

VOLUSIA COUNTY **SCHOOL IMPACT FEE UPDATE**

FINAL REPORT



Prepared for:

VOLUSIA COUNTY SCHOOL DISTRICT

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VOLUSIA COUNTY
2004 SCHOOL IMPACT FEE UPDATE STUDY
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Volusia County School Impact Fee Update Study

I. INTRODUCTION

Tindale-Oliver & Associates, Inc. (TOA) was retained by the Volusia County School District to update the school impact fee program in Volusia County. Volusia County periodically updates its school impact fee program so that impact fees charged to new development are reasonably proportional to the costs of providing new student stations to serve new development. This report will serve as the technical support document and be used to update the Volusia County School Impact Fee Ordinance and associated fee schedule.

There are 73 public school facilities that currently serve the students and residents of Volusia County and its municipalities. The following bullets summarize the different categories of public school facilities, as well as the total number of each type that are operated by the Volusia County School District. For purposes of this analysis, only data from the 67 traditional elementary, middle, and high schools will be used.

- Elementary Schools (47)
- Middle Schools (11)
- Middle-High Schools (1)
- High Schools (8)
- Charter Schools (3)
- Alternative Education Programs (3)

II. OVERVIEW OF SCHOOL IMPACT FEE

Impact fees are charges paid by new residential development to help defray a portion of the capital cost of public education facilities that are needed to serve the demand for student stations created by new development. Through revenues generated by the school impact fee, Volusia County can help to mitigate a portion of the impact that new students place on school facilities by using impact fee revenues to help offset the cost of providing capital facilities for the additional students. The School District is responsible only for public education facilities within the county, and cannot control admission to or management of private education facilities or regulate home schooling. As a result,

impact fees collected by the County are used only for public schools. Subsequently, the following analysis considers only data from public education facilities in Volusia County.

The remainder of this report discusses the analysis used in the development of the school impact fee. In order to develop an updated school impact fee schedule by residential unit type, five major elements must be addressed. These elements include the following.

- Cost Component
- Credit Component
- Net Impact Cost per Student
- Student Generation Rate
- Proposed School Impact Fee Schedule

These five elements are summarized in the remainder of this report, with the result being the net impact cost for new residential development in Volusia County. School impact fees are charged only to residential land uses and the net impact cost is presented as two alternative options in this report. First, the net impact cost is developed based on three types of residential uses: single-family home, multi-family home, and mobile home. Second, a single residential impact fee is presented that would be charged to each residential use regardless of its type.

Population

Volusia County's public education facilities provide services to the entire county. Attendance boundaries for individual schools can be redrawn in order to balance school enrollment where students live with where there is available school capacity. Further, school capacity that is added in one location can serve new development in another part of the county. Therefore, the appropriate impact fee district for public education facilities is countywide.

III. COST COMPONENT

Facility Cost per Student Station

In determining the cost of providing public school facilities in Volusia County, the first step is to calculate the facility cost per student station. Several cost components must be considered when calculating the total cost of constructing a school facility. These cost components include construction costs, administration costs associated with construction,

architecture and engineering costs (A&E), furniture, fixtures, and equipment (FF&E) costs, public utilities costs, and the cost of land. The weighted average construction cost for each of type of school is developed based on these cost components, which are described in more detail in the following sections.

Elementary School Costs

The weighted average construction and sitework cost per square foot for a typical elementary school in Volusia County is determined using the estimated costs for two elementary schools planned to be built in the near future, one bid contract awarded for the construction of a new elementary school, and the actual construction cost for one completed elementary school recently built in Volusia County. The cost of the one elementary school already built and the one elementary school for which a bid has been received were inflated to December 2004 dollars to reflect the current construction cost per square foot. This results in all elementary school costs being in December 2004 dollars.

To verify the general reasonableness of the elementary cost calculations, the weighted average construction cost per square foot for these four elementary schools in Volusia County was compared to cost per square foot for two recently constructed elementary schools in Orange County. This comparison found that costs in Orange County are within 2.5 percent of the construction and sitework costs per square foot for elementary schools in Volusia County. Therefore, it was determined that the cost per square foot for elementary schools in Volusia County is reasonable when compared to the costs for elementary schools in Orange County. To further confirm the reasonableness of the elementary cost calculations, the architect for the two planned elementary schools included in this analysis, Elementary School “V” and Osteen Elementary School, was contacted. The current cost estimates for these schools were reviewed and discussions with the Architect of these schools indicates that these costs are likely to be conservative and that future bids awarded for these schools should be expected to be 15 percent higher than the costs presented in this report.

Middle School Costs

The construction and sitework cost per square foot for middle schools in Volusia County was reviewed based on the contract construction cost for a prototype middle school currently being constructed in Volusia County. Discussions with the School District Facilities Department indicates that the current contract cost of the middle school being built in Volusia County is low compared to other recent school bids, and is even less than the average cost of elementary schools discussed above. Therefore, two middle schools recently built in Seminole County were also reviewed. The average cost per square foot for the two middle schools in Seminole County is about 6 percent higher than the cost per square foot for the middle school in Volusia County. Similar to elementary school analysis, the costs for the three middle schools have been inflated to current dollars. Since only one middle school has been built recently in Volusia County, the costs of the Seminole County middle schools were combined with the cost of the Volusia County middle school, resulting in a weighted average cost per square foot figure for middle schools to be used in the impact fee cost calculations.

High School Costs

Similar to calculating the construction and sitework cost per square foot for middle schools, there has been only one high school recently built in Volusia County. The cost for the high school is based on the actual construction cost, inflated to current dollars. Although cost information for only one high school is available, the construction and sitework costs per square foot are within 0.5 percent of the cost per square foot developed for elementary schools, as discussed above. Thus, this cost will be used for the high school cost component in the impact fee cost calculations.

Administration, Architecture and Engineering (A&E), Furniture, Fixtures and Equipment (FF&E), and Public Utilities Costs

The construction cost per facility is calculated by multiplying the total construction and site work cost per square foot by the total square footage for each school type. The administration, A&E, FF&E, and public utilities costs are then determined for each type of school by taking a percentage of the total construction cost per facility. The various percentages used for each of these cost calculations are based on the costs of recently constructed school facilities, as well as information from School District Facilities Department.

Land Costs

The cost of land that the school facility is on must also be added to the total facility cost for a school. To determine the cost of land for school facilities, a weighted average cost per acre of \$42,355 is used. This figure is based on multiple purchases of land in 2004 by the School District for school facilities in Volusia County. The land cost per facility is calculated by multiplying the cost per acre of \$42,355 by the prototypical number of acres purchased for each school type, which is 20 acres per elementary school, 40 acres per middle school, and 80 acres per high school.

Construction Interest Expense

In addition to the costs identified above, the interest expense or lost opportunity on funds that the School District uses during construction of a new school facility must be considered. According to the School District Facilities Department, it takes three years from start to finish to construct an elementary school, four years to construct a middle school, and five years to construct a high school. These life cycle time frames include land acquisition, the planning and bidding process, and the actual construction of the facility.

Based on historical and current financing trends, the School District bonds the majority of new school construction. Therefore, it is appropriate to charge new development for the net interest cost per facility (which is the difference between the bond interest rate during construction less any interest earned on bond proceeds during construction) that the School District incurs in order to construct new school facilities.

This net interest cost per type of facility is added to the total cost per facility in Table 1. This table also includes the cost components discussed above in calculating the weighted average facility cost per student station. The square footage listed in Table 1 is based on the standard size of facilities planned to be built for each type of school in Volusia County, per the School District Facilities Department. As presented in Table 1, the weighted average facility cost per student station is \$23,712.

Table I
School Facility Cost per Student Station⁽¹⁾

Cost Component	Type of School			Total	Weighted Average
	Elementary School	Middle School	High School		
Number of Student Stations	727	1,256	2,633	4,616	N/A
Total Square Footage	92,457	175,243	390,000	N/A	N/A
Total Construction and Site Work Cost per Square Foot ⁽²⁾	\$126.51	\$116.56	\$125.90	N/A	N/A
School Facility Cost Components:					
Construction Cost per Facility ⁽³⁾	\$11,696,924	\$20,426,443	\$49,100,658	\$81,224,025	\$35,407,563
Administration Costs per Facility ⁽⁴⁾	\$175,454	\$306,397	\$736,510	\$1,218,360	\$531,113
Architecture & Engineering Costs per Facility ⁽⁵⁾	\$701,815	\$1,225,587	\$2,946,039	\$4,873,441	\$2,124,454
Public Utilities Costs per Facility ⁽⁶⁾	\$175,454	\$306,397	\$736,510	\$1,218,360	\$531,113
Furniture, Fixtures, and Equipment Cost per Facility ⁽⁷⁾	\$1,169,692	\$2,246,909	\$6,383,086	\$9,799,687	\$4,436,557
Land Cost per Facility ⁽⁸⁾	\$846,706	\$1,693,412	\$3,386,825	\$5,926,943	\$2,525,994
Subtotal Construction Cost per Facility ⁽⁹⁾	\$14,766,045	\$26,205,144	\$63,289,627	\$104,260,817	\$45,556,795
Net Interest Cost per Facility ⁽¹⁰⁾	\$608,401	\$1,127,430	\$2,834,765	\$4,570,596	\$2,019,562
Total Construction Cost per Facility ⁽¹¹⁾	\$15,374,446	\$27,332,574	\$66,124,392	\$108,831,413	\$47,576,356
Weighted Average Facility Cost per Student Station ⁽¹²⁾	\$21,148	\$21,762	\$25,114	N/A	\$23,712

- (1) Source: Volusia County School District
- (2) Based on estimates for planned facilities, recent contract bids, and actual costs for recently constructed schools.
- (3) Total square footage multiplied by the construction and sitework cost per square foot (Item 2) for each school type.
- (4) Administration costs are assumed to be 1.5 percent of the construction and sitework cost per facility.
- (5) Architecture and engineering costs are assumed to be 6 percent construction and sitework cost per facility.
- (6) Costs for public utilities are assumed to be 1.5 percent of the construction cost per facility.
- (7) Furniture, fixtures, and equipment costs are assumed to be 10 percent of the construction cost for elementary schools, 11 percent for middle schools, and 13 percent for high schools.
- (8) Land costs are based on a cost of \$42,355 per acre, based on the cost of land purchased by the School District in 2004. Land cost of per facility assumes 20 acres will be purchased for elementary schools, 40 acres for a middle school, and 80 acres for a high school.
- (9) The subtotal construction cost per facility is the sum of all cost components (Items 3-8) for each respective school type.
- (10) The net interest cost per facility is difference between the bond interest costs during the construction less interest earned on bond proceeds during construction) that the School District incurs in order to construct a new school facility.
- (11) The total construction cost per facility is the sum of the subtotal construction cost per facility (Item 9) and the net interest cost per facility (Item 10).
- (12) The weighted average facility cost per student station is the total construction cost per facility (Item 11) divided by the number of student stations for each respective school type.

Weighted Facility Impact Cost per Student

The calculation of the total impact cost per student is based on the facility cost per student station figures derived in Table 1.

The weighted facility impact cost per student is calculated using the utilization rates for each school type. The utilization rates are based on the ratio of the projected student enrollment in 2009/10 to the projected student capacity in the 2009/10 school year. These figures are derived using student enrollment data provided by the Volusia County School District.

The estimated number of students projected for the 2009/10 school year is used to determine the projected distribution of students by school type. This figure is used because subsequent calculations are extracted over the same five-year time period. The weighted total facility impact cost per student is then determined by multiplying the weighted cost per student by the respective utilization factors for each school type.

The utilization factor adjusts the cost per student to the extent to which each type of school is projected to be utilized. The utilization rates for the three types of schools will be the basis for establishing the level of service. A utilization rate over 100 percent indicates that the schools are over capacity and that there is a need for additional capacity. Therefore, the cost per student station is reduced by this percentage to ensure that new growth does not pay for the deficiency in capacity. Utilization rates under 100 percent indicate there is excess capacity and the cost per student station is adjusted by this percentage to ensure that new growth pays for the availability and use of this capacity.

As illustrated in Table 2, the sum of these factored costs is the weighted facility impact cost of \$22,665 per student.

Table 2
Weighted Facility Impact Cost per Student

Calculation Step	Type of School			Total
	Elementary School	Middle School	High School	
Total Facility Cost per Student Station ⁽¹⁾	\$21,148	\$21,762	\$25,114	\$23,712
Utilization Rate ⁽²⁾	99.7%	108.5%	91.5%	99.2%
Projected Students for 2009/10 School Year ⁽³⁾	31,602	16,739	18,768	67,109
Distribution of Projected Students for 2009/10 School Year ⁽⁴⁾	47.1%	24.9%	28.0%	100.0%
Weighted Facility Impact Cost per Student⁽⁵⁾	\$21,207	\$20,050	\$27,452	\$22,665

(1) Source: Table 1

(2) Source: Volusia County School District. The utilization rate is the ratio of projected students (by school type) to the total available student stations for the 2009/10 school year.

(3) Source: Volusia County School District

(4) The distribution of projected students for the 2009/10 school year is calculated by dividing the projected number of students for the 2009/10 school year for each school type by the total projected students for the 2009/10 school year.

(5) The weighted facility impact cost per student by school type is calculated by multiplying the total facility cost per student station (Item 1) by the respective utilization rate (Item 2) for each school type. The overall weighted total facility impact cost per student is calculated by cross-multiplying the weighted total facility impact cost per student for each school type by the respective distribution factors (Item 4) for each school type.

Total Facility Impact Cost per Student Station

The weighted facility impact cost per student station includes two additional cost components that are used to determine the total impact cost per student for public education facilities in Volusia County. These cost components include the cost of providing transportation to new students and the cost of ancillary support facilities. Both of these additional cost components are discussed below.

Public School System Transportation Costs

The first additional cost component is the cost of providing transportation to new students. Growth projections provided by the School District indicate that there will be an average of 1,300 new students per year over the next five years. Historically, 40 percent of students utilize transportation services provided by the School District. This results in a projection of 2,600 new students over the next five years who will require or utilize public school system transportation services. The capital cost of expanding the bus fleet to serve these new students is projected to be \$1.5 million over the next five years, resulting in a cost of \$577 per student.

Cost of Ancillary Facilities

The second additional cost component is the capital cost of ancillary facilities that are necessary for the School District to provide support services for the students, schools, transportation services, and administrative personnel. The School District currently has 387,200 square feet of ancillary facilities. Based on the construction cost per square foot for a recently built maintenance facility located in Daytona, the total value to replace all ancillary facilities is \$39.2 million. This results in a cost per student of \$614 for ancillary facilities.

These two cost components are added to the weighted facility impact cost per student, resulting in a total impact cost of \$23,856 per student, as presented in Table 3.

Table 3
Facility Impact Cost per Student

Calculation Step	Total
Weighted Total Facility Impact Cost per Student⁽¹⁾	\$22,665
Transportation Service Impact Cost per Student	
Total Additional Capital Cost of Transportation Services ⁽²⁾	\$1,500,000
Projected Additional Students Utilizing Transportation Services ⁽³⁾	2,600
Cost of Transportation Services per Student	\$576.92
Ancillary Facility Impact Cost per Student	
Total Square Feet of Ancillary Facilities ⁽⁴⁾	387,200
Cost per Square Foot for Ancillary Facilities ⁽⁵⁾	\$101.16
Total Cost of Ancillary Facilities	\$39,169,152
Current Student Enrollment ⁽⁴⁾	63,798
Cost of Ancillary Facilities per Student	\$613.96
Total Impact Cost per Student⁽⁶⁾	\$23,856

(1) Source: Table 2

(2) Source: Student Transportation Services, Volusia County School District

(3) The number of additional students that will utilize transportation services by 2009/10, which is assumed to be 40 percent of 6,500 total students (1,300 students per year for the next five years).

(4) Source: Volusia County School District

(5) Based on the total facility cost (construction, A&E, and FF&E) per square foot of the School District's recently constructed maintenance facility, located in Daytona.

(6) The sum of the weighted total facility impact cost per student (from Table 2), the cost of transportation services per student, and cost of ancillary facilities per student.

IV. CREDIT COMPONENT

In addition to the school impact fee program, other revenues that new development generates, which are used towards capital expansion of school facilities, must be considered in the credit component of the school impact fee. In order to ensure that new residential development is not being overcharged for the capital cost of new education facilities, a credit is given for any additional revenue, other than impact fees, that new development generates and that is used for capital school facility expansion. This ensures that each new residential development pays the appropriately calculated impact fee, less any additional revenue included as part of the impact fee credit. A credit for school impact fees is not given for revenue generated by new development that is used for capital maintenance of existing education facilities or for maintenance or operation costs.

The following state and local sources of revenues will be considered in developing impact fee credits.

- Public Education Capital Outlay;
- State Capital Outlay and Debt Service;
- State “Classroom for Kids”;
- Local 2-mill revenues;
- Local sales tax revenues; and

State Revenue Credit for Expansion of Student Stations

The Florida State Constitution authorizes sources of revenue for school districts: Public Education Capital Outlay (PECO) and Capital Outlay and Debt Service (CO&DS). Revenues from PECO are generated through a 2.5 percent tax imposed on the gross receipts of sellers of electricity, natural or manufactured gas, and telecommunication services in the State. Revenues generated from this tax are used to fund capital renovation and expansion projects for public education facilities. CO&DS revenues are generated from the licensing of motor vehicles and motor homes and are also used for capital renovation and expansion projects for public education facilities. CO&DS revenues are distributed annually among school districts and community college districts based on a constitutional formula.¹ In addition to the PECO and CO&DS revenues, the School District also receives “Classroom for Kids” revenues for expansion projects,

¹State of Florida, Local Government Information Handbook, September 2000.

which are included in the total available State revenues in Table 4. Since these funds are used to provide new student stations, they are included in the State credit calculation.

Based on budgeted revenues for these three sources that are available over the next five years, the total projected state revenues available for the expansion of student stations is \$11.5 million. Thus, the five-year total state revenues used for expansion are divided by the 12,217 planned student stations expected to be constructed over the next five years, by the 2009/10 school year. Table 4 illustrates the calculation of the state revenue credit of \$942 per student.

Table 4
State Revenue Credit

Calculation Step	Figure
Total State Revenues (2005-2010) ⁽¹⁾	
CO&DS Revenues	\$270,000
PECO Fixed Capital Outlay Revenues	\$0
Classroom for Kids Revenues	\$11,241,124
Planned Student Stations (2005-2010) ⁽²⁾	12,217
State Revenue Per Student⁽³⁾	\$942.22

(1) Source: Capital Outlay Five-Year Program

(2) Source: Volusia County School District

(3) State revenue per student is calculated by dividing the total expected state revenue (Item 1) by the total number of planned student stations (Item 2).

2-Mill Revenue Credit for Expansion of Student Stations

The School District has the authority to levy up to 2-mills of the county-wide ad valorem tax to generate revenue for education. Revenue generated by the 2-mill tax is used for both capital renovation and capital expansion. The School District's Five-Year Work Program projects revenues of \$252.6 million from the 2-mill tax. This is based on a 3.85 percent increase in 2-mill revenue each year. Review of the historical growth rate in 2-mill revenues over the last 5 years indicates that the revenues from this revenue source have been growing at the rate of 9.67 percent annually. Based on this growth rate, the there will be approximately \$283.7 million in revenues generated by the 2-mill tax for the School District over the next five years. This higher revenue projection will be used in the 2-mill revenue credit calculation. Review of the School District's Five-Year Work Program indicates that approximately 26.5 percent of these revenues will be used for school capital expansion projects. Using this information, the 2-mill credit is determined by taking the percentage of average annual five-year 2-mill revenues for capital

expansion, which is \$15.0 million, and dividing that amount by the five-year average annual number of student stations for the next five years. This results in an annual 2-mill revenue credit of \$230 per student. The present value of this amount is calculated using an interest rate of 5 percent over a 25-year time period. This results in a present value credit of \$3,238 per student, as illustrated in Table 5.

Table 5
2-Mill Revenue Credit

Calculation Step	Figure
Total Five-Year Projected 2-Mill Revenues ⁽¹⁾	\$283,705,896
Percent of Five-Year 2-Mill Revenue used for Capital Expansion ⁽²⁾	26.5%
Average Annual Five-Year 2-Mill Revenue Used for Capital Expansion ⁽³⁾	\$15,036,413
Total Five-Year Average Annual Student Stations ⁽⁴⁾	65,453
2-Mill Annual Revenue Per Student ⁽⁵⁾	\$229.73
Bond Yield Rate	5.00%
Capitalization Period, Years	25
Present Value of Annual 2-Mill Revenue⁽⁶⁾	\$3,237.80

- (1) Source: Volusia County School District Five-Year Work Program. Five-year projections are based on an inflation rate of 9.67 percent, according to historical growth rates of taxable property values over the last five years.
- (2) Ratio of five-year 2-mill revenue used for capital expansion to total available five-year 2-mill revenues, per Volusia County School District.
- (3) Average annual 2-mill revenues are calculated by multiplying the total five-year projected 2-mill revenues (Item 1) by the percentage of total five-year 2-mill revenues used for capital expansion (Item 2) and dividing by five years.
- (4) Source: Volusia County School District
- (5) The 2-mill revenue per student figure is calculated by dividing the total expected 2-mill revenue used for expansion (Item 3) by the average annual number of student stations (Item 4).
- (6) The present value of the 2-mill revenue per student (Item 5) at 5 percent interest over a 25-year capitalization period.

Sales Tax Revenue Credit for Expansion of Student Stations

Volusia County residents passed a half-cent sales tax to generate additional revenue for education that will be in effect for 12 years, from 2004 through 2016. While it could be argued that the sales tax credit should only be based on the sales tax revenue generated by residential land uses, this study includes all sales tax revenue generated by the half-cent sales tax for schools. The School District's Five-Year Work Program projects revenues of \$191.7 million from the half-cent sales tax. This is based on a 3.85 percent increase in half cent sales tax revenue each year. Review of the historical growth rate in sales tax revenues over the last 10 years indicates that the revenues from this revenue source have

been growing at the rate of 6 percent annually. Based on this growth rate, there will be approximately \$200.1 million in revenues generated by the half cent sales tax for the School District over the next five years. This higher revenue projection will be used in the sales tax revenue credit calculation. According to the project list for the sales tax provided by the School District, 39 percent of the half-cent sales tax revenues will be used to fund capital expansion projects for school facilities. As presented in Table 6, the present value of this annual revenue per student is based on an interest rate of 4 percent over the 12 years that the sales tax is in effect, resulting in a present value credit of \$2,238 per student.

Table 6
Sales Tax Revenue Credit

Calculation Step	Figure
Total Five-Year Projected Sales Tax Revenues ⁽¹⁾	\$200,121,952
Percent of Sales Tax Revenue used for Capital Expansion ⁽²⁾	39.0%
Average Annual Five-Year Sales Tax Revenue Used for Capital Expansion ⁽³⁾	\$15,609,512
Total Five-Year Average Annual Student Stations ⁽⁴⁾	65,453
Sales Tax Annual Revenue Per Student ⁽⁵⁾	\$238.48
Bond Yield Rate	4.00%
Capitalization Period, Years	12
Present Value of Annual Sales Tax Revenue⁽⁶⁾	\$2,238.15

- (1) Source: Volusia County School District Five-Year Work Program. Five-year projections are based on an inflation rate of 6 percent, according to historical growth rates of sales tax revenues from FY 1993-2003.
- (2) Ratio of five-year sales tax revenue used for expansion to total five-year sales tax revenues, per the Volusia County School District.
- (3) The adjusted total five-year projected sales tax revenues (Item 1) multiplied by the percentage of total five-year sales tax revenues used for capital expansion (Item 2) and divided by five years to determine the average annual five-year sales tax revenue used for capital expansion.
- (4) Source: Volusia County School District
- (5) The sales tax revenue per student figure is calculated by dividing the total expected sales tax revenue used for capital expansion (Item 3) by the average annual number of student stations (Item 4).
- (6) The present value of the sales tax revenue per student (Item 5) at 4 percent interest over a 12-year capitalization period.

As stated previously, nominal increases were taken for the 2-mill and sales tax revenues over the next five years based on historical trends. However, the cost component has not been escalated and is based on current dollars.

V. Net Impact Cost per Student

Table 7 provides a summary of the three revenue credits discussed previously, with the result being the net impact cost per student of \$17,438.

Table 7
Net Impact Cost per Student

Calculation Step	Figure
Total Impact Cost per Student ⁽¹⁾	\$23,855.89
State Revenue Credit ⁽²⁾	\$942.22
2-Mill Revenue Credit ⁽³⁾	\$3,237.80
Sales Tax Revenue Credit ⁽⁴⁾	\$2,238.15
Total Revenue Credit ⁽⁵⁾	\$6,418.17
Net Impact Cost per Student⁽⁶⁾	\$17,437.71

(1) Source: Table 3

(2) Source: Table 4

(3) Source: Table 5

(4) Source: Table 6

(5) Sum of state revenue credit (Item 2), 2-mill revenue credit (Item 3), and sales tax revenue credit (Item 4).

(6) Total impact cost per student (Item 1) less the total revenue credit per student (Item 5).

VI. Student Generation Rates

The number of students living in a household varies depending on the type of residential housing. Therefore, school impact fees are often assessed based on the student generation rates of specific residential use types. For Volusia County, the student generation rate per residential unit is based on three types of residential uses: single family, multi-family, and mobile homes, as well as a weighted average student generation rate for all residential land uses.

The student generation rate, or number of students per unit figure, is developed by dividing the number of students within a particular residential use type by the total number of units of that land use in Volusia County. The student generation rates by residential use type, as well as the weighted average student generation rates for all residential land uses, are provided in Table 8

Table 8
Student Generation Rates

Residential Land Use Type	Number of Students⁽¹⁾	Number of Units⁽²⁾	Students per Unit⁽³⁾
Single Family	52,181	131,667	0.396
Multi-Family	8,355	54,796	0.152
Mobile Home	3,263	24,234	0.135
Weighted Average Residential	63,798	210,696	0.303

- (1) The ratio of total enrolled students to total students from the Public Use Microdata Sample (PUMS) 2000 is 0.998. This ratio is applied to the total students for each residential land use to get the distribution of currently enrolled students by land use.
- (2) The ratio of total enrolled students to total students from the Public Use Microdata Sample (PUMS) 2000 is 0.998. This ratio is applied to the total units per residential land from Census 2000 (excluding boats, RVs, vans, etc.) for each residential land use to get the distribution of units by land use.
- (3) Number of students (Item 1) divided by the number of units (Item 2) for each respective residential land use type.

VII. Proposed School Impact Fee Schedule

To determine the proposed school impact fee for each residential land use, the net impact cost per student, from Table 7 is multiplied by the student generation rate for each residential use, from Table 8. The resulting net impact fees per residential use type are presented in the proposed impact fee schedule in Table 9.

Table 9
Proposed School Impact Fee Schedule

Residential Land Use	Impact Unit	Net Impact Cost per Student⁽¹⁾	Students per Unit⁽²⁾	Net Cost per Unit⁽³⁾
Single Family Detached	Dwelling Unit	\$17,438	0.396	\$6,905
Multi-Family	Dwelling Unit	\$17,438	0.152	\$2,651
Mobile Home	Dwelling Unit	\$17,438	0.135	\$2,354
Weighted Average Residential	Dwelling Unit	\$17,438	0.303	\$5,284

- (1) Source: Table 7
- (2) Source: Table 8
- (3) Net impact cost per unit is the product of the net impact cost per student (Item 1) and the number of students per unit (Item 2)

At the request of the School District, two impact fee schedule options are presented. The first option is to adopt the detailed impact fee schedule, showing an impact fee for each land use that is proportionate to the student generation rate for each land use. Thus a separate and unique impact fee would be developed for the single family, multi-family,

and mobile home land uses as indicated in Table 9. The second option is to only have one residential land use in the impact fee schedule that is then assessed uniformly to all residential permits. This can be done by using the weighted average residential student generation rate from Table 8. The resulting fee is illustrated in Table 9 under the land use of weighted average residential. Although the School District may choose the latter option, it is the recommendation of the consultant to implement the first option in which an impact fee is developed based on the student generation rate for each applicable residential land use.

VIII. Comparison of Current and Proposed School Impact Fees

A comparison between the current and the proposed school impact fee schedule is provided in Table 10. Both options discussed in Section VII are illustrated in Table 10.

Table 10
Comparison of Current and Proposed School Impact Fees

Land Use	Current Impact Fee	Proposed Impact Fee	Percent Change
Single Family	\$1,138.71	\$6,905	506.4%
Multi-Family	\$1,138.71	\$2,651	132.8%
Mobile Home	\$1,138.71	\$2,354	106.7%
Weighted Average Residential	\$1,138.71	\$5,284	364.0%

IX. Comparison of School Impact Fees in Surrounding Jurisdictions

A comparison of Volusia County's current and proposed school impact fee to school impact fees in other jurisdictions in Florida is provided in Table 11. This table includes the date of last update or if fees are currently pending increases. This table illustrates that the more recent or pending single family home school impact fees are generally much higher than the fees developed in the older studies.

Table 11
Comparison of School Impact Fees in Surrounding Jurisdictions

Jurisdiction	Date of Last Update	Single Family Impact Fee (per DU)
Volusia County (existing)	1992	\$1,139
Seminole County	1992	\$1,384
Brevard County	2004	\$4,445
Flagler County	2004	\$4,725
Volusia County Weighted Residential	Proposed	\$5,284
Volusia County Single Family Residential	Proposed	\$6,905
Orange County	Proposed	\$7,000
Lake County	Proposed	\$7,056
Osceola County	2004	\$9,802

X. Indexing

In many cases, impact fees are reviewed periodically (every three to five years, etc.) as opposed to an annual basis. If no adjustment to the impact fee schedule is made during this period, a situation can be created where major adjustments to the impact fee schedule become likely to be required due to the time between the adjustments. The need for significant adjustments also creates major concerns in the development community. To address this issue, it is recommended that the Volusia County School Impact Fee be indexed for construction and land cost increases on an annual basis.