

VOLUSIA COUNTY

**PARKS & RECREATION, FIRE RESCUE SERVICES, AND
TRANSPORTATION**

IMPACT FEE UPDATE STUDY

EXECUTIVE SUMMARY



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Volusia County Impact Fee Update Study

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Introduction

To address recent cost increases along with new infrastructure required to support continuing growth, Volusia County retained Tindale-Oliver & Associates (TOA) to update the impact fee schedules for the Parks and Recreation, Fire Services, and Transportation impact fee program areas. The parks and recreation and fire services impact fee program areas were last updated by Volusia County in 2001, while the Transportation impact fee program was last updated by Volusia County in 2003.

An impact fee is a one-time capital charge levied against new development and is designed to cover the cost of the capital infrastructure consumed by new development. The general equation used to compute the impact fee for a given land use is:

$$(\text{Demand} \times \text{Cost}) - \text{Credit} = \text{Fee}$$

The net impact fee is calculated as the total capital cost of providing the necessary infrastructure, less any additional revenue generated by new development that also will be used to pay for the additional infrastructure necessitated by new growth. The impact fee updates utilize a consumption-driven impact fee methodology based on the current level of service being achieved. New development is charged based on the value of the current infrastructure or roadway system that they will consume per unit of development (e.g., dwelling unit, 1,000 square feet, etc.) less any applicable revenue credits. Under the consumption-driven approach, new development is not charged for capital expansion to the system for reasons other than those necessitated by new growth and does not pay to improve the level of service above the existing achieved standards, which would improve existing deficiencies. The purpose of an impact fee is to assist in maintaining the current level of service standard for each impact fee program area established by the County by providing funding for the implementation of projects that have been or will be identified in Volusia County's Capital Improvements Program.

The impact fees recommended in the technical report entitled *Parks and Recreation, Fire Rescue Services, and Transportation Impact Fee Update Study*, dated November 6, 2007, referred to hereafter as the Technical Report, must pass the two-prong dual rational-nexus test. The first prong requires the need for capital facilities created by new development to be reasonably proportional to the amount of the fee charged. The second prong requires that the expenditure of impact fee funds create a reasonable benefit to the new

development paying the fees.

The purpose of the Technical Report is to create a legally defensible and technically supportable set of impact fees for the above referenced impact fee program areas. It is important to note that, pursuant to the State Impact Fee Act, whenever possible, the most current and local data available at the time of the study was used in the impact fee analysis.

Parks and Recreation

The following sections provide a comparison of the cost and credit components used to develop Volusia County's current parks and recreation impact fee schedule to the cost and credit components of the proposed parks and recreation impact presented in the Technical Report. Further, a comparison of the current and proposed parks and recreation impact fees for several residential land uses for both district and local parks also is presented in this section.

Parks and Recreation Impact Fee Variable Comparison

The following three tables, Table ES-1, Table ES-2, and Table ES-3, present comparisons of the variables used to develop the current parks and recreation impact fee schedule versus the variables of the proposed impact fees that are presented in the Technical Report.

Table ES-1 presents a comparison of the total parks acreage by park type, as well as the cost component variables used to calculate the total impact cost per resident for district and local parks for the current and proposed impact fees.

As presented in Table ES-1, the land cost per acre has increased by 994 percent for district parks and 286 percent for local parks since the previous impact fee update, while the facilities cost per acre increased 92 percent for district parks and 67 percent for local parks since the previous impact fee update. This increase can be attributed to the rapid rise in construction costs and land values that has occurred over the past several years. As documented in the Section VI, Indexing, of the Technical Report, land values in Volusia County have averaged an annual increase of 26 percent since 2003, with an increase of 36 percent in 2006. Construction costs for roads and buildings have also risen dramatically due to the increases in steel and concrete costs, as well as other materials, observed since 2004. The replacement costs used for the respective impact fee programs developed in the Technical Report are based on the actual costs to construct those

facilities at current costs, based on land value information received from the Volusia County Property Appraiser, recent bids provided by Volusia County and recent costs for similar facilities observed in other jurisdictions.

Table ES-2 presents a comparison of the credit component variables. As presented in this table, only a bond debt service credit was provided for district parks in the previous study. The credit for the proposed impact fees for district parks are provided for recent capital expansion improvements, the remaining amount of the debt issue to be repaid by future residents, and a credit for past payments of property taxes made by vacant land owners that have contributed to parks and recreation capital expansion projects. The previous impact fee study did not provide a credit for the local parks; however, the proposed impact fee study does provide a vacant land credit

Table ES-3 presents a comparison of the total impact cost, total credit per resident for both district and local parks, and net parks and recreation impact fees per dwelling single family dwelling unit. As presented in Table ES-3, the proposed net impact cost per single family dwelling unit increased 128 percent for district parks and decreased 57 percent for local parks. The resulting increase in district impact fees can be attributed to an increase in the district parks acreage, as well as an increase in the land cost and facilities cost per acre.

The reason for the decrease in the net impact cost for local parks is that the inventory of local parks used in the parks inventory in the previous impact fee update included parks located at public school facilities and within municipalities. These parks are not assets owned by the County and, therefore, are not included in the inventory used to develop the proposed parks and recreation impact fee schedule.

Table ES-1
Parks and Recreation Impact Fee Variable Comparison – Parks Acreage and Cost Component

Description	2001 Study ⁽¹⁾		2007 Study ⁽²⁾		Percent Change	
	District Parks	Local Parks	District Parks	Local Parks	District Parks	Local Parks
Parks Acreage	619.96	215.08	1,392.52	38.00	125%	-82%
Cost Component						
Land Cost per Acre	\$9,677	\$26,363	\$105,890	\$101,890	994%	286%
Facility Cost per Acre	\$19,880	\$17,091	\$38,199	\$28,509	92%	67%
Total Parks Cost per Acre	\$29,557	\$43,453	\$144,089	\$130,399	387%	200%
Total Parks and Recreation Costs	\$18,324,271	\$9,345,900	\$200,646,814	\$4,955,145	995%	-47%
Total Impact Cost per Resident	\$148	\$87	\$379	\$40	156%	-54%

(1) Source: Section 70-114(c) of the Volusia County Code of Ordinances. The bond credit per dwelling unit has been converted to a credit per resident for comparison purposes.

(2) Source: Tables III-3, III-6, III-7, and III-8 of the Technical Report. Land cost per acre includes the cost to purchase land, site development costs, and architecture and engineering costs associated with developing the land for parks facilities.

Table ES-2
Parks and Recreation Impact Fee Variable Comparison – Credit Component

Description	2001 Study ⁽¹⁾		2007 Study ⁽²⁾		Percent Change	
	District Parks	Local Parks	District Parks	Local Parks	District Parks	Local Parks
Capital Improvement Credit per Resident	N/A	N/A	\$35	N/A	N/A	N/A
Bond Credit per Resident	\$27	N/A	\$0.40	N/A	-99%	N/A
Effective Vacant Land Credit per Resident	N/A	N/A	\$30	\$5	N/A	N/A
Total Credit per Resident	\$27	N/A	\$65	\$5	142%	N/A

(1) Source: Section 70-114(c) of the Volusia County Code of Ordinances. The bond credit per dwelling unit has been converted to a credit per resident for comparison purposes.

(2) Source: Table III-12 of the Technical Report

Table ES-3
Parks and Recreation Impact Fee Variable Comparison – Total Cost, Total Credit, and Net Impact Fee

Description	2001 Study ⁽¹⁾		2007 Study ⁽²⁾		Percent Change	
	District Parks	Local Parks	District Parks	Local Parks	District Parks	Local Parks
Total Impact Cost per Resident	\$148	\$87	\$379	\$40	156%	-54%
Total Credit per Resident	\$27	N/A	\$65	\$5	142%	N/A
Net Single Family Fee per Dwelling Unit⁽³⁾	\$340	\$200	\$774	\$86	128%	-57%

(1) Source: Section 70-114(c) of the Volusia County Code of Ordinances. The bond credit per dwelling unit has been converted to a credit per resident for comparison purposes.

(2) Source: Table ES-1 for the total impact cost per resident and Table ES-2 for the total credit per resident. Net single family fee from Table III-13 of the Technical Report for district parks and Table III-14 of the Technical Report for local parks.

(3) For comparison purposes, the net impact fee per single family dwelling unit does not include the 3 percent administration fee imposed by Volusia County.

Parks and Recreation Impact Fee Schedule Comparison

Table ES-4 presents a comparison of the current and proposed parks and recreation impact fees for several residential land uses included in the fee schedule for unincorporated Volusia County. The fees presented in this table include the 3 percent administration fee currently imposed by Volusia County. As presented in this table, the fee for the single family land use of 1,500 to 2,499 square feet results in an increase of 140 percent for the district parks fee and a decrease of 62 percent for the local parks fee over the current parks and recreation impact fee schedule.

It should be noted that the proposed parks and recreation impact fee schedule is based on several different residential land uses, each with a specific demand component calculated according to the number of persons per dwelling unit specific to each type of residential unit. Since the distribution of demand among residential land uses varies, the impact fees included in the proposed fee schedule create a more equitable fee between the different residential land uses, as opposed to charging a single impact fee rate for all residential land uses.

As previously mentioned, the increase in the district parks fee is mainly attributed to the increased cost of parks facilities, as well as the increased district parks acreage used to determine the impact fee. The decrease in the local parks fee is attributed to the decrease in local parks acreage included in the technical analysis used to calculate the proposed impact fee schedule.

Table ES-4
Parks and Recreation Impact Fee Comparison

Land Use	unit	Volusia County Existing ⁽¹⁾			Volusia County Proposed ⁽²⁾			Percent Change		
		District Parks	Local Parks	Total	District Parks	Local Parks	Total	District Parks	Local Parks	Total
Single Family Detached (1,500 - 2,499 sq ft)	du	\$342	\$239	\$581	\$798	\$89	\$886	133%	-63%	53%
Multi-Family	du	\$342	\$239	\$581	\$461	\$42	\$503	35%	-83%	-13%
Mobile Home	du	\$342	\$239	\$581	\$520	\$63	\$583	52%	-74%	0%

(1) Source: Volusia County Residential Impact Fee Schedule for Unincorporated Volusia County, revised May 1, 2006. Includes 3 percent administration fee imposed by Volusia County.

(2) Source: Tables III-13 and III-14 of the Technical Report. Includes 3 percent administration fee imposed by Volusia County.

Fire Services

Due to methodological differences between the 2001 impact fee update and the analysis presented in Section IV of the Technical Report, a comparison of the cost and credit variables for the fire services impact fees cannot be made. Further, because the proposed fire services impact fee schedules use functional population as the basis for the demand component, the nonresidential impact fees vary according to land use, whereas the current fire services impact fee schedule is based on a single impact fee rate for all nonresidential land uses. The result is a variation in the percent increase between the current and proposed impact fee schedule for the nonresidential land uses presented in the following table, which range from 88 percent to 2,345 percent.

Table ES-5 provides a comparison of the current fire services impact fee schedule for the single family land use of 1,500 to 2,499 square feet, as well as several example nonresidential land uses. The proposed fire services impact fee schedule includes nearly 40 land uses, each with a specific functional population coefficient calculated according to the demand that a unit of development for each land use is estimated to consume of existing fire-related capital infrastructure. As previously discussed under Parks and Recreation, since the distribution of demand among nonresidential land uses varies greatly, the impact fees included in the proposed fee schedule create a more equitable fee between the different land uses, as opposed to charging a single impact fee rate for all nonresidential land uses.

The proposed impact fee for the single family land use of 1,500 to 2,499 square feet is 124 percent higher than the current fire services impact fee for the single family land use

Table ES-5
Fire Services Impact Fee Comparison

Land Use	unit	Volusia County Existing ⁽¹⁾	Volusia County Proposed ⁽²⁾	Percent Change
Residential:				
Single Family Detached (1,500 - 2,499 sf)	du	\$287	\$641	124%
Non-residential:				
General Light Industrial	1,000 sf	\$150	\$282	88%
Office (50,000 sf)	1,000 sf	\$150	\$580	287%
High Turnover Restaurant	1,000 sf	\$150	\$2,855	1803%
Fast Food Restaurant w/Drive-Thru	1,000 sf	\$150	\$3,668	2345%
Retail (100,000 sf)	1,000 sf	\$150	\$956	537%
Bank/Savings Drive-In	1,000 sf	\$150	\$968	545%

Source: Table IV-12 of the Technical Report

Transportation

The following sections provide a comparison of the demand, cost and credit components used to develop Volusia County's current transportation impact fee schedule to the demand, cost and credit components of the proposed transportation impact presented in the Technical Report.

The demand for travel placed on the transportation system (daily trip generation rate times the trip length times the percent of new trips) is expressed in units of vehicle miles of travel for each land use contained in the impact fee schedule. It should be noted that trip generation is expressed in average daily rates since new development produces and consumes trips on a daily basis. The cost of building new capacity is typically expressed in units of dollars per vehicle mile or lane mile of roadway capacity. The credit is an estimate of the non-impact fee revenues generated by a unit of each land use of new development that are allocated to roadway construction or transportation system capacity expansion. Thus, the impact fee is an "up front" payment for a portion of the cost of building a lane mile of capacity directly related to the amount of capacity consumed by each unit of land use contained in the impact fee schedule. Further, a comparison of the current transportation impact fee schedule for seven key land uses also is presented in this section.

Transportation Impact Fee Variable Comparison

Table ES-6 presents a comparison of the demand component used to develop the current transportation impact fee schedule versus the demand component of the proposed impact fee, as presented in Appendix G, Table G-1 of the Technical Report. As presented in the following table, the total vehicle miles of travel being charged for 4 of the 7 land uses shown has been reduced. Specifically, for the single family residential land use (1,500 – 2,499 square feet), the trip generation rate used was based on similar studies conducted throughout Florida, including Volusia County. This rate of 7.53 daily trips is approximately 21 percent lower than the Institute of Transportation Engineers' (ITE) *Trip Generation* reference report (7th edition) rate of 9.57 trips per day. The single family trip length was increased by approximately 2 percent due to the addition of more studies in the Florida Studies Database. The overall effect of trip generation rate decrease and trip length increase is a reduction in the vehicle miles of travel being charged of 26 percent. Table V-9 of the Technical Report provides a detailed explanation of changes for specific land uses due to ITE edition changes and additional trip characteristics studies in the Florida Database.

Table ES-6
Transportation Impact Fee Variable Comparison – Demand Component

Land Use	unit	Volusia County Existing ⁽¹⁾					Volusia County Proposed ⁽²⁾					Percent Change
		TGR	TL	%NT	Gross VMT	Net VMT	TGR	TL	%NT	Gross VMT	Net VMT	
Residential:												
Single Family Detached (1,500 - 2,499 sf)	du	9.57	6.12	100%	29.28	20.58	7.53	6.24	100%	23.49	15.24	-26%
Non-residential:												
General Light Industrial	1,000 sf	6.97	5.10	91%	16.17	11.37	6.97	5.10	91%	16.17	10.49	-8%
Office (50,000 sf)	1,000 sf	12.12	5.44	93%	30.66	21.55	15.65	5.15	92%	37.07	24.05	12%
High Turnover Restaurant	1,000 sf	130.34	3.00	72%	140.77	98.96	123.91	2.90	71%	127.57	82.74	-16%
Fast Food Restaurant w/Drive-Thru	1,000 sf	496.12	2.06	60%	306.60	215.54	519.58	2.21	58%	333.00	215.98	0%
Retail (100,000 sf)	1,000 sf	68.17	2.10	64%	45.81	32.20	62.81	2.52	62%	49.07	31.82	-1%
Bank/Savings Drive-In	1,000 sf	265.21	2.40	46%	146.40	102.92	281.55	2.46	46%	159.30	103.32	0%

(1) Source: Volusia County Roadway Impact Fee Technical Memorandum, September 2003

(2) Source: Technical Report, Table V-4 for county cost, state cost, and weighted cost. Table V-5 for total credit, Table V-6 for capacity added per lane mile, Table V-8 for interstate/toll facility adjustment factor, and Appendix G, Table G-1 for all other variables.

Table ES-7 presents a comparison of the cost and credit components used to develop the current transportation impact fee schedule versus the cost and credit components of the proposed impact fee presented in the Technical Report. As presented in this table, the weighted cost per lane mile increased by approximately 157 percent primarily due to the recent increase in construction costs and land values. In addition, in terms of credit components, the total gas tax pennies being dedicated to capacity expansion projects decreased by 4 percent (See Table V-5 of the Technical Report for further detail). The decrease in the gas tax credit means that less non-impact fee revenues are being used for capital expansion than in the prior study. This has the effect of increasing the amount of the transportation impact fee per unit of land use. The other input variables primarily remained constant and as explained in the Technical Report the increased impact fees can be attributed primarily to cost increases.

Table ES-7
Transportation Impact Fee Variable Comparison – Cost and Credit Components

Description	2003 Study ⁽¹⁾	2007 Study ⁽²⁾	Percent Change
Cost Component			
County Cost per Lane Mile	\$1,267,613	\$4,040,243	219%
State Cost per Lane Mile	\$2,351,383	\$4,668,853	99%
Weighted Cost per Lane Mile	\$1,678,362	\$4,310,545	157%
Capacity Added per Lane Mile	10,232	8,233	-20%
Cost per Vehicle Mile of Capacity	\$164	\$524	219%
Interstate/Toll Facility Adjustment Factor	29.7%	31.0%	4%
Credit Component			
Total Gas Tax Pennies	13.9	13.3	-4%
Fuel Efficiency	17.57	17.70	1%
Effective Days	365	365	0%
Interest Rate	5.0%	5.0%	0%
Facility Life	20	25	25%

(1) Source: Volusia County Roadway Impact Fee Technical Memorandum, September 2003

(2) Source: Technical Report, Table V-4 for county cost, state cost, and weighted cost. Table V-5 for total credit, Table V-6 for capacity added per lane mile, Table V-8 for interstate/toll facility adjustment factor, and Appendix G, Table G-1 for all other variables.

Transportation Impact Fee Schedule Comparison

Table ES-8 provide a comparison of the current transportation impact fee schedule for the single family land use of 1,500 to 2,499 square feet, as well as several example nonresidential land uses. It should be noted that the existing fees shown are not the adopted fees, but the maximum calculated fees from the 2003 Technical Report which provide a basis for comparison to the proposed impact fee schedule.

**Table ES-8
Transportation Impact Fee Comparison**

Land Use	unit	Volusia County Existing ⁽¹⁾			Volusia County Proposed ⁽²⁾			Percent Change
		Total Impact Cost	Gas Tax Credit	Net Impact Fee	Total Impact Cost	Gas Tax Credit	Net Impact Fee	
Residential:								
Single Family Detached (1,500 - 2,499 sf)	du	\$3,377	\$801	\$2,576	\$7,978	\$987	\$6,991	171%
Non-residential:								
General Light Industrial	1,000 sf	\$1,865	\$409	\$1,456	\$5,492	\$691	\$4,801	230%
Office (50,000 sf)	1,000 sf	\$3,524	\$773	\$2,751	\$12,590	\$1,579	\$11,011	300%
High Turnover Restaurant	1,000 sf	\$16,142	\$3,541	\$12,601	\$43,320	\$5,779	\$37,541	198%
Fast Food Restaurant w/Drive-Thru	1,000 sf	\$35,061	\$7,692	\$27,369	\$113,082	\$15,785	\$97,297	256%
Retail (100,000 sf)	1,000 sf	\$5,283	\$1,159	\$4,124	\$16,663	\$2,269	\$14,394	249%
Bank/Savings Drive-In	1,000 sf	\$16,698	\$3,663	\$13,035	\$54,097	\$7,413	\$46,684	258%

(1) Source: Volusia County Roadway Impact Fee Technical Memorandum, September 2003. It should be noted that the net impact fee does not include the administrative cost charged in addition to the fee.

(2) Source: Technical Report, Appendix G, Table G-1. It should be noted that the net impact fee does not include the administrative cost charged in addition to the fee.