

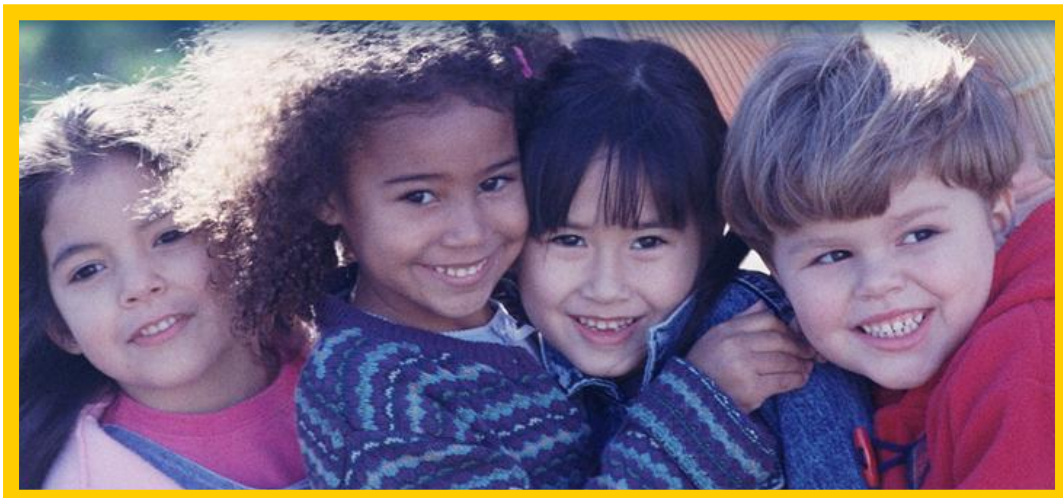
# Arkansas Statewide Educational Facilities Assessment – 2004

## ADDENDUM

February 22, 2005



Task Force  
to Joint Committee  
on Educational Facilities



For additional information please visit:

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The following report was prepared by the Task Force to Joint Committee on Educational Facilities. The numbers contained within are estimates as of February 22, 2005. Status of school facilities is ever changing due to many variables including new deficiencies, new building construction, repairs, renovations, and updated cost estimates. The following numbers are for planning purposes only. School construction costs will vary depending on solutions identified.



## Introduction

This report contains updated assessment data and is a supplement to the first report issued on November 30, 2004. The purpose of this supplemental data is to:

- Provide clarification to the purpose of the assessment, as well as the approach and methodology
- Define terms for better understanding of the assessment data and its potential uses
- Update facility needs based on district review of the data
- Summarize data for additional need classifications, shared facilities, and priority refinement.

The intent of the assessment was to identify the condition of school facilities in Arkansas, and determine their adequacy to serve their intended purpose. The November 30, 2004, report was delivered to the Joint Committee with the understanding the program manager would complete individual district reviews with school officials throughout January 2005.

It should be noted that a facility assessment should not be confused with a building repair or renovation program. The focus of the assessment is to determine the current condition of school facilities. This information can be helpful in determining a repair or renovation program, but additional master planning at the building and school level is necessary. This assessment is not a repair program or master plan. This assessment provides basic information regarding building inventories, existing deficiencies, and lifecycle data that can be used to compare the relative condition from one school to another. An assessment is needed in developing a master plan but in itself does not denote such.

A facilities condition assessment can be used for:

- Developing and maintaining an inventory of facility information that can be used for planning purposes
- Identifying needs that could impact the continued and ongoing operation of the facility
- Classifying of short and long term needs across a range of facility types and building systems
- Determining major renovations and in some cases building replacement
- Determining life cycle or replacement needs for building systems that are projected to reach the end of their useful life in the next ten years
- Identifying growing districts and the potential facility impacts
- Comparing the educational suitability of school facilities.

While a facility assessment can be used to develop an overall modernization project, the estimates include both the hard dollar construction component, as well as indirect soft costs associated with design, engineering, material testing, contingencies, and administrative expenses. As such, these assessments do not represent actual implementation plans and may identify deficiencies that are lower priority needs that could be deferred, or excluded from a high priority renovation program. Each district will have to review the needs for each facility, and make a determination on how best to address those needs under a variety of specific renovation projects.

## Explanations

When the report was disseminated throughout the state at the end of 2004, many who reviewed the document felt additional explanation of some of the report's terms and methodologies were necessary to better understand the purpose and contents of the study. Following are some explanations that may be helpful while reviewing this update, as well as the original report.

1. The original report was based on use of the building in the 2003-04 school year. After meeting with district officials, this update reflects building use changes put in place after last summer's assessment.
2. Costs account for buildings being brought up to proposed building system standards.
3. Current state guidelines for student/teacher ratios were maintained.



4. Cost estimates are in 2004 dollars and were based on an average cost per square foot to construct a particular school type then adjusted for the location of the facility within the state. Repair estimates use the nationally recognized RSMMeans Facilities Cost Data™ to estimate repair costs at the time of assessment.
5. The enrollment and use of buildings to calculate educational suitability cost were based the 2003-04 school year.
6. The space requirements for school facilities were based on the space guidelines in the draft Arkansas School Facility Manual.
7. The number of current school buildings and school districts would remain the same. Consideration for any future consolidation was not included.
8. Alternative uses of facilities for the purpose of generating income, reducing operating expenses, or reducing capital expenditures were not estimated or incorporated.
9. Additional space for growing districts was accounted for, but no credit was taken for declining districts.
10. Additional square footage for schools that do not meet proposed educational suitability standards was added, but no credit was taken for schools that exceeded space standards.
11. Temporary/Portable buildings were not included in total available permanent square footage; however, this space was inventoried.
12. School buildings that are used for educational purposes were evaluated based at a more comprehensive level where as administrative and other buildings, that are not used for academic purposes, were evaluated using a summary level.
13. Per a request from the legislature, ball fields and tennis courts were not included in condition costs.
14. In some cases there are abandoned buildings owned by a district, but not being utilized by the district. These buildings have been excluded from this Addendum.

It is important to understand the following key definitions in order to fully understand the report and update.

## Deficiencies and Life Cycle

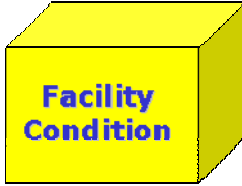
Deficiencies are items which need repaired today or have zero years left in their lifecycle. For example, the life cycle of a roof is 20 years. The current roof was replaced in 1973. Therefore, a cost was included to replace the roof based on current codes and proposed standards. Life expectancies of building systems were developed by the Building Owners and Managers Association [BOMA] and adjusted based on the experience of working on school projects throughout the United States.

When referring to life expectancy, what often comes to mind is the average life expectancy of males at 74.5 years and females at 79.9 years [according to the National Center for Health Statistics 2002 United States Life Tables]. These expectancies have been developed by major insurance companies and the Centers for Disease Control and Prevention. Insurance companies use these tables to determine insurance rates and the cost of aging. Some people have beaten the odds and have lived to be over 80 years old. Some persons have not been as fortunate. Regardless, no one lives forever. This same logic can be used with respect to buildings – determining a cost model requires a great deal of attention to be placed on life expectancy tables.

## Repair Costs

Unlike human beings, building systems can be replaced when they no longer function or reach the end of their life cycle. The cost of replacing the system was based on using RSMMeans™ adjusted for the State of Arkansas. RSMMeans™ is the most commonly used building system cost index in the United States. Adjustments for Arkansas are based on regional cost factors in the state. In general the costs in Arkansas are lower than the national averages.

The estimated cost is based on replacing a system with a system which meets current codes and/or standards which are identified in the draft Arkansas School Facility Manual. These costs not only include the new item, but often include demolition and removal of the existing item, soft costs such as architectural and engineering fees, labor, and contingencies. For example, a door deficiency correction includes removing and installing the door and frame. Further, to meet current ADA [American Disability Requirements], this door will require special hardware for opening and closing. This door may also need to be recessed for safety purposes. This could result in wall reconstruction including removing existing wall parts and building new partial wall structures.



Like people, it is possible that a system can exceed its life expectancy. For the purposes of this study, it is understood that it will require 5 - 10 years or more to accomplish this task. Therefore, it is safe to assume that if the life has expired, these items will need to be focused on within the next several years. Based on this assessment process additional items will also need to be addressed.

## Deficiency Classifications

Following publication of the initial report in November, a number of discussions included the need to identify specific categories of deficiencies to assist the legislature in identifying a funding plan. As part of this update, all deficiencies have been further classified according to nine major classifications. In some cases these classification are not exclusive, meaning a need could be classified in more than one area, so the most important classification was chosen.

1. **Safe, Dry and Healthy:** These deficiencies essentially consist of building needs that pertain to the fire and safety needs, roofing, windows and exit doors, plumbing, major electrical, HVAC, and structural needs. These items may align closely with Priority One items and are important to providing a safe and comfortable environment for the building’s inhabitants, maintaining the integrity of the building envelope, or maintaining an operational status from a mechanical, electrical or plumbing standpoint.
2. **General Building Improvement:** These deficiencies are similar to the Safe, Dry and Healthy classification as they include roofing, plumbing, HVAC, electrical, fire & safety items. These items were identified as needing repair or replacement but are less significant than Safe, Dry and Healthy. An example of a General Building Improvement is a rusted downspout within the roofing system – although it is rusty, it may still do its job of carrying water off a roof, but still eventually needs replaced and probably should be replaced when the roof is being repaired.
3. **“Year Zero” Life Cycle Deficiencies:** Assessors identified current needs for all facilities. They also gathered data on major building systems and components to determine particular components that have reached the end of their life. These items may be operating today, however they have exceeded their useful life and long term functionality can not be expected. Where major building components exceeded their useful life and therefore has “Zero” life left, then a deficiency was added to the database and so classified as Year Zero deficiencies. These deficiencies may still be operational; however the plan takes the funding need in to consideration. The estimated cost is based on replacing a system with a system which meet current codes and/or standard which are identified in the draft Arkansas School Facility Manual. It is safe to assume that if the life has expired, during the next several years these items will need to be addressed.
4. **Interior Improvements:** Identified needs that primarily concern interior finishes. Walls, flooring materials, and ceiling needs are included in this classification.
5. **Americans with Disabilities Act [ADA]:** Needs that pertain to providing access to people with disabilities, including site, access, restrooms, and life safety.
6. **Site and Playfields:** Deficiencies that pertain to the exterior site and may include parking, sidewalks, covered walkways, exterior lighting, and playgrounds. The updated costs associated with playfields have been eliminated.
7. **Educational Improvements:** Deficiency items that directly effect the educational environment. These may include functional equity concerns and will address instructional aids, support for instructional programs, computing infrastructure, and other educational needs.
8. **Specialties:** Includes items such as writing surfaces, elevators, moveable partitions, and stage equipment.
9. **Technology:** Deficiencies related to and including the public address and intercom system, telephones, and computer technology infrastructure.

The Facility Condition Cost has been reduced by \$348 million from the November 30 report. Of this amount \$152 million can be contributed to the elimination of playfields, tennis courts, and abandoned buildings that are no longer being used for instructional purposes. Approximately \$196 million is contributed to further data analysis and input from local school districts.

The following table indicates facility condition costs by classification and building system.



**Facility Condition Classification**

Building System	Facility Condition Classification									Total
	1	2	3	4	5	6	7	8	9	
	Safe Dry & Healthy	General Building Improvements	Yr Zero Lifecycle	Interior	ADA	Site	Ed Improvments	Specialties	Technology	
Site		\$ 15,489,620	\$ 24,202,467		\$ 11,406,558	\$ 60,871,350	\$ 27,746,075			\$ 139,716,070
Roofing	\$ 62,494,062	\$ 18,515,084	\$ 65,063,223							\$ 146,072,368
Exterior	\$ 30,003,422	\$ 19,996,283	\$ 52,312,181	\$ 2,500,239	\$ 13,463,725					\$ 118,275,851
Interior	\$ 1,206,389	\$ 64,083	\$ 137,811,266	\$ 123,900,203	\$ 28,083,334		\$ 12,789,202			\$ 303,854,477
HVAC	\$ 10,165,006	\$ 205,132,146	\$ 249,903,111				\$ 13,697,289			\$ 478,897,552
Electrical	\$ 2,061,894	\$ 78,051,367	\$ 41,943,419	\$ 1,125,635			\$ 7,015,803			\$ 130,198,118
Plumbing	\$ 39,585,257	\$ 9,332,948	\$ 116,318,728		\$ 12,816,351		\$ 7,500,007			\$ 185,553,291
Fire & Safety	\$ 58,799,313	\$ 7,341,154	\$ 38,849,314				\$ 1,711,996			\$ 106,701,776
Specialties		\$ 1,802,076	\$ 34,756,494		\$ 14,002,625		\$ 182,272,848	\$ 23,741,637		\$ 256,575,680
Structural	\$ 1,027,224	\$ 33,065,705			\$ 989,190					\$ 35,082,119
Technology			\$ 6,868,579						\$ 22,346,530	\$ 29,215,109
<b>Total</b>	<b>\$ 205,342,568</b>	<b>\$ 388,790,465</b>	<b>\$ 768,028,782</b>	<b>\$ 127,526,077</b>	<b>\$ 80,761,783</b>	<b>\$ 60,871,350</b>	<b>\$ 252,733,220</b>	<b>\$ 23,741,637</b>	<b>\$ 22,346,530</b>	<b>\$ 1,930,142,412</b>

**Safe, Dry & Healthy**

Safe, Dry and Healthy includes the following deficiencies under the major systems. Items included require repair, replacement, or they may be missing.

**ELECTRICAL \$2,061,894**

- Circuit Breakers
- Lighting
- GFI Receptacles
- External Wiring

**EXTERIOR \$30,003,422**

- Windows
- Exterior Doors
- Door & Window Frames

**FIRE & SAFETY \$58,799,313**

- Fire Protection Systems
- Emergency Lights
- Fire Extinguishers
- Emergency Lighting
- Exit Signs
- Fire Alarm Panels
- Heat Detectors
- Horn/Strobes
- Pull Stations
- Smoke Detectors

**HVAC \$10,165,006**

- Furnaces
- Heat Pumps

**INTERIOR \$1,206,389**

- Emergency Exit Door Hardware

**PLUMBING \$39,585,257**

- Backflow Preventers
- Domestic Water Piping
- Sanitary Sewer Piping
- Electric Water Heaters
- Gas Water Heaters
- Sinks/Lavatories
- Toilets/Urinals/Water Closets

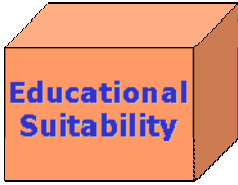
**ROOFING \$62,494,062**

- Built-Up Bituminous Roofing
- Cold Applied Bituminous Roofing
- Elastomeric Membrane Roofing
- Modified Bituminous Membrane Roofing
- Roll Roofing
- Sheet Metal Roofing
- Asphalt Shingles

**STRUCTURAL \$1,027,224**

- Structural Concrete

**TOTAL: \$205,342,568**



To determine educational suitability, the space requirements for comprehensive elementary, middle, high, and combination schools were identified. The spaces were determined based on the curriculum and class size guidelines of the State of Arkansas. The standards and guidelines were developed to provide an adequate educational program for all schools.

In the original report, each school was addressed independently. Where two or more schools shared the same facility, i.e. cafeteria or gymnasium, the space was assigned to one of the schools and not the other. This resulted in some schools, where the shared space was assigned, with excess space where other schools, where the shared space was not assigned, as being deficient. In the this updated report, where schools share the same campus, the existing space was combined and this was compared to the combined required square feet based on the draft Arkansas School Facility Manual. This methodology more accurately reflects the education suitability and reduces the overall costs.

There were 153 campuses impacting 335 schools [some campuses had more than two schools]. Using this methodology significantly impacted the educational suitability costs and more accurately reflects the need.

In other instances the calculations in the November report included square footage for non-instructional spaces such as district storage or abandoned buildings. In this Addendum, these spaces have been eliminated from the educational suitability calculation. As a result, in these instances, the educational suitability cost may have increased.

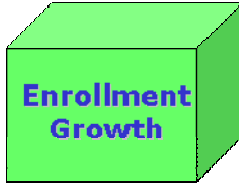
As a result of distance, grade configuration, and program considerations, no attempt was made to determine if students could be moved from one campus to another campus in the same district or between districts to create a more efficient arrangement.

Upon completing of the district meetings in January 2005, educational suitability costs have been updated to reflect the use of shared spaces and sites.

### Total Suitability Cost by School Type

School Type	# of Schools	Suitability Cost
Pre-K	10	\$ 2,662,442
Elementary Schools	572	\$ 264,430,030
K-8 Schools	15	\$ 2,286,987
K-12 Schools	9	\$ 1,987,230
Middle Schools	197	\$ 80,375,633
Middle/High Schools	183	\$ 79,003,257
High Schools	144	\$ 125,990,241
<b>Total</b>	<b>1,130</b>	<b>\$ 556,735,819</b>

\*Does not include Other/Alternative Schools



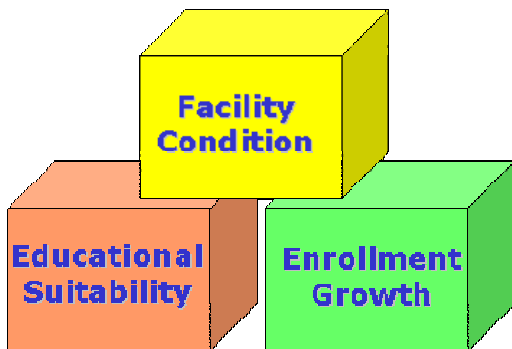
Over half of the districts are projected to increase in enrollment. These districts are expected to add 27,594 projected students over the next five years, and 18,817 over the following ten years, for a total of 46,411 estimated students.

Some districts will be able to absorb the growth within their existing schools. In other cases, additions or new schools will have to be constructed. Preliminary estimates indicate that up to 25% of projected growth could be absorbed into existing schools.

Eight of 254 school districts make up 53% of the total projected enrollment growth.

### Enrollment Growth Costs

	Additional Students	Cost
1-5 Years ['04-'08]	25,761	\$ 361,769,048
6-10 Years ['09-'13]	19,157	\$ 269,391,324
<b>Total</b>	<b>44,918</b>	<b>\$ 631,160,372</b>



The chart below compares and summarizes current and projected costs for all school facilities in the state organized by condition, suitability and growth. School facilities are a long-term investment. As buildings age, systems need to be repaired or replaced. Future life cycle models have been developed to project future expenditures five years out. In addition, enrollment growth costs have been projected five years into the future so that the total cost can be compared today [current costs] and the cost five years from now [projected costs]. It should be made clear, to address all of the needs identified would likely require an implementation schedule of ten or more years.

### Overall Cost Summary

	Current Costs		Projected 5 Years	
	Schools Only	All Buildings	Schools Only	All Buildings
<b>Condition: Current</b>	\$ 1,869,674,532	\$ 1,930,142,412	\$ 1,869,674,532	\$ 1,930,142,412
<b>Yr 1-5 Life Cycle</b>	N/A	N/A	\$ 1,191,535,189	\$ 1,271,082,587
<b>Suitability</b>	\$ 556,735,819	\$ 556,735,819	\$ 556,735,819	\$ 556,735,819
<b>Growth</b>	N/A	N/A	\$ 361,769,048	\$ 361,769,048
<b>Total</b>	<b>\$ 2,426,410,351</b>	<b>\$ 2,486,878,231</b>	<b>\$ 3,979,714,588</b>	<b>\$ 4,119,729,866</b>

\* All costs in 2004 Dollars

\* Does not include land purchase and off site development costs

\* Does not include efficiency opportunities [i.e. improved use of existing building]





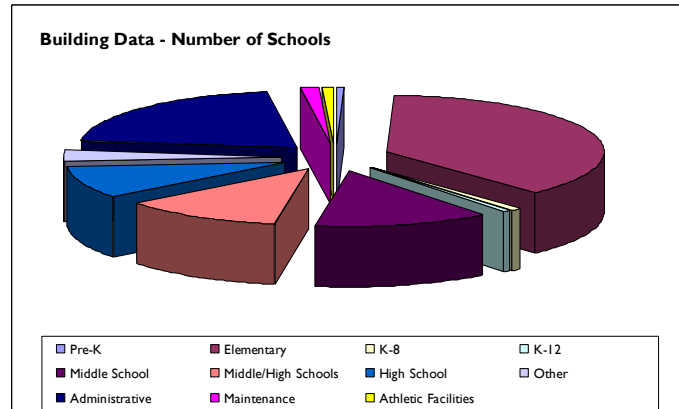
## Updated Charts & Tables

The following charts and tables reflect any assessment information updates since November 30, 2004.

### Statewide Facility Statistics

#### Number of Schools

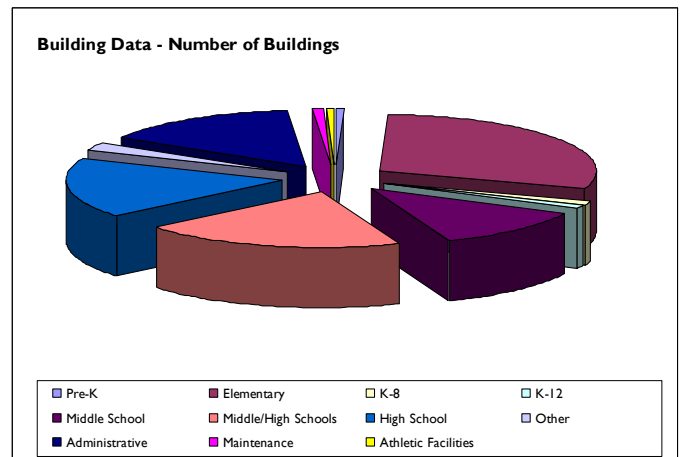
School/Facility Type	Schools	Permanent Buildings
Pre-K	10	24
Elementary	572	1,594
K-8	15	51
K-12	9	57
Middle School	197	671
Middle/High Schools	183	1,198
High School	144	1,032
Other Schools	47	123
Administrative/Maintenance/Athletic		965
<b>Total</b>	<b>1,177</b>	<b>5,715</b>



Note: Excludes schools that are no longer used for instructional purposes.

#### Facility Information (Permanent and Temporary)

School/Facility Type	# of Schools	# of Buildings	Sq Ft
Pre-K	10	31	324,424
Elementary	572	1,948	28,210,398
K-8	15	70	705,195
K-12	9	68	761,843
Middle School	197	759	15,823,932
Middle/High Schools	183	1,288	12,604,799
High School	144	1,135	20,005,988
Other	47	141	1,543,469
Administrative	319	977	4,223,539
Maintenance	25	59	512,377
Athletic Facilities	11	31	266,615
<b>Total</b>	<b>1,532</b>	<b>6,507</b>	<b>84,982,579</b>
School Only Area	<b>1,177</b>	<b>5,440</b>	<b>79,980,048</b>
Temporary Buildings		<b>792</b>	

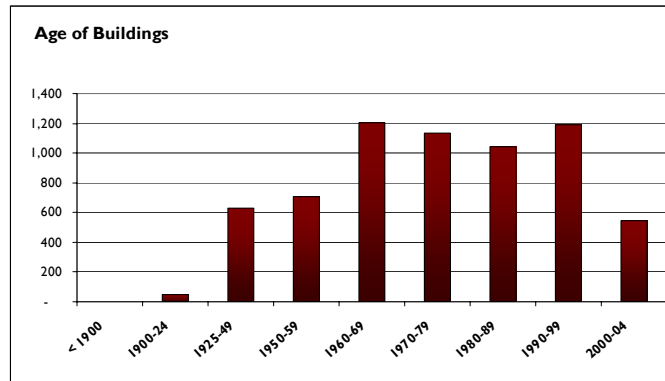


Note: Excludes all abandoned buildings.



**Age of Buildings**

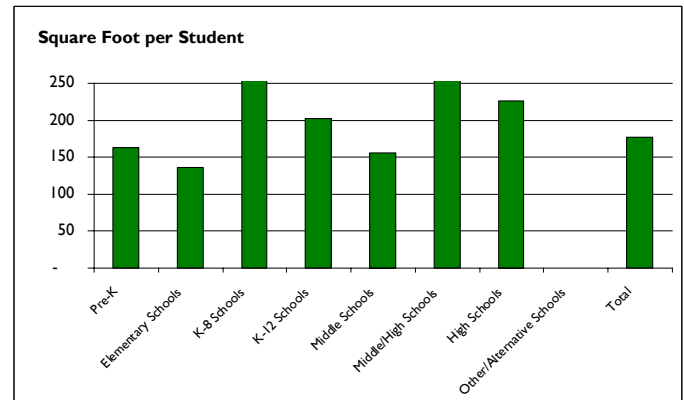
School/Facility Type	Number of Buildings									Total
	< 1900	1900-24	1925-49	1950-59	1960-69	1970-79	1980-89	1990-99	2000-04	
<b>Pre-K</b>				4	10	10	4	2	1	<b>31</b>
<b>Elementary Schools</b>		16	149	254	375	320	300	366	168	<b>1,948</b>
<b>K-8 Schools</b>		3	7	11	11	17	10	6	5	<b>70</b>
<b>K-12 Schools</b>			9	5	9	13	13	16	3	<b>68</b>
<b>Middle Schools</b>		4	63	129	138	103	112	145	65	<b>759</b>
<b>Middle/High Schools</b>		2	179	109	207	244	211	216	120	<b>1,288</b>
<b>High Schools</b>		4	58	77	254	205	178	241	118	<b>1,135</b>
<b>Other/Alternative Schools</b>		2	22	17	21	29	25	21	4	<b>141</b>
Administrative Facilities		19	133	96	159	172	180	160	58	<b>977</b>
Maintenance/Transportation		1	10	5	12	16	3	12		<b>59</b>
Athletic Facilities			1		7	6	6	8	3	<b>31</b>
<b>Total</b>	<b>-</b>	<b>51</b>	<b>631</b>	<b>707</b>	<b>1,203</b>	<b>1,135</b>	<b>1,042</b>	<b>1,193</b>	<b>545</b>	<b>6,507</b>



**Square Feet per Student**

School Type	# of Schools	# of Students	Total Sq Ft	Sq Ft/ Student
Pre-K	10	1,988	324,424	163
Elementary Schools	572	206,870	28,210,398	136
K-8 Schools	15	2,604	705,195	271
K-12 Schools	9	3,758	761,843	203
Middle Schools	197	101,954	15,823,932	155
Middle/High Schools	183	45,915	12,604,799	275
High Schools	144	88,496	20,005,988	226
Other/Alternative Schools	47	886	1,543,469	
<b>Total</b>	<b>1,177</b>	<b>452,471</b>	<b>79,980,048</b>	<b>177</b>

Note: # of Students excludes 740 students associated with Alternative Campuses classified as other.

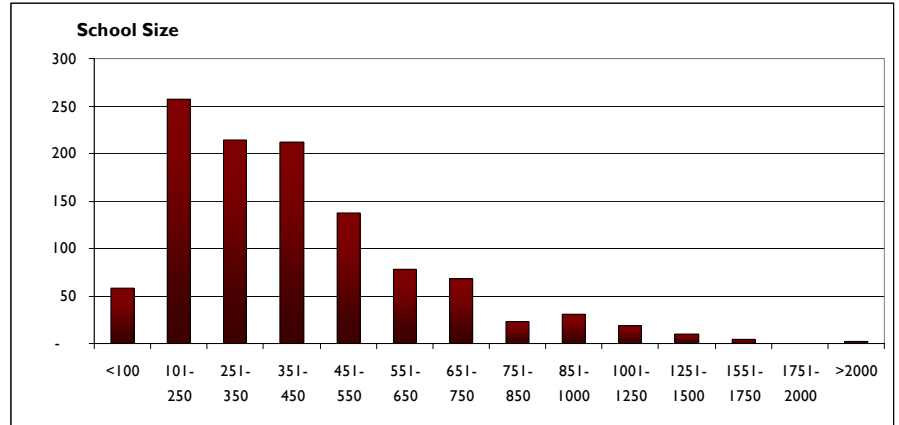




**Size of Schools**

Enrollment	# of Schools	%
<100	58	5.21%
101-250	257	23.09%
251-350	214	19.23%
351-450	212	19.05%
451-550	137	12.31%
551-650	78	7.01%
651-750	68	6.11%
751-850	23	2.07%
851-1000	31	2.79%
1001-1250	19	1.71%
1251-1500	10	0.90%
1551-1750	4	0.36%
1751-2000	-	0.00%
>2000	2	0.18%
<b>Total</b>	<b>1,113</b>	

Note: # of Schools does not include 64 schools with no enrollment.  
 Note: Does not include other/alternative



**Size of Districts**

Enrollment	# of Districts	%
350-450	28	11.02%
451-550	21	8.27%
551-650	25	9.84%
651-750	21	8.27%
551-750	18	7.09%
851-1000	19	7.48%
1001-1250	27	10.63%
1251-1500	16	6.30%
1551-1750	14	5.51%
1751-2000	10	3.94%
2001-3500	29	11.42%
>3500	26	10.24%
<b>Total</b>	<b>254</b>	

**Schools per District**

# of Schools	# of Districts
1-4	133
5-9	88
10-19	26
20-29	5
30+	2
<b>Total</b>	<b>254</b>



## Facility Condition

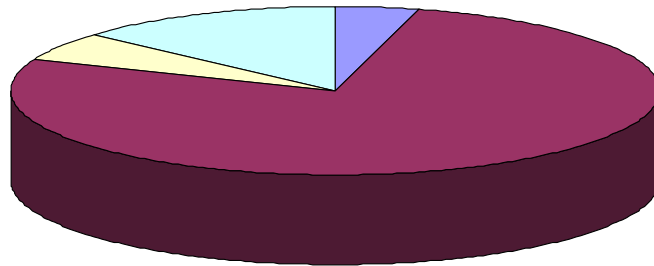
Based on further analysis, the Safe, Dry and Healthy category on page 4 reflects high priority needs more accurately. The following chart indicates the priority cost items as stated in the November 30<sup>th</sup> report.

### Statewide Crosstab by System by Priority

Building System	Facility Condition Priority				Total
	1	2	3	4	
Site	\$ 164,052	\$ 91,206,196	\$ 10,302,192	\$ 38,043,628	\$ 139,716,067
Roofing	\$ 2,785,459	\$ 143,233,003	\$ 52,054	\$ 1,850	\$ 146,072,365
Exterior	\$ 1,894,606	\$ 115,543,426	\$ 72,842	\$ 764,974	\$ 118,275,848
Structure	\$ 506,159	\$ 34,427,663	\$ 3,919	\$ 144,376	\$ 35,082,118
Interior	\$ 3,787,421	\$ 249,114,237	\$ 40,798,663	\$ 10,154,149	\$ 303,854,470
HVAC	\$ 821,298	\$ 455,953,236	\$ 12,062,695	\$ 10,060,314	\$ 478,897,542
Plumbing	\$ 7,112	\$ 177,844,682	\$ 37,194	\$ 7,664,300	\$ 185,553,288
Electrical	\$ 1,511,010	\$ 116,434,499	\$ 2,764,561	\$ 9,488,044	\$ 130,198,114
Technology		\$ 840,805	\$ 6,886,115	\$ 21,488,188	\$ 29,215,108
Fire and Safety	\$ 52,894,163	\$ 53,751,703	\$ 17,554	\$ 38,353	\$ 106,701,773
Specialties	\$ 16,687,287	\$ 43,826,187	\$ 37,170,199	\$ 158,892,003	\$ 256,575,675
<b>Total</b>	<b>\$ 81,058,566</b>	<b>\$ 1,482,175,636</b>	<b>\$ 110,167,989</b>	<b>\$ 256,740,179</b>	<b>\$ 1,930,142,370</b>

Total Cost by Priority

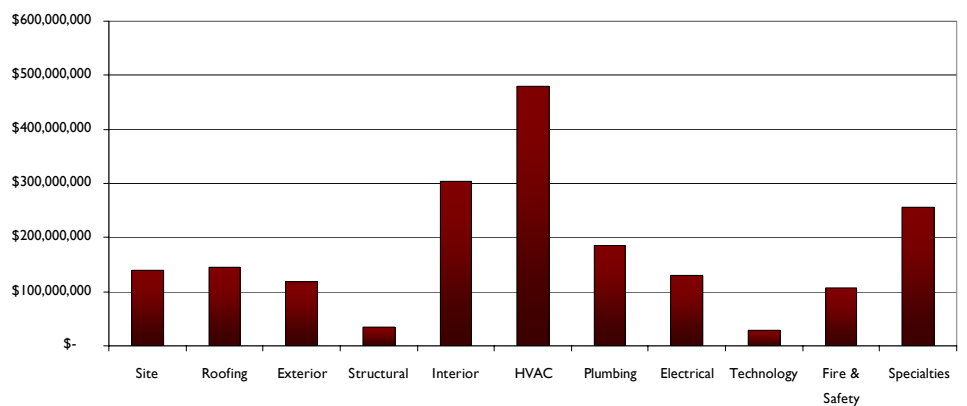
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### Statewide Cost By Building System

Building System	System Cost
Site	\$ 139,716,067
Roofing	\$ 146,072,365
Exterior	\$ 118,275,848
Structural	\$ 35,082,118
Interior	\$ 303,854,470
HVAC	\$ 478,897,542
Plumbing	\$ 185,553,288
Electrical	\$ 130,198,114
Technology	\$ 29,215,108
Fire & Safety	\$ 106,701,773
Specialties	\$ 256,575,675
<b>Total</b>	<b>\$1,930,142,370</b>

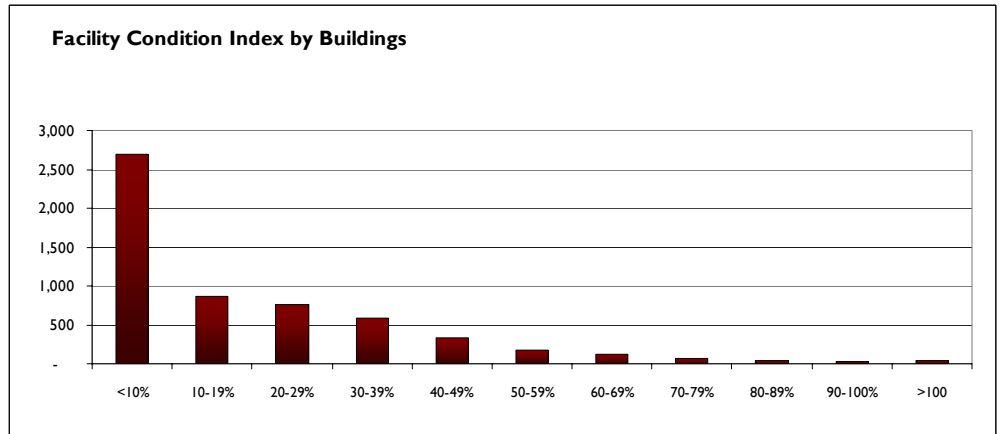
Building System Costs





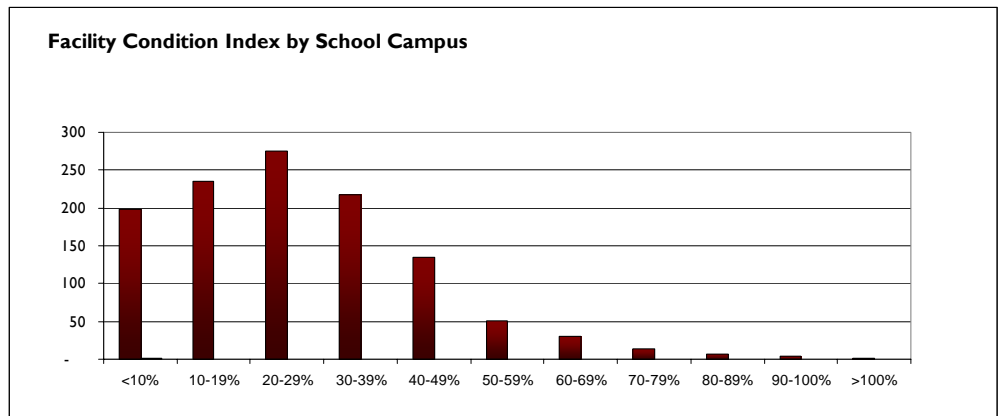
**Statewide Facility Condition Index (FCI)**

FCI	Buildings
<10%	2,689
10-19%	872
20-29%	760
30-39%	591
40-49%	339
50-59%	177
60-69%	120
70-79%	63
80-89%	35
90-100%	33
>100	36
<b>Total</b>	<b>5,715</b>



**Statewide Facility Condition Index (FCI)**

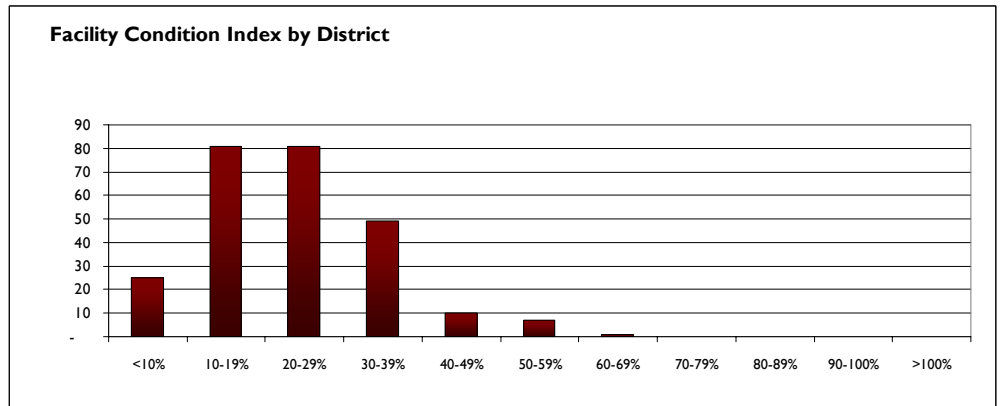
FCI	Schools
<10%	198
10-19%	236
20-29%	275
30-39%	217
40-49%	135
50-59%	51
60-69%	30
70-79%	14
80-89%	7
90-100%	4
>100%	2
<b>Total</b>	<b>1,169</b>



Note: Chart excludes Other/Alternative Schools

**Districtwide Facility Condition Index (FCI)**

FCI	Districts
<10%	25
10-19%	81
20-29%	81
30-39%	49
40-49%	10
50-59%	7
60-69%	1
70-79%	-
80-89%	-
90-100%	-
>100%	-
<b>Total</b>	<b>254</b>



Note: Chart excludes Other/Alternative Schools



Task Force to Joint Committee on Educational Facilities

Future Life Cycle Costs (Unescalated)

Building System	Current Conditions	Cost per Square Foot	Year					Total Life Cycle
			2005	2006	2007	2008	2009	
Site	\$ 139,716,067	\$ 1.64	\$ 12,379,969	\$ 14,307,988	\$ 24,597,882	\$ 11,394,310	\$ 88,580,696	\$ 151,260,845
Roofing	\$ 146,072,365	\$ 1.72	\$ 15,703,365	\$ 24,743,420	\$ 33,205,550	\$ 15,916,144	\$ 77,636,560	\$ 167,205,039
Exterior	\$ 118,275,848	\$ 1.39	\$ 8,439,330	\$ 13,093,733	\$ 16,868,910	\$ 6,781,990	\$ 36,822,668	\$ 82,006,631
Structural	\$ 35,082,118	\$ 0.41	\$ 372,842	\$ 1,707,644	\$ 1,650,494	\$ 2,817,068	\$ 3,736,468	\$ 10,284,516
Interior	\$ 303,854,470	\$ 3.58	\$ 32,246,758	\$ 66,305,732	\$ 92,302,912	\$ 74,613,968	\$ 209,697,904	\$ 475,167,274
HVAC	\$ 478,897,542	\$ 5.64	\$ 4,989,295	\$ 7,234,601	\$ 7,785,775	\$ 4,061,566	\$ 16,206,035	\$ 40,277,271
Plumbing	\$ 185,553,288	\$ 2.18	\$ 4,936,735	\$ 8,383,658	\$ 9,155,235	\$ 4,923,955	\$ 16,123,137	\$ 43,522,719
Electrical	\$ 130,198,114	\$ 1.53	\$ 13,104,857	\$ 13,322,819	\$ 13,351,692	\$ 8,553,763	\$ 45,279,244	\$ 93,612,375
Technology	\$ 29,215,108	\$ 0.34	\$ 17,352,174	\$ 12,510,010	\$ 12,854,276	\$ 14,766,310	\$ 64,869,232	\$ 122,352,002
Fire & Safety	\$ 106,701,773	\$ 1.26	\$ 5,341,217	\$ 6,795,587	\$ 6,726,155	\$ 7,338,906	\$ 25,598,848	\$ 51,800,713
Specialties	\$ 256,575,675	\$ 3.02	\$ 2,746,610	\$ 4,327,198	\$ 5,523,962	\$ 2,580,164	\$ 18,415,268	\$ 33,593,202
<b>Total</b>	<b>\$ 1,930,142,370</b>	<b>\$ 22.71</b>	<b>\$ 117,613,152</b>	<b>\$ 172,732,389</b>	<b>\$ 224,022,843</b>	<b>\$ 153,748,143</b>	<b>\$ 602,966,060</b>	<b>\$ 1,271,082,587</b>

Facility Condition Classification

1	2	3	4	5	6	7	8	9
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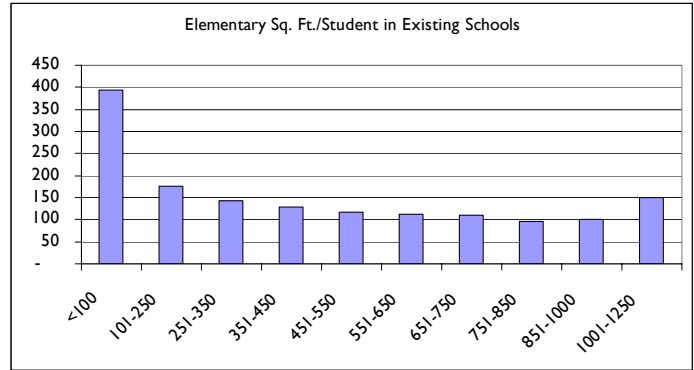
Building System	Safe Dry & Healthy	General Building Improvements	Yr Zero Lifecycle	Interior	ADA	Site	Ed Improvements	Specialties	Technology	Total
Site		\$ 15,489,620	\$ 24,202,467		\$ 11,406,558	\$ 60,871,350	\$ 27,746,075			\$ 139,716,070
Roofing	\$ 62,494,062	\$ 18,515,084	\$ 65,063,223							\$ 146,072,368
Exterior	\$ 30,003,422	\$ 19,996,283	\$ 52,312,181	\$ 2,500,239	\$ 13,463,725					\$ 118,275,851
Interior	\$ 1,206,389	\$ 64,083	\$ 137,811,266	\$ 123,900,203	\$ 28,083,334		\$ 12,789,202			\$ 303,854,477
HVAC	\$ 10,165,006	\$ 205,132,146	\$ 249,903,111				\$ 13,697,289			\$ 478,897,552
Electrical	\$ 2,061,894	\$ 78,051,367	\$ 41,943,419	\$ 1,125,635			\$ 7,015,803			\$ 130,198,118
Plumbing	\$ 39,585,257	\$ 9,332,948	\$ 116,318,728		\$ 12,816,351		\$ 7,500,007			\$ 185,553,291
Fire & Safety	\$ 58,799,313	\$ 7,341,154	\$ 38,849,314				\$ 1,711,996			\$ 106,701,776
Specialties		\$ 1,802,076	\$ 34,756,494		\$ 14,002,625		\$ 182,272,848	\$ 23,741,637		\$ 256,575,680
Structural	\$ 1,027,224	\$ 33,065,705			\$ 989,190					\$ 35,082,119
Technology			\$ 6,868,579						\$ 22,346,530	\$ 29,215,109
<b>Total</b>	<b>\$ 205,342,568</b>	<b>\$ 388,790,465</b>	<b>\$ 768,028,782</b>	<b>\$ 127,526,077</b>	<b>\$ 80,761,783</b>	<b>\$ 60,871,350</b>	<b>\$ 252,733,220</b>	<b>\$ 23,741,637</b>	<b>\$ 22,346,530</b>	<b>\$ 1,930,142,412</b>



## Educational Suitability

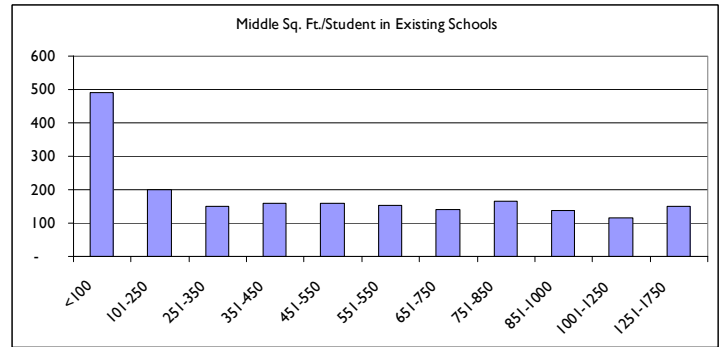
### Elementary Schools: Existing Square Feet Per Student

Enrollment	Total Enrollment	Total Sq Ft	Sq Ft/ Student
<100	1,613	636,612	395
101-250	24,666	4,337,395	176
251-350	36,706	5,279,482	144
351-450	50,516	6,567,273	130
451-550	43,517	5,111,084	117
551-650	20,988	2,340,313	112
651-750	20,286	2,237,572	110
751-850	4,750	459,635	97
851-1000	4,439	450,210	101
1001-1250	1,101	164,024	149
<b>Total</b>	<b>208,582</b>	<b>27,583,600</b>	



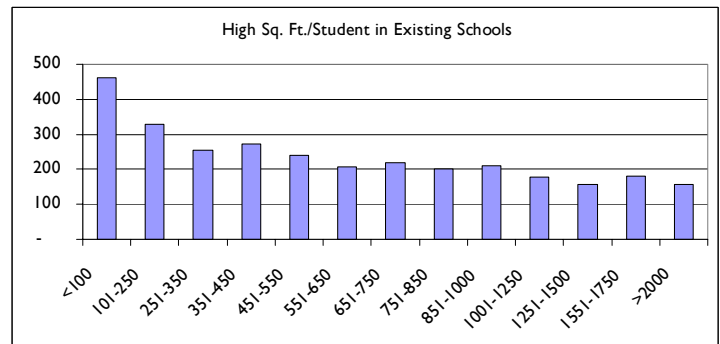
### Middle Schools: Existing Square Feet Per Student

Enrollment	Total Enrollment	Total Sq Ft	Sq Ft/ Student
<100	230	112,816	491
101-250	4,409	883,575	200
251-350	6,309	938,013	149
351-450	17,526	2,811,793	160
451-550	12,505	1,975,159	158
551-550	17,576	2,695,888	153
651-750	18,657	2,629,133	141
751-850	5,512	908,170	165
851-1000	12,960	1,799,829	139
1001-1250	7,365	841,783	114
1251-1750	1,509	226,700	150
<b>Total</b>	<b>104,558</b>	<b>15,822,859</b>	



### High Schools: Existing Square Feet Per Student

Enrollment	Total Enrollment	Total Sq Ft	Sq Ft/ Student
<100	1,551	716,579	462
101-250	16,711	5,499,887	329
251-350	20,984	5,344,020	255
351-450	15,725	4,269,394	272
451-550	12,480	3,000,968	240
551-650	7,756	1,595,256	206
651-750	8,361	1,825,788	218
751-850	7,964	1,607,399	202
851-1000	10,836	2,281,690	211
1001-1250	12,158	2,169,010	178
1251-1500	10,664	1,660,327	156
1551-1750	8,208	1,484,208	181
>2000	4,771	750,235	157
<b>Total</b>	<b>138,169</b>	<b>32,204,761</b>	





### Required Square Feet

School Type	Existing Sq. Ft.	Required Sq. Ft.
Pre-K	324,424	284,126
Elementary Schools	28,210,398	27,494,236
K-8 Schools	705,195	338,998
K-12 Schools	761,843	558,438
Middle Schools	15,823,932	13,857,506
Middle/High Schools	12,604,799	10,320,262
High Schools	20,005,988	16,605,961
<b>Total</b>	<b>78,436,579</b>	<b>69,459,528</b>

Note: Totals exclude Other/Alternative school types.

### Schools within Space Guidelines

		# of School Campuses				
		% Guidelines	Elementary Schools	Middle Schools	High Schools	Total
Below Guidelines	<b>&lt;50</b>	18	8	13	81	
	<b>50-59</b>	15	6	2	23	
	<b>60-69</b>	36	8	6	50	
	<b>70-79</b>	69	9	17	95	
	<b>80-89</b>	81	15	14	110	
	<b>90-99</b>	82	17	27	126	
Above Guideline	<b>100 - 109</b>	65	23	39	127	
	<b>110-119</b>	54	27	46	127	
	<b>120-129</b>	28	22	31	81	
	<b>130-139</b>	14	6	32	52	
	<b>140-149</b>	16	8	13	37	
	<b>150+</b>	56	29	57	145	

Note: Total excludes new schools with no enrollment

Excludes Other/Alternative Schools

### Total Suitability Cost by School Type

School Type	# of Schools	Suitability Cost
Pre-K	10	\$ 2,662,442
Elementary Schools	572	\$ 264,430,030
K-8 Schools	15	\$ 2,286,987
K-12 Schools	9	\$ 1,987,230
Middle Schools	197	\$ 80,375,633
Middle/High Schools	183	\$ 79,003,257
High Schools	144	\$ 125,990,241
<b>Total</b>	<b>1,130</b>	<b>\$ 556,735,819</b>

\*Does not include Other/Alternative Schools

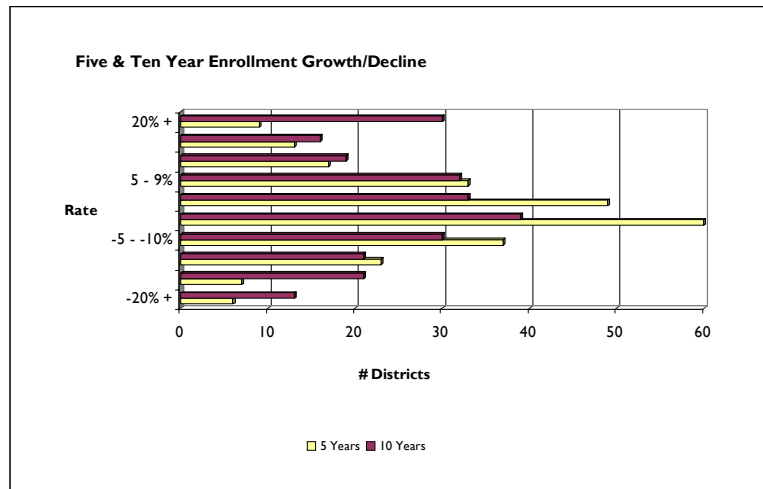
\*Shared campus costs are typically shown with the High Schools





## Enrollment Growth

Projected Growth or Decline	# Districts Within 5 Years	# Districts Within 10 Years
20% +	9	30
15 - 19%	13	16
10 - 14%	17	19
5 - 9%	33	32
0 - 4%	49	33
0 - -4%	60	39
-5 - -10%	37	30
-11 - -15%	23	21
-16 - -20%	7	21
-20% +	6	13



## Additional Students

	5 Year Enrollment Growth	10 Year Enrollment Growth	# Districts
Growing	25,761	44,918	130
Declining	(11,525)	15,821	124
<b>Total</b>	<b>14,236</b>	<b>29,097</b>	<b>254</b>

## Enrollment Growth Costs

	Additional Students	Cost
1-5 Years ['04-'08]	25,761	\$ 361,769,048
6-10 Years ['09-'13]	19,157	\$ 269,391,324
<b>Total</b>	<b>44,918</b>	<b>\$ 631,160,372</b>



## Total Cost

### Facility Condition Classification

1	2	3	4	5	6	7	8	9
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Building System	Safe Dry & Healthy	General Building Improvements	Yr Zero Lifecycle	Interior	ADA	Site	Ed Improvements	Specialties	Technology	Total
Site		\$ 15,489,620	\$ 24,202,467		\$ 11,406,558	\$ 60,871,350	\$ 27,746,075			\$ 139,716,070
Roofing	\$ 62,494,062	\$ 18,515,084	\$ 65,063,223							\$ 146,072,368
Exterior	\$ 30,003,422	\$ 19,996,283	\$ 52,312,181	\$ 2,500,239	\$ 13,463,725					\$ 118,275,851
Interior	\$ 1,206,389	\$ 64,083	\$ 137,811,266	\$ 123,900,203	\$ 28,083,334		\$ 12,789,202			\$ 303,854,477
HVAC	\$ 10,165,006	\$ 205,132,146	\$ 249,903,111				\$ 13,697,289			\$ 478,897,552
Electrical	\$ 2,061,894	\$ 78,051,367	\$ 41,943,419	\$ 1,125,635			\$ 7,015,803			\$ 130,198,118
Plumbing	\$ 39,585,257	\$ 9,332,948	\$ 116,318,728		\$ 12,816,351		\$ 7,500,007			\$ 185,553,291
Fire & Safety	\$ 58,799,313	\$ 7,341,154	\$ 38,849,314				\$ 1,711,996			\$ 106,701,776
Specialties		\$ 1,802,076	\$ 34,756,494		\$ 14,002,625		\$ 182,272,848	\$ 23,741,637		\$ 256,575,680
Structural	\$ 1,027,224	\$ 33,065,705			\$ 989,190					\$ 35,082,119
Technology			\$ 6,868,579						\$ 22,346,530	\$ 29,215,109
<b>Total</b>	<b>\$ 205,342,568</b>	<b>\$ 388,790,465</b>	<b>\$ 768,028,782</b>	<b>\$ 127,526,077</b>	<b>\$ 80,761,783</b>	<b>\$ 60,871,350</b>	<b>\$ 252,733,220</b>	<b>\$ 23,741,637</b>	<b>\$ 22,346,530</b>	<b>\$ 1,930,142,412</b>

## Condition + Suitability Costs per Student

Cost/Student	# Districts
< \$2,500	20
\$2,500 - 4,999	87
\$5,000 - 7,499	85
\$7,500 - 9,999	40
\$10,000 - 12,499	16
\$12,500 - 14,999	4
\$15,000 +	2
<b>Total</b>	<b>254</b>

## Overall Cost Summary

	Current Costs		Projected 5 Years	
	Schools Only	All Buildings	Schools Only	All Buildings
<b>Condition: Current</b>	\$ 1,869,674,532	\$ 1,930,142,412	\$ 1,869,674,532	\$ 1,930,142,412
<b>Yr 1-5 Life Cycle</b>	N/A	N/A	\$ 1,191,535,189	\$ 1,271,082,587
<b>Suitability</b>	\$ 556,735,819	\$ 556,735,819	\$ 556,735,819	\$ 556,735,819
<b>Growth</b>	N/A	N/A	\$ 361,769,048	\$ 361,769,048
<b>Total</b>	<b>\$ 2,426,410,351</b>	<b>\$ 2,486,878,231</b>	<b>\$ 3,979,714,588</b>	<b>\$ 4,119,729,866</b>

\* All costs in 2004 Dollars

\* Does not include land purchase and off site development costs

\* Does not include efficiency opportunities [i.e. improved use of existing building]





