

# VIRGINIA BEACH CITY PUBLIC SCHOOLS

## LONG RANGE FACILITIES MASTER PLAN UPDATE

VOL. 1

## EXECUTIVE SUMMARY

AUGUST 2018



*'Building & Improving on Success'*



# ACKNOWLEDGEMENTS

Cooperative Strategies would like to thank the students, staff, Board of Education, Facilities Steering Committee, and the community of the Virginia Beach City Public Schools for their commitment and dedication to the planning process.

## Virginia Beach City Public School Board

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## Virginia Beach City Public Schools

**Executive Director of Facilities Services:** Tony Arnold  
**Staff Architect:** Donald W. Bahlman Jr.  
**Project Manager:** William C. Borkman  
**Chief Academic Officer:** Amy Cashwell  
**Sustainability Officer:** J. Tim Cole  
**Project Manager:** Judith Christman  
**Demographer:** Melisa Ingram  
**GIS Analyst:** Kimberly Millering  
**Director of School Plant:** Eric Woodhouse

## Facilities Steering Committee

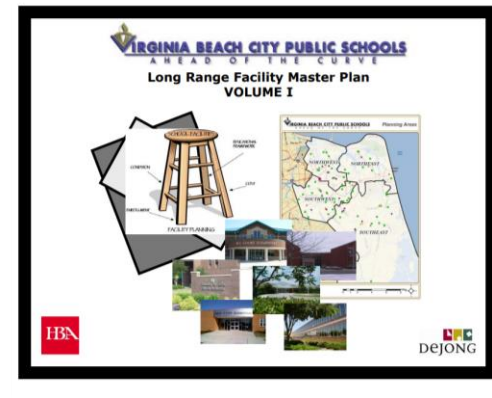
Hope Berns (Student Representative)  
Aliaksandr Bul (Student Representative)  
Amanda Burgess (Student Representative)  
Michelle Chapleau  
Zion Clark (Student Representative)  
Joe Damus  
Chris Gorri  
Thomas Ferrell  
Barry Frankenfield  
Veleka Gatling  
Daniel Keever  
Johnny Lauterbach  
Shirann Lewis  
Sara Lockett  
Brad Martin (Chamber of Commerce Representative)  
Ashley McLeod  
Jacob Phillips (Student Representative)  
Karen Prochilo  
Zoe Quinones (Student Representative)  
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Waddee B. Thoroughgood  
Rosemary Wilson  
Cheryl Woodhouse

# EXECUTIVE SUMMARY

In 2007, Virginia Beach City Public Schools, HBA and Cooperative Strategies worked in collaboration to develop a Long Range Facility Master Plan. This plan outlined a series of options for modernizing facilities within the Division. In the 2007 plan, the timeline for school modernization and replacement was dependent upon the level of funding. The funding scenarios included:

- Continuing current \$60 million funding, with no escalation
- Continuing current \$60 million funding, with 6% yearly escalation
- Continuing current \$80 million funding, with 6% yearly escalation
- Continuing current \$100 million funding, with 6% yearly escalation

Since that time, funding has dipped from the 2007 level of \$60 million per year, and construction costs have increased significantly. Due to these factors, facility replacement and modernization has not kept pace with the recommendations of the 2007 Long Range Facility Master Plan. The table on the following page compares the \$60 million funding, with 6% yearly escalation funding scenario, to what has actually taken place.



In the Fall of 2017, VBCPS began an update to the 10-year facilities master plan, specifically to update demographic, condition and program data used in the first plan, and to develop recommendations according to the new data and current funding levels.

This master plan will align all of the relevant data that will provide guidance on the next fifteen [15] prioritized capital projects. This plan specifically focuses on the relationship between funding and completion time of capital projects in an effort to assist the School Board and the City of Virginia Beach, with a tool for future budgeting.

# EXECUTIVE SUMMARY

The green shaded boxes below represent the estimated replacement and modernization timeline, from the 2007 Long Range Facility Master Plan, based on \$60 million per year escalated 6% annually. The black boxes show the actual timeline of projects that have been completed or are in the current CIP, based on the funding that has been available since 2008-09. The red shaded boxes show projects that would have already started, or started within the next few years, but have been pushed back due to the drop in funding level.

School Name	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Renaissance Academy	\$10.5m	\$4.6m	\$0m	\$0m												
Virginia Beach Middle	\$2.5m	\$1.8m	\$0m	\$0m												
Windsor Oaks Elem	\$9.0m	\$2.8m	\$0m	\$0m												
Great Neck MS	\$12.0m	\$15.0m	\$18.0m	\$3.5m												
School Bus Garage Facility	\$4.0m	\$3.9m	\$0m	\$0m												
Kellam HS																
Princess Anne MS																
College Park ES																
John B. Dey ES																
Princess Anne HS																
Thoroughgood ES																
Old Donation Center																
Kempsville HS																
Kempsville MS																
Williams, BF ES																
Princess Anne ES																
First Colonial HS																
King's Grant ES																
Plaza MS																

# MODERNIZATION / REPLACEMENT PROGRAM

## Virginia Beach City Public Schools Modernization/Replacement Program

Completed Projects					
Construction Started	School (R) Replacement (M) Modernization	Original Opening Date	Construction Complete	Difference Opening Date vs. Construction Complete	Total Project Cost (Millions)
1996	Linkhorn Park ES (R)	1955	1998	43	12.3
1997	WT Cooke ES (R)	1906	1999	93	8.9
1998	Seatack ES (R)	1952	2000	48	9.1
1999	Bayside ES (R)	1941	2000	59	8.9
1999	Creeds ES (M)	1939	2001	62	6.9
1999	Shelton Park ES (M)	1954	2001	47	7.4
1999	Thalia ES (M)	1956	2001	45	8.6
2000	Luxford ES (M)	1961	2002	41	7.8
2001	Kempsville Meadows ES (R)	1959	2002	43	9.6
2001	Woodstock ES (R)	1957	2002	45	10.2
2001	Kempsville ES (M)	1961	2003	42	8.8
2001	Malibu ES (M)	1962	2003	41	7.4
2002	Pembroke ES (M)	1962	2004	42	8.1
2002	Lynnhaven ES (M)	1963	2004	41	8.1
2002	Trantwood ES (M)	1963	2004	41	8.7
2003	Hermitage ES (R)	1964	2005	41	11.1
2003	Arrowhead ES (R)	1965	2005	40	10.8
2004	Pembroke Meadows ES (M)	1969	2006	37	9.7
2005	School Plant/Supply (R)	1938	2007	69	17.4
2006	Windsor Woods ES (R)	1966	2007	41	15.8
2006	Brookwood ES (R)	1968	2007	39	15.0
2006	Newtown Road ES (R)	1970	2008	38	18.0
2008	Windsor Oaks ES (R)	1970	2009	39	17.1
2007	Renaissance Academy (R)	1938-1960	2010	72/50	66.2
2007	Va Beach MS (R)	1952	2010	58	51.6
2009	School Bus Garage (R)	1936	2010	74	21.8
2009	Great Neck MS (R)	1961	2011	50	46.5
2010	College Park ES (R)	1973	2011	38	22.1
2011	Kellam High School (R)	1962	2014	52	102.0
2014	Old Donation School (R)	1957/1965	2017	60/52	63.4
	Average/Total			49	619.3

KELLAM  
HIGH  
SCHOOL



OLD  
DONATION  
SCHOOL



JOHN B. DEY  
ELEMENTARY



THOROUGHGOOD  
ELEMENTARY



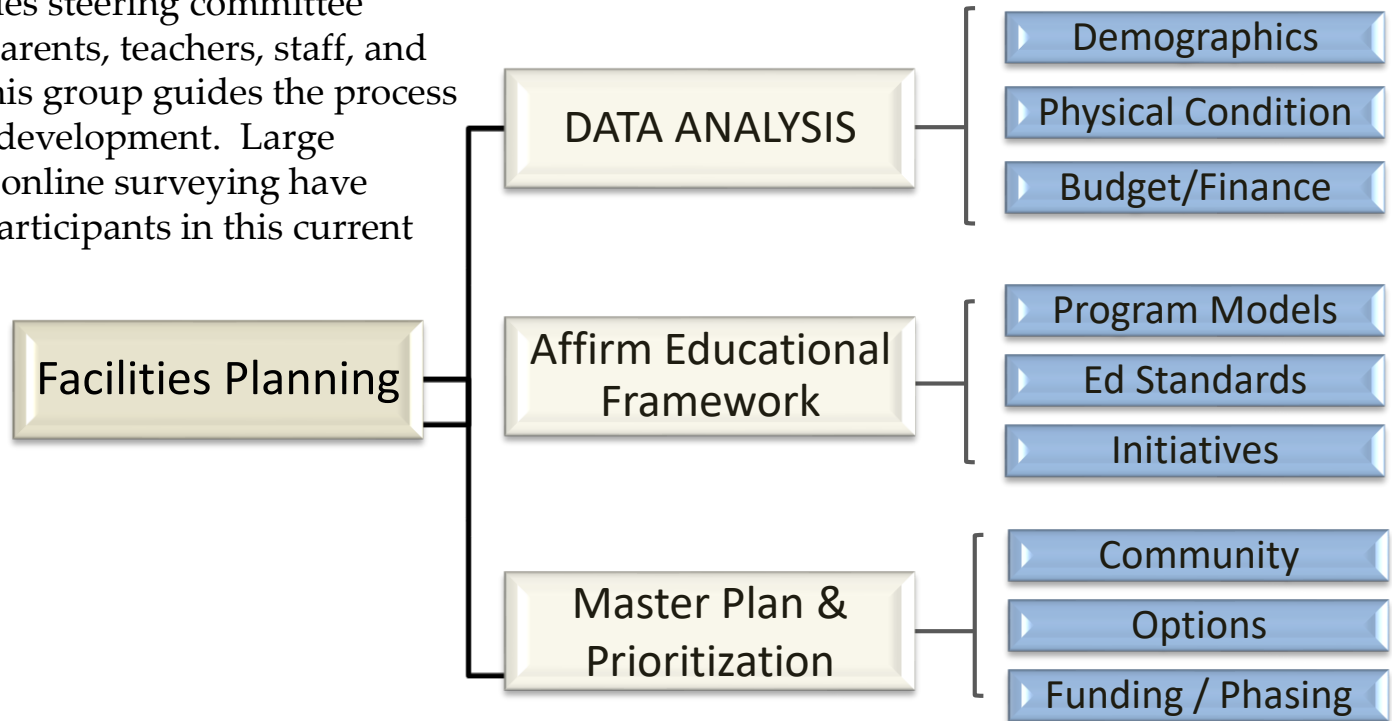
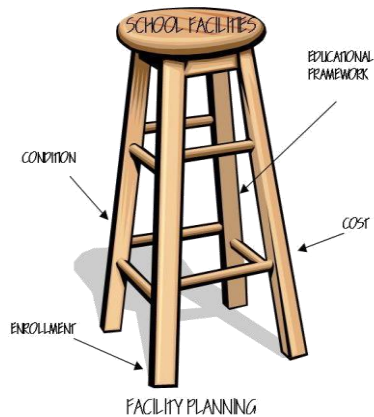
PRINCESS ANNE  
MIDDLE SCHOOL



# PROCESS

Virginia Beach City Public Schools facilities planning is a wholistic view on what it means to modernize and upkeep schools in the 21<sup>st</sup> century. Planning is both comprehensive and iterative in that the process considers demographics/enrollment, facility capacities, conditions & educational adequacy, current and future teaching and learning models, and most certainly costs to complete. Iterative in that the data builds upon each other to create a road map for prioritizing capital projects that meet modern educational standards and fall within budget parameters.

VBCPS is also committed to involving community members in the planning process. From the local level in creating a facilities steering committee consisting of students, parents, teachers, staff, and community members, this group guides the process and assists in the plan's development. Large community forums and online surveying have allowed for over 3,000 participants in this current planning process.

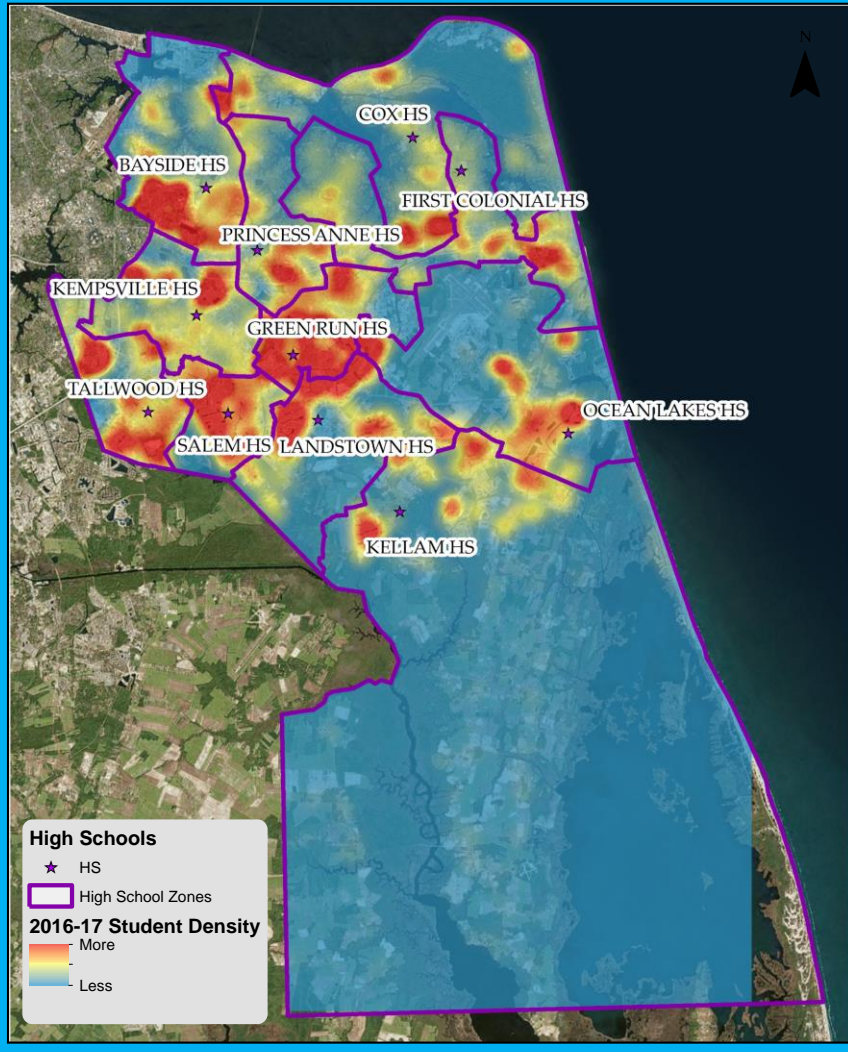




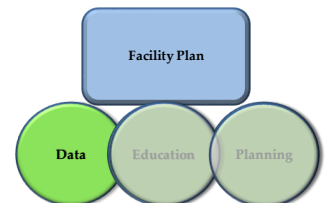
# DEMOGRAPHICS

## Student Density Map

Virginia Beach City Public Schools - 2016-17 Student Density Map



This map illustrates the density of Virginia Beach City Public Schools for the 2016-17 school year. The dark red indicates areas of higher density and the blue indicates area of lower density.





# DEMOGRAPHICS

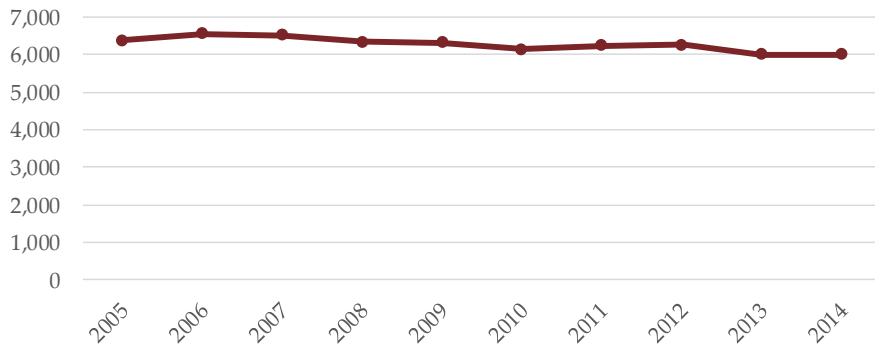
## Live Birth Data

### LIVE BIRTH COUNTS VIRGINIA BEACH CITY

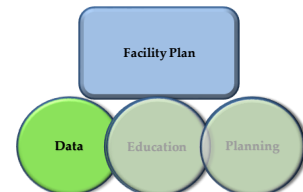
Year	# of births
2005	6,382
2006	6,567
2007	6,513
2008	6,341
2009	6,324
2010	6,143
2011	6,249
2012	6,270
2013	6,003
2014	6,008

Source: Virginia Department of Health

### LIVE BIRTH COUNTS VIRGINIA BEACH CITY



Utilization of live birth data is helpful when projecting future kindergarten enrollments. These data provides a helpful overall trend. The table and graph to the left are the live birth counts for Virginia Beach, Virginia from 2005 to 2014. With consistent birth to kindergarten survival ratios, it is anticipated that kindergarten enrollment will continue to decline in the near term.



# ENROLLMENT

## Historical Enrollment

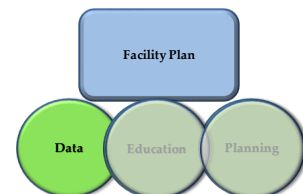
As indicated in the table and graphs to the right and below, over the past ten years, K-12 student enrollment in Virginia Beach City Public Schools has decreased by approximately 2,500 students.

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
K	4,605	4,810	4,739	5,047	4,810	4,914	4,697	4,541	4,431	4,570
1	5,230	5,264	5,401	5,476	5,587	5,397	5,376	5,302	5,160	5,046
2	5,310	5,162	5,309	5,359	5,336	5,523	5,346	5,325	5,210	5,125
3	5,396	5,339	5,202	5,248	5,298	5,384	5,498	5,282	5,277	5,230
4	5,151	5,393	5,368	5,208	5,196	5,326	5,299	5,433	5,283	5,217
5	5,271	5,156	5,401	5,355	5,163	5,210	5,315	5,332	5,362	5,259
6	5,358	5,278	5,232	5,427	5,344	5,239	5,168	5,319	5,315	5,368
7	5,368	5,358	5,251	5,284	5,437	5,347	5,225	5,143	5,234	5,274
8	5,389	5,364	5,379	5,256	5,231	5,422	5,343	5,215	5,131	5,228
9	6,365	6,014	5,995	5,869	5,740	5,781	5,818	5,656	5,476	5,466
10	5,749	5,794	5,588	5,452	5,372	5,304	5,396	5,467	5,313	5,219
11	5,463	5,451	5,470	5,207	5,212	5,128	5,023	5,101	5,157	5,034
12	5,033	5,116	5,030	5,063	4,896	4,884	4,926	4,895	4,974	5,118
Total	69,688	69,499	69,365	69,251	68,622	68,859	68,430	68,011	67,323	67,154

Source: Virginia Beach City Public Schools

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
K-5	30,963	31,124	31,420	31,693	31,390	31,754	31,531	31,215	30,723	30,447
6-8	16,115	16,000	15,862	15,967	16,012	16,008	15,736	15,677	15,680	15,870
9-12	22,610	22,375	22,083	21,591	21,220	21,097	21,163	21,119	20,920	20,837

Source: Virginia Beach City Public Schools



# ENROLLMENT

## Projected Enrollment

Virginia Beach City Public Schools is projecting K-12 enrollment to decrease by approximately 1,100 students between 2017-18 and 2022-23. This drop is primarily due to declining birth rates since 2007 and smaller entering kindergarten classes.

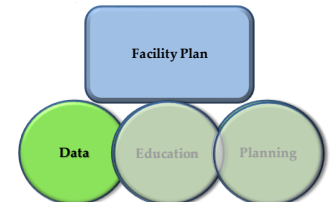
These smaller classes are replacing large enrollment classes that were a result of large birth rates/kindergarten enrollment in the early part of the 21<sup>st</sup> century.

	2018-19	2019-20	2020-21	2021-22	2022-23
K	4,714	4,811	4,966	4,980	4,996
1	5,086	5,174	5,092	5,134	5,111
2	4,985	5,045	5,021	5,109	5,047
3	5,118	4,957	5,075	4,962	5,109
4	5,181	4,989	4,807	5,015	4,915
5	5,199	5,167	5,002	4,833	4,948
6	5,302	5,215	5,218	5,145	5,072
7	5,328	5,253	5,195	5,147	5,083
8	5,266	5,291	5,235	5,191	5,138
9	5,570	5,587	5,641	5,540	5,486
10	5,265	5,258	5,272	5,336	5,223
11	4,963	4,949	4,986	4,999	5,067
12	4,911	4,816	4,786	4,846	4,854
Total	66,888	66,512	66,296	66,237	66,049

Source: Virginia Beach City Public Schools

	2018-19	2019-20	2020-21	2021-22	2022-23
K-5	30,283	30,143	29,963	30,033	30,126
6-8	15,896	15,759	15,648	15,483	15,293
9-12	20,709	20,610	20,685	20,721	20,630

Source: Virginia Beach City Public Schools



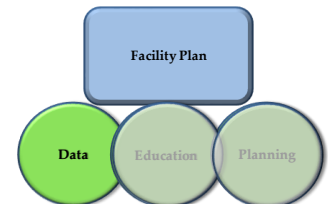
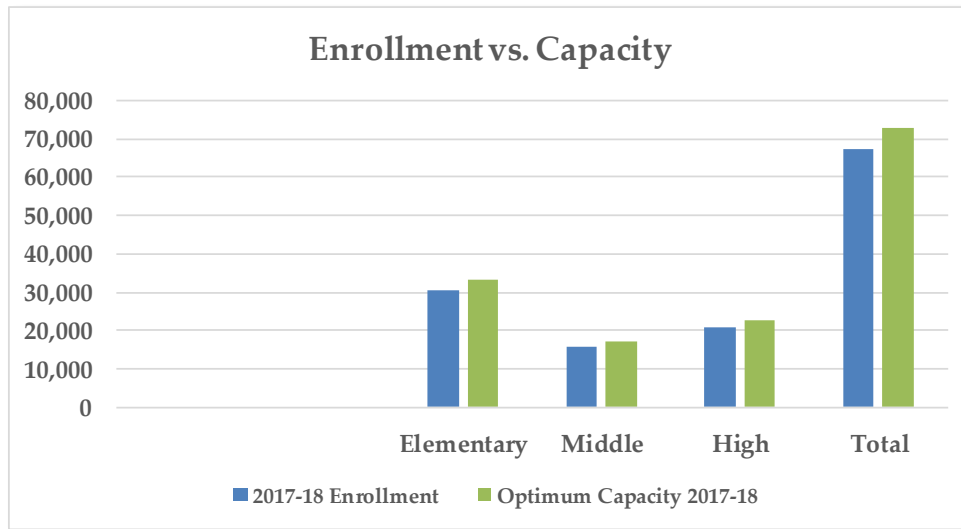
# CAPACITY OF FACILITIES

## Capacity / Utilization

Capacity & Enrollment	2017-18 Enrollment	Optimum Capacity 2017-18	2017-18 Utilization
Elementary	30,447	32,385	94.0%
Middle	15,870	18,025	88.0%
High	20,837	23,674	88.0%
<b>Total</b>	<b>67,154</b>	<b>74,084</b>	<b>90.6%</b>

Source: Virginia Beach City Public Schools

Virginia Beach City Public Schools currently has a utilization rate of 90.6% with consideration of full-day kindergarten implementation. Even with a continued slight decline in enrollment, facility utilization will remain within an optimal range.



# FACILITY CONDITION

## Terms

The following are terms that describe how the condition of a facility is measured. The condition, both physical and educational appropriateness, is a key indicator in prioritization of modernization of facilities. The following pages will present the condition of each facility from what is considered the poorest condition school to the best condition school in that order.

### **Facility Condition Index (FCI):**

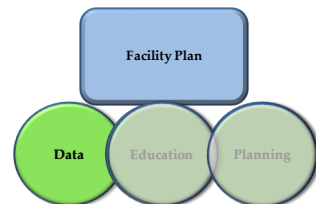
A numeric score between 0 and 1 which represents the cost of replacing building systems and components that will wear out over the next 25 years divided by the cost of total building replacement; 0 = new condition and 1.000 = worst possible condition.

### **Educational Adequacy Factor (EAF):**

An assessment that rates the various elements of a school building and school site for how well, or how poorly, they support the desired educational programs. For the EAF, 1.000 = perfect score and 2.000 = worst possible score.

### **Total Condition Index (TCI):**

$FCI \times EAF$ . For this index, 0 = perfect score and 2.000 = worst possible score. Allows us to compare facilities in the division against each other, considering both the relative condition of the facilities and the relative adequacy of a facility to support the desired educational program.

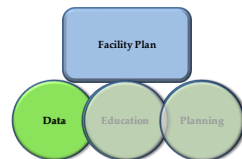


# FACILITY CONDITION

## REFER TO VOL. 2 FOR FULL REPORT

Sorted by Total Condition Index  
High to Low

School Name	Year Constructed	Year Modernized	Building Area (SF)	Membership, Sep 30, 2017	Optimum Capacity	Number Over/ (Under) Capacity	Percent Over/ Under Capacity	School Facility Condition Index	Educational Adequacy Factor	Total Condition Index
Old Aragona ES (currently Bayside 6th Grade)	1957		56,516	437	445	-8	-1.8%	0.880	1.428	1.256
Princess Anne HS	1954		228,860	1779	1,917	-138	-7.2%	0.745	1.591	1.185
Kellam HS (Old)	1962		200,887	#N/A	#N/A	#N/A	#N/A	0.780	1.388	1.083
Princess Anne ES	1956		77,953	573	657	-84	-12.8%	0.705	1.490	1.050
Kempsville HS	1966		202,665	1632	1,969	-337	-17.1%	0.705	1.473	1.038
Green Run ES	1976		58,275	359	392	-33	-8.4%	0.677	1.400	0.948
First Colonial HS	1966		178,266	1804	1,811	-7	-0.4%	0.657	1.352	0.889
Betty F Williams, ES	1963		77,656	476	531	-55	-10.4%	0.724	1.216	0.880
North Landing ES	1975		60,280	456	491	-35	-7.1%	0.750	1.143	0.857
Kempsville MS	1969		136,287	802	869	-67	-7.7%	0.622	1.363	0.848
Bayside MS	1969		180,134	672	918	-246	-26.8%	0.626	1.321	0.827
Bayside HS	1964		200,816	1868	1,827	41	2.2%	0.616	1.329	0.819
Fairfield ES	1976		58,280	548	594	-46	-7.7%	0.620	1.280	0.794
Lynnhaven MS	1974		140,099	912	1,250	-338	-27.0%	0.581	1.341	0.779
Independence MS	1974		137,656	1217	1,148	69	6.0%	0.610	1.270	0.775
Holland ES	1967		73,956	581	635	-54	-8.5%	0.674	1.136	0.766
White Oaks ES	1977		77,333	563	617	-54	-8.8%	0.591	1.278	0.755
Rosemont ES	1981		63,667	397	438	-41	-9.4%	0.641	1.164	0.746
Kingston ES	1965		65,223	520	648	-128	-19.8%	0.653	1.141	0.745
Plaza MS	1969		157,869	1090	1,179	-89	-7.5%	0.620	1.198	0.743
Birdneck ES	1988		137,250	539	755	-216	-28.6%	0.602	1.230	0.741
Point'O View ES	1969		75,219	702	707	-5	-0.7%	0.669	1.085	0.726
Kings Grant ES	1969		72,043	566	617	-51	-8.3%	0.631	1.138	0.718
Providence ES	1981		61,831	550	608	-58	-9.5%	0.585	1.208	0.707
Tallwood ES	1989		69,988	581	657	-76	-11.6%	0.582	1.211	0.705
Rosemont Forest ES	1987		69,788	495	635	-140	-22.0%	0.605	1.162	0.703
Brandon MS	1978		190,586	1205	1,383	-178	-12.9%	0.621	1.125	0.698
Indian Lakes ES	1979		66,816	571	644	-73	-11.3%	0.552	1.254	0.692
Green Run HS	1979		235,721	1735	1,926	-191	-9.9%	0.613	1.106	0.678
Red Mill ES	1989		69,788	624	747	-123	-16.5%	0.575	1.154	0.664
Cox HS	1983		236,744	1816	1,955	-139	-7.1%	0.582	1.129	0.657
Tech & Career Ed. Center	1972		114,790	#N/A	#N/A	#N/A	#N/A	0.631	1.021	0.645
Alanton ES	1966		74,049	608	702	-94	-13.4%	0.590	1.085	0.640
Glenwood ES	1990		139,600	920	1,004	-84	-8.4%	0.586	1.068	0.626
Centerville ES	1984		67,082	713	650	63	9.7%	0.485	1.276	0.619
Salem HS	1988		260,889	1702	1,850	-148	-8.0%	0.553	1.080	0.597
Salem ES	1988		66,890	470	491	-21	-4.3%	0.461	1.239	0.572





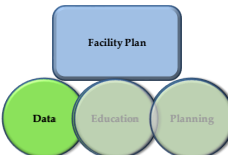
# FACILITY CONDITION

REFER TO VOL. 2 FOR FULL REPORT

Sorted by Total Condition Index

High to Low

School Name	Year Constructed	Year Modernized	Building Area (SF)	Membership, Sep 30, 2017	Optimum Capacity	Number Over/ (Under) Capacity	Percent Over/ Under Capacity	School Facility Condition Index	Educational Adequacy Factor	Total Condition Index
Parkway ES	1987		67,840	438	466	-28	-6.0%	0.472	1.178	0.556
Ocean Lakes ES	1989		69,917	526	680	-154	-22.6%	0.500	1.111	0.555
Tallwood HS	1992		294,457	1946	2,352	-406	-17.3%	0.518	1.067	0.553
Salem MS	1988		217,500	1023	1,031	-8	-0.8%	0.488	1.083	0.528
Strawbridge ES	1991		84,948	666	743	-77	-10.4%	0.443	1.118	0.495
Ocean Lakes HS	1994		330,525	2074	2,731	-657	-24.1%	0.418	1.000	0.418
Creeds ES	1939	2001	69,285	306	387	-81	-20.9%	0.369	1.000	0.369
Lynnhaven ES	1963	2002	80,670	370	426	-56	-13.1%	0.366	1.000	0.366
Malibu ES	1962	2003	73,182	369	419	-50	-11.9%	0.365	1.000	0.365
Thalia ES	1956	2001	91,550	604	617	-13	-2.1%	0.360	1.000	0.360
Pembroke Meadows ES	1969	2006	75,926	479	473	6	1.3%	0.360	1.000	0.360
Luxford ES	1961	2002	82,242	514	548	-34	-6.2%	0.348	1.000	0.348
Shelton Park ES	1954	2001	81,576	349	482	-133	-27.6%	0.345	1.000	0.345
Landstown ES	1993		81,634	756	774	-18	-2.3%	0.332	1.000	0.332
Kempsville ES	1961	2003	78,146	428	486	-58	-11.9%	0.332	1.000	0.332
Landstown MS	1993		201,000	1423	1,571	-148	-9.4%	0.326	1.000	0.326
Pembroke ES	1962	2004	108,773	497	612	-115	-18.8%	0.322	1.000	0.322
Larkspur MS	1994		247,264	1523	1,763	-240	-13.6%	0.316	1.000	0.316
Trantwood ES	1963	2004	81,040	477	576	-99	-17.2%	0.315	1.000	0.315
Corporate Landing ES	1993		96,620	411	590	-179	-30.3%	0.307	1.000	0.307
Christopher Farms ES	1997		78,740	687	738	-51	-6.9%	0.306	1.000	0.306
Cooke ES	1999		92,256	510	545	-35	-6.4%	0.302	1.000	0.302
Corporate Landing MS	1997		235,093	1224	1,625	-401	-24.7%	0.301	1.000	0.301
Linkhorn Park ES	1998		76,285	607	662	-55	-8.3%	0.297	1.000	0.297
New Castle ES	1999		87,060	777	869	-92	-10.6%	0.297	1.000	0.297
Arrowhead ES	2005		79,480	435	486	-51	-10.5%	0.296	1.000	0.296
Bayside ES	2000		77,428	471	527	-56	-10.6%	0.285	1.000	0.285
Seatack ES	2000		74,375	391	436	-45	-10.3%	0.279	1.000	0.279
Landstown HS	2001		308,924	2139	2,594	-455	-17.5%	0.274	1.000	0.274
Kempsville Meadows ES	2002		72,076	471	527	-56	-10.6%	0.269	1.000	0.269
Woodstock ES	2002		82,707	677	671	6	0.9%	0.264	1.000	0.264
Newtown ES	2008		88,711	509	483	26	5.4%	0.264	1.000	0.264
Three Oaks ES	2005		92,210	729	810	-81	-10.0%	0.254	1.000	0.254
Hermitage ES	2005		94,018	651	698	-47	-6.7%	0.243	1.000	0.243
Diamond Springs ES	2007		97,000	522	527	-5	-0.9%	0.241	1.000	0.241
Windsor Woods ES	2008		84,265	332	473	-141	-29.8%	0.234	1.000	0.234
Brookwood ES	2008		80,065	644	590	54	9.2%	0.234	1.000	0.234
Renaissance Academy	2009		284,968	379	1,231	-852	-69.2%	0.230	1.000	0.230
Virginia Beach MS	2010		189,730	865	954	-89	-9.3%	0.222	1.000	0.222

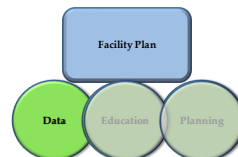


# FACILITY CONDITION

## REFER TO VOL. 2 FOR FULL REPORT

Sorted by Total Condition Index  
High to Low

School Name	Year Constructed	Year Modernized	Building Area (SF)	Membership, Sep 30, 2017	Optimum Capacity	Number Over/ (Under) Capacity	Percent Over/ Under Capacity	School Facility Condition Index	Educational Adequacy Factor	Total Condition Index
Great Neck MS	2011		219,370	1177	1,384	-207	-15.0%	0.214	1.000	0.214
Windsor Oaks ES	2009		88,340	593	576	17	3.0%	0.193	1.000	0.193
College Park ES	2011		94,861	489	506	-17	-3.4%	0.144	1.000	0.144
John B. Dey ES	1956	2019	107,058	812	815	-3	-0.4%	0.103	1.000	0.103
Kellam HS	2014		336,410	2038	1,857	181	9.7%	0.073	1.000	0.073
Princess Anne MS	2021		222,571	1505	1,584	-79	-5.0%	0.000	1.000	0.000
Old Donation School (ES)	2017		-	1181	1,160	21	1.8%	0.000	1.000	0.000
Thoroughgood ES	2020		66,259	677	648	29	4.5%	0.000	1.000	0.000



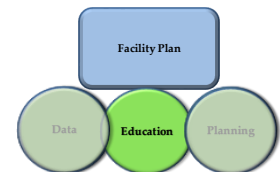
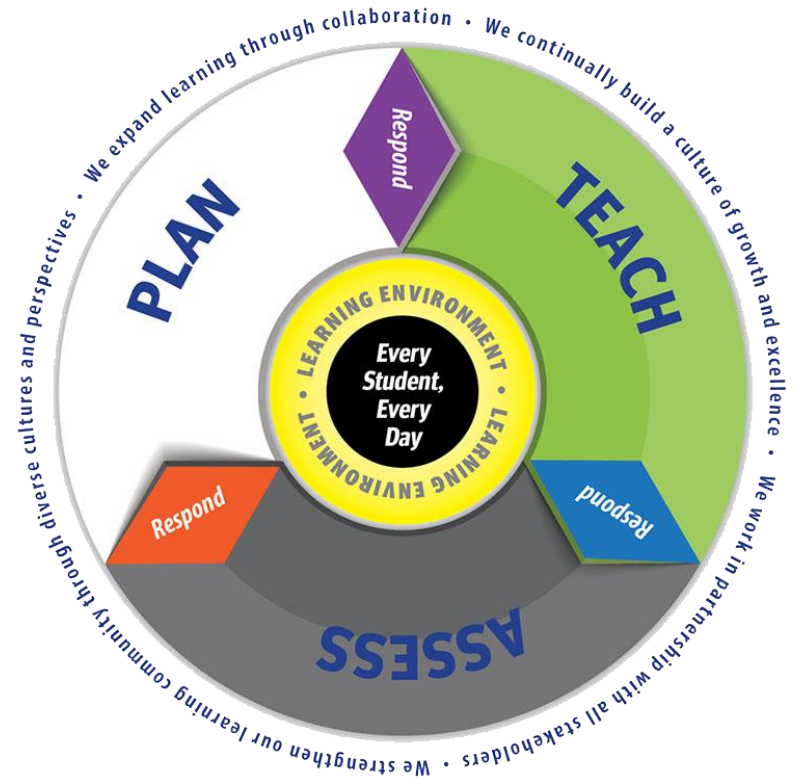


# EDUCATIONAL FRAMEWORK

## Teaching & Learning Framework

The teaching and learning that occurs in all schools sets the foundation and framework for all facilities plans. Focus on teaching and learning sets direction for form to follow function, thus creating a vision for how facilities should be planned in the future. The following is the Teaching and Learning Framework as set forth by VBCPS.

- **Teach:** Student Goal Setting and Reflection
- **A Balanced Approach to Assessment**
- **Assess:** Descriptive Feedback
- **Plan:** Learning Targets
- **Learning Environment:** Personalized Learning
- **Plan:** Fostering Globally Competitive Skills Through STEM
- **Learning Environment:** Using Protocols & Seminars
- **Plan:** Using Technology
- **Learning Environment:** Using Routines & Procedures

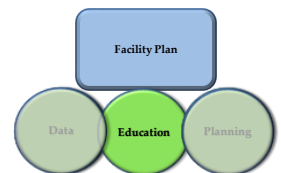
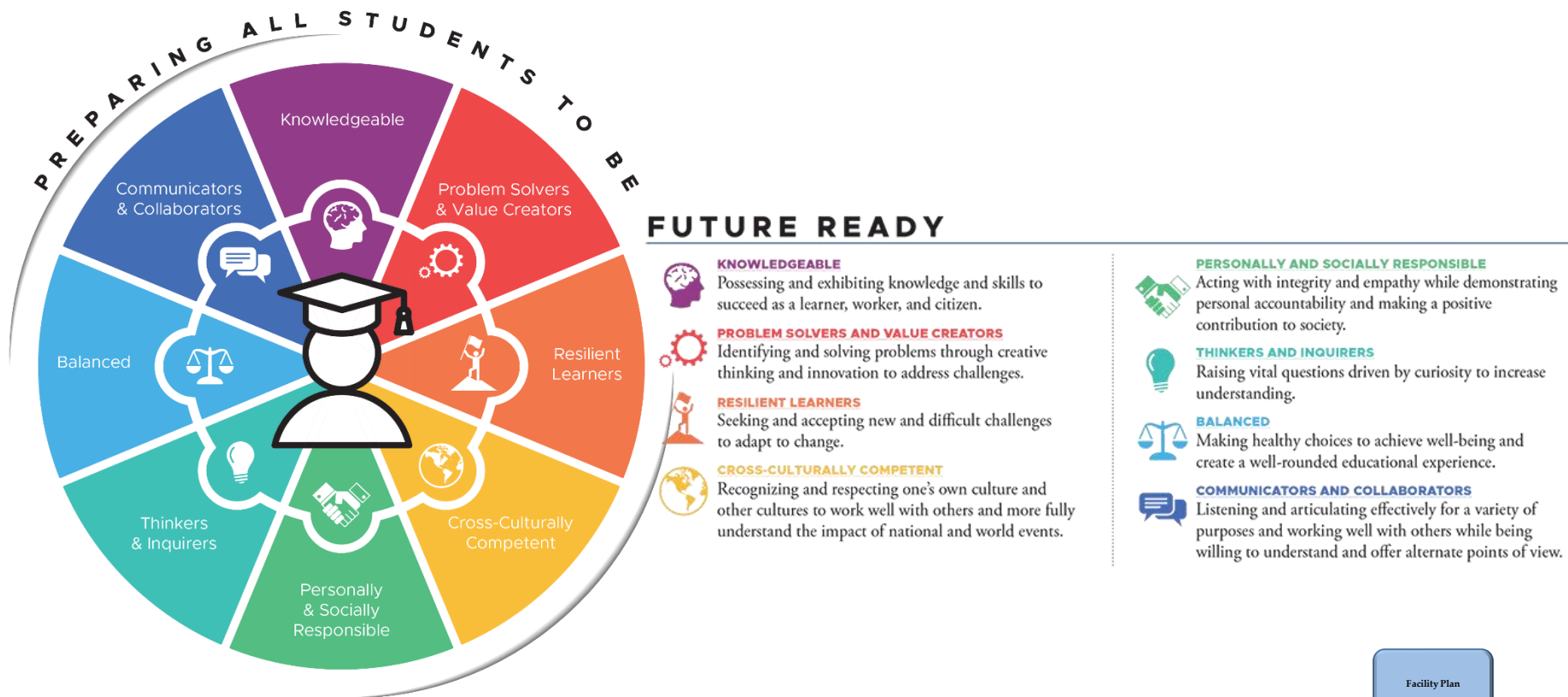




# EDUCATIONAL FRAMEWORK

## Graduate Profile

VBCPS Compass to 2020 points to a definitive objective of getting all students college and career ready. By defining how to prepare all students to be future ready, a facilities plan for modernization can be used as a tool to create environments that support those objectives. VBCPS has created the graduate profile to inspire, motivate and guide the work of students, teachers, schools, and the Division.

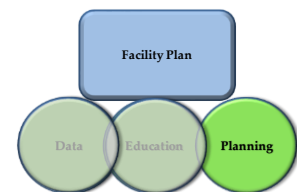


# PLANNING

## Community Engagement

### Steering Committee

The Steering Committee is an essential part of the planning process. This group of approximately 25 members consists of students, teachers, school/division leadership, civic organizations, and business representatives. This group met six times during the planning process and provided valuable guidance and insight at each phase.





# PLANNING

## Community Engagement

### Community Meeting #1

3,717  
Survey  
Responses

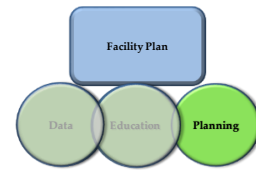
The first community meeting was conducted on November 13<sup>th</sup> and 14<sup>th</sup> at Kellam HS & Old Donation School. The purpose of this meeting was to present process, review background data used in planning and to survey participants on the following topics:

- Current Perception of Modernization Program (i.e. does the current rate of the modernization program meet the demand for facility upgrades across the Division?)
- Prioritizing Important Data Points
- Prioritizing Grade Level Facilities

	Paper	Web	Web + Paper	Group
Strongly Satisfied	5	172	177	0
Satisfied	12	988	1,000	2
Neutral	14	1,345	1,359	3
Dissatisfied	19	866	885	4
Strongly Dissatisfied	2	266	268	1
No Consensus	n/a	n/a	n/a	4
<b>Total</b>	<b>52</b>	<b>3,637</b>	<b>3,689</b>	<b>14</b>

	Paper	Web	Web + Paper	Group
4 Cost	29	1,139	1,168	7
3 Building capacity/student enrollment	24	1,736	1,760	6
2 Building's ability to accomodate school programming needs	32	2,083	2,115	8
5 Least disruption to the educational experience during construction (ie. Swing space options to temporarily house students while work is underway)	26	1,032	1,058	5
1 Age or physical condition of facility	51	2,928	2,979	13
No Consensus	n/a	n/a	n/a	3
<b>Total</b>	<b>162</b>	<b>8,918</b>	<b>9,080</b>	<b>42</b>

	0	1	2	3	4	5	6	7	8	9	10	Average
Elementary Schools	70	436	866	915	496	361	132	68	53	1	64	3.2
Middle Schools	61	285	831	1715	296	133	51	17	14	2	29	2.8
High Schools	16	184	419	638	727	775	300	186	122	6	164	4.4
<b>Total</b>	<b>147</b>	<b>905</b>	<b>2116</b>	<b>3268</b>	<b>1519</b>	<b>1269</b>	<b>483</b>	<b>271</b>	<b>189</b>	<b>9</b>	<b>257</b>	





# PLANNING

## Community Engagement

### Community Meeting #2

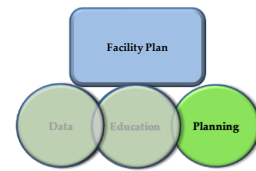


The second community meeting was conducted on March 14th, 15<sup>th</sup>, 20<sup>th</sup>, & 21<sup>st</sup> at Tallwood HS, Kellam HS, Old Donation School & Great Neck MS. This meeting presented funding scenarios and re-surveyed the modernization program as based on the following:

- Satisfaction on the number of projects completed at funding level scenarios
- Preferred Level of Funding

# of Buildings Satisfaction Rating	Strongly Satisfied	Satisfied	Neutral	Dissatisfied	Strongly Dissatisfied
\$40 million per year	131	256	325	553	643
\$60 million per year	166	484	436	516	306
\$80 million per year	203	675	478	305	247
\$100 million per year	598	451	362	246	251

Preferred Funding Level Ranking 1 to 4 (1 most preferred)	1	2	3	4
\$40 million per year	378	181	144	958
\$60 million per year	304	481	824	52
\$80 million per year	261	832	523	45
\$100 million per year	718	167	170	606





# RECOMMENDATIONS

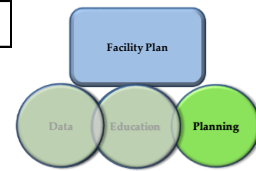
# RECOMMENDATIONS

## Replacement Candidates

The schools identified in the table below represent the top 15 candidates for replacement, and the order of schools shown below is based solely on the Total Condition Index. Actual order of projects is subject to change and may be influenced by factors such as building utilization, educational programming, funding, and swing space availability.

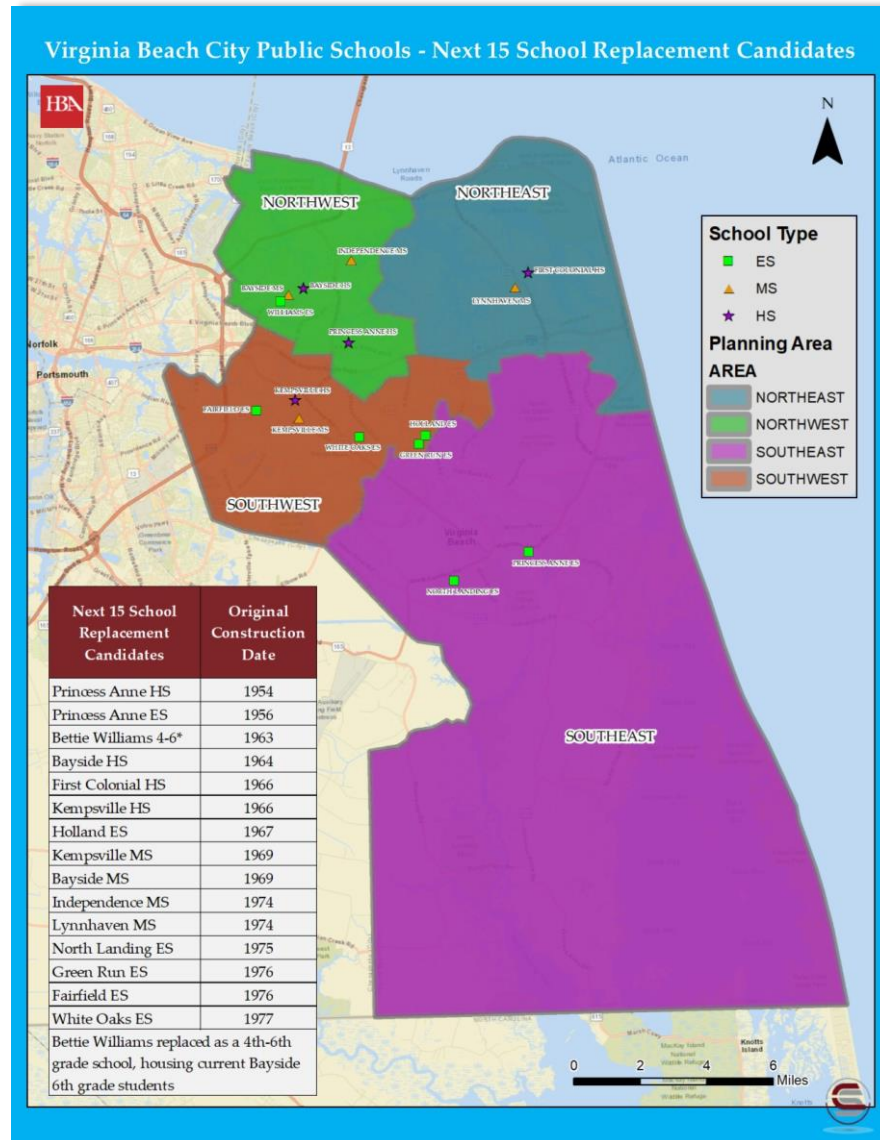
Next 15 School Replacement Candidates	Original Construction Date	Square Footage	School Facility Condition Index	Educational Adequacy Factor	Total Condition Index
Princess Anne HS	1954	228,860	0.745	1.591	1.185
BF Williams (4-5) + Old Aragona ES (Bayside 6)	1963/1957	134,152	0.802	1.322	1.068
Princess Anne ES	1956	77,953	0.705	1.490	1.050
Kempsville HS	1966	202,665	0.705	1.473	1.038
Green Run ES	1976	58,275	0.677	1.400	0.948
First Colonial HS	1966	178,266	0.657	1.352	0.889
North Landing ES	1975	60,280	0.750	1.143	0.857
Kempsville MS	1969	136,287	0.622	1.363	0.848
Bayside MS	1969	180,134	0.626	1.321	0.827
Bayside HS	1964	200,816	0.616	1.329	0.819
Fairfield ES	1976	58,280	0.620	1.280	0.794
Lynnhaven MS	1974	140,099	0.581	1.341	0.779
Independence MS	1974	137,656	0.610	1.270	0.775
Holland ES	1967	73,956	0.674	1.136	0.766
White Oaks ES	1977	77,333	0.591	1.278	0.755

BF Williams replaced as a 4th-6th grade school, housing current Bayside 6th grade students



# RECOMMENDATIONS

## Replacement Candidates – School Locations





# RECOMMENDATIONS

## Funding Scenarios

When determining the potential order and completion date of the 15 school replacement candidates, four funding scenarios were developed:

- \$20M Capital Renewal + \$20M CIP (approximate current level of funding)
- \$20M Capital Renewal + \$40M CIP (doubles CIP allocation)
- \$20M Capital Renewal + \$60M CIP (triples CIP allocation)
- \$20M Capital Renewal + \$80M CIP (quadruples CIP allocation)

Capital Renewal funding is for annual expenditures for school condition and minor space improvement. Examples can include replacement of HVAC systems, roofing systems, windows, flooring systems, minor renovations to educational space, and other identified facility condition improvement needs. Capital Improvement Program (CIP) funding is allocated for new construction and/or modernization projects.

The table on the following page shows the completion date and age at replacement for each school in each of the four funding scenarios. It should be noted that the order of projects varies based on the funding level, in order to finish all projects in as short of time as possible. When replacing schools on their current sites, providing on-site or off-site swing space for students must be considered if they will not be able to remain at their current facility during construction.

Historical school construction trends indicate that a 5% - 6% average annual increase in construction costs should be anticipated, and this escalation should be built into any future funding scenarios, both for Capital Renewals and also for CIP. In addition to annual construction cost increases, additional deterioration of existing building systems should be expected and planned for. Therefore, funding for Capital Renewal and CIP will need to be increased to maintain or improve condition of facilities across the Division.

# RECOMMENDATIONS

## Funding Scenarios

The table below shows the recommended order of schools along with the estimated completion date and age at replacement for each school in each of the four funding scenarios. It should be noted that the order of projects varies based on the funding level, in order to finish all projects in as short of time as possible. This analysis includes a 5% yearly escalation of construction costs and a 3% yearly escalation in funding, for all scenarios.

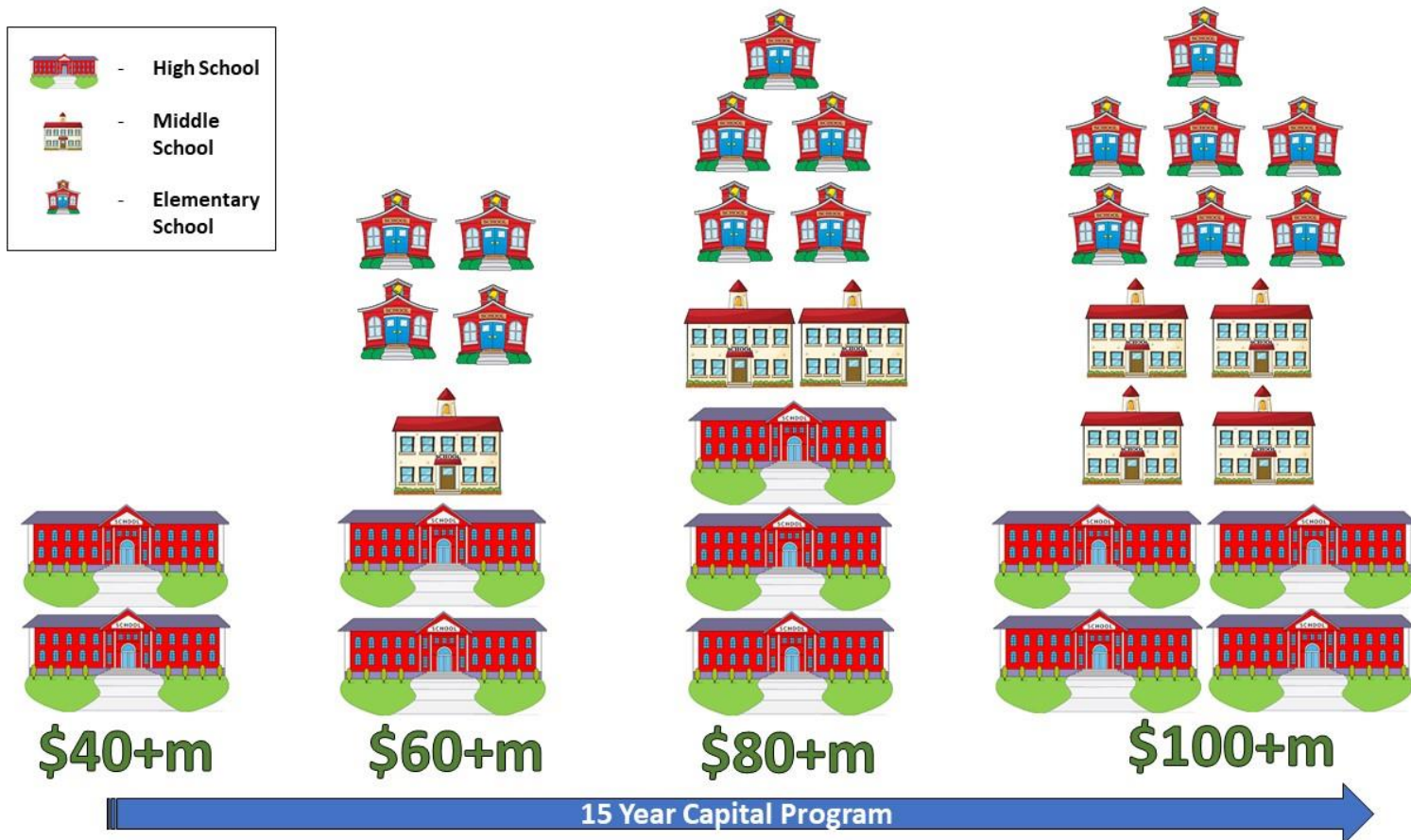
Next 15 School Replacement Candidates	Original Construction Date	Scenario 1 40 M/Year Completion Date	Scenario 1 40 M/Year Age at Replacement	Scenario 2 60 M/Year Completion Date	Scenario 2 60 M/Year Age at Replacement	Scenario 3 80 M/Year Completion Date	Scenario 3 80 M/Year Age at Replacement	Scenario 4 100 M/Year Completion Date	Scenario 4 100 M/Year Age at Replacement
Princess Anne HS	1954	2023	69	2023	69	2023	69	2023	69
BF Williams (4-5) + Old Aragona ES (Bayside 6)	1963/1957	2054	94	2025	65	2024	64	2025	65
Princess Anne ES	1956	2050	94	2025	69	2024	68	2025	69
Bayside HS	1964	2030	66	2031	67	2028	64	2026	62
First Colonial HS	1966	2039	73	2036	70	2033	67	2032	66
Kempsville HS	1966	2046	80	2042	76	2039	73	2036	70
Holland ES	1967	2058	91	2027	60	2025	58	2028	61
Kempsville MS	1969	2065	96	2047	78	2031	62	2026	57
Bayside MS	1969	2072	103	2052	83	2036	67	2031	62
Independence MS	1974	2079	105	2056	82	2041	67	2036	62
Lynnhaven MS	1974	2086	112	2061	87	2045	71	2038	64
North Landing ES	1975	2090	115	2029	54	2028	53	2027	52
Green Run ES	1976	2094	118	2037	61	2029	53	2029	53
Fairfield ES	1976	2097	121	2046	70	2043	67	2029	53
White Oaks ES	1977	2101	124	2048	71	2043	66	2031	54
Average	1969	2066	97	2039	71	2033	65	2029	61

BF Williams replaced as a 4th-6th grade school, housing current Bayside 6th grade students

# RECOMMENDATIONS

## Funding Scenarios

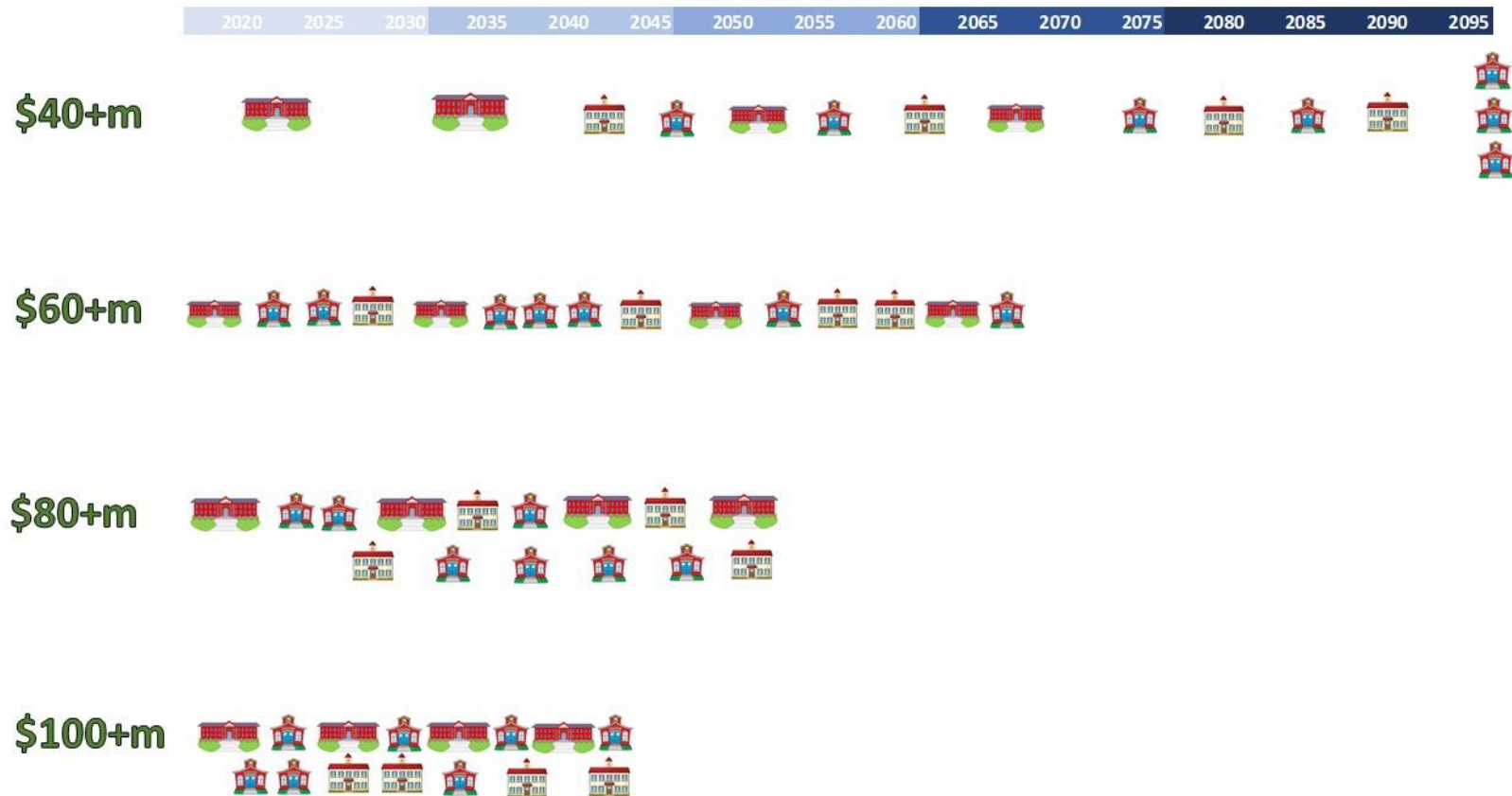
The graphic below displays the number and type of facilities that could be constructed within a 15 year capital program at each of the four funding levels. This analysis includes a 5% yearly escalation of construction costs and a 3% yearly escalation in funding, for all scenarios.



# RECOMMENDATIONS

## Funding Scenarios

The graphic below displays how long it would take to complete all 15 facilities at each of the four funding scenarios. This analysis includes a 5% yearly escalation of construction costs and a 3% yearly escalation in funding, for all scenarios.



# VIRGINIA BEACH CITY PUBLIC SCHOOLS



## LONG RANGE FACILITIES MASTER PLAN UPDATE

AUGUST 2018



Tracy Richter, President/Partner  
[trichter@coopstrategies.com](mailto:trichter@coopstrategies.com)

Matt Sachs, GIS Analyst  
[msachs@coopstrategies.com](mailto:msachs@coopstrategies.com)



ARCHITECTURE  
INTERIOR DESIGN

Mike Ross, AIA/REFP, President  
[MikeR@HBAonline.com](mailto:MikeR@HBAonline.com)