

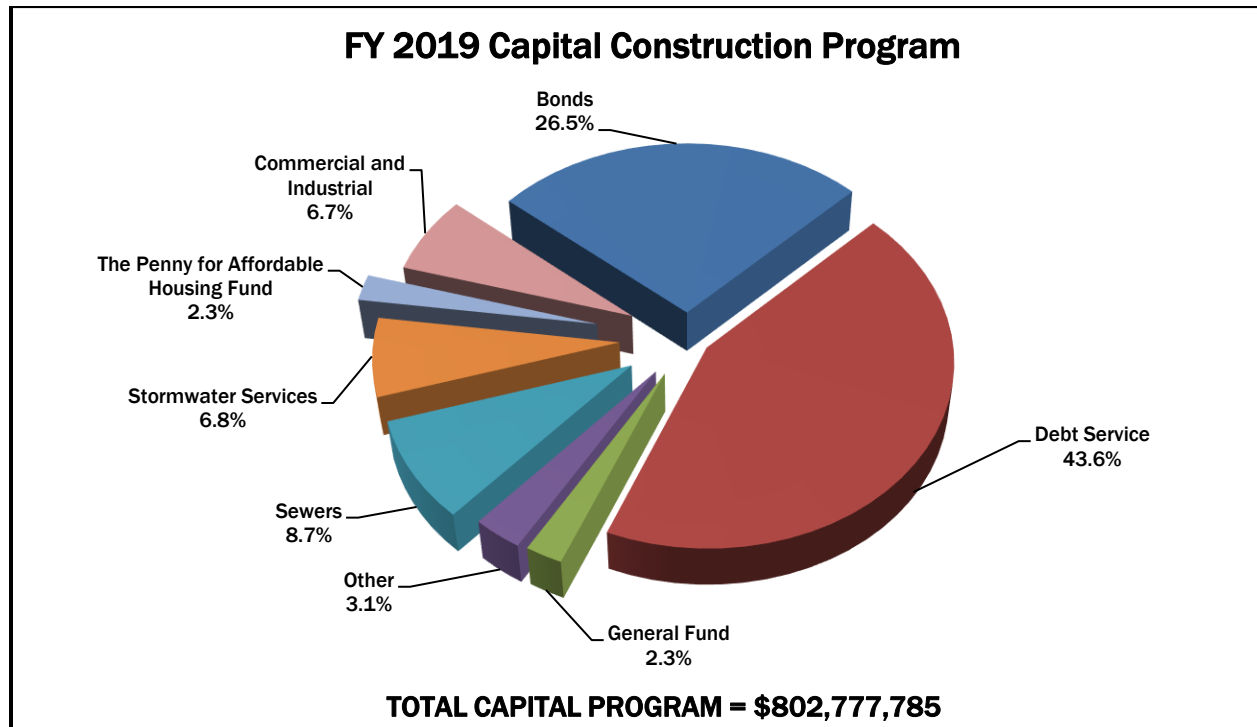
Capital Projects Overview

Summary of Capital Construction Program

The Capital Construction Program of Fairfax County is organized to meet the existing and anticipated future needs of the citizens of the County and to enable the County government to provide necessary services. The Capital Construction Program (other than sanitary sewer construction and resource recovery projects) is primarily financed through transfers from the General Fund and the sale of General Obligation Bonds. Supplementing the General Fund and General Obligation Bond monies are additional funding sources including federal and state grants, contributions, and tax revenues from special revenue districts.

The Fairfax County Capital Construction Program includes, but is not limited to construction of both new and renovated school facilities, park facilities, transportation facilities, libraries, trails/sidewalks, fire stations, government centers with police substations, stormwater management facilities, athletic fields, housing units to provide affordable housing opportunities to citizens, commercial revitalization initiatives and infrastructure replacement and upgrades at County facilities. In addition, the Program includes contributions and obligations in support of the capital construction.

Funding in the amount of \$802,777,785 is included in FY 2019 for the County's Capital Construction Program. Of this amount, \$349,973,431 is included for debt service and \$452,804,354 is included for capital expenditures. The source of funding for capital expenditures includes: \$18,462,076 from the General Fund; \$213,000,000 in General Obligation Bonds; \$70,000,000 in sewer system revenues; \$18,000,000 in Real Estate revenues supporting the Affordable Housing Program; \$54,672,620 in Stormwater Services revenue; \$54,076,686 in Commercial and Industrial revenues; and \$24,592,972 in financing from various other sources. Other sources of financing include, but are not limited to, transfers from other funds, pro rata share deposits, user fees, developer contributions and/or payments.



Capital Projects Overview

General Fund Support

In FY 2019, an amount of \$18,462,076 is supported by the General Fund for capital projects. This includes an amount of \$11,871,476 for commitments, contributions and facility maintenance and \$6,590,600 for Paydown projects. The Paydown program has been redesigned at the request of the Board of Supervisors to exclude those projects that are on-going maintenance projects or annual contributions. Paydown now includes infrastructure replacement and upgrades, athletic field improvements and other capital improvements. The FY 2019 General Fund Capital Program represents a slight decrease of \$979,800 based on a shift of operational expenses from the Capital Program to the General Fund operational budget. This shift is associated with operational expenses related to the management of the Laurel Hill and Workhouse Arts Foundation properties. Funding for capital improvements and other property management expenses had previously been funded in Fund 30010, County Construction and Contributions. In recent years, funding has supported staffing and maintenance in the Park Authority and Facilities Management Department, and funding no longer supports capital improvements projects. There is no net impact to the General Fund. Based on the Board of Supervisor’s FY 2018 Budget Guidance to “increase funding for infrastructure both in the use of one-time balances and by increasing the level of funding in the annual budget”, additional funding for Paydown projects is anticipated to be included as part of the *FY 2018 Third Quarter Review*.

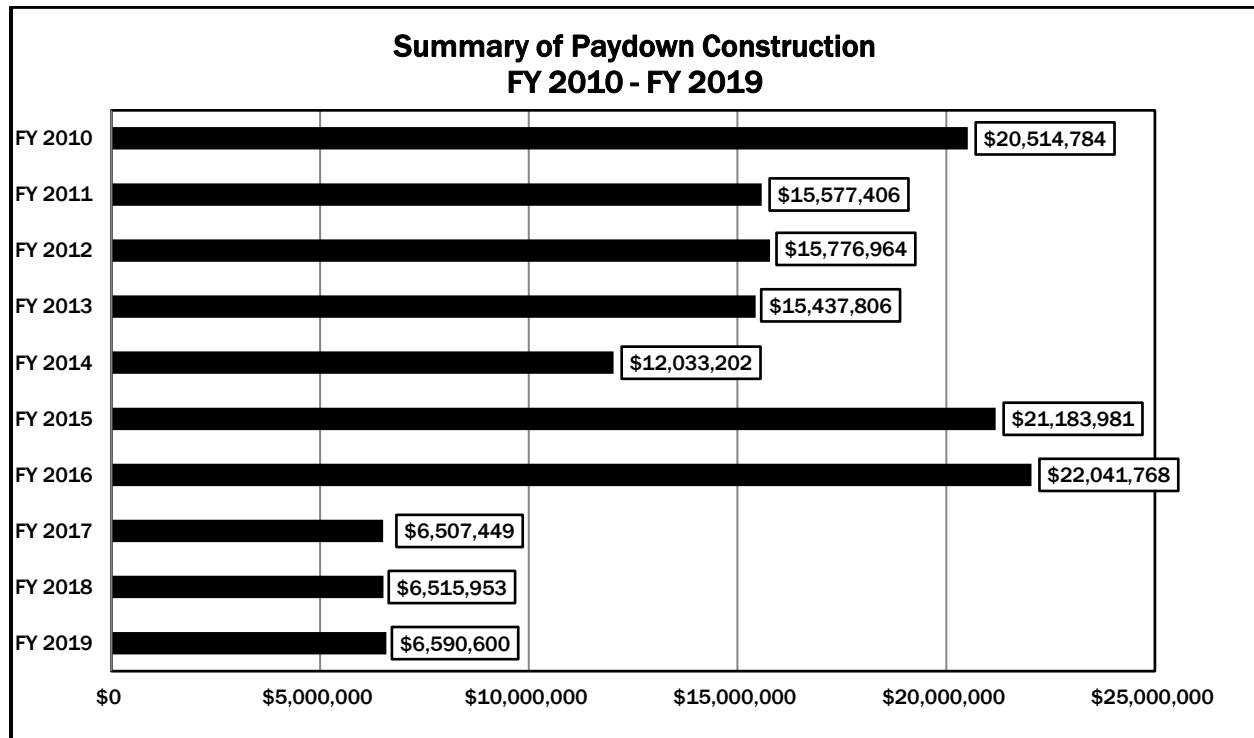
The FY 2019 General Fund Supported Program is illustrated below:

FY 2019 Capital Construction/Paydown Summary*			
	Commitments, Contributions and Facility Maintenance	Paydown	Total General Fund Support
Athletic Field Maintenance and Sports Projects	\$4,435,338	\$1,700,000	\$6,135,338
Park Authority Inspections, Maintenance and Infrastructure Upgrades	\$960,000	\$1,690,000	\$2,650,000
Environmental Initiatives	\$535,000	\$0	\$535,000
On-Going Development, Infrastructure Maintenance and Revitalization	\$1,560,000	\$0	\$1,560,000
Payments and Contributions	\$4,381,138	\$0	\$4,381,138
County Infrastructure Replacement and Upgrades	\$0	\$1,700,600	\$1,700,600
Reinvestment, Repair, and Emergency Maintenance of County Roads and Walkways	\$0	\$1,300,000	\$1,300,000
Developer Default Improvements	\$0	\$200,000	\$200,000
Total General Fund Support	\$11,871,476	\$6,590,600	\$18,462,076

* Reflects General Fund support. Other funding sources such as dedicated revenue and bond funding are not included in these totals.

Capital Projects Overview

The graph below depicts the level of Paydown funding between FY 2010 and FY 2019. The decrease beginning in FY 2017 is associated with the revised definition of the Paydown program.



Specifics of the FY 2019 General Fund Supported Program include:

Athletic Field Maintenance and Sports Projects

FY 2019 funding in the amount of \$7,610,338 has been included for the athletic field maintenance and sports program. This level of funding is supported by a General Fund transfer of \$6,135,338 and revenue generated from the Athletic Services Fee in the amount of \$1,475,000. Of the Athletic Services Fee total, \$800,000 will be dedicated to the turf field replacement program, \$275,000 will be dedicated to custodial support for indoor sports organizations, \$250,000 will be dedicated to maintenance of school athletic fields, \$75,000 will be dedicated to synthetic turf field development, and \$75,000 will partially fund the Youth Sports Scholarship Program. The Athletic Service Fee revenue is based a rate of \$5.50 per participant per season and \$15 for tournament team fees for diamond field users and indoor gym users and a rate of \$8.00 per participant per season and \$50 tournament team fees for rectangular fields users. The increase for rectangular is specifically to pay for the turf field replacement fund.

Specific funding levels associated with maintenance include:

- ◆ An amount of \$860,338 provides for specific contracted services aimed at improving the condition of athletic fields scheduled for community use at FCPS elementary schools, middle schools and centers. Maintenance responsibilities include mowing at a frequency of 29 times per year and annual aeration/over-seeding. This effort is supported entirely by the General Fund and is managed by the Park Authority.

Capital Projects Overview

- ◆ An amount of \$1,000,000 is dedicated to the maintenance of diamond fields at Fairfax County Public Schools and is partially supported by revenue generated by the Athletic Services Fee. This funding is used for contracted maintenance aimed at High School programs, athletic field renovations, and irrigation maintenance of non-Park Authority athletic fields. This includes 417 non-Park Authority athletic fields of which 369 are located at elementary, middle schools, and centers. All field maintenance is coordinated between the Park Authority and the Department of Neighborhood and Community Services. Of the total funding, an amount of \$250,000 is included for this program based on the FY 2019 projection of revenue generated from the Athletic Services Fee and \$750,000 is supported by the General Fund.
- ◆ An amount of \$50,000 is included for routine maintenance of girls' softball field amenities on select Fairfax County Public School sites. These amenities, such as dugouts, fencing and irrigation systems, were added or constructed by the County based on recommendations from the citizen-led Action Plan Review Team (APRT) in order to reduce disparities in the quality of fields assigned to boys' baseball and girls' softball organizations. Routine maintenance is necessary both to maintain equity and to ensure safety. For five years, funding of \$200,000 was provided to support Girls' Fast Pitch Field Maintenance improvements to various girls' softball fields throughout the County as requested by the Fairfax Athletic Inequities Reform (FAIR). FY 2019 funding will provide maintenance to the improvements and amenities previously made to girls' softball fields. This project is supported entirely by the General Fund and coordinated by Department of Neighborhood and Community Services.
- ◆ An amount of \$75,000 is included to support the development of synthetic turf fields. Fields are chosen through a review process based on the need in the community, projected community use and the field location and amenities. This effort is coordinated between the Park Authority and the Department of Neighborhood and Community Services and funding is provided from revenue generated from the Athletic Services Fee. It should be noted that as part of the *FY 2013 Carryover Review*, a Joint County School initiative was implemented to develop new synthetic turf fields throughout the County. This recommendation was based on the findings of the Synthetic Turf Field Task Force in its July 2013 report which determined the need for synthetic turf fields at 8 remaining high schools in the County that did not have turf fields. This program is now fully funded.
- ◆ An amount of \$2,700,000 is included for athletic field maintenance and repairs, irrigation repairs, lighting repairs, turf maintenance, utility costs, and capital equipment replacement costs. The Park Authority is responsible for full service maintenance on 268 athletic fields, of which 39 are synthetic turf and 224 are natural turf. In addition, the field inventory includes 115 lighted and 115 irrigated fields. The fields are used by more than 200 youth and adult sports organizations as well as Fairfax County citizens. This effort is supported entirely by the General Fund and is managed by the Park Authority.
- ◆ An amount of \$275,000 is included for custodial support for indoor gyms used by sports organizations. The use of FCPS indoor facilities on the weekend requires FCPS to schedule a school system employee to open and close the facility. Revenue generated from the Athletic Services Fee is used to provide payment for FCPS staff, eliminating the need for indoor sports organizations to pay the hourly rate previously charged. This project is entirely supported by revenue generated from the Athletic Services Fee and is managed by the Department of Neighborhood and Community Services.

Capital Projects Overview

- ◆ An amount of \$150,000 is included for the Youth Sports Scholarship Program. The Youth Sports Scholarship Program provides support to youth from low-income families who want to participate in community-based sports programs. Of the total funding, an amount of \$75,000 is included for this program based on the FY 2019 projection of revenue generated from the Athletic Services Fee, and \$75,000 is supported by the General Fund.

Specific funding levels associated with Paydown capital improvements include:

- ◆ An amount of \$250,000 is included to continue the replacement and upgrading of Fairfax County Public Schools (FCPS) athletic field lighting systems at middle and high schools used by many County organizations. Funding supports a replacement and repair schedule, as well as improvements to bring existing lighting systems up to new standards. The school system's Office of Design and Construction Services ensures lighting standards are maintained and FCPS annually prioritizes funding for field lighting. FY 2019 funding supports the replacement and repair for one field's existing lighting systems. This project is supported entirely by the General Fund and coordinated by the Department of Neighborhood and Community Services.
- ◆ An amount of \$2,250,000 is included for the turf field replacement program in FY 2019. Funding of \$800,000 is supported by Athletic Service Fee revenue and \$1,450,000 is supported by the General Fund. There are a total of 91 synthetic turf fields throughout the County, of which 24 are FCPS stadium fields and 67 are County Parks/FCPS non-stadium fields. There are over 130,000 youth and adult participants (duplicated number) annually that benefit from rectangular turf fields. Funding is needed to address the growing need for field replacement and to support a replacement schedule over the next 10 years. If turf fields are not replaced when needed, they may need to be closed for safety reasons. Most manufacturers provide an 8-year warranty for a properly maintained synthetic turf field; however, it is a generally accepted practice to assume a life expectancy of the synthetic turf field of no more than 10 years. For planning purposes, the County adopted an annual budget estimate of a little more than half of the installation funding, which is a generally accepted practice for the industry. The current projected replacement cost per field is approximately \$450,000. Based on a projected 10-year replacement cycle and the current 67 County field inventory, replacement funding requires a regular financial commitment. Therefore, staff developed a 10-year replacement plan for the current inventory which requires revenue from the Athletic Fee and the General Fund support.

Park Inspections, Maintenance and Infrastructure Upgrades

FY 2019 funding in the amount of \$2,650,000 has been included for Park facilities and grounds. The Park facilities maintained with General Fund monies include but are not limited to: rental properties, historic properties, nature centers, maintenance facilities, sheds, shelters, and office buildings. Park priorities are based on the assessment of current repair needs including safety and health issues, facility protection, facility renewal and improved services. In addition, Park maintenance requirements are generated through scheduled preventative maintenance or from user requests for facility alterations. Without significant reinvestment in buildings and grounds, older facilities can fall into a state of ever decreasing condition and functionality, resulting in increased maintenance and repair costs in the future. Preventative and repair work is required for roofs, HVAC, electrical and lighting systems, fire alarm systems and security systems. Funding is essential to the maintenance and repair of building stabilization, including infrastructure replacement and upgrades at 551,091 square feet of non-revenue supported Park Authority structures and buildings. Maintenance is also required on over 580 pieces of grounds equipment.

Capital Projects Overview

Specific projects funded in FY 2019 include:

Facility Maintenance Supported by the General Fund

- ◆ An amount of \$476,000 is provided to fund annual requirements for Parks grounds at non-revenue supported parks. The Park Authority is responsible for the care of a total park acreage of 23,418 acres of land, with 427 park site locations. This funding is used for mowing and other grounds maintenance, as well as arboreal services. Arboreal services are provided in response to Park staff and citizens' requests and include pruning, removal and inspections of trees within the parks. There has been a rise in staff responses to requests for the inspection and removal of hazardous or fallen trees within the parks and those that may pose a threat to private properties.
- ◆ An amount of \$484,000 is included to provide corrective and preventive maintenance and inspections at over 551,091 square feet at non-revenue supported Park Authority structures and buildings. This maintenance includes the scheduled inspection and operational maintenance of HVAC, plumbing, electrical, security and fire alarm systems. This funding is critical in order to prevent the costly deterioration of facilities due to lack of preventative maintenance.

Infrastructure Replacement and Upgrades (Paydown)

- ◆ An amount of \$925,000 is included for general park infrastructure replacement and upgrades at non-revenue supported Park facilities. Repairs and replacements support building systems at or beyond life expectancy which are experiencing significant annual maintenance. These requirements include: various roof replacements and/or repairs on outdoor public restrooms and picnic shelters (\$200,000); replacement of fire and security systems at historic sites, nature centers, and maintenance facilities including the addition of freeze and water monitoring sensors to several historic sites (\$125,000); replacement of windows, doors, and siding at picnic shelters, outdoor restrooms, and historic sites (\$150,000); replacement of HVAC equipment at Nature Centers, Visitor Centers, and Maintenance Shops (\$250,000) and the stabilization or repairs of buildings at properties conferred to the Park Authority (\$200,000).
- ◆ An amount of \$765,000 is included to provide improvements and repairs to park facilities and amenities including playgrounds, athletic courts, fences, picnic shelters, parking lots and roadways. In addition, funding will provide for annual maintenance to 326 miles of trails and replacement of un-repairable wooden bridges with fiber glass bridges to meet county code.

Environmental Initiatives

FY 2019 funding of \$535,000 has been included for environmental initiatives. FY 2019 projects were selected based on the project selection process supported by the Environmental Quality Advisory Council (EQAC). The selection process includes the application of specific project criteria, review of proposals from County agencies, and identification of projects for funding. Specific funding levels include:

- ◆ An amount of \$200,000 is included to continue the Invasive Management Area (IMA) program. The Park Authority manages this volunteer program, as well as other invasive removal initiatives. These programs restore hundreds of acres of important natural areas, protect tree canopy, and reach thousands of volunteers. Currently more than 12,000 trained volunteer leaders have contributed 52,700 hours of service since the program's inception in 2005, improving over 1,000 acres of parkland.

Capital Projects Overview

- ◆ An amount of \$5,000 is included for the Green Purchasing Program. This program is designed to support limited term staff to assist in clearly specifying environmental attributes during the County's procurement process. Fairfax County has a current inventory of over 2,400 contracts and emphasizing environmental attributes such as recycling, energy efficiency, durability and reduced toxicity during the procurement process can contribute to the purchase of green products, creating fiscal and environmental savings.
- ◆ An amount of \$7,115 is included for the award-winning spring outreach programs. These programs reach thousands of people in the county and have a deep impact on many youth and adults. Programs include classroom presentations, outdoor learning experiences, outreach events and festivals, high school Envirothon competitions, rain barrel workshops, Seedling Sales, high school science fair project judging, stream monitoring, Enviroscape trainings, storm drain marking, the Sustainable Garden Tour and more.
- ◆ An amount of \$75,000 is included for the Watershed Protection and Energy Conservation Matching Grant Program. This program is intended to support energy education and outreach initiatives and promote community engagement around sustainability and conservation issues. Specifically, the program will provide financial incentives to empower civic associations, places of worship and homeowners through their associations to implement on-the-ground sustainability projects. The initiative will build on current programs that provide technical assistance, hands-on support, outreach and education to Fairfax County homeowners and residents. Projects will improve water quality, reduce greenhouse gas emissions and conserve energy and water. This funding level will support printing and materials, matching grants and one limited term full-time position to conduct outreach and education, site assessments, and inspections.
- ◆ An amount of \$62,200 is included for stream bank and meadow restorations and the purchase of a no-till seed drill for planting native grasses and wildflower seeds. Of this amount, \$1,200 will provide for Riverbend Park stream plantings to stabilize an eroding bank, \$41,500 will provide for meadow restoration at Riverbend Park and Huntley Meadows Park to restore pollinator friendly habitat, and \$19,500 will support the purchase of the no-till seed drill. The purchase of this equipment will save the county approximately \$4,750 in contracting expenses associated with over ten acres of meadow restoration.
- ◆ An amount of \$95,685 is included for LED Solar parking lot lighting and automated heating and/or cooling controls at Green Briar Park. There are currently 30 non-staffed facilities which include irrigation sheds, pump houses and outdoor restrooms. Currently, the heating and cooling equipment can only be turned on and off manually. With the automation of heating and cooling controls, energy efficiencies and temperature control will be achieved. Funding will support installation at two non-staffed facilities. The return on investment is estimated to be 5 years. The LED solar parking lot lighting project will reduce energy use by up to 80 percent. The return on investment is estimated to be 3 years and includes substantially reduced maintenance costs.
- ◆ An amount of \$90,000 is included for the purchase for propane extraction equipment to recover unused propane from cylinders that are disposed of as part of the County's Household Hazardous Waste Program. The extracted propane can then be used by propane supported county equipment and the empty tanks can be sold as scrap metal and recycled. This equipment would allow the County to eliminate paying for the disposal of propane tanks and receive the benefit of the recycled propane tanks and extracted propane.

Capital Projects Overview

In addition, an amount of \$58,140 has been provided in Fund 10030, Contributory Fund, to continue partnering with two non-profit agencies to support tree planting efforts throughout the County.

Revitalization

- ◆ An amount of \$950,000 is included to continue routine maintenance and non-routine repairs in five major commercial revitalization areas (Annandale, Route 1, Springfield, McLean and Baileys Crossroads). The goal of this program is to provide an enhanced level of infrastructure and right-of-way features in these urbanizing areas in order to facilitate pedestrian movements and create a “sense of place.” Routine maintenance in the commercial revitalization areas currently includes grass mowing, trash removal, fertilization, mulching of plant beds, weed control and plant pruning. Non-routine maintenance includes asset maintenance or replacement (e.g., trees, plants, bicycle racks, area signs, street furniture, bus shelter, drinking fountains) to sustain the overall visual characteristics of the districts. FY 2019 funding represents an increase of \$200,000 from the FY 2018 Adopted Budget Plan to support 2 positions to plan, manage, implement and provide some identified service enhancements as supported by the Board of Supervisors.

In addition, staff continues to develop a multi-year implementation plan to phase in an enhanced level of service provided within Commercial Revitalization Districts (CRDs). Staff is working to develop a more sustainable maintenance and reinvestment approach by reviewing the current inventory, reviewing urban streetscape standards, researching best management practices, and developing a more rigorous review and implementation process for new projects. The goal of the program is to enhance the appearance, functionality and sustainability of the pedestrian environment in CRDs and to prevent CRD infrastructure and aesthetic improvements from falling into a state of disrepair. The proposed Plan would include expanding the areas eligible for enhanced levels of service for grass cutting, landscaping, litter control, weed control and street light inspections. In addition, the plan would include routine street sweeping and provide for the repairs and replacement of sidewalks and curbs for areas within the CRD.

- ◆ An amount of \$460,000 is included to support routine maintenance, non-routine repairs and recurring landscaping associated with the Tyson’s Corner Silver Line area along the Route 7 corridor, from Route 123 to the Dulles Toll Road. Routine maintenance services include landscape maintenance along the median and both sides of the road, trash removal, snow removal, and stormwater facility maintenance. The primary difference between maintenance requirements related to the Silver Line Metro system stations and other existing Metro stations is the County’s maintenance requirement associated with 27 water quality swales under the raised tracks of the Silver Line located in VDOT Right-of-Way. Typical maintenance for the swales will include litter and sediment removal, vegetation care, and structural maintenance. It is anticipated that additional maintenance responsibilities may be required after the completion of Phase II of the Silver Line.

Capital Projects Overview

Payments and Obligations

- ◆ Funding of \$840,145 is included for the annual payment associated with the Salona property based on the Board of Supervisors' approval of the purchase of this conservation easement on September 26, 2005. The total cost of the property is \$18.2 million with payments scheduled through FY 2026.
- ◆ Funding of \$1,000,000 is included for the County's annual contribution to offset school operating and overhead costs associated with School-Age Child Care (SACC) Centers.
- ◆ Funding of \$2,540,993 is included for Fairfax County's contribution to the Northern Virginia Community College (NVCC). Funding provides for the continued construction and maintenance of various capital projects on college campuses within the NVCC system. The FY 2019 rate of \$2.25 per capita is applied to the population figure provided by the Weldon Cooper Center.

County Infrastructure Replacement and Upgrades

Infrastructure Replacement and Upgrades support the long-term needs of the County's capital assets to maximize the life of County facilities, avoid their obsolescence, and provide for planned repairs, improvements and restorations to make them suitable for organizational needs. Fairfax County will have a projected FY 2019 facility inventory of over 10 million square feet of space (excluding schools, parks, and housing facilities). This inventory continues to expand with the addition of newly constructed facilities, the renovation and expansion of existing facilities and the acquisition of additional property. With such a large inventory, it is critical that a planned program of repairs and restorations be maintained. In addition, the age of a major portion of this inventory of facilities is reaching a point where major reinvestments are required in the building subsystems.

Each year, the Facilities Management Department (FMD) prioritizes and classifies infrastructure replacement and upgrade projects into five categories. Projects are classified as Category F: urgent/safety related, or endangering life and/or property; Category D: critical systems beyond their useful life or in danger of possible failure; Category C: life-cycle repairs/replacements where repairs are no longer cost effective; Category B: repairs needed for improvements if funding is available, and Category A: good condition.

The requirement for County infrastructure replacement and upgrades is estimated at \$26 million per year. This estimate is based on current assessment data, as well as industry standards (2 percent of the current replacement value). Based on current staffing levels, the complexity of many of the projects, and the timeline for completing replacement and upgrade projects, it is estimated that approximately \$15 million per year would be a good funding goal. Due to budget constraints, in FY 2019, an amount of \$1,700,600 is included to address two of the top priority Category F projects. In addition, funding in the amount of \$8,237,400 will be proposed as part of the *FY 2018 Third Quarter Review* for a total of \$9,938,000 in FY 2019 identified projects. These projects, all category F, will address emergency building repairs, fire alarm system replacement, parking lot and garage repairs, HVAC system upgrades, roof repairs and waterproofing, emergency generator replacement, elevator/escalator repairs, and electrical system upgrades/repairs.

Capital Projects Overview

The specific projects funded in FY 2019 include:

- ◆ Funding in the amount of \$1,700,600 will support HVAC system component replacements at a variety of locations. This funding includes \$750,000 for the replacement of the HVAC and the control system at Hollin Hall based on increased failure of the equipment, the difficulty in procuring obsolete parts, and outdated technology. The system requires increased maintenance efforts due to age and stress on the system. Failure to replace this system can lead to increased energy usage, periodic loss of control of the system, and a disruption to the building. Funding of \$275,000 is included for the replacement of the cooling tower, motors, and belts at the Jennings Judicial Center due to increased failures and reduced effectiveness. Funding of \$210,000 is included for the replacement of the rooftop ductwork at the Government Center in order to extend the useful life of the ductwork by an estimated seven to ten years. The existing ductwork has outlived its useful life, which leads to water and condensation leaking into the building and damaging the finishes. Funding of \$208,000 is included for the replacement of the building control unit, boiler, and hot water pumps at Stevenson Place based on increased failures and utility costs. Funding of \$170,000 is included for the replacement of the building automation system at the Boys Probation House based on obsolete technology and increased failures. This will integrate the system and allow for remote monitoring and control of the system. Lastly, funding of \$87,600 is included for design work only associated with the replacement of the building automation unit, boilers, and pumps at the Juvenile Detention Center based on obsolete technology and increased failures and utility costs. It is anticipated that the remaining funding to complete this project will be included in the *FY 2018 Third Quarter Review*.

Reinvestment, Repair, and Emergency Maintenance of County Roads and Walkways

- ◆ An amount of \$700,000 is included for the Reinvestment, Repair, and Emergency Maintenance of County Roads. The County is responsible for 38 miles of roadways not maintained by VDOT. Funding was previously approved to build an accurate inventory and condition assessment of County-owned roads and service drives. As a result, the 2015 Rinker study identified an amount of \$4 million in reinvestment funding required for the roadways with the most hazardous conditions, as well as increased annual funding for emergency repairs. On-going road maintenance includes, but is not limited to, pothole repair, drive surface overlays, subgrade repairs, curb and gutter repairs, traffic and pedestrian signage repairs, hazardous tree removal, grading, snow and ice control, patching of existing travelways, minor ditching and stabilization of shoulders, and drainage facilities. It is anticipated that the \$4 million requirement for the initial reinvestment program will be funded over a 5-year period, with funding from the allocation of the Capital Sinking Fund. Once this initial backlogged reinvestment has been completed, it is anticipated that staff will re-assessed the status of the program and develop the next multi-year plan to continue needed reinvestment and determine the appropriate annual funding level to sustain the Program in the future. Annual funding of \$700,000 in FY 2019 is also consistent with the 5-year plan.
- ◆ An amount of \$600,000 is included to meet emergency and critical infrastructure requirements for County trails, sidewalks and pedestrian bridges. In addition to the infrastructure replacement and upgrades of 675 miles of walkways, the Department of Public Works and Environmental Services (DPWES) and the Fairfax County Department of Transportation are responsible of 69 pedestrian bridges. This inventory includes 63 percent of walkways that are over 19 years old. Funding was previously approved to build an accurate inventory and condition assessment of County-owned walkways. As a result, the 2013 Rinker study identified an amount of \$3 million in reinvestment funding required for 10 miles of trails in the poorest condition. On-going critical repairs include the

Capital Projects Overview

correction of safety and hazardous conditions such as the damaged trail surfaces, retaining wall failures, handrail repairs, and the rehabilitation of pedestrian bridges. It is anticipated that the \$3 million requirement for the initial reinvestment program will be funded over a 3-year period, with funding from the allocation of the Capital Sinking Fund. Once this initial backlogged reinvestment has been completed, it is anticipated that staff will re-assessed the status of the program and develop the next multi-year plan to continue needed reinvestment and determine the appropriate annual funding level to sustain the Program in the future. Annual funding of \$600,000 in FY 2019 is also consistent with the 3-year plan.

On-going Development Efforts

- ◆ An amount of \$75,000 is included to support payments to developers for interest earned on conservation bond deposits. The County requires developers to contribute funds to ensure the conservation of existing natural resources. Upon satisfactory completion of projects, the developer is refunded the deposit with interest. This estimate is based on actual funding requirements in the past several years.
- ◆ An amount of \$75,000 is included to support the maintenance of geodetic survey control points for the Geographic Information System (GIS). This project also supports the development and maintenance of an interactive, GIS-based website that will provide convenient and cost effective monumentation information to the County's land development customers.
- ◆ Funding of \$300,000 is included to support the Developer Default program. This project is necessitated by economic conditions surrounding the construction industry that result in some developers not completing required public facilities, including acceptance of roads by the state, walkways and storm drainage improvements. FY 2019 funding is supported by \$200,000 in General Fund monies and \$100,000 in anticipated developer default revenue based on the trend of 2-3 default projects being received annually.

Capital General Obligation Bond Program

The Board of Supervisors annually reviews cash requirements for capital projects financed by General Obligation bonds to determine the ongoing schedule for construction of currently funded projects as well as those capital projects in the early planning stages. The bond capital program is reviewed annually by the Board of Supervisors in association with the Capital Improvement Program (CIP) and revisions are made to cashflow estimates and appropriation levels as needed. The CIP is designed to balance the need for public facilities as expressed by the countywide land use plan with the fiscal capability of the County to meet those needs. The CIP serves as a general planning guide for the construction of general purpose, school, and public facilities in the County. The County's ability to support the CIP is entirely dependent upon and linked to the operating budget. The size of the bond program in particular is linked to the approved General Fund disbursement level.

The Virginia Constitution requires that long-term debt pledged by the full faith and credit of the County can only be approved by voter referendum. There is no statutory limit on the amount of debt the voters can approve. It is the County's own policy to manage debt within the guidelines identified in the *Ten Principles of Sound Financial Management*. The *Ten Principles* specifically indicate that debt service expenditures as a percentage of General Fund disbursements should remain under 10 percent and that the percentage of debt to estimated market value of assessed property should remain under 3 percent. The County continues to maintain these debt ratios with debt service requirements as a percentage of General

Capital Projects Overview

Fund disbursements at 7.82 percent, and net debt as a percentage of market value at 1.16 percent as of June 30, 2017.

Continual monitoring and adjustments to the County's CIP have been necessary, as economic conditions have changed. The FY 2019 – FY 2023 Advertised Capital Improvement Program (With Future Fiscal Years to 2028) is released concurrently with the FY 2019 budget. It should be noted that the operating budget is directly affected by the approval of the capital budget and its capital project components. The operating budget must support the debt service costs of all bond issues related to the capital budget, as well as the operating maintenance costs for each facility and improvement.

In FY 2019, an amount of \$213,000,000 is included in General Obligation Bond funding. Specific funding levels in FY 2019 include:

- ◆ Funding in the amount of \$180,000,000 is included for various school construction projects financed by General Obligation Bonds. This level of bond support reflects an increase of \$25,000,000 in annual bond sales for FCPS. For several years, the School Board has requested an increase in the annual bond sales limit based on an identified gap in the level of funding to support school renovation projects. The increase from \$155 million to \$180 million annually is recommended based on FCPS requirements and debt service affordability. For details of the specific proposed school projects, see the Fairfax County Public School's FY 2019 Advertised Budget.
- ◆ Funding in the amount of \$30,000,000 is included to support the 117-mile Metrorail system as well as to maintain and/or acquire facilities, equipment, railcars and buses.
- ◆ Funding of \$3,000,000 is included for the County's annual contribution to the Northern Virginia Regional Park Authority (NVRPA) Capital program. The NVRPA Park system includes 30 parks and over 12,860 acres of land, over 100 miles of trails, numerous historic sites, five waterparks, two family campgrounds, three golf courses, a nature center, botanical gardens, rental cabins and cottages, five marinas, and over 40 miles of protected shoreline along major rivers and reservoirs.

Stormwater Management Program

Stormwater Services are essential to protect public safety, preserve property values and support environmental mandates such as those aimed at protecting the Chesapeake Bay and the water quality of other local jurisdictional waterways. Projects include repairs to stormwater infrastructure, measures to improve water quality such as stream stabilization, rehabilitation, safety upgrades of state regulated dams, repair and rehabilitation of underground pipe systems, surface channels, flood mitigation, site retrofits and best management practices (BMP), and other improvements. This funding also supports the implementation of watershed master plans, public outreach efforts, and stormwater monitoring activities as well as operational maintenance programs related to the existing storm drainage infrastructure as it pertains to stormwater conveyance and stormwater quality improvements.

As part of the FY 2010 Adopted Budget Plan, a special service district was created to support the Stormwater Management Program and provide a dedicated funding source for both operating and capital project requirements, as authorized by Code of Virginia Ann. Sections 15.2-2400. In FY 2019, the stormwater service rate will increase from \$0.0300 to \$0.0325 per \$100 of assessed real estate value. This level is consistent with the five-year plan developed in FY 2015 as a phased approach for funding and staffing to support the anticipated regulatory increases. The five-year spending plan includes approximately \$225 million in required projects and operational support. FY 2019 represents the final year of the five-year plan and during the next year, staff will be evaluating the success of the program, analyzing

Capital Projects Overview

future stormwater rate requirements and developing the next 5-10 year Stormwater plan. It is anticipated that the next multi-year plan will continue to include ¼ cent increases per year until such time as the rate is at the target level of 4 cents.

FY 2019 funding will support \$54,672,620 for capital project implementation including, infrastructure reinvestment, regulatory requirements, dam safety, and contributory funding requirements. Specific funding levels in FY 2019 include:

- ◆ Funding in the amount \$6,500,000 is included for the Stormwater Regulatory Program. The County is required by federal law to operate under the conditions of a state issued MS4 Permit. Stormwater staff annually evaluates funding required to meet the increasing federal and state regulatory requirements pertaining to the MS4 Permit requirements, and State and Federal mandates associated with controlling water pollution delivered to local streams and the Chesapeake Bay. The MS4 Permit allows the County to discharge stormwater from its stormwater systems into state and federal waters. The County currently owns and/or operates approximately 6,800 regulated outfalls within the stormwater system that are governed by the permit. The current permit was issued to the County in April 2015. The permit requires the County to document the stormwater management facility inventory, enhance public outreach and education efforts, increase water quality monitoring efforts, provide stormwater management and stormwater control training to all County employees, and thoroughly document all of these enhanced efforts. The permit also requires the County to implement sufficient stormwater projects that will reduce the nutrients and sediment delivered to the Chesapeake Bay in compliance with the Chesapeake Bay TMDL implementation plan adopted by the State.
- ◆ Funding in the amount of \$7,500,000 is included for Dam Safety and Facility Rehabilitation. There are currently more than 6,200 stormwater management facilities in service that range in size from small rain gardens to large state regulated flood control dams. The County is responsible for inspecting both County owned and privately owned facilities and for maintaining County owned facilities. This inventory increases annually and is projected to continually increase as new development and redevelopment sites are required to install stormwater management controls. This program maintains the control structures and dams that control and treat the water flowing through County owned facilities. This initiative also includes the removal of sediment that occurs in both wet and dry stormwater management facilities to ensure that adequate capacity is maintained to treat the stormwater. The program results in approximately 70 projects annually that require design and construction management activities as well as contract management and maintenance responsibilities.
- ◆ Funding in the amount of \$7,000,000 is included for Conveyance System Inspections, Development and Rehabilitation. The County owns and operates approximately 1,400 miles of underground stormwater pipes and improved channels with an estimated replacement value of over one billion dollars. The County began performing internal inspections of the pipes in FY 2006. The initial results showed that more than 5 percent of the pipes were in complete failure and an additional 15 percent required immediate repair. Increased MS4 Permit regulations apply to these 1,400 miles of existing conveyance systems, 62,000 stormwater structures, and a portion of the immediate downstream channel at the 6,800 pipe outlets. Acceptable industry standards indicate that one dollar re-invested in infrastructure saves seven dollars in the asset's life and 70 dollars if asset failure occurs. Once the initial internal inspections are complete, the goal of this program is to inspect pipes on a 20-year cycle and rehabilitate pipes and improved outfall channels before total failure occurs.

Capital Projects Overview

- ◆ Funding in the amount of \$24,216,507 is included for Stream and Water Quality Improvements. This program funds water quality improvement projects necessary to mitigate the impacts to local streams and the Chesapeake Bay resulting from urban stormwater runoff. This includes water quality projects such as construction of stormwater management ponds, implementation of low impact development techniques on stormwater facilities, stream restoration, and approximately 1,700 water quality projects identified in the completed countywide Watershed Management Plans. In addition, Total Maximum Daily Load (TMDL) requirements for local streams and the Chesapeake Bay are the regulatory process by which pollutants entering impaired water bodies are reduced. The Chesapeake Bay TMDL was established by the EPA and requires that MS4 communities as well as other dischargers implement measures to significantly reduce the nitrogen, phosphorous and sediment loads entering waters draining to the Bay by 2025. Compliance with the Bay TMDL requires that the County should undertake construction of new stormwater facilities, retrofit existing facilities and properties, and increase maintenance. Based on several years of experience constructing projects, and including recent changes in the nutrient accounting guidelines, staff has reduced the estimated cost of compliance with the Bay TMDL to approximately \$25 million per year. The EPA is currently updating the Bay model and it is anticipated that the update will result in changes to both the assigned targets as well as how projects are credited, which will likely impact future compliance estimates. In addition to being required to meet Bay TMDL targets, the current MS4 Permit requires the County to develop and implement action plans to address local impairments. Most of the 1,700 watershed management plan projects contribute toward achieving the bay and local stream TMDL requirements.
- ◆ Funding in the amount of \$5,000,000 is included for the Emergency and Flood Control Program. This program supports flood control projects for unanticipated flooding events that impact storm systems and flood residential properties. The program provides annual funding for scoping, design, and minor construction activities related to flood mitigation projects.
- ◆ Funding in the amount of \$3,000,000 is included for Flood Prevention in the Huntington area. This program will address the health and public safety concerns associated with the recurring flooding in the Huntington area by designing and constructing a levee and community drainage improvements that will ensure the safe operation and long-term sustainability of this critical piece of infrastructure. Initial funding of \$30.0 million was approved as part of the 2012 Stormwater Bond Referendum. The bond amount approved by the voters was based on a preliminary design by the US Army Corps of Engineers (USACE). The current, updated total project estimate is approximately \$40.0 million. To accommodate funding beyond that currently approved, a strategy was developed using a portion of revenue from the Stormwater Service District allocated to the Stream and Water Quality Improvements Program. The strategy reallocates a total of \$10.0 million over a four year period. Use of the Stormwater Service District for this project is consistent with the goals of the program to address structural flooding and other critical community stormwater needs.
- ◆ Funding in the amount of \$800,000 is included for the Stormwater Allocations to Towns project. On April 18, 2012, the State Legislature passed SB 227, which entitles the Towns of Herndon and Vienna to all revenues collected within their boundaries by Fairfax County's stormwater service district. An agreement was developed for a coordinated program whereby the Towns remain part of the County's service district and the County returns 25 percent of the revenue collected from properties within each town. This allows for the towns to provide services independently such as maintenance and operation of stormwater pipes, manholes, and catch basins. The remaining 75 percent remains with the County and the County takes on the responsibility for the Towns' Chesapeake Bay TMDL requirements as well as other TMDL and MS4 requirements. This provides for an approach that is based on watersheds rather than on jurisdictional lines.

Capital Projects Overview

- ◆ Lastly, FY 2019 funding of \$656,113 is included for County contributions. An amount of \$527,730 is provided for the Northern Virginia Soil and Water Conservation District (NVSWCD). The NVSWCD is an independent subdivision of the Commonwealth of Virginia that provides leadership in the conservation and protection of Fairfax County's soil and water resources. It is governed by a five-member Board of Directors, three of whom are elected every four years by the voters of Fairfax County and two who are appointed by the Virginia Soil and Water Conservation Board. Accordingly, the work of NVSWCD supports many of the environmental efforts set forth in the Board of Supervisors' Environmental Excellence 20-year Vision Plan. The goal of the NVSWCD is to continue to improve the quality of the environment and general welfare of the citizens of Fairfax County by providing them with a means of dealing with soil, water conservation and related natural resource problems. It provides County agencies with comprehensive environmental evaluations for proposed land use changes with particular attention to the properties of soils, erosion potential, drainage and the impact on the surrounding environment. NVSWCD has consistently been able to create partnerships and leverage state, federal and private resources to benefit natural resources protection in Fairfax County. In addition, an amount of \$128,383 is provided for the Occoquan Watershed Monitoring Program (OWMP) to ensure that water quality is monitored and protected in the Occoquan Watershed. Given the many diverse uses of the land and water resources in the Occoquan Watershed (agriculture, urban residential development, commercial and industrial activity, water supply, and wastewater disposal), the OWMP plays a critical role as the unbiased interpreter of basin water quality information.

The Penny for Affordable Housing Fund

The Penny for Affordable Housing, formerly known as the Housing Flexibility Fund, was established in FY 2006 and is designed to serve as a readily available local funding source with the flexibility to preserve and promote the development of affordable housing. For fiscal years 2006 through 2009, the Board of Supervisors (BOS) dedicated revenue commensurate with the value of one cent from the Real Estate tax rate to the Preservation of Affordable Housing, a major County priority. In FY 2010, the BOS reduced annual funding to Fund 30300, The Penny for Affordable Housing, by 50 percent in order to balance the budget. From FY 2006 through FY 2017, the fund has provided a total of \$216.8 million for affordable housing in Fairfax County.

A total of 3,000 affordable units have been preserved for both homeownership and rental purposes in a variety of large and small projects. Of that number, 252 units are preserved as affordable housing for periods of five years or less, and 2,748 units are preserved for 20 years or longer. A variety of funding sources were used to preserve these units; however, The Penny for Affordable Housing funds were critical for the preservation of several large multifamily complexes purchased by private nonprofits and for-profit organizations. These purchases represent a significant portion of the units: 319 units in Janna Lee Villages in the Hybla Valley area (Lee District), 148 units in Hollybrooke II and III in the Seven Corners area of Falls Church (Mason District), 105 units in Coralain Gardens located on Arlington Boulevard (Route 50) in Falls Church (Mason District), 90 units in Sunset Park Apartments in Falls Church (Mason District), 130 units at Mount Vernon House in Alexandria (Mount Vernon District), 216 units in Madison Ridge in Centreville (Sully District), 74 units in Wexford Manor A and B (Providence District), and 113 units in Huntington Gardens (Lee District). These funds were also instrumental in preserving two large complexes: 180 units at the Crescent apartment complex in Reston (Hunter Mill District) and 672 units at the Wedgewood Apartments complex in Annandale (Mason District). These projects were purchased by the County and are being managed by the Fairfax County Redevelopment and Housing Authority (FCRHA) as part of the low- and moderate-income rental program. Without the availability of The Penny for Affordable Housing, both of these apartment complexes may have been lost as affordable housing.

Capital Projects Overview

In FY 2019, funding of \$18,000,000 is allocated as follows: \$5,753,275 for Wedgewood for the annual debt service, \$2,600,000 for Crescent Apartments annual debt service, \$7,744,225 for the Housing Blueprint Project, and \$1,902,500 for Affordable/Workforce Housing.

Wastewater Management System

The Fairfax County Wastewater Management Program is operated, maintained, and managed within the Department of Public Works and Environmental Services (DPWES), and includes nearly 3,242 miles of sewer lines, 63 pumping stations, and 57 flow metering stations, covering approximately 234 square miles of the County's 407-square-mile land and water area. Treatment of wastewater generated is provided primarily through six regional wastewater collection and treatment plants. One of the six regional plants is the County owned and operated Noman M. Cole, Jr. Pollution Control Plant (NCPCP), which is currently permitted to treat 67 million gallons per day (MGD) of flow. By agreement, other regional facilities include the Alexandria Renew Enterprises (AlexRenew) Treatment Plant, the Upper Occoquan Service Authority Plant, the District of Columbia Blue Plains Plant, Loudoun Water and the Arlington County Plant. Fairfax County utilizes all of these facilities to accommodate a total treatment capacity of 157 MGD.

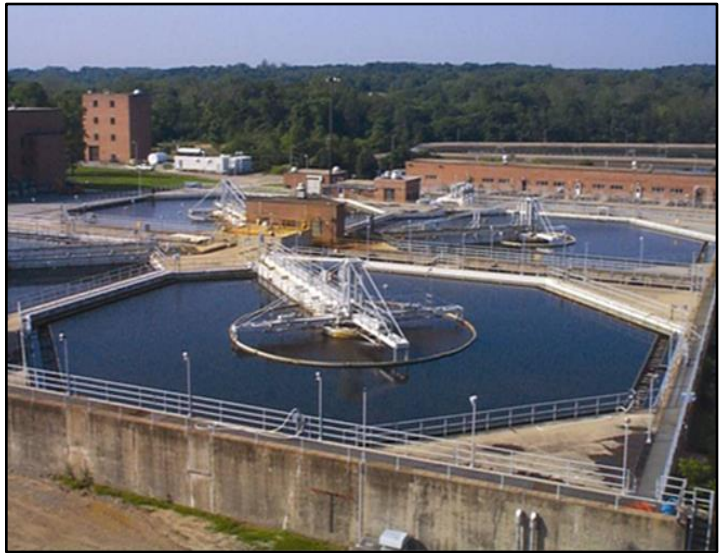


Photo of the Noman M. Cole, Jr. Pollution Control Plant

Total FY 2019 funding is \$70,000,000 including support for the following projects:

- ◆ Funding in the amount of \$11,435,521 is included for facility improvements to the DC Water's Blue Plains Treatment Plant to comply with nutrient discharge limits. Projects supporting the Enhanced Nitrogen Removal Program include providing an additional 40 million gallons of new anoxic reactor capacity for nitrogen removal, a new post aeration facility, pump station, and other new facilities to store and feed methanol and alternative sources of carbon. In addition, funding will also provide for the Clean Rivers Project to prevent combined storm and sanitary overflows during major storm events by storing the overflow in tunnels until the plant has capacity to fully treat the water. This project is currently under construction. The County is responsible for 31 mgd of the 370 mgd or 8.38 percent of the capacity at the Blue Plains Treatment Plant.
- ◆ Funding in the amount of \$16,086,600 will fund the County's share of the upgrades to the Alexandria Renew Enterprises Treatment Plant (AlexRenew). Funding supports the design and construction of a State of the Art Nitrogen Upgrade Program (SANUP) for nitrogen removal. FY 2019 funding is included for engineering design, construction management, landscape architecture and engineering services during construction to comply with the nutrient discharge limits. The County is responsible for 32.4 mgd of the 54 mgd or 60 percent of the capacity at the Alexandria Renew Enterprises Treatment Plant.

Capital Projects Overview

- ◆ Funding in the amount of \$1,276,340 is included for plant upgrades at the Arlington Wastewater Treatment Plant. This funding will support annual repair and rehabilitation work for various facilities as scheduled in Arlington County's Capital Improvement Program. The County is responsible for 3.0 of the 40 mgd or 7.5 percent of capacity at the Arlington Wastewater Treatment Plant.
- ◆ Funding in the amount of \$14,680,739 is included for the continuation of systematic rehabilitation of structures and equipment at the Noman M. Cole, Jr. Pollution Control Plant (NMCCPCP). FY 2019 funding will provide for the rehabilitation and replacement of pumps, gates, and valves; stormwater runoff improvements, and continuation of the rehabilitation of the motor control centers/distribution centers (MCC/DC) and raw wastewater pump station facility.
- ◆ Funding in the amount of \$3,000,000 is included to satisfy the annual appropriation requirement for the County's Extension and Improvement (E&I) Program as approved by the Board of Supervisors on April 12, 2011. This policy adjusts the Connection Charges such that the future cost of the E&I Program is shared equally between the County's Sewer Fund and the property owners seeking public sewer service, when the Health Department determines the properties' septic systems have failed.
- ◆ Funding in the amount of \$5,616,773 is provided for the systematic rehabilitation of the County's 3,242 miles of sanitary sewer lines. Rehabilitation includes, among other things, the use of trenchless technology to rehabilitate approximately 20 miles of sewer per year.
- ◆ Funding in the amount of \$5,276,333 is included to complete the rehabilitation of force mains at the Waynewood I and II, Mount Vernon, Merrywood, Tyson's Dodge, Wellington I, Langley School, Ravenwood, Riverwood and Jones Point.
- ◆ Funding in the amount of \$5,673,694 is included for the regularly scheduled repair, renovation, and replacement of pumping station equipment and facilities. There will be three pump stations in the design phase and six pump stations in the construction phase in FY 2019.
- ◆ Funding in the amount of \$500,000 is included for the planned replacement of sewer meters throughout the County. FY 2019 funding is provided for the continuation of replacing sewer meters used for measuring wastewater flow to and from other jurisdictions for billing and monitoring purposes as well as portable meters used in infiltration and inflow studies to measure wet weather flows.
- ◆ Funding in the amount of \$1,254,000 is included for the condition assessment of 166 segments of 8 to 15 inch gravity sewer lines and provides recommendations for the rehabilitation and/or replacement alternatives. FY 2019 funding will provide for the next phase of this program, which includes construction work.
- ◆ Funding in the amount of \$5,000,000 is included for the condition assessment of 49 miles of sewer lines with a diameter of 15 inches or larger and provides recommendations for the rehabilitation and/or replacement alternatives. FY 2019 funding will provide for the next phase of this program which includes construction work.
- ◆ Funding in the amount of \$200,000 is included for the maintenance of the Robert P. McMath Facility that is the headquarters for the Wastewater Collection Division.

Capital Projects Overview

County and Regional Transportation Projects Fund

The County and Regional Transportation Projects Fund supports the County's implementation of new transportation projects and is funded by the commercial and industrial real estate tax for transportation and Northern Virginia Transportation Authority (NVTA) local tax revenues. The taxing authority for commercial and industrial real property was authorized under the Transportation Funding and Reform Act of 2007 (HB 3202), approved by the Virginia General Assembly on April 4, 2007, and implemented by the Board of Supervisors as part of the [FY 2009 Adopted Budget Plan](#). This revenue helps accelerate the County's implementation of roadway, transit and pedestrian projects.

HB 3202 allows localities to assess a tax on the value of commercial and industrial real estate and to use the proceeds on new transportation improvements. The County's FY 2019 rate is \$0.125 per \$100 of assessed value (the maximum allowed per state code), which will generate approximately \$54.6 million in revenue. This estimate is based on current projections in the commercial real estate market.

On April 3, 2013, the Virginia General Assembly approved HB 2313, a transportation funding package. The bill included regional components for planning districts that meet certain thresholds (population, registered vehicles, and transit ridership). Northern Virginia meets these criteria for the imposition of certain taxes, and HB 2313 is expected to generate over \$300 million per year for transportation projects in the region. The bill mandates that 70 percent of this regional funding be allocated by the NVTA, with the remaining 30 percent provided to the individual localities embraced within NVTA for their determination. Fairfax County's local share of HB 2313 funds is projected to be \$42.4 million in FY 2019. By adopting the commercial and industrial property tax rate of \$0.125, the County qualifies to receive these 30 percent revenues.

FY 2019 funding of \$54,076,686 supports for priority projects including \$24,031,710 for Construction Reserve, \$28,391,082 for Cost Benefit Analysis Support, \$978,786 for the Town of Herndon NVTA, and \$675,108 for the Town of Vienna NVTA.

Other Financing

Funding in the amount of \$24,592,972 includes \$1,575,000 that is associated with projects discussed above including \$100,000 in developer default revenues and \$1,475,000 in athletic services fees. The remaining \$23,017,972 supports various other projects financed by other sources of revenue. Specific funding levels in FY 2019 include:

Housing:

- ◆ Funding of \$189,954 is included for the Undesignated Housing Trust Fund project for reallocation to specific projects when identified and approved by both the Fairfax County Redevelopment and Housing Authority (FCRHA) and Board of Supervisors during FY 2019.
- ◆ Funding in the amount of \$500,000 is included for the Land/Unit Acquisition project for reallocation to specific projects when identified and approved by both the FCRHA and Board of Supervisors during FY 2019.

Other:

- ◆ Funding in the amount of \$22,328,018 is included for various school construction projects financed from a state construction grant, Parent Teachers Association/Parent Teacher Organization receipts, and transfers from Fund S31000, Public School Construction Fund. For more details, see the [Fairfax County Public School's FY 2019 Advertised Budget](#).

Capital Projects Overview

Capital Construction and Operating Expenditure Interaction

To maintain a balanced budget, annual revenues are projected and operating and capital construction expenditures are identified to determine the County's overall requirements and funding availability. Funding levels for capital construction projects are based on the merits of a particular project together with the available funding from all financing sources, with primary reliance on General Obligation bonds. The Board of Supervisors annually reviews cash requirements for capital project financing.

The County's capital program has a direct impact on the operating budget, particularly in association with the establishment and opening of new facilities. The Board of Supervisors continues to be cognizant of the effect of the completion of capital projects on the County's operating budget. The cost of operating new or expanded facilities or infrastructure is included in the fiscal year the facility becomes operational. However, in some cases, like the construction of the expanded and renovated Courthouse, the operating impact may be absorbed gradually over several years. For example, costs associated with loose and systems furniture, moving expenses, providing for additional security and staffing, renovating existing courtrooms, implementing new courtroom technology, and setting up an Operations and Maintenance satellite shop with staff dedicated to the courthouse facility are all costs that can be phased in over time, thus spreading the operating impact over a number of years, rather than concentrating costs in the fiscal year the facility opens.

Capital projects can affect future operating budgets either positively or negatively due to an increase or decrease in maintenance costs, or by providing capacity for new programs or services. Such impacts vary widely from project to project and, as such, are evaluated individually. Operating costs resulting from the completion of a capital project differ greatly depending on the type of capital project and construction delays. A new facility, for example, will often require additional staff, an increase in utility costs, and increases in custodial, security and maintenance contracts. Conversely, a capital project that renovates an existing facility may reduce operating expenditures due to a decrease in necessary maintenance costs. For example, funding HVAC and electrical system repair or replacement projects has the potential to reduce operating expenditures by reducing costly maintenance and staff time spent addressing critical system repairs. The same is true for projects such as fire alarms, emergency generators, and carpet replacement, as well as roof repairs. Investing in aging and deteriorating building systems and components can alleviate the need for future expenditures, often resulting in significant cost avoidance. Additionally, if a system failure should occur, there is the potential that a County facility must shut down, suspending services to citizens and disrupting County business. The County's emphasis on capital renewal and preventative maintenance works to ensure these kinds of interruptions are avoided.

The opening of new County facilities results in the widest range of operating costs. For example, equipment and furniture, a book buy, additional staff, and an increase in utility costs may all be necessary to prepare for the opening of a new library or extensive library expansion/renovation. These costs are estimated as the project is developed and included in the appropriate agency budget in the year the facility becomes operational.

Capital Projects Overview

New, Renovated, or Expanded County Facilities in FY 2019

Facility	Fiscal Year Completion	Additional Positions	Estimated Net Operating Costs
FY 2019 New, Renovated, or Expanded Facilities			
Facilities Management Department (FMD) Operational Costs for New Facilities	FY 2019	0/0.0 FTE	\$79,725
Two new SACC rooms at White Oaks	FY 2019	2/1.6 FTE	\$86,403
Total FY 2019 Costs		2/1.6 FTE	\$166,128

The following facilities are scheduled to open in FY 2019 or later and may require additional staffing and operating costs beginning in FY 2020. Requests for funding will be reviewed as part of the development of the annual budget in the year the facility becomes operational.

Facility	Fiscal Year Completion
Herndon Station Parking Garage	FY 2019
Innovation Center Station Parking Garage	FY 2019
John Marshall Community Library	FY 2019
Burkholder Renovations	FY 2019
Lewinsville Redevelopment	FY 2019
Lorton Fire Station	FY 2020
Bailey's Shelter	FY 2020
Jefferson Fire Station	FY 2020
Reston Fire Station	FY 2021
Eleanor Kennedy Shelter	FY 2021
Patrick Henry Shelter	FY 2021
Edsall Road Fire Station	FY 2021
Merrifield Fire Station	FY 2022
Woodlawn Fire Station	FY 2022
Penn Daw Fire Station	FY 2022
Police Tactical Operations Renovation (Pine Ridge)	FY 2022
Franconia Police Station	FY 2022
South County Police Station/Animal Shelter	FY 2022
Events Center	FY 2022
Springfield Commuter Parking Garage	FY 2022
Sully Community Center	FY 2022
Lorton Community Center	FY 2022
Courtroom Renovations Phase III and IV	FY 2022
Emergency Vehicle Operations and K9 Center	FY 2022
Embry Rucker Shelter	FY 2022
Police Heliport	FY 2022
Mount Vernon RECenter	TBD
Reston Town Center North	TBD
Reston Regional Library	TBD
Original Mt. Vernon High School Redevelopment	TBD

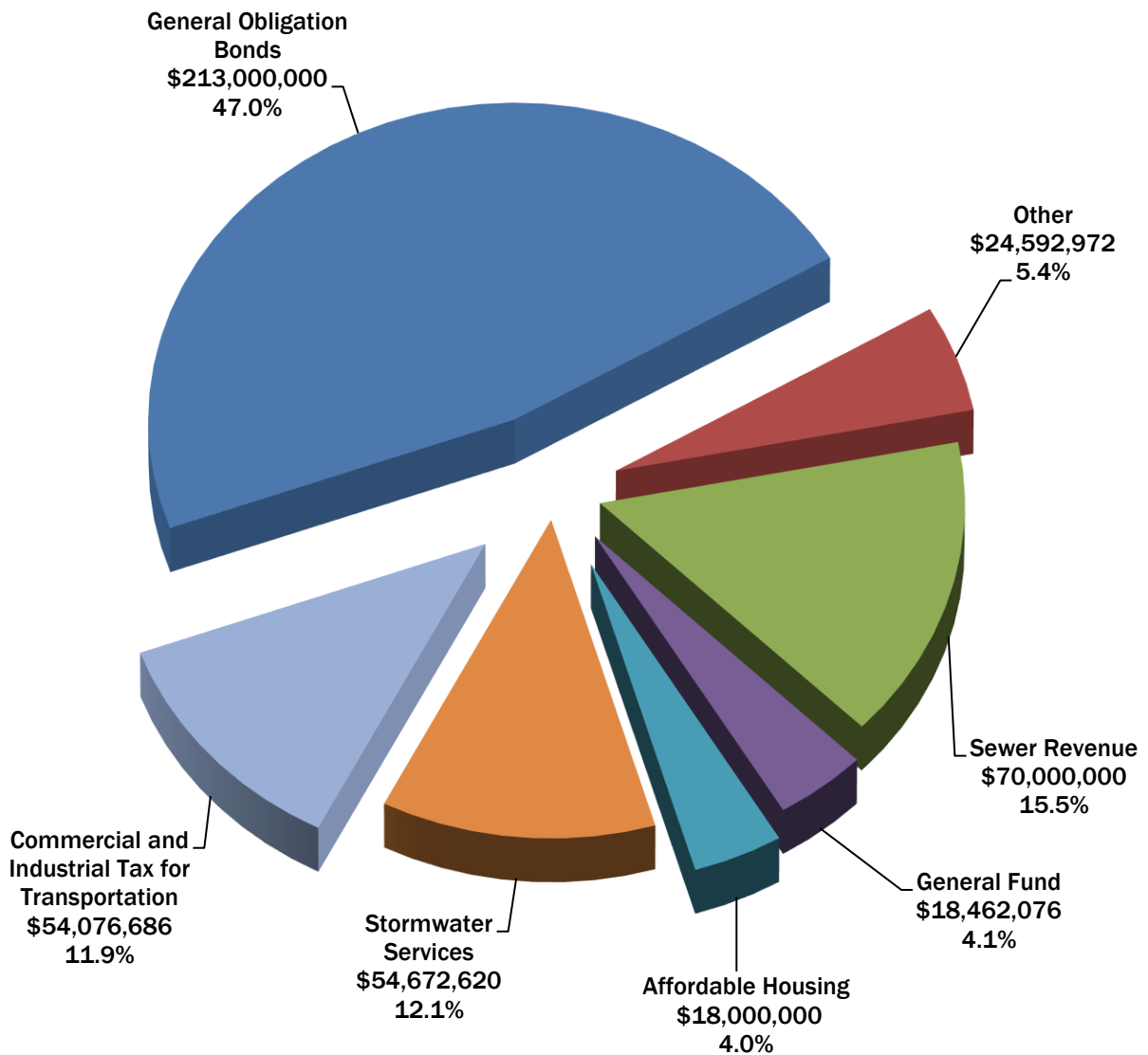
Capital Projects Overview

Summary of FY 2019 Capital Construction Program

Major segments of the County's FY 2019 Capital Construction Program are presented in several pie charts that follow to visually demonstrate the funding sources for capital expenditures. Capital construction expenditures by fund are shown in the Summary Schedule of FY 2019 Funded Capital Projects. In addition, a list of all projects funded in FY 2019 and their funding sources has been included in this section. For additional information, see the Capital Project Funds section of the Capital Construction and Other Operating Funds in Volume 2. Detailed information concerning capital projects in Fund S31000, Public School Construction, can be found in the [Fairfax County Public School's FY 2019 Advertised Budget](#).

Capital Projects Overview

CAPITAL CONSTRUCTION PROJECTS FY 2019 SOURCE OF FUNDS

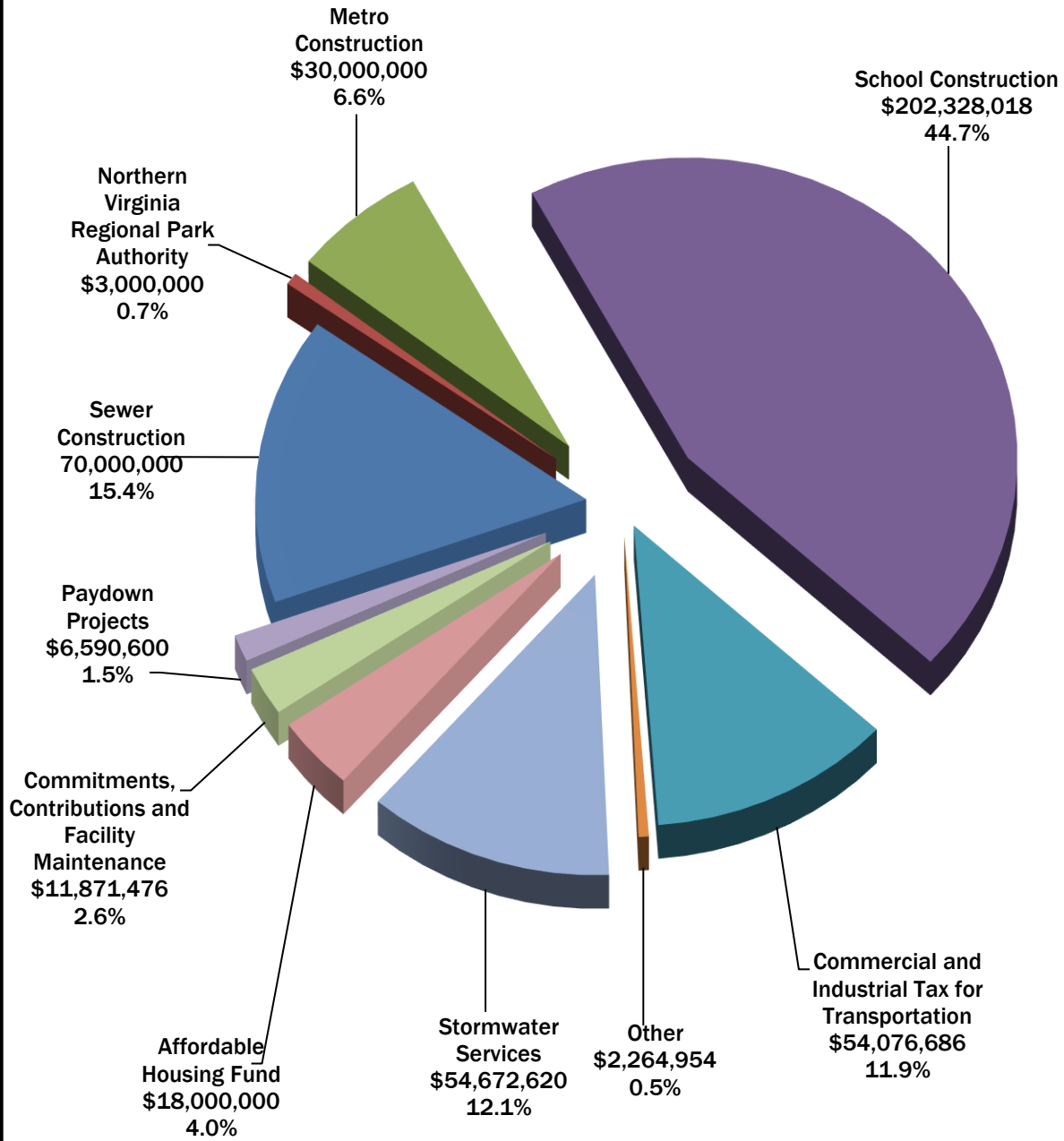


TOTAL = \$452,804,354

NOTE: This chart does not include debt service funding.

Capital Projects Overview

CAPITAL CONSTRUCTION PROJECTS FY 2019 EXPENDITURES

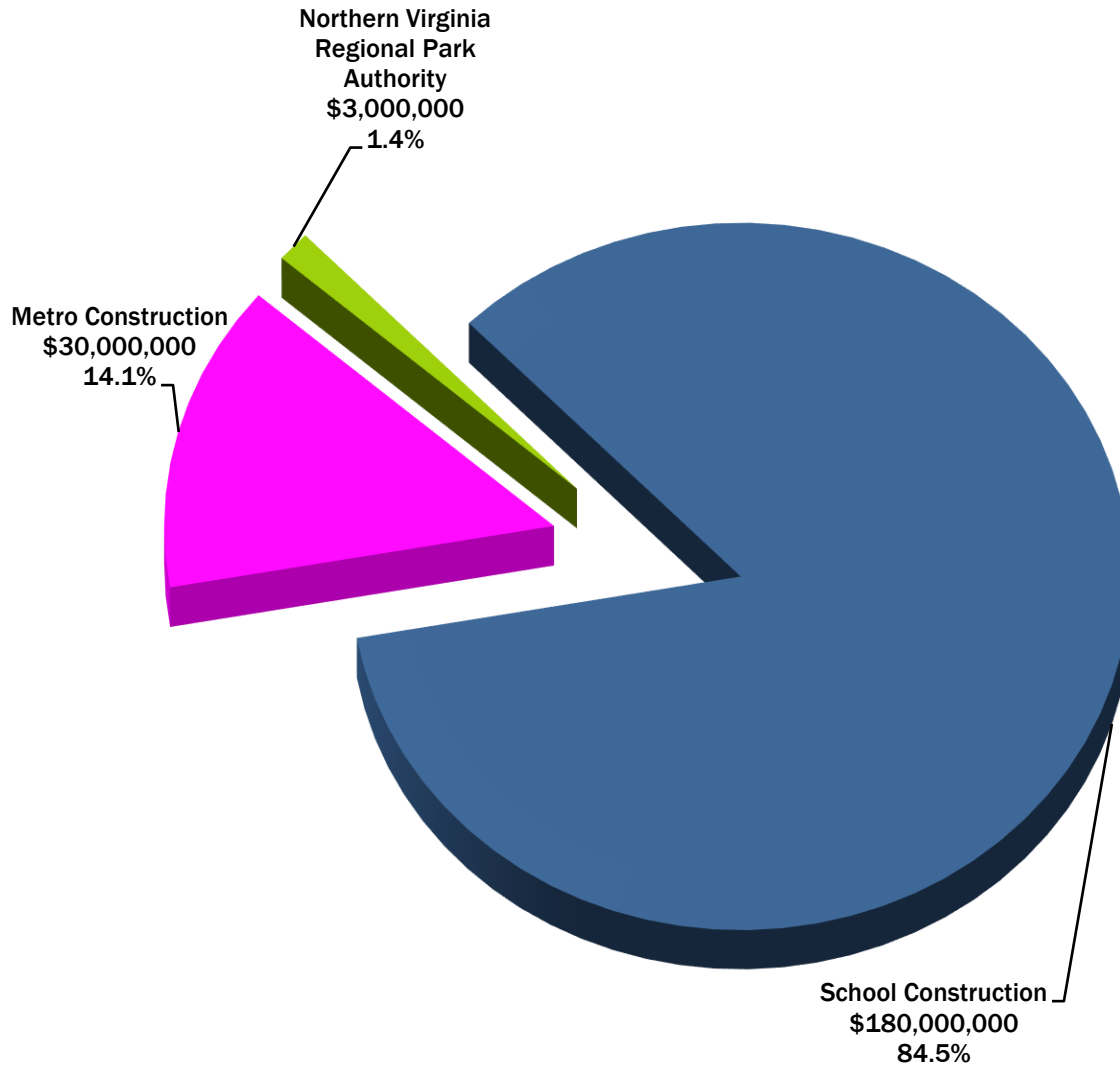


TOTAL = \$452,804,354

NOTE: This chart does not include debt service funding.

Capital Projects Overview

GENERAL OBLIGATION BOND FINANCED CAPITAL PROJECTS FY 2019 EXPENDITURES



TOTAL = \$213,000,000

**SUMMARY SCHEDULE OF FY 2019
FUNDED CAPITAL PROJECTS**

FY 2019 FINANCING

Fund/Title	FY 2017 Actual	FY 2018 Adopted Budget Plan	FY 2018 Revised Budget Plan	FY 2019 Advertised Budget Plan	General Obligation Bonds ¹	General Fund	Federal/ State Aid	Other ²
SPECIAL REVENUE FUNDS³								
40000 County Transit Systems	\$4,992,891	\$2,300,000	\$9,471,809	\$0	\$0	\$0	\$0	\$0
40010 County and Regional Transportation Projects	68,633,981	53,932,085	368,959,060	54,076,686	0	0	0	54,076,686
40050 Reston Community Center	420,152	1,904,000	6,254,461	0	0	0	0	0
40060 McLean Community Center	696,404	0	7,084,367	0	0	0	0	0
40100 Stormwater Services ⁴	46,993,026	48,577,294	117,024,105	54,672,620	0	0	0	54,672,620
40140 Refuse Collection	0	0	801,915	0	0	0	0	0
40150 Refuse Disposal	242,042	0	3,436,582	0	0	0	0	0
40170 I-95 Refuse Disposal	3,376,159	2,550,000	6,847,532	0	0	0	0	0
40300 Housing Trust Fund	414,734	557,932	11,547,015	689,954	0	0	0	689,954
Subtotal	\$125,769,389	\$109,821,311	\$531,426,846	\$109,439,260	\$0	\$0	\$0	\$109,439,260
DEBT SERVICE FUNDS								
20000 Consolidated County and Schools Debt Service Fund	\$311,752,440	\$341,373,647	\$363,522,005	\$349,973,431	\$0	\$346,793,431	\$0	\$3,180,000
Subtotal	\$311,752,440	\$341,373,647	\$363,522,005	\$349,973,431	\$0	\$346,793,431	\$0	\$3,180,000
CAPITAL PROJECTS FUNDS								
30000 Metro Operations and Construction ⁵	\$27,759,479	\$30,000,000	\$30,000,000	\$30,000,000	\$30,000,000	\$0	\$0	\$0
30010 General Construction and Contributions	40,821,101	21,690,923	225,297,373	20,736,476	3,000,000	16,161,476	0	1,575,000
30020 Infrastructure Replacement and Upgrades	8,416,801	1,825,953	30,869,214	1,700,600	0	1,700,600	0	0
30030 Library Construction	5,704,622	0	26,699,129	0	0	0	0	0
30040 Contributed Roadway Improvements	8,848,846	0	36,182,039	0	0	0	0	0
30050 Transportation Improvements	21,784,923	0	115,705,160	0	0	0	0	0
30060 Pedestrian Walkway Improvements	1,612,344	500,000	4,577,600	600,000	0	600,000	0	0
30070 Public Safety Construction	45,006,004	0	249,264,631	0	0	0	0	0
30080 Commercial Revitalization Program	134,341	0	1,889,425	0	0	0	0	0

**SUMMARY SCHEDULE OF FY 2019
FUNDED CAPITAL PROJECTS**

FY 2019 FINANCING

Fund/Title	FY 2017 Actual	FY 2018 Adopted Budget Plan	FY 2018 Revised Budget Plan	FY 2019 Advertised Budget Plan	General Obligation Bonds ¹	General Fund	Federal/ State Aid	Other ²
30090 Pro Rata Share Drainage Construction	586,425	0	3,305,160	0	0	0	0	0
30300 The Penny for Affordable Housing Fund	17,687,322	17,627,927	48,033,014	18,000,000	0	0	0	18,000,000
30310 Housing Assistance Program	413,105	0	6,154,629	0	0	0	0	0
30400 Park Authority Bond Construction	16,074,882	0	126,762,291	0	0	0	0	0
S31000 Public School Construction	204,661,017	179,189,347	401,798,781	202,328,018	180,000,000	0	0	22,328,018
Subtotal	\$399,511,212	\$250,834,150	\$1,306,538,446	\$273,365,094	\$213,000,000	\$18,462,076	\$0	\$41,903,018
ENTERPRISE FUNDS								
69300 Sewer Construction Improvements	\$80,712,196	\$69,339,663	\$111,057,689	\$70,000,000	\$0	\$0	\$0	\$70,000,000
69310 Sewer Bond Construction	16,169,306	0	118,340,832	0	0	0	0	0
Subtotal	\$96,881,502	\$69,339,663	\$229,398,521	\$70,000,000	\$0	\$0	\$0	\$70,000,000
TOTAL	\$933,914,543	\$771,368,771	\$2,430,885,818	\$802,777,785	\$213,000,000	\$365,255,507	\$0	\$224,522,278

¹ The sale of bonds is presented here for planning purposes. Actual bond sales are based on cash needs in accordance with Board policy.

² Other financing includes developer contributions and payments, sewer system revenues, transfers from other funds, pro rata deposits, special revenue funds, and fund balances.

³ Reflects the capital construction portion of total expenditures.

⁴ As part of the FY 2010 Adopted Budget Plan, a service district was created to support stormwater management operating and capital requirements, as authorized by Code of Virginia Ann. sections 15.2-2400.

⁵ Reflects capital construction portion of Metro expenses net of State Aid.

FY 2019 FUNDED CAPITAL PROJECTS
(For additional information see referenced Fund narratives)

Fund	Project Name	Project	FY 2019 Advertised Total	General Fund	General Obligation Bonds	Athletic Services Fee	Sewer Revenues	Stormwater Revenues	Penny for Affordable Housing	Commercial and Industrial Revenues	Other Revenues
30000	Metro Operations and Construction Contribution	N/A	\$30,000,000		\$30,000,000						
30010	Athletic Field Maintenance	2G51-002-000	\$2,700,000	\$2,700,000							
30010	Athletic Fields - APRT Amenity Maintenance	2G79-220-000	\$50,000	\$50,000							
30010	Athletic Fields - FCPS Lighting	PR-000082	\$250,000	\$250,000							
30010	Athletic Fields - Park Maintenance at FCPS	2G51-001-000	\$860,338	\$860,338							
30010	Athletic Services Fee - Custodial Support	2G79-219-000	\$275,000			\$275,000					
30010	Athletic Services Fee - Diamond Field Maintenance	2G51-003-000	\$1,000,000	\$750,000		\$250,000					
30010	Athletic Services Fee - Sports Scholarships	2G79-221-000	\$150,000	\$75,000		\$75,000					
30010	Athletic Services Fee - Turf Field Development	PR-000080	\$75,000			\$75,000					
30010	Athletic Services Fee - Turf Field Replacement	PR-000097	\$2,250,000	\$1,450,000		\$800,000					
30010	Developer Defaults	2G25-020-000	\$300,000	\$200,000							\$100,000
30010	EIP - Environmental Initiatives	2G02-001-000	\$239,315	\$239,315							
30010	EIP - Invasive Plant Removal	2G51-032-000	\$200,000	\$200,000							
30010	EIP - Park Lighting and Energy Retrofits	PR-000067	\$95,685	\$95,685							
30010	NOVA Community College Contribution	2G25-013-000	\$2,540,993	\$2,540,993							
30010	NVRPA Contribution	2G06-003-000	\$3,000,000		\$3,000,000						
30010	Parks-Preventative Maintenance And Inspections	2G51-007-000	\$484,000	\$484,000							
30010	Parks - Building/Structures Reinvestment	PR-000109	\$925,000	\$925,000							
30010	Parks - Infrastructure/Amenities Upgrade	PR-000110	\$765,000	\$765,000							
30010	Parks - Ground Maintenance	2G51-006-000	\$476,000	\$476,000							
30010	Payments Of Interest On Bond Deposits	2G06-002-000	\$75,000	\$75,000							
30010	Reinvestment and Repairs to County Roads	2G25-021-000	\$700,000	\$700,000							
30010	Revitalization Maintenance - CRP Areas	2G25-014-000	\$950,000	\$950,000							
30010	Revitalization Maintenance - Tysons	2G25-088-000	\$460,000	\$460,000							
30010	Salona Property Payment	2G06-001-000	\$840,145	\$840,145							
30010	School-Aged Child Care Contribution	2G25-012-000	\$1,000,000	\$1,000,000							
30010	Survey Control Network Monumentation	2G25-019-000	\$75,000	\$75,000							
30020	HVAC System Upgrades and Replacement	GF-000011	\$1,700,600	\$1,700,600							
30060	Reinvestment and Repairs to County Walkways	2G25-057-000	\$600,000	\$600,000							
30300	Affordable/Workforce Housing	2H38-072-000	\$1,902,500						\$1,902,500		
30300	Crescent Apartments Debt Service	2H38-075-000	\$2,600,000						\$2,600,000		

FY 2019 FUNDED CAPITAL PROJECTS
(For additional information see referenced Fund narratives)

Fund	Project Name	Project	FY 2019 Advertised Total	General Fund	General Obligation Bonds	Athletic Services Fee	Sewer Revenues	Stormwater Revenues	Penny for Affordable Housing	Commercial and Industrial Revenues	Other Revenues
30300	Housing Blueprint Project	2H38-180-000	\$7,744,225						\$7,744,225		
30300	Wedgewood Debt Service	2H38-081-000	\$5,753,275						\$5,753,275		
40010	Construction Reserve	2G40-001-000	\$24,031,710							\$24,031,710	
40010	Construction Reserve NVTA 30%	2G40-107-000	\$28,391,082							\$28,391,082	
40010	Herndon NVTA 30% Capital	2G40-105-000	\$978,786							\$978,786	
40010	Vienna NVTA 30% Capital	2G40-106-000	\$675,108							\$675,108	
40100	Conveyance System Inspection/Development	2G25-028-000	\$2,000,000					\$2,000,000			
40100	Conveyance System Rehabilitation	SD-000034	\$5,000,000					\$5,000,000			
40100	Dam Safety and Facility Rehabilitation	SD-000033	\$7,500,000					\$7,500,000			
40100	Emergency and Flood Response Projects	SD-000032	\$5,000,000					\$5,000,000			
40100	Flood Prevention-Huntington Area-2012	SD-000037	\$3,000,000					\$3,000,000			
40100	NVSWD Contributory	2G25-007-000	\$527,730					\$527,730			
40100	Occoquan Monitoring Contributory	2G25-008-000	\$128,383					\$128,383			
40100	Stormwater Allocation to Towns	2G25-027-000	\$800,000					\$800,000			
40100	Stormwater Regulatory Program	2G25-006-000	\$6,500,000					\$6,500,000			
40100	Stream and Water Quality Improvements	SD-000031	\$24,216,507					\$24,216,507			
40300	Land/Unit Acquisition	2H38-066-000	\$500,000								\$500,000
40300	Undesignated Housing Trust Fund	2H38-060-000	\$189,954								\$189,954
69300	Alexandria WWTP Upgrades and Rehabilitation	WW-000021	\$16,086,600				\$16,086,600				
69300	Arlington WWTP Rehabilitation	WW-000020	\$1,276,340				\$1,276,340				
69300	Blue Plains WWTP Upgrades and Rehabilitation	WW-000022	\$11,435,521				\$11,435,521				
69300	Collection System Replacement and Rehabilitation	WW-000007	\$5,616,773				\$5,616,773				
69300	Extension and Improvement Projects	WW-000006	\$3,000,000				\$3,000,000				
69300	Force Main Rehabilitation	WW-000008	\$5,276,333				\$5,276,333				
69300	Integrated Sewer Metering	WW-000005	\$500,000				\$500,000				
69300	Large Diameter Pipe Rehabilitation and Replacement	WW-000026	\$5,000,000				\$5,000,000				
69300	Noman Cole Treatment Plant Renewal	WW-000009	\$14,680,739				\$14,680,739				
69300	Pumping Station Rehabilitation	WW-000001	\$5,673,694				\$5,673,694				
69300	Robert P. McMath Facility Improvements	WW-000004	\$200,000				\$200,000				
69300	Sewer Sag Program	WW-000024	\$1,254,000				\$1,254,000				
S31000	Public School Construction	N/A	\$202,328,018		\$180,000,000						\$22,328,018
	Total		\$452,804,354	\$18,462,076	\$213,000,000	\$1,475,000	\$70,000,000	\$54,672,620	\$18,000,000	\$54,076,686	\$23,117,972