

---

**SUPERINTENDENT'S PROPOSED  
CAPITAL IMPROVEMENT PLAN  
FOR  
CHESAPEAKE PUBLIC SCHOOLS  
2009-2019**

---

**Foreword**

**T**he *Superintendent's Proposed Capital Improvement Plan* for Chesapeake Public Schools is a **management tool for planning the capital improvement projects** costing \$100,000 or more that will be needed to house students adequately or to support the educational mission, including the maintenance of facilities. As such, it is useful for (1) estimating capital improvement expenditures over the future five-year period, (2) identifying short- and long-range (ten-year) building projects, and (3) establishing priorities for the orderly completion of projects.

A capital improvement plan for schools typically includes the following types of projects:

- New or expanded physical structures which are permanent in nature.
- The remodeling or renovation of an existing facility.
- The purchase of land for a school.
- The replacement of mechanical systems, roofs, and other large maintenance projects.
- The cost of engineering and architectural work needed prior to the execution of a project.

Proposals for housing students other than by capital improvement projects are also included in the *Superintendent's Proposed Capital Improvement Plan*. These proposals may include grade level realignments, attendance zone adjustments, alternate uses for existing facilities, and temporary housing proposals.

The purpose of this report is to present the *Superintendent's Proposed Capital Improvement Plan* for the school system for the 2009-2019 planning period. Although the proposed plan is presented for a ten-year period, the projects designated for the first two years of the plan are the highest priority needs.

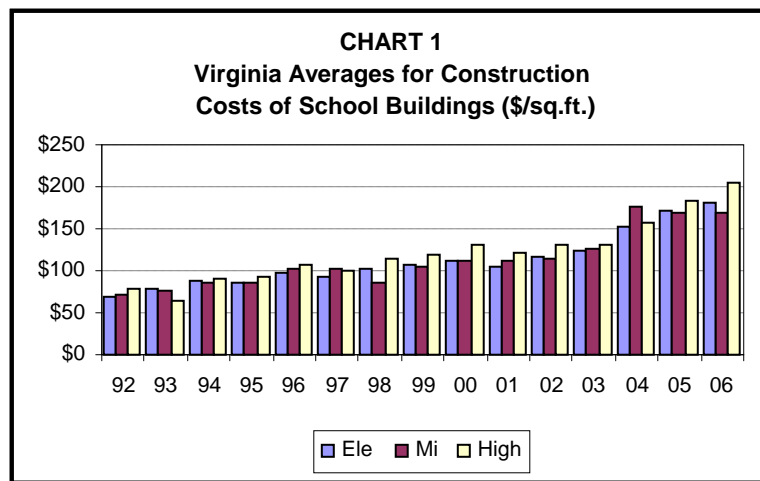
Traditionally, Chesapeake has used four sources for funding school capital projects: (1) the city's annual borrowing authority, (2) local bond referendum, (3) loans from the state Literary Fund, and (4) the Virginia Public Schools Authority. Beginning in 1999, additional funding was made available at the state level through lottery proceeds and funds specifically identified for school construction. It is anticipated that the state will continue to provide a limited amount of funding for school construction. In the past, the city has borrowed a significant amount of funds for capital projects, including school construction, using the funding sources mentioned previously. According to the city, a significant amount of additional debt service cannot be added without jeopardizing the city's bond rating until (1) some of the existing debt is retired, or (2) the revenue source is increased. For the 2002-2007 five-year planning period, no funds were appropriated to the School Board (other than those funds from the state) for capital projects. For the 2003-2008 period, \$2.4 million was appropriated for school capital projects, although the School Board requested over \$152 million (2002 dollars). For the 2004-2009 period, again, no funds were appropriated to the School Board (other than those funds from the state) for capital projects. For the 2005-2010 period Council appropriated \$66.6 million. For the 2006-2011 period Council appropriated \$49.6 million, for the 2007-2012 period Council appropriated approximately \$7.6 million, and for the 2008-2013 period Council appropriated approximately \$17.2 million for school capital projects. It is important to note that the funds appropriated since 2005 has been for the construction of two schools (Grassfield High and Oscar Smith Middle) and the addition to and renovation of one school (Western Branch High). Additionally, Council has established a "lock box" concept for funding school construction projects. Annually recurring revenues are earmarked for capital projects and placed in a "lock box" in an attempt to accrue funds required to leverage the cost of new schools. This concept, as currently being funded, will not produce the funds necessary to leverage all the capital projects contained in this plan.

Although the school administration acknowledges the financial constraints of the city at this time, the *Superintendent's Proposed Capital Improvement Plan: 2009-2019* requests funding for school capital projects in the first five years (2009-2014) of the plan. Additional funding for school capital projects will be requested in future revisions of the capital improvement plan based on unfunded current needs and anticipated future student enrollment needs. It is likely that funding from one or more of the four sources mentioned previously, or from other funding sources, will be required in order for critical school capital projects to be completed in a timely manner to house the public school population in the City of Chesapeake.

The cost figures utilized to estimate the cost of new and renovated school facilities in Chesapeake are updated yearly. When determining these estimates the following are considered:

1. *Virginia Averages for Construction Costs of School Buildings* published by the Virginia Department of Education.
2. Chesapeake projects under design for which detailed cost estimates have been prepared.
3. Recently bid Chesapeake projects.
4. Consultation with local architects and contractors.
5. Consultation with neighboring school systems.
6. Yearly update of the *Building Construction Cost Data* published by R.S. Means Company, Inc.

As can be seen in Chart 1 (right), the cost of school construction in Virginia rose slowly and steadily from 1991 until 1998. Those school construction costs increased significantly in 1999, 2002, 2004, 2005, and again in 2006. While the costs of school construction for 2007-2008 have not yet been released by the state, it is apparent that school construction costs have continued to increase significantly. With the cost of Virginia school projects awarded in 2005 ranging from \$150 per square foot for some elementary schools to as much as \$178-\$232 per square foot for some middle and high schools, school construction costs increased again over the course of the 2006-2007 school year.



Many factors impact construction costs. Some of the most important are (1) the number of other large construction projects either online or soon to be online, (2) the availability and cost of manpower, (3) the availability and cost of materials, and (4) the effect of the global economy. Beginning in December 2003, the price of all types of construction materials and labor showed sharp increases. Until recently, prices have continued to increase sharply. Beginning in late 2003 and early 2004, increasing costs of steel and steel products were being experienced across the United States and in the general global markets. China and third world countries have been expanding construction to meet the needs of their expanding economies. To accomplish this, these countries have been increasing their demand for steel and other construction materials at the same time. Industry experts expect China alone to use 30 percent of the world's supply of steel through 2010. To exacerbate the steel supply problem, the number of steel plants in the United States has decreased by half since 1980.

At the same time, the United States has also seen the cost of concrete increase, more

specifically the cement used to make concrete. Cement is another construction material that China and other expanding economies have been importing in increasing quantities. Additionally, the cost of petroleum has increased dramatically. Currently the cost of other petroleum-based products has continued to increase and is expected to continue increasing for the foreseeable future. This means the cost of transporting construction materials has increased and the cost of other petroleum-based products, such as asphalt, has increased.

According to Turner Construction, two factors other than the cost of materials and fuel are driving the continued increases in the cost of construction. These factors are the continued increase in the amount of non-residential construction and the continued lack of readily available skilled labor. In 2007, construction costs increased 7.7 percent. In the first six months of 2008, construction costs increased another 3.0 percent. In 2008 there has been a slowing in the increasing cost of construction. With rise in the price of petroleum, anything made from it, such as asphalt, have also increased dramatically. But commodities made from metals and other sources have seen a slowing in the pace of cost increases. Costs are still rising, but at a slower pace. According to Turner Construction, “The perception that there may be an economic slowdown has lead to an easing of pricing pressure and an increase in competition among trade contractors in some markets. However, in major metropolitan markets.....the available volume of work continues to drive pricing upward.” Simply, the cost of construction continues to rise but at a slower pace than seen in the past several years.

In identifying cost estimates to prepare proposed construction budgets, the school system is guided first by the yearly update of the *Virginia Averages for Construction Costs of School Buildings*. The information contained in this data is compared to data collected from the other sources listed previously. In addition, other school divisions whose cost data is contained in the Virginia average cost tabulation are consulted to compare information about how those projects compare to projects in Chesapeake. This method has worked well in previous years’ revisions of the capital improvement plan. However, for this revision of the capital improvement plan, the more recent increases in the cost of construction will have a major upward impact on the cost estimates used for projects included in this plan. Currently, it appears that construction costs for schools in our area will be in the range of \$159-\$200 per square foot.

## **BACKGROUND 2002-2007**

**T**en factors influence the capital building program of the Chesapeake Public Schools. These influences are:

- 1. Storm water management regulations and strict interpretations of the Clean Water Act affecting wetlands.**
- 2. Sustained residential growth and the resultant student enrollment changes experienced in Chesapeake since 1983.**
- 3. The passage of the Americans with Disabilities Act.**
- 4. Changes in governmental mandates affecting school programs and facilities.**
- 5. The availability of sewer and water.**
- 6. The School Board's technology initiative.**
- 7. The goal of the School Board and City Council to reduce reliance on portable classrooms.**
- 8. City Council's growth management policies.**
- 9. The need for major repairs, maintenance, and renovations.**
- 10. The School Board's VHSL venue initiative.**

Each of the preceding factors will be discussed separately in the following pages.

### **INFLUENCE OF THE WETLANDS ISSUE**

**W**etlands are regulated through Section 404 of the Clean Water Act. The 1987 U.S. Army Corps of Engineers (COE) Wetlands Delineation Manual is used to identify tidal and nontidal "dry" wetlands. A dry area may be considered a nontidal wetland if there are (1) wetland type plants, (2) wetland type soil, and (3) groundwater within 18 inches of the surface. Under current wetland regulations vast tracts of land within the City of Chesapeake are considered nontidal "dry" wetlands. The destruction/filling of these "dry" nontidal wetlands requires permit approval from the COE.

Over the past several years, wetland regulations have become more stringent and have had an

impact on residential construction in Chesapeake. Beginning in February 1997, the COE allowed the destruction of up to one-third of an acre of nontidal wetlands without the COE being notified and permitted the destruction of one-third to three acres of nontidal wetlands with COE approval of a common permit called the Nationwide Permit 26. At that time, the COE indicated that the Nationwide Permit 26 would eventually be phased out and replaced with several Nationwide Permits based on type of activity. In June 2000, the Nationwide Permit 26 was replaced with five new Nationwide Permits. The basic threshold for requiring one of the new Nationwide Permits was one-tenth of an acre of wetlands to one-half of an acre of wetlands. With the new regulations, projects impacting more than one-half of an acre of wetlands must obtain an individual permit that requires a more rigorous and extended review process by both the COE and the Virginia Department of Environmental Quality (DEQ). In October 2001, DEQ began a new wetlands program regulating all wetlands projects in the state. The new regulations include a broader list of areas where individual Virginia Water Protection (VWP) permits will be required. Additionally, in an attempt to streamline the permitting process and coordinate DEQ and COE permitting, a State Programmatic General Permit was established in October 2002.

While transferring wetland regulatory responsibility to the State is designed to streamline the permitting process, the DEQ-led process is expected to better protect and restore non-tidal wetlands through its more rigorous standards. The altering of the permit process is likely to delay and/or to increase the cost of some projects. Over time, stricter regulations regarding tidal and nontidal wetlands and a more rigorous review process should result in fewer new homes being built. In the short term (2009-2014), it is anticipated that the regulation of wetlands will not reduce the number of new homes that will be built in Chesapeake. A short-term (2009-2014) impact is not anticipated due to the availability of residentially zoned land and the amount of land not subject to wetland regulations. It is likely that over the 2009-2014 five-year planning period the number of residential building permits issued and the number of new homes actually built each year will be determined by the market. The plans contained in this report were developed anticipating minimal impact from wetland regulations on the amount of residential construction during the 2009-2014 planning period. However, it seems probable that under current regulations ultimately Chesapeake will experience less residential growth than had been anticipated previously.

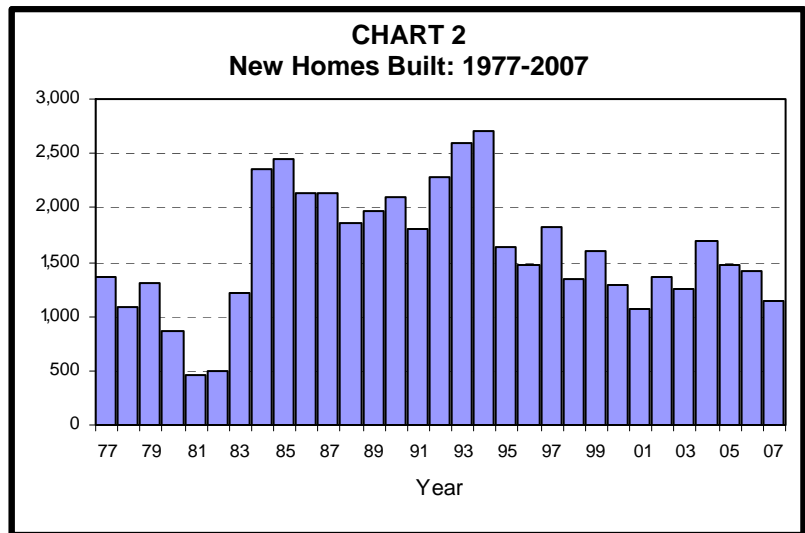
## **INFLUENCE OF RESIDENTIAL GROWTH**

For the purpose of planning for school facility needs, the city has been divided into seven school planning areas. These seven school planning areas are identified with the middle school attendance zones and associated high school attendance zones.

Middle school attendance zones are generally not identical to the high school attendance zones. For planning purposes, in some areas two middle school attendance zones are being treated as a single school planning area. Currently, the Deep Creek Middle School attendance zone and the Hugo A. Owens Middle School attendance zone, the Crestwood Middle School attendance zone and the Greenbrier Middle School attendance zone, and the Western Branch Middle School attendance zone and the Jolliff Middle School attendance zone are treated as three separate middle school

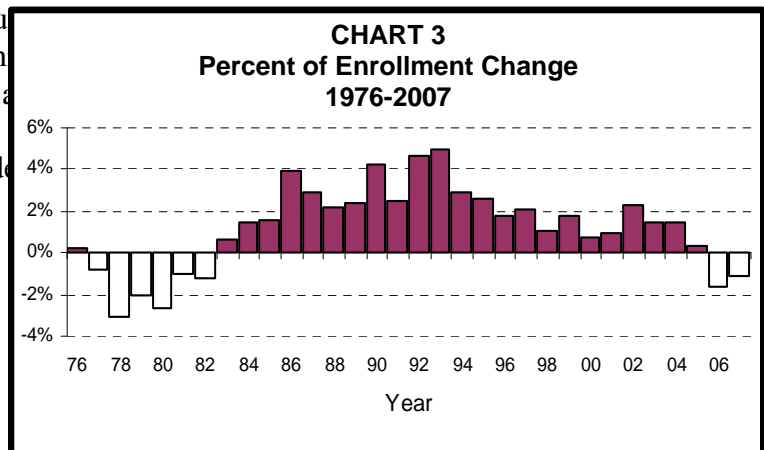
planning areas. The Western Branch Middle School attendance zone and the Jolliff Middle School attendance zone combined equal the current Western Branch High School attendance zone. In the remaining high school attendance zones students come from more than one middle school planning area. For example, Great Bridge High School receives students from Great Bridge Middle School, Hickory Middle School and Crestwood Middle School. In these areas the high school projections will be based on the total high school zone rather than on the individual middle school planning areas.

The capital building needs of the school system are directly linked with the residential growth of the city (1983-2006). After 1982, the school system began experiencing an increase in student population after a six-year period of decline in enrollment. This increase in enrollment began after the start of rapid, increased residential growth in the city in 1982. As shown in Chart 2 (right), in 1995 about 1,600 new homes were



built in Chesapeake. Those 1,600 homes marked the first time since 1984 that fewer than 1,800 new homes were built in a calendar year. Before 1984, Chesapeake had gone through six-year residential building cycles, with three years of peak construction activity followed by three years of reduced activity. Since 1984, that six-year cycle has not been repeated. Conventional wisdom had suggested that a downturn in this building cycle was imminent. Between 1995 and 1999, new home construction ranged between 1,500 – 1,800 units with the exception of 1998 when 1,350 new homes were constructed. Between 2000 and 2003 new home construction slowed to about 1,100 – 1,400 units each year. In 2004, the number of new homes constructed within the city increased to about 1,690. In 2005, the number of new homes constructed decreased to 1,470 units, in 2006, the number of new homes constructed decreased to about 1,400 units, and in 2007, the number of new homes constructed decreased to about 1,140 units. Based on the downturn in the national as well as the local housing market, it is not anticipated that the number of new homes constructed in 2008 will exceed the number of units constructed in 2007. In fact, from January 2008 – July 2008 just over 350 new homes were constructed in the city. Therefore, the long anticipated downturn in the level of residential construction is happening and 2008 is trending toward a significantly reduced level of new construction. After thirteen consecutive years (1995-2007), this reduced level of residential construction is having an effect on students as the period progressed and beginning to decline, however that enrollment at all levels and

Chart 3 (right) shows that student

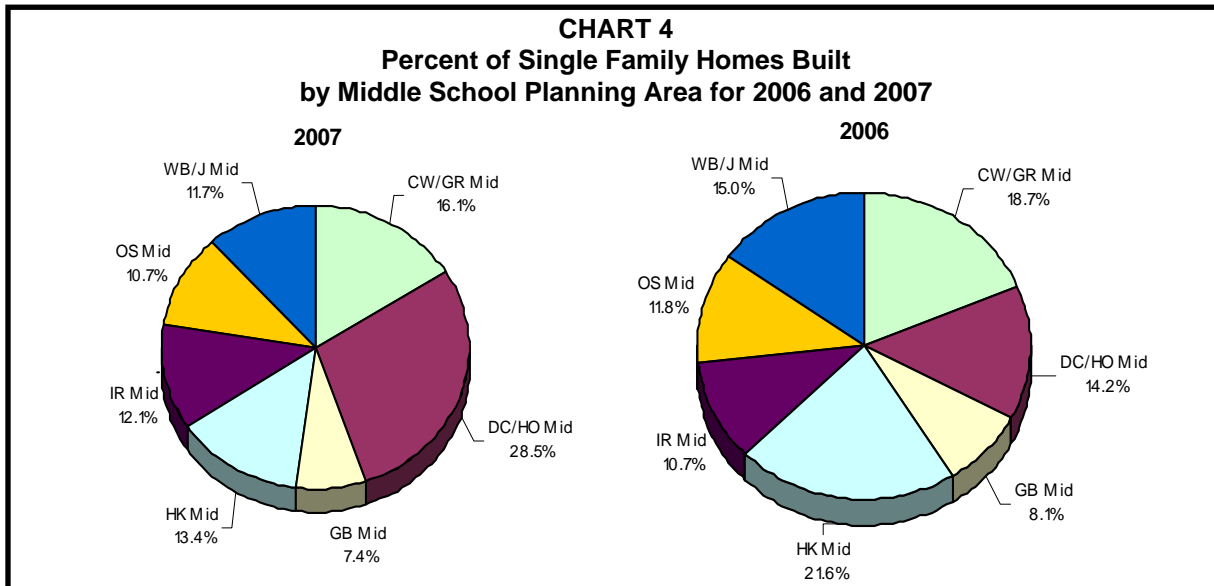


percent per year between 1986 and 1997. Between 1998 and 2001, enrollment increased between .75 percent and 1.75 percent. In 2002 student enrollment increased by 2.2 percent, in 2003 enrollment increased about 1.5 percent, in 2004 student enrollment increased about 1.4 percent, and in 2005 enrollment increased about .3 percent. Student enrollment decreased by 1.6 percent in 2006 and enrollment decreased by 1.1 percent in 2007. After twenty-three consecutive years of enrollment growth, the school division has experienced two consecutive years of enrollment decline (2006 and 2007). Between 2002 and 2007, enrollment in Chesapeake increased by about 180 students. The small increase over the five-year period reflects the moderate increase in enrollment at the beginning of the five-year period and the decline in enrollment at the end of the five-year period. In the early-to-mid-1990s yearly enrollment increased significantly. Enrollment increased 1,580 students in 1993, which is the largest increase experienced by the Chesapeake schools to date. Enrollment increased by about 900 students in both 1994 and 1995. Beginning in 1996, however, enrollment growth began to moderate and continued to be moderate through the 2001-02 school year resulting in an average increase of about 500 students a year for that period. In 2002, enrollment growth had more than doubled from the previous year by increasing about 850 students. In 2003 and 2004, enrollment growth was again moderate and increased by about 580 students and 565 students respectively. In 2005 enrollment increased by 116 students, in 2006 enrollment decreased by about 640 students, and in 2007 enrollment decreased by about 440 students. The loss of student enrollment for 2006 and 2007 is a reflection of the moderate number of new homes being constructed and demographic changes within various neighborhoods throughout the city.

Residential development in Chesapeake has not progressed at the same rate in all school planning areas. Some school planning areas have seen many new homes built while others have experienced limited residential construction. This discrepancy results in enrollment increases in some planning areas while other areas have experienced a decline. Single family homes have the greatest impact on enrollments because they usually result in the greatest number of public school-age children per home. Based on citywide averages (July 2008), there are .16 school-age children per multi-family style condominium, .12 school-age children per townhouse-style condominium, .34 school-age children per apartment, .47 school-age children per detached condominium, .46 school-age children per townhouse, and .53 school-age children per single family home.

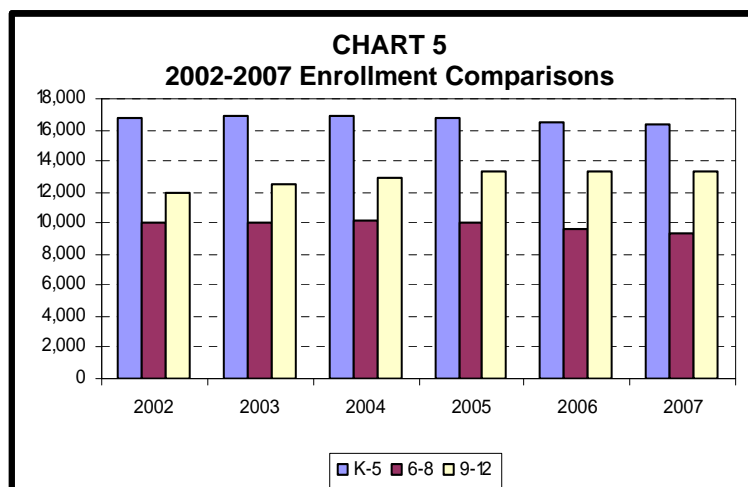
Chart 4 (below) shows the percentage of the new single family homes built in Chesapeake in each of the seven middle school planning areas for 2006 and 2007. There were 900 single family homes built in 2006 and 634 homes built in 2007. Therefore, the 2006 pie shown in Chart 4 is proportionally larger than the 2007 pie. As shown in Chart 4, the largest share and, therefore, the largest number of new single family homes were built in the Hickory Middle School Planning Area in 2006 and in the Deep Creek/Hugo A. Owens Middle Schools Planning Area in 2007. The share of new single family homes being built in 2006 compared to 2007 in the Hickory Middle School Planning Area decreased from 21.6 percent to 13.4 percent, in the Crestwood/Greenbrier Middle School Planning Area from 18.7 percent to 16.1 percent, in the Western Branch/Jolliff Middle Schools Planning Area from 15.0 percent to 11.7 percent, in the Oscar Smith Middle School Planning Area from 11.8 percent to 10.7 percent, and in the Great Bridge Middle School Planning Area from 8.1 percent to 7.4 percent. The share of new single family homes being built in the Deep

Creek/Hugo A. Owens Middle Schools Planning Area and the Indian River Middle School Planning Area increased from 2006 to 2007. The share of new homes constructed in the Deep Creek/Hugo A. Owens Middle Schools Planning Area increased from 14.2 percent to 28.5 percent, and in the Indian River Middle School Planning Area increased from 10.7 percent to 12.1 percent.



Just as residential growth has progressed at differing rates throughout the city, increases as well as decreases in student enrollment have varied from school to school and school planning area to school planning area. For example, in 2007 enrollment declined overall, however, 14 schools showed an increase in enrollment from the previous year. As stated previously, after 23 consecutive years of enrollment growth, the school division has had a decline in enrollment for the last two years (2006 and 2007). That trend is anticipated to continue for a few years and then stabilize. It is also important to note that the number of 12<sup>th</sup> graders exiting the school division has continued to grow faster than the number of kindergarteners entering the school division. As housing starts became more moderate and now have slowed significantly, the impact of not having enough kindergarteners to replace the outgoing 12<sup>th</sup> graders is more apparent. After the enrollment stabilizes, it is expected to increase due to the city's 30 percent projected population growth by 2030.

The citywide growth in student enrollment was not experienced equally at all grade levels. As shown in Chart 5 (right) the largest enrollment increase was experienced at the secondary level (Grades 6-12) during the 2002-2007 five-year period. Enrollment for Grades 9-12 (four grade levels) increased by about 1,380 students. At the same time, enrollment at the



elementary and middle school levels decreased. Enrollment in Grades K-5 (six grade levels) decreased by about 500 students and enrollment in Grades 6-8 (three grade levels) decreased by about 700 students.

## **INFLUENCE OF THE AMERICANS WITH DISABILITIES ACT**

In January 1992, the Americans with Disabilities Act (ADA) took effect. In February 1992, the Americans with Disabilities Act Accessibility Guidelines (ADA-AG) were included in the Virginia Uniform Statewide Building Code. Briefly, the ADA requires that state and local governments ensure that qualified individuals with disabilities are not excluded from services, programs, or activities because the buildings are inaccessible. The ADA addresses the business sector as well as the public sector.

The ADA is a federal law that requires the following:

1. All existing school programs shall be operated so that they are, when viewed in their entirety, readily accessible to and useable by qualified individuals with disabilities.
2. All new construction (including additions) shall be readily accessible to qualified individuals with disabilities.
3. To the maximum extent feasible, all alterations shall be completed so that the altered portion of the facility is readily accessible to qualified individuals with disabilities.

State law currently recommends that architects and engineers use the ADA-AG when designing school construction projects. Further, the federal regulations require school systems to develop transitional plans to achieve compliance where necessary. School systems are not required to make alterations to existing facilities if all programs are readily accessible. Accessibility is not required in each existing facility if program accessibility can be achieved by other means or at an alternate site. However, any new construction or building alterations, to the maximum extent possible, must meet the requirements of the ADA-AG.

The ADA has had, and will continue to have, a significant impact on the cost of new construction and the cost of additions and renovations. The ADA will also have a major influence in decisions of whether to renovate and enlarge older multistory facilities or to construct new replacement facilities.

## **INFLUENCE OF CHANGING GOVERNMENTAL MANDATES**

Since 1976, there have been many state and federal governmental mandates that have, in effect, reduced the capacity of our schools. For example, the state has mandated smaller class sizes for all secondary English classes. Federal mandates have had a dramatic impact in offerings and class size requirements for disabled students. Some of the state and federal mandate changes that have affected the space and capacity available in Chesapeake schools are:

- ❖ Smaller class sizes for regular education programs at all levels.
- ❖ Smaller class sizes in Grades K-3 in schools with large numbers of at-risk students.
- ❖ Increased graduation requirements.
- ❖ Increased program requirements for students with disabilities.
- ❖ Smaller class sizes for the programs for students with disabilities.
- ❖ Increased numbers of support programs/services, such as elementary school guidance counselors.
- ❖ Computer literacy requirements.
- ❖ Programs for at-risk students.
- ❖ Programs for gifted students.
- ❖ Requirement that students in secondary schools take at least five periods of classes.

### **INFLUENCE OF SEWER AND WATER AVAILABILITY**

In some areas of the city the availability and capacity of the existing sewer lines may have an impact on the number of new homes that can be built. Generally, proposed developments located in the urban or suburban areas of the city are required to connect to public water and sewer if they are located within one mile of an existing Hampton Roads Sanitation District (HRSD) sewer force main. These areas include nearly all of South Norfolk and Indian River, the majority of Western Branch, and the northern portions of Deep Creek, Great Bridge and Hickory. Future planned extensions of HRSD force mains in the urban and suburban areas of the city will potentially open up additional developable land that had previously not been served by public sewer. Where sewer service is available to a property proposed for rezoning classification, the ability to serve the proposed development is evaluated as part of the city's Level of Service (LOS) policy.

Previous revisions of the capital improvement plan indicated that the existing availability of water may have an even greater impact on the construction of new homes and on the economy of Chesapeake in general than the capacity of the sewer lines. While increasing the capacity of the sewer lines can increase the capacity of the sewer system in a relatively straightforward manner, the

amount of water available is relatively finite. Since issues regarding the Lake Gaston pipeline have been resolved, it appears the city will have sufficient water for several years. In fact, the city gets water from various sources, including neighboring cities, the Northwest River, ground wells, and the Lake Gaston pipeline. The city anticipates that this water supply will accommodate water demand in the city through 2040.

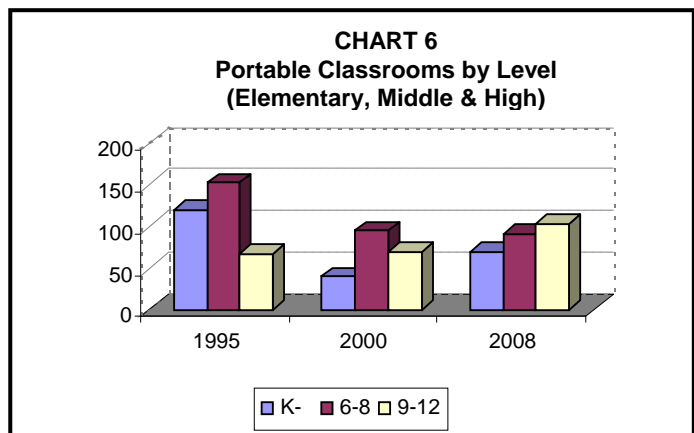
### **INFLUENCE OF THE SCHOOL BOARD’S TECHNOLOGY INITIATIVE**

Technological advancements during the past decade have led to the development of new and innovative tools for the workplace and for educational settings. Because the uses of technology in the workplace have increased, schools must provide learning environments that prepare students to use technology in all areas of life. Technology includes computers, local area networks, media retrieval, telecommunications, distance learning, multimedia, and imaging systems.

In order for students to access these technologies, the infrastructure, including the conduit and cabling for voice, video, and data transfer to support the technologies is necessary. Providing the required infrastructure (including the hardware, larger classrooms to accommodate the hardware, and additional furniture) has increased the cost of new construction projects.

### **INFLUENCE OF REDUCING RELIANCE ON PORTABLE CLASSROOMS**

Reliance on portable classrooms increased steadily as the pace of residential construction continued at high levels between 1984 and 1995 (see Chart 2, page 7). This sustained high level of residential growth has strained the resources of the city to provide the necessary permanent school facilities as well as other services such as roads. During the 1995-96 school year, 342 portable classrooms at 25 locations were needed to supplement the classrooms available in permanent school facilities in Chesapeake (Chart 6, right). At that time, more portables were necessary at the middle school level than at either the elementary school or the high school levels. For 2008-09, portables are more evenly distributed throughout each of the levels (elementary, middle, and high), with the most portables being required at the high school level.



Both the School Board and City Council have expressed a strong desire to reduce reliance on portable classrooms in Chesapeake by increasing the number of permanent classrooms available. That desire led Council to petition the state legislature for a change in the city charter to permit more flexibility in funding school capital projects. The city's increased funding flexibility allowed the School Board and City Council to begin providing the necessary permanent classrooms in a timely manner. As a result of these efforts, the pace of school construction increased and the need for portable classrooms decreased. No additional portable classrooms were needed for the 1996-97 school year. In fact, over a three-year period the need for portable classrooms declined from 342 in the 1995-96 school year to 182 for the 1997-98 school year. However, for the 1998-99 and 1999-00 school years, over 190 portable classrooms were required. In the 2000-01 school year, 206 portable classrooms were required, in the 2001-02 school year 202 portable classrooms were required, in the 2002-03 school year 235 portable classrooms were required, in the 2003-04 school year 240 portable classrooms were required, in the 2004-05 school year 280 portable classrooms were required, in the 2005-06 school year 316 portable classrooms were required, and in the 2006-07 school year 339 portable classrooms were required. For the 2007-08 school year, about 300 portable classrooms (instructional and non-instructional) are being utilized. The reduction in portable classrooms utilized for the 2006-07 school year to the 2007-08 school year is due to the opening of Grassfield High School. In 2008-09, it is anticipated that approximately 265 portable classrooms will be needed.

### **INFLUENCE OF CITY COUNCIL'S GROWTH MANAGEMENT POLICIES**

In 1995, City Council established a Level of Service (LOS) policy for roads, schools, and public utilities for residential rezoning applications. The city's LOS policy, as it related to schools, considered whether the schools that would serve a proposed development had the capacity available to serve the student population. At that time, the LOS policy based the percent of school capacity on student enrollment. Since its inception, the LOS policy has changed three times. In 1997, the LOS policy determined the percent of school capacity utilizing student enrollment and students projected from approved residential construction plans. Since 2002, the LOS policy has determined the percent of capacity by utilizing student enrollment, students projected from final approved residential construction plans, and students projected from the proposed residential rezoning to be heard by Planning Commission and City Council. Beginning in October 2005, the percent of capacity was to be determined by utilizing student enrollment, students projected from approved preliminary site and subdivision plans, and students projected from the proposed residential rezoning to be heard by Planning Commission and City Council. Over a period of several months, City staff established a mechanism to accurately compute the figures beginning in April 2007. In all the versions of the LOS policy, if any school serving the property is at 120 percent or more of its

capacity and there is no funded project scheduled for completion within one year of Council action on the rezoning request that would provide relief to the overtaxed school(s), the city planning department would forward a recommendation for denial of the rezoning application to City Council.

This Council policy should have the effect of encouraging residential rezonings in those areas where permanent classroom space is more available. Conversely, this policy should help discourage additional residential rezonings in areas where serious overcrowding problems exist.

## **INFLUENCE OF REQUIRED MAJOR REPAIRS, MAINTENANCE, AND RENOVATIONS**

Over the past 20 years, Chesapeake Public Schools has built new school facilities and additions to existing school facilities to address the overwhelming need for additional permanent classrooms. The focus during this time has been providing needed additional classrooms. As many of the most pressing space needs were addressed, at least in the short term, it became apparent that many facilities faced needed repairs and renovations. In order to assess the system-wide need for major repairs, maintenance, and renovations, the New Construction Department, in conjunction with School Plants, began a systematic evaluation of Chesapeake's older, more mature facilities. The focus has been on facilities in service 20 years or more. Facilities that have had an addition(s) constructed within the past 20 years but the original facility was not renovated at the time of the addition(s) are also a major focus. These facility evaluations are called Facility Condition Inspections. A Facility Condition Inspection is a detailed inspection and evaluation of a facility including the following: the site, the exterior of the facility, the roof, the interior of the facility, and the heating, ventilation and air conditioning (HVAC) system. A standard evaluation and recording procedure was developed and used for each facility and facility area to be inspected. As part of the data gathering, input was obtained from the current building users, from plant maintenance personnel and records, and from direct observation. Combining input on each facility from its users, from maintenance, and from direct observation, permits the development of a prioritized plan for upgrading facilities and for scheduling and budgeting maintenance and repair or renovation.

The initial facilities that were evaluated included the Chesapeake Center for Science and Technology, Crestwood Intermediate School, Crestwood Middle School, Deep Creek SECEP (the former Deep Creek Intermediate School), the Educational Services Center, Great Bridge Middle School, Great Bridge Primary School, Indian River Middle School (including the Annex), the Instructional Services Center, Oscar Smith Middle School, the School Plants/Transportation/Educational Resource Center (ERC) complex, the former RE-ED Center (in the Brentwood subdivision of the city), and Western Branch Middle School. After conducting Facility Condition Inspections on these facilities, the results were evaluated by staff from New Construction and School Plants. Some identified facility issues were determined to be maintenance items that could be addressed through the regular maintenance program of School Plants. Other facility issues were identified as needing to be addressed through the capital budget process. The issues needing to be addressed through the capital budget range from replacement of HVAC systems and roofs to the complete renovation of a facility. After evaluating the results of the Facility Condition Inspections conducted during the 1998-1999 school year, it was determined that several facilities would require

attention within the ten-year capital improvement plan. Some of the needs identified during the recent Facility Condition Inspections appear in this revision of the capital improvement plan. During the 2001-2002 school year, more detailed studies were completed in order to develop plans for addressing the needs at several of these facilities. As a result of the initial Facility Condition Inspections, specific plans for Oscar Smith Middle, Indian River Middle, and Great Bridge Primary schools were included in the *School Board's Proposed Capital Improvement Plan: 2004-2014*.

The chart in Appendix B (page 143) outlines facilities that either (1) have had facility condition inspections performed during the 2003-2004 and 2004-2005 school years or (2) that will have facility condition inspections performed during the first five-year period. Eight facilities (Butts Road Primary, Crestwood Intermediate, Chittum Elementary, Indian River High, Southeastern Elementary, Western Branch Middle, Rena B. Wright Primary, and Western Branch Intermediate schools) received a facility condition inspection during the 2003-2004 school year. One facility, Western Branch Middle School, was identified during the initial Facility Condition Inspections performed in 1998 as requiring further study by an architectural and engineering team. A modernization study was conducted to determine whether an addition is required, the extent of renovations needed, and to provide a cost estimate for the work. Specific plans for the modernization of Western Branch Middle School were included in the *School Board's Proposed Capital Improvement Plan: 2006-2016*. Four schools (Camelot Elementary, G. W. Carver Intermediate, Greenbrier Primary schools, and the Chesapeake Center for Science & Technology) received Facility Condition Inspections during the 2004-2005 school year. Plans to address the other eleven schools' facility condition inspections from the past two years will be included in future revisions of the capital improvement plan. Now that Grassfield High School has opened, additional facility condition inspections will be performed as staff time becomes available. It is important to note that many of the facilities listed in Appendix B have had additions constructed within the past 15 years but received only very limited renovations to the original facility.

### **INFLUENCE OF SCHOOL BOARD'S VHSL VENUE INITIATIVE**

The School Board has expressed its desire that all high schools be provided with a special VHSL (Virginia High School League) venue that would be conducive to hosting district and regional competitions for that event. For example, Oscar Smith High School is currently able to host district and regional basketball and wrestling events. Hickory, Oscar Smith, and Western Branch high schools are currently able to host district and regional football events. The following listing shows the VHSL events in which Chesapeake Public Schools participate and the proposed locations for those events. It should be noted that some new event venues are planned at the New High School in the Elbow Road/Centerville Turnpike North Area (baseball, softball, swimming). In making recommendations for the proposed school sites, the following factors were taken into consideration:

- The number of participants and spectators who will attend the event.
- The availability and proximity of parking to the event.
- Any site restrictions preventing development of the site.
- The size of the facility needed to host the event.
- Existing facilities capable of hosting the event.

<b><u>EVENT</u></b>	<b><u>PROPOSED LOCATION</u></b>
➤ Baseball	IRHS, GFHS, New High School - Elbow Road/Centerville Turnpike North Area
➤ Basketball (Boys/Girls)	OSHS, New High School - Elbow Road/Centerville Turnpike North Area
➤ Cross Country (Boys/Girls)	Bells Mill Creek Park (Behind Public Safety Bldg.)
➤ Field Hockey	GFHS
➤ Football	HHS, OSHS, WBHS
➤ Gymnastics (Girls Only)	IRHS, OSHS, WBHS, GFHS
➤ Indoor Track (Boys/Girls)	GFHS
➤ Outdoor Track (Boys/Girls)	GFHS
➤ Soccer (Boys/Girls)	GFHS
➤ Softball	GFHS, New High School - Elbow Road/Centerville Turnpike North Area
➤ Swimming (Boys/Girls)	New High School – Elbow Road/Centerville Turnpike North Area
➤ Tennis (Boys/Girls)	GFHS
➤ Volleyball (Boys/Girls)	GFHS
➤ Wrestling	OSHS, New High School – Elbow Road/Centerville Turnpike North Area
➤ Cheerleading	OSHS

**ENROLLMENT PROJECTIONS  
2009-2019**

Enrollment projections from all of the school planning areas point to a slow to moderate increase in the number of students in some areas and a loss of students in other areas. Table 1 (below) shows the projected changes in student enrollment that are anticipated by the year 2014. These anticipated changes will result from one or more of the following: (1) additional pupils who are new to the school system because of residential growth, and (2) demographic changes within some communities.

**TABLE 1  
Student Enrollment Changes<sup>1</sup>  
2009-2014**

--

<sup>1</sup>All estimates have been rounded to the nearest 10.

<b>SCHOOL PLANNING GROWTH AREA</b>	<b>K-5 ELEM</b>	<b>6-8 MIDDLE</b>	<b>9-12 HIGH</b>	<b>TOTAL</b>
Crestwood Middle/Greenbrier Middle	30	-50	** <sup>1</sup>	<b>-20</b>
Deep Creek Middle/ Hugo A. Owens Middle, Deep Creek High & Grassfield High	30	30	-50	<b>10</b>
Great Bridge Middle & Great Bridge High	-20	-170	-110	<b>-300</b>
Hickory Middle & Hickory High	0	-120	-200	<b>-320</b>
Indian River Middle & Indian River High	20	10	-40	<b>-10</b>
Oscar Smith Middle & Oscar Smith High	30	30	-110	<b>-50</b>
Western Branch Middle/ Jolliff Middle & Western Branch High	<u>10</u>	<u>10</u>	<u>-90</u>	<b><u>-70</u></b>
<b>TOTAL</b>	<b>100</b>	<b>-260</b>	<b>-600</b>	<b>-760</b>

The data in Table 1 (page 17) show that by the year 2014, the school division expects to lose approximately 760 students, bringing the total enrollment of the school system to about 37,800<sup>2</sup> students.

The number of additional students expected during the second five-year planning period (2014-2019) is shown in Table 2 (below). The data indicate that about 300 additional students can be expected during the 2014-2019 planning period.

**TABLE 2**  
**Student Enrollment Changes<sup>3, 4</sup>**  
**2014-2019**

---

<sup>1</sup>Students from Crestwood Middle School attend either Oscar Smith High School or Great Bridge High School for Grades 9-12. Students from Greenbrier Middle School attend either Indian River High School or Oscar Smith High School for Grades 9-12. Therefore, the projections for additional high school students from the Crestwood/Greenbrier Middle Schools Planning Area are included with those of the high schools these students will attend.

<sup>2</sup>The projected total enrollment of 37,800 students is based on the current enrollment, the projected decrease for the 2008-2009 school year, and the projected decrease for the 2009-2014 five-year planning period.

<sup>3</sup>All estimates have been rounded to the nearest 10.

<sup>4</sup>The student enrollment changes presented in Table 2 represent students who will result from new residential development or from demographic changes only but are not affected by any attendance zone adjustments or grade level realignments.

<b>SCHOOL PLANNING GROWTH AREA</b>	<b>K-5 ELEM</b>	<b>6-8 MIDDLE</b>	<b>9-12 HIGH</b>	<b>TOTAL</b>
Crestwood Middle/Greenbrier Middle	20	40	** <sup>1</sup>	<b>60</b>
Deep Creek Middle/ Hugo A. Owens Middle, Deep Creek High & Grassfield High	30	50	30	<b>110</b>
Great Bridge Middle & Great Bridge High	0	20	-10	<b>10</b>
Hickory Middle & Hickory High	20	30	10	<b>60</b>
Indian River Middle & Indian River High	0	20	-10	<b>10</b>
Oscar Smith Middle & Oscar Smith High	30	30	30	<b>90</b>
Western Branch Middle/ Jolliff Middle & Western Branch High	<u>-30</u>	<u>40</u>	<u>-50</u>	<b><u>-40</u></b>
<b>TOTAL</b>	<b>70</b>	<b>230</b>	<b>0</b>	<b>300</b>

---

<sup>1</sup>Students from Crestwood Middle School attend either Oscar Smith High School or Great Bridge High School for Grades 9-12. Students from Greenbrier Middle School attend either Indian River High School or Oscar Smith High School for Grades 9-12. Therefore, the projections for additional high school students from the Crestwood/Greenbrier Middle Schools Planning Area are included with those of the high school these students will attend.

Table 3 (below) summarizes the changes expected in student enrollments due to new residential development and demographic changes within some communities over the entire ten-year period (2009-2019). By the end of the year 2019, it is projected that there will be a loss of 460 students, bringing the total student enrollment to approximately 38,100<sup>1</sup> students.

**TABLE 3**  
**Student Enrollment Changes**<sup>2, 3</sup>  
**2009-2019**

<b>SCHOOL PLANNING GROWTH AREA</b>	<b>K-5 ELEM</b>	<b>6-8 MIDDLE</b>	<b>9-12 HIGH</b>	<b>TOTAL</b>
Crestwood Middle/Greenbrier Middle	50	-10	** <sup>4</sup>	<b>40</b>
Deep Creek Middle/ Hugo A. Owens Middle, Deep Creek High & Grassfield High	60	80	-20	<b>120</b>
Great Bridge Middle & Great Bridge High	-20	-150	-120	<b>-290</b>
Hickory Middle & Hickory High	20	-90	-190	<b>-260</b>
Indian River Middle & Indian River High	20	30	-50	<b>0</b>
Oscar Smith Middle & Oscar Smith High	60	60	-80	<b>40</b>
Western Branch Middle/ Jolliff Middle & Western Branch High	<u>-20</u>	<u>50</u>	<u>-140</u>	<b><u>-110</u></b>
<b>TOTAL</b>	<b>170</b>	<b>-30</b>	<b>-600</b>	<b>-460</b>

---

<sup>1</sup>The projected total enrollment of 38,100 students is based on the current enrollment, the projected decrease for the 2008-09 school year, and the projected decrease for the 2009-2019 ten-year planning period.

<sup>2</sup>All estimates have been rounded to the nearest 10.

<sup>3</sup>The student enrollment changes presented in Table 3 are a combination of the projected changes presented in Table 1 and Table 2.

<sup>4</sup>Students from Crestwood Middle School attend either Oscar Smith High School or Great Bridge High School for Grades 9-12. Students from Greenbrier Middle School attend either Indian River High School or Oscar Smith High School for Grades 9-12. Therefore, the projections for additional high school students from the Crestwood/Greenbrier Middle Schools Planning Area are included with those of the high school these students will attend.

## THE REQUIREMENTS FOR ADDITIONAL CLASSROOM SPACE: 2009-2019

Approximately 4,000 student spaces (Table 4, below) are projected to be available by the year 2014. The data in Table 4 indicate that by the year 2014 the need for additional classrooms is expected in the Indian River Middle School Planning Area and the Hickory Middle School Planning Area. Classroom space is anticipated to be available (from least to greatest) in the Oscar Smith Middle School Planning Area, the Western Branch/Jolliff Middle Schools Planning Area, the Great Bridge Middle School Planning Area, the Crestwood/Greenbrier Middle Schools Planning Area, and the Deep Creek/Hugo A. Owens Middle Schools Planning Area.

**TABLE 4**  
**Additional Student Spaces<sup>1</sup>**  
**Available/Needed by the Year 2014**

SCHOOL PLANNING GROWTH AREA	K-5 ELEM	6-8 MIDDLE	9-12 HIGH	TOTAL
Crestwood Middle/Greenbrier Middle	-25	-750	** <sup>2</sup>	<b>-775</b>
Deep Creek Middle/ Hugo A. Owens Middle, Deep Creek High & Grassfield High	-300	-780	-775	<b>-1,855</b>
Great Bridge Middle & Great Bridge High	-525	-225	0	<b>-750</b>
Hickory Middle & Hickory High	-200	100	100	<b>0</b>
Indian River Middle & Indian River High	-125	-125	275	<b>25</b>
Oscar Smith Middle & Oscar Smith High	-75	-350 <sup>3</sup>	330	<b>-95</b>
Western Branch Middle/ Jolliff Middle & Western Branch High	<u>225</u>	<u>-625</u>	<u>-150<sup>4</sup></u>	<b><u>-550</u></b>
<b>TOTAL</b>	<b>-1,025</b>	<b>-2,755</b>	<b>-220</b>	<b>-4,000</b>

<sup>1</sup>All estimates have been rounded to the nearest 5.

<sup>2</sup>Students from Crestwood Middle School attend either Oscar Smith High School or Great Bridge High School for Grades 9-12. Students from Greenbrier Middle School attend either Indian River High School or Oscar Smith High School for Grades 9-12. Therefore, the projections for additional high school students from the Crestwood/Greenbrier Middle Schools Planning Area are included with those of the high school these students will attend.

<sup>3</sup>Assumes the completion of the replacement school for Oscar Smith Middle School in September 2009.

<sup>4</sup>Assumes the completion of the addition to and renovation of Western Branch High School in September 2010.

The data in Table 5 (below) show approximately 3,700 total additional classroom spaces, the equivalent of about **148 classrooms** (not including those classrooms for specialized instruction), being available by the end of the 2009-2019 ten-year planning period. Although classroom space will be available in some areas, additional permanent classroom space will be required in the Hickory Middle School Planning Area and the Indian River Middle School Planning Area.

**TABLE 5**  
**Additional Student Spaces<sup>1, 2</sup>**  
**Available/Needed by the Year 2019**

<b>SCHOOL PLANNING GROWTH AREA</b>	<b>K-5 ELEM</b>	<b>6-8 MIDDLE</b>	<b>9-12 HIGH</b>	<b>TOTAL</b>
Crestwood Middle/Greenbrier Middle	-5	-710	** <sup>3</sup>	<b>-715</b>
Deep Creek Middle/ Hugo A. Owens Middle, Deep Creek High & Grassfield High	-270	-730	-745	<b>-1,745</b>
Great Bridge Middle & Great Bridge High	-525	-205	-10	<b>-740</b>
Hickory Middle & Hickory High	-180	130	110	<b>60</b>
Indian River Middle & Indian River High	-125	-105	265	<b>35</b>
Oscar Smith Middle & Oscar Smith High	-45	-320 <sup>4</sup>	360	<b>-5</b>
Western Branch Middle/ Jolliff Middle & Western Branch High	<u>195</u>	<u>-585</u>	<u>-200<sup>5</sup></u>	<b><u>-590</u></b>
<b>TOTAL</b>	<b>-955</b>	<b>-2,525</b>	<b>-220</b>	<b>-3,700</b>

<sup>1</sup>All estimates have been rounded to the nearest 5.

<sup>2</sup>The number of additional student spaces needed represents the number of spaces required for the entire 2009-2019 planning period and includes those presented in Table 4 on page 20.

<sup>3</sup>Students from Crestwood Middle School attend either Oscar Smith High School or Great Bridge High School for Grades 9-12. Students from Greenbrier Middle School attend either Indian River High School or Oscar Smith High School for Grades 9-12. Therefore, the projections for additional high school students from the Crestwood/Greenbrier Middle Schools Planning Area are included with those of the high school these students will attend.

<sup>4</sup>Assumes the completion of the replacement school for Oscar Smith Middle School in September 2009.

<sup>5</sup>Assumes the completion of the addition to and renovation of Western Branch High School in September 2010.

Additional spaces needed at each grade level (elementary, middle, and high) are estimated using the following formula: (current enrollment + projected students) - operational capacity at each school within a planning area = the number of additional instructional spaces needed.

As with student growth projections, the need for classroom space is unevenly distributed throughout the city. The varying pattern from area to area is due to the uneven rate of development throughout the city and the extent of classroom space currently available. As shown in Table 4 (page 20), at the elementary school level the greatest need for additional classroom space is in the Western Branch/Jolliff Middle Schools Planning Areas. At the middle school level, 100 classroom spaces will be required in the Hickory Middle School Planning Area. Even though Grassfield High School opened in September 2007, additional high school classroom space will be necessary in the Oscar Smith Middle School Planning Area, the Indian River Middle School Planning Area, and the Hickory Middle School Planning Area (ranging from 100 spaces to 330 spaces). Overall, the greatest need for additional permanent classroom space student spaces) is at the high school level.

As Table 5 (page 21) indicates, by the year 2019, the greatest number of additional elementary classrooms needed is expected to be in the Western Branch/Jolliff Middle Schools Planning Area. Table 5 also shows that by the year 2019, the Hickory Middle School Planning Area will need 130 classroom spaces at the middle school level (Grades 6-8). At the high school level (Grades 9-12), additional permanent classroom space will be necessary in the Oscar Smith Middle School Planning Area, the Indian River Middle School Planning Area and the Hickory Middle School Planning Area by the end of the ten-year period ranging from approximately 110 spaces to 360 spaces.

## PROJECTS IN PROGRESS

(From Previous Revisions of the Capital Improvement Plan)

The capital improvement plan is updated yearly. Because the capital improvement plan addresses only unfunded facility needs, any project for which funding has been approved is deleted from the current update. Table 6 (below) shows a list of the projects from previous updates of the capital improvement plan for which the planning and construction process has begun but has not yet been completed. Costs for these projects are not included in Table 39 (page 114) in the currently proposed update of the capital improvement plan. When determining the school facility needs in each school planning area for the **currently proposed plan (2009-2019)**, the three projects listed below are treated as if they have already been completed.

**TABLE 6**  
**Capital Projects in Progress**  
**Funded 1996-2007**

<b>Project</b>	<b>Major Funding Source</b>	<b>Anticipated Completion Date</b>
Land, Elementary School, Southern Chesapeake area	Lottery Proceeds	9/09 <sup>1</sup>
Construction, Replacement School for Oscar Smith Middle	Virginia Public Schools Authority Bonds	8/09
Construction, Addition to and Renovation of Western Branch High	Virginia Public Schools Authority Bonds	8/10

---

<sup>1</sup>This project has been delayed for several years to allow time to monitor growth, the impact of the Chesapeake Expressway, the impact of the city's Transportation Corridor Overlay District (TCOD), and future plans for the Fentress Naval facility.

## THE PRINCIPLES BEHIND THE PLAN

The proposed Capital Improvement Plan for 2009-2014 has been developed using the philosophy statement and planning principles for future schools originally developed by the School Facilities Task Force in 1985-86,<sup>1</sup> revised and updated in the School Improvement Plan: 1996-2002 in 1996,<sup>2</sup> and revised and updated in the School Improvement Division Plan: 2002-2007 in 2002.<sup>3</sup> In planning future facilities, every attempt has been made to formulate plans based upon these guidelines, which were endorsed by the Chesapeake School Board in June 2002. These guidelines appear below.

### Philosophy Statement on School Facilities<sup>2</sup>

Because Chesapeake's public school facilities are an expression of the community's commitment to educate and to invest in its children and its future, Chesapeake Public Schools should:

- (1) Provide facilities that meet the curricular and extracurricular program needs of our students, that are logically designed and, to the extent possible, that are flexible enough to adapt to changing requirements.
- (2) Provide facilities that support and enhance the use of current and future technology.
- (3) Plan schools that have sufficient space to house the students, mindful of the present and future growth patterns of our city.
- (4) Design and construct school facilities free of safety hazards.
- (5) Design and construct school facilities in harmony with the history and architecture of the community.
- (6) Construct and maintain school facilities to be structurally sound, clean, efficient, and attractive.
- (7) Provide facilities that meet the requirements of the centralized support services, such as transportation, food services, central administration and plant maintenance.

---

<sup>1</sup>A Plan for School Facilities in Chesapeake, 1985-2000. Report of the School Facilities Task Force. Chesapeake Public Schools, 1986.

<sup>2</sup>School Improvement Plan: 1996-2002. Report of the Citywide School Improvement Planning Team. Chesapeake Public Schools, 1996.

<sup>3</sup>School Improvement Division Plan: 2002-2007. Report of the Citywide School Improvement Planning Team. Chesapeake Public Schools, 2002.

- (8) Work with other city departments to provide facilities that encourage multiple public uses, including parking and grounds.
- (9) Secure funding and support for school facility needs.

**Planning Principles for Future Schools<sup>1</sup>**

**Buildings**

1. Give primary consideration to the basic instructional, administrative, and extracurricular programs of the school system in determining the design of a school.
2. Specify minimum school enrollments in order to ensure a comprehensive instructional program at each school.
  - ◆ Elementary schools                      100 students per grade level
  - ◆ Middle schools                              200 students per grade level
  - ◆ High schools                                 300 students per grade level
3. Design and construct the central facilities (cafeteria, auditorium, media center, and administrative unit) of schools to allow for the following maximum enrollments (excluding the requirements for special needs students).
  - ◆ Elementary schools                      900 students
  - ◆ Middle schools                              1,500 students
  - ◆ High schools                                 2,000 students
4. Consider the potential for expansion when designing new facilities which are not initially constructed to maximum capacity.
5. Design and construct school additions in accordance with maximum capacity guidelines, to the extent possible, before constructing new schools.

---

<sup>1</sup>School Improvement Division Plan: 2002-2007. Report of the Citywide School Improvement Planning Team. Chesapeake Public Schools, 2002.

## Sites

6. Consider the following when determining the location of a school site:
  - ◆ Accessibility
  - ◆ Proximity to compatible city services, such as parks, athletic fields, and utilities
  - ◆ Adjacent zoning
  - ◆ Elementary school sites that are in close proximity to the communities served
  - ◆ Secondary school sites that encompass larger geographic areas
7. Adhere to, or exceed, the Virginia Department of Education guidelines when determining useable acreage required for a school site. Guidelines for school site size are as follows:

◆ Elementary schools	20 acres
◆ Middle schools	35-40 acres
◆ High schools	75-100 acres

The configuration of the site, the curricular and extracurricular educational program (including physical education and playing fields), and local requirements (including parking and storm water management) will impact the guidelines.

## Planning

8. Explore all viable options for housing students before constructing new schools and additions.
  - ◆ Review school attendance zones.
  - ◆ Utilize portable classrooms as temporary space until the population in the community stabilizes.
  - ◆ Explore the feasibility of scheduling alternatives.
9. Draw boundary lines for school zone changes according to minimum and maximum enrollment guidelines.
10. Plan for stable school attendance zone boundaries to the extent possible.

11. Revise the operational capacity of school buildings annually based on the current instructional program of each building.
12. Reevaluate and revise annually, all proposals (such as new construction projects, renovations, grade level realignments, and attendance zone adjustments) for inclusion in the School Board's ten-year Proposed Capital Improvement Plan.

## SUMMARY OF THE PLAN FOR 2009-2014

The proposed capital improvement plan calls for the expenditure of \$466,751,400 to complete the projects in the first five-year period shown in Table 39A on page 123 (\$379,428,500 in Table 39, page 114). Due to the rapidly increasing costs of materials and manpower, an inflation factor of 5.6 percent is being used for this revision to the capital improvement plan. This is more reflective of the actual costs of the project for the specified year and corresponds to the consumer price index for July 2008. Projects in the first-five year planning period include the following:

- ❖ **Construction of four new schools** (middle school to relieve overcrowding at Hickory Middle, high school in the Elbow Road/Centerville Turnpike North area, elementary school in the B.M. Williams Primary/Crestwood Intermediate and Greenbrier Primary/Intermediate area, and elementary school in the Deep Creek Elementary/Deep Creek Central Elementary area)
- ❖ **Construction of one school addition and renovation** (Chittum Elementary)
- ❖ **Modernization of two schools** (Crestwood Middle and Indian River High)
- ❖ **Design of two school modernizations** (Great Bridge Primary and Indian River Middle)
- ❖ **Replacement of roofs at twenty facilities** (Rena B. Wright Primary, Butts Road Primary, Great Bridge Primary, Southwestern Elementary, Chittum Elementary, Indian River Middle, Sparrow Road Intermediate, Western Branch Intermediate, Great Bridge Intermediate, Butts Road Intermediate, Greenbrier Intermediate, Southeastern Elementary, Treacle Elementary, Camelot Elementary, Crestwood Middle, Indian River High, the Planetarium, the former RE-ED Center, the Warehouse and Supply facility, and School Plants)
- ❖ **Replacement of twenty-nine HVAC systems** (Deep Creek High, Southeastern Elementary, B. M. Williams Primary, Treacle Elementary, Greenbrier Primary, Carver Intermediate, Portlock Primary, Cedar Road Elementary, Western Branch Primary, Oscar Smith High, Camelot Elementary, Hickory Elementary, Southwestern Elementary, Western Branch Intermediate (plus mixing boxes), Great Bridge High, Deep Creek Middle, Great Bridge Middle (partial), Truitt Intermediate, Butts Road Intermediate, Great Bridge Intermediate, Greenbrier Intermediate, Hickory Middle, Hugo Owens Middle, Norfolk Highlands Primary, Western Branch Middle, Thurgood Marshall Elementary, Hickory High (plus chillers), Edwards-Wilson Center, and the Instructional Services Center (ISC))
- ❖ **Replacement of mixing boxes at three schools** (Indian River High, Indian River Middle, and Western Branch Middle)
- ❖ **A parking/storage facility for school buses**

- ❖ **Repaving at four schools** (Deep Creek Elementary, Deep Creek High, Western Branch Primary, and Great Bridge High)
- ❖ **Repairs at one facility** (Alternative School)
- ❖ **Install lights for the softball field at one school** (Great Bridge High)
- ❖ **Repair auditorium ceiling at one school** (Indian River High)
- ❖ **Addition and renovation to the food services warehouse**

---

**CAPITAL IMPROVEMENT PLAN  
BY  
SCHOOL PLANNING AREAS**

---