

APPROVED CAPITAL IMPROVEMENTS PROGRAM

Fiscal Years 2015-24



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PRINCE WILLIAM COUNTY PUBLIC SCHOOLS

***Capital Improvements Program
Fiscal Years 2015-24***

Table of Contents

Overview 1

Recent Accomplishments..... 2

Major Changes 2

Planning..... 3

Funding 4

New Schools, Additions, and Other Bond-Funded Projects 5

Site Acquisition..... 7

Site Acquisition Funding 8

Renovations and Renewals 9

Major Maintenance 10

Schedule of Renovations and Renewals 11

Technology Improvements Program 16

Energy Management 17

Summary 23

Appendix A: School Facility Summary.....A-1 through A-22

Appendix B: Student Enrollment & Housing Data.....B-1 through B-20

Appendix C: Identified School Sites.....C-1 through C-9

Appendix D: School Construction Financial Data.....D-1 through D-8

CAPITAL IMPROVEMENTS PROGRAM

Fiscal Years 2015-24

Prince William County Public Schools is the second largest of 132 school divisions in the Commonwealth of Virginia and one of the 40 largest school divisions in the country. The School Division provides services to over six percent of the state's student enrollment. The total 2013-14 enrollment was 85,055 students with permanent capacity for 85,419 students. This capacity is supplemented with 199 instructional portable classrooms. Permanent capacity is set to increase by 20,973 seats over the next ten years with completion of new school facility construction identified within this Capital Improvements Program (CIP).

Prince William County Public Schools is organized to focus on meeting the needs of its students and employees while managing 91 schools, along with administrative and support facilities. The CIP is a management tool for planning the capital improvements projects needed to house these students and employees adequately. It is an ongoing plan designed to address the need for construction of new school facilities, classroom additions to existing schools, site acquisition, renewals of existing facilities, and upgrading and maintaining the School Division's infrastructure. The CIP is a blueprint of work to be performed over the next ten-year period as determined in assessments of building needs, capacity, and utilization. It is developed to provide facilities and future school sites to sustain world-class educational programs at a reasonable cost.

The CIP enables the School Division to address changing enrollment patterns and utilize facilities in ways that are consistent with sound educational practices. It is a "cumulative" process that builds upon the prior year's plan and is adjusted annually based on updated enrollment projections and fiscal limitations (debt service and budget constraints). Based on the annually updated enrollment projections, the CIP provides general guidance for the next ten years.

This ten-year plan uses a long-term planning approach that helps to better focus staff efforts. The CIP is not an inventory of all the work that must be performed on school facilities over the next ten years. It is, rather, a specific budget for the first year of the program (FY 2015) combined with a more general planning schedule for four additional years (FY 2016-19) and then an estimate of projects needed for FY 2020-24. The projects designated for the first two years of the plan are the highest priority needs.

Prince William County Public Schools - Strategic Plan

The Capital Improvements Program must meet the following objective of the Strategic Plan:

Objective 2.3: Enhance the appearance, condition, and capacity of physical plants, facilities, and equipment.

- 2.3.1 All Division facilities will pass compliance audits and meet building code regulations.
- 2.3.2 Each year, the number of trailers will be reduced so that students are housed in permanent facilities.

This objective is addressed in two general program areas:

- New Construction - projects under construction and planned construction projects to include additions
- Renovations/Renewals/Maintenance - managing existing school building conditions

Recent Accomplishments

In the past five years eight new schools and thirteen additions have been constructed, costing \$331 million and adding 9,805 student seats.

Additions at nine schools were recently completed and opened in September 2013. Elementary school additions include Loch Lomond (4 classrooms), Mullen (6 classrooms), Penn (7 classrooms), Sinclair (11 classrooms), Sudley (10 classrooms), and West Gate (4 classrooms). Middle school additions include Benton (11 classrooms) and Potomac (11 classrooms), and a 30-classroom addition was completed at Potomac High School.

Major renewals of 10 schools were completed in the last five years at a cost of nearly \$72 million.

Additionally, we continue to assess and improve school safety, including multimillion dollar enhancements in new school design and upgrades to existing buildings by providing controlled access entryways.

Major Changes

Major changes from the 2014-23 CIP include:

- New Dominion 10-classroom addition delayed from 2016-2019
- Western Bus Facility delayed one year from 2016-2017
- Belmont ES 4-classroom addition increased to 10-classroom addition
- Neabsco ES 8-classroom addition moved forward from 2019 to 2017
- Elementary School (Lake Ridge Area) added to 2020
- Springwoods ES 5-classroom addition removed from 2017
- Lake Ridge ES 7-classroom addition and Antietam ES 13-classroom addition removed from 2020
- 2020 Middle School designated as Potomac Shores
- 2021 Elementary School TBD designated as Cherry Hill Area
- 2022 Elementary School TBD designated as Haymarket Area
- Elementary School (Linton Hall Area) added to 2022
- Elementary School (Stonewall Area) added to 2023

Planning

Planning for capital improvements is an ongoing process. Priorities shift as conditions change at individual facilities, as programs change, and as the student population totals change. The official student enrollment count for Prince William County Public Schools, as of September 30, 2013, is 85,055 students. From 2012 to 2013, total enrollment grew by 1,504 students, or 1.8 percent growth rate. This is compared to growth from 2011 to 2012 of 1,876 students, or 2.3 percent.

2014-15 enrollment is projected to be 87,108 students, an increase of 2,053 students overall. Examining student enrollment growth within school attendance areas, “Geographic Areas,” and school program capacities, guides the identification of the need for additional space for students. Possible solutions to overcrowding conditions include portable classrooms, relocation of special programs, changes in attendance area boundaries, additions, and the construction of new facilities.

Student enrollment projections are utilized for a variety of planning and decision-making functions, among which operational and capital budgeting needs are most prominent. The functional objectives of the Student Housing program are to ensure the accurate preparation of information to enable decision-making with respect to the housing of Prince William County students. Individual school forecasts provide a snapshot of the anticipated changes that Prince William County’s public schools will encounter in the course of the current planning period.

Annually, the status of student housing is assessed for the next ten (10) years. This assessment includes determining the current availability of space for students, assessing current student enrollment, projecting future student enrollment, and preparing recommendations for current and future housing of students. During the next five years, student enrollment is projected to increase by an average annual rate of about 2.5 percent. This will result in almost 10,560 additional students during this period.

Building new school facilities and additions to existing school facilities addresses the overwhelming need for additional classrooms; where possible, additions are utilized as cost-effective alternatives to the construction of new facilities.

The School Division is committed to re-evaluate the current facilities now housing the students at Independent Hill School and PACE East. A plan to disburse Independent Hill students to existing schools and replace PACE East School in 2018 is proposed with this CIP. This involves adding classrooms to new elementary construction, increasing classroom additions at east and west middle schools, and adding space to construction plans for the 12th High School. This will allow the students of Independent Hill School to be educated in the least restrictive environment.

School Facility Totals

By School Type

School Type	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Elementary Schools	53	53	55	55	55	57	57	57
Traditional Schools	2	2	2	2	2	2	2	2
Middle Schools	14	15	15	15	15	15	16	16
High Schools	10	10	10	10	10	11	11	11
Total (Regular Education)	79	80	82	82	82	85	86	86
Special Education	4	4	4	4	3	3	3	3
Alternative Education	2	2	2	2	2	2	2	2
Total	85	86	88	88	87	90	91	91

Funding

This CIP is presented by the Superintendent as part of the budget and reviewed and adopted by the Prince William County School Board after a public hearing. The CIP is then presented to the Prince William Board of County Supervisors as part of the School Division’s budget for funding appropriation.

Prioritizing the work within the available funding to address the most critical needs is an ever-present challenge. Funds are included in the approved budget to support the CIP. The funding formula developed by the Associate Superintendent for Finance and Support Services provides targets for construction and maintenance expenditures.

It is impossible to address all School Division needs in a single year; therefore, a long-term approach is needed to balance expenditures with anticipated revenues. Funding for long-range plans is adjusted for Prince William County’s overall bonding capacity to maintain a Triple A bond rating, as directed by the Prince William Board of County Supervisors.

“Proffered” funds also provide revenue. Proffers are residential rezoning applicant’s monetary or in-kind contribution to the School Division to help mitigate the capital costs associated with residential development.

Proffer Funds Received by PWCS

<i>Fiscal Year Received</i>	<i>Amount</i>	<i>Purpose</i>
2014*	\$6,631,723	Construction projects, Portable classroom relocation
2013	\$5,527,008	Construction and renewal projects, Portable classroom relocation/maintenance
2012	\$5,427,209	Construction and renewal projects, Portable classroom relocation/maintenance
2011	\$3,223,771	Construction and renewal projects, Portable classroom relocation/maintenance
2010	\$7,363,382	Construction and renewal projects, Portable classroom relocation/maintenance
2009	\$8,018,018	Construction and site acquisition, Renewal projects
2008	\$7,054,482	Construction and site acquisition, Renewal projects
2007	\$10,686,615	PACE West / Yorkshire replacement / various construction, Renewal projects
2006	\$9,799,063	Tyler addition construction, Various construction projects
2005	\$9,600,000	East and West sites, Administration Building, Construction
2003	\$2,200,000	Acquisition of the Williams ES site, Additions to Sudley ES and Bristow Run ES
2002	\$4,265,554	New construction/renewals, Land acquisition for Transportation Center Central, Middle school site at Four Year Trail
2001	\$1,000,000	Acquisition of 10th high school site
2000	\$876,680	New Marsteller MS clearing and grading, Improvement of the Gar-Field HS athletic fields
1999	\$980,000	Improvement of the Brentsville HS parking lot, tennis court and the bus loop
1998	\$1,600,000	Acquisition of Ashland ES site
1996	\$450,000	Acquisition of additional land for the Kingsbrooke ES site
1995	\$671,955	Acquisition of land for the Kingsbrooke ES site
1994	\$793,055	Lightner Road and Old Bridge Schools, Site Acquisition
1992	\$231,845	Lightner Road School Site
Total	\$86,400,360	

*Proffer amount as of 1/2014

New Schools, Additions, and Other Bond-Funded Projects

<i>Scheduled Completion</i>	<i>Project</i>	<i>Cost</i>
<i>September 2014</i>	Haymarket Elementary School	<i>Previously Funded/Under Construction</i>
	The Nokesville School	
	River Oaks Elementary Addition (7 rooms)	
	Parkside Middle Addition/IHS West (14 rooms + 1 IHS)	
	Renewal - Dumfries Elementary School (Partial Funding)	
<i>September 2015</i>	Devlin Rd. Elementary School/IHS	\$25,987,000
	Featherstone Elementary Addition (6 rooms)	\$8,831,000
	Total - 2015	\$34,818,000
<i>September 2016</i>	Ferlazzo Elementary School/IHS	\$28,534,000
	12th High School/IHS (Mid-County)	\$110,943,000
	Rippon Middle Addition/IHS (8 rooms + 1 IHS)	\$7,410,000
	Maintenance Facility (Independent Hill site)	\$11,444,000
	Total - 2016	\$158,331,000
<i>September 2017</i>	Elementary School at Potomac Shores	\$29,374,000
	Elementary School (East - Neabsco Mills Area) ¹	\$29,374,000
	Kilby Elementary School Replacement	\$31,476,000
	Belmont Elementary Addition (10 rooms)	\$8,667,000
	Henderson Elementary Addition (10 rooms)	\$9,318,000
	Neabsco Elementary School Addition (8 rooms)	\$7,904,000
	Western Bus Facility	\$4,826,000
Total - 2017	\$120,939,000	
<i>September 2018</i>	Elementary School at Vint Hill Rd.	\$30,847,000
	Middle School (West - Linton Hall Area) (1464 capacity)	\$55,911,000
	PACE East Replacement/Multi-Space	\$32,227,000
	Total - 2018	\$118,985,000
<i>September 2019</i>	13th High School (West) ¹	\$118,331,000
	Leesylvania Elementary School Addition (4 rooms)	\$6,900,000
	New Dominion Addition (10 rooms)	\$5,623,000
	Elementary School Addition Haymarket Area (6 rooms)	\$6,901,000
	Total - 2019	\$137,755,000

New Schools, Additions, and Other Bond-Funded Projects

<i>Scheduled Completion</i>	<i>Project</i>	<i>Cost</i>
<i>September 2020</i>	Elementary School (Lake Ridge Area) ¹	\$34,016,000
	Middle School at Potomac Shores (1464 capacity)	\$61,651,000
	Pattie Elementary School Addition (10 rooms)	\$10,787,000
	Total - 2020	\$106,454,000
<i>September 2021</i>	Elementary School (Cherry Hill Area) ¹	\$35,721,000
	14th High School (Mid-County) ¹	\$127,561,000
	Total - 2021	\$163,282,000
<i>September 2022</i>	Elementary School (Haymarket Area) ¹	\$37,511,000
	Elementary School (Linton Hall Area) ¹	\$37,511,000
	Middle School (TBD) ¹	\$67,976,000
	Total - 2022	\$142,998,000
<i>September 2023</i>	Elementary School (Stonewall Area)	\$39,389,000
	Total - 2023	\$39,389,000
TOTAL (FY 2015-2024)		\$1,022,951,000

*Note 1 Sites needed by proffer or purchase
(Current CIP does not include acquisition funds)*

Site Acquisition

School staff reviews county residential development plans and maintains a database containing number of anticipated housing units and stage of development. This information is used in making enrollment projections. The projected enrollments by geographic area determine future school locations and attendance areas. School sites acquired must be located and sized in accordance with the adopted Prince William County Comprehensive Plan.

The County's level of development has made school site land acquisitions challenging as prime undeveloped land has been purchased or optioned by developers for future residential, commercial, and industrial development. Even with purchased and proffered sites, there are still nine school sites and one bus facility needed by 2023. If proffered school sites are not used, an additional number of sites would need to be acquired.

Land acquisition will continue to figure prominently in this and future capital improvement budgets. Funding for school site acquisition comes from a combination of "proffered" funds or sites, bond funds, and the operating budget. "Proffered" funds are monetary and/or in-kind contributions to the School Division in order to offset the impact of new residential development on schools.

In making efforts to acquire proffered sites, staff works cooperatively with developers of land to secure the best possible land or monetary contribution. Actual monetary amounts received by Prince William County Schools vary depending on the year a development was first proposed and the number and type of residential units to be constructed. Funds are received when individual units are permitted/built within the development and not in one lump sum.

The location, character, and extent of all proposed public facilities must be consistent with Prince William County's Comprehensive Plan as determined by the Prince William County Planning Commission and the Prince William Board of County Supervisors.

Site Acquisition Funding

Year To Open	Year Acquired / To Acquire	New School	Property Status	Existing Funds	Funds Required
2015	2011	Devlin Road ES	Purchased/PWCS Owned	N/A	N/A
2016	2010	Ferlazzo ES	Proffered	N/A	N/A
	2006-09	12th High School	PWCS Owned – 110 acres	N/A	N/A
	N/A	Maintenance Facility	PWC Owned – Independent Hill Site	N/A	N/A
2017	2014	Western Bus Facility	Site Needed - Rt. 15 Area	\$0	\$3,000,000
	2002	ES @ Potomac Shores	Proffered	N/A	\$0
	2013	Kilby ES Replacement	PWCS Owned	N/A	N/A
	2014	ES East	Site Needed – Neabsco Mills Area	\$0	\$4,000,000
2018	2011	ES West (Vint Hill Rd.)	Proffered – Vint Hill Rd	N/A	N/A
	N/A	PACE East Replacement – Multi -Space	PWCS Owned – Independent Hill	N/A	N/A
	2011	MS West (Linton Hall Area)	Proffered – Vint Hill Rd	N/A	\$0
	2014		Otherwise Site Needed	\$0	\$7,500,000
2019	2014-15	13th High School (West)	Potential Proffer @ Stone Haven	N/A	\$0
			Otherwise Site Needed	\$0	\$17,000,000
2020	2015-16	ES (Lake Ridge Area)	Site Needed	\$0	\$4,500,000
	2015	MS East @ Potomac Shores	Proffer	\$0	\$0
2021	2015-16	ES (Cherry Hill Area)	Site Needed	\$0	\$5,000,000
	2015	14th High School (Mid-County)	Site Needed	\$0	\$17,500,000
2022	2016	ES (Haymarket Area)	Site Needed	\$0	\$5,500,000
	2016	ES (Linton Hall Area)	Site Needed	\$0	\$5,500,000
	2015-16	MS TBD	Site Needed	\$0	\$12,500,000
2023	2016	ES (Stonewall Area)	Site Needed	\$0	\$5,500,000
Total Amount of Unfunded Sites					\$87,500,000

Sites needed by proffer or purchase. Funding not identified in current CIP.

Renovations and Renewals

New construction projects are only part of the CIP picture. Renovations/renewals are programmed to assure that all schools are safe, functional, and provide the facilities necessary to support the current educational programs regardless of the age of the building. School renewals are infrastructure improvements that are important to improve capacity, provide adequate activity spaces, and to meet current instructional needs, such as technology and computer laboratories.

Forty-five of the Division's 91 school facilities are over 25 years old. The goal of the school renewal program is to renovate schools prior to 25 years of age since last renewal. The older buildings are well-maintained but are in constant need of repair. They must be renewed to provide quality space, continuity, and stability for a *World-Class Education*.

The Office of Facilities Services continues to meet these challenges head-on and to make dramatic improvements to the physical condition of schools. School building conditions are assessed annually and consideration of critical needs and prior facility upgrades are evaluated. Recent renewals allow for changing the emphasis from systems replacements to maintenance in areas such as roofing and paving repairs.

This CIP addresses the reduction of the backlog of renewal projects at older buildings, with age of each school building the first consideration. The order of renewals may be altered when major components are addressed with previous projects, accelerated deterioration conditions warrant, and with funding constraints. The Schedule of Renovations and Renewals includes annual dollars for kitchen upgrades, roof replacement/repairs, upgrades for HVAC equipment and controls, energy infrastructure improvements, Title IX improvements, and technology improvements.

The projects contained in this plan are based on the planning, design review, and input from a team of in-house facility maintenance professionals, administration, school principals, and facility-condition evaluations conducted by architect and engineer consultants. The list of capital projects identified provides a clear statement of school facility requirements that have been categorized within the limitation of projected funding.

The FY 2015 budget includes funds for renewals at Dumfries, Henderson, King, Lake Ridge, Loch Lomond, and Springwoods Elementary Schools; roof replacements for Graham Park Middle School and Saunders Middle School; HVAC repair at Osbourn Park High School and Stonewall Jackson High School; Transportation Bus Parking; window wall replacement at Woodbridge Middle School; and various kitchen upgrades, energy infrastructure improvements, HVAC upgrades, and Title IX improvements.

<i>School Renewals / Major Infrastructure Renovations may include:</i>	
HVAC Systems	Lockers
Lighting	Roof Replacement
Electrical System	Flooring
Plumbing	Painting
Fire Alarm System	Technology
Security System	Casework
Telephone and Intercom Systems	Doors / Hardware
American Disability Act (ADA)	Site Improvements
Bleachers	Title IX Improvements
Elementary School P.E. Space	Clinic Improvements
Secure Access Improvements	

Budget – Renovations / Renewals

The School Division budgets for repairs and renewals using the National Building Research Board recommendations. This Board recommends that 2 to 4 % of current replacement value of facilities be budgeted annually for repairs and renewals. The current replacement value of schools is approximately \$2,215,671,000. Prince William County Schools has established an average annual renewal and repair target of 3% of the current replacement value of facilities with 1.5% for preventive maintenance and 1.5% for repairs and renewals. The amount targeted to be budgeted each year varies from approximately 2.2% to 3.4%, dependent upon the year of the Commonwealth of Virginia’s biennium funding. The target to be budgeted in FY 2015 for repairs, renovations, and maintenance is \$75,844,000 (3.4% value), with the estimated budget for renovations, renewals, technology, and energy improvements in FY 2015 at \$52,269,000.

Major Maintenance

To improve and maintain current facilities, each school is evaluated at seven (7) –year intervals and major maintenance repairs are scheduled. Major maintenance may include:

<i>Typical Major Maintenance Activities</i>	
<i>7-Year Cycle</i>	<i>14-Year Cycle</i>
Carpeting (Partial)	Paint Exterior and Interior (Partial)
Paint Hallways, Offices, Exterior Doors, Kitchens (Partial)	Repave / Seal Coat Parking Lot, Paved Areas, and Tennis Courts
*Seal Coat Paved Areas and Repaint	Re-key Interior and Exterior Doors
*Minor HVAC Repairs	*Repair / Replace Fencing and Backstops
*Repair Concrete Sidewalks and Curbs	*Carpeting (Partial)
*Clean and Repair Storm Drains	*Update Food Service Equipment (Partial)
*Repair Fencing	*Minor Roof Repairs
*Electrical System Preventive Maintenance	*Update Plumbing Fixtures
*Trim Trees / Landscaping	*Update Electrical Service
*Re-Lamp Interior and Exterior Light Fixtures	*Update HVAC Controls
	*Minor Chiller Rebuilding
	*Stage Lighting / Curtain

**Based on restricted funding levels, many of these items are not addressed on a regular basis. Repairs are made on an “as-needed” basis until other funding sources become available*

Schedule of Renovations and Renewals

<i>Fiscal Year</i>	<i>Year Opened</i>	<i>Project</i>	<i>Proposed Funding</i>
2014	1953	Dumfries Elementary School - Renewal (Partial Funding)	<i>Previously Funded/Under Construction</i>
	1962	Loch Lomond Elementary School - Renewal Phase 1	
		Fred Lynn Middle School - HVAC Repair	
		Woodbridge MS - Window Wall Replacement (Funding Phase 1)	
		Gar-Field High School - Roof Replacement (Partial)	
		Gar-Field High School - Auditorium Upgrade	
		Woodbridge High School - Roof Replacement	
		Woodbridge High School - Auditorium Upgrade	
		Interior/Exterior Bleachers - Phase 5	
		Transportation Bus Parking (TBD)	
		Kitchen - Upgrades	
		Energy Infrastructure Improvements	
		HVAC Equipment and Controls - Upgrades	
		Title IX Improvements	
2015	1953	Dumfries Elementary School - Renewal (Partial Funding)	\$3,000,000
	1985	Henderson Elementary School - Renewal (Funding Phase 1)	\$6,365,000
	1981	King Elementary School - Renewal (Funding Phase 1)	\$6,365,000
	1983	Lake Ridge Elementary School - Renewal (Funding Phase 1)	\$6,365,000
	1962	Loch Lomond Elementary School - Renewal Phase 2 (Funding Phase 1)	\$3,365,000
	1985	Springwoods Elementary School - Renewal (Funding Phase 1)	\$6,365,000
		Woodbridge MS - Window Wall Replacement (Funding Phase 2)	\$800,000
		Osborn Park High School - HVAC Repair	\$2,000,000
		Stonewall Jackson High School - HVAC Repair	\$1,700,000
		Kitchen HVAC Upgrades - Phase 1 of 2	\$1,000,000
		Graham Park Middle School - Roof Replacement	\$2,900,000
		Saunders Middle School - Roof Replacement	\$2,800,000
		Transportation Bus Parking (TBD)	\$1,001,000
		Kitchen - Upgrades	\$1,200,000
		Energy Infrastructure Improvements	\$1,000,000
	HVAC Equipment and Controls - Upgrades	\$1,303,000	
	Title IX Improvements	\$240,000	
	Technology Improvement Program - Upgrades	\$4,500,000	
	Total - Fiscal Year 2015		\$52,269,000

Schedule of Renovations and Renewals

<i>Fiscal Year</i>	<i>Year Opened</i>	<i>Project</i>	<i>Proposed Funding</i>
2016		Henderson Elementary School - Renewal (Funding Phase 2)	\$2,241,000
		King Elementary School - Renewal (Funding Phase 2)	\$2,241,000
		Lake Ridge Elementary School - Renewal (Funding Phase 2)	\$2,241,000
		Loch Lomond Elementary School - Renewal Phase 2 (Funding Phase 2)	\$2,241,000
		Springwoods Elementary School - Renewal (Funding Phase 2)	\$2,241,000
		Kitchen HVAC Upgrades - Phase 2 of 2	\$1,116,000
		Hylton High School - Roof Replacement (Funding Phase 1)	\$2,800,000
		Lake Ridge Middle School - Roof Replacement	\$2,800,000
		Kitchen - Upgrades	\$750,000
		Energy Infrastructure Improvements	\$1,000,000
		HVAC Equipment and Controls - Upgrades	\$1,832,000
		Roof Replacements/Repairs (TBD)	\$1,000,000
		Title IX Improvements	\$250,000
		Technology Improvement Program - Upgrades	\$4,500,000
	Total - Fiscal Year 2016	\$27,253,000	
2017	1990	Antietam Elementary School - Renewal (Funding Phase 1)	\$7,360,000
	1989	McAuliffe Elementary School - Renewal (Funding Phase 1)	\$7,360,000
	1990	Mullen Elementary School - Renewal (Funding Phase 1)	\$7,360,000
	1989	Westridge Elementary School - Renewal (Funding Phase 1)	\$7,360,000
	1989	Lake Ridge Middle School - Renewal (Funding Phase 1)	\$8,000,000
	1988	Saunders Middle School - Renewal (Funding Phase 1)	\$8,000,000
		Rippon Middle School - Fenestration Improvements - Phase 1	\$1,100,000
		Gar-Field High School - Roof Replacement (Partial)	\$1,500,000
		Hylton High School - Roof Replacement (Funding Phase 1 + 2)	\$2,200,000
		Kitchen - Upgrades	\$830,000
		Energy Infrastructure Improvements	\$1,000,000
		HVAC Equipment and Controls - Upgrades	\$1,648,000
		Roof Replacements/Repairs (TBD)	\$1,200,000
		Title IX Improvements	\$260,000
	Technology Improvement Program - Upgrades	\$4,500,000	
	Total - Fiscal Year 2017	\$59,678,000	

Schedule of Renovations and Renewals

<i>Fiscal Year</i>	<i>Year Opened</i>	<i>Project</i>	<i>Proposed Funding</i>
2018	1990	Antietam Elementary School - Renewal (Funding Phase 2)	\$2,128,000
		McAuliffe Elementary School - Renewal (Funding Phase 2)	\$2,128,000
		Mullen Elementary School - Renewal (Funding Phase 2)	\$2,128,000
		Westridge Elementary School - Renewal (Funding Phase 2)	\$2,128,000
		Lake Ridge Middle School - Renewal (Funding Phase 2)	\$2,603,000
		Saunders Middle School - Renewal (Funding Phase 2)	\$2,603,000
		River Oaks Elementary School - Renewal (Funding Phase 1)	\$6,353,000
		Beville Middle School - Roof Replacement	\$2,700,000
		Kitchen - Upgrades	\$391,000
		Energy Infrastructure Improvements	\$1,000,000
		HVAC Equipment and Controls - Upgrades	\$1,000,000
		Roof Replacements/Repairs (TBD)	\$605,000
		Title IX Improvements	\$270,000
		Technology Improvement Program - Upgrades	\$4,500,000
Total - Fiscal Year 2018			\$30,537,000
2019	1996	River Oaks Elementary School - Renewal (Funding Phase 2)	\$3,609,000
		Bennett Elementary School - Renewal (Funding Phase 1)	\$7,000,000
	1996	Leesylvania Elementary School - Renewal (Funding Phase 1)	\$7,000,000
	1994	Marshall Elementary School - Renewal (Funding Phase 1)	\$7,000,000
	1991	Montclair Elementary School - Renewal (Funding Phase 1)	\$7,000,000
	1995	Mountain View Elementary School - Renewal (Funding Phase 1)	\$7,000,000
	1995	Old Bridge Elementary School - Renewal (Funding Phase 1)	\$7,000,000
	1998	Penn Elementary School - Renewal (Funding Phase 1)	\$7,000,000
	2019	Benton Middle School - Roof Replacement (Funding Phase 1)	\$2,500,000
		Forest Park High School - Roof Replacement (Funding Phase 1)	\$2,500,000
		Rippon Middle School - Fenestration Improvements - Phase 2	\$1,210,000
		Kitchen - Upgrades	\$600,000
		Energy Infrastructure Improvements	\$1,000,000
		HVAC Equipment and Controls - Upgrades	\$1,368,000
		Roof Replacements/Repairs (TBD)	\$1,293,000
		Title IX Improvements	\$280,000
	Technology Improvement Program - Upgrades	\$4,500,000	
Total - Fiscal Year 2019			\$67,860,000

Schedule of Renovations and Renewals

<i>Fiscal Year</i>	<i>Year Opened</i>	<i>Project</i>	<i>Proposed Funding</i>
2020		Bennett Elementary School - Renewal (Funding Phase 2)	\$3,460,000
		Leesylvania Elementary School - Renewal (Funding Phase 2)	\$3,460,000
		Marshall Elementary School - Renewal (Funding Phase 2)	\$3,460,000
		Montclair Elementary School - Renewal (Funding Phase 2)	\$3,460,000
		Mountain View Elementary School - Renewal (Funding Phase 2)	\$3,460,000
		Old Bridge Elementary School - Renewal (Funding Phase 2)	\$3,460,000
		Penn Elementary School - Renewal (Funding Phase 2)	\$3,460,000
		Forest Park High School - Roof Replacement (Funding Phase 2)	\$1,000,000
		Benton Middle School - Roof Replacement (Funding Phase 2)	\$1,000,000
		Energy Infrastructure Improvements	\$1,000,000
		HVAC Equipment and Controls - Upgrades	\$1,254,000
		Roof Replacements/Repairs (TBD)	\$1,018,000
		Title IX Improvements	\$290,000
		Technology Improvement Program - Upgrades	\$4,500,000
		Total - Fiscal Year 2020	\$34,282,000
2021	1998	Bristow Run Elementary School - Renewal (Funding Phase 1)	\$8,250,000
	2000	Signal Hill Elementary School - Renewal (Funding Phase 1)	\$8,250,000
	2000	Benton Middle School - Renewal (Funding Phase 1)	\$9,500,000
	1991	Beville Middle School - Renewal (Funding Phase 1)	\$9,500,000
	2000	Forest Park High School - Renewal (Funding Phase 1)	\$13,000,000
	1991	Hylton High School - Renewal (Funding Phase 1)	\$13,000,000
		Transportation Bus Parking (TBD)	\$1,685,000
		Fenestration Improvements (TBD)	\$1,600,000
		Kitchen - Upgrades	\$1,000,000
		Energy Infrastructure Improvements	\$1,000,000
		HVAC Equipment and Controls - Upgrades	\$1,700,000
		Roof Replacements/Repairs (TBD)	\$3,997,000
		Title IX Improvements	\$300,000
		Technology Improvement Program - Upgrades	\$4,500,000
		Total - Fiscal Year 2021	\$77,282,000

Schedule of Renovations and Renewals

<i>Fiscal Year</i>	<i>Year Opened</i>	<i>Project</i>	<i>Proposed Funding</i>
2022		Bristow Run Elementary School - Renewal (Funding Phase 2)	\$3,297,000
		Signal Hill Elementary School - Renewal (Funding Phase 2)	\$3,297,000
		Benton Middle School - Renewal (Funding Phase 2)	\$3,398,000
		Beville Middle School - Renewal (Funding Phase 2)	\$3,398,000
		Forest Park High School - Renewal (Funding Phase 2)	\$5,009,000
		Hylton High School - Renewal (Funding Phase 2)	\$5,009,000
		Fenestration Improvements (TBD)	\$2,500,000
		Kitchen - Upgrades	\$1,000,000
		Energy Infrastructure Improvements	\$1,000,000
		HVAC Equipment and Controls - Upgrades	\$2,059,000
		Roof Replacements/Repairs (TBD)	\$4,147,000
		Title IX Improvements	\$310,000
		Technology Improvement Program - Upgrades	\$4,500,000
	Total - Fiscal Year 2022	\$38,924,000	
2023		Renewals - Ashland ES, Cedar Point ES, Swans Creek ES, Marsteller MS (Funding Phase 1)	\$74,839,000
		Kitchen - Upgrades	\$2,000,000
		Energy Infrastructure Improvements	\$1,000,000
		HVAC Equipment and Controls - Upgrades	\$2,000,000
		Roof Replacements/Repairs (TBD)	\$4,322,000
		Title IX Improvements	\$320,000
		Technology Improvement Program - Upgrades	\$4,500,000
	Total - Fiscal Year 2023	\$88,981,000	
2024		Renewals - Ashland ES, Cedar Point ES, Swans Creek ES, Marsteller MS, Forest Park HS (Funding Phase 2)	\$26,369,000
		Fenestration Improvements (TBD)	\$2,000,000
		Kitchen - Upgrades	\$2,000,000
		Energy Infrastructure Improvements	\$1,000,000
		HVAC Equipment and Controls - Upgrades	\$2,000,000
		Roof Replacements/Repairs (TBD)	\$6,000,000
		Title IX Improvements	\$330,000
	Technology Improvement Program - Upgrades	\$4,500,000	
	Total - Fiscal Year 2024	\$44,199,000	
TOTAL (FY 2015-2024)			\$521,265,000

Technology Improvements Program

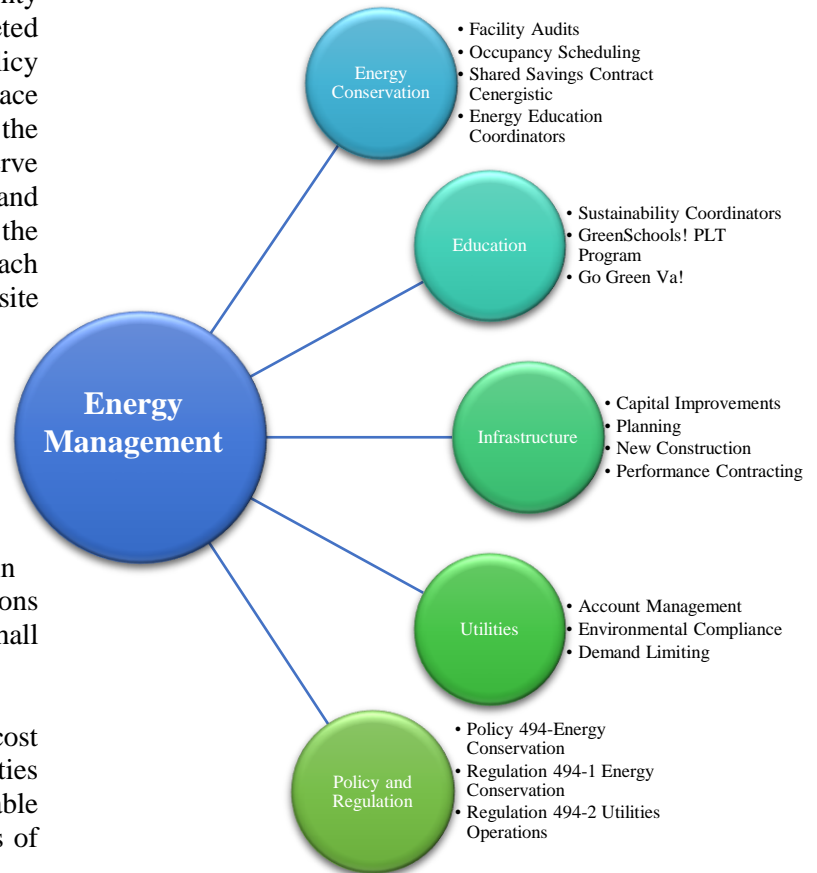
Technology	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
VoIP phones 9 HS	2,215,609				
VoIP phones 10 MS	1,039,440				
VoIP phones 6 MS		623,664			
VoIP phones 51 ES		2,876,336			
VoIP Upgrades					700,000
VoIP Legacy Maint					
Network/Perimeter Upgrade	615,000				615,000
CO Server Upgrade				673,419	1,000,000
School Server Upgrade					500,000
Firewall/Proxy Upgrade		1,000,000			
Wireless Legacy Maint	87,935		50,869		54,000
Wireless 3 AYP HS	542,016				
Wireless 8 HS			1,445,376		
Wireless 16 MS			2,028,352		
Wireless 13 ES			975,403		
Wireless 51 ES				3,826,581	
Radios					600,000
Interactive Projectors					1,031,000
TOTAL	\$4,500,000	\$4,500,000	\$4,500,000	\$4,500,000	\$4,500,000

Energy Management

Energy Management in Prince William County Public Schools (PWCS) utilizes a multifaceted approach to stewardship and conservation. Policy 494 states that the School Board will embrace energy conservation and believes it to be the responsibility of the School Board to conserve energy and natural resources. Support and program oversight are the responsibility of the Office of Facilities Services, however, each school or facility shall designate a site administrator who will be accountable for energy conservation.

Implementation of the energy conservation program shall be through a team led by the Office of Facilities Services' Administrative Coordinator, Energy Management, and Energy Education Coordinator(s), in accordance with Regulation 494-1. All decisions related to the implementation of this policy shall be firmly grounded in common sense.

Accurate records of energy consumption and cost will be maintained by the Office of Facilities Services for each site to provide verifiable performance results on the goals and progress of the energy conservation program.



Energy Conservation

Energy Education Coordinators

Energy Education Coordinators work to establish accountability for energy consumption at every level in the organization. These individuals are responsible for developing and monitoring the organization's energy management program, under School Board approved policies and regulations, for the purpose of reducing utility consumption.

Basic areas of responsibility include: administration and recordkeeping, accountability, reporting, program implementation, promoting organizational employee involvement, and validating energy management system compliance to the energy policy and guidelines. Energy Education Coordinators use EnergyCAP software to monitor energy usage trends.

The role of the Energy Education Coordinators is instrumental in the success of the energy conservation program and helping retain funds where they are most important – in the classroom.

Facility Audits

Sites within PWCS will be visited by an Energy Education Coordinator regularly. Audits conducted during the normal school week will assess the ability of staff to interpret and apply Policy 494 and Regulation 494-1. Audits will primarily be conducted after hours and during periods of low occupancy. Each site will also be reviewed during holiday periods, Code Red, and Code Green closings as well as extended shutdown periods such as the winter break, spring break, and summer vacation.

Facility Occupancy Scheduling

Facility use and scheduling is a critical component of energy management in PWCS. Each facility is assessed for its occupancy and use patterns in order to identify periods of inactivity and low usage. Mechanical systems are then programmed through automated building control systems to reduce mechanical operation and therefore energy consumption during periods of low usage. Schedules are reviewed regularly with site-based administrators and adjusted for seasonal patterns and system performance.

School locations conducting events scheduled before or after normal school hours are required to enter these activities into FacilityDirect. Per Regulation 494-1, "Energy Conservation," HVAC settings will revert to those designated for an unoccupied state after hours, during weekends and on holidays. If heating or air conditioning is needed for a scheduled activity, staff is required to check the HVAC box to indicate as such in the request. Failure to do so will result in no available HVAC service. Events are entered no later than a week in advance, so that the service can be scheduled in a timely manner.

Cenergistic, Inc.

In June 2012, PWCS entered into a shared savings contract with Cenergistic, Inc. to generate savings based on behavioral changes and operational strategic planning. The contractor has assisted with staffing recommendations,

EnergyCAP software integration, and program methodology. The term of this contract is five years and will expire in 2017. Savings shared through this agreement are compared to a baseline of utility expenses from the 2011-12 school year. PWCS retains 65% of the savings attributable to this program.

Period	Month	Savings		Period Total
		\$	%	
Fast Track 2012	July	\$106,459	6.6%	\$339,491
	August	\$116,376	6.8%	
	September	\$116,656	6.4%	
	October	\$202,144	11.7%	\$629,244
	November	\$227,067	12.0%	
	December	\$200,033	11.1%	
1st Performance Quarter 2013	January	\$248,560	12.9%	\$914,251
	February	\$254,623	13.5%	
	March	\$411,068	22.2%	
2nd Performance Quarter 2013	April	\$296,018	17.3%	\$853,226
	May	\$293,188	15.8%	
	June	\$264,020	15.6%	
3rd Performance Quarter 2013	July	\$422,693	24.1%	\$1,094,909
	August	\$385,422	20.9%	
	September	\$286,794	15.0%	
4th Performance Quarter 2013	October	\$292,397	16.2%	\$1,222,514
	November	\$440,301	22.2%	
	December	\$489,816	22.9%	
5th Performance Quarter 2014	January	\$428,175	19.3%	\$428,175
	February			
	March			
Total Program Savings		\$5,481,810	15.6%	

Sustainability Coordinators

Sustainability is the dedicated effort of an organization, working together, to reduce the use of finite resources. By evaluating everything from the materials used in the construction of our new schools and renovations, to enhanced storm water management, sustainable purchasing, energy efficiency and environmental literacy in the classroom, we as a group can decrease the negative impact our activities have on our world, starting today.

The role of a Sustainability Coordinator is not an intense one, but it is very important. Sustainability Coordinators function as ambassadors on behalf of the Energy Management division, conveying our collective message of environmental leadership to each individual site. Each coordinator will be encouraged to create opportunities for discussions about sustainability and energy conservation. The Office of Facilities Services will provide tools for the development of a sustainable culture within each school. Volunteers requiring recertification points could potentially earn up to 5 hours for participation as a site based Sustainability Coordinator.

Project Learning Tree

The Office of Facilities Services incorporates education into the overall strategic plan for the School Division. Energy Management staff support the development and implementation of GreenSchools! modules that focus on Energy, Water, Waste and Recycling, and Environmental Quality. Modules are registered with the Office of Student Learning and the Professional Learning Catalog under SCI 706. Participants requiring recertification points receive 5 hours for participation in the annual training workshop.

GreenSchools! investigations bolster science, technology, engineering, and math (STEM) education while promoting sustainable schools. They provide students with opportunities to actively engage in scientific inquiry as they solve real-world environmental issues at their school. PLT GreenSchools! is a program of the American Forest Foundation, in partnership with the 50-state PLT network, the U.S. Forest Service, the Corporation for National and Community Service, and many other national, state, and local partners.

Go Green Va.!

The Go Green Va.! program is sponsored by the Virginia School Board Association. The program requires annual documentation and planning for issues relating to environmental stewardship, energy management, indoor air quality, and education of students in the classroom regarding sustainable strategies. PWCS has participated since 2009 earning both the Certified Green School Division award and the Silver Green School certification.

Utilities

Account Management

Regulation 494-2 establishes responsibilities and operating procedures for the management of utilities by the Office of Facilities Services. It is the responsibility of staff to provide operating utilities and technical services supporting the proper maintenance and operation of school facilities. All utility invoices are processed using customized software called UtilityDirect. The Administrative Coordinator, Energy Management functions as the liaison for third party contracts and utilities provided by private corporations and companies.

Utilities covered by this provision include:

- Heating Fuels
- Electrical Services
- Water and Sewer Services
- Motorized Fuels

Environmental Compliance

Prior to procurement, delivery or payment of any heating and/or motorized fuels, the Administrative Coordinator, Energy Management ensures coordination with the Administrative Coordinator, Environmental Services, to verify proper delivery techniques, inspect spill control methods, and verify quantity delivered.

Demand Limiting

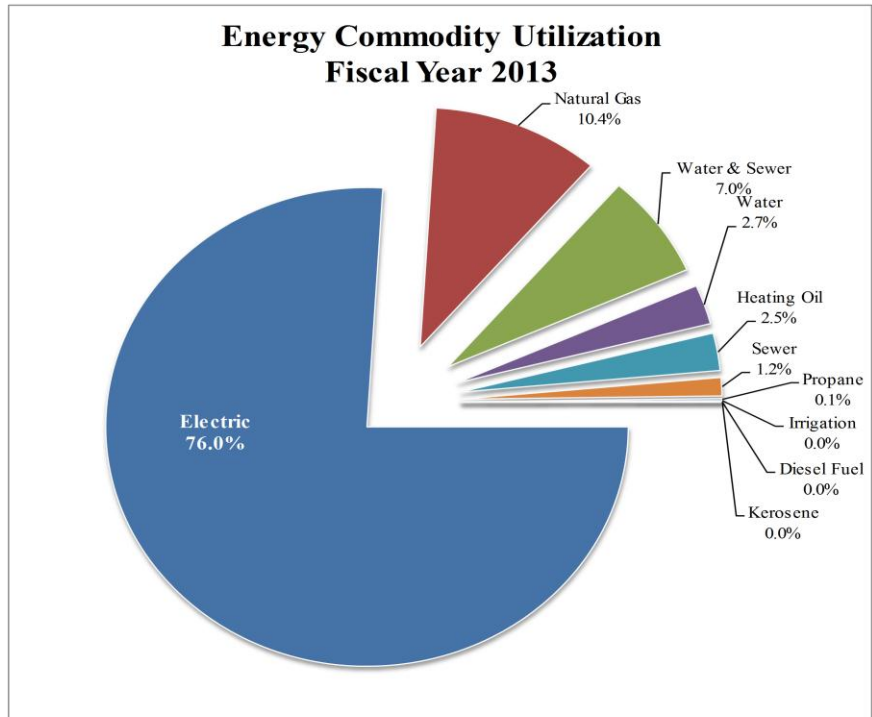
Due to the constraints of available electrical utility capacity and required demand, it has become essential for utility providers at times to control the distribution of electricity. Demand limiting engages customers to reduce their personal or corporate consumption when possible, during critical times, so as not to overload the electrical grid. Utilities sub-contract the administration of demand limiting programs.

Enrollment in such programs means

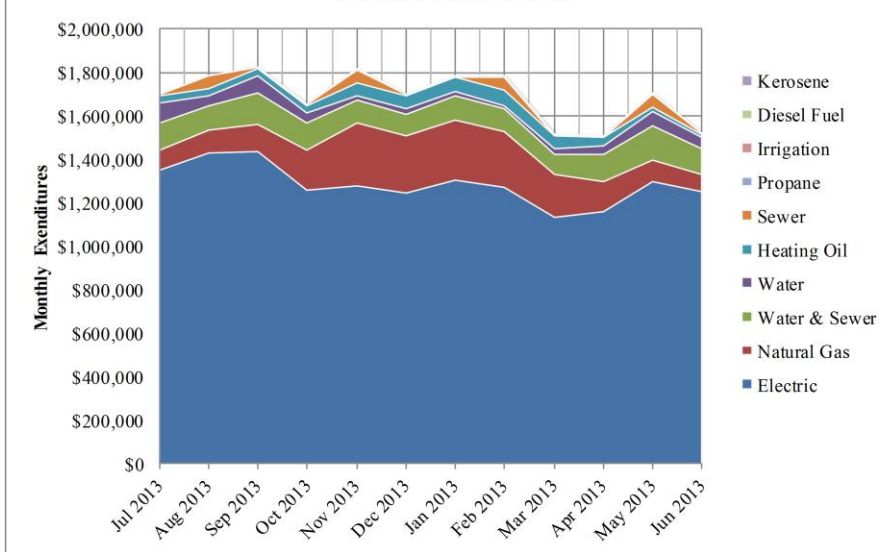
utility customers may be notified of a critical period and subsequently, voluntarily, curtail usage where possible. A rebate is provided based on the extent of curtailment pursued. These peak periods are generally during the summer.

Over summer break, demand limiting presents a great opportunity for Prince William County Schools to pursue the benefits of demand limiting as a potential revenue source. Our facilities currently operate on a reduced schedule during these times.

Energy Utilization Charts Fiscal Year 2013



Monthly Utility Expenditures by Commodity Fiscal Year 2013



Energy Infrastructure

Energy Infrastructure Improvements Funds

The PWCS Capital Improvements Program calls for a portion of the anticipated energy conservation savings to be directed towards continued investment in infrastructure improvements capable of generating additional savings and greater efficiency.

<i>Anticipated Energy Infrastructure Funding Priorities Fiscal Years 2015-19</i>					
Energy Infrastructure Improvement Project	Fiscal Year				
	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>
Building Automation Improvements	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000
Boiler Fuel Conversions	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
Lighting Control Systems	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 50,000
Mechanical Infrastructure (Supplemental Heating, Cooling, Dehumidification)	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 400,000
Building Envelope/Thermal Insulation	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 100,000
Third-Party Energy Audits					\$ 100,000
Total	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000

Utilizing Energy Infrastructure Improvement funding allocated in the CIP creates sustainable facility improvements that serve a wide range of priorities within the Office of Facilities Services while creating measureable Return on Investment (ROI).

The Energy Management division has endeavored to work with a variety of stakeholders from throughout the School Division to identify priorities.

Applicable infrastructure improvements include:

- Conversion of heating systems from fuel oil to natural gas to reduce point of use cost.
- Building management control system installation, upgrades, and modernization.
- Lighting control systems.
- Lifecycle modernization/replacement of inefficient and poorly performing mechanical systems.
- Building envelope improvements for better insulated entry points, windows, and exterior cladding.
- Sustainability focused enhancements designed to maximize educational opportunities derived directly from school facility sites (e.g. activity trails, ecological studies, civil engineering/ land survey training, renewable energy).

Performance Contracting

PWCS has endeavored to utilize all available tools at our disposal in our efforts to reduce facility operating costs. Executive Order 48, issued by the Governor of Virginia in 2008, created a contract that all state and public bodies may use for the assessment and improvement of energy consuming infrastructure. This arrangement aids in the reduction of lengthy competition as the contractors on the approved contract have been pre-qualified at the state level. Performance Contracting is specifically appropriate for aiding jurisdictions in lifecycle cost analysis, and payback analysis. These two formulary tools are used in the study of a construction project’s anticipated financial performance. Performance Contractors can thereby propose to provide financing on behalf of Owners by allocating future savings toward the cost of the project.

In 2008, PWCS began utilizing the state Performance Contract through the use of federal ARRA funding. Currently, Hylton High School is still under a performance agreement whereby stipulated future savings may be shared between the Owner and the contractor.

New Construction

The Office of Facilities Services is committed to the construction of energy efficient, highly performing facilities. Energy Management team members regularly review all energy consuming systems during the design and development of any building construction, renovation or alteration. The Administrative Coordinator, Energy Management provides final coordination with the Supervisor of Construction for energy management related specifications and construction details.

Energy Infrastructure Improvement Projects Fiscal Years 2014 and 2015	
FY2014 Energy Infrastructure Improvement Projects	
Site	Scope
All Sites	Commission and calibrate BAS systems, sensors and scheduling; upgrade programmable thermostats
Server Based Software Systems	Upgrade Apogee Operating System for Siemens OS
Central Transportation	Replace Electric Reflective Heating System with Landfill Gas Based System
Occoquan Elementary	DX Based Cooling system with Variable Flow Refrigerant System
Brentsville HS	Evaluate and replace failed pipe insulation on cooling plant (Phase 1 of 2)
All Sites where required	Rain Gauges for all Irrigation systems currently lacking
All Sites with Refrigerated Food Storage	Convert freezer to Demand Defrost as opposed to Timed Defrost
All Sites where required	Building Envelope Maintenance, to include weather-stripping, doors and hardware
Replace Remaining Wink-o-Matics	Flashing Speed sign retrofit with solar/battery power
FY2015 Energy Infrastructure Improvement Projects	
Site	Scope
All Sites	Commission and Calibrate BAS systems, sensors and scheduling; upgrade programmable thermostats
Central Transportation	Veeder Root upgrades for tracking Transportation Fuels
Mountain View ES and Marshall ES	Design upgraded HVAC System
Brentsville HS	Evaluate and replace failed pipe insulation on cooling plant (Phase 2 of 2)
All Sites where required	Replace "256" School Building Automation Systems to bring up to current standards
Hooe Rd Transport	T-12 lighting conversion to T-8
All Sites where required	Building Envelope Maintenance, to include weather-stripping, doors and hardware
Gar-Field HS, Woodbridge HS, and Rippon MS	Water tanks at Gar-Field HS, Woodbridge HS, and Rippon MS require a combined electrical demand of 1,200,000 watts/4,092,000 BTUs. They would be replaced with heaters equaling a combined 360,000 watts max/1,227,600 BTUs. The sizing of the new heaters is based on actual usage recorded at each location.

Summary

•	Projected Growth in Students, Fiscal Years 2015 -24.....	22,986
•	Additional School Facilities.....	18
	New Elementary Schools.....	10
	New Middle Schools.....	3
	New High Schools.....	3
	Replacement Schools (<i>PACE East, Kilby Elementary</i>).....	2
•	Additional Classrooms (9 Schools).....	72
	Elementary School Classroom Additions (7 Schools).....	54
	Middle School Classroom Additions (1 School).....	8
	Special Education Classroom Additions.....	10
•	Total Additional Capacity	19,509
•	Construction of New Facilities and Additions.....	\$1,023,906,000
•	Renewals.....	\$ 463,415,000
	<i>TOTAL NEW CONSTRUCTION / RENEWALS</i>	\$1,487,321,000

Capital Projects Funded Fiscal Year 2015

- Construct Devlin Road Elementary School
- Construct 12th High School
- Construct addition to Featherstone Elementary School
- Renewal of Dumfries, Henderson, King, Lake Ridge, Loch Lomond, and Springwoods Elementary Schools
- Continue Title IX Improvements
- Energy Infrastructure Improvements
- Technology Improvements Plan

APPENDIX A

School Facility Summary

SCHOOL FACILITIES

Alvey Elementary School

School & Site Information

Construction (Year):	2003	Regular Classrooms:	41
Renovation (Year):		Square Feet:	83,084
Program Capacity:	780	Site Size (Acres):	20.17

Ann Ludwig Special School

School & Site Information

Construction (Year):	1975	Number of Rooms:	N/A
Renovation (Year):		Square Feet:	14,220
Program Capacity:	60	Site Size (Acres):	4.77

Maintenance & Repair

- Steel windows are old, do not close properly, are single-paned and are not energy efficient. Windows should be replaced.
- Building does not have an energy management system.
- Building has subsurface soil settlement issues. Extensive stabilization is required to continue to utilize this building longer than three to five years.

Handicap Access

- Toilets not handicap accessible; must be upgraded to ADA standards.
- Water fountains are not at ADA standards.
- Building signage does not meet ADA standards.

Antietam Elementary School (Scheduled for Renewal in FY 2017)

School & Site Information

Construction (Year):	1990	Regular Classrooms:	31
Renovation (Year):		Square Feet:	62,334
Program Capacity:	616	Site Size (Acres):	14.85

Maintenance and Repair

- HVAC system replacement – classroom terminal units.
- Energy Management Control System (EMCS) upgrade.

Handicap Access

- Fire alarm system must be upgraded to provide both audio and visual notification in all occupied areas.

Ashland Elementary School (Scheduled for Renewal in FY 2023)

School & Site Information

Construction (Year):	2002	Regular Classrooms:	46
Renovation (Year):	2008	Square Feet:	98,461
Addition (Year):	2008		
Program Capacity:	900	Site Size (Acres):	18.05

Battlefield High School

School & Site Information

Construction (Year):	2004	Regular Classrooms:	101
Renovation (Year):		Square Feet:	285,086
Program Capacity:	2,053	Site Size (Acres):	78.82

Bel Air Elementary School

School & Site Information

Construction (Year):	1969	Regular Classrooms:	28
Renovation (Year):	2008	Square Feet:	53,712
Addition (Year):	2008		
Program Capacity:	568	Site Size (Acres):	15

Additional Space

- School needs a security apartment.

Belmont Elementary School

School & Site Information

Construction (Year):	1967	Regular Classrooms:	25
Renovation (Year):	2006	Square Feet:	45,790
Program Capacity:	462	Site Size (Acres):	14.28

Additional Space

- School needs a security apartment.
- **A 10-classroom addition is scheduled for 2017.**

Bennett Elementary School (Scheduled for Renewal in FY 2019)

School & Site Information

Construction (Year):	1996	Regular Classrooms:	40
Renovation (Year):		Square Feet:	85,728
Program Capacity:	780	Site Size (Acres):	15.29

Benton Middle School (Scheduled for Renewal in FY 2021)

School & Site Information

Construction (Year):	2000	Regular Classrooms:	65
Renovation (Year):		Square Feet:	151,008
Addition (Year):	2013		
Program Capacity:	1,464	Site Size (Acres):	48.15

Maintenance & Repair

- Roof replacement.
- Track Replacement.

Beville Middle School (Scheduled for Renewal in FY 2021)

School & Site Information

Construction (Year):	1991	Regular Classrooms:	65
Renovation (Year):		Square Feet:	134,140
Program Capacity:	1,191	Site Size (Acres):	42.13

Maintenance & Repair

- Roof replacement.
- HVAC system replacement.

Brentsville District High School

School & Site Information

Construction (Year):	1965	Regular Classrooms:	53
Renovation (Year):	1998-2000	Square Feet:	163,066
Program Capacity:	1,110	Site Size (Acres):	77.22

Maintenance & Repair

- Weight room replacement.
- Concession building replacement.

Bristow Run Elementary School (Scheduled for Renewal in FY 2021)

School & Site Information

Construction (Year):	1998	Regular Classrooms:	40
Renovation (Year):		Square Feet:	85,724
Program Capacity:	780	Site Size (Acres):	21.69

Buckland Mills Elementary School

School & Site Information

Construction (Year):	2006	Regular Classrooms:	43
Renovation (Year):		Square Feet:	89,900
Program Capacity:	852	Site Size (Acres):	15

Bull Run Middle School

School & Site Information

Construction (Year):	2002	Regular Classrooms:	65
Renovation (Year):		Square Feet:	135,309
Program Capacity:	1,233	Site Size (Acres):	39.35

Cedar Point Elementary School (Scheduled for Renewal in FY 2023)

School & Site Information

Construction (Year):	2001	Regular Classrooms:	41
Renovation (Year):		Square Feet:	83,204
Program Capacity:	780	Site Size (Acres):	15.48

Central Transportation Center

Site Information

Construction (Year):	2005	Regular Classrooms:	N/A
Renovation (Year):	N/A	Square Feet:	15,615
Program Capacity:	N/A	Site Size (Acres):	29.92

Coles Elementary School

School & Site Information

Construction (Year):	1969	Regular Classrooms:	25
Renovation (Year):	2009	Square Feet:	55,787
Program Capacity:	472	Site Size (Acres):	17.04

Additional Space

- School needs a security apartment.

Dale City Elementary School

School & Site Information

Construction (Year):	1967	Regular Classrooms:	25
Renovation (Year):	2006	Square Feet:	45,264
Program Capacity:	496	Site Size (Acres):	14.83

Additional Space

- School needs a security apartment (has a security trailer).

Dumfries Elementary School (Scheduled for Renewal in FY 2014)

School & Site Information

Construction (Year):	1953	Regular Classrooms:	27
Renovation (Year):	1989	Square Feet:	44,925
Program Capacity:	520	Site Size (Acres):	10

Maintenance & Repair

- Drives, walks, and parking areas need to be repaired and resurfaced.
- Kitchen renovation, including enlarging freezer.
- Roofing (except metal roof area) needs replacement.

Additional Space

- School needs a security apartment.
- Parking lot needs expansion.

Ellis Elementary School

School & Site Information

Construction (Year):	2004	Regular Classrooms:	32
Renovation (Year):		Square Feet:	76,700
Program Capacity:	626	Site Size (Acres):	10.47

Enterprise Elementary School

School & Site Information

Construction (Year):	1978	Regular Classrooms:	26
Renovation (Year):	2009	Square Feet:	51,260
Program Capacity:	520	Site Size (Acres):	14.97

Additional Space

- School needs a security apartment (has a security trailer).

Featherstone Elementary School

School & Site Information

Construction (Year):	1961	Regular Classrooms:	23
Renovation (Year):	2001	Square Feet:	37,366
Program Capacity:	462	Site Size (Acres):	12

Maintenance & Repair

- Kitchen renovation.

Additional Space

- School needs a security apartment.
- **A 6-classroom addition is scheduled for 2015.**

Fitzgerald Elementary School

School & Site Information

Construction (Year):	2008	Regular Classrooms:	46
Renovation (Year):		Square Feet:	106,170
Program Capacity:	852	Site Size (Acres):	11.18

Forest Park High School (Scheduled for Renewal in FY 2021)

School & Site Information

Construction (Year):	2000	Regular Classrooms:	101
Renovation (Year):		Square Feet:	283,268
Program Capacity:	2,053	Site Size (Acres):	79.06

Maintenance & Repair

- Roof replacement.

Freedom High School

School & Site Information

Construction (Year):	2004	Regular Classrooms:	101
Renovation (Year):		Square Feet:	285,886
Program Capacity:	2,053	Site Size (Acres):	80.70

Gainesville Middle School

School & Site Information

Construction (Year):	2007	Regular Classrooms:	65
Renovation (Year):		Square Feet:	135,309
Program Capacity:	1,233	Site Size (Acres):	39.42

Gar-Field High School

School & Site Information

Construction (Year):	1972	Regular Classrooms:	125
Renovation (Year):	2005	Square Feet:	353,742
Program Capacity:	2,734	Site Size (Acres):	91.53

Maintenance & Repair

- Areas of the building not renewed in 2005 (administrative areas).

Glenkirk Elementary School

School & Site Information

Construction (Year):	2005	Regular Classrooms:	41
Renovation (Year):		Square Feet:	83,084
Program Capacity:	780	Site Size (Acres):	15.57

Godwin Middle School

School & Site Information

Construction (Year):	1971	Regular Classrooms:	54
Renovation (Year):	2009, 2010	Square Feet:	125,232
Program Capacity:	982	Site Size (Acres):	29.98

Additional Space

- School needs a security apartment (has a security trailer).

Graham Park Middle School

School & Site Information

Construction (Year):	1963	Regular Classrooms:	47
Renovation (Year):	2001	Square Feet:	110,514
Program Capacity:	867	Site Size (Acres):	21.88

Maintenance & Repair

- Exterior lights need replacing.
- Drives, walks and parking areas need to be repaired and resurfaced (partial).
- Outside playing areas need renovation (partial).
- HVAC system replacement (partial).
- Roof replacement.

Additional Space

- School needs a security apartment (has a security trailer).

Gravelly Elementary School

School & Site Information

Construction (Year):	2008	Regular Classrooms:	43
Renovation (Year):		Square Feet:	95,074
Program Capacity:	852	Site Size (Acres):	17.87

Henderson Elementary School (Scheduled for Renewal in FY 2015)

School & Site Information

Construction (Year):	1985	Regular Classrooms:	29
Renovation (Year):		Square Feet:	55,962
Program Capacity:	592	Site Size (Acres):	14.92

Maintenance and Repair

- Drives, walks, and parking areas need to be repaired and resurfaced.
- HVAC system replacement (partial).
- Energy Management Control System (EMCS) upgrade.
- Roof replacement.

Handicap Access

- Toilets not handicap accessible; must be upgraded to ADA standards.
- Hardware, such as door handles, does not meet ADA standards and should be replaced.
- Fire alarm system must be upgraded to provide both audio and visual notification in all occupied areas.

Additional Space

- School needs a security apartment.
- **A 10-classroom addition is scheduled for 2017.**

Hooe Road Transportation Center (Main Transportation Center)

Site Information

Construction (Year):	1979	Regular Classrooms:	N/A
Parts Storage Building	2010		
Renovation (Year):		Square Feet:	32,783
Program Capacity:	N/A	Site Size (Acres):	20

Maintenance and Repair

- Paint booth needs upgrade.

Handicap Access

- Building signage does not meet ADA standards.

Additional Space

- Replace trailers with modular unit.

Hylton High School (Scheduled for Renewal in FY 2021)

School & Site Information

Construction (Year):	1991	Regular Classrooms:	101
Renovation (Year):		Square Feet:	282,346
Program Capacity:	2,053	Site Size (Acres):	74.82

Maintenance and Repair

- Roof replacement.
- Parking lot lights upgraded.

Handicap Access

- Hardware, such as door handles, does not meet ADA standards and should be replaced.
- Fire alarm system must be upgraded to provide both audio and visual notification in all occupied areas.

Independent Hill Administrative Complex

Site Information

Occupied (Year):	1968	Regular Classrooms:	N/A
Renovation (Year):		Square Feet:	127,447
Program Capacity:	N/A	Site Size (Acres):	44.24

Maintenance and Repairs

- Renovate Barracks 3.
- Drives, walks and parking areas need to be repaired and resurfaced (partial).
- Water system needs to be upgraded for fire flow.
- Fencing needs to be replaced.
- Remove asbestos throughout complex.
- Renovate garage area.

Additional Space

- Structures and grounds building needed.
- Small engine and landscape building needed.

Independent Hill School

Site Information

Construction (Year):	Converted to School 1971/1972	Regular Classrooms:	11
Renovation (Year):		Square Feet:	40,304
Program Capacity:		Site Size (Acres):	Included with complex

Kelly Leadership Center

Site Information

Construction (Year):	2008	Regular Classrooms:	N/A
Renovation (Year):	N/A	Square Feet:	150,000
Program Capacity:	N/A	Site Size (Acres):	20

Kerrydale Elementary School

School & Site Information

Construction (Year):	1972	Regular Classrooms:	24
Renovation (Year):	2007	Square Feet:	46,300
Program Capacity:	496	Site Size (Acres):	15.41

Handicap Access

- ADA portable accessible ramp for stage.

Additional Space

- School needs a security apartment (has a security trailer).

Kilby Elementary School (Scheduled for Replacement in FY 2017)

School & Site Information

Construction (Year):	1959	Regular Classrooms:	24
Renovation (Year):	2001	Square Feet:	39,412
Program Capacity:	414	Site Size (Acres):	12.78

King Elementary School (Scheduled for Renewal in FY 2015)

School & Site Information

Construction (Year):	1981	Regular Classrooms:	26
Renovation (Year):		Square Feet:	51,260
Program Capacity:	520	Site Size (Acres):	15.19

Maintenance & Repair

- Additional parking lot lighting is needed.
- Drives, walks, and parking areas need to be repaired and resurfaced.
- HVAC system and controls replacement.

Handicap Access

- Doors and gates need widening to meet ADA requirements.
- Exterior pathways and walks need ADA accessibility modifications.
- Toilets not handicap accessible; must be upgraded to ADA standards.
- Hardware, such as door handles, does not meet ADA standards and should be replaced.
- Building signage does not meet ADA standards.
- Fire alarm system must be upgraded to provide both audio and visual notification in all occupied areas.

Additional Space

- Parking lot needs expansion.
- School needs a security apartment.

Lake Ridge Elementary School (Scheduled for Renewal in FY 2015)

School & Site Information

Construction (Year):	1983	Regular Classrooms:	27
Renovation (Year):		Square Feet:	53,400
Program Capacity:	544	Site Size (Acres):	15.07

Maintenance & Repair

- Drives, walks, and parking areas need to be repaired and resurfaced.
- Resilient floor tile and carpet need replacing. Policy is to replace carpeting with vinyl tile.
- HVAC system replacement.

Handicap Access

- Stage is not handicap accessible.
- Hardware, such as door handles, does not meet ADA standards and should be replaced.
- Building signage does not meet ADA standards.
- Fire alarm system must be upgraded to provide both audio and visual notification in all occupied areas.
- Paths and walks need upgrading to ADA accessibility standards.

Additional Space

- School needs a security apartment.

Lake Ridge Middle School (Scheduled for Renewal in FY 2017)

School & Site Information

Construction (Year):	1989	Regular Classrooms:	65
Renovation (Year):		Square Feet:	132,258
Program Capacity:	1,191	Site Size (Acres):	34.09

Maintenance & Repair

- Roof replacement.

Handicap Access

- Fire alarm system must be upgraded to provide both audio and visual notification in all occupied areas.
- Hardware, such as door handles, does not meet ADA standards and should be replaced.

Additional Space

- School needs a security apartment (has a security trailer).

Leesylvania Elementary School (Scheduled for Renewal in FY 2019)

School & Site Information

Construction (Year):	1996	Regular Classrooms:	41
Renovation (Year):		Square Feet:	83,084
Program Capacity:	804	Site Size (Acres):	16.29

Additional Space

- **A 4-classroom addition is scheduled for 2019.**

Loch Lomond Elementary School (Scheduled for a Two-Phase Renewal in FY 2014 and FY 2015)

School & Site Information

Construction (Year):	1962	Regular Classrooms:	22
Renovation (Year):	1992	Square Feet:	58,278
Addition (Year):	2013		
Program Capacity:	616	Site Size (Acres):	10.70

Maintenance & Repair

- HVAC system replacement (partial).

Handicap Access

- Most door openings are inadequate for ADA.
- Hardware, such as door handles, does not meet ADA standards and should be replaced.

Additional Space

- School needs a security apartment.

Lynn Middle School

School & Site Information

Construction (Year):	1964	Regular Classrooms:	64
Renovation (Year):	2001	Square Feet:	131,974
Program Capacity:	1,170	Site Size (Acres):	28.56

Additional Space

- School needs a security apartment (has a security trailer).

Marshall Elementary School (Scheduled for Renewal in FY 2019)

School & Site Information

Construction (Year):	1994	Regular Classrooms:	35
Renovation (Year):		Square Feet:	62,700
Program Capacity:	698	Site Size (Acres):	24.16

Handicap Access

- Fire alarm system must be upgraded to provide both audio and visual notification in all occupied areas.

Marsteller Middle School (Scheduled for Renewal in FY 2023)

School & Site Information

Construction (Year):	2002	Regular Classrooms:	65
Renovation (Year):		Square Feet:	135,309
Program Capacity:	1,233	Site Size (Acres):	36.41

Marumsco Hills Elementary School

School & Site Information

Construction (Year):	1966	Regular Classrooms:	35
Renovation (Year):	2006	Square Feet:	56,661
Addition	2009		
Program Capacity:	650	Site Size (Acres):	12.20

McAuliffe Elementary School (Scheduled for Renewal in FY 2017)

School & Site Information

Construction (Year):	1989	Regular Classrooms:	28
Renovation (Year):		Square Feet:	59,517
Program Capacity:	568	Site Size (Acres):	15.05

Handicap Access

- Install a generator to operate emergency lights and equipment.
- Hardware, such as door handles, does not meet ADA standards and should be replaced.
- Fire alarm system must be upgraded to provide both audio and visual notification in all occupied areas.
- Drives, walks, and parking areas need to be repaired and resurfaced.

Additional Space

- School needs a security apartment.

McCuin Transportation Center

School & Site Information

Construction (Year):	2002	Regular Classrooms:	N/A
Renovation (Year):		Square Feet:	8,400
Program Capacity:	211 cars 170 buses	Site Size (Acres):	11.5

Additional Space:

- Wash bay for vehicles.

Minnieville Elementary School

School & Site Information

Construction (Year):	1972	Regular Classrooms:	28
Renovation (Year):	2005	Square Feet:	53,028
Program Capacity:	544	Site Size (Acres):	15.24

Additional Space

- School needs a security apartment (has a security trailer).

Montclair Elementary School (Scheduled for Renewal in FY 2019)

School & Site Information

Construction (Year):	1991	Regular Classrooms:	35
Renovation (Year):		Square Feet:	70,928
Addition	2008		
Program Capacity:	698	Site Size (Acres):	15.85

Mountain View Elementary School (Scheduled for Renewal in FY 2019)

School & Site Information

Construction (Year):	1995	Regular Classrooms:	35
Renovation (Year):		Square Feet:	67,815
Program Capacity:	698	Site Size (Acres):	29.95

Maintenance & Repair

- Fire alarm system upgrade.

Mullen Elementary School (Scheduled for Renewal in FY 2017)

School & Site Information

Construction (Year):	1990	Regular Classrooms:	41
Renovation (Year):		Square Feet:	78,063
Addition (Year):	2013		
Program Capacity:	876	Site Size (Acres):	15

Neabsco Elementary School

School & Site Information

Construction (Year):	1969	Regular Classrooms:	33
Renovation (Year):	2009	Square Feet:	58,354
Program Capacity:	626	Site Size (Acres):	12.79

Additional Space

- School needs a security apartment.
- **An 8-classroom addition is scheduled for 2017.**

New Dominion School and Modular Additions

School & Site Information

Construction (Year):	1975	Regular Classrooms:	20
Renovation (Year):	1993	Square Feet:	14,749
Program Capacity:	N/A	Site Size (Acres):	9.3

Handicap Access

- Building signage does not meet ADA standards.
- Fire alarm system must be upgraded to provide both audio and visual notification in all occupied areas.

Additional Space

- School needs a security apartment.
- **A 10-classroom addition is scheduled for 2019.**

Nokesville Elementary School (K-8 Replacement School Scheduled for FY 2014)

School & Site Information

Construction (Year):	1928	Regular Classrooms:	19
Renovation (Year):	1993	Square Feet:	50,373
Program Capacity:	342	Site Size (Acres):	10.06

Maintenance & Repair

- Resilient floor tile and carpet need replacing. Policy is to replace carpeting with vinyl tile.
- Drives, walks and parking areas need to be repaired and resurfaced.
- Gym flooring needs replacing.
- Roofing, except metal roof area, needs replacement.
- Kindergarten modular needs replacement.

Handicap Access

- Toilets not handicap accessible; must be upgraded to ADA standards.
- Hardware, such as door handles, does not meet ADA standards and should be replaced.
- Building signage does not meet ADA standards.
- Fire alarm system must be upgraded to provide both audio and visual notification in all occupied areas.
- Building has 2nd floor; needs elevator to meet ADA standards.

Additional Space

- School needs a security apartment.
- Parking lot needs expansion.
- **A K-8 Replacement School is scheduled for 2014.**

Occoquan Elementary School

School & Site Information

Construction (Year):	1927	Regular Classrooms:	26
Renovation (Year):	2002	Square Feet:	57,812
Program Capacity:	520	Site Size (Acres):	10.10

Additional Space

- School needs a security apartment.
- An activity room was added in 2013.

Maintenance & Repair

- Roof replacement (partial).
- HVAC upgrade (scheduled for 2014).

Old Bridge Elementary School (Scheduled for Renewal in FY 2019)

School & Site Information

Construction (Year):	1995	Regular Classrooms:	32
Renovation (Year):		Square Feet:	74,433
Program Capacity:	626	Site Size (Acres):	17.85

Osborn Park High School

School & Site Information

Construction (Year):	1975	Regular Classrooms:	115
Renovation (Year):	2006	Square Feet:	328,386
Program Capacity:	2,430	Site Size (Acres):	56.06

Maintenance & Repair

- Resilient floor tile and carpet need replacing (partial).
- HVAC system replacement (partial).
- Kitchen renovation (partial).
- Areas of the building were not renewed in 2006 (primarily gymnasium and administrative areas).
- Replace track.

PACE East (Scheduled for Replacement in FY 2018)

School & Site Information

Construction (Year):	1950	Regular Classrooms:	9
Renovation (Year):		Square Feet:	8,900
Program Capacity:	N/A	Site Size (Acres):	3.19

PACE West

School & Site Information

Construction (Year):	2012	Regular Classrooms:	N/A
Renovation (Year):		Square Feet:	41,552
Program Capacity:	N/A	Site Size (Acres):	36.96

Parks Elementary School

School & Site Information

Construction (Year):	2006	Regular Classrooms:	41
Renovation (Year):		Square Feet:	83,084
Program Capacity:	780	Site Size (Acres):	15.20

Parkside Middle School

School & Site Information

Construction (Year):	1963	Regular Classrooms:	63
Renovation (Year):	1999-2000	Square Feet:	116,699
Program Capacity:	1,139	Site Size (Acres):	30

Additional Space

- **A 16-classroom addition is scheduled for 2014.**

Patriot High School

School & Site Information

Construction (Year):	2011	Regular Classrooms:	101
Renovation (Year):		Square Feet:	312,067
Program Capacity:	2,053	Site Size (Acres):	76.51

Pattie Elementary School

School & Site Information

Construction (Year):	1978	Regular Classrooms:	36
Renovation (Year):	2013	Square Feet:	54,082
Program Capacity:	698	Site Size (Acres):	15

(Includes Washington Reid)

Additional Space

- School needs a security apartment.
- **A 10-classroom addition is scheduled for 2020.**

Penn Elementary School (Scheduled for Renewal in FY 2019)

School & Site Information

Construction (Year):	1996	Regular Classrooms:	39
Renovation (Year):		Square Feet:	87,354
Addition (Year):	2013		
Program Capacity:	626	Site Size (Acres):	16.93

Additional Space

- **A 7-classroom addition was completed in 2013.**

Pennington School

School & Site Information

Construction (Year):	1968	Regular Classrooms:	31
Renovation (Year):	2011	Square Feet:	58,346
Program Capacity:	648	Site Size (Acres):	15

Additional Space

- School needs a security apartment.

Piney Branch Elementary School

School & Site Information

Construction (Year):	2011	Regular Classrooms:	44
Renovation (Year):		Square Feet:	104,829
Program Capacity:	924	Site Size (Acres):	21.70

Porter School

School & Site Information

Construction (Year):	2004	Regular Classrooms:	32
Renovation (Year):		Square Feet:	71,245
Program Capacity:	672	Site Size (Acres):	16.93

Potomac High School

School & Site Information

Construction (Year):	1980	Regular Classrooms:	112
Renovation (Year):	2013	Square Feet:	273,329
Addition (Year):	2013		
Program Capacity:	1,655	Site Size (Acres):	75.09

Maintenance & Repair

- Humidification system is needed in band room.
- Wood flooring is needed in performing arts area.

Potomac Middle School

School & Site Information

Construction (Year):	2006	Regular Classrooms:	65
Renovation (Year):		Square Feet:	151,008
Addition (Year):	2013		
Program Capacity:	1,464	Site Size (Acres):	36.43

Potomac Transportation Center

Site Information

Construction (Year):	Building 1-1988 Building 2-2000	Regular Classrooms:	N/A
		Square Feet:	15,431
Renovation (Year):		Site Size (Acres):	16.76
Program Capacity:	N/A		

Maintenance and Repair

- Wash bay for vehicles.
- Complete unfinished storage area to provide additional restrooms and classroom space.

Potomac View Elementary School

School & Site Information

Construction (Year):	1964	Regular Classrooms:	37
Renovation (Year):	2005	Square Feet:	62,000
Addition (Year):	2009		
Program Capacity:	746	Site Size (Acres):	12.38

Additional Space

- School needs a security apartment.

Reagan Middle School

School & Site Information

Construction (Year):	2012	Regular Classrooms:	65
Renovation (Year):		Square Feet:	136,622
Program Capacity:	1,233	Site Size (Acres):	41.8

Rippon Middle School

School & Site Information

Construction (Year):	1967	Regular Classrooms:	63
Renovation (Year):	2009-2010	Square Feet:	132,607
Program Capacity:	1,139	Site Size (Acres):	30.23

Maintenance & Repair

- Fenestration improvements.

Additional Space

- **An 8-classroom addition is scheduled for 2016.**

River Oaks Elementary (Scheduled for Renewal in FY 2018)

School & Site Information

Construction (Year):	1990	Regular Classrooms:	31
Renovation (Year):		Square Feet:	63,118
Program Capacity:	616	Site Size (Acres):	15.18

Maintenance & Repair

- Telephones should be installed in all classrooms.
- Playing fields/areas need renovation.
- Need steps from lower parking area to playing fields.
- HVAC system and controls replacement.

Handicap Access

- Hardware, such as door handles, does not meet ADA standards and should be replaced.

Additional Space

- **A 7-classroom addition is scheduled for 2014.**

Rockledge Elementary School

School & Site Information

Construction (Year):	1972	Regular Classrooms:	31
Renovation (Year):	2007	Square Feet:	64,769
Addition (Year):	2009		
Program Capacity:	650	Site Size (Acres):	16.15

Handicap Access

- ADA portable accessible ramp is needed for stage.

Additional Space

- School needs a security apartment (has a security trailer).

Saunders Middle School (Scheduled for Renewal in FY 2017)

School & Site Information

Construction (Year):	1988	Regular Classrooms:	64
Renovation (Year):		Square Feet:	137,088
Program Capacity:	1,212	Site Size (Acres):	29.54

Maintenance & Repair

- Track and tennis courts need repairs.
- Playing fields/area needs refurbishing.
- Roof replacement.

Handicap Access

- Minor modifications are needed to paths, doorway entrances, and toilet rooms.
- Generator replacement.
- Telephones should be installed in all classrooms.

Additional Space

- School needs a security apartment (has a security trailer).

Signal Hill Elementary School (Scheduled for Renewal in FY 2021)

School & Site Information

Construction (Year):	2000	Regular Classrooms:	41
Renovation (Year):		Square Feet:	83,084
Program Capacity:	780	Site Size (Acres):	24.45

Sinclair Elementary School

School & Site Information

Construction (Year):	1968	Regular Classrooms:	40
Renovation (Year):	2009	Square Feet:	76,760
Addition (Year):	2013		
Program Capacity:	568	Site Size (Acres):	15

Additional Space

- School needs a security apartment.

Springwoods Elementary School (Scheduled for Renewal in FY 2015)

School & Site Information

Construction (Year):	1986	Regular Classrooms:	28
Renovation (Year):		Square Feet:	57,530
Program Capacity:	592	Site Size (Acres):	15.11

Maintenance & Repair

- Walks repaired and resurfaced (partial).
- HVAC system replacement (partial).
- Playing field needs to be refurbished.

Handicap Access

- Building signage does not meet ADA standards.
- Fire alarm system must be upgraded to provide both audio and visual notification in all occupied areas.

Additional Space

- School needs a security apartment.

Stonewall Jackson High School

School & Site Information

Construction (Year):	1973	Regular Classrooms:	117
Renovation (Year):	2005	Square Feet:	328,540
Program Capacity:	2,409	Site Size (Acres):	56.61

Maintenance & Repair

- Clay unit masonry needs extensive re-pointing.
- Resilient floor tile and carpet need replacing (partial).
- HVAC system replacement (partial).
- Kitchen renovation.
- Areas of the building not renewed in 2005 (primarily gymnasium and administrative areas).

Stonewall Middle School

School & Site Information

Construction (Year):	1964	Regular Classrooms:	52
Renovation (Year):	2002	Square Feet:	127,673
Program Capacity:	1,003	Site Size (Acres):	32.22

Additional Space

- School needs a security apartment (has a security trailer).

Maintenance & Repair

- Fencing needs replacement (partial).

Sudley Elementary School

School & Site Information

Construction (Year):	1972	Regular Classrooms:	32
Renovation (Year):	2004	Square Feet:	73,457
Addition (Year):	2013		
Program Capacity:	462	Site Size (Acres):	14

Additional Space

- School needs a security apartment (has a security trailer).

Swans Creek Elementary School (Scheduled for Renewal in FY 2023)

School & Site Information

Construction (Year):	2001	Regular Classrooms:	38
Renovation (Year):		Square Feet:	86,685
Addition (Year):	2012		
Program Capacity:	626	Site Size (Acres):	18.49

Triangle Elementary School

School & Site Information

Construction (Year):	2009	Regular Classrooms:	44
Renovation (Year):		Square Feet:	103,679
Program Capacity:	924	Site Size (Acres):	18.87

Tyler Elementary School

School & Site Information

Construction (Year):	1968	Regular Classrooms:	28
Renovation (Year):	2007	Square Feet:	56,014
Addition (Year):	2007		
Program Capacity:	568	Site Size (Acres):	42.18

Additional Space

- School needs a security apartment.

Vaughan Elementary School

School & Site Information

Construction (Year):	1964	Regular Classrooms:	36
Renovation (Year):	2005	Square Feet:	61,204
Addition (Year):	2009		
Program Capacity:	698	Site Size (Acres):	13.55

Victory Elementary School

School & Site Information

Construction (Year):	2005	Regular Classrooms:	43
Renovation (Year):		Square Feet:	89,911
Program Capacity:	852	Site Size (Acres):	21.23

Washington-Reid Annex

School & Site Information

Construction (Year):	1951,60,67	Regular Classrooms:	
Renovation (Year):		Square Feet:	24,953
Program Capacity: (see Pattie E.S.)		Site Size (Acres):	9.21

Additional Space

- School needs a security apartment.

West Gate Elementary School

School & Site Information

Construction (Year):	1964	Regular Classrooms:	33
Renovation (Year):	1993 / 2009	Square Feet:	62,727
Addition (Year):	2013		
Program Capacity:	568	Site Size (Acres):	12.11

Westridge Elementary School (Scheduled for Renewal in FY 2017)

School & Site Information

Construction (Year):	1989	Regular Classrooms:	34
Renovation (Year):		Square Feet:	70,599
Addition (Year):	2012		
Program Capacity:	568	Site Size (Acres):	15

Additional Space:

- School needs a security apartment.

Williams Elementary School

School & Site Information

Construction (Year):	2004	Regular Classrooms:	41
Renovation (Year):		Square Feet:	83,084
Program Capacity:	780	Site Size (Acres):	13.56

Wood Elementary School

School & Site Information

Construction (Year):	2011	Regular Classrooms:	44
Renovation (Year):		Square Feet:	104,448
Program Capacity:	924	Site Size (Acres):	17.24

Woodbine Pre-School Center

School & Site Information

Construction (Year):	1953	Regular Classrooms:	4
Renovation (Year):	1990	Square Feet:	8,320
Program Capacity:	120	Site Size (Acres):	1.91

Maintenance & Repair

- Roof ventilation and exhaust fans need replacing.
- Electrical outlets are needed.

Handicap Access

- Toilets not handicap accessible; must be upgraded to ADA standards.
- Building signage does not meet ADA standards.

Additional Space

- Additional parking needed.

Woodbridge High School

School & Site Information

Construction (Year):	1974	Regular Classrooms:	125
Renovation (Year):	2006	Square Feet:	352,497
Program Capacity:	2,734	Site Size (Acres):	52.69

Maintenance & Repair

- Resilient floor tile and carpet need replacing (partial).
- Kitchen renovation.
- Track resurfacing.
- Fencing needs replacement (partial).
- Roof replacement (partial).
- Replace operable auditorium partitions.
- Areas of the building not renewed in 2006 (primarily the auditorium and administrative areas).

Woodbridge Middle School

School & Site Information

Construction (Year):	1964	Regular Classrooms:	56
Renovation (Year):	2002-2003	Square Feet:	125,311
Program Capacity:	1,066	Site Size (Acres):	37.36

Maintenance & Repair

- Window wall replacement.

Additional Space

- School needs a security apartment (has a security trailer).

Yorkshire Elementary School

School & Site Information

Construction (Year):	2009	Regular Classrooms:	46
Renovation (Year):		Square Feet:	106,614
Program Capacity:	948	Site Size (Acres):	13.21

APPENDIX B

Student Enrollment & Housing Data

APPENDIX B

STUDENT ENROLLMENT & HOUSING DATA

- Enrollment Forecast Methodology
 - Analysis of Student Information
 - Analysis of Housing Unit Information
 - Preparation of Student Enrollment Forecasts
- Student Generation Factors
- Cohort Progression
- Alternative Solutions to School Overcrowding
- Student Enrollment Data: Current and Projected Enrollment
 - by School (Elementary, Middle, High, and Special/Alternative Education), School Years 2013-23
- Housing Units in Residential Development
 - by School (Elementary, Middle, and High)
- Historical and Projected Enrollment Data
- Student Enrollment Projections - Error Rate Analysis
- Portable Classrooms
- Various Charts and Graphs
- Geographic Areas – Map and Table

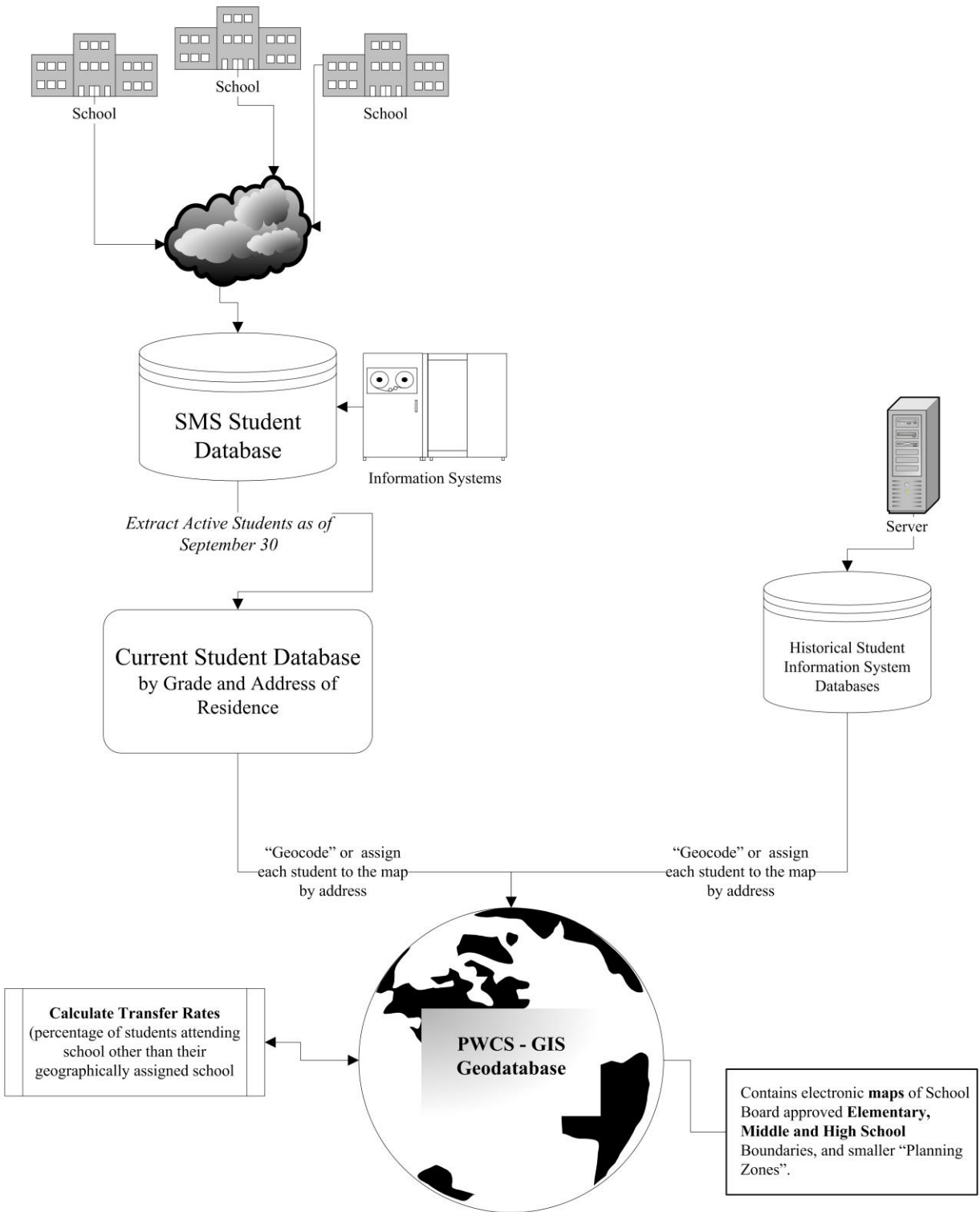
Enrollment Forecast Methodology

All forecasts have several things in common; all are an extrapolation of the past, all involve some level of judgment, and all forecasts are wrong. This is why judgment is so important when creating and evaluating the forecast. The real goal in the forecasting process is to reduce the range of error and monitor the process over time so it can continually be improved.

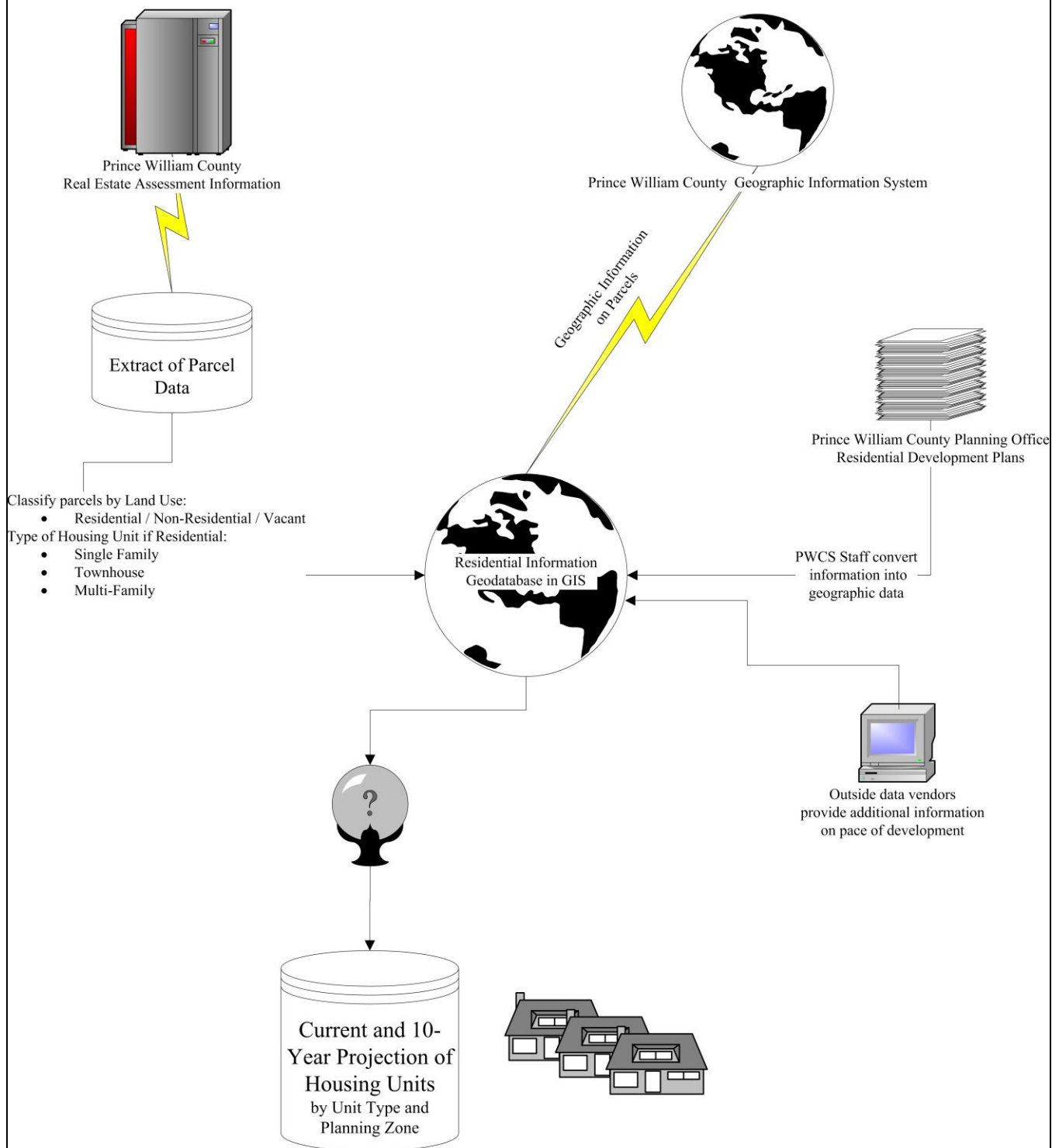
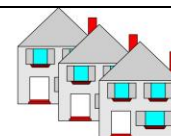
The forecasting methodology used to predict the number of students who will be enrolling in Prince William County Schools for the next 10 years is a combination of cohort progression method and student generation factors method, along with judgmental adjustment to fine-tune the forecasts. This combination of methods was chosen because it provides for very accurate forecasts and at the same time is relatively inexpensive to produce. The process is data intensive and involves the extensive use of Geographic Information System (GIS) to analyze the many geographic data involved.

The accuracy of this forecasting method has been very good in the past, with an average error of approximately 0.5% countywide. Success at the school level has not been as good but the forecasts

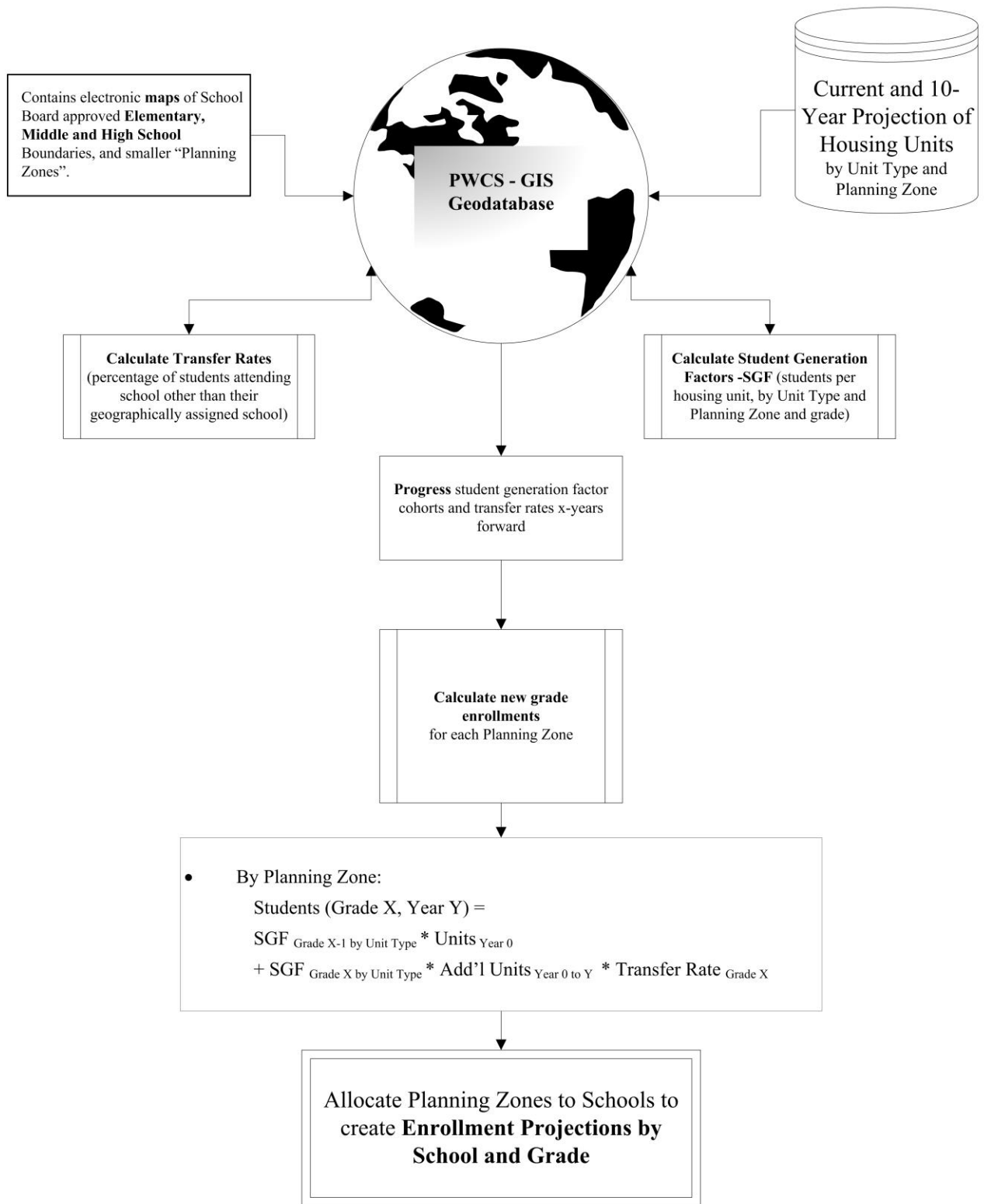
Analysis of Student Information



Analysis of Housing Unit Information



Preparation of Student Enrollment Forecasts



have been well within the acceptable range. Countywide forecasts have been more successful than the school level forecasts because the population being forecasted is much larger. This phenomenon is common to all forecasting methodologies and is therefore expected.

Student Generation Factors

The enrollment forecasts are created using the **student generation factors method** combined with the **cohort progression method**. Together, these two means produce additional students using the current year’s housing unit totals as a baseline. The process is detailed in the preceding flow charts. This is an effective method that can, with accurate data, provide highly accurate forecasts of future enrollments.

Generation factors are created types for each geographically small “Planning Zone” by dividing the number of students residing in the Planning Zone by the number of existing housing units. The ratio of students per housing unit is then projected and applied to the number of predicted housing units by year to produce the forecasts of total students in Prince William County Schools.

Year-by-year housing unit forecasts are created, with student generation factors then applied on a grade-by-grade level to create the overall enrollment forecasts. These forecasts have been historically very accurate.

Cohort Progression

The cohort progression method is, in basic terms, the application of an average growth rate over time to the current year’s enrollment by grade level cohort. This growth rate can be taken from the previous year, or from an average of several previous years. The resulting ratio or growth rate is then applied to the current year's enrollment by grade level cohort to project the next year’s enrollment.

The cohort ratio calculation in the following example describes the progression of sixth graders to seventh grade on average over 3 years. The same could be done over 2, 5, or any desired number of years. A greater number of years in the cohort calculation lessens the effects of any given year on the forecast, effectively “smoothing out” the historical data. Keeping this in mind, the forecaster can adjust the number of years used to calculate the cohort ratio to adjust for current and expected economic conditions and produce more accurate forecast results.

Grade	Year ₍₋₃₎	Year ₍₋₂₎	Year ₍₋₁₎	Year ₍₀₎	Cohort Ratio	Year ₍₊₁₎
6 th	3,888	4,066	4,348	4,581		
7 th	N/A	4,024	4,184	4,525	1.0350	4,741

1. **Cohort Ratio** = $(7^{th} Year_{(-2)} + 7^{th} Year_{(-1)} + 7^{th} Year_{(0)}) / (6^{th} Year_{(-3)} + 6^{th} Year_{(-2)} + 6^{th} Year_{(-1)})$
 $7^{th} Year_{(0)}$ indicates the 7th grade cohort of Current Year.
2. **Cohort Ratio** = $(4,024 + 4,184 + 4,525) / (3,888 + 4,066 + 4,348) = 1.0350$
3. **Forecasted 7th Year₍₊₁₎ Grade Cohort** = $4,581 \times 1.0350 = 4,741$

The number of years used to calculate the cohort ratio has changed several times over the period starting with 1980 in Prince William County. These changes were made to help adjust for the increasing growth rates in the late 80's and in the 2000's. The three-year cohort had been used up until 2001 to project the one-year growth in student enrollment by grade. However, due to the high growth rates experienced in Prince William County in the 2000's, a two-year cohort, or combination of the two- and three-year cohort, has been used to calculate the forecasts for 2014-15. This is because it is believed that the growth pattern over the last two years is a better representation of the short-term future. In the future the use of mixed cohorts may also be employed to adjust for differing growth rates within the county.

After each of these forecasts is calculated there is a reconciliation of the two using the judgment of the forecasters. The result is a forecast that is used as a baseline for the out-year forecasts.

Alternative Solutions to School Overcrowding

There are several general methods that have been considered to alleviate overcrowding in schools.

- Year-Round Schooling
- Boundary changes - For the opening of new schools or to shift student populations
- Optimization of boundaries so all available space in the county will be used
- Placement of portable classrooms
- New construction
- Freezing transfers
- Program changes – Examples:
 - Shifting eighth grade to a high school with unused space;
 - Moving PK Special Education programs;
 - Increasing pupil/teacher ratio;
 - Split shift.

The method chosen for relieving overcrowding at a given school is determined by several criteria. These criteria include continuity and quality of educational program; maintenance of contiguous communities; transportation considerations; using centerline on divided highways when possible; and topographical features.

Student Enrollment Data: Current and Projected Enrollment
Elementary Schools
SY 2013-14 to SY 2023-24

Elementary School	Available Space		2013-14			2014-15			2018-19			2023-24		
	Capacity	Portable Classrooms	Students	+/-	% Util	Students	+/-	% Util	Students	+/-	% Util	Students	+/-	% Util
Alvey ES	780		796	-16	102.1%	654	126	83.8%	768	12	98.5%	801	-21	102.7%
Antietam ES	616	1	622	-6	101.0%	616	0	100.0%	672	-56	109.1%	697	-81	113.1%
Ashland ES	900		955	-55	106.1%	982	-82	109.1%	1,084	-184	120.4%	1,116	-216	124.0%
Bel Air ES	568	6	594	-26	104.6%	602	-34	106.0%	639	-71	112.6%	663	-95	116.7%
Belmont ES	462	2	471	-9	101.9%	474	-12	102.6%	544	-82	117.7%	636	-174	137.7%
Bennett ES	780		807	-27	103.5%	698	82	89.5%	775	5	99.4%	1,212	-432	155.4%
Bristow Run ES	780		706	74	90.5%	706	74	90.5%	759	21	97.3%	816	-36	104.6%
Buckland Mills ES	852	7	1,083	-231	127.1%	679	173	79.7%	755	97	88.6%	861	-9	101.1%
Cedar Point ES	780		705	75	90.4%	673	107	86.3%	745	35	95.5%	764	16	97.9%
Coles ES	472	3	496	-24	105.1%	508	-36	107.6%	554	-82	117.4%	580	-108	122.8%
Dale City ES	496	5	473	23	95.4%	485	11	97.8%	510	-14	102.8%	528	-32	106.4%
Dumfries ES	520	6	555	-35	106.7%	582	-62	111.9%	620	-100	119.3%	643	-123	123.6%
Ellis ES	626	1	559	67	89.3%	572	54	91.4%	654	-28	104.4%	805	-179	128.6%
Enterprise ES	520	2	526	-6	101.2%	523	-3	100.6%	572	-52	110.0%	591	-71	113.6%
Featherstone ES	462	7	534	-72	115.6%	572	-110	123.8%	599	-137	129.7%	626	-164	135.4%
Fitzgerald ES	852		860	-8	100.9%	930	-78	109.2%	1,054	-202	123.7%	1,228	-376	144.1%
Glenkirk ES	780	2	893	-113	114.5%	945	-165	121.2%	1,000	-220	128.3%	1,037	-257	132.9%
Gravely ES	852		796	56	93.4%	803	49	94.2%	958	-106	112.4%	1,000	-148	117.4%
Haymarket ES	948					721	227	76.1%	856	92	90.3%	1,060	-112	111.8%
Henderson ES	592	2	558	34	94.3%	554	38	93.6%	596	-4	100.7%	616	-24	104.0%
Kerrydale ES	496	4	462	34	93.1%	477	19	96.2%	507	-11	102.2%	526	-30	106.0%
Kilby ES	414	2	420	-6	101.4%	429	-15	103.6%	473	-59	114.3%	575	-161	138.9%
King ES	520	2	491	29	94.4%	501	19	96.3%	564	-44	108.4%	586	-66	112.6%
Lake Ridge ES	544	5	639	-95	117.5%	646	-102	118.8%	697	-153	128.1%	722	-178	132.7%
Leesylvania ES	804	2	771	33	95.9%	785	19	97.6%	833	-29	103.6%	908	-104	112.9%
Loch Lomond ES	616		467	149	75.8%	493	123	80.0%	546	70	88.7%	582	34	94.5%
Marshall ES	698		629	69	90.1%	592	106	84.8%	634	64	90.8%	652	46	93.4%
Marumsco Hills ES	650	9	749	-99	115.2%	827	-177	127.2%	997	-347	153.4%	1,051	-401	161.6%
McAuliffe ES	568	1	467	101	82.2%	471	97	82.9%	527	41	92.8%	547	21	96.2%
Minnieville ES	544	3	598	-54	109.9%	638	-94	117.3%	715	-171	131.4%	754	-210	138.6%
Montclair ES	698		651	47	93.3%	650	48	93.1%	702	-4	100.6%	728	-30	104.3%
Mountain View ES	698		674	24	96.6%	629	69	90.1%	695	3	99.5%	737	-39	105.6%
Mullen ES	876		695	181	79.3%	721	155	82.3%	760	116	86.7%	838	38	95.7%
Neabsco ES	626	2	570	56	91.1%	574	52	91.7%	613	13	97.9%	635	-9	101.4%
Nokesville ES	342	5	378	-36	110.5%									
Nokesville School, The	592					517	75	87.3%	649	-57	109.6%	691	-99	116.7%
Occoquan ES	520	6	579	-59	111.3%	583	-63	112.1%	636	-116	122.3%	666	-146	128.1%
Old Bridge ES	626		695	-69	111.0%	688	-62	109.9%	745	-119	119.0%	770	-144	122.9%
Parks ES	780		817	-37	104.7%	855	-75	109.6%	864	-84	110.8%	897	-117	115.0%
Pattie ES	698		698	0	100.0%	712	-14	102.0%	792	-94	113.5%	820	-122	117.5%
Penn ES	780		723	57	92.7%	757	23	97.1%	773	7	99.1%	891	-111	114.3%
Pennington ES	405		402	3	99.3%	405	0	100.0%	405	0	100.0%	405	0	100.0%
Piney Branch ES	924		730	194	79.0%	776	148	84.0%	972	-48	105.2%	2,253	-1,329	243.8%
Porter ES	420		417	3	99.3%	420	0	100.0%	420	0	100.0%	420	0	100.0%
Potomac View ES	746	8	766	-20	102.7%	819	-73	109.8%	873	-127	117.0%	931	-185	124.8%
River Oaks ES	780	4	680	100	87.2%	714	66	91.5%	797	-17	102.2%	826	-46	105.9%
Rockledge ES	650		614	36	94.5%	625	25	96.2%	675	-25	103.9%	719	-69	110.7%
Signal Hill ES	780		558	222	71.5%	546	234	70.0%	634	146	81.3%	854	-74	109.4%
Sinclair ES	876		796	80	90.9%	801	75	91.4%	851	25	97.2%	1,032	-156	117.8%
Springwoods ES	592	5	711	-119	120.1%	721	-129	121.8%	746	-154	125.9%	773	-181	130.6%
Sudley ES	876	2	800	76	91.3%	840	36	95.9%	909	-33	103.8%	940	-64	107.3%
Swans Creek ES	770		643	127	83.5%	652	118	84.7%	1,120	-350	145.4%	2,012	-1,242	261.3%
Triangle ES	924		761	163	82.4%	777	147	84.1%	842	82	91.1%	991	-67	107.3%
Tyler ES	568	2	680	-112	119.7%	508	60	89.4%	557	11	98.1%	623	-55	109.7%
Vaughan ES	698	3	798	-100	114.3%	793	-95	113.6%	920	-222	131.9%	957	-259	137.2%
Victory ES	852	5	929	-77	109.0%	953	-101	111.9%	1,048	-196	123.0%	1,091	-239	128.0%
West Gate ES	770	5	675	95	87.7%	709	61	92.1%	751	19	97.5%	781	-11	101.4%
Westridge ES	712		702	10	98.6%	679	33	95.4%	721	-9	101.3%	753	-41	105.8%
Williams ES	780	3	857	-77	109.9%	886	-106	113.6%	975	-195	124.9%	1,016	-236	130.3%
Wood ES	924	2	981	-57	106.2%	948	-24	102.6%	1,043	-119	112.8%	1,247	-323	134.9%
Yorkshire ES	948	2	876	72	92.4%	945	3	99.7%	1,163	-215	122.6%	1,237	-289	130.5%
Total	41,723	126	39,538	481	98.8%	40,341	1,040	97.5%	44,857	-3,476	108.4%	50,714	-9,333	122.6%

Student Enrollment Data: Current and Projected Enrollment
 Elementary Schools – Additional Space to be Constructed
 SY 2013-14 to SY 2023-24

Elementary School	2013-14			2014-15			2018-19			2023-24		
	Students	+/-	% Util	Students	+/-	% Util	Students	+/-	% Util	Students	+/-	% Util
2015												
<i>Elementary School/IHS (Devlin Road Area)</i>								852			852	
<i>Featherstone Elementary Addition (6 rooms)</i>								144			144	
2016												
<i>Elementary School/IHS (East - Ferlazzo)</i>								852			852	
2017												
<i>Belmont Elementary Addition (10 rooms)</i>								240			240	
<i>Kilby Elementary School Replacement</i>								438			438	
<i>Elementary School (East - Neabsco Mills)</i>								650			650	
<i>Neabsco Elementary Addition (8 rooms)</i>								192			192	
<i>Elementary School (East - Potomac Shores)</i>								852			852	
2018												
<i>Elementary School (Vint Hill Road ES)</i>								852			852	
2019												
<i>Haymarket Area Addition (6 rooms)</i>											144	
<i>Henderson Elementary School Addition (10)</i>											240	
<i>Leesylvania Elementary Addition (4 rooms)</i>											96	
2020												
<i>Elementary School (East - Lake Ridge Area)</i>											852	
<i>Pattie Elementary Addition (10 rooms)</i>											240	
2021												
<i>Elementary School (East - Cherry Hill Area)</i>											852	
2022												
<i>Elementary School (Haymarket Area)</i>											852	
<i>Elementary School (Linton Hall Area)</i>											852	
2023												
<i>Elementary School (Stonewall Area)</i>											852	
Sum of Additional Seats								5,072			10,052	
Total	39,538	481	98.8%	40,341	1,040	97.5%	44,857	1,596	96.6%	50,714	719	98.6%

Student Enrollment Data: Current and Projected Enrollment
Middle Schools
SY 2013-14 to SY 2023-24

Middle School	Available Space		2013-14			2014-15			2018-19			2023-24		
	Capacity	Portable Classrooms	Students	+/-	% Util	Students	+/-	% Util	Students	+/-	% Util	Students	+/-	% Util
Benton MS	1,464	1	1,327	137	90.6%	1,345	119	91.9%	1,415	49	96.6%	1,537	-73	105.0%
Beville MS	1,191		1,135	56	95.3%	1,128	63	94.7%	1,192	-1	100.1%	1,254	-63	105.3%
Bull Run MS	1,233		1,134	99	92.0%	1,182	51	95.9%	1,237	-4	100.4%	1,507	-274	122.2%
Gainesville MS	1,233	5	1,329	-96	107.8%	1,311	-77	106.3%	1,465	-232	118.9%	2,071	-838	168.0%
Godwin MS	982		1,107	-125	112.7%	1,096	-114	111.6%	1,164	-182	118.5%	1,229	-247	125.2%
Graham Park MS	867	2	922	-55	106.3%	989	-122	114.1%	1,067	-200	123.0%	1,174	-307	135.4%
Lake Ridge MS	1,191		1,218	-27	102.3%	1,273	-81	106.8%	1,327	-136	111.4%	1,394	-203	117.0%
Lynn MS	1,170		992	178	84.8%	1,016	154	86.8%	1,112	58	95.1%	1,232	-62	105.3%
Marsteller MS	1,233	10	1,471	-238	119.3%	1,262	-304	124.6%	1,325	-426	134.6%	1,548	-675	154.7%
Nokesville ES			80											
Nokesville School, The	439					331	108	75.4%	402	37	91.6%	433	6	98.6%
Parkside MS	1,139		1,234	-95	108.3%	1,256	-140	112.3%	1,401	-283	124.8%	1,670	-548	148.2%
Pennington TS	243		235	8	96.7%	243	0	100.0%	243	0	100.0%	243	0	100.0%
Porter TS	252		257	-5	102.0%	252	0	100.0%	252	0	100.0%	252	0	100.0%
Potomac MS	1,464		1,152	312	78.7%	1,218	247	83.1%	1,501	-37	102.6%	1,932	-468	132.0%
Reagan MS	1,233		1,257	-24	101.9%	1,307	-74	106.0%	1,497	-264	121.4%	1,710	-477	138.6%
Rippon MS	1,139		1,166	-27	102.4%	1,234	-94	108.3%	1,405	-266	123.4%	1,560	-421	137.0%
Saunders MS	1,212		1,051	161	86.7%	1,079	133	89.0%	1,140	72	94.0%	1,200	12	99.0%
Stonewall MS	1,003	5	1,231	-228	122.7%	1,177	-209	120.8%	1,224	-268	126.7%	1,287	-340	133.9%
Woodbridge MS	1,066		1,174	-108	110.1%	1,249	-183	117.1%	1,335	-269	125.2%	1,409	-343	132.2%
Total	19,754	23	19,473	-158	100.8%	19,948	-194	101.0%	21,704	-1,950	109.9%	24,642	-4,888	124.7%
<i>Parkside Middle/IHS West (15/1 room addition, 2014)</i>														
							315			315			315	
<i>Rippon Middle/IHS West (8/1 room addition, 2016)</i>														
										168			168	
<i>Middle School (West - Linton Hall Area, 2018)</i>														
										1,464			1,464	
<i>Middle School (Potomac Shores, 2020)</i>														
													1,464	
<i>Sum of Additional Seats</i>														
							315			1,947			3,411	
Total	19,754	23	19,473	-158	100.8%	19,948	121	99.4%	21,704	-3	100.0%	24,642	-1,477	106.4%

Student Enrollment Data: Current and Projected Enrollment
High Schools
SY 2013-14 to SY 2023-24

Middle School	Available Space		2013-14			2014-15			2018-19			2023-24		
	Capacity	Portable Classrooms	Students	+/-	% Util	Students	+/-	% Util	Students	+/-	% Util	Students	+/-	% Util
Battlefield HS	2,053	6	2,461	-408	119.9%	2,567	-514	125.0%	2,817	-764	137.2%	3,093	-1,040	150.6%
Brentsville HS	1,110		922	188	83.1%	1,134	-24	102.2%	1,387	-277	125.0%	1,372	-262	123.6%
Forest Park HS	2,053	6	2,349	-296	114.4%	2,255	-202	109.8%	2,231	-178	108.7%	2,203	-150	107.3%
Freedom HS	2,053		1,920	134	93.5%	1,935	118	94.3%	2,130	-77	103.8%	2,789	-736	135.8%
Gar-Field HS	2,839		2,454	385	86.4%	2,524	315	88.9%	2,718	121	95.7%	2,945	-106	103.7%
Hylton HS	2,053	5	2,394	-341	116.6%	2,346	-293	114.3%	2,426	-373	118.2%	2,166	-113	105.5%
Osborn Park HS	2,430	3	2,763	-333	113.7%	2,778	-348	114.3%	2,994	-564	123.2%	3,161	-731	130.1%
Patriot HS	2,053	10	2,614	-561	127.3%	2,878	-825	140.2%	2,900	-847	141.3%	3,318	-1,265	161.6%
Potomac HS	2,357		1,624	734	68.9%	1,724	633	73.1%	2,342	15	99.4%	3,366	-1,009	142.8%
Stonewall Jackson HS	2,409		2,318	91	96.2%	2,439	-30	101.2%	2,699	-290	112.0%	3,775	-1,366	156.7%
Woodbridge HS	2,734		2,848	-114	104.2%	2,837	-103	103.8%	2,908	-174	106.4%	2,841	-107	103.9%
Total	24,144	30	24,665	-521	102.2%	25,417	-1,273	105.3%	27,553	-3,409	114.1%	31,028	-6,884	128.5%
<i>12th High School - East (2016)</i>														
										2,053			2,053	
<i>13th High School - West (2019)</i>														
													2,053	
<i>14th High School - East (2021)</i>														
													2,053	
<i>Sum of Additional Seats</i>														
										2,053			6,159	
Total	24,144	30	24,665	-521	102.2%	25,417	-1,273	105.3%	27,553	-1,356	105.2%	31,028	-725	102.4%

Student Enrollment Data: Current Enrollment
 Special Education and Alternative Schools
 SY 2013-14

Special Education and Alternative School	2013-14	
	Portable Classrooms	Students
Independent Hill SE	8	159
PACE West SE	0	103
Pre-School Child Find	0	99
School Based Pre-K	0	338
Woodbine SE	1	68
New Directions Alt	0	466
New Dominion Alt	11	84
TJHS Regional Magnet	0	62
Total	20	1,379
<i>Devlin Road Elementary (IHS West -1 room addition, 2015)</i>		
<i>Ferlazzo Elementary (IHS East -1 room addition, 2016)</i>		
<i>Rippon Middle Addition (IHS East -1 room addition, 2016)</i>		
<i>12th HS (IHS 2 room addition, 2016)</i>		
<i>PACE East Replacement, 2018</i>		
<i>New Dominion Alt (10 room addition, 210 additional seats, 2019)</i>		

Housing Units in Residential Development
By Elementary School Attendance Area and Stage of Development
September 2013

Elementary School	Active				Planned				Rezoning Submitted				Total
	SF	TH	MF	Total	SF	TH	MF	Total	SF	TH	MF	Total	
Alvey ES	55			55	130			130				-	185
Ashland ES	222			222	12			12				-	234
Bel Air ES				-				-				-	-
Belmont ES			12	12			387	387			670	670	1,069
Bennett ES				-	49	505		554	27			27	581
Bristow Run ES	4			4				-	21	20	78	119	123
Buckland Mills ES			116	116		247		247	10	130		140	503
Coles ES	99			99	21			21				-	120
Dale City ES				-	4			4				-	4
Dumfries ES			117	117	11			11				-	128
Ellis ES			624	624				-				-	624
Featherstone ES			288	288	11			11				-	299
Fitzgerald ES	70		516	586	124	398		522	18			18	1,126
Glenkirk ES	83			83	8			8				-	91
Gravelly ES	307			307	158			158				-	465
Haymarket ES			52	52	363	261	36	660			316	316	1,028
Henderson ES	11			11	9			9				-	20
Kilby ES				-			148	148			399	399	547
King ES	79			79	61			61				-	140
Leesylvania ES				-		147	550	697				-	697
Loch Lomond ES			144	144				-			110	110	254
Marshall ES	11			11	25			25				-	36
Marumscot Hills ES			577	577			342	342				-	919
McAuliffe ES		7		7				-				-	7
Minnieville ES			126	126		30	163	193				-	319
Montclair ES	22			22				-				-	22
Mountain View ES	13			13				-				-	13
Mullen ES				-			20	20				-	20
Neabsco ES			68	68				-				-	68
Nokesville School, The	403			403	127			127				-	530
Occoquan ES		48	68	116	14			14				-	130
Old Bridge ES				-	4			4				-	4
Parks ES				-	11			11				-	11
Pattie ES			244	244				-				-	244
Penn ES	12	12		24	273			273	33			33	330
Piney Branch ES		55	336	391	116	206	96	418		1,200	880	2,080	2,889
Potomac View ES				-		30	114	144				-	144
River Oaks ES	247			247				-				-	247
Rockledge ES			72	72				-			216	216	288
Signal Hill ES	55			55	126	179	296	601	31			31	687
Sinclair ES				-				-	161	260	13	434	434
Swans Creek ES	118		442	560	976	1,100	1,846	3,922				-	4,482
Triangle ES	14			14	92	12		104				-	118
Tyler ES			149	149			27	27		102	598	700	876
Vaughan ES			333	333	139			139				-	472
Victory ES				-	84	55		139				-	139
Westridge ES	7			7	20			20				-	27
Williams ES	185			185				-			162	162	347
Wood ES	21			21				-	465			465	486
Yorkshire ES			772	772	31		110	141				-	913
Total	2,038	122	5,056	7,216	2,999	3,170	4,135	10,304	766	1,712	3,442	5,920	23,440

Housing Units in Residential Development
By Middle School Attendance Area and Stage of Development
September 2013

Middle School	Active				Planned				Rezoning Submitted				Total
	SF	TH	MF	Total	SF	TH	MF	Total	SF	TH	MF	Total	
Benton MS	421	12		433	425			425	33			33	891
Beville MS	72		126	198	139	30	163	332				-	530
Bull Run MS	49		317	366			63	63	161	1,562	1,411	3,134	3,563
Gainesville MS	87	55	960	1,102	208	437	96	741	21	130	80	231	2,074
Godwin MS			68	68	4			4				-	72
Graham Park MS	14		361	375	200	12	161	373				-	748
Lake Ridge MS		48	72	120	24			24				-	144
Lynn MS			701	701	10	30	649	689			1,285	1,285	2,675
Marsteller MS				-			20	20		20	78	98	118
Nokesville School, The	416			416	176	505		681	492			492	1,589
Parkside MS	22		772	794	123	179	406	708	31			31	1,533
Potomac MS	550		442	992	976	1,247	1,685	3,908			162	162	5,062
Reagan MS	326			326	651	332		983	10		316	326	1,635
Rippon MS	81		1,093	1,174	47	398	892	1,337	18			18	2,529
Saunder MS		7		7	12			12				-	19
Stonewall MS			144	144				-			110	110	254
Woodbridge MS				-	4			4				-	4
Total	2,038	122	5,056	7,216	2,999	3,170	4,135	10,304	766	1,712	3,442	5,920	23,440

Housing Units in Residential Development
By High School Attendance Area and Stage of Development
September 2013

High School	Active				Planned				Rezoning Submitted				Total
	SF	TH	MF	Total	SF	TH	MF	Total	SF	TH	MF	Total	
Battlefield HS	375		201	576	651	332	63	1,046	10	102	914	1,026	2,648
Brentsville HS	443			443	146			146	27			27	616
Forest Park HS	244		361	605	33	12		45				-	650
Freedom HS			1,726	1,726	11	428	1,541	1,980	18		670	688	4,394
Gar-Field HS			194	194	167	30	163	360				-	554
Hylton HS	138	7		145	93			93				-	238
Osborn Park HS	85	12	772	869	485	684	406	1,575	64			64	2,508
Patriot HS	108		116	224	8	176		184	486	150	158	794	1,202
Potomac HS	645		442	1,087	1,191	1,247	1,846	4,284			162	162	5,533
Stonewall Jackson HS		55	1,104	1,159	200	261	116	577	161	1,460	923	2,544	4,280
Woodbridge HS		48	140	188	14			14			615	615	817
Total	2,038	122	5,056	7,216	2,999	3,170	4,135	10,304	766	1,712	3,442	5,920	23,440

Student Enrollment Data: Historical and Projected 1966-2023

Year	School Type				Total	Annual Change	
	Elementary	Middle	High	Special Education		Number	Percentage
1966	11,361	5,242	4,511	133	21,247		
1967	11,782	5,843	4,991	83	22,699	1,452	6.8%
1968	13,083	6,488	5,641	97	25,309	2,610	11.5%
1969	14,266	7,164	6,496	97	28,023	2,714	10.7%
1970	15,377	7,873	7,008	106	30,364	2,341	8.4%
1971	15,794	8,368	8,053	107	32,322	1,958	6.4%
1972	15,975	8,738	8,741	107	33,561	1,239	3.8%
1973	16,583	9,498	9,464	80	35,625	2,064	6.1%
1974	19,462	9,865	10,338	148	39,813	4,188	11.8%
1975	19,538	10,261	10,800	201	40,800	987	2.5%
1976	18,693	9,799	10,277	238	39,007	-1,793	-4.4%
1977	16,626	9,041	10,463	309	36,439	-2,568	-6.6%
1978	15,378	8,466	10,729	273	34,846	-1,593	-4.4%
1979	16,166	8,344	10,918	286	35,714	868	2.5%
1980	15,385	8,465	10,993	310	35,153	-561	-1.6%
1981	15,429	8,757	11,031	367	35,584	431	1.2%
1982	15,141	8,775	10,927	382	35,225	-359	-1.0%
1983	15,334	8,701	11,128	401	35,564	339	1.0%
1984	15,598	8,438	11,464	383	35,883	319	0.9%
1985	16,326	8,273	11,844	447	36,890	1,007	2.8%
1986	17,130	8,414	11,850	526	37,920	1,030	2.8%
1987	18,143	8,460	12,010	611	39,224	1,304	3.4%
1988	19,334	8,730	11,883	703	40,650	1,426	3.6%
1989	20,130	9,060	11,652	692	41,534	884	2.2%
1990	20,702	9,320	11,638	686	42,346	812	2.0%
1991	20,984	9,861	11,846	709	43,400	1,054	2.5%
1992	21,768	10,212	12,178	712	44,870	1,470	3.4%
1993	21,605	10,654	12,501	779	45,539	669	1.5%
1994	21,826	10,733	12,822	900	46,281	742	1.6%
1995	22,473	11,085	13,329	825	47,712	1,431	3.1%
1996	22,886	11,327	13,828	760	48,801	1,089	2.3%
1997	23,529	11,636	14,366	751	50,282	1,481	3.0%
1998	24,044	11,744	14,839	994	51,621	1,339	2.7%
1999	24,690	12,212	15,292	868	53,062	1,441	2.8%
2000	25,653	12,774	16,079	633	55,139	2,077	3.9%
2001	26,814	13,445	16,881	683	57,823	2,684	4.9%
2002	27,717	14,256	17,558	698	60,229	2,406	4.2%
2003	28,820	15,035	18,525	719	63,099	2,870	4.8%
2004	30,101	15,580	19,652	760	66,093	2,994	4.7%
2005	31,286	15,623	20,448	877	68,234	2,141	3.2%
2006	32,704	15,748	21,228	1,003	70,683	2,449	3.6%
2007	33,858	16,040	21,792	964	72,654	1,971	2.8%
2008	34,428	16,273	21,930	1,027	73,657	1,003	1.4%
2009	36,055	17,034	22,328	1,239	76,656	2,999	4.1%
2010	37,261	17,700	22,857	1,298	79,115	2,459	3.2%
2011	38,436	18,351	23,500	1,348	81,635	2,520	3.2%
2012	39,269	18,902	24,015	1,365	83,551	1,916	2.3%
2013	39,538	19,473	24,665	1,379	85,055	1,504	1.8%
2014	40,341	19,948	25,418	1,402	87,108	2,053	2.4%
2015	41,495	20,338	26,203	1,422	89,458	2,350	2.7%
2016	42,634	20,673	26,809	1,441	91,557	2,098	2.3%
2017	43,722	21,146	27,132	1,460	93,460	1,903	2.1%
2018	44,868	21,705	27,555	1,488	95,615	2,155	2.3%
2019	45,851	22,241	27,911	1,518	97,520	1,904	2.0%
2020	47,082	22,762	28,469	1,548	99,861	2,341	2.4%
2021	48,518	23,448	29,258	1,577	102,801	2,939	2.9%
2022	49,551	24,215	29,999	1,612	105,376	2,576	2.5%
2023	50,726	24,644	31,028	1,644	108,041	2,665	2.5%

Student Enrollment Projections Error Rate Analysis

School Year	Actual Student Enrollment	Student Enrollment Projections									
		One Year Before			Two Years Before		Four Years Before		Five Years Before		
		Projection	Difference	% Error *	Projection	% Error *	Projection	% Error *	Projection	% Error *	
1995-96	47,712	47,162	(550)	1.17%	47,255	0.97%	50,589	-5.69%	49,543	-3.70%	
1996-97	48,041	47,991	(50)	0.10%	46,928	2.37%	49,765	-3.46%	50,738	-5.32%	
1997-98	49,531	48,939	(592)	1.21%	49,033	1.02%	54,650	-9.37%	52,475	-5.61%	
1998-99	50,627	50,785	158	-0.31%	49,865	1.53%	48,731	3.89%	50,746	-0.23%	
1999-00	53,062	52,546	(516)	0.98%	53,102	-0.08%	52,567	0.94%	51,330	3.37%	
2000-01	55,139	54,269	(870)	1.60%	53,352	3.35%	53,038	3.96%	53,831	2.43%	
2001-02	57,823	57,026	(797)	1.40%	55,763	3.69%	54,788	5.54%	54,930	5.27%	
2002-03	60,229	59,916	(313)	0.52%	58,829	2.38%	55,688	8.15%	57,231	5.24%	
2003-04	63,109	62,391	(718)	1.15%	61,962	1.85%	58,059	8.70%	57,541	9.68%	
2004-05	66,093	65,721	(372)	0.57%	64,321	2.75%	62,185	6.28%	59,639	10.82%	
2005-06	68,234	68,988	754	-1.09%	68,181	0.08%	64,709	5.45%	63,717	7.09%	
2006-07	70,683	70,211	(472)	0.67%	71,511	-1.16%	67,804	4.25%	66,393	6.46%	
2007-08	72,654	72,187	(467)	0.65%	71,866	1.10%	71,555	1.54%	69,488	4.56%	
2008-09	73,657	73,321	(336)	0.46%	73,592	0.09%	75,914	-2.97%	74,270	-0.83%	
2009-10	76,656	74,736	(1,920)	2.57%	75,393	1.68%	74,840	2.43%	77,888	-1.58%	
2010-11	79,115	78,308	(807)	1.03%	75,996	4.10%	75,226	5.17%	75,433	4.88%	
2011-12	81,635	81,070	(565)	0.70%	79,866	2.21%	77,238	5.69%	76,766	6.34%	
2012-13	83,551	83,837	286	-0.34%	82,941	0.74%	79,079	5.66%	80,203	4.17%	
2013-14	85,055	85,926	871	-1.01%	86,191	-1.32%	83,659	1.67%	80,801	5.26%	
(MPE) Mean Percentage Error				0.50%		1.08%		2.09%		2.84%	
(MAPE) Mean Absolute Percentage Error				0.84%		2.01%		4.39%		4.79%	

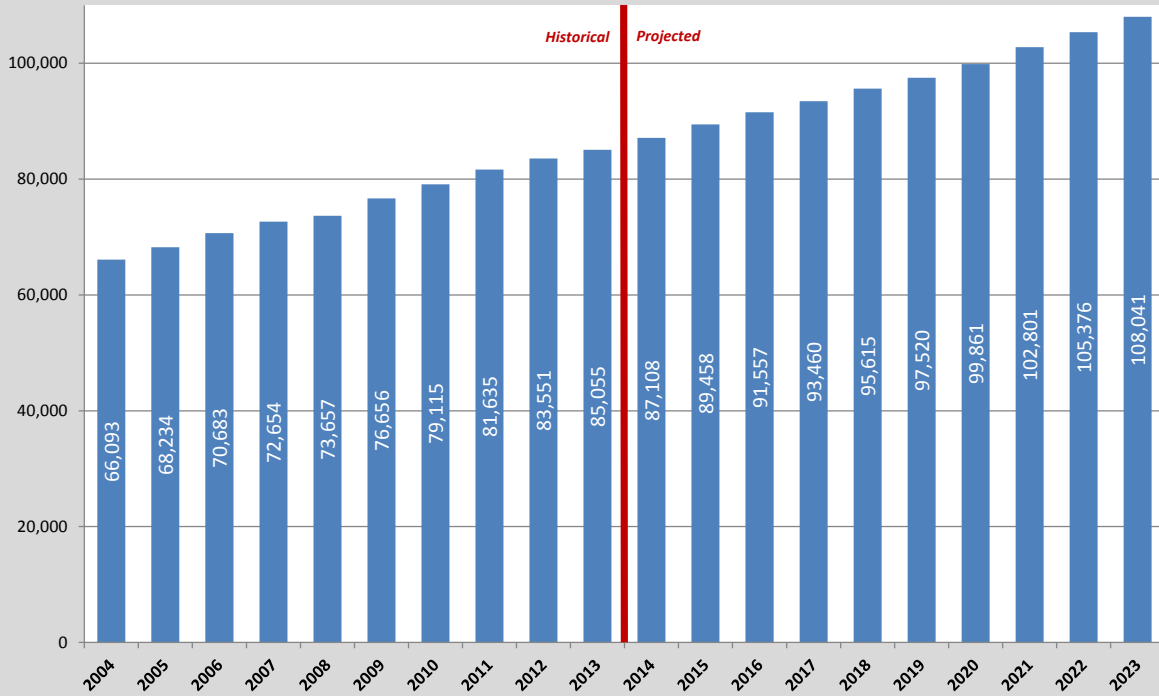
*A negative forecast error indicates that the projection was greater than the actual value.

Portable Classrooms: Current and Historical Totals By School Type, 1998 to 2013

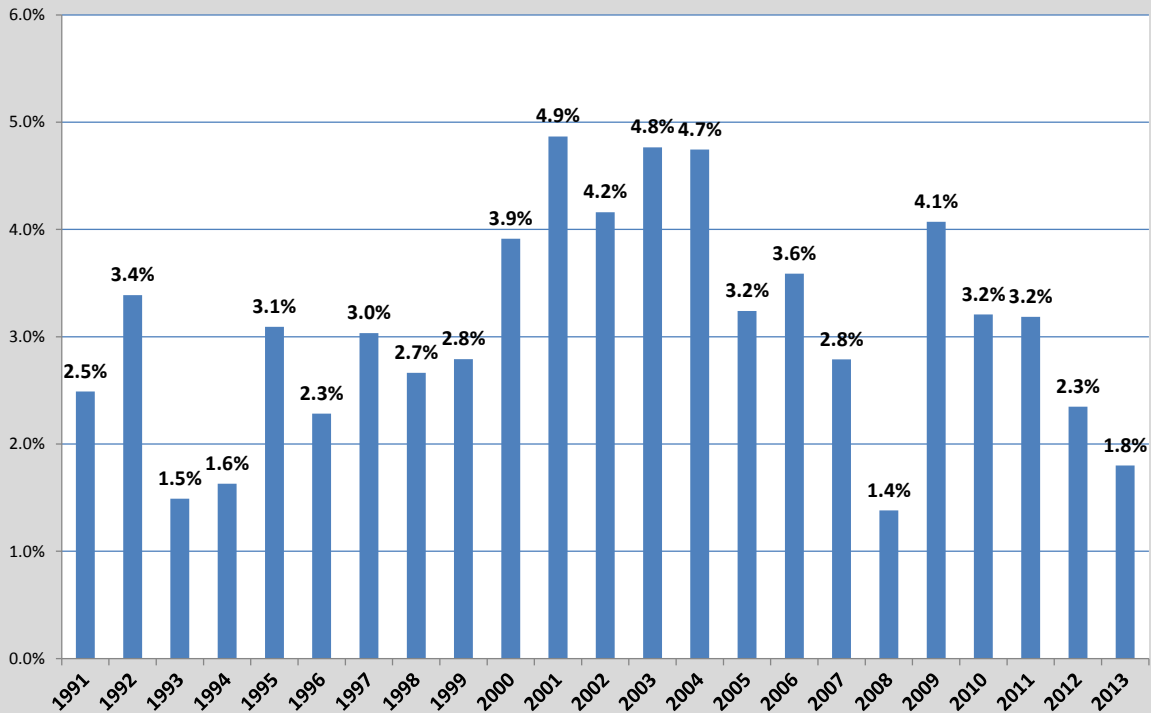
Year	Elementary	Middle	High	Alternative	Special Education	Total
1998	101	21	28	0	5	155
1999	109	25	25	0	5	164
2000	118	31	5	10	5	169
2001	122	37	2	10	5	176
2002	130	26	2	10	5	173
2003	141	16	2	10	5	174
2004	168	19	2	10	5	204
2005	185	40	5	10	5	245
2006	179	27	8	10	5	229
2007	184	20	14	10	10	238
2008	171	20	21	10	10	232
2009	150	21	36	10	7	224
2010	145	21	37	10	10	223
2011	132	31	21	10	10	204
2012	136	29	18	10	9	202
2013	126	23	30	11	9	199

Note: Includes portable classrooms used for instructional purposes.

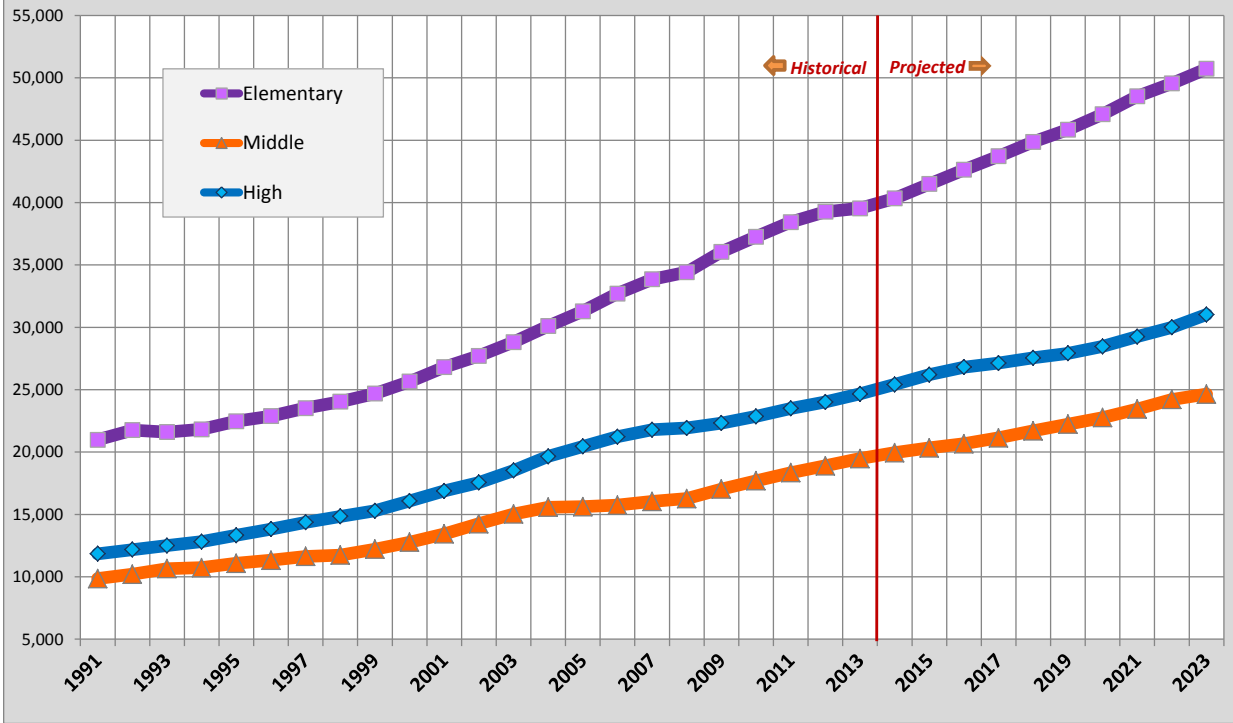
Prince William County Public Schools
Historical and Projected Enrollment



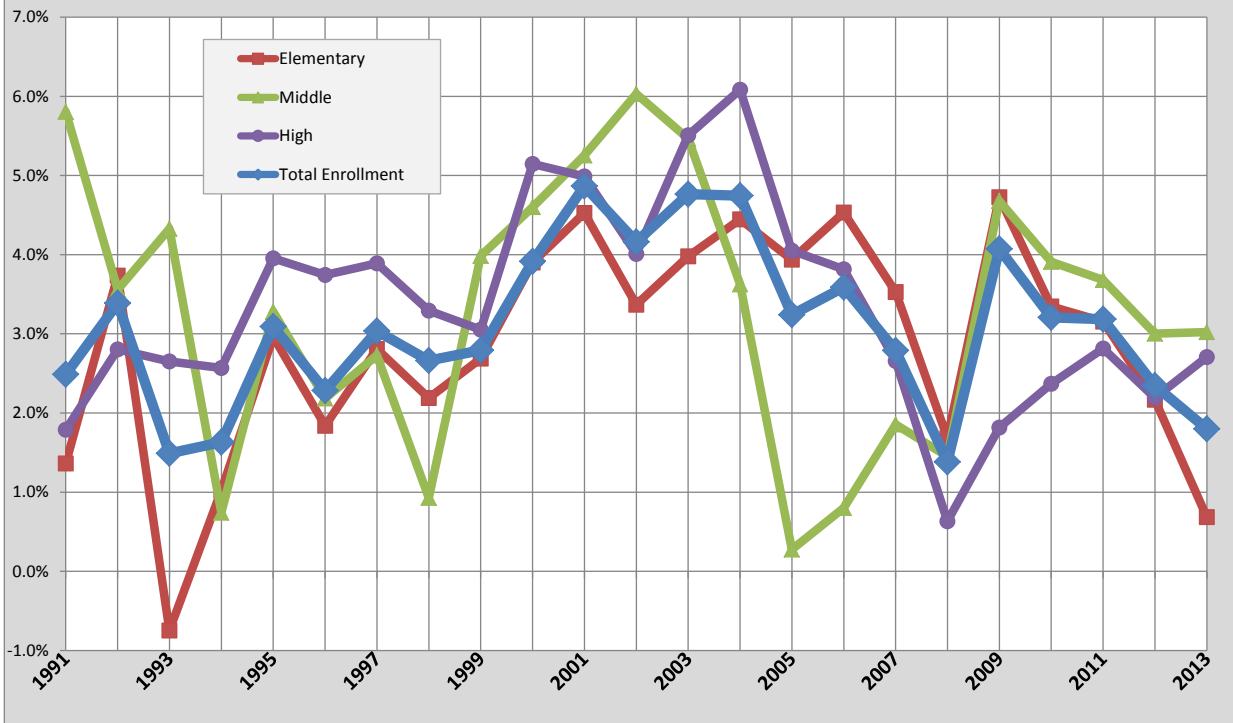
Prince William County Public Schools
Annual Percentage Change in Enrollment



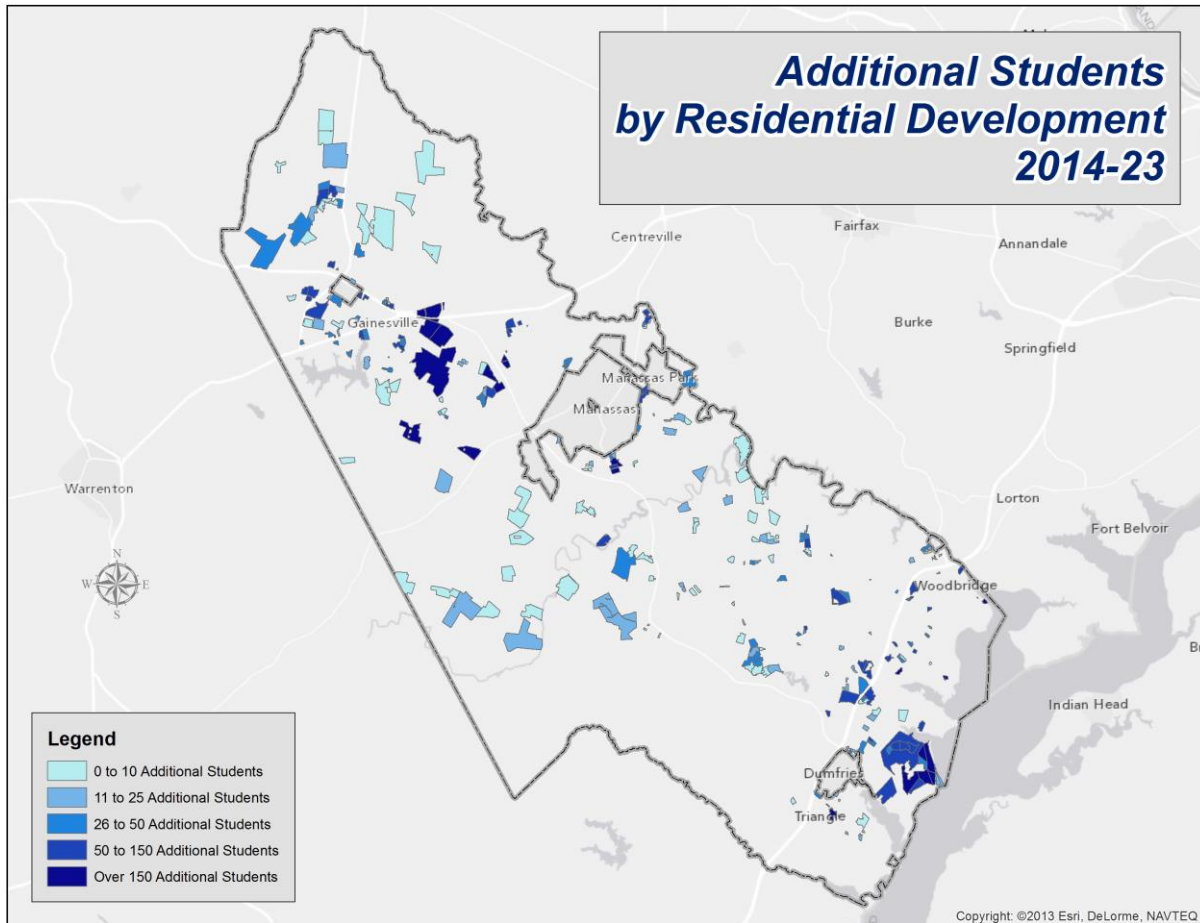
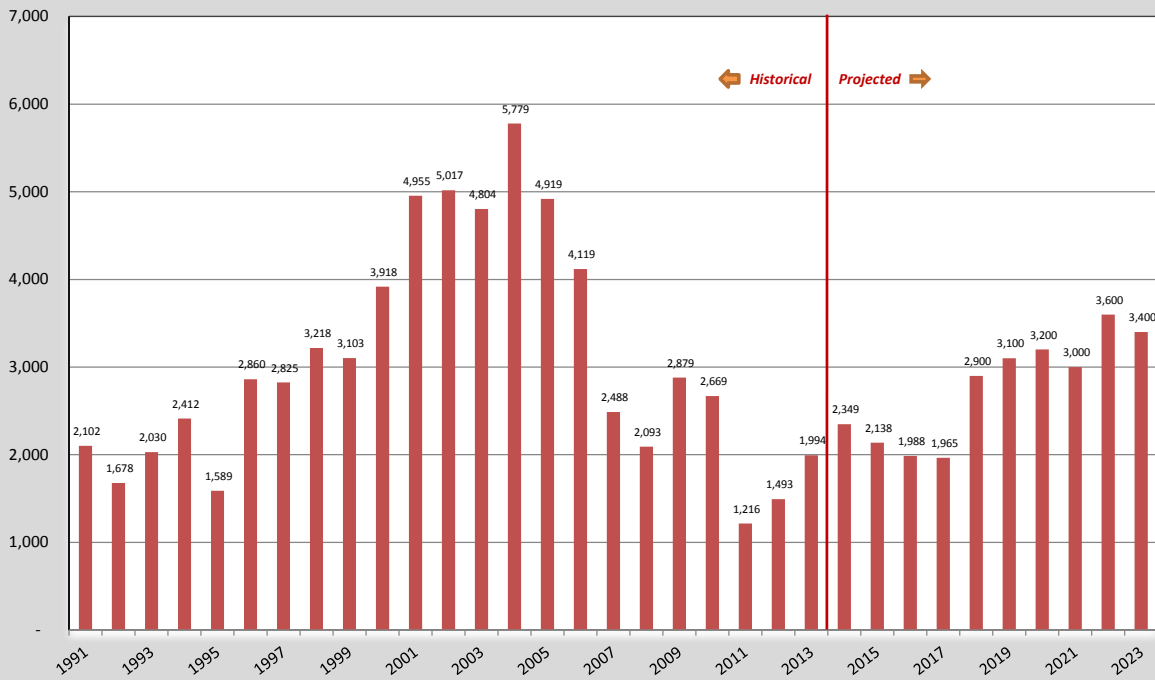
Prince William County Public Schools
Historical and Projected Enrollment by School Level

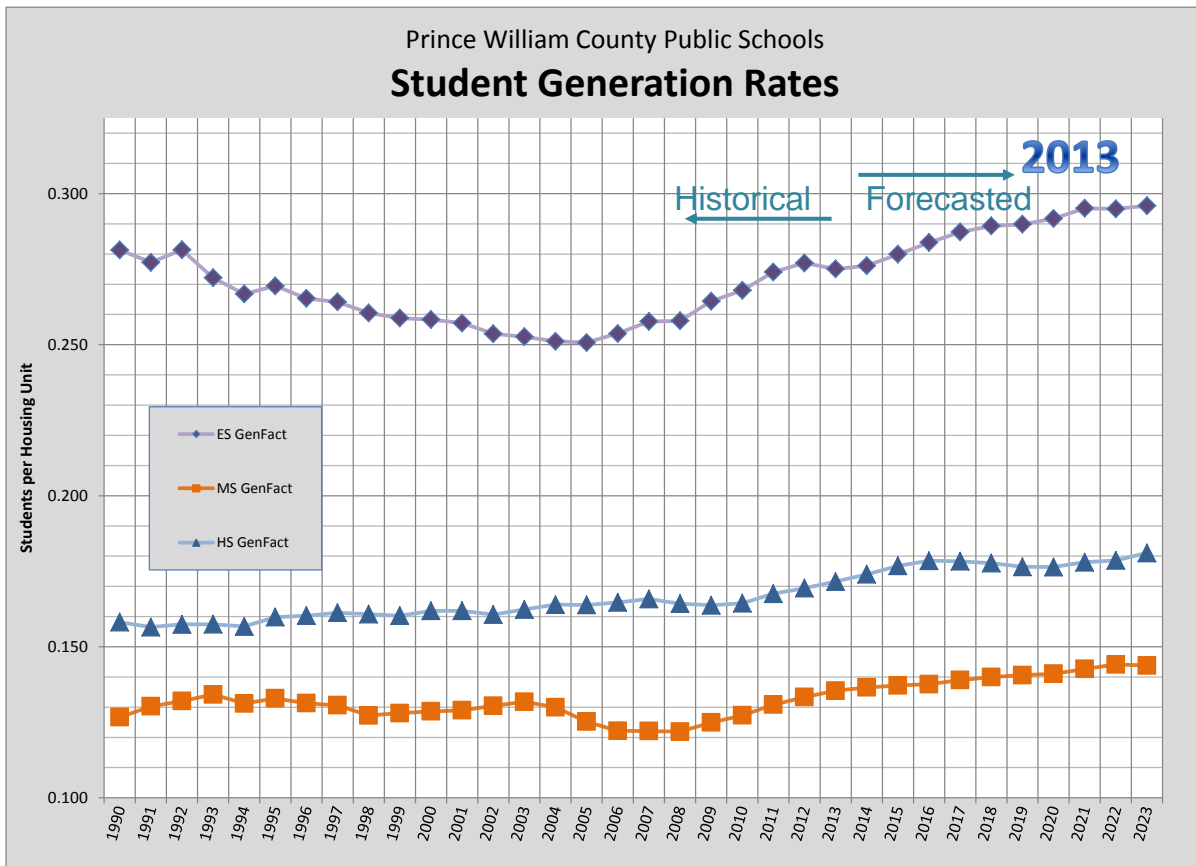
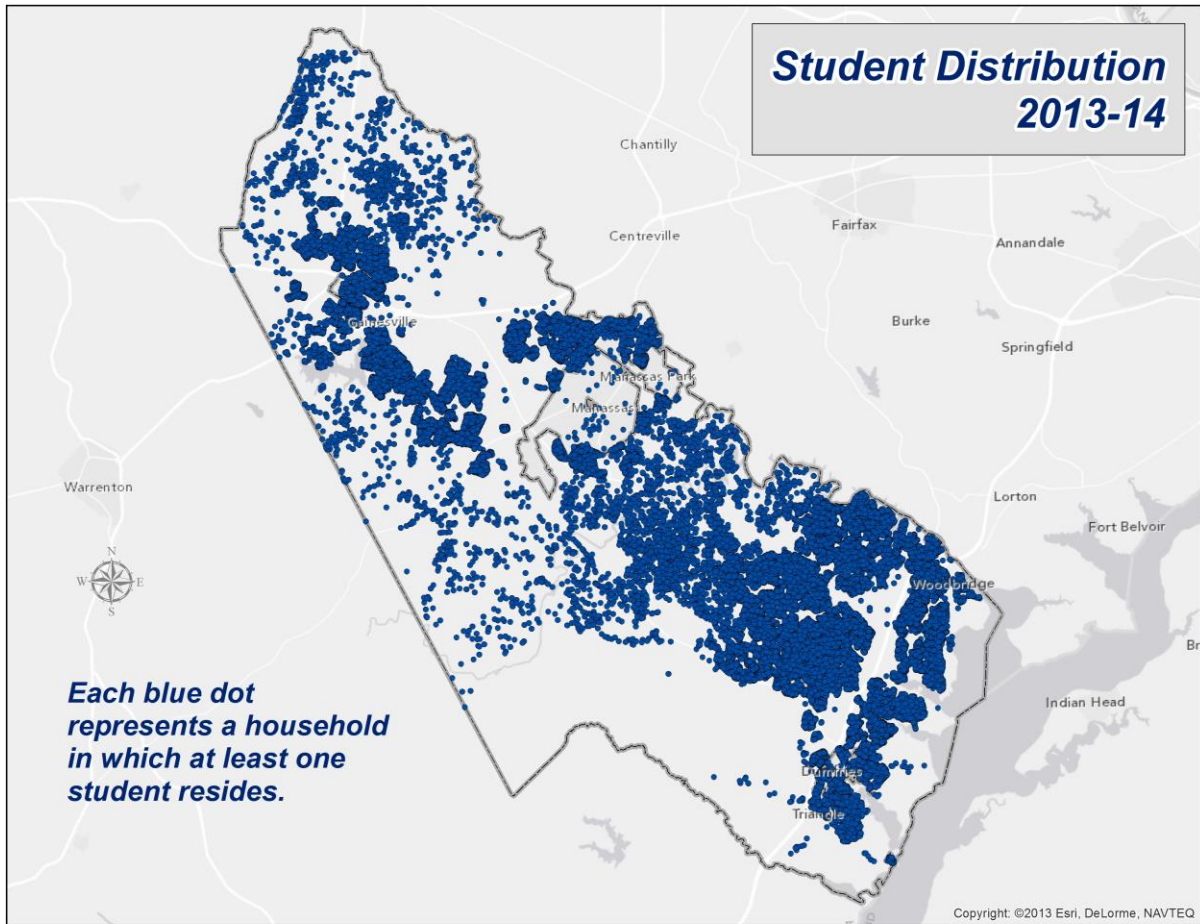


Prince William County Public Schools
Annual Percentage Change in Enrollment by School Level



Prince William County Historical and Projected Annual Housing Unit Change



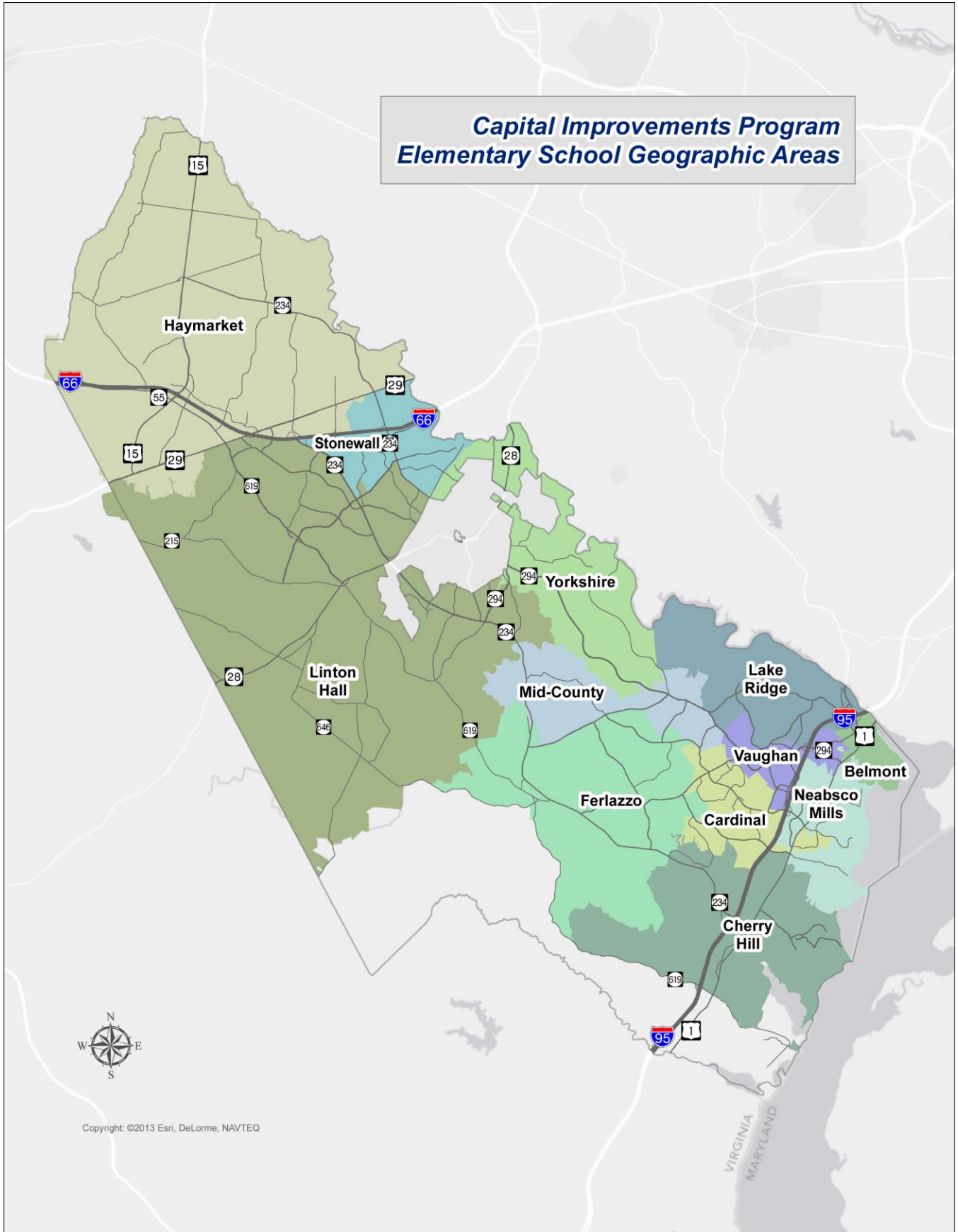


Student Generation Factors: Current and Select Historical
1988-2013

	School Type	Unit Type			Total
		Single Family	Townhouse	Multi-Family	
2013-14	Elementary	0.294	0.284	0.185	0.275
	Middle	0.156	0.127	0.074	0.135
	High	0.206	0.151	0.082	0.172
	Total	0.656	0.562	0.340	0.582
2012-13	Elementary	0.302	0.287	0.184	0.279
	Middle	0.156	0.120	0.075	0.133
	High	0.205	0.147	0.083	0.169
	Total	0.662	0.554	0.342	0.582
2011-12	Elementary	0.300	0.275	0.195	0.277
	Middle	0.154	0.119	0.075	0.132
	High	0.206	0.145	0.092	0.171
	Total	0.660	0.539	0.361	0.580
2010-11	Elementary	0.301	0.258	0.167	0.268
	Middle	0.152	0.111	0.067	0.127
	High	0.202	0.139	0.072	0.164
	Total	0.655	0.509	0.306	0.560
2005-06	Elementary	0.289	0.251	0.135	0.252
	Middle	0.152	0.118	0.056	0.127
	High	0.206	0.151	0.062	0.167
	Total	0.647	0.520	0.253	0.546
1999-2000	Elementary	0.287	0.282	0.159	0.265
	Middle	0.156	0.123	0.054	0.130
	High	0.212	0.143	0.057	0.168
	Total	0.655	0.548	0.270	0.563
1988-89	Elementary	0.365	0.331	0.161	N/A
	Middle	0.230	0.132	0.049	N/A
	High	0.289	0.140	0.044	N/A
	Total	0.884	0.603	0.254	N/A

Note: The 'Student Generation Factor' is a mathematical representation of the relationship between housing units in Prince William County and the number of students enrolled in Prince William County Public Schools on September 30 of each year. In other words, it is the number of enrolled students per total number of housing units by type.

**Capital Improvements Program
Elementary School Geographic Areas**



Geographic Area	Schools
Belmont Area	Belmont ES
Cardinal Area	Bel Air ES
	Dale City ES
	Fitzgerald ES
	Henderson ES
	Minnieville ES
	Neabsco ES
Cherry Hill Area	Dumfries ES
	Pattie ES
	River Oaks ES
	Swans Creek ES
	Triangle ES
	Williams ES
Ferlazzo Area	Ashland Es
	Coles ES
	Enterprise ES
	King ES
	McAuliffe ES
	Montclair ES
	Parks ES
Haymarket Area	Alvey ES
	Buckland Mills ES
	Gravelly ES
	Haymarket ES
	Mountain View ES
	Tyler ES
Lake Ridge Area	Antietam ES
	Lake Ridge ES
	Occoquan ES
	Old Bridge ES
	Rockledge ES
	Springwoods ES
	Westridge ES
Linton Hall Area	Bennett ES
	Bristow Run ES
	Cedar Point ES
	Ellis ES
	Glenkirk ES
	Nokesville School, The
	Piney Branch ES
	Victory ES
Wood ES	

Geographic Area	Schools
Mid-County Area	Kerrydale ES
	Marshall ES
	Penn ES
Neabsco Mills Area	Featherstone ES
	Leesylvania ES
	Marumsc Hills ES
	Potomac View ES
Stonewall Area	Mullen ES
	Sinclair ES
	Sudley ES
	West Gate ES
Vaughan Area	Kilby ES
	Vaughan ES
Yorkshire Area	Loch Lomond ES
	Signal Hill ES
	Yorkshire ES

APPENDIX C

Identified School Sites

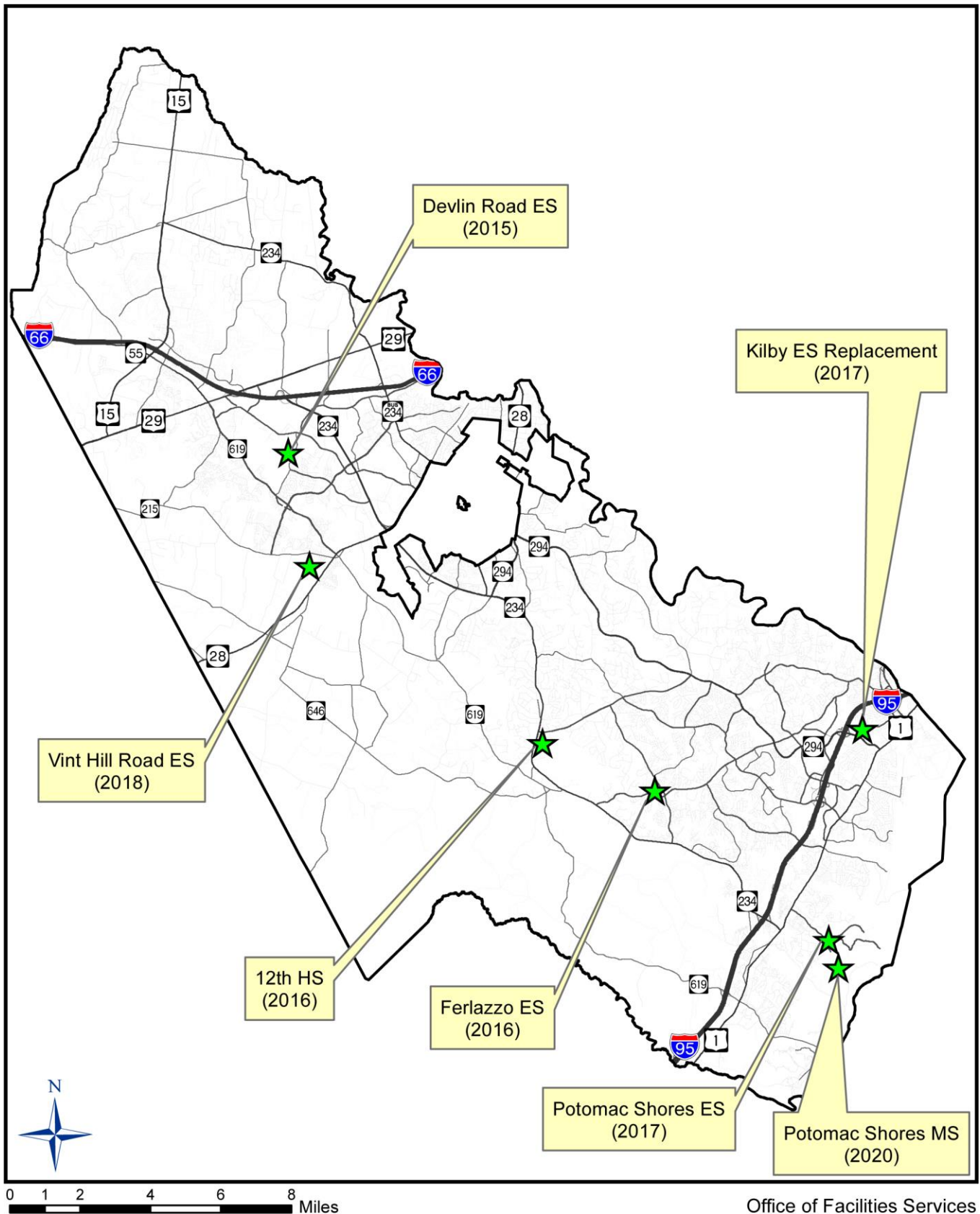
IDENTIFIED SCHOOL SITES

- Overall Map of School Sites Identified in the Capital Improvements Program
 - Devlin Road Elementary School (2015)
 - Ferlazzo Elementary School (2016)
 - 12th High School (2016)
 - Potomac Shores Elementary School (2017)
 - Kilby Elementary School Replacement (2017)
 - Vint Hill Road Elementary School (2018)
 - Potomac Shores Middle School (2020)

[School Site Maps](#)

Appendix C details the school sites that have been acquired by the School Division. Some of these sites are programmed to be utilized for new school facilities within this Capital Improvements Program document. Where this is true, the year that the site is to be constructed upon is shown on the map.

New School Facilities Identified in the Capital Improvements Program (CIP)




Office of Facilities Services

Devlin Road Elementary School

Opens September 2015



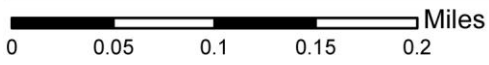

 Miles
 0 0.025 0.05 0.075 0.1

Office of Facilities Services



0 0.025 0.05 0.075 0.1 Miles

Office of Facilities Services

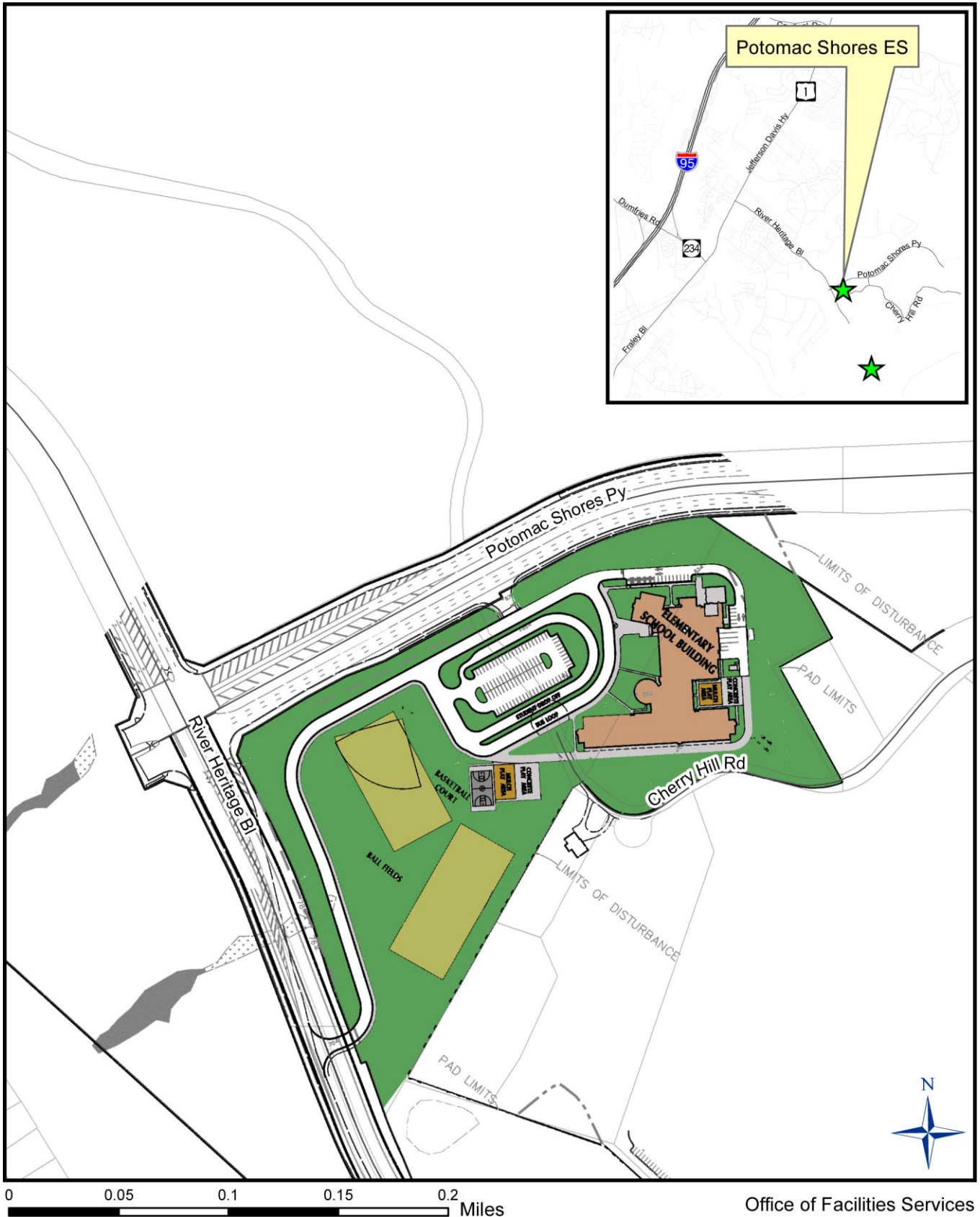


Office of Facilities Services

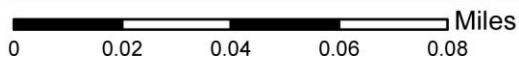
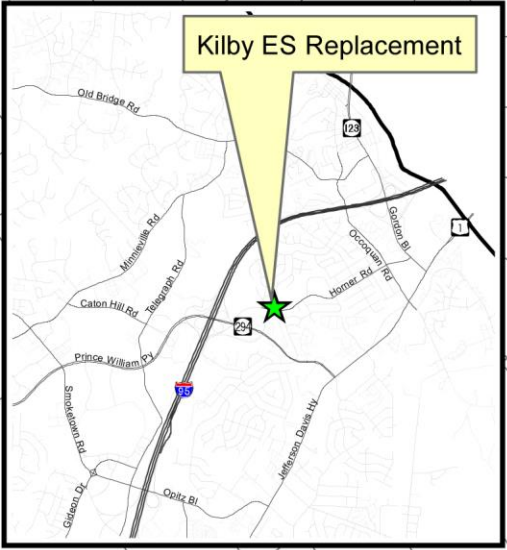
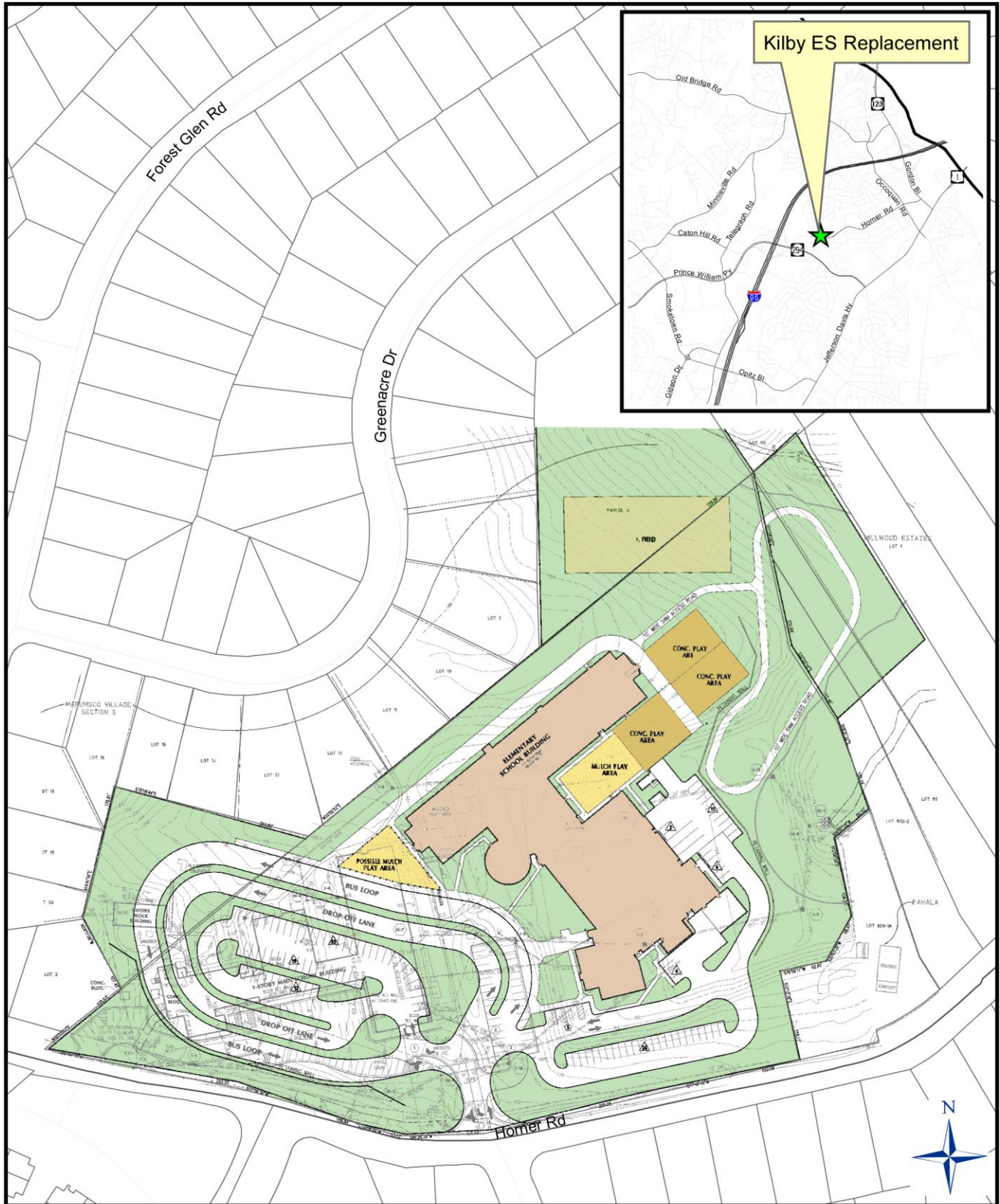


Potomac Shores Elementary School

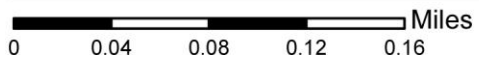
Opens September 2017



Office of Facilities Services



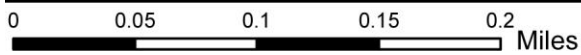
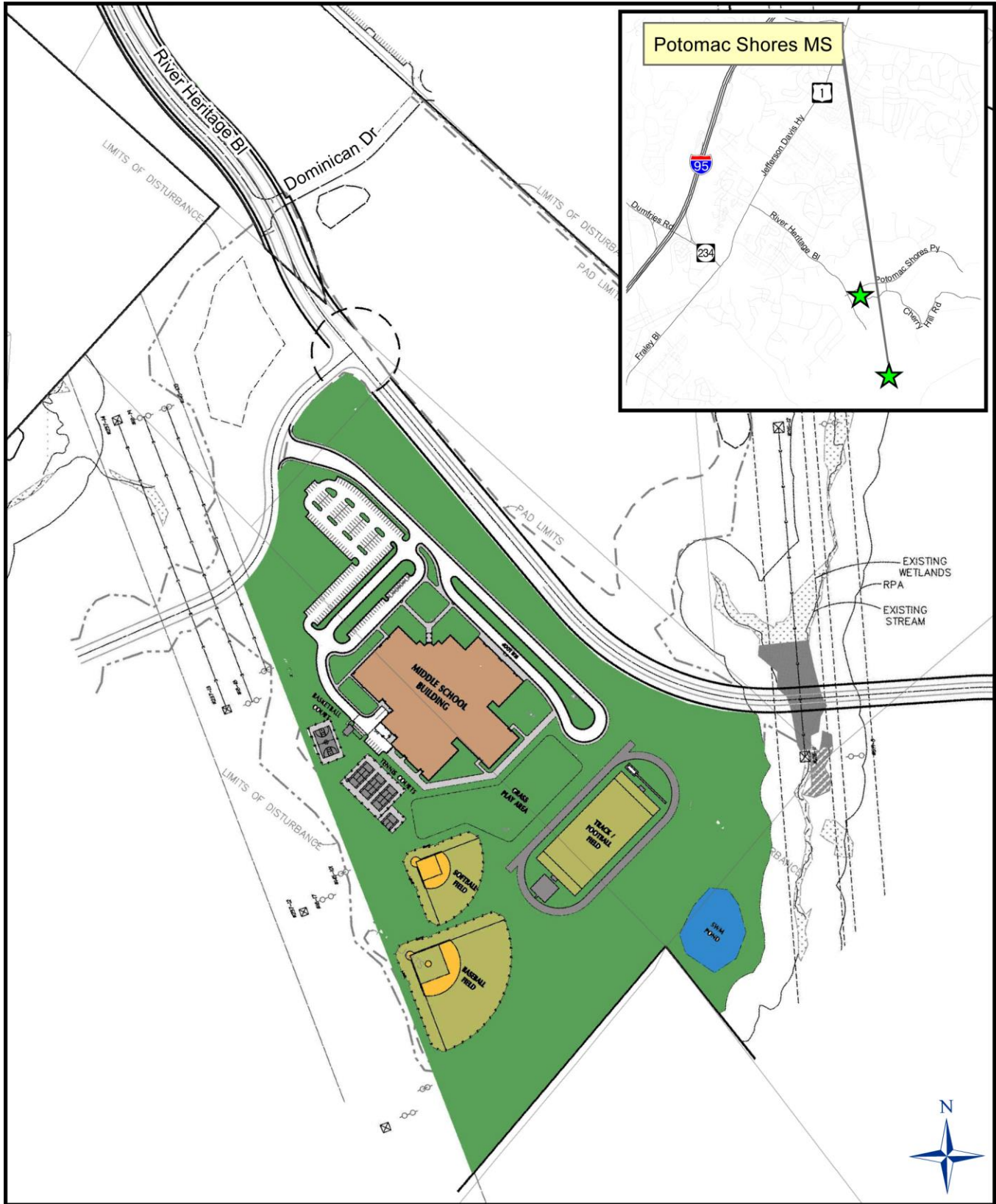
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Office of Facilities Services

Potomac Shores Middle School

Opens September 2020



Office of Facilities Services

APPENDIX D

School Construction Financial Data

SCHOOL CONSTRUCTION FINANCIAL DATA

- School Construction Projects by Types of Expenditures
- Report of Bond Expenditures
- Commonwealth of Virginia Comparative School Construction Cost Data
 - New Elementary Schools
 - New Middle Schools
 - New High Schools
- Elementary School Construction Cost Comparatives

School Construction Financial Data

School Construction Projects by Types of Expenditures FY2012 to FY2016

PWCS Project Name	Opening Date	CIP Construction Project Budget	Construction Expenditures							Total Construction Expenditures	Operating Fund / Start Up Costs ⁷	Site Acquisition Costs ⁸	Total Project Costs
			Construction Contract Bid ¹	Project Costs Outside of Construction Contract					Total Project Costs Outside of Construction Contract				
				Construction Contract Change Order Costs ²	Temporary Employees ³	Engineering Services ⁴	Furnishings & Equipment ⁵	Other Non-Construction Contract Costs ⁶					
12th High School	Sep-16	\$ 110,943,000	\$ 97,907,000									\$ 8,785,796	
Devlin Road Elementary	Sep-15	\$ 25,987,000										\$ 3,345,844	
Haymarket Elementary	Sep-14	\$ 27,663,000	\$ 18,788,000								\$ 339,295	\$ 16,679	
Nokesville School, The	Sep-14	\$ 31,000,000	\$ 28,402,000								\$ 230,000	\$ 236,665	
PACE West Special	Sep-12	\$ 11,526,000	\$ 7,698,000	\$ 265,453	\$ 154,054	\$ 755,007	\$ 644,474	\$ 686,834	\$ 2,505,821	\$ 10,203,821	\$ -	\$ 93,537	\$ 10,297,358
Reagan Middle	Sep-12	\$ 26,382,000	\$ 18,914,000	\$ 500,381	\$ 188,871	\$ 1,018,825	\$ 2,178,833	\$ 1,138,259	\$ 5,025,169	\$ 23,939,169	\$ 719,000	\$ 4,261	\$ 24,662,430
Patriot High	Sep-11	\$ 84,110,000	\$ 70,699,000	\$ 1,683,390	\$ 288,976	\$ 4,334,084	\$ 3,892,000	\$ 2,667,044	\$ 12,865,494	\$ 83,564,494	\$ 1,640,000	\$ 7,391,771	\$ 92,596,265
T. Clay Wood Elementary	Sep-11	\$ 18,494,000	\$ 13,859,000	\$ 456,286	\$ 169,805	\$ 996,299	\$ 1,243,359	\$ 213,240	\$ 3,078,989	\$ 16,937,989	\$ 302,000	\$ -	\$ 17,239,989
Piney Branch Elementary	Sep-11	\$ 21,224,000	\$ 15,799,000	\$ 416,944	\$ 112,149	\$ 1,088,068	\$ 1,246,023	\$ 571,677	\$ 3,434,861	\$ 19,233,861	\$ 302,000	\$ 4,252,663	\$ 23,788,524

¹ Construction contract to build the facility; may include site preparation work, road improvements, and other construction items as specified in the bid documents

² Change orders include errors and omissions, charges initiated by the owner, inspection outcomes, school-based staff generated changes, and unanticipated site conditions

³ On-site construction project managers, custodial services

⁴ Architectural and Engineering Services, traffic analyses, environmental analyses, archeological studies

⁵ Outfitting costs for desks, smart-boards, office furniture, computers, servers, athletic and PE equipment, lab equipment, and other equipment that is not part of the physical structure of the building

⁶ Utility Fees, easements, traffic signalization, inspection services, stormwater fees, wetlands mitigation and monitoring, erosion controls, and other unclassified expenses

⁷ Expendable Equipment and Materials to include: instructional supplies, office supplies, instruction kits, textbooks, library books, glassware, P.E. equipment, uniforms for athletics / music programs, etc., as well as the salaries of the principal and bookkeeper during the initial startup period

⁸ Purchase of properties, easements, rights of way, and associated settlement and title fees

Report of Bond Expenditures Bond Issuance: Virginia Public School Authority 2014 (V14A)

Bond Issuance	Project Name	Anticipated /Estimated Cost in CIP	Adjustments - Year 1	Adjustments - Year 2	Resulting Project Amount
		Original Bond Disbursement			
V14A	Elementary School - Devlin Road	\$ 25,987,000			\$ 25,987,000
V14A	Featherstone Elementary Addition (6 rooms)	\$ 8,531,000			\$ 8,531,000
V14A	12th High School/IHS (Mid-County)	\$ 49,968,000			\$ 49,968,000
V14A	Elementary School/IHS (East - Ferlazzo)	\$ 2,000,000			\$ 2,000,000
V14A	Rippon Middle Addition/IHS East (9 rooms)	\$ 300,000			\$ 300,000
V14A	Maintenance Facility	\$ 1,444,000			\$ 1,444,000
V14A	Kilby Elementary School Replacement	\$ 1,000,000			\$ 1,000,000
Total		\$ 89,230,000	\$ -	\$ -	\$ 89,230,000

Report of Bond Expenditures
Bond Issuance: Virginia Public School Authority 2013 (V13A)

Bond Issuance	Project Name	Anticipated /Estimated Cost in CIP	Adjustments - Year 1	Adjustments - Year 2	Resulting Project Amount
		Original Bond Disbursement			
V13A	Nokesville School, The - Building, New	\$ 11,000,000			\$ 11,000,000
V13A	Haymarket ES - Building, New	\$ 27,663,000	\$ (1,320,000)		\$ 26,343,000
V13A	Dumfries ES - Renewal	\$ 3,825,000			\$ 3,825,000
V13A	River Oaks ES - Addition	\$ 5,913,000	\$ 700,000		\$ 6,613,000
V13A	Parkside MS - Addition	\$ 10,559,000			\$ 10,559,000
V13A	12th HS Site - Building, New	\$ 8,000,000	\$ 570,000		\$ 8,570,000
V13A	Featherstone ES - A/E, Addition	\$ 300,000	\$ 50,000		\$ 350,000
Total		\$ 67,260,000	\$ -	\$ -	\$ 67,260,000

Report of Bond Expenditures
Bond Issuance: Virginia Public School Authority 2012 (V12A)

Bond Issuance	Project Name	Anticipated /Estimated Cost in CIP	Adjustments - Year 1	Adjustments - Year 2	Resulting Project Amount
		Original Bond Disbursement			
V12A	Potomac HS - Renewal/Addition	\$ 7,655,000	\$ 500,000		\$ 8,155,000
V12A	Pattie ES - Renewal	\$ 3,806,000	\$ (36,000)	\$ (100,000)	\$ 3,670,000
V12A	Loch Lomond ES - Addition	\$ 5,950,000	\$ 871,000	\$ (350,000)	\$ 6,471,000
V12A	Mullen ES - Addition	\$ 5,700,000	\$ 302,000	\$ (600,000)	\$ 5,402,000
V12A	Nokesville K-8 - Building, New	\$ 14,000,000	\$ 3,630,000		\$ 17,630,000
V12A	Penn ES - Addition	\$ 5,817,000	\$ (971,000)	\$ (550,000)	\$ 4,296,000
V12A	River Oaks ES - A/E, Addition	\$ 300,000	\$ 36,000	\$ (26,000)	\$ 310,000
V12A	Sinclair ES - Addition	\$ 6,260,000	\$ (33,000)		\$ 6,227,000
V12A	Sudley ES - Addition	\$ 6,100,000	\$ (118,000)	\$ (174,000)	\$ 5,808,000
V12A	West Gate ES - Addition	\$ 3,140,000	\$ 1,002,000		\$ 4,142,000
V12A	Benton MS - Addition	\$ 7,247,000	\$ (2,635,000)		\$ 4,612,000
V12A	Parkside MS - A/E, Addition	\$ 500,000			\$ 500,000
V12A	Potomac MS - Addition	\$ 7,770,000	\$ (2,548,000)		\$ 5,222,000
V12A	12th site - A/E	\$ 3,000,000			\$ 3,000,000
V12A	Loch Lomond ES - Renewal, A/E			\$ 350,000	\$ 350,000
V12A	Henderson ES - Renewal, A/E			\$ 350,000	\$ 350,000
V12A	King ES - Renewal, A/E			\$ 350,000	\$ 350,000
V12A	Lake Ridge ES - Renewal, A/E			\$ 350,000	\$ 350,000
V12A	Springwoods ES - Renewal, A/E			\$ 350,000	\$ 350,000
V12A	Devlin Road ES - Building, New, A/E			\$ 50,000	\$ 50,000
Total		\$ 77,245,000	\$ -	\$ -	\$ 77,245,000

Report of Bond Expenditures
Bond Issuance: Virginia Public School Authority 2011 (V11A)

Bond Issuance	Project Name	Anticipated /Estimated Cost in CIP	Adjustments - Year 1	Adjustments - Year 2	Resulting Project Amount
		Original Bond Disbursement			
V11A	A&E Mullen, Sinclair, Sudley, West Gate, Loch Lomond	\$ 1,500,000	\$ 100,000		\$ 1,600,000
V11A	Bus Parking (Gar-Field HS)	\$ 1,009,000			\$ 1,009,000
V11A	PACE West SE	\$ 8,026,000		\$ (20,000)	\$ 8,006,000
V11A	Piney Branch Elementary	\$ 5,000,000	\$ (1,750,000)	\$ (730,000)	\$ 2,520,000
V11A	Potomac HS Addition	\$ 7,655,000			\$ 7,655,000
V11A	Reagan Middle	\$ 12,150,000		\$ (1,900,000)	\$ 10,250,000
V11A	Swans Creek	\$ 4,765,000	\$ (450,000)	\$ (1,365,925)	\$ 2,949,075
V11A	T. Clay Wood Elementary	\$ 4,000,000	\$ (450,000)	\$ (850,000)	\$ 2,700,000
V11A	Westridge ES Addition	\$ 4,130,000	\$ 450,000		\$ 4,580,000
V11A	Nokesville K-8 School (A&E)		\$ 500,000	\$ (203,053)	\$ 296,947
V11A	Penn Elementary School Addition (A&E)		\$ 350,000		\$ 350,000
V11A	Benton Middle School Addition (A&E)		\$ 450,000		\$ 450,000
V11A	Potomac Middle School Addition (A&E)		\$ 350,000		\$ 350,000
V11A	Parkside Middle School Addition (A&E)		\$ 450,000	\$ (65,075)	\$ 384,925
V11A	Devlin Road Elementary Site (A&E)			\$ 750,000	\$ 750,000
V11A	Haymarket Drive ES Site (A&E)			\$ 100,000	\$ 100,000
V11A	Occoquan ES Activity Room (A&E)			\$ 100,000	\$ 100,000
V11A	Dumfries ES Renewal (A&E)			\$ 300,000	\$ 300,000
V11A	Potomac HS Renewal / Addition			\$ 2,931,000	\$ 2,931,000
V11A	Occoquan ES Activity Room			\$ 953,053	\$ 953,053
	Total	\$ 48,235,000	\$ -	\$ -	\$ 48,235,000

Report of Bond Expenditures
Bond Issuance: Virginia Public School Authority 2010 (V10A)

Bond Issuance	Project Name	Anticipated /Estimated Cost in CIP	Adjustments - Year 1	Adjustments - Year 2	Resulting Project Amount
		Original Bond Disbursement			
V10A	Linton Hall Road Elementary	\$ 16,224,000	\$ (200,000)	\$ (100,000)	\$ 15,924,000
V10A	Patriot High School	\$ 37,285,000		\$ (500,000)	\$ 36,785,000
V10A	Reagan Middle	\$ 14,232,000	\$ (500,000)	\$ 46,960	\$ 13,778,960
V10A	T. Clay Wood Elementary	\$ 14,494,000	\$ (200,000)	\$ (350,000)	\$ 13,944,000
V10A	Haymarket Drive Elementary (A&E)		\$ 900,000	\$ (141,275)	\$ 758,725
V10A	Patriot High School (A&E)			\$ 44,315	\$ 44,315
V10A	Potomac High School - Renewal/Addition			\$ 1,000,000	\$ 1,000,000
	Total	\$ 82,235,000	\$ -	\$ -	\$ 82,235,000

Commonwealth of Virginia Comparative School Construction Cost Data 2008-09 through 2013-14 New Elementary Schools

Year	Project #	Name	Grades	Division	Contract Award Date	Maximum Operating Capacity	Building Cost	Site Cost	Total ² Cost	Total Sq Ft	Sq Ft/ Pupil	Total Cost/ Sq Ft	Building Only Cost/Sq Ft	Total Cost/ Pupil
2013-14	075-110	Devlin Road Elementary	K-5	Prince William Co	Dec-13	905	\$16,186,000	\$4,100,000	\$20,286,000	107,273	119	\$189.11	\$150.89	\$22,415
2012-13	075-108	Haymarket Elementary	K-5	Prince William Co	Feb-13	868	\$14,396,000	\$4,392,000	\$18,788,000	99,135	114	\$189.52	\$145.22	\$21,645
2012-13	139-58	South Salem	K-5	Salem City	Apr-12	600	\$13,235,950	\$1,667,250	\$14,903,200	90,913	152	\$163.93	\$145.59	\$24,839
2012-13	086-76	New Elementary ³	PK-5	Smyth Co	Nov-11	603	\$11,122,199	\$4,078,016	\$15,200,215	83,717	139	\$181.57	\$132.85	\$25,208
2011-12	043-97	West Area ES #9	K-5	Henrico Co	Jun-11	788	\$11,394,069	\$1,473,256	\$12,867,325	78,400	99	\$164.12	\$145.33	\$16,329
2011-12	053-38	Moorefield Station	K-5	Loudoun Co	Apr-12	988	\$15,393,220	\$3,449,571	\$18,842,791	105,951	107	\$177.84	\$145.29	\$19,072
2011-12	053-100	Discovery	K-5	Loudoun Co	Apr-12	988	\$14,951,844	\$3,954,311	\$18,906,155	105,951	107	\$178.44	\$141.12	\$19,136
2011-12	123-50	Oak Grove ⁴	K-5	Richmond City	Sep-11	704	\$14,857,440	\$2,103,216	\$16,960,656	90,810	129	\$186.77	\$163.61	\$24,092
2011-12	123-110	Broad Rock/Bellemeade ⁵	K-5	Richmond City	Sep-11	704	\$16,849,512	\$2,495,489	\$19,345,001	90,810	129	\$213.03	\$185.55	\$27,479
2010-11	029-78	Lacey	K-6	Fairfax Co	Jul-10	935	\$11,880,100	\$1,868,900	\$13,749,000	98,590	105	\$139.46	\$120.50	\$14,705
2010-11	029-99	Graham Road	PK-6	Fairfax Co	Sep-10	400	\$10,121,565	\$369,435	\$10,491,000	81,354	203	\$128.95	\$124.41	\$26,228
2010-11	053-53	Frederick Douglass	K-5	Loudoun Co	Apr-11	940	\$16,685,000	\$5,206,000	\$21,891,000	100,477	107	\$217.87	\$166.06	\$23,288
2009-10	121-148	Simondale	PK-5	Portsmouth City	Nov-09	780	\$11,066,000	\$3,100,000	\$14,166,000	80,000	103	\$177.08	\$138.33	\$18,162
2009-10	128-72	College Park ⁶	K-5	Va Beach City	Jan-10	616	\$14,738,600	\$3,184,000	\$17,922,600	94,231	153	\$190.20	\$156.41	\$29,095
2009-10	80-53	Mason Cove	PK-5	Roanoke Co	Dec-09	336	\$7,763,717	\$2,073,341	\$9,837,058	52,530	156	\$187.27	\$147.80	\$29,277
2009-10	60-2	Prices' Fork	PK-5	Montgomery Co	Jan-10	838	\$13,666,750	\$1,933,250	\$15,600,000	106,300	127	\$146.75	\$128.57	\$18,616
2009-10	75-104	Kettle Run	K-5	Prince William Co	Mar-10	889	\$12,476,000	\$1,383,000	\$13,859,000	104,829	118	\$132.21	\$119.01	\$15,589
2009-10	75-105	Linton Hall	K-5	Prince William Co	May-10	889	\$13,281,981	\$2,527,726	\$15,809,707	104,829	118	\$150.81	\$126.70	\$17,784
2008-09	5A-8A	Moss Knuckles ⁷	PK-5	Louisa Co	Sep-08	792	\$10,569,784	\$2,822,216	\$13,392,000	85,620	108	\$156.41	\$123.45	\$16,909
2008-09	131-19A	9th Elementary ⁸	PK-5	Williamsburg/JC Co	Nov-08	730	\$15,958,569	\$1,882,650	\$17,841,219	93,247	128	\$191.33	\$171.14	\$24,440
2008-09	60-3A	Elliston Shawsville ⁹	PK-5	Montgomery Co	Nov-08	838	\$15,920,182	\$2,685,818	\$18,606,000	106,300	127	\$175.03	\$149.77	\$22,203
2008-09	53-45A	Buffalo Trail ¹⁰	K-5	Loudoun Co	Jan-09	989	\$10,714,000	\$5,639,290	\$16,353,290	102,141	103	\$160.11	\$104.89	\$16,535

* The final report for 2013-14 will be generated after June 30, 2014.

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

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

3 - Site cost include \$270,000 for egress road and \$924,000 for off site utilities.

4 - Excludes cost of community center, and includes cost for the demolition of the existing building.

5 - Includes cost of demolition of old school building.

6 - Site cost includes \$135,000 for demolition of existing school and abatement work.

7 - Includes on-site sewage treatment plant and on-site water system.

8 - Site cost was split proportionally with new middle school being built on same site.

9 - Includes \$321,690 for off-site sewer, force main and pump station.

10 - Includes off-site developer cost for \$1,931,290 which is in the general contract.

Commonwealth of Virginia Comparative School Construction Cost Data 2008-09 through 2013-14 New Middle Schools

Year	Project #	Name	Grades	Division	Contract Award Date	Maximum Operating Capacity ¹	Building Cost	Site Cost	Total ² Cost	Total Sq Ft	Sq Ft/ Pupil	Total Cost/ Sq Ft	Building Only Cost/Sq Ft	Total Cost/ Pupil
2013-14	101-09	Jefferson-Houston PK-8	PK-8	Alexandria City	Jun-13	805	\$31,961,348	\$4,695,397	\$36,656,745	124,500	155	\$294.43	\$256.72	\$45,536
2012-13	053-104	Trailside	6-8	Loudoun Co	Jun-12	1,154	\$26,874,012	\$3,221,898	\$30,095,910	175,064	152	\$171.91	\$153.51	\$26,080
2012-13	123-77	Martin Luther King ³	6-8	Richmond City	Apr-12	847	\$27,306,636	\$2,835,518	\$30,142,154	149,600	177	\$201.48	\$182.53	\$35,587
2011-12	075-107	Nokesville K-8 School	K-8	Prince William Co	Jun-12	924	\$22,602,000	\$5,800,000	\$28,402,000	141,832	153	\$200.25	\$159.36	\$30,738
2010-11	<i>No Projects Reported</i>													
2009-10	75-103A	Ronald Reagan Middle	6-8	Prince William Co	Feb-10	1,102	\$15,265,478	\$3,648,522	\$18,914,000	133,480	121	\$141.70	\$114.37	\$17,163
2009-10	29-231A	South County	6-8	Fairfax Co	Mar-10	1,172	\$19,293,100	\$2,656,900	\$21,950,000	176,021	150	\$124.70	\$109.61	\$18,729
2009-10	53-58A	J. Michael Lunsford	6-8	Loudoun Co	Jan-10	1,351	\$24,145,000	\$4,281,000	\$28,426,000	177,880	132	\$159.80	\$135.74	\$21,041
2008-09	43-95A	West Area ⁴	6-8	Henrico Co	Aug-08	1,000	\$19,715,150	\$3,500,000	\$23,215,150	120,024	120	\$193.42	\$164.26	\$23,215
2008-09	131-19.1	4th Middle School ⁵	6-8	Williamsburg/JC Co	Nov-09	830	\$26,031,431	\$3,822,350	\$29,853,781	145,458	175	\$205.24	\$178.96	\$35,968
2008-09	128-43A	Great Neck ⁶	6-8	Va Beach City	Jul-09	1,212	\$28,706,998	\$6,320,002	\$35,027,000	223,260	184	\$156.89	\$128.58	\$28,900
2008-09	68-4A	Orange ⁷	6-8	Orange Co	Feb-09	1,295	\$24,947,000	\$5,460,000	\$30,407,000	169,320	131	\$179.58	\$147.34	\$23,480

* The final report for 2013-14 will be generated after June 30, 2014.

1 - Division operating capacity may differ from SOL maximum capacity. State SOL capacity based on a pupil teacher ratio of 25:1 in core classrooms.

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

3 - Cost include \$400,000 for site and building demolition, and a 2,835 square foot auxiliary gym.

4 - Building cost includes technology system and storage shed. Site cost includes \$185,000 traffic signal.

5 - Site cost split proportionally with new elementary school being built on the same site.

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

7 - Site cost includes \$2,060,000 for water, sewer, water tank, and road widening.

Commonwealth of Virginia Comparative School Construction Cost Data 2008-09 through 2013-14 New High Schools

Year	Project #	Name	Grades	Division	Contract Award Date	Maximum ¹ Operating Capacity	Building Cost	Site Cost	Total ² Cost	Total Sq Ft	Sq Ft/ Pupil	Total Cost/ Sq Ft	Building Only Cost/Sq Ft	Total Cost/ Pupil
2013-14	054-60	Louisa County High School	9-12	Louisa County	Jul-13	2,011	\$46,473,432	\$2,059,570	\$48,533,002	272,834	136	\$177.88	\$170.34	\$24,134
2013-14	053-106	Twelfth High School	9-12	Prince William County	Dec-13	2,140	\$78,907,000	\$19,000,000	\$97,907,000	425,176	199	\$230.27	\$185.59	\$45,751
2013-14	053-106	New Huguenot High School	9-12	Richmond City	Jun-12	1,574	\$51,991,220	\$10,283,262	\$62,274,482	253,821	161	\$245.35	\$204.83	\$39,564
2013-14	053-106	Stafford High School Repl	9-12	Stafford County	Jun-13	2,102	\$50,715,200	\$9,106,800	\$59,822,000	281,653	134	\$212.40	\$180.06	\$28,466
2012-13	053-106	HS-6 at Loudoun Valley Estates II	9-12	Loudoun County	Feb-13	1,949	\$56,548,276	\$6,971,776	\$63,520,052	283,422	145	\$224.12	\$199.52	\$32,591
2012-13	060-83	Blacksburg High School	9-12	Montgomery County	Jul-11	1,650	\$47,258,625	\$7,621,578	\$54,880,203	293,286	178	\$187.12	\$161.13	\$33,261
2012-13	060-65	New Auburn High School	9-12	Montgomery County	Jul-11	853	\$27,985,261	\$4,261,737	\$32,246,998	180,940	212	\$178.22	\$154.67	\$37,804
2011-12	128-107	Kellum Replacement ³	9-12	Va Beach City	Aug-11	2,000	\$58,909,096	\$15,013,694	\$73,922,790	350,952	175	\$210.64	\$167.86	\$36,961
2010-11	007-45	Wakefield	9-12	Arlington Co	May-11	2,173	\$77,389,376	\$11,000,623	\$88,389,999	382,102	176	\$231.33	\$202.54	\$40,676
2010-11	022-31	NEW Clarke County	9-12	Clarke Co	Jul-10	884	\$19,550,000	\$3,750,000	\$23,300,000	162,050	183	\$143.78	\$120.64	\$26,357
2010-11	053-37	John Champe ⁴	9-12	Loudoun Co	Jan-11	1,955	\$40,996,000	\$19,766,000	\$60,762,000	275,574	141	\$220.49	\$148.77	\$31,086
2009-10		No Projects Reported												
2008-09	43-96A	Henrico #1 ⁵	9-12	Henrico Co	Oct-08	1,868	\$50,700,000	\$7,133,623	\$57,833,623	255,000	137	\$226.80	\$198.82	\$30,966
2008-09	53-20A	Tuscarora ⁶	9-12	Loudoun Co	Dec-08	1,895	\$45,071,040	\$11,000,000	\$56,071,040	279,426	147	\$200.67	\$161.30	\$29,589
2008-09	53-59A	Woodgrove ⁷	9-12	Loudoun Co	Jan-09	1,651	\$44,375,000	\$9,500,000	\$53,875,000	251,915	153	\$213.86	\$176.15	\$32,632
2008-09	32-20A	Fluvanna ⁸	9-12	Fluvanna Co	Mar-09	1,633	\$44,379,363	\$12,486,637	\$56,866,000	314,389	193	\$180.88	\$141.16	\$34,823
2008-09	75-102A	11th High School	9-12	Prince William Co	Jan-09	2,041	\$58,655,600	\$12,043,400	\$70,699,000	312,067	153	\$226.55	\$187.96	\$34,639

* The final report for 2013-14 will be generated after June 30, 2014.

1 - Division operating capacity may differ from SOL maximum capacity. State operating capacity is generally based on a pupil teacher ratio of 25:1 in all program areas, at 90 percent.

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

3 - Project cost includes required road widening, new turning lanes, football stadium, track, play fields, and other outside practice facilities.

4 - \$3,250,000 for required off-site road improvements.

5 - Total cost includes field house at \$1,480,000 and terrazzo flooring at \$300,500.

6 - Heavy grading, rock removal, as well as environmental issues increased site cost.

7 - On-site water and sewer systems were additional site costs.

8 - The base high school capacity is 1,633 students. The building includes spaces for career, technical and vocational programs for 100 additional students and core support facilities were sized for an additional 250 students.

Elementary School Construction Cost Comparatives 2003-04 through 2013-14

Elementary School	Building Square Footage	School Construction Contract			Building Cost		Site Cost	
		Bid Date	Bid Contract Total	Contract Cost Per Sq Ft	Bldg Cost Total	Bldg Cost Per Sq Ft	Site Cost Total	Site Cost Per Sq Ft
Williams ¹	83,084	Feb-03	\$10,570,000	\$127.22	\$8,061,000	\$97.02	\$2,509,000	\$30.20
Ellis	76,724	Feb-03	\$8,869,000	\$115.60	\$7,638,000	\$99.55	\$1,231,000	\$16.04
Porter	71,245	Feb-03	\$8,945,000	\$125.55	\$7,338,000	\$103.00	\$1,607,000	\$22.56
Glenkirk	83,084	Feb-04	\$11,711,000	\$140.95	\$8,364,000	\$100.67	\$3,347,000	\$40.28
Victory ²	89,911	Feb-04	\$11,380,000	\$126.57	\$9,505,000	\$105.72	\$1,875,000	\$20.85
Buckland Mills	89,911	Feb-05	\$12,765,000	\$141.97	\$10,245,000	\$113.95	\$2,520,000	\$28.03
Parks	83,084	Feb-05	\$12,277,000	\$147.77	\$9,622,000	\$115.81	\$2,655,000	\$31.96
Gravelly	95,074	Feb-07	\$17,250,000	\$181.44	\$15,449,000	\$162.49	\$1,801,000	\$18.94
Fitzgerald ³	106,170	Feb-07	\$17,580,000	\$165.58	\$15,880,000	\$149.57	\$1,700,000	\$16.01
Yorkshire	106,614	Jun-07	\$18,863,000	\$176.93	\$16,292,000	\$152.81	\$2,571,000	\$24.12
Triangle	103,679	Feb-08	\$19,769,000	\$190.68	\$16,169,000	\$155.95	\$3,600,000	\$34.72
Wood ⁴	104,958	Feb-10	\$13,859,000	\$132.04	\$12,437,000	\$118.50	\$1,422,000	\$13.55
Piney Branch	104,958	Feb-10	\$15,799,000	\$150.53	\$12,999,000	\$123.85	\$2,800,000	\$26.68
Haymarket ⁵	99,135	Jan-13	\$18,788,000	\$189.52	\$14,396,000	\$145.22	\$4,392,000	\$44.30
Devlin Road	107,273	Dec-13	\$20,286,000	\$189.11	\$16,186,000	\$150.89	\$4,100,000	\$38.22

1 Actual bid was 12,570. Approximately 2.0 million is for site work associated with adjacent middle school. For project comparison purposes bid amount and site sq. ft. amounts have been adjusted accordingly.
 2 This site was pre-graded by the developer, value approximately 1.2 million. For project comparison purposes add 13.35 to project sq. ft. cost and to site sq. ft. cost.
 3 This site was pre-graded by the developer, value approximately 700K. For project comparison purposes add 6.59 to project sq. ft. cost and to site sq. ft. cost.
 4 This site was pre-graded which included partial utilities infrastructure and bus loop as part of the adjacent high school project, value approximately 650K. For project comparison purposes add 6.19 to project sq. ft. cost and to site sq. ft. cost.
 5 This site was heavily wooded and contained \$845k in offsite utility / roadwork cost.

