

## Public School Facilities Cost Data

Year 2009-2010

### **Introduction**

The Division of Support Services has compiled the average school construction cost data for public school projects bid during the period of July 1, 2008 - June 30, 2009. This report provides data on the construction cost for each school project and average state construction cost data for different school types.

This report provides an overview of the construction prices for projects bid during the period of July 1, 2008- June 30, 2009, and the figures on this report should be adjusted for conditions that may affect a future project's cost. When budgeting for a new school several important factors should be taken into consideration, including: changes in the construction market, changes in the price of materials, cost of transportation, inflation, the impact of the educational program on the school size, and other factors that may impact the cost of a particular school. Additionally, the bid market will also impact the project's cost, with a more competitive market yielding lower prices and a less competitive market higher prices.

It should be noted that the state average construction price in this report only represents the aggregated average construction cost per square foot in Virginia. This figure does not take into consideration the above-mentioned factors or the location of a project. In general, square foot construction cost prices in Northern Virginia are typically higher, while prices in the Southside and Tidewater have been historically lower than the state average. These regional variations should be taken into account when preparing budgets for new projects.

If you have any questions, please contact Hunter Barnes or Vijay Ramnarain at (804) 225-2035.

## 2008-09 New Elementary Schools

Project No.	Name	Grades	Division	Contract Award Date	Maximum <sup>1</sup> Operating Cap.	Building Cost	Site Cost	Total <sup>2</sup> Cost	Total Sq. Feet	Sq. Ft./ Pupil	Total Cost/ Sq. Ft.	Building Only Cost/Sq. Ft.	Total Cost/ Pupil
54-8A	Moss Knuckols	PK-5	Louisa Co.	Sep-08	792	\$ 10,569,784	\$ 2,822,216 <sup>3</sup>	\$ 13,392,000	85,620	108	\$ 156.41	\$ 123.45	\$ 16,909
131-19A	9th Elementary	PK-5	Williamsburg/JC Co.	Nov-08	730	\$ 15,958,569	\$ 1,882,650 <sup>4</sup>	\$ 17,841,219	93,247	128	\$ 191.33	\$ 171.14	\$ 24,440
60-3A	Elliston Shawsville	PK-5	Montgomery Co.	Nov-08	838	\$ 15,920,182	\$ 2,685,818 <sup>5</sup>	\$ 18,606,000	106,300	127	\$ 175.03	\$ 149.77	\$ 22,203
53-45A	Seven Hills	K-5	Loudoun Co.	Jun-09	989	\$ 10,714,000	\$ 5,639,290 <sup>6</sup>	\$ 16,353,290	102,141	103	\$ 160.11	\$ 104.89	\$ 16,535
<b>TOTALS</b>					<b>3,349</b>	<b>\$ 53,162,535</b>	<b>\$ 13,029,974</b>	<b>\$ 66,192,509</b>	<b>387,308</b>	<b>116</b>	<b>\$ 170.90</b>	<b>\$ 137.26</b>	<b>\$ 19,765</b>

<sup>1</sup> Division operating capacity may differ from SOL maximum capacity. Pre-kindergarten classrooms counted at 16 students, grades K-3 classrooms counted at 24:1, grades 4-5 counted at 25:1. grades 4-5 counted at 25:1.

<sup>2</sup> Usually includes construction, site development, water system, sewage disposal, built-in equipment and demolition. A & E fees, value engineering, construction management. fees, cost of site, loose equipment, and furniture are excluded.

<sup>3</sup> Includes on-site sewage treatment system and on-site water system.

<sup>4</sup> Site cost was split proportionally with new middle school being built on the same site.

<sup>5</sup> Includes \$321,690 for off-site sewer, force main and pump station.

<sup>6</sup> Includes off-site developer cost for \$1,931,290 which is in the general contract.

## 2008-09 Middle and Intermediate New Schools

Project No.	Name	Grades	Division	Contract Award Date	Maximum <sup>1</sup> Operating Cap.	Building Cost	Site Cost	Total <sup>2</sup> Cost	Total Sq. Feet	Sq. Ft./ Pupil	Total Cost/ Sq. Ft.	Building Only Cost/Sq. Ft.	Total Cost/ Pupil	
43-95A	West Area	6th-8th.	Henrico Co.	Aug-08	1,000	\$ 19,715,150 <sup>3</sup>	\$ 3,500,000 <sup>4</sup>	23,215,150	120,024	120	\$ 193.42	\$ 164.26	23,215	
131-19.1	4th. Middle	6th-8th.	Williamsburg/JC Co.	Nov-09	830	\$ 26,031,431	\$ 3,822,350 <sup>5</sup>	29,853,781	145,458	175	\$ 205.24	\$ 178.96	35,968	
128-43A	Great Neck	6th.-8th	VA Beach City	Jul-09	1,212	\$ 28,706,998	\$ 6,320,002 <sup>6</sup>	35,027,000	223,260	184	\$ 156.89	\$ 128.58	28,900	
68-4A	Orange Middle	6th-8th.	Orange Co.	Feb-09	1,295	\$ 24,947,000	\$ 5,460,000 <sup>7</sup>	30,407,000	169,320	131	\$ 179.58	\$ 147.34	23,480	
TOTALS						4,337	\$ 99,400,579	\$ 19,102,352	\$ 118,502,931	658,062	152	\$ 180.08	\$ 151.05	27,324

<sup>1</sup> Division operating capacity may differ from the SOL maximum capacity. State SOL capacity based on a pupil teacher ratio of 25:1 in core classrooms.

<sup>2</sup> Usually includes construction, site development, water system, sewage disposal, built-in equipment and demolition. A & E fees, value engineering, construction management. fees, cost of site, loose equipment, and furniture are excluded.

<sup>3</sup> Includes technology system and storage shed.

<sup>4</sup> Includes traffic signal \$185,000.

<sup>5</sup> Site cost was split proportionally with new elementary school being built on the same site.

<sup>6</sup> Site cost includes \$611,420 for demolition of existing middle school building and asbestos abatement.

<sup>7</sup> Site cost includes \$2,060,000 for water sewer, watertank and road widening.

## 2008-09 New High Schools

Project No.	Name	Grades	Division	Contract Award Date	Maximum <sup>1</sup> Operating Cap.	Building Cost	Site Cost	Total <sup>2</sup> Cost	Total Sq. Feet	Sq. Ft./ Pupil	Total Cost/ Sq. Ft.	Building Only Cost/Sq. Ft.	Total Cost/ Pupil
43-96A	Henrico No.1	9th.-12th.	Henrico Co.	Oct.-08	1,868	\$ 50,700,000	\$ 7,133,623 <sup>3</sup>	\$ 57,833,623	255,000	137 \$	226.80 \$	198.82 \$	30,960
53-20A	Tuscarora	9th.-12th.	Loudoun Co.	Dec-08	1,895	\$ 45,071,040	\$ 11,000,000 <sup>4</sup>	\$ 56,071,040	279,426	147 \$	200.67 \$	161.30 \$	29,589
53-59A	Woodgrove	9th-12th	Loudoun Co.	Jan-09	1,651	\$ 44,375,000	\$ 9,500,000 <sup>5</sup>	\$ 53,875,000	251,915	153 \$	213.86 \$	176.15 \$	32,632
32-20 A	Fluvanna	9th-12th	Fluvanna Co.	Mar-09	1,633	\$ 44,379,363 <sup>6</sup>	\$ 12,486,637	\$ 56,866,000	314,389	193 \$	180.88 \$	141.16 \$	34,823
75-106A	Patriot	9th-12th	Prince Wm Co.	Jan-09	2,041	\$ 58,655,600	\$ 12,043,400	\$ 70,699,000	312,067	153 \$	226.55 \$	187.96 \$	34,639
TOTALS					9,088	\$ 243,181,003	\$ 52,163,660	\$ 295,344,663	1,412,797	155 \$	209.05 \$	172.13 \$	32,498

<sup>1</sup> Division operating capacity may differ from the SOL maximum capacity. State operating capacity is generally based on pupil teacher ratio of 25:1, in all program areas X 90%.

<sup>2</sup> Usually includes construction, site development, water system, sewage disposal, built-in equipment and demolition. A & E fees, value engineering, construction management fees, cost of site, loose equipment and furniture are excluded.

<sup>3</sup> Total cost includes fieldhouse at 1.48 M and terrazzo flooring at \$300,500.

<sup>4</sup> Heavy grading, rock removal, as well as environmental issues, increased site cost.

<sup>5</sup> On site water and sewer systems were additional site costs.

<sup>6</sup> The base HS capacity is 1,633 students. The building includes spaces for career, technical & vocational programs for 100 additional students and core support facilities were sized for an addition 250 students.

PPEA and Combined or Technical Schools put under Contract 2008-09

Project No.	Name	Grades	Division	Contract Award Date	Maximum Operating Cap.	Building Cost	Site Cost	Total Cost	Total Sq. Feet	Sq. Ft./ Pupil	Total Cost/ Building Only Sq. Ft.	Total Cost/ Cost/Sq. Ft	Total Cost/ Pupil
NONE													

## 2008-09 Selected Addition and Renovation Projects Under Contract

Name	Division	Contract Award Date	Construction <sup>1</sup> Cost	Total Sq. Ft.	Total Cost /Sq. Ft.
Central Elementary	Fluvanna Co.	May, 2009	\$ 471,289	6,170	\$ 76.38
Chatham High	Pittsylvania Co.	December, 2008	\$ 14,512,000	118,306	\$ 122.66
Dan River high	Pittsylvania Co.	Deember, 2008	\$ 13,453,500	111,802	\$ 120.33
Gretna High	Pittsylvania Co.	December, 2008	\$ 12,917,000	111,948	\$ 115.38
Tunstall High	Pittsylvania Co.	December, 2008	\$ 14,668,500	125,399	\$ 116.97
Fieldale Laurel Park Rich Acres	Henry Co.	May, 2009	\$ 414,100	6,254	\$ 66.21
<b>TOTALS</b>			<b>\$ 56,436,389</b>	<b>479,879</b>	
Statewide Average					<b>\$ 117.61</b>

<sup>1</sup> Construction cost may include both new construction and renovated cost within the same project.

## Tabulation of Virginia Averages for Construction Cost of School Buildings

FISCAL YEAR	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
<b>ELEMENTARY</b>						
Sq. Ft. per Pupil	100	102	107	105	115	116
Cost/Sq. Ft.	\$124.48	\$153.16	\$171.17	\$180.30	\$179.41	\$170.90
Cost/Pupil	\$12,458	\$15,627	\$18,244	\$18,963	\$20,649	\$19,765
Number of New Schools	8	10	14	16	14	4
<b>INTERMEDIATE/MIDDLE</b>						
Sq. Ft. per Pupil	172	137	128	141	198	152
Cost/Sq. Ft.	\$125.66	\$175.78	\$168.60	\$169.52	\$195.35	\$180.08
Cost/Pupil	\$21,569	\$24,135	\$21,653	\$23,897	\$38,701	\$27,324
Number of New Schools	4	3	4	3	2	4
<b>HIGH SCHOOLS</b>						
Sq. Ft. per Pupil	146	142	156	157	151	155
Cost/Sq. Ft.	\$131.91	\$157.60	\$183.94	\$205.68	\$176.81	\$209.05
Cost/Pupil	\$19,230	\$22,420	\$28,637	\$32,382	\$26,776	\$32,498
Number of New Schools	2	1	4	5	2	5
<b>PUBLIC-PRIVATE PROJECTS, COMBINED OR ALTERNATIVE EDUCATION SCHOOLS</b>						
Sq. Ft. per Pupil	141	150	124	149	139	0
Cost/Sq. Ft.	\$144.90	\$164.98	\$161.59	\$190.23	\$177.62	\$0.00
Cost/Pupil	\$20,474	\$24,687	\$20,063	\$28,356	\$24,641	\$0
Number of New Schools	2 <sup>1</sup>	6	2	4	6	0

<sup>1</sup> Public-Private school projects.

<b>ADDITIONS AND RENOVATIONS</b>						
Costs/Sq. Ft.	\$61.74	\$105.21	\$95.97	\$37.83	\$106.34	\$117.61
Number of Projects	7	15	16	10	9	7