



Volusia County Schools

School Impact Fee Update Study

Final Report

May 20, 2022

Prepared for:

Volusia County Schools

200 North Clara Ave
DeLand, Florida 32720

Prepared by:

Benesch

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



Volusia County Schools
School Impact Fee Update Study
Table of Contents

I. INTRODUCTION	1
II. METHODOLOGY	5
III. INVENTORY	6
IV. SERVICE AREA AND ENROLLMENT	7
V. FACILITY SERVICE DELIVERY.....	9
VI. COST COMPONENT	10
VII. CREDIT COMPONENT	17
VIII. NET IMPACT COST PER STUDENT.....	21
IX. STUDENT GENERATION RATES	22
X. CALCULATED IMPACT FEE SCHEDULE.....	24
XI. SCHOOL IMPACT FEE COMPARISON	26

Appendix A – Volusia County Schools -- Inventory

Appendix B – Building and Land Cost Analysis

I. Introduction

With over 550,000 residents, Volusia County continues to experience growth. The County ranks 25th in terms its projected growth rate through 2050 (0.7 percent per year) and ranks 16th in terms of the projected absolute growth (additional 134,000 residents by 2050).¹ Volusia County Schools (VCS) provide PreK through 12 education from 68 traditional school to approximately 60,000 students.

To help fund school infrastructure needs due to new growth, the Volusia County Education Facilities Impact Fee was originally adopted in 1992, and the technical study that is the basis of the current school impact fee ordinance was last updated in 2013. During 2012 and 2013, the School Board convened a rule making committee that included representatives from the Volusia Building Industry Association and District staff. This committee worked together with Benesch (formerly Tindale Oliver) in preparing the 2013 school impact fee report and making a recommendation on a school impact fee. The impact fee was adopted at approximately \$3,000 per home or approximately 66 percent of the full calculated rate at that time, which was to remain in effect until 2022.

The technical study was updated in 2018 for informational purposes and to ensure that the School Board’s school impact fee complied with state legislation mandating most recent and localized data and to provide a timely update to the 2013 report.

In 2021, Benesch was retained by VCS to update the technical calculations. In addition, a new rule making committee was identified to participate the completion of the update study. The remainder of this report provides an overview of the legal requirements and presents the updated cost, credit and demand calculations and the resulting fee schedule.

Legal Overview

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

- Be supported by a study demonstrating that the fees are proportionate in amount to the need created by new development paying the fee; and

¹ Source: BEBR, Volume 55, Bulletin 192, February 2022 (Medium-Level Projections)

- Be spent in a manner that directs a proportionate benefit to new development, typically accomplished through establishment of benefit districts (if needed) and a list of capacity-adding projects included in the School District’s Five-Year Capital Plan, Capital Improvement Plan, or another planning document/Master Plan.

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

Since then, the following legislation further defined the impact fee framework in Florida:

- **HB 227 in 2009:** The Florida legislation statutorily clarified that in any action challenging an impact fee, the government has the burden of proving by a preponderance of the evidence that the imposition or amount of the fee meets the requirements of state legal precedent or the Impact Fee Act and that the court may not use a deferential standard.
- **SB 360 in 2009:** Allowed fees to be decreased without the 90-day notice period required to increase the fees and purported to change the standard of legal review associated with impact fees. SB 360 also required the Florida Department of Community Affairs (now the Department of Economic Opportunity) and Florida Department of Transportation (FDOT) to conduct studies on “mobility fees,” which were completed in 2010.
- **HB 7207 in 2011:** Required a dollar-for-dollar credit, for purposes of concurrency compliance, for impact fees paid and other concurrency mitigation required.
- **HB 319 in 2013:** Applied mostly to concurrency management authorities, but also encouraged local governments to adopt alternative mobility systems using a series of tools identified in section 163.3180(5)(f), Florida Statutes.
- **HB 207 in 2019:** Included the following changes to the Impact Fee Act along with additional clarifying language:
 1. Impact fees cannot be collected prior to building permit issuance; and
 2. Impact fee revenues cannot be used to pay debt service for previously approved projects unless the expenditure is reasonably connected to, or has a rational nexus with, the increased impact generated by the new residential and commercial construction.

- **HB 7103 in 2019:** Addressed multiple issues related to affordable housing/linkage fees, impact fees, and building services fees. In terms of impact fees, the bill required that when local governments increase their impact fees, the outstanding impact fee credits for developer contributions should also be increased. This requirement was to operate prospectively; however, HB 337 that was signed in 2021 deleted this clause and making all outstanding credits eligible for this adjustment. This bill also allowed local governments to waive/reduce impact fees for affordable housing projects without having to offset the associated revenue loss.
- **SB 1066 in 2020:** Added language allowing impact fee credits to be assignable and transferable at any time after establishment from one development or parcel to another that is within the same impact fee zone or impact fee district or that is within an adjoining impact fee zone or district within the same local government jurisdiction. In addition, added language indicating any new/increased impact fee not being applicable to current or pending permit applications submitted prior to the effective date of an ordinance or resolution imposing new/increased fees.
- **HB 1339 in 2020:** Required reporting of various impact fee related data items within the annual financial audit report submitted to the Department of Financial Services.
- **HB 337 in 2021:** Placed limits on the amount and frequency of fee increases, but also included a clause to exceed these restrictions if the local governments can demonstrate extraordinary circumstances, hold two public workshops discussing these circumstances and the increases are approved by two-thirds of the governing body. This act is retroactive to January 1, 2021.

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

Impact Fee Definition

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

Impact Fee vs. Tax

- An impact fee is generally regarded as a regulatory function established based upon the specific benefit to the user related to a given infrastructure type and is not established for the primary purpose of generating revenue for the general benefit of the community, as are taxes.
- Impact fee expenditures must convey a proportional benefit to the fee payer. This is accomplished through the establishment of benefit districts as needed, where fees collected in a benefit district are spent in the same benefit district.
- An impact fee must be tied to a proportional need for new infrastructure capacity created by new development.

This technical report has been prepared to support legal compliance with existing case law and statutory requirements. The study methodology is documented in the following 10 sections of this technical report:

- Methodology
- Inventory
- Service Area and Enrollment
- Facility Service Delivery
- Cost Component
- Credit Component
- Net Impact Cost per Student
- Student Generation Rates
- Calculated School Impact Fee Schedule
- School Impact Fee Schedule Comparison

Information supporting this analysis was obtained from the Volusia County Schools and other sources, as indicated.

II. Methodology

The methodology used to update the educational facilities impact fee is a consumption-based impact fee methodology, which has also been used to calculate the current adopted school impact fee in Volusia County as well as several school impact fees throughout Florida, including, but not limited to fees in Brevard, Broward, Collier, Hernando, Indian River, Lake, Orange, Osceola, Palm Beach, Sarasota, and Seminole Counties. A consumption-based impact fee is intended to charge new growth the proportionate share of the cost of providing a new student station, based upon the student generation rate (demand), or the number of students a dwelling unit is expected to generate over the life of the home.

Consumption-based methodology has been utilized to calculate the impact fee.

The impact fee calculations contained in this report are based on the most current and localized data available, consistent with the 2006 Florida Impact Fee Act. Should one or more variables affecting the impact fee change significantly, a recalculation of the impact fee would be necessary prior to the scheduled update of the study. Changes that could potentially trigger a recalculation of the impact fee include, but are not limited to, significant changes in the student generation rate, a considerable change in the cost per student, a change in amount or source of revenue available for capital expansion, or a decision to incur additional debt to fund new capacity.

III. Inventory

Volusia County Schools (VCS) provides public education facilities that are available to all school-age residents of Volusia County. As such, this analysis will consider all traditional elementary, middle, and high school level facilities and the students attending these facilities located throughout and living within the county.

Currently, VCS operates 68 traditional public schools that serve the students of Volusia County and its municipalities. The inventory consists of 45 elementary schools, 12 middle schools, 2 multi-level schools, and 9 high schools. VCS' inventory is presented in Appendix A, Table A-1.

Volusia County Schools operates 68 traditional school as well as other types of schools.

IV. Service Area and Enrollment

VCS provides public education facilities that are available to all Kindergarten thru 12th grade (K-12) students throughout the entire county. Attendance boundaries can be redrawn to balance school enrollment with available school capacity and therefore can serve different geographic areas over time. In addition, the Florida Department of Education (FDOE) has been increasing its support of Choice programs where students can attend schools outside of their designated districts. Therefore, the appropriate impact fee district for public schools is countywide.

Table 1 presents historical enrollment trends since 2000-01 school year. To be consistent with the inventory used in the impact fee analysis, the enrollment figures presented in this table only include those students attending the schools listed in Appendix A, Table A-1.

Table 1
Traditional School Enrollment vs. Population

School Year	Traditional Enrollment ⁽¹⁾	Annual Percent Change	Population (BEBR-M) ⁽²⁾	Annual Percent Change
2000-01	60,114	1.94%	450,254	1.60%
2001-02	61,160	1.74%	457,241	1.60%
2002-03	61,352	0.31%	465,240	1.70%
2003-04	62,449	1.79%	475,542	2.20%
2004-05	63,798	2.16%	484,615	1.90%
2005-06	64,157	0.56%	492,969	1.70%
2006-07	64,382	0.35%	498,480	1.10%
2007-08	63,152	-1.91%	499,273	0.20%
2008-09	61,487	-2.64%	496,456	-0.60%
2009-10	60,520	-1.57%	494,593	-0.40%
2010-11	59,761	-1.25%	496,655	0.40%
2011-12	59,197	-0.94%	499,610	0.60%
2012-13	58,647	-0.93%	502,777	0.60%
2013-14	58,884	0.40%	507,995	1.00%
2014-15	59,378	0.84%	514,710	1.30%
2015-16	60,038	1.11%	521,882	1.40%
2016-17	60,119	0.13%	528,438	1.30%
2017-18	60,073	-0.08%	535,961	1.40%
2018-19	60,381	0.51%	543,369	1.40%
2019-20	60,059	-0.53%	553,543	1.90%
2020-21	57,954	-3.50%	563,358	1.80%
2021-22	59,478	2.63%	570,400	1.30%

Table 1 (Continued)
Traditional School Enrollment vs. Population

School Year	Traditional Enrollment ⁽¹⁾	Annual Percent Change	Population (BEBR-M) ⁽²⁾	Annual Percent Change
2022-23	59,128	-0.59%	577,530	1.30%
2023-24	59,143	0.03%	584,749	1.20%
2024-25	59,086	-0.10%	592,100	1.30%
2025-26	58,840	-0.42%	597,607	0.90%
2026-27	58,665	-0.30%	603,165	0.90%
2027-28	58,711	0.08%	608,774	0.90%
2028-29	58,883	0.29%	614,436	0.90%
2029-30	59,154	0.46%	620,100	0.90%

1) Source: Volusia County School District, Day 20 counts and Enrollment Projections

2) Source: BEBR, Volume 55, Bulletin 192, February 2022 (Medium-Level Projections)

V. Facility Service Delivery

For educational facilities impact fee calculation purposes, service delivery is measured in terms of gross permanent square footage per permanent station. Based on discussions with VCS, future prototype school characteristics were identified in terms of square footage per station.

As shown in Table 2 on page 12, the facility service delivery in Volusia County is 145 gross permanent square feet per permanent student station for elementary schools, 142 gross permanent square feet per permanent student station for middle schools, and 147 gross permanent square feet per permanent student station for high schools.

VI. Cost Component

The capital costs of providing educational facilities includes three components: the school facility cost, transportation cost, and ancillary facility costs. This section addresses each of these components.

Facility Cost per Student Station

The first step in determining the cost of providing traditional public schools to Volusia County residents is to calculate the facility cost per student station. Several cost components must be considered when calculating the total cost of constructing a school, including administrative costs, architectural and engineering costs, site improvement costs (collectively referred to as non-construction costs); construction costs; furniture, fixtures, and equipment (FF&E) costs; and the cost to purchase the land. Each component of the school facility cost is described in more detail in the following subsections.

The cost of a school includes various components, such as facility cost (buildings and land), transportation costs, and ancillary facility costs.

Architect/Site Improvement, Construction and FF&E Costs

To determine the non-construction, construction, and FF&E costs associated with building a new school in Volusia County, the following information was evaluated:

- Most recent schools built in Volusia County (schools built 2017 through 2021);
- Estimates for upcoming construction;
- Insurance values of existing schools;
- School cost information from other Florida School Districts; and
- Discussions with VCS staff.

Based on this review, a construction cost estimate of \$225 per gross square foot is utilized for elementary schools, middle schools, and high schools. Non-construction and FF&E cost are calculated based on the ratio of these costs to the construction cost. These figures are estimated at 17 percent of construction cost for non-construction improvement costs and 8 percent for FF&E costs. Detailed information on cost estimates is included in Appendix B.

Table 2 presents the cost per gross permanent square foot figures for non-construction, construction, and FF&E cost components for each school level.

Land Cost

For each school type, the land cost per square foot is based on a value of \$50,000 per acre. This cost per acre is based on recent appraisals received by VCS, vacant land sales and vacant land values of similarly sized parcels. The results of the vacant land analysis documented in Appendix B suggest that \$50,000 per acre is a reasonable estimate for impact fee calculation purposes.

The land cost per square foot by school type was developed based on required acreage per average permanent square footage by school level. The resulting land cost figures for each school level also are presented in Table 2.

Overall, total facility cost estimates range from \$40,555 per permanent station for middle schools to \$42,145 per permanent station for high schools.

In 2016, the Florida Legislature passed House Bill 7029, requiring that beginning July 1, 2017, schools districts may not use funds from any other sources for new construction of educational plant space that exceeds the statutory maximum cost per student station. The legislation also required the Office of Economic and Demographic Research (EDR) to conduct a study of the cost per student station. EDR report was completed in January 2017; however, the Legislation has not yet adjusted the cost per station based on the findings of the study.

In the absence of any adjustments, existing Student Station Cost Factors published by the Florida Department of Education (FDOE) are used to develop alternative cost estimates. These cost figures include construction, architectural/design, and FF&E costs but exclude land and site preparation costs. The DOE cost factors were last updated in 2006 and have been indexed since using Consumer Price Index. Table 2 also presents a comparison of the student station cost estimates against the maximum cost per student station published by the FDOE, which ranged from \$25,239 for elementary schools to \$35,402 for high schools. In other words, the published FDOE costs are approximately 33 percent lower than the estimated local cost per student station for elementary schools, 26 percent lower for middle schools, and 7 percent lower for high schools. The remainder of this report uses FDOE-based cost estimate for impact fee calculations.

Table 2
School Facility Cost per Student Station

Cost Component	Elementary	Middle	High
Gross Permanent Square Feet per Permanent Student Station ⁽¹⁾	145.0	142.0	147.0
School Facility Cost Components:			
Non-Construction Cost per Gross Permanent Square Foot ⁽²⁾	\$38.25	\$38.25	\$38.25
Construction Cost per Gross Permanent Square Foot ⁽³⁾	\$225.00	\$225.00	\$225.00
FF&E Cost per Gross Permanent Square Foot ⁽⁴⁾	\$18.00	\$18.00	\$18.00
Land Cost per Gross Permanent Square Foot ⁽⁵⁾	\$5.15	\$4.35	\$5.45
Total Facility Cost per Gross Permanent Square Foot ⁽⁶⁾	\$286.40	\$285.60	\$286.70
Facility Cost per Permanent Student Station⁽⁷⁾	\$41,528	\$40,555	\$42,145
Facility Cost per Permanent Student Station -- Excl Land & Site Preparation	\$37,519	\$36,743	\$38,036
FDOE Cost per Permanent Station ⁽⁸⁾	\$25,239	\$27,255	\$35,402
Total Cost with FDOE Cost per Permanent Station⁽⁹⁾	\$29,248	\$31,068	\$39,511

- 1) Source: Volusia County School District
- 2) Source: Appendix B, Table B-3 (Site Prep/Architectural/Design) multiplied by construction cost per gross square foot (Item 3)
- 3) Source: Appendix B, Table B-1
- 4) Source: Appendix B, Table B-3 (FF&E) multiplied by construction cost per gross square foot (Item 3)
- 5) Based on required acres per average permanent square footage by school level and an estimated land value of \$50,000 per acre (Appendix B)
- 6) Source: Sum of non-construction cost (Item 2), construction cost (Item 3), FF&E cost (Item 4) and land cost (Item 5)
- 7) Source: Permanent gross square foot per student station (Item 1) multiplied by facility cost per permanent gross square foot (Item 6)
- 8) Source: Florida Department of Education, published December 2021. Represents estimates for May 2022.
- 9) FDOE cost plus site preparation and land cost per station

Total Facility Cost per Student by School Type

The total facility impact cost per student for each school type is based on the facility cost per student station figures calculated in Table 2 and is typically calculated by dividing the cost per student station by the ratio of current student enrollment to available capacity. The adjustment of dividing the cost per student station by the ratio of current student enrollment to available capacity converts the cost per student station to a cost per student. In addition, this calculation accounts for the current surplus or shortage in permanent capacity and adjusts the costs accordingly. If there is available capacity (e.g., currently more permanent student stations than students), then the total facility cost per student increases because there are more than one permanent station per student to allow for operational capacity needs. Similarly, if there are currently more students enrolled than available capacity, the cost per student is adjusted downward since each student is receiving less than one permanent station, on average.

On a districtwide basis, VCS has 9 percent of available capacity. At individual school levels, VCS currently has 14 percent available capacity at elementary schools, 6 percent available capacity at middle schools, and 4 percent available capacity at high schools.

The School Board's policy is to provide a permanent station per student and use portable stations for temporary fluctuations. Given this, impact fee calculations do not charge for available capacity, which result in more conservative impact fee levels. As shown in Table 3, the weighted average total facility cost estimate is \$33,000 based on the policy of providing one permanent station per student. If the School Board were to adopt the current achieved LOS as the standard, the cost per student would have been approximately 10 percent higher, or \$36,275 per student compared.

It is important to note that the value of portable/relocatable stations is not included in the cost calculations as portables are generally used for temporary fluctuations in enrollment levels and are not intended to be used on a permanent basis, which is also consistent with the Volusia County School Board policies.

Table 3
Total Facility Impact Cost per Student

Item	School Level			
	Elementary	Middle	High	Weighted Avg/Total
<i>Facility Impact Cost per Student</i>				
Facility Cost per Permanent Student Station ⁽¹⁾	\$29,248	\$31,068	\$39,511	N/A
Student Enrollment (2021/22 School Year) ⁽²⁾	26,181	14,025	19,272	59,478
Permanent Capacity (2021/22 School Year) ⁽³⁾	30,712	14,858	20,069	65,639
Ratio of Enrollment to Permanent Capacity ⁽⁴⁾	85%	94%	96%	91%
Facility Impact Cost per Student⁽⁵⁾	\$29,248	\$31,068	\$39,511	\$33,003
Facility Impact Cost per Student -- Achieved LOS ⁽⁶⁾	\$34,409	\$33,051	\$41,157	\$36,275

1) Source: Table 2

2) Source: Volusia County School District, Day 20 Counts

3) Source: Appendix A, Table A-1

4) Source: Student enrollment (Item 2) divided by permanent capacity (Item 3)

5) Based on the Volusia County School Board policy of providing a permanent station per student

6) Facility cost per permanent student station (Item 1) divided by ratio of enrollment to permanent capacity (Item 4)

Total Impact Cost per Student

In addition to the facility cost per student calculated in Table 3, the total facility cost per student includes two additional cost components: the capital costs associated with providing transportation services and ancillary facilities. Both of these cost components are calculated on a per student basis and are not dependent on school type. Each of these additional cost components is discussed in further detail below.

Transportation Costs

The first additional capital cost component is the cost of providing transportation services to students. Volusia County Schools currently owns 260 buses valued at \$27.8 million. In addition to its bus fleet, VCS has 28 support vehicles valued at \$664,000, which include vehicles such as cars, vans, and trucks. These cost estimates are based on the total replacement costs provided by the District. The resulting total capital asset value is \$28.5 million for transportation services. The total value of the transportation fleet is divided by the student enrollment figures, including charter and special school enrollment to reflect the entire student population benefiting from services provided by VCS' transportation fleet. The result is a cost of \$453 per student for transportation services, as shown in Table 4.

Administrative Facility Cost Analysis

The other capital cost component is the ancillary facilities that are necessary for VCS to provide support services to students and schools. VCS currently has over 323,800 square feet of permanent ancillary facilities for transportation, maintenance, warehouse, and administrative functions. The current value of each existing ancillary facilities is estimated at \$200 per square foot of building space, based on the insurance values of the existing ancillary facilities as well as figures obtained from other Florida School Districts. In terms of land value, similar to school buildings, a cost estimate of \$50,000 per acre is used. As shown, the total ancillary facility value amounts to \$69.5 million, which converts to \$1,107 per student when using the total enrollment count previously discussed.

Table 4
Total Impact Cost per Student

Description	Cost/ Enrollment Figure	Cost per Student Figure
Weighed Average Total Facility Impact Cost per Student ⁽¹⁾	-	\$33,003
<i>Transportation Services Cost per Student</i>		
Total Value of Transportation Services ⁽²⁾	\$28,463,796	-
Total Enrollment (2019/20 School Year) ⁽³⁾	62,818	-
Total Transportation Services Cost per Student ⁽⁴⁾	-	\$453
<i>Ancillary Facility Cost per Student</i>		
Building Value for Ancillary Facilities ⁽⁵⁾	\$64,766,400	-
Land Value for Ancillary Facilities ⁽⁶⁾	<u>\$4,761,000</u>	-
Total Value for Ancillary Facilities	\$69,527,400	-
Total Ancillary Facilities Cost per Student ⁽⁷⁾		<u>\$1,107</u>
Total Impact Cost per Student⁽⁸⁾	-	\$34,563

- 1) Source: Table 3
- 2) Source: Volusia County School District
- 3) Source: Volusia County Schools' 20-day enrollment count for 2019/2020 school year. Total enrollment includes charter schools and special center schools as they are provided transportation services.
- 4) Value of transportation services (Item 2) divided by the total enrollment (Item 3)
- 5) Total square footage of ancillary facilities valued at \$200 per square foot
- 6) Total acreage of ancillary facilities valued at \$50,000 per acre
- 7) Total value of ancillary facilities divided by total enrollment (Item 3)
- 8) Sum of facility cost per student (Item 1), transportation cost per student (Item 4), and ancillary facility cost per student (Item 7)

VII. Credit Component

To ensure that new residential development is not being overcharged for the capital costs associated with new traditional public schools, a credit for non-impact fee revenue generated by new development that is used towards capital expansion of educational facilities needs to be considered in the calculation of the school impact fee. A credit is not provided for revenues that fund capital renovation or maintenance of existing facilities or for operational costs.

A review of VCS' historical capacity expansion expenditures over the past five years suggests that VCS funds capacity expansion projects primarily with Local Capital Improvement Fund (ad valorem revenue) and local option sales tax revenues. In addition, a credit is given for future remaining payments for existing debt service on bonds used to build capacity.

Capital Improvement "Cash" Credit

The School Board has the authority to levy up to 1.5 mills of countywide ad valorem tax to generate revenue for capital expansion expenditures. In addition to the capital improvement tax, VCS receives revenues from the ½-cent School Capital Outlay Surtax to fund the capital expansion of traditional schools.

As shown in Table 5, VCS appropriated approximately \$15.2 million between FY 2017 and FY 2021 for capacity projects. To calculate the capital improvement credit per student, the average annual appropriations (approximately \$3.0 million) is divided by the average annual enrollment for the same time period (approximately 59,600 students). As shown, this calculation amounts to \$51.12 per student per year.

Once the capital improvement credit per student is calculated, an adjustment is made to account for the portion that will be paid with ad valorem tax revenue. This adjustment is made to account for the fact that new homes tend to pay higher property taxes. The adjustment factor was estimated based on a comparison of the average taxable value of newer homes to that of all homes. As shown in Table 5, the adjusted credit amounts to \$69.78 per student per year.

Finally, the total credit over a 25-year period, which is considered to be the time frame when major repairs or replacements are needed for structures built, is calculated at \$1,250 per student.

Table 5
Revenue Credit per Student

Project Type ⁽¹⁾	2017	2018	2019	2020	2021	Total
Ad Valorem						
Pierson Elementary School - Replacement School	\$506,724	\$5,855,375	\$11,277	\$139	-	\$6,373,515
Westside Elementary - Renovations/Additions	\$35,061	\$209,096	\$1,758,429	\$1,427,801	\$353,769	\$3,784,156
George Marks Elementary - George Marks Elementary Master Plan	-	\$26,761	\$272,911	\$173,487	\$450,084	\$923,243
Deltona Middle - Deltona Middle Master Plan	-	-	\$717	\$717	-	\$1,434
Chisholm Elementary - Chisholm Replacement School	-	-	-	\$13,458	\$2,918	\$16,376
Subtotal - Ad Valorem	\$541,785	\$6,091,232	\$2,043,334	\$1,615,602	\$806,771	\$11,098,724
Sales Tax						
Chisholm Elementary - Chisholm Replacement School	-	-	\$1,067,637	\$1,493,975	\$409,652	\$2,971,264
Deltona Middle - Deltona Middle Master Plan	-	-	\$137,654	\$95,434	\$162,175	\$395,263
George Marks Elementary - George Marks Elementary Master Plan	-	-	\$304,475	-	\$72,306	\$376,781
Pierson Elementary - Replacement School	-	-	\$117,279	\$1,841	-	\$119,120
Westside Elementary - Renovations/Additions	-	-	-	\$188,628	\$81,335	\$269,963
Subtotal - Sales Tax	-	-	\$1,627,045	\$1,779,878	\$725,468	\$4,132,391
Total Expenditures						\$15,231,115
Average Annual Expenditures ⁽²⁾						\$3,046,223
Average Annual Enrollment ⁽³⁾						59,589
Revenue Credit per Student⁽⁴⁾						\$51.12
- Portion Funded with Ad Valorem Tax Revenues ⁽⁵⁾						\$37.32
- Portion Funded with Sales Tax Revenues ⁽⁶⁾						\$13.80
Credit Adjustment Factor ⁽⁷⁾						1.50
Adjusted Revenue Credit per Student (Ad Valorem ONLY) ⁽⁸⁾						\$55.98
Adjusted Revenue Credit per Student ⁽⁹⁾						\$69.78
Capitalization Rate ⁽¹⁰⁾						2.75%
Capitalization Period, Years ⁽¹¹⁾						25
Present Value of Capital Improvement Revenue Credit per Student⁽¹²⁾						\$1,250

- 1) Source: Volusia County School District
- 2) Total expenditures divided by 5 to calculate the average annual expenditures
- 3) Source: Table 1
- 4) Average annual expenditures (Item 2) divided by the average enrollment (Item 3)
- 5) Revenue credit per student (Item 4) multiplied by the ad valorem portion of total expenditures (72.9%)
- 6) Revenue credit per student (Item 4) multiplied by the sales tax portion of total expenditures (27.1%)
- 7) Adjustment factor to reflect higher ad valorem taxes paid by new homes
- 8) Portion funded with ad valorem (Item 5) multiplied by the credit adjustment factor (Item 7)
- 9) Sum of the portion funded with sales tax (Item 6) and the adjusted ad valorem credit (Item 8)
- 10) Interest rate the District is likely to pay for future bonds, provided Volusia County Schools
- 11) Time period after which major repairs are needed
- 12) Present value of adjusted revenue credit per student (Item 9) at 2.75% interest rate (Item 10) over a 25-year capitalization period (Item 11)

Debt Service Credit

As mentioned previously, VCS has utilized COPs and other bonds to pay for a portion of the capacity expansion projects and given that there is still an outstanding debt obligation, a credit is calculated for the future payments related to capacity expansion projects.

To calculate the debt service credit per student, the remaining payments were brought back to present value, based on the number of years and annual interest rate of each COP issue. Once the present value of remaining payments is calculated, each debt issue is divided by the average annual enrollment for the time period remaining.

Similar to the capital improvement credit, the portion of the debt service credit per student repaid with ad valorem tax revenue is adjusted to account for the fact that new homes tend to pay more in property taxes compared to older homes. As shown, in Table 6 the total adjusted debt service credit is estimated at \$1,289 per student.

Table 6
Debt Service Credit per Student

Description	Number of Years of Remaining Payments ⁽¹⁾	Remaining Payments Due for Expansion ⁽²⁾	Present Value of Total Remaining Payments for Expansion ⁽³⁾	Average Annual Enrollment ⁽⁴⁾	Debt Service Credit per Student ⁽⁵⁾
<i>Certificates of Participation</i>					
COPS 3961	2	\$19,233,533	\$17,881,500	59,136	\$302
COPS 3962	9	\$76,456,380	\$28,573,999	59,023	<u>\$484</u>
<i>Subtotal - Ad Valorem Credit</i>					\$786
Credit Adjustment Factor ⁽⁶⁾					1.50
Adjusted Ad Valorem Credit per Student⁽⁷⁾					\$1,179
<i>Sales Tax Revenue Bond</i>					
Sales Tax Revenue Bond	10	\$8,410,454	\$6,494,390	59,115	\$110
Total Debt Service Credit per Student⁽⁸⁾					\$1,289

- 1) Source: Volusia County School District
- 2) Source: Volusia County School District
- 3) Source: Present value of the total remaining payments due, based on the interest rate of each payment and the number of years of remaining payments
- 4) Table 1
- 5) Present value of total remaining payments (Item 3) divided by the average annual enrollment over the life of the remaining payments (Item 4)
- 6) Adjustment factor to reflect higher ad valorem taxes paid by new homes
- 7) Ad valorem funded portion of the debt service credit per student multiplied by the credit adjustment factor (Item 6)
- 8) Sum of adjusted ad valorem credit per student and sales tax revenue bond credit per student

VIII. Net Impact Cost per Student

The net impact fee per student is the difference between the cost component and the credit component. Table 7 summarizes the three-step process used to calculate the net impact cost per student for traditional schools in Volusia County.

First, the total impact cost per student is determined. This is the sum of the weighted average facility impact cost per student and the transportation and ancillary facility cost components per student as previously presented in Table 4.

Second, the total revenue credit is determined. This is the sum of the capital improvement revenue credit per student from Table 5 and the debt service revenue credit per student from Table 6.

Third, the net impact cost per student is determined, which is the difference between the total impact cost per student and total revenue credit per student. As presented, the net impact cost amounts to \$32,024 per student.

Table 7
Net Cost per Student

Variable	Cost per Student
Impact Cost	
Total Impact Cost per Student ⁽¹⁾	\$34,563
Impact Credit	
Revenue Credit per Student ⁽²⁾	\$1,250
Debt Service Credit per Student ⁽³⁾	<u>\$1,289</u>
Total Revenue Credit per Student ⁽⁴⁾	\$2,539
Net Impact Cost	
Net Impact Cost per Student ⁽⁵⁾	\$32,024

1) Source: Table 4

2) Source: Table 5

3) Source: Table 6

4) Sum revenue credit (Item 2) and debt service credit (Item 3)

5) Total impact cost (Item 1) less the total revenue credit (Item 4)

IX. Student Generation Rates

The number of students living in a household varies depending on the type of residential housing. Therefore, educational facilities impact fees are typically assessed based on the specific student generation rates (SGR) for different residential land use categories. Volusia County's current school impact fee schedule combines all residential units under a single category. The updated schedule provides three separate residential categories in addition to the combined category.

Similar to the 2013 and 2018 technical studies conducted by Benesch, this study employs a methodology that uses Geographic Information Systems (GIS) to develop the student generation rate for Volusia County. Specifically, GIS was used to link student addresses to parcels in the Volusia County Property Appraiser's database in order to generate the number of students per unit by school type and land use. This process is described in more detail below.

First, Volusia County Schools provided a file that linked the addresses of students who attend the schools listed in Appendix A, Table A-1. Based on this information, all of the traditional students attending schools in Volusia County could be matched to a parcel. Once the students were matched to a parcel, the count of students by residential categories mentioned previously were determined.

Next, using the County's Property Appraiser database, parcels were grouped by residential categories. This provided the total count of units.

Finally, the number of students by land use category were divided by the total number of units. The results of this analysis are provided in Table 8. The shift away from single family toward multi-family units is consistent with the general trends observed statewide. In the case of mobile home parks, the fluctuation is the result of excluding the age restricted mobile home parks in this study. In the 2018 study, these mobile home parks were included in the calculations which lowered the SGR.

Table 8
Student Generation Rates

Residential Land Use Type	Number of Students ⁽¹⁾	Number of Units ⁽²⁾	Students per Unit ⁽³⁾	2013 Study SGR ⁽⁴⁾	Percent Change
Single Family Detached/ Mobile Home on Lot	49,448	191,425	0.258	0.305	-15.4%
Multi-Family	8,210	59,862	0.137	0.104	31.7%
Mobile Home Park	770	14,796	0.052	0.036	44.4%
All Residential Land Uses	58,428	266,083	0.220	0.234	-6.0%

1) Source: Volusia County School District

2) Source: Volusia County Property Appraiser Database

3) Number of students (Item 1) divided by the number of units (Item 2)

4) Source: *Volusia County Schools, School Impact Fee Update Study, Final Report, April 29, 2013*

X. Calculated Impact Fee Schedule

To determine the calculated educational facilities impact fee for each residential land use category, the net impact cost per student previously shown in Table 7 is multiplied by the student generation rates shown in Table 8. The resulting calculated impact fee for each residential land use category is shown in Table 9.

Table 9
Calculated Educational Facilities Impact Fee Schedule

Land Use	Unit	Net Impact Cost per Student ⁽¹⁾	Student Generation Rate ⁽²⁾	Calculated Fee ⁽³⁾	Current Adopted Fee ⁽⁴⁾	Percent Change (Calculated vs. Adopted)	Current Adopted Fee @100% ⁽⁵⁾	Percent Change (2013 vs 2020 @100%)
Single Family Detached	dwelling unit	\$32,024	0.258	\$8,262	\$2,942	181%	\$4,483	84%
Multi-Family	dwelling unit	\$32,024	0.137	\$4,387	\$2,942	49%	\$4,483	-2%
Mobile Home Park	dwelling unit	\$32,024	0.052	\$1,665	\$2,942	-43%	\$4,483	-63%
All Residential Land Uses	dwelling unit	\$32,024	0.220	\$7,045	\$2,942	139%	\$4,483	57%

1) Source: Table 7, DOE cost

2) Source: Table 8

3) Net impact cost per student (Item 1) multiplied by the student generation rate (Item 2)

4) Source: Volusia County Growth and Resource Management Department

5) Source: *Volusia County Schools, School Impact Fee Update Study, Final Report, April 29, 2013*

XI. School Impact Fee Comparison

As part of the work effort in updating Volusia County’s educational facilities impact fee program, a comparison of the calculated single family school impact fee for Volusia County to the single family school impact fees adopted by other counties throughout Florida has been prepared. Table 11 presents this comparison. For those where the information was available, the year of most recent technical study and adoption percentage of the full calculated impact fee are also shown. Surrounding counties are highlighted in orange.

Nearly 40% of Florida counties have a school impact fee.

Table 11
School Impact Fee Schedule Comparison - Single Family Rates

County	Date of Last Update ⁽¹⁾	Adoption Percent ⁽¹⁾	Single Family (per du)	
			Adopted Fee ⁽¹⁾	Fee @ 100% ⁽²⁾
Miami-Dade County	1995	100%	\$2,448	\$2,448
Marion County ⁽³⁾	2006	100%	\$3,967	\$3,517
Citrus County	2021	50%	\$2,059	\$4,117
Volusia County - Adopted	2013	66%	\$2,942	\$4,483
Indian River County	2020	28%	\$1,310	\$4,680
St. Johns County	2018	100%	\$5,312	\$4,725
Flagler County	2004	76%	\$3,600	\$4,756
Baker County	2005	52%	\$2,592	\$5,000
Nassau County	2017	100%	\$5,431	\$5,431
St. Lucie County	2009	100%	\$6,786	\$5,447
Lee County	2018	53%	\$2,879	\$5,484
Martin County	2012	100%	\$5,567	\$5,567
Manatee County	2017	100%	\$6,127	\$6,127
Hernando County	2019	50%	\$3,176	\$6,352
Sarasota County	2015	26%	\$2,032	\$7,835
Hillsborough County	2020	100%	\$8,227	\$8,227
Volusia County - Calculated	2022	N/A	\$8,262	\$8,262
Palm Beach County ⁽⁴⁾	2022	80%	\$6,685	\$8,322
Lake County	2019	100%	\$8,927	\$8,927
Pasco County	2017	92%	\$8,328	\$9,028
Clay County	2009	77%	\$7,034	\$9,096
Orange County	2020	96%	\$9,148	\$9,513
Broward County	2017	93%	\$8,809	\$9,516
Brevard County	2015	50%	\$5,097	\$10,193
Collier County	2015	67%	\$8,790	\$11,164
Polk County	2019	65%	\$7,798	\$11,997
Seminole County	2017	73%	\$9,000	\$12,322
Osceola County ⁽⁵⁾	2021	100%	\$12,923	\$12,923

- 1) Source: Published impact fee schedules and discussions with representatives from each County
- 2) Represents the full calculated fee from each respective technical study
- 3) Educational system impact fee suspended through December 31, 2022.
- 4) Fee shown effective January 1, 2023
- 5) Fee shown effective March 6, 2023

APPENDIX A
Volusia County Schools -- Inventory

Appendix A: Volusia County Schools -- Inventory

This appendix provides the Volusia County Schools' inventory of schools used in the impact fee calculation

Table A-1
Volusia County Schools Inventory Summary

School	Grade Level	Year Acquired	Acres	Permanent Stations	Permanent Capacity	Permanenet Net Sq. Ft.
<i>Elementary Schools</i>						
Blue Lake Elementary	PK 05	1981	26.0	703	703	100,989
Champion Elementary	PK 05	2005	20.0	720	720	103,970
Chisholm Elementary	PK 05	1953	21.0	809	809	88,547
Citrus Grove Elementary	KG 05	2006	23.0	764	764	107,438
Coronado Beach Elementary	PK 05	1961	11.0	282	282	48,996
Cypress Creek Elementary	KG 05	1993	24.6	754	754	105,329
Debary Elementary	PK 05	1995	18.0	801	801	106,930
Deltona Lakes Elementary	PK 05	1980	40.0	882	882	122,830
Discovery Elementary	PK 05	1985	19.0	725	725	104,624
Edgewater Public Elementary	PK 05	1959	19.0	729	729	91,942
Edith I Starke Elementary	PK 05	1955	15.0	457	457	70,748
Enterprise Elementary	PK 05	1891/1937	8.0	671	671	87,953
Forest Lake Elementary	PK 05	1992	24.0	733	733	102,018
Freedom Elementary	KG 05	1997	30.0	782	782	113,594
Friendship Elementary	KG 05	1989	14.0	531	531	90,292
George W Marks Elementary	PK 05	1955	28.0	856	856	85,517
Horizon Elementary	PK 05	1987	10.0	725	725	98,213
Indian River Elementary	PK 05	1988	24.0	772	772	114,622
Louise S Mcinnis Elementary	PK 05	1932	15.0	420	420	60,454
Manatee Cove Elementary	PK 05	1997	20.0	774	774	107,914
Orange City Elementary	PK 05	1914	8.0	539	539	70,092
Ormond Beach Elementary	PK 05	1908	4.0	294	294	39,795
Ortona Elementary	PK 05	1947	11.0	276	276	41,706
Osceola Elementary	PK 05	1954	13.0	665	665	70,362
Osteen Elementary	PK 05	1981	32.0	764	764	108,449
Palm Terrace Elementary	PK 05	1988	29.0	810	810	114,991
Pathways Elementary	PK 05	1988	20.0	725	725	110,941
Pierson Elementary	PK 05	1890/2017	23.5	674	674	92,662
Pine Trail Elementary	PK 05	1981	19.0	786	786	106,916
Port Orange Elementary	PK 05	1902	6.0	344	344	43,865
Pride Elementary	PK 05	2005	20.0	765	765	104,975
Read-Pattillo Elementary	PK 05	1954	11.0	493	493	67,585
R J Longstreet Elementary	PK 05	1953	10.0	492	492	68,836
South Daytona Elementary	PK 05	1958	13.0	978	978	119,853
Spirit Elementary	PK 05	1992	20.0	768	768	112,909
Spruce Creek Elementary	PK 05	1977	20.0	827	827	112,337

Table A-1 (continued)
Volusia County Schools Inventory Summary

School	Grade Level	Year Acquired	Acres	Permanent Stations	Permanent Capacity	Permanenet Net Sq. Ft.
Elementary Schools						
Sugar Mill Elementary	PK 05	1981	20.0	623	623	102,370
Sunrise Elementary	PK 05	1989	13.0	731	731	109,845
Sweetwater Elementary	PK 05	1992	19.8	725	725	103,360
Timbercrest Elementary	PK 05	1987	20.0	722	722	106,360
Tomoka Elementary	PK 05	1967	15.0	690	690	81,147
Turie T Small Elementary	PK 05	1953	11.0	452	452	64,484
Volusia Pines Elementary	KG 05	1989	20.0	563	563	94,156
Westside Elementary	PK 05	1966	15.0	802	802	103,663
Woodward Avenue Elementary	PK 05	1965	<u>13.0</u>	<u>630</u>	<u>630</u>	<u>80,574</u>
Subtotal - Elementary			815.9	30,028	30,028	4,145,153
Middle Schools						
Campbell Middle	06 08	1961	39.0	1,251	1,126	175,316
Creekside Middle	06 08	1996	45.0	1,258	1,132	163,118
David C. Hinson Sr.	06 08	2000	50.0	1,184	1,066	180,932
Deland Middle	06 08	1981	40.0	1,345	1,211	201,832
Deltona Middle	06 08	1964	36.0	1,323	1,191	141,300
Galaxy Middle	06 08	1987	30.0	1,297	1,167	166,237
Heritage Middle	06 08	1993	40.0	1,234	1,111	168,205
New Smyrna Beach Middle	06 08	1979	30.0	1,254	1,129	186,129
Ormond Beach Middle	06 08	1960	29.0	1,414	1,273	197,421
River Springs Middle School	06 08	1998	10.0	1,502	1,352	197,847
Silver Sands Middle	06 08	1981	49.0	1,290	1,161	189,219
Southwestern Middle	06 08	1961	<u>20.0</u>	<u>978</u>	<u>880</u>	<u>125,036</u>
Subtotal - Middle			418.0	15,330	13,799	2,092,592
High Schools						
Atlantic Senior High	09 12	1990	70.0	1,453	1,380	224,230
Deland Senior High	09 12	1936/1962/1980	65.0	3,049	2,897	364,616
Deltona Senior High	09 12	1986	80.0	1,958	1,860	324,673
Mainland Senior High	09 12	1959	55.0	2,501	2,376	320,611
New Smyrna Beach High School	09 12	2002	70.0	2,430	2,309	337,877
Pine Ridge Senior High	09 12	1991	83.0	1,836	1,744	262,808
Seabreeze Senior High	09 12	1960	23.0	1,839	1,747	227,897
Spruce Creek Senior High	09 12	1973	67.0	2,189	2,080	251,395
University High School	09 12	2003	<u>27.0</u>	<u>2,883</u>	<u>2,738</u>	<u>369,521</u>
Subtotal - High			540.0	20,138	19,131	2,683,628
Multi-Level Schools						
Holly Hill K-8	PK 08	1981	19.0	1,169	1,052	152,704
T D Taylor Middle High	06 12	1954	<u>54.0</u>	<u>1,715</u>	<u>1,629</u>	<u>233,976</u>
Subtotal - Multi-Level			73.0	2,884	2,681	386,680
Grand Total			1,846.9	68,380	65,639	9,308,053

Source: Volusia County School District, FISH Report

APPENDIX B
Building and Land Cost Analysis

Appendix B: Building and Land Cost Analysis

This appendix provides additional information on the data and analysis used to estimate building and land values for the Volusia County educational facilities impact fee.

Building Cost Analysis

To determine the architectural/site improvement, construction, and FF&E costs associated with building a new school in Volusia County, the following information was evaluated:

- Schools built in Volusia County over the past five years;
- Estimates for upcoming construction;
- Insurance values of existing schools;
- School cost information from other Florida School Districts; and
- Discussions with VCS staff.

The following paragraphs provide further detail on this research and analysis.

Construction Cost

Recent construction projects by Volusia Schools include Westside Elementary, Pierson Elementary, George Mark Elementary, and Chisolm Elementary. The average cost associated amounted to \$250 per square foot and ranged from \$165 per square foot to \$385 per square foot. The schools that are recently bid and/or under construction include three elementary schools and one middle school. The cost for these range from \$240 per square foot to \$415 per square foot.

Insurance values of existing school buildings averages \$170 per square foot for buildings only and \$185 per square foot when contents are included. Insurance values tend to be conservative estimates because insurance companies exclude the value of the foundation and other more permanent parts of the structure since they would not have to be rebuilt if the structure was damaged or lost. If adjusting the insurance values upwards 30 percent to account for this, the estimated total cost averages \$238.

In addition to reviewing recently constructed schools, upcoming construction estimates, and insurance values, cost information from other recently completed impact fees from other Florida jurisdictions was analyzed. Based on this review, the construction cost ranged from \$170 per square foot to \$175 per square foot for schools built over the past two years. Construction cost

index obtained from the Engineering News Record suggests an increase of almost 15 percent since the 2018 report.

Given this data, construction cost is estimated at \$225 per gross square foot for elementary, middle, and high schools. Table B-1 provides a summary of this information.

**Table B-1
Construction Cost Analysis – Volusia County**

Item	Date	Elementary	Middle	High	ENR Index
Construction Cost per Gross Sq Ft					
2013 Report Cost ⁽¹⁾	2013	\$120	\$127	\$162	-
2018 Report Cost ⁽²⁾	2018	\$165	\$170	\$190	-
2018 Report Cost, Indexed ⁽³⁾	2021	\$188	\$194	\$217	14.0%
Recent Construction⁽⁴⁾					
Westside Elementary	2017-2021	\$236	-	-	-
Chisholm Elementary	2017-2021	\$195	-	-	-
George Marks Elementary	2018-2021	\$246	-	-	-
Pierson Elementary	2018-2020	\$139	-	-	-
Weighted Average	2017-2021	\$197			
On-going Construction & Recent Bids⁽⁵⁾					
Beachside Elementary	Aug, 2021	\$238			
Woodward Elementary	2017-2021	\$413			
Turie T Small Elementary	2017-2021	\$322			
Deltona Middle	2018-2022		\$279		
Weighted Average	2017-2022	\$309	\$279		
Insurance Values⁽⁶⁾					
Building Value per Permanent Sq Ft		\$172	\$170	\$169	-
Content Value per Permanent Sq Ft		\$13	\$11	\$13	-
Total Insurance Value per Permanent Sq Ft		\$185	\$181	\$182	-
Other Florida School Districts⁽⁷⁾					
2011-20		\$144	\$148	\$153	-
2011-13		\$118	\$149	\$184	-
2018-20		\$174	\$168	\$175	-
Change from 2011-20 to 2018-20		20.8%	13.5%	14.4%	-
Construction Cost per Gross Sq Ft					
Values Used in Study		\$225	\$225	\$225	-

- 1) Source: Volusia County Schools, School Impact Fee Update Study, Final Report, April 29, 2013
- 2) Source: Volusia County Schools, School Impact Fee Update Study, Final Report, February 19, 2019
- 3) Source: 2018 Report costs (Item 3) adjusted using Engineering News Record, Building Cost Index
- 4) Source: Volusia County School District
- 5) Source: Volusia County School District
- 6) Source: Volusia County School District
- 7) Source: Florida Department of Education Construction Reports

Construction costs experienced in Volusia County and other Florida jurisdictions since 2011 are summarized in Table B-2.

**Table B-2
Construction Cost Analysis –Other Florida Jurisdictions**

Year Opened	District	Type	Facility Name	Construction Cost	Gross SF	Construction Cost per GSF
Elementary Schools:						
2011	Charlotte	Elem	Meadow Park Elementary	\$12,696,116	116,251	\$109
2011	Duval	Elem	Waterleaf Elementary	\$14,882,021	106,269	\$140
2011	Escambia	Elem	Global Learning Academy	\$17,019,155	127,600	\$133
2011	Orange	Elem	Wetherbee Elementary	\$11,795,072	113,073	\$104
2011	Pasco	Elem	Connerton Elementary "R"	\$11,598,590	92,842	\$125
2012	Alachua	Elem	Meadowbrook Elementary	\$12,388,973	104,887	\$118
2012	Indian River	Elem	Vero Beach Elementary	\$17,243,103	121,037	\$142
2012	Lee	Elem	Tortuga Preserve	\$16,021,554	141,643	\$113
2012	Orange	Elem	SunRidge Elementary	\$10,031,097	98,176	\$102
2012	St. Johns	Elem	Palencia Elementary	\$12,677,682	115,811	\$109
2012	Volusia	Elem	Citrus Grove Elementary	\$13,854,183	106,177	\$130
2013	Orange	Elem	Sun Blaze Elementary	\$10,269,207	86,619	\$119
2013	Orange	Elem	Hackney Prairie Road Area Elementary	\$11,261,094	103,818	\$108
2014	Orange	Elem	Shingle Creek ES (Replacement)	\$8,633,484	84,111	\$103
2014	Orange	Elem	John Young ES (Replacement)	\$8,810,724	84,111	\$105
2014	Orange	Elem	Pineloch ES	\$9,343,280	89,420	\$104
2014	Orange	Elem	Dr. Phillips ES	\$8,150,993	72,617	\$112
2014	Orange	Elem	Spring Lake ES	\$9,768,510	72,794	\$134
2014	Orange	Elem	Washington Shores ES (Replacement)	\$10,068,768	80,949	\$124
2014	Orange	Elem	Little River ES	\$8,202,194	61,780	\$133
2014	Orange	Elem	Wheatley ES (Replacement)	\$9,153,883	79,521	\$115
2014	Pasco	Elem	Schrader Elementary	\$10,620,622	84,983	\$125
2015	Orange	Elem	Eagle Creek Elementary	\$9,248,244	84,611	\$109
2015	Orange	Elem	Independence Elementary	\$9,394,386	85,747	\$110
2015	Orange	Elem	Ocoee ES (Replacement)	\$9,286,970	88,220	\$105
2015	Orange	Elem	Clay Springs Elementary	\$11,675,199	83,565	\$140
2015	Orange	Elem	Lake Weston Elementary	\$10,026,192	91,158	\$110
2015	Orange	Elem	Lovell Elementary	\$10,246,051	83,802	\$122
2015	Palm Beach	Elem	Glade View Elementary	\$14,554,646	87,385	\$167
2015	Palm Beach	Elem	Rosenwald Elementary	\$11,841,132	66,532	\$178
2015	Pasco	Elem	Sanders Memorial Elementary	\$17,016,823	112,619	\$151
2016	Orange	Elem	Millennia Gardens Elementary	\$10,659,959	89,384	\$119
2016	Orange	Elem	Tangelo Park ES	\$10,966,573	83,338	\$132
2016	Pasco	Elem	Wiregrass Elementary School (Elem "W")	\$14,362,434	91,113	\$158
2016	Washington	Elem	Kate Smith Elementary School	\$20,670,897	156,833	\$132
2017	Orange	Elem	Bay Lake Elementary	\$12,290,816	94,279	\$130
2017	Orange	Elem	Engelwood Elementary	\$12,340,163	87,926	\$140
2017	Orange	Elem	Ivy Lane Elementary	\$12,088,430	80,768	\$150
2017	Orange	Elem	Laureate Park Elementary	\$12,791,307	94,588	\$135
2017	Orange	Elem	Meadow Woods Elementary	\$13,397,484	95,656	\$140
2017	Orange	Elem	Mollie Ray ES	\$11,683,841	81,086	\$144
2017	Orange	Elem	Oak Hill ES	\$12,427,300	84,376	\$147
2017	Orange	Elem	Rock Lake ES	\$13,247,608	84,376	\$157
2017	Orange	Elem	Ventura ES	\$13,342,673	95,892	\$139
2017	Orange	Elem	Westpointe ES	\$9,667,395	45,719	\$211
2017	St Johns	Elem	Picolata Crossing Elementary	\$19,392,791	117,047	\$166
2017	Pasco	Elem	Bexley Elementary	\$16,714,559	107,813	\$155
2017	Nassau	Elem	Wildlight Elementary School	\$16,099,092	109,437	\$147
2017	Broward	Elem	Riverglades Elementary	\$4,671,335	32,181	\$145
2017	Hamilton	Elem	Hamilton County Elementary School	\$17,500,400	155,763	\$112
2018	Escambia	Elem	Kingsfield Elementary School	\$28,770,985	134,996	\$213
2018	Hillsborough	Elem	Dawson Elementary School	\$16,268,915	100,019	\$163
2018	Orange	Elem	William Frangus Elementary	\$15,189,190	96,412	\$158
2018	Orange	Elem	Hidden Oaks Elementary	\$11,937,801	76,944	\$155
2018	Orange	Elem	Hungerford Elementary School	\$12,267,221	68,263	\$180
2018	Orange	Elem	Maxey Elementary School	\$12,279,442	82,448	\$149
2018	Orange	Elem	Pine Hills Elementary School	\$15,276,786	101,828	\$150
2018	Volusia	Elem	Pierson Elementary School	\$16,796,841	120,751	\$139
2018	Clay	Elem	Discovery Oaks Elementary School	\$19,802,549	118,181	\$168
2019	Manatee	Elem	Barbara Harvey Elementary School	\$15,273,839	108,968	\$140
2019	Monroe	Elem	Gerald Adams Elementary School	\$28,979,762	106,000	\$273
2019	Orange	Elem	Deerwood Elementary School	\$15,049,370	83,499	\$180
2019	Orange	Elem	Water Spring Elementary School	\$15,607,674	94,363	\$165
2019	Orange	Elem	Castleview Elementary School	\$15,655,568	104,076	\$150
2019	Taylor	Elem	Taylor County Primary School	\$14,710,412	107,000	\$137
2019	Volusia	Elem	Chisholm Elementary School	\$20,025,951	102,583	\$195
2020	Monroe	Elem	Stanley Switlik Elementary School	\$26,029,130	63,128	\$412
2020	Orange	Elem	Summerlake Elementary School	\$15,296,551	92,142	\$166
2020	Orange	Elem	Sunshine Elementary School	\$15,219,483	91,051	\$167
2020	Orange	Elem	Vista Pointe Elementary School	\$16,228,961	87,697	\$185
2020	Pinellas	Elem	Melrose Elementary School	\$11,504,168	79,014	\$146

Table B-2 Continued
Construction Cost Analysis – Other Florida Jurisdictions

Year Opened	District	Type	Facility Name	Construction Cost	Gross SF	Construction Cost per GSF
Elementary Schools:						
2020	Seminole	Elem	Pine Crest School of Innovation	\$19,027,902	154,694	\$123
2020	Walton	Elem	Dune Lakes Elementary School	\$28,740,110	157,273	\$183
Total/Weighted Average -- Elementary Schools				\$1,018,033,616	7,047,033	\$144
Total/Weighted Average -- Elementary Schools (2015 - 2020)				\$763,543,311	4,902,544	\$156
Total/Weighted Average -- Elementary Schools: Excluding Volusia County				\$967,356,641	6,717,522	\$144
Total/Weighted Average -- Elementary Schools: Excluding Volusia County (2018-20)				\$405,938,611	2,331,330	\$174
Middle Schools:						
2011	Hernando	Middle	Winding Waters K-8	\$21,182,866	241,811	\$88
2011	Polk	Middle	Boone Middle	\$17,900,963	108,633	\$165
2011	Walton	Middle	Emerald Coast Middle	\$15,918,884	129,066	\$123
2012	Collier	Middle	Bethune Education Center	\$5,538,155	38,924	\$142
2012	Dade	Middle	North Dade Middle	\$18,921,534	100,245	\$189
2012	Lee	Middle	Hams Marsh Middle	\$23,750,925	171,050	\$139
2012	Orange	Middle	Lake Nona Middle	\$16,923,455	167,123	\$101
2012	Orange	Middle	SunRidge Middle	\$23,617,116	184,436	\$128
2013	Monroe	Middle	Horace O'Bryant	\$30,596,297	240,080	\$127
2015	St Johns	Middle	Patriot Oaks Academy	\$21,224,724	157,062	\$135
2015	St Johns	Middle	Valley Ridge Academy	\$21,116,642	157,062	\$134
2016	Orange	Middle	Wedgfield K-8 School	\$20,111,884	138,560	\$145
2016	Polk	Middle	Citrus Ridge: A Civics Academy	\$33,560,797	216,483	\$155
2017	Orange	Middle	OCPS Academic Center for Excellence	\$30,678,582	251,812	\$122
2017	Orange	Middle	Innovation	\$22,320,667	174,686	\$128
2017	Orange	Middle	Timber Springs Middle	\$24,333,075	192,319	\$127
2017	Orange	Middle	Carver Middle	\$22,812,870	191,978	\$119
2017	Calhoun	Middle	Atha Public School	\$19,084,925	130,747	\$146
2017	Hillsborough	Middle	Sulphur Springs K-8	\$5,312,830	19,205	\$277
2017	Holmes	Middle	Bonifay PK-8	\$32,270,798	220,940	\$146
2018	Escambia	Middle	Beulah Middle School	\$32,408,450	204,000	\$159
2018	Orange	Middle	Audubon Park School K-8	\$26,388,243	178,149	\$148
2018	Orange	Middle	Lake Como School K-8	\$24,193,636	166,473	\$145
2018	Seminole	Middle	New Millenium Middle School	\$41,807,137	231,420	\$181
2018	St Johns	Middle	Freedom Crossing Academy ("LL") K-8	\$31,540,253	193,725	\$163
2018	St Johns	Middle	Palm Valley Academy ("KK") K-8	\$33,888,445	193,725	\$175
2019	Manatee	Middle	Mona Jain Middle School	\$25,209,315	166,205	\$152
2019	Orange	Middle	Horizon West Middle School	\$24,142,598	185,434	\$130
2019	Orange	Middle	Pershing School K-8	\$25,939,347	172,422	\$150
2019	Osceola	Middle	Harmony Middle School	\$29,966,931	178,935	\$167
2020	Jackson	Middle	Marianna K-8 School	\$52,087,045	334,000	\$156
2020	Monroe	Middle	Plantation Key School	\$36,558,507	106,877	\$342
2020	Palm Beach	Middle	Verde K-8 School	\$26,973,780	143,076	\$189
2020	Pasco	Middle	Cypress Middle School "HH"	\$33,722,701	194,633	\$173
Total/Weighted Average -- Middle Schools				\$872,004,377	5,881,296	\$148
Total/Weighted Average -- Middle Schools (2015-2020)				\$697,654,182	4,499,928	\$155
Total/Weighted Average -- Middle Schools: Excluding Volusia County (2018-20)				\$444,826,388	2,649,074	\$168
High Schools:						
2011	Broward	High	Lanier James Education Center	\$8,889,147	60,862	\$146
2011	Calhoun	High	Blountstown High	\$19,407,910	132,321	\$147
2011	Charlotte	High	Charlotte High	\$61,755,842	415,184	\$149
2011	Lake	High	Lake Minneola High	\$46,988,193	312,344	\$150
2011	Okeechobee	High	Okeechobee Achievement Academy	\$5,499,975	48,331	\$114
2011	Orange	High	Evans High Replacement	\$55,507,691	405,232	\$137
2011	Polk	High	Winter Haven Senior	\$26,374,234	219,148	\$120
2011	Polk	High	Auburndale Senior	\$19,522,053	157,921	\$124
2011	Polk	High	Davenport School of the Arts	\$29,136,512	245,420	\$119
2011	Polk	High	Kathleen Senior	\$24,323,662	153,829	\$158
2012	Dade	High	International Studies SHS	\$7,192,325	37,120	\$194
2012	Dade	High	Medical Academy or Science and Technology	\$9,303,705	83,260	\$112
2012	St. Lucie	High	Lincoln Park Academy	\$10,928,736	98,737	\$111
2013	Martin	High	Martin County High	\$7,623,316	70,038	\$109
2016	Charlotte	High	Lemon Bay High School	\$51,569,511	355,858	\$145
2017	Dade	High	Miami Carol City Senior High	\$62,462,106	363,856	\$172
2017	Levy	High	Williston Middle High School	\$33,542,921	203,250	\$165
2017	Pasco	High	Cypress Creek High	\$41,025,203	264,029	\$155
2017	Dade	High	Maritime & Science Technology Academy	\$13,994,875	97,043	\$144
2017	Osceola	High	Poinciana High	\$4,553,211	26,552	\$171
2017	Pinellas	High	Palm Harbor University High	\$9,983,642	51,346	\$194
2017	St Johns	High	Nease High	\$10,658,296	65,428	\$163
2017	Orange	High	Windermere HS	\$54,879,598	376,016	\$146
2018	Dixie	High	Dixie County High School	\$26,000,000	219,288	\$119
2018	Osceola	High	Tohopekaliga High School	\$66,540,379	378,987	\$176
2018	Pinellas	High	Largo High School	\$39,857,982	276,965	\$144

Table B-2 Continued
Construction Cost Analysis – Other Florida Jurisdictions

Year Opened	District	Type	Facility Name	Construction Cost	Gross SF	Construction Cost per GSF
High Schools:						
2019	Lee	High	Bonita Springs High School	\$44,285,000	224,492	\$197
2019	Manatee	High	Parrish Community High School	\$55,477,768	284,231	\$195
2019	Osceola	High	NeoCity Academy	\$11,757,909	44,928	\$262
2020	Orange	High	Magnolia School	\$19,071,524	78157	\$244
Total/Weighted Average -- High Schools				\$878,113,226	5,750,173	\$153
Total/Weighted Average -- High Schools (2015-2020)				\$545,659,925	3,310,426	\$165
Total/Weighted Average (All Schools)				\$2,768,151,219	18,678,502	\$148

Source: Florida Department of Education and previous Benesch school impact fee studies, when available

Architectural, Design/Site Improvement and Furniture and Fixture and Equipment Costs

The architectural/site preparation and furniture, fixtures, and equipment (FF&E) and other soft costs are calculated based on the ratio of these costs to the construction costs observed in Volusia County and other jurisdictions. These estimates are based on both the recent school construction in Volusia County and cost figures observed in other Florida jurisdictions. Table B-3 provides a summary of information used to develop these estimates.

**Table B-3
Other Building Cost Components**

Cost Item	Average of Recent Projects	Other Florida School Districts ⁽²⁾	2013 Study ⁽³⁾	Used in Study
Site Development	3%	10%	18% to 23%	10%
Architecture/Design	11%	7%		7%
FF&E	6%	8%	9%	8%
Total	20%	25%	27% to 32%	25%

1) Source: Volusia County School District

2) Source: Tables B-4 and B-5

3) Source: *Volusia County Schools, School Impact Fee Update Study, Final Report, April 29, 2013*

Table B-4
Architectural/Civil Design and FF&E Cost Analysis - Seminole County and Other Florida Jurisdictions

Year Opened	District	Type	Facility Name	Architect & Eng. Fees	Ratio of Architect & Eng. Fees to Construction Cost	Furniture & Equipment	Ratio of FF&E to Construction Cost
2011	Broward	High	Lanier James Education Center	\$1,075,459	12%	\$1,304,137	15%
2011	Calhoun	High	Blountstown High	\$1,968,893	10%	\$994,719	5%
2011	Charlotte	Elem	Meadow Park Elementary	\$944,273	7%	\$674,842	5%
2011	Charlotte	High	Charlotte High	\$6,502,129	11%	\$2,676,408	4%
2011	Duval	Elem	Waterleaf Elementary	\$1,621,628	11%	\$1,899,236	13%
2011	Escambia	Elem	Global Learning Academy	\$1,682,415	10%	\$2,861,931	17%
2011	Hernando	Middle	Winding Waters K-8	\$880,709	4%	\$4,279,500	20%
2011	Lake	High	Lake Minneola High	\$3,030,934	6%	\$6,483,383	14%
2011	Okeechobee	High	Okeechobee Achievement Academy	\$453,761	8%	\$427,114	8%
2011	Orange	High	Evans High Replacement	\$3,568,884	6%	\$3,743,130	7%
2011	Orange	Elem	Wetherbee Elementary	\$812,505	7%	\$1,081,762	9%
2011	Pasco	Elem	Connerton Elementary "R"	\$858,671	7%	\$1,298,389	11%
2011	Polk	High	Winter Haven Senior	\$853,483	3%	\$2,360,389	9%
2011	Polk	High	Auburndale Senior	\$1,462,146	7%	\$3,124,050	16%
2011	Polk	High	Davenport School of the Arts	\$1,042,674	4%	\$2,330,971	8%
2011	Polk	High	Kathleen Senior	\$875,094	4%	\$2,267,250	9%
2011	Polk	Middle	Boone Middle	\$1,080,157	6%	\$1,331,348	7%
2011	Walton	Middle	Emerald Coast Middle	\$1,709,689	11%	\$700,000	4%
2012	Alachua	Elem	Meadowbrook Elementary	\$1,010,997	8%	\$1,974,896	16%
2012	Collier	Middle	Bethune Education Center	\$561,233	10%	\$734,057	13%
2012	Dade	High	International Studies SHS	\$684,965	10%	\$757,496	11%
2012	Dade	Middle	North Dade Middle	\$867,900	5%	\$1,122,762	6%
2012	Dade	High	Medical Academy or Science and Technology	\$762,932	8%	\$919,966	10%
2012	Indian River	Elem	Vero Beach Elementary	\$1,476,006	9%	\$1,342,512	8%
2012	Lee	Middle	Hams Marsh Middle	\$721,076	3%	\$1,814,273	8%
2012	Lee	Elem	Tortuga Preserve	\$214,042	1%	\$1,487,461	9%
2012	Orange	Elem	SunRidge Elementary	\$580,395	6%	\$951,358	9%
2012	Orange	Middle	Lake Nona Middle	\$1,277,253	8%	\$1,795,567	11%
2012	Orange	Middle	SunRidge Middle	\$1,137,698	5%	\$1,591,755	7%
2012	St. Johns	Elem	Palencia Elementary	\$956,170	8%	\$1,500,000	12%
2012	St. Lucie	High	Lincoln Park Academy	\$1,623,543	15%	\$3,246,193	30%
2012	Volusia	Elem	Citrus Grove Elementary	\$1,098,766	8%	\$1,555,729	11%
2013	Marion	Elem	Legacy Elementary	\$675,267	7%	\$1,680,825	17%
2013	Martin	High	Martin County High	\$1,274,200	17%	\$419,893	6%
2013	Monroe	Middle	Horace O'Bryant	\$3,221,414	11%	\$1,320,362	4%
2013	Orange	Elem	Sun Blaze Elementary	\$587,445	6%	\$1,035,369	10%
2013	Orange	Elem	Hackney Prairie Road Area Elementary	\$890,931	8%	\$1,057,127	9%
2013	Palm Beach	Elem	Gove Elementary	\$1,871,815	7%	\$917,852	3%
2013	Palm Beach	Elem	Galaxy Elementary	\$1,595,664	7%	\$790,823	4%
2014	Orange	Elem	Shingle Creek ES (Replacement)	\$636,833	7%	\$1,235,140	14%
2014	Orange	Elem	John Young ES (Replacement)	\$644,485	7%	\$1,037,820	12%
2014	Orange	Elem	Pineloch ES	\$632,269	7%	\$1,048,977	11%
2014	Orange	Elem	Dr. Phillips ES	\$837,933	10%	\$835,624	10%
2014	Orange	Elem	Spring Lake ES	\$646,909	7%	\$874,049	9%
2014	Orange	Elem	Washington Shores ES (Replacement)	\$591,793	6%	\$964,395	10%
2014	Orange	Elem	Little River ES	\$1,212,762	15%	\$705,810	9%
2014	Orange	Elem	Wheatley ES (Replacement)	\$740,790	8%	\$803,731	9%
2014	Palm Beach	Elem	The Conservatory School of North Palm Beach	\$1,746,723	8%	\$781,394	4%
2014	Pasco	Elem	Schrader Elementary	\$741,224	7%	\$781,652	7%
2015	Hillsborough	Elem	Thompson Elementary	\$1,117,623	8%	\$1,614,056	12%
2015	Orange	Elem	Eagle Creek Elementary	\$503,008	5%	\$1,168,200	13%
2015	Orange	Elem	Independence Elementary	\$454,954	5%	\$1,168,200	12%
2015	Orange	Elem	Ocoee ES (Replacement)	\$669,660	7%	\$1,039,087	11%
2015	Orange	Middle	Clay Springs Elementary	\$619,675	5%	\$1,265,087	11%
2015	Orange	High	Lake Weston Elementary	\$557,676	6%	\$1,395,286	14%
2015	Orange	Elem	Lovell Elementary	\$532,470	5%	\$1,258,788	12%
2015	Palm Beach	Middle	Glade View Elementary	\$1,142,611	8%	\$661,409	5%
2015	Palm Beach	High	Rosenwald Elementary	\$942,748	8%	\$593,229	5%
2015	Pasco	Elem	Sanders Memorial Elementary	\$1,442,401	8%	\$2,095,402	12%
2015	St Johns	Middle	Patriot Oaks Academy	\$1,492,491	7%	\$2,200,000	10%
2015	St Johns	Middle	Valley Ridge Academy	\$856,884	4%	\$2,200,000	10%
2016	Charlotte	High	Lemon Bay High School	\$6,486,215	13%	\$3,010,405	6%
2016	Hillsborough	Elem	Lamb Elementary	\$1,159,221	8%	\$1,494,022	11%
2016	Orange	Elem	Bay Lake Elementary	\$715,680	6%	\$1,414,425	12%
2016	Orange	Elem	Tangelo Park Elementary	\$766,295	7%	\$1,115,037	10%
2016	Pasco	Elem	Wiregrass Elementary School (Elem "W")	\$993,089	7%	\$1,594,261	11%
2016	Polk	Middle	Citrus Ridge: A Civics Academy	\$1,235,864	4%	\$3,060,826	9%
2016	Washington	Elem	Kate Smith Elementary School	\$1,799,321	9%	\$1,567,022	8%
2017	Orange	Elem	Millenia Gardens Elementary	\$660,780	6%	\$1,129,925	11%
2017	Orange	K8	Wedgfield	\$2,153,131	11%	\$1,787,827	9%
2017	Orange	Elem	Laureate Park Elementary	\$636,009	5%	\$1,365,945	11%
2017	Orange	Elem	Engelwood ES	\$659,183	5%	\$1,284,730	10%
2017	Orange	Elem	Ivey Lane ES	\$599,596	5%	\$1,204,983	10%
2017	Orange	Elem	Meadow Woods ES	\$782,369	6%	\$1,110,974	8%
2017	Orange	Elem	Mollie Ray ES	\$693,404	6%	\$1,226,272	10%
2017	Orange	Elem	Oak Hill ES	\$581,863	5%	\$972,235	8%
2017	Orange	Elem	Rock Lake ES	\$672,601	5%	\$1,235,894	9%
2017	Orange	Elem	Ventura ES	\$780,745	6%	\$1,262,836	9%
2017	Orange	K8	OCPS Academic Center for Excellence	\$2,342,381	8%	\$2,174,838	7%
2017	Orange	Middle	Innovation Middle	\$1,954,764	9%	\$1,789,440	8%
2017	Orange	Middle	Timber Springs Middle	\$2,460,335	10%	\$1,776,313	7%

Table B-4 Continued

Architectural/Civil Design and FF&E Cost Analysis - Seminole County and Other Florida Jurisdictions

Year Opened	District	Type	Facility Name	Architect & Eng. Fees	Ratio of Architect & Eng. Fees to Construction Cost	Furniture & Equipment	Ratio of FF&E to Construction Cost
2017	Orange	Middle	Carver Middle	\$1,519,638	7%	\$1,743,238	8%
2017	St Johns	Elem	Picolata Crossing Elementary	\$711,881	4%	\$1,613,190	8%
2017	Pasco	Elem	Bexley Elementary	\$1,176,816	7%	\$1,795,991	11%
2017	Nassau	Elem	Wildlight Elementary School	\$1,649,044	10%	\$2,457,873	15%
2017	Broward	Elem	Riverglades Elementary	\$303,332	6%	\$412,293	9%
2017	Hamilton	Elem	Hamilton County Elementary School	\$1,677,527	10%	\$1,825,273	10%
2017	Calhoun	Middle	Atha Public School	\$1,436,603	8%	\$1,205,972	6%
2017	Hillsborough	Middle	Sulphur Springs K-8	\$417,315	8%	\$304,755	6%
2017	Holmes	Middle	Bonifay PK-8	\$2,870,562	9%	\$2,616,795	8%
2017	Dade	High	Miami Carol City Senior High	\$5,273,339	8%	\$4,534,318	7%
2017	Levy	High	Williston Middle High School	\$1,849,055	6%	\$672,515	2%
2017	Pasco	High	Cypress Creek High	\$2,712,972	7%	\$4,004,683	10%
2017	Dade	High	Maritime & Science Technology Academy	\$1,052,669	8%	\$815,189	6%
2017	Osceola	High	Poinciana High	\$267,393	6%	\$507,388	11%
2017	Pinellas	High	Palm Harbor University High	\$1,034,481	10%	\$825,000	8%
2017	St Johns	High	Nease High	\$828,000	8%	\$898,000	8%
2017	Orange	High	Windermere HS	\$4,993,625	9%	\$3,600,435	7%
2017	Orange	Elem	Westpointe Elementary	\$860,457	9%	\$1,549,090	16%
2018	Escambia	Elem	Kingsfield Elementary School	\$2,421,087	8%	\$1,500,000	5%
2018	Hillsborough	Elem	Dawson Elementary School	\$712,947	4%	\$1,494,667	9%
2018	Orange	Elem	William Frangus Elementary	\$642,656	4%	\$1,176,891	8%
2018	Orange	Elem	Hidden Oaks Elementary	\$640,642	5%	\$1,069,297	9%
2018	Orange	Elem	Hungerford Elementary School	\$650,486	5%	\$898,313	7%
2018	Orange	Elem	Maxey Elementary School	\$626,928	5%	\$1,115,173	9%
2018	Orange	Elem	Pine Hills Elementary School	\$693,105	5%	\$1,222,976	8%
2018	Volusia	Elem	Pierson Elementary School	\$1,459,238	12%	\$1,320,570	11%
2018	Clay	Elem	Discovery Oaks Elementary School	\$869,100	4%	\$2,115,666	11%
2018	Escambia	Middle	Beulah Middle School	\$3,394,057	10%	\$2,100,000	6%
2018	Orange	Middle	Audubon Park School K-8	\$2,972,528	11%	\$1,891,815	7%
2018	Orange	Middle	Lake Como School K-8	\$2,050,230	8%	\$1,389,540	6%
2018	Seminole	Middle	New Millenium Middle School	\$2,892,045	7%	\$2,420,357	6%
2018	St Johns	Middle	Freedom Crossing Academy ("LL") K-8	\$1,247,321	4%	\$2,552,409	8%
2018	St Johns	Middle	Palm Valley Academy ("KK") K-8	\$1,342,410	4%	\$2,552,409	8%
2018	Dixie	High	Dixie County High School	\$2,055,000	8%	\$190,000	1%
2018	Osceola	High	Tohopekaliga High School	\$3,360,740	5%	\$7,554,619	11%
2018	Pinellas	High	Largo High School	\$3,606,122	9%	\$2,672,069	7%
2019	Manatee	Elem	Barbara Harvey Elementary School	\$1,104,274	7%	\$1,421,736	9%
2019	Monroe	Elem	Gerald Adams Elementary School	\$2,151,000	7%	\$741,878	3%
2019	Orange	Elem	Deerwood Elementary School	\$679,669	5%	\$1,053,641	7%
2019	Orange	Elem	Water Spring Elementary School	\$673,077	4%	\$1,216,334	8%
2019	Orange	Elem	Castlevew Elementary School	\$781,914	5%	\$1,228,879	8%
2019	Taylor	Elem	Taylor County Primary School	\$1,216,820	8%	\$956,924	7%
2019	Volusia	Elem	Chisholm Elementary School	\$206,670	2%	\$1,081,721	9%
2019	Manatee	Middle	Mona Jain Middle School	\$1,580,528	6%	\$1,719,916	7%
2019	Orange	Middle	Horizon West Middle School	\$1,357,152	6%	\$1,837,875	8%
2019	Orange	Middle	Pershing School K-8	\$2,114,313	8%	\$1,803,900	7%
2019	Osceola	Middle	Harmony Middle School	\$1,552,230	5%	\$2,909,828	10%
2019	Lee	High	Bonita Springs High School	\$2,178,000	5%	\$5,654,899	13%
2019	Manatee	High	Parrish Community High School	\$2,436,800	4%	\$3,103,578	6%
2019	Osceola	High	NeoCity Academy	\$1,436,484	12%	\$1,701,403	14%
2020	Jackson	Middle	Marianna K-8 School	\$4,686,265	9%	\$0	0%
2020	Monroe	Middle	Plantation Key School	\$276,122	1%	\$1,460,039	4%
2020	Monroe	Elem	Stanley Switlik Elementary School	\$1,762,172	7%	\$960,545	4%
2020	Orange	High	Magnolia School	\$1,468,970	8%	\$783,281	4%
2020	Orange	Elem	Summerlake Elementary School	\$717,175	5%	\$1,111,507	7%
2020	Orange	Elem	Sunshine Elementary School	\$748,162	5%	\$998,043	7%
2020	Orange	Elem	Vista Pointe Elementary School	\$600,440	4%	\$1,132,166	7%
2020	Palm Beach	Middle	Verde K-8 School	\$2,411,658	9%	\$1,750,237	6%
2020	Pasco	Middle	Cypress Middle School "HH"	\$2,073,215	6%	\$2,810,008	8%
2020	Pinellas	Elem	Melrose Elementary School	\$1,129,923	10%	\$101,749	1%
2020	Seminole	Elem	Pine Crest School of Innovation	\$1,718,290	9%	\$3,187,873	17%
2020	Walton	Elem	Dune Lakes Elementary School	\$3,049,104	11%	\$1,790,828	6%
Total/Weighted Average				\$202,791,762	7%	\$234,297,938	8%
Total/Weighted Average (Excluding Volusia County)				\$200,027,088	7%	\$230,339,918	8%
Total/Weighted Average (2015-2020)				\$140,846,825	7%	\$157,374,511	8%

Source: Florida Department of Education and previous Benesch school impact fee studies, when available.

Table B-5
Site Development Cost Analysis - Volusia County and Other Florida Jurisdictions

Year Opened	District	Type	Facility Name	Site Development	Ratio of Site Development to Construction Cost
2011	Broward	High	Lanier James Education Center	\$918,943	10%
2011	Calhoun	High	Blountstown High	\$1,362,604	7%
2011	Charlotte	Elem	Meadow Park Elementary	\$1,802,689	14%
2011	Charlotte	High	Charlotte High	\$7,904,370	13%
2011	Duval	Elem	Waterleaf Elementary	\$1,361,500	9%
2011	Escambia	Elem	Global Learning Academy	\$200,000	1%
2011	Hernando	Middle	Winding Waters K-8	\$0	0%
2011	Lake	High	Lake Minneola High	\$454,710	1%
2011	Okeechobee	High	Okeechobee Achievement Academy	\$1,300	0%
2011	Orange	High	Evans High Replacement	\$2,151,931	4%
2011	Orange	Elem	Wetherbee Elementary	\$0	0%
2011	Pasco	Elem	Connerton Elementary "R"	\$2,313,586	20%
2011	Polk	High	Winter Haven Senior	\$0	0%
2011	Polk	High	Auburndale Senior	\$0	0%
2011	Polk	High	Davenport School of the Arts	\$0	0%
2011	Polk	High	Kathleen Senior	\$0	0%
2011	Polk	Middle	Boone Middle	\$0	0%
2011	Walton	Middle	Emerald Coast Middle	\$1,717,116	11%
2012	Alachua	Elem	Meadowbrook Elementary	\$86,278	1%
2012	Indian River	Elem	Vero Beach Elementary	\$1,196,000	7%
2012	Collier	Middle	Bethune Education Center	\$479,652	9%
2012	Dade	High	International Studies SHS	\$0	0%
2012	Dade	Middle	North Dade Middle	\$0	0%
2012	Dade	High	Medical Academy or Science and Technology	\$0	0%
2012	Lee	Middle	Hams Marsh Middle	\$2,100,258	9%
2012	Lee	Elem	Tortuga Preserve	\$1,367,613	9%
2012	Orange	Elem	SunRidge Elementary	\$1,296,632	13%
2012	Orange	Middle	Lake Nona Middle	\$0	0%
2012	Orange	Middle	SunRidge Middle	\$1,051,252	4%
2012	St. Johns	Elem	Palencia Elementary	\$0	0%
2012	St. Lucie	High	Lincoln Park Academy	\$7,901,452	72%
2012	Volusia	Elem	Citrus Grove Elementary	\$415,026	3%
2013	Martin	High	Martin County High	\$536,994	7%
2013	Monroe	Middle	Horace O'Bryant	\$2,740,572	9%
2013	Orange	Elem	Sun Blaze Elementary	\$658,487	6%
2013	Orange	Elem	Hackney Prairie Road Area Elementary	\$657,635	6%
2014	Orange	Elem	Shingle Creek ES (Replacement)	\$1,188,410	14%
2014	Orange	Elem	John Young ES (Replacement)	\$1,438,471	16%
2014	Orange	Elem	Washington Shores ES (Replacement)	\$1,395,463	14%
2014	Orange	Elem	Wheatley ES (Replacement)	\$1,083,517	12%
2014	Orange	Elem	Pineloch ES	\$1,409,183	15%
2014	Orange	Elem	Dr. Phillips ES	\$1,850,611	23%
2014	Orange	Elem	Spring Lake ES	\$1,276,130	13%
2014	Orange	Elem	Little River ES	\$1,142,327	14%
2014	Pasco	Elem	Schrader Elementary	\$1,217,102	11%
2015	Hillsborough	Elem	Thompson Elementary	\$1,020,579	8%
2015	Orange	Elem	Clay Springs Elementary	\$2,096,813	18%
2015	Orange	High	Lake Weston Elementary	\$1,719,879	17%
2015	Orange	Elem	Lovell Elementary	\$851,121	8%
2015	Orange	Elem	Eagle Creek Elementary	\$1,934,060	21%
2015	Orange	Elem	Independence Elementary	\$1,649,461	18%
2015	Orange	Elem	Ocoee ES (Replacement)	\$1,470,388	16%
2015	Palm Beach	Middle	Glade View Elementary	\$1,652,065	11%
2015	Palm Beach	High	Rosenwald Elementary	\$1,853,846	16%
2015	Pasco	Elem	Sanders Memorial Elementary	\$1,478,220	9%
2015	St Johns	Middle	Patriot Oaks Academy	\$0	0%
2015	St Johns	Middle	Valley Ridge Academy	\$0	0%
2016	Charlotte	High	Lemon Bay High School	\$7,169,846	14%
2016	Hillsborough	Elem	Lamb Elementary	\$3,980	0%
2016	Orange	Elem	Bay Lake Elementary	\$2,371,208	19%
2016	Orange	Elem	Tangelo Park Elementary	\$1,682,616	15%
2016	Pasco	Elem	Wiregrass Elementary School (Elem "W")	\$1,213,282	8%
2016	Polk	Middle	Citrus Ridge: A Civics Academy	\$0	0%
2016	Washington	High	Kate Smith Elementary School	\$2,568,867	12%
2017	Orange	Elem	Millenia Gardens Elementary	\$1,802,063	17%
2017	Orange	K8	Wedgfield School K-8	\$3,151,392	16%
2017	Orange	Elem	Laureate Park Elementary	\$1,229,287	10%
2017	Orange	Elem	Engelwood ES	\$1,389,126	11%
2017	Orange	Elem	Ivey Lane ES	\$1,526,111	13%
2017	Orange	Elem	Meadow Woods ES	\$1,358,748	10%
2017	Orange	Elem	Mollie Ray ES	\$1,525,138	13%

Table B-5
Site Development Cost Analysis - Volusia County and Other Florida Jurisdictions

Year Opened	District	Type	Facility Name	Site Development	Ratio of Site Development to Construction Cost
2017	Orange	Elem	Oak Hill ES	\$1,629,450	13%
2017	Orange	Elem	Rock Lake ES	\$2,685,941	20%
2017	Orange	Elem	Ventura ES	\$2,458,354	18%
2017	Orange	K8	OCPS Academic Center for Excellence	\$1,503,611	5%
2017	Orange	Middle	Innovation Middle	\$1,856,965	8%
2017	Orange	Middle	Timber Springs Middle	\$3,047,594	13%
2017	Orange	Middle	Carver Middle	\$3,648,736	16%
2017	Orange	High	Windermere HS	\$8,003,699	15%
2017	Pasco	Elem	Bexley Elementary	\$1,481,772	9%
2017	Nassau	Elem	Wildlight Elementary School	\$4,423,526	27%
2017	Broward	Elem	Riverglades Elementary	\$671,049	14%
2017	Hamilton	Elem	Hamilton County Elementary School	\$1,241,320	7%
2017	Calhoun	Middle	Atha Public School	\$1,389,719	7%
2017	Hillsborough	Middle	Sulphur Springs K-8	\$0	0%
2017	Holmes	Middle	Bonifay PK-8	\$1,489	0%
2017	Dade	High	Miami Carol City Senior High	\$7,753,194	12%
2017	Levy	High	Williston Middle High School	\$1,773,603	5%
2017	Pasco	High	Cypress Creek High	\$8,217,342	20%
2017	Dade	High	Maritime & Science Technology Academy	\$335,946	2%
2017	Osceola	High	Poinciana High	\$414,907	9%
2017	Pinellas	High	Palm Harbor University High	\$2,306,147	23%
2017	St Johns	High	Nease High	\$0	0%
2017	Orange	Elem	Westpointe Elementary	\$1,422,408	15%
2018	Hillsborough	Elem	Hope Dawson Elementary	\$0	0%
2018	Escambia	Elem	Kingsfield Elementary School	\$1,835,262	6%
2018	Orange	Elem	William Frangus Elementary	\$2,529,474	17%
2018	Orange	Elem	Hidden Oaks Elementary	\$1,686,521	14%
2018	Orange	Elem	Hungerford Elementary School	\$1,490,730	12%
2018	Orange	Elem	Maxey Elementary School	\$1,103,308	9%
2018	Orange	Elem	Pine Hills Elementary School	\$1,026,205	7%
2018	Volusia	Elem	Pierson Elementary School	\$2,081,652	18%
2018	Clay	Elem	Discovery Oaks Elementary School	\$1,668,705	8%
2018	Escambia	Middle	Beulah Middle School	\$7,401,440	23%
2018	Orange	Middle	Audubon Park School K-8	\$1,787,707	7%
2018	Orange	Middle	Lake Como School K-8	\$1,747,202	7%
2018	Seminole	Middle	New Millenium Middle School	\$1,714,394	4%
2018	St Johns	Middle	Freedom Crossing Academy ("LL") K-8	\$0	0%
2018	St Johns	Middle	Palm Valley Academy ("KK") K-8	\$0	0%
2018	Dixie	High	Dixie County High School	\$1,500,000	6%
2018	Osceola	High	Tohopekaliga High School	\$9,186,709	14%
2018	Pinellas	High	Largo High School	\$10,741,728	27%
2019	Manatee	Elem	Barbara Harvey Elementary School	\$1,055,565	7%
2019	Monroe	Elem	Gerald Adams Elementary School	\$0	0%
2019	Orange	Elem	Deerwood Elementary School	\$2,253,796	15%
2019	Orange	Elem	Water Spring Elementary School	\$1,844,486	12%
2019	Orange	Elem	Castleview Elementary School	\$1,587,126	10%
2019	Taylor	Elem	Taylor County Primary School	\$2,266,867	15%
2019	Volusia	Elem	Chisholm Elementary School	\$0	0%
2019	Manatee	Middle	Mona Jain Middle School	\$3,674,825	15%
2019	Orange	Middle	Horizon West Middle School	\$2,924,349	12%
2019	Orange	Middle	Pershing School K-8	\$1,866,230	7%
2019	Osceola	Middle	Harmony Middle School	\$4,005,510	13%
2019	Lee	High	Bonita Springs High School	\$11,339,000	26%
2019	Manatee	High	Parrish Community High School	\$8,097,183	15%
2019	Osceola	High	NeoCity Academy	\$2,227,396	19%
2020	Jackson	Middle	Marianna K-8 School	\$0	0%
2020	Monroe	Middle	Plantation Key School	\$208,401	1%
2020	Monroe	Elem	Stanley Switlik Elementary School	\$0	0%
2020	Orange	High	Magnolia School	\$2,328,178	12%
2020	Orange	Elem	Summerlake Elementary School	\$1,713,260	11%
2020	Orange	Elem	Sunshine Elementary School	\$3,074,502	20%
2020	Orange	Elem	Vista Pointe Elementary School	\$4,458,820	27%
2020	Palm Beach	Middle	Verde K-8 School	\$3,336,287	12%
2020	Pasco	Middle	Cypress Middle School "HH"	\$6,161,935	18%
2020	Pinellas	Elem	Melrose Elementary School	\$1,108,393	10%
2020	Seminole	Elem	Pine Crest School of Innovation	\$1,770,059	9%
2020	Walton	Elem	Dune Lakes Elementary School	\$1,914,262	7%
Total/Weighted Average				\$268,380,149	10%
Total/Weighted Average (2015-2020)				\$215,702,335	11%
Total/Weighted Average (Excluding Volusia)				\$265,883,471	10%

Source: Florida Department of Education and previous Benesch school impact fee studies, when available.

Administrative Facilities Costs Analysis

VCS currently has over 323,800 square feet of permanent ancillary facilities for transportation, maintenance, warehouse, and administrative functions. Based on the insurance values and estimates obtained from other jurisdictions, the ancillary facility value is estimated at \$200 per square foot.

Land Value Analysis

To estimate the current land value, the following analysis is conducted:

- Recent land appraisals completed in 2020 and 2021 for Volusia County Schools provided land cost ranging from \$70,000 per acre to \$96,000 per acre.
- A review of the current market value of land from the Property Appraiser database where the existing schools are located indicated a weighted average value of \$21,000, with a range of \$1,500 per acre to \$196,000 per acre. Property Appraiser estimates for publicly owned land are considered to be conservative since these properties do not pay taxes, and therefore the values are not updated frequently.
- An analysis of vacant land sales in Volusia County between 2017 and 2021 for parcels of similar size to the current inventory suggested an average value of \$47,000 per acre.
- An analysis of estimated market value of vacant land from the Property Appraiser database for parcels of similar size to the current inventory resulted an average value of \$31,000 per acre.

Given this information, a unit cost of \$50,000 per acre is found to be a reasonable estimate for impact fee calculation purposes.



Volusia County Schools

School Impact Fee

Demonstrated Needs Study

October 29, 2022

Prepared for:

Volusia County Schools

200 North Clara Ave

DeLand, Florida 32720

Prepared by:

Benesch

1000 N. Ashley Dr., #400

Tampa, Florida, 33602

ph (813) 224-8862

E-mail: nkamp@benesch.com



Volusia County

School Impact Fee Update Study

Demonstrated Needs Study

The Volusia County School Impact Fee was originally adopted in 1992 and last updated in 2013. Volusia County Schools (VCS) retained Benesch in 2021 to update the impact fee program. In June 2021, Florida House Bill (HB) 337 was signed by the Governor, which placed limits on impact fee increases while allowing local governments to exceed these limits if the following is fulfilled:

1. A demonstrated needs study justifying any increase in excess of those authorized that has been completed within 12 months before the adoption of the impact fee increase and expressly demonstrating the extraordinary circumstances necessitating the need to exceed the phase-in limitations.
2. No less than two publicly noticed workshops dedicated to the extraordinary circumstances.
3. Approval of the impact fee increase ordinance by at least a two-thirds vote of the governing body.

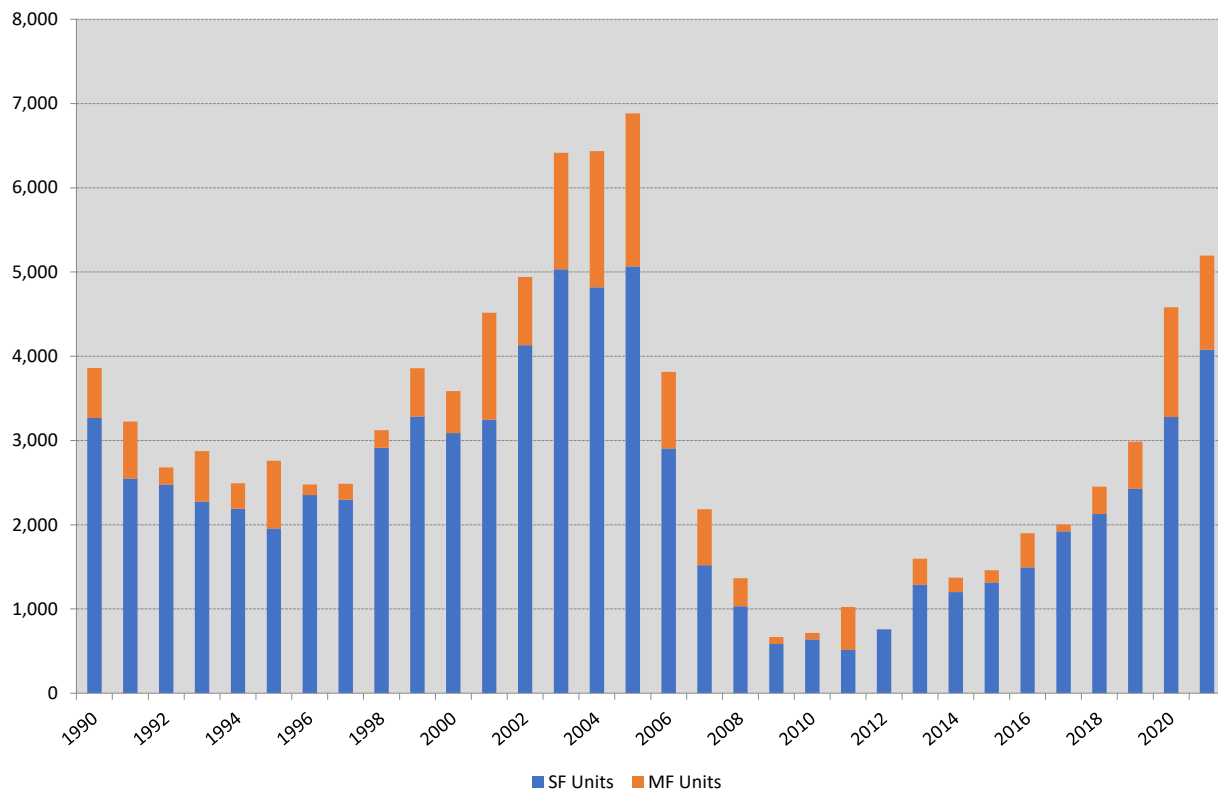
Benesch completed a technical study that updated the existing school impact fee program. The study provided the data and analysis that support a level of increase exceeding the 50-percent limit identified in HB 337 primarily due to time elapsed since the last update of the impact fee program and adopted percentage implemented in 2013. In addition, VCS developed a list of needed capacity expansion projects that could be built in a more timely manner with additional impact fee revenues. The remaining sections of this document address the need for and extraordinary circumstances that necessitate an increase higher than 50 percent.

Volusia County Profile and Growth Trends

With a population of 570,000, Volusia County ranks 12th out of 67 Florida counties in terms of population. The county continues to experience growth. Growth projections provided by University of Florida, Bureau of Business and Economic Research (BEER) range from 0.73 percent to 1.25 percent per year over the next ten years. In terms of absolute growth, the County ranks 16th out of 67 counties and is projected to add 137,000 persons through 2050.

Consistent with these population growth patterns, permits for new structures have been increasing. **Figure 1** shows residential permitting trends. As presented, after a decline between 2005 and 2012 due to the economic downturn, permitting levels started to increase again. The number of residential permits increased from approximately 665 permits in 2009 to almost 5,200 permits in 2021.

Figure 1
Residential Permitting



Source: U.S. Census

This continuing growth is resulting in a need for additional student stations at certain subareas of the county. While some schools have available capacity, development patterns require additional stations at locations that are near or at capacity, resulting in a need to construct additional stations.

Impact Fee Updates and Cost Increases

Volusia County school impact fees were last updated in 2013, and therefore, reflect 10 years old data including the cost levels. During 2012 and 2013, the School Board convened a rule making committee that included representatives from the Volusia Building Industry Association and VCS staff. This committee was involved in reviewing the 2013 school impact fee report and making a recommendation on a school impact fee. The impact fee was adopted at approximately \$3,000 per home, which represented 66 percent of the full fee at that time. In addition, the agreement with the negotiated rule making committee required that the discounted fees were to remain in effect until 2022. Although a technical study was completed in 2018, it was used for informational purposes only. Many jurisdictions update their fees every four to five years to reflect current conditions.

Over the past several years, the School District has been experiencing significant cost increases. While school construction cost was approximately \$200 per square foot for stations constructed between 2017 and 2021, this cost increased to an average of almost \$310 per square foot in bids received since August 2021, reflecting a cost increase of 50 percent just over the past five years.

In addition to cost increases and the reduced fee levels, calculated fees also reflect updated capital asset inventory, accounting for investment made into school infrastructure over the past 10 years, as well as updates to credit and demand components. Calculated fees for all residential categories combined result in an increase of almost 140 percent.

Table 1 provides a comparison of calculated and adopted fee levels. As shown, if the calculated impact fees were adopted at full levels and fees were updated more frequently (every five years), the fee increase would be approximately 25 percent as opposed to 140 percent. The current fee levels that were artificially capped in 2013 due to the agreement create an extraordinary circumstance in terms of fees failing to reflect current cost levels.

Table 1
Calculated and Adopted School Impact Fee Levels

Study Date	Full Calculated Fee - All Residential	% Change	Adopted Fee	% Change to Full Calculated Rate
2013	\$4,483		\$3,000	
2018	\$5,664	26%	\$2,942	89%
2022	\$7,045	24%	N/A	139%

Project Needs

The School District identified a list of capacity expansion projects to address demand for additional student stations. The current Work Program includes \$44 million of impact fee funding. In addition, VCS has a list of additional needs that amount to \$114 million that could be funded impact fee revenues.

Over the past four years, school impact fees generated \$6 million to almost \$13 million per year. Based on recent permitting levels, the full calculated fee is estimated to generate \$20 million to \$28 million per year. With this level of revenues, the School District would be able to fund the additional projects needed in four to six years. With the caps placed by HB 337, the revenues are likely to range from \$10 million to \$15 million per year. With these reduced revenues, in the absence of other revenue sources, the needed projects would be built in eight to 12 years, instead of four to six years.

Summary and Conclusions

This supplemental document provided information demonstrating the need for and extraordinary conditions necessitating an increase above the 50-percent limit for the Volusia County school impact fees. The key findings of this review include the following:

- Volusia County is continuing to experience growth, which is necessitating the construction of additional school capacity.
- The primary reasons for the high increase are the 10-year time period between the last update and this update studies, and the adoption of the 2013 fees at a reduced rate in accordance with the agreement with the negotiated rule making committee. Many jurisdictions update their fees every four to five years. If updated every five years, fees would have increased only 25 percent instead of 140 percent.
- Costs are continuing to increase making it difficult for School Districts to fund capacity projects.
- VCS identified a list of needs that are impact fee eligible. Adopting a fee that is capped under HB 337 would double the time needed to build these projects with impact fee revenues. With reduced impact fee levels, the existing population will need to subsidize new growth, or the level of service will degrade.