

Long Range Facility Master Plan VOLUME I



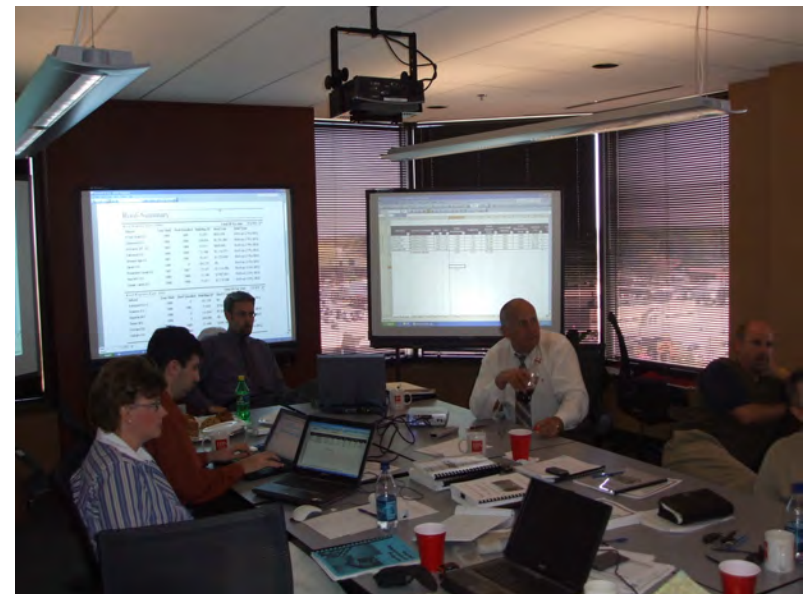
The collage features a central diagram of a stool representing 'SCHOOL FACILITIES'. Labels point to different parts of the stool: 'EDUCATIONAL FRAMEWORK' (top), 'CONDITION' (left side), 'COST' (right side), 'ENROLLMENT' (bottom left), and 'FACILITY PLANNING' (bottom). To the right is a map of 'VIRGINIA BEACH CITY PUBLIC SCHOOLS Planning Areas' divided into 'NORTHWEST', 'NORTHEAST', 'SOUTHWEST', and 'SOUTHEAST' regions, with various colored markers indicating school locations. Below the map are several photographs of school buildings, including 'W.T. COOKE ELEMENTARY', 'ERANK W. COX HIGH SCHOOL', and 'POINT OF VIEW ELEMENTARY'. A scale bar and north arrow are also present on the map.



Acknowledgements

DeJONG and HBA extend their appreciation to the Virginia Beach City Public School Division for commissioning this project and for its cooperation to make this study possible. Special acknowledgements go to John Kalocay, Tony Arnold, Kathy O'Hara, Donald Greer and their staffs for their tremendous support and guidance throughout the entire planning process.

We also thank the Steering Committee, attendees of the Educational Framework Conference and Community Dialogues, citizens who responded to the web questionnaire, and numerous community organizations that contributed to this study.



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Facility Master Plan Steering Committee

The School Division and Consultants would like to extend a special appreciation to the members of the Facility Master Plan Steering Committee.

This Committee represents a broad cross section of the community including parents, teachers, administrative staff, and community members. The Steering Committee had the important task of facilitating the development of a Master Facility Plan.

The Committee was responsible for reviewing demographic and facility data, examining future trends that will impact educational facilities, engaging the community in dialogue regarding future direction, formulating options for addressing school facility needs, and presenting recommendations to the School Board regarding the future facility needs of the Division.

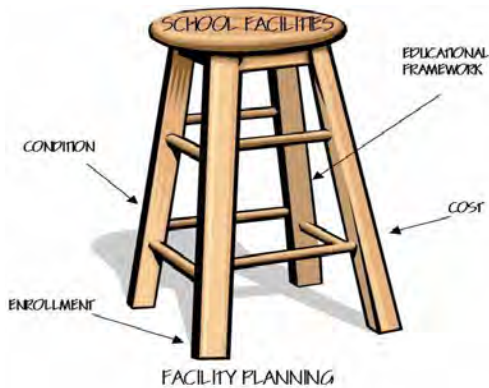
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Introduction



The City of Virginia Beach and Virginia Beach City Public Schools are committed to providing the greatest educational experience for all students enrolled in its schools. To ensure this commitment, school division and city officials realize that school facilities need to be

maintained and reflect environments conducive for learning and teaching. They also realize that the highest level of efficiency needs to be maintained for the school division's entire facility inventory. This facility study is more than just an examination of building conditions. It also takes into consideration enrollments, capacities, the desired educational framework, and finances. This process was entered as a proactive approach for exploring long-term facility options of determining which schools to build new, renovate, consolidate, and discontinue.

The Virginia Beach City Public Schools Long Range Facility Master Plan outlines a series of options for improving and rebuilding the Division's elementary, middle, and high schools. This master plan is data driven and provides an opportunity for broad based community input. However, this is the beginning, not the conclusion. It is hoped that through improving Virginia Beach City Public Schools' facilities, a new generation of schools will be in place to provide an appropriate learning environment for the next 50 to 60 years.

Facility Planning Process

The Facility Planning Process included the following milestones:

- Facility Assessments & Appraisals
 - 36 facilities were assessed by system i.e. roofing, heating, ventilation, cooling, windows, flooring, plumbing, etc.
 - Appraisals of subjective factors such as lighting, interior environments, technology, etc were conducted in 36 facilities
- Educational Framework Conference
 - Approximately 100 community leaders, parents, students, city administrators and Division personnel attended the conference to give broad-based input on Division-wide academic and facility topics
- Options Development
 - An Options Work Session was held to aggregate the Educational Framework results and build options based on data and Division expertise
- Community Dialogue
 - Community input on facility options was collected from the four planning areas
- Recommendations
 - Data collected and developed throughout the process was used to create facility recommendations for the School Division

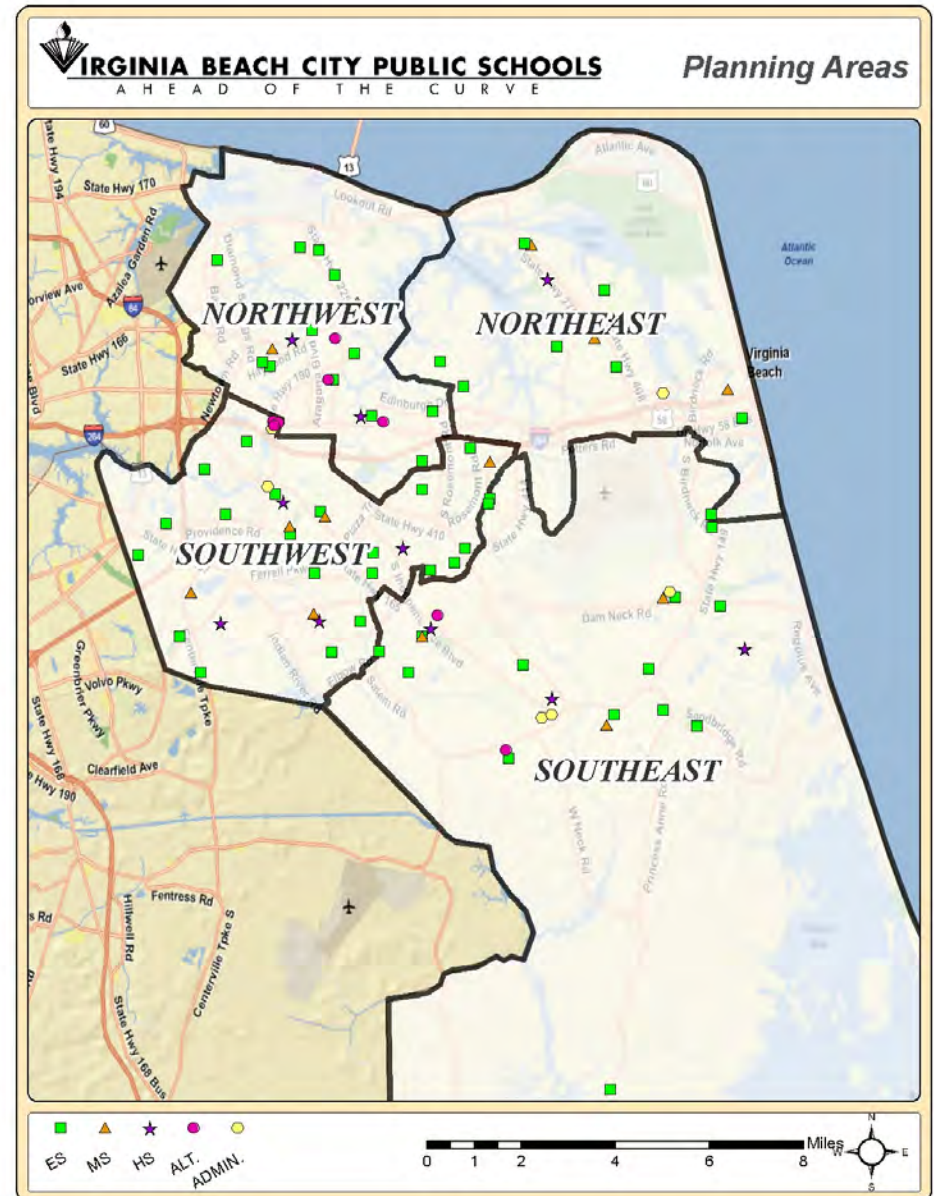
	Jan – Feb 2007 Task One: Project Implementation	March 2007 Task Two: Data Collection	April 2007 Task Three: Develop Options	May 2007 Task Four: Develop Plan	June - Aug 2007 Task Five: Finalize the Plan
Facilities Planning	Review Existing Division Information	Conduct Facility Assessments Educational Adequacy Site Inspections	Based on Data: Educational Framework, GIS Assessments, Enrollment Projections, Capacity Facility Options New Construction - Additions - Renovations - Building Replacement Initial Cost Estimates and Impact	Prioritization Criteria Construction/Renovation/ Additions Building Replacement Deferred Maintenance Cost and Timeline of Projects	<ul style="list-style-type: none"> ■ Assessment data including systems condition and detailed needs analysis for each site ■ Future building needs, present and future building capacities and operation and maintenance costs ■ List of proposed projects in priority order ■ School Board Work Session Presentation
Community Engagement	Determine Planning Areas Form Steering Committee Prepare for Community Dialogues	Compile Data into Background Report for Each Planning Area Educational Framework Conference Web Questionnaires	Planning Area Committee Meetings to Review Community Input Formation of Facility Options Area Community Dialogue #2 to Get Input on Options	Organization of Projects Construction/Renovation/ Additions Building Replacement Deferred Maintenance Steering Committee Recommendations Recommendations Developed into Master Plan	
	Steering Committee	Steering Committee	Steering Committee	Steering Committee	Steering Committee

Division-wide Planning Areas

At the beginning of the planning process the City was divided into four smaller manageable planning areas. These planning areas were largely determined by high school boundaries. Where possible, in creating the four planning areas for the city, significant geographic borders such as rivers, parks, and highways were also taken into consideration. The four planning areas are: Northeast, Northwest, Southwest, and Southeast.

This provided the opportunity to examine the facility needs of a geographic area and work collaboratively with community members to formulate options and recommendations for schools.

The four planning areas are outlined in the adjacent map and defined on the next four pages.



Northeast Planning Area

Elementary Schools

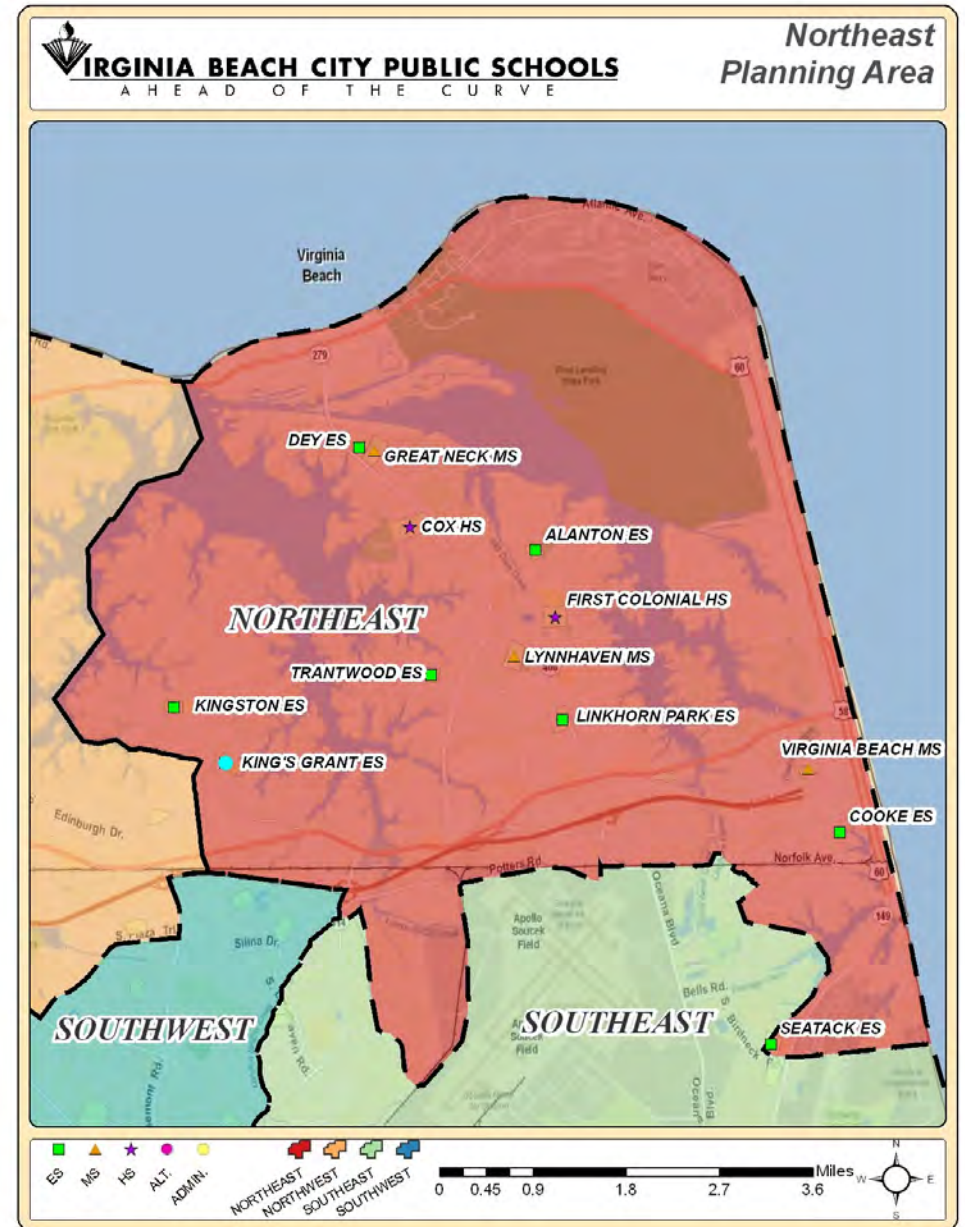
Alanton Elementary
Cooke Elementary
Dey Elementary
Kingston Elementary
King's Grant Elementary
Linkhorn Park Elementary
Seatack Elementary
Trantwood Elementary

Middle Schools

Great Neck Middle
Lynnhaven Middle
Virginia Beach Middle

High Schools

Cox High
First Colonial High



Northwest Planning Area

Elementary Schools

Bayside Elementary
Bettie F. Williams Elementary
Diamond Springs Elementary
Hermitage Elementary
Luxford Elementary
Malibu Elementary
Newtown Elementary
Pembroke Elementary
Pembroke Meadows Elementary
Shelton Park Elementary
Thalia Elementary
Thoroughgood Elementary
Windsor Woods Elementary

Middle Schools

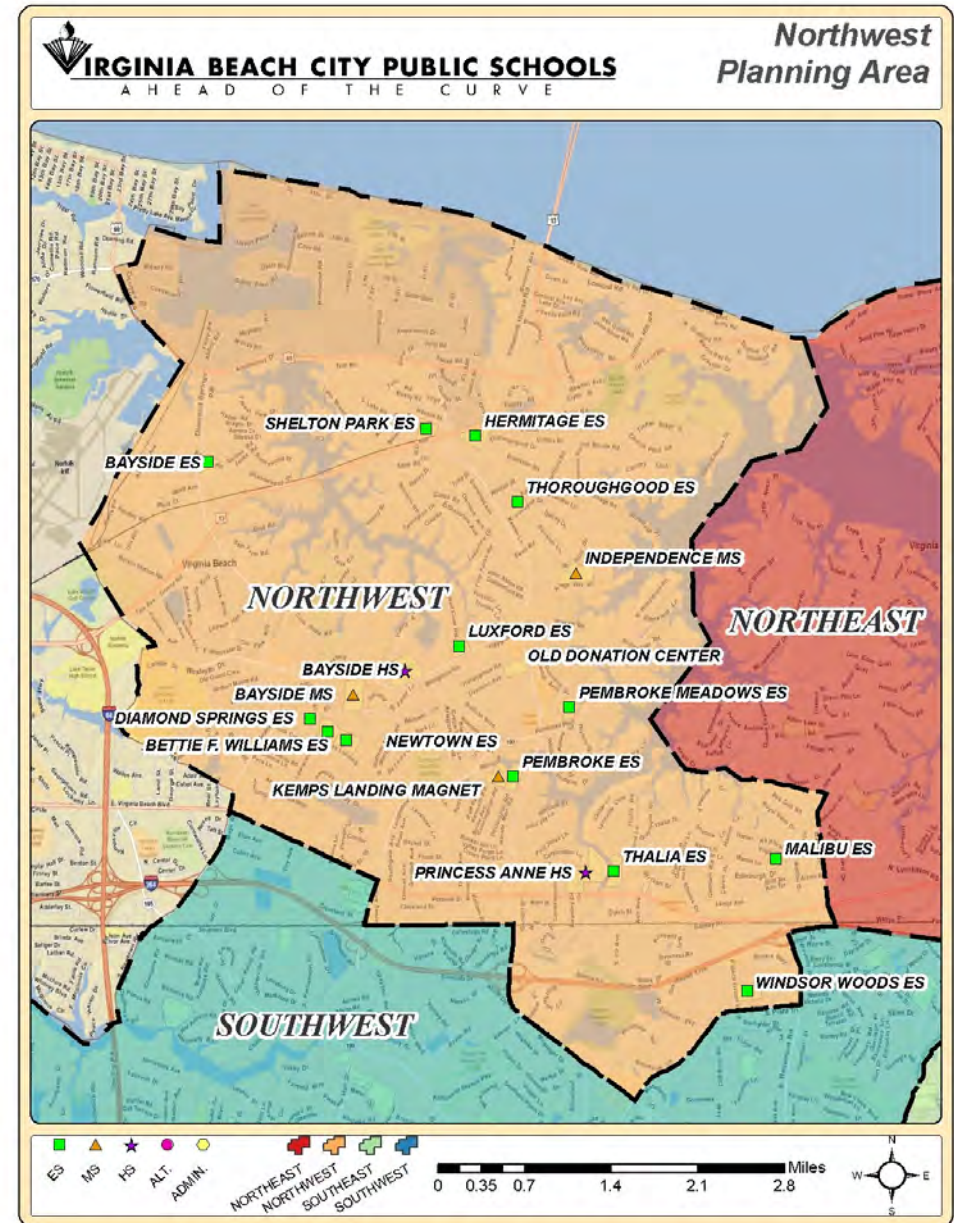
Bayside Middle
Independence Middle

High Schools

Bayside High
Princess Anne High

Gifted Magnet Schools

Kemps Landing Magnet
Old Donation Center



Southeast Planning Area

Elementary Schools

Birdneck Elementary
Brookwood Elementary
Christopher Farms Elementary
Corporate Landing Elementary
Creeds Elementary
Landstown Elementary
New Castle Elementary
North Landing Elementary
Ocean Lakes Elementary
Plaza Elementary
Princess Anne Elementary
Red Mill Elementary
Salem Elementary
Strawbridge Elementary
Three Oaks Elementary

Middle Schools

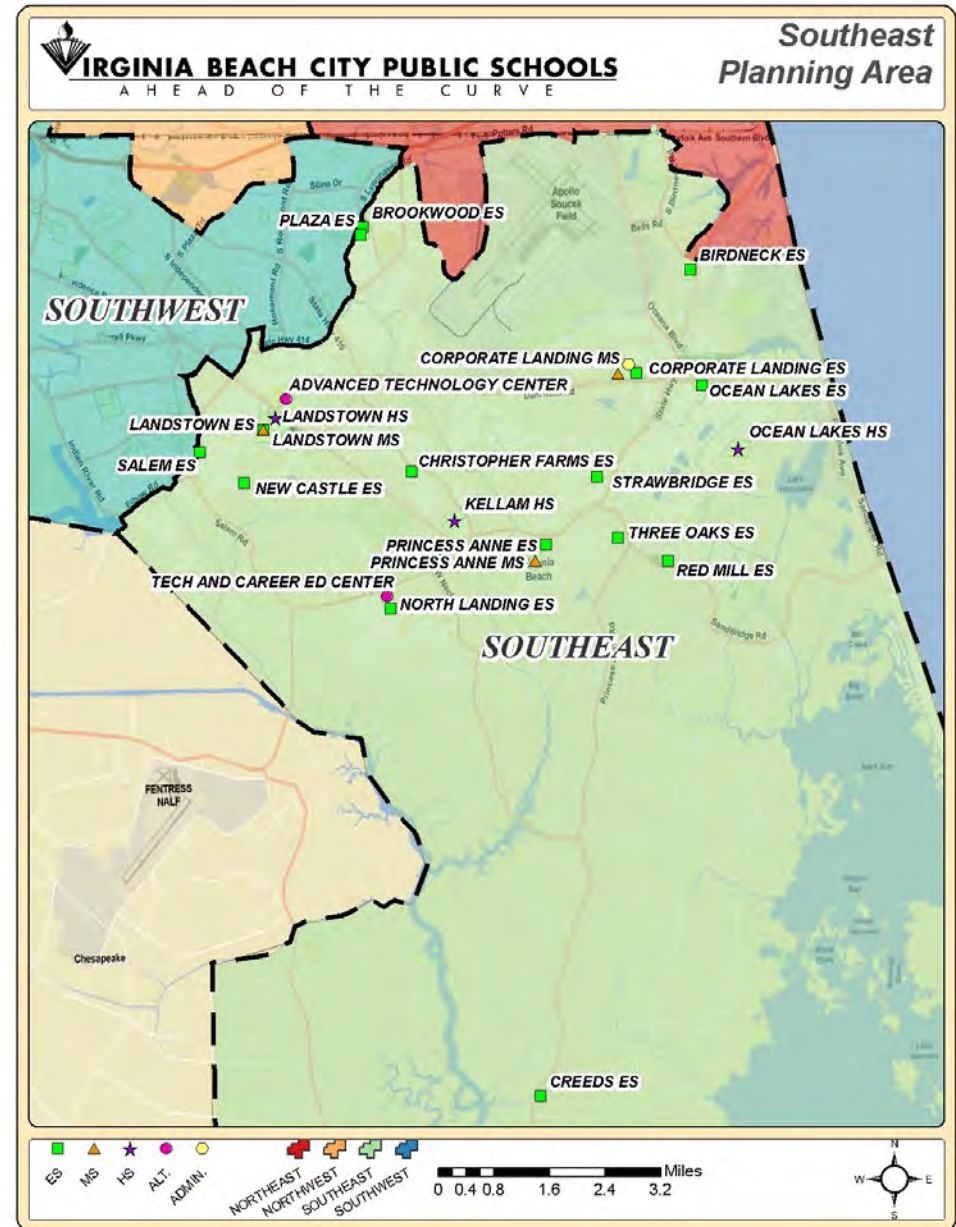
Corporate Landing Middle
Landstown Middle
Princess Anne Middle

High Schools

Kellam High
Landstown High
Ocean Lakes High

Technical Schools

Advanced Technology Center
Technical & Career Education Center



Southwest Planning Area

Elementary Schools

Arrowhead Elementary
Centerville Elementary
College Park Elementary
Fairfield Elementary
Glenwood Elementary
Green Run Elementary
Holland Elementary
Indian Lakes Elementary
Kempsville Elementary
Kempsville Meadows Elementary
Lynnhaven Elementary
Parkway Elementary
Point O'View Elementary
Providence Elementary
Rosemont Elementary
Rosemont Forest Elementary
Tallwood Elementary
White Oaks Elementary
Windsor Oaks Elementary
Woodstock Elementary

Middle Schools

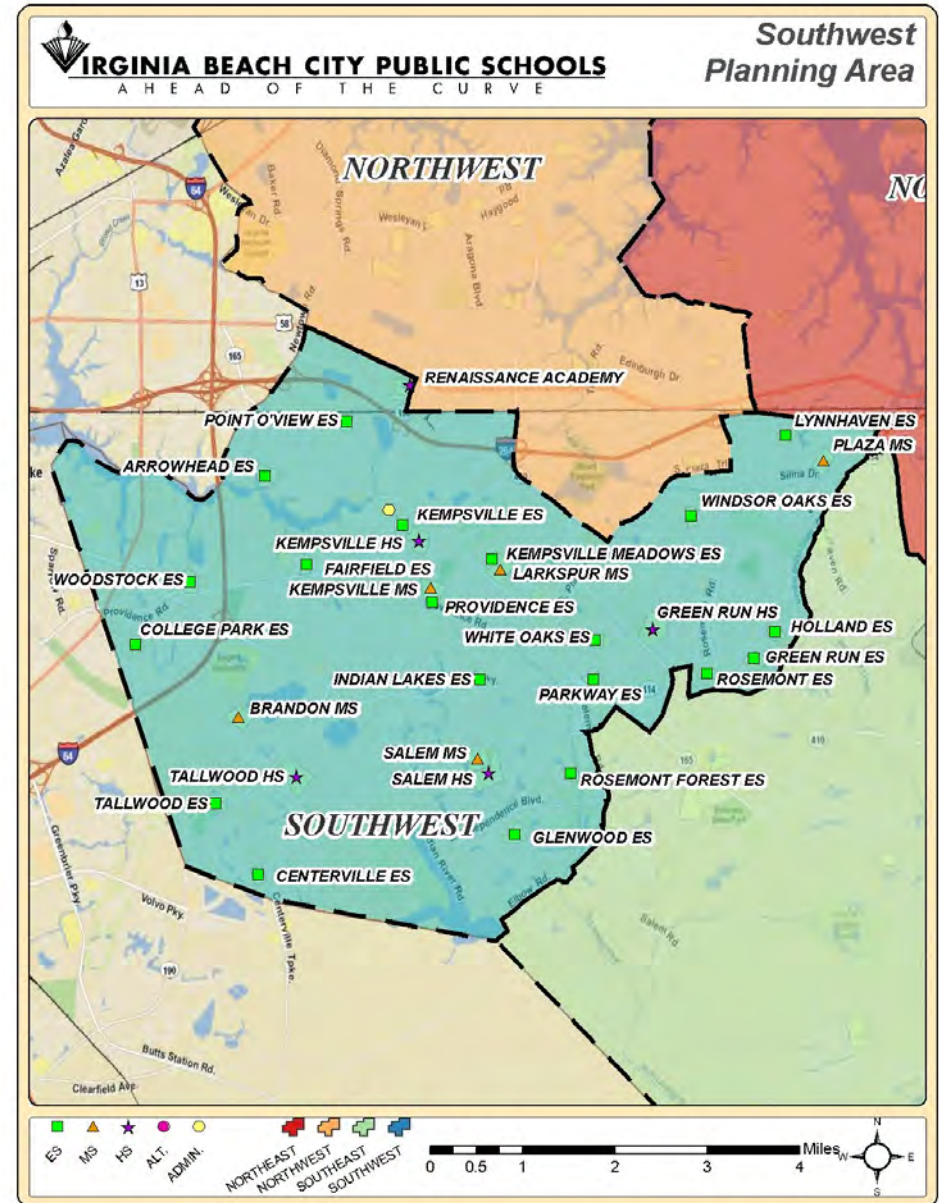
Brandon Middle
Kempsville Middle
Larkspur Middle
Plaza Middle
Salem Middle

High Schools

Green Run High
Kempsville High
Salem High
Tallwood High

Other Schools

Renaissance Academy



10 –Year Historic Modernization / Replacement Program

Since 1998, Virginia Beach City Public Schools has either fully modernized or replaced twenty-one (21) elementary schools. The ten years of elementary capital improvements completed one-third of the elementary schools in the Division and has had a positive impact on the educational environment across several school communities. The success of this program has also heightened awareness in the city’s older communities regarding the pressing need for renovation of the schools in their neighborhoods.

The adjacent chart reflects completed projects, projects currently under construction, and projects currently being designed. In addition to the current modernization and replacement program, the Division added one new elementary school (Three Oaks) and is in the process of adding a K-1 school (Diamond Springs Elementary) on the Newtown /Bettie F. Williams Campus.

Virginia Beach City Public Schools Modernization/Replacement Program and Proposed Schedule

Completed Projects			
Construction Started	School	Original Opening Date	Construction Complete
1996	Linkhorn Park ES	1955	1998
1997	WT Cooke ES	1906	1999
1998	Seatack ES	1952	2000
1999	Bayside ES	1941	2000
1999	Creeds ES	1939	2001
1999	Shelton Park ES	1954	2001
1999	Thalia ES	1956	2001
2000	Luxford ES	1961	2002
2001	Kempsville Meadows ES	1959	2002
2001	Woodstock ES	1957	2002
2001	Kempsville ES	1961	2003
2001	Malibu ES	1962	2003
2002	Pembroke ES	1962	2004
2002	Lynnhaven ES	1963	2004
2002	Trantwood ES	1963	2004
2003	Hermitage ES	1964	2005
2003	Arrowhead ES	1965	2005
2004	Pembroke Meadows ES	1969	2006

Projects Under Construction			
Construction Started	School	Original Opening Date	Construction Complete
2005	School Plant/Supply	1938	2007
2006	Windsor Woods ES	1966	2008
2006	Brookwood ES	1968	2008
2006	Newtown ES	1970	2008

Projects Being Designed			
Proposed Construction Start	School	Original Opening Date	Proposed Construction Complete
2007	Virginia Beach MS	1952	2010
2007	CEL/Central Academy/Alt. Ed	1948-1960	2010
2008	Windsor Oaks ES	1970	2009
2009	Great Neck MS	1961	2011

Division-wide Historic Enrollment by Grade Group

One of the key tasks of the Facility Master Plan is to accurately project enrollment. With a good understanding of how many students the Division will be serving in the future, facilities can be planned accordingly. To this end, historic enrollment trends were reviewed to project future enrollment.

The following table show the six year historic enrollment totals by grade group. Elementary school enrollment peaked at 34,647 students in 2001-02 and has decreased by over 3,000 since then. In the last six years, middle school enrollment peaked in 2003-04 and has since decreased by over 1,800 students. High school enrollment reached a high of 23,474 in 2004-05; 2006-07 enrollment was 23,321 students.

Virginia Beach City Public Schools Division Wide Historic Enrollment						
Grade	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
K	4,728	4,873	4,891	4,846	4,904	4,705
1	5,470	5,546	5,588	5,501	5,400	5,395
2	5,712	5,639	5,466	5,533	5,374	5,250
3	5,667	5,814	5,670	5,446	5,466	5,312
4	5,986	5,849	5,869	5,681	5,425	5,399
5	5,856	6,220	5,873	5,814	5,606	5,318
ES Special Ed*	1,228	counted in grade levels				
K-5 sub total	34,647	33,941	33,357	32,821	32,175	31,379
6	6,317	6,215	6,310	6,000	5,851	5,519
7	6,181	6,338	6,234	6,233	5,854	5,794
8	6,089	6,189	6,322	6,123	6,108	5,708
6-8 sub total	18,587	18,742	18,866	18,356	17,813	17,021
9	6,687	7,001	7,094	7,132	6,761	6,705
10	5,865	5,855	5,945	5,972	6,148	5,925
11	5,451	5,215	5,278	5,544	5,611	5,605
12	4,643	4,988	4,882	4,826	4,940	5,086
9-12 sub total	22,646	23,059	23,199	23,474	23,460	23,321
Ungraded	46	16	2	0	0	0
TOTAL	75,926	75,758	75,424	74,651	73,448	71,721

Source: Virginia Beach City Public Schools

*Special Ed not counted in grade level for ES until 2002-03

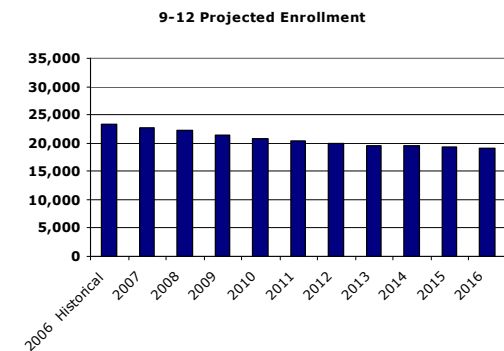
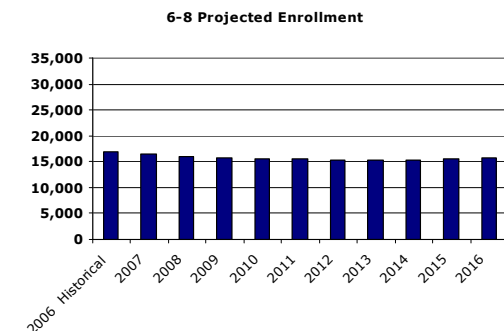
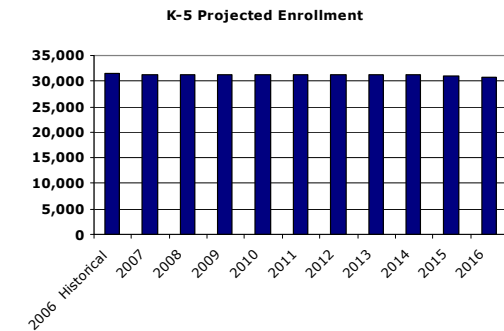
Grades 6-12 Special Ed counted in respective grade levels

Enrollment Projections – Division-wide by Grade Groups

The table below and charts to the right illustrate the projected enrollment by grade groups. The 2006 column illustrates actual 2006-07 historical enrollment. Enrollment in the K-5 grade group is projected to decrease by approximately 551 students. Enrollment in the 6-8 grade group is projected to decrease by approximately 1,291 students. Enrollment in the 9-12 grade group is projected to decrease by approximately 4,131 students. This fluctuation in grade group projections will result in an overall K-12 enrollment decrease of approximately 5,973 students.

Virginia Beach City Public Schools Division Wide Projected Enrollment											
Grade	2006 Historical	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
K	4,705	4,766	4,870	4,893	4,879	4,795	4,777	4,759	4,741	4,723	4,705
1	5,395	5,237	5,305	5,421	5,446	5,431	5,337	5,317	5,297	5,277	5,257
2	5,250	5,347	5,191	5,258	5,373	5,398	5,383	5,290	5,270	5,250	5,230
3	5,312	5,198	5,294	5,139	5,205	5,319	5,344	5,329	5,237	5,217	5,198
4	5,399	5,341	5,226	5,323	5,167	5,234	5,348	5,373	5,358	5,266	5,246
5	5,318	5,323	5,266	5,152	5,248	5,094	5,160	5,273	5,298	5,283	5,192
ES subtotal	31,379	31,212	31,152	31,186	31,318	31,271	31,349	31,341	31,201	31,016	30,828
6	5,519	5,328	5,332	5,275	5,162	5,257	5,103	5,169	5,282	5,307	5,292
7	5,794	5,475	5,285	5,290	5,233	5,120	5,215	5,063	5,128	5,240	5,265
8	5,708	5,720	5,405	5,217	5,222	5,166	5,055	5,148	4,998	5,062	5,173
MS Subtotal	17,021	16,523	16,022	15,782	15,617	15,543	15,373	15,380	15,408	15,609	15,730
9	6,705	6,423	6,436	6,082	5,871	5,876	5,813	5,688	5,793	5,624	5,696
10	5,925	5,773	5,530	5,541	5,236	5,055	5,059	5,005	4,897	4,988	4,842
11	5,605	5,421	5,282	5,059	5,070	4,791	4,624	4,629	4,579	4,480	4,563
12	5,086	5,115	4,947	4,820	4,617	4,627	4,372	4,220	4,224	4,179	4,089
HS subtotal	23,321	22,732	22,195	21,502	20,794	20,349	19,868	19,542	19,493	19,271	19,190
TOTAL	71,721	70,467	69,369	68,470	67,729	67,163	66,590	66,263	66,102	65,896	65,748

Source: DeJONG



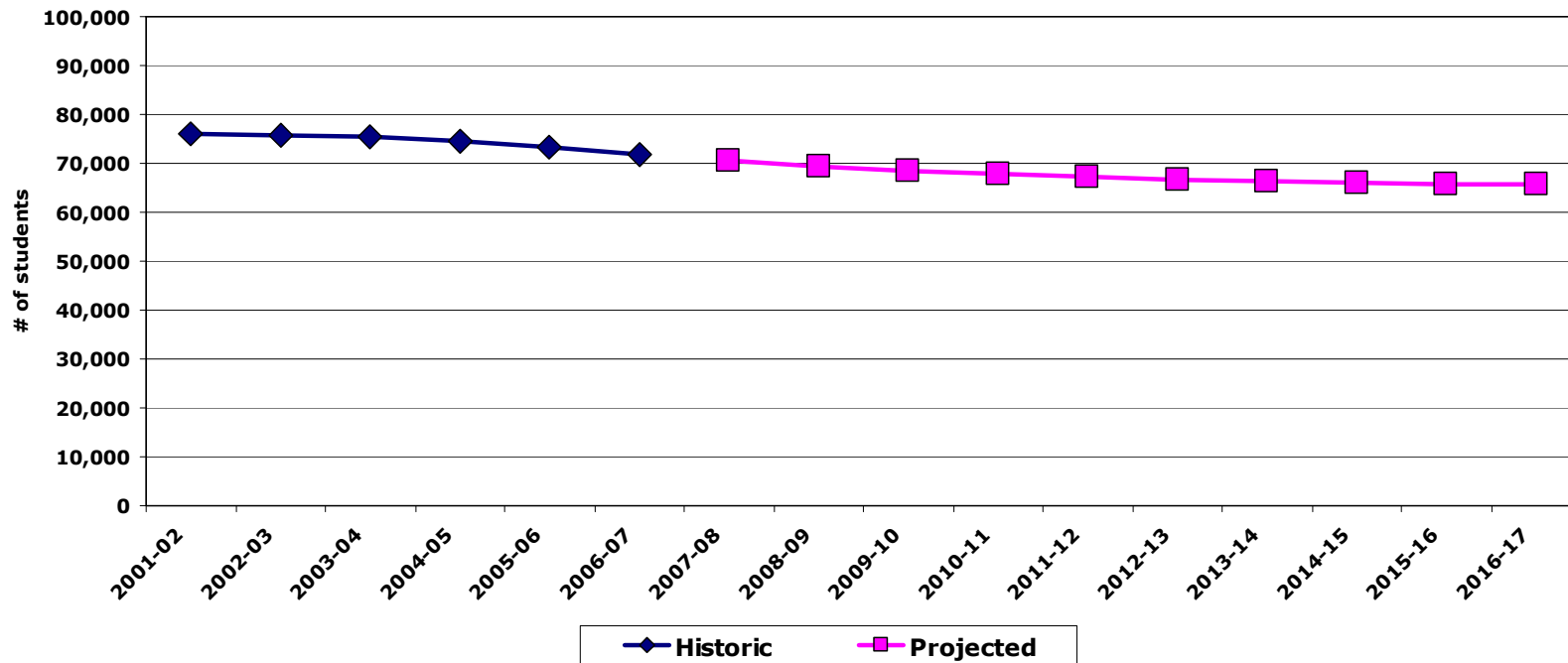
Historical / Projected Enrollment Comparison

This table and chart illustrate the historical and projected enrollment. Enrollment is projected to decrease by approximately 5,973 students by 2016-17.

Historical/Projected Enrollment Comparison																
	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Historical	75,926	75,758	75,424	74,651	73,448	71,721										
Projected							70,467	69,369	68,470	67,729	67,163	66,590	66,263	66,102	65,896	65,748

Source: DeJONG

Virginia Beach City Public Schools Historical/Projected Enrollment Comparison



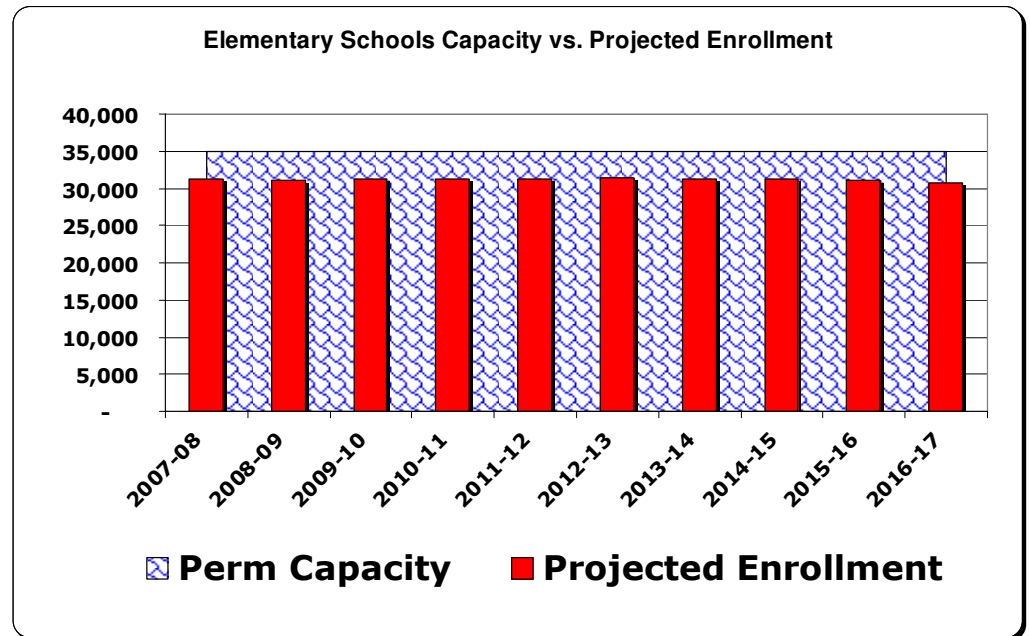
Projected Enrollment vs. Permanent Capacity

A student capacity analysis was conducted for each school. The capacity analysis is based on the targeted pupil-to-teacher ratio based on an established methodology for calculating capacities for elementary, middle, and high schools. Student capacity, calculated for elementary, middle, and high schools for each of the four planning areas is a critical factor in analyzing space requirements to accommodate projected enrollment when planning for future school facilities.

The tables and charts below and on the following pages compare Division-wide permanent classroom capacity to the ten year projected enrollment by grade level.

Elementary School Projected Enrollment vs. Capacity

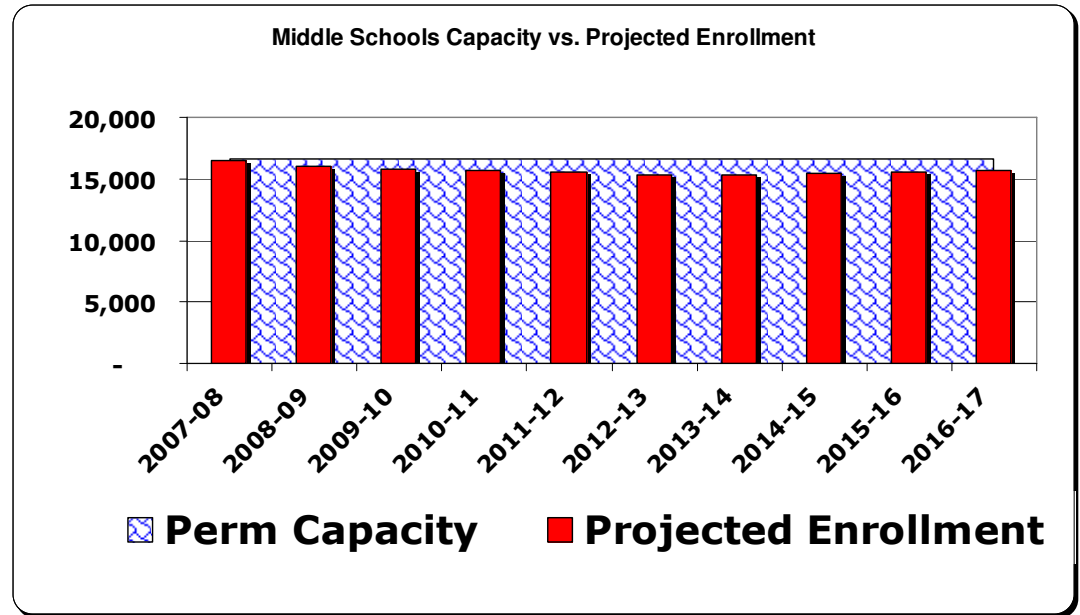
Year	Projected Enrollment	Perm Capacity	Perm Capacity vs Proj Enrlmt
2007-08	31,212	35,019	3,807
2008-09	31,152	35,019	3,867
2009-10	31,186	35,019	3,833
2010-11	31,318	35,019	3,701
2011-12	31,271	35,019	3,748
2012-13	31,349	35,019	3,670
2013-14	31,341	35,019	3,678
2014-15	31,201	35,019	3,818
2015-16	31,016	35,019	4,003
2016-17	30,828	35,019	4,191



The table and chart below compare Middle School projected enrollment and capacity.

Middle School Projected Enrollment vs. Capacity

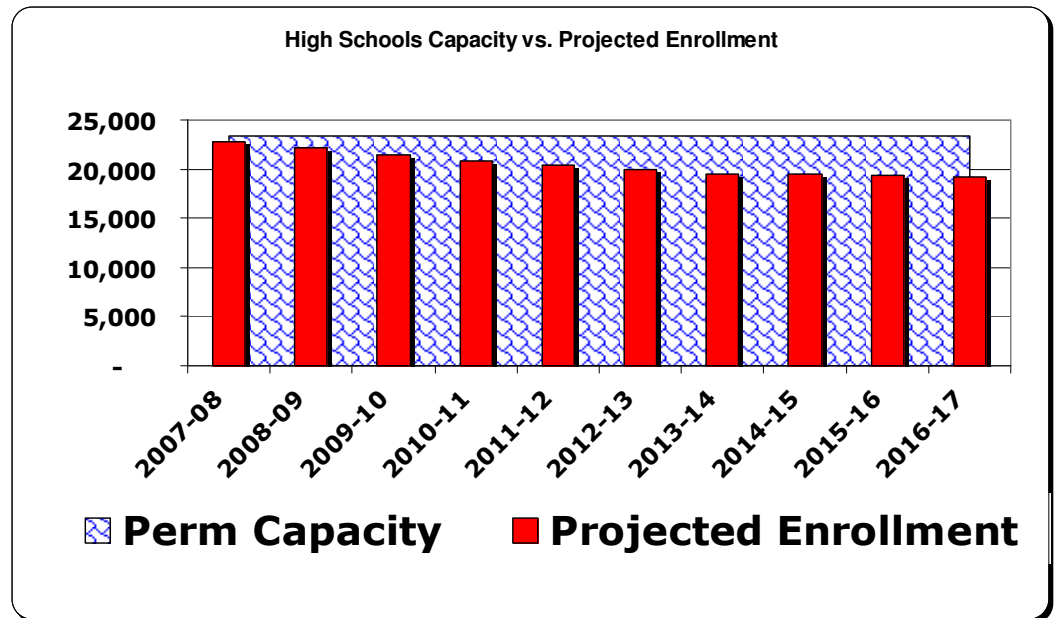
Year	Projected Enrollment	Perm Capacity	Perm Capacity vs Proj Enrlmt
2007-08	16,523	16,604	81
2008-09	16,022	16,604	582
2009-10	15,782	16,604	822
2010-11	15,617	16,604	987
2011-12	15,543	16,604	1,061
2012-13	15,373	16,604	1,231
2013-14	15,380	16,604	1,224
2014-15	15,408	16,604	1,196
2015-16	15,609	16,604	995
2016-17	15,730	16,604	874



The table and chart below compare High School projected enrollment and capacity.

High School Projected Enrollment vs. Capacity

Year	Projected Enrollment	Perm Capacity	Perm Capacity vs Proj Enrlmt
2007-08	22,732	23,363	631
2008-09	22,195	23,363	1,168
2009-10	21,502	23,363	1,861
2010-11	20,794	23,363	2,569
2011-12	20,349	23,363	3,014
2012-13	19,868	23,363	3,495
2013-14	19,542	23,363	3,821
2014-15	19,493	23,363	3,870
2015-16	19,271	23,363	4,092
2016-17	19,190	23,363	4,173



Facility Assessment

Facility assessments were conducted on thirty-six Virginia Beach City Public School facilities as part of the long range comprehensive master planning process. For the facilities that had modernization studies done in the past, the assessments reflect the data gathered from those studies. Assumptions were made that newer buildings were adequate and did not require assessments.

This process involved assessing the schools by individual systems (e.g. roofing, heating, ventilation, cooling, windows, flooring, and plumbing). Each system was evaluated based on a number of factors:

- Age of the system
- Life expectancy of the system
- Condition of the system

The assessor assigned a value between 1 and 5 to each system (1= immediate replacement; 5 = brand new). The values were then averaged together based upon the percentage of that type of system. For example, the floors in each building might have carpet, terrazzo, concrete, and ceramic tile over varying percentages of the total floor. These were averaged based upon the amount of floor covered. The averages were then expressed as a percentage between 1 and 0 (1 = system life exceeded; 0 = brand new system). This number is called a System Condition Index.

These individual building systems were averaged together using a system importance factor which was developed from taking the schedule of values for current construction projects and separating the amounts based upon which category they fit. This provided a dollar amount per square foot for each system as well as a percentage of the total cost for each system.

These values allowed the assessors to assign correct importance to each System Condition Index, resulting in a more accurate Facility Condition Index (FCI). The FCI is also a value between 1 and 0 with 1 being immediate replacement and 0 being brand new.

This value was then combined with the Educational Adequacy Index (EAI) to produce a **Total Condition Index (TCI)**. The TCI correctly expressed the building condition as a combination of the condition of the facility and the adequacy of the learning environments. This resulted in the ability to evaluate each building in its entirety.

Educational Adequacy Appraisals

HBA conducted Educational Adequacy Appraisals on thirty-six elementary, middle, and high school facilities as part of the long range comprehensive master planning process. This type of appraisal involved assessing how well the building and site support the instructional program. For the facilities that had modernization studies done in the past, the appraisal results compiled for them were used in this report. Newer buildings were assumed to be adequate and did not require appraisals. They were, however, assigned a 100% rating assuming total possible points would be achieved.

Although this was a subjective appraisal, it was a valuable tool to use for looking at a facility on a more comprehensive basis, and it considered the size, location, and types of academic and support spaces. If we are asking teachers to team teach, do we provide them a separate place to collaborate? Are the classrooms large enough to allow for flexible arrangements for various program delivery styles? Does the location of a room make sense? (Is the music room anywhere near the stage?) Do the Kindergarten classrooms have direct access to their own playground? Do administrators have access to conference rooms? Does the community have access to areas they use after hours? Is the building inviting? Is it safe and secure? Can you find the front door on your first attempt?

Factors considered *in general* included size, location, adjacencies, furnishings, flexibility of spaces, technology, artificial and natural light, acoustics, support spaces, and storage.

Additionally, large group spaces such as *gymnasiums, cafeterias, auditoriums*, were evaluated for specialty lighting, sound systems, and accessibility to community.

The *administration, guidance, clinic, and teacher workroom* spaces were also appraised. In addition to the general factors, privacy of offices, conference rooms, and workrooms were considered.

The *interior environment* was appraised with consideration for factors such as wayfinding (appropriate signage), welcoming environment, pleasing colors and adequate display for student work, areas for student interaction, lighting, technology, and flexibility.

Factors for *lobbies, commons spaces and corridors* included adequate size for safe traffic flow and gathering space and sufficient number of restrooms and drinking fountains.

The *school site* was assessed regarding size (number of acres), suitability for outdoor learning, appropriately located

and equipped playgrounds and playfields, separation of vehicular and pedestrian traffic, separation of bus, car, and service vehicles, adequate parking and landscaping.

Each category had a total number of possible points, and the score earned by category as well as for the entire building and resulting percent show how well the school supports the educational program. The sample for an elementary school below explains the calculation:

Total Possible Points (Elementary School)	Total Points Earned	Percent (This is also the EAF or Educational Adequacy Factor)	Rating
1,300	1,120	.86	Satisfactory

The Rating Scale is further explained below:

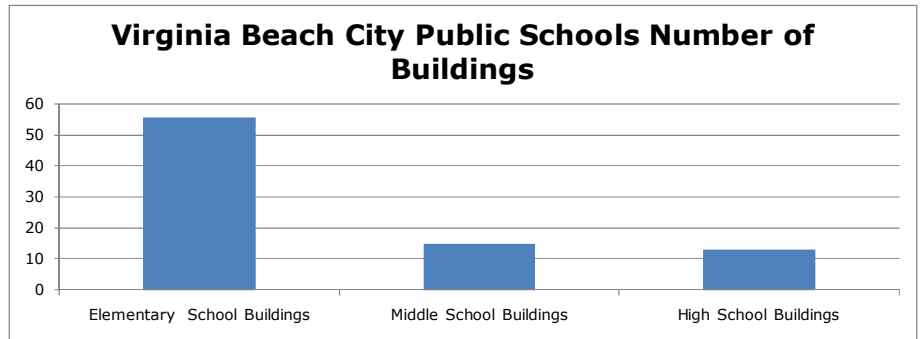
Rating	Percent
Excellent	90-100%
Satisfactory	70-89%
Borderline	50-69%
Poor	30-49%
Inadequate	1-19%

The detailed report for each school assessed is contained in Volume III of the Long Range Facility Master Plan Report.

Facility Data

The table below and the chart to the right illustrate the number of buildings in Virginia Beach City Public Schools inventory.

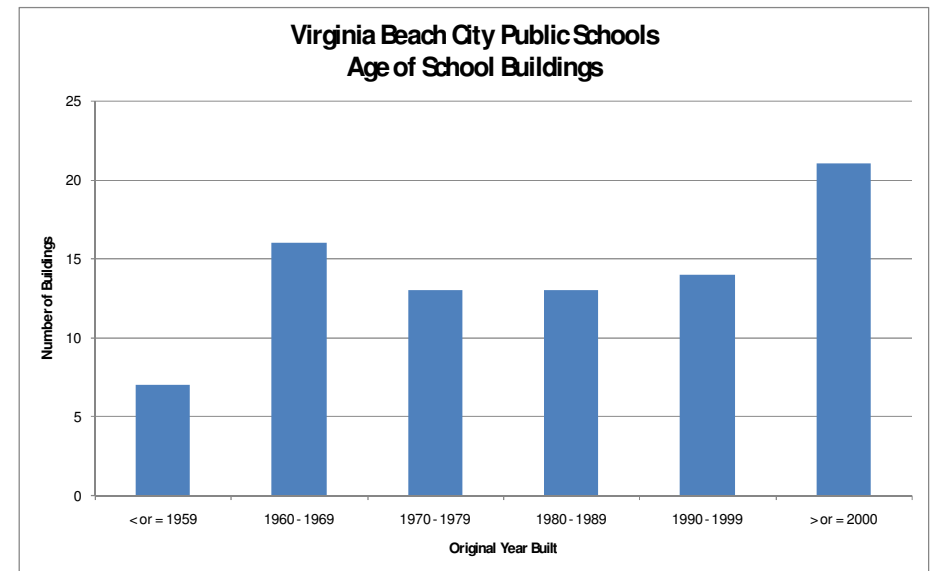
Virginia Beach City Public Schools Number of Buildings	
School Level	# of Buildings
Elementary School Buildings	56
Middle School Buildings	15
High School Buildings	13
Grand Total	84



Facility Age

This table and chart illustrate the age of public school buildings in Virginia Beach. VBCPS has seven buildings, just under 10% of their entire inventory, originally constructed before 1960. Over the following five decades, VBCPS constructed an average of 15 buildings each decade, bringing the total number of buildings to 84.

Virginia Beach City Public Schools Age of School Buildings		
Years	# of Buildings	% of Buildings
< or = 1959	7	8%
1960 - 1969	16	19%
1970 - 1979	13	15%
1980 - 1989	13	15%
1990 - 1999	14	17%
> or = 2000	21	25%

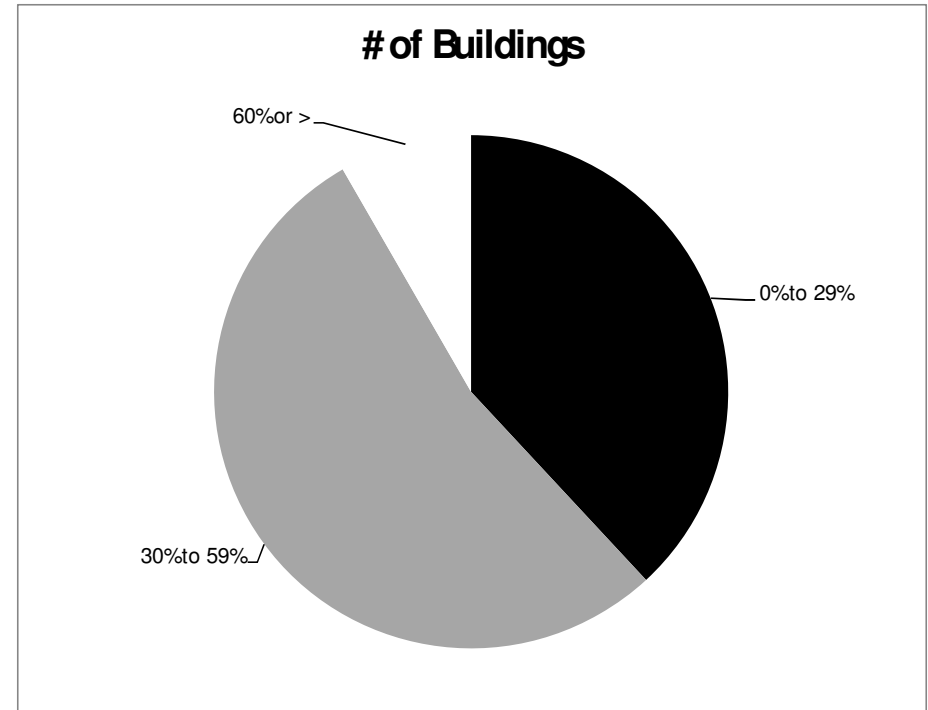


Facility Condition

The condition of a building is determined by evaluating the systems within that facility and estimating costs based on the life cycle or even deficiencies of each system. The Facility Condition Index [FCI] is a percentage indicator of the cost of renovation divided by the cost of school replacement.

This table and chart illustrate the Facility Condition Index for Virginia Beach City Public School buildings. The Facility Condition Index is reflected as a percentage that should be interpreted as the **lower** the percentage the **better** the condition is of the facility.

Virginia Beach City Public Schools Facility Condition Index (FCI) of School Buildings		
FCI	# of Buildings	% of Buildings
0% to 29%	32	38%
30% to 59%	45	54%
60% or >	7	8%



Cost Assumptions

The table below represents total project cost estimates for new or replacement school buildings throughout Virginia Beach for all Planning Areas. Please note that these are only planning estimates based on projected 2008 costs and are being used for comparative purposes only. Once a project is selected and designed, more precise estimates will be determined.

Estimated Total Project Cost per Square Foot*			
Action	Elementary School	Middle School	High School
New Construction	\$170	\$189	\$202

*The above costs do NOT include 25% soft costs for design fees, contingencies, furniture/equipment, etc. The costs do NOT include purchase of sites, sale of existing properties, or demolition of schools if they are to be replaced.

The square footage would include but not be limited to:

- Pre-Kindergarten Classrooms
- Classrooms
- Special Education Classrooms
- Art Rooms
- Music Rooms
- Computer Labs
- Library/Media Centers
- Gymnasiums
- Cafeteria/Food Service
- Support spaces such as offices, conference rooms, storage, etc.
- Corridor, lobby, stairwell, elevator and other circulation spaces
- Mechanical spaces
- Custodial spaces

The following square footages will be used to determine the physical size of educational facilities. These square footages are based on national norms.

Target Space per Student (in sq. ft.)	
Elementary	140
Middle	170
High	170

Master Plan Definitions

The Master Plan recommends specific actions at each facility. The terms below provide a description of the suggested actions incorporated within the facility options.

Replacement entails building a new school facility either on the same site or at a new location.

Full Modernization includes extensive renovation to bring the building up to current codes and creating appropriate learning environments. This would include replacement of or upgrades to building components [Handicapped accessibility, heating/ventilation/air-conditioning, roof, electrical, windows, flooring, ceiling, lighting, technology infrastructure] and interior reconfiguration of space to support educational programs. Full modernization may include the construction of new space to provide adequate program area. After having undergone a full modernization, an existing building would be comparable to a new building.

Component Replacement includes bringing a school building up to current codes. However, the amount of work to be completed would be less extensive than a major renovation. This could include replacement or upgrades to building components [Handicapped accessibility, heating/ventilation/air conditioning, roof, electrical, windows, flooring, ceiling, lighting, technology infrastructure].

Demolition/Modernization/New Construction typically applies to campuses that have multiple buildings or separate additions. In this case the option refers to the modernization of building(s) that can be adapted to today's building standards, demolition of the building(s) deemed inadequate and new construction of spaces to meet program and square footage requirements.

General Maintenance means continued general maintenance but no renovations.

New School means the school building was recently constructed and will operate on a maintenance schedule with no capital cost associated for the building.

Relocate means to place the program at another existing facility that could become available as a result of the long range facility plan.

Options Development

The background and facility data gathered by HBA and DeJONG along with the educational framework, facility assessments, and educational adequacy assessments were used to develop facility options. In addition, the following guiding principles and assumptions were used in developing options:

- Focusing on neighborhoods
- Aligning schools to where students live
- Right-sizing buildings to enrollment
- Modernizing or replacing facilities
- Creating 21st century learning environments

Options were developed within the four Planning Areas. Developing options in this manner allowed for options to be based on specific community needs that were also aligned with equity throughout the Division. For each of the four planning areas, options were developed: Full Modernization, Demolition/Modernization/New, Replace, Relocate, Component Replacement, or General Maintenance.

The School Division invited the community to a series of four dialogues held in each Planning Area to provide input regarding these facility options. There were approximately 500 community members in attendance at the four dialogues. Community members received background

information regarding the School Division and its facilities. Participants reviewed the facility options and responded to questions presented in a questionnaire.

The options charts for each planning area's elementary and middle schools, Division-wide high schools, and gifted schools are on the following pages.

The full results of the Community Dialogues are included in Volume II.



Facility Options

Northeast

The table below lists the Elementary and Middle School options presented for the Northeast Planning Area.

School Name	Total Condition Index	Anticipated Enrollment	Option A		Option B		Option C	
			Action	Cost Estimate (2008 Dollars)	Action	Cost Estimate (2008 Dollars)	Action	Cost Estimate (2008 Dollars)
Alanton ES	57%	574	Full Modernization	\$11.5m	Demo/ Mod/ New	\$16.1m	Replace	\$20m
John B. Dey ES	95%	742	Full Modernization	\$16.3m			Replace	\$23.1m
King's Grant ES	63%	624	Full Modernization	\$12.6m	Demo/ Mod/ New	\$16.5m	Replace	\$20m
Kingston ES	62%	565	Full Modernization	\$12.80	Demo/ Mod/ New	\$17.7m	Replace	\$20m
MIDDLE SCHOOLS								
Lynnhaven MS	61%	1,222	Full Modernization	\$33.8m	Demo/ Mod/ New	\$48.4m	Replace	\$53m

Northwest

The table below lists the Elementary and Middle School options presented for the Northwest Planning Area.

School Name	Total Condition Index	Anticipated Enrollment	Option A		Option B		Option C	
			Action	Cost Estimate (2008 Dollars)	Action	Cost Estimate (2008 Dollars)	Action	Cost Estimate (2008 Dollars)
Bettie F. Williams ES	80%	685	Full Modernization	\$14m	Demo/Mod/New	\$16m	Replace	\$20m
Thoroughgood ES	80%	584	Full Modernization	\$13m	Demo/Mod/New	\$17.9m	Replace	\$20m
MIDDLE SCHOOLS								
Bayside MS	72%	766	Full Modernization	\$42.9m	Demo/Mod/New	\$46.9m		
Independence MS	57%	1,242	Full Modernization	\$40.70	Demo/Mod/New	\$48.9m	Replace	\$53m

Southeast

The table below lists the Elementary and Middle School options presented for the Southeast Planning Area.

School Name	Total Condition Index	Anticipated Enrollment	Option A		Option B		Option C	
			Action	Cost Estimate (2008 Dollars)	Action	Cost Estimate (2008 Dollars)	Action	Cost Estimate (2008 Dollars)
North Landing ES	72%	561	Full Modernization	\$12.9m	Demo/ Mod/ New	\$19.8m	Replace	\$19.8m
Plaza ES	60%	440	Full Modernization	\$13m	Demo/ Mod/ New	\$16.4m	Replace	\$19.9m
Princess Anne ES	78%	591	Full Modernization	\$11.3m	Demo/ Mod/ New	\$15.5m	Replace	\$20m
MIDDLE SCHOOLS								
Princess Anne MS	95%	1,492	Full Modernization	\$38.3m			Replace	\$53m

Southwest

The table below lists the Elementary and Middle School options presented for the Southwest Planning Area.

School Name	Total Condition Index	Anticipated Enrollment	Option A		Option B		Option C	
			Action	Cost Estimate (2008 Dollars)	Action	Cost Estimate (2008 Dollars)	Action	Cost Estimate (2008 Dollars)
College Park ES	96%	439	Full Modernization	\$14.9m			Replace	\$19.8m
Fairfield ES	76%	602	Full Modernization	\$14m			Replace	\$19.8m
Green Run ES	74%	468	Full Modernization	\$13.5m			Replace	\$19.8m
Holland ES	62%	525	Full Modernization	\$11.9m	Demo/Mod/New	\$16.2m	Replace	\$20m
Indian Lakes ES	59%	535	Full Modernization	\$11.6m			Replace	\$19.9m
Point O'View ES	60%	441	Full Modernization	\$12.3m	Demo/Mod/New	16.4m	Replace	\$20m
White Oaks ES	63%	820	Full Modernization	\$11.1m			Replace	\$20m
MIDDLE SCHOOLS								
Kempsville MS	86%	1,005	Full Modernization	\$40.9m			Replace	\$53m
Plaza MS	68%	843	Full Modernization	\$36.5m			Replace	\$53.3m

Division-wide High Schools

The table below lists the High School options presented for the Division.

School Name	Total Condition Index	Anticipated Enrollment	Option A		Option B		Option C	
			Action	Cost Estimate (2008 Dollars)	Action	Cost Estimate (2008 Dollars)	Action	Cost Estimate (2008 Dollars)
Bayside HS	63%	1,438	Full Modernization	\$43.1m	Demo/Mod/New	\$63.3m	Replace	\$71.0m
First Colonial HS	65%	1,896	Full Modernization	\$71.0m	Demo/Mod/New	\$90.5m	Replace	\$93.6m
Kellam HS	77%	1,815	Full Modernization	\$72.7m	Demo/Mod/New	\$88.4m	Replace	\$93.9m
Kempsville HS	79%	1,531	Full Modernization	\$52.5m	Demo/Mod/New	\$67.1m	Replace	\$75.6m
Princess Anne HS	89%	1,603	Full Modernization	\$47.2m	Demo/Mod/New	\$70.5m	Replace	\$76.2m
Technical & Career Center	49%	Included with HS Projections	Full Modernization	\$16.4m			Replace	\$32.3m

Gifted Schools

The table below lists the Gifted School options presented for the Division.

School Name	Total Condition Index	Anticipated Enrollment	Option A		Option B	
			Action	Cost Estimate (2008 Dollars)	Action	Cost Estimate (2008 Dollars)
Old Donation Center	98%	500	Full Modernization	\$16.1m	Relocate	TBD
Kemps Landing	98%	600	Full Modernization	\$17.5m	Relocate	TBD

Recommendations

The Virginia Beach City Public Schools Long Range Facility Master Plan Steering Committee is pleased to submit the following recommendations.

1. The Facility Master Plan Steering Committee recognizes the outstanding efforts of Virginia Beach City Public Schools in addressing the improvement of school facilities through Project Renovate.

In the past ten years, Virginia Beach City Public Schools successfully renovated, replaced, or newly constructed 21 elementary projects throughout the School Division. At the time of these recommendations, the Division is also in design or construction of seven [7] additional school projects.

Many of these schools were renovated or replaced as a result of the aging of facilities and to improve the educational environment for teaching and learning.

Project Renovate projects in the past ten years have focused on elementary schools. There remain many elementary schools which will still need to be addressed as well as more challenging middle and high school projects.

2. The Facility Master Plan Steering Committee recommends the following projects to be included in the Long Range Facility Master Plan.

Elementary Schools

- Alanton ES
- Bettie F. Williams ES
- College Park ES
- John B. Dey ES
- Fairfield ES
- Green Run ES
- Holland ES
- Indian Lakes ES
- King's Grant ES
- Kingston ES
- North Landing ES
- Old Donation Center
- Plaza ES
- Point O'View ES
- Princess Anne ES
- Thoroughgood ES
- White Oaks ES

Middle Schools

- Bayside MS
- Independence MS
- Kemps Landing Magnet
- Kempsville MS

- Lynnhaven MS
- Plaza MS
- Princess Anne MS

High Schools

- Bayside HS
- First Colonial HS
- Kellam HS
- Kempsville HS
- Princess Anne HS
- Technical & Career Education Center

The schools listed should receive extensive renovation or be replaced during the next 10-20 years.

3. The Facility Master Plan Steering Committee proposes the following prioritization of projects.

The Committee recognizes that the implementation of a building program of this size must be staged in phases. Phases will provide an opportunity to manage large scale projects with efficiency and attention to detail. The primary method for determining the order of projects was based on the criteria as determined in the educational framework and input received through the community dialogues.

The prioritization of **all schools in this plan** might be as follows:

Phase I:

1. Kellam HS
2. Princess Anne MS
3. College Park ES
4. John B. Dey ES
5. Princess Anne HS
6. Thoroughgood ES
7. Old Donation Center
8. Kemps Landing Magnet
9. Plaza ES

Phase II:

- 10.Kempsville HS
- 11.Kempsville MS
- 12.Bettie F. Williams ES
- 13.Princess Anne ES
- 14.First Colonial HS
- 15.King's Grant ES
- 16.Plaza MS

Phase III:

- 17.North Landing ES
- 18.Bayside HS
- 19.Lynnhaven MS
- 20.Green Run ES
- 21.Independence MS
- 22.Fairfield ES
- 23.Kingston ES
- 24.Bayside MS
- 25.Alanton ES

Phase IV:

- 26.Technical & Career Education Center
- 27.Holland ES
- 28.Point O'View ES
- 29.White Oaks ES
- 30.Indian Lakes ES

4. The Facility Master Plan Steering Committee recommends that the Division's school facilities not recommended for modernization, renovation, or full replacement continue to be properly maintained and kept in proper working order through on-going maintenance and component replacement.

Schools which are not recommended for modernization, renovation or full replacement will also need to be kept in proper working order. These buildings will require replacement of systems such as roofs, windows, paving, air-conditioning, electrical upgrades, as well as health and safety items.

Based on the data which has been collected, the School Division can perform lifecycle forecasting of component replacement needs.

Even buildings which are recommended for modernization, renovation or full replacement may require interim improvements until such time that a building project is implemented.

5. The Facility Master Plan Steering Committee recommends the development of a Swing Space plan during the renovation or construction of school projects.

Most of the projects recommended require major renovation or building replacement. To expedite the implementation of these projects Swing Space [alternative locations to house students while a school is under construction] will be needed.

Finding alternative locations can be a temporary inconvenience but will expedite the project schedule, lessen the impact of the overall cost of construction and address safety concerns.

The implementation of the Long Range Facilities Master Plan requires swing space to house students while modernization or replacement of schools occurs.

Swing Space alternatives might include:

- Use of existing school while new school is being constructed on same site or new site
- Portables
- Use of school no longer occupied due to reduction of school inventory
- Use of temporary space [i.e. office buildings]
- Combinations of the above

The availability of swing space may alter the order of implementing projects.

6. The Facility Master Plan Steering Committee recommends the development of elementary, middle, and high school educational specifications to guide the renovation, replacement, and construction of new schools.

Educational specifications should be developed to guide the design and construction of projects. Education is undergoing significant changes which will impact the facility requirements for future schools. Schools will need to incorporate increasing levels of technology, flexibility to allow different types of program delivery [i.e. thematic schools, schools within schools, team teaching], and respond to changes in educational pedagogy [i.e. increased hands-on learning and incorporating multiple intelligences]. These specifications will also be flexible and undergo periodic

review in order to accommodate delivery method changes and facility design innovations.

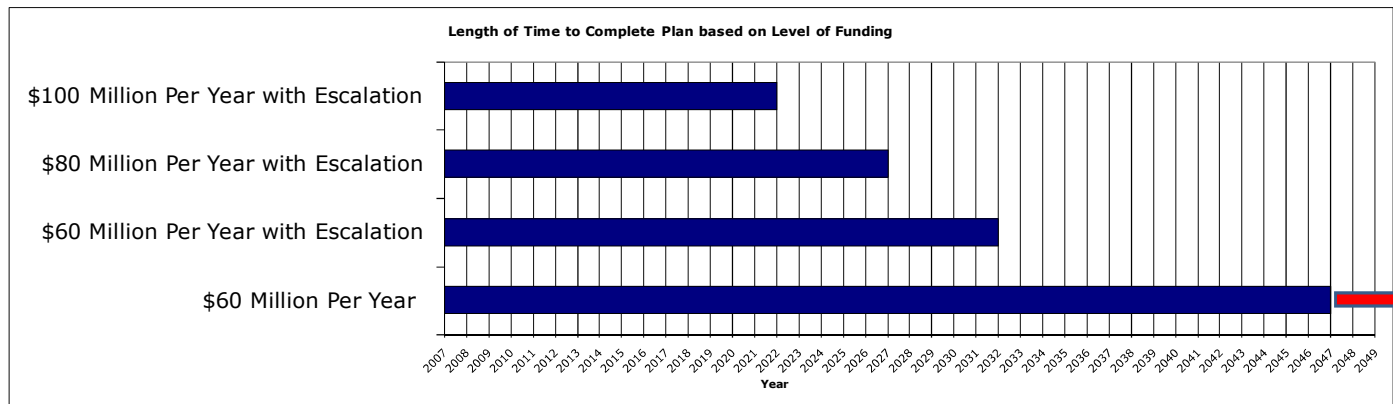
7. The Facility Master Plan Steering Committee recommends the Division continue to annually review building capacities specific to each grade level facility.

The capacity of school facilities should be reviewed on an annual basis. Capacity analysis should include program considerations, class-size policies, and percentage utilization based on grade level. It is also recommended that the utilization percentage used for high schools be reduced from 90% to 85% when determining the capacity of those schools. Utilization norms should be included when developing educational specifications as stated in Recommendation #6.

8. The Facility Master Plan Steering Committee recommends that projects be accomplished in a timely manner.

The Committee recognizes that all projects cannot [nor should not] be completed at the same time. The Committee also recognizes that projects will need to be phased in over time. However, the Committee recommends that the projects identified be accomplished within a 15 year period of time. To accomplish this, additional financial resources will be required.

The chart below demonstrates the length of time it will take to complete the projects based on four levels of funding (PLEASE REFER TO PAGES 36-39 FOR PROJECT SPECIFIC TIMELINES):



Recommendation 8 Continued

1. Funding level of \$100 million plus a 6% annual increase in funding and a 6% annual escalation in construction costs. This would be considered the 15 year plan. To address the projects listed, it would take approximately 15 years to complete.

2. Funding level of \$80 million plus a 6% annual increase in funding and a 6% annual escalation in construction costs. This would be considered the 20 year plan. To address the projects listed, it would take approximately 20 years to complete.

3. Current funding level of \$60 million plus a 6% annual increase in funding and a 6% annual escalation in construction costs. This would be considered the 25 year plan. To address the projects listed, it would take approximately 25 years to complete.

4. Freezing the current funding level of \$60 million annually with a 6% annual escalation in construction costs. This would be the "never ending plan." It would take 20 years to complete the first 10 projects. There would not be enough money for any additional projects other than deferred maintenance. In other words this funding level will not be sufficient to address the facility needs.

The Committee recognizes this as a significant issue. At the same time, if facility needs are not addressed in a timely manner, the facilities improvement needs and costs will continue to escalate.

9. The Facility Master Plan Steering Committee recommends that the School Board explore the development of shared facilities between schools of different grade levels as a means to reduce overall facility costs.

The Facility Master Plan Steering Committee recognizes that the cost of construction has increased substantially. As a means to maximize the use of funds and to reduce the overall cost, the committee recommends that building schools of different grade levels with shared sites and some shared facilities be considered when appropriate. This might consist of an elementary and middle school on a shared site with a shared gymnasium, cafeteria or other common facilities. This same approach might be considered for a middle and high school.

10. The Facility Master Plan Steering Committee recommends that the School Board consider reducing the number of elementary schools and the number of portables in the Virginia Beach City Public School Division.

The School Division is experiencing declining enrollment. Most of the decline to date has occurred at the elementary and middle school levels. This decline is expected to impact the high schools in the next 5-10 years. In reviewing the enrollments and capacities, most of the future excess capacity will be occurring at the elementary and high school levels. High schools are currently at or over capacity. The renovation and replacement of high school facilities provides the opportunity to reduce the enrollment and capacity at the high school level. It is anticipated that in the future there will be the same number of high schools, but the square footage of the high schools should be smaller.

At the elementary level, the projections indicate there is future excess capacity for approximately 4,000 students or approximately 10% of the student population. A significant portion of what is perceived to be excess capacity will be used for other programs due to class size reduction, expansion of full-day Kindergarten and programs for special needs students. There is also a need to maintain some flexibility to accommodate potential increases in future

enrollments as demographic changes occur. The Committee recommends the School Division reduce permanent elementary capacity by approximately 1,000 students.

Through input received from the community dialogues, participants have indicated that the general criteria to be used for reducing the number of schools should be based on building condition and number of students impacted. The Committee recommends that the Division create a process for establishing the criteria to be used and formulating options for the closing of elementary school facilities.

This recommendation also includes the reduction of portables currently being used as classrooms in the Division. An appropriate number of portables should remain in inventory to accommodate students for swing space during the modernization or replacement of existing facilities.

11. The Facility Master Plan Steering Committee recommends the School Division develop the internal capacity and authorize the professional services needed to implement this plan.

Based on the number of schools which are in need of major renovation and replacement, along with the size of the projects as the Division addresses secondary schools, the level of staffing and the need for outside professional services must be expanded. Cost for this increase is built in to the cost of projects. This recommendation is not intended to be self serving on the part of the facilities staff or consultants which have developed this report but is stated to insure appropriate planning, design, and oversight of project implementation. The costs for these services have been included in the cost estimates of the proposed projects.

12. The Facility Master Plan Steering Committee recommends the School Division continue to adjust attendance boundaries to continue to balance enrollments and optimize the efficiencies of operations.

The recommendations include discontinuing some schools and replacing other schools with new schools. A boundary study should be conducted through a community process that details future attendance boundaries. It is suggested

that this be done in a manner which minimizes disruptions of attendance boundaries as the School Division moves from phase to phase in the implementation of this Plan.

13. The Facility Master Plan Steering Committee recommends the School Division update this plan every five years.

To keep current, it is suggested that the Plan be updated every five years or as the School Division moves from one phase to the next. This will allow the Plan to be adjusted based on unanticipated changes in demographics and building conditions.

14. The Facility Master Plan Steering Committee recommends the community be continuously involved in the review and implementation of these recommendations.

The involvement of the community was important in the development of this plan. As future decisions need to be made and as projects are designed and implemented, ongoing community involvement should be encouraged. Ongoing communication that builds trust and support for this plan will be important.

The Facility Master Plan Steering Committee also stands ready to be of further assistance if needed.

Proposed Projects by Phase

The Phase I projects are selected based on the following factors.

1. **Community Input**

Recommendations from the Facility Master Plan Committee were based on community input gathered at the Educational Framework Conference and Community Dialogues

2. **Condition of School Building**

All of the Phase I projects were identified by the HBA facility assessment report as needing major renovation or replacement. All of the schools selected had a Facility Condition Index [FCI] in excess of 80% which would suggest the cost of renovation would be 80% or more of the cost of new construction.

3. **Student Capacity**

The proposed size of each Phase I school was based on a review of the number of public school students residing in the area and fall within the desired range of school size obtained through Community Dialogues.

4. **Availability of Sites**

The first projects will be the most difficult to stage since there are no existing school buildings that can be used for swing space. Therefore the focus of Phase I is to build new schools on adjacent or nearby sites in order to stage the projects.

5. **Future Phases & Swing Space**

In many cases, Phase I projects were selected to facilitate the implementation of future phases. The schools being replaced in Phase I may be used for swing space for the schools to be renovated or replaced in future phases.

6. **Combination of Elementary, Middle and High Schools**

It is suggested that each phase include 2-3 elementary schools, 1-2 middle schools and 1-2 high school projects.

7. **Ability to Finance Projects**

Not all projects can be accomplished at the same time based on the availability of resources. Therefore, the number of projects in each phase will be limited.

8. **Spreading projects around the City**

Each phase should include projects spread throughout the City for three reasons. First, it is easier to stage projects if they are not located all in one area [i.e. where to locate students]. Second, this permits each area of the City to be re-evaluated between phases to examine potential demographic changes. Third, each area of the City will benefit from the revitalization efforts.

Project Specific Timelines

As referenced on page 31 of this document, the implementation timeline of this school facility master plan is dependent upon the amount of funding available for projects. The next four pages illustrate project specific timelines and costs based on the amount of funding available. The timelines suggest escalation of construction costs at approximately 6% per year.

Funding: \$60 Million per year with no escalation

By providing the current estimated funding toward capital projects without any escalation factors, as the table below illustrates, the first ten [10] projects would be completed in approximately the next 20 years. More projects could be completed by either changing the recommended actions on each site or placing less costly projects on the front end of the project.

School Name	Proposed Action	Approximate Cost in 2008 Dollars	Approximate Escalated Cost	Project Start Year	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	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	2029-2030		
Renaissance Academy	Current Project	\$65.2m	\$65.2m	2007	\$11.2m	\$5.2m																						
Virginia Beach Middle	Current Project	\$52.6m	\$52.6m	2007	\$2.7m	\$2.0m																						
Windsor Oaks Elem	Current Project	\$18.8m	\$18.8m	2008	\$9.5m	\$3.1m																						
Great Neck MS	Current Project	\$62.5m	\$62.5m	2009	\$12.7m	\$16.9m	\$21.4m	\$4.5m																				
School Bus Garage Facility	Current Project	\$19.9m	\$19.9m	2009	\$4.2m	\$4.4m																						
Kellam HS	Replace on new site	\$93.9m	\$120.9m	2010																								
Princess Anne MS	Replace	\$66.2m	\$95.9m	2012																								
College Park ES	Replace	\$19.8m	\$31.3m	2014																								
John B. Dey ES	Reno/Demo/New	\$19.7m	\$33.1m	2015																								
Princess Anne HS	Replace	\$70.5m	\$128.8m	2016																								
Thoroughgood ES	Replace	\$20.0m	\$44.9m	2020																								
Old Donation Magnet	Reno/Demo/New	\$20.0m	\$47.6m	2021																								
Kemp's Landing	Replace	\$20.0m	\$54.9m	2023																								
Plaza ES	Reno/Demo/New	\$20.0m	\$56.7m	2024																								
Kempsville HS	Reno/Demo/New	\$67.1m	\$232.7m	2027																								
Kempsville MS	Replace	\$44.2m		Never																								
Williams, BF ES	Replace	\$14.1m		Never																								
Princess Anne ES	Reno/Demo/New	\$15.5m		Never																								
First Colonial HS	Reno/Demo/New	\$90.5m		Never																								
Kings Grant ES	Reno/Demo/New	\$16.5m		Never																								
Plaza MS	Reno/Demo/New	\$39.7m		Never																								
North Landing ES	Replace	\$19.8m		Never																								
Bayside HS	Reno/Demo/New	\$63.3m		Never																								
Lynnhaven MS	Replace	\$53.0m		Never																								
Green Run ES	Replace	\$19.8m		Never																								
Independence MS	Replace	\$53.0m		Never																								
Fairfield ES	Replace	\$19.8m		Never																								
Kingston ES	Reno/Demo/New	\$17.7m		Never																								
Bayside MS	Reno/Demo/New	\$39.7m		Never																								
Alanton ES	Reno/Demo/New	\$16.1m		Never																								
Technical & Career Center	Relocate/Replace	\$32.3m		Never																								
Holland ES	Reno/Demo/New	\$16.2m		Never																								
Point O'View ES	Reno/Demo/New	\$16.4m		Never																								
White Oaks ES	Full Modernization	\$11.1m		Never																								
Indian Lakes ES	Full Modernization	\$11.6m		Never																								
Component Replacement		\$0m	\$423.0m		\$9.5m	\$10.1m	\$10.7m	\$11.4m	\$12.0m	\$12.8m	\$13.5m	\$14.3m	\$15.2m	\$16.1m	\$17.1m	\$18.1m	\$19.2m	\$20.3m	\$21.6m	\$22.9m	\$24.2m	\$25.7m	\$27.2m	\$28.9m	\$30.6m	\$32.4m		
Total		\$1128.9m	\$1371.1m		\$36.0m	\$36.7m	\$41.1m	\$70.9m	\$75.7m	\$55.6m	\$61.3m	\$47.5m	\$54.7m	\$72.9m	\$77.3m	\$18.9m	\$23.5m	\$64.7m	\$65.7m	\$27.9m	\$52.8m	\$102.8m	\$31.3m	\$46.1m	\$133.2m	\$141.2m		
Cumulative Total		\$1128.9m	\$2922.9m		\$64.0m	\$100.7m	\$141.8m	\$212.7m	\$288.4m	\$344.0m	\$405.3m	\$452.8m	\$507.5m	\$580.4m	\$657.7m	\$676.7m	\$700.1m	\$764.8m	\$830.4m	\$858.4m	\$911.2m	\$1013.9m	\$1045.2m	\$1091.3m	\$1224.5m	\$1365.8m		
Funding					\$60.0m	\$60.0m	\$60.0m	\$60.0m	\$60.0m	\$60.0m	\$60.0m	\$60.0m	\$60.0m	\$60.0m	\$60.0m	\$60.0m	\$60.0m	\$60.0m	\$60.0m	\$60.0m	\$60.0m	\$60.0m	\$60.0m	\$60.0m	\$60.0m	\$60.0m	\$60.0m	

Funding: \$60 Million per year with escalation

Funding this capital project at \$60 million per year and escalating that funding by 6% per year, as per the increase in construction costs, this capital campaign would take approximately 23 years to complete and cost an estimated \$2.8 billion dollars over the life of the plan.

School Name	Proposed Action	Approximate Cost in 2008 Dollars	Approximate Escalated Cost	Project Start Year	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	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	2029-2030	2030-2031	2031-2032
Renaissance Academy	Current Project	\$65.2m	\$65.2m	2007	\$10.5m	\$4.6m	\$0m	\$0m																				
Virginia Beach Middle	Current Project	\$52.6m	\$52.6m	2007	\$2.5m	\$1.8m	\$0m	\$0m																				
Windsor Oaks Elem	Current Project	\$18.8m	\$18.8m	2008	\$9.0m	\$2.8m	\$0m	\$0m																				
Great Neck MS	Current Project	\$62.5m	\$62.5m	2009	\$12.0m	\$15.0m	\$18.0m	\$3.5m																				
School Bus Garage Facility	Current Project	\$19.9m	\$19.9m	2009	\$4.0m	\$3.9m	\$0m	\$0m																				
Kellam HS	Replace on new site	\$93.9m	\$114.1m	2009																								
Princess Anne MS	Replace	\$66.2m	\$90.5m	2011																								
College Park ES	Replace	\$19.8m	\$23.4m	2009																								
John B. Dey ES	Reno/Demo/New	\$19.7m	\$27.8m	2012																								
Princess Anne HS	Replace	\$70.5m	\$108.2m	2013																								
Thoroughgood ES	Replace	\$20.0m	\$29.9m	2013																								
Old Donation Center	Reno/Demo/New	\$20.0m	\$31.7m	2014																								
Kemp's Landing	Replace	\$20.0m	\$34.5m	2015																								
Plaza ES	Reno/Demo/New	\$20.0m	\$33.6m	2015																								
Kempsville HS	Reno/Demo/New	\$67.1m	\$122.6m	2016																								
Kempsville MS	Replace	\$44.2m	\$85.5m	2017																								
Williams, BF ES	Replace	\$14.1m	\$28.3m	2018																								
Princess Anne ES	Reno/Demo/New	\$15.5m	\$32.8m	2019																								
First Colonial HS	Reno/Demo/New	\$90.5m	\$196.9m	2019																								
King's Grant ES	Reno/Demo/New	\$16.5m	\$39.3m	2021																								
Plaza MS	Reno/Demo/New	\$39.7m	\$97.2m	2021																								
North Landing ES	Replace	\$19.8m	\$47.1m	2021																								
Bayside HS	Reno/Demo/New	\$63.3m	\$164.1m	2022																								
Lynnhaven MS	Replace	\$53.0m	\$145.6m	2023																								
Green Run ES	Replace	\$19.8m	\$56.1m	2024																								
Independence MS	Replace	\$53.0m	\$163.6m	2025																								
Fairfield ES	Replace	\$19.8m	\$63.1m	2026																								
Kingston ES	Reno/Demo/New	\$17.7m	\$56.4m	2026																								
Bayside MS	Reno/Demo/New	\$39.7m	\$137.9m	2027																								
Alanton ES	Reno/Demo/New	\$16.1m	\$57.6m	2028																								
Technical & Career Center	Relocate/Replace	\$32.3m	\$118.8m	2028																								
Holland ES	Reno/Demo/New	\$16.2m	\$61.5m	2029																								
Point O'View ES	Reno/Demo/New	\$16.4m	\$62.2m	2029																								
White Oaks ES	Full Modernization	\$11.1m	\$44.6m	2030																								
Indian Lakes ES	Full Modernization	\$11.6m	\$46.7m	2030																								
Component Replacement		\$225.0m	\$484.8m		\$9.5m	\$10.1m	\$10.7m	\$11.4m	\$12.0m	\$12.8m	\$13.5m	\$14.3m	\$15.2m	\$16.1m	\$17.1m	\$18.1m	\$19.2m	\$20.3m	\$21.6m	\$22.9m	\$24.2m	\$25.7m	\$27.2m	\$28.9m	\$30.6m	\$32.4m	\$34.4m	\$36.4m
Total		\$1252.7m	\$2806.1m		\$50.0m	\$48.5m	\$101.8m	\$75.4m	\$56.5m	\$91.0m	\$91.9m	\$100.8m	\$71.4m	\$93.1m	\$118.3m	\$100.8m	\$139.1m	\$129.0m	\$157.4m	\$152.4m	\$172.3m	\$158.9m	\$110.9m	\$226.9m	\$106.8m	\$212.5m	\$208.9m	\$119.2m
Cumulative Total					\$107.4m	\$155.9m	\$257.7m	\$333.2m	\$389.7m	\$480.7m	\$572.6m	\$673.4m	\$744.8m	\$838.0m	\$956.3m	\$1057.0m	\$1196.1m	\$1325.1m	\$1482.5m	\$1635.0m	\$1807.3m	\$1966.1m	\$2077.0m	\$2303.9m	\$2410.7m	\$2623.2m	\$2832.1m	\$2951.3m
Funding					\$63.6m	\$67.4m	\$71.5m	\$75.7m	\$80.3m	\$85.1m	\$90.2m	\$95.6m	\$101.4m	\$107.5m	\$113.9m	\$120.7m	\$128.0m	\$135.7m	\$143.8m	\$152.4m	\$161.6m	\$171.3m	\$181.5m	\$192.4m	\$204.0m	\$216.2m	\$229.2m	\$242.9m

Funding: \$80 Million per year with escalation

Funding this capital project at \$80 million per year and escalating that funding by 6% per year, as per the increase in construction costs, this capital campaign would take approximately 17 years to complete and cost an estimated \$2.1 billion dollars over the life of the plan.

School Name	Proposed Action	Approximate Cost in 2008 Dollars	Approximate Escalated Cost	Project Start Year	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	2024-2025	
Renaissance Academy	Current Project	\$65.2m	\$65.2m	2007	\$10.5m	\$4.6m	\$0.0m	\$0.0m														
Virginia Beach Middle	Current Project	\$52.6m	\$52.6m	2007	\$2.5m	\$1.8m	\$0.0m	\$0.0m														
Windsor Oaks Elem	Current Project	\$18.8m	\$18.8m	2008	\$9.0m	\$2.8m	\$0.0m	\$0.0m														
Great Neck MS	Current Project	\$62.5m	\$62.5m	2009	\$12.0m	\$15.0m	\$18.0m	\$3.5m														
School Bus Garage Facility	Current Project	\$19.9m	\$19.9m	2009	\$4.0m	\$3.9m	\$0.0m	\$0.0m														
Kellam HS	Replace on new site	\$93.9m	\$114.1m	2009																		
Princess Anne MS	Replace	\$66.2m	\$85.3m	2010																		
College Park ES	Replace	\$19.8m	\$23.4m	2009																		
John B. Dey ES	Reno/Demo/New	\$19.7m	\$24.7m	2010																		
Princess Anne HS	Replace	\$70.5m	\$96.3m	2011																		
Thoroughgood ES	Replace	\$20.0m	\$25.1m	2010																		
Old Donation Center	Reno/Demo/New	\$20.0m	\$28.2m	2012																		
Kemp's Landing	Replace	\$20.0m	\$28.9m	2012																		
Plaza ES	Reno/Demo/New	\$20.0m	\$29.9m	2013																		
Kempsville HS	Reno/Demo/New	\$67.1m	\$102.9m	2013																		
Kempsville MS	Replace	\$44.2m	\$71.8m	2014																		
Williams, BF ES	Replace	\$14.1m	\$22.4m	2014																		
Princess Anne ES	Reno/Demo/New	\$15.5m	\$26.0m	2015																		
First Colonial HS	Reno/Demo/New	\$90.5m	\$165.4m	2016																		
King's Grant ES	Reno/Demo/New	\$16.5m	\$27.7m	2015																		
Plaza MS	Reno/Demo/New	\$39.7m	\$72.6m	2016																		
North Landing ES	Replace	\$19.8m	\$39.6m	2018																		
Bayside HS	Reno/Demo/New	\$63.3m	\$130.0m	2018																		
Lynnhaven MS	Replace	\$53.0m	\$108.8m	2018																		
Green Run ES	Replace	\$19.8m	\$41.9m	2019																		
Independence MS	Replace	\$53.0m	\$122.3m	2020																		
Fairfield ES	Replace	\$19.8m	\$44.5m	2020																		
Kingston ES	Reno/Demo/New	\$17.7m	\$39.7m	2020																		
Bayside MS	Reno/Demo/New	\$39.7m	\$97.2m	2021																		
Alanton ES	Reno/Demo/New	\$16.1m	\$38.3m	2021																		
Technical & Career Center	Relocate/Replace	\$32.3m	\$79.0m	2021																		
Holland ES	Reno/Demo/New	\$16.2m	\$40.9m	2022																		
Point O'View ES	Reno/Demo/New	\$16.4m	\$41.4m	2022																		
White Oaks ES	Full Modernization	\$11.1m	\$29.7m	2023																		
Indian Lakes ES	Full Modernization	\$11.6m	\$31.0m	2023																		
Component Replacement		\$180.0m	\$244.2m		\$9.5m	\$9.9m	\$10.4m	\$10.9m	\$11.5m	\$12.1m	\$12.7m	\$13.3m	\$14.0m	\$14.7m	\$15.4m	\$16.2m	\$17.0m	\$17.8m	\$18.7m	\$19.6m	\$20.6m	
Total		\$1207.7m	\$2073.1m		\$49.9m	\$50.6m	\$111.7m	\$158.7m	\$100.5m	\$106.9m	\$106.6m	\$121.6m	\$113.8m	\$124.5m	\$148.1m	\$164.2m	\$185.8m	\$165.5m	\$195.6m	\$181.2m	\$75.6m	
Cumulative Total					\$107.7m	\$158.3m	\$270.0m	\$428.8m	\$529.2m	\$636.1m	\$742.7m	\$864.4m	\$978.2m	\$1102.7m	\$1250.7m	\$1414.9m	\$1600.7m	\$1766.2m	\$1961.8m	\$2143.0m	\$2218.6m	
Funding					\$84.8m	\$89.9m	\$95.3m	\$101.0m	\$107.1m	\$113.5m	\$120.3m	\$127.5m	\$135.2m	\$143.3m	\$151.9m	\$161.0m	\$170.6m	\$180.9m	\$191.7m	\$203.2m	\$215.4m	

Funding: \$100 Million per year with escalation

Funding this capital project at \$100 million per year and escalating that funding by 6% per year, as per the increase in construction costs, this capital campaign would take approximately 13 years to complete and cost an estimated \$1.8 billion dollars over the life of the plan.

School Name	Proposed Action	Approximate Cost in 2008 Dollars	Approximate Escalated Cost	Project Start Year	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
Renaissance Academy	Current Project	\$65.2m	\$65.2m	2007	\$10.5m	\$4.6m	\$0.0m	\$0.0m									
Virginia Beach Middle	Current Project	\$52.6m	\$52.6m	2007	\$2.5m	\$1.8m	\$0.0m	\$0.0m									
Windsor Oaks Elem	Current Project	\$18.8m	\$18.8m	2008	\$9.0m	\$2.8m	\$0.0m	\$0.0m									
Great Neck MS	Current Project	\$62.5m	\$62.5m	2009	\$12.0m	\$15.0m	\$18.0m	\$3.5m									
School Bus Garage Facility	Current Project	\$19.9m	\$19.9m	2009	\$4.0m	\$3.9m	\$0.0m	\$0.0m									
Kellam HS	Replace on new site	\$93.9m	\$114.1m	2009													
Princess Anne MS	Replace	\$66.2m	\$80.5m	2009													
College Park ES	Replace	\$19.8m	\$23.4m	2009													
John B. Dey ES	Reno/Demo/New	\$19.7m	\$24.7m	2010													
Princess Anne HS	Replace	\$70.5m	\$90.8m	2010													
Thoroughgood ES	Replace	\$20.0m	\$25.1m	2010													
Old Donation Center	Reno/Demo/New	\$20.0m	\$26.6m	2011													
Kemp's Landing	Replace	\$20.0m	\$27.3m	2011													
Plaza ES	Reno/Demo/New	\$20.0m	\$26.6m	2011													
Kempsville HS	Reno/Demo/New	\$67.1m	\$97.1m	2012													
Kempsville MS	Replace	\$44.2m	\$63.9m	2012													
Williams, BF ES	Replace	\$14.1m	\$19.9m	2012													
Princess Anne ES	Reno/Demo/New	\$15.5m	\$23.1m	2013													
First Colonial HS	Reno/Demo/New	\$90.5m	\$138.8m	2013													
King's Grant ES	Reno/Demo/New	\$16.5m	\$26.1m	2014													
Plaza MS	Reno/Demo/New	\$39.7m	\$64.6m	2014													
North Landing ES	Replace	\$19.8m	\$33.2m	2015													
Bayside HS	Reno/Demo/New	\$63.3m	\$109.1m	2015													
Lynnhaven MS	Replace	\$53.0m	\$91.4m	2015													
Green Run ES	Replace	\$19.8m	\$35.2m	2016													
Independence MS	Replace	\$53.0m	\$102.6m	2017													
Fairfield ES	Replace	\$19.8m	\$37.3m	2017													
Kingston ES	Reno/Demo/New	\$17.7m	\$33.4m	2017													
Bayside MS	Reno/Demo/New	\$39.7m	\$77.0m	2017													
Alanton ES	Reno/Demo/New	\$16.1m	\$32.2m	2018													
Technical & Career Center	Relocate/Replace	\$32.3m	\$66.3m	2018													
Holland ES	Reno/Demo/New	\$16.2m	\$32.4m	2018													
Point O'View ES	Reno/Demo/New	\$16.4m	\$34.7m	2019													
White Oaks ES	Full Modernization	\$11.1m	\$23.5m	2019													
Indian Lakes ES	Full Modernization	\$11.6m	\$24.6m	2019													
Component Replacement		\$135.0m	\$180.1m		\$9.5m	\$10.1m	\$10.7m	\$11.4m	\$12.0m	\$12.8m	\$13.5m	\$14.3m	\$15.2m	\$16.1m	\$17.1m	\$18.1m	\$19.2m
Total		\$1162.7m	\$1785.9m		\$51.4m	\$56.9m	\$147.7m	\$200.3m	\$131.0m	\$128.2m	\$181.9m	\$149.4m	\$171.0m	\$162.7m	\$171.7m	\$196.1m	\$125.3m
Cumulative Total					\$109.2m	\$166.0m	\$313.7m	\$514.0m	\$645.0m	\$773.2m	\$955.1m	\$1104.5m	\$1275.6m	\$1438.3m	\$1610.0m	\$1806.1m	\$1931.4m
Funding					\$106.0m	\$112.4m	\$119.1m	\$126.2m	\$133.8m	\$141.9m	\$150.4m	\$159.4m	\$168.9m	\$179.1m	\$189.8m	\$201.2m	\$213.3m