

Proposed Capital Improvements Program Fiscal Years 2020–29

Prince William County School Board Work Session

January 9, 2019

Dave Cline, Associate Superintendent for Finance & Support Services (Retired)



Prince William County

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Capital Improvements Program

Working Group

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Matt Guilfoyle	Associate Superintendent for Communications & Technology Services
<i>Office of Facilities Services</i>	
John Windley	Director, Facilities Services
David Beavers	Supervisor, Planning and Financial Services
Maureen Hannan	Supervisor, Land Acquisition and CIP Planning
Matt Cartlidge	Supervisor, Planning
Rodney Clayborn	Supervisor, Facilities Management
John Mills	Supervisor, Construction
Brian Gorham	Administrative Coordinator, Energy Management
Dave Cline	<i>Retired</i> Associate Superintendent for Finance & Support Services
Dee Thompson	<i>Retired</i> Supervisor, Construction
<i>Office of Financial Services</i>	
John Wallingford	Director, Financial Services
<i>Office of Information Technology Services</i>	
AJ Phillips	Director, Information Technology Services

Capital Improvements Program

School Board Work Session

Agenda

- Discuss the Capital Improvements Program (CIP) Process
- Review updated Enrollment Projections
- Review the proposed CIP
- Review the changes from last year's CIP
- Review the proposed Technology Improvements Plan (TIP)
- Next Steps
 - CIP will be presented February 6, 2019 as part of the proposed budget



Capital Improvements Program

Definition

- An ongoing plan for
 - new construction/additions
 - renewals of existing facilities
 - upgrading of the School Division's infrastructure including technology and energy improvements
- A cumulative process that builds upon the prior year's Capital Improvements Program
- A blueprint of the work to be done over the next 10-year period as determined by
 - assessments of building infrastructure needs
 - school capacities
 - school space utilization patterns
- A list of specific capital improvements proposed over the next 10-year period
- A plan based on the updated enrollment projections and fiscal limitations (debt service and budget constraints)
- A plan to eliminate portable classrooms



Capital Improvements Program

Elements of the CIP

- School Site Acquisition
- Construction of New Schools
- Construction of Classroom Additions to Existing Schools
- Construction of School Support Facilities
- Renewals/Renovations of Existing Schools
- Major Maintenance Projects
- Temporary Space (206 portable instructional classrooms)
- Title IX Improvements
- Energy Infrastructure Improvements
- Technology Improvements Program



Significant Issues Impacting the 2019–28 CIP

- Divisionwide enrollment grew by only 342 students, or 0.4%, from 2017–18 to 2018–19
 - Smallest numerical increase in the student enrollment since 1984
 - Smallest kindergarten cohort in five years (2013)
 - Overall decrease in elementary enrollment for two consecutive years
 - 10-year projections revised downward to reflect current conditions
 - Decrease in the number of anticipated students in 2027 from last year's projections by nearly 5,900
 - Residential development has slowed to levels similar to 2009 / 2010
- 2019 Program Capacity Changes
 - Updates to K-3 class-size reduction qualifying data (free lunch percentage), special education classroom use, and other specialized classroom use at each elementary school
 - Results in the capacity reduction of 1,005 seats across all elementary schools



Major Changes from the 2019–28 CIP

- Specific Changes to the CIP
 - 2022
 - Middle School Additions at Bull Run, Gainesville, and Marsteller Middle Schools (11 classrooms each) added
 - Site Acquisition Funds – Elementary School (TBD) added to 2022 and 2024
 - 2024
 - Elementary School (Yorkshire Area) delayed from 2024 to 2028
 - Middle School West (Linton Hall Area) delayed from 2024 to beyond current CIP
 - 2025
 - Elementary School (Cardinal Area) added



Major Changes from the 2019–28 CIP

- Specific Changes to the CIP
 - 2026
 - Occoquan Elementary School Replacement moved forward from 2028 to 2026
 - Middle School (TBD) delayed from 2026 to beyond scope of current CIP
 - 2027
 - 15th High School (TBD) delayed from 2027 to beyond scope of current CIP
 - KLC Addition/Renewal (Administrative Space Addition) added
 - Elementary School (South Route 1 Area) added
 - 2028
 - Mid-County Area Elementary School Addition [8 classrooms] added
 - Ferlazzo Area Elementary School Addition [5 classrooms] added
 - Middle School Addition (TBD) [24 classrooms] added



Major Changes Summary

- Added to the CIP
 - 2 new Elementary Schools
 - Elementary School Additions – 13 classrooms
 - Middle School Additions – 57 classrooms
 - Kelly Leadership Center Addition
 - Site Acquisition Funds ES (TBD)
 - Auxiliary Gyms – Woodbridge and Gar-Field High Schools
- Delayed beyond the scope of the current CIP
 - 2 Middle Schools
 - 1 High School
- Renewals and Renovations
 - Funding totals adjusted to reflect changes in enrollment projections



Property Acquisition

(Final Settlement Pending)

School Facility	Acres	Purchase Price
Occoquan ES Adjacent Property	.6144	\$865,000
Potomac Shores ES #2	5	\$2,500,000



Site Acquisition

- Land acquisition for school sites is challenging
- School Division staff:
 - Reviews county residential development plans/proposed rezonings
 - Maintains a database of future developments, with the number of expected housing units and stage of development
- Projected enrollments by geographic area reviewed to determine future school location needs
- School sites and/or funding for land acquisition comes from:
 - Developer proffer contributions from rezoning cases submitted prior to July 1, 2016
 - Bond/debt funding
 - Operating budget
- Joint CIP Planning Committee
 - Based on efforts of the Joint County/Schools Capital Process Team, both Boards committed to developing a shared process for land acquisition, directing staff to work together to help efficiently acquire school sites and eliminate portable classrooms



Site Acquisition

Proffer Changes Review

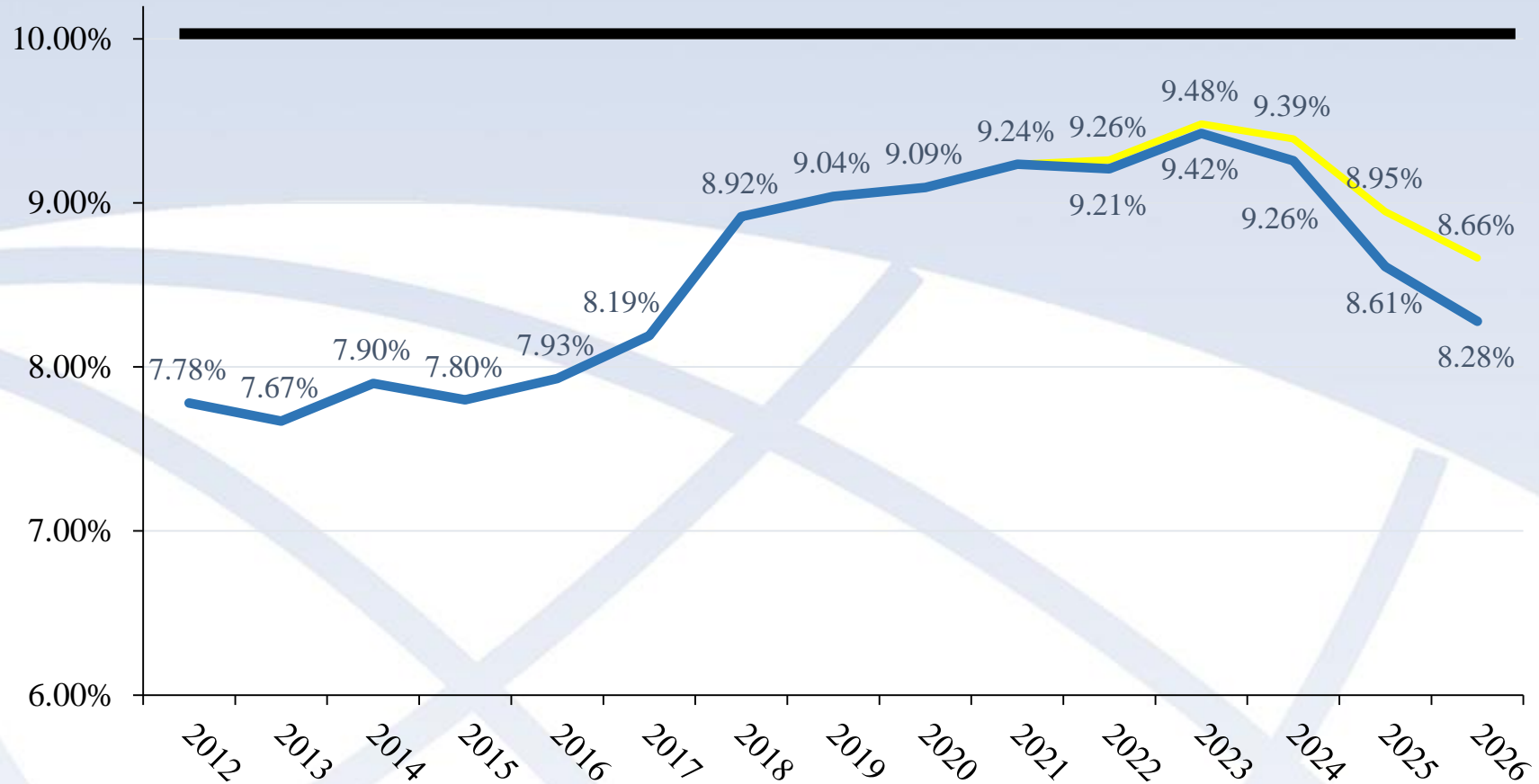
- As of July 1, 2016, the Virginia General Assembly passed SB-549, which amends the Virginia Code relating to conditional zoning for residential rezoning cases and proffer amendments.
- Summary:
 - The School Division will still collect monetary contributions on rezoning cases filed prior to July 1, 2016.
 - As of July 1, 2016, the School Division will be receiving monetary contributions based on the rezoning applicant's methodology to determine a proffer amount using only generated students that exceed existing capacity. The estimated proffer amount will then be applied to the proposed residential units to be constructed.
 - First major residential rezoning (Gainesville Crossing) under new SB-549 was submitted November 2017; Applicant provided impact analysis for School Division review.
 - Fewer than five cases have since been submitted and are currently under review.



School Land Needs - Planned

Year to Open	Year to Acquire	School	Property Status	Estimated Funds Required	Funding Source
2022	2019	ES (Stonewall Area)	PWC Site	N/A	N/A
2023	2020	ES (Occoquan/Woodbridge Area)	Site Needed	\$7,500,000	Bond
	2019	ES (Potomac Shores #2)	Site Pending	\$2,500,000	Bond
2024	2019-20	14 th High School (2,557 capacity)	Site Needed	\$14,000,000	Bond
2025	2021	ES (Cardinal Area)	Site Needed	\$9,015,000	Bond
2027	2022–23	ES (Route 1 South Area)	Site Needed	\$9,380,000	Bond
2028	2023	ES (Yorkshire Area)	Site Needed	\$9,568,000	Bond

Debt as a % of Revenue FY 2020 Budget

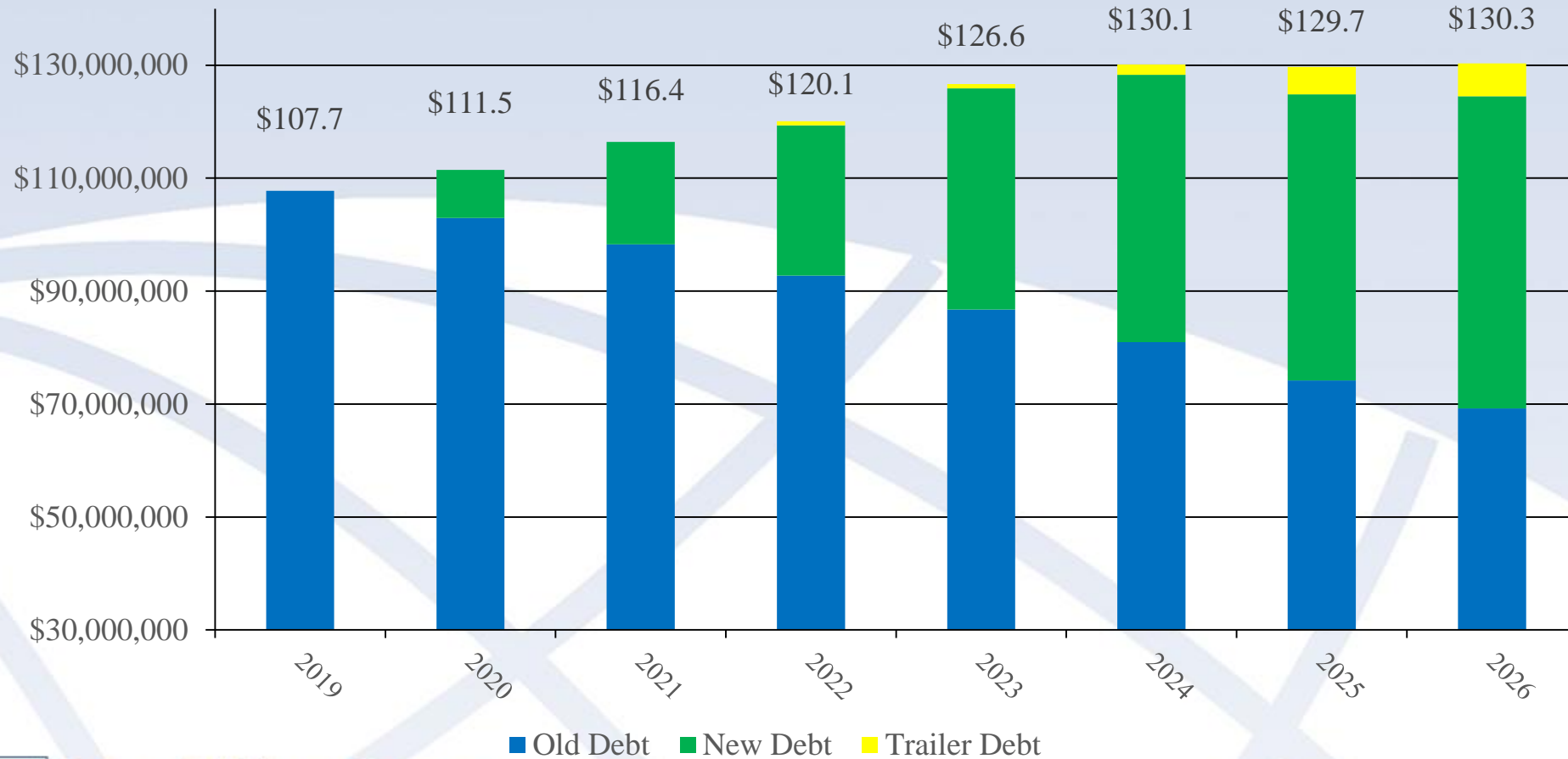


Regular CIP

Reflects additional debt associated with elimination of portable classrooms

10% of revenue is the cap set in the county's *Principles of Sound Financial Management*

Increase in Debt Service



Debt Sales V19A – V28A

Series	Non-Trailer Related	Trailer Related	Total
V19A	113,209,600		113,209,600
V20A	116,467,800		116,467,800
V21A	100,130,000	9,015,000	109,145,000
V22A	151,832,000		151,832,000
V23A	93,000,000	12,880,000	105,880,000
V24A	41,100,000	34,715,000	75,815,000
V25A	62,970,000	7,900,000	70,870,000
V26A	48,600,000	41,860,000	90,460,000
V27A	65,205,000	61,625,000	126,830,000
V28A	4,500,000	6,070,000	126,830,000
Total	\$ 797,014,400	\$ 174,065,000	\$ 971,079,400



Note: The cost to eliminate portable classrooms is dependent upon changes in projected enrollment, demographic composition of the student population, and the program capacity of schools.

New School Construction

Bond Funded

YEAR OPEN	NEW SCHOOL	FUNDS
2019	PW Parkway Elementary School	\$32,685,000
2021	Middle School @ Potomac Shores	\$64,119,000
	13 th High School (2,557 capacity)	\$127,400,000
2022	Elementary School (Rosemount Lewis)	\$36,980,000
2023	Elementary School (Potomac Shores #2)	\$38,650,000
	Elementary School (Occq./Woodbridge Area)	\$38,650,000
2024	14 th High School (Mid-County) (2,557 capacity)	\$147,500,000
2025	Elementary School (Cardinal Area)	\$42,215,000
2026	Occoquan Elementary School – Replacement	\$44,970,000
2027	Elementary School (Route 1 South Area)	\$46,110,000
2028	Elementary School (Yorkshire Area)	\$47,105,000



Classroom Additions

Bond Funded

YEAR OPEN	SCHOOL	FUNDS
2022	Bull Run MS [11 classrooms]	\$14,375,000
	Gainesville MS [11 classrooms]	\$14,375,000
	Marsteller MS [11 classrooms]	\$14,375,000
2028	ES Addition (Mid-County Area) [8 classrooms]	\$16,300,000
	ES Addition (Ferlazzo Area) [5 classrooms]	\$12,605,000
	MS Addition (TBD) [24 classrooms]	\$38,440,000

Notes: Additions may include up to 7,000 square feet for P.E., Clinic, Strings, Science, Administration, and Resource Areas



Other Bond Funded Projects

YEAR OPEN	PROJECT	FUNDS
2020	Auxiliary Gyms – Woodbridge HS and Gar-Field HS	\$8,500,000
2022	Site Acquisition Funds – ES (TBD)	\$9,015,000
2024	Site Acquisition Funds – ES (TBD)	\$9,380,000
2027	KLC Addition/Renewal (Admin. Space Addition)	\$18,000,000



Facility Renewal Program

- Goal: Initially renovate facilities prior to 25 years of age; 21 years of age the eventual target
- Renewal list first developed in late 1990s
- Prioritization of facility renewal list, prepared 2017, based on year facility built or date of last renewal
- Program “Funding Stream” used is 2% to 4% of current replacement value of facilities budgeted annually (Target 3% of replacement value)
- Facility building conditions assessed annually
- Consideration of current critical needs
- Consideration of prior facility upgrades



Renewals and Repairs

Funding Targets

- National Building Research Board recommended annual budget for repairs and renovations
 - 2% to 4% of the current replacement value of facilities
- PWCS annual target for repairs and renovations
 - 3% of the current replacement value of facilities
- FY 2020 Replacement Value of Schools
 - \$2,957,247,000
- FY 2020 Target for repairs and renovations
 - \$88,717,000 (3.0% of Value)
- FY 2020 Estimated budget for repairs and renovations
 - \$73,249,000 (2.5% of Value)



Facility Renewals

Accomplishments

- Considerable progress has been made in adding activity rooms to elementary schools with renewals
- Secure entrances added with renovations
- Air conditioning of all elementary school kitchens completed
- Music Rooms added to middle school renewals



School Renewals

Major - Infrastructure Renovations

School Renewals may include	
HVAC Systems	Lockers
Lighting	Roof Replacement
Electrical Systems	Flooring
Plumbing	Painting
Fire Alarm Systems	Technology
Security Systems	Casework
Telephone and Intercom Systems	Doors / Hardware
ADA	Site Improvements
Bleachers	Title IX Improvements
Elementary School P.E. Space	Clinic Improvements
Secure Access Improvements	



School Renewals 2020

FISCAL YEAR	SCHOOL	FUNDS	TOTAL
2020	School Renewals:		
	Leesylvania Elementary School – Renewal (Funding Phase 2)	\$ 3,600,000	
	Marshall Elementary School – Renewal (Funding Phase 2)	\$ 3,421,000	
	Montclair Elementary School – Renewal (Funding Phase 2)	\$ 3,421,000	
	Old Bridge Elementary School – Renewal (Funding Phase 2)	\$ 3,600,000	
	Mountain View Elementary School – Renewal (Funding Phase 1)	\$ 7,955,000	
	Beville Middle School – Renewal (Funding Phase 1)	\$ 16,690,000	
	Rippon Middle School – Fenestration Improvements (Funding Phase 2)	\$ 1,500,000	
	Potomac View Elementary School – Roof Replacement	\$ 1,150,000	
	Belmont Elementary School – Partial Roof Replacement	\$ 772,000	
	Municipal Separate Storm Sewer Systems (MS4)	\$ 500,000	
	Roof Replacements/Repairs (TBD)	\$ 900,000	
	HVAC Equipment and Controls Upgrades	\$ 850,000	
	Portable Classroom Relocation	\$ 500,000	
	Energy Infrastructure Improvements	\$ 1,000,000	
	Title IX Improvements	\$ 290,000	
	Technology Improvement Program - Upgrades	\$ 4,000,000	\$50,149,000



School Renewals 2021

FISCAL YEAR	SCHOOL	FUNDS	TOTAL
2021	School Renewals:		
	Beville Middle School – Renewal (Funding Phase 2)	\$ 769,047	
	Hylton HS – Renewal (Funding Phase 1)	\$ 18,429,000	
	Bennett ES – Renewal (Funding Phase 1)	\$ 8,934,143	
	Mountain View ES – Renewal (Funding Phase 2)	\$ 3,308,667	
	Penn ES – Renewal (Funding Phase 1)	\$ 8,934,143	
	Transportation Bus Parking (TBD)	\$ 1,000,000	
	Municipal Separate Storm Sewer Systems (MS4)	\$ 500,000	
	Roof Replacements/Repairs (TBD)	\$ 2,300,000	
	HVAC Equipment and Control Upgrades	\$ 1,200,000	
	Kitchen Upgrades	\$ 609,000	
	Asphalt Upgrades	\$ 1,000,000	
	Portable Classroom Relocation	\$ 500,000	
	Energy Infrastructure Improvements	\$ 1,000,000	
	Title IX Improvements	\$ 300,000	
Technology Improvement Program – Upgrades	\$ 4,500,000	\$53,284,000	



Major Maintenance

7- and 14-Year Cycle

7-year Major Maintenance may include
Carpeting (Partial)
Paint (Partial – Hallways, Offices, Exterior Doors, Kitchens)
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
Re-lamp Interior and Exterior Light Fixtures

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

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

Infrastructure Task Force

Prioritized Potential Improvements – Elementary Schools

- Total cost for security-related improvements
 - \$1,066,000
- Additional specialty instruction spaces
 - Science labs – \$16,000,000
 - Activity rooms – \$11,900,000
 - Strings rooms – \$44,800,000
 - Story rooms – \$33,000,000
- Additional on-site parking
 - \$2,200,000
- Total – Elementary School Improvements – \$108,966,000

Please Note: These items were recommendations by the Infrastructure Task Force, but are not included in the CIP



Infrastructure Task Force

Prioritized Potential Improvements – Middle & High Schools

- Correct HVAC, electrical, intercom/PA and plumbing issues at all Tier 1 middle and high schools that are not scheduled for renovation in the next three years of the CIP and have not been renovated in the last 10 years.
 - Accelerate Gar-Field, Woodbridge, Stonewall Jackson, and Osbourn Park HS renewals to bring them within the current CIP. [\$25 to \$37 million each]
 - Accelerate Graham Park, Fred Lynn, and Woodbridge MS renewals to bring them within the current CIP. [\$18 to \$27 million each]
 - Consider delaying the next renewals of more recently renovated schools to offset the costs, if new CIP funding cannot be identified.



Infrastructure Task Force

Prioritized Potential Improvements – Middle & High Schools

- Build new auxiliary gymnasiums at Woodbridge HS and Gar-Field HS. [\$4.25 million each]
- Improvements for CTE programs at Brentsville HS, especially the horticulture program. [\$0.5 to \$1.0 million]
- Address renovation items at Stonewall Jackson HS and Osbourn Park HS that were not completed when the open classrooms were enclosed.
 - Renovate the first floor “core” area (all but auditorium and gym). [\$2.5 million each]



Energy Infrastructure Improvements

- \$1 million of energy conservation savings are directed annually towards “infrastructure improvements”
- Program to replace older energy-consuming infrastructure
 - Leverage technological advances and best practices to increase efficiency in operating school facilities
 - Projects undertaken include:
 - Hot water system “right sizing”
 - HVAC controls systems upgrades
 - Lighting upgrades
 - Natural gas conversions
 - Boiler replacements
 - Chiller replacements
- Invested \$4,466,177 on energy infrastructure improvement projects (FY2014–FY2018)
 - Total cumulative savings = \$3,267,593
 - 14.6% rate of return
 - Simple payback of 3.2 years



Technology Improvement Plan

2020–24 Future Ready

Innovative Learning and Engagement

Enabling learning and engagement anytime, anywhere on any device.



Planned TIP Implementation

Comprehensive planning approach, including:

- Network infrastructure/bandwidth upgrades/replacements
- New student information system, due to end-of-life by the vendor
- Divisionwide System Implementations (e.g., HR Talent Management, Credit Card Acceptance)
- VoIP (Voice over Internet Protocol) school telephone and LAN/WLAN systems upgrades/replacements to include wireless in trailers
- Data center/school upgrades/replacements (e.g., servers, back-up systems, storage, disaster recovery)
- Computer refresh
- Maintenance/upgrading/replacement of existing systems
- ✓ Recommended instructional technology improvements to be determined



TIP Projected Implementation Costs

	FY 19	FY20	FY21	FY22	FY23	FY24
Data Center/School Upgrades/Replacements	\$280,000	\$2,070,000	\$120,000	\$370,000	\$120,000	\$120,000
VoIP/LAN/WLAN School Upgrades and Replacements	\$3,961,117	\$3,669,000	\$5,275,522	\$2,675,522	\$2,675,522	\$2,575,522
IT Security/Infrastructure Upgrades/Replacements	\$452,000	\$440,000	\$961,751	\$400,000	\$715,000	\$440,000
Divisionwide Enterprise Systems	\$5,882,209	\$1,094,300	\$2,750,000	-	-	-
Computer Refresh Average (additional funding would be needed if fully-funded)	\$9,097,661	\$9,097,661	\$9,097,661	\$9,097,661	\$9,097,661	\$9,097,661
Projected Estimated Totals	\$19,672,987	\$16,370,961	\$18,204,934	\$12,543,183	\$12,608,183	\$12,333,183



- When revenue is insufficient to cover expenses, items in the age-based computer refresh will be delayed until future years, unless 50/50 school matching funds (when offered/available) exceeds expectations.
- The non-fully-funded equipment would cost an additional \$4.3 million (on average) annually (e.g. \$1.8 million for interactive whiteboards, tablets, and printers and \$2.5 million for computers).

Projected TIP Revenue

Includes projected funding from PWCS Five-Year Budget Plan, state refresh, federal E-Rate, school 50/50 match, and cable franchise fees, but not expected to be sufficient to fully implement until the out-years of the 10-year TIP.

- While replacement schedules have been established for all Divisionwide technologies, some equipment is not fully-funded for replacement (e.g., interactive whiteboards, tablets, printers)
- Federal E-Rate Category I funding has been diminished for FY18 and Federal E-Rate Category II funding will have greater restrictions on its use
- As part of long-term plan, local PWCS funding includes increases of \$500,000 annually



Projected TIP Revenue

	FY 19	FY20	FY21	FY22	FY23	FY24
PWCS Five-Year Budget* Plan	\$6,671,228	\$5,094,300	\$4,500,000	\$5,000,000	\$5,500,000	\$6,000,000
Federal E-Rate Type I*	-	-	-	-	-	-
Federal E-Rate, Type II Modernization*	\$1,480,130	\$1,533,600	-	-	-	-
50/50 Computer Refresh (Revenue from Schools)	\$350,000	\$350,000	\$350,000	\$350,000	\$350,000	\$350,000
VPSA State Technology Incentive Program*	\$2,338,000	\$2,338,000	\$2,338,000	\$2,338,000	\$2,338,000	\$2,338,000
Local Cable Franchise Fees*	\$400,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
LOCAL, STATE, AND FEDERAL TOTALS	\$11,239,358	\$9,515,061	\$7,388,000	\$7,888,000	\$8,388,000	\$8,888,000
PROJECTED REVENUE (+/-) VS. PLAN IMPLEMENTATION	-\$8,433,629	-\$6,855,061	-\$10,816,934	-\$4,655,183	-\$4,220,183	-\$3,445,183

***Notes:**

1. FY19-FY20 PWCS Five-Year Budget Plan includes funding to replace the vendor end-of-life student information system (FY18 - \$2,134,472, FY19 - \$3,171,228, FY20 - \$1,094,300 = \$6.4 million total).
2. These revenue sources have restrictions on the technology and services that can be purchased. For FY21-FY24, E-Rate Type II Revenue is not included pending available funding from the Federal Government.
3. These revenue sources do not include year-end funding that has supplemented the TIP over recent years.



Advertised Capital Improvements Program

Five Year Summary

Fiscal Years 2020–24

Existing Conditions	
Projected Growth in Students (2018 to 2023)	4,334
Student Enrollment (September 30, 2018)	90,203
Student Enrollment (September 30, 2023)	94,537
Current Student Capacity	88,840
Current Portable Classrooms in Use	206

Proposed Capital Improvements Program	
New School Facilities	6
New Elementary Schools	3
New Middle Schools	1
New High Schools	2
School Additions (Classrooms)	33
Elementary School Additions	---
Middle School Additions (3 School)	33
High School Additions	---
School Additions (non-classrooms)	2
Auxiliary Gym – Gar-Field HS	1
Auxiliary Gym – Woodbridge HS	1
Proposed Capacity to be Constructed	9,399
Proposed Costs	
New School Facilities	\$453,299,000
Classroom Additions	\$51,625,000
Renewals	\$283,880,000
Site Acquisition	\$18,395,000



Capital Improvements Program

Timeline

Date	Event
January 9, 2019	School Board CIP Work Session
February 6, 2019	Proposed CIP/Budget Presented to School Board
February 20, 2019	Public Hearing
March 13, 2019	Final School Board CIP/Budget Markup
March 20, 2019	School Board Approves CIP/Budget



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