



May 2007

Report No. 07-29

## School Districts Are Reducing Class Size in Several Ways; May Be Able to Reduce Costs

### at a glance

During the 2002 general election voters amended the Florida Constitution to reduce class sizes so that by the 2010-11 school year the maximum number of students in core courses does not exceed specified limits.

Since the passage of the amendment, school districts have relied heavily on construction options such as building of new schools and additions to existing schools and to a lesser extent on relocatables and non-construction options such as rezoning and co-teaching as primary strategies to reduce class sizes. However, districts predict that they will rely more heavily on new school construction in the future to reduce class sizes as options for expansions on existing sites are exhausted.

School districts indicate that increasing construction costs have made it difficult for them to construct the number of classrooms needed to lower class sizes to required levels. However, districts vary widely in their average student station construction costs even after taking into consideration regional cost differences.

School districts can reduce construction costs by adding classroom capacity through additions to existing schools rather than building entirely new schools, by using frugal construction practices and prototypical designs, and by using modular construction and relocatables whenever possible.

## Scope -

This report provides information to the Legislature on how school districts are using fixed capital outlay (facilities) funds to meet the requirements specified in the Class Size Reduction Amendment to the Florida Constitution, which voters approved in 2002.<sup>1</sup> Specifically, this report addresses the four questions below.<sup>2</sup>

- Are school districts meeting the constitutional requirement to reduce class sizes?
- What strategies are school districts implementing to reduce class sizes?
- What challenges do school districts have in meeting class size reduction goals?
- Are there strategies that school districts can implement to decrease the costs associated with reducing class sizes?

## Background

During the 2002 general election voters approved Amendment 9, referred to as the Class Size Reduction Amendment, to the Florida Constitution.<sup>3</sup> The amendment requires school districts to reduce the number of students in each classroom by at least two students per year until the maximum class sizes specified in the amendment are achieved. By the 2010-11 school year, the maximum number of students in core courses may not

<sup>&</sup>lt;sup>1</sup> Fixed Capital Outlay assets include fixed assets or real property, land, new buildings, and remodeling of real property that materially extends its useful life or materially improves or changes its functional use.

<sup>&</sup>lt;sup>2</sup> This report does not specifically address how class size reduction requirements apply to charter schools.

<sup>&</sup>lt;sup>3</sup> Section 1, Article IX of the Florida Constitution relating to public education

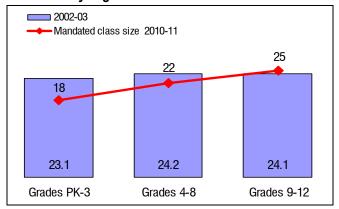
exceed 18 students in grades K-3, 22 students in grades 4-8, and 25 students in grades 9-12. <sup>4</sup> The average number of students at each grade grouping is calculated according to the following schedule:

- at the district level for the 2003-04 through the 2005-06 school years;
- at the school level for the 2006-07 and 2007-08 school years; and
- at the classroom level for the 2008-09 school year and thereafter.

Exhibit 1 shows that in 2002-03 statewide class size averages for elementary and middle grade levels were higher than those mandated in the amendment.  $^5$ 

#### Exhibit 1

#### In 2002-03, Average Class Sizes for PK-8 Were Considerably Higher Than Those Mandated



Source: Florida Department of Education.

Florida law has several provisions to ensure school districts meet class size reduction goals. Florida law assigns several responsibilities to the Florida Department of Education (DOE) to ensure the state meets class size reduction goals. DOE must develop an annual K-12 fixed capital outlay budget request for meeting statewide facility needs and is responsible for holding school districts accountable for meeting class size reduction goals. DOE must measure each district's annual yearly progress toward meeting the two students per year reduction goals based upon the October student membership survey each year, and must report school districts' progress to the districts, Governor and Legislature.

Florida law provides consequences for districts that do not reduce average class sizes as required. Beginning in the 2006-07 school year, the department is to develop a constitutional compliance plan for districts that are not in compliance with the constitutional requirement. These plans must include, but are not limited to, redrawing school attendance zones to maximize use of facilities while minimizing the additional use of transportation. <sup>6</sup>

The Legislature has provided funds specifically to address class size reduction goals. Early estimates on the cost of meeting the class size reduction requirements varied widely. For instance, estimates for construction and land purchases ranged from \$4.4 billion to \$9.4 billion. Reasons for this variation included differences in assumptions about what strategies districts would use to add classroom capacity. A major problem in developing precise cost estimates was the unavailability of state-level accurate and reliable data on the number of suitable classrooms at each grade level by school district.

Since 2003-04, in addition to the \$1.5 billion in general fixed capital outlay funding, the Legislature has appropriated \$1.9 billion in fixed capital outlay funding through the Classrooms for Kids program to be used specifically to meet class size reduction goals. School districts must use Classrooms for Kids funds only to construct, renovate, remodel, or repair educational facilities to increase capacity that are in excess of projects (including the purchase or lease-purchase of relocatable facilities) identified in their five-year work plans adopted prior to March 15, 2003. <sup>7,8</sup>

<sup>&</sup>lt;sup>4</sup> The Florida Department of Education defines core courses for class size reduction as reading/language arts, mathematics, science and social studies, foreign language, English for Speakers of Other Languages, Exceptional Student Education, and courses taught in traditional self-contained school classrooms.

<sup>&</sup>lt;sup>5</sup> These averages were derived by taking the total number students at each level in every term/classroom/period combination in a core course and dividing that number by the total term/classroom period core combination reported. These are statewide averages and do not reflect the number of schools or individual classrooms that exceeded the mandates established in the amendment.

<sup>&</sup>lt;sup>6</sup> Section 1003.03(4)(b), F.S.

<sup>&</sup>lt;sup>7</sup> *Relocatables* are also referred to as *portables*.

<sup>&</sup>lt;sup>8</sup> Section 1013.735(3), F.S.

Exhibit 2 shows state fixed capital outlay funding for K-12 education by fiscal year. Florida law also authorizes school districts to use funds generated from a levy on local property (ad valorem taxes) to finance school construction projects associated with enrollment growth and ongoing facility State and local fixed capital outlay needs.<sup>9</sup> funds to school districts totaled approximately 2006-07. 10 from 2003-04 to \$12.7 billion (Appendices A and B contain a more detailed description on school capital outlay funding and allocations to school districts.)

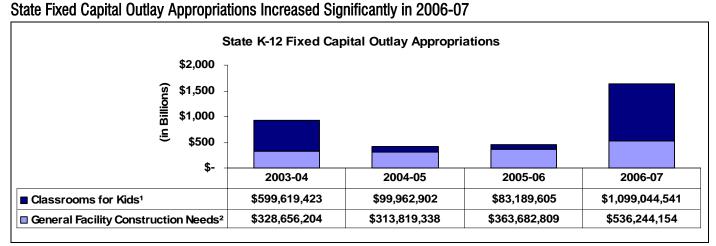
DOE requested \$2.9 billion in its 2007-08 legislative budget request to fund 41 school districts' and four university lab schools' classroom needs to meet class size reduction goals by 2010-11. <sup>11, 12</sup>

Exhibit 2

## Methods -

Florida law provides school districts with considerable flexibility in determining the details of how they will meet the class size requirements. <sup>13</sup> School districts are not required to report their strategies for implementing class size reduction to any state level agency and the Department of Education does not survey school districts to obtain this information. To identify district strategies and assess how they are using fixed capital outlay funds to meet class size reduction goals, we surveyed the state's 67 school districts. We also analyzed classroom inventory, student, and funding data maintained by the Department of Education.

<sup>13</sup> Section 1003.03(3), F.S.



<sup>1</sup> Includes \$30 million Lottery District Equity Recognition Allocation for 2003-2004.

<sup>2</sup> These funds are used for general facility construction needs as established in s. 1013.64, *Florida Statutes*. They may also be used for class size reduction projects. The primary source of funds is the Public Education Capital Outlay (PECO) funds derived from the gross receipt tax on utilities services (2.5%) and communications services (2.37%).

Source: Florida Department of Education, Office of Educational Facilities.

<sup>&</sup>lt;sup>9</sup> Section 1011.71(2), *F.S.*, authorizes districts to levy up to 2 mills without an election. Section 1011.73, *F.S.*, refers to procedures for a voted millage election.

<sup>&</sup>lt;sup>10</sup> The revenue figures do not include local bond referendums, 1/2-cent sales surtax, impact fees, and certificates of participation or other local sources of funds.

<sup>&</sup>lt;sup>11</sup> The State Board of Education approved 2007-08 legislative budget request of \$2.9 billion was revised downward to \$2.1 billion due to smaller than expected enrollment projections by the December 15, 2006 Education Estimating Conference.

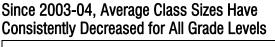
<sup>&</sup>lt;sup>12</sup> FAMU, FAU, UF, and FSU.

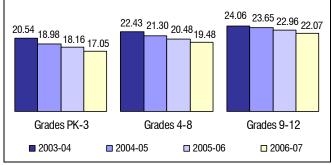
## **Questions-**

## Are school districts meeting the constitutional requirement to reduce class sizes?

Since 2003, school districts have made consistent progress toward meeting class size reduction goals. Exhibit 3 shows on average class sizes have decreased each year since 2003-04. While most school districts (61 of 67) met 2005-06 class size targets, which were at the district level, six did not—Charlotte, Franklin, Gulf, Manatee, Marion and St. Lucie. <sup>14</sup> School districts that do not meet the required two-student-per-year reduction are subject to transfer of a percentage of their class size reduction fixed capital outlay budgets which fund school construction. <sup>15</sup>

#### Exhibit 3





Source: Florida Department of Education.

Based on the most recent Department of Education data, school districts may have difficulty meeting the more stringent 2006-07 class size targets, which are set at the school level. DOE data, based on the November 2006 student census, shows that 177 traditional schools (5.8% of the 3,038 traditional schools statewide) and 88 charter schools (25% of the state's 358 charter schools) were not in compliance with the school-level class size requirements. Overall, 42 of 67 school districts had at least one school that did not meet the 2006-07 school-level class size averages at that time. <sup>16</sup> After the appeals process and adjustments, 86 traditional schools and 49 charter schools remained out of compliance resulting in 24 school districts transfering a total of \$5.1 million in operating funds to their fixed capital outlay budgets. <sup>17</sup>

## What strategies are school districts implementing to reduce class sizes?

Florida law provides several methods that districts can use to reach class size goals. In addition to building new classrooms, districts can encourage students to take dual enrollment classes, maximize the use of teaching staff, redraw attendance zones, and make use of joint use facilities with community colleges and public and private universities.<sup>18</sup> In their responses to our survey, school districts indicated that over the past three years they have relied heavily on new construction and to a lesser extent on adding relocatables to increase available classrooms (see Exhibit 4). Districts predict that they will rely more heavily on new school construction in the future to reduce class sizes as options for classroom expansions at existing sites are exhausted.<sup>19</sup> Few districts have used nonconstruction options such as rezoning and coteaching as primary strategies to reduce class sizes.

<sup>&</sup>lt;sup>14</sup> Eight districts did not meet class size targets in the 2005-06 school years prior to the DOE unexpected student growth adjustment. However, after these adjustments DOE classified Suwannee and Walton county school districts to be in compliance with the targets.

<sup>&</sup>lt;sup>15</sup> Districts may appeal the transfer to the State Board of Education based on impediments such as unexpected student growth, new teacher hires since the October student count and insufficient space. Based on a review of the appeals, the Commissioner of Education may recommend alternative amounts be transferred.

<sup>&</sup>lt;sup>16</sup> The number of schools not in compliance with the class size requirement ranged from district to district with 11 districts having one school out of compliance to Orange County with the largest number of schools (31) out of compliance.

<sup>&</sup>lt;sup>17</sup> This figure does not include the university lab schools located at FAU, FSU-Broward, and UF.

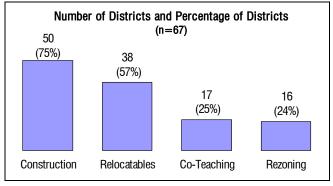
<sup>&</sup>lt;sup>18</sup> Section 1003.03, F.S.

<sup>&</sup>lt;sup>19</sup> The new classroom standards adopted by DOE on August 22, 2005, to reduce class sizes to the level required in the amendment caused some school districts to add classroom additions or otherwise expand existing schools even though they were experiencing no growth in student population.

**Most school districts relied on construction to meet class size reduction requirements.** Between 2003-04 and 2005-06, more school districts relied on construction options than other strategies to meet class size reduction requirements. For instance, as shown in Exhibit 4, 50 of 67 districts (75%) indicated that they were building additional classrooms as a primary way of reducing class sizes. During this three-year period, districts reported building a total of 19,795 additional classrooms, about a quarter of which (5,471 or 28%) were financed all or in part with Classrooms for Kids funds.

#### Exhibit 4





Note: The percentages of strategies used by school districts exceeds 100% because school districts reported using multiple strategies to achieve class size reduction goals.

Source: OPPAGA survey of school districts.

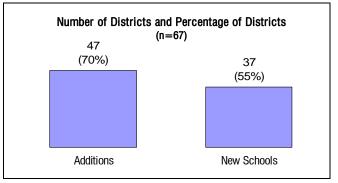
New school construction edged out additions to existing schools to create the largest number of new classrooms added with Classrooms for Kids funds. Between 2003-04 and 2005-06, school districts relied on both classroom additions to existing schools and new school construction to increase the number of classrooms. Because building additions to existing schools is significantly less expensive than building new schools, districts' choices in construction strategies can have a large effect on the state's cost.

As shown in Exhibit 5, most school districts (70%, or 47 of 67) identified classroom additions as a construction strategy used to meet class size reduction requirements. A smaller proportion of school districts, 57% (38) indicated that building

new schools was a class size reduction strategy they used.  $^{\rm 20}$ 

#### Exhibit 5

## More Districts Relied on the Construction of Additions to Meet Class Size Reduction Requirements



Note: The percentages for construction strategies used by school districts exceeds 100% because school districts reported using both strategies to meet class size reduction goals.

Source: OPPAGA analysis of school districts' survey responses.

Although more districts indicated that they relied on additions to existing schools as their primary strategy to add new classrooms, new school construction resulted in the most classrooms added between 2003-04 and 2005-06 (see Exhibit 6.) This occurred because while more districts relied on additions to existing schools to meet class size reduction goals, those school districts that added the most classrooms generally did so through new school construction.

#### Exhibit 6

New Schools Provided Most of the Classrooms Funded	
Wholly and in Part by Classrooms for Kids Funds	

Type of Construction	Number/(Percentage) of Classrooms		Number/(Percentage) of Student Stations		
New Schools	2,602	(47%)	56,032	(52%)	
Additions	2,245	(41%)	43,206	(40%)	
Relocatables	591	(11%)	7,834	(7%)	
Other <sup>1</sup>	33	(1%)	498	(<1%)	
Total	5,471	(100%)	107,570	(100%)	

<sup>1</sup> Districts that had met their class size reduction needs reported using Classrooms for Kids funding on other construction projects such as a food service renovation, technical center, or food storage building. Source: OPPAGA survey of school districts.

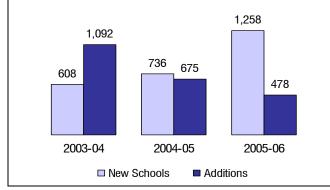
<sup>&</sup>lt;sup>20</sup> The percentage of school districts constructing additions and new schools exceeds 100% because many districts reported using both strategies.

Districts reported that new school construction accounted for 2,602 of the 5,471 (47%) classrooms built using Classrooms for Kids funds. Additions to existing schools followed closely behind new school construction, and produced 2,245 (41%) of the class size reduction-funded classrooms.

School districts' construction strategies have changed over time. While additions to existing schools yielded the most new classrooms constructed using Classrooms for Kids funds in 2003-04, the number of classrooms produced through classroom additions rather than new school construction has steadily decreased over the past three years. As shown in Exhibit 7, districts reported using Classrooms for Kids funds to partially or entirely finance the cost to construct 1,092 classroom additions at existing schools in 2003-04, which exceeded the 608 classrooms through new school construction. added However, by 2005-06, the reverse was true with new school construction accounting for 1,258 (72%) of the 1,736 classrooms constructed using Classrooms for Kids funds. Districts expect this trend to continue until the constitutional mandate takes effect in 2010-11.

#### Exhibit 7

New School Construction Has Replaced School Additions as the Source of New Classrooms Funded by State Class Size Reduction Allocations



Source: OPPAGA analysis of school districts' survey responses.

School districts indicated that a main reason for this shift in construction strategies is that they have added as many classrooms to existing schools as space and infrastructure permit. As a result, districts will need to build new schools in new locations both to meet the class size requirement and to accommodate growth areas where there are not enough schools to serve the student population.

School districts have frequently used relocatable classrooms and modular construction to add classroom space. Districts reported using relocatable (portable) classrooms as the second most frequently cited class size reduction strategy, with over half (57%) of districts indicating that they added relocatable classrooms as a means to meet class size reduction requirements. Between fiscal years 2003-04 and 2005-06, school districts reported that they added 7,495 relocatable classrooms of which 591 (8%) were financed all or in part with Classrooms for Kids funds. During the three-year period, the costs associated with the lease or purchase of relocatable classrooms accounted for 3% (\$21,144,901) of the Classrooms Kids funds the districts for reported (\$620,227,685).

Districts gave several different reasons for using relocatable classrooms. Fast-growing districts like Lake and Osceola stated that relocatables allowed to quickly or temporarily them relieve overcrowding where adequate space and infrastructure were available, while other districts reported that relocatable classrooms offered them the flexibility to adapt to demographic shifts within the county. Eighteen districts indicated that they plan to continue to use relocatables as a temporary measure while permanent classrooms are constructed or longer if funds for permanent facilities are not available. However, districts anticipate reducing the use of relocatables over time, especially those that they lease rather than own, as they are replaced by permanent classrooms.

Some districts (Broward, Miami, and Palm Beach) indicated they were also using modular construction to add permanent classrooms in addition to traditional "stick-built" construction. For example, Broward reported that it added 38 classrooms through modular construction, while Miami-Dade indicated that it added 15,000 student stations using modular units.<sup>21</sup>

 $<sup>^{21}</sup>$  Prefabricated classroom building of which up to 95% is built off- site.

School districts are generally not using strategies that would reduce the need to construct additional classrooms. School districts generally are not relying on rezoning and co-teaching to meet the class size requirements, although these strategies maximize the use of existing classroom space and therefore reduce the number of new classrooms needed. Only a quarter of the districts indicated that rezoning (16) or co-teaching (17) were among their strategies to reduce class sizes.<sup>22</sup> Districts reported several reasons for not pursuing these options, including the lack of parental support for rezoning and confusion over whether co-teaching was an acceptable method for reducing class sizes.

**Few school districts have rezoned to better use underutilized schools.** <sup>23</sup> Most districts (50, or 79% of 63 districts reporting) have at least some underutilized schools. However, only 14 of the 50 districts (28%) have rezoned or plan to change school boundaries to maximize the use of classroom space at existing schools. Instead, most districts generally plan to build new classrooms and schools to reduce class sizes.

Districts often cited parental resistance as a primary reason for not pursuing school rezoning as a means to better use existing facilities. Districts also cited increased transportation costs that would be incurred to bus students to underutilized schools and the long bus rides rezoning would require for some students. For example, Brevard County School District reported that it has chosen not to rezone because of doing so would require busing students 75 miles from overcrowded schools in the southern part of the county to underutilized schools in the north. Monroe County School District cited a similar situation in which students would need to be transported 104 miles from Key Largo to its underutilized elementary schools in Key West. Okaloosa similarly noted that Eglin Air Force Base, in the center of the district, serves as a geographical barrier to busing elementary students to underutilized coastal schools. Rezoning also would not help school districts that have experienced rapid growth in areas where no schools currently exist, such as in parts of St. Lucie, Lake, and Osceola counties

Most school districts are not using co-teaching to reduce class sizes. Seventeen school districts (25%) reported that they were using or planned to use co-teaching, in which two or more teachers in a classroom share responsibility for student instruction, to meet class size reduction requirements. Three districts Duval (97%), Lake (60%), and Seminole (40%) reported using coteaching most extensively, with Duval stating that it will be able to meet the class size reduction requirements almost entirely (96%) through coteaching. While Department of Education data shows an approximate five-fold increase in the number of class periods taught through coteaching between 2002-03 and 2006-07, coteaching still represented only approximately 4% of all class periods taught in 2006-07.

Use of co-teaching may have been limited due to changing state direction on use of this technique. In June 2005, the Florida Board of Education adopted a policy that excluded co-teaching from the calculation of class size compliance for the 2006-07 school year. However, the 2006 Legislature passed a bill to approve the use of co-teaching as an acceptable strategy to meet the class size reduction requirements. Most districts, did report that they are considering co-teaching as a transitional strategy until enough new classrooms can be built or acquired.

## What challenges do school districts have in meeting class size reduction goals?

School districts identified several challenges in meeting class size reduction requirements. These include construction cost increases, competition for scarce land suitable for school sites, parental resistance to rezoning, and local permitting processes.

<sup>&</sup>lt;sup>22</sup> Some districts also reported using innovative strategies such as adding a seventh period to the day (Bradford); converting districtowned non-classroom space to classrooms (Brevard and Santa Rosa); converting abandoned commercial space, such as a K-Mart store, to classrooms and other education uses (Osceola); and redeploying staff to maximize the use of existing facilities (Santa Rosa).

<sup>&</sup>lt;sup>23</sup> School district classroom facilities are considered underutilized if classroom use is less than 90%.

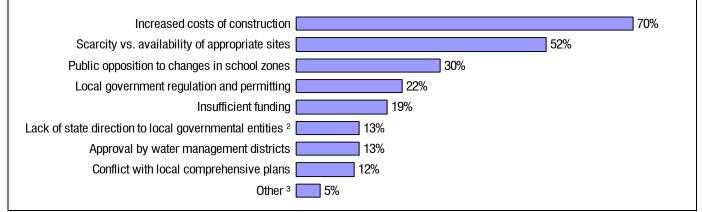
Districts identified the increased cost of construction as their major challenge to achieving class size reduction goals. Exhibit 8 shows that 70% of school districts report considerable difficulty meeting class size reduction deadlines and staying within budget due to rapid increases in construction costs. This percentage jumps to 94% for the 30 districts with a need for class size reduction funding as identified in the DOE funding formula. For example, the Lake County School District noted that its construction costs have increased substantially due to higher costs for fuel, materials and the effects of hurricanes. Rising costs associated with repairing hurricane damage was also listed as a major challenge by Escambia and Charlotte county school districts. Thirteen districts reported that due to rising construction costs they need more funds to meet class size reduction requirements. <sup>24</sup>

The increase in construction costs affects some districts more than others, depending on the number of additional student stations they need and the strategies they adopt to address the class size reduction requirements. The impact may also be mitigated by the predicted slowing growth in student populations in South Florida, which may relieve the immediate need for new classrooms to meet class size reduction requirements. Difficulty finding affordable, appropriate sites was a problem for about half of the school districts.

Half (35) of the districts reported difficulties in obtaining property to build new schools. For instance, fast growing districts including Lake, Lee, Osceola, and St. Lucie reported difficulty in finding affordable school sites due to rapidly increasing property values, resulting in selecting less desirable sites that can have environmental issues and infrastructure constraints such as a lack of water, sewers, and roads. Districts reported that these factors have increased the time and costs of finding appropriate school sites.

Some districts are making progress with rezoning schools despite challenges. While districts may face parental resistance to rezoning to help meet class size requirements, several reported that they have successfully taken this step. To help gain public support for changing school boundaries, the Hillsborough County School District created a School Capacity Advisory Council consisting of 35 members to provide recommendations on making the best use of existing facilities. The committee recommended many future school boundary changes which the district plans to implement. The Palm Beach County School District reported that it has reconfigured attendance zones for 50 of its schools, and Manatee County School District reported it plans ongoing boundary changes as the district grows.

#### Exhibit 8 Districts Report Several Challenges in Meeting Class Size Reduction Requirement <sup>1</sup>



<sup>1</sup>The four university laboratory schools (FSU, FAU, UF, and FAMU) were not included in the survey.

<sup>&</sup>lt;sup>24</sup> These districts are Miami-Dade, Palm Beach, Collier, Osceola, Pinellas, Polk, Sarasota, Baker, Wakulla, Lafayette, Manatee, St. Lucie, and Santa Rosa.

<sup>&</sup>lt;sup>2</sup> Other than school districts.

<sup>&</sup>lt;sup>3</sup>Other: relocation problems, enrollment estimation, rezoning, and inadequacies of State Requirements for Educational Facilities to meet program needs. Source: OPPAGA analysis of districts' survey data.

Districts can face conflicts with governmental entities over zoning issues, approval by water management districts, and permitting delays. Districts report that when constructing new schools or adding classrooms they often contend with a lack of appropriately zoned sites, lengthy review and permitting processes, and conflicting land use regulations among governmental entities within counties. For example, one district reported acquiring a school site only to determine that it could not build on the site due to subsequent changes in the land development regulations adopted by the local government. The Palm Beach County School District similarly reported that some cities have not allowed schools to be built in some residential land use categories, making it difficult to expand campuses and to find new school sites.

recommended Several districts that the Department of Community Affairs provide additional direction to local governments to address this problem. While the department approves local comprehensive plans, it does not review local land development regulations unless they are in conflict with the comprehensive plan. A department official noted that while there are competing legitimate concerns among school districts and local governments, districts deal with a patchwork of regulations that are not well suggested coordinated, and that local governments designate areas where building schools is permissible.

Several districts stated that although they are required to meet class size reduction deadlines by 2010-11, they do not receive priority from local governments in the permit review processes. For instance, the Brevard, Lee, and Pasco county school districts reported lengthy reviews and delays in obtaining development permits, which make it difficult to construct classrooms quickly.

# Are there strategies that school districts can implement to decrease the costs associated with reducing class sizes?

The passage of the Class Size Amendment followed the decentralization and transfer of responsibility for public school construction

programs from Department of Education to the school districts beginning in 1995. Florida law grants school districts flexibility in their use of state appropriated class size reduction funds to meet class size reduction goals. The strategies that school districts adopt to reduce class sizes can have a significant effect on the overall cost of meeting the constitutional requirement. For instance, districts that seek to meet class size reduction requirements by adding classrooms to existing schools versus building new schools can have significantly lower construction costs. In school districts addition, that use frugal prototypical construction practices, school designs, modular construction, and relocatable classrooms can substantially reduce their costs.

Districts' overall costs of adding classroom capacity vary considerably. School construction costs per student station for elementary classrooms varies substantially throughout the state. We analyzed the construction costs for six districts over the 2000 through 2005 period and found that, after adjusting for regional cost differences, these costs range from a high of \$17,207 in Leon County School District to a low of \$10,946 in Miami/Dade School District (see Exhibit 9). 25, 26 Given that districts are relying most heavily on building classrooms to reduce class sizes, these construction cost differences may affect the state's cost to meet constitutional requirements.

We identified several ways that school districts can reduce construction costs. These include implementing frugal construction practices and prototypical designs, constructing student stations

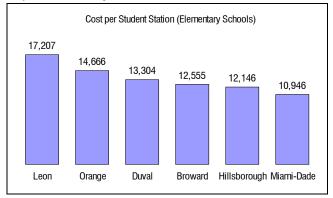
<sup>&</sup>lt;sup>25</sup> To compare project costs from different years and locations, OPPAGA analyzed the cost of construction using the Department of Education Cost of Construction reports for fixed capital outlay projects reported annually by school districts for six districts that have their major city included in the RS Means Historical Cost Indexes. These districts and cities were Broward (Fort Lauderdale), Duval (Jacksonville), Dade (Miami), Orange (Orlando), Leon (Tallahassee), and Hillsborough (Tampa). This enabled us to adjust for regional cost differences and annual inflation in our analysis. Since elementary schools comprise the majority of the unmet need identified by DOE, we limited the majority of our analysis to elementary schools in order to control the possible effects of school type on costs. This allowed the comparison of 83 elementary classroom addition projects from four districts and 47 elementary school construction projects from five districts on a cost equalized basis.

<sup>&</sup>lt;sup>26</sup> The RS Means indexes are used by contractors to prepare bids on construction projects by pricing labor and materials, escalating costs over time and comparing and equalizing cost among different cities. *RS Means Square Foot Costs 27th Annual Edition 2006*, pp. 459 and 461.

through classroom additions to existing schools rather than by building new schools, and adding student stations with modular construction and relocatable classrooms.

#### Exhibit 9

#### Construction Costs Per Student Station Varied Significantly Among Six School Districts When Adjusted for Regional Differences



Source: OPPAGA analysis of district cost data from 2000-2005 reported to DOE.

Frugal construction practices and prototypical design can help reduce construction costs. Several reported districts adopting frugal construction practices and prototypical school design to reduce construction costs. For example, the Hillsborough County School District, which had relatively low adjusted construction costs, involved stakeholders in a 1998 study of its facility needs and subsequently adopted space-efficient prototypical school designs to meet those needs. <sup>27</sup> These designs include steps such as building to the minimum state square footage standards, using a standard space-efficient design for each type of building, and combining spaces for multipurpose uses when possible. Using standard designs for elementary, middle, and high schools enables the district to cut architectural fees, build schools faster, and enables contractors to gain experience with the standard designs. As shown in Exhibit 9, these practices enabled the district to have lower construction costs than many other districts.

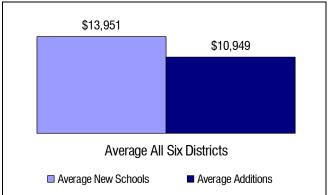
<sup>27</sup> Frugal construction practices rely on use of readily available materials and standardized mechanical, electrical and telecommunications systems to lower construction costs.

Adding classrooms to existing schools is less expensive than constructing new schools. It is substantially less expensive to build classrooms at existing school sites than to build new schools. As shown in Exhibit 10, the six school districts we examined spent on average \$10,949 to add a student station at existing schools, \$3,002 less than the average \$13,951 cost to add student stations at new schools. A primary reason for this difference is that new schools include not only the classroom space but also relatively expensive support spaces such as administration offices, media centers, and cafeterias.

These cost differences can have a significant impact on the cost of meeting class size reduction requirements. However, as mentioned earlier in this report, many districts indicated that they have reached a point where they have added as many additional classrooms to existing schools as space would permit and that classroom additions increasingly are no longer feasible. Thus, the cost of adding additional student stations in the future is likely to increase as school districts rely more heavily on more costly new school construction.

#### Exhibit 10

#### The Cost to Add Student Stations Is Lower for Additions to Existing Schools Than New School Construction



Source: OPPAGA analysis of the 2000-2005 cost of construction data reported by school districts to DOE.

Some districts use modular construction and relocatable classrooms. To help manage construction costs, several school districts (Broward, Dade, and Palm Beach) have used modular construction to lower costs and to speed up occupancy. Because modular classrooms are built largely off-site while site preparation is underway, these units can shorten the construction schedule and reduce costs. For Broward County School instance, District indicated that adding student stations using modular additions enabled it to substantially decrease its average construction costs. Districts that use modular additions view them as permanent solutions to their space problems, and Broward officials reported that these units have received high marks from teachers.

In addition, several school districts reported that they have used relocatable classrooms as an economical and flexible class size solution. These districts included Okaloosa, Orange, and Polk. At an average cost of \$75,000 per unit or \$3,000 per student station, relocatable classrooms are well below the cost of both modular and traditionally built additions.<sup>28</sup> Relocatable classrooms can be readily moved between schools to meet demographic changes in student populations. Due to their lower cost, these temporary classrooms can be a cost-effective way to meet the class size requirement for districts that are expecting lower future student populations. For example, the revised student enrollment forecasts to 2010-11 projected that the Broward and Orange county school districts will experience declines in 25%student population of and 17%, respectively.<sup>29</sup> These districts may find it more cost effective to use temporary classrooms rather than constructing permanent facilities that may not be needed. (See Appendix C for more information on projected student population declines.)

#### <sup>28</sup> Costs are based on DOE's average cost of \$75,000 for a relocatable divided by 25 student stations.

## Agency Response-

In accordance with the provisions of s. 11.51(5), *Florida Statutes,* a draft of our report was submitted to the Commissioner of Education to review and respond. The Commissioner's written response is reprinted herein in Appendix D.

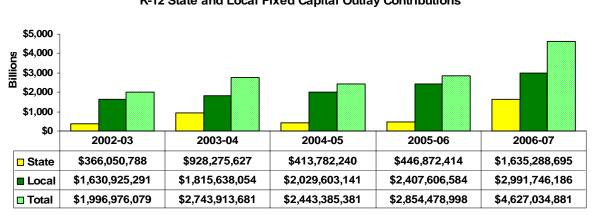
<sup>&</sup>lt;sup>29</sup> CO-FTE forecast based on the Office of Demographic and Economic Research December 15, 2006, projections to 2010-11.

## Appendix A

## School Districts Have Financed School Construction from a Combination of Ad Valorem Property Taxes and State Appropriations

School districts have used discretionary (not requiring voter approval) 2-mill revenue as the primary source of fixed capital outlay funding. Table A-1 shows that non-voted 2-mill capital improvements revenue derived from ad valorem (property) taxes authorized in Florida Statutes has been the primary source of funding for public school construction projects. It also shows that fixed capital outlay funding from both state and local sources has more than doubled since the passage of the Class Size Reduction Amendment in 2002-03. The increase in 2-mill revenue has helped offset higher construction costs and can be largely attributed to the dramatic rise in property values during the last three years. <sup>30</sup>





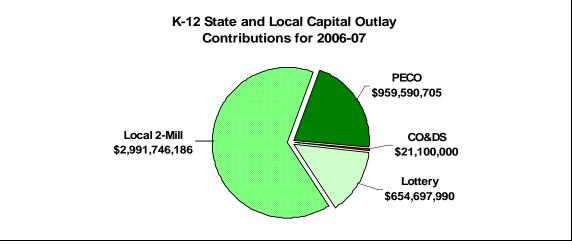
Source: DOE, Office of Educational Facilities.

<sup>&</sup>lt;sup>30</sup> The 2-mill revenue figures do not include local bond referendums, 1/2-cent sales surtax, impact fees, and certificates of participation or other local sources of funds. According to DOE, the sales surtax imposed by 24 districts has added an additional \$1.8 billion in funding over the last three years while impact fees imposed by 25 districts over the same time period have added \$864.9 million in additional revenues.

Table A-2 shows that for 2006-2007, local property tax revenue accounts for 65% or approximately \$3 billion of the total \$4.6 billion in school construction funding. The state contribution is 35% or \$1.6 billion dollars.<sup>31</sup> The state appropriation includes estimated Capital Outlay and Debt Service (CO&DS) revenue for 2006-07, Lottery revenue and Public Education Capital Outlay (PECO) funding for new construction.<sup>32</sup> The PECO (\$445,302,010) portion and Lottery-funded portion (\$654,697,990) add up to \$1.1 billion in Classrooms for Kids funding to finance new classrooms for class size reduction. The proportion of local and state funding has fluctuated over the years. During the five year period 2002-03 through 2006-07, the state share has ranged from 16% to 35% of the total fixed capital outlay funding for district educational facilities in a given year.

#### Table A-2





Note: CO & DS (Capital Outlay and Debt Service) funds are derived from motor vehicle license tag fees and PECO (Public Education Capital Outlay) funds are derived from a gross receipt tax on utilities and communication services. Source: DOE, Office of Educational Facilities.

<sup>&</sup>lt;sup>31</sup> The \$21.1 million from the Capital Outlay and Debt Service (CO & DS) Trust Fund derived from motor vehicle license tags is estimated.

<sup>&</sup>lt;sup>32</sup> The PECO Trust Fund, derived from a 2.5% gross receipt tax on utilities and a 2.37% tax on communication services, serves as the primary state capital outlay funding for public schools.

## Appendix B

## **Class Size Reduction Allocations**

Table B-1 provides the Classroom for Kids allocation history for school districts for Fiscal Years 2003-04 through 2006-07. The Legislature appropriated approximately \$1.9 billion to the Classroom for Kids Program since the passage of the Class Size Amendment on November 5, 2002. Section 1013.735, *Florida Statutes,* describes how each school district's share of the annual appropriation for the program is calculated. This calculation is based on the school district's capital outlay full-time student membership (25%) and the percentage of K-12 capital outlay full-time equivalent growth (65%). The remaining 10% of the appropriation must be allocated according to the allocation formula in s. 1013.64(1)(a),*Florida Statutes,* relating to the square footage and age of existing facilities.

Table B-1 also includes revenue sources for the Classroom for Kids Program. Over the fouryear period, these sources included Lottery proceeds, general revenue, Public Education Capital Outlay (PECO) funds.<sup>33</sup> In addition, in 2003-04, school districts received Lottery District Equity Recognition funds if they met the annual two-per-year reduction in class size requirements and participated in any of the following: a half-cent school capital outlay sales surtax, the levy of the local government infrastructure sales surtax, or levied voted millage for capital outlay purposes.<sup>34</sup>

	Lottery Proceeds	General Revenue	PECO	PECO and Lottery	Four-Year Total
	Actual	Actual	Actual	Actual	Classrooms for
School District	2003-04	2004-05	2005-06	2006-07	Kids
Alachua	\$3,715,656	\$ 797,070	\$505,616	\$ 8,836,659	\$ 13,855,001
Baker	644,730	96,096	189,982	3,133,531	4,064,339
Вау	4,420,678	681,773	619,616	10,115,070	15,837,137
Bradford	1,096,794	68,432	55,589	733,455	1,954,270
Brevard	12,813,233	2,230,022	1,689,350	11,314,373	28,046,978
Broward	44,018,517	7,895,720	4,386,251	40,451,273	96,751,761
Calhoun	354,532	43,180	122,601	423,190	943,503
Charlotte	4,034,782	851,686	199,264	2,567,027	7,652,759
Citrus	2,447,354	368,158	263,334	7,254,059	10,332,905
Clay	8,387,460	2,352,146	1,792,727	38,315,599	50,847,932
Collier	17,156,690	2,928,197	2,218,934	39,045,979	61,349,800
Columbia	1,616,162	311,032	247,969	5,096,546	7,271,709
Dade	50,324,970	4,984,664	4,116,344	53,499,162	112,925,140
DeSoto	600,718	166,626	124,997	833,595	1,725,936
Dixie	215,221	36,358	29,745	612,914	894,238
Duval	18,296,340	3,032,647	2,067,449	23,018,689	46,415,125
Escambia	4,385,854	969,616	660,491	6,995,090	13,011,051
Flagler	5,190,149	1,195,911	1,008,442	26,950,650	34,345,152
Franklin	160,380	26,982	20,637	272,187	480,186
Gadsden	670,697	112,833	92,245	1,169,490	2,045,265

#### Table B-1

Classrooms for Kids Appropriation History (Passed During the 2003 Regular Session)

<sup>&</sup>lt;sup>33</sup> PECO funds, derived from a gross receipt tax (2.5%) on utilities, have historically been the primary state source of fixed capital outlay revenue for school construction projects.

<sup>&</sup>lt;sup>34</sup> As provided by s. 1013.736, *F.S.*, and line item 14F of the 2003-04 General Appropriations Act.

School District	Lottery Proceeds Actual 2003-04	General Revenue Actual 2004-05	PECO Actual 2005-06	PECO and Lottery Actual 2006-07	Four-Year Total Classrooms for Kids
Gilchrist	540,214	128,572	77,865	1,060,009	1,806,660
Glades	114,343	33,012	214,321	787,400	1,149,076
Gulf	445,558	41,560	60,596	447,674	995,388
Hamilton	207,274	85,049	29,095	389,854	711,272
Hardee	1,567,550	135,145	102,756	1,506,255	3,311,706
Hendry	1,620,360	223,346	163,352	1,223,870	3,230,928
Hernando	6,391,717	1,687,538	1,373,016	23,227,656	32,679,927
Highlands	2,027,286	392,888	567,207	3,847,994	6,835,375
Hillsborough	73,698,163	10,417,704	8,520,056	139,682,849	232,318,772
Holmes	309,574	52,777	54,443	1,165,564	1,582,358
Indian River	4,476,084	929,938	604,513	8,183,025	14,193,560
Jackson	1,252,414	157,533	141,173	3,026,444	4,577,564
Jefferson	253,792	33,668	26,075	322,669	636,204
Lafayette	125,217	21,585	19,831	470,338	636,971
Lake	16,514,165	3,343,135	2,190,827	26,675,596	48,723,723
Lee	20,557,312	3,876,785	3,885,454	73,681,172	102,000,723
Leon	5,436,589	714,545	413,649	12,869,789	19,434,572
Levy	758,001	106,486	197,275	1,036,289	2,098,051
Liberty	244,519	20,163	49,898	1,536,137	1,850,717
Madison	262,775	45,497	36,687	462,827	807,786
Manatee	11,434,242	1,591,968	1,665,444	33,188,137	47,879,791
Marion	9,246,449	1,008,955	1,570,622	23,745,806	35,571,832
Martin	7,314,379	736,872	347,236	7,007,005	15,405,492
Monroe	1,119,516	197,071	128,004	1,688,742	3,133,333
Nassau	1,840,495	242,361	337,004	6,469,684	8,889,544
Okaloosa	2,762,334	450,045	400,238	6,431,609	10,044,226
Okeechobee	916,731	442,990	171,018	2,229,468	3,760,207
Orange	42,847,383	9,591,731	8,997,612	66,120,159	127,556,885
Osceola	24,773,601	4,733,874	2,856,195	37,130,685	69,494,355
Palm Beach	43,673,471	7,029,986	5,542,778	30,172,225	86,418,460
Pasco	20,250,139	3,790,253	3,967,867	50,018,343	78,026,602
Pinellas	17,897,434	2,888,233	1,889,207	25,278,213	47,953,087
Polk	24,469,514	2,315,541	3,539,589	81,681,825	112,006,469
Putnam	1,470,414	217,183	240,215	2,214,959	4,142,771
St. Johns	12,712,811	1,872,542	1,503,125	31,918,185	48,006,663
St. Lucie	10,537,201	2,133,287	2,506,377	34,395,504	49,572,369
Santa Rosa	5,741,229	1,336,274	909,309	7,058,432	15,045,244
Sarasota	9,688,339	2,228,336	2,205,312	16,007,780	30,129,767
Seminole	14,122,771	2,419,825	2,449,585	21,076,049	40,068,230
Sumter	878,121	106,057	111,348	1,147,414	2,242,940
	610,400	119,584	71,671	2,719,924	3,521,579
Suwannee Taylor	385,052	59,320	46,412	587,562	1,078,346
Union	215,498	36,508	40,412	1,508,846	1,802,717
	13,670,960				
Volusia	611,602	2,241,124	1,867,621	17,488,878	35,268,583
Wakulla		157,718	358,576	2,503,929	3,631,825
Walton	2,216,111	294,834	222,836	4,974,533	7,708,314
Washington Total	859,402 <b>\$599,619,423</b>	124,355 <b>\$99,962,902</b>	102,867 \$83,189,605	2,038,696 <b>\$1,099,044,541</b>	3,125,320 <b>\$1,881,816,471</b>

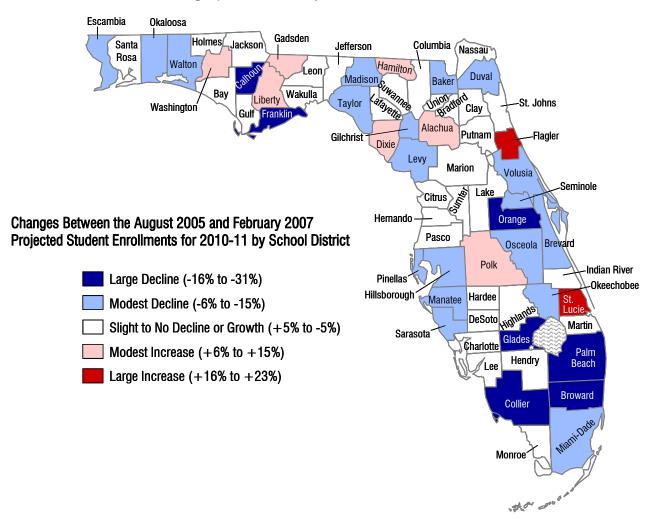
Source: Department of Education.

## Appendix C

## **Changes in Student Population Forecast**

This map below portrays the differences between the total 2010-11 capital outlay full time equivalent enrollment projection incorporated in the 2006-07 DOE legislative budget request (based on August 2005 projections) and the projection by the February 2007 enrollment conference.<sup>35, 36</sup> Overall the state experienced a little over a 9% shift in projected enrollment. (See Table C-1.) However, impact on the need for resources is more dramatic than the overall enrollment shift because facilities are fixed resources that need significant lead time for construction. Facilities constructed in one school district cannot easily be used in another school district as populations shift.

Another way of assessing the impact of this shift is that applying the 2006 enrollment projections for 2010-11 that were in the 2006-07 LBR to the 2007-08 LBR formula would double the cost of meeting 2010-11 constitutional class size requirements even though the later overall enrollment projection was only about 9% lower.



<sup>&</sup>lt;sup>35</sup> The portion of enrollment that requires facilities constructed by the school district.

<sup>&</sup>lt;sup>36</sup> Based on the data from the Office of Economic and Demographic Research Education Estimating Conference, Public Schools K-12, December 15, 2006.

## Table C-1 August 2005 and February 2007 Projected Student Enrollments for 2010-11 by School District

District	Projection August 2005 <sup>1</sup>	Projection February 2007 <sup>2</sup>	Difference	Percentage	District	Projection August 2005 <sup>1</sup>	Projection February 2007 <sup>2</sup>	Difference	Percentage
Alachua	25,056	26,748	1,692	6.75%	Lake	42,966	44,122	1,156	2.69%
Baker	5,384	5,036	(348)	-6.46%	Lee	79,653	80,728	1,075	1.35%
Bay	24,578	24,576	(2)	-0.01%	Leon	31,789	31,109	(680)	-2.14%
Bradford	3,288	3,238	(50)	-1.52%	Levy	6,119	5,703	(416)	-6.80%
Brevard	72,396	62,574	(9,822)	-13.57%	Liberty	1,316	1,437	121	9.19%
Broward	280,957	212,052	(68,905)	-24.53%	Madison	2,713	2,365	(348)	-12.83%
Calhoun	2,552	2,066	(486)	-19.04%	Manatee	43,828	41,079	(2,749)	-6.27%
Charlotte	18,334	17,460	(874)	-4.77%	Marion	43,954	44,294	340	0.77%
Citrus	16,531	16,350	(181)	-1.09%	Martin	18,309	17,631	(678)	-3.70%
Clay	40,465	41,243	778	1.92%	Monroe	6,878	6,560	(318)	-4.62%
Collier	53,872	44,486	(9,386)	-17.42%	Nassau	10,805	11,216	411	3.80%
Columbia	10,507	10,151	(356)	-3.39%	Okaloosa	28,773	26,855	(1,918)	-6.67%
Dade	337,308	287,418	(49,890)	-14.79%	Okeechobee	7,450	6,855	(595)	-7.99%
DeSoto	4,647	4,721	74	1.59%	Orange	204,436	172,621	(31,815)	-15.56%
Dixie	1,970	2,149	179	9.09%	Osceola	61,173	53,679	(7,494)	-12.25%
Duval	125,740	118,188	(7,552)	-6.01%	Palm Beach	185,720	154,081	(31,639)	-17.04%
Escambia	41,361	37,580	(3,781)	-9.14%	Pasco	74,046	70,399	(3,647)	-4.93%
Flagler	15,312	18,828	3,516	22.96%	Pinellas	104,449	96,535	(7,914)	-7.58%
Franklin	1,010	823	(187)	-18.51%	Polk	90,093	99,218	9,125	10.13%
Gadsden	5,392	5,691	299	5.55%	Putnam	11,732	11,174	(558)	-4.76%
Gilchrist	3,095	2,910	(185)	-5.98%	St. Johns	30,935	31,749	814	2.63%
Glades	1,341	922	(419)	-31.25%	St. Lucie	41,269	47,969	6,700	16.23%
Gulf	2,078	1,979	(99)	-4.76%	Santa Rosa	26,538	25,257	(1,281)	-4.83%
Hamilton	1,747	1,884	137	7.84%	Sarasota	45,262	40,151	(5,111)	-11.29%
Hardee	5,205	5,081	(124)	-2.38%	Seminole	72,278	63,201	(9,077)	-12.56%
Hendry	7,137	7,242	105	1.47%	Sumter	5,625	5,489	(136)	-2.42%
Hernando	26,503	26,309	(194)	-0.73%	Suwannee	5,820	5,709	(111)	-1.91%
Highlands	13,241	13,183	(58)	-0.44%	Taylor	3,060	2,838	(222)	-7.25%
Hillsborough	207,798	192,429	(15,369)	-7.40%	Union	2,150	2,208	58	2.70%
Holmes	3,265	3,192	(73)	-2.24%	Volusia	69,575	65,611	(3,964)	-5.70%
Indian River	18,336	17,603	(733)	-4.00%	Wakulla	5,077	5,201	124	2.44%
Jackson	7,176	6,976	(200)	-2.79%	Walton	6,986	6,255	(731)	-10.46%
Jefferson	1,114	1,136	22	1.97%	Washington	3,302	3,756	454	13.75%
Lafayette	1,115	1,096	(19)	-1.70%	State	2,764,501	2,510,267	(254,234)	-9.20%

<sup>1</sup> Department of Education student enrollment projections for 2010-11 used to develop the 2006-07 legislative budget request.

<sup>2</sup> Education Estimating Conference February 12, 2007.

Source: Compiled by OPPAGA.

## Appendix D

### **FLORIDA DEPARTMENT OF EDUCATION**



Jeanine Blomberg Commissioner of Education



STATE BOARD OF EDUCATION

T. WILLARD FAIR, Chairman Members DONNA G. CALLAWAY DR. AKSHAY DESAI ROBERTO MARTÍNEZ PHOEBE RAULERSON KATHLEEN SHANAHAN LINDA K. TAYLOR

April 27, 2007

Dr. Gary VanLandingham, Director Florida Office of Program Policy Analysis and Government Accountability The Florida Legislature 111 West Madison, Room 312 Tallahassee, Florida 32399-1475

Dear Dr. VanLandingham:

I wish to acknowledge receipt of the Office of Program Policy Analysis and Government Accountability (OPPAGA) report entitled "School Districts Are Reducing Class Size in Several Ways; May Be Able to Reduce Costs," and recognize the effort that went into the production of the report.

The results of your study support the contention of the Department and the State Board of Education that the school districts are, in fact, making every effort to achieve the constitutional requirements which the voters approved in 2002 and are addressing the implementation requirements as specified in Section 1003.03, F.S.

For the first three years of class size requirements, compliance was determined from the district average. However, beginning in 2006-07, compliance with the class size constitutional amendment was measured at the school level. This has provided additional challenges for both traditional public and charter schools. Beginning in the 2008-09 school year, compliance with the statutory and constitutional obligations will be measured at the individual classroom level. As districts plan for this transition, the Department of Education is committed to providing support and technical assistance to ensure compliance for all traditional public and charter schools by 2010.

Sincerely,

Canine Blonly Jeanine Blomberg

JB:lcj

Report No. 07-29

The Florida Legislature

## *Office of Program Policy Analysis and Government Accountability*



OPPAGA provides performance and accountability information about Florida government in several ways.

- <u>OPPAGA publications and contracted reviews</u> deliver program evaluation, policy analysis, and justification reviews of state programs to assist the Legislature in overseeing government operations, developing policy choices, and making Florida government better, faster, and cheaper.
- <u>Florida Government Accountability Report (FGAR)</u> is an Internet encyclopedia, <u>www.oppaga.state.fl.us/government</u>, that provides descriptive, evaluative, and performance information on more than 200 Florida state government programs.
- <u>Florida Monitor Weekly</u>, an electronic newsletter, delivers brief announcements of research reports, conferences, and other resources of interest for Florida's policy research and program evaluation community.
- Visit OPPAGA's website, the Florida Monitor, at <u>www.oppaga.state.fl.us</u>

OPPAGA supports the Florida Legislature by providing evaluative research and objective analyses to promote government accountability and the efficient and effective use of public resources. This project was conducted in accordance with applicable evaluation standards. Copies of this report in print or alternate accessible format may be obtained by telephone (850/488-0021 or 800/531-2477), by FAX (850/487-3804), in person, or by mail (OPPAGA Report Production, Claude Pepper Building, Room 312, 111 W. Madison St., Tallahassee, FL 32399-1475). Cover photo by Mark Foley.

Project supervised by David D. Summers (850/487-9257) Project conducted by Rose Cook (850/487-1760), Robert Cox, Roxanne Hughes, Gregory Perchine, and Sibylle Allendorff Jane Fletcher, Education Staff Director (850/487-9255) Gary R. VanLandingham, Ph. D., OPPAGA Director