



The School Board of Broward County, Florida

**Student Generation Rate/
School Impact Fee Study
Countywide**

—Technical Report 1—

June 16, 2014

Prepared by:



Nancy E. Stroud, Esq.
Lewis Stroud & Deutsch, P.L.



Broward County Public Schools, Florida

The School Board of Broward County

Patricia Good, Chair
Donna P. Korn, Vice Chair
Robin Bartleman
Heather P. Brinkworth
Abby M. Freedman
Laurie Rich Levinson
Ann Murray
Dr. Rosalind Osgood
Nora Rupert

Leadership

Robert W. Runcie, Superintendent of Schools
Paul J. Carland II, Esq., General Counsel
Benjamin Leong, Chief Financial Officer
Leslie M. Brown, Chief Portfolio Services Officer
Christopher Akagbosu, Director, Facility Planning & Real Estate
Omar Shim, Director, Capital Budget
Patrick J. Sipple, Director, Demographics and Student Assignments

Consultants

Walter H. Keller, Inc.
Lewis Stroud & Deutsch, P.L.

Walter H. Keller, Inc.
Consulting Engineers & Planners
Coral Springs • Sewall's Point
3727 S.E. Ocean Boulevard, Suite 200A
Sewall's Point, FL 34996
Broward: (954) 755-3822
Martin: (772) 219-9079
email: wkeller@whkinc.com

STUDENT GENERATION RATE/SCHOOL IMPACT FEE STUDY
TECHNICAL REPORT 1
JUNE 16, 2014

TABLE OF CONTENTS

I. Executive Summary	1
II. Introduction	6
III. Student Generation Rate.....	7
Methodology	7
Definitions	10
Data Tables	11
Regional Planning Areas	13
Student Generation Rate With Housing Data Set	16
Student Generation Rate With American Community Survey	19
IV. Updated Financial Data	23
Methodology	23
Capital Revenue Sources	24
Millage	24
Capital Outlay and Debt Service (CO & DS)	24
School Impact Fees Collected	24
Other Revenues	25
Five Year Capital Improvement Program	27
Total School Plant and Land Costs	29
Ancillary Facilities	31
Bus Fleet	32
State and Local Credits	33
State Credit	33
Local and Debt Service Credits	33
Net Funding Deficit Per New Student	36
V. Updated School Impact Fee	37
Impact Fee Benefit Zones	40
Legal Analysis	41
Dual Rational Nexus Test	42
School Impact Fees	43
Statutory Law	44
Updated Study	45
VI. Recommendations	47

STUDENT GENERATION RATE/SCHOOL IMPACT FEE STUDY
TECHNICAL REPORT 1
JUNE 16, 2014

TABLE OF CONTENTS (CONTINUED)

LIST OF FIGURES

1. Planning Areas.....	14
------------------------	----

LIST OF TABLES

1. Housing, Population & Public Student Trends.....	12
2. New Dwelling Units by Type and Planning Area 2006-2013	13
3. Percentage of New Dwelling Units by Type and Region	15
4. Number Bedrooms by Type of Unit	15
5. Student Generation Rate (2014-2007).....	17
6. Student Generation Rates Countywide and by Planning Area	18
7. Dwelling Units by Year and Bedrooms	19
8. Public School & Charter School Students by Bedrooms (2012).....	20
9. Public School & Charter School Students by Bedrooms (2006-2012)	20
10. Preliminary Student Generation Rate-American Community Survey	22
11. Broward County Impact Fees (2006-2013).....	24
12. Analysis of Capital Outlay Allocations (FY09-FY13).....	26
13. Five Year Estimated Construction Appropriations	28
14. New Student Total Cost Per Station	30
15. Ancillary Facilities	31
16. Bus Fleet Replacement Value.....	32
17. Broward County Property Values for 2013	34
18. Proceeds Derived From Millage.....	35
19. Past Payment Credit for Vacant and Agricultural Properties	35
20. Net Funding Deficit Per New Student	36
21. Recommended Countywide School Impact Fee Schedule	38
22. Existing and Possible School Impact Fees Countywide and by Planning Area	39

**STUDENT GENERATION RATE/SCHOOL IMPACT FEE STUDY
TECHNICAL REPORT 1
JUNE 16, 2014**

TABLE OF CONTENTS (CONTINUED)

APPENDIX

LIST OF TABLES

A-1. Single Family Student Generation Rates by Planning Area.....	A-1
A-2. Townhouse, Duplex, and Villa Student Generation Rates by Planning Area	A-2
A-3. Garden Apartment Student Generation Rates by Planning Area	A-3
A-4. Mid-Rise Student Generation Rates by Planning Area	A-4
A-5. High-Rise Student Generation Rates by Planning Area.....	A-5

I. EXECUTIVE SUMMARY

School Impact Fees provide important funding assistance to the Capital Building Program of the Broward County School Board. This Study updates the Student Generation Rate and current school impact fees, which are based on 2007 conditions to 2014 conditions.

Technical Report 1 address Deliverable #14 of the Contract Agreement requiring new recommended Countywide Student Generation Rate and School Impact Fee Schedule. The Report documents the methodology, data collection, data analysis and the resulting conclusions of the 2014 Study. The 2014 results are compared to the 2007 Study. The updated Student Generation Rates are used with a financial analysis of the Net Funding Deficit Per New Student to provide a School Impact Fee Schedule by housing unit type and bedroom mix. School Impact Fee Schedules are provided Countywide and by seven (7) Planning Areas. The Student Generation Rate is utilized to determine the School Impact Fee and not for projections of future students which are based on Certificates of Occupancy.

Difficulties encountered in the 2007 Study and subsequent Study in 2010 was important in shaping the methodology for this effort. The approved Broward County methodology utilizes the Housing Types included in the Broward County Land Development Code. Housing unit and student population characteristics require use of a housing data set of recently constructed dwelling units and subsequent address matching of Public School students to dwelling unit addresses. In the 2007 Study, the number of bedrooms of matched housing units in the garden, mid-rise and high rise apartments were not always known for the specific matched units. The overall building bedroom mix was used to estimate the bedroom characteristics of matched units.

The 2010 Study utilized U.S. Census American Community Survey (ACS) 3 Year microdata information to develop the Student Generation Rate (SGR). The housing unit mix of the ACS differs from the Broward County Land Development Code and the identification of garden, mid-rise and high rise apartments is not available. The 2010

Study also took place at a time with continued Public School enrollment declines and a severe economic recession was underway. For these and other reasons, the 2010 Study was not approved by the Broward County Commission.

This Study Methodology utilized a complete (100%) sampling of new housing units completed between 2006 and 2013 using Certificates of Occupancy information, building permit information, property information and school enrollment data from the Broward County Department of Planning and Redevelopment Division, the Broward County Property Appraiser and the Broward County Public Schools. This process is consistent with the methodology utilized in the 2007 Broward County School Impact Fee Study.

The Broward County POSSE Permit and Licensing System Data Base was used to provide an initial 2006-2013 housing data set. Broward County Property Appraiser's (BCPA) Property and Housing Data files were also used to identify housing units constructed between 2006 through 2013. An extensive manual editing procedure was performed to eliminate duplicate or incorrect information, provide information to listings with missing data or provide new information on known residential units that were not initially provided. The final housing data set totaled 24,467 residential units. The data set was stratified countywide and by planning areas. Single family units accounted for 25% of the housing units. Townhouse, duplex and villa dwellings totaled 27% of the housing units. Garden, mid-rise and high rise apartments made up 20%, 13.5% and 15% respectively.

The Broward County School Board's Portfolio Services Department of Demographics and Student Assignments provided current address listing of all Public School students by address. The student listing represented the 2013-2014 Benchmark Day enrollment. The enrollment count included students in 229 Public Schools and centers. The 2013-2014 student membership totaled 262,563 students; 224,955 in Public Schools and centers; and, 37,608 in Charter Schools. Charter students were not included in the address matching effort.

Address matching of Public School students and the housing data set identified 6,078 Public School students in 3,910 dwelling units. The 2014 Student Generation Rate

(SGR) of all units is 0.248 Public School students per residential unit. This is a 16.5% decrease from the 2007 Study. The 2014 Student Generation Rate (SGR) for the various housing unit categories with a comparison to the 2007 Study follows:

Single Family: 0.434 SGR, a 7.1% decrease from 2007;

Townhouse/Duplex/Villa: 0.321 SGR, a 41.4% increase from 2007;

Garden Apartment: 0.227 SGR, a 22.6% increase from 2007;

Mid Rise Apartment: 0.048 SGR, a 3.2% increase from 2007; and,

High Rise Apartment: 0.019 SGR, almost a 400% increase from 2007.

Bedroom information was missing for approximately 900 matched dwelling units. The information was generally confined to the townhouse/duplex/villa and garden apartment categories. The bedroom information is needed to develop the School Impact Fee schedule for the bedroom ranges in the Broward County Land Development Code. The planning staffs of Broward County municipalities were contacted to assist in providing the missing bedroom information. With the assistance of the municipalities, bedroom information was obtained for 90% of the matched housing units.

The U.S. Census 2010-2012 American Community Survey 3 Year public use microdata were also reviewed to assess its applicability for the Study's SGR and School Impact Fee analysis. The ACS includes both Public School and Charter School students. The Charter School students cannot be removed from the analysis. While the ACS predicts a higher SGR than the approved Broward County methodology using the CO Housing Data Set, the limited sampling for school students and the inconsistencies with the housing types in the Broward County Land Development Code, restricted its use in this Study.

Recent and projected financial information was obtained and reviewed to establish revenue and expenditure levels for capital improvements. Historically, 28.8 million dollars in school impact fees were collected between 2008-09 to 2012-13. The majority of capital outlay revenue (92%) is derived from local sources, primarily the 1.5 mill Capital Improvement Tax. The 5 Year School Board Capital Improvement Program

(CIP) totals 1.365 billion dollars. A major part of the CIP (55%) is oriented to payment of the debt service for previously issued Certificates of Participation (COPs). The COPs were used to fund school expansion and other capital improvement needs. Analysis of the COPs revealed that 45% of the COP debt is related to capacity improvements.

Review of recent school improvement costs were performed to establish a New Student Total Cost per Station of \$28,800 for plant and land costs for different school types. Ancillary school facilities costs were estimated to be \$1,183 per new student. The cost for the bus fleet was \$618 per new student. For this Study, the total cost per new student is \$30,601. With the average SGR of 0.248 Public School students per unit, \$7,589 would be required for each residential unit. It is estimated that 42.79% of the needed funding is available from existing sources such as the State and the local Capital Millage, leaving a Net Funding Deficit Per New Student of \$17,693.

The Net Funding Deficit Per New Student multiplied times the SGR is the Maximum Defensible School Impact Fee. The adopted School Impact Fee can be less but cannot exceed the maximum. School Impact Fee Schedules were prepared. The current School Impact Fee is based on the 2007 Study recommendation assessed at 75% with price deflator adjustments (increases) of 5.1%. Comparisons of proposed and current Countywide School Impact Fees per Table 21 are:

Single Family (3 or less bedrooms): \$6,558 vs. \$6,276, a 4.5% increase;
(4 or more bedrooms): \$8,242 vs. \$9,116, a 9.6% decrease;

TDV (2 or less bedrooms): \$3,783 vs. \$2,125, a 78% increase;
(3 or more bedrooms): \$6,418 vs. \$4,937, a 30% increase;

Garden Apartment (1 or less bedrooms): \$358 vs. \$1,906, an 81% decrease;
(2 bedrooms): \$4,182 vs. \$3,352, a 25% increase;
(3 or more bedrooms): \$7,598 vs. \$4,415, a 72% increase;

Mid-Rise (1 or less bedrooms): \$279 vs. \$811, a 66% decrease;
(2 or more bedrooms): \$1,098 vs. \$811, a 35% increase; and,

High-Rise (Average): \$344 vs. \$71, a 385% increase.

A School Impact Fee schedule was also prepared for the seven (7) Planning Areas and similar bedroom ranges as the countywide schedule above. Because the Planning Areas are smaller subgroups of Broward County and may have unique and non-typical situations, the School Impact Fee ranges for the Planning Areas varies widely. In some instances, a smaller dwelling unit (with less bedrooms) may have a higher fee than a larger unit with more bedrooms. For these reasons, the implementation of School Impact Fees at the seven (7) Planning Areas is not recommended at this time.

Impact fees are a legally acceptable means for funding new capital needs created by new development. The study results provide the foundation for assessing a proportionate share of the costs of new capacity related to the new students associated with new housing units. The recommended fee is less than maximum proportionate share supported by the data. It is expected that the impact fees collected will be used to pay back the portion of the COPs that funded the capacity improvements related to new growth. In this way, the recommended school impact fees meet the tests of legal sufficiency.

II. INTRODUCTION

The School Board of Broward County utilizes School Impact Fees as part of its overall program of funding the Capital Building Program of the District. The School Impact Fee Program was initiated in January 1979. The School Board engaged Walter H. Keller, Inc. in December 2013 to update the Student Generation Rate and School Impact Fee Schedule. The Study is based on a 100% sampling of new housing units. The new Student Generation Rate will be used for the School Impact Fee Schedule and not for projections of future students, which are developed, based on Certificates of Occupancy.

Draft Technical Report 1 documents the methodology, data collection, data analysis and the resulting conclusions of the 2014 student generation rate analysis. The Report discusses the Student Generation Rate development including discussions of the Methodology, Definitions, Data Tables and the preliminary Student Generation Rate by Housing Unit Types. The results are compared to the 2007 Student Generation Rate Report.

Financial data is updated in Section IV of the Report. The Section provides a discussion of the methodology, recent and projected revenue and capital expenses, establishes the cost of a new student and the net deficit associated with the new student.

Section V of the Report, addresses the School Impact Fee Update and the Fee Schedule. Technical Report 1 presents both Countywide and Planning Area School Impact Fees utilizing the current four (4) Impact Fee Benefit Zones. The legal basis for the Broward County School Impact is assessed.

The Final Section of the Report provides recommendations on changes to the Broward County Land Development Code and suggestions on improving future efforts to update the School Impact Fee.

III. STUDENT GENERATION RATE

Methodology

The Study Methodology is predicated on utilizing a complete (100%) sampling of new housing units completed between 2006 and 2013 using Certificates of Occupancy information, building permit information, property information and school enrollment data from the Broward County Department of Planning and Redevelopment Division, the Broward County Property Appraiser and the Broward County Public Schools. This process is consistent with the methodology utilized in the 2007 Broward County School Impact Fee Study.

Broward County maintains a Permit and Licensing Data Base known as POSSE. POSSE includes a wide variety of development information such as, the building permit date, Certificate of Occupancy date, development name, dwelling unit type, site address, municipal jurisdiction, zip code, number of units, number of bedrooms, Plat Book and Page, Block number and Lot number. Information is entered into the system from municipal and the County building departments. A formal request for POSSE development information was submitted to the Development Management and Environmental Review Section in January 2014 requesting all records for residential structures with a building permit between January 1, 2006 and December 31, 2013 with or without Certificate of Occupancy information.

The Development Management and Environmental Review Section compiled three sets of data files covering the requested time frame. The files included approximately 17,400 records. After review of the initial data files, an additional request was submitted to separate mid-rise and high rise units, which were combined in the initial data sets. The mid-rise and high rise data was obtained in February 2014. Based on this preliminary information, approximately 17,500 Certificates of Occupancy were identified. The preliminary review revealed major work was needed to improve the reliability of the data file. Work was initiated to eliminate duplicate information, add in missing data and finalize the CO data.

Broward County Property Appraiser's (BCPA) Property and Housing Data files were also requested to facilitate the refinement of housing units constructed between 2006 through 2013. The Geographic Information System (GIS) linkages in the Property Appraiser's Property and Housing data files were valuable for mapping and quality control. The BCPA property files included both non-residential and residential classification and all County parcels at the time of the data set. Efforts were initiated to restrict the data set to residential uses and to the CO data time frame. It should be noted however, the definitions of dwelling unit type in the BCPA data generally aligns with the U.S. Census definitions and not the Broward County POSSE data set.

U.S. Census information was also used to facilitate the housing data reasonableness and for use as a secondary basis for determining the Student Generation Rate. The American Community Survey 3-Year Public Use Microdata Sample (PUMS) for 2010-2012 was analyzed. Information compiled included: dwelling units constructed by year and number of bedrooms; dwelling units by type and number of bedrooms; public school students by unit type; and, number of bedrooms and public school students by unit type and bedrooms since 2006.

The Broward County School Board's Portfolio Services Department of Demographics and Student Assignments provided current address listing of all public school students by address. The student listing represented the 2013-2014 Benchmark Day enrollment, which was collected on September 9, 2013. The enrollment count included students in 229 public schools and centers.

The resulting two data files, the final housing unit inventory of dwelling units completed between 2006-2013 and the 2013-2014 student address listing, were electronically compared and, when appropriate, public school students were matched to housing units.

The number of new residential units (constructed between 2006-2013) totaled approximately 20,000 dwelling units after the initial editing. The housing unit inventory includes units either as a single row (for single family and townhouse units), a series of buildings (for multi-family developments) or a single building with multiple units. The 2013-2014 student membership file totaled 262,563 students; 224,955 in public schools

and centers; and, 37,608 in charter schools. Charter school students were not included in the address matching effort.

Manual edit checks were continued to identify inappropriate address listings and to manually correct the listing to improve the number of matches. As of April 7, 2014, the housing data inventory totaled 27,600 units. Approximately 14% of the housing units were matched to the September 9, 2013 Benchmark 14th Day student listing. Of this amount, bedroom and apartment information was not provided for 910 dwelling units. The missing bedroom information occurred primarily in the townhouse, duplex and villa and garden apartment dwelling unit types.

Additional efforts were initiated to obtain the missing bedroom information from a variety of sources. The first steps performed included research of the Property Appraiser website and review of the School Board municipal CO listings to identify the development name or current project name. Website searches were then used to find sales, rental, project or site plan information. The next effort involved contacting the municipality's contact person relative to the municipal CO listing and requesting City assistance in obtaining the missing bedroom information for the matched units.

Initial testing of this process was encouraging. Projects totaling 1,516 dwelling units were assessed in detail. Initially, almost 60% of the units were without bedroom information or were incorrectly classified. Seventy-nine (79) students were found in 69 units. Utilizing the process described above, 97% of the bedrooms were identified for the units with matched students. City assistance was important and beneficial in securing the bedroom information. This assistance was requested from 22 municipalities to address the missing bedroom information. With the help of the municipalities, approximately 70% of the housing units with matched students and missing bedroom information were obtained and included in the bedroom SGR analysis.

Definitions

For the purposes of this Study, the following definitions are utilized in all tables and narrative discussions.

Single Family.

One (1) dwelling unit, other than a mobile home, sharing no walls with another dwelling unit.

Townhouse.

Three (3) or more attached dwelling units attached by a common party or firewall, with each unit having two (2) or more residential stories (exclusive of parking levels) and direct access from the ground floor.

Duplex.

Two (2) dwelling units, attached by a common party or firewall, in one (1) building.

Villa.

Three (3) or more dwelling units, attached by a common party or firewall, in a building not exceeding one (1) residential story.

Garden Apartment.

Three (3) or more attached dwelling units in a two (2) or three (3) residential story building with each unit being only one (1) story.

Mid Rise.

Four (4) or more attached dwelling units in a building with four (4) to eight (8) residential stories (exclusive of parking levels).

High Rise.

Nine (9) or more attached dwelling units in a building with nine (9) or more residential stories (exclusive of parking levels).

Mobile Home.

"Mobile home" has the same meaning given in Section 320.01(2), Florida Statutes, and includes only those mobile homes in which permanent residential habitation is permitted by applicable land development regulations.

Data Tables

Table 1 provides Housing Unit, Resident Population and Public School Student growth trends since 2000. The enrollment for Public School Students (K-12 & Centers) is for the Benchmark Day as reported by the Office of Portfolio Services. The Housing unit estimates were obtained from the U.S. Census for July 1 in the calendar year. The Resident Population is taken from the University of Florida's Bureau of Economic and Business Research (BEBR) population estimates for April 1 in the calendar year.

The calendar year on the following page is the first year of the Fiscal Year in Table 1. For example, for Fiscal Year 2001, the calendar year would be 2000. Future projections from 2015 through 2021 are noted in blue.

School Impact Fees are only collected for the Public School facilities. For this reason, the totals for Public School Students in Table 1 do not include Charter School or Private School Students.

Table 1 – Housing, Population & Public Student Trends

Fiscal Year	Total Housing Units	Resident Population	Public School Students	Population per 100 Housing Units	Public School Students Per 100 Housing Units	Public School Students Per 1,000 Population
2000-2001	743,815	1,623,018	244,147	218	33	150
2001-2002	754,982	1,649,925	252,212	219	33	153
2002-2003	764,941	1,669,925	254,888	218	33	153
2003-2004	776,061	1,698,425	258,884	219	33	152
2004-2005	783,519	1,723,131	259,130	220	33	150
2005-2006	791,742	1,740,987	255,799	220	32	147
2006-2007	797,858	1,753,162	246,516	220	31	141
2007-2008	803,389	1,765,707	241,783	220	30	137
2008-2009	806,128	1,758,494	237,040	218	29	135
2009-2010	807,092	1,744,922	234,601	216	29	134
2010-2011	810,324	1,748,066	233,598	216	29	134
2011-2012	810,172	1,753,162	229,314	216	28	131
2012-2013	811,270	1,771,099	227,517	218	28	128
2013-2014	816,279	1,784,715	224,955	219	28	126
2014-2015	821,439	1,791,348	224,266	218	27	125
2015-2016	826,448	1,797,981	223,699	218	27	124
2016-2017	832,827	1,808,547	222,936	217	27	123
2017-2018	839,206	1,819,112	222,544	217	27	122
2018-2019	845,584	1,829,678	221,674	216	26	121
2019-2020	851,963	1,840,243				
2020-2021	858,342	1,850,809				

Sources: Fiscal Years per Broward County School Board
Total Housing Units by U.S. Census for July 1 the beginning Year
Resident Population for April 1 by Univ of FL BEBR for beginning Year
Public School Students (including Centers) by Broward County School Board
School Impact Fees apply to Public Schools. Table 1 does not include Charter School or Private School Students.
Rounded Population & Student Counts per 100 Housing Units and 1,000 Population by Walter H. Keller, Inc.
Public School Student Projections FY2015-2019 by Broward Co School Board Office of Portfolio Services 11/4/13
Total Housing Unit Projections for 2015 & 2020 by Broward County Planning & Redevelopment Div Draft 2014
Resident Population Projections for 2015 & 2020 by Univ of FL BEBR
Other Year Projections by Interpolation by Walter H. Keller, Inc.

Regional Planning Areas

The 2007 School Impact Fee Study included analysis using the Broward County Planning Council's Regional Planning Areas. The 2014 Study updates the Planning Areas based on the School Board's High School Innovation Zones and the Broward MPO 2014 Traffic Analysis Zones. The updated Regional Planning Areas for this Study are provided in Figure 1 on the following page. Table 2 summarizes the dwelling units constructed and given Certificate of Occupancy between January 1, 2006 and December 31, 2013 as derived from the CO Housing Unit development process.

Table 2 – New Dwelling Units by Type and Planning Area 2006-2013

Planning Area	All	Single Family	Townhouse Duplex-Villa	Garden Apartment	Mid Rise	High Rise
NW	1,923	1,202	595	62	64	0
NE	3,308	638	967	1,149	304	250
C	2,469	207	1,284	313	665	0
WC	2,234	574	234	257	452	717
EC	4,905	1,045	1,070	915	1,118	757
SW	5,241	1,832	1,798	1,611	0	0
SE	4,387	506	648	604	700	1,929
Countywide	24,467	6,004	6,596	4,911	3,303	3,653

Source: Walter H. Keller, Inc.

The percentage of new residential dwelling units by Planning Area (PA) within Broward County in the January 2006 to December 2013 time frame is shown in Table 3 on Page 10. Table 3 reveals that the greatest number of single family units were constructed in the Southwest PA (30.5%) followed by the Northwest PA (20%). The Southwest PA also has the largest percentage of townhouse/duplex/villa and garden apartment unit growth: 27.3% for townhouses; and, 32.8% for garden apartments. The growth in mid-rise and high-rise apartments was greatest in the Southeast and East Central Planning Areas.

Figure 1 – Planning Areas

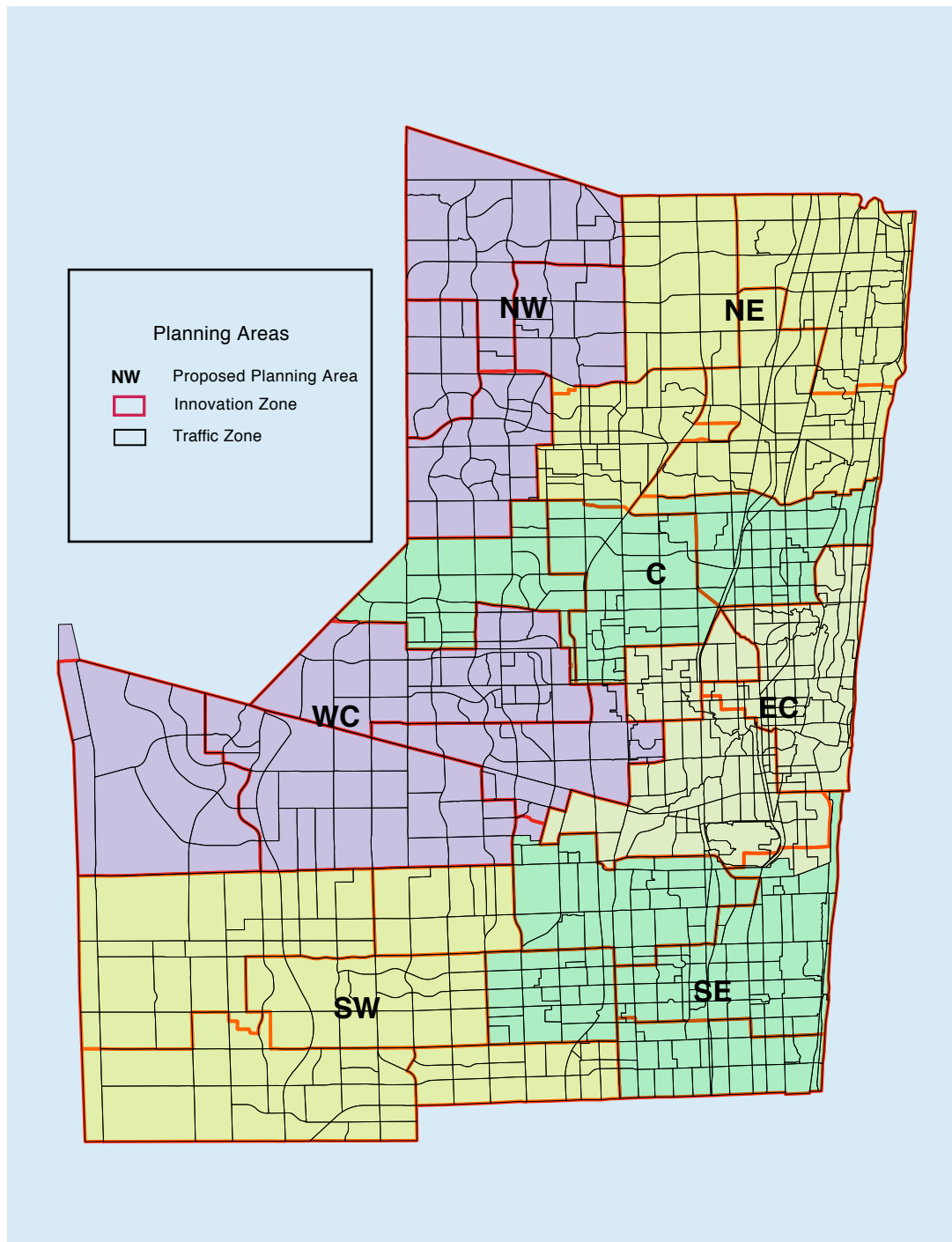


Table 3 – Percentage of New Dwelling Units by Type and Region

Planning Area	All	Single Family	Townhouse Duplex-Villa	Garden Apartment	Mid Rise	High Rise
NW	7.9%	20.0%	9.0%	1.3%	1.9%	
NE	13.5%	10.6%	14.7%	23.4%	9.2%	6.8%
C	10.1%	3.4%	19.5%	6.4%	20.1%	
WC	9.1%	9.6%	3.5%	5.2%	13.7%	19.6%
EC	20.0%	17.4%	16.2%	18.6%	33.8%	20.7%
SW	21.4%	30.5%	27.3%	32.8%		
SE	17.9%	8.4%	9.8%	12.3%	21.2%	52.8%

Source: Walter H. Keller, Inc.

Single family and townhouse dwelling units generally have more bedrooms than multi-family units. For example, single family units have 4 or more bedrooms 66% of the time while townhouses have 3 or more bedrooms 72% of the time. Multi-family units (garden, mid rise and high rise) have 2 bedrooms approximately 49% of the time. Table 4 lists the percent of bedrooms by dwelling unit types between January 2006 and December 2013.

Table 4 – Number Bedrooms by Type of Unit

Unit Type	Bedrooms	Percentage
Single Family	3 or less	33.7%
	4 or more	66.3%
Townhouse-Duplex-Villa	1 or less	0.8%
	2	26.7%
	3 or more	72.5%
Garden Apartment (3 floors or less)	1 or less	25.2%
	2	51.4%
	3 or more	23.4%
Mid Rise (4 to 8 floors)	1 or less	30.7%
	2 or more	69.3%
High Rise (9 floors or more)	1 or less	18.9%
	2 or more	81.1%

Source: Walter H. Keller, Inc.

Student Generation Rate With Housing Data Set

The methodology presented in the prior Section described the process for developing the Student Generation Rate. The Student Generation Rates were developed using the definitions from Page 10 for each housing unit type by bedroom and by grade level. The methodology for this Study utilizes the universe of new (constructed over 2006-2013) Broward County residential units, a total of 24,467. The 2013-2014, 14th Day Benchmark student membership file of 224,955 Public School students (including Centers) was addressed by matching against the street address of each new residential unit after appropriate address format cleanup. This result is often referred to as a 100 percent sample since all Broward County School District students are being examined to see how many live in the universe of new housing constructed in the county over the specified time period.

The housing file includes all new residential construction in the Broward County and thus both files can be conceptualized as complete counts. No specific sampling design is used thus the results of the address matching can be viewed as representing the parameters of interest for that time period (2006-2013) and geographic area (Broward County). In simple terms, the derived students per housing unit multipliers are the county average for each sub-classification of housing type defined in the new housing inventory file by grade or school level (as desired). The breakout of the multipliers by school level, housing type, number of bedrooms, or any other attribute that is available in the addressed matched data file is also based on the complete count with respect to new housing built from 2006-2013 in Broward County. The results represent a tabulation, not estimates, derived from a sample of new housing.

The countywide Student Generation Rate analysis by dwelling unit type, bedrooms and school level are provided in Table 5 rounded to 3 digits. Table 5 also includes a comparison with the 2007 student generation rates. Table 6 provides comparisons to the updated Planning Areas. Student Generation Rates by Planning Area are provided on separate sheets in the Appendix (see Tables A-1 through A-5).

Table 5 – Student Generation Rate (2014 vs. 2007)

SINGLE FAMILY								
Bedrooms	Elementary		Middle		High		Total	
	Land Development Code (current)	2014 Study Update	Land Development Code (current)	2014 Study Update	Land Development Code (current)	2014 Study Update	Land Development Code (current)	2014 Study Update
3 or less	0.175	0.173	0.077	0.091	0.096	0.107	0.348	0.371
4 or more	0.240	0.232	0.124	0.111	0.140	0.122	0.504	0.466
Average	0.225	0.212	0.113	0.105	0.129	0.117	0.467	0.434
TOWNHOUSE • DUPLEX • VILLA								
Bedrooms	Elementary		Middle		High		Total	
	Land Development Code (current)	2014 Study Update	Land Development Code (current)	2014 Study Update	Land Development Code (current)	2014 Study Update	Land Development Code (current)	2014 Study Update
1 or less	0.028	0.060	0.000	0.000	0.000	0.000	0.028	0.060
2	0.058	0.109	0.026	0.049	0.034	0.056	0.118	0.214
3 or more	0.126	0.177	0.061	0.076	0.084	0.110	0.271	0.363
Average	0.106	0.158	0.051	0.068	0.070	0.095	0.227	0.321
GARDEN APARTMENT								
Bedrooms	Elementary		Middle		High		Total	
	Land Development Code (current)	2014 Study Update	Land Development Code (current)	2014 Study Update	Land Development Code (current)	2014 Study Update	Land Development Code (current)	2014 Study Update
1 or less	0.055	0.013	0.023	0.003	0.029	0.004	0.107	0.020
2	0.093	0.136	0.039	0.056	0.053	0.044	0.185	0.236
3 or more	0.120	0.193	0.055	0.113	0.069	0.123	0.244	0.429
Average	0.093	0.118	0.040	0.056	0.052	0.053	0.185	0.227
MID RISE								
Bedrooms	Elementary		Middle		High		Total	
	Land Development Code (current)	2014 Study Update	Land Development Code (current)	2014 Study Update	Land Development Code (current)	2014 Study Update	Land Development Code (current)	2014 Study Update
Studio	0.027	0.008	0.011	0.004	0.008	0.004	0.046	0.016
1	0.027	0.008	0.011	0.004	0.008	0.004	0.046	0.016
2	0.027	0.028	0.011	0.013	0.008	0.021	0.046	0.062
Average	0.027	0.022	0.011	0.010	0.008	0.015	0.046	0.048
HIGH RISE								
Bedrooms	Elementary		Middle		High		Total	
	Land Development Code (current)	2014 Study Update	Land Development Code (current)	2014 Study Update	Land Development Code (current)	2014 Study Update	Land Development Code (current)	2014 Study Update
Studio	0.002	0.001	0.001	0.001	0.001	0.000	0.004	0.003
1	0.002	0.001	0.001	0.001	0.001	0.000	0.004	0.003
2 or more	0.002	0.012	0.001	0.004	0.001	0.006	0.004	0.023
Average	0.002	0.010	0.001	0.004	0.001	0.005	0.004	0.019
MOBILE HOME								
Bedrooms	Elementary		Middle		High		Total	
	Land Development Code (current)	2014 Study Update	Land Development Code (current)	2014 Study Update	Land Development Code (current)	2014 Study Update	Land Development Code (current)	2014 Study Update
1 or less	0.084	**	0.083	**	0	**	0.167	**
2	0.084	**	0.083	**	0	**	0.167	**
3 or more	0.182	**	0.182	**	0	**	0.364	**
Average	0.084	**	0.083	**	0	**	0.167	**

Source: SBBC School Boundaries and Broward County Department of Planning and Environmental Protection

Notes: * No students observed in sample; ** Not sampled or identified in survey

SGR Results Rounded to 3 Digits For Comparison Purposes Only.

See Tables 21, 22, & Appendix Tables A-1 to A-5 for Higher Specificity.

Table 6 - Student Generation Rates Countywide and by Planning Area

Dwelling Unit Type	Number of Bedrooms	2007		2014		2014		2014		2014		2014		2014		2014		2014		2014	
		Countywide Generation Rates	Countywide Generation Rates	Countywide Generation Rates	NW SGR	NE SGR	WC SGR	C SGR	EC SGR	SW SGR	SE SGR	SGR	SGR	SGR	SGR	SGR	SGR	SGR	SGR	SGR	SGR
Single Family Home	3 or less	0.348	0.371	0.252	0.472	0.513	0.407	0.356	0.306	0.453											
	4 or more	0.504	0.466	0.691	0.414	0.260	1.112	0.178	0.479	0.276											
	Average	0.467	0.434	0.647	0.440	0.277	0.710	0.269	0.419	0.377											
Townhouse, Duplex, Villa	1 or less	0.028	0.060	0.000	1.000	0.000	0.000	0.025	0.000	0.000											
	2	0.118	0.214	0.427	0.287	0.118	0.277	0.079	0.158	0.273											
	3 or more	0.271	0.363	0.830	0.336	0.253	0.331	0.276	0.286	0.404											
Garden Apartments	Average	0.227	0.321	0.746	0.331	0.244	0.316	0.206	0.249	0.341											
	1 or less	0.107	0.020	0.000	0.014	0.041	0.000	0.011	0.029	0.038											
	2	0.185	0.236	0.125	0.376	0.173	0.135	0.140	0.231	0.227											
Mid-Rise (4-8 Stories)	3 or more	0.244	0.429	0.000	0.647	0.214	0.344	0.249	0.349	0.481											
	Average	0.185	0.227	0.097	0.351	0.140	0.137	0.122	0.202	0.313											
	1 or less	n.a.	0.016	0.000	0.023	0.014	0.007	0.025	0.000	0.007											
High-Rise (9 or + Stories)	2 or more	n.a.	0.062	0.797	0.042	0.071	0.044	0.046	0.000	0.005											
	Average	0.046	0.048	0.797	0.036	0.053	0.036	0.039	0.000	0.006											
	1 or less	0.004	0.003	0.000	0.000	0.006	0.000	0.000	0.000	0.003											
	2 or more	0.004	0.023	0.000	0.000	0.007	0.000	0.020	0.000	0.012											
	Average	0.004	0.019	0.000	0.000	0.056	0.000	0.016	0.000	0.010											

Source: Walter H. Keller, Inc.

Note: SGR Results Rounded to 3 Digits for Comparison Purposes Only. See Tables 21, 22 & Appendix Tables A-1 through A-5 for Greater Specificity.

Student Generation Rate With American Community Survey

While the preferred approach to developing the Student Generation Rate is based on using a housing data set consistent with the Broward County Land Development Code, an analysis was also performed using the U.S. Census 2012 American Community Survey.

Table 7 provides housing unit trends as provided by the U.S. Census American Community Survey 3 Year Public Use Microdata Sampling for 2010-2012. This information indicates the number of units constructed between 2006 and 2012 by the number of bedrooms in Broward County. Note, this Table is a sampling and does not include 2013 information.

Table 7 – Dwelling Units by Year and Bedrooms

Year Unit Built	Bedrooms						Total	% of Total
	0	1	2	3	4	5+		
1939 or earlier	366	1,585	2,247	1,605	556	206	6,565	0.8%
1940 to 1949	487	2,193	4,655	2,735	615	128	10,813	1.3%
1950 to 1959	2,380	10,948	25,555	28,566	4,846	1,052	73,347	9.0%
1960 to 1969	3,146	24,386	47,929	36,577	9,530	1,489	123,057	15.2%
1970 to 1979	3,273	43,859	103,516	48,714	15,846	2,510	217,718	26.9%
1980 to 1989	2,577	21,961	69,271	40,251	14,595	2,044	150,699	18.6%
1990 to 1999	1,225	11,643	35,863	46,464	29,232	7,904	132,331	16.3%
2000 to 2004	595	6,304	17,151	20,016	12,681	6,272	63,019	7.8%
2005	404	1,395	3,117	2,833	1,404	612	9,765	1.2%
Subtotal	14,453	124,274	309,304	227,761	89,305	22,217	787,314	97.1%
% of Subtotal	2%	16%	39%	29%	11%	3%		
2006	11	1,222	2,433	2,362	805	665	7,498	0.9%
2007	226	864	2,515	2,268	587	296	6,756	0.8%
2008	35	882	1,653	1,110	224	453	4,357	0.5%
2009	53	617	952	566	100	97	2,385	0.3%
2010	0	196	478	544	309	20	1,547	0.2%
2011	26	0	181	225	115	0	547	0.1%
2012	0	0	90	50	98	0	238	0.0%
Subtotal	351	3,781	8,302	7,125	2,238	1,531	23,328	2.9%
% of Subtotal	2%	16%	36%	31%	10%	7%		
Grand Total	14,804	128,055	317,606	234,886	91,543	23,748	810,642	
% of Grand Total	2%	16%	39%	29%	11%	3%		

Source: American Community Survey - 3 Yr Public Microdata Sample for 2010-2012
Walter H. Keller, Inc.

The American Community Survey (ACS) estimates 23,328 dwelling units were constructed between 2006 and 2012.

Table 8 provides Public School Students by Bedrooms as provided by the U.S. Census American Community Survey 3 Year Public Use Microdata Sampling for 2010-2012. The Public School Students includes both Public School and Charter School Students. Note, the Table does not include 2013 information.

Table 8 – Public School & Charter School Students by Bedrooms (2012)

Unit Type	Bedrooms						Total	% of Total
	0	1	2	3	4	5+		
Mobile home or trailer	0	0	1,397	2,886	524	200	5,007	1.9%
One-family house detached	399	182	11,817	72,869	50,978	17,357	153,602	59.5%
One-family house attached	19	138	6,328	15,029	2,054	183	23,751	9.2%
2 Apartments	108	484	3,993	4,152	181	202	9,120	3.5%
3-4 Apartments	78	1,101	7,737	4,174	809	514	14,413	5.6%
5-9 Apartments	91	1,132	7,640	5,423	214	0	14,500	5.6%
10-19 Apartments	178	1,447	8,758	5,316	76	59	15,834	6.1%
20-49 Apartments	0	1,182	8,572	3,178	125	0	13,057	5.1%
50 or more apartments	0	1,157	5,311	1,974	278	0	8,720	3.4%
Boat, RV, van, etc.	0	0	29	191	0	0	220	0.1%
Total	873	6,823	61,582	115,192	55,239	18,515	258,224	
% of Total	0.3%	2.6%	23.8%	44.6%	21.4%	7.2%		

Source: American Community Survey - 3 Yr Public Microdata Sample for 2010-2012
Walter H. Keller, Inc.

Table 9 provides Public School Students by Bedrooms in dwelling units built since 2006 as provided by the U.S. Census American Community Survey 3 Year Public Use Microdata Sampling for 2010-2012. The Public School Students includes both Public School and Charter School Students. As previously mentioned, this Table is a sampling and does not include 2013 information.

Table 9 – Public School & Charter School Students by Bedrooms (2006-2012)

Unit Type	Bedrooms						Total	% of Total
	0	1	2	3	4	5+		
Mobile home or trailer	0	0	0	285	42	0	327	3.3%
One-family house detached	0	0	257	693	1,227	1,214	3,391	44.1%
One-family house attached	0	0	365	1,328	76	0	1,769	19.9%
2 Apartments	0	0	374	0	0	0	374	3.8%
3-4 Apartments	0	0	213	172	0	0	385	3.9%
5-9 Apartments	0	0	183	60	0	0	243	4.0%
10-19 Apartments	0	0	669	326	0	0	995	11.0%
20-49 Apartments	0	0	382	231	0	0	613	6.3%
50 or more apartments	0	162	41	73	0	0	276	3.5%
Boat, RV, van, etc.	0	0	0	0	0	0	0	0.0%
Total	0	162	2,484	3,168	1,345	1,214	8,373	
% of Total	0.0%	1.7%	26.2%	36.9%	16.5%	18.7%		

Source: American Community Survey - 3 Yr Public Microdata Sample for 2010-2012
Walter H. Keller, Inc.

The ACS information in Table 9 estimates 8,373 Public School and Charter School students are generated by the 23,328 dwelling units reported in Table 7. In the 2013-14 calendar year, Public School students (including Centers) accounted for approximately 87% of the total students with Charters School students at 13%. Public School Students (without Charter School students) would equate to 7,285 students in Table 9. Unfortunately, the ACS does not allow removal of Charter School students from the analysis.

The American Community Survey's dwelling unit types are also not consistent with the Broward County Land Development Code for garden apartments, mid-rise apartments and high-rise apartments. The ACS apartment descriptions are by set groups of apartments per building.

The difficulties in using the American Community Survey restricted the development of School Impact Fee rates for several reasons. First, the inability to remove the Charter School students from the student totals presented an incorrect estimate. Secondly, the unit type descriptions were not consistent with the dwelling unit types in the Broward County Land Development Code. For example, the Code includes garden apartments, mid rise apartments and high rise apartments. The ACS lists multi-family units by the number of units per building. The number of floors is not available. For these reasons, the preparation of School Impact Fees using the ACS were not pursued.

Preliminary countywide Student Generation Rates per the 2012 American Community Survey are provided in Table 10 for Public School and Charter School Students.

Table 10 – Preliminary Countywide Student Generation Rate – American Community Survey

SINGLE FAMILY								
Bedrooms	Elementary		Middle		High		Total	
	Land Development Code (current)	2014 Study Census	Land Development Code (current)	2014 Study Census	Land Development Code (current)	2014 Study Census	Land Development Code (current)	2014 Study Census
3 or less	0.175	0.173	0.077	0.217	0.096	0.229	0.348	0.618
4 or more	0.240	0.413	0.124	0.108	0.140	0.176	0.504	0.697
Average	0.225	0.340	0.113	0.141	0.129	0.192	0.467	0.673
TOWNHOUSE • DUPLEX • VILLA								
Bedrooms	Elementary		Middle		High		Total	
	Land Development Code (current)	2014 Study Census	Land Development Code (current)	2014 Study Census	Land Development Code (current)	2014 Study Census	Land Development Code (current)	2014 Study Census
1 or less	0.028	0.000	0.000	0.000	0.000	0.000	0.028	0.060
2	0.058	0.070	0.026	0.094	0.034	0.186	0.118	0.350
3 or more	0.126	0.174	0.061	0.182	0.084	0.134	0.271	0.490
Average	0.106	0.134	0.051	0.148	0.070	0.151	0.227	0.433
MULTI-FAMILY								
Bedrooms	Elementary		Middle		High		Total	
	Land Development Code (current)	2014 Study Census	Land Development Code (current)	2014 Study Census	Land Development Code (current)	2014 Study Census	Land Development Code (current)	2014 Study Census
1 or less	0.055	0.021	0.023	0.013	0.029	0.022	0.107	0.056
2	0.093	0.149	0.039	0.017	0.053	0.090	0.185	0.256
3 or more	0.120	0.199	0.055	0.045	0.069	0.120	0.244	0.364
Average	0.093	0.117	0.040	0.021	0.052	0.074	0.185	0.212

Source: American Community Survey - 3 Yr Microdata Sample for 2010-2012

IV. UPDATED FINANCIAL DATA

Methodology

This Section of the Study describes the methodology for collecting and analyzing key Broward County School Board financial data. A major portion of the financial data presented in this section was obtained from the Capital Budget Department, School Board of Broward County, Florida.

The School Board of Broward County utilizes a mixture of local, state and federal funding sources to provide the necessary funds to operate, maintain and provide needed school facilities. The first portion of the financial section identifies the revenue sources available and recent funding trends for capital projects including millage (local property taxes), from the State of Florida, school impact fees and voter approved bond issues.

The need and cost for needed school plant facilities are projected based on the projection of student enrollment by grade level and the number of student stations for school types. The cost of school plant facilities are computed based on recent land acquisition costs and the design, construction and equipment costs for new schools. The end result of this analysis is the average cost per new student.

An evaluation is performed to project the future availability of construction funds from local property taxes and revenue from the State of Florida to identify appropriate credits that should be assigned. Capital construction cost credits is determined for property taxes, State funding and past payments. The resulting credits are subtracted from the average cost per new student to arrive at the average net funding deficit per new student.

The average net funding deficit per new student is multiplied by the student generation rates calculated in Table 5 to identify the School Impact Fee for various types of units and bedroom ranges.

Capital Revenue Sources

Millage

Local property taxes provide the largest revenue component for the capital revenue stream. Current Florida Statutes allow a local school district to levy from 0 to 1.5 mills for capital and maintenance needs. In the 2013 – 2014 school year, Broward County's Property Appraiser adjusted taxable value was 141.425 billion dollars. The 1.5 mill tax provided 204.5 million dollars for Capital Projects was based on a 95% assessment level.

Capital Outlay and Debt Service (CO&DS)

A source of State revenue is a portion of the revenues derived from the licensing of motor vehicles and mobile homes. The state constitution provides that the first proceeds of revenues derived from such licensing are placed in the District Capital Outlay and Debt Service Trust Fund and used for capital outlay projects of school districts and community colleges. The revenue is distributed annually based on the constitutional formula.

School Impact Fees Collected

School impact fee revenue collections provided 28.8 million dollars to the School Board of Broward County between the FY 2009 and FY 2013 school years ending on June 30th. Table 11 provides the school impact fee collections by year and Impact Fee Benefit Zone. Note, the amounts include interest and are rounded to the nearest dollar.

Table 11 – Broward County School Impact Fees (2006 – 2013)

Fiscal Year	Impact Fee Benefit Zone				Totals
	A	B	C	D	
2008-09	\$ 41,213	\$ 354,040	\$ 57,647	\$ 44,825	\$ 497,725
2009-10	\$ 145,314	\$ 483,027	\$ 57,949	\$ 1,553,321	\$ 2,239,611
2010-11	\$ 832,315	\$ 1,330,340	\$ 384,148	\$ 2,306,660	\$ 4,853,463
2011-12	\$ 2,991,979	-\$ 24,901	\$ 2,110,756	\$ 1,247,252	\$ 6,325,086
2012-13	\$ 5,258,143	\$ 1,387,394	\$ 3,421,048	\$ 4,783,126	\$ 14,849,710
	\$ 9,268,964	\$ 3,529,901	\$ 6,031,547	\$ 9,935,184	\$ 28,765,595

Source: Capital Budget Department, School Board of Broward County, FL

Other Revenues

The School Board of Broward County also utilizes Certificates of Participation (COPs) to meet its capital needs. The proceeds of the COPs are used to pay for new and replacement construction of educational facilities, land, equipment and buses under a lease purchase agreement. The Board may also get voter approval to issue General Obligation Bonds (GOBs) that the State of Florida authorizes and Capital Outlay Bond Issues (COBIs).

Table 12 on the following page, summarizes the five year funding of the District's Capital Outlay efforts between 2008-2009 through 2012-2013. As can be observed from the Table, local sources accounted for almost 92% of the funding for Capital Outlay efforts over the last five years. State funds accounted for 7.45 % of the funding.

Table 12 - Analysis of Capital Outlay Allocations (FY09 - FY13)

Analysis of Capital Outlay Allocations 2008-09 TO 2012-13												
Source of Funding	2008-09	2009-10	2010-11	2011-12	2012-13	TOTAL						
Federal Revenue												
Federal Direct	\$6,222,208.39		\$93,632.61	\$2,821,962.08	\$194,066.30	\$9,331,869.38						
						0.61%						
State Revenue												
State Sources	\$37,429,151.62	\$22,599,459.28	\$17,023,267.16	\$18,403,108.56	\$18,341,032.47	\$113,796,019.09						
						7.45%						
Local Revenue												
Millage & interest	\$297,268,501.66	\$228,390,881.00	\$197,382,510.23	\$194,510,606.57	\$196,925,607.53	\$1,114,478,106.99						
Long Term Bonds			\$1,190,929.37			\$1,190,929.37						
Loans & interest	\$11,749,660.55	\$8,902,011.69			\$5,031,765.00	\$25,683,437.24						
COPs & interest	\$133,963,000.00		\$51,645,000.00			\$185,608,000.00						
Discounts on COPs	-\$815,735.60					-\$815,735.60						
Proceeds: Sale of Capital Assets	\$3,211,623.81	\$626,105.94	\$2,001,649.26	\$2,678,478.69	\$413,740.56	\$8,931,598.26						
Loss Recoveries	\$197,609.08	\$7,116,278.11	\$2,288,986.74	\$89,777.21	\$2,790,814.00	\$12,483,465.14						
Other Local Sources	\$28,089,908.25	\$4,719,361.20	\$6,832,666.52	\$6,965,475.04	\$9,429,906.65	\$56,037,317.66						
Subtotal	\$473,664,567.75	\$249,754,637.94	\$261,341,742.12	\$204,244,337.51	\$214,591,833.74	\$1,403,597,119.06						
						91.94%						
TOTAL *	\$517,315,927.76	\$272,354,097.22	\$278,458,641.89	\$225,469,408.15	\$233,126,932.51	\$1,526,725,007.53						
						100.00%						
Source: Capital Budget Department, School Board of Broward County, Florida												
<table><tr><td>Federal Percent</td><td>0.61%</td></tr><tr><td>State Percent</td><td>7.45%</td></tr><tr><td>Local Percent</td><td>91.94%</td></tr></table>							Federal Percent	0.61%	State Percent	7.45%	Local Percent	91.94%
Federal Percent	0.61%											
State Percent	7.45%											
Local Percent	91.94%											

NOTES:

* Proceeds of refinancing transactions, interfund transfers, non-recurring sources, non-construction revenues and impact fees have been excluded from the above analysis.

Five Year Capital Improvement Program

The School Board's Capital Improvement Program is largely funded by the Capital Millage Tax. The Capital Millage was previously reduced by the legislature from 2 mills to 1.5 mills. A significant portion of the Program includes payments towards the debt service of the recent building program. Other efforts to be considered in the CIP include improvement in technology in the classroom, buses and school equipment. Table 13 details the appropriations in the Program.

Table 13 - Five Year Estimated Construction Appropriations

Five Year Estimated Construction Appropriations						
2013-14 - 2017-18						
Appropriation	2013-14	2014-15	2015-16	2016-17	2017-18	5 Year
						Total
COPs Debt Service	\$ 149,437,000	\$ 149,350,000	\$ 151,012,000	\$ 150,872,000	\$ 156,257,000	\$ 756,928,000
Equipment Leases	\$ 9,346,000	\$ 7,533,000	\$ 5,675,000	\$ 5,048,000	\$ 4,422,000	\$ 32,024,000
Bldg Leases & Real Estate Costs	\$ 2,495,000	\$ 803,000	\$ 752,000	\$ 756,000	\$ 765,000	\$ 5,571,000
Facilities/Capt Salaries & Mgmt Fees	\$ 15,500,000	\$ 15,500,000	\$ 15,500,000	\$ 15,500,000	\$ 15,500,000	\$ 77,500,000
Charter School Xfr (State Flow Thru)	\$ 16,000,000	\$ 16,000,000	\$ 16,000,000	\$ 16,000,000	\$ 16,000,000	\$ 80,000,000
Capital Improvements	\$ 7,600,000	\$ 7,600,000	\$ 7,600,000	\$ 7,600,000	\$ 7,600,000	\$ 38,000,000
Maintenance Transfer	\$ 59,025,000	\$ 59,025,000	\$ 59,025,000	\$ 59,025,000	\$ 59,025,000	\$ 295,125,000
Other Projects	\$ 45,786,000	\$ 9,725,000	\$ 7,637,000	\$ 2,780,000	\$ 13,601,000	\$ 79,529,000
Total Appropriations	\$ 305,189,000	\$ 265,536,000	\$ 263,201,000	\$ 257,581,000	\$ 273,170,000	\$ 1,364,677,000
						55.5%
						2.3%
						0.4%
						5.7%
						5.9%
						2.8%
						21.6%
						5.8%

Source: Adopted District Educational Facilities Plan Fiscal Years 2013-14 through 2017-18.

Total School Plant and Land Costs

Recent Broward County school plant costs are reported in the State of Florida Department of Revenue yearly School Plant Cost of Construction Reports. A review of the annual listings between 2007 and 2012 produced a listing of school improvements. The listing was separated into the various school types: elementary, middle, high schools, and Centers.

The land value for each location was obtained from the Broward County Property Appraiser for 2014. In order to account for the distribution of enrollment in different school levels, a ratio was developed based on the projected enrollment in Broward County Public Schools for 2018-19. Table 14 provides the New Student Total Cost per Station incorporating the plant cost, 2014 land value and the ratio of future enrollment.

Table 14 - New Student Total Cost Per Station

School Name	Year	Enrollment to School Type Ratio	Student Stations	Total Facility Cost	Cost Per Student Station	Total Plant Cost	Plant Cost Per Student Station	Land Value
Blanche Ely High Western High	2010		753	\$17,873,566	\$23,736	\$17,873,566	\$23,736	\$923,460
	2009		900	\$26,576,521	\$29,529	\$26,606,106	\$29,562	\$1,884,291
		0.308	1,653				\$26,908	\$1,699
Nova Middle Apollo Middle Pines Middle	2009		425	\$6,484,512	\$15,258	\$6,484,512	\$15,258	\$2,630,286
	2008		308	\$14,560,058	\$47,273	\$14,561,128	\$47,276	\$903,520
	2007		1,785	\$32,434,913	\$18,171	\$33,437,581	\$18,733	\$2,552,730
		0.124	2,518				\$21,637	\$2,417
Norcrest Elementary Discovery Elementary Heron Heights Elementary	2010		866	\$24,467,358	\$28,253	\$24,467,358	\$28,253	\$1,133,517
	2009		954	\$28,571,361	\$29,949	\$28,656,237	\$30,038	\$7,656,510
	2009		1,000	\$29,369,374	\$29,369	\$29,369,374	\$29,369	\$4,182,170
		0.452	2,820				\$29,253	\$4,600
Cypress Run Educ Ctr Lanier James Educ Ctr	2008		242	\$16,666,339	\$68,869	\$16,798,969	\$69,417	\$3,789,950
	2011		262	\$12,187,686	\$46,518	\$12,412,686	\$47,377	\$1,363,272
		0.025	504				\$57,960	\$10,225
New Student Total Cost per Station =				\$28,800				

Source: Florida Department of Education - Construction Cost Reports
Broward County Property Appraiser
Walter H. Keller, Inc.

Notes: Plant Cost for Year 2007 is based on the Construction Contract awarded between 1/2006 through 12/31/2007.
Plant Costs for all other Years except 2007 are for Construction Contracts completed between January 1 through 12/31 of the Noted Year.
Land Values are based on Broward County Property Appraiser's Website Valuation as of May 2014.

Ancillary Facilities

The School Board of Broward County has a mixture of administrative, operations and maintenance facilities providing for the day-to-day operation of the school system. Information was obtained from the current Schedule of Values for 2014-2015. Information on Land Value of each location was obtained from the Broward County Property Appraiser's Website as of May 2014. Table 15 provides the inventory of the Ancillary Facilities and the Ancillary Cost per New Student.

Table 15 – Ancillary Facilities

No.	Facility	Land Value	Bldg Value	Contents	Imprvmnts	Total Value
1	N Area Portable Annex - Training Ctr	\$4,663,560	\$3,372,000	\$415,000	\$164,000	\$8,614,560
2	Edgewood Administration Complex	\$2,681,830	\$2,495,570	\$766,000	\$362,000	\$6,305,400
3	HRD	\$360,000	\$610,000	\$50,000	\$25,000	\$1,045,000
4	Rock Island Annex - (Training)	\$1,075,950	\$6,331,330	\$1,200,000		\$8,607,280
5	Physical Plant Operations - Zone 2	-		\$100,000		\$100,000
6	S Area Administration Portable Annex	\$1,217,700	\$4,725,000	\$675,000		\$6,617,700
7	Pompano Administrative Center	\$5,216,320	\$3,648,000	\$656,000	\$25,000	\$9,545,320
8	Dillard Community Ctr (Museum)	-	\$1,705,000	\$69,000	\$28,000	\$1,802,000
9	Twin Lakes Warehouse & Transportation	\$3,905,000	\$13,818,000	\$3,126,000	\$85,000	\$20,934,000
10	BECON Administration	\$2,551,527	\$5,266,000	\$841,000	\$748,000	\$9,406,527
11	N Area Bus Complex	\$4,667,170	\$2,644,000	\$346,000	\$207,000	\$7,864,170
12	ESE Title 1	-	\$1,901,000	\$304,000	\$36,000	\$2,241,000
13	Community School North	\$152,024	\$2,499,000	\$128,000	\$153,000	\$2,932,024
14	N Area Bus Garage	\$1,306,800	\$961,000	\$105,000	\$65,000	\$2,437,800
15	S Area Bus Garage	-	\$1,526,000	\$262,000	\$500,000	\$2,288,000
16	Twin Lakes Annex	\$450,000	\$1,985,000	\$324,000	\$33,000	\$2,792,000
17	Kathleen C Wright Adm Complex	\$2,890,330	\$64,391,000	\$7,391,000	\$195,000	\$74,867,330
18	W Central Bus Compound	\$8,329,550	\$4,190,000	\$563,000	\$208,000	\$13,290,550
19	SW Area Bus Complex	\$9,272,040	\$4,536,000	\$168,000	\$0	\$13,976,040
20	Technology & Support Serv Facility	\$2,472,410	\$14,345,000	\$1,936,000	\$145,000	\$18,898,410
21	N Area Maint & Warehouse	\$1,274,420	\$6,464,000	\$1,386,000	\$26,000	\$9,150,420
22	South Area Maintenance Office	\$2,192,030	\$1,154,000	\$169,000	\$282,000	\$3,797,030
23	TSSC Annex (Including the Bank)	\$2,462,060	\$7,975,000	\$1,069,000	\$44,000	\$11,550,060
24	Twin Lakes Adm Office	\$878,000	\$5,933,000	\$935,000	\$0	\$7,746,000
25	S Area Portable Annex (SW 172nd Ave)	\$6,295,520	\$7,388,000	\$1,287,000	\$565,000	\$15,535,520
Total Replacement Value for Ancillary Facilities =						\$262,344,141
Cost For Ancillary Facilities Per New Student =						\$1,183

Source: Broward County School Board Schedule of Values 2014-2015
 Facility Planning & Real Estate Department, Broward County School Board
 Broward County Property Appraiser
 Walter H. Keller, Inc.

Bus Fleet

The Broward County School Board maintains a bus fleet to transport students. The bus fleet includes a mixture of vehicles with different passenger loads with and without hydraulic lifts. Table 16 identifies the current bus inventory, replacement value and the Bus Fleet Cost per New Student.

Table 16 – Bus Fleet Replacement Value

Passenger Size of Bus	Lift ?	Number of Buses	Cost	Replacement Value
23	N	2	\$94,850	\$189,700
29	N	63	\$94,850	\$5,975,550
47	N	56	\$98,612	\$5,522,272
65	N	506	\$102,679	\$51,955,574
72	N	7	\$105,018	\$735,126
77-78	N	173	\$105,018	\$18,168,114
83-84	N	178	\$105,018	\$18,693,204
19-29	y	27	\$98,786	\$2,667,222
47	y	87	\$103,337	\$8,990,319
65	y	160	\$107,903	\$17,264,480
78	y	2	\$112,925	\$225,850
84	y	59	\$112,925	\$6,662,575
Total Buses & Replacement \$			1,320	\$137,049,986
Bus Fleet Cost Per New Student =				\$618

Source: Student Transportation & Fleet Services, Broward County School Board

State and Local Credits

State Credit

The amount of State funding for Broward County's Capital Improvement Program between FY 2009 through FY 2013 represented 7.45% of the total capital funding component.

Future State funding for new school construction has been reviewed. Significant reductions in State funding are projected.

Local and Debt Service Credits

The major source for capital funding is the local capital millage. The Broward County School Board currently levies a 1.5 mill capital tax.

The Broward County Property Appraiser's estimate of the fair market value and average taxable value of Broward County residential properties is used to calculate average just value. Information was obtained from the Property Appraiser on the 2013 (tax year) Ad Valorem Assessment Roll. Table 17, on the following page, provides key statistics relative to the average residential taxable value and the average residential just value.

Table 17 – Broward County Property Values for 2013

Broward County Property Values Calculation of Average and Just Value 2013			
	Number of Parcels	Taxable Value	Just Value
Number of Parcels Receiving Credit for Homestead Exemption	391,395		
Residential Parcels:			
Single Family	378,470	\$ 66,037,497,600	\$ 83,059,495,740
Condominium	252,399	\$ 22,554,454,540	\$ 26,545,960,730
Co-op	11,806	\$ 1,043,313,790	\$ 1,222,003,830
Mobile Homes*	4,139	\$ 187,258,600	\$ 256,102,530
Multi-family less than 10 units	16,608	\$ 2,569,001,440	\$ 2,776,333,050
Multi-family more than 10 units	1,467	\$ 6,421,666,610	\$ 6,850,912,070
Retirement Homes & Misc.			
Total	664,889	\$ 98,813,192,580	\$ 120,710,807,950
Avg Taxable Value Based Upon 664,889 Parcels		\$ 148,616	
Avg Just Value Based Upon 664,889 Parcels			\$ 181,550

Source: Broward County Property Appraiser (10/9/13)

Notes:

(1) Percentage of homes in Broward County that have homestead is 58.87%

(391,395 homestead parcels compared to the total of 664,889).

(2) The total number of parcels in Broward County is 738,071. Land parcels commercial, industrial, agricultural, etc., make up the remaining parcels.

*Homestead exemption is available when the mobile homeowner also owns the land.

The computation of the local credit amount for property tax (millage) for capital is calculated in Table 17. For the 2013 Tax Roll, the average taxable value is \$181,550. Table 18 assumes the average new residential dwelling unit costs 25% more than the average existing (used) residential unit. Estimated millage proceeds are provided for new residential units for capital millage. New construction (capacity) portion of this levy is estimated at 34.11%. The resulting net present value is estimated to be \$1,696.

Table 18 – Proceeds Derived From Millage

Proceeds Derived From Millage	
<u>2013</u>	Capital
Just Value - Average Residential Unit	\$181,550
New Residential Unit Factor*	25.00%
Assessed Value - Average New Residential Unit	\$226,938
Homestead Exemption	\$14,718
Taxable Value - Average New Residential Unit	\$212,220
Millage Rate**	1.5000
Millage Proceeds per Average New Residential Unit	\$318.33
Portion of Millage Funding Available / Utilized for Capacity	34.11%
Proceeds Per Average New Residential Unit	\$108.58
Net Present Value (Capitalizing this payment at 4% for 25 years)	\$1,696
* Estimate of average new home sale versus used home sale.	
** 2013 actual rate	

Source: Broward County Property Appraiser
Walter H. Keller, Inc.

The 2013 Assessment Roll prepared by the Broward County Property Appraiser's Office was used to establish the past payment credit for vacant property and agricultural parcels. Taxable values are reported in Table 19. The parcels account for 1.81% of the taxable value in Broward County resulting in a 0.62% past payment credit.

Table 19 – Past Payment Credit for Vacant and Agricultural Properties

Calculation of Past Payment Credit Vacant and Agricultural Properties Fiscal Year 2013		
	Number of Parcels	Taxable Value
BROWARD COUNTY PROPERTY VALUES:		
Vacant Parcels: Residential	13,885	\$ 1,231,812,470
Commercial	1,686	\$ 718,636,570
Industrial	523	\$ 237,441,100
Agricultural Parcels	1,314	\$ 264,900,350
Vacant and Agricultural Totals	17,408	\$ 2,452,790,490
County-wide Totals	738,071	\$ 135,191,525,660
% of Vacant and Agricultural Properties to Countywide Total		1.81%
% of capital millage funding available for construction		34.11%
Past Payment Credit		0.62%
The total number of parcels in Broward County is 738,071. Residential housing parcels comprise 678,774 of the total number of parcels; commercial, industrial and other properties make up the remaining parcels.		

Source: Broward County Property Appraiser

Net Funding Deficit Per New Student

The average cost per new student for school plant facilities, land, ancillary facilities and bus fleet is calculated in Table 20 below as \$30,601. The average student generation rate was computed to be 0.248 students per residential dwelling unit resulting in an average funding need per new residential dwelling unit of \$7,589 (see Table 20 below). Table 20 projects a 42.79% credit for anticipated funding, leaving an anticipated deficit of \$17,693 per new student.

Table 20 – Net Funding Deficit Per New Student

Net Funding Deficit per New Student			
Cost Per New Student Station			\$28,800
Ancillary Facility Cost Per New Student			\$1,183
Bus Fleet Cost Per New Student			\$618
			<u>\$30,601</u>
Average Students Per New Residential Unit*			0.248
Average Funding Required Per New Residential Unit			<u>\$7,589</u>
Weighted Cost Per New Student			\$30,601
Federal	0.61%	(\$187)	
State	7.45%	(\$2,280)	
Local (Capital Millage)	34.11%	(\$10,438)	
Past Payment Credit	0.62%	(\$190)	
Total	<u>42.79%</u>		<u>(\$12,908)</u>
Anticipated Average Net Funding Deficit Per New Student			\$17,693
* Weighted basis for all dwelling unit types			

Source: Walter H. Keller, Inc.

V. UPDATED SCHOOL IMPACT FEE

The first part of this Report detailed student enrollment, dwelling unit characteristics and calculated an updated student generation rate. The second part of the Report provided current financial information relative to revenues, school plant land and construction costs, anticipated funding and credits for capital expenditures resulting in identifying the net funding deficit per new student. This portion of the Report incorporates the prior information to provide a recommended School Impact Fee Schedule.

Table 21, on the following page, provides a comparison of the existing and maximum countywide defensible School Impact Fee Schedule. The schedule is stratified by dwelling unit type and number of bedrooms for single family, townhouse/duplex/villa, garden apartments and mid-rise dwelling units. For high rise dwelling unit types, the fee is per unit, not by bedrooms. The fee schedule for mobile homes will be based on the prior generation rates utilizing the new fee deficit per student. All definitions are consistent with the definitions provided on page 5. For greater specificity, the updated Student Generation Rates are rounded to five (5) digits.

The Current (2007) School Impact Fee was implemented at 75% of the recommended fee and phased in at 25% per year for three (3) years. Between 2011 and 2013, the fees were increased 1.3%, 2.0% and 1.8% respectively.

Table 22 provides a comparison of the existing and maximum defensible School Impact Fee countywide and by Planning Area. Note, the Planning Area locations were previously presented in the Figure 1 on page 9. In a few instances, limited or insufficient student occurrences were observed in individual cells and are noted in the Table. Use of the appropriate Countywide Rate would apply to these cells.

Table 21 – Recommended Countywide School Impact Fee Schedule

Comparision of Existing & Possible Countywide School Impact Fees					
Dwelling Unit Type	Number of Bedrooms	Current Generation Rates	Updated Generation Rates	Current School Impact Fee	Max Defensible School Impact Fee*
Single Family Home	3 or less	0.348	0.37068	\$ 6,276	\$ 6,558
	4 or more	0.504	0.46581	\$ 9,116	\$ 8,242
	Average	0.467	0.43371		
Townhouse, Duplex, Villa	1 or less	0.028	0.06000	\$ 456	n.a.
	2	0.118	0.21384	\$ 2,125	\$ 3,783
	3 or more	0.271	0.36274	\$ 4,937	\$ 6,418
	Average	0.227	0.32065		
Garden Apartments	1 or less	0.107	0.02021	\$ 1,906	\$ 358
	2	0.185	0.23634	\$ 3,352	\$ 4,182
	3 or more	0.244	0.42944	\$ 4,415	\$ 7,598
	Average	0.185	0.22704		
Mid-Rise (4-8 Stories)	1 or less	n.a.	0.01578	n.a.	\$ 279
	2 or more	n.a.	0.06204	n.a.	\$ 1,098
	Average	0.046	0.04784	\$ 811	\$ 846
High-Rise (9 or + Stories)	Average	0.004	0.01944	\$ 71	\$ 344
Mobile Home	2 or less	0.167		\$ 2,814	TBD
	3 or more	0.364		\$ 6,132	TBD

Source: Walter H. Keller, Inc.

n.a. - Insufficient Occurences in Cell.

Italic and Bold Fees (**\$266**) have limited Occurences in Cell.

* Maximum Defensible Fee - Final Fee Can be Less than the Maximum.

Table 22 - Existing and Possible School Impact Fees Countywide and by Planning Area

Comparison of Existing & Possible School Impact Fees													
Dwelling Unit Type	Number of Bedrooms	Current Generation Rates	Updated Generation Rates	Current Impact Fee	Countywide Impact Fee*	Max Defensible <-----				Max Defensible School Impact Fee by Planning Area ----->			
						NW Impact Fee*	NE Impact Fee*	WC Impact Fee*	C Impact Fee*	EC Impact Fee*	SW Impact Fee*	SE Impact Fee*	
Single Family Home	3 or less 4 or more Average	0.348 0.504 0.467	0.37068 0.46581 0.43371	\$ 6,276 \$ 9,116	\$ 6,558 \$ 8,242	\$ 4,460 \$ 12,220	\$ 8,355 \$ 7,330	\$ 9,073 \$ 4,597	\$ 7,197 \$ 19,681	\$ 6,307 \$ 3,145	\$ 5,418 \$ 8,475	\$ 8,020 \$ 4,892	
Townhouse, Duplex, Villa	1 or less 2 3 or more Average	0.028 0.118 0.271 0.227	0.06000 0.21384 0.36274 0.32065	\$ 456 \$ 2,125 \$ 4,937	n.a. \$ 3,783 \$ 6,418	n.a. \$ 7,562 \$ 14,688	n.a. \$ 5,075 \$ 5,947	n.a. n.a. \$ 4,484	n.a. \$ 4,906 \$ 5,854	n.a. \$ 1,394 \$ 4,878	n.a. \$ 2,803 \$ 5,063	n.a. \$ 4,836 \$ 7,149	
Garden Apartments	1 or less 2 3 or more Average	0.107 0.185 0.244 0.185	0.02021 0.23634 0.42944 0.22704	\$ 1,906 \$ 3,352 \$ 4,415	\$ 358 \$ 4,182 \$ 7,598	n.a. n.a. n.a.	n.a. \$ 6,661 \$ 11,452	n.a. \$ 3,062 n.a.	n.a. \$ 2,397 \$ 6,082	n.a. \$ 2,479 \$ 4,398	n.a. \$ 4,095 \$ 6,175	n.a. \$ 4,021 \$ 8,519	
Mid-Rise (4-8 Stories)	1 or less 2 or more Average	n.a. n.a. 0.046	0.01578 0.06204 0.04784	n.a. n.a. \$ 811	\$ 279 \$ 1,098 \$ 846	n.a. \$ 14,099	n.a. n.a.	n.a. \$ 1,252	n.a. \$ 787	n.a. \$ 814	n.a. n.a.	n.a. n.a.	
High-Rise (9 or + Stories)	Average	0.004	0.01944	\$ 71	\$ 344	n.a.	n.a.	\$ 987	n.a.	n.a.	n.a.	\$ 174	
Mobile Home	2 or less 3 or more	0.167 0.364		\$ 2,814 \$ 6,132	TBD TBD								

Source: Walter H. Keller, Inc.

* Maximum Defensible Fee - Final Fee Can be Less

Italic and Bold Fees (**\$266**) have limited Occurrences in Cell.
n.a. - Insufficient Occurrences in Cell.

Impact Fee Benefit Zones

Broward County previously established four Impact Fee Benefit Zones (See Draft Technical Report 2, Figure 2). School Impact Fees collected within the Zone are spent in the Zone. Table 11, on page 19, summarized Broward School Impact Fee collections between 2009-2013. Approximately 28.8 million dollars were collected countywide. The northern zone, Zone A (generally north of Commercial Boulevard), collected approximately 9.3 million dollars. Highest collections were in Zone D, representing South Broward County (generally south of Stirling Road west of SR7 and Sheridan Street east of SR 7), where 9.9 million dollars were collected.

The seven Broward Planning Areas were previously shown in Figure 1, on page 14. The Planning Areas are consistent with the High School Innovation Zones.

An analysis of the current and proposed School Impact Fees was performed. If the Housing Data Set in Table 2 totaling 24,467 dwelling units were assessed on the Current Fee Schedule, approximately \$95.2 million dollars would be generated. If the Housing Data Set were assessed with the Maximum Defensible Countywide Fee Schedule, approximately \$100.9 million dollars would be generated. The proposed fee would result in a 6% increase in collections.

An additional analysis was performed using the seven (7) proposed Planning Areas. As in the previously analysis, the 24,467 dwelling units assessed on the Current Fee Schedule using the seven (7) proposed Planning Areas would generate approximately \$95.2 million dollars. If the Housing Data Set were assessed with the Maximum Defensible Fee Schedule based on the proposed Planning Areas, approximately \$100.7 million dollars would be generated. The proposed fee schedule based on the proposed seven (7) Planning Areas would also result in a 5.8% increase in collections. Because of the School Impact Fee rates for dwelling units by Planning Area vary widely from the Countywide rates, some significant differences in collections occur at the Planning Area level.

Legal Analysis

The Florida experience since the early 1980s has shown that impact fees remain a significant means for funding infrastructure needed as a result of new development. Impact fees can supplement and enhance other revenue sources, creating more flexibility for existing capital resources to be used for capital needs other than those created by new development. Judiciously used, they can positively affect the timing for providing facilities. The Broward County School Board and Broward County have been in the forefront of the use of school impact fees, beginning with the first impact fees adopted in 1979. The school impact fees have been updated periodically to reflect changes in the underlying data the form the basis for the fees. The updates are important to ensure that the legal tests for the Broward County school impact fees continue to be met, and also are required by the Interlocal Agreement between the School Board, the County Commission and certain municipalities.

The authority for use of impact fees in Florida has been established through local home rule power and ordinances, rather than through legislative authorization and statutory mandates. As a result, the significant legal limitations on impact fees in Florida are found in Florida case law, although there is some procedural limitations found in Florida statutes as well. Most recently, the 2011 Florida legislature mandated that the burden of establishing the reasonableness of an impact fee falls to the local government. This was a substantive shift of the burden from the normal judicial review of local government action, which otherwise would place the burden on the party who challenges the fee to prove that it is unreasonable.

The propriety of imposing impact fees on new development to provide for the cost of capital facilities made necessary by that growth was first discussed in *City of Dunedin v. Contractors & Builders Ass'n*¹. Dunedin became the first Florida appellate opinion to validate impact fees, based on the principle that new growth can be made to pay its proportionate share of the costs of providing capital facilities to serve that growth. Although the Florida Supreme Court later invalidated the Dunedin water and sewer

¹ 312 So. 2d 763 (Fla. 2d DCA 1975).

impact fee for failure to earmark the proceeds in a trust fund, it permitted the city to correct the flaw retroactively, and the Dunedin decisions became the polestar cases validating the concept of impact fees in Florida.²

Dual Rational Nexus Test

Following the Dunedin case, Home Builders and Contractors of Palm Beach County v. Board of County Commissioners³ decided the validity of impact fees for roads made necessary by the increased traffic generated by new development. The Florida appellate court upheld the Palm Beach County road impact fee ordinance and applied what became known as the “dual rational nexus test” for determining the validity of impact fees adopted under local government police powers. Under this test, an impact fee must be based on a reasonable connection between the need for additional road facilities and the growth in population that will be generated by the subdivision new growth. The fees must be an equitable pro rata share of the cost of reasonable capital expansion required because of the new development. The rational nexus test also requires that the development that pays the fee benefit from its use. Notably, in response to the challenge that non-payers would receive benefit from the roads, the Home Builders court held that benefits accruing to the overall community did not invalidate the ordinance, so long as those affected did not have to pay more than their fair share. Exclusivity is not the proper test for valid impact fees, the court stated, because “[i]t is difficult to envision any capital improvement for parks, sewers, drainage, roads, or whatever which would not in some measure benefit members of the community who do not reside in or utilize the new development.”⁴ The dual rational nexus test had been articulated in more detail the same year in Hollywood, Inc. v. Broward County⁵, upholding the validity of park impact fees. Following these cases, many Florida local governments adopted impact fees for various

² Contractors and Builders Ass'n of Pinellas County v. City of Dunedin, 329 So. 2d 314 (Fla. 1976).

³ 446 So. 2d 140 (Fla. 4th DCA 1983), rev. denied, 451 So. 2d 848 (Fla. 1984), app. dismissed, 469 U.S. 976 (1984).

⁴ Id. at 143.

⁵ 431 So. 2d 606 (Fla. 4th DCA 1983).

capital facilities, particularly for roads and parks.⁶ There remained doubt, however, of whether the court would accept impact fees for schools, as schools for historical reasons could be viewed as uniquely the responsibility of the community as a whole. As a result, only a few jurisdictions attempted to adopt such impact fees.

School Impact Fees

The question of whether school impact fees could withstand constitutional scrutiny was finally decided by the Florida Supreme Court in *St. John's County v. Northeast Fla. Builders Ass'n, Inc.*⁷ In *St. Johns*, the Court examined the constitutionality of a county ordinance imposing an impact fee on new residential construction, to be used for new school facilities. The Court applied the two-part “rational nexus” test to the school impact fee. The Court held that a school impact fee based on an expected need to service a projected 44 students per 100 dwelling units, or an average of 0.44 public school children per single-family home, met the first part of the dual rational nexus test. However, it held that the second part of the test was not met, because there was no assurance that the funds would be spent to benefit those who paid the fees. The impact fee was not effective within municipalities that did not enter into an interlocal agreement with the county to collect the fee, and thus there was nothing to keep impact fees from being spent to build schools to accommodate new development within a municipality that had not entered into the interlocal agreement. The Court further indicated that if the county could demonstrate that “substantially all” of either the county population or of the projected new development was covered by the ordinance, then the second test could be met. The *St. Johns* case unleashed school impact fees from constitutional uncertainty, and counties, including Broward County, began to rely on school impact fees to supplement increasingly restricted revenues for the construction of schools.

⁶ See Fred Bosselman and Nancy E. Stroud, “Pariah to Paragon: Developer Exactions in Florida 1975-1985,” 14 *Stetson Law Rev.* Local Government Law Symposium 525 (1985).

⁷ 583 So. 2d 635 (Fla. 1991).

Statutory law

As noted above, there are few statutory limitations pertaining to impact fees in Florida. The Growth Management Act of 1985, §163.3202, Florida Statutes, required local governments to adopt land development regulations as part of the implementation of their comprehensive plans. This requirement remains even after state planning mandates were significantly reduced through the 2011 Community Planning Act. §163.3202 (3) encourages the use of innovative land development regulations, specifically including impact fees. In addition, §380.06(15)(e), Florida Statutes, requires local governments to enact impact fees applicable to all development, in order to be able to collect such fees from developments of regional impact (DRI). A reciprocal provision is found in §380.16, Florida Statutes, which requires that developments of regional impact be given credits against any impact fees, which are for the same purposes of the exactions that are made a part of the DRI development order.

In 2006, the legislature enacted the “Florida Impact Fee Act,” now codified in §163.31801, Florida Statutes, and subsequently amended the Act in 2009 and 2011. The Act explicitly recognizes that impact fees are an important source of revenue for a local government to use in funding the infrastructure necessitated by new growth and places some restrictions on the use of impact fees. As noted above, the Act since 2011 requires that the government have the burden of proving, by a preponderance of the evidence, that the imposition or amount of the fee meets legal requirements. It also requires that notice be provided no less than 90 days before the effective date of an ordinance or resolution imposing a new or increased impact fee. Other provisions of the Act, consistent with existing case law and practice, require that:

- the calculation of the impact fee be based on the most recent and localized data;
- a local governmental shall account for the revenues and expenditures of impact fees in a separate accounting fund;
- administrative charges for the collection of impact fees are limited to actual costs;
- and,

audits performed pursuant to Section 218.39, Florida Statutes, and submitted to the Auditor General must include an affidavit signed by the chief financial officer of the local governmental entity or school board stating that the entity or board has complied with the Act.

The general principles applicable to impact fees from the case law and the statutes do not mandate any one particular methodology to arrive at a legally defensible fee. However some methodological guidelines have become professionally well accepted. These include the calculation of the costs of facilities on a per capita or square foot basis; credits for capital contributions made by the Feepayer toward payment of the fees; the use of geographic districts for the collection and expenditure of the fees; and a time frame for the expenditure of the fees collected.

Updated Study

The current study updates the prior study of October, 2010 conducted for the School Board of Broward County. The study addresses the two “rational nexus” tests applicable to impact fees. The first test is that fees must be based on the proportion of the need for new capacity attributable to growth. At the time of the 2010 Study, it was noted that the need for school impact fees continues even with the enrollment declines of the past several years, as the number of school age children in the County begins growing again and continues to grow through 2030, and the high but temporary vacancy rate stabilizes with a more stable economy. This update confirms that new housing units will continue to be added to the existing inventory of housing in the County, with the concomitant new students. Moreover, as in the 2010 study, the County has a surplus of capacity in the existing schools, but in substantial part this surplus was created during the School Board’s construction program in the last ten years, primarily from 2005 – 2009. Capacity from this program was built in advance of the need, as the School Board caught up with school construction needs and implemented planning for future needs. The School Board continues to pay the debt on the certificates of participation used to finance that construction. As a portion of the debt can be attributed to the capacity to pay for students generated by new growth (estimated at 45% in 2014), impact fees continue to be needed

to retire that portion of the debt attributed to new growth. In addition, school impact fees must be proportional the needs created by new growth. This update ensures the correct proportionality of the fees by updating student generation rates. The rates have been calculated for the School Board's seven planning areas, as updated, to take into account the varying housing and student generation rates that occur within the County in these districts. This refinement in student generation rates helps to further ensure that the first rational nexus test is met by providing even more specific data as a foundation for the fees.

The second rational nexus test requires that the impact fees collected go to benefit the new development that pays the fees. This study has reviewed the existing four benefit zones currently in use by the School Board, and has prepared data to support modified modifications to the zones to three benefit zones consistent with the updated seven planning areas. Within each benefit zone the data shows there is sufficient eligible outstanding debt on constructed capacity to absorb the anticipated impact fee revenues generated from within the zones.

This study has confirmed the need to continue to update information periodically to ensure that the data underlying the impact fees supports the need for and benefit provided by the use of impact fees. Enrollment at both public schools and charter schools bears a continued watch as demographics and the economy of the County changes and the debt on construction is paid down.

V. RECOMMENDATIONS

This Technical Report for the Student Generation Rate/Impact Fee Study has documented student generation rates for single family, townhouse/duplex/villa, garden apartments, mid rise and high rise dwelling units. Based on the anticipated funding deficit per student, School Impact Fee Schedules were provided in Table 21 (Countywide) and Table 22 (by Planning Area). The following recommendations are offered relative to the findings of this Study and the preparation of subsequent studies.

1. Complications in removing the Charter students and inconsistencies with the dwelling unit types of the Broward County Land Development Code in the multi-family units limit the ability to recommend use of the U.S. Census American Community Survey.
2. Based on the significant differences in the Student Generation Rate and subsequent School Impact Fee Schedule by Planning Area, it is recommended the Student Generation Rates remain Countywide. It is further recommended the proposed Countywide Student Generation Rates and Countywide School Impact Fee Schedule depicted in Table 21 on page 38 be incorporated into the Broward County Land Development Code.
3. The School Board Staff and the Broward County Development Management Staff should initiate efforts with Broward's municipalities to obtain bedroom characteristics in the Broward County POSSE System during the permitting process to facilitate use of the Housing Data Set in subsequent updates. In addition, resources should be set aside to enable on-going quality control of the Data Set.

Appendix

Table A-1- Single Family Student Generation Rates by Planning Area

Planning Area	Single Family		Elementary		Middle		High		Total	
	Number of Bedrooms	Total Units	Matched Student	Generation Rate	Matched Student	Generation Rate	Matched Student	Generation Rate	Matched Student	Generation Rate
Northwest	3 or less	119	16	0.1345	7	0.0588	7	0.0588	30	0.25210
	4 or more	1083	410	0.3786	171	0.1579	167	0.1542	748	0.69067
	Total	1,202	426	0.3544	178	0.1481	174	0.1448	778	0.64725
Northeast	3 or less	288	66	0.2292	33	0.1146	37	0.1285	136	0.47222
	4 or more	350	61	0.1743	33	0.0943	51	0.1457	145	0.41429
	Total	638	127	0.1991	66	0.1034	88	0.1379	281	0.44044
West Central	3 or less	39	8	0.2051	7	0.1795	5	0.1282	20	0.51282
	4 or more	535	65	0.1215	31	0.0579	43	0.0804	139	0.25981
	Total	574	73	0.1272	38	0.0662	48	0.0836	159	0.27700
Central	3 or less	118	22	0.1864	13	0.1102	13	0.1102	48	0.40678
	4 or more	89	45	0.5056	28	0.3146	26	0.2921	99	1.11236
	Total	207	67	0.3237	41	0.1981	39	0.1884	147	0.71014
East Central	3 or less	533	82	0.1538	49	0.0919	59	0.1107	190	0.35647
	4 or more	512	52	0.1016	22	0.0430	17	0.0332	91	0.17773
	Total	1,045	134	0.1282	71	0.0679	76	0.0727	281	0.26890
Southwest	3 or less	640	92	0.1438	47	0.0734	57	0.0891	196	0.30625
	4 or more	1192	263	0.2206	146	0.1225	162	0.1359	571	0.47903
	Total	1,832	355	0.1938	193	0.1053	219	0.1195	767	0.41867
Southeast	3 or less	289	64	0.2215	29	0.1003	38	0.1315	131	0.45329
	4 or more	217	27	0.1244	12	0.0553	21	0.0968	60	0.27650
	Total	506	91	0.1798	41	0.0810	59	0.1166	191	0.37747
Total	3 or less	2,026	350	0.1728	185	0.0913	216	0.1066	751	0.37068
	4 or more	3,978	923	0.2320	443	0.1114	487	0.1224	1,853	0.46581
	Total	6,004	1,273	0.2120	628	0.1046	703	0.1171	2,604	0.43371

Source: Walter H. Keller, Inc.

Table A-2 - Townhouse, Duplex, and Villa Student Generation Rates by Planning Area

Planning Area	TDV		Elementary		Middle		High		Total	
	Number of Bedrooms	Total Units	Students	Generation Rate	Students	Generation Rate	Students	Generation Rate	Students	Generation Rate
Northwest	0 or 1	-	-	0.0000	-	0.0000	-	0.0000	-	0.00000
	2	124	28	0.2258	11	0.0887	14	0.1129	53	0.42742
	3 or more	471	176	0.3737	86	0.1826	129	0.2739	391	0.83015
	Total	595	204	0.3429	97	0.1630	143	0.2403	444	0.74622
Northeast	0 or 1	2	2	1.0000	-	0.0000	-	0.0000	2	1.00000
	2	129	22	0.1705	5	0.0388	10	0.0775	37	0.28682
	3 or more	836	135	0.1615	63	0.0754	83	0.0993	281	0.33612
	Total	967	159	0.1644	68	0.0703	93	0.0962	320	0.33092
West Central	0 or 1	-	-	0.0000	-	0.0000	-	0.0000	-	0.00000
	2	17	1	0.0588	1	0.0588	-	0.0000	2	0.11765
	3 or more	217	27	0.1244	14	0.0645	14	0.0645	55	0.25346
	Total	234	28	0.1197	15	0.0641	14	0.0598	57	0.24359
Central	0 or 1	2	-	0.0000	-	0.0000	-	0.0000	-	0.00000
	2	339	48	0.1416	20	0.0590	26	0.0767	94	0.27729
	3 or more	943	140	0.1485	68	0.0721	104	0.1103	312	0.33086
	Total	1,284	188	0.1464	88	0.0685	130	0.1012	406	0.31620
East Central	0 or 1	40	1	0.0250	-	0.0000	-	0.0000	1	0.02500
	2	330	8	0.0242	6	0.0182	12	0.0364	26	0.07879
	3 or more	700	99	0.1414	50	0.0714	44	0.0629	193	0.27571
	Total	1,070	108	0.1009	56	0.0523	56	0.0523	220	0.20561
Southwest	0 or 1	2	-	0.0000	-	0.0000	-	0.0000	-	0.00000
	2	524	47	0.0897	23	0.0439	13	0.0248	83	0.15840
	3 or more	1,272	186	0.1462	59	0.0464	119	0.0936	364	0.28616
	Total	1,798	233	0.1296	82	0.0456	132	0.0734	447	0.24861
Southeast	0 or 1	4	-	0.0000	-	0.0000	-	0.0000	-	0.00000
	2	300	38	0.1267	20	0.0667	24	0.0800	82	0.27333
	3 or more	344	82	0.2384	22	0.0640	35	0.1017	139	0.40407
	Total	648	120	0.1852	42	0.0648	59	0.0910	221	0.34105
Total	0 or 1	50	3	0.0600	-	0.0000	-	0.0000	3	0.06000
	2	1,763	192	0.1089	86	0.0488	99	0.0562	377	0.21384
	3 or more	4,783	845	0.1767	362	0.0757	528	0.1104	1,735	0.36274
	Total	6,596	1,040	0.1577	448	0.0679	627	0.0951	2,115	0.32065

Source: Walter H. Keller, Inc.

Table A-3 -Garden Apartment Student Generation Rates by Planning Area

Planning Area	Garden Apt		Elementary		Middle		High		Total	
	Number of Bedrooms	Total Units	Students	Generation Rate	Students	Generation Rate	Students	Generation Rate	Students	Generation Rate
Northwest	0 or 1	14	-	0.0000	-	0.0000	-	0.0000	-	0.0000
	2	48	3	0.0625	2	0.0417	1	0.0208	6	0.12500
	3 or more	-	-	0.0000	-	0.0000	-	0.0000	-	0.00000
	Total	62	3	0.0484	2	0.0323	1	0.0161	6	0.09677
Northeast	0 or 1	287	2	0.0070	1	0.0035	1	0.0035	4	0.01394
	2	587	145	0.2470	54	0.0920	22	0.0375	221	0.37649
	3 or more	275	89	0.3236	54	0.1964	35	0.1273	178	0.64727
	Total	1,149	236	0.2054	109	0.0949	58	0.0505	403	0.35074
West Central	0 or 1	73	1	0.0137	-	0.0000	2	0.0274	3	0.04110
	2	156	13	0.0833	11	0.0705	3	0.0192	27	0.17308
	3 or more	28	1	0.0357	1	0.0357	4	0.1429	6	0.21429
	Total	257	15	0.0584	12	0.0467	9	0.0350	36	0.14008
Central	0 or 1	94	-	0.0000	-	0.0000	-	0.0000	-	0.00000
	2	155	11	0.0710	6	0.0387	4	0.0258	21	0.13548
	3 or more	64	10	0.1563	7	0.1094	5	0.0781	22	0.34375
	Total	313	21	0.0671	13	0.0415	9	0.0288	43	0.13738
East Central	0 or 1	274	3	0.0109	-	0.0000	-	0.0000	3	0.01095
	2	464	29	0.0625	17	0.0366	19	0.0409	65	0.14009
	3 or more	177	17	0.0960	10	0.0565	17	0.0960	44	0.24859
	Total	915	49	0.0536	27	0.0295	36	0.0393	112	0.12240
Southwest	0 or 1	442	8	0.0181	3	0.0068	2	0.0045	13	0.02941
	2	808	100	0.1238	38	0.0470	49	0.0606	187	0.23144
	3 or more	361	48	0.1330	31	0.0859	47	0.1302	126	0.34903
	Total	1,611	156	0.0968	72	0.0447	98	0.0608	326	0.20236
Southeast	0 or 1	53	2	0.0377	-	0.0000	-	0.0000	2	0.03774
	2	308	42	0.1364	14	0.0455	14	0.0455	70	0.22727
	3 or more	243	57	0.2346	27	0.1111	33	0.1358	117	0.48148
	Total	604	101	0.1672	41	0.0679	47	0.0778	189	0.31291
Total	0 or 1	1,237	16	0.0129	4	0.0032	5	0.0040	25	0.02021
	2	2,526	343	0.1358	142	0.0562	112	0.0443	597	0.23634
	3 or more	1,148	222	0.1934	130	0.1132	141	0.1228	493	0.42944
	Total	4,911	581	0.1183	276	0.0562	258	0.0525	1,115	0.22704

Source: Walter H. Keller, Inc.

Table A-4 - Mid-Rise Student Generation Rates by Planning Area

Planning Area	Mid Rise Apt			Elementary		Middle		High		Total	
	Number of Bedrooms	Total Units	Students	Generation Rate	Students	Generation Rate	Students	Generation Rate	Students	Students	Generation Rate
Northwest	0 or 1	-	-	0.0000	-	0.0000	-	0.0000	-	-	0.00000
	2 or more	64	19	0.2969	14	0.2188	18	0.2813	18	51	0.79688
	Total	64	19	0.2969	14	0.2188	18	0.2813	18	51	0.79688
Northeast	0 or 1	88	2	0.0227	-	0.0000	-	0.0000	-	2	0.02273
	2 or more	216	4	0.0185	2	0.0093	3	0.0139	3	9	0.04167
	Total	304	6	0.0197	2	0.0066	3	0.0099	3	11	0.03618
West Central	0 or 1	141	1	0.0071	1	0.0071	-	0.0000	-	2	0.01418
	2 or more	311	14	0.0450	4	0.0129	4	0.0129	4	22	0.07074
	Total	452	15	0.0332	5	0.0111	4	0.0088	4	24	0.05310
Central	0 or 1	148	-	0.0000	-	0.0000	1	0.0068	1	1	0.00676
	2 or more	517	13	0.0251	3	0.0058	7	0.0135	7	23	0.04449
	Total	665	13	0.0195	3	0.0045	8	0.0120	8	24	0.03609
East Central	0 or 1	357	4	0.0112	3	0.0084	2	0.0056	2	9	0.02521
	2 or more	761	14	0.0184	7	0.0092	14	0.0184	14	35	0.04599
	Total	1,118	18	0.0161	10	0.0089	16	0.0143	16	44	0.03936
Southwest	0 or 1	-	-	0.0000	-	0.0000	-	0.0000	-	-	0.00000
	2 or more	-	-	0.0000	-	0.0000	-	0.0000	-	-	0.00000
	Total	-	-	0.0000	-	0.0000	-	0.0000	-	-	0.00000
Southeast	0 or 1	280	1	0.0036	-	0.0000	1	0.0036	1	2	0.00714
	2 or more	420	1	0.0024	-	0.0000	1	0.0024	1	2	0.00476
	Total	700	2	0.0029	-	0.0000	2	0.0029	2	4	0.00571
Total	0 or 1	1,014	8	0.0079	4	0.0039	4	0.0039	4	16	0.01578
	2 or more	2,289	65	0.0284	30	0.0131	47	0.0205	47	142	0.06204
	Total	3,303	73	0.0221	34	0.0103	51	0.0154	51	158	0.04784

Source: Walter H. Keller, Inc.

Table A-5 -High-Rise Student Generation Rates by Planning Area

Planning Area	High Rise Apt			Elementary		Middle		High		Total	
	Number of Bedrooms	Total Units	Students	Generation Rate	Students	Generation Rate	Students	Generation Rate	Students	Students	Generation Rate
Northwest	0 or 1	-	-	0.00000	-	0.00000	-	0.00000	-	-	0.00000
	2 or more	-	-	0.00000	-	0.00000	-	0.00000	-	-	0.00000
	Total	-	-	0.00000	-	0.00000	-	0.00000	-	-	0.00000
Northeast	0 or 1	-	-	0.00000	-	0.00000	-	0.00000	-	-	0.00000
	2 or more	250	-	0.00000	-	0.00000	-	0.00000	-	-	0.00000
	Total	250	-	0.00000	-	0.00000	-	0.00000	-	-	0.00000
West Central	0 or 1	157	-	0.00000	1	0.00637	-	0.00000	-	1	0.00637
	2 or more	560	21	0.03750	7	0.01250	11	0.01964	39	39	0.06964
	Total	717	21	0.02929	8	0.01116	11	0.01534	40	40	0.05579
Central	0 or 1	-	-	0.00000	-	0.00000	-	0.00000	-	-	0.00000
	2 or more	-	-	0.00000	-	0.00000	-	0.00000	-	-	0.00000
	Total	-	-	0.00000	-	0.00000	-	0.00000	-	-	0.00000
East Central	0 or 1	144	-	0.00000	-	0.00000	-	0.00000	-	-	0.00000
	2 or more	613	8	0.01305	2	0.00326	2	0.00326	12	12	0.01958
	Total	757	8	0.01057	2	0.00264	2	0.00264	12	12	0.01585
Southwest	0 or 1	-	-	0.00000	-	0.00000	-	0.00000	-	-	0.00000
	2 or more	-	-	0.00000	-	0.00000	-	0.00000	-	-	0.00000
	Total	-	-	0.00000	-	0.00000	-	0.00000	-	-	0.00000
Southeast	0 or 1	388	1	0.00258	-	0.00000	-	0.00000	-	1	0.00258
	2 or more	1,541	7	0.00454	3	0.00195	8	0.00519	18	18	0.01168
	Total	1,929	8	0.00415	3	0.00156	8	0.00415	19	19	0.00985
Total	0 or 1	689	1	0.00145	1	0.00145	-	0.00000	-	2	0.00290
	2 or more	2,964	36	0.01215	12	0.00405	21	0.00709	69	69	0.02328
	Total	3,653	37	0.01013	13	0.00356	21	0.00575	71	71	0.01944

Source: Walter H. Keller, Inc.

Because Success Doesn't Just Happen



Walter H. Keller, Inc.
Consulting Engineers & Planners

Coral Springs Office
P.O. Box 9740
Coral Springs, FL 33075
(954) 755-3822

Sewall's Point Office
3727 SE Ocean Boulevard, Suite 200A
Sewall's Point, FL 34996
(772) 219-9079