

**Collier County
School Impact Fee
Update Study**

FINAL Report



Prepared for:

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June 23, 2015

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Appendix A – School District Inventory

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Introduction

To comply with the technical study update requirements of the impact fee ordinance and given the recent changes in variables affecting the impact fee, Collier County (referred to hereafter as the County) retained Tindale Oliver to update the school impact fee schedule. The County's current adopted fee is based on a 2006 study, adopted at 50 percent. Although an update study was completed in 2011, the County decided to maintain the 50-percent rate based on the 2006 study.

The last technical support document for the County's adopted School Impact Fee was completed in 2006.

The study methodology is documented in the following 10 sections of this technical report:

- Methodology
- Inventory
- Service Area and Population
- 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 Collier County School District (the District), Collier County, and other sources, as indicated.

Methodology

The methodology used to update the school impact fee is a consumption-based impact fee methodology, which has also been used to calculate the current adopted school impact fee for Collier County as well as several school impact fees throughout Florida, including, but not limited to fees in Orange, Osceola, Citrus, Highlands, Palm Beach and Brevard Counties. A consumption-based impact fee charges new development 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. A consumption-based impact fee is intended to charge new growth the proportionate share of the cost of providing a new student station available for use by new growth.

A consumption-based methodology has been used for this study.

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 costs, in amount or sources of revenue available for expansion, or a decision to incur additional debt to fund new capacity.

Inventory

The Collier County School District provides public education facilities that are available to all school-age residents of Collier County. As such, this analysis will consider all public elementary, middle, and high school level facilities and the students attending these facilities located throughout and living within Collier County.

The District currently operates 48 traditional public schools that serve the students of Collier County and its municipalities, including 29 elementary schools, 10 middle schools, 8 high schools, and 1 multi-level school. The District also operates a number of other programs, including alternative learning programs, technical schools, and adult learning centers in the county. To ensure that the impact fee reflects only classroom space for traditional schools, adult, technical, and alternative learning schools are not included in the inventory and impact fee calculations. The District's current school inventory is provided in Appendix A, Table A-1.

*Collier County
School District
operates 48
traditional schools as
well as other types of
schools.*

Service Area and Enrollment

The Collier County School District provides public education facilities that are available to all Pre-Kindergarten thru 12th grade (PK-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. As such, the appropriate impact fee district for public schools is countywide.

Table 1 presents the historical student enrollment since 2000, as well as projected enrollment through 2019. Historical enrollment figures are based on the 5th Month Membership Counts for Years 2000 through 2015. Projections for future years are obtained from the District's *Capital Improvement Plan FY 15-34*.

In order to be consistent with the inventory used in the impact fee analysis, the enrollment figures presented in this table only include those students attending (or projected to attend) the schools listed in Appendix A, Table A-1. The annual percent change for the enrollment is presented, as well as a three-year average to account for random fluctuations. Table 1 reflects that student enrollment increased by about 1,060 students over the past five years.

Table 1
Collier County Enrollment

Year	Enrollment ⁽¹⁾	Annual Percent Change	3-Year Average
2000-01	34,157	N/A	N/A
2001-02	36,240	6.1%	N/A
2002-03	37,635	3.8%	N/A
2003-04	39,441	4.8%	4.9%
2004-05	40,942	3.8%	4.1%
2005-06	41,870	2.3%	3.6%
2006-07	41,612	-0.6%	1.8%
2007-08	41,056	-1.3%	0.1%
2008-09	41,178	0.3%	-0.5%
2009-10	41,672	1.2%	0.1%
2010-11	41,820	0.4%	0.6%
2011-12	42,020	0.5%	0.7%
2012-13	42,566	1.3%	0.7%
2013-14	42,934	0.9%	0.9%
2014-15	42,878	-0.1%	0.7%
2015-16	43,442	1.3%	0.7%
2016-17	43,494	0.1%	0.4%
2017-18	43,488	0.0%	0.5%
2018-19	43,507	0.0%	0.0%

(1) Source: Collier County School District, excludes alternative schools. Years 2000-01 through 2014-15 are based on 5th month count; and future year estimates are obtained from the FY 15 – 34 CIP

Facility Service Delivery

Schools that were recently constructed or planned to be constructed by the District over the next 20 years are similarly designed in square footage and student stations. These “prototype” schools have been or will be constructed to different standards than the older existing schools. More efficient, recently built prototype facilities are used to measure service delivery levels.

More efficient, recently built prototype facilities are used to measure the service delivery levels.

Table 2 illustrates the facility service delivery in Collier County, which is 139.1 Florida Inventory of School Houses (FISH) net square feet per permanent student station for elementary schools, 144.9 FISH net square feet per permanent student station for middle schools, and 161.2 FISH net square feet per permanent student station for high schools.

Table 2
Facility Service Delivery

Description	School Type		
	Elementary	Middle	High
Permanent Net Square Footage ⁽¹⁾	497,943	170,529	290,085
Permanent Student Stations ⁽²⁾	3,581	1,177	1,800
Net Square Feet per Student Station ⁽³⁾	139.1	144.9	161.2

(1), (2) Source: Collier County School District

(3) Permanent FISH net square footage (Item 1) divided by permanent student stations (Item 2)

Cost Component

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

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

Facility Cost per Student Station

The first step in determining the cost of providing public schools to Collier 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 architect/site improvement costs; construction costs; furniture, fixtures, and equipment (FF&E) costs; the cost to purchase the land; and the interest carrying cost. Each component of the school facility cost is described in more detail in the following subsections.

Architect/Site Improvement, Construction and FF&E Costs

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

- Construction cost associated with the on-going addition to Immokalee Middle School;
- Information obtained on the ratio of other cost components (such as design, site preparation, furniture/fixture/equipment, etc.) to the construction cost for projects built since 2009;
- Insurance values of existing schools, which provides a conservative estimate since more permanent parts of the structures, such as the foundation, etc. are typically not insured;
- School cost estimates provided by the Collier County School District;
- Information obtained from other jurisdictions regarding recently built schools; and
- Estimates provided by industry architects active in Collier County.

Detailed information on cost estimates is included in Appendix B.

Table 3 presents the cost per square foot figures for the architect/site improvement, construction, and FF&E cost components for each school type. For illustration purposes, Table 3 also presents the weighted average figure for each cost component, based on all three school types that are planned to be built over the next 20 years.

Land Cost

For each school type, the land cost per square foot is based on a value of \$85,000 per acre. This cost per acre is based primarily on a review of the location of planned schools over the next 20 years and vacant land values in these areas as well as the School District's recent land purchases/appraisals. The results of the land value analysis are documented in Appendix B.

The land cost per square foot of building by school type was developed based on the acres per 1,000 permanent net building square feet for the future prototype schools. The resulting land value figures used for each type of school are presented in Table 3.

Net Interest Cost

It should be noted that, when a School District incurs debt to fund additional capacity, interest carrying costs need to be added to the school facility construction costs. Historically, Collier County School District obtained 85 percent of the funding for new or expanding schools by issuing Certificates of Participation (COPs). However, the Collier County School Board's recent policy direction requires reducing reliance on debt financing. Based on discussions with the District representatives, it is estimated that future school funding from COPs is likely to decrease to 25 percent, and the remaining amount will be paid with cash. Resulting interest cost incurred during the construction period is also included in Table 3. The figure includes a downward adjustment of 75 percent to account for the expansion projects estimated to be funded with cash payment based on recent policy direction.

Table 3
School Facility Cost per Student Station

Cost Component	Elementary School	Middle School	High School	Total / Weighted Average
Square Feet per Student Station (LOS) ⁽¹⁾	139.1	144.9	161.2	N/A
Additional Planned Capacity for the Next 20 Years ⁽²⁾	5,514	2,584	4,046	12,144
School Facility Cost Components:				
Facility Planning Cost per Square Foot ⁽³⁾	\$27.00	\$30.00	\$33.00	\$29.64
Construction Cost per Square Foot ⁽⁴⁾	\$180.00	\$200.00	\$220.00	\$197.58
FF&E Cost per Square Foot ⁽⁵⁾	\$23.40	\$26.00	\$28.60	\$25.69
Land Cost per Square Foot ⁽⁶⁾	\$13.69	\$17.43	\$14.62	\$14.80
Net Interest Carrying Cost per Facility ⁽⁷⁾	\$2.17	\$3.68	\$3.91	\$3.07
Total Facility Cost per Square Foot ⁽⁸⁾	\$246.26	\$277.11	\$300.13	\$270.78
Facility Cost per Student Station⁽⁹⁾	\$34,255	\$40,153	\$48,381	\$40,216

(1) Source: Table 2

(2) Source: Educational Plant Survey, 2011 and 2014-2015 Work Plan

(3), (4), (5) For each school type, the respective cost per square foot figures are based on recent/on-going construction figures, estimates obtained from the Collier County School District, recent bids obtained from other school districts in Florida, and information from industry architects. Detailed information on cost estimates is included in Appendix B.

(6) The land cost per square foot for each school type is based on the acreage per 1,000 permanent square feet for the future prototype schools at a cost of \$85,000 per acre. This cost per acre estimate is based on recent land purchases/appraisals, location of future schools within the county and average land values in these areas. Further information is included in Appendix B.

(7) Net interest carrying cost represents the interest the District has to pay for borrowing the necessary funds to construct new schools. The cost is adjusted downward by 75% to reflect that the District is likely to fund approximately 75% of the capacity expansion projects with cash, and borrow the remainder.

(8) Sum of the school facility cost per net square foot (Items 3 thru 7)

(9) The net square feet per permanent student station (Item 1) multiplied by the total school facility cost per net square foot (Item 8) for each respective school type. Weighted average is based on the number of stations that are planned for each school type (Item 2).

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 derived in Table 3, and is typically calculated by dividing the cost per student station by the ratio of current student enrollment to available capacity (number of permanent student stations typically adjusted by 100% for elementary schools, 90% for middle schools, and 95% for high schools). 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 availability or shortage in permanent capacity and adjusts the costs accordingly. If there is available capacity (e.g., currently more permanent student stations than expected students), then the total facility cost per student increases because the achieved level of service suggests more than one station per student to accommodate functional or program capacity needs. Similarly, if there are currently more students enrolled than available capacity, the cost per student is adjusted downward.

In the case of Collier County, there is currently 14 percent permanent capacity available in elementary schools, 11 percent permanent capacity available in middle schools, and 15 percent permanent capacity available in high schools.

Prior to including these figures in the calculations, an adjustment was made to account for impact fee revenues used to pay off debt service. The adopted Work Plan for FY 14-15 estimates that the School District will use an average of \$9.4 million per year toward Certificates of Participation (COPs) debt service payments. When this annual dollar amount is converted to student stations that are funded with COPs, the permanent capacity that is owned or will be paid with non-impact fee revenues decreases to 20,143 in elementary schools and 10,825 in middle schools. Based on these figures, there is a capacity shortage of 4 percent in elementary schools and the available capacity in middle schools is reduced to 9 percent.

Finally, the District's adopted level of service standard calls for an enrollment-to-FISH capacity ratio of 95 percent for elementary and middle schools, and a ratio of 100 percent for high schools.

The weighted average cost per student is calculated under each of these cases and the lowest cost is used for impact fee calculation purposes. This is because while inventory

availability represent the community's investment into educational facilities, adopted level of service (LOS) standards represent the future LOS the School District intends to provide. As presented in **Table 4**, the resulting weighted average cost per student based on the adopted LOS standards is \$41,485 per student. Using the achieved LOS, this figure would have increased to approximately \$43,308 per student.

Table 4
Total Facility Impact Cost per Student by School Type

Calculation Step	Elementary School	Middle School	High School	Weighted Average/ Total
Facility Impact Cost per Student				
Facility Cost per Student Station ⁽¹⁾	\$34,255	\$40,153	\$48,381	\$40,216
Existing Student Enrollment for 2014/15 School Year ⁽²⁾	20,901	9,831	12,146	42,878
Existing Student Capacity for 2014/15 School Year ⁽³⁾	24,192	11,100	14,262	49,554
Existing Student Capacity for 2014/15 School Year Adjusted for Impact Fee Payments ⁽⁴⁾	20,143	10,825	14,262	45,230
Ratio of Existing Enrollment to Existing Permanent Capacity ⁽⁵⁾	86%	89%	85%	87%
Ratio of Existing Enrollment to Existing Permanent Capacity Adjusted for Impact Fee Payments ⁽⁶⁾	104%	91%	85%	95%
Adopted Level of Service Standard ⁽⁷⁾	95%	95%	100%	N/A
Additional Planned Capacity for the Next 20 Years ⁽⁸⁾	5,514	2,584	4,046	12,144
Weighted Average Total Facility Impact Cost per Student based on Total Available Capacity ⁽⁹⁾	\$39,831	\$45,116	\$56,919	\$46,649
Weighted Average Total Facility Impact Cost per Student based on Adjusted Permanent Capacity ⁽¹⁰⁾	\$32,938	\$44,124	\$56,919	\$43,308
Weighted Average Total Facility Impact Cost per Student Based on Adopted LOS Standard⁽¹¹⁾	\$36,058	\$42,266	\$48,381	\$41,485

(1) Source: Table 3

(2) Source: Collier County School District, excludes alternative schools, based on 5th month count

(3) Source: Appendix A, Table A-1

(4) Existing student capacity for 2014/15 school year (Item 3) adjusted for capacity expansion funded with COPs where the debt service is being paid back with impact fee revenues

(5) Existing student enrollment for 2014/15 school year (Item 2) divided by the existing student capacity for 2014/15 school year (Item 3)

(6) Existing student enrollment for 2014/15 school year (Item 2) divided by the existing student capacity for 2014/15 school year adjusted for impact fee payments (Item 4)

(7) Source: Capital Improvement Plan FY 15-34, Collier County School District

(8) Source: Table 3

(9) Facility cost per student station (Item 1) divided by the ratio of existing enrollment to existing permanent capacity (Item 5)

(10) Facility cost per student station (Item 1) divided by the ratio of existing enrollment to existing permanent capacity adjusted for impact fee payments (Item 6)

(11) Facility cost per student station (Item 1) divided by the adopted level of service standard (Item 7)

Total Cost per Student

In addition to the facility cost per student calculated in Table 4, 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. The District currently owns 351 buses used for student transportation at an average cost of approximately \$116,000 per bus, which includes related equipment such as radios, GPS, cameras, etc., and is consistent with bus costs observed in other school districts. In addition to its bus fleet, the District has 238 support vehicles, which include vehicles such as cars, vans, trailers, and trucks. The cost of the support vehicles varies depending on the type of vehicle, with an average cost of approximately \$27,000 per vehicle, based on the information provided by the District. The result is a total value of \$47.0 million for transportation services, including \$40.6 million for buses and \$6.4 million for support vehicles. The total value of the transportation fleet is divided by the District's enrollment for schools included in Appendix A, Table A-1 (presented in Table 1). The result is a cost of \$1,097 per student for transportation services, as presented in **Table 5**.

Ancillary Facilities Costs

The other capital cost component is for the ancillary facilities that are necessary for the District to provide support services for students, schools, transportation services, and administrative personnel. The District currently has approximately 252,000 square feet of permanent ancillary facilities for maintenance, warehouse, and administrative functions. Current values of each existing ancillary facility depend on the type of facility and were based on the insurance values, with the weighted average value equaling approximately \$170 per square foot.

The cost of land for ancillary facilities also is included in the ancillary facility values. The land value for ancillary facilities is the same as that used for schools (\$85,000 per acre).

The ancillary facility cost per student is based on the existing inventory, which is valued at \$51.7 million, including \$43.5 million for buildings and \$8.2 million for land. Based on the current enrollment, the result is a cost of \$1,206 per student for ancillary facilities, as presented in Table 5.

Table 5
Transportation Services and
Ancillary Facility Cost per Student

Description	Figure
Transportation Services Cost per Student	
Total Value of Transportation Services ⁽¹⁾	\$47,037,463
Enrollment for 2014/15 School Year ⁽²⁾	42,878
Total Transportation Services Cost per Student ⁽³⁾	\$1,097
Ancillary Cost per Student	
Building Value for Ancillary Facilities ⁽⁴⁾	\$43,492,100
Land Value for Ancillary Facilities ⁽⁵⁾	<u>\$8,202,500</u>
Total Ancillary Facility Value ⁽⁶⁾	\$51,694,600
Total Ancillary Facility Value per Student ⁽⁷⁾	\$1,206

(1) Source: Collier County School District

(2) Source: Table 1

(3) Total value of transportation services (Item 1) divided by the enrollment for the 2014/15 school year (Item 2)

(4) Source: Collier County Schools, Schedule of Property, May 5, 2014

(5) Source: Collier County School District for acreage figures. Acres multiplied by the estimated cost per acre of \$85,000 (see Appendix B for further detail on land value estimates).

(6) Sum of the building value for ancillary facilities and the land value for ancillary facilities (Items 4 and 5)

(7) Total ancillary facility value (Item 6) divided by the enrollment for the 2014/15 school year (Item 2)

Credit Component

To ensure that new development is not being overcharged for construction of future student stations, any non-impact fee revenue that will be generated by new development and that will be used towards the capital expansion of school facilities must be included as a credit to reduce the total cost per student. It is important to note that a credit for school impact fees is not given for revenue generated by new development that is used for capital renovation of existing educational facilities or for maintenance or operational costs.

Based on a review of the District's capacity addition expenditures over the past five years and planned expenditures over the next five years, it has been determined that the School District used Capital Improvement Tax revenues for expansion projects paid with cash. In addition, capacity projects were funded with COPs, and therefore, a credit for remaining debt service payments is given.

Capital Improvement Tax

The Collier County School Board has the authority to levy ad valorem tax to generate revenue for capital, up to 1.5 mills. Referred to as Capital Improvement Tax (CIT), this revenue is used for both capital renovation and expansion projects, as well as technology, vehicles, buses, and maintenance. In Collier County, the millage rate for generating CIT revenue was 1.38 mills in FY 2014-15, and is estimated to increase to 1.5 mills by FY 2016-17.

The capital improvement tax revenue credit per student is calculated by dividing the total amount of capital revenue by the average enrollment during this ten-year period. As presented in Table 6, the resulting capital improvement revenue available for the capital expansion of public schools in Collier County is \$36 per student per year.

Once the capital improvement tax credit per student is calculated, a credit adjustment is made to account for the fact that new homes tend to pay higher property taxes per dwelling unit. This adjustment factor was estimated based on a comparison of the average taxable value of homes built over the past five years to that of all homes. As shown in table 6, this adjusted credit amounts to \$58 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 replacement is needed for structures built, is estimated at \$971 per student.

Table 6
Portion of Capital Improvement Tax Revenue Used for Expansion

Revenue Source	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Total
Capital Improvement Tax⁽¹⁾											
Bethune Educational Center - Addition	\$2,550	\$1,351,958	\$6,635,598	\$2,844	-	-	-	-	-	-	\$7,992,951
Calusa Park Elementary Addition	\$7,020	-	-	-	-	-	-	-	-	-	\$7,020
Veteran's Memorial Elementary Additions	\$6,981	-	-	-	-	-	-	-	-	-	\$6,981
Site Acquisition	\$526,746	\$15,271	\$1,787	\$136,897	-	\$65,000	\$50,000	\$120,000	-	-	\$915,702
School Renovations (Expansion Component)	-	\$141,088	\$117,534	-	\$141,175	-	-	-	-	-	\$399,797
General Improvements (Capacity Related)	-	-	\$86,655	-	-	-	-	-	-	-	\$86,655
Special Needs Facility Modifications	-	-	\$392,372	-	-	-	-	-	-	-	\$392,372
Immokalee Middle Addition/Renovation	-	-	-	-	-	\$5,420,000	-	-	-	-	\$5,420,000
Prof Svcs-Eng/Arch/Other	-	-	-	-	\$2,800	-	-	-	-	-	\$2,800
Total Capital Improvement Expenditures	\$543,298	\$1,508,318	\$7,233,946	\$139,741	\$143,975	\$5,485,000	\$50,000	\$120,000	\$0	\$0	\$15,224,277
Average Annual Capital Improvement Expenditures⁽²⁾											\$1,522,428
Average Student Enrollment (FY 10-FY 19)⁽³⁾											42,782
Annual Capital Improvement Credit per Student⁽⁴⁾											\$36
Credit Adjustment Factor⁽⁵⁾											1.60
Adjusted Annual Capital Improvement Credit per Student⁽⁶⁾											\$58
Capitalization Rate⁽⁷⁾											3.36%
Capitalization Period, Years⁽⁸⁾											25
Present Value of Capital Improvement Revenue Credit per Student⁽⁹⁾											\$971

(1) Source: Collier County School District

(2) Total capital improvement expenditures divided by 10 years

(3) Source: Table 1

(4) Average annual capital improvement expenditures (Item 2) divided by the average student enrollment (Item 3) for the same period

(5) Adjustment factor to reflect higher ad valorem taxes paid by new homes

(6) Annual capital improvement credit per student (Item 4) multiplied by the credit adjustment factor (Item 5)

(7) Interest rate the District is likely to pay for future bonds, provided by Collier County School District

(8) Time period after which major repairs are needed

(9) Present value of adjusted revenue credit per student (Item 6) at 3.36% interest rate (Item 7) over a 25-year capitalization period (Item 8)

Debt Service Credit per Student

The District has been using COPs to pay for a portion of the capacity expansion projects. Given that there is still an outstanding debt service on COPs, a credit is calculated for future debt service payments related to capacity expansion projects. The District uses primarily impact fee and CIT revenues to pay the debt service.

As discussed previously, the portion of payments funded with impact fee revenues was accounted for by reducing the available capacity. A revenue credit is calculated for the remaining portion of each outstanding COP issue used to fund capacity expansion projects. The remaining payments that will be funded with non-impact fee revenues were brought back to present value, based on the remaining number of years and annual interest rate of each respective COP issue. This figure is adjusted to account for the fact that new homes tend to pay higher property taxes per dwelling unit. As mentioned previously, this adjustment factor was estimated based on a comparison of the average taxable value of homes built over the past five years to that of all homes. As presented in **Table 7**, the debt service credit is \$9,982 per student.

Table 7
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 ⁽³⁾	Average Annual Enrollment ⁽⁴⁾	Debt Service Credit per Student ⁽⁵⁾
Certificates of Participation					
2005 COPS Issue	2	\$20,850,054	\$20,413,200	43,160	\$473
2005A COPS Issue	8	\$134,558,894	\$109,708,670	43,416	\$2,527
2006 COPS Issue	7	\$69,037,776	\$61,145,949	43,403	\$1,409
2007 COPS Issue	13	\$64,102,051	\$48,706,668	43,451	\$1,121
2010 COPS Issue	8	\$20,040,721	\$18,579,430	43,416	\$428
2014A COPS Issue ⁽⁶⁾	12	\$15,967,034	\$12,197,641	43,447	\$281
Total Debt Service Credit Per Student					\$6,239
Credit Adjustment Factor ⁽⁷⁾					1.60
Adjusted Debt Service Credit Per Student⁽⁸⁾					\$9,982

(1), (2) Source: Collier County School District

(3) 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) Source: Table 1, represents the estimated average annual enrollment over the life of remaining payments

(5) Present value of total remaining payments (Item 3) divided by the average annual enrollment over the life of remaining payments (Item 4)

(6) A portion of debt service is being paid back with impact fees. Present value of total remaining payments reflects the portion that is being paid back with ad valorem tax revenues.

(7) Adjustment factor to reflect higher ad valorem taxes paid by new homes

(8) Total debt service credit per student multiplied by the credit adjustment factor (Item 6)

Net Impact Cost per Student

The net impact fee per student is the difference between the cost component and the credit component. **Table 8** summarizes the three-step process used to calculate the net impact cost per student for public schools in Collier County by residential land use for each fee schedule option.

First, the total impact cost per student is determined, which is the sum of the weighted average facility impact cost per student from Table 4 and the transportation and ancillary facility cost components per student from Table 5. As previously mentioned, the transportation and ancillary cost components are calculated on a per-student basis and do not differ by type of school or by type of residential land use.

Second, the total revenue credit per student is determined. This is the sum of the capital improvement tax revenue credit per student and the debt service payments credit per student presented in Tables 6 and Table 7.

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.

Table 8
Net Impact Cost per Student

Cost/Credit Element	Per Student
Impact Cost	
Facility Impact Cost per Student ⁽¹⁾	\$41,485
Transportation Impact Cost per Student ⁽²⁾	\$1,097
Ancillary Facility Impact Cost per Student ⁽³⁾	<u>\$1,206</u>
Total Impact Cost per Student⁽⁴⁾	\$43,788
Impact Credit	
Capital Improvement Tax Revenue Credit per Student ⁽⁵⁾	(\$971)
Debt Service Repayments Credit per Student ⁽⁶⁾	<u>(\$9,982)</u>
Total Revenue Credit per Student⁽⁷⁾	(\$10,953)
Net Impact Cost	
Net Impact Cost per Student⁽⁸⁾	\$32,835

(1) Source: Table 4

(2) Source: Table 5

(3) Source: Table 5

(4) Sum of facility impact cost per student, transportation impact cost per student, and ancillary facility cost per student (Items 1 through 3)

(5) Source: Table 6

(6) Source: Table 7

(7) Sum of capital improvement tax revenue credit per student (Item 5) and the debt service credit per student (Item 6)

(8) Total impact cost per student (Item 4) less the total revenue credit per student (Item 7)

Student Generation Rates

The number of students living in a household typically varies depending on the type of residential housing. Therefore, school impact fees are typically assessed based on the specific student generation rates for different types of residential land uses.

This impact fee study employs a methodology using Geographic Information Systems (GIS) to develop the student generation rate for Collier County. Specifically, GIS was used to link student addresses to parcels in the Collier County Property Appraiser's database in order to generate the number of students per unit by school type and land use based on the latest tax roll. This process is described in more detail in the following sections.

Determination of Total Housing Units by Type of Land Use

The Property Appraiser's database is used to identify the number of housing units for student generation rate calculations for the single family, multi-family, and mobile home land uses. For all land uses, the total number of countywide units for the 2015 tax year were extracted from the parcel database based on the appropriate use code.

Determination of Students by School Type and Land Use Code

The determination of the number of students per land use by type of school (e.g., elementary, middle, and high school) for traditional schools was completed using the following process.

First, the Collier County School District provided a GIS shapefile containing geocoded student addresses. Then, student addresses were linked to their respective parcels in the Property Appraiser database using address point data.

The student generation rates used as the demand component for the impact fee only includes those students for which the impact fee is based, or students attending those

schools listed in Appendix A, Table A-1. Therefore, the school code associated with each student record was used to exclude students attending schools or other facilities not included in the impact fee inventory.

As previously mentioned, once the GIS shapefile with the geocoded student addresses was provided, the second step in the analysis was to link each student address to data from the parcel database. This allows for determining which type of land use is assigned to a given parcel (or address) where a student lives. This was accomplished by spatially joining the student address to the respective parcel in the database using GIS.

Approximately 93 percent of the students were successfully linked to a parcel. Of those, a portion of the addresses indicated a non-residential or vacant property, land uses that are not included in the impact fee schedule. The following assumptions were used to identify the appropriate land use for these records. Records shown under Mobile Home Parks were added to the student counts for mobile homes and those that had agricultural land uses were added to single family residential land use. This approach resulted in only 3 percent of student addresses being linked to a non-residential land use (such as orphanage, offices, hotel/motel, etc.). Students residing at non-residential/vacant land uses and those residing outside of Collier County are excluded from the calculations to provide a more conservative estimate. Finally, student records that were not linked to a parcel or those with a vacant residential land use designation were redistributed among all three residential land uses.

The results of this analysis are presented in **Table 9**, which includes the student generation rates calculated for each of the three land uses, based on the methodology described above.

Table 9
Student Generation Rates

Residential Land Use	Number of Students ⁽¹⁾	Number of Units ⁽²⁾	Students per Unit ⁽³⁾
Single Family	27,341	81,016	0.34
Multi Family	11,228	101,818	0.11
Mobile Home	2,632	9,483	0.28
Total	41,201	192,317	0.21

(1) Source: Collier County School District

(2) Source: Collier County Property Appraiser database

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

Calculated School Impact Fee Schedule

To determine the calculated school impact fee for each residential land use under each fee schedule scenario, the net impact cost per student is multiplied by the student generation rate. The resulting net impact fees are presented in **Table 10**. The table also presents a comparison to the current impact fee levels, which were adopted at 50 percent of the maximum calculated rates. To provide a more “apples-to-apples” comparison, the current rates at 100 percent level are also shown as well as the rates calculated in the 2011 update study which were not adopted.

Table 10
Calculated School Impact Fee Schedule

Residential Land Use	Impact Unit	Net Impact Cost per Student ⁽¹⁾	Students per Unit ⁽²⁾	Net Impact Cost per Unit ⁽³⁾	Adopted Fee ⁽⁴⁾	2009 Indexed Fee at 100% ⁽⁵⁾	2011 Study Fee at 100% - Not Adopted ⁽⁶⁾
Single Family	du	\$32,835	0.34	\$11,164	\$5,378	\$10,755	\$8,680
Multi Family	du	\$32,835	0.11	\$3,612	\$1,672	\$3,344	\$2,492
Mobile Home	du	\$32,835	0.28	\$9,194	\$3,344	\$6,687	\$5,712

(1) Source: Table 8

(2) Source: Table 9

(3) Net impact cost per student (Item 1) multiplied by students per unit (Item 2)

(4) Source: Collier County Impact Fee Administration, the fee was adopted at 50% of the calculated level

(5) Source: Collier County Impact Fee Administration

(6) Source: 2011 Collier County Schools Impact Fee Update Study

School Impact Fee Schedule Comparison

As part of the work effort in updating Collier County’s school impact fee program, a comparison of the calculated single family school impact fees for Collier County to the single family school impact fees adopted by other counties throughout Florida has been prepared. **Table 11** presents this comparison. As information available, the impact fee adoption percentage and the full rate are also shown.

*Approximately
one-third of
Florida counties
implemented a
school impact
fee.*

Table 11
School Impact Fee Schedule Comparison

County ⁽¹⁾	Date of Last Update	Adoption %	Adopted Single Family Fee ⁽²⁾	Single Family Fee @ 100% ⁽³⁾
Citrus County*	2015	50%	\$1,261	\$2,522
Palm Beach County ⁽⁴⁾	2015	N/A	\$1,866	\$15,305
Sarasota County ^{(4)*}	2015	N/A	\$2,032	\$7,835
Highlands County*	2006	50%	\$2,901	\$5,801
Volusia County	2013	67%	\$3,000	\$4,483
Flagler County	2004	76%	\$3,600	\$4,756
Hillsborough County	2004	100%	\$4,000	\$4,000
Marion County	2006	55%	\$4,068	\$7,375
Polk County	2015	42%	\$4,403	\$10,483
Brevard County ⁽⁴⁾	2015	N/A	\$4,445	\$10,193
Lee County	2015	100%	\$4,540	\$4,540
Pasco County	2005	100%	\$4,876	\$4,313
Seminole County	2007	99%	\$5,000	\$5,068
Collier County Current Adopted	2011	50%	\$5,378	\$10,755
Martin County	2006	100%	\$5,567	\$4,555
St. Lucie County	2009	100%	\$6,188	\$5,447
St. Johns County	2011	100%	\$6,242	\$5,772
Manatee County*	2006	100%	\$6,350	\$5,886
Orange County	2011	100%	\$6,525	\$6,525
Clay County	2009	77%	\$7,034	\$9,096
Hernando County*	2013	100%	\$7,103	\$7,103
Lake County ⁽⁴⁾	2015	N/A	\$7,719	\$9,324
Broward County	2007	75%	\$7,351	\$9,755
Osceola County	2014	100%	\$10,187	\$10,187
Collier County Calculated	2015	100%	N/A	\$11,164

* County fees are currently suspended

- (1) Represents percent assessed compared to the full calculated fee. The difference indicates adjustments due to policy decisions or indexing.
- (2) Source: County Impact Fee Schedules. Fees presented are for a 3-bedroom or a 2,000-square foot single family home.
- (3) Represents maximum calculated rate at the time of technical study, reflecting any indexing applied by each jurisdiction, if applicable.
- (4) Rates shown under Single Family Impact Fee at 100% (Item 3) reflect most recent on-going technical study

Appendix A
School District Inventory

Appendix A

School District Inventory

Table A-1
Collier County School District Existing School Inventory

Number	Schools	Grades Served	Year Opened	Net (Perm.) Square Feet	Permanent Stations	Permanent Capacity
Elementary Schools						
1	Avalon	PK-5	1969	87,159	466	466
2	Big Cypress	PK-5	1986	126,280	940	940
3	Calusa Park	PK-5	2002	162,587	924	924
4	Corkscrew	PK-5	1999	132,855	836	836
5	Eden Park	PK-5	2008	119,564	824	824
6	Estates	PK-5	2004	136,945	779	779
7	Golden Gate - North	PK-5	1974	108,149	797	797
	Golden Gate - South	PK-5	2004	68,648	409	409
8	Golden Terrace - North	PK-5	1989	95,943	747	747
	Golden Terrace - South	PK-5	2004	78,594	589	589
9	Highlands	PK-5	1966	132,650	808	808
10	Lake Park	PK-5	1956/1989	87,109	570	570
11	Lake Trafford	PK-5	1967/1989	136,659	881	881
12	Laurel Oak	PK-5	1993	105,569	702	702
13	Lely	PK-5	1990	127,211	821	821
14	Manatee	PK-5	1994	110,049	766	766
15	Mike Davis	PK-5	2008	126,345	919	919
16	Naples Park	PK-5	1974	98,868	750	750
17	Osceola	PK-5	2002	141,815	767	767
18	Palmetto	PK-5	2008	125,054	919	919
19	Parkside	PK-5	2007	127,212	919	919
20	Pelican Marsh	PK-5	1996	141,452	846	846
21	Pinecrest	PK-5	1960	125,430	854	854
22	Poinciana	PK-5	1974	107,336	763	763
23	Sabal Palm	PK-5	2003	132,994	772	772
24	Sea Gate	PK-5	1965	117,580	898	898
25	Shadowlawn	PK-5	1960	92,737	660	660
26	Tommie Barfield	PK-5	1956/1974	111,921	600	600
27	Veteran's Memorial Elementary	PK-5	2007	153,775	944	944
28	Village Oaks	PK-5	1987	116,347	839	839
29	Vineyards	PK-5	1990	132,326	883	883
	Subtotal - Elementary School			3,667,163	24,192	24,192

Table A-1 (Continued)
Collier County School District Existing School Inventory

Number	Schools	Grades Served	Year Opened	Net (Perm.) Square Feet	Permanent Stations	Permanent Capacity
Middle Schools						
1	Corkscrew	6-8	2000	156,030	1,142	1,028
2	Cypress Palm	6-8	2007	170,529	1,308	1,177
3	East Naples	6-8	1969	145,308	1,132	1,019
4	Golden Gate	6-8	1981	160,585	1,340	1,206
5	Gulfview	6-8	1938/1994	96,126	745	671
6	Immokalee	6-8	1991	164,903	1,383	1,245
7	Manatee	6-8	1995	170,090	1,477	1,329
8	North Naples	6-8	2004	152,772	1,095	986
9	Oakridge	6-8	1993	169,728	1,470	1,323
10	Pine Ridge	6-8	1974	148,626	1,240	1,116
	Total - Middle School			1,534,697	12,332	11,100
High Schools/Multi-Level Schools						
1	Barron Collier	9-12	1978	290,000	1,934	1,837
2	Everglades City	PK-12	1957/1996	76,728	537	483
3	Golden Gate	9-12	2004	363,876	2,094	1,989
4	Gulf Coast	9-12	1998	356,275	1,929	1,833
5	Immokalee	9-12	1975	257,340	1,790	1,701
6	Lely	9-12	1975	253,803	2,103	1,998
7	Lorenzo Walker Technical	9-12	2006/2008	59,142	606	576
8	Naples	9-12	1960	302,876	2,022	1,921
9	Palmetto Ridge	9-12	2004	376,760	2,025	1,924
	Total - High Schools/Multi-Level Schools			2,336,800	15,040	14,262
	Grand Total - All Schools			7,538,660	51,564	49,554

Source: Florida Department of Education, Florida Inventory of School Houses (FISH), August 20, 2014 (Year opened provided by the Collier School District. When two different years are show, the second figure indicates reconstruction year of the building).

APPENDIX B
Supplemental Unit Cost Information

Appendix B

Building and Land Value Analysis

This Appendix provides additional information on the methods used to estimate building and land values for the school impact fee.

Building Construction Costs

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

- Recently built schools in Collier County;
- Cost estimates included in the Educational Plant Survey;
- Insurance values of the existing schools;
- School cost information for over 100 schools in other Florida counties;
- Estimates provided by Collier County School District; and
- Estimates provided by industry architects active in Collier County.

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

Construction Cost

Collier County has not built any new schools over the past few years; however, the County is in the process of expanding Immokalee Middle School. This addition includes a new two-story, 22,400-net square foot, 16-classroom building. The construction cost associated with this school is approximately \$215 per net square foot. Because this addition does not include any central facilities, it is likely to be less expensive than building a new school.

The insurance values of the existing schools average approximately \$145 per net square foot for buildings only and \$175 per square foot for buildings and contents. It is important to note insurance values do not include the full cost of constructing a school since certain components of a building, such as the foundation, are excluded from these values. As such, insurance values are considered to be a conservative estimate.

The District's Educational Plant Survey includes several school expansion/renovation projects. The estimated cost associated with these expansions ranges from \$215 per net square foot to \$235 per net square foot.

The School District estimated new school construction to range from \$195 per net square foot to \$235 per net square foot, while estimates obtained by architects who are active in Collier County ranged from \$200 per net square foot to \$250 per net square foot.

Finally, Table B-2 provides a summary of data obtained from the Florida Department of Education for schools built in 2011 through 2013. As shown, the construction cost is ranging from \$115 per net square foot to \$255 per net square foot.

Table B-1 provides a summary of this information. Given this data and information, average construction costs of \$180 per net square foot for elementary schools, \$200 per net square foot for middle schools, and \$220 per net square foot for high schools are used in this study, which are found to be reasonable, if not conservative, estimates for impact fee calculation purposes and reflect the local cost factors of Collier County schools.

Table B-1
Construction Cost Analysis – Collier County

Year Built ⁽¹⁾	Facility Name ⁽²⁾	Construction Cost ⁽³⁾	Net Permanent Square Feet ⁽⁴⁾	Construction Cost per NSF ⁽⁵⁾
New School Construction:				
2015	Immokalee Middle Addition	\$4,856,379	22,351	\$217
Insurance Values of Existing School Buildings: ⁽⁶⁾			Bldg Only	Bldg & Contents
	- Elementary Schools		\$144	\$171
	- Middle Schools		\$143	\$167
	- High Schools		\$145	\$182
	- All Traditional Schools		\$144	\$174
Educational Plant Survey Estimates for School Additions ⁽⁷⁾				\$216 - \$233
Construction Cost Range Obtained From Other Florida Jurisdictions ⁽⁸⁾				\$115 - \$255
School District Estimates ⁽⁹⁾				\$195 - \$235
Estimates Obtained from Industry Architects ⁽¹⁰⁾				\$200 - \$250
Estimates Used in the Study:				
	- Elementary Schools			\$180
	- Middle Schools			\$200
	- High Schools			\$220

(1), (2), (3), (4) Source: Collier County School District

(5) Construction cost divided by net permanent square feet

(6) Source: Collier County School District, Statement of Property Values, May 5, 2014

(7) Source: Collier County School District Educational Plant Five Year Survey Report, September 18, 2014

(8) Source: Florida Department of Education

(9) Source: Collier County School District

(10) Source: Zyscovich Architects

Table B-2
Construction Cost analysis – Other Florida Jurisdictions

Year Built	County	Facility Name/Type	Construction Cost	Total Cost	Net Sq. Ft.	Construction Cost per Net SF
Elementary Schools						
2011	Charlotte	Meadow Park Elementary	\$12,696,116	\$18,415,280	89,652	\$142
2011	Duval	Waterleaf Elementary	\$14,882,021	\$24,786,442	82,062	\$181
2011	Escambia	Global Learning Academy	\$17,019,155	\$24,108,501	120,015	\$142
2011	Osceola	Highlands Elementary	\$14,534,309	\$18,145,244	106,918	\$136
2011	Pasco	Connerton Elementary "R"	\$11,598,590	\$19,102,688	84,972	\$136
2012	Alachua	Meadowbrook Elementary	\$12,388,973	\$19,444,444	97,000	\$128
2012	Indian River	Vero Beach Elementary	\$17,243,103	\$21,533,893	110,495	\$156
2012	Lee	Tortuga Preserve	\$16,021,554	\$23,456,732	129,936	\$123
2012	Orange	SunRidge Elementary	\$10,031,097	\$14,162,606	66,645	\$151
2012	St. Johns	Palencia Elementary	\$12,677,682	\$15,290,832	102,314	\$124
2012	Volusia	Citrus Grove Elementary	\$13,854,183	\$19,661,608	98,842	\$140
2013	Marion	Legacy Elementary	\$14,047,310	\$18,245,314	104,324	\$135
2013	Orange	Sun Blaze Elementary	\$10,269,207	\$12,707,954	64,410	\$159
2013	Orange	Hackney Prairies Road Area Elementary	\$11,261,094	\$14,797,447	75,189	\$150
2013	Palm Beach	Galaxy Elementary	\$19,780,288	\$28,938,866	85,571	\$231
2013	Palm Beach	Gove Elementary	\$23,540,256	\$35,753,685	116,174	\$203
Total/Weighted Average -- Elementary Schools			\$231,844,938	\$328,551,536	1,534,519	\$151
Middle Schools						
2011	Dade	North Dade Middle	\$18,921,534	\$21,216,883	94,660	\$200
2011	Orange	Lake Nona Middle	\$16,923,455	\$23,466,083	149,897	\$113
2011	Polk	Boone Middle	\$17,900,963	\$20,312,468	69,921	\$256
2011	Walton	Emerald Coast Middle	\$15,918,884	\$25,134,830	126,770	\$126
2012	Dade	North Dade Middle and North Dade Center for Modern Languages	\$18,921,534	\$21,216,883	94,660	\$200
2012	Lee	Hams Marsh Middle	\$23,750,925	\$30,653,842	164,662	\$144
2012	Orange	Sunridge Middle	\$23,617,116	\$30,375,846	152,436	\$155
2013	Monroe	Horace O'Bryant	\$30,596,297	\$38,366,941	196,598	\$156
Total/Weighted Average -- Middle Schools			\$166,550,708	\$210,743,776	\$1,049,604	\$159
High Schools						
2011	Broward	Lanier James Education Center	\$8,889,147	\$12,412,686	42,608	\$209
2011	Calhoun	Blountstown High	\$19,407,910	\$25,135,928	100,366	\$193
2011	Charlotte	Charlotte High	\$61,755,842	\$92,390,747	258,700	\$239
2011	Dade	International Studies SHS	\$7,192,325	\$21,846,054	35,137	\$205
2011	Dade	Medical Academy or Science and Technology	\$9,303,705	\$18,811,197	78,845	\$118
2011	Okeechobee	Okeechobee Achievement Academy	\$5,499,975	\$6,696,931	43,024	\$128
2011	Polk	Auburndale Senior	\$19,522,053	\$24,482,933	101,466	\$192
2011	Polk	Davenport School of the Arts	\$29,136,512	\$32,548,129	157,446	\$185
2011	Polk	Kathleen Senior	\$24,323,662	\$27,493,666	112,017	\$217
2011	Polk	Winter Haven Senior	\$26,374,234	\$29,588,106	140,940	\$187
2012	Dade	International Studies SHS	\$7,192,325	\$21,846,054	35,137	\$205
2012	Dade	Medical Academy or Science and Technology	\$9,303,705	\$18,811,197	78,845	\$118
2012	Orange	Evans High	\$55,507,691	\$81,091,877	289,061	\$192
2012	St. Lucie	Lincoln Park Academy	\$10,928,736	\$24,423,402	93,703	\$117
2013	Lake	Lake Minneola High	\$46,974,201	\$57,354,621	294,664	\$159
2013	Martin	Martin County High	\$7,623,316	\$9,854,403	63,601	\$120
Total/Weighted Average -- High Schools			\$348,935,339	\$504,787,931	\$1,925,560	\$181
Total/Weighted Average (All Schools)			\$747,330,985	\$1,044,083,243	\$4,509,683	\$166

Source: Florida Department of Education

Architectural, Design, Site Preparation, Furniture, Fixture and Equipment Costs

The architectural, design, site preparation (including on-site improvement and traffic control costs), and FF&E costs (including technology) are calculated based on the ratio of these costs to the construction costs observed in Collier County and other jurisdictions. These figures were also discussed with the District representatives and are estimated at 15 percent of construction cost for facility planning, which includes 5 percent for architectural/ design and 10 percent for site preparation costs. In addition, the estimate for FF&E is 13 percent of the construction cost. Tables B-3 and B-4 summarize the data obtained from Collier County and other jurisdictions.

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

Year	District	Type	Facility Name	Construction Cost	Architect & Eng Fees	Ratio of Architect & Eng Fees to Construction Cost	FF&E	Ratio of FF&E to Construction Cost
2009	Okaloosa	Elem	Riverside Elementary School	\$11,716,323	\$1,448,365	12%	\$3,066,309	26%
2009	Bay	Elem	Deer Point Elementary	\$16,646,867	\$1,046,428	6%	\$1,106,071	7%
2009	Broward	Elem	Discovery Elementary (K-6)	\$24,813,884	\$1,017,051	4%	\$2,729,823	11%
2009	Broward	Elem	Heron Heights Elementary	\$25,377,383	\$1,101,087	4%	\$2,821,297	11%
2009	Charlotte	Elem	East Elementary	\$14,128,364	\$1,189,449	8%	\$750,180	5%
2009	Collier	Elem	Eden Park Elementary (K-6)	\$19,625,793	\$743,765	4%	\$2,824,488	14%
2009	Collier	Elem	Mike Davis Elementary	\$18,747,061	\$830,774	4%	\$2,390,841	13%
2009	Duval	Elem	Bartram Springs Elementary	\$16,349,939	\$942,474	6%	\$1,752,167	11%
2009	Hillsborough	Elem	Bailey Elementary	\$7,308,787	\$554,962	8%	\$1,475,000	20%
2009	Hillsborough	Elem	Stowers Elementary	\$10,360,379	\$596,594	6%	\$1,475,000	14%
2009	Lee	Elem	Heights Elementary School	\$20,794,081	\$464,500	2%	\$1,635,759	8%
2009	Lee	Elem	Lehigh Elementary School	\$15,702,253	\$641,950	4%	\$856,087	5%
2009	Manatee	Elem	G.D. Rogers Garden Elementary	\$12,223,480	\$1,049,384	9%	\$788,800	6%
2009	Martin	Elem	Citrus Grove Elementary	\$21,130,325	\$1,067,331	5%	\$1,280,297	6%
2009	Orange	Elem	Keene's Crossing Elementary School	\$12,452,304	\$515,371	4%	\$1,196,557	10%
2009	Osceola	Elem	KOA Elementary School (Elem L)	\$12,610,702	\$621,750	5%	\$1,787,818	14%
2009	Osceola	Elem	Narcoossee Elementary (ES M)	\$14,770,196	\$611,435	4%	\$1,800,412	12%
2009	Palm Beach	Elem	C.O. Taylor/Kirklane Elementary	\$35,663,420	\$1,864,969	5%	\$1,013,080	3%
2009	Palm Beach	Elem	Hope-Centennial Elementary	\$25,030,950	\$2,092,633	8%	\$868,294	3%
2009	Polk	Elem	Spessard Holland Elementary	\$15,642,049	\$572,492	4%	\$1,508,553	10%
2009	Sarasota	Elem	Atwater Elementary School	\$12,524,430	\$1,802,665	14%	\$651,817	5%
2009	Volusia	Elem	Champion Elementary	\$14,696,164	\$725,513	5%	\$950,364	6%
2009	Wakulla	Elem	Riversink Elementary	\$15,363,460	\$817,426	5%	\$967,599	6%
2009	Washington	Elem	Vernon Elementary School	\$6,259,105	\$492,392	8%	\$267,742	4%
2009	Brevard	High	Satellite High School	\$4,736,903	\$225,000	5%	\$358,000	8%
2009	Brevard	High	Heritage High School	\$57,088,946	\$2,328,706	4%	\$5,470,874	10%
2009	Hillsborough	High	Steinbrenner High School	\$38,437,165	\$1,588,553	4%	\$4,945,000	13%
2009	Hillsborough	High	Strawberry Crest High School	\$43,204,430	\$3,051,138	7%	\$4,945,000	11%
2009	Orange	High	East River High School	\$58,970,282	\$1,860,628	3%	\$5,304,005	9%
2009	Orange	High	Lake Nona High School	\$60,857,702	\$1,721,299	3%	\$5,217,696	9%
2009	Sarasota	High	Suncoast Polytechnical High School	\$11,730,040	\$1,030,406	9%	\$2,160,265	18%
2009	Walton	High	Walton Senior High	\$35,764,000	\$1,992,342	6%	\$645,000	2%
2009	Okaloosa	Middle	Shoal River Middle School	\$12,779,256	\$1,297,594	10%	\$3,229,106	25%
2009	Duval	Middle	Westview K-8	\$29,119,287	\$2,600,719	9%	\$3,013,790	10%
2009	Hernando	Middle	Explorer K-8	\$41,212,410	\$1,748,584	4%	\$3,220,587	8%
2009	Hillsborough	Middle	Barrington Middle School	\$16,315,050	\$961,428	6%	\$2,259,000	14%
2009	Indian River	Middle	Storm Grove Middle School	\$34,106,673	\$2,205,007	6%	\$4,191,001	12%
2009	Lake	Middle	East Ridge Middle School	\$27,281,965	\$1,283,420	5%	\$2,491,107	9%
2009	Osceola	Middle	Westside K-8 School	\$23,051,370	\$1,363,350	6%	\$2,686,144	12%
2009	Sarasota	Middle	Woodland Middle School	\$31,412,195	\$3,004,145	10%	\$2,077,048	7%
2009	St. Johns	Middle	Liberty Pines Academy (K-8)	\$25,277,687	\$971,288	4%	\$1,197,445	5%
2010	Broward	Elem	Norcrest Elementary	\$22,286,245	\$885,319	4%	\$1,257,845	6%

Table B-4 (Continued)
Architectural/Civil Design and FF&E Cost Analysis
Collier County and Other Florida Jurisdictions

Year	District	Type	Facility Name	Construction Cost	Architect & Eng Fees	Ratio of Architect & Eng Fees to Construction Cost	FF&E	Ratio of FF&E to Construction Cost
2010	Collier	Elem	Palmetto Elementary	\$20,224,743	\$889,743	4%	\$2,671,470	13%
2010	Lake	Elem	Sorrento Elementary	\$15,842,160	\$668,339	4%	\$1,896,206	12%
2010	Orange	Elem	Old Cheney/North Forsyth Elementary	\$12,096,899	\$783,588	6%	\$987,926	8%
2010	Osceola	Elem	East Lake Elementary	\$11,747,305	\$537,980	5%	\$1,885,002	16%
2010	Palm Beach	Elem	Everglades Elementary	\$15,940,134	\$1,863,296	12%	\$1,075,126	7%
2010	Palm Beach	Elem	Northboro Elementary	\$24,168,146	\$1,990,621	8%	\$780,037	3%
2010	Palm Beach	Elem	Plumosa Elementary	\$21,038,789	\$2,075,316	10%	\$715,049	3%
2010	Seminole	Elem	New Midway Elementary	\$12,297,322	\$810,700	7%	\$1,133,007	9%
2010	Clay	High	Oakleaf High	\$50,819,745	\$2,562,240	5%	\$3,064,772	6%
2010	Duval	High	Atlantic Coast High	\$50,466,294	\$5,220,136	10%	\$5,048,820	10%
2010	Hernando	High	Weeki Wachee High	\$33,006,787	\$1,939,097	6%	\$4,719,813	14%
2010	Sarasota	High	Riverview High	\$78,561,000	\$5,999,998	8%	\$4,377,536	6%
2010	Collier	High	Lorenzo Walker Institute of Technology High	\$9,843,413	\$795,386	8%	\$1,312,405	13%
2010	Orange	High	Apopka HS Replacement	\$70,267,621	\$2,112,349	3%	\$4,733,044	7%
2010	Palm Beach	High	Palm Beach Gardens Community High	\$75,097,581	\$3,829,735	5%	\$3,330,581	4%
2010	Palm Beach	High	Suncoast High	\$59,972,270	\$3,938,916	7%	\$2,280,000	4%
2010	Volusia	High	University High	\$72,990,143	\$3,092,214	4%	\$6,096,162	8%
2011	Charlotte	Elem	Meadow Park Elementary	\$12,696,116	\$944,273	7%	\$674,842	5%
2011	Duval	Elem	Waterleaf Elementary	\$14,882,021	\$1,621,628	11%	\$1,899,236	13%
2011	Escambia	Elem	Global Learning Academy	\$17,019,155	\$1,682,415	10%	\$2,861,931	17%
2011	Osceola	Elem	Highlands Elementary	\$14,534,309	\$666,978	5%	\$1,650,318	11%
2011	Pasco	Elem	Connerton Elementary "R"	\$11,598,590	\$858,671	7%	\$1,298,389	11%
2011	Calhoun	High	Blountstown High	\$19,407,910	\$1,968,893	10%	\$994,719	5%
2011	Charlotte	High	Charlotte High	\$61,755,842	\$6,502,129	11%	\$2,676,408	4%
2011	Broward	High	Lanier James Education Center	\$8,889,147	\$1,075,459	12%	\$1,304,137	15%
2011	Dade	High	International Studies SHS	\$7,192,325	\$684,965	10%	\$757,496	11%
2011	Dade	High	Medical Academy or Science and Technology	\$9,303,705	\$762,932	8%	\$919,966	10%
2011	Okeechobee	High	Okeechobee Achievement Academy	\$5,499,975	\$453,761	8%	\$427,114	8%
2011	Polk	High	Auburndale Senior	\$19,522,053	\$1,462,146	7%	\$3,124,050	16%
2011	Polk	High	Davenport School of the Arts	\$29,136,512	\$1,042,674	4%	\$2,330,971	8%
2011	Polk	High	Kathleen Senior	\$24,323,662	\$875,094	4%	\$2,267,250	9%
2011	Polk	High	Winter Haven Senior	\$26,374,234	\$853,483	3%	\$2,360,389	9%
2011	Dade	Middle	North Dade Middle	\$18,921,534	\$867,900	5%	\$1,122,762	6%
2011	Hernando	Middle	Winding Waters K-8	\$14,559,177	\$880,709	6%	\$4,279,500	29%
2011	Orange	Middle	Lake Nona Middle	\$16,923,455	\$1,277,253	8%	\$1,795,567	11%
2011	Polk	Middle	Boone Middle	\$17,900,963	\$1,080,157	6%	\$1,331,348	7%
2011	Walton	Middle	Emerald Coast Middle	\$15,918,884	\$1,709,689	11%	\$700,000	4%
2012	Alachua	Elem	Meadowbrook Elementary	\$12,388,973	\$1,010,997	8%	\$1,974,896	16%
2012	Indian River	Elem	Vero Beach Elementary	\$17,243,103	\$1,476,006	9%	\$1,342,512	8%
2012	Lee	Elem	Tortuga Preserve	\$16,021,554	\$214,042	1%	\$1,487,461	9%
2012	Orange	Elem	SunRidge Elementary	\$10,031,097	\$580,395	6%	\$951,358	9%
2012	St. Johns	Elem	Palencia Elementary	\$12,677,682	\$956,170	8%	\$1,500,000	12%
2012	Volusia	Elem	Citrus Grove Elementary	\$13,854,183	\$1,098,766	8%	\$1,555,729	11%
2012	Collier	Middle	Bethune Education Center	\$5,538,155	\$561,233	10%	\$734,057	13%
2012	Dade	Middle	North Dade Middle	\$18,921,534	\$867,900	5%	\$1,122,762	6%
2012	Lee	Middle	Hams Marsh Middle	\$23,750,925	\$721,076	3%	\$1,814,273	8%
2012	Orange	Middle	SunRidge Middle	\$23,617,116	\$1,137,698	5%	\$1,591,755	7%
2012	Dade	High	International Studies SHS	\$7,192,325	\$684,965	10%	\$757,496	11%
2012	Dade	High	Medical Academy or Science and Technology	\$9,303,705	\$762,932	8%	\$919,966	10%
2012	Orange	High	Evans High	\$55,507,691	\$3,568,884	6%	\$3,743,130	7%
2012	St. Lucie	High	Lincoln Park Academy	\$10,928,736	\$1,623,543	15%	\$3,246,193	30%
2013	Marion	Elem	Legacy Elementary	\$14,047,310	\$675,267	5%	\$1,680,825	12%
2013	Orange	Elem	Sun Blaze Elementary	\$10,269,207	\$587,445	6%	\$1,035,369	10%
2013	Orange	Elem	Hackney Prairies Road Area Elementary	\$11,261,094	\$890,931	8%	\$1,057,127	9%
2013	Palm Beach	Elem	Galaxy Elementary	\$19,780,288	\$1,804,129	9%	\$1,586,590	8%
2013	Palm Beach	Elem	Gove Elementary	\$23,540,256	\$2,005,390	9%	\$2,027,670	9%
2013	Monroe	Middle	Horace O'Bryant	\$30,596,297	\$3,221,414	11%	\$1,320,362	4%
2013	Lake	High	Lake Minneola High	\$46,974,201	\$3,030,934	6%	\$6,483,383	14%
2013	Martin	High	Martin County High	\$7,623,316	\$1,274,200	17%	\$419,893	6%
Total/Weighted Average				\$2,375,377,974	\$148,064,865	6%	\$209,869,423	9%
Total/Weighted Average (Collier County Schools ONLY)				\$73,979,165	\$3,820,901	5%	\$9,933,261	13%
Total/Weighted Average (Excluding Collier County Schools)				\$2,301,398,809	\$144,243,964	6%	\$199,936,162	9%

Source: Florida Department of Education

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

Year	District	Type	Facility Name	Construction Cost	Site Improv/Devel	Ratio of Site Development to Construction Cost
2009	Okaloosa	Elem	Riverside Elementary School	\$11,716,323	\$2,148,260	18%
2009	Bay	Elem	Deer Point Elementary	\$16,646,867	\$1,711,350	10%
2009	Broward	Elem	Discovery Elementary (K-6)	\$24,813,884	\$3,397	0%
2009	Charlotte	Elem	East Elementary	\$14,128,364	\$1,389,286	10%
2009	Collier	Elem	Eden Park Elementary (K-6)	\$19,625,793	\$2,083,000	11%
2009	Collier	Elem	Mike Davis Elementary	\$18,747,061	\$1,722,320	9%
2009	Duval	Elem	Bartram Springs Elementary	\$16,349,939	\$1,427,211	9%
2009	Hillsborough	Elem	Bailey Elementary	\$7,308,787	\$753,646	10%
2009	Hillsborough	Elem	Stowers Elementary	\$10,360,379	\$941,642	9%
2009	Lee	Elem	Heights Elementary School	\$20,794,081	\$220,848	1%
2009	Lee	Elem	Lehigh Elementary School	\$15,702,253	\$679,758	4%
2009	Manatee	Elem	G.D. Rogers Garden Elementary	\$12,223,480	\$969,092	8%
2009	Martin	Elem	Citrus Grove Elementary	\$21,130,325	\$722,012	3%
2009	Orange	Elem	Keene's Crossing Elementary School	\$12,452,304	\$1,487,617	12%
2009	Osceola	Elem	KOA Elementary School (Elem L)	\$12,610,702	\$1,874,555	15%
2009	Osceola	Elem	Narcoossee Elementary (ES M)	\$14,770,196	\$631,727	4%
2009	Palm Beach	Elem	C.O. Taylor/Kirklane Elementary	\$35,663,420	\$3,628,916	10%
2009	Palm Beach	Elem	Hope-Centennial Elementary	\$25,030,950	\$2,733,790	11%
2009	Sarasota	Elem	Atwater Elementary School	\$12,524,430	\$4,737,875	38%
2009	Volusia	Elem	Champion Elementary	\$14,696,164	\$1,615,729	11%
2009	Wakulla	Elem	Riversink Elementary	\$15,363,460	\$1,300,000	8%
2009	Washington	Elem	Vernon Elementary School	\$6,259,105	\$450,421	7%
2009	Brevard	High	Satellite High School	\$4,736,903	\$307,888	6%
2009	Brevard	High	Heritage High School	\$57,088,946	\$9,834,384	17%
2009	Hillsborough	High	Steinbrenner High School	\$38,437,165	\$4,391,015	11%
2009	Hillsborough	High	Strawberry Crest High School	\$43,204,430	\$3,443,506	8%
2009	Orange	High	East River High School	\$58,970,282	\$10,333,793	18%
2009	Orange	High	Lake Nona High School	\$60,857,702	\$7,186,702	12%
2009	Sarasota	High	Suncoast Polytechnical High School	\$11,730,040	\$1,463,101	12%
2009	Walton	High	Walton Senior High	\$35,764,000	\$50,000	0%
2009	Okaloosa	Middle	Shoal River Middle School	\$12,779,256	\$2,170,119	17%
2009	Duval	Middle	Westview K-8	\$29,119,287	\$1,708,817	6%
2009	Hernando	Middle	Explorer K-8	\$41,212,410	\$1,200,000	3%
2009	Hillsborough	Middle	Barrington Middle School	\$16,315,050	\$1,368,167	8%
2009	Indian River	Middle	Storm Grove Middle School	\$34,106,673	\$6,629,160	19%
2009	Lake	Middle	East Ridge Middle School	\$27,281,965	\$599,565	2%
2009	Osceola	Middle	Westside K-8 School	\$23,051,370	\$2,162,558	9%
2009	Sarasota	Middle	Woodland Middle School	\$31,412,195	\$6,909,752	22%
2010	Broward	Elem	Norcrest Elementary	\$22,286,245	\$37,949	0%
2010	Collier	Elem	Palmetto Elementary	\$20,224,743	\$2,440,985	12%
2010	Lake	Elem	Sorrento Elementary	\$15,842,160	\$48,712	0%
2010	Orange	Elem	Old Cheney/North Forsyth Elementary	\$12,096,899	\$1,815,172	15%
2010	Osceola	Elem	East Lake Elementary	\$11,747,305	\$1,255,467	11%
2010	Palm Beach	Elem	Everglades Elementary	\$15,940,134	\$2,286,725	14%
2010	Palm Beach	Elem	Northboro Elementary	\$24,168,146	\$1,482,606	6%
2010	Palm Beach	Elem	Plumosa Elementary	\$21,038,789	\$1,967,540	9%
2010	Clay	High	Oakleaf High	\$50,819,745	\$274,000	1%
2010	Duval	High	Atlantic Coast High	\$50,466,294	\$7,648,460	15%
2010	Sarasota	High	Riverview High	\$78,561,000	\$14,665,000	19%
2010	Collier	High	Lorenzo Walker Institute of Technology High	\$9,843,413	\$287,278	3%
2010	Orange	High	Apopka HS Replacement	\$70,267,621	\$9,439,283	13%
2010	Palm Beach	High	Palm Beach Gardens Community High	\$75,097,581	\$10,693,532	14%
2010	Palm Beach	High	Suncoast High	\$59,972,270	\$9,785,603	16%
2010	Volusia	High	University High	\$72,990,143	\$12,232,947	17%
2011	Charlotte	Elem	Meadow Park Elementary	\$12,696,116	\$1,802,689	14%
2011	Duval	Elem	Waterleaf Elementary	\$14,882,021	\$1,361,500	9%
2011	Escambia	Elem	Global Learning Academy	\$17,019,155	\$200,000	1%

Table B-5 (Continued)
Site Development Cost Analysis
Collier County and Other Florida Jurisdictions

Year	District	Type	Facility Name	Construction Cost	Site Improv/Devel	Ratio of Site Development to Construction Cost
2011	Osceola	Elem	Highlands Elementary	\$14,534,309	\$1,293,639	9%
2011	Pasco	Elem	Connerton Elementary "R"	\$11,598,590	\$2,313,586	20%
2011	Calhoun	High	Blountstown High	\$19,407,910	\$1,362,604	7%
2011	Charlotte	High	Charlotte High	\$61,755,842	\$7,904,370	13%
2011	Broward	High	Lanier James Education Center	\$8,889,147	\$918,943	10%
2011	Okeechobee	High	Okeechobee Achievement Academy	\$5,499,975	\$1,300	0%
2011	Walton	Middle	Emerald Coast Middle	\$15,918,884	\$1,717,116	11%
2012	Alachua	Elem	Meadowbrook Elementary	\$12,388,973	\$86,278	1%
2012	Indian River	Elem	Vero Beach Elementary	\$17,243,103	\$1,196,000	7%
2012	Lee	Elem	Tortuga Preserve	\$16,021,554	\$1,367,613	9%
2012	Orange	Elem	SunRidge Elementary	\$10,031,097	\$1,296,632	13%
2012	St. Johns	Elem	Palencia Elementary	\$12,677,682	\$0	0%
2012	Volusia	Elem	Citrus Grove Elementary	\$13,854,183	\$415,026	3%
2012	Collier	Middle	Bethune Education Center	\$5,538,155	\$479,652	9%
2012	Dade	Middle	North Dade Middle	\$18,921,534	\$0	0%
2012	Lee	Middle	Hams Marsh Middle	\$23,750,925	\$2,100,258	9%
2012	Orange	Middle	SunRidge Middle	\$23,617,116	\$1,051,252	4%
2012	Dade	High	International Studies SHS	\$7,192,325	\$0	0%
2012	Dade	High	Medical Academy of Science and Technology	\$9,303,705	\$0	0%
2012	Orange	High	Evans High	\$55,507,691	\$2,151,931	4%
2012	St. Lucie	High	Lincoln Park Academy	\$10,928,736	\$7,901,452	72%
2013	Marion	Elem	Legacy Elementary	\$14,047,310	\$477,607	3%
2013	Orange	Elem	Sun Blaze Elementary	\$10,269,207	\$658,487	6%
2013	Orange	Elem	Hackney Prairies Road Area Elementary	\$11,261,094	\$657,635	6%
2013	Palm Beach	Elem	Galaxy Elementary	\$19,780,288	\$1,929,530	10%
2013	Palm Beach	Elem	Gove Elementary	\$23,540,256	\$1,284,903	5%
2013	Monroe	Middle	Horace O'Bryant	\$30,596,297	\$2,740,572	9%
2013	Lake	High	Lake Minneola High	\$46,974,201	\$13,992	0%
2013	Martin	High	Martin County High	\$7,623,316	\$536,994	7%
Total/Weighted Average				\$2,079,619,126	\$214,573,798	10%
Total/Weighted Average (Collier County Schools ONLY)				73,979,165	7,013,235	9%
Total/Weighted Average (Collier County Schools ONLY, excl Lorenzo Walker Institute)				64,135,752	6,725,957	10%
Total/Weighted Average (Excluding Collier County Schools)				\$2,005,639,961	\$207,560,563	10%

Source: Florida Department of Education

Land Value Analysis

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

- Recent land purchases as well as estimates for future purchases;
- A review of current market value of land from the Property Appraiser database where the existing schools are located;
- An analysis of vacant land sales in Collier County over the past three years for parcels of necessary size;
- An analysis of market value of all vacant land from the Property Appraiser database for parcels of necessary size and similar location; and
- Discussions with the District staff.

The value of parcels where the existing schools are located, as estimated by the Property Appraiser, indicates an average land value of \$65,000 per acre. Property Appraiser estimates tend to be on the conservative side for publicly owned land. Historical land purchases in 2010 and 2012 resulted in an average value of \$115,000 per acre with a range of \$46,000 per acre to \$188,000 per acre. The District recently obtained an appraisal for a school site in the Parkland residential community, which was estimated at \$136,000 per acre. In addition, the location of next few schools suggest that the District may purchase land initially in the western parts of the county, which tends to be more expensive, and move eastward as development occurs. Given this information, a unit cost of \$85,000 per acre is found to be a reasonable and even a conservative estimate for impact fee calculation purposes.

**Table B-6
Land Value Estimate**

Description	Year ⁽¹⁾	Purchase Price/Estimate ⁽²⁾	Acreage ⁽³⁾	Land Value per Acre ⁽⁴⁾
<i>Recent Land Purchases:</i>				
Immokalee Transportation/Bus Facility Site				
- Lot 11	Dec 2012	\$130,000	2.84	\$45,775
- Lot 12	June 2010	\$500,000	2.66	\$187,970
<i>Future Land Purchases:</i>				
Appraisal for Parkland School Site	2015	\$2,050,000	15	\$136,667
Value of Existing School Parcels ⁽⁵⁾ :				
- Elementary				\$56,894
- Middle				\$61,847
- High				\$76,439
- All				\$65,485
Land Value Used in the 2010 Study, Adjusted for Changes in Property Values ⁽⁶⁾				\$81,466
Used in the Study				\$85,000

(1), (2), (3), (4) Source: Collier County School District

(5) Source: Collier County Property Appraiser

(6) Source: Collier County School Impact Fee Update Study, August 22, 2011 and Collier County Property Appraiser