021	Flagler	$258,000	$2,582,000	10%	-	-	-
2022	Lake	$215,000	$2,145,000	10%	-	-	-
2022	Volusia	$188,000	$2,350,000	8%	-	-	-
2023	Manatee	$546,000	$3,900,000	14%	-	-	-
2024	Hendry	$220,000	$2,000,000	11%	$440,000	$4,000,000	11%
2024	St. Johns	$257,000	$2,573,000	10%	$381,000	$3,812,000	10%
	Average	**$272,000**	**$2,547,000**	**11%**	**$337,000**	**$3,108,000**	**11%**

Source: Each respective jurisdiction

Right-of-Way

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

County Roadways

For impact fee purposes, the ROW cost for county roads is 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 from estimates for future local improvements and from other jurisdictions throughout Florida.

As shown in **Table B-4**, estimated costs for local planned improvements indicate ROW cost ratios ranging from three (3) percent to 132 percent with a weighted average of 45 percent. As shown in **Table B-5**, the ROW-to-construction factors from other jurisdictions range from 10 percent to 60 percent with an average of 35 percent.

Based on a review of these data sets and discussions with Marion County staff, ROW costs were estimated at approximately **40 percent** of the construction costs. This midpoint considers the wide range of ROW cost ratios and provides a conservative estimate for the impact fee calculation.

State Roadways

Similar to county roads, the ROW cost for state roads was estimated as a percentage of the construction cost per lane mile. As shown in **Table B-5**, the ROW-to-construction factor for state roads in other jurisdictions ranged from 20 percent to 60 percent with a weighted average of 38 percent.

Based on a review of this data set and discussions with Marion County staff, it was estimated that the county roadway factor of **40 percent** of construction would also be representative of the ROW cost for state roads.

Table B-4

Right-of-Way Cost Factor for County Roads – Planned Improvements in Marion County

Road	Scope	Improv.	Length	Lanes Added	Lane Miles Added	ROW	Construction/ CEI	Construction Only	ROW-to-Construction Ratio
EMERALD RD EXTENSION	From SE 92nd Loop to Florida Northern Railroad	New 2-Lane	1.80	2	3.60	$4,717,819	$15,117,800	$13,757,198	34%
NW 49TH/35TH ST PH 3 (FKA 3A & 3B)	From NE 35th St to N End of Limerock Pit	New 4-Lane	3.40	4	13.60	$8,088,214	$27,329,248	$24,869,616	33%
SW 90TH ST	From SW 60th Ave to 0.8 mi E of SW 60th Ave	New 2-Lane	0.80	2	1.60	$70,000	$2,500,000	$2,275,000	3%
CR 484 WIDENING PH 1	From Marion Oaks Blvd to CR 475A	4 to 6 Lanes	1.80	2	3.60	$14,040,000	$12,540,000	$11,411,400	123%
MARION OAKS MANOR EXTENSION PH 1	From SW 49th Ave to Marion Oaks Ln	Add 2 Lanes	3.00	2	6.00	$7,500,000	$15,300,000	$13,923,000	54%
NE 35TH ST PH 2	From CR 200A to NE 25th Ave	Add 2 Lanes	1.20	2	2.40	$2,072,211	$6,000,000	$5,460,000	38%
NE 35TH ST PH 3	From NE 25th Ave to NE 36th Ave	Add 2 Lanes	1.00	2	2.00	$3,500,000	$5,000,000	$4,550,000	77%
NW 44TH AVE	From NW 63rd St to CR 326	Add 2 Lanes	1.40	2	2.80	$700,000	$8,200,000	$7,462,000	9%
NW 60TH AVE EXTENSION	From US 27 to NW 49th St	New 4-Lane	0.90	4	3.60	$2,250,000	$7,000,000	$6,370,000	35%
SW 38TH/40TH ST PH A	From SW 80th Ave to SW 60th Ave	Add 2 Lanes	1.90	2	3.80	$5,308,086	$20,000,000	$18,200,000	29%
SW 38TH/40TH ST PH B	From SW 60th Ave to SW 43rd Ct	Add 2 Lanes	1.90	2	3.80	$6,390,000	$9,500,000	$8,645,000	74%
SW 49TH/40TH AVE PH 1	From SW 66th St to SW 42nd St	New 4-Lane	1.70	4	6.80	$1,036,961	$18,095,153	$16,466,589	6%
SW 49TH AVE - NORTH	From Marion Oaks Trail to SW 95th St	New 4-Lane	3.40	4	13.60	$11,898,513	$36,000,000	$32,760,000	36%
SW 80TH AVE - SEGMENT 1	From SW 90th St to 1/2 mi N of SW 38th St	Add 2 Lanes	4.50	2	9.00	$6,091,140	$24,350,000	$22,158,500	27%
SW 80TH AVE - SEGMENT 2	From 0.5 mi N of SW 38th St to 0.25 mi S of SR 40	Add 2 Lanes	1.75	2	3.50	$6,300,000	$9,000,000	$8,190,000	77%
NW 80TH/70TH AVE - SEGMENT 3	From SR 40 to US 27	Add 2 Lanes	3.76	2	7.52	$7,462,578	$24,087,055	$21,919,220	34%
CR 484 WIDENING PH 2	From CR 475A to CR 475	4 to 6 Lanes	2.00	2	4.00	$2,000,000	$9,600,000	$8,736,000	23%
CR 484 WIDENING PH 3	From SR 200 to Marion Oaks Pass	Add 2 Lanes	5.30	2	10.60	$13,500,000	$45,000,000	$40,950,000	33%
SE 92ND LOOP EXTENSION	From US Hwy 441 to SE 36th Ave	New 2-Lane	0.50	2	1.00	$3,000,000	$2,500,000	$2,275,000	132%
NE 35TH ST PH 4	From NE 36th Ave to SR 40	Add 2 Lanes	2.60	2	5.20	$7,800,000	$13,000,000	$11,830,000	66%
CR 475	From SE 32nd St to SE 59th St	Add 2 Lanes	1.90	2	3.80	$6,600,000	$13,200,000	$12,012,000	55%
CR 35	From SR 40 to NE 35th St	Add 2 Lanes	0.40	2	0.80	$2,000,000	$3,900,000	$3,549,000	56%
CR 42 WIDENING	From SE 36th Ave to US 301	Add 2 Lanes	2.75	2	5.50	$6,875,000	$13,750,000	$12,512,500	55%
SW 60TH AVE	From SR 200 to N of US 27	4 to 6 Lanes	7.30	2	14.60	$26,280,000	$43,800,000	$39,858,000	66%
SE 92ND LOOP	From US Hwy 441 to SR 35	Add 2 Lanes	1.60	2	3.20	$5,500,000	$8,200,000	$7,462,000	74%
BANYAN RD EXTENSION	From Pecan Pass to Almond Rd	New 2-Lane	0.70	2	1.40	$5,000,000	$7,000,000	$6,370,000	78%
CR 42 WIDENING	From CR 475 to SE 36th Ave	Add 2 Lanes	2.00	2	4.00	$5,000,000	$10,000,000	$9,100,000	55%
SW 80TH ST	From SW 80th Ave to SR 200	Add 2 Lanes	1.50	2	3.00	$450,000	$9,000,000	$8,190,000	5%
SE MARICAMP RD	From SE 31st St to Midway Rd	4 to 6 Lanes	4.40	2	8.80	$17,160,000	$38,276,000	$34,831,160	49%
Total					**153.12**	**$188,590,522**	**$457,245,256**	**$416,093,183**	**45%**

Source: Marion County

Table B-5

ROW Cost Factor for County & State Roads – Other Florida Jurisdictions

Year	County	County Roadways (Cost per Lane Mile)			State Roadways (Cost per Lane Mile)		
		ROW	Constr.	ROW Ratio	ROW	Constr.	ROW Ratio
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%
2017	St. Lucie	$990,000	$2,200,000	45%	$1,395,000	$3,100,000	45%
2017	Clay	$954,000	$2,385,000	40%	-	-	-
2018	Collier	$1,208,000	$3,500,000	35%	$1,208,000	$3,500,000	35%
2019	Sumter	$1,202,000	$2,862,000	42%	$1,447,000	$3,365,000	43%
2020	Indian River	$529,000	$2,647,000	20%	$718,000	$3,593,000	20%
2020	Hillsborough	$1,448,000	$2,897,000	50%	$1,448,000	$2,897,000	50%
2020	Hernando	$844,000	$2,108,000	40%	$1,265,000	$3,163,000	40%
2021	Manatee	$1,120,000	$2,800,000	40%	-	-	-
2021	Flagler	$258,000	$2,582,000	10%	-	-	-
2022	Lake	$1,073,000	$2,145,000	50%	-	-	-
2022	Volusia	$470,000	$2,350,000	20%	-	-	-
2023	Manatee	$741,000	$3,900,000	19%	-	-	-
2023	Marion	$840,000	$2,400,000	35%	$1,190,000	$3,400,000	35%
2024	Hendry	$400,000	$2,000,000	20%	$800,000	$4,000,000	20%
2024	St. Johns	$900,000	$2,573,000	35%	$1,335,000	$3,812,000	35%
Average		**$851,000**	**$2,438,000**	**35%**	**$1,143,000**	**$3,046,000**	**38%**

Source: Each respective jurisdiction

Construction

County Roads

The construction cost for county roads (curb & gutter, urban section design) was based on recent local projects, local estimates, and the cost of recent projects in other jurisdictions in Florida. A review of local construction cost data from recent years identified three improvements:

- SW 49th Ave (South Seg. A & E) from 0.7 miles S. of CR 484 to Marion Oaks Trail
- FL Crossroads Commerce Park Rd from S. terminus to Hwy 484
- CR 484 from Marion Oaks Pass to Marion Oaks Course

Costs for these local improvements ranged from $1.2 million per lane mile to $2.2 million per lane mile with a weighted average cost of $1.5 million per lane mile, as shown in **Table B-6**. This figure increases to approximately $2.4 million per lane mile when indexed, which is explained further later in this section.

Estimates for the planned projects in Marion County were also reviewed. As shown in **Table B-7**, these include 29 future improvements ranging from $1.4 million per lane mile to $4.8 million per lane mile with a weighted average construction cost of $2.7 million per lane mile.

In addition to local improvements, a review of recently bid projects throughout Florida was conducted. As shown in **Table B-8**, a total of 46 projects from 15 different counties were identified with a weighted average cost of approximately $3.6 million per lane mile (all improvements have urban-design characteristics). From this dataset, the counties that are more suburban/rural in nature (similar to Marion County) were separated. This subset of suburban/rural counties had a weighted average construction cost of $3.0 million per lane mile. This subset was then furthered narrowed to only include improvements since 2020, which resulted in a construction cost to $3.3 million per lane mile

Construction Indexing Analysis

In addition to the review of local and statewide roadway construction improvements, several cost indices were reviewed, including:

- Producer Price Index (PPI) for Highway & Street Construction
- National Highway Construction Cost Index

This review focused on the construction cost increases over the last five years (2020 to 2024), where many jurisdictions in Florida experienced a significant increase in roadway construction costs. These indices ranged from a 42 percent increase to a 66 percent increase, with an average of approximately **54 percent**. When applied to the local project costs from Table B-6, the average construction cost per lane mile increases from $1.6 million to $2.4 million per lane mile.

Based on a review of the local project costs, local cost estimates, and cost of statewide projects, a construction cost of **$2.7 million per lane mile** for county roads (curb & gutter) was utilized in the impact fee calculations. This figure is slightly above the indexed local improvements but is consistent with the estimates for planned projects in Marion County and conservative compared to recent improvements throughout Florida, providing a reasonable estimate for impact fee calculation purposes.

Table B-6

Local Roadway Construction Costs – Recent County Road Improvements in Marion County

ID	On	From	To	Improvement	Bid Year	Length	Lanes Added	Lane Miles Added	Curb & Gutter vs Open Drainage	Construction/ CEI Cost	Construction Cost	Construction Cost per Lane Mile	Construction Cost (Indexed)[1]	Construction Cost per Lane Mile
Recent Projects														
TIP077251	SW 49th Ave - South Seg. A & E	0.7 mi S of CR 484	Marion Oaks Tr	New 4-Ln Rd	FY 2020	1.38	4	5.52	Curb & Gutter	$7,310,158	$6,652,244	**$1,205,000**	$10,244,000	**$1,856,000**
TIP077701	FL Crossroads Commerce Park Rd	S Terminus	Hwy 484	New 2-Ln Rd	FY 2020	1.10	2	2.20	Curb & Gutter	$3,515,279	$3,198,904	**$1,454,000**	$4,926,000	**$2,239,000**
TIP077733	CR 484	Marion Oaks Pass	Marion Oaks Course	2 to 4 Lanes	FY 2020	1.50	2	3.00	Curb & Gutter	$7,401,206	$6,735,097	**$2,245,000**	$10,372,000	**$3,457,000**
Total								**10.72**			**$16,586,245**	**$1,547,000**	**$25,542,000**	**$2,383,000**

Source: Marion County

1) Figures reflect 54% increase based on PPI, and NHCCI indices

Table B-7

Local Roadway Construction Costs – Planned Improvements in Marion County

Road	Scope	Improv.	Length	Lanes Added	Lane Miles Added	Construction/ CEI	Construction Only	Constr. CpLM
EMERALD RD EXTENSION	From SE 92nd Loop to Florida Northern Railroad	New 2-Lane	1.80	2	3.60	$15,117,800	$13,757,198	$3,821,444
NW 49TH/35TH ST PH 3 (FKA 3A & 3B)	From NE 35th St to N End of Limerock Pit	New 4-Lane	3.40	4	13.60	$27,329,248	$24,869,616	$1,828,648
SW 90TH ST	From SW 60th Ave to 0.8 mi E of SW 60th Ave	New 2-Lane	0.80	2	1.60	$2,500,000	$2,275,000	$1,421,875
CR 484 WIDENING PH 1	From Marion Oaks Blvd to CR 475A	4 to 6 Lanes	1.80	2	3.60	$12,540,000	$11,411,400	$3,169,833
MARION OAKS MANOR EXTENSION PH 1	From SW 49th Ave to Marion Oaks Ln	Add 2 Lanes	3.00	2	6.00	$15,300,000	$13,923,000	$2,320,500
NE 35TH ST PH 2	From CR 200A to NE 25th Ave	Add 2 Lanes	1.20	2	2.40	$6,000,000	$5,460,000	$2,275,000
NE 35TH ST PH 3	From NE 25th Ave to NE 36th Ave	Add 2 Lanes	1.00	2	2.00	$5,000,000	$4,550,000	$2,275,000
NW 44TH AVE	From NW 63rd St to CR 326	Add 2 Lanes	1.40	2	2.80	$8,200,000	$7,462,000	$2,665,000
NW 60TH AVE EXTENSION	From US 27 to NW 49th St	New 4-Lane	0.90	4	3.60	$7,000,000	$6,370,000	$1,769,444
SW 38TH/40TH ST PH A	From SW 80th Ave to SW 60th Ave	Add 2 Lanes	1.90	2	3.80	$20,000,000	$18,200,000	$4,789,474
SW 38TH/40TH ST PH B	From SW 60th Ave to SW 43rd Ct	Add 2 Lanes	1.90	2	3.80	$9,500,000	$8,645,000	$2,275,000
SW 49TH/40TH AVE PH 1	From SW 66th St to SW 42nd St	New 4-Lane	1.70	4	6.80	$18,095,153	$16,466,589	$2,421,557
SW 49TH AVE - NORTH	From Marion Oaks Trail to SW 95th St	New 4-Lane	3.40	4	13.60	$36,000,000	$32,760,000	$2,408,824
SW 80TH AVE - SEGMENT 1	From SW 90th St to 1/2 mi N of SW 38th St	Add 2 Lanes	4.50	2	9.00	$24,350,000	$22,158,500	$2,462,056
SW 80TH AVE - SEGMENT 2	From 0.5 mi N of SW 38th St to 0.25 mi S of SR 40	Add 2 Lanes	1.75	2	3.50	$9,000,000	$8,190,000	$2,340,000
NW 80TH/70TH AVE - SEGMENT 3	From SR 40 to US 27	Add 2 Lanes	3.76	2	7.52	$24,087,055	$21,919,220	$2,914,790
CR 484 WIDENING PH 2	From CR 475A to CR 475	4 to 6 Lanes	2.00	2	4.00	$9,600,000	$8,736,000	$2,184,000
CR 484 WIDENING PH 3	From SR 200 to Marion Oaks Pass	Add 2 Lanes	5.30	2	10.60	$45,000,000	$40,950,000	$3,863,208
SE 92ND LOOP EXTENSION	From US Hwy 441 to SE 36th Ave	New 2-Lane	0.50	2	1.00	$2,500,000	$2,275,000	$2,275,000
NE 35TH ST PH 4	From NE 36th Ave to SR 40	Add 2 Lanes	2.60	2	5.20	$13,000,000	$11,830,000	$2,275,000
CR 475	From SE 32nd St to SE 59th St	Add 2 Lanes	1.90	2	3.80	$13,200,000	$12,012,000	$3,161,053
CR 35	From SR 40 to NE 35th St	Add 2 Lanes	0.40	2	0.80	$3,900,000	$3,549,000	$4,436,250
CR 42 WIDENING	From SE 36th Ave to US 301	Add 2 Lanes	2.75	2	5.50	$13,750,000	$12,512,500	$2,275,000
SW 60TH AVE	From SR 200 to N of US 27	4 to 6 Lanes	7.30	2	14.60	$43,800,000	$39,858,000	$2,730,000
SE 92ND LOOP	From US Hwy 441 to SR 35	Add 2 Lanes	1.60	2	3.20	$8,200,000	$7,462,000	$2,331,875
BANYAN RD EXTENSION	From Pecan Pass to Almond Rd	New 2-Lane	0.70	2	1.40	$7,000,000	$6,370,000	$4,550,000
CR 42 WIDENING	From CR 475 to SE 36th Ave	Add 2 Lanes	2.00	2	4.00	$10,000,000	$9,100,000	$2,275,000
SW 80TH ST	From SW 80th Ave to SR 200	Add 2 Lanes	1.50	2	3.00	$9,000,000	$8,190,000	$2,730,000
SE MARICAMP RD	From SE 31st St to Midway Rd	4 to 6 Lanes	4.40	2	8.80	$38,276,000	$34,831,160	$3,958,086
Total					**153.12**	**$457,245,256**	**$416,093,183**	**$2,717,432**

Source: Marion County

Table B-8

Construction Cost – County Road Improvements from Other Florida Jurisdictions

County	County Classification	District	Description	From	To	Year	Feature	Design	Length	Lanes Added	Lane Miles Added	Construction Cost	Construction Cost per Lane Mile
URBAN Counties; Curb & Gutter													
Orange	Urban	5	CR 535 Seg. F	Overstreet Rd	Fossick Rd	2014	2 to 4	Curb & Gutter	0.60	2	1.20	$3,263,746	$2,719,788
Hillsborough	Urban	7	Boyette Rd, Ph. III	Donneymoor Dr	Bell Shoals Rd	2014	2 to 4	Curb & Gutter	1.84	2	3.68	$25,720,068	$6,989,149
Orange	Urban	5	International Dr	Westwood Blvd	Westwood Blvd	2015	4 to 6	Curb & Gutter	2.20	2	4.40	$16,775,875	$3,812,699
Orange	Urban	5	Reams Rd	Delmar Ave	Taborfield Ave	2017	2 to 4	Curb & Gutter	0.36	2	0.72	$3,409,584	$4,735,533
Orange	Urban	5	Destination Pkwy 1B/2A	Tradeshow Blvd	Lake Cay	2017	2 to 4	Curb & Gutter	0.78	2	1.56	$6,110,403	$3,916,925
Hillsborough	Urban	7	Bruce B. Downs Blvd, Seg. A	Bearss Ave	Palm Springs Blvd	2017	4 to 8	Curb & Gutter	3.56	4	14.24	$37,155,153	$2,609,210
Hillsborough	Urban	7	Bruce B. Downs Blvd, Seg. D	Pebble Creek Dr	Pasco Co. Line	2018	4 to 8	Curb & Gutter	1.36	4	5.44	$17,755,778	$3,263,930
Hillsborough	Urban	7	CR 580 (Sam Allen Rd)	SR 39A (Paul Buchman Hwy)	Park Rd	2018	2 to 4	Curb & Gutter	2.00	2	4.00	$23,200,000	$5,800,000
Palm Beach	Urban	4	Roebuck Rd	Jog Rd	Haverhill Rd	2018	2 to 5	Curb & Gutter	1.03	3	3.10	$5,154,028	$1,662,590
Palm Beach	Urban	4	Lyons Rd	Clint Moore Rd	N of LWDD L-39 Canal	2018	2 to 4	Curb & Gutter	0.70	2	1.40	$3,163,022	$2,259,301
Orange	Urban	5	Holden Ave	John Young Pkwy	Orange Blossom Tr	2019	0/2 to 4	Curb & Gutter	1.24	2/4	3.50	$18,798,771	$5,371,077
Orange	Urban	5	Boggy Creek Rd N	South Access Rd	Wetherbee Rd	2019	2 to 4	Curb & Gutter	1.29	2	2.58	$8,585,774	$3,327,819
Palm Beach	Urban	4	Hood Rd	E. of FL Turnpike	W. of Central Blvd	2019	2 to 4	Curb & Gutter	0.95	2	1.90	$12,686,954	$6,677,344
Palm Beach	Urban	4	Silver Beach Rd	E. of Congress Ave	Old Dixie/Pre. Barack Obama Hwy	2019	2 to 3	Curb & Gutter	0.90	1	0.90	$4,478,355	$4,975,950
Hillsborough	Urban	7	19th Ave NE	US 41	US 301	2019	2 to 4	Curb & Gutter	6.08	2	12.16	$67,919,173	$5,585,458
Hillsborough	Urban	7	Big Bend Rd	US 41/Simmons Loop	Covington Gardens Dr/US Hwy 301	2019	4 to 6	Curb & Gutter	1.75	2	3.50	$48,417,488	$13,833,568
Total (2014-2023); Urban Counties ONLY									**Count:**	**16**	**64.28**	**$302,594,172**	**$4,707,000**
SUBURBAN/RURAL Counties; Curb & Gutter													
Collier	Suburban/Rural	1	Golden Gate Blvd	Wilson Blvd	Desoto Blvd	2014	2 to 4	Curb & Gutter	2.40	2	4.80	$16,003,504	$3,334,063
Brevard	Suburban/Rural	5	St. Johns Heritage Pkwy	SE of I-95 Intersection	US 192 (Space Coast Pkwy)	2014	0 to 2	Curb & Gutter	3.11	2	6.22	$16,763,567	$2,695,107
Sarasota	Suburban/Rural	1	Bee Ridge Rd	Mauna Loa Blvd	Iona Rd	2014	2 to 4	Curb & Gutter	2.68	2	5.36	$14,066,523	$2,624,351
St. Lucie	Suburban/Rural	4	W Midway Rd (CR 712)	Selvitz Rd	25th St	2014	2 to 4	Curb & Gutter	1.00	2	2.00	$15,359,926	$7,679,963
Lake	Suburban/Rural	5	N. Hancock Rd Ext.	Old 50	Gatewood Dr	2014	0/2 to 4	Curb & Gutter	1.50	2/4	5.00	$8,185,574	$1,637,115
Polk	Suburban/Rural	1	CR 655 & CR 559A	Pace Rd & N of CR 559A	N. of CR 559A & SR 599	2014	2 to 4	Curb & Gutter	2.60	2	5.20	$10,793,552	$2,075,683
Volusia	Suburban/Rural	5	Howland Blvd	Courtland Blvd	N. of SR 415	2014	2 to 4	Curb & Gutter	2.08	2	4.16	$11,110,480	$2,670,788
Polk	Suburban/Rural	1	Ernie Caldwell Blvd	Pine Tree Tr	US 17/92	2015	0 to 4	Curb & Gutter	2.41	4	9.64	$19,535,391	$2,026,493
Flagler	Suburban/Rural	5	Old Kings Rd Ext.	Forest Grove Dr	Matanzas Woods Pkwy	2015	0 to 4	Curb & Gutter	0.52	4	2.08	$4,831,579	$2,322,875
Manatee	Suburban/Rural	1	44th Ave E	15th St E	19th St Ct E	2015	2 to 4	Curb & Gutter	0.45	2	0.90	$5,454,438	$6,060,487
Hendry	Suburban/Rural	1	Helms Rd Ext.	SR 29	SR 80	2015	0 to 4	Curb & Gutter	2.60	4	10.40	$14,678,000	$1,411,346
Volusia	Suburban/Rural	5	LPGA Blvd	Jimmy Ann Dr/Grand Reserve	Derbyshire Rd	2016	2 to 4	Curb & Gutter	0.68	2	1.36	$3,758,279	$2,763,440
St. Lucie	Suburban/Rural	4	W Midway Rd (CR 712)	25th St	US 1	2016	2 to 4	Curb & Gutter	1.60	2	3.20	$31,483,319	$9,838,537
Lake	Suburban/Rural	5	CR 466A, Ph. I	US 27/441	Sunny Ct	2016	2 to 4	Curb & Gutter	0.44	2	0.88	$3,237,561	$3,679,047
Manatee	Suburban/Rural	1	44th Ave E	19th St Ct E	30th St E	2016	0 to 4	Curb & Gutter	0.90	4	3.60	$11,763,178	$3,267,549
Lake	Suburban/Rural	5	CR 466A, Ph. IIIA	Poinsettia Ave	Century Ave	2018	2 to 4	Curb & Gutter	0.42	2	0.84	$3,368,889	$4,010,582
Volusia	Suburban/Rural	5	Williamson Blvd	LPGA Blvd	Strickland Range Rd	2019	2 to 4	Curb & Gutter	0.93	2	1.86	$4,951,165	$2,661,917
Lake	Suburban/Rural	5	North Hancock Rd	CR 561A	Minneola Interchange	2018	0 to 2	Curb & Gutter	1.20	2	2.40	$2,902,256	$1,209,273
Lee	Suburban/Rural	1	Alico Rd	Ben Hill Griffin Pkwy	E. of Airport Haul Rd	2018	2 to 4	Curb & Gutter	1.78	2	3.56	$18,062,562	$5,073,753
Lee	Suburban/Rural	1	Homestead Rd	S. of Sunrise Blvd	N. of Alabama Rd	2018	2 to 4	Curb & Gutter	2.25	2	4.50	$14,041,919	$3,120,426
Lake	Suburban/Rural	5	Citrus Grove Rd, Ph. I	W. of Grassy Lake Rd	Hancock Rd	2019	0 to 4	Curb & Gutter	0.87	4	3.48	$5,751,614	$1,652,763
Lake	Suburban/Rural	5	Education Ave	Grassy Lake Rd	US 27	2019	0 to 2	Curb & Gutter	1.22	2	2.44	$3,324,769	$1,362,610
Hernando	Suburban/Rural	7	Cortez Blvd Frontage Rd @ I-75			2020	0 to 2	Curb & Gutter	0.62	2	1.24	$2,064,688	$1,665,071
Volusia	Suburban/Rural	5	Howland Blvd	Providence Blvd	Elkcam Blvd	2020	2 to 4	Curb & Gutter	2.38	2	4.76	$11,290,456	$2,371,945
Volusia	Suburban/Rural	5	Orange Camp Rd	MLK Blvd	I-4	2020	2 to 4	Curb & Gutter	2.23	2	4.46	$8,741,920	$1,960,072
Volusia	Suburban/Rural	5	10th St	Myrtle Ave	US-1	2020	0/2 to 4	Curb & Gutter	0.47	2/4	1.42	$9,456,399	$6,659,436
Lake	Suburban/Rural	5	Citrus Grove Rd, Ph. III	US 27	Scrub Jay Ln	2020	2 to 4	Curb & Gutter	0.81	2	1.62	$6,434,819	$3,972,110
Manatee	Suburban/Rural	1	Ft Hamer Rd	US 301	69th St E	2021	0 to 4	Curb & Gutter	0.75	4	3.00	$11,637,711	$3,879,237
Manatee	Suburban/Rural	1	44th Ave E	44th Ave Plaza E	Lakewood Ranch Blvd	2023	0 to 4	Curb & Gutter	2.50	4	10.00	$29,809,786	$2,980,979
Manatee	Suburban/Rural	1	Moccasin Wallow Rd	W of 115th Ave E	US 301	2023	2 to 4	Curb & Gutter	1.30	2	2.60	$16,647,973	$6,403,067
Total (2014-2023); Suburban/Rural Counties ONLY									**Count:**	**30**	**112.98**	**$335,511,797**	**$2,970,000**
Total (2020-2023); Suburban/Rural Counties ONLY									**Count:**	**8**	**29.10**	**$96,083,752**	**$3,302,000**
URBAN & SUBURBAN/RURAL Counties; Curb & Gutter													
Total (2014-2023); Urban & Suburban/Rural Counties									**Count:**	**46**	**177.26**	**$638,105,969**	**$3,600,000**

Source: Data obtained from each respective county (Building and Public Works Departments)

State Roads

The construction cost for state roads (curb & gutter, urban section design) was based primarily on the cost of local recent projects/estimates, projects in other communities in Florida and an adjustment based on information from the 2015 Marion County Transportation Impact Fee Update Study.

The construction cost for state roads (curb & gutter, urban section design) was based on recent local projects, local estimates, and the cost of recent projects in other jurisdictions in Florida. A review of local construction cost data from recent years identified three improvements:

- SR 35 (Baseline Rd) from SE 96th Place Rd to SR 464 (SE Maricamp Rd) (2015)
- SR 40 from E. of CR 314 to E. of CR 314A (planned project)
- SR 40 from E. of CR 314A to Levy Hammock Rd (planned project)

Costs for these local improvements ranged from $2.7 million to $8.0 million per lane mile with a weighted average cost of $5.1 million per lane mile, as shown in **Table B-9**.

As shown in **Table B-10**, a total of 67 projects from 33 different counties were identified with a weighted average cost of approximately $4.4 million per lane mile (all improvements have urban-design characteristics). From this dataset, the counties that are more suburban/rural in nature (similar to Marion) were separated. This subset of suburban/rural counties had a weighted average construction cost of $4.5 million per lane mile. When looking at more recent improvements (2017+), the average construction cost increase to $5.1 million per lane mile.

Based on these data sets, the state road construction cost was estimated at approximately $5.0 million per lane mile. Given the limited local data available, data from the 2015 Marion County TIF Update Study was also reviewed. In that report, local state road improvements averaged $2.1 million per lane mile while the statewide database at the time averaged $2.7 million per lane mile. Therefore, the local Marion County improvements were approximately 80 percent of the costs of statewide improvements. Through a review of the local and statewide estimates, this ratio was applied to the current cost of state projects (app. $5.0 million), resulting in **$4.0 million per lane mile** ($5.0 M from B-10 × 80%) for state roads (curb & gutter).

Table B-9

Local Roadway Construction Costs – Recent/Planned State Road Improvements in Marion County

ID	On	From	To	Improvement	Construction Year	Length	Lanes Added	Lane Miles Added	Construction Cost	Construction Cost per Lane Mile
238693-1	SR 35 (Baseline Rd)	SE 96th Place Rd	SR 464 (SE Maricamp Rd)	2 to 4 Lanes	2015	3.75	2	7.50	$20,430,000	**$2,724,000**
410674-3	SR 40	E. of CR 314	E. of CR 314A	2 to 4 Lanes	TBD	6.14	2	12.28	$65,100,000	**$5,301,000**
410674-4	SR 40	E. of CR 314A	Levy Hammock Rd	2 to 4 Lanes	TBD	2.66	2	5.32	$42,800,000	**$8,045,000**
Total								**25.10**	**$128,330,000**	**$5,113,000**

Source: Florida Department of Transportation

Table B-10

Construction Cost – State Road Improvements from Other Florida Jurisdictions

County	County Classification	District	Description	From	To	Year	Feature	Design	Length	Lanes Added	Lane Miles Added	Construction Cost	Construction Cost per Lane Mile
URBAN Counties; Curb & Gutter													
Broward	Urban	4	SR 7 (US 441)	N. of Hallandale Beach	N. of Fillmore St	2014	4 to 6	Curb & Gutter	1.79	2	3.58	$30,674,813	$8,568,384
Broward	Urban	4	Andrews Ave Ext.	Pompano Park Place	S. of Atlantic Blvd	2014	2 to 4	Curb & Gutter	0.36	2	0.72	$3,177,530	$4,413,236
Miami-Dade	Urban	6	SR 823/NW 57th Ave	W. 65th St	W. 84th St	2014	4 to 6	Curb & Gutter	1.00	2	2.00	$17,896,531	$8,948,266
Miami-Dade	Urban	6	SR 823/NW 57th Ave	W. 53rd St	W. 65th St	2014	4 to 6	Curb & Gutter	0.78	2	1.56	$14,837,466	$9,511,196
Orange	Urban	5	SR 50	SR 429 (Western Beltway)	E. of West Oaks Mall	2014	4 to 6	Curb & Gutter	2.56	2	5.12	$34,275,001	$6,694,336
Orange	Urban	5	SR 15 (Hofner Rd)	Lee Vista Blvd	Conway Rd	2015	2 to 4	Curb & Gutter	3.81	2	7.62	$37,089,690	$4,867,413
Miami-Dade	Urban	6	SR 977/Krome Ave/SW 177th Ave	S of SW 136th St	S. of SR 94 (SW 88th St/Kendall Dr)	2016	0 to 4	Curb & Gutter	3.50	4	14.00	$32,129,013	$2,294,930
Broward	Urban	4	SW 30th Ave	Griffin Rd	SW 45th St	2016	2 to 4	Curb & Gutter	0.24	2	0.48	$1,303,999	$2,716,665
Hillsborough	Urban	7	SR 43 (US 301)	SR 674	S. of CR 672 (Balm Rd)	2016	2 to 6	Curb & Gutter	3.77	4	15.08	$43,591,333	$2,890,672
Miami-Dade	Urban	6	NW 87th Ave/SR 25 & SR 932	NW 74th St	NW 103rd St	2016	0 to 4	Curb & Gutter	1.93	4	7.72	$28,078,366	$3,637,094
Hillsborough	Urban	7	SR 60 (Adamo Dr)	E of US 301	W of Falkenburg Rd	2017	4 to 6	Curb & Gutter	0.96	2	1.92	$21,100,000	$10,989,583
Hillsborough	Urban	7	US 301	Sun City Center Blvd	Balm Rd	2017	2 to 6	Curb & Gutter	3.80	4	15.20	$50,800,000	$3,342,105
Orange	Urban	5	SR 423 (John Young Pkwy)	SR 50 (Colonial Dr)	Shader Rd	2017	4 to 6	Curb & Gutter	2.35	2	4.70	$27,752,000	$5,904,681
Palm Beach	Urban	4	SR 80	W. of Lion County Safari Rd	Forest Hill Blvd	2018	4 to 6	Curb & Gutter	7.20	2	14.40	$32,799,566	$2,277,748
Miami-Dade	Urban	6	SR 847 (NW 47th Ave)	SR 860 (NW 183rd St)	N. of NW 199th St	2018	2 to 4	Curb & Gutter	1.31	2	2.62	$18,768,744	$7,163,643
Miami-Dade	Urban	6	SR 847 (NW 47th Ave)	N. of NW 199th St and S of NW 203 St	Premier Pkwy and N of S Snake CR Canal	2018	2 to 4	Curb & Gutter	1.09	2	2.18	$10,785,063	$4,947,277
Orange	Urban	5	SR 414 (Maitland Blvd)	E. of I-4	E. of CR 427 (Maitland Ave)	2018	4 to 6	Curb & Gutter	1.39	2	2.78	$7,136,709	$2,567,162
Miami-Dade	Urban	6	SR 997 (Krome Ave)	SW 312 St	SW 232nd St	2019	2 to 4	Curb & Gutter	3.64	2	7.28	$30,374,141	$4,172,272
Miami-Dade	Urban	6	SR 25 (Okeechobee Rd)	Broward Co. Line	W of Heft	2021	4 to 6	Curb & Gutter	4.59	2	9.18	$42,309,680	$4,608,898
Broward	Urban	4	University Dr	SR 834 (Sample Rd)	Sawgrass Expwy	2022	4 to 6	Curb & Gutter	1.50	2	3.00	$12,660,719	$4,220,240
Total (2014-2023); Urban Counties ONLY									**Count:**	**20**	**121.14**	**$497,540,364**	**$4,107,000**
SUBURBAN/RURAL Counties; Curb & Gutter													
Okeechobee	Suburban/Rural	1	SR 70	NE 34th Ave	NE 80th Ave	2014	2 to 4	Curb & Gutter	3.60	2	7.20	$23,707,065	$3,292,648
Martin	Suburban/Rural	4	CR 714/Indian St	Turnpike/Martin Downs Blvd	W. of Mapp Rd	2014	2 to 4	Curb & Gutter	1.87	2	3.74	$14,935,957	$3,993,571
Pinellas	Suburban/Rural	7	43rd St Extension	S. of 118th Ave	40th St	2014	0 to 4	Curb & Gutter	0.49	4	1.96	$4,872,870	$2,486,158
Nassau	Suburban/Rural	2	SR 200 (A1A)	W. of Still Quarters Rd	W. of Ruben Ln	2014	4 to 6	Curb & Gutter	3.05	2	6.10	$18,473,682	$3,028,472
Charlotte	Suburban/Rural	1	US 41 (SR 45)	Enterprise Dr	Sarasota County Line	2014	4 to 6	Curb & Gutter	3.62	2	7.24	$31,131,016	$4,299,864
Duval	Suburban/Rural	2	SR 243 (JIA N Access)	Airport Rd	Pelican Park (I-95)	2014	0 to 2	Curb & Gutter	2.60	2	5.20	$14,205,429	$2,731,813
Desoto	Suburban/Rural	1	US 17	CR 760A (Nocatee)	Heard St	2014	2 to 4	Curb & Gutter	4.40	2	8.80	$29,584,798	$3,361,909
Hendry	Suburban/Rural	1	SR 82 (Immokalee Rd)	Lee County Line	Collier County Line	2015	2 to 4	Curb & Gutter	1.27	2	2.54	$7,593,742	$2,989,662
Clay	Suburban/Rural	2	SR 21	S. of Branan Field	Old Jennings Rd	2015	4 to 6	Curb & Gutter	1.45	2	2.90	$15,887,487	$5,478,444
Putnam	Suburban/Rural	2	SR 15 (US 17)	Horse Landing Rd	N. Boundary Rd	2015	2 to 4	Curb & Gutter	1.99	2	3.98	$13,869,804	$3,484,875
Osceola	Suburban/Rural	5	SR 500 (US 192/441)	Eastern Ave	Nova Rd	2015	4 to 6	Curb & Gutter	3.18	2	6.36	$16,187,452	$2,545,197
Osceola	Suburban/Rural	5	SR 500 (US 192/441)	Aeronautical Blvd	Budinger Ave	2015	4 to 6	Curb & Gutter	3.94	2	7.88	$34,256,621	$4,347,287
Lake	Suburban/Rural	5	SR 25 (US 27)	N. of Boggy Marsh Rd	N. of Lake Louisa Rd	2015	4 to 6	Curb & Gutter	6.52	2	13.03	$37,503,443	$2,878,238
Seminole	Suburban/Rural	5	SR 15/600	Shepard Rd	Lake Mary Blvd	2015	4 to 6	Curb & Gutter	3.63	2	7.26	$42,712,728	$5,883,296
Sarasota	Suburban/Rural	1	SR 45A (US 41) (Venice Bypass)	Gulf Coast Blvd	Bird Bay Dr W	2015	4 to 6	Curb & Gutter	1.14	2	2.28	$16,584,224	$7,273,782
St. Lucie	Suburban/Rural	4	SR 614 (Indrio Rd)	W. of SR 9 (I-95)	E. of SR 607 (Emerson Ave)	2016	2 to 4	Curb & Gutter	3.80	2	7.60	$22,773,660	$2,996,534
Seminole	Suburban/Rural	5	SR 46	Mellonville Ave	E. of SR 415	2016	2 to 4	Curb & Gutter	2.83	2	5.66	$26,475,089	$4,677,578
Citrus	Suburban/Rural	7	SR 55 (US 19)	W. Green Acres St	W. Jump Ct	2016	4 to 6	Curb & Gutter	2.07	2	4.14	$27,868,889	$6,731,616
Walton	Suburban/Rural	3	SR 30 (US 98)	Emerald Bay Dr	Tang-o-mar Dr	2016	4 to 6	Curb & Gutter	3.37	2	6.74	$42,140,000	$6,252,226
Duval	Suburban/Rural	2	SR 201	S. of Baldwin	N. of Baldwin (Bypass)	2016	0 to 4	Curb & Gutter	4.11	4	16.44	$50,974,795	$3,100,657
Hardee	Suburban/Rural	1	SR 35 (US 17)	S. of W. 9th St	N. of W. 3rd St	2016	0 to 4	Curb & Gutter	1.11	4	4.44	$14,067,161	$3,168,280
Alachua	Suburban/Rural	2	SR 20 (SE Hawthorne Rd)	E. of US 301	E. of Putnam Co. Line	2017	2 to 4	Curb & Gutter	1.70	2	3.40	$11,112,564	$3,268,401
Okaloosa	Suburban/Rural	3	SR 30 (US 98)	CR 30F (Airport Rd)	E. of Walton Co. Line	2017	4 to 6	Curb & Gutter	3.85	2	7.70	$33,319,378	$4,327,192
Bay	Suburban/Rural	3	SR 390 (St. Andrews Blvd)	E. of CR 2312 (Baldwin Rd)	Jenks Ave	2017	2 to 6	Curb & Gutter	1.33	4	5.32	$14,541,719	$2,733,406
Pasco	Suburban/Rural	7	SR 54	E. of CR 577 (Curley Rd)	E. of CR 579 (Morris Bridge Rd)	2017	2 to 4/6	Curb & Gutter	4.50	2/4	11.80	$41,349,267	$3,504,175
Lake	Suburban/Rural	5	SR 46 (US 441)	W. of SR 500	E. of Round Lake Rd	2017	2 to 6	Curb & Gutter	2.23	4	8.92	$27,677,972	$3,102,912
Wakulla	Suburban/Rural	3	SR 369 (US 19)	N. of SR 267	Leon Co. Line	2018	2 to 4	Curb & Gutter	2.24	2	4.48	$15,646,589	$3,492,542
St. Lucie	Suburban/Rural	4	SR 713 (Kings Hwy)	S. of SR 70	SR 9 (I-95) Overpass	2018	2 to 4	Curb & Gutter	3.42	2	6.84	$45,162,221	$6,602,664

Table B-10 (continued)

Construction Cost – State Road Improvements from Other Florida Jurisdictions

County	County Classification	District	Description	From	To	Year	Feature	Design	Length	Lanes Added	Lane Miles Added	Construction Cost	Construction Cost per Lane Mile
SUBURBAN/RURAL Counties; Curb & Gutter													
Citrus	Suburban/Rural	7	SR 55 (US 19)	W. Jump Ct	CR 44 (W Fort Island Tr)	2018	4 to 6	Curb & Gutter	4.81	2	9.62	$50,444,444	$5,243,705
Sarasota	Suburban/Rural	1	SR 45A (US 41) (Venice Bypass)	Center Rd	Gulf Coast Blvd	2018	4 to 6	Curb & Gutter	1.19	2	2.38	$15,860,000	$6,663,866
Seminole	Suburban/Rural	5	SR 46	Orange Blvd	N. Oregon St (Wekiva Section 7B)	2019	4 to 6	Curb & Gutter	1.30	2	2.60	$17,848,966	$6,864,987
Duval	Suburban/Rural	2	Jax National Cemetery Access Rd	Lannie Rd	Arnold Rd	2019	0 to 2	Curb & Gutter	3.26	2	6.52	$11,188,337	$1,716,003
Pasco	Suburban/Rural	7	SR 52	W. of Suncoast Pkwy	E. of SR 45 (US 41)	2019	4 to 6	Curb & Gutter	4.64	2	9.28	$45,307,439	$4,882,267
Hernando	Suburban/Rural	7	SR 50	Windmere Rd	E of US 301	2019	4 to 6	Curb & Gutter	5.60	2	11.20	$52,736,220	$4,708,591
Hernando	Suburban/Rural	7	CR 578 (County Line Rd)	Suncoast Pkwy	US 41 @ Ayers Rd	2019	0 to 4	Curb & Gutter	1.49	4	5.96	$20,155,312	$3,381,764
Putnam	Suburban/Rural	2	SR 20	Alachua/Putnam Co. Line	SW 56th Ave	2019	2 to 4	Curb & Gutter	6.95	2	13.90	$45,290,778	$3,258,329
Bay	Suburban/Rural	3	SR 390 (St. Andrews Blvd)	SR 368 (23rd St)	E of CR 2312 (Baldwin Rd)	2019	2 to 6	Curb & Gutter	2.47	4	9.88	$41,711,427	$4,221,804
Lake	Suburban/Rural	5	SR 500 (US 441)	Lake Ella Rd	Avenida Central	2020	4 to 6	Curb & Gutter	4.08	2	8.16	$44,960,000	$5,509,804
Polk	Suburban/Rural	1	SR 542 (Dundee Rd)	MP 2.685	MP 6.211	2020	2 to 4	Curb & Gutter	3.52	2	7.04	$43,563,143	$6,187,946
St. Lucie	Suburban/Rural	4	Port St. Lucie Blvd	S of Alcantarra Blvd	S of Darwin Blvd	2021	2 to 4	Curb & Gutter	0.71	2	1.42	$11,372,179	$8,008,577
Seminole	Suburban/Rural	5	SR 426/CR 419	Pine Ave	Avenue B	2021	2 to 4	Curb & Gutter	1.39	2	2.78	$19,997,789	$7,193,449
Leon	Suburban/Rural	3	SR 263 (Capital Circle)	CR 2203 (Springhill Rd)	SR 371 (Orange Ave)	2022	2 to 6	Curb & Gutter	2.34	4	9.36	$64,267,058	$6,866,139
Brevard	Suburban/Rural	5	Galaxy Way	Kennedy Pkwy	Space Commerce Way	2023	2 to 4	Curb & Gutter	2.67	2	5.34	$26,159,982	$4,898,873
Bay	Suburban/Rural	3	SR 30A (US 98)	Mandy Ln	E of Nautilus St	2023	4 to 6	Curb & Gutter	2.27	2	4.54	$49,730,089	$10,953,764
Bay	Suburban/Rural	3	SR 30A (US 98)	E of Nautilus St	E of R Jackson Blvd	2023	4 to 6	Curb & Gutter	2.29	2	4.58	$59,960,604	$13,091,835
Volusia	Suburban/Rural	5	SR 15 (US 17)	S of Spring St	Lake Winona Rd	2023	2 to 4	Curb & Gutter	1.55	2	3.10	$14,764,285	$4,762,673
St. Lucie	Suburban/Rural	4	CR 712 (Midway Rd)	W. of Jenkins Rd	Selvitz Rd	2023	2 to 4	Curb & Gutter	0.79	2	1.58	$22,928,072	$14,511,438
Total (2014-2023); Suburban/Rural Counties ONLY									**Count:**	**47**	**299.19**	**$1,352,861,746**	**$4,522,000**
Total (2017-2023); Suburban/Rural Counties ONLY									**Count:**	**26**	**167.70**	**$847,055,834**	**$5,051,000**
Total (2020-2023); Suburban/Rural Counties ONLY									**Count:**	**10**	**47.90**	**$357,703,201**	**$7,468,000**
URBAN & SUBURBAN/RURAL Counties; Curb & Gutter													
Total (2014-2023); Urban & Suburban/Rural Counties									**Count:**	**67**	**420.33**	**$1,850,402,110**	**$4,402,000**
Total (2020-2023); Urban & Suburban/Rural Counties									**Count:**	**12**	**60.08**	**$412,673,600**	**$6,869,000**

Source: Florida Department of Transportation

Construction Engineering/Inspection

County Roadways

The CEI cost factor for county roads is estimated as a percentage of the construction cost per lane mile. This factor is determined based on a review of CEI-to-construction cost ratios from other jurisdictions throughout Florida. As shown in **Table B-11**, the CEI factors 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 county roads is estimated at **nine (9) percent** of the construction cost per lane mile.

State Roadways

Similarly, the CEI cost for state roads is estimated as a percentage of the construction cost per lane mile based on a review of CEI-to-construction cost ratios from other Florida jurisdictions. As shown in **Table B-11**, the CEI factors ranged from 10 percent to 11 percent with a weighted average of 11 percent. Given this, the CEI cost for state roads is estimated at **11 percent** of the construction cost per lane mile.

Table B-11

CEI Cost Factor for County & State Roads – Other Florida Jurisdictions

Year	County	County Roadways (Cost per Lane Mile)			State Roadways (Cost per Lane Mile)		
		CEI	Constr.	CEI Ratio	CEI	Constr.	CEI Ratio
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%
2017	St. Lucie	$198,000	$2,200,000	9%	$341,000	$3,100,000	11%
2017	Clay	$191,000	$2,385,000	8%	-	-	-
2019	Collier	$315,000	$3,500,000	9%	$385,000	$3,500,000	11%
2019	Sumter	$258,000	$2,862,000	9%	$370,000	$3,365,000	11%
2020	Indian River	$238,000	$2,647,000	9%	$395,000	$3,593,000	11%
2020	Hillsborough	$363,000	$4,036,000	9%	$486,000	$4,421,000	11%
2020	Hernando	$189,000	$2,108,000	9%	$348,000	$3,163,000	11%
2021	Manatee	$252,000	$2,800,000	9%	-	-	-
2021	Flagler	$232,000	$2,582,000	9%	-	-	-
2022	Lake	$172,000	$2,145,000	8%	-	-	-
2022	Volusia	$259,000	$2,350,000	11%	-	-	-
2023	Manatee	$429,000	$3,900,000	11%	-	-	-
2023	Marion	$216,000	$2,400,000	9%	$374,000	$3,400,000	11%
2024	Hendry	$180,000	$2,000,000	9%	$440,000	$4,000,000	11%
2024	St. Johns	$257,000	$2,573,000	10%	$381,000	$3,812,000	10%
Average		**$229,000**	**$2,492,000**	**9%**	**$341,000**	**$3,153,000**	**11%**

Source: Each respective jurisdiction

Roadway Capacity

As shown in **Table B-12**, the average capacity per lane mile was based on the projects in the Marion County 2045 Long Range Transportation's cost feasible roadway projects lists. The listing of projects reflects the mix of improvements that will yield the vehicle-miles of capacity (VMC) that will be built in Marion County. The resulting weighted average capacity per lane mile of approximately 15,200 was used in the transportation impact fee calculations.

Table B-12

Marion County 2045 Long Range Transportation Plan – Cost Feasible Plan

ID	Jurisdiction	Facility	From	To	Description	Curb & Gutter vs. Open Drainage	Project Length	# of Existing Lanes	# of Future Lanes	Lane Miles Added	Initial Capacity	Future Capacity	Added Capacity	Vehicle-Miles of Capacity Added	VMC Added per Lane Mile
R1	State	SR 200	Citrus County Line	CR 484	Widen to 4 lanes	open drainage	5.98	2	4	11.96	14,000	55,700	41,700	249,366	20,850
R5	State	US 441	CR 42	SE 132nd Street Rd	Widen to 6 lanes	open drainage	1.33	4	6	2.66	38,430	56,805	18,375	24,439	9,188
R7	State	SR 326	CR 200A	NE 36th Avenue	Add 2 lanes	open drainage	1.18	2	4	2.36	22,400	37,300	14,900	17,582	7,450
R9	State	US 27	I-75	NW 27th Avenue	Widen to 6 lanes	curb & gutter	1.18	4	6	2.36	38,430	56,805	18,375	21,683	9,188
R10	State	SR 35	CR 25	SE 92nd Place Rd	Widen to 4 lanes	curb & gutter	1.77	4	6	3.54	22,890	42,525	19,635	34,754	9,818
R12	State	SR 40	SW 140th Avenue	CR 328	Widen to 4 lanes	open drainage	3.00	2	4	6.00	14,000	55,700	41,700	125,100	20,850
R13	State	SR 40	SW 60th Avenue	I-75	Widen to 6 lanes	curb & gutter	2.00	4	6	4.00	38,430	56,805	18,375	36,750	9,188
R14	State	SR 40	I-75	SW 27th Avenue	Widen to 6 lanes	curb & gutter	0.95	4	6	1.90	38,430	56,805	18,375	17,456	9,187
R15	State	US 41	SR 40	Levy County Line	Widen to 4 lanes	open drainage	7.10	2	4	14.20	14,000	55,700	41,700	296,070	20,850
3423	State	SR 40	E of CR 314	CR 314A	Widen to 4 lanes	open drainage	5.85	2	4	11.70	14,000	55,700	41,700	243,945	20,850
3442	State	SR 326	SR 25/US 301/US 441	Old US 301/CR 200A	Widen to 4 lanes	open drainage	2.30	2	4	4.60	17,920	29,840	11,920	27,416	5,960
4106742	State	SR 40	from end of 4 lanes	to East of CR 314	Widen to 4 lanes	open drainage	4.89	2	4	9.78	14,000	55,700	41,700	203,913	20,850
3424	State	SR 40	CR 314A	Levy Hammock Rd	Widen to 4 lanes	open drainage	2.63	2	4	5.26	14,000	55,700	41,700	109,671	20,850
R16	Non-State	NW 49th/35th St	NW 44th Ave	North End of Limerock Pit	New 4 lane div w/interchange	curb & gutter	1.00	0	4	4.00	0	32,940	32,940	32,940	8,235
R17	Non-State	SW 44th Avenue	SR 200	SW 20th Street	Widen to 4 lanes	curb & gutter	1.81	2	4	3.62	20,160	33,570	13,410	24,272	6,705
R18	Non-State	SW 44th Avenue	SW 20th Street	SR 40	Widen to 4 lanes	curb & gutter	1.28	2	4	2.56	19,530	32,940	13,410	17,165	6,705
R19	Non-State	SW 44th Avenue	SR 40	NW 10th Street	New 4 lane	curb & gutter	0.80	0	4	3.20	0	32,940	32,940	26,352	8,235
R28	Non-State	NW 49th/35th St	1.1mi W of NW 44th Ave	NW 44th Ave	New 2 lane	curb & gutter	1.10	0	2	2.20	0	15,930	15,930	17,523	7,965
R30	Non-State	NW 44th Avenue	NW 60th Street	SR 326	Widen to 4 lanes	curb & gutter	1.37	2	4	2.74	29,340	67,770	38,430	52,649	19,215
R36	Non-State	NE 35th Street	W Anthony Rd	CR 200A	Widen to 4 lanes	curb & gutter	1.21	2	4	2.42	11,232	24,336	13,104	15,856	6,552
R38	Non-State	NE 35th Street	CR 200A	NE 25th Avenue	Widen to 4 lanes	curb & gutter	1.21	2	4	2.42	11,232	24,336	13,104	15,856	6,552
R39	Non-State	NE 35th Street	NE 25th Avenue	NE 36th Avenue	Widen to 4 lanes	curb & gutter	1.00	2	4	2.00	11,232	24,336	13,104	13,104	6,552
R40	Non-State	Emerald Rd Extension	SE 92nd Loop	Florida Northern Railroad	New 2 lane	curb & gutter	1.94	0	2	3.88	0	29,340	29,340	56,920	14,670
R56	Non-State	SW 49th/40th Ave	SW 66th St	SW 42nd St Flyover	New 4 lane divided	curb & gutter	1.54	0	4	6.16	0	35,820	35,820	55,163	8,955
R61	Non-State	SW 49th Ave	CR 484	900 Feet N of Marion Oaks Tr	New 4 lane divided	curb & gutter	0.77	0	4	3.08	0	35,820	35,820	27,581	8,955
R65	Non-State	NW 70th Ave	US 27	NW 43rd St/NW 49th Street	Widen to 4 lanes	curb & gutter	0.76	2	4	1.52	10,224	22,752	12,528	9,521	6,264
R66	Non-State	SW 70th/80th Ave	SW 38th St	SR 40	Widen to 4 lanes	curb & gutter	2.49	2	4	4.98	29,340	67,770	38,430	95,691	19,215
R70	Non-State	SW 38th St	SW 60th Ave	SW 43rd Ct	Widen to 4 lanes	curb & gutter	1.53	2	4	3.06	12,744	28,656	15,912	24,345	7,956
R73	Non-State	CR 42	US 441	CR 25	Widen to 4 lanes	curb & gutter	3.79	2	4	7.58	29,340	67,770	38,430	145,650	19,215
R74	Non-State	NW 70th/80th Ave	SR 40	US 27	Widen to 4 lanes	curb & gutter	3.36	2	4	6.72	29,340	67,770	38,430	129,125	19,215
R75	Non-State	SW 70th/80th Ave	SW 90th St	SW 38th St	Widen to 4 lanes	curb & gutter	4.10	2	4	8.20	29,340	67,770	38,430	157,563	19,215
R76	Non-State	SW 49th Ave	Marion Oaks Manor	SW 142nd Pl Rd	Widen to 4 lanes	curb & gutter	1.10	2	4	2.20	15,930	35,820	19,890	21,879	9,945
R77	Non-State	SW 165th St	Marion Oaks Blvd	Marion Oaks Lane	Widen to 4 lanes	open drainage	1.24	2	4	2.48	15,930	35,820	19,890	24,664	9,945
-	Non-State	SW 90th St	SW 60th Ave	0.8 miles E of SW 60th Ave	New 2 lane	open drainage	0.80	0	2	1.60	0	15,930	15,930	12,744	7,965
Total										**156.94**				**2,384,708**	**15,200**
Total: Non-State Projects ONLY										**76.62**	**49%**	**(a)**		**976,563**	**12,700**
Total: State Projects ONLY:										**80.32**	**51%**	**(b)**		**1,408,145**	**17,500**
Total: Non-State, Curb & Gutter Projects ONLY										**72.54**	**95%**	**(c)**			
Total: Non-State, Open Drainage Projects ONLY										**4.08**	**5%**	**(d)**			
Total: State, Curb & Gutter Projects ONLY										**11.80**	**15%**	**(e)**			
Total: State, Open Drainage Projects ONLY										**68.52**	**85%**	**(f)**			

Source: Marion County 2045 Long Range Transportation Plan & the Marion County TPO's Congestion Management Plan (CMP)

Appendix C
Credit Component

Appendix C: Credit Component

This appendix presents the detailed calculations for the credit component. County fuel taxes that are collected in Marion 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 first 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. 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.
- 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.

4. 1st Local Option Tax (up to 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.
- Marion County has adopted all six pennies of this local option tax.

5. 2nd Local Option Tax (up to 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.
- Marion County has adopted all five pennies of this local option tax.

Each year, the Florida Legislature's Office of Economic and Demographic Research (EDR) 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 2023-24 data represent projected fuel tax distributions to Marion County for the current fiscal year. 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 considers the differing amounts of revenues generated for the various types of fuel taxes. It is estimated that approximately $2.21 million will be generated annually for the County from one penny of fuel tax in Marion County.

Revenues from other sources, such as infrastructure sales tax, grants, etc. are converted to gas tax equivalent using this dollar value as a conversion factor. This conversion is needed to be able to relate associate funding to travel by each land use.

Table C-1

Estimated Fuel Tax Distribution Allocated to Capital Programs for Marion County & Municipalities, FY 2023-24[1]

Tax	Amount of Levy per Gallon	Total Distribution	Distribution per Penny
Constitutional Fuel Tax	$0.02	$5,113,185	$2,556,593
County Fuel Tax	$0.01	$2,261,090	$2,261,090
9th Cent Fuel Tax	$0.01	$2,528,025	$2,528,025
1st Local Option (1-6 cents)	$0.06	$14,225,572	$2,370,929
2nd Local Option (1-5 cents)	$0.05	$9,065,197	$1,813,039
Total	**$0.15**	**$33,193,069**	
Weighted Average per Penny[2]			**$2,212,871**

1) Source: Florida Legislature's Office of Economic and Demographic Research, http://edr.state.fl.us/content/local-government/reports/ --
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

For the calculated impact fee, the capital improvement credit includes capacity-expansion expenditures for roadway improvements in Marion County.

County Capital Project Funding

A review of the County's historical (FY 2019-2024) expenditures and current (FY 2025-2029) Transportation Improvement Program indicated that a combination of sales tax, fuel tax, impact fees, and bonds are used to fund transportation capacity expansion improvements. As shown in Table C-2, Marion County allocates approximately 14.8 equivalent pennies of fuel tax revenue to capacity expansion projects such as new road construction, lane additions, and intersection improvements (excluding impact fee revenues).

Table C-2

County Fuel Tax Equivalent Pennies

Source	Cost of Projects	Number of Years	Revenue from 1 Penny[3]	Equivalent Pennies[4]
Historical FY 2019-2024 County Expenditures[1]	$82,774,874	6	$2,212,871	$0.062
Marion FY 2025-2029 TIP Expenditures[2]	$277,643,068	5	$2,212,871	$0.251
Total	**$360,417,942**	**11**	**$2,212,871**	**$0.148**

1) Source: Table C-5
2) Source: Table C-6
3) Source: Table C-1
4) Cost of projects divided by number of years divided by revenue from 1 penny (Item 3) divided by 100

Additionally, the County is currently using fuel tax revenues to retire debt that was issued to fund capacity expansion improvements, specifically, the Series 2016 Public Improvement Revenue Refunding Bond. As shown in Table C-3, a credit of 1.8 pennies is allocated toward outstanding debt service in Marion County.

Table C-3

County Debt Service Fuel Tax Equivalent Pennies

Source	Cost of Projects	Number of Years	Revenue from 1 Penny[3]	Equivalent Pennies[4]
Public Improvement Bond, Series 2016[1]	$19,817,268	5	$2,212,871	$0.018
Total	**$19,817,268**			**$0.018**

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

State Capital Project Funding

In the calculation of the equivalent pennies of fuel tax from the State, funding on transportation capacity-expansion projects spanning a 15-year period (from FY 2015 to FY 2029) were reviewed. This included projects such as lane additions, new road construction, intersection improvements, interchanges, traffic signal projects, and other capacity-addition projects. The use of a 15-year period, for purposes of developing a state credit for roadway capacity expansion projects, results in a stable credit, as it accounts for the volatility in FDOT spending in the county over short periods of time.

The total cost of the transportation capacity-expansion projects for the "historical" periods and the "future" period:

- FY 2015-2019 work plan equates to 8.5 pennies
- FY 2020-2024 work plan equates to 7.5 pennies

- FY 2025-2029 work plan equates to 6.9 pennies

The combined weighted average over the 15-year period of state expenditure for capacity-expansion transportation projects results in a total of 7.6 equivalent pennies. Table C-4 documents this calculation. The specific projects that were used in the equivalent penny calculations are summarized in Table C-8.

Table C-4

State Fuel Tax Equivalent Pennies

Source	Cost of Projects[(1)]	Number of Years	Revenue from 1 Penny[(3)]	Equivalent Pennies[(4)]
Projected Work Program, FY 2025 to 2029[(1)]	$76,057,860	5	$2,212,871	$0.069
Historical Work Program, FY 2020 to 2024[(1)]	$82,624,531	5	$2,212,871	$0.075
Historical Work Program, FY 2015 to 2019[(1)]	$93,992,698	5	$2,212,871	$0.085
Total	**$252,675,089**	**15**	**$2,212,871**	**$0.076**

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

Table C-5

Marion County Historical Transportation Capacity Expenditures (FY 2019-2024)

On	From	To	Improvement	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Total
CR 42	at SE 182ND AVE RD		Add Turn Lanes	$0	$0	$0	$13,010	$32,143	$865,984	**$911,137**
CR 475A AT SW 66TH ST	at SW 66th St		Roundabout	$0	$0	$0	$0	$0	$145,192	**$145,192**
CR 475A ELEVATED ROADWAY	600' S of SW 55th St Rd	SW 42nd St	Elevated Roadway	$0	$0	$0	$0	$0	$186,953	**$186,953**
CR 484	MARION OAKS PASS	MARION OAKS COURSE	Add 2 Lanes	$621,509	$6,526,662	$1,751,758	$0	$0	$0	**$8,899,929**
EMERALD RD EXTENSION	SE 92ND LOOP	FLORIDA NORTHERN RAILROAD	New 2 Lane	$0	$0	$0	$102,383	$453,906	$194,832	**$751,121**
FCCP - SW 145TH PLACE RD EXTENSION	INTERNAL	INTERNAL	N/A	$0	$0	$0	$0	$0	$88,996	**$88,996**
FLORIDA CROSSROADS COMMERCE PARK RD	S TERMINUS	HWY 484	New 2 Lane	$86,447	$3,326,375	$188,904	$0	$0	$0	**$3,601,726**
MISC PROJECTS			ROW Acquisition	$111,149	$11,828	$188,525	$133,462	$314,996	$0	**$759,960**
NE 35TH ST PH 3	NE 25TH AVE	NE 36TH AVE	Add 2 Lanes	$1,190	$102,724	$0	$51,362	$0	$0	**$155,276**
NW 49TH/35TH ST PH 2C	NW 44TH AVE	N End of Limerock Pit	New 4 Lane Dividedw/ Interchange	$0	$855,461	$0	$0	$0	$11,700,000	**$12,555,461**
NW 49TH/35TH ST PH 3 (FKA 3A & 3B)	CR 225A	NW 44TH AVE	Add 4 Lane Road	$0	$0	$62,532	$142,071	$197,497	$276,809	**$678,909**
NW 70TH AVE (WEC)	at US 27		Intersection Improvement	$0	$219,457	$826,617	$3,380,947	$2,455,712	$228,457	**$7,111,190**
NW 80TH AVE (WEC)	at SR 40		Intersection Improvement	$0	$205,466	$42,625	$3,199,616	$3,023,444	$749,880	**$7,221,031**
NW NE 35TH ST PH 1A	US 441	600' E of W ANTHONY RD	Add 2 Lanes	$1,920,036	$1,837,746	$0	$0	$0	$0	**$3,757,782**
NW/NE 35TH ST PH 1B	600' E of W ANTHONY RD	CR 200A	Add 2 Lanes	$600,384	$1,002,666	$177,264	$16,550	$0	$0	**$1,796,864**
SW 49TH 40TH AVE PH2	SW 95TH ST	SW 80TH ST	New 4 Lane Divided	$1,516,306	$3,660,406	$465	$0	$0	$0	**$5,177,177**
SW 49TH 40TH AVE PH3	SW 80TH ST	100' S of SW 66TH ST	New 4 Lane Divided	$22,473	$5,036,342	$372,487	$0	$0	$0	**$5,431,302**
SW 49TH AVE - NORTH	MARION OAKS TRAIL	SW 95TH ST	New 4 Lane Divided	$0	$0	$0	$1,219,401	$4,597,122	$5,130,272	**$10,946,795**
SW 49TH AVE - SOUTH SEGMENT A	CR 484	900 ft N of MARION OAKS TRAIL	New 4 Lane Divided	$0	$240,847	$1,952,085	$2,872,149	$1,791,346	$771,189	**$7,627,616**
SW 49TH AVE - SOUTH SEGMENT E	0.7 mi S of CR 484	CR 484	New 4 Lane Divided	$0	$3,048,331	$72,427	$0	$0	$0	**$3,120,758**
SW 49TH AVE - SOUTH SEGMENTS A & E	0.7 mi S of CR 484	MARION OAKS TRAIL	New 4 Lane Divided	$200,308	$21,880	$38,345	$0	$0	$2,410	**$262,943**
SW 49TH/40TH AVE PH 1	SW 66TH ST	SW 42ND ST FLYOVER	New 4 Lane Divided	$0	$0	$16,760	$9,475	$206,646	$552,097	**$784,978**
SW 60TH AVE	SW 90TH ST	SW 80TH ST	Signalization Projects	$0	$31,655	$81,908	$46,792	$0	$0	**$160,355**
SW/NW 80TH/70TH AVE	SW 90th St	1/2 mi N of US 27	Add 2 Lanes	$0	$176,903	$173,232	$291,288	$0	$0	**$641,423**
Total				**$5,079,802**	**$26,304,749**	**$5,945,934**	**$11,478,506**	**$13,072,812**	**$20,893,071**	**$82,774,874**

Source: Marion County

Table C-6

Marion County FY 2025-2029 Transportation Improvement Program

Description	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	Total
Capacity Projects						
Emerald Rd Extension from SE 92nd Loop to FL Northern RR	$10,400,000	$0	$0	$0	$0	**$10,400,000**
NW 49TH/35th St Ph 3 (FKA 3A & 3B) from CR 225A to NW 44th Ave	$27,020,000	$0	$0	$0	$0	**$27,020,000**
NW 80th/70th Ave from SR 40 to US 27	$0	$5,716,724	$0	$0	$0	**$5,716,724**
NE 35th St Ph 1B from 600' E of W Anthony Rd to CR 200A	$0	$0	$8,979,000	$0	$0	**$8,979,000**
SW 49th Ave - North from Marion Oaks Trail to SW 9Sth St	$0	$11,192,844	$27,200,000	$0	$0	**$38,392,844**
SW 38TH/40th St Ph A from SW 80th Ave to SW 60th Ave	$0	$0	$15,100,000	$0	$0	**$15,100,000**
Marion Oaks Manor Ext Ph 1 from SW 49th Ave to Marion Oaks Ln	$1,377,000	$0	$0	$4,500,000	$15,300,000	**$21,177,000**
SW/NW 80th Ave from 0.5 mi N of SW 38th St to 0.25 mi S of SR 40	$0	$1,300,000	$0	$4,700,000	$8,000,000	**$14,000,000**
SW 80th Ave from SW 80th St to 1/2 mi N of SW 38th St	$607,000	$2,600,000	$3,000,000	$9,110,000	$0	**$15,317,000**
CR 475A from SW 66th St to 1.8 mi N of SW 66th St	$4,000,000	$13,800,000	$0	$0	$900,000	**$18,700,000**
NE 35th St Ph 2 from CR 200A to NE 25th Ave	$0	$666,667	$1,266,667	$666,666	$1,000,000	**$3,600,000**
NE 35th St Ph 3 from NE 25th Ave to NE 36th Ave	$0	$625,000	$625,000	$625,000	$970,000	**$2,845,000**
Marion Oaks Manor Ext Ph 2 from Marion Oaks Ln to CR 475	$0	$3,068,100	$6,125,000	$14,000,000	$20,090,000	**$43,283,100**
CR 484 Widening Ph 1 from Marion Oaks Blvd to CR 475A	$1,200,000	$14,040,000	$12,540,000	$0	$0	**$27,780,000**
SW 38TH/40th St Ph B from SW 60th Ave to SW 43rd Ct	$0	$0	$3,000,000	$12,200,000	$0	**$15,200,000**
NW 44th Ave from NW 63rd St to CR 326	$0	$0	$840,000	$700,000	$7,000,000	**$8,540,000**
SW 60th Ave North Ext from US 27 to NW 49th St	$0	$0	$300,000	$0	$720,000	**$1,020,000**
CR 484 Widening Ph 2 from CR 475A to CR 475	$0	$0	$0	$572,400	$0	**$572,400**
Total	**$44,604,000**	**$53,009,335**	**$78,975,667**	**$47,074,066**	**$53,980,000**	**$277,643,068**

Source: Marion County FY 2025-2029 TIP

Table C-7

Series 2016 Public Improvement Revenue Refunding Bond

Period Ending	Principal	Coupon	Interest	Debt Service	Annual Debt Service
6/1/2025			$225,890.00	$225,890.00	
12/1/2025	$3,515,000	2.450%	$225,890.00	$3,740,890.00	$3,966,780.00
6/1/2026			$182,831.25	$182,831.25	
12/1/2026	$3,595,000	2.450%	$182,831.25	$3,777,831.25	$3,960,662.50
6/1/2027			$138,792.50	$138,792.50	
12/1/2027	$3,685,000	2.450%	$138,792.50	$3,823,792.50	$3,962,585.00
6/1/2028			$93,651.25	$93,651.25	
12/1/2028	$3,770,000	2.450%	$93,651.25	$3,863,651.25	$3,957,302.50
6/1/2029			$47,468.75	$47,468.75	
12/1/2029	$3,875,000	2.450%	$47,468.75	$3,922,468.75	$3,969,937.50
Totals	**$18,440,000**	**2.450%**	**$1,377,267.50**	**$19,817,267.50**	**$19,817,267.50**
Payments Remaining (2025-2029)					**$19,817,268**
% Dedicated to Roadway Capacity Expansion Projects					**100%**
Portion Dedicated to Roadway Capacity Expansion					**$19,817,268**
Number of Years of Remaining Payments					**5**

Source: Marion County

Table C-8

Florida Department of Transportation, District 5 – Marion County Work Program FY 2015-2029

ItemSeg	Description	Wkmx Description	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total
238648-1	SR 45 (US 41) FROM SW 110TH ST TO NORTH OF SR 40	ADD LANES & RECONSTRUCT	$3,825,771	$5,467,607	$1,994,105	$8,010,352	$2,181,656	$3,254	$623,192	$5,941	$755,196	$351,805	$4,493	$0	$0	$0	$0	**$23,223,372**
238651-1	SR 200 FROM CITRUS CO LINE TO CR 484	ADD LANES & RECONSTRUCT	$492,467	$530,670	$135,388	$31,886	$2,745	$114	$0	$60	$0	$0	$0	$0	$5,000,000	$0	$0	**$6,193,330**
238677-1	SR 35 (BASELINE RD) FROM MARICAMP RD (SR 464) TO SR 40 (SILVER SPRINGS	ADD LANES & RECONSTRUCT	$10,939	$6,197	$7,103	$1,868	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$26,107**
238677-4	SR 35 / BELLEVIEW BYPASS FROM US 27/441 TO SR 35	NEW ROAD CONSTRUCTION	$918	$134	$0	$0	$0	$142	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,194**
238693-1	SR 35 BASELINE ROAD FROM SE 92PL/BELLEVIEW BY PASS TO SR 464/MARICAMP	ADD LANES & RECONSTRUCT	$23,560,091	$2,020,068	$1,785,974	$1,358,236	$291,286	$72,719	$34	$0	$0	$0	$0	$0	$0	$0	$0	**$29,088,408**
238719-1	SR 40 FROM CR 328 TO SW 80TH AVE(CR 225A)	ADD LANES & RECONSTRUCT	$271,448	$755,507	$450,219	$913	$0	$99	$26	$0	$0	$0	$0	$0	$0	$0	$0	**$1,478,212**
238720-1	SR 40 FROM SR 45 (US 41) TO CR 328	ADD LANES & RECONSTRUCT	$54	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$54**
410674-1	SR 40 FROM END OF 4 LN SECTION TO LAKE CO LINE	PD&E/EMO STUDY	$0	$45	$264	$9,810	$819	$16,359	$10,231	$7,675	$1,825	$519	$1,097	$0	$0	$0	$0	**$48,644**
410674-2	SR 40 FROM END OF 4 LANES TO EAST OF CR 314	ADD LANES & RECONSTRUCT	$27,481	$1,116,688	$394,112	$1,233,672	$838,054	$990,822	$3,737,746	$2,405,692	$9,920	$314,867	$19,093	$0	$0	$0	$0	**$11,088,147**
410674-3	SR 40 FROM EAST OF CR 314 TO EAST OF CR 314A	ADD LANES & RECONSTRUCT	$25,073	$1,080,909	$147,538	$160,497	$410,249	$309	$1,034	$1,881,509	$41,270	$2,611,105	$17,965,627	$14,733,000	$13,435,148	$4,725,000	$1,320,245	**$58,538,513**
410674-4	SR 40 FROM CR 314 A TO LEVY HAMMOCK ROAD	ADD LANES & RECONSTRUCT	$0	$0	$0	$0	$0	$0	$0	$2,709,970	$25,567	$15,560	$205,000	$0	$0	$0	$0	**$2,956,097**
413019-4	MARION TRAFFIC ENGINEERING CONTRACTS	TRAFFIC SIGNALS	$253,542	$451,288	$627,966	$648,091	$667,024	$710,465	$738,634	$808,617	$830,674	$910,154	$988,772	$1,037,115	$1,017,450	$0	$0	**$9,689,792**
416220-1	SR 326 FROM W OF CR 35 TO E OF CR 35	TRAFFIC SIGNALS	$576	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$576**
424186-1	SE 92ND LOOP (BELLEVIEW BYPASS) FROM US27/441 TO SR35	NEW ROAD CONSTRUCTION	$6,320	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$6,320**
424186-2	SE 92ND LOOP (BELLEVIEW BYPASS) NORTH PHASE FROM CR 25 TO SR 35	NEW ROAD CONSTRUCTION	$6,659,779	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$6,659,779**
424186-3	SE 92ND LOOP (BELLEVIEW BYPASS) SOUTH PHASE FROM US 441 TO CR 25	NEW ROAD CONSTRUCTION	$4,834,454	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$4,834,454**
424186-4	SE 92ND LOOP (BELLEVIEW BYPASS) FROM US 27/441 TO SR 35	NEW ROAD CONSTRUCTION	$196,515	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$196,515**
427198-1	SR 500 (US 27) AT NW 110TH AVE (CR464B)	ADD LEFT TURN LANE(S)	$208	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$208**
430252-1	OCALA ITS COUNTYWIDE MARION COUNTY	ITS COMMUNICATION SYSTEM	$0	$0	$0	$0	$293,054	$885,105	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,178,159**
430986-1	SR 45 (US41) AT SW 61ST STREET INTERSECTION	ADD TURN LANE(S)	$147	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$147**
431797-1	NE 25TH AVENUE FROM NE 14TH STREET (SR492) TO NE 35TH STREET	ADD LANES & RECONSTRUCT	$40,415	$927,105	$57,844	$122,929	$75,536	$361	$333	$192	$0	$0	$0	$0	$0	$0	$0	**$1,224,715**
431797-2	NE 25TH AVENUE FROM NE 14TH STREET (SR492) TO NE 24TH STREET	ADD LANES & RECONSTRUCT	$0	$0	$0	$0	$8,757	$0	$250	$0	$0	$0	$0	$0	$0	$0	$0	**$9,007**
431797-3	NE 25TH AVENUE FROM NE 24TH STREET TO NE 35TH STREET	ADD LANES & RECONSTRUCT	$0	$0	$0	$0	$1,383	$552	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,935**
431798-1	NE 36TH AVENUE FROM SR 492 (NE 14TH ST) TO NE 35TH STREET	ADD LANES & RECONSTRUCT	$94,512	$13,255	$8,553	$118,060	$604,638	$211	$515	$22,886	$0	$0	$0	$0	$0	$0	$0	**$862,630**
431798-2	NE 36TH AVENUE FROM SR 492 (NE 14TH ST) TO NE 20TH PLACE	ADD LANES & RECONSTRUCT	$0	$837,634	$66,145	$287,289	$14,929	$9,047	$1,167	$215	$0	$0	$0	$0	$0	$0	$0	**$1,216,426**
431798-4	NE 36TH AVENUE FROM NORTH OF NE 25TH STREET TO NE 35TH STREET	ADD LANES & RECONSTRUCT	$0	$973,906	$6,981	$26,509	$30,641	$22,514	$647	$0	$0	$0	$0	$0	$0	$0	$0	**$1,061,198**
432421-1	SR 40 FROM NE 25TH AVENUE TO W OF NE 10TH ST	INTERSECTION IMPROVEMENT	$12,971	$1,068,724	$29,019	$838	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,111,552**
433206-1	CR 484 AT MARION OAKS TRAIL	INTERSECTION IMPROVEMENT	$0	$289,054	$516	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$289,570**
433651-1	CR 484 FROM SW 20TH AVENUE TO CR 475A	INTERCHANGE IMPROVEMENT	$26,174	$183,899	$24,023	$323,407	$974,460	$1,619,119	$439,982	$13,897,774	$1,919,101	$664,366	$914,987	$0	$0	$0	$0	**$20,987,292**
433652-1	SR 40 INTERSECTIONS AT SW 40TH AVENUE AND SW 27TH AVENUE	ADD TURN LANE(S)	$138,619	$30,424	$10,624	$35,941	$12,983	$494	$376,544	$2,094,163	$501,581	$130,283	$183,969	$0	$0	$0	$0	**$3,515,625**
433660-1	US 441 @ SR 464	TRAFFIC OPS IMPROVEMENT	$22,999	$22,654	$10,771	$20,391	$94,897	$83,548	$181,391	$65,453	$252	$1,279	$164,809	$4,516,874	$21,240	$0	$0	**$5,206,558**
433661-1	US 441 FROM SR 40 TO SR 40A (SW BROADWAY)	TRAFFIC OPS IMPROVEMENT	$6,320	$16,150	$7,002	$6,264	$4,250	$149,748	$653,737	$4,997,816	$75,893	$347,658	$268,532	$0	$0	$0	$0	**$6,533,370**
433665-1	SR 40 CORRIDOR OPERATIONAL IMPROVEMENTS FROM US 441 TO NW 1ST AVE	INTERSECTION IMPROVEMENT	$12,867	$460,256	$5,774	$445	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$479,342**
434844-1	CR 42 AT SE 182ND	ADD LEFT TURN LANE(S)	$24,454	$300	$257	$0	$0	$0	$0	$0	$297,447	$0	$0	$0	$0	$0	$0	**$322,458**
434844-2	CR 42 AT SE 182ND	ADD LEFT TURN LANE(S)	$0	$0	$0	$0	$0	$0	$0	$0	$117,532	$2,543	$5,525	$0	$0	$0	$0	**$125,600**
435209-2	NW 49TH ST FROM NW 70TH (CR 225) TO NW 44TH AVE	ADD LANES & RECONSTRUCT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,500,000	$0	$0	$0	$0	**$1,500,000**
435492-1	SR 40 INTERSECTION IMPROVEMENTS AT MARTIN LUTHER KING BLVD	INTERSECTION IMPROVEMENT	$8	$568	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$576**
435492-2	SR 40 INTERSECTION IMPROVEMENTS AT MARTIN LUTHER KING BLVD.	INTERSECTION IMPROVEMENT	$0	$0	$741,246	$104	$0	$0	$144	$0	$0	$0	$0	$0	$0	$0	$0	**$741,494**
435547-2	SW 44TH EXTENSION FROM SR 200 TO SR 40	NEW ROAD CONSTRUCTION	$0	$0	$0	$0	$0	$0	$0	$1,000,000	$0	$0	$0	$0	$0	$0	$0	**$1,000,000**
435547-3	CITY OF OCALA NW44TH AVENUE EXTENSION PROJECT	NEW ROAD CONSTRUCTION	$0	$0	$0	$0	$0	$0	$0	$0	$8,000,000	$0	$0	$0	$0	$0	$0	**$8,000,000**
435549-1	SW 49TH AVE RD FROM SW 95TH STREET TO SW 66TH STREET	NEW ROAD CONSTRUCTION	$0	$0	$0	$0	$4,687,837	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$4,687,837**
435659-1	SR 200 @ SW 38TH CT FROM W OF 38TH CT TO E OF 38TH CT	ADD TURN LANE(S)	$0	$3,611	$602	$77	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$4,290**
435659-2	SR 200 @ I-75/W OF I-75 TO E OF I-75 ADDING LEFT & RIGHT TURN LANES	ADD TURN LANE(S)	$0	$864,383	$35,108	$4,146,085	$137,495	$576,767	$740,612	$900	$0	$0	$0	$0	$0	$0	$0	**$6,501,350**
435660-2	SR 326 FROM SR 326 RXR CROSS 627142B TO E OF CR 25A (NW GAINESVILE RD)	ADD TURN LANE(S)	$396,147	$29,208	$46,330	$89,482	$684,438	$1,354,173	$119,940	$7,720	$1,059	$0	$0	$0	$0	$0	$0	**$2,728,497**
435686-1	SR 500 / US 441 @ SE 98TH LANE	ADD LEFT TURN LANE(S)	$0	$0	$0	$237,646	$15,149	$1,184,596	$8,138	$26,768	$54,993	$19,071	$0	$0	$0	$0	$0	**$1,546,361**
436361-1	ITS OPERATIONAL SUPPORT- MARION COUNTY CMGC CONTRACT	ITS COMMUNICATION SYSTEM	$0	$0	$0	$0	$0	$0	$105,606	$2,296,678	$27,196	$122,374	$16,343	$0	$0	$0	$0	**$2,568,197**
436361-2	ITS OPERATIONAL SUPPORT- CITY OF OCALA	ITS COMMUNICATION SYSTEM	$0	$0	$0	$0	$0	$0	$95,104	$606,876	$5,250	$217	$0	$0	$0	$0	$0	**$707,447**
436407-1	SUNSET HARBOR ROAD AT US 441	INTERSECTION IMPROVEMENT	$8,473	$0	$0	$22	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$8,495**
436407-2	SUNSET HARBOR ROAD AT US 441 INTERSECTION	INTERSECTION IMPROVEMENT	$0	$0	$54,925	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$54,925**
443669-1	NW 10TH AVE / NE 14TH ST / SR 492 @ NE 30TH AVE INTERSECTION	TRAFFIC OPS IMPROVEMENT	$0	$0	$0	$4,441	$334,537	$33,454	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$372,432**
445688-1	US 27/US 441 @ CR 42	TRAFFIC SIGNALS	$0	$0	$0	$876	$0	$0	$216,932	$8,219	$790,546	$25,690	$189	$0	$0	$0	$0	**$1,042,452**
445701-1	SE ABSHIER BLVD FROM SE HAMES RD TO N OF SE AGNEW RD	TRAFFIC SIGNALS	$0	$0	$0	$1,125	$0	$0	$457,204	$71,738	$3,401,546	$194,374	$7,064	$0	$0	$0	$0	**$4,133,051**
445800-1	E SR 40 @ SR 492	TRAFFIC SIGNALS	$0	$0	$0	$0	$0	$0	$481,952	$2,355,110	$5,788	$294,904	$54,257	$0	$0	$0	$0	**$3,192,011**
447603-1	NW 10TH/NE 14TH ST SR 492 TO NE 25TH AVE.	TRAFFIC SIGNALS	$0	$0	$0	$250	$0	$0	$2,483	$408,366	$19,035	$1,652,440	$62,650	$0	$0	$0	$0	**$2,145,224**
449277-1	CR-484 AT THE INTERSECTION OF MARION OAKS BLVD	INTERSECTION IMPROVEMENT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$356,167	$0	$0	$0	$0	**$356,167**
449277-2	CR-484 AT THE INTERSECTION OF MARION OAKS BLVD	INTERSECTION IMPROVEMENT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$92,163	$0	$0	$0	$0	**$92,163**
449317-1	CR 484 AT SW 135TH ST RD	ADD LEFT TURN LANE(S)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$263,886	$0	$0	$0	$0	**$263,886**
449317-2	CR 484 AT SW 135TH ST RD	ADD LEFT TURN LANE(S)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$108,219	$0	$0	$0	$0	**$108,219**
449443-1	NE 8TH AVE FROM SR 40 TO SR 492	ROUNDABOUT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$4,452,800	$0	$0	**$4,452,800**
450340-1	EMERALD ROAD EXTENSION FROM SE 92ND LOOP TO CR464 (SE MARICAMP RD)	NEW ROAD CONSTRUCTION	$0	$0	$0	$0	$0	$0	$0	$0	$4,695,763	$0	$0	$0	$0	$0	$0	**$4,695,763**
451060-1	CR 42 AT CR 25 INTERSECTION IMPROVEMENTS	INTERSECTION IMPROVEMENT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$385,850	$0	$0	$0	**$385,850**
451060-2	CR 42 AT CR 25 INTERSECTION IMPROVEMENTS	INTERSECTION IMPROVEMENT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$204,296	$0	$0	$0	$0	**$204,296**
453201-1	NW 49TH ST. FROM NW 70TH AVE (CR 225A) TO NW 44TH AVE	RIGHT OF WAY ACQUISITION	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,000,000	$0	$0	$0	$0	$0	**$1,000,000**
455106-1	MARION COUNTY TSMCA	TRAFFIC SIGNALS	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$494,000	$509,000	**$1,003,000**
455106-2	CITY OF OCALA TSMCA	TRAFFIC SIGNALS	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$504,000	$519,000	**$1,023,000**
Total			**$40,949,742**	**$17,150,244**	**$6,648,389**	**$16,877,506**	**$12,366,817**	**$7,713,972**	**$8,993,578**	**$35,680,338**	**$21,577,434**	**$8,659,209**	**$23,387,138**	**$20,672,839**	**$23,926,638**	**$5,723,000**	**$2,348,245**	**$252,675,089**
Total (5-year Summaries)					**FY 2015 to FY 2019:**		**$93,992,698**				**FY 2020 to FY 2024:**	**$82,624,531**				**FY 2025 to FY 2029:**	**$76,057,860**	

Source: Florida Department of Transportation, District 5

Table C-9

Average Motor Vehicle Fuel Efficiency – Excluding Interstate Travel

Travel Vehicle Miles of Travel (VMT) @			
	22.8	**7.3**	
Other Arterial Rural	329,742,000,000	52,696,000,000	382,438,000,000
Other Rural	325,232,000,000	32,997,000,000	358,229,000,000
Other Urban	1,485,169,000,000	102,144,000,000	1,587,313,000,000
Total	***2,140,143,000,000***	***187,837,000,000***	***2,327,980,000,000***

Percent VMT	
@ 22.8 mpg	**@ 7.3 mpg**
86%	14%
91%	9%
94%	6%
92%	**8%**

Fuel Consumed			
	Gallons @ 22.8 mpg	**Gallons @ 7.3 mpg**	
Other Arterial Rural	14,462,368,421	7,218,630,137	21,680,998,558
Other Rural	14,264,561,404	4,520,136,986	18,784,698,390
Other Urban	65,138,991,228	13,992,328,767	79,131,319,995
Total	***93,865,921,053***	***25,731,095,890***	***119,597,016,943***

Total Mileage and Fuel	
2,327,980	**miles (millions)**
119,597	**gallons (millions)**
19.47	**mpg**

Source: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics 2022* , Section V, Table VM-1
Annual Vehicle Distance Traveled in Miles and Related Data - 2022 by Highway Category and Vehicle Type
http://www.fhwa.dot.gov/policyinformation/statistics.cfm

Table C-10

Annual Vehicle Distance Travelled in Miles and Related Data – 2022[1]

By Highway Category and Vehicle Type

Updated: February 2024 **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):									
2022	Interstate Rural	148,757	1,164	1,601	50,143	11,677	61,652	**198,900**	**73,328**	274,993
2022	Other Arterial Rural	229,877	2,233	2,231	99,865	19,332	33,364	**329,742**	**52,696**	386,901
2022	Other Rural	221,526	3,294	2,293	103,707	19,890	13,106	**325,232**	**32,997**	363,816
2022	All Rural	600,160	6,691	6,125	253,714	50,899	108,122	853,874	159,021	1,025,711
2022	Interstate Urban	378,935	2,842	2,624	104,686	20,397	49,710	**483,621**	**70,108**	559,194
2022	Other Urban	1,158,710	14,232	9,741	326,459	64,928	37,216	**1,485,169**	**102,144**	1,611,287
2022	All Urban	1,537,646	17,074	12,365	431,144	85,325	86,927	1,968,790	172,252	2,170,481
2022	Total Rural and Urban[5]	2,137,805	23,765	18,490	684,859	136,224	195,049	2,822,664	331,272	3,196,191
2022	Number of motor vehicles registered[2]	197,080,414	9,567,664	954,119	61,464,968	11,083,997	3,249,824	258,545,382	14,333,821	283,400,986
2022	Average miles traveled per vehicle	10,847	2,484	19,379	11,142	12,290	60,018	10,917	23,111	11,278
2022	Person-miles of travel (millions)[4]	3,284,669	24,369	391,991	1,007,240	136,224	195,049	4,291,909	331,272	5,039,542
2022	Fuel consumed (thousand gallons)	86,040,199	540,572	2,497,605	37,939,063	17,180,850	28,218,175	123,979,262	45,399,024	172,416,463
2022	Average fuel consumption per vehicle (gallons)	437	56	2,618	617	1,550	8,683	480	3,167	608
2022	Average miles traveled per gallon of fuel consumed	24.8	44.0	7.4	18.1	7.9	6.9	**22.8**	**7.3**	18.5

(1) The FHWA estimates national trends by using State reported Highway Performance and Monitoring System (HPMS) data, fuel consumption data (MF-21), vehicle registration data (MV-1), other data such as the R.L. Polk vehicle data, and a host of modeling techniques.

(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 wheelbase.

(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) For 2021 and 2020, the vehicle occupancy is estimated by the FHWA from the 2017 National Household Travel Survey (NHTS) and the annual R.L. Polk Vehicle registration data; For single unit truck and heavy trucks, 1 motor vehicle mile traveled = 1 person-mile traveled.

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

Appendix D
Calculated Transportation Impact Fee Schedule

Appendix D: Calculated Transportation Impact Fee Schedule

This appendix presents the detailed fee calculations for each land use in the Marion County transportation impact fee schedule.

- Table D-1: Marion County Calculation Transportation Impact Fee Schedule
- Table D-2: Marion County Maximum Allowable Transportation Impact Fee Rates

Table D-1

Calculated Transportation Impact Fee Schedule

Gasoline Tax								Unit Construction Cost:	$4,722,000			Interstate/Toll Facility Adjustment Factor:	13.5%		
$$ per gallon to capital:	$0.242							Capacity per lane mile:	15,200			Cost per VMC:	$310.66		
Facility life (years):	25			County Revenues:	$0.166			Fuel Efficiency:	19.47 mpg						
Interest rate:	2.45%			State Revenues:	$0.076			Effectivedays per year:	365						

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length[1]	Total Trip Length	Percent New Trips	% New Trips Source	Net VMT[2]	Total Impact Cost	Annual Gas Tax	Gas Tax Credit	Net Impact Fee	Current Impact Fee[3]	% Change
	RESIDENTIAL:														
210	Single Family (Detached) - 1,500 sf or less	du	**6.43**	Appendix A: Table A-34	**7.61**	8.11	**100%**	n/a	21.16	$6,575	$118	$2,187	**$4,388**	$1,093	302%
	Single Family (Detached) - 1,501 to 2,499 sf	du	**7.81**	Appendix A: Table A-34	**7.61**	8.11	**100%**	n/a	25.71	$7,986	$144	$2,668	**$5,318**	$1,397	281%
	Single Family (Detached) - 2,500 sf and greater	du	**8.59**	Appendix A: Table A-34	**7.61**	8.11	**100%**	n/a	28.27	$8,783	$158	$2,928	**$5,855**	$1,562	275%
215	Single Family (Attached)	du	**6.77**	Blend ITE 11th & FL Studies	**7.61**	8.11	**100%**	n/a	22.28	$6,922	$125	$2,316	**$4,606**	$903	410%
220	Multi-Family Housing (Low-Rise, 1-3 floors)	du	**6.74**	ITE 11th Edition	**5.99**	6.49	**100%**	n/a	17.46	$5,424	$99	$1,834	**$3,590**	$903	298%
221/222	Multi-Family Housing (Mid/High-Rise, 4+ floors)	du	**4.54**	ITE 11th Edition	**5.99**	6.49	**100%**	n/a	11.76	$3,654	$67	$1,242	**$2,412**	$568	325%
240	Mobile Home Park	du	**4.17**	FL Studies	**5.29**	5.79	**100%**	n/a	9.54	$2,964	$55	$1,019	**$1,945**	$514	278%
251	Senior Adult Housing - Detached	du	**3.54**	Blend ITE 11th & FL Studies	**6.23**	6.73	**100%**	n/a	9.54	$2,963	$54	$1,001	**$1,962**	$1,093	80%
252	Senior Adult Housing - Attached	du	**2.99**	Blend ITE 11th & FL Studies	**4.99**	5.49	**100%**	n/a	6.45	$2,005	$37	$686	**$1,319**	$903	46%
253	Congregate/Assisted Care Facility	du	**2.33**	Blend ITE 11th & FL Studies	**3.54**	4.04	**72%**	FL Studies	2.57	$798	$15	$278	**$520**	$184	183%
	LODGING:														
310	Hotel	room	**5.56**	Blend ITE 11th & FL Studies	**7.20**	7.70	**66%**	FL Studies	11.43	$3,550	$64	$1,186	**$2,364**	$375	530%
320	Motel	room	**3.35**	ITE 11th Edition	**4.99**	5.49	**77%**	FL Studies	5.57	$1,729	$32	$593	**$1,136**	$267	326%
	RECREATION:														
411	Public Park	acre	**0.78**	ITE 11th Edition	**5.41**	5.91	**90%**	Based on LUC 710	1.64	$510	$9	$167	**$343**	$136	152%
416	RV Park/Campground	site	**1.62**	ITE 11th Edition (Adjusted)[4]	**4.83**	5.33	**100%**	Same as LUC 240	3.38	$1,051	$20	$371	**$680**	$514	32%
420	Marina	berth	**2.41**	ITE 11th Edition	**6.95**	7.45	**90%**	Based on LUC 710	6.52	$2,025	$37	$686	**$1,339**	$427	214%
430	Golf Course	hole	**30.38**	ITE 11th Edition	**6.95**	7.45	**90%**	Based on LUC 710	82.19	$25,532	$462	$8,561	**$16,971**	$2,774	512%
445	Movie Theater	screen	**114.83**	Blend ITE 11th & FL Studies	**2.33**	2.83	**88%**	FL Studies	101.83	$31,635	$649	$12,026	**$19,609**	$2,610	651%
492	Racquet Club/Health Spa	1,000 sf	**34.50**	ITE 11th Edition	**5.41**	5.91	**94%**	FL Studies	75.88	$23,573	$435	$8,061	**$15,512**	$2,065	651%
495	Recreational Community Center	1,000 sf	**28.82**	ITE 11th Edition	**5.41**	5.91	**90%**	Based on LUC 710	60.69	$18,854	$348	$6,449	**$12,405**	$2,065	501%

Table D-1 (continued)

Calculated Transportation Impact Fee Schedule

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length[1]	Total Trip Length	Percent New Trips	% New Trips Source	Net VMT[2]	Total Impact Cost	Annual Gas Tax	Gas Tax Credit	Net Impact Fee	Current Impact Fee[3]	% Change
	INSTITUTIONS:														
520	Elementary School (Private)	student	**2.27**	ITE 11th Edition	**4.30**	4.80	**80%**	Based on LUC 710 (adjusted)[5]	3.38	$1,049	$20	$371	**$678**	$55	1133%
522	Middle School (Private)	student	**2.10**	ITE 11th Edition	**4.30**	4.80	**80%**	Based on LUC 710 (adjusted)[5]	3.12	$971	$18	$334	**$637**	$76	738%
525	High School (Private)	student	**1.94**	ITE 11th Edition	**4.30**	4.80	**90%**	Based on LUC 710	3.25	$1,009	$19	$352	**$657**	$80	721%
540	University/Junior College (7,500 or fewer students) (Private)	student	**2.00**	ITE Regression Analysis	**6.95**	7.45	**90%**	Based on LUC 710	5.41	$1,681	$30	$556	**$1,125**	$156	621%
550	University/Junior College (more than 7,500 students) (Private)	student	**1.50**	ITE Regression Analysis	**6.95**	7.45	**90%**	Based on LUC 710	4.06	$1,261	$23	$426	**$835**	$116	620%
560	Church	1,000 sf	**7.60**	ITE 11th Edition	**4.13**	4.63	**90%**	Based on LUC 710	12.22	$3,796	$72	$1,334	**$2,462**	$410	501%
565	Day Care Center	1,000 sf	**49.63**	Blend ITE 11th & FL Studies	**2.13**	2.63	**73%**	FL Studies	33.38	$10,368	$216	$4,003	**$6,365**	$1,318	383%
590	Library	1,000 sf	**72.05**	ITE 11th Edition	**6.95**	7.45	**49%**	Orange Co. 2004 Road IF Update	106.12	$32,967	$597	$11,063	**$21,904**	$2,377	822%
	MEDICAL:														
610	Hospital	1,000 sf	**10.77**	ITE 11th Edition	**6.95**	7.45	**78%**	Midpoint of LUC 310 & LUC 720	25.25	$7,844	$142	$2,631	**$5,213**	$879	493%
620	Nursing Home	bed	**3.02**	Blend ITE 11th & FL Studies	**2.72**	3.22	**89%**	FL Studies	3.16	$982	$20	$371	**$611**	$80	664%
640	Animal Hospital/Veterinary Clinic	1,000 sf	**24.20**	Blend ITE 11th & FL Studies	**2.00**	2.50	**70%**	FL Studies	14.65	$4,552	$96	$1,779	**$2,773**	$539	415%
	OFFICE:														
710	Office	1,000 sf	**10.84**	ITE 11th Edition	**5.41**	5.91	**92%**	FL Studies	23.33	$7,249	$134	$2,483	**$4,766**	$676	605%
720	Medical Office/Clinic	1,000 sf	**23.83**	FL Studies	**5.83**	6.33	**89%**	FL Studies	53.48	$16,613	$305	$5,652	**$10,961**	$1,528	617%
770	Business Park	1,000 sf	**12.65**	Blend ITE 11th & FL Studies	**5.65**	6.15	**89%**	FL Studies	27.51	$8,547	$157	$2,909	**$5,638**	$785	618%
	RETAIL:														
822	Retail 6,000 sfgla or less	1,000 sfgla	**54.45**	ITE 11th Edition	**1.18**	1.68	**39%**	Appendix A: Fig. A-2 (6k sfgla)	10.84	$3,367	$81	$1,501	**$1,866**	$442	322%
822	Retail 6,001 to 40,000 sfgla	1,000 sfgla	**54.45**	ITE 11th Edition	**1.55**	2.05	**48%**	Appendix A: Fig. A-2 (19k sfgla)	17.52	$5,443	$122	$2,261	**$3,182**	$442	620%
821	Retail 40,001 to 150,000 sfgla	1,000 sfgla	**67.52**	ITE 11th Edition	**2.04**	2.54	**57%**	Appendix A: Fig. A-2 (59k sfgla)	33.96	$10,549	$222	$4,114	**$6,435**	$1,014	535%
820	Retail greater than 150,000 sfgla	1,000 sfgla	**37.01**	ITE 11th Edition	**2.94**	3.44	**75%**	Appendix A: Fig. A-2 (538k sfgla)	35.30	$10,965	$217	$4,021	**$6,944**	$1,014	585%
840/841	New/Used Auto Sales	1,000 sf	**24.58**	Blend ITE 11th & FL Studies	**4.83**	5.33	**79%**	FL Studies	40.56	$12,602	$235	$4,355	**$8,247**	$1,325	522%
850	Supermarket	1,000 sf	**94.48**	Blend ITE 11th & FL Studies	**2.18**	2.68	**56%**	FL Studies	49.89	$15,497	$322	$5,967	**$9,530**	$1,490	540%
862	Home Improvement Superstore	1,000 sf	**30.74**	ITE 11th Edition	**2.45**	2.95	**64%**	Appendix A: Fig. A-2 (135k sfgla)	20.85	$6,476	$132	$2,446	**$4,030**	$619	551%

Table D-1 (continued)

Calculated Transportation Impact Fee Schedule

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length[1]	Total Trip Length	Percent New Trips	% New Trips Source	Net VMT[2]	Total Impact Cost	Annual Gas Tax	Gas Tax Credit	Net Impact Fee	Current Impact Fee[3]	% Change
	RETAIL:														
880/881	Pharmacy/Drug Store with or w/o Drive-Thru	1,000 sf	**103.86**	Blend ITE 11th & FL Studies	**2.18**	2.68	**32%**	FL Studies	31.34	$9,735	$202	$3,743	**$5,992**	$791	658%
890	Furniture Store	1,000 sf	**6.30**	ITE 11th Edition	**6.39**	6.89	**54%**	FL Studies	9.40	$2,921	$53	$982	**$1,939**	$217	794%
	SERVICES:														
911	Bank/Savings Walk-In	1,000 sf	**57.94**	ITE 11th Edition (Adjusted)[6]	**2.58**	3.08	**46%**	Same as LUC 912	29.74	$9,239	$186	$3,447	**$5,792**	$1,720	237%
912	Bank/Savings Drive-In	1,000 sf	**103.73**	Blend ITE 11th & FL Studies	**2.58**	3.08	**46%**	FL Studies	53.24	$16,541	$333	$6,171	**$10,370**	$2,260	359%
931	Restaurant	1,000 sf	**86.03**	Blend ITE 11th & FL Studies	**3.30**	3.80	**77%**	FL Studies	94.55	$29,371	$571	$10,581	**$18,790**	$2,803	570%
n/a	Small Local Restaurant[7]	1,000 sf	**86.03**	Same as LUC 931	**2.15**	2.65	**58%**	Same as LUC 934 (Appendix A)	46.40	$14,414	$300	$5,559	**$8,855**	$2,803	216%
941	Quick Lube	service bay	**40.00**	ITE 11th Edition	**3.80**	4.30	**72%**	Same as LUC 942	47.33	$14,704	$281	$5,207	**$9,497**	$1,334	612%
942	Automobile Care Center	1,000 sf	**28.19**	Blend ITE 11th & FL Studies	**3.80**	4.30	**72%**	FL Studies	33.36	$10,363	$198	$3,669	**$6,694**	$1,047	539%
944	Gas Station w/Convenience Store <2,000 sq ft	fuel pos.	**172.01**	ITE 11th Edition	**2.00**	2.50	**23%**	FL Studies	34.22	$10,631	$224	$4,151	**$6,480**	$850	662%
945	Gas Station w/Convenience Store 2,000 to 5,499 sq ft	fuel pos.	**264.38**	ITE 11th Edition (Adjusted)[8]	**2.00**	2.50	**23%**	Same as LUC 944	52.60	$16,340	$345	$6,393	**$9,947**	$850	1070%
	Gas Station w/Convenience Store 5,500+ sq ft	fuel pos.	**345.75**	ITE 11th Edition	**2.00**	2.50	**23%**	Same as LUC 944	68.79	$21,369	$451	$8,357	**$13,012**	$850	1431%
947	Self-Service Car Wash	service bay	**43.94**	Blend ITE 11th & FL Studies	**2.29**	2.79	**68%**	FL Studies	29.59	$9,193	$189	$3,502	**$5,691**	$811	602%
948	Automated Car Wash	car tunnel	**775.00**	ITE 11th Edition (Adjusted)[9]	**2.29**	2.79	**68%**	Same as LUC 947	521.95	$162,149	$3,335	$61,798	**$100,351**	$811	12274%
	INDUSTRIAL:														
110	General Light Industrial	1,000 sf	**4.87**	ITE 11th Edition	**5.41**	5.91	**92%**	Same as LUC 710	10.48	$3,257	$60	$1,112	**$2,145**	$428	401%
140	Manufacturing	1,000 sf	**4.75**	ITE 11th Edition	**5.41**	5.91	**92%**	Same as LUC 710	10.23	$3,176	$59	$1,093	**$2,083**	$234	790%
150	Warehousing	1,000 sf	**1.71**	ITE 11th Edition	**5.41**	5.91	**92%**	Same as LUC 710	3.68	$1,144	$21	$389	**$755**	$218	246%
151	Mini-Warehouse	1,000 sf	**1.46**	Blend ITE 11th & FL Studies	**3.69**	4.19	**92%**	Same as LUC 710	2.14	$666	$13	$241	**$425**	$78	445%
154	High-Cube Transload and Short-Term Warehouse	1,000 sf	**1.40**	ITE 11th Edition	**5.41**	5.91	**92%**	Same as LUC 710	3.01	$936	$17	$315	**$621**	$78	696%
n/a	Mine/Commercial Excavation[10]	1,000 cy	**0.01**	Florida Studies	**15.56**	16.06	**97%**	Florida Studies	0.07	$20.28	$0.94	$17.42	**$2.86**	-	-

1) Source: Appendix A, Table A-35

2) Net VMT calculated as ((Trip Generation Rate* Trip Length* % New Trips) * (1-Interstate/Toll Facility 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 miles of capacity.

3) Source: Marion County Growth Services Department, Planning Division. Current rate for Multi-Family Low-Rise is shown for "Single Family Attached". The 2015 calculated rate for Assisted Living Facility (adjusted to 20%) is shown for "Senior Adult Housing – Detached" and "Assisted Care Living Facility"
4) The ITE 11th Edition trip generation rate was adjusted to reflect the average occupancy rate of 60 percent based on data provided by the Marion County Property Appraiser's Office and the Florida Association of RV Parks and Campgrounds
5) The percent new trips for schools was estimated at 90% based on LUC 710, but was then adjusted to 80% to provide a conservative fee rate. This adjustment reflects the nature of elementary and middle school uses where attendees are unable to drive and are typically dropped off by parents/guardians on their way to another destination.
6) The ITE 11th Edition trip generation rate for PM Peak Hour of Adjacent traffic was adjusted by the ratio of Daily to PM Peak Hour for LUC 912 to approximate a daily TGR.
7) This rate should only be applied to small local restaurants that are not part of a multi-location restaurant chain.
8) Due to only slight variation, the trip generation rates for LUC 945 2,000 to 3,999 sq ft and 4,000 to 5,499 sq ft were combined into a weighted average trip generation rate for a single land use tier of 2,000 to 5,499 sq ft.
9) The ITE 11th Edition trip generation rate for PM Peak Hour of Adjacent traffic was adjusted by a factor of 10 to approximate the Daily TGR.
10) The mines land use impact fee rate was calculated using a TGR of 0.01 per cy, a TL (unadjusted) of 14.82 miles, a PNT of 97% based on the 2009 Collier County Mines Trip Characteristics Study, Tindale Oliver. Fuel efficiency value estimated at 6.5 gallons per mile.

Table D-2

Maximum Allowable Transportation Impact Fee Rates

ITE LUC	Land Use	Unit	Current Transp. Impact Fee[1]	Calculated Transp. Impact Fee (2025)[2]	Current to Calc. (2025)	Maximum Allowable Rates for 2025[3]	Current to Max. (2025)
	RESIDENTIAL:						
210	Single Family (Detached) - Less than 1,500 sf	du	$1,093	**$4,388**	301%	**$1,639**	50.0%
	Single Family (Detached) - 1,501 to 2,499 sf	du	$1,397	**$5,318**	281%	**$2,095**	50.0%
	Single Family (Detached) - 2,500 sf and greater	du	$1,562	**$5,855**	275%	**$2,343**	50.0%
215	Single Family (Attached)*	du	$903	**$4,606**	410%	**$1,354**	49.9%
220	Multi-Family Housing (Low-Rise, 1-3 floors)	du	$903	**$3,590**	298%	**$1,354**	49.9%
221/222	Multi-Family Housing (Mid/High-Rise, 4+ floors)	du	$568	**$2,412**	325%	**$852**	50.0%
240	Mobile Home Park	du	$514	**$1,945**	278%	**$771**	50.0%
251	Senior Adult Housing - Detached*	du	$1,093	**$1,962**	80%	**$1,639**	50.0%
252	Senior Adult Housing - Attached*	du	$903	**$1,319**	46%	**$1,319**	46.1%
253	Congregate/Assisted Care Facility	du	$184	**$520**	183%	**$276**	50.0%
	LODGING:						
310	Hotel	room	$375	**$2,364**	530%	**$562**	49.9%
320	Motel	room	$267	**$1,136**	325%	**$400**	49.8%
	RECREATION:						
411	Public Park	acre	$136	**$343**	152%	**$204**	50.0%
416	RV Park/Campground*	site	$514	**$680**	32%	**$680**	32.3%
420	Marina*	berth	$427	**$1,339**	214%	**$640**	49.9%
430	Golf Course	hole	$2,774	**$16,971**	512%	**$4,161**	50.0%
445	Movie Theater*	screen	$2,610	**$19,609**	651%	**$3,915**	50.0%
492	Racquet Club/Health Spa	1,000 sf	$2,065	**$15,512**	651%	**$3,097**	50.0%
495	Recreational Community Center*	1,000 sf	$2,065	**$12,405**	501%	**$3,097**	50.0%
	INSTITUTIONS:						
520	Elementary School (Private)	student	$55	**$678**	1133%	**$82**	49.1%
522	Middle School (Private)	student	$76	**$637**	738%	**$114**	50.0%
525	High School (Private)	student	$80	**$657**	721%	**$120**	50.0%
540	University/Junior College (7,500 or fewer students) (Private)	student	$156	**$1,125**	621%	**$234**	50.0%
550	University/Junior College (more than 7,500 students) (Private)	student	$116	**$835**	620%	**$174**	50.0%
560	Church	1,000 sf	$410	**$2,462**	500%	**$615**	50.0%
565	Day Care Center	1,000 sf	$1,318	**$6,365**	383%	**$1,977**	50.0%
590	Library	1,000 sf	$2,377	**$21,904**	821%	**$3,565**	50.0%
	MEDICAL:						
610	Hospital	1,000 sf	$879	**$5,213**	493%	**$1,318**	49.9%
620	Nursing Home	bed	$80	**$611**	664%	**$120**	50.0%
640	Animal Hospital/Veterinary Clinic	1,000 sf	$539	**$2,773**	414%	**$808**	49.9%
	OFFICE:						
710	Office	1,000 sf	$676	**$4,766**	605%	**$1,014**	50.0%
720	Medical Office/Clinic	1,000 sf	$1,528	**$10,961**	617%	**$2,292**	50.0%
770	Business Park	1,000 sf	$785	**$5,638**	618%	**$1,177**	49.9%
	RETAIL:						
822	Retail 6,000 sfgla or less	1,000 sfgla	$442	**$1,866**	322%	**$663**	50.0%
822	Retail 6,001 to 40,000 sfgla	1,000 sfgla	$1,014	**$3,182**	214%	**$1,521**	50.0%
821	Retail 40,001 to 150,000 sfgla	1,000 sfgla	$1,014	**$6,435**	535%	**$1,521**	50.0%
820	Retail greater than 150,000 sfgla	1,000 sfgla	$1,014	**$6,944**	585%	**$1,521**	50.0%
840/841	New/Used Auto Sales	1,000 sf	$1,325	**$8,247**	522%	**$1,987**	50.0%
850	Supermarket	1,000 sf	$1,490	**$9,530**	540%	**$2,235**	50.0%
862	Home Improvement Superstore	1,000 sf	$619	**$4,030**	551%	**$928**	49.9%
880/881	Pharmacy/Drug Store with or w/o Drive-Thru	1,000 sf	$791	**$5,992**	658%	**$1,186**	49.9%
890	Furniture Store	1,000 sf	$217	**$1,939**	794%	**$325**	49.8%
	SERVICES:						
911	Bank/Savings Walk-In	1,000 sf	$1,720	**$5,792**	237%	**$2,580**	50.0%
912	Bank/Savings Drive-In	1,000 sf	$2,260	**$10,370**	359%	**$3,390**	50.0%
931	Restaurant	1,000 sf	$2,803	**$18,790**	570%	**$4,204**	50.0%
n/a	Small Local Restaurant	1,000 sf	$1,340	**$8,855**	561%	**$2,010**	50.0%
941	Quick Lube	service bay	$1,334	**$9,497**	612%	**$2,001**	50.0%
942	Automobile Care Center	1,000 sf	$1,047	**$6,694**	539%	**$1,570**	50.0%
944	Gas Station w/Convenience Store <2,000 sq ft	fuel pos.	$850	**$6,480**	662%	**$1,275**	50.0%
945	Gas Station w/Convenience Store 2,000 to 5,499 sq ft	fuel pos.	$850	**$9,947**	1070%	**$1,275**	50.0%
	Gas Station w/Convenience Store 5,500+ sq ft	fuel pos.	$850	**$13,012**	1431%	**$1,275**	50.0%
947	Self-Service Car Wash	service bay	$811	**$5,691**	602%	**$1,216**	49.9%
948	Automated Car Wash*	car tunnel	$811	**$100,351**	12274%	**$1,216**	49.9%

Table D-2 (continued)

Maximum Allowable Transportation Impact Fee Rates

ITE LUC	Land Use	Unit	Current Transp. Impact Fee[1]	Calculated Transp. Impact Fee (2025)[2]	Current to Calc. (2025)	Maximum Allowable Rates for 2025[3]	Current to Max. (2025)
	INDUSTRIAL:						
110	General Light Industrial	1,000 sf	$428	**$2,145**	401%	**$642**	50.0%
140	Manufacturing	1,000 sf	$234	**$2,083**	790%	**$351**	50.0%
150	Warehousing	1,000 sf	$218	**$755**	246%	**$327**	50.0%
151	Mini-Warehouse	1,000 sf	$78	**$425**	445%	**$117**	50.0%
154	High-Cube Transload and Short-Term Warehouse	1,000 sf	$102	**$621**	509%	**$153**	50.0%
n/a	Mine/Commercial Excavation	1,000 cy	n/a	**$2.86**	n/a	**$2.86**	-

1) Source: Marion County Growth Services Department, Planning Division
2) Source: Appendix D, Table D-2
3) Pursuant to F.S. 163.31801, impact fee increases cannot exceed 50% of the current adopted rate

*Current rate shown is based on similar land use in the County's impact fee schedule; in certain cases, rates have been adjusted to account for a change in the unit of measure

- LUC 215 = Multi-Family Housing (Low-Rise) rate is shown
- LUC 251 = Single Family (Detached) Less than 1,500 sf rate is shown
- LUC 252 = Multi-Family Housing (Low-Rise) rate is shown
- LUC 416 = Mobile Home Park rate is shown
- LUC 420 = Retail rate is shown (converted to "per berth")
- LUC 445 = Racquet Club/Health Spa rate is shown (converted to "per screen")
- LUC 948 = Self-Service Car Wash rate is shown (converted to "per car tunnel")