The General Capital Projects Fund or Pay-As-You-Go (PAYG) Budget provides funding for capital improvements using current year ongoing revenue, one-time funding, state and federal grants, and developer fees. In addition to annual PAYG appropriations, master lease financing, bond financing and various other dedicated funding sources are the other primary sources of funding for the capital projects included in the biennial Capital Improvement Plan (CIP), found on the County's website. Detailed information concerning the County's bond financing is contained in the Debt Service section of the FY 2017 Budget.

PAYG and voter approved bond funding have historically been the primary sources of funding for the County's maintenance capital program. The County's long stated goal for the maintenance capital program is to "maintain what we have." Towards that goal, programs conduct a condition assessment of their capital assets so that they are able to provide a sustainable plan that prioritizes their inventory of needs. Maintenance capital projects are designed to protect assets from premature failure and are focused on replacement and renewal of existing infrastructure. They differ from operating maintenance activities in cost, size, nature, and frequency of maintenance activity.

The General Capital Projects categories include Local Parks and Recreation, Transportation Initiatives, Government Facilities, Information Technology Investments, Community Conservation, and Regional Partnerships.

#### MAINTENANCE CAPITAL

The purpose of Arlington's Maintenance Capital (MC) program is to ensure that existing capital assets throughout the County are maintained in a reliable and serviceable condition, and are periodically updated and renewed as necessary. The MC program serves to prolong the useful life of these investments, while minimizing the need for repeated asset repair emergencies. Although MC funds are not contingency funds they provide versatility in allowing the County to respond to unforeseen emergencies.

This budget continues our focus on Maintenance Capital – particularly reinvestment in facilities and parks assets, paving and information technology. It also invests in infrastructure, such as land acquisition, to take advantage of opportunities for county-wide needs. The County has made great progress over the last several fiscal years:

- We continue to add staff to help with both planning and execution.
- Staff continues the multi-year strategy to address the maintenance capital reinvestment.
- In all programs, we bundle projects where appropriate to minimize service disruption and reduce capital costs by seeking efficiencies.
- We continue to use a variety of funding sources to best match the type of maintenance capital needs in order to leverage as many projects within an affordable budget.

#### **OVERVIEW OF FY 2018**

The proposed FY 2018 PAYG budget totals \$11.54 million, comprised of \$6.88 million of base ongoing funds and \$4.66 million of one-time funds. In addition to the FY 2018 proposed budget, there is an additional \$8.6 million in one-time PAYG funding from FY 2016 year-end closeout for FY 2017 and 2018 projects. This funding includes \$4.8 million in bond premium, generated by the spring 2016 bond sale, which is restricted in use to only capital projects. Additionally, during the closeout process, approved project allocations from budget savings included \$2.5 million in land acquisition for Fire Station 8 and the temporary facility costs at its current location on Lee Highway. In addition, \$0.6

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million was set aside to replace emergency generators at Fire Stations 1, 2 and 9, and the Water, Sewer Streets Administration Building. The balance of the funds are allocated to maintenance capital projects such as paving, streetlights, technology at the courts police building and detention center to allow for public safety radio reception, synthetic turf replacement and other county capital needs, consistent with the CIP.

The FY 2018 PAYG budget funds routine and non-routine capital expenditures. The routine expenditures include maintenance of capital assets such as streets, bridges, signals and infrastructure, street lights, bus shelters, replacement of building components, fields, playgrounds, courts, technology equipment and systems as well as neighborhood conservation projects, energy efficiency projects and contributions to regional programs. Non-routine expenditures include land acquisitions.

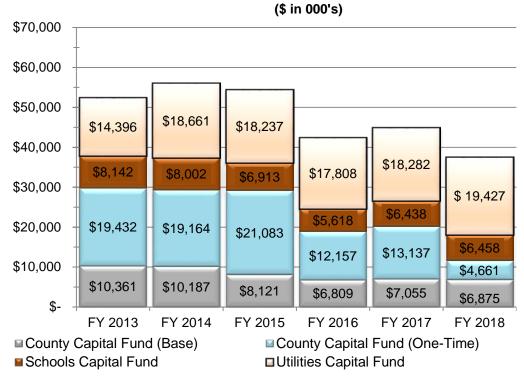
County capital project descriptions, PAYG appropriation charts, and fund statements are included on the following pages. Because projects are often multi-year in nature, appropriations rather than actual expenditures are presented. Appropriations more accurately reflect the County Board's intent, priorities, decisions, and PAYG funding levels than actual expenditures. Fiscal impact is the net increase in annual operating costs associated with a capital funding decision. Capital funding decisions that expand or significantly change the nature and quality of an asset typically increase future operating budgets over the life of the asset. However, some capital funding decisions that replace current assets with efficient, low maintenance assets or extend the useful life of an asset can reduce future operating budgets.

In addition to the General Capital Projects Fund, there are PAYG investments in other funds and operations:

- The Utilities Fund FY 2018 proposed PAYG budget of \$19.4 million includes funding for Wastewater Treatment Plant capital maintenance and improvements to the Washington Aqueduct, which supplies the County with 100 percent of its drinking water.
- The School Superintendent's proposed FY 2018 PAYG budget is \$6.5 million, which includes major maintenance and minor construction funding.

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# PAY-AS-YOU-GO APPROPRIATION HISTORY FY 2013 - FY 2018



# PAY-AS-YOU-GO APPROPRIATION HISTORY BY CATEGORY (\$ in 000's)

PROGRAM CATEGORY	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Regional Partnerships	\$1,136	\$1,214	\$1,287	\$1,453	\$1,364	\$1,263
Transportation & Pedestrian	4,037	5,041	9,757	3,431	7,334	3,050
Government Facilities	13,356	3,408	2,890	5,249	3,695	2,624
Parks and Recreation	6,410	5,211	4,090	1,639	2,880	1,185
Technology Investment (IT)	1,090	1,000	4,517	502	1,373	300
Community Conservation	500	500	500	500	500	500
Public Art	50	-	-	-	-	-
Land Acquisition	-	-	-	-	361	1,976
County-S chools Joint Use Projects	-	8,634	2,000	2,500	2,500	-
Capital Contingency / Admin	3,214	4,343	4,163	3,692	185	638
Total County Capital Fund	\$29,793	\$29,351	\$29,204	\$18,966	\$20,192	\$11,536
S chools Capital Fund	8,142	8,002	6,913	5,618	6,438	6,458
Utilities Capital Fund	14,396	18,661	18,237	17,808	18,282	19,427
Total Capital Fund	\$52,331	\$56,014	\$54,354	\$42,392	\$44,912	\$37,421

## PAYG PROJECTS (\$ in 000s)

PROGRAM CATEGORY	Base Funds	One- Time Funds	FY 2018 Proposed	FY 16 C/O Funds for FY 17 Projects	Total Funds
Transportation Maintenance Capital	\$838	\$1,050	\$1,888	\$3,060	\$4,948
Facilities Maintenance Capital	1,594		1,594	600	2,194
Parks Maintenance Capital	770	150	920	12	932
Subtotal Maintenance Capital	3,202	1,200	4,402	3,672	8,074
Regional Partnerships	1,263	-	1,263	-	1,263
Neighborhood Conservation	500	-	500	-	500
Information Technology	-	300	300	449	749
Transportation Multi-Modal	812	350	1,162	660	1,822
Park Master Plans	265		265		265
S ynthetic T urf				1,295	1,295
Facilities Design and Construction	545	485	1,030	2,500	3,530
Land Acquisition	-	1,976	1,976		1,976
Capital Contingent	288	350	638		638
S ubtotal O ther Capital	3,673	3,461	7,134	4,904	12,038
<b>Total Projects</b>	\$6,875	\$4,661	11,536	\$8,576	\$20,112

<sup>\*</sup> Numbers may not add due to rounding.

## **Regional Partnerships**

\$1,263,103

Arlington annually contributes capital funding to several regional organizations that provide beneficial services to Arlington residents and visitors.

• Fiscal Impact - The Regional Partnerships program represents the County's annual contributions to support the capital efforts of regional programs. The County also contributes operating costs to the regional partnership programs. The County's share is based on each regional program's allocation formula.

#### Northern Virginia Regional Park Authority

\$588,951

The Northern Virginia Regional Park Authority (NVRPA) is a multi-jurisdictional agency comprised of Arlington County, Fairfax County, Loudoun County, and the Cities of Alexandria, Falls Church, and Fairfax. The Park Authority owns and operates over 10,000 acres of parklands with 21 major parks, including Potomac Overlook, Upton Hill and the W&OD Regional Parks in Arlington. This capital funding for FY 2018 represents Arlington's annual contribution to NVRPA's capital program and is based on the percentage of population of the six jurisdictions.

## Northern Virginia Community College

\$528,026

This funding represents the County's ongoing capital contribution to the Northern Virginia Community College (NVCC) program for land acquisition and site development of all campuses. Arlington is one of nine jurisdictions that share costs associated with NVCC's capital program. The FY 2018 budget is based on a \$2.25 allocation for each person living in Arlington.

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## Northern Virginia Criminal Justice Academy

\$146,126

In 2006, the principal members agreed to fund the construction of the Emergency Vehicle Operations Center (EVOC). The initial payments began in FY 2007 and will continue through FY 2026. The FY 2018 budget reflects Arlington's contribution towards the annual debt payments of the EVOC.

#### Transportation - Maintenance Capital

\$4,948,104

The Transportation Maintenance Capital program maintains transportation infrastructure by repaving streets, maintaining pedestrian and vehicular bridges, maintaining signals and signal infrastructure, replacing bus shelters, etc.

## Paving Program

\$3,260,104

The County currently maintains over 974 lane miles by a combination of resurfacing, rebuilding and slurry seal maintenance. The type of maintenance for a particular street is based on the most recent (not older than two years) Pavement Condition Index (PCI) and the type of street (arterial, collector, neighborhood). Arterials are repaved more often due to the traffic volumes and type of vehicles using them, while neighborhood streets get slurry seal treatment every seven to 10 years to extend their life rather than re-paving them as often. Of the total funding, \$650,000 is available for the 2017 paving season and \$2,610,000 is available for the 2018 paving season. Since the \$650,000 will be executed in FY 2017, it will not be included in the Transportation Maintenance Capital Project List in the back of the document.

## Bridge Maintenance

\$-

This program is responsible for the maintenance of 35 vehicular and pedestrian bridges in Arlington County. Twenty-six of the bridges are included in the Federal Highway Administration (FHWA) National Bridge Inventory (NBI), which establishes standards for inspection and maintenance of public highway bridges. All NBI bridges are required to be inspected and reported at least bi-annually. This is an ongoing program for the annual inspections, routine and emergency maintenance, and rehabilitation projects for the County's bridge inventory. Existing balances are sufficient for the work planned for FY 2018 so no new funds are proposed at this time. Should costs exceed balances for any immediate and unforeseen need, funds will be recommended for allocation from the capital contingent account.

## Transportation Systems and Traffic Signals

\$200,000

Arlington County's transportation systems and traffic signals are in continuous need of maintenance and upgrades. The current systems include aging infrastructure, some of which is more than 30 years old, with out-of-date control systems including hardware and software. Funding is used to maintain the County's traffic signals, pedestrian signals, school flashers, signal cabinet hardware and other maintenance items in the signals area. The funding will also be used to replace aging and inefficient signals with features including: traffic signal controllers and cabinets, interactive audible countdown ADA accessible pedestrian signals to improve accessibility, advanced video detection systems, bicycle detection, remote data collection systems, battery backup systems, CCTVs, and upgrading of electrical grounding.

## Street Lighting

\$850,000

County streets are illuminated with approximately 19,000 streetlights. Out of that, 7,350 streetlights are owned and maintained by the County and the rest are owned and maintained by Dominion Virginia Power. The County receives approximately 14 repair service calls per day, which could range from a bulb change to more complicated work such as knocked-down pole repair and underground conductor repair. This program funding will be used for repairing

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streetlight issues, fixing knockdown poles, underground repair and maintaining an efficient streetlight system in the County (\$600,000).

In 2016, the County initiated a Streetlight Management Plan (SMP) to focus on updating GIS inventory, reviewing County's current streetlight standards, developing a maintenance plan and researching new technologies. This funding will help to execute the SMP, which will be completed in CY 2017 (\$200,000).

County owned streetlights are controlled using a radio communication system from a central server. This system is currently in use for dimming programs, providing automatic failure alerts and energy consumption data. This program funding will be used for routine server maintenance (\$50,000).

## Arlington Transit (ART) Fleet Rehabilitation and Major Repairs

\$249,000

Arlington County currently operates and maintains 65 buses to provide local fixed-route transit service, called ART, throughout the County. To improve the reliability and extend the useful life of the buses, the County's Transit Bureau initiated a mid-life bus rehabilitation project. The buses are all low-floor vehicles powered by compressed natural gasoline (CNG) rated by the Federal Transit Administration for a 12-year life. A mid-life rehabilitation of the engine and other major components in the sixth to ninth year of service would extend the useful life of a bus to 16 years of revenue service. This project started with the rehab of the first eight heavy duty buses that began service in August 2007 and received a mid-life rehab in 2015. FY 2018 PAYG funding will allow the Transit Bureau to rehab the next group of 12 aging buses and also help cover the cost for unscheduled major repairs for buses with significant mileage.

## Traffic Calming Device Maintenance

\$203,000

This program replaces existing traffic calming devices such as speed humps as streets are repaved. It also funds the replacement or repair of traffic calming devices which have deteriorated to the point where action is required.

#### Regulatory Signage

\$70,000

Arlington County owns over 100,000 signs. On average, the County installs and maintains approximately 5,000 signs each year. Recent federal rules for sign reflectivity, stop, yield, and other regulatory signs, combined with updated rules for sign size standards will require replacement of an additional 2,000 signs per year to meet compliance dates. These are significant safety requirements that necessitate systematic replacement.

The funds will support the efficient movement of people in cars, on bikes, or by foot. Effective signage supports the reduction of traffic congestion by facilitating traffic movements, and public safety. Old non-conforming signs will be replaced with the latest upgraded signs.

#### Bus Stop and Shelter Program

\$116,000

Through this on-going annual program, the Transit Bureau replaces aging transit shelters, installs shelters where needed, makes repairs and site improvements, and provides other passenger amenities (such as benches, litter receptacles and customer information) at bus stops throughout the County. Placement of these shelters, passenger amenities and other improvements is determined by the survey data from the continuously updated Bus Stop Database, current bus route strategies in the Transit Development Plan, citizen input, and through coordination with other County initiated transportation capital improvement projects. In addition, the program includes planning, designing and constructing new bus stops as the County adds or modifies bus routes.

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## **Transportation Multi-Modal Programs**

\$1,822,121

Accessibility and options for movement throughout the County and the rest of the region are achieved by providing a high quality transit system, a robust bicycle and pedestrian network, and effective transportation demand management approaches.

## Pedestrian and Bike Safety

\$400,121

The primary objective of this program initiative is to improve access and increase safety for cyclists and pedestrians, primarily on Arlington arterial streets. This initiative builds on the existing bicycle and pedestrian transportation infrastructure with a vision of achieving the goals of the Master Transportation Plan. Currently, this program provides for the installation of wayfinding signage (\$30,000) as well as funding of a project (\$370,000) to improve pedestrian and bike intersection safety on Arlington Ridge Road at S. Lynn Street.

#### East Falls Church Streets

\$52,000

This program will allow staff to develop conceptual signal design plans in the East Falls Church area and help to prioritize the intersections that will receive signal upgrades. The program will allow staff to perform traffic counts and collect survey data for the design of traffic signals.

#### Transit ITS & Security Program

\$240,000

The Transit Intelligent Transportation System (ITS) and Security Program is dedicated to the use of technology to improve transit operations and rider information systems and identify and mitigate agency security and safety issues. Arlington's ongoing initiatives focus on providing accurate and timely information to both operations staff and transit customers. The Transit Bureau will use FY 2018 PAYG funding to leverage state matching funding and help cover the cost for the Business Intelligence Automation project – the implementation of a management information system needed to integrate ART's various data sources. This system will streamline reporting, including federally required National Transit Data (NTD) reporting, and provide analytics for assessing and improving system operations. The system will save significant staff hours in reporting efforts and provide cost savings from more efficient transit operations.

## Parking Meters

\$680,000

This program allows for the purchase of 80 new multi-meters to replace old, failing mechanical meters that have been deployed on the street for over a decade. Approximately 600 antiquated single-space meters will be replaced with new multi-meters in metered locations throughout the County. Multi-meters provide enhanced customer service by allowing customers to pay with a credit card and receive a receipt for their transaction. Multi-meters allow the County to make adjustment to rates and enforcement times in order to better manage limited curbside space. They also provide transaction data which allows staff to analyze parking demand and trends.

#### Parking Meters ADA

\$250,000

Funds will be used to install new handicapped reserved metered parking spaces throughout the County and to make accessibility improvements to existing spaces.

#### Transportation Asset Management

\$100,000

The primary objective of this program initiative is to develop real time asset inventory for Traffic Engineering & Operations (TE&O) using ArcGIS for all County roadways and integration with Cartegraph. TE&O already has GIS databases for traffic signals, CCTV, Count Stations and Streetlights. Additional field data collection is needed for signs and parking meters. This program will allow for the integration of these existing datasets into the Cartegraph system, which will

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improve work flow process. The current system, Cassworks, is outdated and no longer supported. Cartegraph will replace Cassworks in a phased manner for TE&O programs.

## Planning and Pre-Planning

\$100,000

Funds to be used for pre-project approval analysis. This would fund data collection and project planning work to determine project feasibility and cost/benefit value. Pre-planning involves coordination between the Transportation Engineering & Operations, Planning and Capital Projects and Engineering bureaus to analyze data and create concept drawings to test feasibility for potential projects that were not previously programmed in the CIP, such as project requests from civic associations and Board members or to address safety issues that have been newly identified. These funds allow potential capital project requests to be evaluated and pre-screened before dedicating specific funding to them and making them official projects. This work is important for good fiscal stewardship.

## **Facilities Maintenance Program**

\$2,194,000

This program plans for adequate maintenance of facilities through their cycle, periodic refreshment, and eventual replacement of obsolete facilities at the appropriate points in the life cycle.

#### Facilities Management Maintenance Capital

\$1,555,000

The FY 2018 Facilities Maintenance Capital Program funds will be used to address deferred and needed maintenance items identified in facility condition assessment studies and staff reports. The Facilities Management Bureau (FMB) maintains over 84 facilities totaling more than 2,400,000 square feet valued at over \$750 million. Facilities maintenance capital projects totaling \$1.55 million are proposed for FY 2018 PAYG funding. The majority of funds will be used to address various infrastructure items at seven facilities. Projects will include the replacement of entrance doors and storefronts at the Central Library; the replacement of the cooling tower, boiler pumps and electronic controls at the Courts/Police Building; the replacement of the fire suppression system at the Courthouse Plaza I Network Operations Center (CHP NOC); and the replacement of the generators, transfer switches and the installation of roll-up portable generator connections at Fire Stations 1, 2, 9 and the Water, Sewer and Streets Administration Building. A program contingency of \$250,000 is included.

#### Furniture, Fixtures & Equipment

\$540,000

The FY 2018 Maintenance Capital funds for the Furniture, Fixtures, and Equipment (FF&E) program will be used to address FF&E items that are in need of a refresh. In making specific project recommendations, staff uses prioritization methodologies which consider many factors including conditions highlighted in the facility condition assessments and "bundle" items coming due with FMB that enable efficiency of contract effort, minimize impact to the users of the space, and yield an overall positive result and appearance. The FF&E program provides furnishings to over 95 County facilities, including shared spaces within Arlington County Public Schools (APS) and Arlington Economic Development (AED) facilities. The funds will be used to provide approximately 200 new chairs, countywide interior upgrades, and furniture for the Central Library.

#### Energy Efficiency

\$99,000

The energy management program monitors and improves energy use in County facilities, and identifies emerging energy-saving opportunities with advanced technologies and best practices. Improved energy efficiency cuts operating costs and improves energy reliability. Reducing energy waste is a fundamental, cost-effective strategy for meeting the County's goals in the Community Energy Plan. The energy management program works closely with the Department of Environmental Services (DES) Facilities Management Bureau and other agencies countywide.

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Over the past decade, investments in energy efficiency have reduced County building energy intensity by over 12 percent, with cumulative avoided costs exceeding \$3.5 million. This year's project will be at Signature Theater/ Shirlington Library. This popular, heavily-used building is now ten years old, and the central HVAC system and its components are due for a tune-up. All electrical and mechanical components and controls will be recommissioned to verify proper operation, and repairs will be made where needed to improve building operation and energy performance. This project is complementary to the GO bond funded Facilities Maintenance project of a new building automation system for this same site. Past recommissioning projects in County facilities have achieved 15 percent -40 percent annual energy savings.

## **Facilities Design and Construction Program**

\$3,530,000

The Facilities Construction program provides facilities for both existing and evolving services and programs, and encompasses both significant modernization and planned replacement of facilities, based upon facility life cycles and changing program demands and services. This program is carefully integrated with the Facilities Maintenance Capital program in planning for periodic renovations and eventual replacement of obsolete facilities at the appropriate points in the life cycle.

#### Master Planning & Feasibility Studies

\$210,000

Facility master planning provides an integrated approach that addresses short, intermediate, and long-term future needs for County facilities. Planning proceeds in phases, and balances shortterm deficiencies with long range objectives for space management and efficiencies, often with emphasis on a particular site, or a certain subgroup of facilities. Projects for FY 2018 include cost estimating for Capital Improvement Plan (CIP) planning (\$150k) and Fire Station #10 project management charges (\$60K/year for 5 years).

**ADA Remediation** 

\$200,000 In FY 2013, the County completed a comprehensive accessibility assessment of 54 facilities to identify facility deficiencies for persons with physical disabilities. This program is to remediate the identified issues in existing facilities. FY 2018 funding will address accessibility deficiencies in Carver Community Center.

## **Land Acquisition & Temporary Facility Costs**

\$2,500,000

These dollars will provide funding for the acquisition of three properties near the existing fire station site and the associated costs to provide a temporary facility while Fire Station 8 (Lee Highway) is under construction. This is a companion project to the Fire Station 8 capital improvement project.

#### **Community Residence**

\$66,000

Community Residence (1212 South Irving Street) is the home to Arlington adults with developmental disabilities seeking maximum independent living in permanent housing. This project will update the first floor restrooms to include new flooring, tile, paint and fixtures.

## **Woodmont Center Restroom Upgrades**

\$269,000

Woodmont Center was originally constructed in 1971 as an elementary school, and given to the County to operate various programs. Many of the original features of the facility are still in place. This project will renovate the restrooms to include replacing the child size fixtures with standard adult fixtures in the Voter Registration, Human Services and YMCA areas. In addition to the fixtures, finishes will be replaced, and the restrooms will be made accessible as footprint allows with building code compliance.

book 343 web 937 Woodmont Center \$285,000

This project will consolidate archival materials for the Center of Local History from two locations into Woodmont Center. Improvements will be made in several upper level rooms, the lower level hallway and the existing Center for Local History space. Modifications will be made to the existing HVAC system and humidifier along with flooring, paint, and furniture improvements.

## **Parks Maintenance Capital Program**

\$931,759

Arlington County currently maintains an extensive inventory of park and recreation assets on over 900 acres of parkland, which includes playgrounds, athletic fields, athletic courts, field and court lighting, picnic shelters, comfort stations, site furnishings, parking lots, park trails and other assets. The Parks Maintenance Capital Program provides capital funding to maintain these valuable assets by proactively replacing inefficient and outmoded infrastructure and preventing premature failure.

## Glencarlyn Picnic Shelter

\$370,000

The project will fund design for the renovation to the picnic shelter and adjacent parking lot at Glencarlyn Park.

#### Capital Asset Manager

\$150,000

Funding for the staff position that manages the Parks Maintenance Capital Program.

Parks Field Fund \$261,759

The field fund is supported by an annual fee assessed on official affiliated youth and adult sports teams playing on Arlington County rectangular and diamond fields. The fees assessed for rectangular fields are directed to support replacement and construction of synthetic turf fields in the County (annual estimate of \$180,000). The fees are targeted towards conversion of one existing grass turf field to synthetic turf in FY 2018 as identified in the FY 2017–FY 2026 CIP and above. The fees assessed on diamond fields (annual estimate of \$70,000) are to be used each year for specific diamond field enhancements, such as improved irrigation, batting cages, or accelerated sod replacement. Additional funds (\$12,000) in FY 2018 are attributable to the September 2016 reconciliation of actual fees collected versus projected Capital FY 2018 budget.

## Feasibility Studies

\$150,000

Master plan funds that provide the ability to conduct timely and relevant analysis as opportunities and needs arise.

#### Synthetic Turf Program

\$1,295,000

The synthetic turf program is largely focused on replacement of existing synthetic turf fields that are approaching the end of their useful life, combined with four new field locations over the next tenyear period.

## Long Bridge Synthetic Field #1 (Marymount)

\$700,000

Design and construction for replacement of the synthetic turf and site amenities. Cost share with Marymount University (50-50).

## TJ Synthetic Community Field

\$595,000

Design and construction for replacement of the synthetic turf and site amenities. Cost share with Arlington Public Schools (County 70/APS 30).

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Park Master Plans \$265,000

The Park Master Plans focus on completing or furthering parks that have Board-adopted park master plans or have undergone significant community planning efforts.

## Park Master Planning: Rosslyn Highlands +

\$265,000

Rosslyn Highlands Park + will be a dynamic park in the heart of Rosslyn. The park is one component of a larger project that includes school, residential and office development. In the fall of 2015, Arlington County worked with the community to develop a conceptual plan for a new Rosslyn Highlands Park and the other public spaces associated with the Western Rosslyn Area Plan (WRAPS). The County Board adopted the park master plan in July 2016. These spaces include County and School properties, open space associated with an affordable housing project at the north side of 18th Street North and open space associated with a private development project. This project is for final design of the open space associated with the affordable housing project.

## **Information Technology**

\$749,040

The majority of equipment, systems and information technology (IT) projects are funded under the master lease equipment finance program. The master lease program is a financing mechanism to acquire equipment, rolling stock, technology and systems that have useful lives ranging from three to ten years. These projects can be found under the Master Lease section of the budget.

Consistent with the adopted FY 2017 – FY 2026 CIP, the FY 2018 budget includes the first phase of implementation of the assessment and collection system replacement and the enterprise payment system. Funding for these projects are planned from revenue bonds due to the useful life of the systems and the large dollar value for each system. The revenue bonds can be amortized over the 20 year useful life of the assets and can be found under the Debt Service section of the budget.

Pay-As-You-Go (PAYG) funds are more flexible and can also be used to pay for equipment. The decision to use either master lease, revenue bonds or PAYG to pay for equipment depends on the type of equipment, affordability, and whether or not there are dedicated funding sources and timing of when the equipment needs to be purchased. The equipment planned to be funded with PAYG funds are listed below.

## Courts Police and Detention Facility – Antenna Amplifier

\$405,000

These funds will be used to replace the Bi-Directional Amplifier/Distributed Antenna System in the Courts/Police building and the Detention Center. This system allows our safety personnel to communicate with each other while in those facilities and it has reached the end of its serviceable life.

## Financial System Hosting and Replacement

\$200,000

These funds will be used to support the migration and implementation costs for the move to a new hosting vendor for our current Oracle ERP system (PRISM).

#### Electronic Summons System

\$144,040

Effective in FY 2015, the County began assessment of a \$5.00 fee as part of the costs in each criminal or traffic case in the district or circuit courts for the use of purchasing an electronic summons system. With an electronic summons system, citation data would be automatically scanned and electronically entered at the point of activity, improving efficiency and accuracy in the processing of issued citations. Once the citation is completed, the transaction data is sent

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electronically to the court's case management systems, allowing violators to prepay their fines promptly and aid the courts in managing their dockets while tracking their caseloads. The costs of the system include peripheral equipment such as handheld devices, portable printers, driver's license scanners and barcode readers as well as the maintenance required for the system. The FY 2018 PAYG budget reflects the projected annual revenue from the fees as well as reconciliation from FY 2016 actual revenues received under the FY 2016 budgeted amount.

## **Neighborhood Conservation**

\$500,000

The Neighborhood Conservation (NC) Program funds public improvements in neighborhoods throughout the County for which the County Board has accepted Neighborhood Conservation Plans developed by civic associations. Projects include installation of curb, gutter, sidewalk, street lights, neighborhood signs, and landscape restoration, including tree installation; storm drainage improvements, including bio-retention basins; park enhancements and renovations; and reconfiguration of streets and intersections to address traffic management and increase pedestrian safety. Typically, the County funds the NC program through PAYG every year as well as bonds considered by voters every two years.

Land Acquisition \$1,976,000

Funds in the program are set aside for land acquisition to take advantage of opportunities that arise for open space or other government uses.

Capital Contingent \$638,000

The FY 2018 proposed budget continues funding for administrative support of capital projects tracking and reporting in the Department of Management and Finance (\$133K). This was added in the FY 2015 adopted budget as one-time funding. Remaining balances (\$505K) are contingency funds for a combination of earmarked projects and unplanned or unforeseen issues.

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## GENERAL CAPITAL PROJECTS FUND FUND STATEMENT

	FY 2016 ACTUAL	FY 2017 ADOPTED	FY 2017 RE-ESTIMATE	FY 2018 PROPOSED
ADJUSTED BALANCE, JULY 1	\$ 97,213,377	\$ 65,317,886	\$ 87,907,183	\$ 54,907,183
R E VE NUE S :				
Commonwealth of Virginia	7,787,831	-	-	-
Federal Government	10,578			
City of Falls Church	-	-	-	-
Charges for Services	1,528,052	-	-	-
Miscellaneous Revenue	3,035,323	-	-	-
Proceeds from Lease Purchase	5,418,570	-	-	-
TOTAL REVENUE	17,780,354	-	-	-
Transfers In (Out):	(400,000)			
Transfers In	19,890,523	11,615,946	11,615,946	11,536,387
TOTAL TRANSFERS IN (OUT)	19,490,523	11,615,946	11,615,946	11,536,387
TOTAL BALANCE, REVENUES				
AND TRANSFERS IN	134,484,254	76,933,832	99,523,129	66,443,570
EXPENDITURES:				
Capital Projects - Current Year	46,577,071	11,615,946	11,615,946	11,536,387
Capital Projects - Carry-Over	46,577,071	33,000,000	33,000,000	35,000,000
Capital Flojects - Cally-Over		33,000,000	33,000,000	33,000,000
TOTAL CAPITAL EXPENDITURES	46,577,071	44,615,946	44,615,946	46,536,387
BALANCE, JUNE 30	\$ 87,907,183	\$ 32,317,886	\$ 54,907,183	\$ 19,907,183

Most capital projects span multiple years, from design to construction completion. The FY 2016 Actual and FY 2017 Re-Estimate columns reflect that funding for capital projects are carried forward each fiscal year, and ending balances fluctuate, reflecting the carryover of these funds. The FY 2018 adopted budget column is presented in a similar fashion to show planned execution of projects in the fiscal year. These are staffs' best estimates based on preliminary plans and design and construction schedules.

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Transportation Maintenance Capital FY 2018 Project List			
Paving	The inventory of streets is broken down as follows: 25 percestreets, 11 percent are collector streets and 64 percent a streets. The Pavement Condition Index (PCI) is updated Arlington's average PCI is currently 71. The County uses maintenance strategies to maintain streets as detailed below.	re residential annually and	
Program	Description	Funding	
Hot Mix Overlay	Paving has been increased to 75 lane miles annually. This includes about three lane miles of streets without curb and gutter (five percent of funding). *There are additional one-time funds of \$0.65M that will be spent in FY 2017.	\$12,860,000	
Slurry Seal	Slurry Seal extends the life of pavement on Residential Streets at a much lower per square yard cost. Program is based on approximately 40 lane miles being slurry sealed annually.	\$400,000	
Microsurfacing	Microsurfacing extends the life of pavement for Arterial Streets at a lower per square yard cost. Program is based on approximately 10 lane miles being microsurfaced annually.	\$500,000	
Re-Building of Streets	Re-builds include partial and total excavations of blocks to re-build the base and sub-base of roadways where significant roadway failure has occurred. Since 2008, an innovative process to stabilize soil with cement has reduced re-build costs by around 50 percent.	\$750,000	
	\$14,510,000		
	1 = 1,2 = 2,000		
Other Transportation Maintenance Capital	Includes transportation systems & traffic signals, streetlights, ART rehabilitation & repairs, traffic calming, regulatory signage, and bus stop & shelter program.	\$1,688,000	
	GO Bonds are from the approved 2016 GO Bond Referenda Total (PAYG \$4.3M; Bonds \$11.9M)	\$16,198,000	

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Facilities Maintenance Capital Program FY 2018 Project List			
*Project Name - Description	PAYG (P) Bond (B)	*Total	
1. Shirlington Library/Signature Theater/Trades Center NOC- BAS Replacement - Replace obsolete building automation system (BAS) with new. Due to advanced technology the system is obsolete. This is a companion project to Energy Management's FY 2018 Shirlington Library retro commissioning project.	\$250,000 B	\$250,000	
<ol> <li>Solid Waste/Traffic Engineering &amp; Operations         Building- Bundled refresh. Design and construction.         Design HVAC replacement; building automation         system (BAS), interior refresh.</li> </ol>	\$1,050,000 B	\$1,050,000	
<ol><li>Central Library- Replace all exterior doors due to deterioration for the doors and constant repairs of the doors.</li></ol>	\$300,000 P	\$300,000	
<ol> <li>Courts Police Building – Replace cooling tower, boiler, pumps and controls.</li> </ol>	\$295,000 P \$2,108,000 B	\$2,403,000	
<ol><li>Fire Station#2 - Replace overhead doors to garage bay.</li></ol>	\$ 350,000 B	\$ 350,000	
6. Generator Replacement - Replaces 3 generators due to replacement parts no longer being available - included in FY16 closeout funds.	\$600,000 P	\$600,000	
<ol> <li>CHP NOC- Fire suppression system replacement – Replace existing Halon fire suppression system with a new fire suppression system for network operating centers (NOC's).</li> </ol>	\$110,000 P	\$110,000	
8. Program Contingency	\$250,000 P	\$250,000	
*Total program funding includes new FY 2018 PAYG funding as well as approved bonds from the 2016 Referenda.	\$1,555,000 \$3,758,000	\$5,313,000	

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Facilities Design and Construction, FF&E Program FY 2018 PAYG Project List	l
Project Name - Description	Total
<ol> <li>Central Library - Replace furniture in the common areas of the Central Library. This would replace furniture in the Center for Local History, conference rooms and sitting areas. This would complement the modernization project of the Library that will take place in fiscal years 2017/2018.</li> </ol>	\$300,000
2. Chair Replacement - Systematic annual chair replacement program to replace task chairs throughout County facilities. Existing chairs ten years or older will be replaced, supportive of the industry standard for life span - allowing for the replacement of approx. 200 chairs per year. This year would start the second out of an eleven-year program.	\$140,000
3. Interior Maintenance Capital Improvement - Systematic Capital Maintenance program that allows for the annual Interior refurbishment of flooring, wallpaper, painting and signage. Facility revitalization has been deferred over the past decade due to the lack of departmental funding sources. This program would enable the Facilities to be upgraded through a systematic ranking of needs based on yearly assessments of our 90+ buildings by internal staff.	\$100,000
Total PAYG	\$540,000

Energy Efficiency Capital Program FY 2018 PAYG Project List	
Project Name - Description	Total
<ol> <li>Signature Theater/Shirlington Library- Point-by-point retro commissioning of Signature Theater and Shirlington Library with repairs as needed for building optimization, ten years after original building delivery.</li> <li>*This is a companion project to FMB's FY 2018 Siemens BAS panel replacement.</li> </ol>	\$99,000
Total PAYG	\$99,000

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Parks Maintenance Capital Program			
FY 2018 Project List			
Project Name - Description	PAYG (P) Bond (B)	*Total	
<b>Bluemont Park</b> – Design. The project is for replacement of tennis courts, lighting, restroom/storage, picnic shelter, parking lot, adjoining section of Four Mile Run Trail, site circulation, site furnishings, drainage, and landscaping.	\$575,000 (B)	\$575,000	
Alcova Heights Park – Design and construction for replacement of basketball court, lights, restroom, playground, sand volleyball, picnic shelter, site circulation, site furnishings, signage, fencing, drainage and landscaping. This project will be broken into two phases per where 8 <sup>th</sup> Street S. cuts the park in two. (originally budgeted in the CIP at \$4m for full project but will be reallocating \$1.605m to Glencarlyn Picnic Shelter)	\$2,395,000 (B)	\$2,395,000	
<b>Marcey Road Park</b> – Design. The project is for replacement of the tennis courts, basketball court, lights, gazebo, site circulation, site furnishings, drainage and landscaping.	\$350,000 (B)	\$350,000	
TJ Park – Framework plan and conceptual design. The project is for replacement of the tennis courts, basketball courts, lights, track, fitness stations, playground, athletic fields, entry feature, site circulation, site furnishings, signage, fencing, drainage, and landscaping.	\$575,000 (B)	\$575,000	
Glencarlyn Picnic Shelter – Design and construction. The project includes the demolition, site work, replacement of the large picnic shelter and parking lot, site amenities (picnic tables, grills and trash cans), pathways, accessibility improvements, landscaping, tree protection and storm water facilities. (Will utilize a portion of the bond funds originally allocated to Alcova Heights for construction)	\$370,000 (P) \$1,605,000 (B)	\$1,975,000	
Capital Asset Manager – Maintenance Capital Program Staff. Staff resources to manage the capital asset program.	\$150,000 (P)	\$150,000	
Field Fund Program – The fees assessed for rectangular fields are to support replacement and construction of synthetic turf fields in the County (annual estimate of \$180,000). The fees assessed on diamond fields (annual estimate of \$70,000) are to be used for specific diamond field enhancements, such as improved irrigation, batting cages, or accelerated sod replacement. Additional funds (\$12,000) in FY 2018 are attributable to the September 2016 reconciliation of actual fees collected versus the projected Capital FY 2018 budget.	\$262,000 (P)	\$262,000	
Feasibility Studies – These funds will provide the ability to conduct timely and relevant analysis and studies as opportunities arise. The program is meant for new planning initiatives that are outside current CIP projects. Examples are potential planning and analysis needs for parks and sites associated with site plan proposals, Arlington Public Schools proposals, affordable housing			
proposals, or land acquisition opportunities.  * Total program funding includes new FY 2018 PAYG funding as	\$150,000 (P)	\$150,000	
well as approved bonds from the 2016 Referenda.  PAYG GO Bond	\$932,000 \$5,500,000	\$6,432,000	

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Synthetic Turf Program FY 2018 Project List	1	
Project Name - Description	PAYG (P) Other (O)	*Total
Long Bridge Synthetic Field #1 (Marymount) - Design and construction. Replacement of synthetic field #1 (Marymount field) at Long Bridge. The project includes demolition, site work, replacement of the synthetic turf and Brock pad, site amenities (shade, flagpole, athletic equipment). Cost share with Marymount University (50-50).	\$700,000 (P) \$700,000 (O)	\$1,400,000
TJ Synthetic Community Field - Design and construction. Replacement of synthetic field at TJ. The project includes demolition, site work, replacement of the synthetic turf, site circulation, site amenities (shade, fencing on the west end of field, athletic equipment, trash cans). Cost share with APS (County 70%, APS 30%)	\$595,000 (P) \$255,000 (O)	\$850,000
* Total program funding includes new FY 2018 PAYG funding as well as contributions from other organizations.  PAYG Other	\$1,295,000 \$955,000	\$2,250,000

Park Master Planning			
Project Name - Description	PAYG (P)	*Total	
Rosslyn Highland Park + - Rosslyn Highlands Park + will be a dynamic park in the heart of Rosslyn. The park is one component of an even bigger project that includes school, residential, and office development. In the fall of 2015, Arlington County worked with the community to develop a conceptual plan for a new Rosslyn Highlands Park and the other public spaces associated with the Western Rosslyn Area Plan (WRAPS). These spaces include County and School property and an open space associated with an affordable housing project at the north side of 18th Street North and open space associated with a private development project. The park master plan was adopted by the County Board in July 2016. This project is for final design of the open space associated with the affordable housing project. The work was moved up from FY 2019 in the CIP in order to correspond to the timing of the affordable housing project on the same site.	\$265,000 (P)	\$265,000	

Total FY 2018 Parks Capital Projects		
P	AYG \$2,492,000	
GO Bo	nds \$5,500,000	\$8,947,000
Ot	her \$955,000	

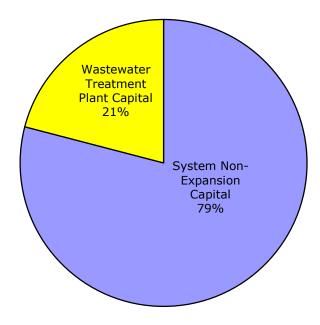
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Our Mission: To provide and maintain a water distribution system, a sewage collection system, and a wastewater treatment plant

The Department of Environmental Services is responsible for managing the Utility Fund, which includes providing and maintaining a water distribution system, a sewage collection system, and a wastewater treatment plant. The Proposed FY 2018 Utility Fund Pay-As-You-Go Budget Summary, program budget appropriation distribution graph, project descriptions, and fund statement are included on the following pages.

#### **Distribution of Fund Budget**



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## **FY 2018 PROPOSED PAYG BUDGET SUMMARY**

PROGRAM CATEGORY	AMOUNT
UTILITIES	
Wastewater Treatment Plant Capital	\$4,027,000
System Non-Expansion Capital	15,399,740
Total Project Cost	19,426,740
Less: Infrastructure Availability Fees & Other Revenue	5,855,100
Net Utilities Funds Support	\$13,571,640

Note: Other revenue includes non-expansion Interjurisdictional revenue of \$555,900 and a first installment reimbursement for the refuse and recycling share of the Utility Billing system.

#### FY 2018 PROPOSED UTILITIES BUDGET

## **Wastewater Treatment Plant Improvements (Non-Expansion)**

\$4,027,000

- Water Pollution Control Plant Maintenance Capital Program. This program provides for the annual repair, replacement, and upgrade of current equipment and infrastructure at the Plant and lift stations. Major program components include refurbishing or replacing equipment to prevent premature failure, infrastructure improvements, and automating treatment processes to increase operational efficiency, reliability, and redundancy. Additionally, studies of alternative treatment processes to increase efficiency and reduce environmental impact are funded through this program (\$2,000,000).
- Solids Master Plan Phase I (Biosolids Projects). This funding is for biosolids processes that are beyond their useful life and in need of replacement. Some potential projects include primary clarifier internal mechanisms, scum concentrator replacement, gravity thickener upgrades, motor control center replacement in the Preliminary Treatment Building, and bar screens upgrades (\$440,000). The Solids Master Planning process, approved in FY 2014 and currently in process, will include a condition assessment and provide replacement options and strategies for decision making.
- Solids Master Plan Phase II (Short Term Needs Projects). This funding is for the second phase of implementation of the Solids Master Plan. It is for short term projects in which equipment is in need of replacement, but which can wait until the completion of the Master Plan so that equipment may be selected with the long term plan in mind. This funding could also be used to rehabilitate equipment to keep it running while the long term strategy is under design and construction. It is anticipated that these projects might include such items as the biological thickening system, sludge blending system, and the lime transfer system (\$830,000).

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- Improvements to Eads Property. Funding is for improvements to a property near the Water Pollution Control Plant that the County purchased in March 2010. This facility serves as the plant's off site warehouse, and is used for storage of larger and less frequently used items. Additionally, Arlington Transit (ART) has some offices within the facility. Per a memorandum of understanding dated November 23, 2011, the Transit Bureau contributes toward the cost of the site (\$100,000).
- Blue Plains Plant Capital. The District of Columbia Water and Sewer Authority Blue Plains Plant processes a portion of Arlington County's sewage after transmission through Fairfax County mains. The capital program funds Arlington's annual payment through Fairfax County to the Blue Plains Plant for capital improvements. It also funds improvements to the transmission system. Payment is due under the terms of the October 3, 1994 Sewage Conveyance, Treatment, and Disposal Agreement with Fairfax County (\$657,000).

## **System Non-Expansion Capital**

\$15,399,740

The funding for these projects comes primarily from a transfer from the Utilities Operating Fund, which is an enterprise fund. The revenues for this enterprise fund are derived primarily from water and sewer utility billings. Fees charged to new users who increase demands on the system are an additional funding source for these projects. The following projects and programs are planned to replace and rehabilitate the County's water distribution and sewage collection system, and to pay for the County's share of planned capital improvements at the Washington Aqueduct.

- Non-expansion inflow and infiltration sanitary sewer capital repairs and replacements (\$3,000,000)
- Water main replacement program (\$2,500,000)
- Water main cleaning and re-lining projects (\$1,800,000)
- Interconnection improvements (\$1,000,000)
- Water/sewer frames & covers (\$750,000)
- Sewer main replacement program (\$500,000)
- Manhole rehabilitation (\$500,000)
- Large diameter sewer rehabilitation/replacement (\$500,000)
- Large diameter water main rehabilitation/replacement (\$450,000)
- Technology enhancements (\$250,000)
- Capital improvements at the Washington Aqueduct (\$3,950,540), from which the County purchases drinking water. Arlington County pays approximately 16 percent of the capital costs for this organization.
- The Utility Billing System, managed by the Utilities Services Office, bills for water and sewer services, refuse and recycling services provided to single family, townhouse and duplex dwellings, and miscellaneous Solid Waste Bureau services. The Utilities Capital Projects Fund will advance the funding for the refuse and recycling share of the new system and it will be reimbursed from the general fund for its share of costs over a period of time that will depend on the final cost of the new system.

#### TOTAL UTILITIES BUDGET

\$19,426,740

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## UTILITIES CAPITAL PROJECTS FUND FUND STATEMENT

	FY 2016 ACTUAL	FY 2017 ADOPTED	FY 2017 RE-ESTIMATE	FY 2018 PROPOSED
ADJUSTED BALANCE, JULY 1	\$51,832,415	\$46,649,915	\$54,088,359	\$54,688,359
,	<del>401,002,110</del>	<b>\$ 10,0 10,0 10</b>	<b>40</b> 1,000,000	<b>40</b> 1,000,000
REVENUES:				
Infrastructure Availability Fees	5,474,990	5,000,000	5,000,000	5,000,000
Sewage Treatment Service Charges	60,110	1,371,000	1,371,000	555,900
Interest	328,868	100,000	100,000	100,000
Misc. Revenue	31,572	-	-	-
TOTAL REVENUE	5,895,540	6,471,000	6,471,000	5,655,900
Transfers In (Out): Transfer in from General Fund Transfer In from Utilities Operating Fund	- 13,525,850	- 11,810,500	- 13,910,500	199,200 13,571,640
TOTAL TRANSFERS IN	13,525,850	11,810,500	13,910,500	13,770,840
TOTAL BALANCE, REVENUES AND TRANSFERS IN	71,253,805	64,931,415	74,469,859	74,115,099
EXPENDITURES:				
Capital Projects - Current Year	17,165,446	18,281,500	18,281,500	19,426,740
Capital Projects - Carry-Over	-	12,957,500	1,500,000	3,772,460
TOTAL CAPITAL EXPENDITURES:	17,165,446	31,239,000	19,781,500	23,199,200
BALANCE, JUNE 30	\$54,088,359	\$33,692,415	\$54,688,359	\$50,915,899

Most capital projects span multiple years, from design to construction completion. The FY 2016 Actual and FY 2017 Re-Estimate columns reflect that funding for capital projects are carried forward each fiscal year, and ending balances fluctuate, reflecting the carryover of these funds. The FY 2018 proposed budget column is presented in a similar fashion to show planned execution of projects in the fiscal year. These are staffs' best estimates based on preliminary plans and design and construction schedules.

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The County uses master lease financing to acquire equipment, rolling stock, furniture, and technology purchases that have useful lives ranging from three to ten years. Master lease financing is very flexible, allowing the County to finance projects with minimal transaction costs and on an "as needed" basis over the term of the master lease. Because of the short-term maturities of master lease financing, interest rates are typically lower than rates on long-term bonds. The County typically procures equipment using temporary funding sources, and then draws funds from the master lease financing institution to reimburse the temporary sources. The projects discussed below are recommended to be financed through the master lease program with related debt service costs funded through the General Fund Non-Departmental budget or the charge backs from the Auto Fund as appropriate.

FY 2018 Master Lease Funded Project Costs (\$ in 000's)

Public Safety Mobile and Portable Radios	\$4,275
Computer Aided Dispatch (CAD) Replacement Planning	350
Sheriff Live Scan System	225
Fire Command Vehicle Technology	150
Sheriff In-Car Cameras	150
Subtotal Public Safety	\$5,150
End User Computing (formerly PC Replacement)	2,125
Network Core Sustainability	1,395
Server/Backup System/Data Storage	500
Public Safety Network Equipment	275
Enterprise Wireless	262
Video Conferencing	181
Subtotal Enterprise Technology and Equipment	\$4,738
General Fund: Program Costs	\$9,888
Auto Fund: Fire Vehicles	\$2,928
TOTAL Project Costs	\$12,816

The FY 2018 list of projects will replace aged and critical technology infrastructure and public safety equipment. The FY 2018 debt service budget of \$7.6 million in the General Fund Non-Department budget for master lease is a three percent increase from the FY 2017 adopted level. Various public safety equipment, previously funded through one-time federal and state grants and other sources, have reached their end of life and must be refreshed. This annual debt service budget level will cover the financing costs (principal and interest) of the General Fund's base program projects listed in the table above and continue to cover debt service costs of capital projects previously approved.

The Master lease equipment financing also covers Fire Department vehicles that are budgeted through the Auto Fund. The debt service for these vehicles are paid from the Auto Fund and

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recovered through charge-backs to the department via the auto rental book charges in the annual budget.

## **Public Safety Mobile and Portable Radios**

\$4,275,000

Mobile radios, used by public safety, are radios that are installed in County vehicles as well as used in the Emergency Communications Center (ECC) as part of the dispatch system. They provide way communication between the Emergency Communications Center and public safety vehicles. Portable radios are hand-held radios that allow for two-way communication with the Emergency Communications Center and all public safety agencies throughout the National Capital Region. Both mobile and portable radios for the Police Department, Sheriff's Department and Office of Emergency Management are due for replacement as these devices are reaching the end of their support on December 31, 2018 (FY 2019). Relying on equipment past the end of support increases the vulnerabilities posed to operational staff as equipment failure will reduce communication options between first responders and dispatch personnel and may increase response times to critical events. By planning in advance, funding of the radios can be phased over two years to allow for easier transition, training, and budget management. The FY 2017 funding covered the first half of the total costs. The second half is included in the FY 2018 proposed budget. The radios have a useful life of seven years. The total cost is \$8.55 million and covers approximately 1,005 portable radios and 354 mobile radios and the supporting equipment such as batteries, chargers, cases, and microphones.

## Computer Aided Dispatch (CAD) System Planning

\$350,000

The CAD is the core system used by ECC to receive requests for service and resources and transfer information to first responders. The system will be outdated by FY 2020 and will require an entire overhaul. In addition, Next Generation 9-1-1 technologies will force changes to CAD as well as every other critical technology system to public safety. This will lead to a modification, either small or large, on nearly every single technological platform. The FY 2018 request is for funds to assess the system and plan for its needs ahead of implementation.

#### Sheriff Live Scan and Portable Live Scan system

\$225,000

Virginia State Code requires the fingerprinting for all individuals arrested using a Live Scan system. This funding will replace the existing Live Scan and Portable Live Scan systems which are past their end of life. The system is tied to the State Police database and sends fingerprints obtained at the Detention Facility to the State Police automatically to provide identification of the individual.

#### **Sheriff In-car Cameras**

\$150,000

The Sheriff's Office currently has 10 in-car camera systems in the Warrant/Civil Process vehicles. This funding will replace the existing camera systems that are past their end of life. These cameras record activities inside and around the vehicles during calls for service. This provides an added layer of protection and accountability for deputies and the public.

## **Fire Command Vehicle Technologies**

\$150,000

The Fire Mobile Command Vehicle is used during planned special events such as the Marine Corps Marathon and Army 10 Miler. The technology-based equipment inside the vehicle allows the incident commander to communicate in an array of different formats to units operating on the scene of the incident. The vehicle is also capable of becoming a mobile office space to support the Fire department or other County departments and can serve as a giant data port or Emergency Communications Center in the event of local, land-based communications failures due to natural or man-made events.

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Technologies needing refreshment include servers, radios, personal computers and peripheral devices.

## **End User Computing**

\$2,125,000

The End User Computing replacement program (formerly known as PC Replacement) works by refreshing the County's end user devices (PC's, laptops, tablets, etc.) on a four to five-year replacement cycle. This approach minimizes large capital outlays for these devices and keeps a large percentage of the inventory within warranty while being responsive to emerging technological trends. The Department of Technology Services (DTS) will continue to work with customers to identify the most appropriate devices necessary for the users' business needs. These funds will be used to replace approximately 1,700 devices.

## **Network Core Sustainability**

\$1,395,000

Funds for network core sustainability provide for continuous refreshment of County network equipment as it reaches end of life and/or requires enterprise-level feature enhancements and upgrades. This equipment supports the entire enterprise and includes routers and switches that are the base for the County's voice, video, and data systems. Without sustainment funds, the voice and data network runs the risk of failure as equipment reaches end of life and/or becomes obsolete. This funding will be used to replace eight end of life hub switches, upgrade end of life optics (lasers) from 10G to 100G bandwidth for increased network core capacity, and the first year of equipment maintenance costs.

Server Refreshment \$500,000

The server refreshment program replaces the County's storage servers based on a five-year replacement cycle. Without replacement, the applications that reside on these devices are at risk of failure. The FY 2018 budget will be used to replace approximately 10 physical host servers with the capacity of supporting 100 virtual servers along with associated software licenses, such as virtualization software, operating system, backup agents, and security software.

## **Public Safety Network Equipment Replacement**

\$275,000

This funding replaces the existing radio equipment that supports the public safety network. This equipment will no longer be supported by the manufacturer after April 2019. Initial funding was approved in the FY 2017 adopted budget for \$500,000 and the FY 2018 funding of \$275,000 will complete the project so that the public safety network can be fully tested and operational before it is no longer supported.

#### **Enterprise-wide Wireless Connectivity Expansion**

\$262,000

These funds will be used to improve indoor wireless access and provide secure wireless coverage to all County-owned and staff occupied buildings, and public facing locations like community centers and libraries. The goal is for all of these facilities to have full wireless coverage by FY 2020.

#### **Expanded Video Conferencing Capabilities**

\$181,000

These funds will be used to address the growing need for County staff to convene in conference rooms for collaboration, interviews, training sessions and meetings using web conferencing services. Vendors, contractors and other County partners are increasing their usage of web conferencing

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services to interact with County staff and conduct County business. Approximately eight conference rooms are targeted for upgrade during this phase.

## **Auto Fund – Fire Vehicles**

\$2,928,000

The fire pumpers were replaced in FY 2010 and have reached the end of the seven-year useful life. The \$2,928,000 funding request will replace the six fire pumpers and also takes advantage of the back credit from the trade in of the old pumpers.

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