

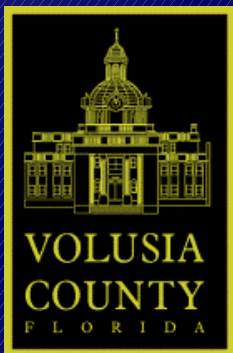
VOLUSIA COUNTY

Roadway Impact Fee Update



Technical Memorandum

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2003



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Volusia County Roadway Impact Fee Ordinance Update

Introduction

Volusia County collects roadway impact fees as a means of ensuring that land development pays a fair share cost of roadway capacity improvements necessary to accommodate that development. The ordinance which enables the collection of these impact fees provides that the ordinance will be updated every four years to keep pace with changes in roadway construction costs, non-impact fee revenues, land uses, and travel demand on non-Interstate roadways. By updating the ordinance at regular intervals, Volusia County can make sure that impact fees reflect roadway construction costs and revenues available to offset those costs.

TEI Engineers and Planners, in association with Tindale Oliver and Associates, was retained by Volusia County to provide the technical support needed for this update of the Roadway Impact Fee.

The specific issues addressed in this update of the Roadway Impact Fee ordinance are:

- **Context** – A peer review was conducted of counties adjacent to Volusia County and other large urban counties. Specific areas researched as part of this review included current impact fee rates, calculation of construction costs and right-of-way credits, waivers and exemptions, and issues regarding new or changing land uses.
- **Cost Components** – Roadway construction cost is an important element of the impact fee equation that determines how much per unit each land use must pay in roadway impact fees. If impact fees are to continue to represent a fair share of the cost of adding roadway capacity, the cost component of the equation must be updated on a regular basis. Roadway construction costs include engineering, right-of-way, construction, and inspection costs.
- **Other Funding Sources** – As part of determining the amount of revenue necessary to construct future needed roadway capacity, the amount of revenue coming from sources other than impact fees must be calculated. In Volusia County, most revenue for capacity improvements is from gasoline taxes. Determining the amount of additional revenue beyond available non-impact fee revenue is a key in calculating the fair-share of cost that must be borne by development.
- **Alternative Fee Schedules** – Based on the cost and credit information, new impact fee rates were developed for each of the land uses in the Volusia County Impact Fee Ordinance and the formula contained in that ordinance. For comparison purposes, three alternative impact fee rates were developed for each land use by using a percentage factor of full fair share of costs.
- **Impact Fee Phasing** – To provide for phasing in of impact fees over the course of four years, an option was developed for starting the new, updated impact fee rates at less than 100% of fair-share cost in year one, and using yearly incremental increases to reach 100% in year four.

- “Incubator Businesses” and Land Use Definitions – Volusia County has experienced an increasing number of developments which are being presented as “warehouse” for impact fee purposes, but which are actually being used to house a number of small service businesses. This issue was reviewed and a recommendation for addressing this land use is included in this report. In addition, Volusia County wants to clarify the distinction between “light industrial” land use and “manufacturing” land use.

For each of these issues, there is a separate section in this report, beginning with the Peer Review.

Peer Review

Volusia County is currently in the process of updating its Roadway Impact Fee Ordinance. Areas which were reviewed for possible updating include roadway construction and right-of-way cost information; the credit adjustment factor for non-impact fee revenue and Interstate highway travel; policies regarding the granting of credits, exemptions, waivers, and rebates; policies regarding the expenditure of impact fees; and clarification of certain land use definitions and issues, including “warehouse/incubator business” uses.

As part of this update process, a peer review of counties throughout Florida was conducted to ascertain issues facing counties of similar size and make-up of Volusia County, and how these issues have been approached. The following counties were reviewed:

- Brevard
- Collier
- Hillsborough
- Lake
- Lee
- Marion
- Orange
- Palm Beach
- Pinellas
- Sarasota
- Seminole

For each of the counties, the most recently adopted impact fee ordinance or land use code was obtained and reviewed. This was followed-up with phone interviews with key persons in each county.

A summary of the peer review for each issue studied is provided below. Table 1 provides a comparative analysis for all of the counties. This table also includes Volusia County as a baseline.

Impact Fee Credits – Difference Between Credit for Design, Construction, and CEI and Credit for Right-of-Way

All counties have provision for credits against impact fees that are due for new development or more intense redevelopment. In some counties, there is no distinction between credit granted for road construction and credit for right-of-way donations. In others, there is a distinction between construction credit and right-of-way credit as it pertains to the connection between the projects allowed for credit and officially adopted plans.

In Lake, Lee, and Sarasota counties, there is no difference in the requirements for construction credit and right-of-way credit. In these counties, projects must be related in some fashion to an adopted Long Range Transportation Plan (LRTP), Comprehensive Plan, or Capital Improvement Program. In Collier County, construction project credit must be for projects in the Cost Feasible LRTP, while credit for ROW can be given for projects in the LRTP Needs Plan. In Marion County, credit for construction must be for projects in the Transportation Improvement Program, while ROW credit can be issued for projects in the LRTP. Pinellas and Brevard counties do not normally allow for credit for ROW donations.

Lee County ties the amount of credit allowed depending upon where the project falls in adopted plans. More credit is granted for projects in the five-year work program as opposed to projects in longer-range plans.

In Volusia County, projects must be in the adopted Thoroughfare Plan to be eligible for credit. If proposed road construction or right-of-way donation is for a project that is included in the County or state five-year work program, such a project is eligible for credit, whether it is site-related or not. The original impact fee ordinance of 1986 had a provision to scale the credit that a particular project was awarded according to its placement on the 5-year road program. This was eliminated in 1995 when the economic development incentive took effect. A time frame within which developers can claim their credits might be limited to 3-5 years?

Transfer of Impact Fee Credits

Many counties that permit impact credits above the amount of impact fees due on a particular project allow impact fee credits to be transferred within the same zone. No counties allow the transfer of impact fee credit outside the zone in which impact fees were collected. Palm Beach, Sarasota, and Seminole counties generally do not allow the transfer of impact fee credits.

Most counties that allow the transfer of impact fee credit also allow the sale of those credits for use on property within the same zone. Volusia County allows the transfer and sale of impact fee credits within the same impact fee zone, but transfers of impact fee credits outside the zone in which the credit was issued is not allowed. This is in line with the practice of most counties.

Expenditure of Impact Fees

The collection of impact fees is, in theory, tied to the need for additional infrastructure in the area of the development paying the fee. For that reason, the expenditure of impact fees are limited to capacity projects within the zone in which they were collected. All counties do provide for exceptions to this rule under certain circumstances.

In all counties, except for Orange, impact fees can be expended in zones adjacent to the zone in which they were collected provided there is a clear demonstration of benefit to both zones. Volusia has this same policy, and therefore can be considered typical. Brevard and Hillsborough counties allow for this only in the case of roadways that form boundaries between two zones.

Lake County requires that municipalities in the collection zone to approve expenditures in adjacent zones.

Only one county, Pinellas, allows the expenditure of impact fees on projects in zones not adjacent to the zone in which they were collected. This requires the approval of municipalities in the affected zones.

Impact Fee Exemptions, Waivers, and Payments from Other Sources

Frequently within impact fee ordinances there are provisions for rebates, exemptions, or waivers for certain circumstances. These include affordable housing and economic development purposes. Peer counties were reviewed to determine the extent to which such provisions are used, and the amount of impact fees that has not been collected or collected from other sources as a result of such provisions.

Affordable Housing

Most counties do have provisions for waiving or discounting impact fees for affordable housing. In one county, Lake, the amount of the discount is determined by whether the housing is for low-income (50% discount) or very low-income (75% discount). Seminole County has a similar arrangement, except that the discounts are 25% and 50%, respectively. All of these counties have arrangements to have fees not collected provided by another source, such as State Housing Incentive Program (SHIP) funds, or interest earned on impact fees already collected.

Economic Development

Several counties have a program for exempting or discounting impact fees for certain industrial land use classifications. This is intended to attract businesses that will have a positive effect on the local economy, such as manufacturing. Again, the fees not collected are usually received from another source, including impact fee interest.

Pinellas and Hillsborough counties have what are termed “No-Fee Transportation Zones”, which are geographically defined areas in which impact fees are not collected. The justification for the designation of such areas is the existence of significant excess transportation capacity in the area under consideration. For that reason, fees not collected are not made up with revenue from another source, since in theory there are no needed roadway capacity projects in those areas that require funding.

In Hillsborough, there are six No-Fee zones, of which one has seen a fair amount of development. In Pinellas County, there are three No-Fee zones. In both counties, the original designation time-period is nearly expired, and it is not clear whether the designations will be renewed.

In Palm Beach County, there are three zones that have been determined to be so isolated from the Major Road Network that roadway impact fees are not collected in those zones.

Volusia County, like most counties, has provisions within its Code to allow the payment of roadway impact fees from other sources for affordable housing and other projects. Economic Opportunity Funds are also available to pay for impact fees on a case-by-case basis for business land uses, but this fund has not been used for that purpose in the past three years.

Impact Fee Dollars Affected

A few counties were able to provide information on the amount of impacts not collected under various rebate or exemption programs. These figures ranged from \$10,000 per year (Marion) to \$670,000 per year (Hillsborough). Most of all of Hillsborough County's uncollected fees are from one No-Fee zone.

Volusia County has had \$57,403.91 in impact fees paid for from other sources in the past three years. Most of this was for the New Hope Villas, a community development project, in which \$55,829.18 in impact fees were paid from SHIP funds and other sources.

“Warehouse/Incubator” Land Use Issues

Volusia County has had a recent issue with proposed developments coming in as “warehouse” in the site plan review process, but actually serving as small businesses once occupied. In these developments, the proposed “warehouse” is partitioned into smaller compartments that house small service businesses, for example, contractors, subcontractors etc. These uses can be expected to produce somewhat higher trip rates than true warehouse uses, and therefore should be subject to impact fees appropriate to those uses. Peer counties were polled to determine whether this has become an issue in other areas of the state.

Many of the counties polled did in fact have experience with this issue. For most counties, the resolution of the problem was to be sure of the actual usage at the time permits for the building are issued. One county, Marion, said they usually catch the actual use of any part of a “warehouse” when additional electric meters are added and must be inspected.

Calculation of Roadway Construction Costs

In the current Volusia County Roadway Impact Fee Ordinance, the cost calculation for road construction is based only on the cost of county road construction. Peer counties were polled to determine the extent to which state road construction cost data was included in their respective impact fee calculation formulas.

Most counties used both state and county construction cost data when developing the construction cost component of their impact fee calculation formula. Three counties, Seminole, Orange and Sarasota, said they used only county road construction data in determining road

construction cost in their last major update in the mid-1990's. However, Sarasota did use state inflation indices to update their construction cost figures since the last major impact fee ordinance revision.

Phasing of Impact Fees

Many times, impact fees are implemented at a reduced rate from the full net cost in the first year of an update, and then subsequently increase to near 100% of the full net cost on a yearly basis as the next update approaches. Volusia County does not currently "phase-in" impact fees in this manner. All of the peer review counties were contacted to determine if they phase impact fees between updates. All counties do phase impact fees except for Pinellas, Lee, and Sarasota counties. This information was used to develop an option for phasing of impact fees in Volusia County.

The Peer Review information is summarized in Table 1 on the following page.

Table 1
Peer Review Summary

County	Credit Requirements		Transfer of Credits		Sale of Credits	Expenditure of Impact Fees in Different Zone		Exemptions, Waivers, Payments from Other Sources			Issues with "Warehouse" Land Use	Cost: County and State Cost or County Only	Phasing of Impact of Fees
	Construction, Design, CEI	Right-Of-Way	Within Same Zone	In Different Zone		Adjacent Zone	Non-Adjacent Zone/Countywide	Affordable Housing	Economic Development Projects	Dollar Value over Past 3 Years			
Volusia	Must be in Thoroughfare Plan. Non-site related credit allowed if project is in the 5-year County or State work program.	Must be in Thoroughfare Plan. Non-site related credit allowed if project is in the 5-year County or State work program.	Transfers allowed within same zone.	Not allowed.	Can be sold.	Expenditure allowed in adjacent zones with demonstrated benefit.	There are no non-adjacent zones.	Code provides for payment of impact fees for affordable housing through SHIP funds.	Economic Opportunity Funds are available to pay for impact fees on case-by-case basis for business uses. Has not been used in last three years.	\$57,403.91 (of which \$55,829.18 was for New Hope Villas) - mostly inter-departmental charges with some SHIP funds.	Developers come in with site plan noted as "warehouse", but building is partitioned for use by small businesses.	Used County costs only.	N/A
Brevard	Credit allowed as part of agreement to be approved by the Board of County Commissioners. If developer initiated - then must be in Comprehensive Plan.	Credits not normally granted for right-of-way.	Credits only issued at time of project up to amount of impact fees due - no carry-over of credits.	Credits only issued at time of project up to amount of impact fees due - no carry-over of credits.	Not allowed.	Expenditure allowed on "boundary roads" in adjacent zones only.	Not allowed.	Allowable on a project-by-project basis.	Impact fee exemptions for uses within certain industrial classifications.	Not available.	Try to catch actual uses at time certificate of occupancy is issued.	Both County and State costs were used.	Yes - 27.5% Reduction Factor
Collier	Credit allowed for projects in Cost-Feasible LRTP.	Credit allowed for projects in Needs LRTP.	Transfers allowed within same zone.	Not allowed.	Not allowed.	Expenditure allowed in adjacent zones with demonstrated benefit.	Not allowed.	Charitable organization waiver up to \$7,500.	Impact fee exemptions for uses within certain industrial classifications.	Not available.	"Warehouse" rate was deleted because of abuses. Generally assess at "General Industrial" rate, but permits are watched for other uses.	Both County and State costs were used.	Yes
Hillsborough	Credit allowed for projects in LRTP.	Credit allowed for projects in LRTP. Separate calculation of ROW impact fees.	Transfers allowed within same zone.	Not allowed.	Can be sold.	Expenditure allowed on "boundary roads" in adjacent zones only.	Not allowed.	Provides for affordable housing impact fee relief - funded through MSTUs.	No-Fee Transportation Zones based on excess capacity. Currently have 6 zones.	\$2,000,000	Usually caught during the permitting process.	Both County and State costs were used.	Yes
Lake	Credit allowed for projects in Comprehensive Plan.	Credit allowed for projects in Comprehensive Plan.	Transfers allowed within same zone.	Not allowed.	Can be sold.	Expenditure allowed in adjacent zones with demonstrated benefit and majority of municipalities in district approve.	Expenditure allowed in adjacent zones with demonstrated benefit and majority of municipalities in district approve.	50% relief for low-income and 75% relief for very low-income. Paid through interest on collected impact fees.	Waiver available for industrial uses but it has not been used.	Not available.	Usually caught during the permitting process.	Both County and State costs were used.	Yes
Lee	Credit issued for three different classes: Class I - Roads in 5 year Work Program (100% credit); Class II - Roads not in 5 year Work Program but in 10 year Work Program (100% ROW credit, construction credit subject to "prematurity" discount); Class III - Roads in LRTP or demonstrated benefit to existing road network (ROW and construction credit subject to "prematurity" discount).	See Construction Credit.	Transfers allowed within same zone.	Not allowed.	Can be sold.	Expenditure allowed in adjacent zones with demonstrated benefit.	Not allowed.	None.	Enterprise Zones to promote redevelopment and in-fill.	Not available.	Generally assessed at "Office" rate based on the appearance of the plan. Applicant would have to appeal assessment - so far none has.	Both County and State costs were used.	No
Marion	Credit issued for projects in 5-year TIP.	Credit issued for projects in LRTP.	Construction credits only issued at time of project up to amount of impact fees due - no carry-over of credits. ROW credits can be transferred within same zone.	Not allowed.	Can be sold.	Expenditure allowed in adjacent zones with demonstrated benefit.	Not allowed.	Affordable housing exemptions through SHIP program.	Industrial rebate program - impact fees for certain industrial land uses rebated over 5 years.	In 2000, \$10,000 rebated.	More intense uses are usually caught when additional electrical meters are permitted.	Both County and State costs were used.	Yes
Orange	Credit issued for off-site improvements	Credit issued for off-site improvements	Transfers allowed within same zone.	Not allowed.	Can be sold.	Not allowed.	Not allowed.	Affordable housing discount provided for.	None.	Not available.	Shell is assessed at warehouse rate - additional fees collected for more intense uses as each individual unit is permitted.	County costs only.	Yes (initially 75%, additional 15% the year after)
Palm Beach	Project must be on Major Road Network	Project must be on Major Road Network	Transfers not allowed.	Transfers not allowed.	Not allowed.	Allowed with demonstration of benefit to both impact fee zones.	Not allowed.	Affordable housing impact fees can be paid from other funds (SHIP, etc.).	Three zones are determined to be isolated from Major Road Network - roadway impact fees not collected in this zone.	Not available.	Termed "flex buildings". Assessed at a "Business Park" rate as determined by building permits.	Used projected costs of roads in the 5-year work program as estimated by Palm Beach County Engineering.	Charges 95% in year one and the additional 5% the second year
Pinellas	Any capacity improvement that will benefit the Major Road Network, including transit improvements.	None	Credits only issued at time of project up to amount of impact fees due - no carry-over of credits.	Credits only issued at time of project up to amount of impact fees due - no carry-over of credits.	Not allowed.	Allowed with demonstration of benefit to both impact fee zones.	Allowed with demonstration of benefit to both districts and local governments in the zone in which fee were collected approve.	Pinellas County Code provides for payment of impact fees for affordable housing through SHIP funds and other sources.	Have No-Fee Transportation Zones based on excess capacity. Zones scheduled to sunset in 2004 and may not be renewed.	Not available.	Some cities are charging for exact use but County is not tracking individual uses in warehouses.	Both County and State costs were used.	No
Sarasota	Project or comparable project must be in CIP and at least partially funded with TIF monies. Credit only allowed up to the amount funded by TIF or amount of impact fee assessment, whichever is less.	See Construction Credit.	Generally not transferable.	Generally not transferable.	Not allowed.	Allowed with demonstration of benefit to both impact fee zones.	Not allowed.	None.	Separate impact fee mitigation ordinance for "export-oriented" industries. Must be in designated mitigation areas and create jobs with a minimum average wage. Up to 50% of impact fees due.	Approximately \$200,000 per year.	Generally assessed at a "Light Industrial" rate.	Last major cost update done with County data, but recent adjustments done using FDOT cost inflation indices.	No
Seminole	Must be part of "contemplated" off-site improvements to designated arterial or collector roads.	See Construction Credit.	Generally not transferable.	Generally not transferable.	Not allowed.	Arterial road impact fees are collected separately and collected on a countywide basis (there are no districts). Collector road impact fees are collected in designated zones, and cannot be spent in zones in which they were not collected.	Arterial road impact fees are collected separately and collected on a countywide basis (there are no districts). Collector road impact fees are collected in designated zones, and cannot be spent in zones in which they were not collected.	25% relief for low-income and 50% relief for very low-income. Paid through SHIP funds and interest on collected impact fees.	None.	Approximately \$60,000 per year.	Shell is assessed at warehouse rate - additional fees collected for more intense uses as each individual unit is permitted.	Used County costs only.	Yes

Update of the Cost Section and Distribution Factor

The overall impact fee formula has two main components: demand and credit. The demand section determines the overall demand, in dollars per land development unit, of new roadway capacity required to meet demand created by new development. The credit portion of the equation takes into consideration gas tax revenues that will be generated by that same demand.

The two demand variables that are part of this update of the Volusia County roadway impact fee are roadway construction cost and the distribution factor.

The general equation used to compute the transportation impact fee for a given land use is:

$$\text{Net Impact Fee} = \frac{(\text{Travel Demand} \times \text{Unit Cost})}{\text{Gross Impact Cost Equation}} - \frac{(\text{Travel Demand} \times \text{Unit Credit})}{\text{Credit Equation}}$$

The unit cost component is one element of the Gross Impact Cost portion of the impact fee equation. The Gross Impact Cost equation is:

$$\text{Gross Impact Cost} = [(TGR/2) \times TL \times \%NT \times DF \times CC]/(CL)$$

where:

TGR	=	Trip Generation Rate (vehicles per day) (Note: TGR is divided by two since only one leg of a trip is attributable to the source of trip generation);
TL	=	Average Trip Length (Miles);
%NT	=	Percent of Trips Generated by the Land Development Activity considered to be new trips on the roadway;
DF	=	Distribution Factor to recognize a portion of travel on local and Interstate roads
CC	=	Unit cost to construct one lane mile of roadway capacity;
CL	=	Capacity per lane mile.

In the equation above, travel demand is determined by multiplying a particular land uses daily trip generation (TGR) by the percentage of those trips that are new trips (%NT) and the average length of those trips (TL). The result expresses per unit travel demand for each land use in vehicle-miles of travel. Travel demand for each use was studied in the update of the Volusia County Roadway Impact Fee Ordinance conducted in 1998. The update of these variables was not part of the scope of work for this update. Therefore, the current trip generation rates, percent new trips, and trip lengths contained in the current ordinance were used for calculating the updated impact fee rates outlined later in this report.

Construction Cost

Construction cost is a part of Gross Impact Cost, and is represented by the variable “CC” in the above equation. The cost of constructing roadway capacity is an integral part of determining the fair share of cost for development. If the cost of roadway construction is not updated on a regular basis, the amount of impact fee revenue needed to meet the demand created by new development will not be collected. Construction costs are composed of three main components: engineering; right-of-way; and actual construction costs. Other costs, such as construction engineering inspection (CEI) and utility relocation are included in these costs.

To update the cost component, three sets of data were used. First, historical capacity project construction cost data from both Volusia County (years 1997/98 to 2001/02) and FDOT (years 1998/99 through 2002/03) were compiled to determine cost experience and the typical ratio of construction, engineering, and right-of-way costs. Second, costs of 5-year work program County (years 2001/02 through 2006/2007) and state (years 2002/03 through 2007/08) capacity projects were used to determine average costs of projects programmed over the next five years. Lastly, the costs of County and state non-FIHS capacity projects contained in Phases II and III (Years 2006 – 2020) Volusia County MPO Cost Feasible Long Range Transportation Plan costs were compiled and analyzed, excluding those projects which have since moved into the 5-year work program. Even though the Volusia County impact fees are used primarily to construct and improve new County roads to County standards, both state and county construction cost data were used, as this provides the most accurate assessment of the cost of providing the capacity required over long range planning horizon.

An analysis of the historical capacity project construction costs resulted in an average County project construction cost of \$1,181,348 per lane mile and state project construction cost of \$2,025,603 per lane mile. The combined historical construction cost for all roads was \$1,534,903 per lane mile. The projects and costs used in the analysis of historical projects are provided in Table A-1 of the Appendix.

There were certain projects included in Phases II and III of the Long Range Transportation Plan that have moved into the 5-year work program window. These projects were included in the 5-year work program analysis and not included in the Long Range Transportation Plan projects. An analysis of the five-year work program capacity project construction costs resulted in an average County project construction cost of \$1,350,731 per lane mile and state project construction cost of \$2,533,126 per lane mile. The combined five-year work program construction cost for all roads was \$2,006,315 per lane mile. The projects and costs used in the analysis of five-year work program projects are provided in Table A-2 of the Appendix.

An analysis of the construction costs for projects in the Phase II and III Cost Feasible Long Range Transportation Plan (projects for years 2006-2020, excluding those projects that have since moved into the 5-year work program) resulted in an average County project construction cost of \$1,212,643 per lane mile and state project construction cost of \$1,549,566 per lane mile.

As noted above, this analysis did not include those projects that have moved into the 5-year work program since the adoption of the Long Range Transportation Plan. The combined historical construction cost for all roads was \$1,321,501 per lane mile. The projects and costs used in the analysis of historical projects are provided in Table A-3 of the Appendix.

As shown above, the average County project construction costs are fairly consistent in all three time periods analyzed. State projects costs varied significantly between the historical and 5-year work program costs and the Long Range Transportation Plan costs. While the variation in state costs between historical and 5-year work program costs is not unusual, in that the types of projects included in each time period can affect costs, the significant drop in state project costs for those projects in Phases II and III of the Long Range Transportation Plan is not in line with typical project costs and expectations. This lower than expected state project costs effectively skews the average cost of Long Range Transportation Plan projects downward past the point considered reasonable. Therefore, the average project cost derived for projects in Phases II and III was not used in determining average project construction costs. Instead, the approach described below was used.

As the costs derived for both historical and 5-year work program projects appeared reasonable, projects from both time periods were combined to arrive at average capacity project costs for both state and County road projects. This is shown in Table 2 on page 13. The detailed information in Table 2 can be found in Table A-4 of the Appendix, which is a table combining state and county historical and 5-year projects. In order to arrive at an accurate per-lane mile average cost for projects to be constructed through the long range planning horizon year of 2020, the County and state project costs were blended together using an average weight by the number of lanes miles of each type of project (state or County) included in the 5-year work program and Phases II and III of the Cost Feasible Long Range Transportation Plan. This weighted average provides the best overall estimate of per-lane mile revenue that will be required through the year 2020. This approach resulted in a blended per lane-mile construction cost of \$1,678,362. Therefore, for the variable “CC” in the Gross Impact Fee equation, the figure \$1,678,362 is used. This is illustrated in Table 3 on page 13.

To summarize based on the data analysis as described above, an overall per-lane mile construction cost of \$1,678,362 was calculated. This cost was used in the demand-side equation in determining per unit impact fee rates for each land use.

Interstate Vehicle Miles Traveled (VMT)

Another component of the demand-side of the impact fee equation is the percentage of travel that occurs over interstate highways (variable “DF” in the Gross Impact Fee equation). Since Volusia County is not responsible for additional capacity on the Interstate system, the equation provides for a credit to reflect that portion of travel that occurs over the Interstate system. Based on information from the most recently adopted Volusia County Urban Area Transportation Study FSUTMS model, an average of 29.7% of Volusia County vehicles miles traveled (VMT) will take place over the Interstate system. This is a change from the previous percentage used (32%),

since an update model has been adopted since the time of the last impact fee update. Therefore, this percentage (29.7%) was used for variable “DF” in the Gross Impact Fee element of the demand-side equation to reflect this percentage of Interstate use in Volusia County.

**Table 2 - Historical and 5-Year Capacity Improvement Projects
Statistical Profile of Cost, Capacity and Lane Miles**

All Roads	
Total Vehicle Miles of Capacity Added:	2,012,641
Total Cost:	\$355,549,145
Average Cost of One Vehicle Mile of Added Capacity:	\$176.66
Total Lane Miles of Added Capacity:	196.866
Average Capacity Added per Lane Mile:	10232
Average Cost Per Lane Mile of Improvement	\$1,806,046
Right of Way Cost Percent of Construction Cost	32%

County Roads		State Road Costs	
Total Vehicle Miles of Capacity Added:	766,733	Total Vehicle Miles of Capacity Added:	1,245,908
Total Cost:	\$125,569,732	Total Cost:	\$229,979,413
Average Cost of One Vehicle Mile of Added Capacity:	\$163.77	Average Cost of One Vehicle Mile of Added Capacity:	\$184.59
Total Lane Miles of Added Capacity:	99.06	Total Lane Miles of Added Capacity:	97.806
Average Capacity Added per Lane Mile:	7740	Average Capacity Added per Lane Mile:	12739
Average Cost Per Lane Mile of Improvement	\$1,267,613	Average Cost Per Lane Mile of Improvement	\$2,351,383
Right of Way Cost Percent of Construction Cost	31%	Right of Way Cost Percent of Construction Cost	32%

**Table 3
Weighted Average Construction Costs**

Jurisdiction	Cost Per Lane Mile (From Table A-4 in the Appendix)	Total Lane Miles 2003-2020	Percent of Total Lane Miles	Weighted Cost Per Lane Mile
County	\$1,267,613.00	266.84	62.1	\$787,187.67
State	\$2,351,383.00	163.12	37.9	\$891,174.16
Totals	-	429.96	100	\$1,678,361.83

Update of the Credit Section

The Volusia County 5-year Capital Improvements Program, FDOT Five-Year Work Program, and the Volusia County MPO Long Range Transportation Plan provide the roadway improvements that will be required in both the short and long term to accommodate traffic generated by new development. A certain portion of the revenue that will be required to construct these projects is anticipated to come from sources other than impact fees, most particularly gas taxes. This gas tax revenue includes revenue that will be generated by travel to and from new development in Volusia County. Therefore, credit must be provided to recognize this revenue to avoid new development having to pay twice for new capacity projects. Overall, the difference between the cost of the needed capacity projects and the non-impact fee revenue available to fund them represents the fair share cost of development.

As was stated in the Cost section of this report, the general equation for computing transportation impact fees is:

$$\text{Net Impact Fee} = \left[\frac{(\text{Travel Demand} \times \text{Unit Cost})}{\text{Gross Impact Cost Equation}} \right] - \left[\frac{(\text{Travel Demand} \times \text{Unit Credit})}{\text{Credit Equation}} \right]$$

The demand for travel on the transportation system is usually expressed in vehicle miles traveled or lane miles of roadway capacity consumed, the unit cost in terms of dollars per vehicle mile or dollars per lane-mile of roadway capacity, and the unit credit equivalent dollars per gallon of gas tax generated by the development allocated to roadway construction or transportation system capacity expansion. Thus, the impact fee represents an “up-front” payment of a portion of the cost to build transportation facilities required to accommodate new development.

The portion of gasoline taxes that government agencies use to construct capacity expansion projects is credited to land development in proportion to the amount of travel they generate. As was outlined in the Cost section of the report, travel is measured in vehicle miles traveled, and is determined by multiplying the per unit trips generated by both the percent new trips for each land use and the average trip length for each land use. While the demand side of the impact fee equation includes a distribution factor to exclude travel on Interstate highways, this factor is not included in the credit side of the equation, since all travel, whether on Interstate or non-Interstate highways, will generate gas tax revenue. Since this tends to overstate the amount of revenue that will be available to construct roads, this approach provides a conservative estimate of additional revenue that will be required to construct capacity roadway projects.

The present value of gasoline tax revenues that a development generates is estimated using the following credit equation:

$$\text{Impact Fee Credit} = [(TGR/2) \times TL \times \%NT \times TPG \times DAYS \times PVIF]/(MPG)$$

where:

TGR	=	Trip Generation Rate;
TL	=	Average Trip Length (miles);
%NT	=	Percent of Trips Generated by the Land Development Activity considered to be new trips on the roadway;
TPG	=	Tax paid per gallon of gasoline which is expected to be applied towards construction of new capacity;
DAYS	=	Number of days in the year;
PVIF	=	Net present value factor at i percent over N years;
MPG	=	Estimated average miles per gallon.

For all land uses, an effective 365 days per year of operation were assumed. This will not be the case for all land uses, as some uses operate on weekdays only (e.g. office buildings) and/or seasonally (e.g. schools). Use of 365 days per year provides a “conservative” estimate of use, ensuring that gasoline taxes are adequately credited against the fee. The net present value factor (PVIF) is used to express future gasoline taxes in current dollars; for Volusia County, a present value factor of 12.46 is used based on a five percent interest rate over 20 years. Five percent represents a conservative estimate of the short-term interest rate, in that interest rates over the past several years have been at historically low levels. The 20-year period was selected because it is a conservative estimate of the life of a roadway and this period generally corresponds to the time period for which road improvement bonds are issued.

For this update of the Volusia County Roadway Impact Fee, the scope of work called for determining the portion of gasoline taxes that will be used to expand roadway capacity in Volusia County. This was determined by finding the number of pennies per gallon that return to the community for non-Interstate, capital improvements for State and County road improvements. The amount of revenue generated by one-cent of gas tax for roadway capacity expansion was estimated using information provided by Volusia County and the Volusia County MPO Cost Feasible Long Range Transportation Plan.

Reviewing the revenue available for projects in the 5-year work program for County and state roadway capacity projects, it was determined that there were approximately 18.44 cents of revenue generated per gallon of gasoline to construct these projects. This is somewhat higher than the expected range of values. A review of the projects included in the five-year work program reveals that there are a number of high-cost state projects included in the five-year program that cannot be considered typical of the longer-range list of projects. Therefore, the 5-year work program was not used as a source for determining typical per-year gasoline tax revenues.

The Volusia County MPO Long Range Transportation Plan provides an estimate of impact fee and non-impact fee revenue forecast to be available for projects in Phases II

and III (years 2006-2020) of the Cost Feasible Long Range Transportation Plan. Non-impact fee revenues consist of State Gas Tax revenues, Local Option Gas Tax revenues and the share of Municipal Gas Tax revenues allocated to Long Range Transportation Plan non-FIHS capacity projects. To determine the amount of non-impact fee revenues available over the 15-year period covering Phases II and III of the Cost Feasible Long Range Transportation Plan, a cost approach was used.

The Cost Feasible Long Range Transportation Plan may only include projects for which there are sufficient revenues expected to be available to construct those projects within the long range planning horizon. Therefore, the total cost of all non-FIHS state and County road capacity projects included in the plan (which excludes Phase I, the work program portion of the plan) can be used as a baseline of total revenue available through the 15 year period. From this baseline, anticipated impact fee revenue, as provided in the plan, is subtracted. Also subtracted is the amount of municipal gas tax revenue to be generated in years 2001-2005 per the Long Range Transportation Plan to be used for Phase II and III projects, since these revenues will not be generated during the time period under study. The Long Range Transportation Plan also notes a revenue shortfall of \$8,065,000 in revenue need for years 2006-2020, and this must also be subtracted from the baseline revenue. Finally, the revenue for those projects which have moved from Phases II or III of the Long Range Transportation Plan to the 5-year work program must also be subtracted. Also excluded was a \$41,040,000 bridge replacement project, as this is not typical of capacity projects to be constructed over the next 20 years, and was not included in the cost calculations. The actual calculations proceed as follows:

Baseline LRTP non-FIHS revenue	=	\$520,250,000
- anticipated impact fee revenue (\$41,586,000)	=	\$478,664,000
- Municipal gas tax generated 2001-2005 (\$18,050,000)	=	\$460,614,000
- Project revenue moved to 5-year WP (\$7,249,000)	=	\$453,365,000
- LRTP Phase III Bridge Project (\$41,040,000)	=	\$412,325,000
- LRTP deficit (\$8,065,000)	=	\$404,260,000
Net non-impact fee revenue for 2006-2020	=	\$404,260,000

The net non-impact fee revenue for 2006-2020 (\$404,260,000) is then divided by 15 to arrive at an annual estimated non-impact fee revenue amount (\$26,950,667). According to the FDOT publication *Florida's Transportation Tax Sources – A PRIMER*, as of January 1, 2003, one cent of gas tax in Volusia County generates \$1,946,000 in annual revenue. Dividing the total annual forecast revenue by the amount each penny generates determines the amount of equivalent cents in gas tax that are available capacity projects. In this case, \$26,950,667 divided by \$1,946,000 to 13.9 pennies per gallon of gas tax revenue available for capacity projects through the year 2020. Since this revenue

estimate is based on the funding from which the Cost Feasible Long Range Transportation Plan was developed, it is, according to the Cost Feasible Long Range Transportation Plan, the amount of tax per gallon that will be available to fund projects through 2020. Based on typical historical values, this appears to be a reasonable estimate.

The estimated miles per gallon for the typical vehicle was derived using information from the Federal Highway Administration and is based on the latest vehicle miles traveled and fuel consumption available (year 2001). The basic calculation is:

2, 088,733,000,000 vehicle miles traveled

divided by:

118,861,496,395 gallons of fuel consumed

equals:

17.57 miles per gallon

The resulting Impact Fee Credit equation is as follows:

$$\text{Impact Fee Credit} = [(TGR/2) \times TL \times \%NT \times 0.139 \times 365 \times 12.46]/(17.57)$$

where:

TGR	=	Trip Generation Rate (vehicles per day);
TL	=	Average Trip Length (miles);
%NT	=	Percent New Trips;
.139	=	Tax paid per gallon of gasoline which is expected to be applied towards construction of new capacity;
365	=	Number of days in the year;
12.46	=	Net present value factor at 5% over 20 years;
17.57	=	Estimated average miles per gallon

This credit equation was used with the Gross Impact Fee equation in the Cost section to calculate the impact fee rates for each land use in the current Volusia County Roadway Impact Fee ordinance. These rates are outlined in the next section of the report.

Updated Land Use Impact Fee Rates

Using the updated cost, credit, and distribution factors described in the preceding sections, the Volusia County per unit impact fees were updated to include the new values. These new rates are shown in Table 4 on the following pages. These rates reflect the full fair-share cost of development for new and expanded roadways required to accommodate trips generated by new development. In addition to the full fair-share cost values, percentage of fair-share cost values were developed as requested by Volusia County as an option to offset the inclusion of state roadway construction costs in the impact fee analysis, and to phase-in new rates as described below. The percentages used were 67.91%, 75% and 90%. These reduced rates are shown in Tables 5, 6 and 7. Trip characteristic information, including trip generation rates, trip lengths, and percent new trips, are from a previous study completed by Ghyabi-Lassiter and Associates dated March 4, 1999.

The 69.7% of total system cost is provided as it represents the equivalent of using only County construction cost information in the cost side of the impact fee formula. Therefore, if the County is to charge for 100% of the County construction cost, it should set the impact fee rates at the 69.71% level.

Indexing of Roadway Impact Fees

Every four years, Volusia County updates its roadway impact fees. As with this update, increases in construction and right-of-way costs are incorporated into the update to account for the increased cost of constructing and expanding roadways. These updates can frequently result in large increases in the impact fees charged, since cost increases are addressed only every four years. An alternative to this large increase is to index impact fees to the annual increase in the cost of constructing roadways and purchasing right-of-way. This practice was used in Volusia County until 1995. As part of this update of the Volusia County Roadway Impact Fee, Volusia County requested that an option for indexing roadway impact fees over the next four years be developed. This option is described below.

The two main components of the cost of constructing and expanding roads are construction costs and right-of-way costs. These costs are not increasing at the same rate, so a weighted rate of inflation must be used for each component. For construction costs, the lasted annual increase as published by the *Engineering News Record* was used. Over the past three years (from 1999 to 2002), the annual increase in construction costs as determined by annual increases in the Construction Cost Index published by the *Engineering News Record* has averaged 2.6%.

For right-of-way costs, information on the increase in property values in Volusia County was obtained from the Volusia County Property Appraisers Office. For the most recent three years (1999 through 2002), property values have increased at the rate of 9.6% per year.

Using the information from the combined historical and 5-year work program project data, it was determined that right-of-way is approximately 31% of roadway construction and expansion costs. The annual index for increasing impact fee rates was thus weighted as follows:

$$\begin{aligned}\text{Index} &= (2.6\% \times .69) + (9.6\% \times .31) \\ &= (1.794) + (2.976) \\ &= 4.77\%\end{aligned}$$

As a reasonableness check, the increase in the County Construction Cost as used in the 1999 update (effective January 1, 2000) of the Roadway Impact Fee and the current (Year 2003) County Construction Cost determined in the course of this update was reviewed. In the 1999 update, the County Construction Cost was found to be \$976,030.42. In 2003, the updated County Construction Cost was found to be \$1,267,613. This represents an increase of 6.75% over the course of four years.

Based on above information, should Volusia County wish to index impact fees for years 2, 3 and 4 of this update, a 5% escalation rate would be an appropriate and conservative rate of increase for each year. This 5% increase is properly applied to the construction cost used in the cost side of the impact fee formula. Table 9 provides the rates as calculated using 100% of the County Construction Costs for the first year and the rates for years 2, 3 and 4 using that same Construction Cost increased by 5% each year.

Table 4

01-Aug-03

Volusia County Impact Fee with New Cost and Credit Variables

Fee Schedule Assumptions																				
Gasoline Tax:						Cost per Lane-Mi:			\$1,678,362			Interstate VMT %:			29.7%					
\$ per gallon to capital:						\$0.139			Capacity per lane:			10,232 vpd			Across-the-board Adjustment:			0%		
Facility life (years):						20			Fuel Efficiency:			17.57 mpg								
Interest Rate:						5%			Effective days per year:			365								
LUC	Land Use	Units	Trip Generation Factor	Source	Percent New Trips	Source	Trip Generation Rate	Source	Average Trip Length	Cost/ Unit/ 1000 SQ. FT.	Gas Tax & License Fee Credit	Cost/ Unit/ 1000 SQ. FT.	Fee/ Unit/ SQ. FT.	Fee / Unit + 3% Admin. Fee		Existing Rate	Rate with Adjustment	% of Current Rate		
	A		B		C		D		E	I	J	K	L	M						
Residential																				
210	Single Family	DU	100.0%	N	100.0%	I	9.57	B	6.12	\$3,376.87	\$801.36	\$2,575.51	\$2,575.51	\$2,652.77		\$1,184.44	\$2,652.77	224.0%		
220	Apartment	DU	100.0%	N	100.0%	I	6.63	F	6.12	\$2,339.46	\$555.17	\$1,784.29	\$1,784.29	\$1,837.81		\$1,174.17	\$1,837.81	156.5%		
230	Residential Condominium/ Townhouse	DU	100.0%	N	100.0%	I	5.86	F	5.10	\$1,723.13	\$415.09	\$1,308.04	\$1,308.04	\$1,347.28		\$596.73	\$1,347.28	225.8%		
240	Mobile Home Park	DU	100.0%	N	100.0%	I	4.81	F	4.30	\$1,192.52	\$292.04	\$900.48	\$900.48	\$927.49		\$407.05	\$927.49	227.9%		
310	Hotel	Rooms	100.0%	F	66.3%	I	8.23	F	6.25	\$1,966.27	\$465.88	\$1,500.39	\$1,500.39	\$1,545.41		\$733.40	\$1,545.41	210.7%		
320	Motel	Rooms	100.0%	F	76.6%	I	5.63	F	4.30	\$1,069.19	\$261.84	\$807.35	\$807.35	\$831.57		\$398.80	\$831.57	208.5%		
620	Nursing Home	Beds	100.0%	F	89.0%	I	2.61	F	2.60	\$348.22	\$91.09	\$257.14	\$257.14	\$264.85		\$129.88	\$264.85	203.9%		
Office and Financial:																				
710	Office under 10,000 GSF	1 sf	100.0%	B	92.7%	I	22.64	B	5.44	\$6,582.72	\$1,444.15	\$5,138.57	\$5.14	\$5.29		\$2.46	\$5.29	215.2%		
710	Office over 10,000 GSF	1 sf	100.0%	B	92.7%	I	12.12	B	5.44	\$3,523.97	\$773.10	\$2,750.86	\$2.75	\$2.83		\$1.31	\$2.83	216.3%		
714	Corporate Headquarters Building	1 sf	100.0%	A	93.0%	I	7.72	A	5.44	\$2,251.90	\$494.03	\$1,757.87	\$1.76	\$1.81		\$0.84	\$1.81	215.5%		
720	Medical Office	1 sf	100.0%	B	83.8%	I	36.13	B	4.85	\$8,466.50	\$1,857.42	\$6,609.09	\$6.61	\$6.81		\$3.16	\$6.81	215.4%		
610	Hospital (Beds to S.F.)	1 sf	100.0%	S	77.0%	I	16.78	S	5.10	\$3,799.30	\$833.51	\$2,965.79	\$2.97	\$3.05		\$1.42	\$3.05	215.1%		
912	Bank w/ Drive-thru	1 sf	100.0%	F	45.5%	I	265.21	F	2.40	\$16,697.94	\$3,663.27	\$13,034.67	\$13.03	\$13.43		\$6.23	\$13.43	215.5%		
911	Bank w/ no Drive-thru	1 sf	100.0%	S	32.0%	I	156.48	F	2.40	\$6,929.00	\$1,520.11	\$5,408.88	\$5.41	\$5.57		\$2.58	\$5.57	215.9%		
Industrial:																				
110	Light Industry	1 sf	100.0%	A	91.0%	B	6.97	F	5.10	\$1,865.07	\$409.17	\$1,455.90	\$1.46	\$1.50		\$0.70	\$1.50	214.2%		
140	Manufacturing	1 sf	100.0%	R	92.0%	I	3.82	R	5.10	\$1,033.41	\$226.71	\$806.69	\$0.81	\$0.83		\$0.39	\$0.83	213.1%		
150	Warehouse	1 sf	100.0%	S	92.0%	I	4.96	S	5.00	\$1,315.50	\$288.60	\$1,026.90	\$1.03	\$1.06		\$0.49	\$1.06	215.9%		
151	Mini-warehousing	1 sf	100.0%	S	91.0%	I	2.50	S	5.00	\$655.85	\$143.88	\$511.96	\$0.51	\$0.53		\$0.24	\$0.53	219.7%		

Table 4

01-Aug-03

Volusia County Impact Fee with New Cost and Credit Variables

Fee Schedule Assumptions																			
Gasoline Tax:							Cost per Lane-Mi:		\$1,678,362		Interstate VMT %:							29.7%	
\$ per gallon to capital: \$0.139							Capacity per lane:		10,232 vpd		Across-the-board Adjustment:							0%	
Facility life (years): 20							Fuel Efficiency:		17.57 mpg										
Interest Rate: 5%							Effective days per year:		365										
LUC	Land Use	Units	Trip Generation Factor	Source	Percent New Trips	Source	Trip Generation Rate	Source	Average Trip Length	Cost/ Unit/ 1000 SQ. FT.	Gas Tax & License Fee Credit	Cost/ Unit/ 1000 SQ. FT.	Fee/ Unit/ SQ. FT.	Fee / Unit + 3% Admin. Fee		Existing Rate	Rate with Adjustment	% of Current Rate	
	A		B		C		D		E	I	J	K	L	M					

Retail:																	
820	Retail: Less than 10,000	1 sfgla	100.0%	C	48.0%	I	155.09	C	1.90	\$8,155.10	\$1,789.10	\$6,365.99	\$6.37	\$6.56	\$3.04	\$6.56	215.7%
820	Retail: 10,000 - 99,999	1 sfgla	100.0%	C	64.0%	I	68.17	C	2.10	\$5,282.54	\$1,158.91	\$4,123.63	\$4.12	\$4.25	\$1.97	\$4.25	215.6%
820	Retail: 100,000 - 1,000,000	1 sfgla	100.0%	C	84.0%	I	27.67	C	3.50	\$4,690.37	\$1,028.99	\$3,661.37	\$3.66	\$3.77	\$1.75	\$3.77	215.5%
820	Retail: Greater than 1,000,000	1 sfgla	100.0%	C	88.0%	I	25.92	C	4.30	\$5,655.05	\$1,240.63	\$4,414.42	\$4.41	\$4.55	\$2.11	\$4.55	215.5%
831	Quality Restaurant	1 sf	100.0%	F	76.7%	I	89.95	F	3.10	\$12,331.29	\$2,705.29	\$9,626.00	\$9.63	\$9.91	\$4.60	\$9.91	215.5%
832	High-Turnover Restaurant	1 sf	100.0%	B	71.6%	I	130.34	F	3.00	\$16,142.19	\$3,541.35	\$12,600.84	\$12.60	\$12.98	\$6.02	\$12.98	215.6%
834	Fast Food Restaurant	1 sf	100.0%	B	59.5%	I	496.12	B	2.06	\$35,060.76	\$7,691.79	\$27,368.98	\$27.37	\$28.19	\$13.08	\$28.19	215.5%
N/A	CBD Sandwich Shop	1 sf	100.0%	V	100.0%	V	19.30	V	6.55	\$7,288.68	\$1,599.02	\$5,689.66	\$5.69	\$5.86	\$2.72	\$5.86	215.5%
837	Quick Lubrication	Bays	100.0%	B	70.7%	B	42.54	B	3.38	\$5,861.17	\$1,285.85	\$4,575.32	\$4,575.32	\$4,712.58	\$2,186.14	\$4,712.58	215.6%
840	Auto Repair	1 sf	100.0%	F	72.2%	F	37.60	F	3.60	\$5,634.79	\$1,236.19	\$4,398.61	\$4.40	\$4.53	\$2.10	\$4.53	215.7%
841	New and Used Car Sales	1 sf	100.0%	F	79.0%	I	37.50	F	4.70	\$8,027.99	\$1,761.22	\$6,266.77	\$6.27	\$6.45	\$2.99	\$6.45	215.9%
849	Tire Store	Bays	100.0%	B	70.7%	I	30.55	B	3.38	\$4,209.18	\$923.43	\$3,285.75	\$3,285.75	\$3,384.33	\$1,569.97	\$3,384.33	215.6%
850	Supermarket	1 sf	100.0%	R	62.0%	I	111.51	R	2.60	\$10,364.04	\$2,273.71	\$8,090.33	\$8.09	\$8.33	\$3.87	\$8.33	215.3%
851	Convenience Store	1 sf	100.0%	F	41.0%	I	737.99	F	1.50	\$26,168.33	\$5,740.93	\$20,427.41	\$20.43	\$21.04	\$9.76	\$21.04	215.6%
853	Convenience Store with Gas Pumps	1 sf	100.0%	F	28.5%	I	845.60	F	1.60	\$22,232.09	\$4,877.37	\$17,354.71	\$17.35	\$17.88	\$8.29	\$17.88	215.6%
N/A	Convenience /Gas /Fast Food	1 sf	100.0%	F	33.0%	F	918.00	F	2.40	\$41,919.71	\$9,196.53	\$32,723.18	\$32.72	\$33.70	\$15.64	\$33.70	215.5%
862	Home Improvement Store	1 sf	100.0%	V	50.0%	V	38.13	V	4.99	\$5,485.14	\$1,203.35	\$4,281.79	\$4.28	\$4.41	\$2.05	\$4.41	215.1%
881	Pharmacy/Drugstore with Drive-Through	1 sf	100.0%	V	35.0%	V	90.76	V	2.41	\$4,413.98	\$968.36	\$3,445.62	\$3.45	\$3.55	\$1.65	\$3.55	215.1%
890	Furniture Store	1 sf	100.0%	F	54.2%	I	5.06	F	6.10	\$964.56	\$211.61	\$752.95	\$0.75	\$0.78	\$0.36	\$0.78	215.4%

Table 4

01-Aug-03

Volusia County Impact Fee with New Cost and Credit Variables

Fee Schedule Assumptions

Gasoline Tax:							Cost per Lane-Mi:		\$1,678,362		Interstate VMT %:				29.7%				
\$ per gallon to capital:							\$0.139		Capacity per lane:		10,232 vpd		Across-the-board Adjustment:				0%		
Facility life (years):							20		Fuel Efficiency:		17.57 mpg								
Interest Rate:							5%		Effective days per year:		365								
LUC	Land Use		Units	Trip Generation Factor	Source	Percent New Trips	Source	Trip Generation Rate	Source	Average Trip Length	Cost/ Unit/ 1000 SQ. FT.	Gas Tax & License Fee Credit	Cost/ Unit/ 1000 SQ. FT.	Fee/ Unit/ SQ. FT.	Fee / Unit + 3% Admin. Fee		Existing Rate	Rate with Adjustment	% of Current Rate
	A			B		C		D		E	I	J	K	L	M				

Recreational:

n/a	General Recreation	Parking Space	100.0%	V	100.0%	V	3.10	V	6.55	\$1,170.72	\$256.84	\$913.88	\$913.88	\$941.30		\$297.21	\$941.30	215.6%
n/a	Major Sports Facility	Parking Space	100.0%	V	100.0%	V	2.10	V	5.87	\$710.74	\$155.92	\$554.81	\$554.81	\$571.46		\$265.28	\$571.46	215.4%
n/a	Local Park	Parking Space	100.0%	V	100.0%	V	3.10	V	3.00	\$536.21	\$117.64	\$418.57	\$418.57	\$431.13		\$200.00	\$431.13	215.6%
n/a	District Park	Parking Space	100.0%	V	100.0%	V	2.11	V	6.55	\$796.85	\$174.82	\$622.03	\$622.03	\$640.69		\$436.66	\$640.69	215.6%

Miscellaneous:

444	Movie Theater	Screens	100.0%	B	76.3%	B	109.97	B	2.96	\$14,319.93	\$3,141.57	\$11,178.36	\$11,178.36	\$11,513.71		\$5,341.16	\$11,513.71	215.6%
560	Church	1 sf	100.0%	S	90.0%	I	9.11	S	3.90	\$1,843.64	\$404.47	\$1,439.17	\$1.44	\$1.48		\$0.69	\$1.48	214.8%
565	Day Care	1 sf	100.0%	F	73.2%	I	79.26	F	2.00	\$6,690.30	\$1,467.75	\$5,222.55	\$5.22	\$5.38		\$2.50	\$5.38	215.2%

- A - Average of several studies
- B - Blend (refer to Tables 3, 4, 5)
- C - Curve (Commercial sites)
- F- Florida Studies (Trip Characteristics Data)
- I - ITE
- N - N/A
- S - Charlotte County Impact Fee
- V -Volusia County
- R - Indian River

Table 5
Volusia County Impact Fee with New Cost and Credit Variables - 90% Fair Share Cost

Fee Schedule Assumptions																		
Gasoline Tax:						Cost per Lane-Mi:			\$1,678,362			Interstate VMT %:			29.7%			
\$ per gallon to capital: \$0.139						Capacity per lane:			10,232 vpd			Across-the-board Adjustment:			10%			
Facility life (years): 20						Fuel Efficiency:			17.57 mpg									
Interest Rate: 5%						Effective days per year:			365									
LUC	Land Use	Units	Trip Generation Factor	Source	Percent New Trips	Source	Trip Generation Rate	Source	Average Trip Length	Cost/ Unit/ 1000 SQ. FT.	Gas Tax & License Fee Credit	Cost/ Unit/ 1000 SQ. FT.	Fee/ Unit/ SQ. FT.	Fee / Unit + 3% Admin. Fee		Existing Rate	Rate with Adjustment	% of Current Rate
	A		B		C		D		E	I	J	K	L	M				
Residential																		
210	Single Family	DU	100.0%	N	100.0%	I	9.57	B	6.12	\$3,376.87	\$801.36	\$2,575.51	\$2,575.51	\$2,652.77		\$1,184.44	\$2,387.50	201.6%
220	Apartment	DU	100.0%	N	100.0%	I	6.63	F	6.12	\$2,339.46	\$555.17	\$1,784.29	\$1,784.29	\$1,837.81		\$1,174.17	\$1,654.03	140.9%
230	Residential Condominium/ Townhouse	DU	100.0%	N	100.0%	I	5.86	F	5.10	\$1,723.13	\$415.09	\$1,308.04	\$1,308.04	\$1,347.28		\$596.73	\$1,212.55	203.2%
240	Mobile Home Park	DU	100.0%	N	100.0%	I	4.81	F	4.30	\$1,192.52	\$292.04	\$900.48	\$900.48	\$927.49		\$407.05	\$834.74	205.1%
310	Hotel	Rooms	100.0%	F	66.3%	I	8.23	F	6.25	\$1,966.27	\$465.88	\$1,500.39	\$1,500.39	\$1,545.41		\$733.40	\$1,390.86	189.6%
320	Motel	Rooms	100.0%	F	76.6%	I	5.63	F	4.30	\$1,069.19	\$261.84	\$807.35	\$807.35	\$831.57		\$398.80	\$748.42	187.7%
620	Nursing Home	Beds	100.0%	F	89.0%	I	2.61	F	2.60	\$348.22	\$91.09	\$257.14	\$257.14	\$264.85		\$129.88	\$238.36	183.5%
Office and Financial:																		
710	Office under 10,000 GSF	1 sf	100.0%	B	92.7%	I	22.64	B	5.44	\$6,582.72	\$1,444.15	\$5,138.57	\$5.14	\$5.29		\$2.46	\$4.76	193.6%
710	Office over 10,000 GSF	1 sf	100.0%	B	92.7%	I	12.12	B	5.44	\$3,523.97	\$773.10	\$2,750.86	\$2.75	\$2.83		\$1.31	\$2.55	194.7%
714	Corporate Headquarters Building	1 sf	100.0%	A	93.0%	I	7.72	A	5.44	\$2,251.90	\$494.03	\$1,757.87	\$1.76	\$1.81		\$0.84	\$1.63	194.0%
720	Medical Office	1 sf	100.0%	B	83.8%	I	36.13	B	4.85	\$8,466.50	\$1,857.42	\$6,609.09	\$6.61	\$6.81		\$3.16	\$6.13	193.9%
610	Hospital (Beds to S.F.)	1 sf	100.0%	S	77.0%	I	16.78	S	5.10	\$3,799.30	\$833.51	\$2,965.79	\$2.97	\$3.05		\$1.42	\$2.75	193.6%
912	Bank w/ Drive-thru	1 sf	100.0%	F	45.5%	I	265.21	F	2.40	\$16,697.94	\$3,663.27	\$13,034.67	\$13.03	\$13.43		\$6.23	\$12.08	194.0%
911	Bank w/ no Drive-thru	1 sf	100.0%	S	32.0%	I	156.48	F	2.40	\$6,929.00	\$1,520.11	\$5,408.88	\$5.41	\$5.57		\$2.58	\$5.01	194.3%
Industrial:																		
110	Light Industry	1 sf	100.0%	A	91.0%	B	6.97	F	5.10	\$1,865.07	\$409.17	\$1,455.90	\$1.46	\$1.50		\$0.70	\$1.35	192.8%
140	Manufacturing	1 sf	100.0%	R	92.0%	I	3.82	R	5.10	\$1,033.41	\$226.71	\$806.69	\$0.81	\$0.83		\$0.39	\$0.75	191.7%
150	Warehouse	1 sf	100.0%	S	92.0%	I	4.96	S	5.00	\$1,315.50	\$288.60	\$1,026.90	\$1.03	\$1.06		\$0.49	\$0.95	194.3%
151	Mini-warehousing	1 sf	100.0%	S	91.0%	I	2.50	S	5.00	\$655.85	\$143.88	\$511.96	\$0.51	\$0.53		\$0.24	\$0.47	197.7%

Table 5
Volusia County Impact Fee with New Cost and Credit Variables - 90% Fair Share Cost

Fee Schedule Assumptions																		
Gasoline Tax:						Cost per Lane-Mi:			\$1,678,362			Interstate VMT %:			29.7%			
\$ per gallon to capital: \$0.139						Capacity per lane:			10,232 vpd			Across-the-board Adjustment:			10%			
Facility life (years): 20						Fuel Efficiency:			17.57 mpg									
Interest Rate: 5%						Effective days per year:			365									
LUC	Land Use	Units	Trip Generation Factor	Source	Percent New Trips	Source	Trip Generation Rate	Source	Average Trip Length	Cost/ Unit/ 1000 SQ. FT.	Gas Tax & License Fee Credit	Cost/ Unit/ 1000 SQ. FT.	Fee/ Unit/ SQ. FT.	Fee / Unit + 3% Admin. Fee		Existing Rate	Rate with Adjustment	% of Current Rate
	A		B		C		D		E	I	J	K	L	M				
Retail:																		
820	Retail: Less than 10,000	1 sfgla	100.0%	C	48.0%	I	155.09	C	1.90	\$8,155.10	\$1,789.10	\$6,365.99	\$6.37	\$6.56		\$3.04	\$5.90	194.1%
820	Retail: 10,000 - 99,999	1 sfgla	100.0%	C	64.0%	I	68.17	C	2.10	\$5,282.54	\$1,158.91	\$4,123.63	\$4.12	\$4.25		\$1.97	\$3.82	194.0%
820	Retail: 100,000 - 1,000,000	1 sfgla	100.0%	C	84.0%	I	27.67	C	3.50	\$4,690.37	\$1,028.99	\$3,661.37	\$3.66	\$3.77		\$1.75	\$3.39	193.9%
820	Retail: Greater than 1,000,000	1 sfgla	100.0%	C	88.0%	I	25.92	C	4.30	\$5,655.05	\$1,240.63	\$4,414.42	\$4.41	\$4.55		\$2.11	\$4.09	193.9%
831	Quality Restaurant	1 sf	100.0%	F	76.7%	I	89.95	F	3.10	\$12,331.29	\$2,705.29	\$9,626.00	\$9.63	\$9.91		\$4.60	\$8.92	194.0%
832	High-Turnover Restaurant	1 sf	100.0%	B	71.6%	I	130.34	F	3.00	\$16,142.19	\$3,541.35	\$12,600.84	\$12.60	\$12.98		\$6.02	\$11.68	194.0%
834	Fast Food Restaurant	1 sf	100.0%	B	59.5%	I	496.12	B	2.06	\$35,060.76	\$7,691.79	\$27,368.98	\$27.37	\$28.19		\$13.08	\$25.37	194.0%
N/A	CBD Sandwich Shop	1 sf	100.0%	V	100.0%	V	19.30	V	6.55	\$7,288.68	\$1,599.02	\$5,689.66	\$5.69	\$5.86		\$2.72	\$5.27	193.9%
837	Quick Lubrication	Bays	100.0%	B	70.7%	B	42.54	B	3.38	\$5,861.17	\$1,285.85	\$4,575.32	\$4,575.32	\$4,712.58		\$2,186.14	\$4,241.32	194.0%
840	Auto Repair	1 sf	100.0%	F	72.2%	F	37.60	F	3.60	\$5,634.79	\$1,236.19	\$4,398.61	\$4.40	\$4.53		\$2.10	\$4.08	194.2%
841	New and Used Car Sales	1 sf	100.0%	F	79.0%	I	37.50	F	4.70	\$8,027.99	\$1,761.22	\$6,266.77	\$6.27	\$6.45		\$2.99	\$5.81	194.3%
849	Tire Store	Bays	100.0%	B	70.7%	I	30.55	B	3.38	\$4,209.18	\$923.43	\$3,285.75	\$3,285.75	\$3,384.33		\$1,569.97	\$3,045.89	194.0%
850	Supermarket	1 sf	100.0%	R	62.0%	I	111.51	R	2.60	\$10,364.04	\$2,273.71	\$8,090.33	\$8.09	\$8.33		\$3.87	\$7.50	193.8%
851	Convenience Store	1 sf	100.0%	F	41.0%	I	737.99	F	1.50	\$26,168.33	\$5,740.93	\$20,427.41	\$20.43	\$21.04		\$9.76	\$18.94	194.0%
853	Convenience Store with Gas Pumps	1 sf	100.0%	F	28.5%	I	845.60	F	1.60	\$22,232.09	\$4,877.37	\$17,354.71	\$17.35	\$17.88		\$8.29	\$16.09	194.1%
N/A	Convenience /Gas /Fast Food	1 sf	100.0%	F	33.0%	F	918.00	F	2.40	\$41,919.71	\$9,196.53	\$32,723.18	\$32.72	\$33.70		\$15.64	\$30.33	194.0%
862	Home Improvement Store	1 sf	100.0%	V	50.0%	V	38.13	V	4.99	\$5,485.14	\$1,203.35	\$4,281.79	\$4.28	\$4.41		\$2.05	\$3.97	193.6%
881	Pharmacy/Drugstore with Drive-Through	1 sf	100.0%	V	35.0%	V	90.76	V	2.41	\$4,413.98	\$968.36	\$3,445.62	\$3.45	\$3.55		\$1.65	\$3.19	193.6%
890	Furniture Store	1 sf	100.0%	F	54.2%	I	5.06	F	6.10	\$964.56	\$211.61	\$752.95	\$0.75	\$0.78		\$0.36	\$0.70	193.9%

Trip characteristic information is from March 4, 1999 Impact Fee Update Study by Ghyabi-Lassiter and Associates

Table 5

01-Aug-03

Volusia County Impact Fee with New Cost and Credit Variables - 90% Fair Share Cost

Fee Schedule Assumptions																					
Gasoline Tax:							Cost per Lane-Mi:		\$1,678,362		Interstate VMT %:							29.7%			
\$ per gallon to capital:				\$0.139			Capacity per lane:		10,232		vpd		Across-the-board Adjustment:							10%	
Facility life (years):				20			Fuel Efficiency:		17.57		mpg										
Interest Rate:				5%			Effective days per year:		365												
LUC	Land Use	Units	Trip Generation Factor	Source	Percent New Trips	Source	Trip Generation Rate	Source	Average Trip Length	Cost/ Unit/ 1000 SQ. FT.	Gas Tax & License Fee Credit	Cost/ Unit/ 1000 SQ. FT.	Fee/ Unit/ SQ. FT.	Fee / Unit + 3% Admin. Fee		Existing Rate	Rate with Adjustment	% of Current Rate			
	A		B		C		D		E	I	J	K	L	M							

Recreational:

n/a	General Recreation	Parking Space	100.0%	V	100.0%	V	2.11	V	6.55	\$1,170.72	\$256.84	\$913.88	\$913.88	\$941.30		\$297.21	\$847.17	194.0%
n/a	Major Sports Facility	Parking Space	100.0%	V	100.0%	V	2.10	V	5.87	\$710.74	\$155.92	\$554.81	\$554.81	\$571.46		\$265.28	\$514.31	193.9%
n/a	Local Park	Parking Space	100.0%	V	100.0%	V	3.10	V	3.00	\$536.21	\$117.64	\$418.57	\$418.57	\$431.13		\$200.00	\$388.02	194.0%
n/a	District Park	Parking Space	100.0%	V	100.0%	V	3.10	V	6.55	\$796.85	\$174.82	\$622.03	\$622.03	\$640.69		\$436.66	\$576.62	194.0%

Miscellaneous:

444	Movie Theater	Screens	100.0%	B	76.3%	B	109.97	B	2.96	\$14,319.93	\$3,141.57	\$11,178.36	\$11,178.36	\$11,513.71		\$5,341.16	\$10,362.34	194.0%
560	Church	1 sf	100.0%	S	90.0%	I	9.11	S	3.90	\$1,843.64	\$404.47	\$1,439.17	\$1.44	\$1.48		\$0.69	\$1.33	193.3%
565	Day Care	1 sf	100.0%	F	73.2%	I	79.26	F	2.00	\$6,690.30	\$1,467.75	\$5,222.55	\$5.22	\$5.38		\$2.50	\$4.84	193.7%

- A - Average of several studies
- B - Blend (refer to Tables 3, 4, 5)
- C - Curve (Commercial sites)
- F- Florida Studies (Trip Characteristics Data)
- I - ITE
- N - N/A
- S - Charlotte County Impact Fee
- V -Volusia County
- R - Indian River

Table 6

Volusia County Impact Fee with New Cost and Credit Variables - 75% Fair Share Cost

Fee Schedule Assumptions																		
Gasoline Tax:						Cost per Lane-Mi:			\$1,678,362			Interstate VMT %:			29.7%			
\$ per gallon to capital: \$0.139						Capacity per lane:			10,232 vpd			Across-the-board Adjustment:			25%			
Facility life (years): 20						Fuel Efficiency:			17.57 mpg									
Interest Rate: 5%						Effective days per year:			365									
LUC	Land Use	Units	Trip Generation Factor	Source	Percent New Trips	Source	Trip Generation Rate	Source	Average Trip Length	Cost/ Unit/ 1000 SQ. FT.	Gas Tax & License Fee Credit	Cost/ Unit/ 1000 SQ. FT.	Fee/ Unit/ SQ. FT.	Fee / Unit + 3% Admin. Fee		Existing Rate	Rate with Adjustment	% of Current Rate
	A		B		C		D		E	I	J	K	L	M				
Residential																		
210	Single Family	DU	100.0%	N	100.0%	I	9.57	B	6.12	\$3,376.87	\$801.36	\$2,575.51	\$2,575.51	\$2,652.77		\$1,184.44	\$1,989.58	168.0%
220	Apartment	DU	100.0%	N	100.0%	I	6.63	F	6.12	\$2,339.46	\$555.17	\$1,784.29	\$1,784.29	\$1,837.81		\$1,174.17	\$1,378.36	117.4%
230	Residential Condominium/ Townhouse	DU	100.0%	N	100.0%	I	5.86	F	5.10	\$1,723.13	\$415.09	\$1,308.04	\$1,308.04	\$1,347.28		\$596.73	\$1,010.46	169.3%
240	Mobile Home Park	DU	100.0%	N	100.0%	I	4.81	F	4.30	\$1,192.52	\$292.04	\$900.48	\$900.48	\$927.49		\$407.05	\$695.62	170.9%
310	Hotel	Rooms	100.0%	F	66.3%	I	8.23	F	6.25	\$1,966.27	\$465.88	\$1,500.39	\$1,500.39	\$1,545.41		\$733.40	\$1,159.05	158.0%
320	Motel	Rooms	100.0%	F	76.6%	I	5.63	F	4.30	\$1,069.19	\$261.84	\$807.35	\$807.35	\$831.57		\$398.80	\$623.68	156.4%
620	Nursing Home	Beds	100.0%	F	89.0%	I	2.61	F	2.60	\$348.22	\$91.09	\$257.14	\$257.14	\$264.85		\$129.88	\$198.64	152.9%
Office and Financial:																		
710	Office under 10,000 GSF	1 sf	100.0%	B	92.7%	I	22.64	B	5.44	\$6,582.72	\$1,444.15	\$5,138.57	\$5.14	\$5.29		\$2.46	\$3.97	161.4%
710	Office over 10,000 GSF	1 sf	100.0%	B	92.7%	I	12.12	B	5.44	\$3,523.97	\$773.10	\$2,750.86	\$2.75	\$2.83		\$1.31	\$2.13	162.2%
714	Corporate Headquarters Building	1 sf	100.0%	A	93.0%	I	7.72	A	5.44	\$2,251.90	\$494.03	\$1,757.87	\$1.76	\$1.81		\$0.84	\$1.36	161.7%
720	Medical Office	1 sf	100.0%	B	83.8%	I	36.13	B	4.85	\$8,466.50	\$1,857.42	\$6,609.09	\$6.61	\$6.81		\$3.16	\$5.11	161.6%
610	Hospital (Beds to S.F.)	1 sf	100.0%	S	77.0%	I	16.78	S	5.10	\$3,799.30	\$833.51	\$2,965.79	\$2.97	\$3.05		\$1.42	\$2.29	161.3%
912	Bank w/ Drive-thru	1 sf	100.0%	F	45.5%	I	265.21	F	2.40	\$16,697.94	\$3,663.27	\$13,034.67	\$13.03	\$13.43		\$6.23	\$10.07	161.6%
911	Bank w/ no Drive-thru	1 sf	100.0%	S	32.0%	I	156.48	F	2.40	\$6,929.00	\$1,520.11	\$5,408.88	\$5.41	\$5.57		\$2.58	\$4.18	162.0%
Industrial:																		
110	Light Industry	1 sf	100.0%	A	91.0%	B	6.97	F	5.10	\$1,865.07	\$409.17	\$1,455.90	\$1.46	\$1.50		\$0.70	\$1.12	160.7%
140	Manufacturing	1 sf	100.0%	R	92.0%	I	3.82	R	5.10	\$1,033.41	\$226.71	\$806.69	\$0.81	\$0.83		\$0.39	\$0.62	159.8%
150	Warehouse	1 sf	100.0%	S	92.0%	I	4.96	S	5.00	\$1,315.50	\$288.60	\$1,026.90	\$1.03	\$1.06		\$0.49	\$0.79	161.9%
151	Mini-warehousing	1 sf	100.0%	S	91.0%	I	2.50	S	5.00	\$655.85	\$143.88	\$511.96	\$0.51	\$0.53		\$0.24	\$0.40	164.8%

Table 6

Volusia County Impact Fee with New Cost and Credit Variables - 75% Fair Share Cost

Fee Schedule Assumptions																		
Gasoline Tax:							Cost per Lane-Mi:		\$1,678,362				Interstate VMT %:		29.7%			
\$ per gallon to capital:			\$0.139				Capacity per lane:		10,232		vpd		Across-the-board Adjustment:		25%			
Facility life (years):			20				Fuel Efficiency:		17.57		mpg							
Interest Rate:			5%				Effective days per year:		365									
LUC	Land Use	Units	Trip Generation Factor	Source	Percent New Trips	Source	Trip Generation Rate	Source	Average Trip Length	Cost/ Unit/ 1000 SQ. FT.	Gas Tax & License Fee Credit	Cost/ Unit/ 1000 SQ. FT.	Fee/ Unit/ SQ. FT.	Fee / Unit + 3% Admin. Fee		Existing Rate	Rate with Adjustment	% of Current Rate
	A		B		C		D		E	I	J	K	L	M				

Retail:																		
820	Retail: Less than 10,000	1 sfgla	100.0%	C	48.0%	I	155.09	C	1.90	\$8,155.10	\$1,789.10	\$6,365.99	\$6.37	\$6.56		\$3.04	\$4.92	161.8%
820	Retail: 10,000 - 99,999	1 sfgla	100.0%	C	64.0%	I	68.17	C	2.10	\$5,282.54	\$1,158.91	\$4,123.63	\$4.12	\$4.25		\$1.97	\$3.19	161.7%
820	Retail: 100,000 - 1,000,000	1 sfgla	100.0%	C	84.0%	I	27.67	C	3.50	\$4,690.37	\$1,028.99	\$3,661.37	\$3.66	\$3.77		\$1.75	\$2.83	161.6%
820	Retail: Greater than 1,000,000	1 sfgla	100.0%	C	88.0%	I	25.92	C	4.30	\$5,655.05	\$1,240.63	\$4,414.42	\$4.41	\$4.55		\$2.11	\$3.41	161.6%
831	Quality Restaurant	1 sf	100.0%	F	76.7%	I	89.95	F	3.10	\$12,331.29	\$2,705.29	\$9,626.00	\$9.63	\$9.91		\$4.60	\$7.44	161.7%
832	High-Turnover Restaurant	1 sf	100.0%	B	71.6%	I	130.34	F	3.00	\$16,142.19	\$3,541.35	\$12,600.84	\$12.60	\$12.98		\$6.02	\$9.73	161.7%
834	Fast Food Restaurant	1 sf	100.0%	B	59.5%	I	496.12	B	2.06	\$35,060.76	\$7,691.79	\$27,368.98	\$27.37	\$28.19		\$13.08	\$21.14	161.6%
N/A	CBD Sandwich Shop	1 sf	100.0%	V	100.0%	V	19.30	V	6.55	\$7,288.68	\$1,599.02	\$5,689.66	\$5.69	\$5.86		\$2.72	\$4.40	161.6%
837	Quick Lubrication	Bays	100.0%	B	70.7%	B	42.54	B	3.38	\$5,861.17	\$1,285.85	\$4,575.32	\$4,575.32	\$4,712.58		\$2,186.14	\$3,534.43	161.7%
840	Auto Repair	1 sf	100.0%	F	72.2%	F	37.60	F	3.60	\$5,634.79	\$1,236.19	\$4,398.61	\$4.40	\$4.53		\$2.10	\$3.40	161.8%
841	New and Used Car Sales	1 sf	100.0%	F	79.0%	I	37.50	F	4.70	\$8,027.99	\$1,761.22	\$6,266.77	\$6.27	\$6.45		\$2.99	\$4.84	161.9%
849	Tire Store	Bays	100.0%	B	70.7%	I	30.55	B	3.38	\$4,209.18	\$923.43	\$3,285.75	\$3,285.75	\$3,384.33		\$1,569.97	\$2,538.24	161.7%
850	Supermarket	1 sf	100.0%	R	62.0%	I	111.51	R	2.60	\$10,364.04	\$2,273.71	\$8,090.33	\$8.09	\$8.33		\$3.87	\$6.25	161.5%
851	Convenience Store	1 sf	100.0%	F	41.0%	I	737.99	F	1.50	\$26,168.33	\$5,740.93	\$20,427.41	\$20.43	\$21.04		\$9.76	\$15.78	161.7%
853	Convenience Store with Gas Pumps	1 sf	100.0%	F	28.5%	I	845.60	F	1.60	\$22,232.09	\$4,877.37	\$17,354.71	\$17.35	\$17.88		\$8.29	\$13.41	161.7%
N/A	Convenience /Gas /Fast Food	1 sf	100.0%	F	33.0%	F	918.00	F	2.40	\$41,919.71	\$9,196.53	\$32,723.18	\$32.72	\$33.70	\$15.64	\$25.28	161.6%	
862	Home Improvement Store	1 sf	100.0%	V	50.0%	V	38.13	V	4.99	\$5,485.14	\$1,203.35	\$4,281.79	\$4.28	\$4.41	\$2.05	\$3.31	161.4%	
881	Pharmacy/Drugstore with Drive-Through	1 sf	100.0%	V	35.0%	V	90.76	V	2.41	\$4,413.98	\$968.36	\$3,445.62	\$3.45	\$3.55	\$1.65	\$2.66	161.3%	
890	Furniture Store	1 sf	100.0%	F	54.2%	I	5.06	F	6.10	\$964.56	\$211.61	\$752.95	\$0.75	\$0.78	\$0.36	\$0.58	161.6%	

Table 6

Volusia County Impact Fee with New Cost and Credit Variables - 75% Fair Share Cost

Fee Schedule Assumptions																		
Gasoline Tax:						Cost per Lane-Mi:		\$1,678,362		Interstate VMT %:						29.7%		
\$ per gallon to capital:				\$0.139		Capacity per lane:		10,232 vpd		Across-the-board Adjustment:						25%		
Facility life (years):				20		Fuel Efficiency:		17.57 mpg										
Interest Rate:				5%		Effective days per year:		365										
LUC	Land Use	Units	Trip Generation Factor	Source	Percent New Trips	Source	Trip Generation Rate	Source	Average Trip Length	Cost/ Unit/ 1000 SQ. FT.	Gas Tax & License Fee Credit	Cost/ Unit/ 1000 SQ. FT.	Fee/ Unit/ SQ. FT.	Fee / Unit + 3% Admin. Fee		Existing Rate	Rate with Adjustment	% of Current Rate
	A		B		C		D		E	I	J	K	L	M				

Recreational:																		
n/a	General Recreation	Parking Space	100.0%	V	100.0%	V	2.11	V	6.55	\$1,170.72	\$256.84	\$913.88	\$913.88	\$941.30		\$297.21	\$705.97	161.7%
n/a	Major Sports Facility	Parking Space	100.0%	V	100.0%	V	2.10	V	5.87	\$710.74	\$155.92	\$554.81	\$554.81	\$571.46		\$265.28	\$428.59	161.6%
n/a	Local Park	Parking Space	100.0%	V	100.0%	V	3.10	V	3.00	\$536.21	\$117.64	\$418.57	\$418.57	\$431.13		\$200.00	\$323.35	161.7%
n/a	District Park	Parking Space	100.0%	V	100.0%	V	3.10	V	6.55	\$796.85	\$174.82	\$622.03	\$622.03	\$640.69		\$436.66	\$480.52	161.7%

Miscellaneous:																		
444	Movie Theater	Screens	100.0%	B	76.3%	B	109.97	B	2.96	\$14,319.93	\$3,141.57	\$11,178.36	\$11,178.36	\$11,513.71		\$5,341.16	\$8,635.28	161.7%
560	Church	1 sf	100.0%	S	90.0%	I	9.11	S	3.90	\$1,843.64	\$404.47	\$1,439.17	\$1.44	\$1.48		\$0.69	\$1.11	161.1%
565	Day Care	1 sf	100.0%	F	73.2%	I	79.26	F	2.00	\$6,690.30	\$1,467.75	\$5,222.55	\$5.22	\$5.38		\$2.50	\$4.03	161.4%

A - Average of several studies

B - Blend (refer to Tables 3, 4, 5)

C - Curve (Commercial sites)

F- Florida Studies (Trip Characteristics Data)

I - ITE

N - N/A

S - Charlotte County Impact Fee

V -Volusia County

R - Indian River

Table 7
Volusia County Impact Fee with New Cost and Credit Variables - 67.91% Fair Share Cost

Fee Schedule Assumptions																			
Gasoline Tax:							Cost per Lane-Mi:		\$1,678,362		Interstate VMT %:							29.7%	
\$ per gallon to capital: \$0.139							Capacity per lane:		10,232 vpd		Across-the-board Adjustment:							32%	
Facility life (years): 20							Fuel Efficiency:		17.57 mpg										
Interest Rate: 5%							Effective days per year:		365										
LUC	Land Use	Units	Trip Generation Factor	Source	Percent New Trips	Source	Trip Generation Rate	Source	Average Trip Length	Cost/ Unit/ 1000 SQ. FT.	Gas Tax & License Fee Credit	Cost/ Unit/ 1000 SQ. FT.	Fee/ Unit/ SQ. FT.	Fee / Unit + 3% Admin. Fee		Existing Rate	Rate with Adjustment	% of Current Rate	
	A		B		C		D		E	I	J	K	L	M					
Residential																			
210	Single Family	DU	100.0%	N	100.0%	I	9.57	B	6.12	\$3,376.87	\$801.36	\$2,575.51	\$2,575.51	\$2,652.77		\$1,184.44	\$1,801.55	152.1%	
220	Apartment	DU	100.0%	N	100.0%	I	6.63	F	6.12	\$2,339.46	\$555.17	\$1,784.29	\$1,784.29	\$1,837.81		\$1,174.17	\$1,248.10	106.3%	
230	Residential Condominium/ Townhouse	DU	100.0%	N	100.0%	I	5.86	F	5.10	\$1,723.13	\$415.09	\$1,308.04	\$1,308.04	\$1,347.28		\$596.73	\$914.97	153.3%	
240	Mobile Home Park	DU	100.0%	N	100.0%	I	4.81	F	4.30	\$1,192.52	\$292.04	\$900.48	\$900.48	\$927.49		\$407.05	\$629.88	154.7%	
310	Hotel	Rooms	100.0%	F	66.3%	I	8.23	F	6.25	\$1,966.27	\$465.88	\$1,500.39	\$1,500.39	\$1,545.41		\$733.40	\$1,049.52	143.1%	
320	Motel	Rooms	100.0%	F	76.6%	I	5.63	F	4.30	\$1,069.19	\$261.84	\$807.35	\$807.35	\$831.57		\$398.80	\$564.74	141.6%	
620	Nursing Home	Beds	100.0%	F	89.0%	I	2.61	F	2.60	\$348.22	\$91.09	\$257.14	\$257.14	\$264.85		\$129.88	\$179.86	138.5%	
Office and Financial:																			
710	Office under 10,000 GSF	1 sf	100.0%	B	92.7%	I	22.64	B	5.44	\$6,582.72	\$1,444.15	\$5,138.57	\$5.14	\$5.29		\$2.46	\$3.59	146.1%	
710	Office over 10,000 GSF	1 sf	100.0%	B	92.7%	I	12.12	B	5.44	\$3,523.97	\$773.10	\$2,750.86	\$2.75	\$2.83		\$1.31	\$1.92	146.9%	
714	Corporate Headquarters Building	1 sf	100.0%	A	93.0%	I	7.72	A	5.44	\$2,251.90	\$494.03	\$1,757.87	\$1.76	\$1.81		\$0.84	\$1.23	146.4%	
720	Medical Office	1 sf	100.0%	B	83.8%	I	36.13	B	4.85	\$8,466.50	\$1,857.42	\$6,609.09	\$6.61	\$6.81		\$3.16	\$4.62	146.3%	
610	Hospital (Beds to S.F.)	1 sf	100.0%	S	77.0%	I	16.78	S	5.10	\$3,799.30	\$833.51	\$2,965.79	\$2.97	\$3.05		\$1.42	\$2.07	146.1%	
912	Bank w/ Drive-thru	1 sf	100.0%	F	45.5%	I	265.21	F	2.40	\$16,697.94	\$3,663.27	\$13,034.67	\$13.03	\$13.43		\$6.23	\$9.12	146.4%	
911	Bank w/ no Drive-thru	1 sf	100.0%	S	32.0%	I	156.48	F	2.40	\$6,929.00	\$1,520.11	\$5,408.88	\$5.41	\$5.57		\$2.58	\$3.78	146.6%	
Industrial:																			
110	Light Industry	1 sf	100.0%	A	91.0%	B	6.97	F	5.10	\$1,865.07	\$409.17	\$1,455.90	\$1.46	\$1.50		\$0.70	\$1.02	145.5%	
140	Manufacturing	1 sf	100.0%	R	92.0%	I	3.82	R	5.10	\$1,033.41	\$226.71	\$806.69	\$0.81	\$0.83		\$0.39	\$0.56	144.7%	

Table 7

01-Aug-03

Volusia County Impact Fee with New Cost and Credit Variables - 67.91% Fair Share Cost

Fee Schedule Assumptions																		
Gasoline Tax:						Cost per Lane-Mi:			\$1,678,362			Interstate VMT %:			29.7%			
\$ per gallon to capital: \$0.139						Capacity per lane:			10,232 vpd			Across-the-board Adjustment:			32%			
Facility life (years): 20						Fuel Efficiency:			17.57 mpg									
Interest Rate: 5%						Effective days per year:			365									
LUC	Land Use	Units	Trip Generation Factor	Source	Percent New Trips	Source	Trip Generation Rate	Source	Average Trip Length	Cost/ Unit/ 1000 SQ. FT.	Gas Tax & License Fee Credit	Cost/ Unit/ 1000 SQ. FT.	Fee/ Unit/ SQ. FT.	Fee / Unit + 3% Admin. Fee		Existing Rate	Rate with Adjustment	% of Current Rate
	A		B		C		D		E	I	J	K	L	M				
150	Warehouse	1 sf	100.0%	S	92.0%	I	4.96	S	5.00	\$1,315.50	\$288.60	\$1,026.90	\$1.03	\$1.06		\$0.49	\$0.72	146.6%
151	Mini-warehousing	1 sf	100.0%	S	91.0%	I	2.50	S	5.00	\$655.85	\$143.88	\$511.96	\$0.51	\$0.53		\$0.24	\$0.36	149.2%

Retail:																		
820	Retail: Less than 10,000	1 sfgla	100.0%	C	48.0%	I	155.09	C	1.90	\$8,155.10	\$1,789.10	\$6,365.99	\$6.37	\$6.56		\$3.04	\$4.45	146.5%
820	Retail: 10,000 - 99,999	1 sfgla	100.0%	C	64.0%	I	68.17	C	2.10	\$5,282.54	\$1,158.91	\$4,123.63	\$4.12	\$4.25		\$1.97	\$2.88	146.4%
820	Retail: 100,000 - 1,000,000	1 sfgla	100.0%	C	84.0%	I	27.67	C	3.50	\$4,690.37	\$1,028.99	\$3,661.37	\$3.66	\$3.77		\$1.75	\$2.56	146.3%
820	Retail: Greater than 1,000,000	1 sfgla	100.0%	C	88.0%	I	25.92	C	4.30	\$5,655.05	\$1,240.63	\$4,414.42	\$4.41	\$4.55		\$2.11	\$3.09	146.3%
831	Quality Restaurant	1 sf	100.0%	F	76.7%	I	89.95	F	3.10	\$12,331.29	\$2,705.29	\$9,626.00	\$9.63	\$9.91		\$4.60	\$6.73	146.4%
832	High-Turnover Restaurant	1 sf	100.0%	B	71.6%	I	130.34	F	3.00	\$16,142.19	\$3,541.35	\$12,600.84	\$12.60	\$12.98		\$6.02	\$8.81	146.4%
834	Fast Food Restaurant	1 sf	100.0%	B	59.5%	I	496.12	B	2.06	\$35,060.76	\$7,691.79	\$27,368.98	\$27.37	\$28.19		\$13.08	\$19.14	146.4%
N/A	CBD Sandwich Shop	1 sf	100.0%	V	100.0%	V	19.30	V	6.55	\$7,288.68	\$1,599.02	\$5,689.66	\$5.69	\$5.86		\$2.72	\$3.98	146.3%
837	Quick Lubrication	Bays	100.0%	B	70.7%	B	42.54	B	3.38	\$5,861.17	\$1,285.85	\$4,575.32	\$4,575.32	\$4,712.58		\$2,186.14	\$3,200.41	146.4%
840	Auto Repair	1 sf	100.0%	F	72.2%	F	37.60	F	3.60	\$5,634.79	\$1,236.19	\$4,398.61	\$4.40	\$4.53		\$2.10	\$3.08	146.5%
841	New and Used Car Sales	1 sf	100.0%	F	79.0%	I	37.50	F	4.70	\$8,027.99	\$1,761.22	\$6,266.77	\$6.27	\$6.45		\$2.99	\$4.38	146.6%
849	Tire Store	Bays	100.0%	B	70.7%	I	30.55	B	3.38	\$4,209.18	\$923.43	\$3,285.75	\$3,285.75	\$3,384.33		\$1,569.97	\$2,298.36	146.4%
850	Supermarket	1 sf	100.0%	R	62.0%	I	111.51	R	2.60	\$10,364.04	\$2,273.71	\$8,090.33	\$8.09	\$8.33		\$3.87	\$5.66	146.2%
851	Convenience Store	1 sf	100.0%	F	41.0%	I	737.99	F	1.50	\$26,168.33	\$5,740.93	\$20,427.41	\$20.43	\$21.04		\$9.76	\$14.29	146.4%
853	Convenience Store with Gas Pumps	1 sf	100.0%	F	28.5%	I	845.60	F	1.60	\$22,232.09	\$4,877.37	\$17,354.71	\$17.35	\$17.88		\$8.29	\$12.14	146.4%
N/A	Convenience /Gas /Fast Food	1 sf	100.0%	F	33.0%	F	918.00	F	2.40	\$41,919.71	\$9,196.53	\$32,723.18	\$32.72	\$33.70		\$15.64	\$22.89	146.4%
862	Home Improvement Store	1 sf	100.0%	V	50.0%	V	38.13	V	4.99	\$5,485.14	\$1,203.35	\$4,281.79	\$4.28	\$4.41		\$2.05	\$3.00	146.1%
881	Pharmacy/Drugstore with Drive-Through	1 sf	100.0%	V	35.0%	V	90.76	V	2.41	\$4,413.98	\$968.36	\$3,445.62	\$3.45	\$3.55		\$1.65	\$2.41	146.1%
890	Furniture Store	1 sf	100.0%	F	54.2%	I	5.06	F	6.10	\$964.56	\$211.61	\$752.95	\$0.75	\$0.78	\$0.36	\$0.53	146.3%	

Table 7

01-Aug-03

Volusia County Impact Fee with New Cost and Credit Variables - 67.91% Fair Share Cost

Fee Schedule Assumptions																		
Gasoline Tax:							Cost per Lane-Mi:			\$1,678,362			Interstate VMT %:			29.7%		
\$ per gallon to capital: \$0.139							Capacity per lane:			10,232 vpd			Across-the-board Adjustment:			32%		
Facility life (years): 20							Fuel Efficiency:			17.57 mpg								
Interest Rate: 5%							Effective days per year:			365								
LUC	Land Use	Units	Trip Generation Factor	Source	Percent New Trips	Source	Trip Generation Rate	Source	Average Trip Length	Cost/ Unit/ 1000 SQ. FT.	Gas Tax & License Fee Credit	Cost/ Unit/ 1000 SQ. FT.	Fee/ Unit/ SQ. FT.	Fee / Unit + 3% Admin. Fee		Existing Rate	Rate with Adjustment	% of Current Rate
	A		B		C		D		E	I	J	K	L	M				
Recreational:																		
n/a	General Recreation	Parking Space	100.0%	V	100.0%	V	2.11	V	6.55	\$1,170.72	\$256.84	\$913.88	\$913.88	\$941.30		\$297.21	\$639.26	146.4%
n/a	Major Sports Facility	Parking Space	100.0%	V	100.0%	V	2.10	V	5.87	\$710.74	\$155.92	\$554.81	\$554.81	\$571.46		\$265.28	\$388.09	146.3%
n/a	Local Park	Parking Space	100.0%	V	100.0%	V	3.10	V	3.00	\$536.21	\$117.64	\$418.57	\$418.57	\$431.13		\$200.00	\$292.79	146.4%
n/a	District Park	Parking Space	100.0%	V	100.0%	V	3.10	V	6.55	\$796.85	\$174.82	\$622.03	\$622.03	\$640.69		\$436.66	\$435.11	146.4%
Miscellaneous:																		
444	Movie Theater	Screens	100.0%	B	76.3%	B	109.97	B	2.96	\$14,319.93	\$3,141.57	\$11,178.36	\$11,178.36	\$11,513.71		\$5,341.16	\$7,819.19	146.4%
560	Church	1 sf	100.0%	S	90.0%	I	9.11	S	3.90	\$1,843.64	\$404.47	\$1,439.17	\$1.44	\$1.48		\$0.69	\$1.01	145.9%
565	Day Care	1 sf	100.0%	F	73.2%	I	79.26	F	2.00	\$6,690.30	\$1,467.75	\$5,222.55	\$5.22	\$5.38		\$2.50	\$3.65	146.1%

A - Average of several studies
B - Blend (refer to Tables 3, 4, 5)
C - Curve (Commercial sites)

F- Florida Studies (Trip Characteristics Data)
I - ITE
N - N/A

S - Charlotte County Impact Fee
V -Volusia County
R - Indian River

**Table 8
Comparison of Impact Fee Rates**

Land Use	Volusia (Current)	Volusia (100%)	Volusia (67.9%)	Non-Volusia Average	Brevard	Collier	Hillsborough ¹	Lake	Lee	Marion	Orange	Palm Beach	Pinellas	Sarasota	Seminole ¹
Single Family Residential (per DU)	\$1,184.44	\$2,652.77	\$1,801.55	\$2,220.38	\$1,327.67	\$3,472.00	\$2,200.00	\$2,189.00	\$2,492.03	\$2,122.00	\$2,075.00	\$3,603.73	\$1,923.00	\$1,959.02	\$1,060.75
Multi-Family (per DU)	\$1,174.17	\$1,837.81	\$1,248.10	\$1,587.57	\$816.49	\$3,429.00	\$1,460.15	\$1,408.00	\$1,725.81	\$1,415.00	\$1,439.00	\$2,522.61	\$1,400.00	\$1,138.46	\$708.75
Light Industrial (per 1000 sf)	\$700.00	\$1,500.00	\$1,020.00	\$1,431.18	\$952.82	\$4,333.00	\$993.90	\$2,157.00	N/A ²	\$1,560.00	\$1,742.00	\$795.40	\$1,251.00	\$1,957.90	N/A
General Commercial 90,000 sf (per 1000 sf)	\$1,970.00	\$4,250.00	\$2,880.00	\$4,297.32	\$1,950.78	\$7,403.00	\$3,352.40	\$2,177.00	\$4,083.82	\$3,892.00	\$6,691.00	\$4,675.85	\$3,004.00	\$7,300.18	\$2,740.50
General Office 100,000 sf (per 1000 sf)	\$1,310.00	\$2,830.00	\$1,920.00	\$2,810.73	\$1,542.69	\$6,401.00	\$1,892.70	\$2,883.00	\$2,305.85	\$3,488.00	\$3,734.00	\$1,514.35	\$2,448.00	\$2,771.74	\$1,936.75
Sit-down High-turnover Restaurant (per 1000 sf)	\$6,020.00	\$12,980.00	\$8,810.00	\$10,774.40	\$7,079.97	\$20,365.00	\$6,409.90	\$11,422.00	\$5,017.82	\$12,195.00	\$13,529.00	\$13,308.47	\$10,139.00	\$8,139.98	\$10,912.25
Medical Office (per1000 sf)	\$3,160.00	\$6,810.00	\$4,620.00	\$6,199.23	\$3,972.32	\$13,854.00	\$5,152.80	\$6,717.00	\$6,479.69	\$7,646.00	\$8,339.00	N/A	\$5,583.00	\$6,624.50	\$3,823.25

Table 9
Roadway Impact Fees With Construction Costs Indexed Over 3 Years at 5%

67.9% Fair Share Cost

Land Use	Units	1st Year Rate	2nd Year Indexed Rate	3rd Year Indexed Rate	4th Year Indexed Rate

Residential

Single Family	DU	\$1,801.55	\$1,919.66	\$2,043.67	\$2,173.88
Apartment	DU	\$1,248.10	\$1,329.92	\$1,415.83	\$1,506.04
Residential Condominium/ Townhouse	DU	\$914.97	\$975.23	\$1,038.51	\$1,104.96
Mobile Home Park	DU	\$629.88	\$671.58	\$715.38	\$761.36
Hotel	Rooms	\$1,049.52	\$1,118.29	\$1,190.49	\$1,266.31
Motel	Rooms	\$564.74	\$602.13	\$641.40	\$682.63
Nursing Home	Beds	\$179.86	\$192.04	\$204.83	\$218.26

Office and Financial:

Office under 10,000 GSF	1 sf	\$3.59	\$3.82	\$4.07	\$4.32
Office over 10,000 GSF	1 sf	\$1.92	\$2.05	\$2.18	\$2.31
Corporate Headquarters Building	1 sf	\$1.23	\$1.31	\$1.39	\$1.48
Medical Office	1 sf	\$4.62	\$4.92	\$5.23	\$5.56
Hospital (Beds to S.F.)	1 sf	\$2.07	\$2.21	\$2.35	\$2.49
Bank w/ Drive-thru	1 sf	\$9.12	\$9.70	\$10.31	\$10.96
Bank w/ no Drive-thru	1 sf	\$3.78	\$4.03	\$4.28	\$4.55

Industrial:

Light Industry	1 sf	\$1.02	\$1.08	\$1.15	\$1.22
Manufacturing	1 sf	\$0.56	\$0.60	\$0.64	\$0.68
Warehouse	1 sf	\$0.72	\$0.76	\$0.81	\$0.86
Mini-warehousing	1 sf	\$0.36	\$0.38	\$0.41	\$0.43

Table 9
Roadway Impact Fees With Construction Costs Indexed Over 3 Years at 5%

67.9% Fair Share Cost

Land Use	Units	1st Year Rate	2nd Year Indexed Rate	3rd Year Indexed Rate	4th Year Indexed Rate

Retail:

Retail: Less than 10,000	1 sfgla	\$4.45	\$4.74	\$5.04	\$5.35
Retail: 10,000 - 99,999	1 sfgla	\$2.88	\$3.07	\$3.26	\$3.47
Retail: 100,000 - 1,000,000	1 sfgla	\$2.56	\$2.73	\$2.90	\$3.08
Retail: Greater than 1,000,000	1 sfgla	\$3.09	\$3.29	\$3.49	\$3.71
Quality Restaurant	1 sf	\$6.73	\$7.16	\$7.62	\$8.09
High-Turnover Restaurant	1 sf	\$8.81	\$9.38	\$9.97	\$10.59
Fast Food Restaurant	1 sf	\$19.14	\$20.37	\$21.66	\$23.01
CBD Sandwich Shop	1 sf	\$3.98	\$4.23	\$4.50	\$4.78
Quick Lubrication	Bays	\$3,200.41	\$3,405.40	\$3,620.64	\$3,846.65
Auto Repair	1 sf	\$3.08	\$3.27	\$3.48	\$3.70
New and Used Car Sales	1 sf	\$4.38	\$4.66	\$4.96	\$5.27
Tire Store	Bays	\$2,298.36	\$2,445.58	\$2,600.15	\$2,762.46
Supermarket	1 sf	\$5.66	\$6.02	\$6.40	\$6.80
Convenience Store	1 sf	\$14.29	\$15.20	\$16.17	\$17.17
Convenience Store with Gas Pumps	1 sf	\$12.14	\$12.92	\$13.73	\$14.59
Convenience /Gas /Fast Food	1 sf	\$22.89	\$24.36	\$25.90	\$27.51
Home Improvement Store	1 sf	\$3.00	\$3.19	\$3.39	\$3.60
Pharmacy/Drugstore with Drive-Through	1 sf	\$2.41	\$2.56	\$2.73	\$2.90
Furniture Store	1 sf	\$0.53	\$0.56	\$0.60	\$0.63

Recreational:

General Recreation	Parking Space	\$639.26	\$680.20	\$723.19	\$768.34
Major Sports Facility	Parking Space	\$388.09	\$412.94	\$439.05	\$466.45
Local Park	Parking Space	\$292.79	\$311.54	\$331.23	\$351.91
District Park	Parking Space	\$435.11	\$462.98	\$492.24	\$522.96

Miscellaneous:

Movie Theater	Screens	\$7,819.19	\$8,320.03	\$8,845.91	\$9,398.08
Church	1 sf	\$1.01	\$1.07	\$1.14	\$1.21
Day Care	1 sf	\$3.65	\$3.89	\$4.13	\$4.39

Assessment of “Warehouse” (Incubator) Businesses

During meetings held with Volusia County staff, it was indicated that there was an issue with site plans being presented for impact fee assessment for “warehouse” use, but, during the construction phase of the project, are being internally partitioned for use by small service businesses. While they are not known to be trip generators on the order of general retail establishments, they do represent a higher level of roadway capacity demand than the “warehouse” use they are being presented as.

During the Peer Review, other jurisdictions were asked if they also were experiencing this same situation. Generally speaking, most jurisdictions have faced this same issue. Most of the jurisdictions address this issue by checking on the actual use at the time of internal permitting, such as when electrical service meters are installed. One jurisdiction removed the “warehouse” use from the impact fee ordinance altogether. Others will generally assess these uses, once they become known, at either an “office” or “general industrial rate”.

Tied to this same issue was clarifying the definition for the land uses “light industrial” and “manufacturing”. Collier and Sarasota counties have both used industrial land uses to characterize the “incubator business” type of land use. Considering the type of business operations usually undertaken at these locations, the general description and trip generation characteristics do appear appropriate. Therefore, a solution for Volusia County to consider is to designate the “light industrial” land use to apply to those land developments which consists of larger buildings which house smaller service-oriented business. The “manufacturing” land use would apply solely to those sites for which the primary purpose would be the actual manufacture (with no on-site sales) of goods.

Appendix

Table A-1 Historical Costs Summary Sheet

Road Segment	From	To	AREA	Impact	Existing #	Future #		Lane Miles	Service Volume Capacity			LENGTH	Veh. Miles of	Project Costs				JURISD
			TYPE	Fee Dist.	Lanes	Lanes		Length	of Imprvt.	Current	Future		Added Cap.	Cap. Added	PE	ROW	CONST	
Atlantic Ave.	6th	Flagler Ave.	U	2	2	3	0.83	0.83	15,600	16,380	780	0.83	647	\$150,000	\$550,000	\$1,200,000	\$1,900,000	CY
Big Tree Road	Nova Rd	Kenilworth Ave.	U	1	2	3	0.85	0.85	15,600	16,380	780	0.85	663	\$120,000	\$0	\$1,464,000	\$1,584,000	CY
Blue Lake Av/Hill Ave	Minnesota Ave	Plymouth Ave.	U	4	0	2	1.50	3	-	15,600	15,600	1.50	23,400	\$124,000	\$408,000	\$817,000	\$1,349,000	CY
County Road 92	SR 15-A	US 17/92	U	4	2	4	1.25	2.5	16,900	35,700	18,800	1.25	23,500	\$230,000	\$0	\$2,200,000	\$2,430,000	CY
Dunn Avenue	Williamson Blvd	Bill France Blvd	U	1	0	2	1.02	2.04	-	16,900	16,900	1.02	17,238	\$220,000	\$439,000	\$1,925,000	\$2,584,000	CY
Enterprise Road	Highbanks Road	Deltona Blvd	U	3	2	4	0.56	1.12	16,900	32,900	16,000	0.56	8,960	\$220,000	\$351,000	\$3,500,000	\$4,071,000	CY
Enterprise Road	Saxon Blvd	Highbanks Rd	U	3	2	4	1.50	3	16,900	32,900	16,000	1.50	24,000	\$210,000	\$2,240,000	\$2,500,000	\$4,950,000	CY
Hamilton Ave.	French Ave.	20th St	R	3	0	2	1.19	2.38	-	15,600	15,600	1.19	18,564	\$77,000	\$75,000	\$997,000	\$1,149,000	CY
Howland Blvd	Highschool	Providence Blvd	U	3	2	4	1.98	3.96	16,900	32,900	16,000	1.98	31,680	\$315,000	\$650,000	\$3,240,000	\$4,205,000	CY
Normandy Blvd	Firwood Drive	Howland Blvd.	U	3	0	2	1.50	3	-	15,600	15,600	1.50	23,400	\$237,000	\$320,000	\$1,545,000	\$2,102,000	CY
Old Mission Road	Josephine Rd	SR 44	U	2	2	4	1.01	2.02	15,600	32,900	17,300	1.01	17,473	\$223,000	\$1,480,000	\$1,846,000	\$3,549,000	CY
Prevatt Ave	Kicklighter Rd	SR 44	T	4	0	2	3.50	7	-	14,600	14,600	3.50	51,100	\$590,000	\$385,000	\$2,495,000	\$3,470,000	CY
Providence Blvd	Tivioli Dr	Fort Smith Blvd	U	3	2	4	0.45	0.9	16,900	35,700	18,800	0.45	8,460	\$110,000	\$25,000	\$959,000	\$1,094,000	CY
Saxon Blvd	Normandy	Sumatra Dr	U	3	2	4	0.69	1.38	15,600	32,900	17,300	0.69	11,937	\$225,000	\$1,900,000	\$1,707,000	\$3,832,000	CY
Saxon Blvd	US 17/92	Existing 4 Ln	U	3	2	4	0.35	0.69	15,600	32,900	17,300	0.35	5,969	\$75,000	\$0	\$5,780,000	\$5,855,000	CY
Taylor Road	Hensel Rd	Spruce Creek Rd	U	1	2	4	1.10	2.2	15,600	32,900	17,300	1.10	19,030	\$455,000	\$147,000	\$2,630,000	\$3,232,000	CY
Veterans Memorial Pkwy	Saxon Blvd	Graves Ave.	T	3	2	4	3.20	6.4	14,600	30,900	16,300	3.20	52,160	\$559,000	\$2,075,000	\$3,415,333	\$6,049,333	CY
Williamson Blvd	SR 400	Thames Rd	U	1	2	4	1.80	3.6	16,900	35,700	18,800	1.80	33,840	\$921,000	\$0	\$1,000,000	\$1,921,000	CY
Williamson Blvd	Hand Ave.	SR 40	U	1	2	4	0.87	1.74	16,900	35,700	18,800	0.87	16,356	\$265,000	\$172,000	\$1,662,000	\$2,099,000	CY
SR 40	0.5 m W Tymber Ck	600' W I-95	U	1	2	4	1.08	2.16	16,400	35,700	19,300	1.08	20,844	\$553,534	\$12,733	\$4,758,197	\$5,324,464	S
SR 44	0.25mi W CR 4139	I-4	T	2	0	2	1.09	2.17	-	12,900	12,900	1.09	13,997	\$580,000	\$4,446,000	\$3,374,000	\$8,400,000	S
SR 44	SR 415	I-95	T	2	2	4	5.14	10.28	12,900	43,600	30,700	5.14	157,798	\$6,000	\$358,000	\$2,626,000	\$2,990,000	S
SR 442	Air Park Rd	SR 5 US 1	U	2	2	4	1.72	3.44	19,600	35,700	16,100	1.72	27,692	\$523,000	\$9,303,000	\$9,365,000	\$19,191,000	S
SR 442	I-95	Air Park Rd	U	2	2	4	1.88	3.76	19,600	35,700	16,100	1.88	30,268	\$0	\$1,703,000	\$4,954,000	\$6,657,000	S
SR 15A	Plymouth Ave	Greens Dairy Rd	U	4	2	4	1.01	2.02	16,900	35,700	18,800	1.01	18,988	\$472,000	\$66,000	\$3,301,000	\$3,839,000	S
SR 15/600 US 17/92	Plantation Road	Highbanks Rd	U	3	2	4	1.33	2.664	16,900	35,700	18,800	1.33	25,042		\$841,627	\$1,562,935	\$4,465,263	S
SR 15/600 US 17/92	Highbanks Rd	Enterprise Rd	U	3	2	4	2.11	4.22	16,900	35,700	18,800	2.11	39,668	\$187,000	\$742,000	\$8,395,000	\$9,324,000	S
SR 15/600 US 17/92	Old Deland Rd	Plantation Rd	U	3	2	4	2.16	4.31	16,900	35,700	18,800	2.16	40,514	\$22,000	\$3,264,000	\$7,468,000	\$10,754,000	S
Totals								83.634					763,187	\$ 7,669,534	\$ 31,953,360	\$ 86,686,465	\$ 128,370,060	

Table A-2 – Five-Year Work Program Summary Sheet

Road Segment	From	To	AREA TYPE	Impact Fee Dist.	Existing # Lanes	Future # Lanes	Length	Lane Miles of Imprvt.	Service Volume Capacity			LENGTH	Veh. Miles of Cap. Added	Project Costs				JURISD
									Current	Future	Added Cap.			PE	ROW	CONST	TOTAL COST	
Clyde Morris Blvd	Fallsway	LPGA	U	1	2	4	2.85	5.70	16,900	35,700	18,800	2.85	53,580	\$210,000	\$390,000	\$4,950,000	\$5,550,000	CY
Dunn Ave.	Williamson Blvd	Tomoka Fms	U	1	0	2	1.00	2.00	-	16,900	16,900	1.00	16,900	\$650,000	\$480,000	\$3,000,000	\$4,130,000	CY
LPGA Blvd./Madeline	Jimmy Ann	Nova Rd	U	1	2	5	0.80	2.40	16,900	35,700	18,800	0.80	15,040	\$330,000	\$2,910,000	\$2,000,000	\$5,240,000	CY
Madeline Ave.	Tomoka Farms Rd	Williamson	U	1	0	2	1.30	2.60	-	16,900	16,900	1.30	21,970	\$300,000	\$500,000	\$2,000,000	\$2,800,000	CY
Madeline Ave.	Sauls Rd	US 1	U	1	0	3	0.80	2.40	-	15,600	15,600	0.80	12,480	\$230,000	\$1,290,000	\$1,200,000	\$2,720,000	CY
Mason Ave.	Fentress	Bill France	U	1	2	3	0.52	0.52	13,520	16,900	3,380	0.52	1,758	\$20,000	\$0	\$130,000	\$150,000	CY
Williamson Blvd	US 92	Dunn Ave.		1	2	4	2.35	4.70	27,000	35,700	8,700	2.35	20,445		\$200,000	\$2,000,000	\$2,460,000	CY
SR 40	Cone Rd	0.4 m W Tymbercrk Rd	T	1	2	4	4.97	9.95	12,900	56,500	43,600	4.97	216,823	\$191,000	\$1,724,000	\$18,224,980	\$20,139,980	S
SR 5A Nova Rd	SR 5 US 1	Village Trial	U	1	2	4	2.25	4.50	16,900	35,700	18,800	2.25	42,300	\$1,984,000	\$2,616,000	\$10,832,000	\$15,432,000	S
SR 5A Nova Rd	Village Trail	Herbert St	U	1	2	4	1.01	2.02	16,900	35,700	18,800	1.01	18,988	\$980,172	\$1,581,000	\$5,976,000	\$8,537,172	S
SR 5A Nova Rd	Wilmette Ave	SR 5 US 1	U	1	2	4	1.20	2.40	16,900	35,700	18,800	1.20	22,560	\$2,058,000	\$578,000	\$5,955,000	\$8,591,000	S
SR 5A Nova Rd	Flomich Ave	Wilmette Ave	U	1	2	6	2.99	11.96	16,900	53,500	36,600	2.99	109,434	\$102,000	\$2,934,000	\$12,659,000	\$15,695,000	S
Old Mission Rd	Park Ave	Eslinger	U	2	0	2	1.00	2.00	-	15,600	15,600	1.00	15,600	\$139,399	\$380,000	\$1,200,000	\$1,719,399	CY
Tenth St.	Tatum	Myrtle	U	2	2	4	0.75	1.50		32,900	17,300	0.75	12,975	\$300,000		\$2,700,000	\$3,440,000	CY
Tenth St.	Myrtle	US 1	U		2	4	0.50	1.00		32,900	17,300	0.50	8,650	\$150,000	\$900,000	\$2,300,000	\$3,350,000	CY
SR 44	W Ramp I-4	SR 415	U	2	2	4	10.52	21.03	12,900	43,600	30,700	10.52	322,811	\$1,534,000	\$14,763,000	\$40,525,262	\$56,822,262	S
DeBary Ave.	I-4	Providence Blvd.	U	3	2	4	1.70	3.40	16,900	35,700	18,800	1.70	31,960	\$450,000	\$2,000,000	\$5,500,000	\$7,950,000	CY
Howland Blvd.	Elkcam	Newmark	U	3	2	4	1.00	2.00	16,900	35,700	18,800	1.00	18,800	\$540,000	\$400,000	\$2,500,000	\$3,440,000	CY
Howland Blvd.	Newmark	Courtland	U	3	2	4	1.15	2.30	16,900	35,700	18,800	1.15	21,620	\$350,000		\$2,000,000	\$2,750,000	CY
I-4 Frontage Rd-PH 1		Orange Camp		3	0	2		4.28	-	16,900	16,900	2.14	36,166	\$500,000		\$5,000,000	\$7,280,000	CY
Providence Blvd.		Saxon Blvd.		3	2	5	1.40	4.20	16,900	35,700	18,800	1.40	26,320		\$100,000	\$2,300,000	\$2,800,000	CY
Providence Blvd.	Ft Smith	Elkcam Blvd.	U	3	2	4	0.80	1.60	16,900	35,700	18,800	0.80	15,040	\$280,000	\$0	\$1,400,000	\$1,680,000	CY
Rhode Island Ext	VMP	Normandy Blvd.	U	3	0	2	1.80	3.60	-	12,480	12,480	1.80	22,464	\$700,000	\$830,000	\$3,700,000	\$5,230,000	CY
Saxon Blvd.	Sumatra	Tivoli	U	3	2	5	0.85	2.55	16,900	35,700	18,800	0.85	15,980	\$300,000	\$2,400,000	\$1,700,000	\$4,400,000	CY
SR 15/600 US 17/92	SR 472	SR 15A	U	3	4	6	1.92	3.83	35,700	53,500	17,800	1.92	34,087	\$260,000	\$692,770	\$7,894,820	\$8,847,590	S
SR 15A	SR 15/600 US 17/92	Beresford Ave	U	4	2	4	1.60	3.20	19,600	61,800	42,200	1.60	67,436	\$355,000	\$3,107,000	\$6,151,166	\$9,613,166	S
SR 15A	Greens Dairy RD	SR 15 US 17	U	4	2	4	1.95	3.90	16,900	35,700	18,800	1.95	36,660	\$1,040,000	\$4,030,000	\$10,286,516	\$15,356,516	S

Table A-2 – Five-Year Work Program Summary Sheet

Road Segment	From	To	AREA	Impact	Existing #	Future #		Lane Miles	Service Volume Capacity				Veh. Miles of	Project Costs				
									Current	Future	Added Cap.			LENGTH	Cap. Added	PE	ROW	
Beresford Ave.	Blue Lake Ave.	Kepler Rd.	U	4	0	2	0.85	1.70	-	12,480	12,480	0.85	10,608	\$130,000	\$250,000	\$675,000	\$1,055,000	CY
Totals								113.23					1,249,454	\$14,743,571	\$ 47,675,770	\$164,759,744	\$ 227,179,085	

Table A-3 LRTP Project Summary

Road Segment	From	To	AREA TYPE	Impact Fee Dist.	Existing # Lanes	Future # Lanes	Length	Lane Miles of Imprvt.	Service Volume Capacity			LENGTH	Veh. Miles of Cap. Added	Project Costs				JURISD
									Current	Future	Added Cap.			PE	ROW	CONST	TOTAL COST	
SR 483 (Clyde Morris Blvd)	US 92	Beville Rd	U	1	4	6	1.20	2.40	35,700	53,500	17,800	1.20	21,360			\$10,923,000	\$10,923,000	S
SR 421	Nova Rd	Spruce Creek Rd	U	1	4	6	0.90	1.80	35,700	53,500	17,800	0.90	16,020			\$3,717,300	\$3,717,300	S
SR 430	SR 483	Sea Breeze Bridge	U	1	4	6	5.35	10.70	35,700	53,500	17,800	5.35	95,230			\$13,217,100	\$13,217,100	S
Dunn Ave	LPGA Blvd	Williamson Blvd.	U	1	0	2	2.20	4.40	-	16,900	16,900	2.20	37,180			\$15,000,000	\$15,000,000	CY
Dunn Ave	Williamson Blvd	Clyde Morris Blvd	U	1	2	4	1.75	3.50	16,900	35,700	18,800	1.75	32,900			\$3,863,700	\$3,863,700	CY
LPGA Blvd	US 1	Nova Rd	U	1	2	4	1.00	2.00	16,900		18,800	1.00	18,800			\$24,000,000	\$24,000,000	CY
LPGA Blvd	US 92	Tomoka Farms Rd	U	1	0	2	1.80	3.60	-	27,000	27,000	1.80	48,600			\$4,836,000	\$4,836,000	CY
Spruce Creek Rd	Herbert St	Dunlawton Ave	U	1	0	2	0.40	0.80	-	15,600	15,600	0.40	6,240			\$1,200,000	\$1,200,000	CY
Tymber Creek Rd	Riverbend Dr	LPGA Blvd	U	1		2	2.50	5.00	-	15,600	15,600	2.50	39,000			\$5,195,000	\$5,195,000	CY
Williamson Blvd	Current Terminus	Pioneer Trail	U	1		2	0.55	1.10	-		16,900	0.55	9,295			\$9,603,000	\$9,603,000	CY
Mason Ave	Williamson Blvd	Bill France	U	1	2	4	1.05	2.10	16,900		18,800	1.05	19,740	\$450,000	\$500,000	\$2,625,000	\$3,575,000	CY
US 92	Nova Rd	US 1	U	1	4	6	1.15	2.30	35,700		17,800	1.15	20,470			\$4,956,400	\$4,956,400	S
SR 400 (Beville Rd)	Clyde Morris Blvd	Nova Rd	U	1	4	6	0.70	1.40	35,700		17,800	0.70	12,460			\$8,494,900	\$8,494,900	S
SR 400 (Beville Rd)	Nova Rd	US 1	U	1	4	6	1.35	2.70	35,700		17,800	1.35	24,030			\$10,005,400	\$10,005,400	S
Airport Rd	Summer Tree	Pioneer Trail	U	1	2	4	3.60	7.20	15,600		17,300	3.60	62,280			\$5,802,900	\$5,802,900	CY
Hand Ave	Tymber Creek Rd	Williamson Blvd.	U	1	0	2	1.35	2.70	-		15,600	1.35	21,060			\$4,644,600	\$4,644,600	CY
Hand Ave	Williamson Blvd	Nova Rd	U	1	2	4	2.50	5.00	15,600	32,900	17,300	2.50	43,250			\$7,038,000	\$7,038,000	CY
LPGA Blvd	Clyde Morris Blvd	I-95	U	1		6	1.10	2.20	33,915		19,585	1.10	21,544			\$1,652,000	\$1,652,000	CY
LPGA Blvd	I-95	Tymber Creek Rd Ext	U	1	2	4	1.10	2.20	16,900		18,800	1.10	20,680			\$2,380,900	\$2,380,900	CY
Madeline Ave	LPGA Blvd Ext	Williamson Blvd.	U	1	0	2	1.30	2.60	-		16,900	1.30	21,970			\$4,503,000	\$4,503,000	CY
Pioneer Trail	Tomoka Farms Rd	Turnbull Bay Rd	U	1	2	4	4.10	8.20	11,700		21,200	4.10	86,920			\$12,853,500	\$12,853,500	CY
Taylor Rd	I-4	Tomoka Farms Rd	U	1	0	2	6.30	12.60	-		15,600	6.30	98,280			\$10,395,000	\$10,395,000	CY
Taylor Rd	Tomoka Farms Rd	Williamson Blvd.	U	1	2	4	2.90	5.80	16,900		18,800	2.90	54,520			\$9,592,000	\$9,592,000	CY
Williamson Blvd	Hand Ave	Dunn Av/ Indigo Ave	U	1	2	4	4.10	8.20	16,900		18,800	4.10	77,080			\$8,602,000	\$8,602,000	CY
Williamson Blvd	Beville Rd	Taylor Rd	U	1	2	4	4.60	9.20	15,600		17,300	4.60	79,580			\$10,515,400	\$10,515,400	CY
Yorktowne Blvd	Dunlawton Ave	Taylor Rd	U	1	0	2	0.50	1.00	-		15,600	0.50	7,800			\$6,001,800	\$6,001,800	CY
SR 5A Nova Rd	Wilmette Ave	SR 5 US 1	U	1	2	4	1.20	2.40	16,900		18,800	1.20	22,560			\$4,350,000	\$4,350,000	S
Airport Rd	Pioneer Trail	SR 44		2	0	2	2.75	5.50	-	15,600	15,600	2.75	42,900			\$4,400,000	\$4,400,000	CY

Table A-3 LRTP Project Summary

Road Segment	From	To	AREA TYPE	Impact Fee Dist.	Existing # Lanes	Future # Lanes		Lane Miles of Imprvt.	Service Volume Capacity			LENGTH	Veh. Miles of Cap. Added	Project Costs				JURISD
									Current	Future	Added Cap.			PE	ROW	CONST	TOTAL COST	
Airport Rd	SR 44		U	2	0	2	8.00	16.00	-		15,600	8.00	124,800			\$5,896,500	\$5,896,500	CY
SR 442 (Ind R. Blvd)	Airport Rd	I-95	U	2	0	2	8.00	16.00	-		16,900	8.00	135,200			\$6,281,800	\$6,281,800	
Tomoka Farms Rd	Taylor Rd	SR 44	T	2	2			10.00	24,900	64,200	39,300	5.00	196,500			\$14,864,700	\$14,864,700	CY
US 17/92	SR 15A (Taylor Rd)	SR 472	U	3	4	6	1.80	3.60	35,700	53,500	17,800	1.80	32,040			\$4,514,600	\$4,514,600	S
SR 415	SR 44	Howland Blvd	T	3	2	4	11.37	22.74	12,900	43,600	30,700	11.37	349,059			\$38,940,700	\$38,940,700	S
SR 415	Howland Blvd	Seminole County	T	3	2	4	6.00	12.00	18,200	56,500	38,300	6.00	229,800			\$23,423,200	\$23,423,200	S
Elkcam Blvd	Riverhead Dr	SR 415	U	3	0	2	3.70	7.40	-	15,600	15,600	3.70	57,720			\$10,100,000	\$10,100,000	CY
Howland Blvd.	Providence Blvd	Elkcam Blvd.	U	3	2	4	2.20	4.40	16,900	35,700	18,800	2.20	41,360			\$4,681,200	\$4,681,200	CY
Howland Blvd.	Courtland Blvd		U		2		2.40	4.80	16,900		18,800	2.40	45,120			\$5,708,800	\$5,708,800	CY
Providence Blvd.	Tivoli Dr		U	3	2		3.00	6.00	16,900	35,700	18,800	3.00	56,400			\$6,069,400	\$6,069,400	CY
	Tivoli Dr	Providence Blvd	U	3	2	4	0.90	1.80	16,900	35,700	18,800	0.90	16,920			\$3,446,000	\$3,446,000	CY
Saxon Blvd.	Westside Connector	US 17/92	U	3	0	2	0.80	1.60	-	16,900	16,900	0.80	13,520			\$827,800	\$827,800	CY
Saxon Blvd.	Enterprise Rd	I-4	U	3	4	6	1.20	2.40	35,700	53,500	17,800	1.20	21,360			\$2,140,000	\$2,140,000	CY
Harley Strick Blvd	VMP	Saxon Blvd	U	3	0	2	0.94	1.88	-	15,600	15,600	0.94	14,664			\$1,240,000	\$1,240,000	CY
Vet Mem Pkwy Ext	Graves Ave.	Harley Strick Blvd	U	3	2	4	1.65	3.30	15,600	32,900	17,300	1.65	28,545			\$2,646,900	\$2,646,900	CY
Vet Mem Pkwy Ext	Graves Ave.	SR 472	U	3	0	5	1.00	5.00	-	32,900	32,900	1.00	32,900			\$1,280,000	\$1,280,000	CY
Deltona Blvd	Enterprise Rd	DeBary Ave	U	3	2	4	0.95	1.90	13,520	35,700	22,180	0.95	21,071			\$2,658,800	\$2,658,800	CY
Enterprise Rd	Deltona Blvd	Main Street	U	3	2	4	1.00	2.00	16,900		18,800	1.00	18,800			\$2,346,000	\$2,346,000	CY
Enterprise Rd	Saxon	US 17/92	U	3	4	6	1.00	2.00	16,900	35,700	18,800	1.00	18,800			\$3,086,000	\$3,086,000	CY
Dirksen Dr	US 17/92	I-4	U	3	2	4	2.00	4.00	21,600	35,700	14,100	2.00	28,200			\$6,256,000	\$6,256,000	CY
Orange Camp Rd	US 17/92	I-4	U	3	2	4	3.10	6.20	16,900	35,700	18,800	3.10	58,280			\$10,009,600	\$10,009,600	CY
Providence Blvd.	Catalina Blvd	Howland Blvd	U	3	0	2	0.62	1.24	-	16,900	16,900	0.62	10,478			\$655,200	\$655,200	CY
Providence Blvd.	Howland Blvd	Elkcam Blvd.	U	3	2	4	1.70	3.40	16,900	35,700	18,800	1.70	31,960			\$4,192,900	\$4,192,900	CY
Rhode Island Ext	Westside Connector	US 17/92	U	3	0	2	1.00	2.00	-	15,600	15,600	1.00	15,600			\$873,600	\$873,600	CY
	Beresford Ave	Hamilton Ave.	U	3	0	2	4.00	8.00	-	15,600	15,600	4.00	62,400			\$3,822,000	\$3,822,000	CY
	French Ave	Saxon Blvd	U	3	0	5	2.90	14.50	-	15,600	15,600	2.90	45,240			\$2,948,400	\$2,948,400	CY
	Orange Ave	CR 4139	U	3	0	2	1.40	2.80	-	16,900	16,900	1.40	23,660			\$2,044,000	\$2,044,000	CY
US 17	SR 40	Ponce DeLeon Blvd	T	4	2	4	6.50	13.00	12,900	43,600	30,700	6.50	199,550			\$22,231,600	\$22,231,600	S

Table A-3 LRTP Project Summary																		
Road Segment	From	To	AREA TYPE	Impact Fee Dist.	Existing # Lanes	Future # Lanes	Length	Lane Miles of Imprvt.	Service Volume Capacity			LENGTH	Veh. Miles of Cap. Added	Project Costs				JURISD
									Current	Future	Added Cap.			PE	ROW	CONST	TOTAL COST	
VMP	SR 44	SR 472	U	4	2	4	4.65	9.30	15,600	32,900	17,300	4.65	80,445			\$4,427,500	\$4,427,500	S
	Orange Camp Rd	SR 472	U	4	0	2	1.35	2.70	-	15,600	15,600	1.35	21,060			\$1,474,200	\$1,474,200	CY
Totals								310.56					3,093,201	\$ 450,000	\$ 500,000	\$ 409,455,300	\$ 410,405,300	

Table A-4 - Combined Historical and 5-Year Costs Summary Sheet

Road Segment	From	To	AREA TYPE	Impact Fee Dist.	Existing # Lanes	Future # Lanes	Length	Lane Miles of Imprvt.	Service Volume Capacity			LENGTH	Veh. Miles of Cap. Added	Project Costs				JURISD
									Current	Future	Added Cap.			PE	ROW	CONST	TOTAL COST	
Atlantic Ave.	6th	Flagler Ave.	U	2	2	3	0.83	0.83	15,600	16,380	780	0.83	647	\$150,000	\$550,000	\$1,200,000	\$1,900,000	CY
Big Tree Road	Nova Rd	Kenilworth Ave.	U	1	2	3	0.85	0.85	15,600	16,380	780	0.85	663	\$120,000	\$0	\$1,464,000	\$1,584,000	CY
Blue Lake Av/Hill Ave	Minnesota Ave	Plymouth Ave.	U	4	0	2	1.50	3	-	15,600	15,600	1.50	23,400	\$124,000	\$408,000	\$817,000	\$1,349,000	CY
County Road 92	SR 15-A	US 17/92	U	4	2	4	1.25	2.5	16,900	35,700	18,800	1.25	23,500	\$230,000	\$0	\$2,200,000	\$2,430,000	CY
Dunn Avenue	Williamson Blvd	Bill France Blvd	U	1	0	2	1.02	2.04	-	16,900	16,900	1.02	17,238	\$220,000	\$439,000	\$1,925,000	\$2,584,000	CY
Enterprise Road	Highbanks Road	Deltona Blvd	U	3	2	4	0.56	1.12	16,900	32,900	16,000	0.56	8,960	\$220,000	\$351,000	\$3,500,000	\$4,071,000	CY
Enterprise Road	Saxon Blvd	Highbanks Rd	U	3	2	4	1.50	3	16,900	32,900	16,000	1.50	24,000	\$210,000	\$2,240,000	\$2,500,000	\$4,950,000	CY
Hamilton Ave.	French Ave.	20th St	R	3	0	2	1.19	2.38	-	15,600	15,600	1.19	18,564	\$77,000	\$75,000	\$997,000	\$1,149,000	CY
Howland Blvd	Highschool	Providence Blvd	U	3	2	4	1.98	3.96	16,900	32,900	16,000	1.98	31,680	\$315,000	\$650,000	\$3,240,000	\$4,205,000	CY
Normandy Blvd	Firwood Drive	Howland Blvd.	U	3	0	2	1.50	3	-	15,600	15,600	1.50	23,400	\$237,000	\$320,000	\$1,545,000	\$2,102,000	CY
Old Mission Road	Josephine Rd	SR 44	U	2	2	4	1.01	2.02	15,600	32,900	17,300	1.01	17,473	\$223,000	\$1,480,000	\$1,846,000	\$3,549,000	CY
Prevatt Ave	Kicklighter Rd	SR 44	T	4	0	2	3.50	7	-	14,600	14,600	3.50	51,100	\$590,000	\$385,000	\$2,495,000	\$3,470,000	CY
Providence Blvd	Tivoli Dr	Fort Smith Blvd	U	3	2	4	0.45	0.9	16,900	35,700	18,800	0.45	8,460	\$110,000	\$25,000	\$959,000	\$1,094,000	CY
Saxon Blvd	Normandy	Sumatra Dr	U	3	2	4	0.69	1.38	15,600	32,900	17,300	0.69	11,937	\$225,000	\$1,900,000	\$1,707,000	\$3,832,000	CY
Saxon Blvd	US 17/92	Existing 4 Ln	U	3	2	4	0.35	0.69	15,600	32,900	17,300	0.35	5,969	\$75,000	\$0	\$5,780,000	\$5,855,000	CY
Taylor Road	Hensel Rd	Spruce Creek Rd	U	1	2	4	1.10	2.2	15,600	32,900	17,300	1.10	19,030	\$455,000	\$147,000	\$2,630,000	\$3,232,000	CY
Veterans Memorial Pkwy	Saxon Blvd	Graves Ave.	T	3	2	4	3.20	6.4	14,600	30,900	16,300	3.20	52,160	\$559,000	\$2,075,000	\$3,415,333	\$6,049,333	CY
Williamson Blvd	SR 400	Thames Rd	U	1	2	4	1.80	3.6	16,900	35,700	18,800	1.80	33,840	\$921,000	\$0	\$1,000,000	\$1,921,000	CY
Williamson Blvd	Hand Ave.	SR 40	U	1	2	4	0.87	1.74	16,900	35,700	18,800	0.87	16,356	\$265,000	\$172,000	\$1,662,000	\$2,099,000	CY
SR 40	0.5 m W Tymber Ck	600' W I-95	U	1	2	4	1.08	2.16	16,400	35,700	19,300	1.08	20,844	\$553,534	\$12,733	\$4,758,197	\$5,324,464	S
SR 44	0.25mi W CR 4139	I-4	T	2	0	2	1.09	2.17	-	12,900	12,900	1.09	13,997	\$580,000	\$4,446,000	\$3,374,000	\$8,400,000	S
SR 44	SR 415	I-95	T	2	2	4	5.14	10.28	12,900	43,600	30,700	5.14	157,798	\$6,000	\$358,000	\$2,626,000	\$2,990,000	S
SR 442	Air Park Rd	SR 5 US 1		2	2	4	1.72	3.44	19,600	35,700	16,100	1.72	27,692	\$523,000	\$9,303,000	\$9,365,000	\$19,191,000	S
SR 442	I-95	Air Park Rd		2	2	4	1.88	3.76	19,600	35,700	16,100	1.88	30,268	\$0	\$1,703,000	\$4,954,000	\$6,657,000	S
SR 15A	Plymouth Ave	Greens Dairy Rd	U	4	2	4	1.01	2.02	16,900	35,700	18,800	1.01	18,988	\$472,000	\$66,000	\$3,301,000	\$3,839,000	S
SR 15/600 US 17/92	Plantation Road	Highbanks Rd	U	3	2	4	1.33	2.664	16,900	35,700	18,800	1.33	25,042		\$841,627	\$1,562,935	\$4,465,263	S
SR 15/600 US 17/92	Highbanks Rd	Enterprise Rd	U	3	2	4	2.11	4.22	16,900	35,700	18,800	2.11	39,668	\$187,000	\$742,000	\$8,395,000	\$9,324,000	S
SR 15/600 US 17/92	Old Deland Rd	Plantation Rd	U	3	2	4	2.16	4.31	16,900	35,700	18,800	2.16	40,514	\$22,000	\$3,264,000	\$7,468,000	\$10,754,000	S
Clyde Morris Blvd	Fallsway	LPGA	U	1	2	4	2.85	5.70	16,900	35,700	18,800	2.85	53,580	\$210,000	\$390,000	\$4,950,000	\$5,550,000	CY

Table A-4 - Combined Historical and 5-Year Costs Summary Sheet

Road Segment	From	To	AREA TYPE	Impact Fee Dist.	Existing # Lanes	Future # Lanes	Length	Lane Miles of Imprvt.	Service Volume Capacity			LENGTH	Veh. Miles of Cap. Added	Project Costs				JURISD
									Current	Future	Added Cap.			PE	ROW	CONST	TOTAL COST	
Dunn Ave.	Williamson Blvd	Tomoka Fms	U	1	0	2	1.00	2.00	-	16,900	16,900	1.00	16,900	\$650,000	\$480,000	\$3,000,000	\$4,130,000	CY
LPGA Blvd./Madeline	Jimmy Ann	Nova Rd	U	1	2	5	0.80	2.40	16,900	35,700	18,800	0.80	15,040	\$330,000	\$2,910,000	\$2,000,000	\$5,240,000	CY
Madeline Ave.	Tomoka Farms Rd	Williamson	U	1	0	2	1.30	2.60	-	16,900	16,900	1.30	21,970	\$300,000	\$500,000	\$2,000,000	\$2,800,000	CY
Madeline Ave.	Sauls Rd	US 1	U	1	0	3	0.80	2.40	-	15,600	15,600	0.80	12,480	\$230,000	\$1,290,000	\$1,200,000	\$2,720,000	CY
Mason Ave.	Fentress	Bill France	U	1	2	3	0.52	0.52	13,520	16,900	3,380	0.52	1,758	\$20,000	\$0	\$130,000	\$150,000	CY
Williamson Blvd	US 92	Dunn Ave.		1	2	4	2.35	4.70	27,000	35,700	8,700	2.35	20,445	\$260,000	\$200,000	\$2,000,000	\$2,460,000	CY
SR 40	Cone Rd	0.4 m W Tymbercrk Rd		1	2	4	4.97	9.95	12,900	56,500	43,600	4.97	216,823	\$191,000	\$1,724,000	\$18,224,980	\$20,139,980	S
SR 5A Nova Rd	SR 5 US 1	Village Trial	U	1	2	4	2.25	4.50	16,900	35,700	18,800	2.25	42,300	\$1,984,000	\$2,616,000	\$10,832,000	\$15,432,000	S
SR 5A Nova Rd	Village Trail	Herbert St	U	1	2	4	1.01	2.02	16,900	35,700	18,800	1.01	18,988	\$980,172	\$1,581,000	\$5,976,000	\$8,537,172	S
SR 5A Nova Rd		SR 5 US 1		1	2	4	1.20	2.40	16,900	35,700	18,800	1.20	22,560	\$2,058,000	\$578,000	\$5,955,000	\$8,591,000	S
SR 5A Nova Rd	Flomich Ave	Wilmette Ave		1	2	6	2.99	11.96	16,900	53,500	36,600	2.99	109,434	\$102,000	\$2,934,000	\$12,659,000	\$15,695,000	S
Old Mission Rd	Park Ave	Eslinger		2	0	2	1.00	2.00	-	15,600	15,600	1.00	15,600	\$139,399	\$380,000	\$1,200,000	\$1,719,399	CY
Tenth St.	Tatum	Myrtle		2	2	4	0.75	1.50	15,600	32,900	17,300	0.75	12,975	\$300,000	\$440,000	\$2,700,000	\$3,440,000	CY
Tenth St.	Myrtle	US 1	U		2	4	0.50	1.00	15,600		17,300	0.50	8,650	\$150,000	\$900,000		\$3,350,000	CY
SR 44	W Ramp I-4	SR 415	U		2	4	10.52	21.03	12,900		30,700	10.52	322,811	\$1,534,000	\$14,763,000	\$40,525,262	\$56,822,262	S
DeBary Ave.	I-4	Providence Blvd.		3	2	4	1.70	3.40	16,900	35,700	18,800	1.70	31,960	\$450,000	\$2,000,000	\$5,500,000	\$7,950,000	CY
Howland Blvd.	Elkcam	Newmark		3	2	4	1.00	2.00	16,900	35,700	18,800	1.00	18,800	\$540,000	\$400,000	\$2,500,000	\$3,440,000	CY
Howland Blvd.	Newmark	Courtland		3	2	4	1.15	2.30	16,900	35,700	18,800	1.15	21,620	\$350,000	\$400,000	\$2,000,000	\$2,750,000	CY
I-4 Frontage Rd-PH 1	SR 472	Orange Camp		3	0	2	2.14	4.28	-	16,900	16,900	2.14	36,166	\$500,000	\$1,780,000	\$5,000,000	\$7,280,000	CY
Providence Blvd.	Alexander Ave.	Saxon Blvd.		3	2	5	1.40	4.20	16,900	35,700	18,800	1.40	26,320	\$400,000	\$100,000	\$2,300,000	\$2,800,000	CY
Providence Blvd.	Ft Smith	Elkcam Blvd.		3	2	4	0.80	1.60	16,900	35,700	18,800	0.80	15,040	\$280,000	\$0	\$1,400,000	\$1,680,000	CY
Rhode Island Ext	VMP	Normandy Blvd.		3	0	2	1.80	3.60	-	12,480	12,480	1.80	22,464	\$700,000	\$830,000	\$3,700,000	\$5,230,000	CY
Saxon Blvd.	Sumatra	Tivoli		3	2	5	0.85	2.55	16,900	35,700	18,800	0.85	15,980	\$300,000	\$2,400,000	\$1,700,000	\$4,400,000	CY
SR 15/600 US 17/92	SR 472	SR 15A		3	4	6	1.92	3.83	35,700	53,500	17,800	1.92	34,087	\$260,000	\$692,770	\$7,894,820	\$8,847,590	S

Table A-4 - Combined Historical and 5-Year Costs Summary Sheet

Road Segment	From	To	AREA TYPE	Impact Fee Dist.	Existing # Lanes	Future # Lanes	Length	Lane Miles of Imprvt.	Service Volume Capacity			LENGTH	Veh. Miles of Cap. Added	Project Costs				JURISD
									Current	Future	Added Cap.			PE	ROW	CONST	TOTAL COST	
SR 15A	SR 15/600 US 17/92	Beresford Ave	U	4	2	4	1.60	3.20	19,600	61,800	42,200	1.60	67,436	\$355,000	\$3,107,000	\$6,151,166	\$9,613,166	S
SR 15A	Greens Dairy RD	SR 15 US 17	U	4	2	4	1.95	3.90	16,900	35,700	18,800	1.95	36,660	\$1,040,000	\$4,030,000	\$10,286,516	\$15,356,516	S
Beresford Ave.	Blue Lake Ave.	Kepler Rd.	U	4	0	2	0.85	1.70	-	12,480	12,480	0.85	10,608	\$130,000	\$250,000	\$675,000	\$1,055,000	CY
Totals								196.866					2,012,641	22,413,105	79,629,130	251,446,209	355,549,145	