

A photograph of four diverse children in a library. In the foreground, a boy in a striped sweater sits on the floor holding two yellow books, and a girl in a purple sweater sits cross-legged holding a pink book. Behind them, another boy in a brown sweater holds a green book, and a girl in a white shirt holds a yellow book. They are all smiling. The background shows bookshelves filled with books.

Approved Capital Improvements Program

Fiscal Years 2014-23



Prince William County

PUBLIC SCHOOLS

Providing A World-Class Education

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CAPITAL IMPROVEMENTS PROGRAM

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PRINCE WILLIAM COUNTY PUBLIC SCHOOLS

***Capital Improvements Program
Fiscal Years 2014-23***

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CAPITAL IMPROVEMENTS PROGRAM

Fiscal Years 2014-23

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 2012-13 enrollment was 83,551 students with permanent capacity for 82,851 students. This capacity is supplemented with 202 instructional portable classrooms. Permanent capacity is set to increase by 20,814 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 2014) combined with a more general planning schedule for four additional years (FY 2015-18) and then an estimate of projects needed for FY 2019-23. 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 year, construction was completed on Reagan Middle School, increasing student capacity by 1,233 seats. The new PACE West Replacement School opened for the 2012-13 school year as well. Also, four elementary schools received the Energy Star Certification.

In the past five years seven new schools and fifteen additions have been constructed, costing \$303 million and adding 8,974 student seats.

Major renewals of 10 schools were completed in the last five years at a cost of nearly \$77 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 2013-22 CIP include:

- Middle school facility capacity increased from 1,233 to 1,464 students (effective 2018)
- Proposed annual funding for Energy Infrastructure Improvements added to Renovations/Renewal Schedule
- Henderson ES 8-classroom addition increased to 10-classroom addition in 2017
- Leesylvania ES 4-classroom addition added to 2019
- Neabsco ES 8-classroom addition added to 2019
- Antietam ES 13-classroom addition added to 2020
- Lake Ridge ES 7-classroom addition added to 2020
- Pattie ES 10-classroom addition added to 2020
- Elementary School TBD added to 2022
- Middle School TBD added to 2022
- New Dominion addition delayed from 2015 to 2016

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, 2012, is 83,551 students. From 2011 to 2012, total enrollment grew by 1,876 students, or 2.3 percent growth rate. This is compared to growth from 2010 to 2011 of 2,520 students, or 3.18 percent.

2013-14 enrollment is projected to be 85,926 students, an increase of 2,375 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 2.6 percent. This will result in almost 11,242 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. Additions at nine schools are under construction and scheduled to open 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 is ongoing at Potomac High School.

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

<i>School Type</i>	<i>2005-06</i>	<i>2006-07</i>	<i>2007-08</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>
Elementary Schools	51	53	53	55	55	55	57	57
Traditional Schools	2	2	2	2	2	2	2	2
Middle Schools	13	14	15	15	15	15	15	16
High Schools	10	10	10	10	10	10	11	11
<i>Total (Regular Education)</i>	76	79	80	82	82	82	85	86
Special Education	4	4	4	4	4	3	3	3
Alternative Education	2	2	2	2	2	2	2	2
Total	82	85	86	88	88	87	90	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. 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.

Proffer funds also provide revenue. Proffers are negotiated at the time of rezoning 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>
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	Aquisition 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	\$79,768,637	

New Schools, Additions, and Other Bond-Funded Projects

<i>Scheduled Completion</i>	<i>Project</i>	<i>Cost</i>
<i>September 2013</i>	Loch Lomond Elementary Addition (4 rooms)	<i>Previously Funded/ Under Construction</i>
	Mullen Elementary Addition (6 rooms)	
	Penn Elementary Addition (7 rooms)	
	Sinclair Elementary Addition (11 rooms)	
	Sudley Elementary Addition (10 rooms)	
	West Gate Elementary Addition (4 rooms)	
	Benton Middle Addition (11 rooms)	
	Potomac Middle Addition (11 rooms)	
	Potomac High School Addition (30 rooms)	
<i>September 2014</i>	Elementary School @ Haymarket/UVA	\$27,663,000
	Nokesville K-8 School	\$25,000,000
	River Oaks Elementary Addition (7 rooms)	\$6,213,000
	Parkside Middle Addition/IHS West (16 rooms)	\$11,059,000
	Renewal-Dumfries Elementary School (Partial Funding)	\$3,825,000
	Total - 2014	\$73,760,000
<i>September 2015</i>	Elementary School/IHS (West - Devlin Rd)	\$28,587,000
	Featherstone Elementary Addition (6 rooms)	\$6,231,000
	Total - 2015	\$34,818,000
<i>September 2016</i>	Elementary School/IHS (East - Ferlazzo)	\$28,534,000
	12th High School/IHS (Mid-County)	\$110,943,000
	Rippon Middle Addition/IHS (9 rooms)	\$7,410,000
	New Dominion Addition (10 rooms) ¹	\$4,857,000
	Maintenance Facility (Independent Hill site)	\$11,444,000
	Western Bus Facility ²	\$4,596,000
Total - 2016	\$167,784,000	
<i>September 2017</i>	Elementary School (East - Potomac Shores)	\$29,374,000
	Elementary School (East - Neabsco Mills Area) ²	\$29,374,000
	Kilby Elementary School Replacement	\$31,476,000
	Belmont Elementary Addition (4 rooms)	\$4,631,000
	Henderson Elementary Addition (10 rooms)	\$9,318,000
	Springwoods Elementary Addition (5 rooms)	\$5,417,000
Total - 2017	\$109,590,000	
<i>September 2018</i>	Elementary School (West - 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	

New Schools, Additions, and Other Bond-Funded Projects

<i>Scheduled Completion</i>	<i>Project</i>	<i>Cost</i>
<i>September 2019</i>	13th High School (West) ²	\$118,331,000
	Leesylvania Elementary School Addition (4 rooms)	\$6,900,000
	Neabsco Elementary School Additon (8 rooms)	\$8,714,000
	Elementary School Addition Haymarket Area (6 rooms)	\$6,901,000
	Total - 2019	\$140,846,000
<i>September 2020</i>	Middle School (East) ² (1464 capacity)	\$61,651,000
	Antietam Elementary School Addition (13 rooms)	\$13,228,000
	Lake Ridge Elementary School Addition (7 rooms)	\$9,793,000
	Pattie Elementary School Addition (10 rooms)	\$10,787,000
	Total - 2020	\$95,459,000
<i>September 2021</i>	Elementary School (TBD) ²	\$35,721,000
	14th High School (Mid-County/East) ²	\$127,561,000
	Total - 2021	\$163,282,000
<i>September 2022</i>	Elementary School (TBD) ²	\$37,511,000
	Middle School (TBD) ²	\$67,976,000
	Total - 2022	\$105,487,000
TOTAL (FY 2014-22)		\$1,010,011,000

Note 1 Construction of the classroom addition, to replace the existing modular and other portable classrooms, is contingent upon the sale of that site's excess property to generate the necessary funding.
(Base est/bid 2010 \$3,700,000)

Note 2 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 seven school sites and bus facility needed by 2022. 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
2014	N/A	Nokesville K-8	PWCS Owned	N/A	N/A
	2008	Haymarket Drive ES	Proffered	N/A	N/A
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 - 102 acres	N/A	N/A
	N/A	Maintenance Facility	PWC Owned - Independent Hill Site	N/A	N/A
2016	2013-14	Bus Center (West I-66)	Site Needed-Rt. 15 Area	\$0	\$3,000,000
2017	2002	ES @ Potomac Shores	Proffered	N/A	N/A
	N/A	Kilby ES Replacement	PWCS Owned	N/A	N/A
	2013		Additional Adjacent Land	\$120,000	\$0
2017	2013-14	ES East	Site Needed - Neabsco Mills Area	\$0	\$4,000,000
2018	2011	ES West (Vint Hill Rd.)	Proffered	N/A	N/A
	N/A	PACE East Replacement - Multi-Space	PWCS Owned - Independent Hill	N/A	N/A
2018	2011	MS West (Linton Hall Area)	Proffered - Vint Hill Rd.	N/A	N/A
	2013-14		Otherwise Site Needed	\$0	\$7,500,000
2019	2014	13th High School (West)	Site Needed	\$0	\$15,000,000
2020	2013	MS East	Potential Proffer @ Potomac Shores	\$0	\$0
	2015		Otherwise Site Needed	\$0	\$9,000,000
2021	2015-16	ES TBD	Site Needed	\$0	\$5,000,000
	2015	14th High School (Mid-County/East)	Site Needed	\$0	\$17,500,000
2022	2015-16	ES TBD	Site Needed	\$0	\$5,000,000
	2015-16	MS TBD	Site Needed	\$0	\$12,500,000
Total Estimated Cost of Unfunded Sites					\$78,500,000

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 2014 budget includes funds for Dumfries Elementary School renewal, roof and auditorium improvements for Woodbridge and Gar-Field High Schools, Lynn Middle School HVAC repair, Woodbridge Middle School window wall replacement, various bleacher upgrades, various kitchen upgrades, energy infrastructure improvements, and Title IX improvements. Recognizing the current financial situation, renovation projects are often delayed rather than eliminated. In many cases, renewal projects are phased over two years.

School Renewals / Major Infrastructure Renovations may include:

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 \$2,081,519,000. Prince William County Schools has established an 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 target to be budgeted in FY 2014 for repairs and renovations is \$62,446,000 (3% value), with the estimated budget in FY 2014 at \$46,274,000 (2.4% value).

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:

Typical Major Maintenance Activities

<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
Relamp Interior and Exterior Light Fixtures	Update HVAC Controls
	Minor Chiller Rebuilding
	Stage Lighting / Curtain

Schedule of Renovations and Renewals

Fiscal Year	Year Opened	Project	Proposed Funding
2014	1953	Dumfries Elementary School - Renewal (Partial Funding)	\$2,000,000
	1962	Loch Lomond Elementary School - Renewal Phase 1	\$3,000,000
		Fred Lynn Middle School - HVAC Repair	\$1,000,000
		Woodbridge MS - Window Wall Replacement (Funding Phase 1)	\$1,464,000
		Gar-Field High School - Roof Replacement (Partial)	\$1,400,000
		Gar-Field High School - Auditorium Upgrade	\$1,200,000
		Woodbridge High School - Roof Replacement	\$3,000,000
		Woodbridge High School - Auditorium Upgrade	\$1,200,000
		Interior/Exterior Bleachers - Phase 5	\$462,000
		Transportation Bus Parking (TBD)	\$1,000,000
		Kitchen - Upgrades	\$2,000,000
		Energy Infrastructure Improvements	\$1,000,000
		HVAC Equipment and Controls - Upgrades	\$1,008,000
		Title IX Improvements	\$230,000
		Total - Fiscal Year 2014	\$19,964,000
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	\$2,000,000
		Kitchen HVAC Upgrades - Phase 1 of 2	\$1,200,000
		Graham Park Middle School - Roof Replacement	\$3,000,000
		Saunders Middle School - Roof Replacement	\$2,800,000
		Transportation Bus Parking (TBD)	\$1,002,000
		Kitchen - Upgrades	\$1,300,000
		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	\$52,970,000	
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	\$1,450,000
		Beville Middle School - Roof Replacement	\$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	\$27,587,000	

Schedule of Renovations and Renewals

Fiscal Year	Year Opened	Project	Proposed Funding	
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)	\$3,000,000
			Kitchen - Upgrades	\$830,000
			Energy Infrastructure Improvements	\$1,000,000
			HVAC Equipment and Controls - Upgrades	\$1,673,000
			Roof Replacements/Repairs (TBD)	\$1,200,000
			Title IX Improvements	\$260,000
			Technology Improvement Program - Upgrades	\$4,500,000
			Total - Fiscal Year 2017	\$60,503,000
	2018		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	
1990		River Oaks Elementary School - Renewal (Funding Phase 1)	\$6,353,000	
		Hylton High School - Roof Replacement (Funding Phase 2)	\$2,000,000	
		Kitchen - Upgrades	\$391,000	
		Energy Infrastructure Improvements	\$1,000,000	
		HVAC Equipment and Controls - Upgrades	\$1,659,000	
		Roof Replacements/Repairs (TBD)	\$1,000,000	
		Title IX Improvements	\$270,000	
		Technology Improvement Program - Upgrades	\$4,500,000	
		Total - Fiscal Year 2018	\$30,891,000	
2019		River Oaks Elementary School - Renewal (Funding Phase 2)	\$3,609,000	
	1996	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	
		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	\$1,000,000	
		Energy Infrastructure Improvements	\$1,000,000	
		HVAC Equipment and Controls - Upgrades	\$1,700,000	
		Roof Replacements/Repairs (TBD)	\$1,393,000	
		Title IX Improvements	\$280,000	
	Technology Improvement Program - Upgrades	\$4,500,000		
		Total - Fiscal Year 2019	\$68,692,000	

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	\$1,700,000
		Roof Replacements/Repairs (TBD)	\$1,018,000
		Title IX Improvements	\$290,000
		Technology Improvement Program - Upgrades	\$4,500,000
		Total - Fiscal Year 2020	\$34,728,000
2021	<i>1998</i>	Bristow Run Elementary School - Renewal (Funding Phase 1)	\$8,250,000
	<i>2000</i>	Signal Hill Elementary School - Renewal (Funding Phase 1)	\$8,250,000
	<i>2000</i>	Benton Middle School - Renewal (Funding Phase 1)	\$9,500,000
	<i>1991</i>	Beville Middle School - Renewal (Funding Phase 1)	\$9,500,000
	<i>2000</i>	Forest Park High School - Renewal (Funding Phase 1)	\$13,000,000
	<i>1991</i>	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)	\$5,000,000
		Title IX Improvements	\$300,000
		Technology Improvement Program - Upgrades	\$4,500,000
		Total - Fiscal Year 2021	\$78,285,000
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)	\$4,500,000
		Title IX Improvements	\$310,000
		Technology Improvement Program - Upgrades	\$4,500,000
	Total - Fiscal Year 2022	\$39,277,000	

Schedule of Renovations and Renewals

Fiscal Year	Year Opened	Project	Proposed Funding
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)	\$5,000,000
		Title IX Improvements	\$320,000
		Technology Improvement Program - Upgrades	\$4,500,000
		Total - Fiscal Year 2023	\$89,659,000
TOTAL (FY 2014-23)			\$502,556,000

Technology Improvements Program

Technology	Fiscal Year				
	2015	2016	2017	2018	2019
VoIP telephones HS	440,000	462,000	585,100	609,355	534,823
VoIP telephones MS	335,000	351,750	469,338	487,804	507,195
VoIP telephones ES	560,000	588,000	717,400	648,270	737,684
Interactive whiteboard HS	977,500	796,375	765,568	906,221	680,000
Interactive whiteboard MS	862,500	675,625	671,636	998,452	409,270
Interactive whiteboard ES	1,127,000	953,350	904,643	330,000	
Digital signage HS		15,000	15,750	16,538	
Digital signage MS		18,900	19,845	20,837	21,879
Digital signage ES		69,563	73,041	76,693	66,250
Radios HS	75,000	75,000			75,000
Radios MS		99,000	99,000		45,000
Radios ES			112,000	112,000	65,000
Student response system HS					334,058
Student response system MS				182,417	386,978
Student response system ES		248,053			511,511
Wireless Mobile Comm. HS	7,200	7,560	7,938	8,335	8,750
Wireless Mobile Comm. MS	12,960	13,608	14,288	15,003	15,753
Wireless Mobile Comm. ES	23,640	59,016	44,453	46,675	49,009
Mobile Principal / SIS info HS	36,000			41,400	
Mobile Principal / SIS info MS	43,200				51,840
Mobile Principal / SIS info ES		67,200			
Total	\$4,500,000	\$4,500,000	\$4,500,000	\$4,500,000	\$4,500,000

Energy Infrastructure Improvements Program

In June 2012, Prince William County Public Schools entered into a contract with Cenergistic, Inc. (formerly EEI) to create an energy conservation program designed to generate significant utility savings through awareness and behavior modification.

The CIP calls for a portion of the anticipated savings to be directed towards infrastructure improvements capable of generating compounding Returns on Investment (ROI) through cost avoidance.

Energy infrastructure improvements capable of generating greater energy efficiency with qualifying ROI include:

- Building management control system installation, upgrades, and modernization
- Life cycle modernization / replacement of inefficient and poorly performing mechanical systems
- Lighting control systems
- Building envelope improvements
- Sustainable site improvements designed to maximize thermal mass and reduce the “heat island” effect
- Conversion of fuel-based heating systems to include dual fuel capabilities.

Energy Conservation Measure	Fiscal Year				
	2014	2015	2016	2017	2018
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	150,000
Mechanical Infrastructure (Supplemental Heating, Cooling, Dehumidification)	300,000	300,000	300,000	300,000	300,000
Building Envelope/Thermal Insulation	200,000	200,000	200,000	200,000	200,000
Total	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000

Summary

•	Projected Growth in Students, Fiscal Years 2014 -23.....	22,700
•	Additional School Facilities.....	17
	New Elementary Schools.....	8
	New Middle Schools.....	3
	New High Schools.....	3
	New K-8 School (<i>Nokesville</i>).....	1
	Replacement Schools (<i>PACE East, Kilby Elementary</i>).....	2
•	Additional Classrooms (15 Schools).....	115
	Elementary School Classroom Additions (12 Schools).....	80
	Middle School Classroom Additions (2 Schools).....	23
	Special Education Classroom Additions.....	12
•	Total Additional Capacity	20,814
•	Construction of New Facilities and Additions.....	\$1,006,186,000
•	Renewals.....	\$ 463,131,000
	TOTAL NEW CONSTRUCTION / RENEWALS.....	\$1,469,317,000

Capital Projects Funded Fiscal Year 2014

- Construct Nokesville K-8
- Construct Haymarket Road Elementary School
- Construct additions to Parkside Middle School and River Oaks Elementary School
- Renewal of Dumfries Elementary School
- Continue Title IX Improvements
- Construct Expanded Bus Parking at Gar-Field High School
- Energy Infrastructure Improvements

APPENDIX A

SCHOOL FACILITY SUMMARY

Alpha Listing of Schools / Facilities - A listing of each school/facility, plus the minimum remaining work to be done at each school/facility, is on the following pages.

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.

Additional Space

- **A 13-classroom addition is scheduled for 2020.**

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			
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
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 4-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:	135,309
Program Capacity:	1,233	Site Size (Acres):	48.15

Additional Space

- **An 11-classroom addition is scheduled for completion 2013.**

Maintenance & Repair

- Roof 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

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

School & Site Information

Construction (Year):	1998	Regular Classrooms:	40
Renovation (Year):		Square Feet:	85,728
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:	83,084
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

- Some steel windows in older section of school do not close properly, are single-paned and are not energy efficient. They should be replaced.
- Install a generator to operate emergency lights and equipment, should a power failure occur.
- 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.
- Plumbing fixtures are outdated, expensive to maintain, and should be replaced.
- Acoustical ceilings need replacement.
- Fire doors are needed to separate auditorium from remainder of building.
- Boilers, heat transfer units need replacement.
- New casework is needed.
- Kitchen renovation, including enlarging freezer.
- HVAC system replacement.
- Roofing (except metal roof area) 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.

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 (Auditorium Scheduled for Renewal in FY 2014)

School & Site Information

Construction (Year):	1972	Regular Classrooms:	128
Renovation (Year):	2005	Square Feet:	353,742
Program Capacity:	2,839	Site Size (Acres):	91.53

Maintenance & Repair

- Replace operable auditorium partitions.
- Some fencing needs replacement.
- Areas of the building not renewed in 2005 (primarily auditorium and administrative areas)
- Roof replacement (partial).

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.

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.

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

Additional Space

- **A replacement school is scheduled for 2017.**

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.
- **A 7-classroom addition is scheduled for 2020.**

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:	34,822
Program Capacity:	414	Site Size (Acres):	10.70

Maintenance & Repair

- Outside play areas (including paved areas) need renovation.
- HVAC system replacement (partial).
- Kitchen renovation.

Handicap Access

- Most door openings are inadequate for ADA.
- Need ramps to many entrances.
- Hardware, such as door handles, does not meet ADA standards and should be replaced.
- Building signage does not meet ADA standards.

Additional Space

- School needs a security apartment.
- **A 4-classroom addition is scheduled for completion in 2013.**

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

Maintenance & Repair

- HVAC system and controls replacement (partial).
- Boiler replacement.

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 (Year):	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 (Year):	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
Program Capacity:	698	Site Size (Acres):	15

Additional Space

- A 6-classroom addition was completed in 2013.

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 2019.

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 2016 (contingent upon sale of site's excess property).

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:	55,225
Program Capacity:	520	Site Size (Acres):	10.10

Additional Space

- School needs a security apartment.
- Activity room is scheduled for completion in 2013.

Maintenance & Repair

- Roof replacement (partial).

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).

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:	19
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

- School needs a security apartment (has a security trailer).
- **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
Program Capacity:	780	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:	113
Renovation (Year):	2013	Square Feet:	273,329
Program Capacity:	2,357	Site Size (Acres):	75.09

Maintenance & Repair

- Drives, walks, and parking areas need to be repaired and resurfaced (partial).
- Kitchen renovation.
- Main water service upgrade.
- Humidification system is needed in band room.
- Wood flooring is needed in performing arts area.

Additional Space

- A 30-classroom addition was completed in 2013.

Potomac Middle School

School & Site Information

Construction (Year):	2006	Regular Classrooms:	65
Renovation (Year):		Square Feet:	135,309
Program Capacity:	1,233	Site Size (Acres):	36.43

Additional Space

- An 11-classroom addition is scheduled for completion 2013.

Potomac Transportation Center

Site Information

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

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
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

- A 9-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

- Fire alarm system needs upgrade to provide both audio and visual notification in all occupied areas.
- 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

- 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

- **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
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:	42
Renovation (Year):	2009	Square Feet:	76,760
Program Capacity:	876	Site Size (Acres):	15

Additional Space

- School needs a security apartment.
- **An 11-classroom addition was completed in 2013.**

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.
- **A 5-classroom addition is scheduled for 2017.**

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:	38
Renovation (Year):	2004	Square Feet:	73,457
Program Capacity:	876	Site Size (Acres):	14

Additional Space

- School needs a security apartment (has a security trailer).
- **A 10-classroom addition was completed in 2013.**

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
Program Capacity:	770	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
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
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:	9
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:	36
Renovation (Year):	1993 / 2009	Square Feet:	62,727
Program Capacity:	770	Site Size (Acres):	12.11

Additional Space:

- A 4-classroom addition was completed in 2013.

Westridge Elementary School (Scheduled for Renewal in FY 2017)

School & Site Information

Construction (Year):	1989	Regular Classrooms:	34
Renovation (Year):		Square Feet:	70,599
Program Capacity:	712	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 (Auditorium Scheduled for Renewal in FY 2014)

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

- 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 2012-22
- 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

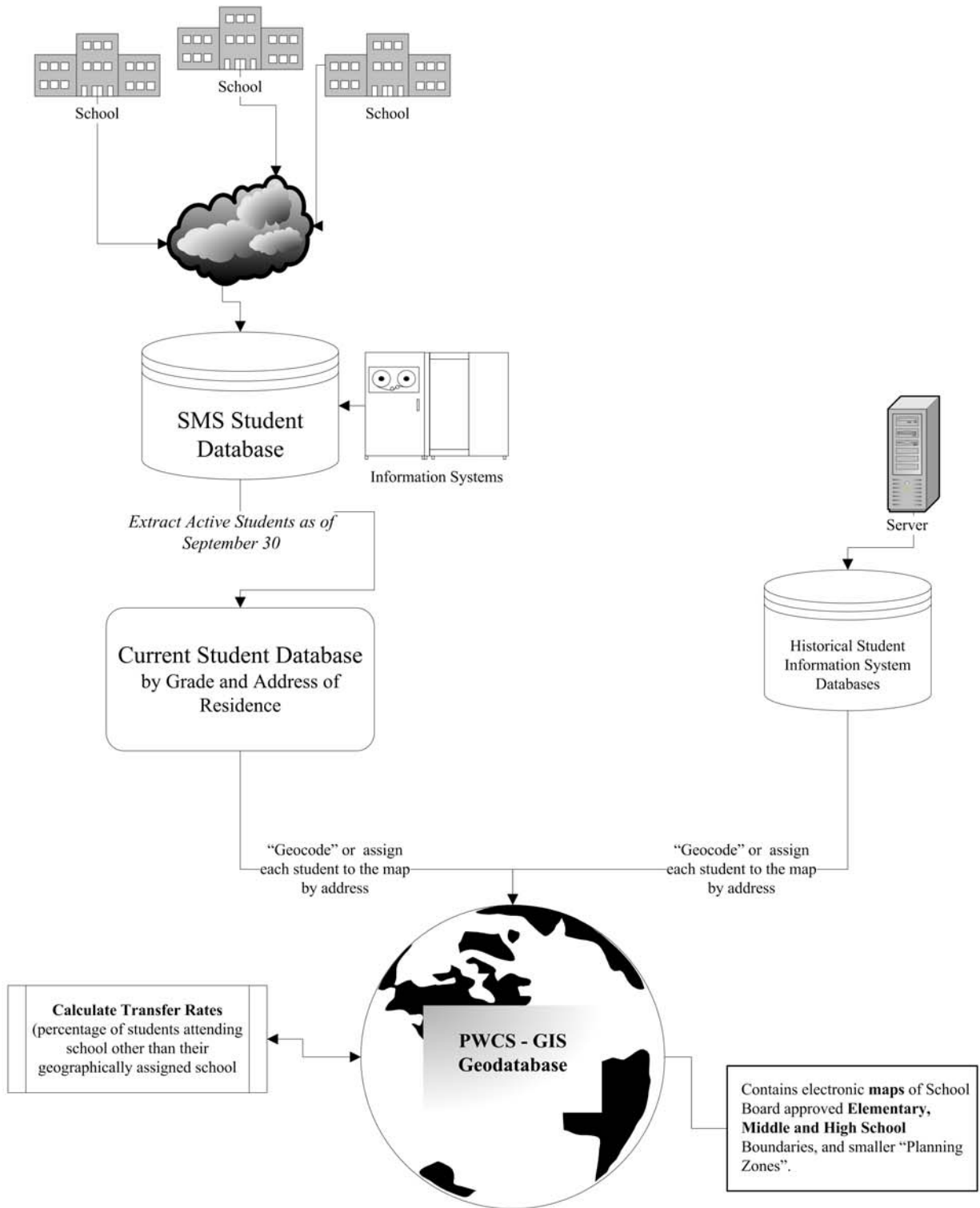
Enrollment Forecast Methodology

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.

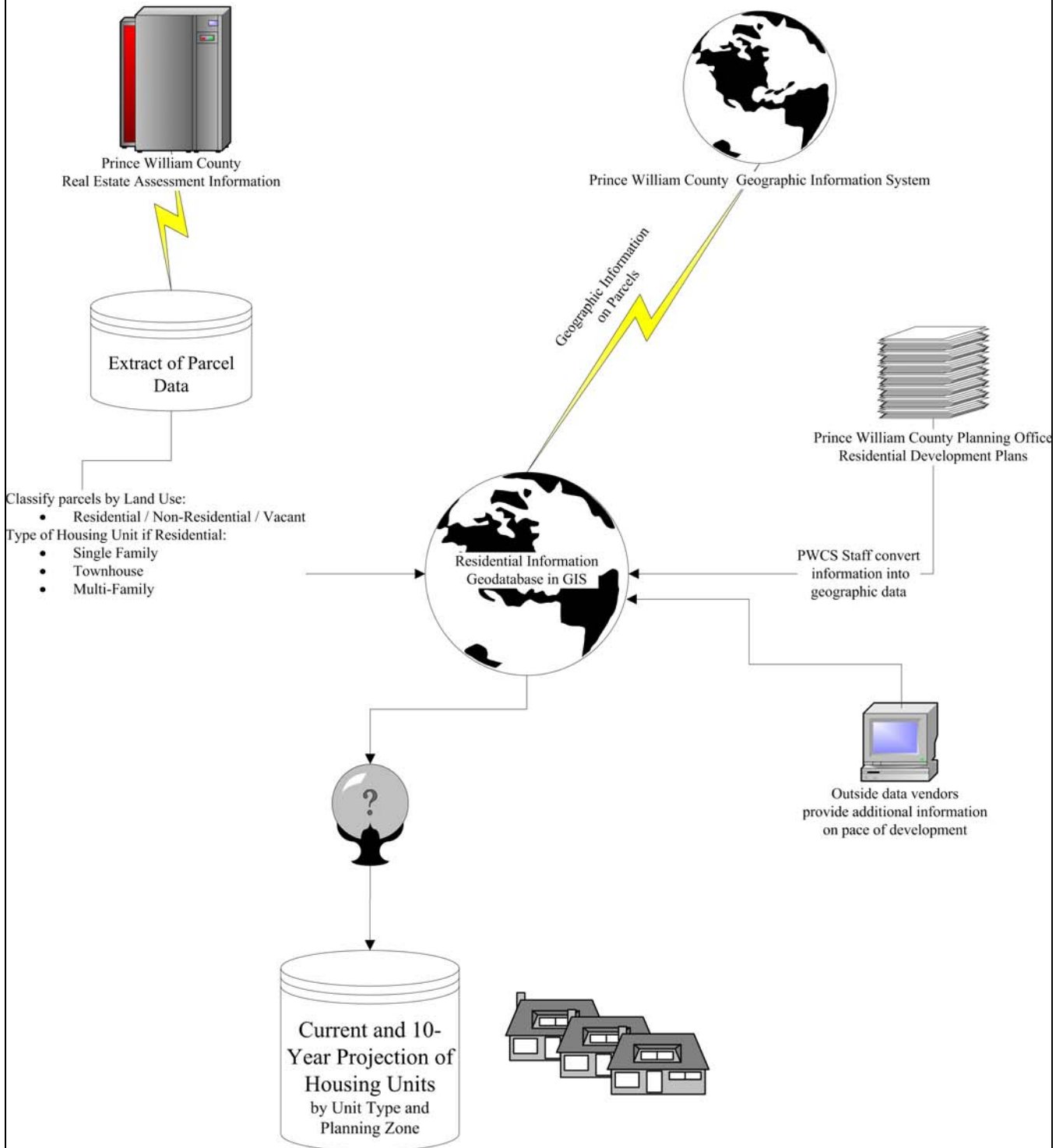
The forecasting methodology used to predict the number of students who will be enrolling in Prince William County Schools for the next 10 years is a combination of cohort progression method and student generation factors method, along with judgmental adjustment to fine-tune the forecasts. This combination 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

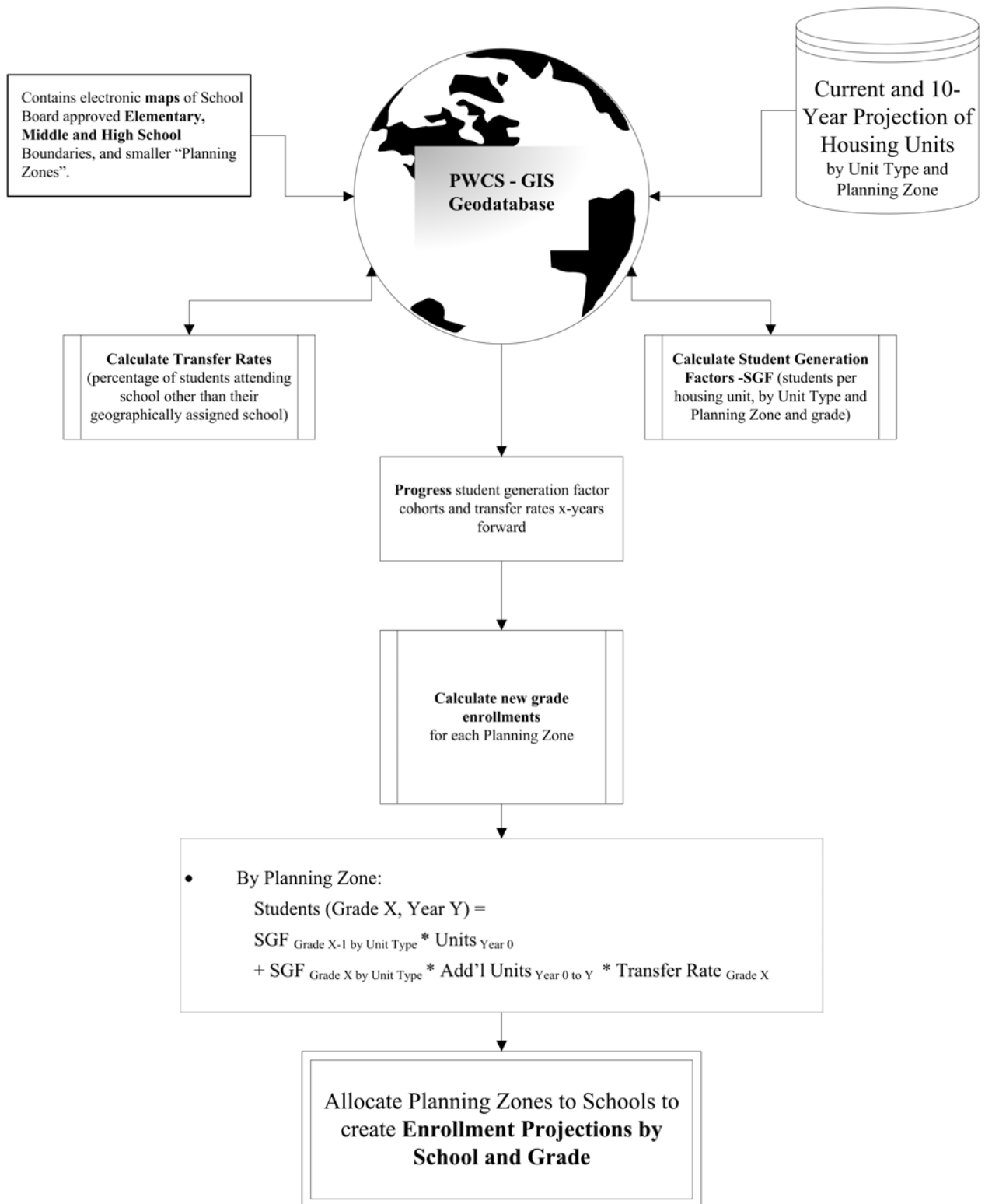
Analysis of Student Information



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** = $(7^{\text{th}}_{\text{Year}(-2)} + 7^{\text{th}}_{\text{Year}(-1)} + 7^{\text{th}}_{\text{Year}(0)}) / (6^{\text{th}}_{\text{Year}(-3)} + 6^{\text{th}}_{\text{Year}(-2)} + 6^{\text{th}}_{\text{Year}(-1)})$
 $7^{\text{th}}_{\text{Year}(0)}$ 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 2012-13. 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 2012-13 to SY 2022-23

Elementary School	Available Space		2012-13			2013-14			2017-18			2022-23		
	Capacity	Portable Classrooms	Students	+/-	% Util	Students	+/-	% Util	Students	+/-	% Util	Students	+/-	% Util
Alvey ES	780		793	-13	101.7%	812	-32	104.1%	916	-136	117.4%	946	-166	121.3%
Antietam ES	616	1	641	-25	104.1%	652	-36	105.9%	676	-60	109.8%	691	-75	112.2%
Ashland ES	900		935	-35	103.9%	965	-65	107.2%	1,146	-246	127.3%	1,172	-272	130.2%
Bel Air ES	568	6	598	-30	105.3%	599	-31	105.4%	631	-63	111.1%	644	-76	113.5%
Belmont ES	462	2	457	5	98.9%	468	-6	101.4%	499	-37	108.0%	688	-226	148.9%
Bennett ES	780		843	-63	108.1%	871	-91	111.6%	955	-175	122.5%	1,307	-527	167.5%
Bristow Run ES	780		714	66	91.5%	706	74	90.5%	755	25	96.8%	778	2	99.8%
Buckland Mills ES	852	5	1,068	-216	125.4%	1,091	-239	128.0%	1,312	-460	154.0%	1,617	-765	189.8%
Cedar Point ES	780	1	736	44	94.4%	718	62	92.1%	759	21	97.3%	776	4	99.5%
Coles ES	472	3	491	-19	104.0%	485	-13	102.7%	553	-81	117.1%	573	-101	121.4%
Dale City ES	496	4	454	42	91.5%	462	34	93.2%	472	24	95.3%	484	12	97.5%
Dumfries ES	520	6	556	-36	106.9%	552	-32	106.2%	608	-88	116.9%	623	-103	119.8%
Ellis ES	626	1	602	24	96.2%	567	59	90.6%	711	-85	113.6%	866	-240	138.3%
Enterprise ES	520	2	530	-10	101.9%	537	-17	103.3%	572	-52	110.1%	585	-65	112.4%
Featherstone ES	462	7	527	-65	114.1%	541	-79	117.1%	618	-156	133.7%	637	-175	137.8%
Fitzgerald ES	852		821	31	96.4%	887	-35	104.1%	1,082	-230	127.0%	1,310	-458	153.8%
Glenkirk ES	780		856	-76	109.7%	906	-126	116.2%	978	-198	125.4%	1,013	-233	129.9%
Gravelly ES	852		795	57	93.3%	829	23	97.3%	1,028	-176	120.7%	1,119	-267	131.3%
Henderson ES	592	2	573	19	96.8%	561	31	94.7%	597	-5	100.8%	612	-20	103.3%
Kerrydale ES	496	4	441	55	88.9%	458	38	92.4%	484	12	97.6%	495	1	99.7%
Kilby ES	414	1	407	7	98.3%	421	-7	101.8%	441	-27	106.6%	563	-149	135.9%
King ES	520	2	516	4	99.2%	530	-10	101.9%	585	-65	112.5%	607	-87	116.7%
Lake Ridge ES	544	5	607	-63	111.6%	629	-85	115.7%	658	-114	121.0%	672	-128	123.6%
Leesylvania ES	804	2	774	30	96.3%	772	32	96.0%	889	-85	110.6%	980	-176	121.8%
Loch Lomond ES	616	3	402	12	97.1%	519	97	84.3%	551	65	89.4%	621	-5	100.8%
Marshall ES	698		640	58	91.7%	614	84	88.0%	700	-2	100.3%	717	-19	102.7%
Marumscos Hills ES	650	7	734	-84	112.9%	774	-124	119.0%	969	-319	149.0%	1,125	-475	173.0%
McAuliffe ES	568		479	89	84.3%	519	49	91.3%	533	35	93.9%	545	23	95.9%
Minnieville ES	544	3	576	-32	105.9%	605	-61	111.2%	648	-104	119.1%	694	-150	127.6%
Montclair ES	698	1	704	-6	100.9%	728	-30	104.4%	780	-82	111.8%	805	-107	115.4%
Mountain View ES	698	1	720	-22	103.2%	689	9	98.7%	745	-47	106.7%	784	-86	112.4%
Mullen ES	876	9	958	-260	137.2%	817	59	93.3%	795	81	90.8%	852	25	97.2%
Neabsco ES	626	1	527	99	84.2%	545	81	87.1%	591	35	94.5%	604	22	96.5%
Nokesville ES	342	5	399	-57	116.7%	392	-50	114.6%	524	-182	153.1%	625	-283	182.7%
Occoquan ES	520	6	548	-28	105.4%	585	-65	112.4%	655	-135	126.0%	673	-153	129.4%
Old Bridge ES	626		692	-66	110.5%	711	-85	113.5%	757	-131	120.9%	774	-148	123.6%
Parks ES	780		766	14	98.2%	769	11	98.5%	836	-56	107.2%	859	-79	110.2%
Pattie ES	698		714	-16	102.3%	744	-46	106.6%	821	-123	117.6%	854	-156	122.4%
Penn ES	626		651	-25	104.0%	677	-51	108.1%	799	-173	127.6%	839	-213	134.0%
Pennington ES	405		404	1	99.8%	405	0	100.0%	405	0	100.0%	405	0	100.0%
Piney Branch ES	924		728	196	78.8%	779	145	84.3%	979	-55	105.9%	1,873	-949	202.7%
Porter ES	420		422	-2	100.5%	420	0	100.0%	420	0	100.0%	420	0	100.0%
Potomac View ES	746	6	753	-7	100.9%	781	-35	104.7%	794	-48	106.4%	819	-73	109.8%
River Oaks ES	616	4	608	8	98.7%	642	-26	104.3%	766	-150	124.3%	800	-184	129.9%
Rockledge ES	650		626	24	96.3%	647	3	99.6%	699	-49	107.5%	714	-64	109.8%
Signal Hill ES	780		612	168	78.5%	599	181	76.8%	682	98	87.4%	794	-14	101.8%
Sinclair ES	876	7	754	-186	132.7%	778	98	88.9%	824	52	94.1%	933	-57	106.4%
Springwoods ES	592	5	679	-87	114.7%	697	-105	117.7%	736	-144	124.4%	753	-161	127.2%
Sudley ES	876		503	-41	108.9%	791	85	90.3%	847	29	96.7%	864	12	98.6%
Swans Creek ES	770		668	102	86.8%	666	104	86.5%	914	-144	118.7%	1,655	-885	214.9%
Triangle ES	924		766	158	82.9%	770	154	83.3%	812	112	87.8%	928	-4	100.4%
Tyler ES	568	2	637	-69	112.1%	674	-106	118.6%	699	-131	123.1%	849	-281	149.5%
Vaughan ES	698	1	813	-115	116.5%	828	-130	118.7%	935	-237	133.9%	1,012	-314	145.0%
Victory ES	852	5	942	-90	110.6%	937	-85	109.9%	1,016	-164	119.2%	1,066	-214	125.1%
West Gate ES	770	12	704	-136	123.9%	646	124	83.9%	703	67	91.3%	718	52	93.2%
Westridge ES	712		707	5	99.3%	709	3	99.6%	754	-42	105.9%	771	-59	108.2%
Williams ES	780	3	867	-87	111.2%	887	-107	113.7%	972	-192	124.6%	1,006	-226	129.0%
Wood ES	924	1	984	-60	106.5%	1,027	-103	111.2%	1,126	-202	121.8%	1,153	-229	124.8%
Yorkshire ES	948		847	101	89.3%	909	39	95.9%	1,025	-77	108.2%	1,089	-141	114.9%
Total	39,865	136	39,269	-708	101.8%	40,299	-434	101.1%	44,735	-4,870	112.2%	49,749	-9,884	124.8%

Student Enrollment Data: Current and Projected Enrollment
 Elementary Schools – Additional Space to be Constructed
 SY 2012-13 to SY 2022-23

Elementary School	2012-13			2013-14			2017-18			2022-23		
	Students	+/-	% Util	Students	+/-	% Util	Students	+/-	% Util	Students	+/-	% Util
2014												
Elementary School (West - Haymarket/UVA)								852			852	
Nokesville K-8 Replacement								258			258	
River Oaks Elementary Addition (7 rooms)								168			168	
2015												
Elementary School/IHS (Devlin Road Area)								852			852	
Featherstone Elementary Addition (6 rooms)								144			144	
2016												
Elementary School/IHS (East - Ferlazzo)								852			852	
2017												
Belmont Elementary Addition (4 rooms)								96			96	
Elementary School (East - Potomac Shores)								852			852	
Elementary School (East - Neabsco Mills Area)								650			650	
Kilby Elementary School Replacement								438			438	
Henderson Elementary School Addition (10 rooms)								240			240	
Springwoods Elementary Addition (5 rooms)								120			120	
2018												
Elementary School (Vint Hill Road ES)											852	
2019												
Addition Haymarket Area (6 rooms)											144	
Leesylvania Elementary Addition (4 rooms)											96	
Neabsco Elementary Addition (8 rooms)											192	
2020												
Antietam Elementary Addition (13 rooms)											312	
Lake Ridge Elementary Addition (7 rooms)											168	
Pattie Elementary Addition (10 rooms)											240	
2021												
Elementary School (TBD - Linton Hall Area)											852	
2022												
Elementary School (TBD)											852	
Sum of Additional Seats								5,522			9,230	
Total	39,269	-708	101.8%	40,299	-434	101.1%	44,735	652	98.6%	49,749	-654	101.3%

Student Enrollment Data: Current and Projected Enrollment
Middle Schools
SY 2012-13 to SY 2022-23

Middle School	Available Space		2012-13			2013-14			2017-18			2022-23		
	Capacity	Portable Classrooms	Students	+/-	% Util	Students	+/-	% Util	Students	+/-	% Util	Students	+/-	% Util
Benton MS	1,233	1	1,275	-42	103.4%	1,304	-71	105.8%	1,433	-200	116.3%	1,531	-298	124.2%
Beville MS	1,191		1,171	20	98.3%	1,126	65	94.5%	1,200	-9	100.8%	1,283	-92	107.7%
Bull Run MS	1,233	10	1,116	117	90.5%	1,154	79	93.6%	1,221	12	99.0%	1,427	-194	115.7%
Gainesville MS	1,233	5	1,305	-72	105.8%	1,369	-136	111.1%	1,565	-332	126.9%	2,114	-881	171.4%
Godwin MS	982		1,028	-46	104.7%	1,013	-31	103.2%	1,075	-93	109.4%	1,151	-169	117.2%
Graham Park MS	867		884	-17	102.0%	940	-73	108.4%	1,032	-165	119.0%	1,144	-277	132.0%
Lake Ridge MS	1,191		1,254	-63	105.3%	1,209	-18	101.5%	1,270	-79	106.7%	1,345	-154	112.9%
Lynn MS	1,170		950	220	81.2%	1,029	141	87.9%	1,110	60	94.9%	1,290	-120	110.2%
Marsteller MS	1,233	10	1,595	-362	129.4%	1,574	-341	127.6%	1,720	-487	139.5%	1,940	-707	157.3%
Parkside MS	1,139		1,159	-20	101.8%	1,284	-145	112.8%	1,405	-266	123.4%	1,633	-494	143.3%
Pennington TS	243		239	4	98.4%	243	0	100.0%	243	0	100.0%	243	0	100.0%
Porter TS	252		265	-13	105.2%	252	0	100.0%	252	0	100.0%	252	0	100.0%
Potomac MS	1,233		1,106	127	89.7%	1,204	29	97.6%	1,437	-204	116.6%	1,857	-624	150.6%
Reagan MS	1,233		1,123	110	91.1%	1,217	16	98.7%	1,414	-181	114.7%	1,644	-411	133.4%
Rippon MS	1,139		1,082	57	95.0%	1,138	1	99.9%	1,310	-171	115.0%	1,566	-427	137.5%
Saunders MS	1,212		1,066	146	88.0%	1,113	99	91.8%	1,228	-16	101.3%	1,306	-94	107.8%
Stonewall MS	1,003	3	1,164	-161	116.1%	1,196	-193	119.2%	1,266	-263	126.2%	1,366	-363	136.2%
Woodbridge MS	1,066		1,120	-54	105.1%	1,184	-118	111.1%	1,259	-193	118.1%	1,354	-288	127.0%
Total	18,853	29	18,902	-49	100.3%	19,549	-696	103.7%	21,442	-2,589	113.7%	24,445	-5,592	129.7%
<i>Benton Middle (11 room addition, 2013)</i>							231			231			231	
<i>Potomac Middle (11 room addition, 2013)</i>							231			231			231	
<i>Nokesville K-8 (2014)</i>										300			300	
<i>Parkside Middle/IHS West (15/1 room addition, 2014)</i>										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	
<i>Middle School (East, 2020)</i>													1,464	
<i>Sum of Additional Seats</i>							462			1,245			4,173	
Total	18,853	29	18,902	-49	100.3%	19,549	-234	101.2%	21,442	-1,344	106.7%	24,445	-1,419	106.2%

Student Enrollment Data: Current and Projected Enrollment
High Schools
SY 2012-13 to SY 2022-23

Middle School	Available Space		2012-13			2013-14			2017-18			2022-23		
	Capacity	Portable Classrooms	Students	+/-	% Util	Students	+/-	% Util	Students	+/-	% Util	Students	+/-	% Util
Battlefield HS	2,053	6	2,490	-439	121.4%	2,479	-426	120.7%	2,667	-614	129.9%	2,968	-915	144.6%
Brentsville HS	1,110		817	293	73.6%	864	246	77.8%	1,154	-44	103.9%	1,356	-246	122.1%
Forest Park HS	2,053	6	2,440	-387	118.9%	2,391	-338	116.5%	2,271	-218	110.6%	2,340	-287	114.0%
Freedom HS	2,053		1,846	207	89.9%	1,884	169	91.8%	2,114	-61	103.0%	2,861	-808	139.3%
Gar-Field HS	2,734		2,407	327	88.0%	2,450	284	89.6%	2,619	115	95.8%	2,909	-175	106.4%
Hylton HS	2,053		2,295	-246	112.0%	2,392	-339	116.5%	2,608	-555	127.1%	2,262	-209	110.2%
Osborn Park HS	2,430	3	2,759	-329	113.5%	2,815	-385	115.8%	3,071	-641	126.4%	3,074	-644	126.5%
Patriot HS	2,053		2,277	-225	111.0%	2,684	-631	130.7%	2,972	-919	144.8%	3,329	-1,276	162.2%
Potomac HS	2,285	3	1,525	130	92.1%	1,615	670	70.7%	2,210	75	96.7%	3,244	-959	142.0%
Stonewall Jackson HS	2,409		2,346	63	97.4%	2,313	96	96.0%	2,504	-95	104.0%	3,215	-806	133.4%
Woodbridge HS	2,734		2,814	-80	102.9%	2,809	-75	102.7%	2,964	-230	108.4%	2,867	-133	104.9%
Total	23,337	18	24,016	-679	102.9%	24,695	-1,358	105.8%	27,156	-3,819	116.4%	30,424	-7,087	130.4%
<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>							0			2,053			6,159	
Total	23,337	18	24,016	-679	102.9%	24,695	-1,358	105.8%	27,156	-1,766	107.0%	30,424	-928	103.1%

Student Enrollment Data: Current Enrollment
Special Education and Alternative Schools
SY 2012-13

Special Education and Alternative School	2012-13	
	Portable Classrooms	Students
Independent Hill SE	8	169
PACE West SE	0	99
Pre-School Child Find	0	79
School Based Pre-K	0	316
Woodbine SE	1	65
New Directions Alt	0	470
New Dominion Alt	10	106
TJHS Regional Magnet	0	61
Total	19	1,365
<i>Parkside Middle Addition (IHS West -1 room addition, 2014)</i>		
<i>Devlin Road Elementary (IHS West -1 room addition, 2015)</i>		
<i>Ferlazzo Elementary (IHS East -1 room addition, 2016)</i>		
<i>New Dominion Alt (10 room addition, 210 additional seats, 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>		

Housing Units in Residential Development
By Elementary School Attendance Area and Stage of Development
September 2012

Elementary School	Active				Planned				Rezoning Submitted				Total
	SF	TH	MF	Total	SF	TH	MF	Total	SF	TH	MF	Total	
Alvey ES	120			120	130			130				-	250
Ashland ES	393			393				-				-	393
Bel Air ES				-				-				-	-
Belmont ES				-			399	399			670	670	1,069
Bennett ES	32	4		36	169	117		286		448		448	770
Bristow Run ES	12			12				-	21			21	33
Buckland Mills ES	59		176	235	378	437	48	863	59	130		189	1,287
Cedar Point ES	4			4				-				-	4
Coles ES	46	76		122	44			44				-	166
Dale City ES				-	4			4				-	4
Dumfries ES			184	184	11			11				-	195
Ellis ES			624	624				-				-	624
Featherstone ES			288	288	12			12				-	300
Fitzgerald ES			369	369	362	493		855	18			18	1,242
Glenkirk ES	72			72	71			71				-	143
Gravely ES	296			296	245			245			304	304	845
Henderson ES	12			12	9			9				-	21
Kilby ES				-			148	148			494	494	642
King ES	77			77	22			22	39			39	138
Leesylvania ES	14	65	32	111	33	152	550	735				-	846
Marshall ES	81			81	5			5				-	86
Marumscos Hills ES		130	764	894			550	550			240	240	1,684
McAuliffe ES		21		21				-				-	21
Minnieville ES				-		30	289	319				-	319
Montclair ES	38			38	5			5				-	43
Mountain View ES	13			13				-				-	13
Mullen ES				-			20	20				-	20
Neabsco ES			71	71				-				-	71
Nokesville ES	115			115	31			31	8			8	154
Occoquan ES	24	133		157	21			21				-	178
Old Bridge ES				-	4			4				-	4
Parks ES	35			35	11			11				-	46
Pattie ES			244	244		40		40				-	284
Penn ES	65	21		86	253			253	36			36	375
Piney Branch ES	175	132	336	643	38	267		305		1,200	880	2,080	3,028
Potomac View ES				-		25		25				-	25
River Oaks ES	235	183	48	466				-				-	466
Rockledge ES			72	72				-				-	72
Signal Hill ES	63			63	80	179	296	555	19			19	637
Sinclair ES				-				-			13	13	13
Swans Creek ES	123		398	521	733	67	1,787	2,587			1,357	1,357	4,465
Triangle ES	33			33	121	303		424				-	457
Tyler ES	52		169	221			64	64				-	285
Vaughan ES			312	312	139		21	160				-	472
Victory ES		29		29	95			95		50		50	174
West Gate ES			96	96			304	304				-	400
Westridge ES	13			13	21			21				-	34
Williams ES	228			228				-			86	86	314
Wood ES	21			21	295			295				-	316
Yorkshire ES			368	368	27		525	552				-	920
Total	2,451	794	4,551	7,796	3,369	2,110	5,001	10,480	200	1,828	4,044	6,072	24,348

Housing Units in Residential Development
By Middle School Attendance Area and Stage of Development
September 2012

Middle School	Active				Planned				Rezoning Submitted				Total
	SF	TH	MF	Total	SF	TH	MF	Total	SF	TH	MF	Total	
Benton MS	176	97		273	302			302	36			36	611
Beville MS	118			118	22			22	39			39	179
Bull Run MS	80		169	249			64	64				-	313
Gainesville MS	255	132	960	1,347	204	267		471		1,200	880	2,080	3,898
Godwin MS			71	71	4	30	289	323				-	394
Graham Park MS	33		428	461	132	343		475				-	936
Lynn MS	24	133	312	469	21	25	547	593			1,164	1,164	2,226
Marsteller MS	144	29		173	326		20	346	29	50		79	598
Parkside MS	95	4	368	467	276	296	821	1,393	19	448		467	2,327
Potomac MS	600	248	446	1,294	766	219	1,787	2,772			1,443	1,443	5,509
Reagan MS	460		176	636	753	437	48	1,238	59	130	304	493	2,367
Rippon MS	12	130	1,453	1,595	383	493	1,100	1,976	18		240	258	3,829
Saunder MS	454	21		475	16			16				-	491
Stonewall MS			96	96			304	304			13	13	413
Woodbridge MS			72	72	164		21	185				-	257
Total	2,451	794	4,551	7,796	3,369	2,110	5,001	10,480	200	1,828	4,044	6,072	24,348

Housing Units in Residential Development
By High School Attendance Area and Stage of Development
September 2012

High School	Active				Planned				Rezoning Submitted				Total
	SF	TH	MF	Total	SF	TH	MF	Total	SF	TH	MF	Total	
Battlefield HS	540		205	745	753	261	112	1,126	59		304	363	2,234
Brentsville HS	190	4		194	477	60		537	8			8	739
Forest Park HS	452		428	880	132	343		475				-	1,355
Freedom HS		130	1,765	1,895	12	518	1,668	2,198	18		910	928	5,021
Gar-Field HS			71	71	173	30	289	492				-	563
Hylton HS	124	97		221	65			65	39			39	325
Osborn Park HS	225	21	368	614	395	236	821	1,452	55	448		503	2,569
Patriot HS	109		140	249	71	176		247	21	130	80	231	727
Potomac HS	612	248	446	1,306	1,137	219	1,787	3,143			1,443	1,443	5,892
Stonewall Jackson HS	175	161	1,056	1,392	133	267	324	724		1,250	813	2,063	4,179
Woodbridge HS	24	133	72	229	21			21			494	494	744
Total	2,451	794	4,551	7,796	3,369	2,110	5,001	10,480	200	1,828	4,044	6,072	24,348

Student Enrollment Data: Historical and Projected 1966-2022

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	40,298	19,550	24,696	1,382	85,926	2,375	2.8%
2014	41,558	20,037	25,425	1,400	88,420	2,494	2.9%
2015	42,681	20,494	26,252	1,419	90,847	2,427	2.7%
2016	43,795	20,881	26,843	1,439	92,957	2,111	2.3%
2017	44,733	21,442	27,157	1,462	94,793	1,836	2.0%
2018	45,807	21,949	27,654	1,487	96,897	2,104	2.2%
2019	46,833	22,610	28,087	1,516	99,047	2,150	2.2%
2020	47,835	23,185	28,696	1,548	101,263	2,216	2.2%
2021	48,927	23,800	29,588	1,583	103,898	2,635	2.6%
2022	49,748	24,445	30,425	1,617	106,235	2,337	2.2%

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%	
(MPE) Mean Percentage Error				0.55%		1.17%		2.10%		2.76%	
(MAPE) Mean Absolute Percentage Error				0.84%		2.04%		4.49%		4.77%	

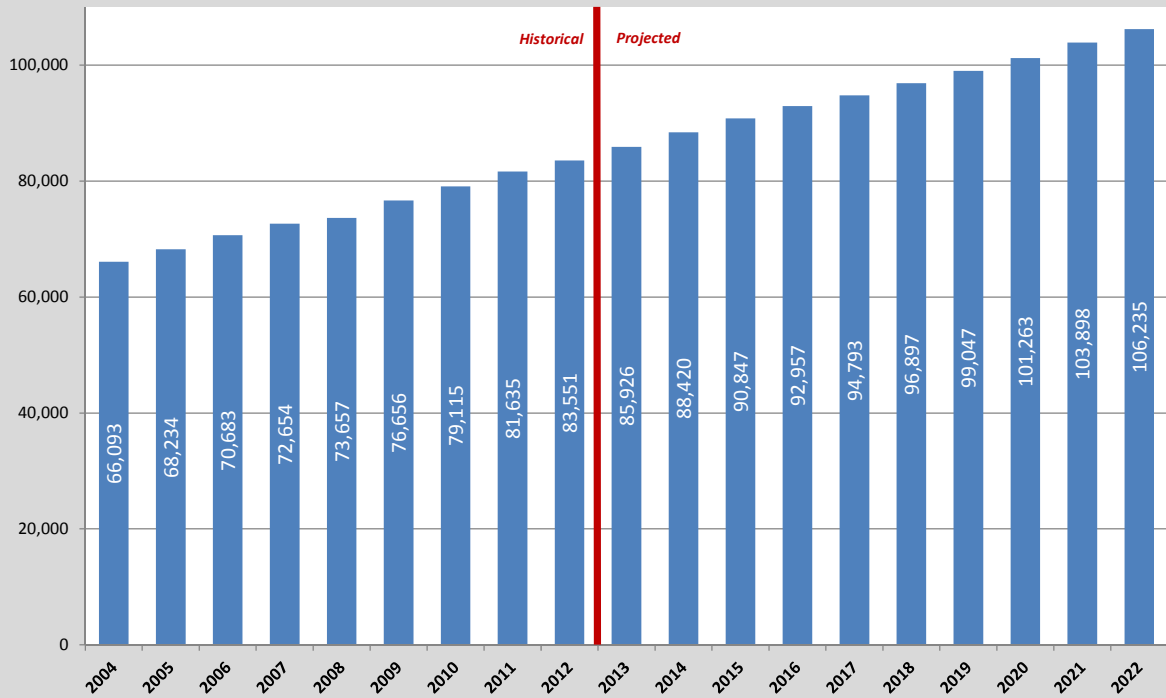
*A negative forecast error indicates that the projection was greater than the actual value.

Portable Classrooms: Current and Historical Totals By School Type, 1998 to 2012

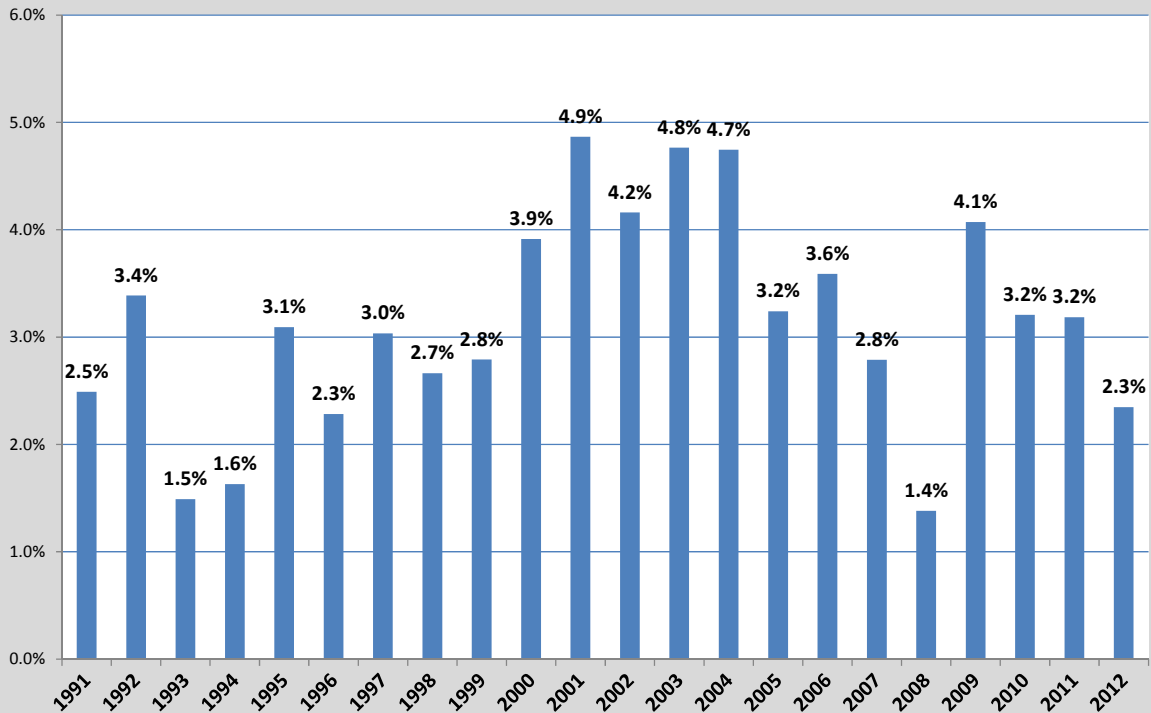
Year	Elementary	Middle	High	Alternative	Special Education	Total
1998	101	21	28	0	5	155
1999	109	25	25	0	5	164
2000	118	31	5	10	5	169
2001	122	37	2	10	5	176
2002	130	26	2	10	5	173
2003	141	16	2	10	5	174
2004	168	19	2	10	5	204
2005	185	40	5	10	5	245
2006	179	27	8	10	5	229
2007	184	20	14	10	10	238
2008	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

Note: Includes portable classrooms used for instructional purposes.

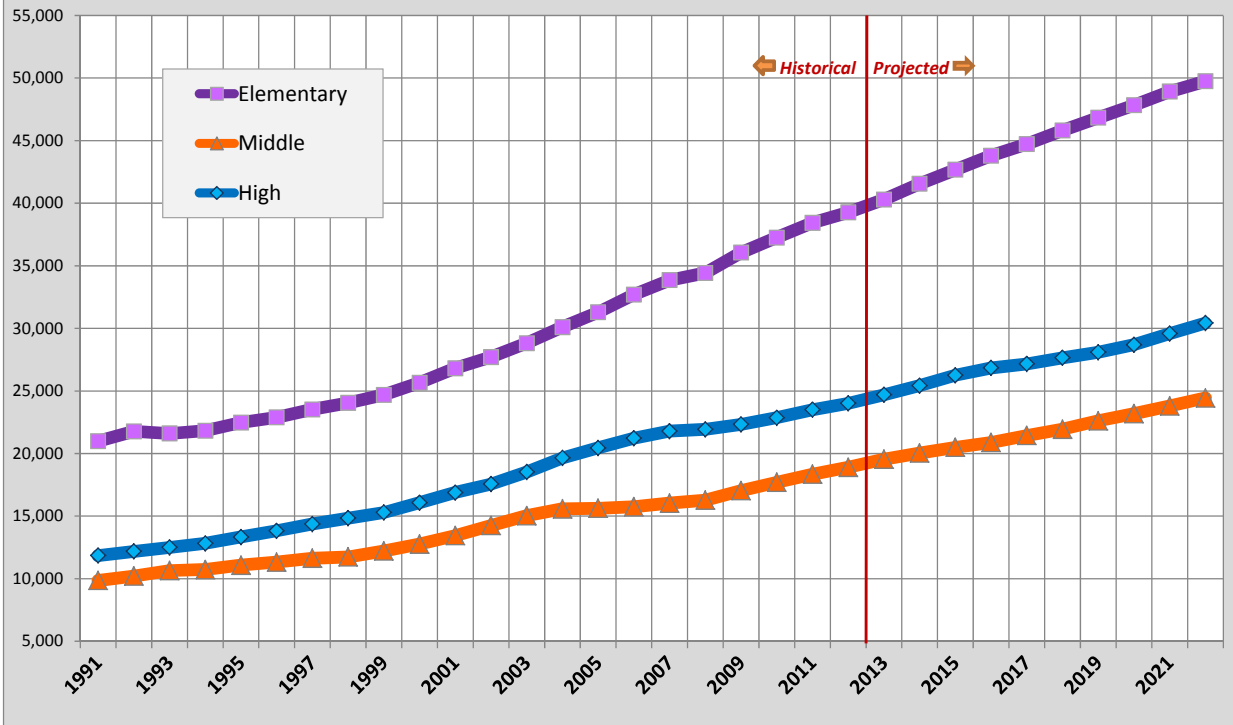
Prince William County Schools
Historical and Projected Enrollment



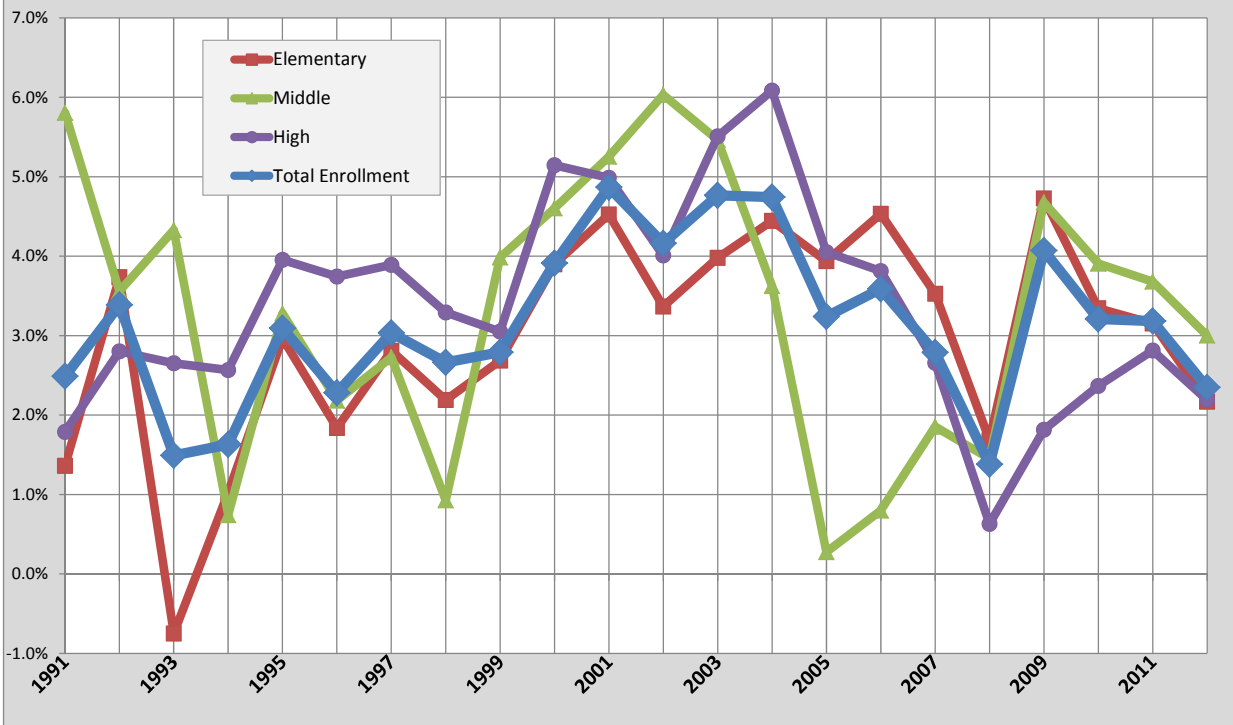
Prince William County Schools
Annual Percentage Change in Enrollment



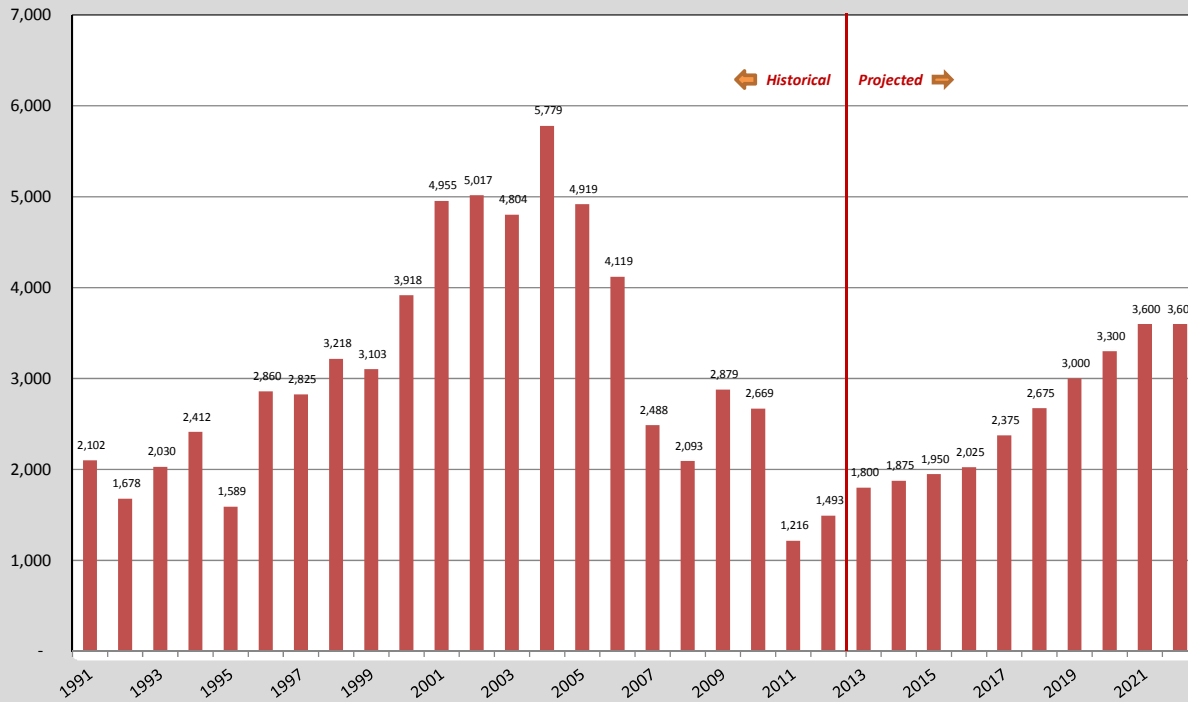
Prince William County Schools
Historical and Projected Enrollment by School Level



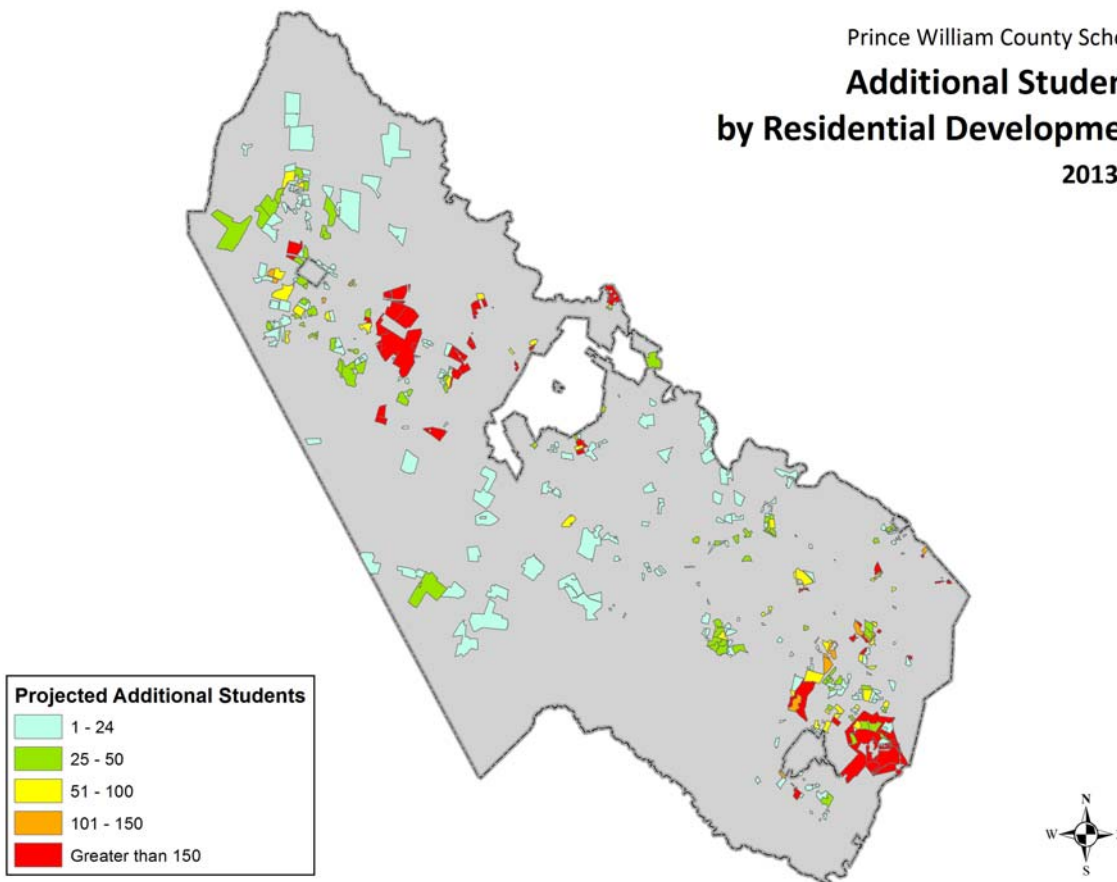
Prince William County Schools
Annual Percentage Change in Enrollment by School Level



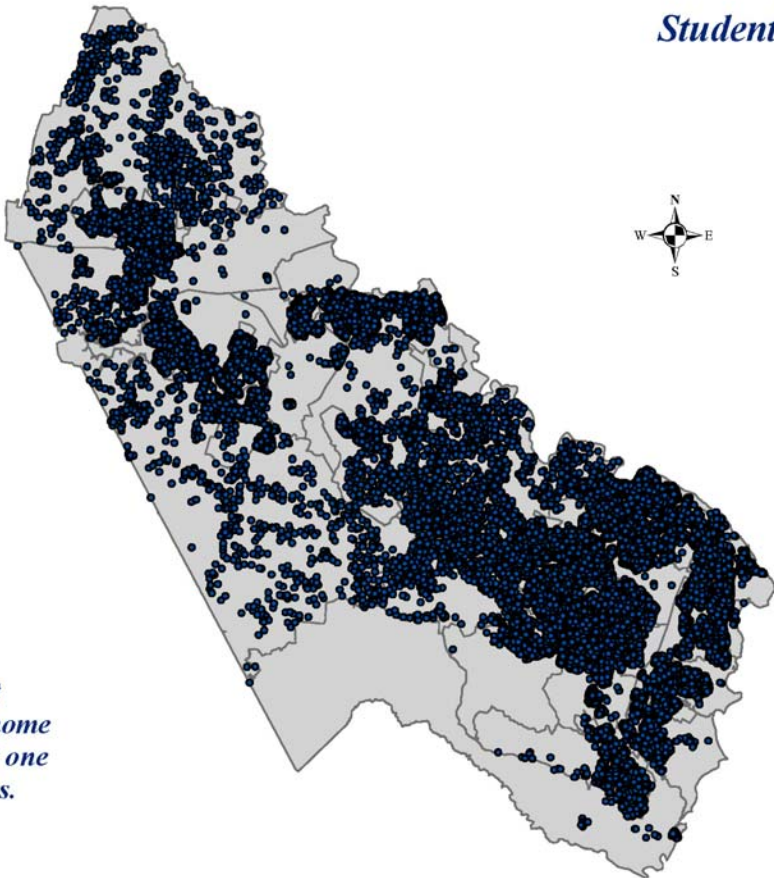
Prince William County Historical and Projected Annual Housing Unit Change



Prince William County Schools Additional Students by Residential Development 2013-22

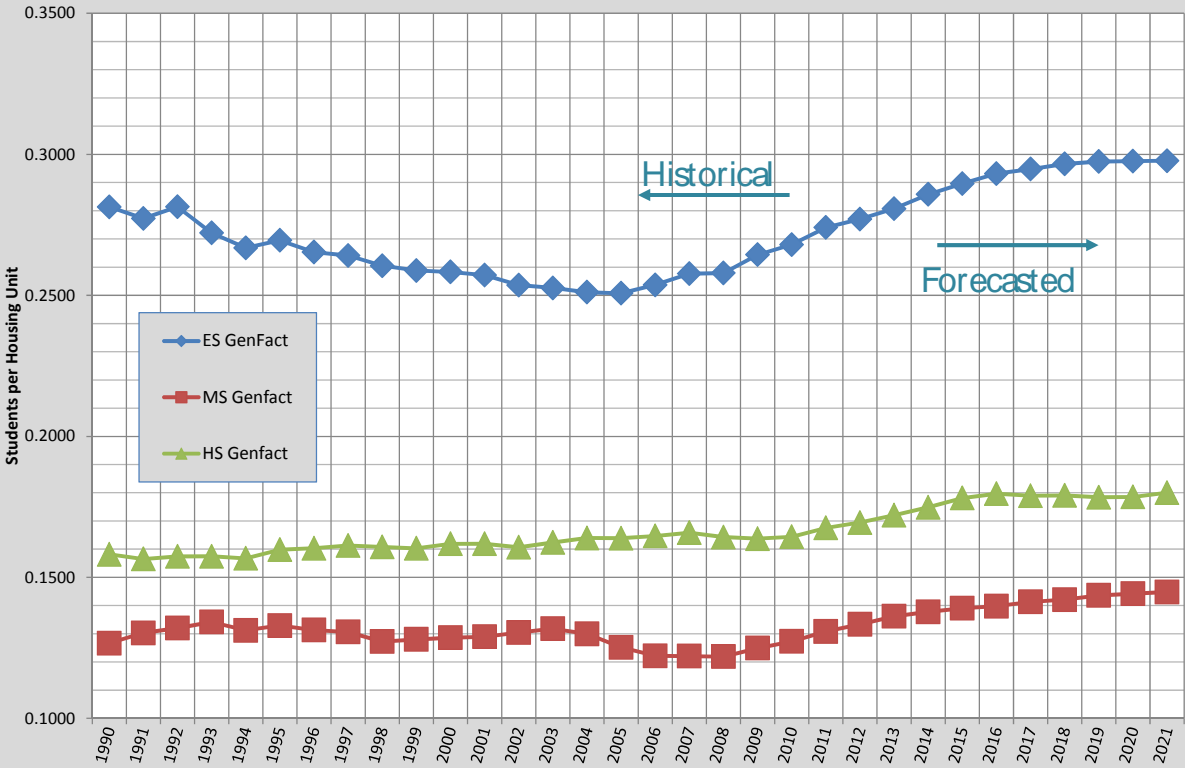


*Student Distribution
2012-13*

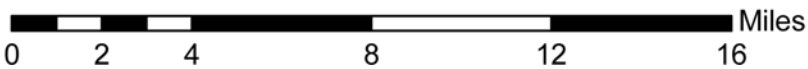
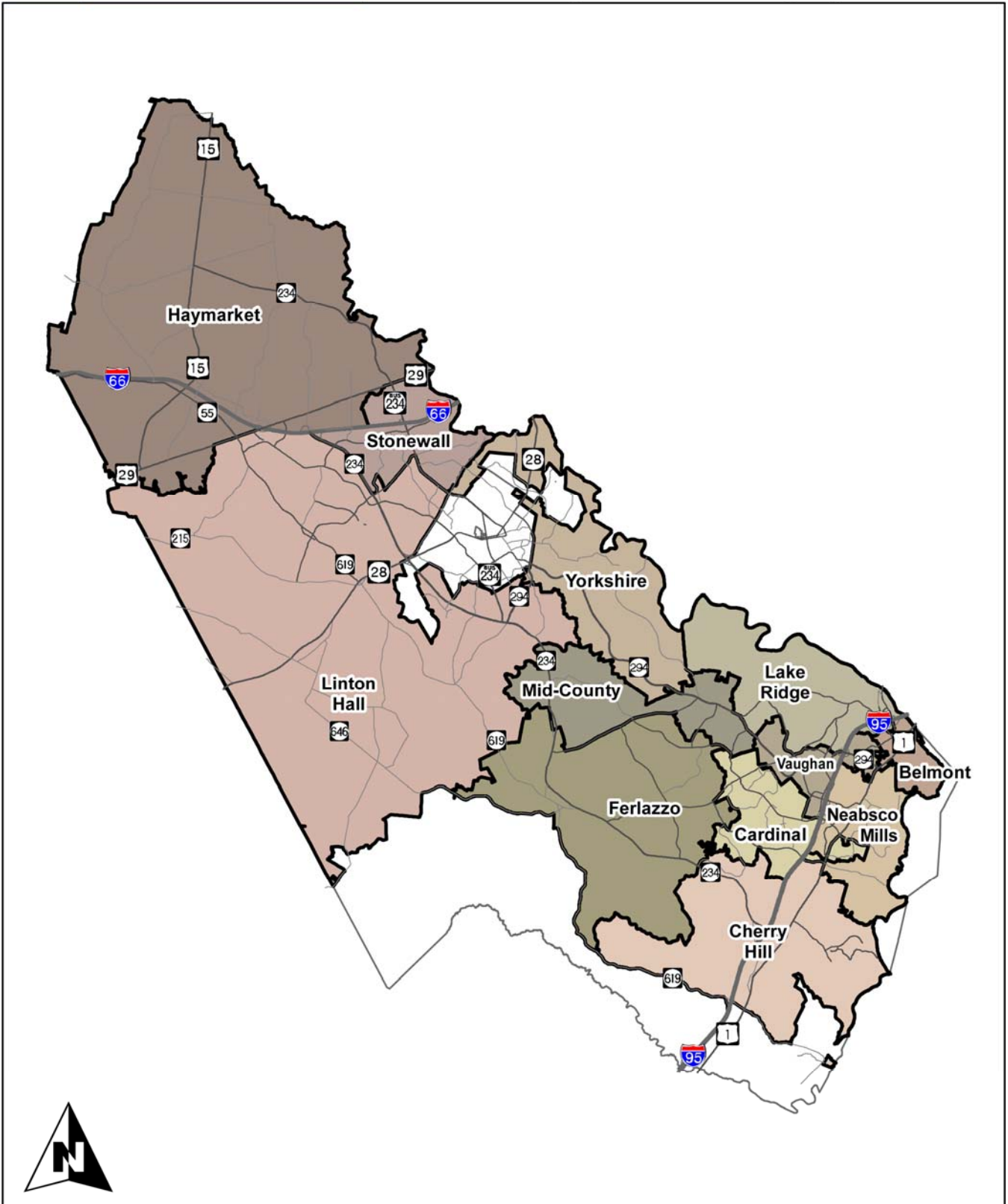


*Each blue dot
represents a home
where at least one
student resides.*

Prince William County Schools
Student Generation Rates



Capital Improvements Program Elementary School Geographic Areas



Office of Facilities Services

Prince William County Schools
Elementary Schools by Geographic Area

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

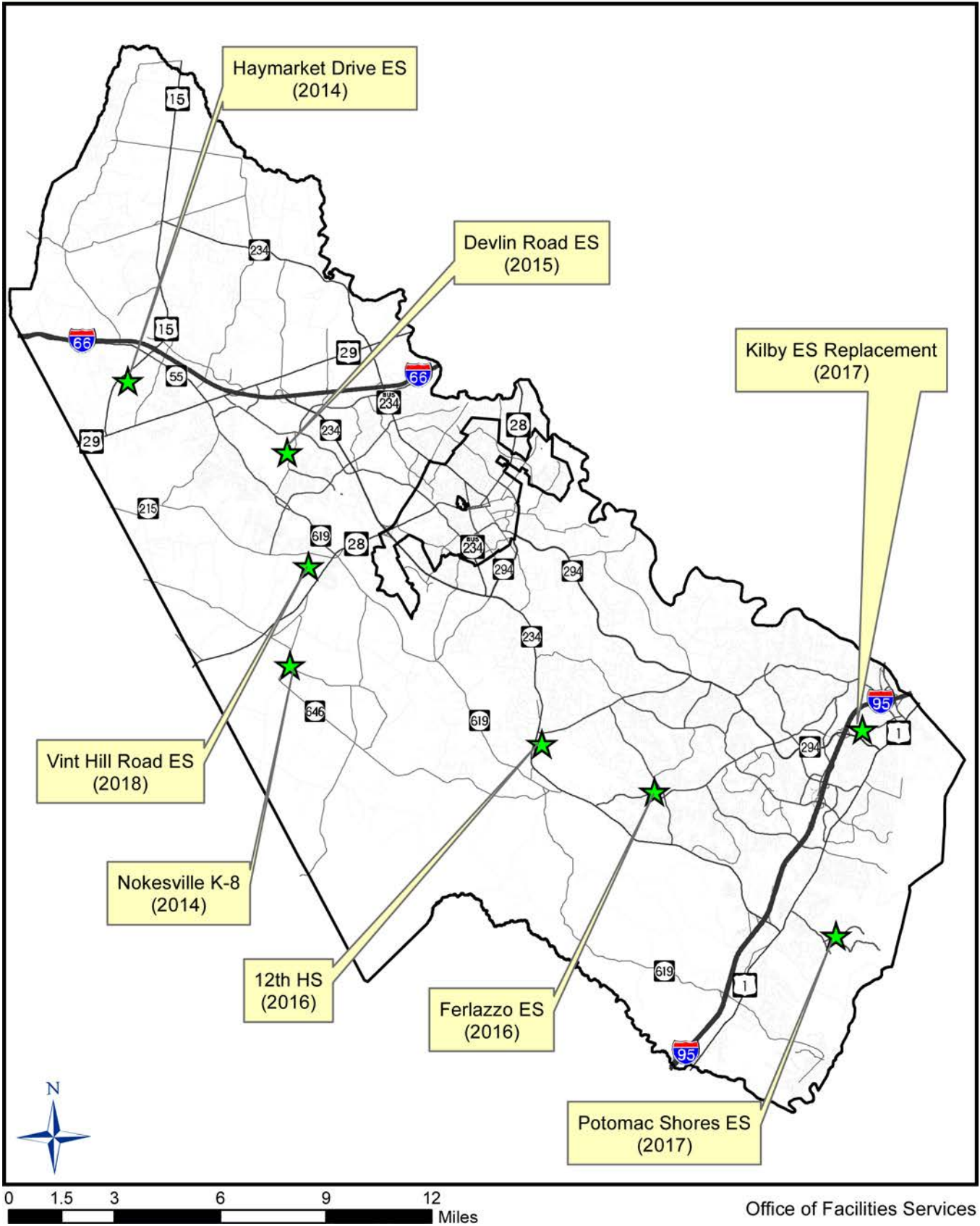
APPENDIX C
IDENTIFIED SCHOOL SITES

- Overall Map of School Sites Identified in the Capital Improvements Program
 - Nokesville K-8 (2014)
 - Haymarket Drive Elementary School (2014)
 - 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)

[School Site Maps](#)

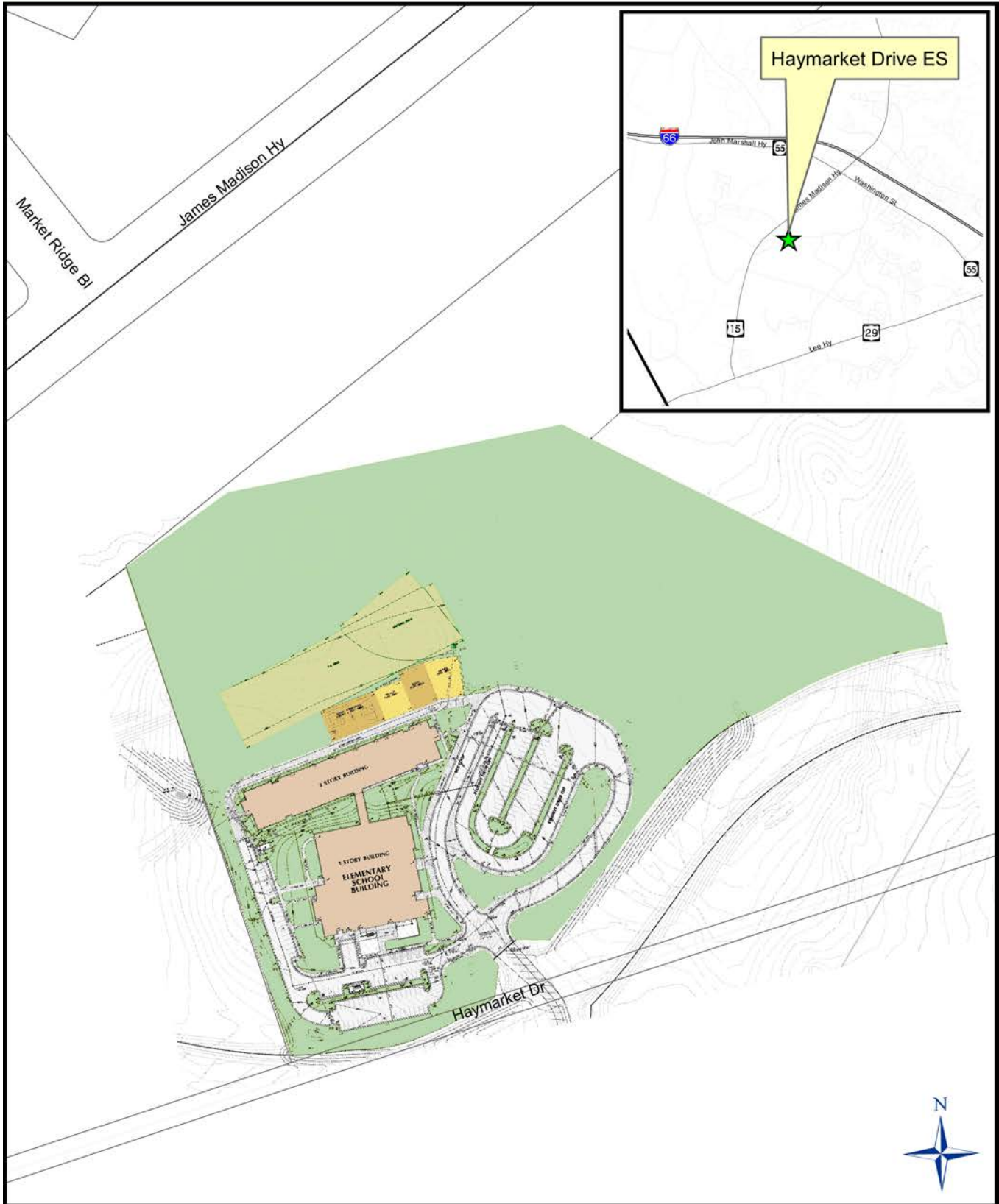
Appendix C details the school sites that have been acquired by the School Division. Some of these sites are programmed to be utilized for new school facilities within this Capital Improvements Program document. Where this is true, the year that the site is to be constructed upon is shown on the map.

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



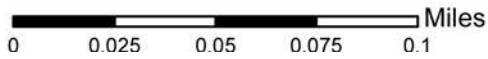
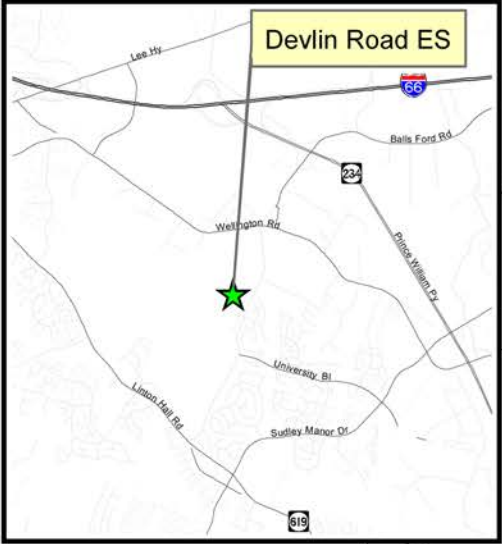
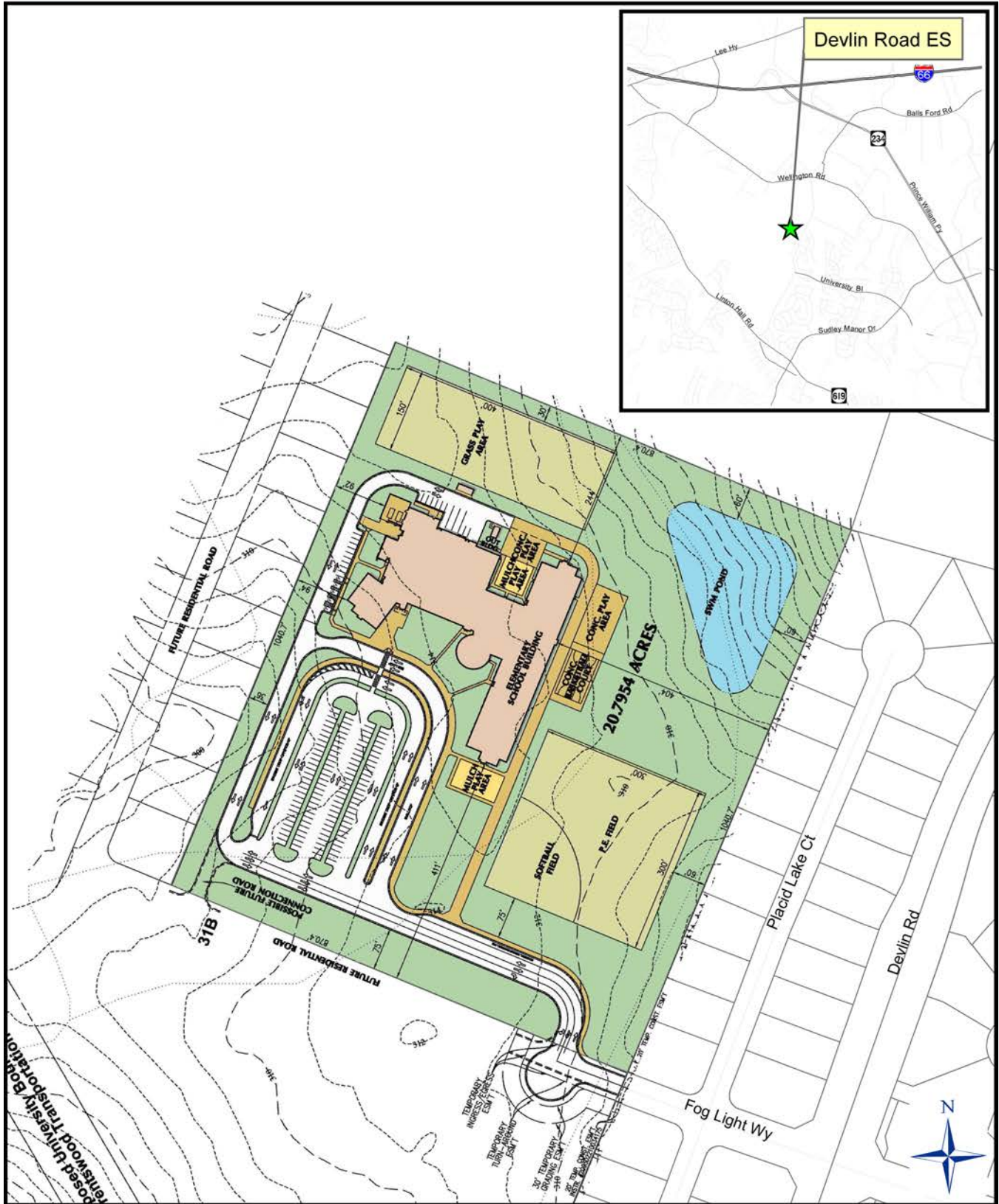


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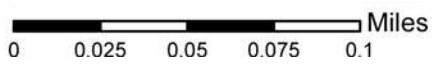


0 0.025 0.05 0.075 0.1 Miles

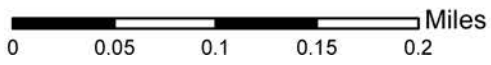
Office of Facilities Services



Office of Facilities Services

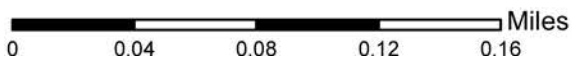
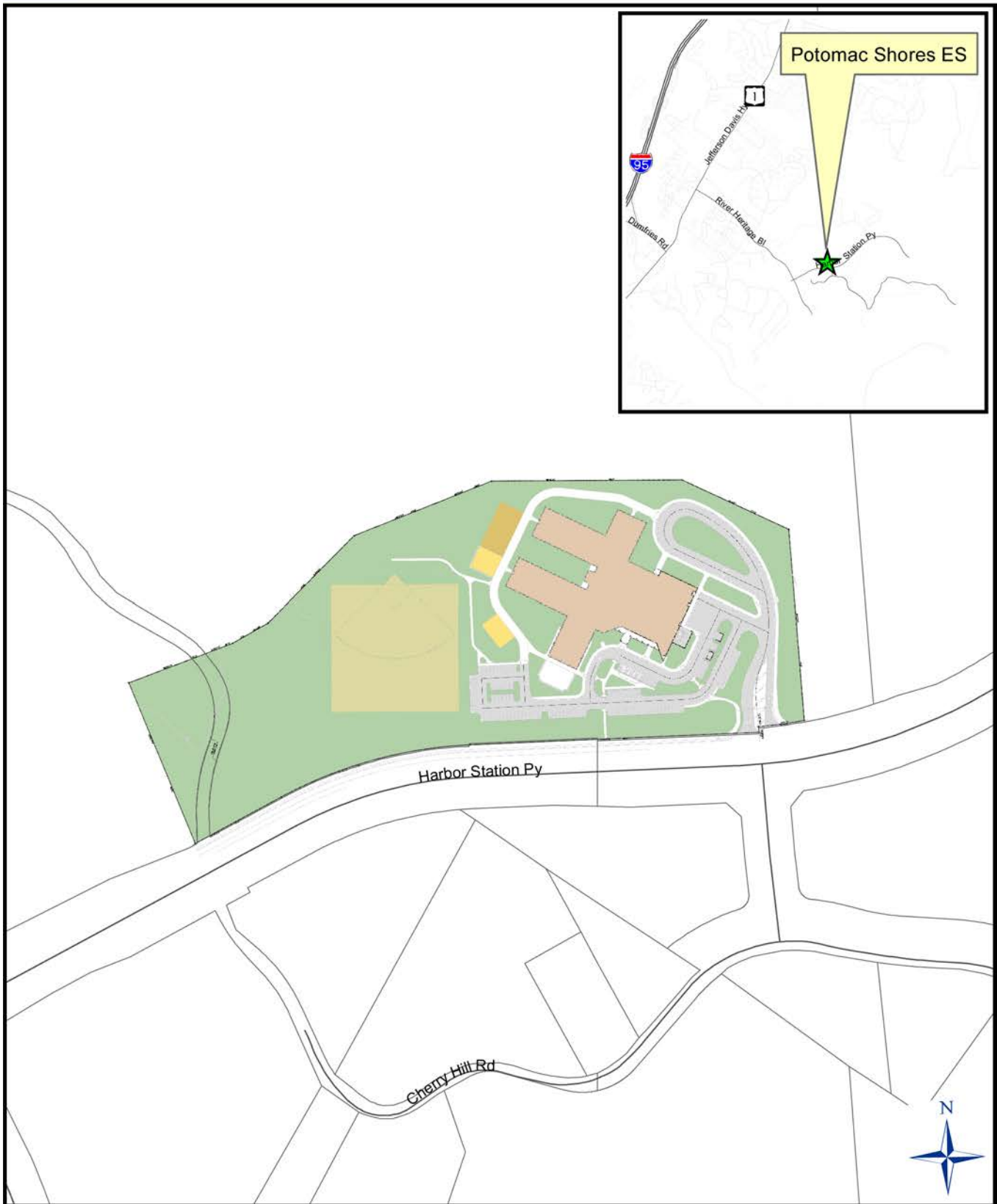


Office of Facilities Services

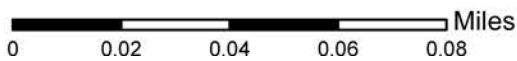
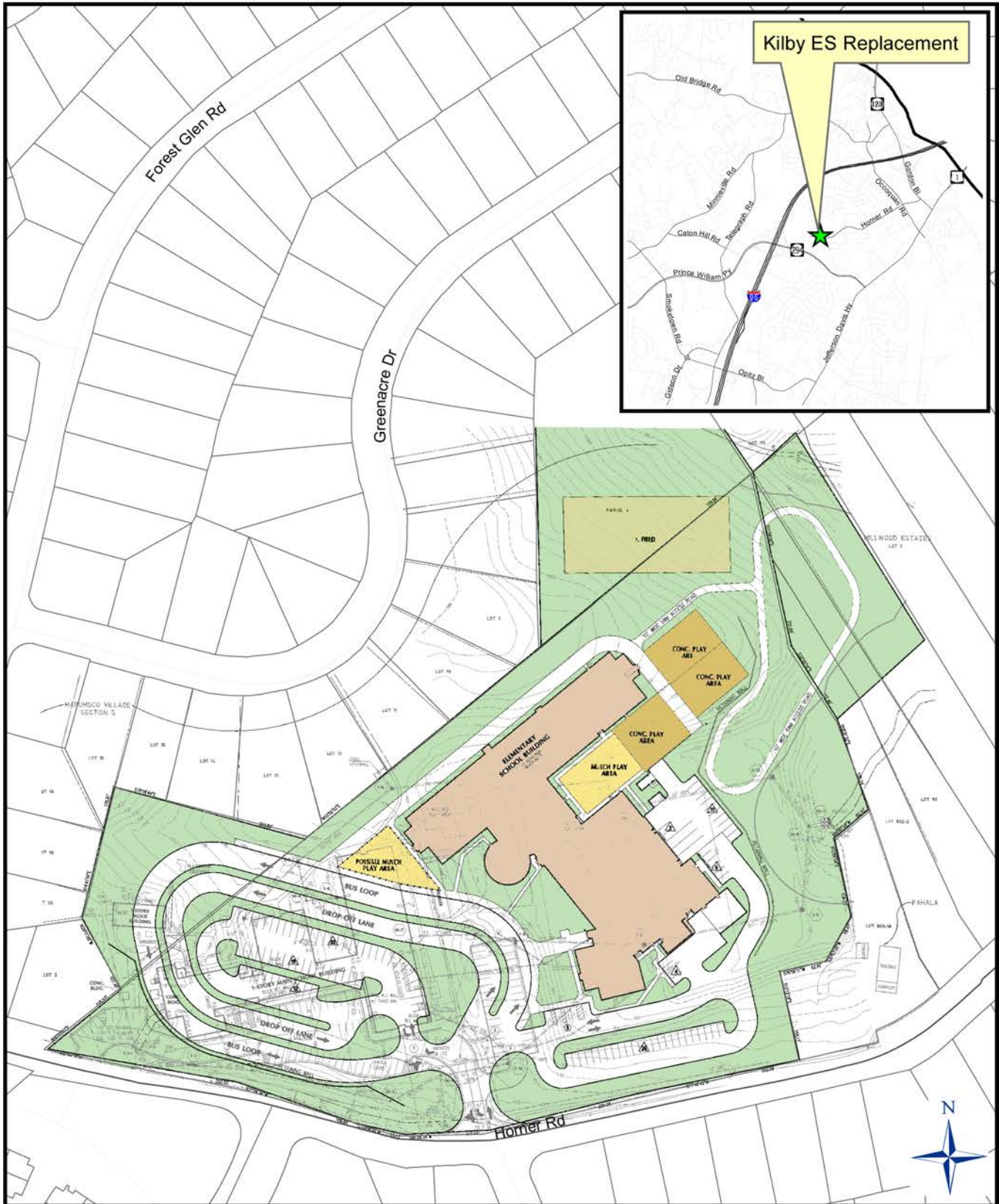


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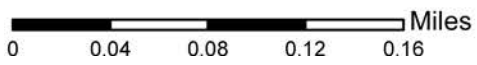
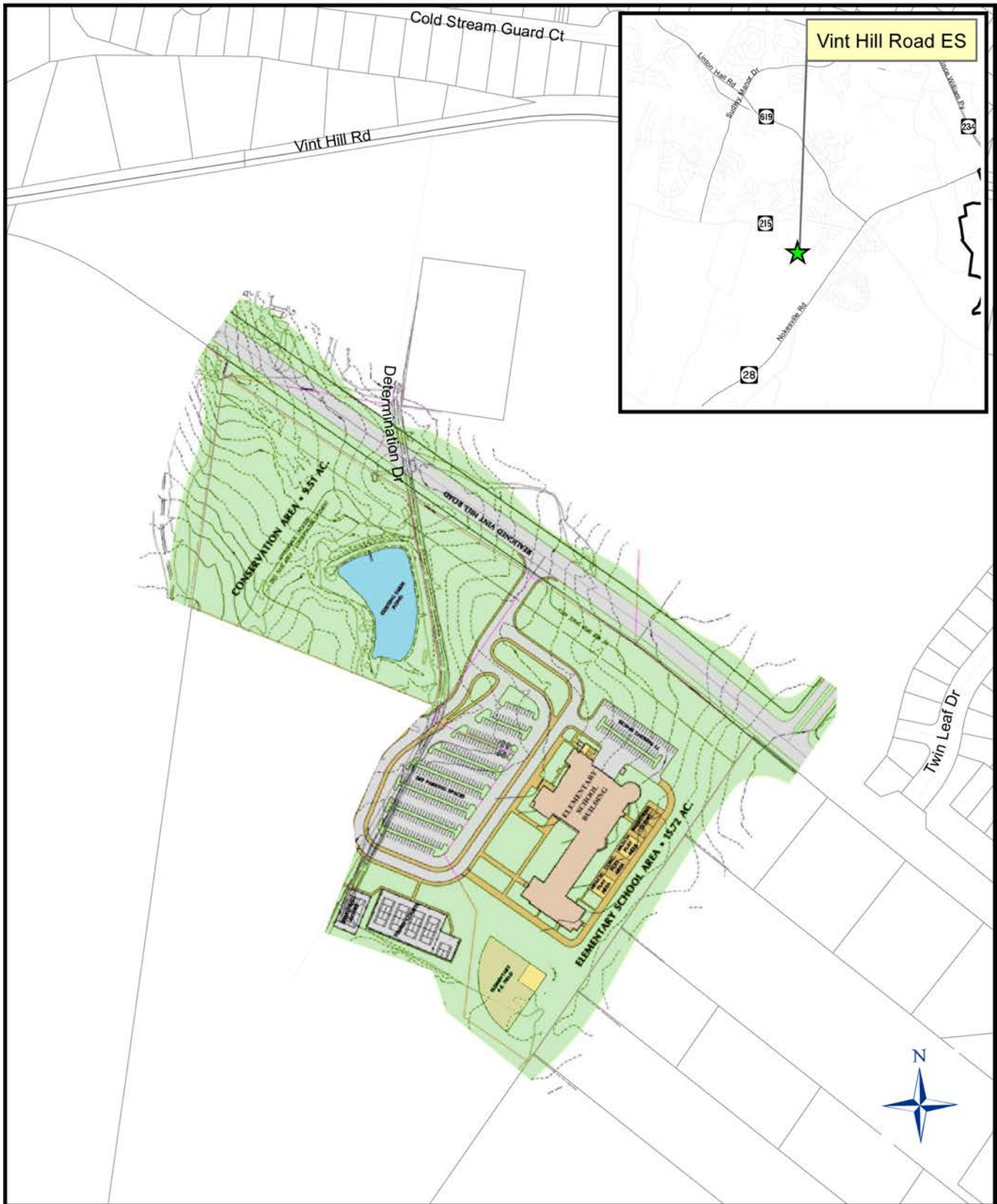




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