

BREVARD COUNTY SCHOOL IMPACT FEE STUDY



Prepared for:

**Board of County Commissioners of
Brevard County, Florida**
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BREVARD COUNTY SCHOOL IMPACT FEE STUDY

I. INTRODUCTION

Tindale-Oliver & Associates, Inc. (TOA) was retained by the Brevard County Board of County Commissioners to examine the feasibility of implementing a school impact fee program in Brevard County. There are approximately 81 public schools that currently serve the residents of Brevard County and its municipalities. The following summarizes the different types of public schools, as well as the total number of each type that are operated by the School Board of Brevard County.

- High School (10);
- Junior/Senior High School (4);
- Middle School (12); and
- Elementary School (55).

In addition to the above school facilities, the School Board also operates several other types of support facilities, including abeyance centers, adult education facilities, an educational services facility and various maintenance facilities.

Due to the population growth that Brevard County has experienced over the last few years, as well as the anticipated future population growth, the Board of County Commissioners determined that it is necessary to explore the possibility of implementing a school impact fee to help mitigate future impacts that new residential development will place on school facilities.

II. OVERVIEW OF SCHOOL IMPACT FEE

Impact fees are charges made to new residential developments to reimburse local governments and school boards for the capital cost of public educational facilities that are needed to serve the residents who occupy the new development. By collecting impact fees from new residential developments, Brevard County can help to mitigate the impact that new residents place on school facilities by using funds from the impact fees to help offset the costs of providing capital facilities for the additional students. The School Board is only responsible for public educational facilities within the County, and cannot control admission to or management of private educational facilities or regulate home schooling. As a result, impact fees collected by the County are used only for public

schools. Therefore, the following analysis considers only data from public educational facilities in Brevard County.

There are five major elements associated with the development of a school impact fee that is implemented by type of residential unit

- School costs per student station;
- Impact cost per student station;
- Calculation of impact fee credits;
- Student generation rate; and
- Proposed impact fee per residential unit.

These five elements are summarized in the report, with the result being the net impact cost for new residential development in Brevard County. School impact fees are charged only to residential land uses and the net impact cost is reflected in a cost calculated per residential unit. The net impact cost is developed based on the following three types of residential units: single-family detached homes, all residential attached homes, and manufactured homes.

The School Board serves the entire County. Therefore, because attendance boundaries for individual schools can be redrawn in order to balance where students live with where there is available school capacity, added school capacity in one location can serve new development in another part of the County. Therefore, it is appropriate to use the entire County as a single benefit district for school impact fees, rather than dividing the County into multiple benefit districts where the impact fees can only be spent in the district in which they were generated. However, multiple benefit districts could be accommodated should the Board of County Commissioners so desire.

III. SCHOOL COST PER STUDENT STATION

Table 1 provides a summary of the costs per student station in Brevard County by school type. The total costs by school type are based on both capital building and land costs, where available, and were provided to TOA to reflect typical capital costs for the land and construction costs for new schools in Brevard County. Data in Table 1 are based on the actual total costs for prototype elementary, middle, and high schools built and opened within the last eight years, from 1995-2003, in Brevard County. The total cost for each

school type is inflated according to the growth rate of the Consumer Price Index (CPI) from the month and year that each school was opened until December 2003¹.

Table 1: School Facility Costs

	Manatee Elementary	Longleaf Elementary	Central Middle	Bayside High
Month/Year Facility Built	August 2003	August 1996	August 1995	August 1997
Actual Construction Cost	\$11,327,615	\$8,822,856	\$20,294,627	\$36,735,785
Inflation Rate (construction) ¹	1.0060	1.1805	1.2145	1.1549
Inflated Construction Cost	\$11,395,581	\$10,415,382	\$24,647,824	\$42,426,158
Actual Land Cost	N/A	\$620,548	N/A	\$613,054
Inflation Rate (land) ²	N/A	1.4070	N/A	1.384
Inflated Land Cost	N/A	\$873,111	N/A	\$848,467
Total Inflated Cost	\$11,395,581	\$11,288,493	\$24,647,824	\$43,274,625
Total Cost by School Type	\$22,684,074		\$24,647,824	\$43,274,625

*Figures may not add due to rounding.

- (1) Inflation rate for construction of school facility is based on State of Florida Student Station Cost Factors.
- (2) The inflation rate for land is based on percentage change in property values from the Brevard County 2001-02 Budget Summary, pg. C-6.

Data from Table 1 are then used in Table 2 to determine the cost per student station by school type. Compared to the State of Florida’s estimated cost per student station by school type in December 2003, Brevard County’s cost per student station were, on average, 15 percent lower than the State’s cost per student station, depending on the type of school. This demonstrates that the costs per student station for the three school types used in this report are conservative for Brevard County.

Table 2: Cost per Student Station by School Type

Cost Component	Elementary	Middle	High	Total
School Building	\$21,810,963	\$24,647,824	\$42,426,158	\$88,884,945
Land	\$873,111	\$0	\$848,241	\$1,721,352
Total	\$22,684,074	\$24,647,824	\$43,274,625	\$90,606,297
Student Stations	1,885	1,899	2,484	6,268
Cost per Student Station	\$12,033.99	\$12,979.37	\$17,421.35	\$14,455.38

Source: Dane G. Theodore, AIA, Brevard School District architect, October 24, 2003.

- (1) Construction costs were inflated according to the CPI from the month and year facility was opened until December 2003.
- (2) Land was not required for construction of middle school.

¹ <http://www.state.fl.us/edr/conferences/peco/station.htm>

IV. TOTAL IMPACT COST PER STUDENT

The impact cost per student is based on the data derived in Table 2. Because there is a variation in the extent to which student stations are actually utilized based on school type, an adjustment is made to reflect utilization rates based on the School Board's Five-Year Work Plan. This step also adjusts the cost per student station to cost per student.

The five-year annual average of total enrolled students from the 2003-03 to 2006-07 school years is used for is used to properly weight the average cost per student by school type.

School bus costs and school bus compound costs are considered separate costs above and beyond school facility costs. The five-year annual average of total enrolled students is used to calculate the school bus cost per student, which is added to the impact cost per student. It should be noted that only the school bus cost used to accommodate new students is used in the calculation of the school bus cost per student. School bus costs towards replacing existing buses are not used in this calculation.

The cost of debt for school buildings is also added to the impact cost. This is based on the present value interest of the current debt, including Certificates of Participation, per student. Present value of interest is based on 5.0 percent debt over a 20-year time period. The result is the impact cost per student considering construction costs per new student station. The present value interest of the debt cost is added to the cost per student to calculate the total impact cost per student. The items discussed in this section, as well as the resulting total impact cost per student, are included in Table 3.

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Table 3: Total Impact Cost per Student

Impact Cost Per Student Station				
Calculation Step	Elementary	Middle	High	Total
Cost Per Student Station	\$12,033.99	\$12,979.37	\$17,421.35	\$14,455.38
Utilization Rate	0.85	0.85	1.02	
Students five-year average ¹	35,442	9,286	23,792	68,520
Student Distribution ¹	51.7%	13.6%	34.7%	
Weighted Cost Per Student Station	\$14,157.64	\$15,269.85	\$17,079.75	\$15,323.00
Total Bus Cost				\$2,756,670
Bus Impact Cost Per Student				\$40.23
Impact Cost Per Student				\$15,363.23
Debt Cost Per Student				
Total Debt, from Work Plan				\$51,111,955
Amount Financed Per Student				\$745.94
Bond Yield Rate				5.0%
Interest				\$37.30
Capitalization Period, Years				20
Present Value Interest				\$464.80
Total Impact Cost Per Student				\$15,828.03

Source: Dane G. Theodore, AIA, Architect for the School District of Brevard County, October 24, 2003 and January 26, 2004.

(1) Total student enrollment for the 2002-02 to 2006-07 school years is used to calculate the five-year average of total enrolled students.

(2) School Bus Cost is based on \$61,765 per bus for 380 buses and \$1,024,000 per bus compound for 4 bus compounds. 10 percent of total estimated school bus costs were used to estimate bus costs for new students.

V. IMPACT FEE CREDITS

In addition to school impact fees, new residential developments generate additional revenues that may also be used to pay for new and expanded school facilities. In order to ensure that new residential developments are not paying more than their appropriate fair share of the total cost, a credit for the other additional revenues generated by new development that are used for school system expansion is deducted from the total impact fee. This ensures that each new residential development pays the appropriate fair share of the cost to build new schools. Credits to school impact fees cannot be given for payments that are not used for new educational facilities needed for new developments. In addition, credits are not given for revenues that are used for maintenance and operation costs, but are only given for revenues that are used for the capital costs associated with new or expanded school facilities.

There are three steps involved in the calculation of revenue credits for the Brevard County school impact fee.

Step One involves calculating revenue credits to account for the state revenues contributing to school capital costs. The Florida State Constitution authorizes two sources of revenue for school districts: Public Education Capital Outlay (PECO) and Capital Outlay and Debt Service (CO & DS). Revenues from PECO are generated through a 2.5 percent tax imposed on the gross receipts of sellers of electricity, natural or manufactured gas, and telecommunication services in the State. Revenues generated from this tax are used to fund capital renovation and expansion projects for public educational facilities. CO & DS revenues are generated from the licensing of motor vehicles and motor homes and are also used for capital renovation and expansion projects for public education facilities. CO & DS revenues are distributed annually among school districts and community college districts based on a constitutional formula.²

In Brevard County, the majority of the PECO and CO & DS funds are used for renovation and remodeling of existing public school facilities. Since these funds are not used to provide new student stations, they are not included in the State credit calculations. Based on historical trends for the 5 year period from 1999 to 2003, the total projected PECO and CO & DS revenues utilized for new construction were \$1,413,265. Further, the PECO and CO & DS funding for new student stations in the School Board's 5 Year CIP Plan from 2003 to 2007 is zero. In order to provide a conservative state credit calculation, the historical trend for the last five years, as discussed above, is used in the credit calculation. Thus, the \$1,413,265 annual PECO and CO & DS funds are divided by the 5,931 student stations expected to be constructed according to the School Board's Five-Year Work Plan 2003 to 2007. Table 4 presents the results of the projected state revenue per student. The 5,931 student stations reflect the number of stations projected to be needed in order to maintain the average current utilization rates or level of service. The projected state revenue per student is then subtracted from the total impact cost per student to adjust the impact fee to include the state revenue credit.

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²State of Florida, *Local Government Information Handbook*, September 2000.

Table 4: State Revenue Credits

Total Impact Cost per Student	\$15,828.03
State Revenue Credits	
PECO	\$1,413,265
Projected Student Stations	5,931
State Revenue per Student	\$238.28
Revised Impact Cost Per Student	\$15,589.75

- (1) PECO, CO & DS revenues are from the 5 year period 1999 to 2003 (Dane G. Theodore, AIA, Architect for the School District of Brevard County, January 26, 2004).
(2) 5,931 student stations expected to be constructed according to the School Board Five-Year Work Plan, 2003 to 2007.

Step Two involves calculating a revenue credit for local revenues, including the sale of property revenues that are used for capital facility expansion purposes. To adjust the impact cost per student to account for the local revenue credit, the total property sales revenues are divided by the 5,931 student stations projected in the School Board's Five-Year Work Plan. This results in the projected property sale proceeds per student, which is illustrated in Table 5. This figure is then subtracted from the revised impact cost per student to adjust the impact cost per student for the local revenue credit in addition to the previous adjustment for the state revenue credit.

Table 5: Local Revenue Credits

Revised Impact Cost per Student	\$15,589.75
Local Revenue Credits	
Property Sales, Food Service Transfer	\$1,000,000
Projected Student Stations	5,931
Property Sale Proceeds per Student	\$168.61
Adjusted Impact Cost per Student	\$15,421.14

- (1) Property sales and food service transfer revenues are estimated in the School Board Five-Year Work Plan 2003 to 2007.

Step Three, the final step for calculating revenue credits, is based on a 2-mill ad valorem tax levied by the School Board. The revenues generated by the 2-mill tax are used for both capital renovation and capital expansion. Based on the School Board Work Plan,

\$69.4 million or 35.4 percent of the revenues are used to fund new construction³. Revenue projections used in this five-year School Board Work Plan for the 2-mill ad valorem tax were based on an annual increase of 2.5 percent per year. Recent trends indicate that a 6.0 percent annual increase revenue is more appropriate. Given this assumption, the amount of revenue available for capital based on the 35.4 percent ratio calculated above was adjusted to \$74.7 million. Review of historical trends from 1999 to 2003 indicates that debt service paid on Certificates of Participation (paid by the 2-mill tax) total \$57.2 million⁴. Since the adjusted five-year total revenue for 2003 to 2007 for new construction (\$74.7 million) is greater than the five-year period from 1999 to 2003 (\$57.2 million), it will be used to develop the 2-mill ad valorem tax credit. This will provide a conservative estimate of the credit amount from the 2-mill ad valorem tax. This calculation is made by dividing the average annual amount of the 2-mill ad valorem tax used for new construction or to pay debt service by the average number of students expected to utilize public school facilities during the 2003 to 2007 time period. This results in an average revenue per student. The present value of this annual revenue per student is based on a bond yield rate of 5.0 percent over a 20-year time period. The present value is subtracted from the \$15,421.14 adjusted impact cost per student calculated by the previous two steps. The result is a \$12,701.14 net impact cost per student, which is illustrated in Table 6

Table 6: 2-mill Debt Service Revenue Credit

Adjusted Impact Cost per Student	\$15,421.14
2-mill Debt Service Revenue Credit	
Adjusted average annual five-year projected 2-mill Revenues, based on a 6 percent annual increase.	\$42,157,554
Percent of five-year 2-mill revenue used for capital expansion ¹ .	35.4%
Five-year 2-mill revenue used for capital expansion	\$14,936,964
Number of Students, 5-Year Avg.	68,438
2-mill Annual Revenue Per Student	\$218.26
Bond Yield rate	5.0%
Capitalization Period, Years	20
Present Value Annual 2-mill Revenue	\$2,720.00
Net Impact Cost per Student	\$12,701.14

(1) Based on the School Board's Five-Year Work Plan , 2003 to 2007, approximately 35.4 percent of the five-year average of 2-mill revenues is used for the expansion of student stations (Dane G. Theodore, AIA, Architect for the School District of Brevard County, January 26, 2004).

³ Data, based on the School Board 5 Year Work Plan 2003 to 2007

⁴ Data provided by Michael Degutis, Director of Accounting, February 4, 2004

A summary of all revenue credits and the resulting net impact cost per student is provided in Table 7.

Table 7: Summary of Revenue Credits and Net Impact Cost

Total Impact Cost per Student	\$15,828.03
State Revenue Credit	\$238.28
Local Revenue Credit	\$168.61
2-mill Debt Service Revenue Credit	\$2,720.00
Total Revenue Credit	\$3,126.89
Net Impact Cost per Student	\$12,701.14

VI. STUDENT GENERATION RATE

Different types of residential housing units typically vary with respect to the number of students living in each type. Therefore, school impact fees are often assessed based on the student generation rates based on residential unit type. For Brevard County, the student generation rate per residential unit is based on three different types of residential units, single family detached, all residential attached, and manufactured home.

The number of students in Brevard County is determined using Census 2000 data, while the number of each housing unit type is based on Brevard County Property Appraiser records. The number of students per type of residential unit is developed by dividing the number of students into the corresponding number of units. The student generation rates by residential unit type are provided in Table 8.

Table 8: Student Generation Rate

Residential Unit Type	Current Number of Students	Number of Units	Students per Unit Type
Single Family Detached	48,043	135,412	0.35
All Residential Attached	13,326	61,369	0.22
Manufactured Home	5,061	24,092	0.21

Sources: Census 2000, PUMS 2000, and Brevard County Property Appraiser Records

VII. PROPOSED SCHOOL IMPACT FEE SCHEDULE BY UNIT TYPE

Table 9 presents the impact fee rate schedule by residential unit type. This fee is calculated by multiplying the net impact cost per student, calculated in Section V of this report, by the student generation rate for each unit type, calculated in the previous section.

Table 9: Proposed School Impact Fee Schedule by Unit Type

Land Use	Impact Unit	Net Cost per Unit
Residential	Single Family Detached	\$4,445.40
Residential	All Residential Attached	\$2,794.25
Residential	Manufactured Home	\$2,667.24