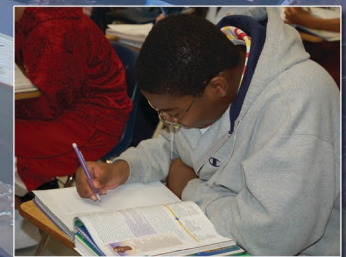
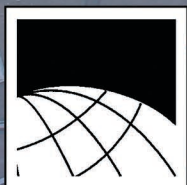


Approved Capital Improvements Program



Fiscal Years 2012-21



Prince William County
PUBLIC SCHOOLS
Providing A World-Class Education



CAPITAL IMPROVEMENTS PROGRAM

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The Prince William County Public School Division does not discriminate in employment or in its educational programs and activities against qualified individuals on the basis of race, color, national origin, religion, sex, pregnancy, age, veteran status, or disability.

PRINCE WILLIAM COUNTY PUBLIC SCHOOLS

***CAPITAL IMPROVEMENTS PROGRAM
FISCAL YEARS 2012-2021***

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CAPITAL IMPROVEMENTS PROGRAM OVERVIEW

Fiscal Years 2012-2021

The Capital Improvements Program (CIP) is a management tool for planning the capital improvements projects needed to house students adequately. It is an ongoing plan designed to address the need for construction of new school facilities, 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. Short- and long-range student enrollment projections are produced and updated annually. Based on the 2010-11 enrollment projections, the CIP provides general guidance for the next ten years. This ten-year plan helps to better focus staff efforts.

To address future facility needs, the CIP process evaluates requirements for new facilities and renewals of existing facilities and infrastructure. It is a "cumulative" process that builds upon the prior year's plan and is updated annually based on enrollment projections and fiscal limitations (debt service and budget constraints). The plan identifies short- and long-range building projects and establishes priorities. The projects designated for the first two years of the plan are the highest priority needs.

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 Triangle Elementary Replacement School and the school was occupied in January 2010. Construction of Patriot High School, Wood Elementary School, and Piney Branch Elementary School continues with completion scheduled for September 2011. A major renovation to Pennington Traditional School was started in 2010 with completion scheduled over a two-year period.

In the past five years a total of eight schools have been constructed or scheduled for 2011 completion; six elementary schools, one middle school, and one high school. The Kelly Leadership Center was also constructed in the past five years.

In this same five-year time frame, additions were completed at Tyler Elementary School (4 classrooms); Ashland Elementary School (5 classrooms); Bel Air Elementary School (8 classrooms); Montclair Elementary School (4 classrooms); Marumsc Hills Elementary School (4 classrooms); Potomac View Elementary School (4 classrooms); Rockledge Elementary School (7 classrooms); and Vaughan Elementary School (9 classrooms).

These new schools and additions have provided 8,794 new student spaces at a cost of \$307,336,000.

Renewal / Maintenance

Forty-six of the Division's 87 school facilities are over 25 years old. The goal of the school renewal program is to renovate buildings prior to 25 years. 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. The renewals of the last few years 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, and upgrades for HVAC equipment and controls.

School renewals may include plumbing, HVAC systems, lighting and electrical systems, fire alarm and security systems, American Disability Act (ADA) compliance, bleachers, lockers, telephone and intercom systems, roof replacement, kitchen upgrades, painting, casework, doors, hardware, data, flooring, site improvements, and Title IX 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.

Planning

Planning for capital improvements is an ongoing process. Priorities shift as conditions change at individual facilities, programs change, and the student population totals change. The official student membership count for Prince William County Public Schools is 79,115 students. From 2009 to 2010, total enrollment grew by 2,460 students, or 3.2 percent. This is compared to growth from 2008 to 2009 of 2,999 students, or 4.1 percent.

2011-2012 enrollment is projected to be 81,070 students, an increase of 1,955 students overall. Prioritizing the work, with the available funding to address the most critical needs, is an ever-present challenge. Examining student enrollment growth within school attendance areas, "Geographic Areas," and school program capacities determines the need for additional space for students. Possible solutions to overcrowding conditions include portable classrooms, relocation of special programs, changes in attendance areas, additions, and the construction of new facilities.

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. Reagan Middle School is under construction, with a scheduled opening in September 2012. PACE West Replacement is under construction on the Tyler Elementary School site. Additions at Westridge Elementary School (6 classrooms), Swans Creek Elementary School (6 classrooms), and Potomac High School (30 classrooms) are also under construction.

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.

The School Board amended the FY 2011-2020 CIP to substitute construction of a K-8 School at Nokesville in lieu of renovating and constructing a 10-classroom addition at Nokesville Elementary School. This replacement school will be built on the Brentsville District High School site and serve approximately 948 students in kindergarten through eighth grade.

The School Division is committed to re-evaluate the current facilities now housing the students at Independent Hill School and PACE East, and will recommend facilities improvements within the next (FY 2013) CIP cycle.

Funding

This CIP is prepared by the Superintendent 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.

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.

Funding for long-range plans was adjusted for Prince William County's overall bonding capability to maintain a Triple A bond rating, as directed by the Prince William Board of County Supervisors. Several renovations and additions to existing buildings will be delayed to accommodate the bonding capability.

Proffer funds also provide revenue. Proffers are negotiated at the time of rezoning to help mitigate the capital costs associated with development.

Inventory

The Capital Improvements Program is not an inventory of all the work that must be performed over the next ten years. It is a specific budget for the first year of the program (FY 2012) combined with a more general planning schedule for four additional years (FY 2013-2016) and then an estimate of projects needed for FY 2017-2021.

The CIP is useful for estimating capital improvement expenditures over the next five-year period, identifying short- and long-range (ten-year) building projects, and establishing priorities for the orderly completion of projects. The plan is ongoing for upgrading the School Division's infrastructure.

The School Division's current inventory of 87 schools includes 10 high schools, 15 middle schools, 55 elementary schools, 2 traditional schools, 2 alternative schools, and 3 special education schools.

Highlights

Elements of the Capital Improvements Program include:

- New School Construction
- Classroom Additions to Existing Schools
- Site Acquisition
- Renewals and Major Maintenance Projects
- Financial Information
- Technology Improvements
- Title IX Improvements

The Capital Improvements Program:

- Identifies and addresses the ten-year capital needs of the School Division
- Assesses the status of student housing by “Geographic Areas” to examine space needs
- Provides sufficient classroom space for the projected student enrollment (12 new schools, additions at 21 schools)
- Continues the 20-25 year schedule for the major renewal of all schools
- Continues a Major Maintenance concept at the 7-year and 14-year level

Major changes from the 2011-2020 CIP include:

- Change “Elementary School – Stonewall Area” to additions at 5 Stonewall Area Elementary Schools (Loch Lomond, Mullen, Sinclair, Sudley, West Gate)
- Additions to 15 Elementary Schools, 4 Middle Schools, 1 High School, and 1 Alternative School
- Advance Pattie Elementary Renewal (Partial Funding) to 2012 from 2013
- Indefinitely defer 2014 6-room addition to Neabsco Elementary
- Delay 2015 “Elementary School – Harbor Station” to 2017
- Advance 2017 “Elementary School – West” to 2015
- Add 2020 “Elementary School” – (TBD)

NEW SCHOOLS, ADDITIONS, AND OTHER BOND-FUNDED PROJECTS

Scheduled Completion	Project	Cost
September 2012	PACE West Replacement	\$11,526,000
	Reagan Middle School	\$26,382,000
	Swans Creek Elementary Addition (6 rooms)	\$4,765,000
	Westridge Elementary Addition (6 rooms)	\$4,130,000
	Renewal - Pattie Elementary School (Funding Phase 2)	\$3,806,000
	Bus Parking Lot	\$1,009,000
	Total - 2012	\$51,618,000
September 2013	Loch Lomond Elementary Addition (4 rooms)	\$6,250,000
	Mullen Elementary Addition (6 rooms)	\$6,000,000
	Penn Elementary Addition (7 rooms)	\$5,820,000
	Sinclair Elementary Addition (11 rooms)	\$6,400,000
	Sudley Elementary Addition (10 rooms)	\$6,560,000
	West Gate Elementary Addition (4 rooms)	\$3,440,000
	Benton Middle Addition (11 rooms)	\$7,247,000
	Potomac Middle Addition (11 rooms)	\$7,768,000
	Potomac High Addition (30 rooms)	\$15,310,000
	Total - 2013	\$64,795,000
September 2014	Elementary School (West - Haymarket/UVA)	\$27,663,000
	Elementary School (West - Devlin Rd. Area)	\$25,962,000
	Nokesville K-8 School	\$25,000,000
	Henderson Elementary Addition (8 rooms)	\$6,643,000
	River Oaks Elementary Addition (7 rooms)	\$5,550,000
	Parkside Middle Addition (15 rooms)	\$9,835,000
	New Dominion Addition (10 rooms) ¹	\$4,364,000
	Renewal-Dumfries Elementary School (Partial)	\$3,825,000
	Total - 2014	\$108,842,000
September 2015	Elementary School (West - Linton Hall Area)	\$30,198,000
	Featherstone Elementary Addition (6 rooms)	\$6,056,000
	Total - 2015	\$36,254,000

NEW SCHOOLS, ADDITIONS, AND OTHER BOND-FUNDED PROJECTS

Scheduled Completion	Project	Cost
September 2016	12th High School (East)	\$106,232,000
	Rippon Middle Addition (8 rooms)	\$6,620,000
	Maintenance Facility	\$11,125,000
	Bus Center (West I-66) ²	\$4,467,000
	Total - 2016	\$128,444,000
September 2017	Elementary School (East - Harbor Station #1)	\$28,560,000
	Belmont Elementary Addition (4 rooms)	\$4,530,000
	Kilby Elementary Addition (13 rooms)	\$11,280,000
	McAuliffe Elementary Addition (10 rooms)	\$7,313,000
	Elementary School Addition Haymarket Area (6 rooms)	\$5,270,000
	Total - 2017	\$56,953,000
September 2018	Elementary School (East - Neabsco Mills Area) ²	\$29,990,000
	Middle School (West - Linton Hall Area)	\$40,986,000
	Total - 2018	\$70,976,000
September 2019	13th High School (TBD) ³	\$121,675,000
	Total - 2019	\$121,675,000
September 2020	Elementary School (TBD) ²	\$33,072,000
	Total - 2020	\$33,072,000
TOTAL (FY 2012-2021)		\$672,629,000

¹ Construction of the classroom addition to replace the existing aged moduls is contingent upon the sale of that site's excess property to generate the necessary funding (Base est/bid-2010 \$3,700,000)

² Site needed by proffer or purchase (Current CIP does not include acquisition funds)

³ Site needed by proffer or purchase (Current CIP does not include acquisition funds); funding needs to be addressed by 2014

STUDENT HOUSING FACILITIES

Prince William County Schools is the second largest of 134 School Divisions in the Commonwealth of Virginia and one of the 50th largest School Divisions in the country. The School Division provides services to over six percent of the state student enrollment. 2010-11 enrollment is 79,115 students with permanent capacity for 75,329 students. This capacity is supplemented with 223 instructional portable classrooms. Additional permanent capacity is to increase by 17,981 seats over the next ten years with completion of new construction identified within this CIP.

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 2.25 percent. This will result in almost 9,325 additional students during this period.

SITE ACQUISITION

School staff reviews county residential development plans and maintains a database containing number of 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 previous rapid 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. In the past 12 months the School Board acquired through developer proffers two elementary school sites (Ferlazzo / Avendale) and a middle school site (Avendale) for future use. Even with these acquisitions, there are still five school sites needed by 2020.

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 as individual units are permitted/built within the development, and are not received in one lump sum.

Site Acquisition Status

Year To Open	Year Acquired / To Acquire	New School	Property Status	Existing Funds	Funds Required
2012	2006	Reagan Middle School	Proffered	N/A	N/A
2012	N/A	PACE West Replacement	PWCS Owned	N/A	N/A
2014	N/A	Nokesville K-8	PWCS Owned	N/A	N/A
2014	2008	ES @ Haymarket	Proffered		
	2011-12		Right-of-Way/Easements Needed	\$1,200,000	N/A
2014	2011	ES West	Site Needed-Devlin Rd. Area	\$3,600,000	N/A
2015	2011-12	ES West	Site Needed - Linton Hall Area	N/A	\$3,600,000*
2016	2006-09	12th High School	PWCS Owned - 102 acres	N/A	N/A
2016	2014-15	Bus Center (West I-66)	Site Needed-10 acres with sewer/15 acres w/o sewer	N/A	\$2,000,000 - \$3,000,000*
2017	2002	ES @ Harbor Station #1	Proffered	N/A	N/A
2018	2012-13	ES East	Site Needed-Neabsco Mills Area	N/A	\$5,000,000*
2018	2012-13	MS West	Site Needed - Linton Hall Area	N/A	\$10,000,000*
2019	2013-14	13th High School (TBD)	Site Needed	N/A	\$17,600,000*
2020	2014-15	ES TBD	Site Needed	N/A	\$4,500,000*
TBD	2002	ES @ Harbor Station #2	Proffered	N/A	N/A
TBD	2010	Ferlazzo ES	Proffered	N/A	N/A
TBD	2010	Avendale ES	Proffered	N/A	N/A
TBD	2010	Avendale MS	Proffered	N/A	N/A

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

RENOVATIONS / 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.

The goal of the School Renewal Program is to renovate schools prior to 25 years of age or 25 years since last renewal. School building conditions are assessed annually and critical needs are addressed.

The FY 2012 budget includes funds for Phase 2 renewal at Pennington School, Phase 1 funding for renewal at Pattie Elementary School, and Title IX improvements. Recognizing the current financial situation, many renovation projects are 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	

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 \$1,731,817,000. 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 2012 for repairs and renovations is \$51,955,000 (3% value), with the estimated budget in FY 2012 at \$32,452,000 (1.9% value).

Prince William County Schools has completed major renewals of 17 schools at a cost of \$66,027,000 over the past five years.

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:

Major Maintenance – 7-Year Cycle

Carpeting (Partial)
Paint Hallways, Offices, Exterior Doors, Kitchens (Partial)
Seal Coat Paved Areas and Repaint
Minor HVAC Repairs
Repair Concrete Sidewalks and Curbs
Clean and Repair Storm Drains
Repair Fencing
Electrical System Preventive Maintenance
Trim Trees / Landscaping
Relamp Interior and Exterior Light Fixtures
Stormwater Management Maintenance

Major Maintenance – 14-Year Cycle

Paint Exterior and Interior (Partial)
Re-key Interior and Exterior Doors
Repave / Seal Coat Parking Lot, Paved Areas and Tennis Courts
Repair / Replace Fencing and Backstops
Carpeting (Partial)
Update Food Service Equipment (Partial)
Major Roof Repairs
Update Plumbing Fixtures
Update Electrical Service
Update HVAC Controls
Minor Chiller Rebuilding
Stage Lighting / Curtain
Stormwater Management Maintenance

SCHEDULE OF RENOVATIONS AND RENEWALS

<i>Fiscal Year</i>	<i>Year Opened</i>	<i>Project</i>	<i>Proposed Funding</i>
2012	<i>1978</i>	Nokesville K-8 School (A & E)	\$2,000,000
		Pattie Elementary School - Renewal (Funding Phase 1)	\$4,000,000
	<i>1969</i>	Pennington School - Renewal (Funding Phase 2)	\$1,010,000
	Montclair Elementary School - Roof Replacement	\$500,000	
	Title IX Improvements	\$210,000	
	Technology Improvement Program - Upgrades	\$4,500,000	
	Total - Fiscal Year 2012		\$12,220,000
2013	<i>1981</i>	Nokesville K-8 School	\$4,000,000
		Potomac High School - Renewal/Addition (Partial Funding)	\$11,556,000
	Graham Park Middle School - HVAC Repair	\$150,000	
	Occoquan Elementary School - Roof Replacement (Partial)	\$600,000	
	Sinclair Elementary School - Roof Replacement (Partial)	\$506,000	
	Tyler Elementary School - Roof Replacement (Partial)	\$500,000	
	Brentsville High School - Roof Replacement (Partial)	\$250,000	
	Stonewall High School - Roof Replacement (Partial)	\$600,000	
	Transportation Hooe Road - Roof Replacement	\$300,000	
	Roof Repairs (TBD)	\$738,000	
	Title IX Improvements	\$220,000	
	Technology Improvement Program - Upgrades	\$4,500,000	
Total - Fiscal Year 2013		\$23,920,000	
2014	<i>1953</i>	Dumfries Elementary School - Renewal (Partial Funding)	\$5,000,000
	<i>1967</i>	Independent Hill School - Renewal	\$1,300,000
	Fred Lynn Middle School - HVAC Repair	\$1,000,000	
	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	
	HVAC Equipment and Controls - Upgrades	\$416,000	
	Title IX Improvements	\$230,000	
	Technology Improvement Program - Upgrades	\$4,500,000	
Total - Fiscal Year 2014		\$22,708,000	

SCHEDULE OF RENOVATIONS AND RENEWALS

<i>Fiscal Year</i>	<i>Year Opened</i>	<i>Project</i>	<i>Proposed Funding</i>
	<i>1985</i>	Henderson Elementary School - Renewal (Funding Phase 1)	\$6,365,000
	<i>1981</i>	King Elementary School - Renewal (Funding Phase 1)	\$6,365,000
	<i>1983</i>	Lake Ridge Elementary School - Renewal (Funding Phase 1)	\$6,365,000
	<i>1962</i>	Loch Lomond Elementary School - Renewal (Funding Phase 1)	\$6,365,000
	<i>1985</i>	Springwoods Elementary School - Renewal (Funding Phase 1)	\$6,365,000
2015		Osbourn Park High School - HVAC Repair	\$1,500,000
		Stonewall High School - HVAC Repair	\$1,700,000
		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
		HVAC Equipment and Controls - Upgrades	\$655,000
		Title IX Improvements	\$240,000
		Technology Improvement Program - Upgrades	\$4,500,000
		Total - Fiscal Year 2015	\$49,722,000
	2016		Henderson Elementary School - Renewal (Funding Phase 2)
		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 (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
		HVAC Equipment and Controls - Upgrades	\$864,000
		Roof Replacements/Repairs (TBD)	\$800,000
		Title IX Improvements	\$250,000
	Technology Improvement Program - Upgrades	\$4,500,000	
	Total - Fiscal Year 2016	\$25,419,000	

SCHEDULE OF RENOVATIONS AND RENEWALS

<i>Fiscal Year</i>	<i>Year Opened</i>	<i>Project</i>	<i>Proposed Funding</i>	
	<i>1990</i>	Antietam Elementary School - Renewal (Funding Phase 1)	\$7,360,000	
	<i>1989</i>	McAuliffe Elementary School - Renewal (Funding Phase 1)	\$7,360,000	
	<i>1990</i>	Mullen Elementary School - Renewal (Funding Phase 1)	\$7,360,000	
	<i>1989</i>	Westridge Elementary School - Renewal (Funding Phase 1)	\$7,360,000	
	<i>1989</i>	Lake Ridge Middle School - Renewal (Funding Phase 1)	\$8,000,000	
	<i>1988</i>	Saunders Middle School - Renewal (Funding Phase 1)	\$8,000,000	
2017		Gar-Field High School - Roof Replacement (Partial)	\$1,500,000	
		Hylton High School - Roof Replacement (Funding Phase 1)	\$3,000,000	
		Kitchen - Upgrades	\$530,000	
		HVAC Equipment and Controls - Upgrades	\$500,000	
		Roof Replacements/Repairs (TBD)	\$710,000	
		Title IX Improvements	\$260,000	
		Technology Improvement Program - Upgrades	\$4,500,000	
		Total - Fiscal Year 2017	\$56,440,000	
			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	
2018	<i>1990</i>	River Oaks Elementary School - Renewal (Funding Phase 1)	\$6,353,000	
		Hylton High School - Roof Replacement (Funding Phase 2)	\$2,000,000	
		HVAC Equipment and Controls - Upgrades	\$658,000	
		Roof Replacements/Repairs (TBD)	\$1,000,000	
		Title IX Improvements	\$270,000	
		Technology Improvement Program - Upgrades	\$4,500,000	
		Total - Fiscal Year 2018	\$28,499,000	

SCHEDULE OF RENOVATIONS AND RENEWALS

<i>Fiscal Year</i>	<i>Year Opened</i>	<i>Project</i>	<i>Proposed Funding</i>
2019		River Oaks Elementary School - Renewal (Funding Phase 2)	\$3,609,000
	<i>1996</i>	Bennett Elementary School - Renewal (Funding Phase 1)	\$7,000,000
	<i>1996</i>	Leesylvania Elementary School - Renewal (Funding Phase 1)	\$7,000,000
	<i>1994</i>	Marshall Elementary School - Renewal (Funding Phase 1)	\$7,000,000
	<i>1991</i>	Montclair Elementary School - Renewal (Funding Phase 1)	\$7,000,000
	<i>1995</i>	Mountain View Elementary School - Renewal (Funding Phase 1)	\$7,000,000
	<i>1995</i>	Old Bridge Elementary School - Renewal (Funding Phase 1)	\$7,000,000
	<i>1998</i>	Penn Elementary School - Renewal (Funding Phase 1)	\$7,000,000
		Benton Middle School - Roof Replacement (Funding Phase 1)	\$2,200,000
		Forest Park High School - Roof Replacement (Funding Phase 1)	\$2,200,000
		Kitchen - Upgrades	\$600,000
		HVAC Equipment and Controls - Upgrades	\$758,000
		Roof Replacements/Repairs (TBD)	\$962,000
		Title IX Improvements	\$280,000
		Technology Improvement Program - Upgrades	\$4,500,000
		Total - Fiscal Year 2019	\$64,109,000
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
		HVAC Equipment and Controls - Upgrades	\$854,000
		Roof Replacements/Repairs (TBD)	\$172,000
		Title IX Improvements	\$290,000
	Technology Improvement Program - Upgrades	\$4,500,000	
	Total - Fiscal Year 2020	\$32,036,000	

SCHEDULE OF RENOVATIONS AND RENEWALS

<i>Fiscal Year</i>	<i>Year Opened</i>	<i>Project</i>	<i>Proposed Funding</i>
	<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>2021</i>	<i>1991</i>	Hylton High School - Renewal (Funding Phase 1)	\$13,000,000
		Kitchen - Upgrades	\$1,000,000
		HVAC Equipment and Controls - Upgrades	\$1,055,000
		Roof Replacements/Repairs (TBD)	\$4,500,000
		Title IX Improvements	\$300,000
		Technology Improvement Program - Upgrades	\$4,500,000
		Total - Fiscal Year 2021	\$72,855,000
TOTAL (Fiscal Years 2012-2021)			\$387,928,000

TECHNOLOGY IMPROVEMENTS PROGRAM

	Fiscal Year 2012	Fiscal Year 2013	Fiscal Year 2014	Fiscal Year 2015	Fiscal Year 2016
VoIP* telephones HS	440,000	462,000	485,100	509,355	434,823
VoIP telephones MS	335,000	351,750	369,338	387,804	407,195
VoIP telephones ES	560,000	588,000	617,400	548,270	680,684
Interactive whiteboard HS	977,500	796,375	727,694	831,578	680,000
Interactive whiteboard MS	862,500	675,625	671,636	798,452	409,270
Interactive whiteboard ES	1,127,000	953,350	1,242,518	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			
Radios MS		99,000	99,000		
Radios ES			112,000	112,000	112,000
Student response system HS					334,058
Student response system MS				182,417	386,978
Student response system ES		248,053			511,511
Cellular phones / Blackberries HS	7,200	7,560	7,938	8,335	8,752
Cellular phones / Blackberries MS	12,960	13,608	14,288	15,003	15,753
Cellular phones / Blackberries 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			
TOTALS	\$4,500,000	\$4,500,000	\$4,500,000	\$4,500,000	\$4,500,000

* VoIP (Voice over Internet Protocol) Phone System for Schools

SUMMARY

•	Projected Growth in Students, Fiscal Years 2012 - 2021.....	18,673
•	Additional School Facilities.....	12
	New Elementary Schools.....	6
	New Middle Schools.....	2
	New High Schools.....	2
	New K-8 School (<i>Nokesville</i>).....	1
	Replacement School (<i>PACE West</i>).....	1
•	Total Additional Classrooms (21 Schools).....	193
	Elementary School Classroom Additions (15 Schools).....	108
	Middle School Classroom Additions (4 Schools).....	45
	High School Classroom Additions (1 School).....	30
	New Dominion Classroom Addition.....	10
•	Construction of New Facilities.....	\$ 531,083,000
•	Additions.....	\$ 141,151,000
•	Renewals.....	\$ 389,559,000
	TOTAL NEW CONSTRUCTION / RENEWALS.....	\$1,061,793,000

Capital Projects Funded Fiscal Year 2012

- Pennington School Renewal (Funding Phase 2)
- Reagan Middle School
- Title IX Improvements
- Pattie Elementary School Renewal (Funding Phase 1)
- Nokesville K-8 Architectural and Engineering
- Montclair Elementary Roof Replacement

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:	8
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.

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.

Handicap Access

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

Ashland Elementary School

School & Site Information

Construction (Year):	2002	Regular Classrooms:	44
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 2019)

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 2013.**

Beville Middle School (Scheduled for Renewal in FY 2018)

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.

Handicap Access

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

Brentsville District High School

School & Site Information

Construction (Year):	1965	Regular Classrooms:	53
Renovation (Year):	1998-00	Square Feet:	163,066
Program Capacity:	1,110	Site Size (Acres):	77.22

Handicap Access

- In some areas, hardware, such as door handles, does not meet ADA standards and should be replaced.

Maintenance & Repair

- Roof replacement (partial).

Bristow Run Elementary School (Scheduled for Renewal in FY 2019)

School & Site Information

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

Buckland Mills Elementary School

School & Site Information

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

Bull Run Middle School

School & Site Information

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

Cedar Point Elementary School

School & Site Information

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

Central Transportation Center

Site Information

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

Coles Elementary School

School & Site Information

Construction (Year):	1969	Regular Classrooms:	24
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:	42
Renovation (Year):		Square Feet:	106,170
Program Capacity:	852	Site Size (Acres):	11.18

Forest Park High School (Scheduled for Renewal in FY 2019)

School & Site Information

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

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:	1233	Site Size (Acres):	39.42

Gar-Field High School (Auditorium Scheduled for Renewal in FY 2013)

School & Site Information

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

Maintenance & Repair

- Replace operable auditorium partitions.
- Some fencing needs replacement.
- Areas of the building not renewed in 2005 (primarily auditorium, gymnasium 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

Maintenance & Repair

- Outside playing areas need renovation.

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:	39
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).

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.
- **An 8-classroom addition is scheduled for 2014**

Hooe Road Transportation Center (Main Transportation Center)

Site Information

Construction (Year):	1979	Regular Classrooms:	N/A
Parts Storage Building	2010		
Renovation (Year):		Square Feet:	28,028
Program Capacity:	N/A	Site Size (Acres):	20

Maintenance and Repair

- Wash bay for vehicles.
- 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 2018)

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 (Scheduled for Renewal in FY 2014)

Site Information

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

Maintenance and Repairs

- Complete renovation including elevator, fire alarm system, and HVAC.

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

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

- School needs a security apartment (has a security trailer).
- **A 13-classroom addition 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 replacement.

Handicap Access

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

Additional Space

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

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

School & Site Information

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

Maintenance & Repair

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

Handicap Access

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

Additional Space

- School needs a security apartment.

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

School & Site Information

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

Maintenance & Repair

- HVAC system replacement (partial).
- 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

Loch Lomond Elementary School (Scheduled for Renewal in FY 2015)

School & Site Information

Construction (Year):	1962	Regular Classrooms:	23
Renovation (Year):	1992	Square Feet:	34,822
Program Capacity:	414	Site Size (Acres):	10.70

Maintenance & Repair

- Electrical rooms need ventilation.
- Loading dock room structure/supports need replacement.
- 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.
- 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 4-classroom addition is scheduled for 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

- Playing fields and areas need repair/replacement.
- HVAC system 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

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:	31
Renovation (Year):	2006	Square Feet:	56,661
Addition	2009		
Program Capacity:	650	Site Size (Acres):	12.20

McAuliffe Elementary School (Scheduled for Renewal in FY 2017)

School & Site Information

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

Handicap Access

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

Additional Space

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

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:	34
Renovation (Year):		Square Feet:	70,928
Addition	2008		
Program Capacity:	698	Site Size (Acres):	15.85

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

School & Site Information

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

Maintenance & Repair

- Fire alarm system upgrade.

Mullen Elementary School (Scheduled for Renewal in FY 2017)

School & Site Information

Construction (Year):	1990	Regular Classrooms:	35
Renovation (Year):		Square Feet:	63,118
Program Capacity:	698	Site Size (Acres):	15

Handicap Access

- Fire alarm system must be upgraded to provide both audio and visual notification in all occupied areas.
- **A 6-classroom addition is scheduled for 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.

New Dominion School and Modular Additions

School & Site Information

Construction (Year):	1975	Regular Classrooms:	20
Renovation (Year):	1993	Square Feet:	14,749 plus modulars
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.
- One modular needs replacement.
- **A 10-classroom addition is scheduled for 2014 (contingent upon sale of site's excess property).**

Nokesville Elementary School

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:	30
Renovation (Year):	2002	Square Feet:	55,225
Program Capacity:	520	Site Size (Acres):	10.10

Additional Space

- School needs a security apartment.

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

School & Site Information

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

Maintenance and Repair

- Replace nine cottages.

PACE West (Scheduled for Replacement in FY 2012)

School & Site Information

Construction (Year):	1935	Regular Classrooms:	14
Renovation (Year):		Square Feet:	32,497
Program Capacity:	N/A	Site Size (Acres):	8.83

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 15-classroom addition is scheduled for 2014.**

Pattie Elementary School (Scheduled for Renewal in FY 2013)

School & Site Information

Construction (Year):	1978	Regular Classrooms:	36
Renovation (Year):		Square Feet:	51,260
Program Capacity:	698	Site Size (Acres):	15

(Includes Washington Reid)

Maintenance & Repair

- Additional parking lot lighting is required.
- Windows are old, do not close properly, and are not energy efficient. They should be replaced.
- 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.
- Kitchen renovation.
- Built-in casework in all rooms.

Handicap Access

- Sidewalk ramp is needed to grant access to Waterway Drive.
- 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.

Penn Elementary School (Scheduled for Renewal in FY 2019)

School & Site Information

Construction (Year):	1996	Regular Classrooms:	32
Renovation (Year):		Square Feet:	71,245
Program Capacity:	626	Site Size (Acres):	16.93

Additional Space

- **A 7-classroom addition is scheduled for 2013.**

Pennington School

School & Site Information

Construction (Year):	1968	Regular Classrooms:	31
Renovation (Year):	2011	Square Feet:	56,330
Program Capacity:	648	Site Size (Acres):	15

Additional Space

- School needs a security apartment.

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 (Scheduled for Renewal in FY 2013)

School & Site Information

Construction (Year):	1980	Regular Classrooms:	82
Renovation (Year):		Square Feet:	218,642
Program Capacity:	1,655	Site Size (Acres):	75.09

Maintenance & Repair

- Doors in several rooms need to be reversed to swing in direction of egress for fire safety.
- Additional exits are needed in 6 rooms for fire safety.
- HVAC system replacement (partial).
- Orchestra pit needs rail.
- Drives, walks, and parking areas need to be repaired and resurfaced (partial).
- Resilient floor tile and carpet need replacing. Policy is to replace carpeting with vinyl tile.
- Acoustical ceilings need to be replaced.
- Kitchen renovation.
- Main water service upgrade.
- Built-in casework needed in all classrooms.
- Humidification system is needed in band room.
- Wood flooring is needed in performing arts area.

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.

Additional Space

- **A 30-classroom addition is scheduled for 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 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:	35
Renovation (Year):	2005	Square Feet:	62,000
Program Capacity:	746	Site Size (Acres):	12.38

Additional Space

- School needs a security apartment.

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

Additional Space

- School needs a security apartment.
- **An 8-classroom addition is scheduled for 2016.**

River Oaks Elementary (Scheduled for Renewal in FY 2018)

School & Site Information

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

Maintenance & Repair

- 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.

Additional Space

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

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.

Rockledge Elementary School

School & Site Information

Construction (Year):	1972	Regular Classrooms:	30
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 2019)

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:	29
Renovation (Year):	2009	Square Feet:	55,960
Program Capacity:	568	Site Size (Acres):	15

Maintenance & Repair

- Roof replacement (partial).

Additional Space

- School needs a security apartment.
- **An 11-classroom addition is scheduled for 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.

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).
- Roof replacement (partial).
- Kitchen renovation.
- Areas of the building were 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:	22
Renovation (Year):	2004	Square Feet:	53,028
Program Capacity:	462	Site Size (Acres):	14

Additional Space

- School needs a security apartment (has a security trailer).
- **A 10-classroom addition is scheduled for 2013.**

Swans Creek Elementary School

School & Site Information

Construction (Year):	2001	Regular Classrooms:	32
Renovation (Year):		Square Feet:	76,724
Program Capacity:	626	Site Size (Acres):	18.49

Additional Space

- **A 6-classroom addition is scheduled for 2012.**

Triangle Elementary School

School & Site Information

Construction (Year):	2009	Regular Classrooms:	40
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:	26
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:	32
Renovation (Year):	2005	Square Feet:	61,204
Addition			
Program Capacity:	698	Site Size (Acres):	13.55

Victory Elementary School

School & Site Information

Construction (Year):	2005	Regular Classrooms:	39
Renovation (Year):		Square Feet:	89,911
Program Capacity:	852	Site Size (Acres):	21.23

Washington-Reid Annex (Scheduled for Renewal in FY 2013 with Pattie ES)

School & Site Information

Construction (Year):	1951,60,67	Regular Classrooms:	
Renovation (Year):	1990	Square Feet:	24,953
Program Capacity: (see Pattie E.S.)		Site Size (Acres):	9.21

Maintenance & Repair

- Old steel windows do not close properly, are single-paned, not energy efficient and should be replaced.
- Install a generator to operate emergency lights and equipment, should a power failure occur.
- Resilient floor tile and carpet need replacing. Policy is to replace carpeting with vinyl tile.
- Repair quarter flooring (settling).

Handicap Access

- Drinking fountains are not handicap accessible.
- Two classrooms are accessible by stairs only.
- 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.

West Gate Elementary School

School & Site Information

Construction (Year):	1964	Regular Classrooms:	29
Renovation (Year):	1993 / 2009	Square Feet:	50,327
Program Capacity:	568	Site Size (Acres):	12.11

Maintenance & Repair

- Paved playing areas need repaving (partial).

Additional Space:

- School needs a security apartment (has a security trailer).
- **A 4-classroom addition is scheduled for 2013.**

Westridge Elementary School (Scheduled for Renewal in FY 2017)

School & Site Information

Construction (Year):	1989	Regular Classrooms:	28
Renovation (Year):		Square Feet:	57,349
Program Capacity:	568	Site Size (Acres):	15

Handicap Access

- 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 6-classroom addition is scheduled for 2012.**

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

Woodbine Pre-School Center

School & Site Information

Construction (Year):	1953	Regular Classrooms:	5
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 2013)

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).
- Playing fields/areas need renovation.
- Kitchen renovation.
- Track resurfacing.
- Stadium light poles repaired.
- Fencing needs replacement (partial).
- Roof replacement (partial).
- Replace operable auditorium partitions.
- Areas of the building were not renewed in 2006 (primarily the auditorium and administrative areas).

Woodbridge Middle School

School & Site Information

Construction (Year):	1964	Regular Classrooms:	56
Renovation (Year):	2002-3	Square Feet:	125,311
Program Capacity:	1,066	Site Size (Acres):	37.36

Additional Space

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

Yorkshire Elementary School

School & Site Information

Construction (Year):	2009	Regular Classrooms:	40
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 2010-2020
- Housing Units in Residential Development
 - by School (Elementary, Middle and High)
- Historical and Projected Enrollment Data – *Prince William County Schools*
- Student Membership Projections - Error Rate Analysis
- Geographic Areas – Map and Table

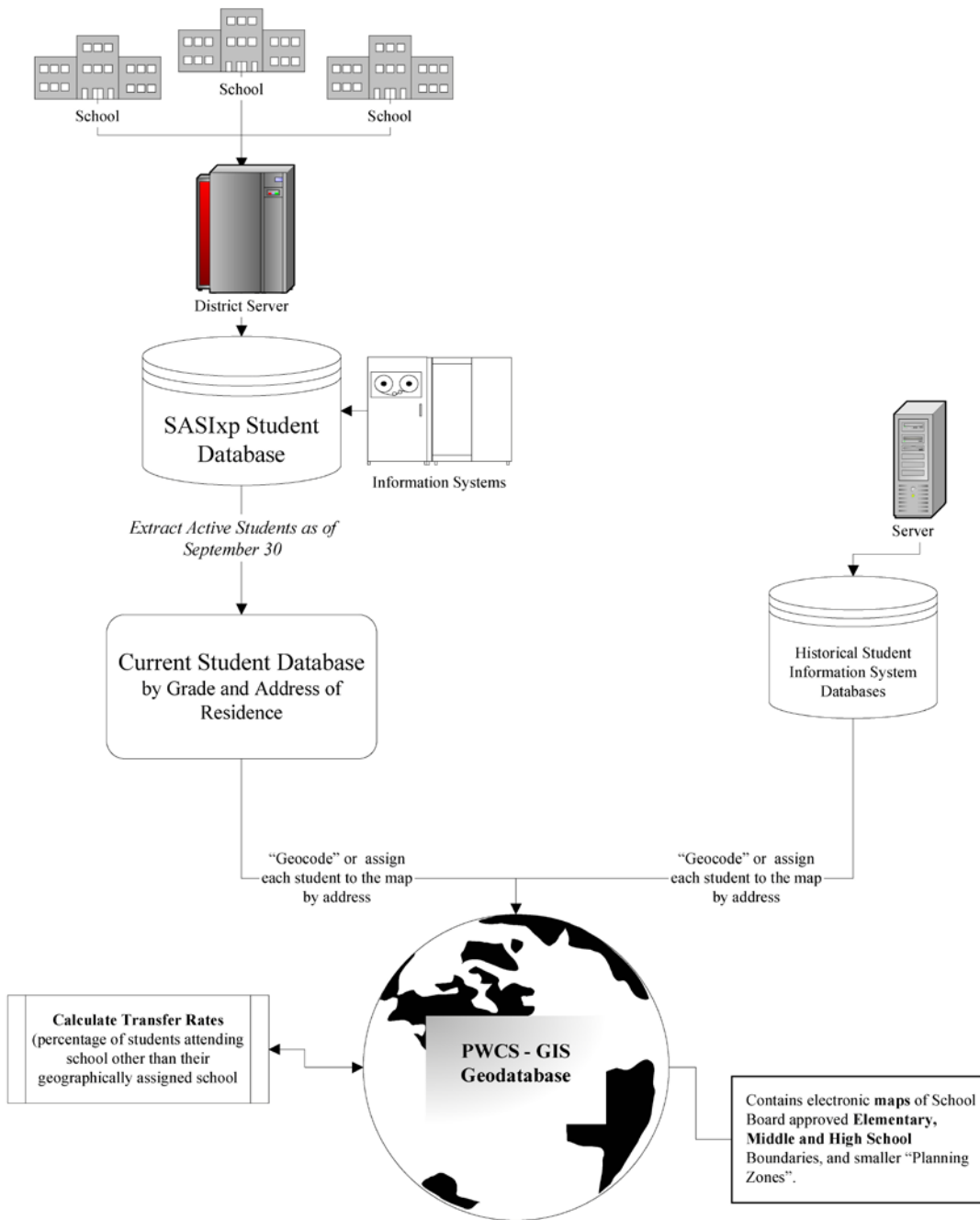
Enrollment Forecast Methodology

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.

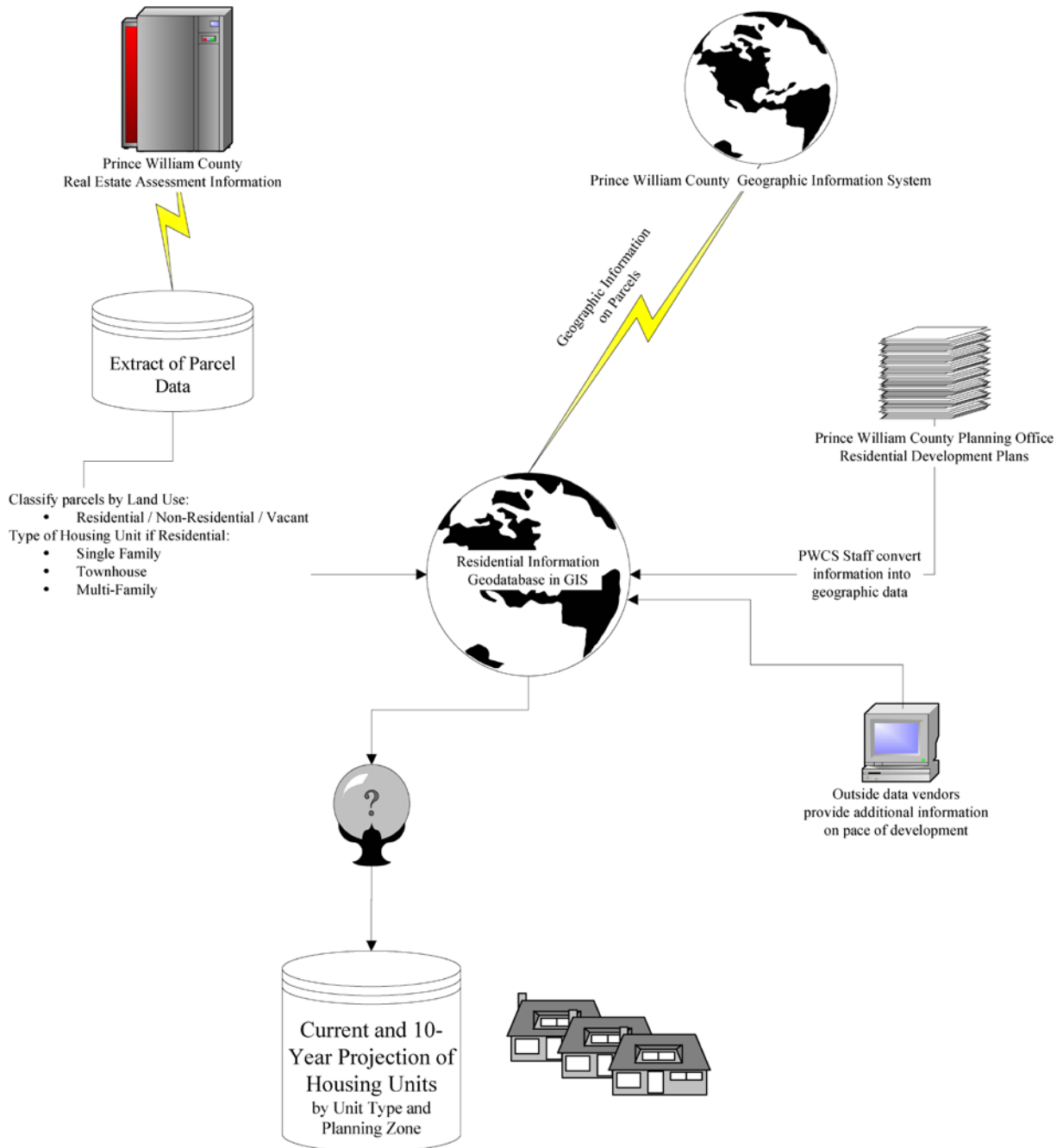
The forecasting methodology used to predict the number of students who will be enrolling in Prince William County Schools for the next 10 years is a combination of cohort progression method and student generation factors method, along with judgmental adjustment to fine-tune the forecasts. This combination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

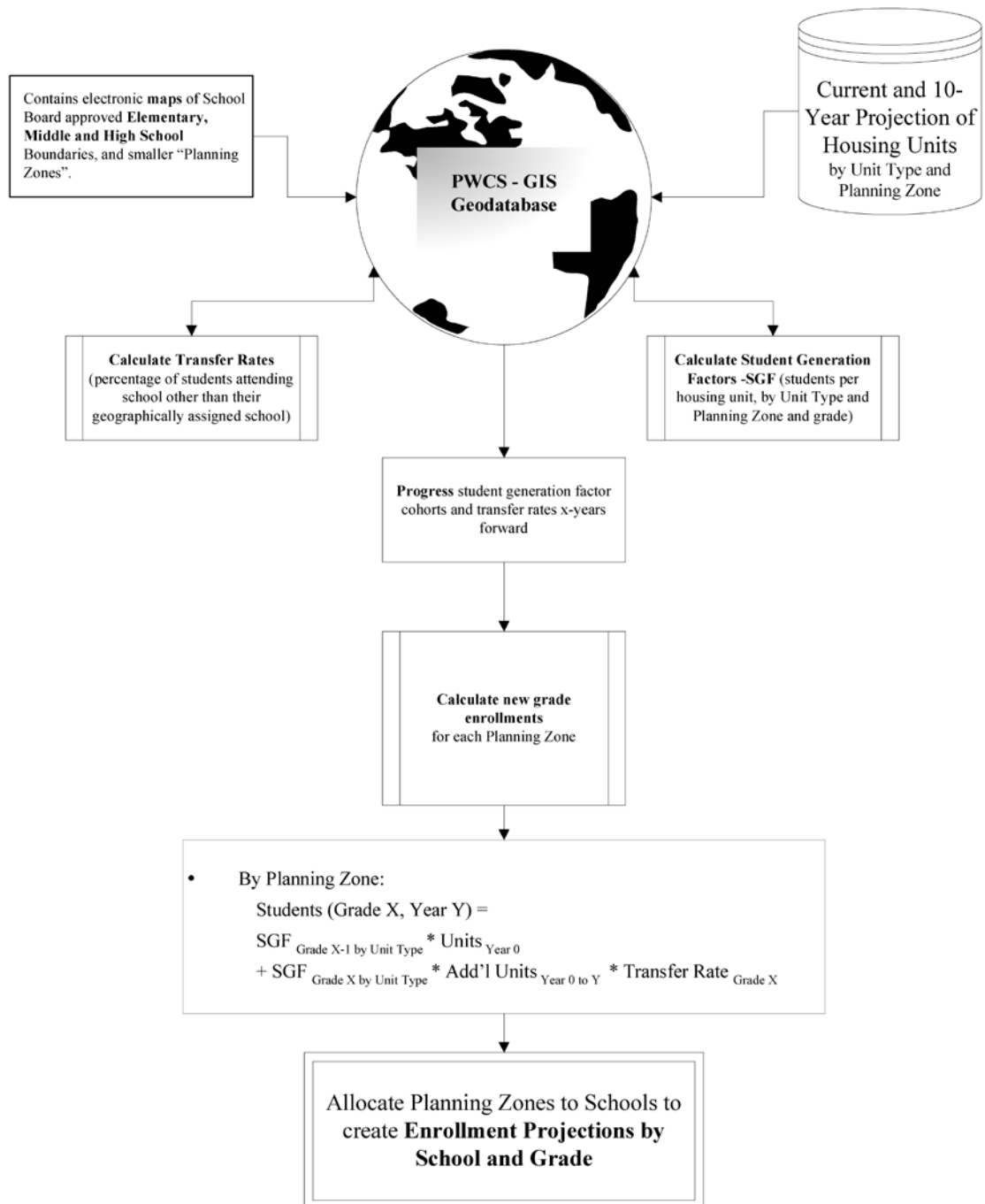
Analysis of Student Information



Analysis of Housing Unit Information



Preparation of Student Enrollment Forecasts



Student Generation Factors

The enrollment forecasts are now 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 attached flow charts. This is an effective method that can, with accurate data, provide highly accurate forecasts of future enrollments.

Generation factors are created by calculating the number of students by housing unit type to the number of housing unit types by small "Planning Zones". The ratio is then applied to the number of predicted available units by year to produce the projections of new students in the Prince William County Schools.

In Prince William County, a year-by-year housing unit forecast is done, with a student generation factor then applied for the whole county 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 2010-2011. 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 trailers
- 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 2010-11 to SY 2020-21

Elementary School	Available Space		2010-11			2011-12			2015-16			2020-21		
	Capacity	Trailers	Students	+/-	%Util	Students	+/-	%Util	Students	+/-	%Util	Students	+/-	%Util
Alvey ES	780	0	774	6	99.2%	802	-22	102.8%	833	-53	106.8%	857	-77	109.9%
Antietam ES	616	1	578	38	93.8%	607	9	98.5%	581	35	94.3%	582	34	94.4%
Ashland ES	900	0	910	-10	101.1%	958	-58	106.4%	1,109	-209	123.2%	1,110	-210	123.3%
Bel Air ES	568	5	541	27	95.2%	556	12	97.9%	528	40	92.9%	528	40	93.0%
Belmont ES	462	2	445	17	96.3%	428	34	92.6%	461	1	99.8%	637	-175	137.8%
Bennett ES	780	0	789	-9	101.2%	774	6	99.2%	821	-41	105.2%	1,047	-267	134.2%
Bristow Run ES	780	10	1,190	-410	152.6%	767	13	98.3%	767	13	98.3%	778	2	99.7%
Buckland Mills ES	852	1	1,005	-153	118.0%	1,034	-182	121.4%	1,148	-296	134.7%	1,346	-494	158.0%
Cedar Point ES	780	9	1,043	-263	133.7%	783	-3	100.4%	794	-14	101.8%	798	-18	102.3%
Coles ES	472	2	480	-8	101.7%	462	10	97.9%	467	5	98.9%	470	2	99.6%
Dale City ES	496	2	441	55	88.9%	438	58	88.3%	443	53	89.3%	444	52	89.4%
Dumfries ES	520	6	483	37	92.9%	500	20	96.2%	531	-11	102.2%	532	-12	102.4%
Ellis ES	626	5	771	-145	123.2%	514	112	82.1%	667	-41	106.6%	865	-239	138.1%
Enterprise ES	520	2	482	38	92.7%	489	31	94.0%	481	39	92.5%	481	39	92.5%
Featherstone ES	462	4	454	8	98.3%	459	3	99.4%	490	-28	106.1%	501	-39	108.4%
Fitzgerald ES	852	0	845	7	99.2%	836	16	98.1%	983	-131	115.3%	1,129	-277	132.6%
Glenkirk ES	780	13	1,234	-454	158.2%	729	51	93.5%	806	-26	103.4%	827	-47	106.0%
Gravenly ES	852	0	747	105	87.7%	777	75	91.2%	887	-35	104.1%	986	-134	115.7%
Henderson ES	592	2	568	24	95.9%	600	-8	101.4%	570	22	96.3%	571	21	96.5%
Kerrydale ES	496	4	461	35	92.9%	463	33	93.3%	463	33	93.3%	463	33	93.4%
Kilby ES	414	1	385	29	93.0%	388	26	93.7%	404	10	97.7%	544	-130	131.5%
King ES	520	2	517	3	99.4%	475	45	91.3%	462	58	88.9%	467	53	89.8%
Lake Ridge ES	544	4	506	38	93.0%	513	31	94.3%	525	19	96.6%	526	18	96.6%
Leesylvania ES	804	0	716	88	89.1%	838	-34	104.2%	884	-80	109.9%	894	-90	111.1%
Linton Hall Road ES	0	0	0	0	0.0%	735	189	79.5%	844	80	91.4%	1,827	-903	197.8%
Loch Lomond ES	414	3	344	70	83.1%	331	83	80.0%	320	94	77.2%	320	94	77.3%
Marshall ES	698	0	647	51	92.7%	632	66	90.5%	655	43	93.8%	664	34	95.1%
Marumsc Hills ES	650	2	683	-33	105.1%	749	-99	115.2%	928	-278	142.8%	1,058	-408	162.7%
McAuliffe ES	568	0	415	153	73.1%	408	160	71.8%	416	152	73.2%	416	152	73.3%
Minnieville ES	544	3	537	7	98.7%	531	13	97.6%	545	-1	100.2%	575	-31	105.7%
Montclair ES	698	0	726	-28	104.0%	749	-51	107.3%	733	-35	105.1%	744	-46	106.6%
Mountain View ES	698	1	773	-75	110.7%	760	-62	108.9%	769	-71	110.2%	797	-99	114.2%
Mullen ES	698	7	899	-201	128.8%	913	-215	130.8%	880	-182	126.1%	881	-183	126.2%
Neabsco ES	626	1	454	172	72.5%	451	175	72.0%	451	175	72.0%	451	175	72.0%
Nokesville ES	342	4	473	-131	138.3%	457	-115	133.6%	472	-130	137.9%	491	-149	143.5%
Occoquan ES	520	6	621	-101	119.4%	628	-108	120.8%	646	-126	124.3%	658	-138	126.6%
Old Bridge ES	626	0	679	-53	108.5%	701	-75	112.0%	689	-63	110.0%	689	-63	110.1%
Parks ES	780	0	732	48	93.8%	768	12	98.5%	744	36	95.4%	776	4	99.5%
Pattie ES	698	1	620	78	88.8%	610	88	87.4%	612	86	87.7%	622	76	89.1%
Penn ES	626	0	638	-12	101.9%	674	-48	107.7%	815	-189	130.2%	843	-217	134.7%
Pennington ES	405	2	395	10	97.5%	405	0	100.0%	405	0	100.0%	405	0	100.0%
Porter ES	420	0	403	17	96.0%	420	0	100.0%	420	0	100.0%	420	0	100.0%
Potomac View ES	746	4	709	37	95.0%	758	-12	101.6%	793	-47	106.3%	794	-48	106.4%
River Oaks ES	616	4	559	57	90.7%	586	30	95.1%	667	-51	108.4%	714	-98	115.8%
Rockledge ES	650	0	496	154	76.3%	491	159	75.5%	510	140	78.4%	510	140	78.5%
Signal Hill ES	780	1	642	138	82.3%	640	140	82.1%	651	129	83.4%	731	49	93.8%
Sinclair ES	568	6	681	-113	119.9%	669	-101	117.8%	661	-93	116.4%	901	-333	158.6%
Springwoods ES	592	5	666	-74	112.5%	704	-112	118.9%	695	-103	117.4%	696	-104	117.5%
Sudley ES	462	1	453	9	98.1%	465	-3	100.6%	458	4	99.1%	458	4	99.2%
Swans Creek ES	626	0	664	-38	106.1%	705	-79	112.6%	1,093	-467	174.5%	1,415	-789	226.0%
Triangle ES	924	0	696	228	75.3%	672	252	72.7%	774	150	83.8%	791	133	85.6%
Tyler ES	568	2	639	-71	112.5%	702	-134	123.6%	717	-149	126.3%	718	-150	126.4%
Vaughan ES	698	0	731	-33	104.7%	741	-43	106.2%	773	-75	110.7%	812	-114	116.4%
Victory ES	852	5	1,068	-216	125.4%	972	-120	114.1%	1,033	-181	121.3%	1,048	-196	123.0%
West Gate ES	568	9	616	-48	108.5%	634	-66	111.6%	711	-143	125.2%	727	-159	128.0%
Westridge ES	568	3	621	-53	109.3%	622	-54	109.5%	610	-42	107.4%	611	-43	107.5%
Williams ES	780	0	807	-27	103.5%	850	-70	109.0%	895	-115	114.7%	942	-162	120.8%
Wood ES	0	0	0	0	0.0%	967	-43	104.7%	1,008	-84	109.1%	1,046	-122	113.2%
Yorkshire ES	948	0	808	140	85.2%	782	166	82.5%	837	111	88.3%	928	20	97.9%
Total	36,425	145	37,261	-836	102.3%	38,072	201	99.5%	40,335	-2,062	105.4%	43,860	-5,587	114.6%

Student Enrollment Data: Current and Projected Enrollment
Elementary Schools – Additional Space to be Constructed
SY 2010-11 to SY 2020-21

Elementary School	Available Space		2010-11			2011-12			2015-16			2020-21		
	Capacity	Trailers	Students	+/-	%Util	Students	+/-	%Util	Students	+/-	%Util	Students	+/-	%Util
2012														
Swans Creek ES (6 room addition)										144			144	
Westridge ES (6 room addition)										144			144	
2013														
Loch Lomond Elementary Addition (4 rooms)										96			96	
Mullen Elementary Addition (6 rooms)										144			144	
Penn Elementary Addition (7 rooms)										168			168	
Sinclair Elementary Addition (11 rooms)										264			264	
Sudley Elementary Addition (10 rooms)										240			240	
West Gate Elementary Addition (4 rooms)										96			96	
2014														
Elementary School (West - Haymarket/UVA)										852			852	
Nokesville K-8										600			600	
Henderson Elementary Addition (8 rooms)										192			192	
River Oaks Elementary Addition (7 rooms)										168			168	
2015														
Elementary School (West - Devlin Rd Area)										852			852	
Elementary School (West)										852			852	
Featherstone Elementary Addition (6 rooms)										144			144	
2017														
Elementary School (East - Harbor Station)													852	
Belmont ES (4 room addition)													96	
Kilby ES (13 room addition)													312	
McAuliffe ES (10 room addition)													240	
Elementary School Addition Haymarket Area (6 rooms)													144	
2018														
Elementary School (East-Neabsco Mills Area)													852	
2020														
Elementary School (TBD)													852	
Sum of Additional Seats										6,660			10,006	
Total	36,425	145	37,261	-836	102.3%	38,072	57	99.9%	40,335	2,750	93.6%	43,860	2,571	94.5%

Student Enrollment Data: Current and Projected Enrollment
Middle Schools
SY 2010-11 to SY 2020-21

Middle School	Available Space		2010-11			2011-12			2015-16			2020-21		
	Capacity	Trailers	Students	+/-	%Util	Students	+/-	%Util	Students	+/-	%Util	Students	+/-	%Util
Benton MS	1,233		1,288	-55	104.5%	1,288	-55	104.5%	1,451	-218	117.7%	1,500	-267	121.6%
Beville MS	1,191	0	1,136	55	95.4%	1,181	10	99.2%	1,264	-73	106.2%	1,315	-124	110.4%
Bull Run MS	1,233	10	1,640	-407	133.0%	1,747	-514	141.7%	1,925	-692	156.1%	2,136	-903	173.3%
Gainesville MS	1,233	0	1,363	-130	110.5%	1,523	-290	123.5%	1,850	-617	150.0%	2,448	-1,215	198.5%
Godwin MS	982	0	947	35	96.4%	993	-11	101.1%	1,063	-81	108.3%	1,107	-125	112.7%
Graham Park MS	867	0	828	39	95.5%	841	26	97.0%	955	-88	110.2%	995	-128	114.8%
Lake Ridge MS	1,191	0	1,239	-48	104.0%	1,152	39	96.7%	1,222	-31	102.6%	1,256	-65	105.5%
Lynn MS	1,170	0	914	256	78.1%	1,009	161	86.2%	1,127	43	96.4%	1,289	-119	110.1%
Marsteller MS	1,233	10	1,521	-288	123.4%	1,601	-368	129.8%	1,755	-522	142.3%	1,935	-702	157.0%
Parkside MS	1,139	0	1,077	62	94.6%	1,212	-73	106.4%	1,352	-213	118.7%	1,528	-389	134.1%
Pennington ES	243	0	236	7	97.1%	243	0	100.0%	243	0	100.0%	243	0	100.0%
Porter ES	252	0	256	-4	101.6%	252	0	100.0%	252	0	100.0%	252	0	100.0%
Potomac MS	1,233	0	1,075	158	87.2%	1,169	64	94.8%	1,532	-299	124.2%	1,759	-526	142.7%
Rippon MS	1,139	0	942	197	82.7%	979	160	86.0%	1,203	-64	105.7%	1,366	-227	120.0%
Saunders MS	1,212	0	1,099	113	90.7%	1,095	117	90.3%	1,263	-51	104.2%	1,318	-106	108.8%
Stonewall MS	1,003	0	1,108	-105	110.5%	1,039	-36	103.5%	1,135	-132	113.2%	1,193	-190	119.0%
Woodbridge MS	1,066	0	1,031	35	96.7%	1,103	-37	103.5%	1,208	-142	113.4%	1,261	-195	118.3%
<i>Reagan Middle (2012)</i>										1,233			1,233	
<i>Benton Middle (11 room addition, 2013)</i>										231			231	
<i>Potomac Middle (11 room addition, 2013)</i>										231			231	
<i>Parkside Middle (15 room addition, 2014)</i>										315			315	
<i>Rippon Middle (8 room addition, 2016)</i>													168	
<i>Middle School (West - Linton Hall Area, 2018)</i>													1,233	
Sum of Additional Seats										2,010			3,411	
Total	17,620	21	17,700	-80	100.5%	18,425	-805	104.6%	20,802	-1,172	106.0%	22,902	-1,871	108.9%

Student Enrollment Data: Current and Projected Enrollment
High Schools
SY 2010-11 to SY 2020-21

High School	Available Space		2010-11			2011-12			2015-16			2020-21		
	Capaci	Trailers	Students	+/-	%Util	Students	+/-	%Util	Students	+/-	%Util	Students	+/-	%Util
Battlefield HS	2,053	15	2,968	-915	144.6%	2,441	-388	118.9%	2,278	-225	111.0%	2,618	-565	127.5%
Brentsville HS	1,110	20	1,668	-558	150.3%	986	124	88.8%	1,084	26	97.7%	1,211	-101	109.1%
Forest Park HS	2,053	0	2,317	-264	112.9%	2,243	-190	109.3%	2,548	-495	124.1%	2,587	-534	126.0%
Freedom HS	2,053	0	1,791	262	87.2%	1,833	220	89.3%	2,107	-54	102.6%	2,786	-733	135.7%
Gar-Field HS	2,734	0	2,518	216	92.1%	2,455	279	89.8%	2,594	140	94.9%	2,880	-146	105.3%
Hylton HS	2,053	0	2,222	-169	108.2%	2,188	-135	106.6%	2,271	-218	110.6%	2,234	-181	108.8%
Osborn Park	2,430	0	2,753	-323	113.3%	2,876	-446	118.4%	3,075	-645	126.5%	3,034	-604	124.9%
Patriot HS	2,053	0	0	2,053	0.0%	1,502	551	73.2%	2,470	-417	120.3%	2,807	-754	136.7%
Potomac HS	1,655	2	1,664	-9	100.5%	1,736	-81	104.9%	2,223	-568	134.3%	2,895	-1,240	174.9%
Stonewall	2,409	0	2,381	28	98.8%	2,355	54	97.8%	2,451	-42	101.8%	3,531	-1,122	146.6%
Woodbridge HS	2,734	0	2,577	157	94.3%	2,634	100	96.3%	2,759	-25	100.9%	2,855	-121	104.4%
<i>Potomac HS (30 room addition, 2014)</i>										630			630	
<i>12th High School (2016)</i>													2,053	
<i>13th High School (2019)</i>													2,053	
Sum of Additional Seats													4,736	
Total	23,337	37	22,857	480	107.4%	23,249	88	99.6%	25,861	-1,894	110.8%	29,438	-1,365	104.9%

Student Enrollment Data: Current and Projected Enrollment
 Special Education and Alternative Schools
 SY 2010-11

Special Education and Alternative School	2010-11	
	Trailers	Students
Independent Hill SE	6	160
PACE West SE	3	95
Pre-School Child Find	0	78
School Based Pre-K	0	297
Woodbine SE	1	74
New Directions Alt	0	437
New Dominion Alt	10	99
TJHS Regional Magnet	0	58
Total	20	1,298
<i>New Dominion (10 room addition, 210 additional seats, 2014)</i>		

**Housing Units in Residential Development
By Elementary School Attendance Area and Stage of Development
September 2010**

	Active				Planned				Rezoning Submitted				Total
	SF	TH	MF	Total	SF	TH	MF	Total	SF	TH	MF	Total	
Alvey	166			166	130			130				-	296
Ashland	106			106	397			397				-	503
Bel Air				-				-				-	-
Belmont				-			720	720			852	852	1,572
Bennett	58	8		66	185	117		302				-	368
Bristow Run	5			5				-				-	5
Buckland Mills	162	111	64	337	261	168	222	651	35	130		165	1,153
Cedar Point				-	18			18				-	18
Coles	66			66	34			34				-	100
Dale City				-	4			4				-	4
Dumfries			220	220	11			11				-	231
Ellis	15	132	960	1,107	158			158				-	1,265
Enterprise				-				-				-	-
Featherstone				-	12		288	300				-	300
Fitzgerald		26	438	464	362	493		855				-	1,319
Glenkirk	409	42		451	158	267		425		1,200	880	2,080	2,956
Gravelly	341			341	282			282			304	304	927
Henderson	8			8	21			21				-	29
Kilby				-			148	148			494	494	642
King	13			13	12			12	12			12	37
Lake Ridge				-				-				-	-
Leesylvania	109	65	144	318	33	152	550	735				-	1,053
Marshall	106			106	5			5				-	111
Marumscos Hills			714	714			680	680			500	500	1,894
McAuliffe		27		27				-				-	27
Minnieville				-		30	289	319				-	319
Montclair	80			80	5			5				-	85
Mountain View	13			13				-				-	13
Mullen				-			20	20				-	20
Neabsco			71	71				-				-	71
Nokesville	144			144	326			326	8			8	478
Occoquan	36			36	59			59				-	95
Old Bridge				-	4			4				-	4
Parks				-	37	76		113	10			10	123
Pattie	6			6		40		40				-	46
Penn	93		195	288	376	51		427	12			12	727
Potomac View				-		25		25				-	25
River Oaks		255	113	368	318			318				-	686
Rockledge				-			72	72				-	72
Signal Hill	66			66	89	110	320	519				-	585
Sinclair				-				-			319	319	319
Springwoods				-	21			21				-	21
Swans Creek			398	398	773	67	1,365	2,205			397	397	3,000
Triangle	60			60	104	291	46	441				-	501
Tyler	52		165	217			162	162				-	379
Vaughan				-	139		333	472				-	472
Victory	75	110		185	95			95	21			21	301
West Gate				-			484	484				-	484
Westridge	18			18				-				-	18
Williams	254			254	210			210			86	86	550
Yorkshire				-	27		877	904			400	400	1,304
Total				6,719	4,666	1,887	6,576	13,129	98	1,330	4,232	5,660	25,508

**Housing Units in Residential Development
By Middle School Attendance Area and Stage of Development
September 2010**

Middle School	Active				Planned				Rezoning Submitted				Total
	SF	TH	MF	Total	SF	TH	MF	Total	SF	TH	MF	Total	
Benton	225		195	420	358	51		409	12			12	841
Beville	83			83	69			69	12			12	164
Bull Run	595	17	189	801	452		210	662			610	610	2,073
Gainesville	585	268	1,000	1,853	512	435	174	1,121	35	1,330	880	2,245	5,219
Godwin			71	71	4	30	289	323				-	394
Graham Park	66		220	286	115	331	46	492				-	778
Lake Ridge				-				-				-	-
Lynn	36			36	59	25	868	952			1,346	1,346	2,334
Marsteller	202	110		312	464		20	484	29			29	825
Parkside	124	8		132	301	227	1,197	1,725			400	400	2,257
Potomac	363	320	511	1,194	1,334	219	1,365	2,918			483	483	4,595
Rippon		26	1,296	1,322	395	493	1,518	2,406			500	500	4,228
Saunders	182	27		209	439	76		515	10			10	734
Stonewall				-			484	484			13	13	497
Woodbridge				-	164		405	569				-	569
Total	2,461	776	3,482	6,719	4,666	1,887	6,576	13,129	98	1,330	4,232	5,660	25,508

**Housing Units in Residential Development
By High School Attendance Area and Stage of Development
September 2010**

High School	Active				Planned				Rezoning Submitted				Total
	SF	TH	MF	Total	SF	TH	MF	Total	SF	TH	MF	Total	
Battlefield	916	153	229	1,298	831	168	384	1,383	35	130	690	855	3,536
Brentsville	250			250	469			469	29			29	748
Forest Park	227		220	447	512	331	46	889				-	1,336
Freedom		26	1,296	1,322	12	518	2,719	3,249			1,352	1,352	5,923
Gar-Field			71	71	173	30	289	492				-	563
Hylton	38	27		65	71	76		147	22			22	234
Osborn Park	361		195	556	657	218	1,197	2,072	12		400	412	3,040
Potomac	371	320	511	1,202	1,717	219	1,365	3,301			483	483	4,986
Stonewall Jackson	262	250	960	1,472	165	327	504	996		1,200	813	2,013	4,481
Woodbridge	36			36	59		72	131			494	494	661
Total	2,461	776	3,482	6,719	4,666	1,887	6,576	13,129	98	1,330	4,232	5,660	25,508

Student Enrollment Data: Historical and Projected
Special Education and Alternative Schools
SY 2010-11

Year	Elementary	Middle	High	Special Education	Total	Change	Percent Change
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	1003	70,683	2,449	3.7%
2007	33,858	16,040	21,792	964	72,654	1,971	2.8%
2008	34,428	16,273	21,930	1027	73,657	1,003	1.4%
2009	36,055	17,034	22,328	1239	76,656	2,999	4.1%
2010	37,261	17,700	22,857	1,298	79,115	2,459	3.2%
2011	38,071	18,425	23,248	1,326	81,070	1,955	2.5%
2012	38,747	19,164	23,676	1,354	82,941	1,871	2.3%
2013	39,296	19,864	24,272	1,384	84,815	1,874	2.3%
2014	39,866	20,314	25,022	1,413	86,614	1,799	2.1%
2015	40,335	20,802	25,861	1,442	88,440	1,825	2.1%
2016	40,854	21,208	26,728	1,471	90,260	1,821	2.1%
2017	41,519	21,694	27,382	1,500	92,095	1,835	2.0%
2018	42,270	22,058	28,130	1,529	93,987	1,891	2.1%
2019	43,062	22,470	28,824	1,558	95,915	1,928	2.1%
2020	43,860	22,902	29,438	1,588	97,788	1,874	2.0%

Student Membership Projections

Error Rate Analysis

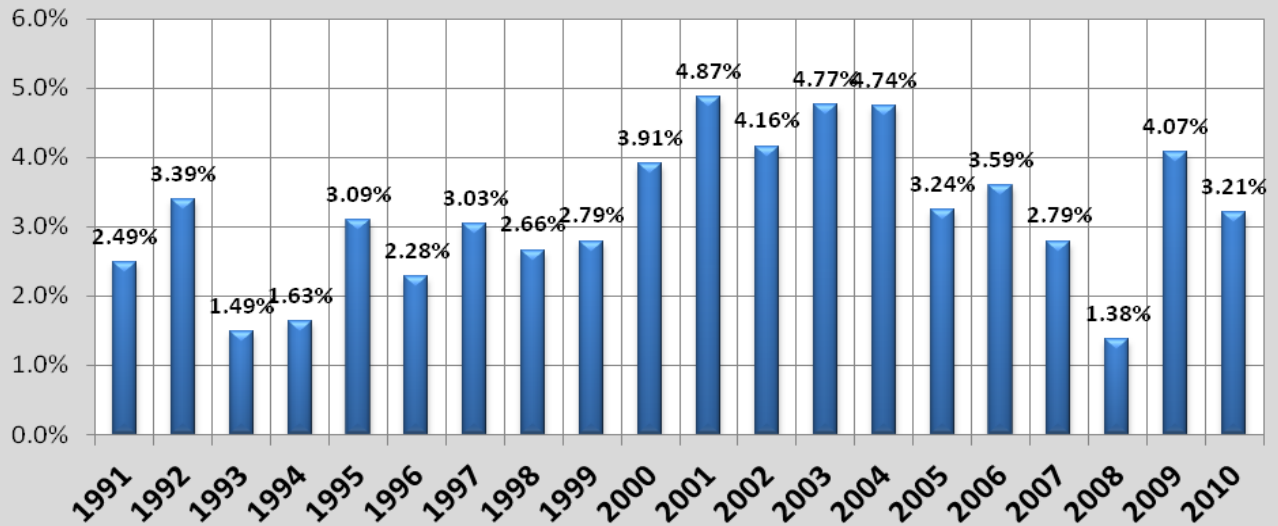
Prince William County Public Schools

School Year	Actual Student Membership	Student Membership Projections							
		One Year Before		Two Years Before		Four Years Before		Five Years Before	
		Projection	% 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%

(MPE) Mean Percentage Error	0.58%	1.15%	1.84%	2.57%
(MAPE) Mean Absolute Percentage Error	0.87%	2.08%	4.40%	4.86%

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

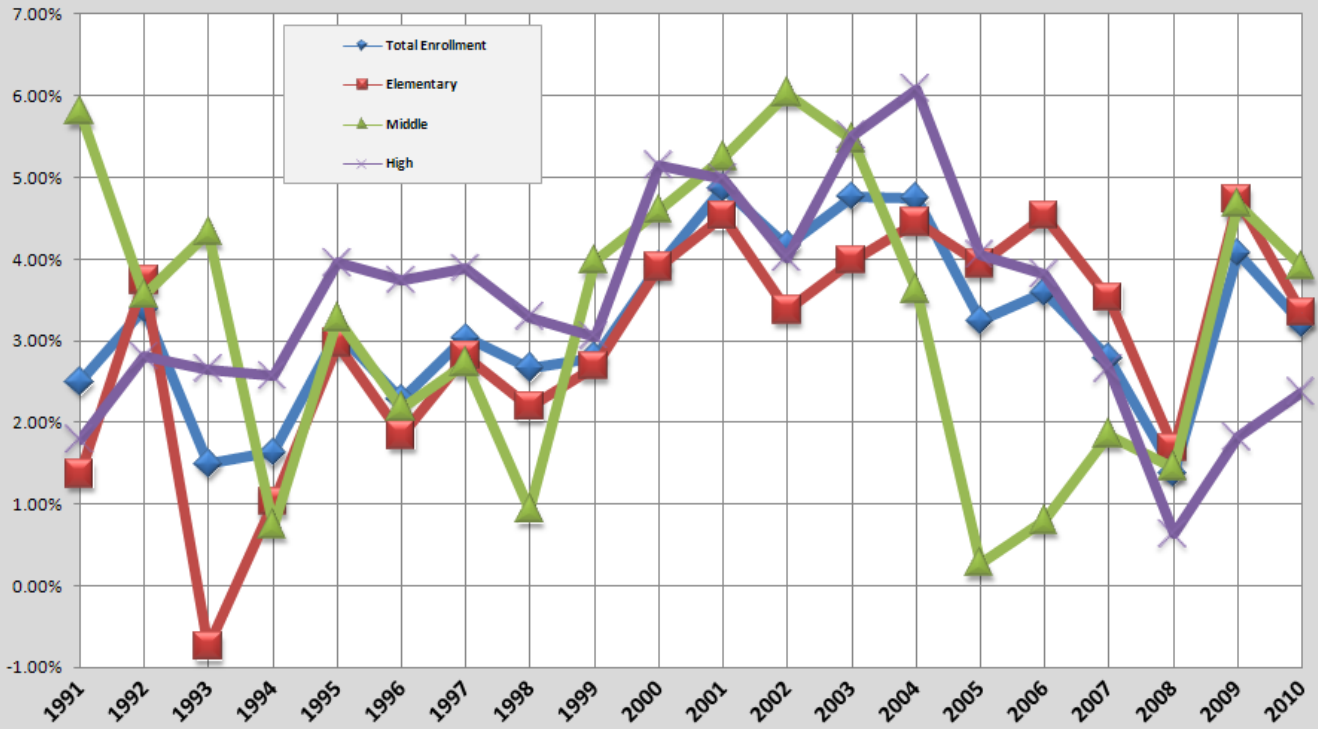
Prince William County Schools Annual Percentage Change in Enrollment



Enrollment Growth by School Level



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



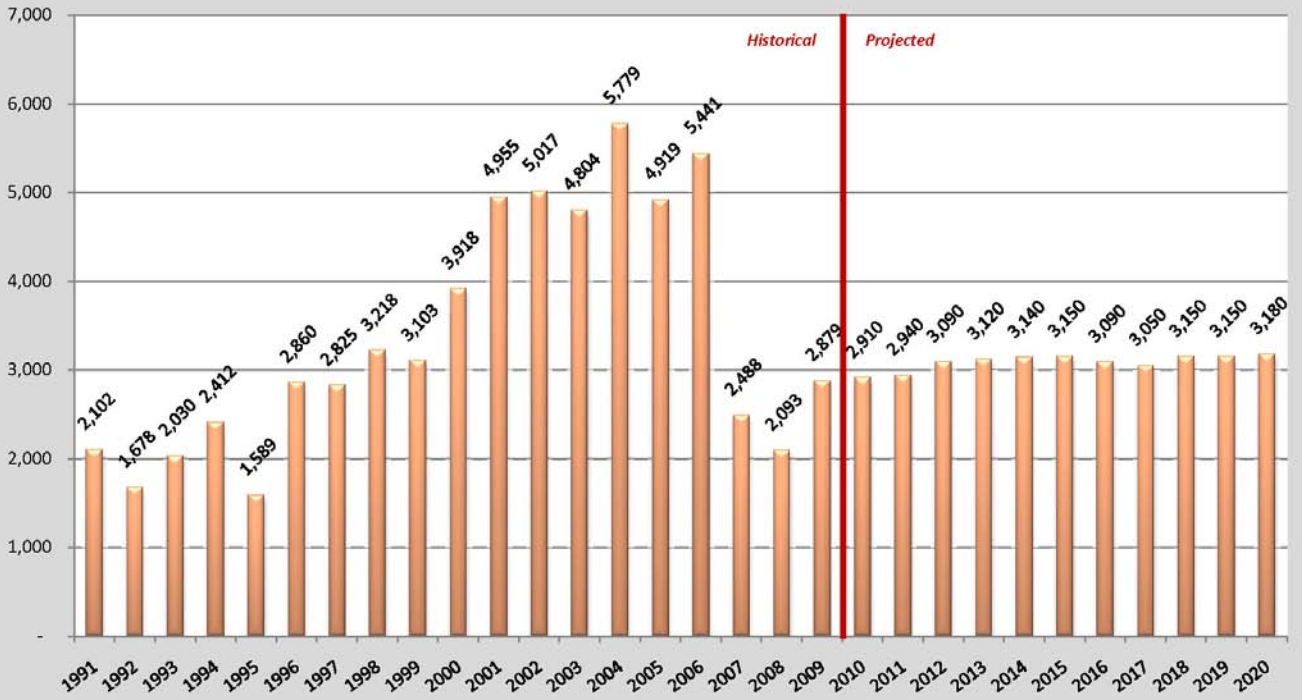
Historical and Projected Enrollment

Prince William County Schools
2004 to 2020

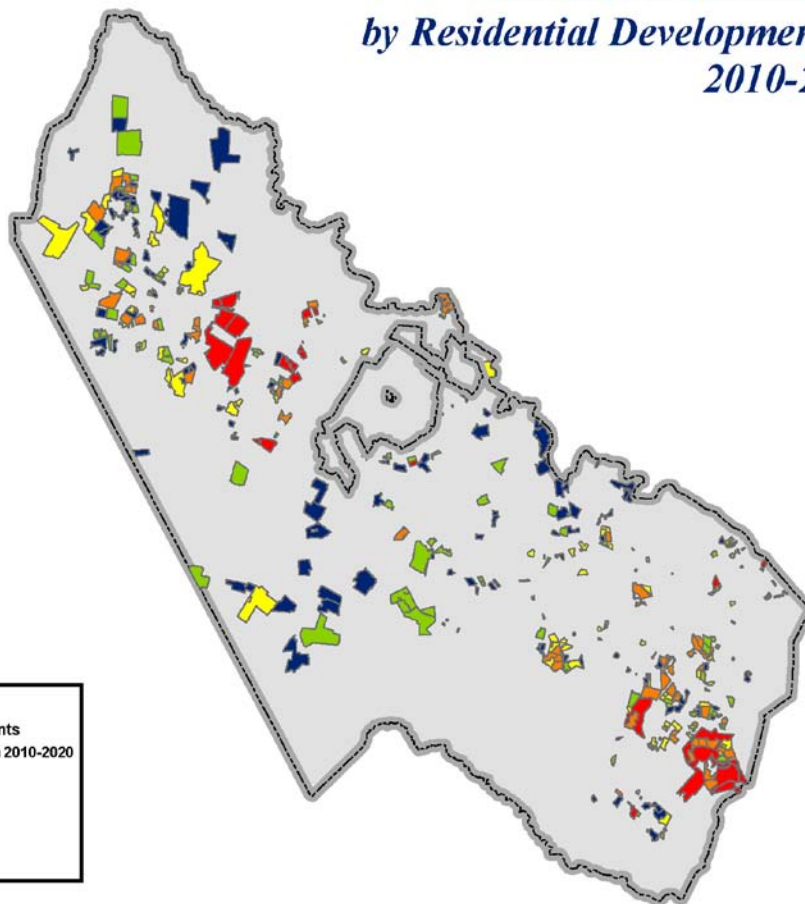


Annual Housing Unit Change

Prince William County, Virginia

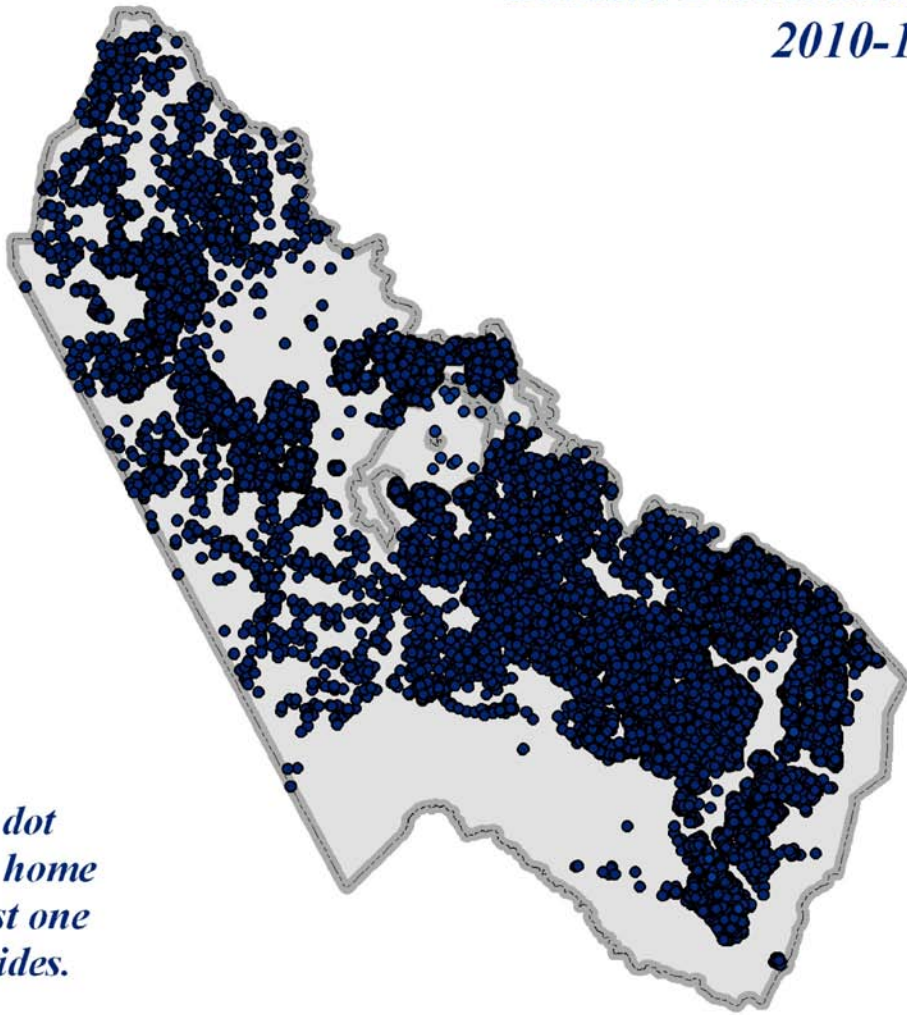


Additional Students by Residential Development 2010-20



Legend	
Residential Developments	
Additional Students from 2010-2020	
■	1 - 10 Students
■	11 - 25 Students
■	26 - 50 Students
■	51 - 150 Students
■	Over 150 Students

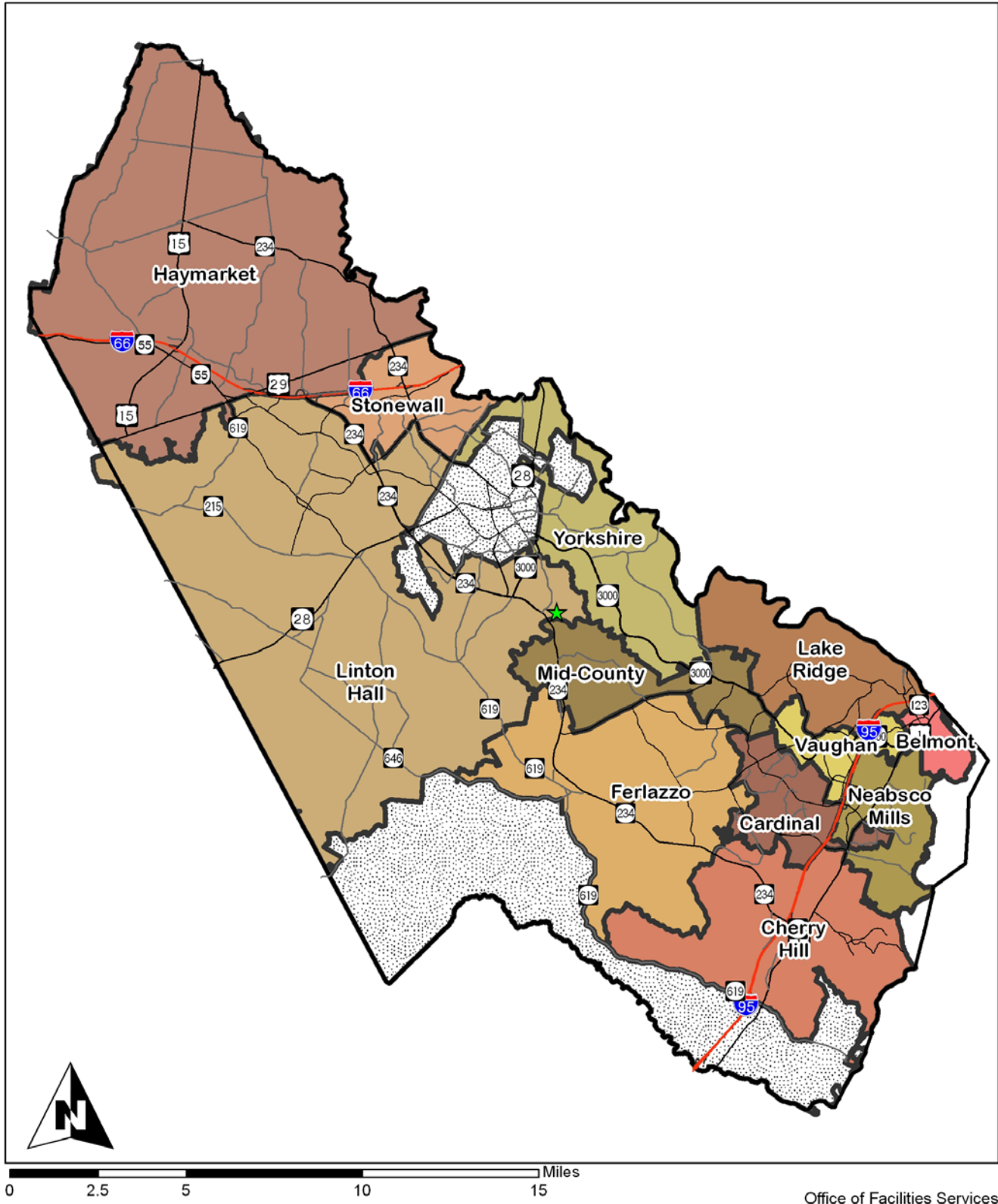
*Student Distribution
2010-11*



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

Capital Improvements Program Elementary School Geographic Areas

FY 2011 -- FY 2020



Office of Facilities Services

Elementary Schools by Geographic Area

Prince William County Schools

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	Gravelly ES
	Mountain View ES
	Tyler ES
	Antietam ES
Lake Ridge Area	Lake Ridge ES
	Occoquan ES
	Old Bridge ES
	Rockledge ES
	Springwoods ES
	Westridge ES
	Bennett ES
Linton Hall Area	Bristow Run ES
	Cedar Point ES
	Ellis ES
	Glenkirk ES
	Nokesville ES
	Victory 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

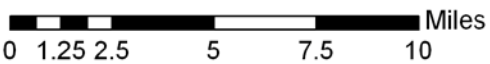
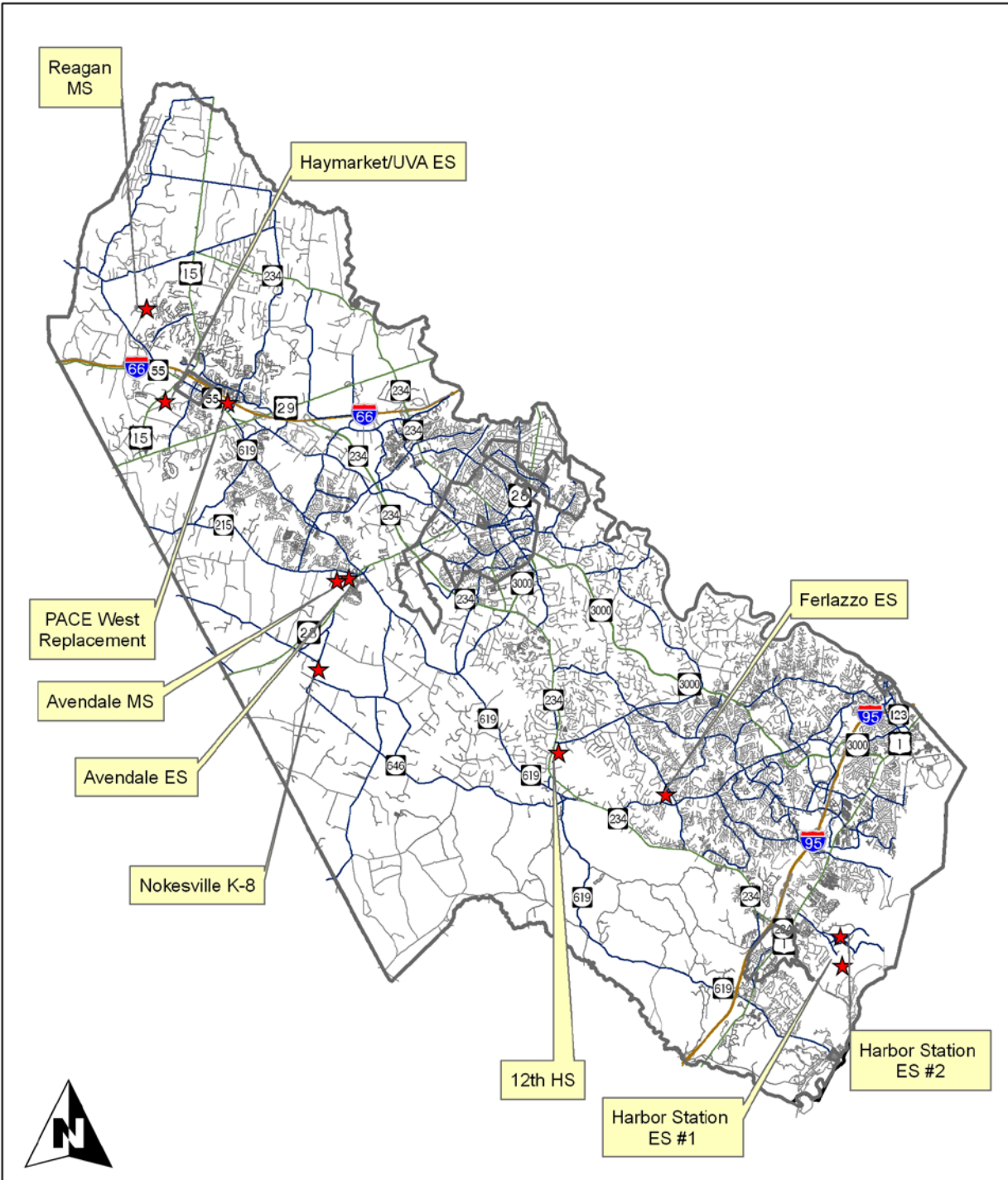
APPENDIX C
IDENTIFIED SCHOOL SITES

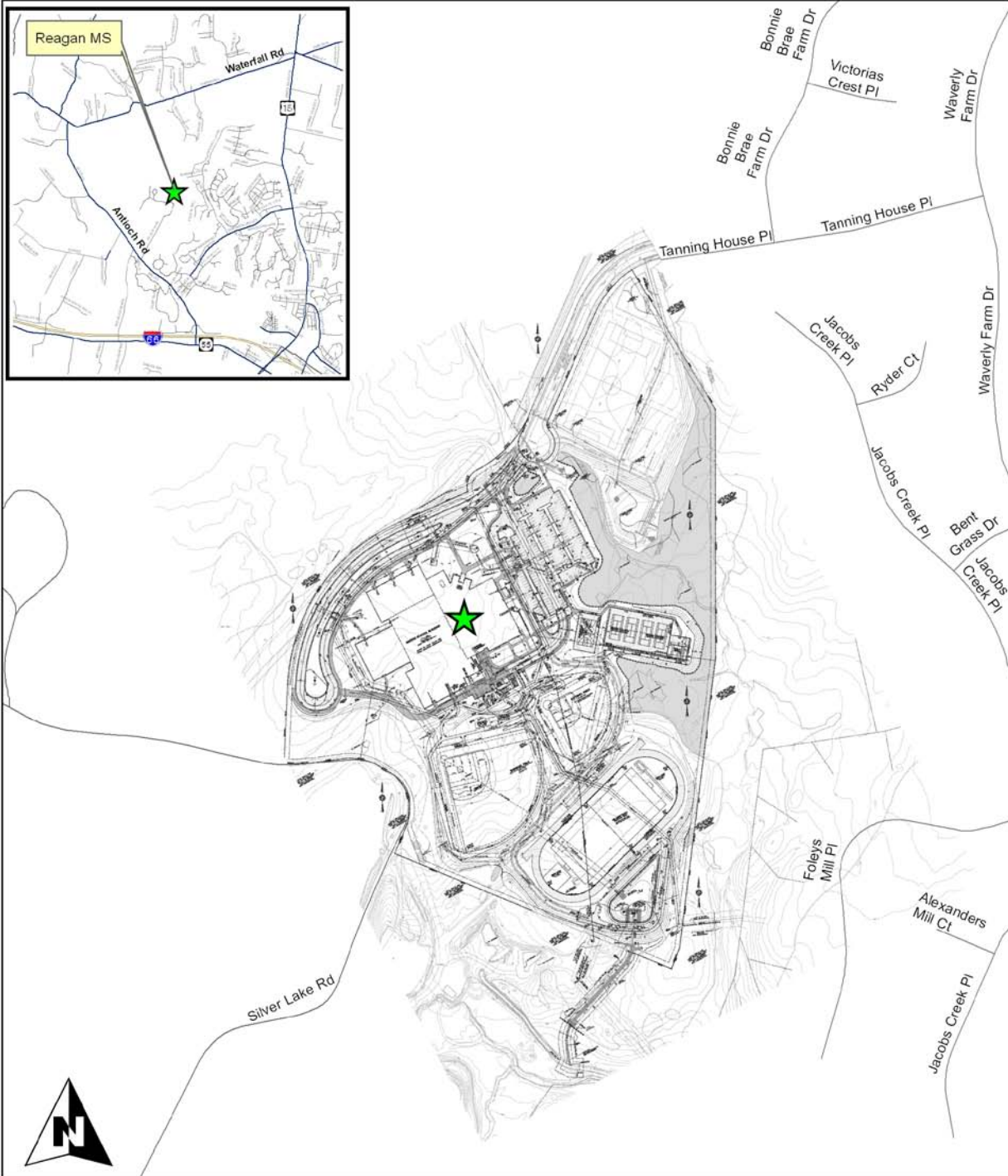
- Overall Map of School Sites Identified in the Capital Improvements Program
 - Reagan Middle School (2012)
 - PACE West School (2012)
 - Nokesville K-8 School (2014)
 - Haymarket/UVA Elementary School (2014)
 - Avendale Elementary School (TBD)
 - 12th High School (2016)
 - Harbor Station #1 Elementary School (2017)
 - Avendale Middle School (TBD)
 - Ferlazzo Elementary School (TBD)
 - Harbor Station #2 Elementary School (TBD)

School Site Maps

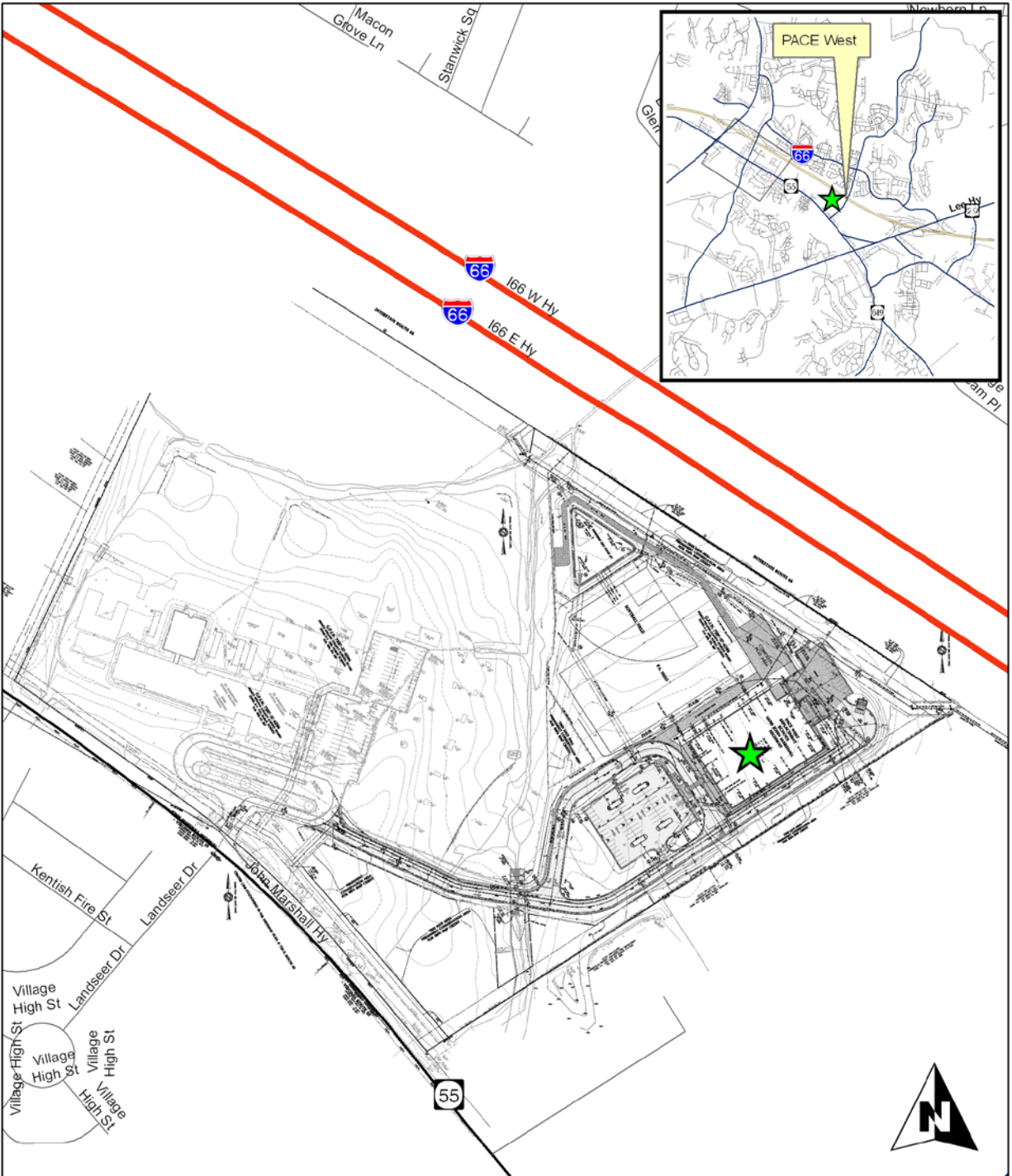
Appendix C details the school sites that have been acquired by the School Division. Some of these sites are programmed to be utilized for new school facilities within this Capital Improvements Program document. Where this is true, the year that the site is to be constructed upon is shown on the map.

Other sites are depicted that are not currently scheduled to be constructed within the scope of this CIP document.

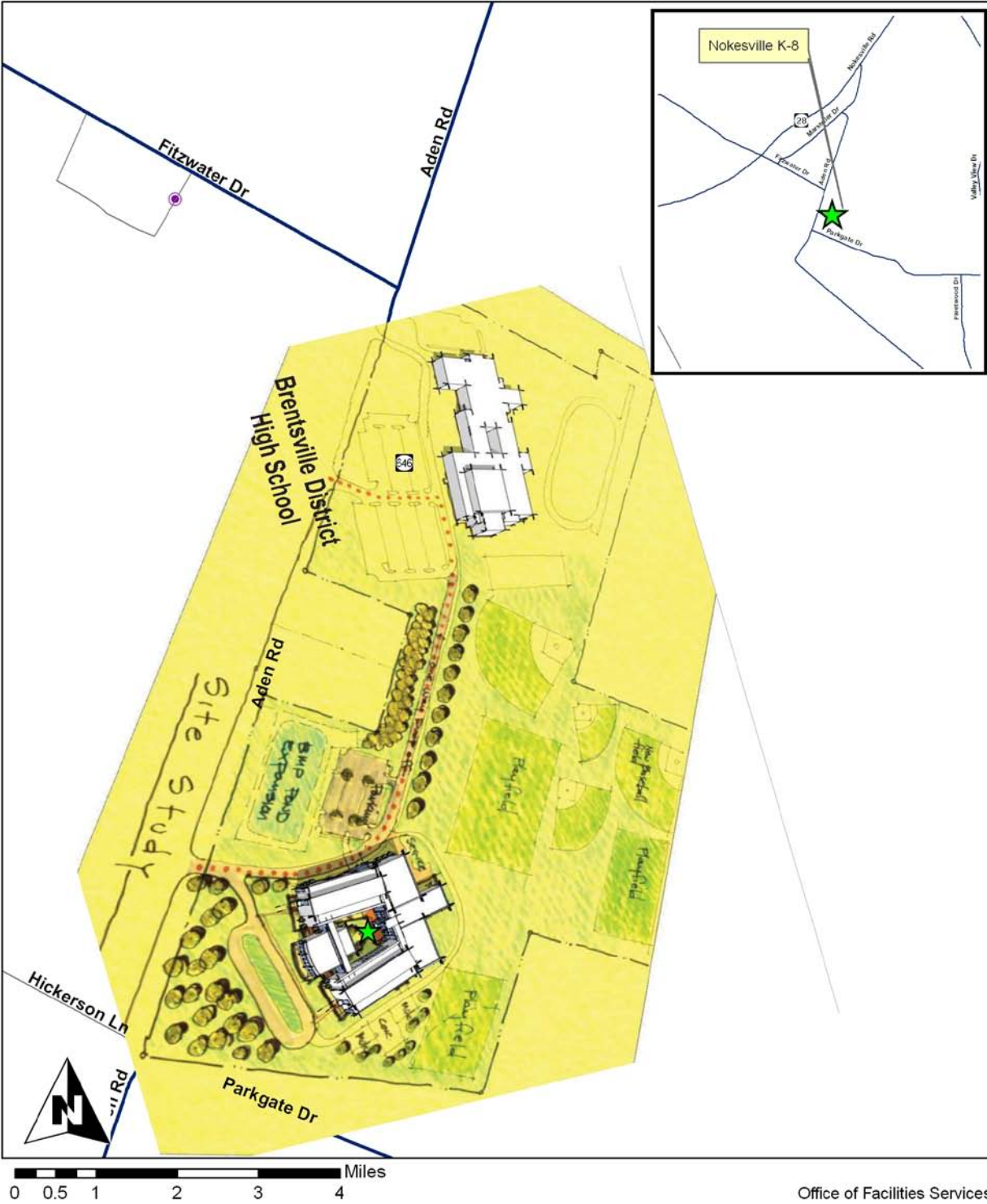




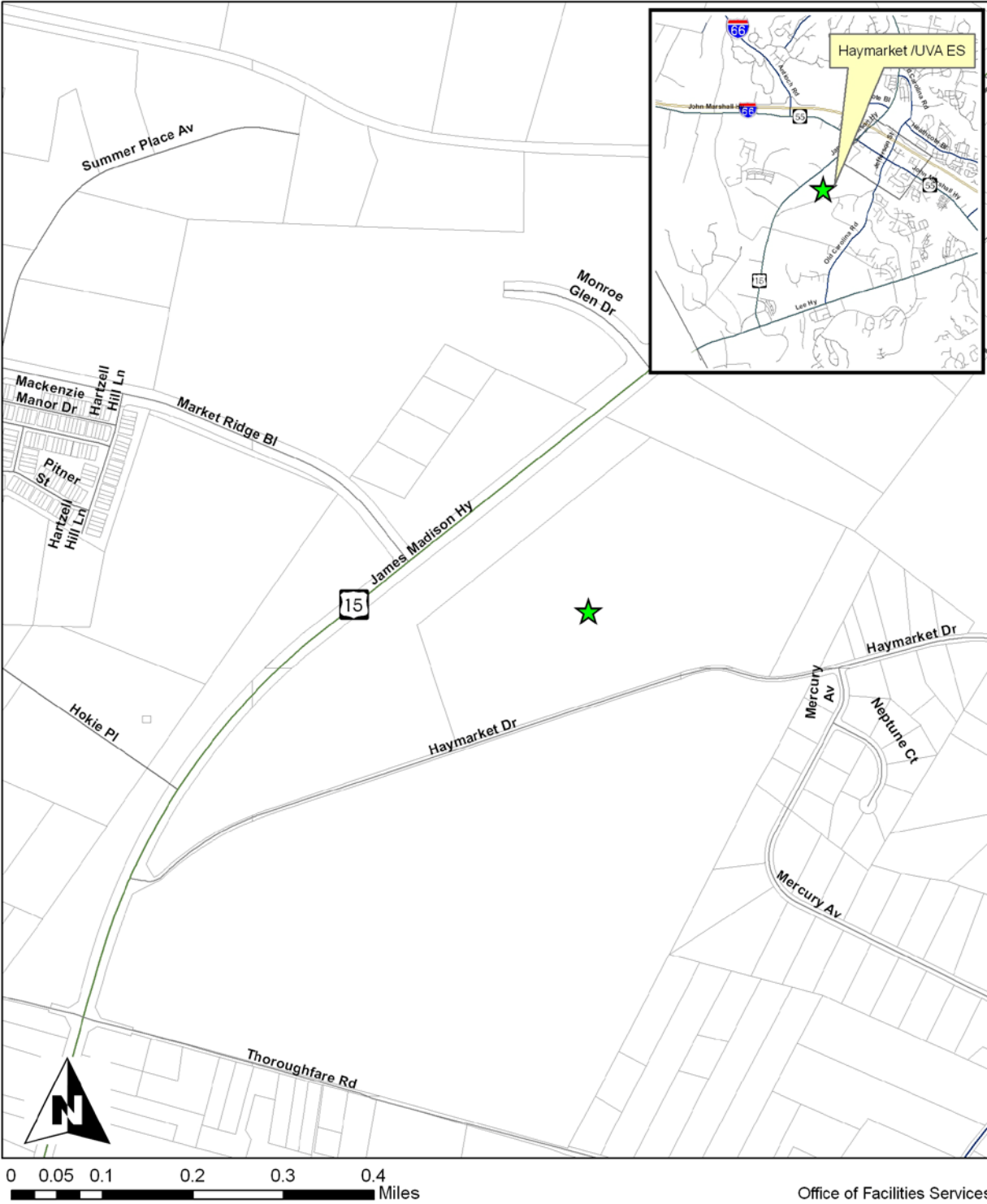
Office of Facilities Services



Office of Facilities Services



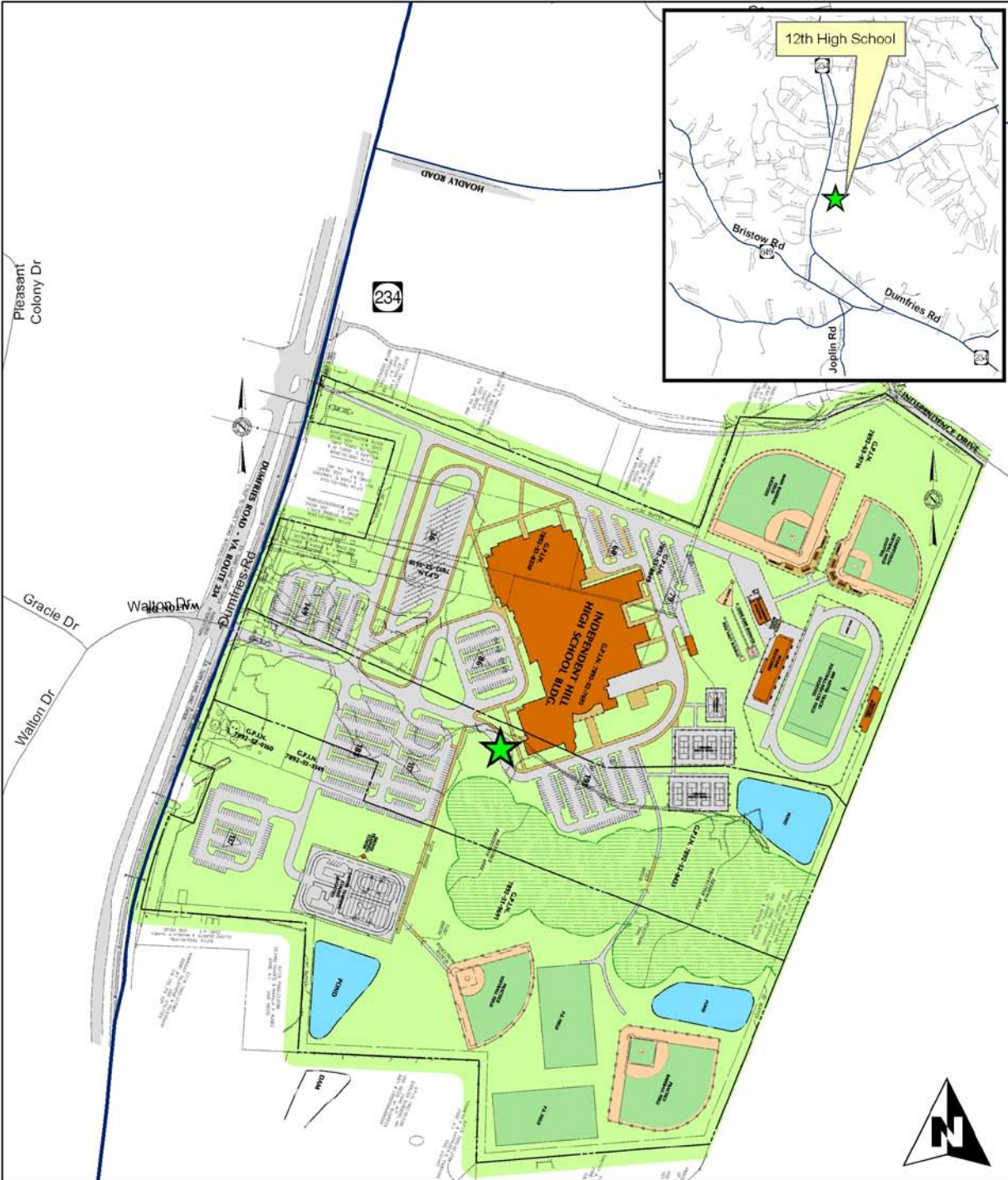
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Office of Facilities Services



Office of Facilities Services



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Harbor Station Elementary School #1

Opens September 2017

FY2012 -- FY 2021

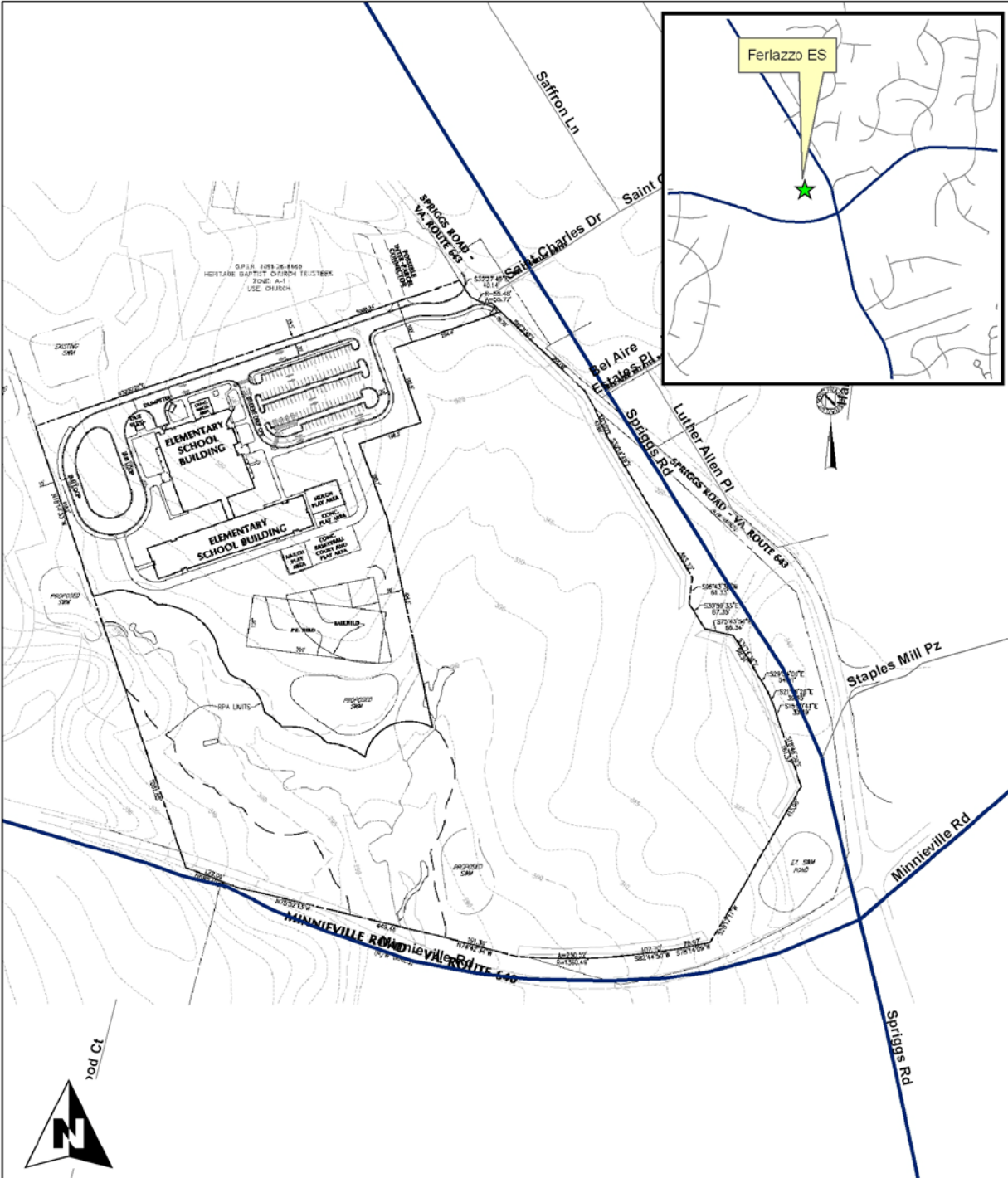


Office of Facilities Services

Avendale Middle School
Opening Year To Be Determined
FY2012 -- FY2021

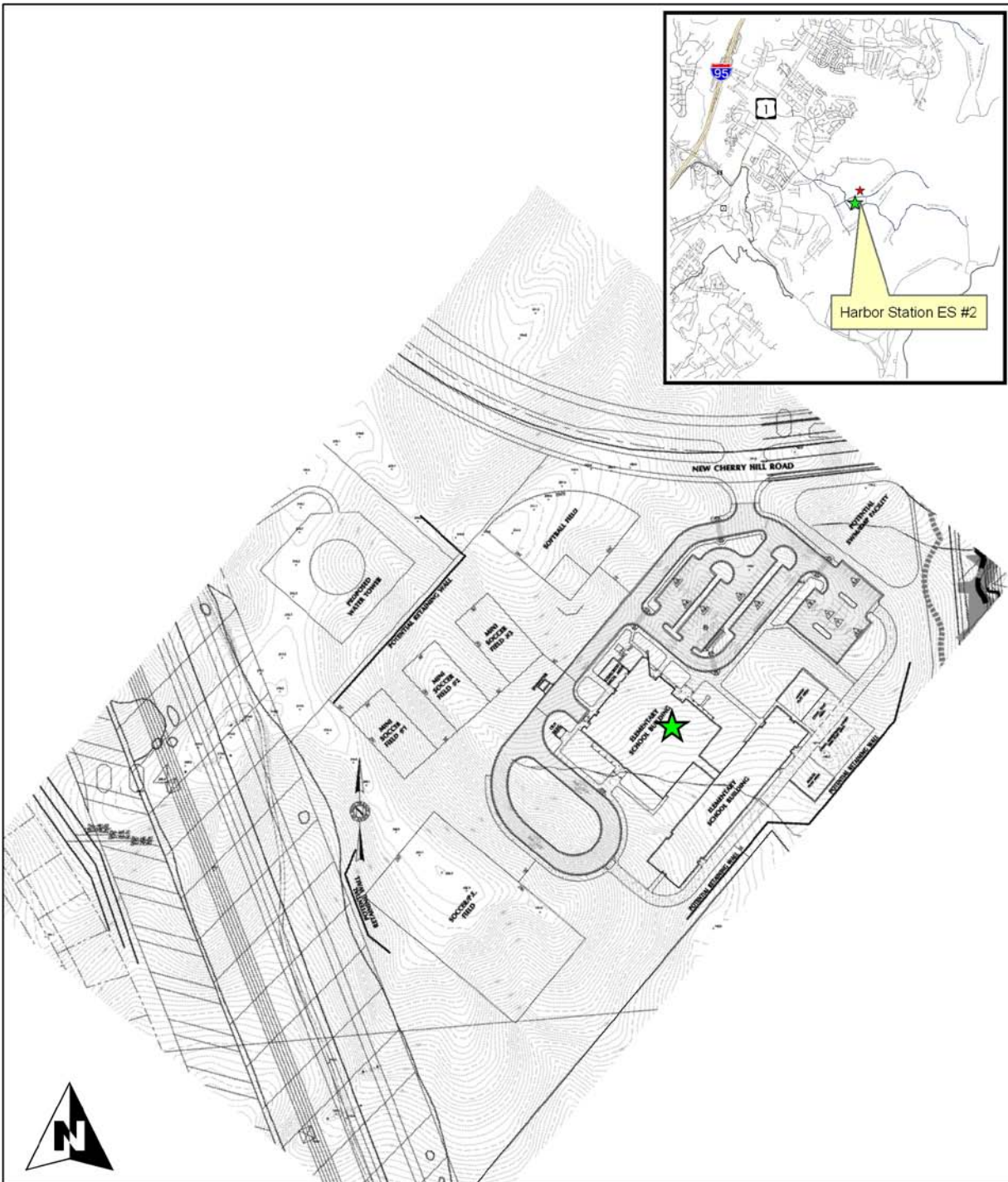


Office of Facilities Services



Office of Facilities Services

Harbor Station Elementary School #2
Opening Year To Be Determined
FY 2012 – FY2021



Office of Facilities Services