Howard County Maryland

Executive Proposed Capital Budget Fiscal Year 2019



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The Honorable Mary Kay Sigaty Chairperson, Howard County Council 3430 Courthouse Drive Ellicott City, MD 21043

Dear Chairperson Sigaty,

I am pleased to present my proposed Fiscal Year 2019 Capital Improvement Program for Howard County. Building upon the last three years, this budget continues to support our residents' priorities in the areas of education, public safety, transportation, infrastructure and community services. I would like to acknowledge the many residents and community leaders representing local nonprofits and agencies who provided their input during our town halls and public hearings.

The proposed FY 2019 capital budget totals \$164.7 million, with \$97.4 million coming from General Obligation (GO) bonds. As you know, the Spending Affordability Advisory Committee recommended a GO bond authorization of \$75 million, lower than their \$85 million recommendation of the past two years and significantly lower than our historical level. I greatly appreciate the Committee's focus on the County's limited capacity to finance capital projects, which is further constrained by a slowdown of revenues in FY 2019.

I also fully support maintaining fiscal discipline to keep the county's debt burden at a manageable level. However, we cannot ignore certain critical infrastructure needs that must be addressed immediately. In particular, with a \$12.3 million decline in State aid to Howard County Public School System (HCPSS) capital projects, I decided to make a one-time boost in County contributions to fill the gap and keep important projects moving forward. I am mindful of the need to keep our debt service at an affordable level and have no intention of maintaining this level of GO funding continuously in future years.

Education and Opportunity

Education continues to be our top priority. This proposed capital budget provides funds to secure our schools, renovate aging school buildings, build new schools to meet enrollment growth, improve technology and support systemic renovations.

The FY 2019 proposed HCPSS capital budget totals \$63.7 million, including \$54.9 million in County and \$8.7 million in State funding. County funding consists of \$47.9 million in GO bonds, an increase of 36.9 percent over FY 2018, and the highest level in nearly a decade, along with \$7.0 million in transfer taxes. The increase in County funding was necessary to help mitigate a significant reduction of State funding so that we could keep critical projects moving forward.

After a recent HCPSS security assessment determined that not all high school buildings are fully secure, I made it a priority to enhance security by providing \$1.1 million to secure school entrances. This infrastructure investment coupled with resources provided in the operating budget will keep our students and staff safe. Funding is also provided to help complete the Waverly Elementary School

Renovation/Addition project (\$4.0 million) and construction of the 42nd elementary school, Hanover Hills Elementary, (\$8.1 million) to accommodate the growing number of children in the northeastern and southeastern regions of the county.

The budget significantly accelerates the new 13th high school (\$6.7 million) with planning and design starting in FY 2019 and completion expected in 2023, four years earlier than the completion date of 2027 in last year's budget. This new high school will be designed to accommodate enrollment projections with a proposed capacity of 1,615 students. The budget also moves up the start of Hammond High School Renovation/Addition (\$4.0 million) from FY 2023 to FY 2019 based on a recently completed high school capacity needs assessment. Matching funds for replacement of Talbott Springs Elementary School were rejected by the State. Therefore, I am proposing \$2.6 million to start renovation/addition

- Enhancement of Security at School Buildings
- Waverly Elementary School Renovation/Addition
- The New Hanover Hills Elementary School
- Hammond High School Renovation/Addition
- Planning/Design for the 13th High School
- Talbott Springs Elementary School Renovation/Addition
- Howard Community College Nursing Building Renovation

work while we await the decision of an appeal HCPSS has filed with the State.

The FY 2019 budget also includes significant County investment in HCPSS systemic renovations (\$21.3 million), covering enhanced security at high schools, special education needs, indoor environmental quality improvements, and various HVAC and renovation projects.

Moreover, the County continues to support existing and future school site land acquisition needs. Additional school site funding of \$3.8 million will complete the acquisition of the Mission Road school site and advance the acquisition of land for an elementary school site in the Turf Valley neighborhood of Ellicott City.

Our commitment to education continues with projects for Howard Community College (HCC) and the Howard County Library System. Last year, HCC opened a much-needed Science, Engineering and Technology building with County support. In FY 2019, \$11.2 million in County funding is included for completion of the Nursing building renovation and other improvements on the campus. Earlier this year, we finished the renovation of the East Columbia Library and opened the Elkridge Library and 50+ Center. In addition, planning, design and some construction work is expected to commence at the Glenwood Library with prior appropriation.

Transportation and Revitalization

- Road Resurfacing and Sidewalks
- Bike Projects
- Bus Stop Improvements
- Stormwater Management Plan

Our PAYGO Capital Funds include \$6.0 million to continue addressing road resurfacing needs, allowing the County to pave approximately 36 miles of roads.

This year's budget includes \$1.1 million in County and grant funding, the largest single year investment ever dedicated

solely to bicycle infrastructure. These funds provide the next step in completing BikeHoward Express, an integrated 48-mile network of bicycle infrastructure. Developing this network will provide significant economic, environmental, and health benefits for our community.

Since July 2017, we have completed improvements at 38 bus stops including new shelters and upgrades to existing shelters, new accessible concrete pads and sidewalks. An additional 35 stops will be completed by the end of June 2018. For FY 2019, we will improve an additional 41 bus stops.

We have worked diligently over the past several years to improve the County's water quality and continue to be one of the leaders in the State. During the past several years, we treated more than 1,400 impervious acres with best management practices to limit the amount of nitrogen, phosphorus, and sediment that have entered our waterways. We are also working to mitigate flooding in the Tiber-Hudson Watershed and protect our treasured Ellicott City from future storms. This includes storm drain improvements and the continued design of stormwater retention facilities identified in the 2017 Hydrologic and Hydraulic Analysis. This year's proposed County funding of \$17.1 million will allow us to continue to move expeditiously on these projects.

Recreation and Parks

This year's capital budget includes \$5.0 million for the design and construction of a swimming pool at the North Laurel Community Center. The community has requested

this pool for many years, and I am pleased to be able to make this project a reality.

North Laurel Pool

- Troy Park
- Blandair Regional Park

County funding of \$1.5 million is provided to complete construction of the lighted synthetic turf stadium field at Troy Park and complete the design of the maintenance building that will serve the needs for this highly used Regional Park.

I'm proud of our recent completion of Phase II of the Blandair Park master plan, which allowed us to build two synthetic turf baseball fields and five tennis courts. The FY 2019 budget provides \$3.2 million in County and Program Open Space funds to continue construction of Phase III, which includes the much-awaited "Playground for All" for children of various abilities and a maintenance building that will serve the entire 300-acre park. The budget also provides funding for the design of Phase IV, which will feature a festival lawn, a children's garden, a large pavilion and restroom, and much needed parking spaces.

Human Services and Public Safety

- Florence Bain 50+ Center
- Community Resources Campus
- Public Safety Radio
 System Enhancements
- Waterloo and North Columbia Fire Stations

As the senior population in the County grows rapidly, we will continue to strengthen services and facilities that benefit our older adults. The newly expanded Elkridge 50+ Center that opened in March will provide additional programing opportunities and expanded services. This budget includes \$1.4 million for the design and renovation of the Florence Bain 50+ Center, the most actively used 50+ Center in the County. Prior year funding will be used to plan and design an expanded East Columbia 50+ Center.

We continue our efforts to expand the Community Resources Campus. Just this week, the campus took an important step forward when the State's Board of Public Works approved the co-relocation of the County's Department of Social Services to offices at the new campus. Our vision of consolidating services to the campus is making it easier for our residents to get the services they need without having to travel all over the county.

Our capital budget also continues to address the needs of police, fire and emergency operations. The budget includes \$5.9 million as the third-year effort in a multi-year project to complete the replacement and upgrade of the public safety radio system.

Just last week, the new Elkridge Fire Station opened. Moving forward, the County is in the process of finalizing the acquisition of State property to construct the Waterloo Fire Station. This project will help address increased growth in the Route 1 corridor. This budget also allows design and planning for a new fire station in North Columbia. The station will provide Columbia and surrounding areas with a new fire station that is strategically located to provide improved services. It will also serve as a temporary coverage of the downtown Columbia area during the planned Banneker Station reconstruction.

Business and Economic Development

I have put a strong emphasis on embracing a culture of innovation across the County. This capital budget supports these goals by creating Howard County's Gateway Innovation Center.

- Gateway Innovation Center
- New Circuit
 Courthouse P3 Project

Supporting our long-term vision of turning the Gateway complex into an Innovation District, the Gateway Innovation Center will consolidate the Economic Development Authority, the Maryland Center for Entrepreneurship (MCE) and the Howard County Tech Council into one building, while providing additional room to create innovations labs, a new technology accelerator and space for additional incubator companies. This next step will be the catalyst to jump start the Innovation District by bringing in private investment to support our growing industries. The FY 2019 budget includes \$3.0 million to start the design and begin renovations at the Gateway Innovation Center. The County systemic facility improvement project will renovate leased space to move certain agencies out of the Gateway building, leaving space to be occupied by the MCE.

I am pleased that the Court House P3 (public-private-partnership) project is moving ahead on schedule. The Request for Proposal was issued to three short-listed bidders with internationally known companies in the field. Before the summer, a proposal is expected to be selected and the multi-year service contract is expected to be presented for approval to the County Council by the fall of 2018. I am highly confident this innovative approach will produce a much-needed facility that benefits the County. Similarly, the County systemic facility improvement project includes funding to renovate leased space to move existing agencies out of the Dorsey building, which is the targeted site for the new Court House.

As you review my proposed capital budget, I hope that you will appreciate the careful planning and attention to detail that we have given to the many existing and new projects. While holding the line on taxes and by keeping our debt service affordable, we have proposed projects that will support our shared goals of a county that endorses a live, learn, work and play approach.

If you have questions during your review, please do not hesitate to contact me or my staff for assistance.

Sincerely,

Allan H. Kittleman County Executive

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2019 New Capital Projects

Project	Description
GENCO-GENERAL COUNTY PROJ	ECTS (5)
C0358-FY2019 NORTH LAUREL COMMUNITY POOL	A project to construct a swimming pool at North Laurel Park.
C0360-FY2019 REAL ESTATE PLANNING AND DESIGN	This project will provide funding for expenses related to potential properties that become available and meet the future needs of the County to serve the public interest and no funded Capital Project exists. The project will also serve as a transfer source and to resolve other acquisition issues on projects that were closed or on those not funded by the Enterprise Fund. This shall include title and appraisal reports, surveys, environmental assessments, and all costs associated with and required for the acquisition of property.
C0359-FY2019 TURF VALLEY SCHOOL SITE ACQUISITION	A project to purchase land for a new elementary school in the Turf Valley neighborhood of Ellicott City. It will include all costs associated with the land acquisition.
C0362-FY2019 GATEWAY INNOVATION CENTER RENOVATION	A project for renovations of the Gateway Building located at 6751 Columbia Gateway Drive to facilitate the implementation of the Gateway Innovation Center.
C0363-FY2019 LINWOOD SCHOOL PARKING LOT	A project to construct a parking lot adjacent to Linwood School site located on Martha Bush Drive in Ellicott City.
EDUC-SCHOOL SYSTEM PROJECT	TS (8)
E1044-FY2019 SYSTEMIC RENOVATIONS	Improvements and installation of systemic renovations at various school sites, including projects of a critical nature such as sprinkler repair, HVAC repair, window replacement, vehicles including but not limited to dump trucks, and other projects in support of the local CIP outlined in the HCPSS Comprehensive Maintenance Plan, as well as emergent projects on school properties. For larger systemic renovation projects (see schools listed in the remarks section) the complete scope of these projects are defined by the BOE approved construction documents (CD) brochure (see Policy 6020 for complete description of process) and any change orders approved subsequent to submittal of the CD brochure.
E1045-FY2019 RELOCATABLE CLASSROOMS	This request will provide funds for the relocation of existing portable classrooms or purchase of new portable classrooms to be placed at schools in need of additional capacity in August 2018. Relocation includes moving the buildings as well as installation of support services that make the buildings functional classrooms.
E1046-FY2019 ROOFING	Reroofing for various schools including design and construction of repairs to existing roofs, old roof removal, new flashing and drains, and installation of new roofing structure and material.
E1048-FY2019 TECHNOLOGY	A capital project to provide and sustain a viable technology infrastructure consistent with the HCPSS technology plan at various school sites.

2019 New Capital Projects

Project	Description
E1049-FY2019 DUNLOGGIN MS RENOVATION/ADDITION	A project to expand educational program spaces with 97 seats of new capacity and renovate the existing facility. This project calls for an expasion of the educational program spaces and renovation of the existing facility. The renovation will include a complete systemic renovation of the existing building including new electrical, mechanical, plumbing, technology, roofing and life safety systems. The 97 seats of additional classroom space and core infrastructure space will allow the building to operate effctively at the larger capacity. Interior spaces will be reconfigured, new finishes provided, accessibility improved, and new spaces added as required to bring the facility into compliance with renovation specifications. The complete scope of this project is defined by the BOE approved construction documents (CD) brochure (see Policy 6020 for complete description of process) and any change orders approved subsequent to submittal of the CD brochure.
E1050-FY2020 CLARKSVILLE ES ADDITION	The Clarksville Elementary School project will expand educational program spaces with 150 seats of new capacity for a new Elementary Regional Language Immersion Program. The program is under development and project details are forthcoming. The complete scope of this project will be defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.
E1051-FY2024 MS/HS CAREER DEVELOPMENT CENTER	The MS/HS Career Development Center project will replace the aging Applications and Research Lab (ARL) school with a larger, more modern facility to facilitate the expansion of educational spaces to meet the growing curriculum. The complete scope of this project would be defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.
E1047-FY2020 SITE ACQUISITION AND CONSTRUCTION RESERVE	This account is a contingency fund for site acquisition and school construction at various school sites. Recent emergent maintenance requirements have strained the school system's existing construction contingency accounts and additional funding is required to ensure that urgently needed repairs can be completed without delay.
SEWER-SEWER PROJECTS (1)	
S6600-FY2019 WATER AND WASTEWATER FACILITIES CAPITAL REPAIRS AND UPGRADES	A project [program] to repair or upgrade existing water or sewer facilities. Work may also include the performance of energy audits, alternative power source upgrades and/or the installation of energy conservation techniques at existing water or sewer facilities.
14 Total New Projects for Budget Y	ear 2019

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How to read the Capital Budget Budget symbols for fund Types

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Sources of Funds, Capital Improvement Program, and Extended County Map of Executive Proposed FY19 funded projects

Bridge Improvement Program	В	Library Projects	L
General County Projects	С	Community College Projects	M
Storm Drainage Projects	D	Recreation & Parks	Ν
Education Capital Projects	Е	Police Projects	Р
Fire And Rescue Projects	F	Sewer Projects	S
Agriculture Preservation Projects	G	Traffic/Intersection Projects	Т
Road Resurfacing Projects	Н	Community Renewal Projects	U
Road Construction Projects	J	Water Projects	W
Sidewalk / Curb Projects	K		

HOW TO READ THE CAPITAL BUDGET

There is a Program Summary page in the beginning of the budget. It is organized to show where the money comes from and the level of effort given to major elements of the Plan Howard 2030 including the cumulative Capital Improvement Program

The budget book is organized in alpha-numeric order following the alpha codes shown in the Table of Contents. The projects in each alpha group are then presented in numeric order.

Each category of projects is summarized in the initial pages for that group. They represent a type of project. Projects with specific locations are shown on a detail map.

In the presentation of the budget detail for each capital project, the display of the project number and title appears on both parts of a two-part form with the following information:

PART A

DESCRIPTION in general terms of what is to be ultimately funded

JUSTIFICATION of need, why, or the objective being met

REMARKS gives further details or statistics

SCHEDULE of major milestones by fiscal year timeframe

OPERATING BUDGET IMPACT estimates cost after project is completed

MAP depicts a specific site or a County-wide project

PART B

A matrix which vertically adds elements of the project development and funding sources which match at the horizontal row Total Project Expenditures with columns to show:

PRIOR APPROPRIATION shows dollars funded in previous budget years

FISCAL '200_' BUDGET shows dollars being acted-on in this > _= fiscal year

APPROPRIATION TOTAL is the sum of the Prior Appropriation and this Fiscal year

FIVE YEAR CAPITAL PROGRAM is a projection of needs 6 to 10 years into the future

TOTAL PROJECT combines prior, this fiscal year, and projected future dollars

PROJECT STATUS shows major milestones which have been accomplished and how much of the prior appropriation has been spent up to February of the current fiscal year.

Capital Budget Revenues CAPITAL BUDGET REVENUE FUNDING TYPE CODES

A = Aid for Schools

State Inter Agency Committee contribution

B = Bonds, general obligation or short term instruments

Part of affordability limit calculation

C = Cash (Utility Enterprise Fund)

Ad valorem and associated interest income

D = Developer Contribution

Either through Agreement or obligation

E = Excise Tax

Dedicated annual tax collected and associated interest income

G = Grant (defined in 'Remarks' on project sheets)

State or Federal monies; POS, FHWA, ISTEA, etc

I = In - Aid of Construction (Utility Enterprise Fund)

Building permit fee to support infrastructure

M = Metro District Bonds (Utility Enterprise Fund)

Not part of affordability % calculation

L = Lease

Lease

O = Other (defined in 'Remarks' on project sheets)

Race Track funds, Special interest group contribution, Fines, assessments, fees, reimbursement

P = Pay as you go

General fund cash on a year by year basis

R = Stormwater Utility (Watershed Protection and Restoration fund)

S = Storm Drain Fund & Storm Water Mgmnt Fees

(defined in 'Remarks' on project sheets)

Down stream off property improvement fund by drainage area or Fee paid in lieu of constructing a retention facility

T = Transfer Tax

% of total collected annually dedicated to education, fire service, parks

U = Utility Enterprise Fund (Summary Level)

'C', 'I', 'M'= from above combined

W = Water Quality State Bond Loan

Bonds floated by State for better rate, we repay as if our own Not part of affordability % calculation

X = Excise tax backed Bonds - 'Non GO Bonds'

Supported borrowing based on dedicated revenue stream Not part of General obligation Bond affordability limit calculation

Z = Education Excise tax backed Bonds

Supported borrowing based on dedicated revenue stream

CC = College revenue backed Bonds

Supported borrowing based on fee-based revenue stream

Howard County, MD Capital Program Summary

(In Thousands of \$)

	PRIOR Appropriation	FISCAL 2019 Budget	TOTAL Appropriation	5Yr Capital Improvement Program	Extended Program Total	TOTAL PROJECT
EDUCATION	725,639	84,806	810,445	635,563	462,796	1,908,804
GENERAL COUNTY PROGRAM	700,986	29,656	730,642	424,532	38,483	1,193,657
OTHER PROGRAMS	170,608	0	170,608	0	0	170,608
RECREATION PARKS	193,138	10,571	203,709	49,920	30,000	283,629
TRANSPORTATION	480,533	44,340	524,873	456,985	182,100	1,163,958
WATER and SEWER	673,837	-4,673	669,164	175,046	40,244	884,454
	2,944,741	164,700	3,109,441	1,742,046	753,623	5,605,110
Revenues						
BONDS	939,007	97,400	1,036,407	931,931	364,858	2,333,196
COLLEGE REVENUE BACKED BOND	7,717	0	7,717	0	0	7,717
DEVELOPER CONTRIBUTION	38,018	6,005	44,023	13,440	0	57,463
EDUCATION EXCISE BONDS	39,923	0	39,923	0	0	39,923
EXCISE TAX	18,522	0	18,522	0	0	18,522
EXCISE TAX BACKED BONDS	157,977	-175	157,802	2,000	0	159,802
GRANTS	212,199	19,664	231,863	96,115	44,350	372,328
IN-AID of CONSTRUCT UTILITIES	26,269	1,730	27,999	23,485	10,492	61,976
LEASE	29,400	0	29,400	0	0	29,400
METRO DISTRICT BOND	459,177	-16,092	443,085	114,131	17,740	574,956
OTHER SOURCES	269,077	15,776	284,853	159,625	86,100	530,578
PAY AS YOU GO	99,748	6,795	106,543	72,093	56,252	234,888
STATE AID for SCHOOLS	180,909	8,743	189,652	185,221	119,519	494,392
STORM DRAINAGE FUND	2,465	0	2,465	275	0	2,740
STORWATER UTILTY FUNDING	39,292	5,765	45,057	25,000	6,000	76,057
TIF BONDS	120,000	0	120,000	30,000	0	150,000
TRANSFER TAX	133,931	11,100	145,031	53,300	36,300	234,631
UTILITY CASH	142,974	7,989	150,963	35,430	12,012	198,405
WATER QUALITY State Bond Loan	28,136	0	28,136	0	0	28,136
	2,944,741	164,700	3,109,441	1,742,046	753,623	5,605,110

Howard County, MD

Executive Proposed 2019 Capital Budget by Source of Funds

(In Thousands of \$)

Program Title	Current FY	Pay Go	Ex. Bonds	Ed Excise Bonds	MD School PSIAC	Storm Drain Fund	GO Bonds	Dev Contrib	Other	Grants	Trans Tax	Utility Fund	Water Quality Bonds	Metro Bonds	Storm water Utility	IAC	TIF Bonds	Mast.
Bridge Improvements	2,415	300	0	0	-	-	1,825	Contrib.	30	260	<u> </u>	-	-	-	-	-	-	<u>Lease</u> -
Storm Drainage	23,795	-	0	0	-	-	3,580	-	12,550	1,900	-	-	-	-	5,765	-	-	-
Road Resurfacing	6,750	6,000	0	0	-	-	-	-	-	750	-	-	-	-	-	-	-	-
Road Construction	4,950	-	-175	0	-	-	3,985	1,190	-	(50)	-	-	-	-	-	-	-	-
Sidewalk/Curb Projects	4,795	345	0	0	-	-	3,660	-	650	140	-	-	-	-	-	-	-	-
Traffic Improvements	1,635	100	0	0	-	-	900	630	70	(65)	-	-	-	-	-	-	-	-
General County	33,041	50	0	0	-	-	24,280	165	5,050	1,696	-	-	-	1,800	-	-	-	-
Fire	1,200	-	0	0	-	-	1,100	-	(2,200)	-	2,300	-	-	-	-	-	-	-
Library	(5,000)	-	0	0	-	-	(5,000)	-	-	-	-	-	-	-	-	-	-	-
Police	415	-	0	0	-	-	415	-	-	-	-	-	-	-	-	-	-	-
Recreation & Parks	10,571	-	0	0	-	-	3,480	20	126	5,145	1,800	-	-	-	-	-	-	-
Sewer	(4,200)	-	0	0	-	-	-	1,000	(500)	-	-	1,660	-	(8,090)	-	1,730	-	-
Water	(473)	-	0	0	-	-	-	3,000	-	-	-	6,329	-	(9,802)	-	-	-	-
Board of Education	63,669	-	0	0	8,743	-	47,926	-	-	-	7,000	-	-	-	-	-	-	-
Community College	21,137	-	0	0	-	-	11,249	-	-	9,888	-	-	-	-	-	-	-	-
Total Capital	164,700	6,795	-175	0	8,743	0	97,400	6,005	15,776	19,664	11,100	7,989	0	(16,092)	5,765	1,730	0	-

Howard County, MD

Executive Proposed 2019 Year Capital Improvement Program Summary

(In Thousands of \$)

Program Title	Prior Appropriation	Fiscal 2019 Budget	Total Appropriation	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Total
Bridge Improvements	19,954	2,415	22,369	1,700	1,300	300	-	-	25,669
Storm Drainage	134,979	23,795	158,774	45,625	41,000	38,100	36,600	37,800	357,899
Road Resurfacing	56,127	6,750	62,877	13,750	13,830	13,950	13,830	13,950	132,187
Road Construction	229,530	4,950	234,480	41,550	68,655	14,700	250	3,250	362,885
Sidewalk/Curb Projects	19,165	4,795	23,960	9,625	9,505	8,350	8,500	8,500	68,440
Traffic Improvements	20,778	1,635	22,413	1,580	5,285	3,135	2,135	230	34,778
General County	610,394	33,041	643,435	99,183	80,772	53,746	38,019	32,850	948,005
Fire	50,065	1,200	51,265	6,530	300	300	300	300	58,995
Library	36,927	(5,000)	31,927	1,135	5,699	33,447	2,575	-	74,783
Police	3,600	415	4,015	1,570	3,665	42,811	19,650	1,680	73,391
Recreation & Parks	193,138	10,571	203,709	13,220	8,350	12,150	11,275	4,925	253,629
Agricultural Preservation	170,608	-	170,608	-	-	-	-	-	170,608
Sewer	453,577	(4,200)	449,377	37,320	32,165	15,290	7,285	5,680	547,117
Water	220,260	(473)	219,787	40,319	12,477	11,182	6,914	6,414	297,093
Board of Education	603,735	63,669	667,404	99,960	100,422	108,626	106,299	112,056	1,194,767
Community College	121,904	21,137	143,041	14,676	14,998	27,407	27,809	23,310	251,241
Total Capital	2,944,741	164,700	3,109,441	427,743	398,423	383,494	281,441	250,945	4,851,487

Howard County, MD

Executive Proposed Capital Budget Extended Summary For Fiscal Year 2019

(In Thousands of \$)

Program Title	Appropriation Total	5 Yr Capital Program	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Extended Capital Program
Bridge Improvements	22,369	3,300	-	-	-	-	25,669
Storm Drainage	158,774	199,125	25,600	26,800	25,600	26,800	462,699
Road Resurfacing	62,877	69,310	13,750	13,750	13,750	13,750	187,187
Road Construction	234,480	128,405	-	-	-	-	362,885
Sidewalk/Curb Projects	23,960	44,480	5,500	5,500	5,500	5,500	90,440
Traffic Improvements	22,413	12,365	100	100	100	-	35,078
General County	643,435	304,570	12,500	11,387	5,285	861	978,038
Fire	51,265	7,730	300	300	300	300	60,195
Library	31,927	42,856	-	-	-	-	74,783
Police	4,015	69,376	5,750	1,500	-	-	80,641
Recreation & Parks	203,709	49,920	18,900	11,100	-	-	283,629
Agricultural Preservation	170,608	-	-	-	-	-	170,608
Sewer	449,377	97,740	5,055	5,055	5,055	5,055	567,337
Water	219,787	77,306	5,006	5,006	5,006	5,006	317,117
Board of Education	667,404	527,363	100,049	103,933	101,048	81,341	1,581,138
Community College	143,041	108,200	14,085	26,260	22,240	13,840	327,666
Total Capital	3,109,441	1,742,046	206,595	210,691	183,884	152,453	5,605,110

Executive Proposed 2019 5 Year Capital Budget Revenue Summary

Source	Prior Approp	Current FY	2020	2021	2022	2023	2023	Total
BONDS	939,007	97,400	194,256	235,963	205,395	161,392	134,925	1,968,338
COLLEGE REVENUE BACKED BOND	7,717	0	0	0	0	0	0	7,717
DEVELOPER CONTRIBUTION	38,018	6,005	4,630	560	4,560	560	3,130	57,463
EDUCATION EXCISE BONDS	39,923	0	0	0	0	0	0	39,923
EXCISE TAX	18,522	0	0	0	0	0	0	18,522
EXCISE TAX BACKED BONDS	157,977	-175	2,000	0	0	0	0	159,802
GRANTS	212,199	19,664	19,000	9,165	27,350	17,250	23,350	327,978
IN-AID of CONSTRUCT UTILITIES	26,269	1,730	6,263	6,213	5,763	2,623	2,623	51,484
LEASE	29,400	0	0	0	0	0	0	29,400
METRO DISTRICT BOND	459,177	-16,092	55,465	33,443	13,573	6,575	5,075	557,216
OTHER SOURCES	269,077	15,776	32,425	32,675	28,975	36,525	29,025	444,478
PAY AS YOU GO	99,748	6,795	14,431	14,695	14,436	14,230	14,301	178,636
STATE AID for SCHOOLS	180,909	8,743	38,537	46,173	60,856	21,335	18,320	374,873
STORM DRAINAGE FUND	2,465	0	275	0	0	0	0	2,740
STORMWATER UTILTY FUNDING	39,292	5,765	5,800	4,800	4,800	4,800	4,800	70,057
TIF BONDS	120,000	0	30,000	0	0	0	0	150,000
TRANSFER TAX	133,931	11,100	9,750	9,750	11,650	11,150	11,000	198,331
UTILITY CASH	142,974	7,989	14,911	4,986	6,136	5,001	4,396	186,393
WATER QUALITY State Bond Loan	28,136	0	0	0	0	0	0	28,136
Total	2,944,741	164,700	427,743	398,423	383,494	281,441	250,945	4,851,487

Fiscal Year 2019 Budget Summary

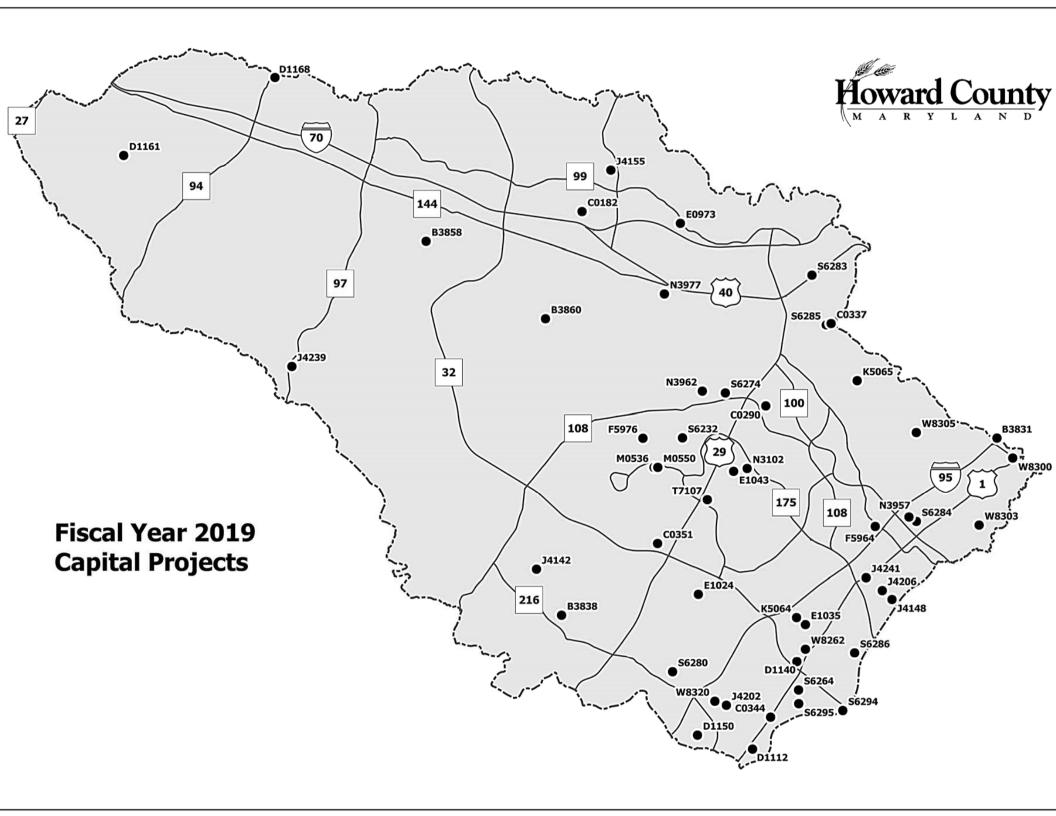
	Columbia Area FY 2019 Capital Projects Map
Project#	<u>Name</u>
C0351	FY2017 HARRIET TUBMAN REMEDIATION and RESTORATION
C0362	FY2019 GATEWAY INNOVATION CENTER RENOVATION
E1024	FY2023 HAMMOND HIGH SCHOOL RENOVATION/ADDITION
E1043	FY2019 TALBOTT SPRINGS ELEM SCHOOL RENOVATION/ADDITION
F5976	FY2018 NORTH COLUMBIA FIRE STATION
M0536	FY2015 NURSING and ST BUILDING RENOVATIONS
M0550	FY2017 SYSTEMIC RENOVATIONS
N3102	FY2000 BLANDAIR REGIONAL PARK
N3962	FY2008 CENTENNIAL PARK IMPROVEMENTS
N3963	FY2009 PATHWAY and TRAIL REHAB and EXPANSION
P4928	FY2015 NEW/THIRD POLICE STATION & MODERNIZATION OF FACILITIES
S6232	FY2001 SEWER CORROSION CORRECTION PROGRAM
S6274	FY2015 UPPER LITTLE PATUXENT PARALLEL SEWER
S6600	FY2019 WATER AND WASTEWATER FACILITIES CAPITAL REPAIRS AND UPGRADES
T7107	FY2014 DOWNTOWN COLUMBIA PATUXENT BRANCH TRAIL EXTENSION
T7108	FY2016 CLARKSVILLE-RIVER HILL STREETSCAPE IMPROVEMENTS
W8322	FY2013 WILDE LAKE WATER MAIN STUDY and REHABILITATION
	Elkridge Area FY 2019 Capital Projects Map
Project#	<u>Name</u>
B3831	FY2007 RIVER ROAD BRIDGE-ROCKBURN (H0-6)
E1028	FY2016 NEW ELEMENTARY SCHOOL #42
E1035	FY2019 NEW HIGH SCHOOL #13
F5964	FY2012 FIRESTATION ONE RELOCATION
J4206	FY2007 MONTEVIDEO ROAD IMPROVEMENTS
K5064	FY2017 MISSION ROAD SIDEWALK

Fiscal Year 2019 Budget Summary

Elkridge Area FY 2019 Capital Projects Map
FY2013 DEEP RUN/SHALLOW RUN INTERCEPTOR IMPROVEMENTS
FY2011 LEVERING AVENUE WATER MAIN
FY2018 ANDERSON AVE/MOUND STREET WATER MAIN
FY2018 LANDING ROAD WATER MAIN LOOP
Ellicott City Area FY 2019 Capital Projects Map
<u>Name</u>
FY2016 CARROLL MILL ROAD BRIDGE REPLACEMENT (H0-23)
FY1985 PUBLIC SAFETY EDUCATION CENTER
FY2019 COURTHOUSE RENOVATION/REPLACEMENT
FY2005 WASTE MANAGEMENT IMPROVEMENTS
FY2014 ELLICOTT CITY IMPROVEMENTS and ENHANCEMENTS
FY2019 TURF VALLEY SCHOOL SITE ACQUISITION
FY2019 LINWOOD SCHOOL PARKING LOT
FY1997 DAVIS AVE AREA DRAINAGE IMPROVEMENTS
FY2003 WAVERLY ELEM RENOVATION/PHASE II ADDITION
FY2012 MARRIOTTSVILLE RD SAFETY IMPROVEMENTS
FY2018 DONCASTER DRIVE SIDEWALK
FY2019 KIWANIS PARK EXTENSION
FY2013 TIBER/SUCKER BRANCH INTERCEPTOR IMPROVEMENTS
FY2017 MD108 PUMP STATION OUTFALL IMPROVEMENTS
North Laurel Area FY 2019 Capital Projects Map
<u>Name</u>
FY2016 SOUTHEAST INFRASTRUCTURE IMPROVEMENTS
FY2005 HIGH RIDGE DRAINAGE
FY2004 STEPHENS ROAD IMPROVEMENTS
FY2013 HAMMOND/PATUXENT INTERCEPTOR IMPROVEMENTS

Fiscal Year 2019 Budget Summary

	North Laurel Area FY 2019 Capital Projects Map
S6286	FY2013 DORSEY RUN PUMP STATION UPGRADE
W8320	FY2013 WHISKEY BOTTOM PUMP STATION RELOCATION
	Savage Area FY 2019 Capital Projects Map
Project#	<u>Name</u>
C0352	FY2017 SITE ACQUISITION FOR SCHOOL SITES AND ELEVATED WATER STORAGE FACILITIES
D1140	FY2005 PINE TREE/GLEN COURT STORM DRAIN SYSTEM
J4148	FY2000 DORSEY RUN ROAD EXTENSION
J4241	FY2011 US RT 1 RT 175 to MONTEVIDEO ROAD
N3957	FY2003 TROY PARK & HISTORIC REHABILITATION
S6264	FY2008 LPWRP CAPITAL REPAIRS
S6294	FY2015 ANNAPOLIS JUNCTION PUMPING STATION RENOVATION
S6295	FY2016 LPWRP 8th ADDITION BIOSOLIDS PROCESSING FACILITIES
W8262	FY2004 GUILFORD ELEVATED WATER TANK
	Scaggsville Area FY 2019 Capital Projects Map
Project#	<u>Name</u>
B3838	FY2006 PINDELL SCHOOL ROAD BRIDGE (H0-106)
J4142	FY1998 HALL SHOP ROAD IMPROVEMENTS
	Western County Area FY 2019 Capital Projects Map
Project#	<u>Name</u>
B3858	FY2019 PFEFFERKORN ROAD BRIDGE (HO-31)
D1161	FY2019 SHAFFERSVILLE ROAD CULVERT REPLACEMENT
D1168	FY2015 MORGAN WOODBINE ROAD SLOPE STABILIZATION
F5972	FY2008 RURAL FIRE PROTECTION PROGRAM
J4239	FY2014 OLD ROXBURY ROAD



Howard County, MD FY2019 Executive Proposed Capital Budget Program: BRIDGE PROJECTS

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
B3831 FY2007 RIVER ROAD BRIDGE-ROCKBURN (H0-6)	В	1,425	100	1,525	0	0	0	0	0	1,525
A project for the design and construction of a replacement structure for the River Road bridge over Rockburn Branch.	Total	1,425	100	1,525	0	0	0	0	0	1,525
B3835 FY2006 HENRYTON ROAD BRIDGE (H0-105) A project for the design and construction of a replacement	В	755	0	755	0	0	0	0	0	755
oridge for the Henryton Road bridge over a tributary to the Patapsco River.	G	960	0	960	0	0	0	0	0	960
r diaposo rivor.	Total	1,715	0	1,715	0	0	0	0	0	1,715
B3838 FY2006 PINDELL SCHOOL ROAD BRIDGE (H0-	В	1,535	100	1,635	0	0	0	0	0	1,635
A project for the design and construction of a replacement structure for the Pindell School Road bridge over Hammond Branch.	Total	1,535	100	1,635	0	0	0	0	0	1,635
B3849 FY1996 DAISY ROAD BRIDGE (H0-38) A project for the design and construction of a replacement	В	767	0	767	0	0	0	0	0	767
oridge and roadway tie-ins.	D	42	0	42	0	0	0	0	0	42
	G	1,400	0	1,400	0	0	0	0	0	1,400
	Р	65	0	65	0	0	0	0	0	65
	Total	2,274	0	2,274	0	0	0	0	0	2,274
B3850 FY2001 STRUCTURE INSPECTION PROGRAM A project to inspect Howard County bridges in accordance	В	200	0	200	0	0	0	0	0	200
with the federally mandated National Bridge Inspection Standards.	Р	1,530	300	1,830	0	300	0	0	0	2,130
Standards.	Total	1,730	300	2,030	0	300	0	0	0	2,330
33853 FY2000 EMERGENCY STRUCTURE	В	3,395	1,000	4,395	0	0	0	0	0	4,395
A fund for Howard County to undertake construction and epair of bridges, culverts and retaining walls requiring	G	1,290	260	1,550	0	0	0	0	0	1,550
prompt action.	0	0	30	30	0	0	0	0	0	30
	Р	44	0	44	0	0	0	0	0	44
	Total	4,729	1,290	6,019	0	0	0	0	0	6,019

Howard County, MD FY2019 Executive Proposed Capital Budget Program: BRIDGE PROJECTS

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
B3857 FY2001 SYSTEMIC STRUCTURE IMPROVEMENTS	В	1,580	300	1,880	100	0	0	0	0	1,980
A project for specialized renovation items for bridges and retaining walls throughout the County.	Р	516	0	516	0	0	0	0	0	516
	Total	2,096	300	2,396	100	0	0	0	0	2,496
B3858 FY2019 PFEFFERKORN ROAD BRIDGE (HO-31) A project for the design and construction of a bridge	В	0	275	275	100	1,000	0	0	0	1,375
replacement for Pfefferkorn Road over Middle Patuxent River.	Total	0	275	275	100	1,000	0	0	0	1,375
B3860 FY2016 CARROLL MILL ROAD BRIDGE REPLACEMENT (H0-23)	В	350	50	400	1,200	0	0	0	0	1,600
A project for the design and construction of a replacement structure for the Carroll Mill Road bridge over Benson Branch.	Total	350	50	400	1,200	0	0	0	0	1,600
B3862 FY2013 RETAINING WALLS A Countywide project for the repair, re-conditioning and	В	1,550	0	1,550	300	0	300	0	0	2,150
development of new retaining walls.	G	1,100	0	1,100	0	0	0	0	0	1,100
	Total	2,650	0	2,650	300	0	300	0	0	3,250
B3863 FY2013 DOWNTOWN COLUMBIA-OAKLAND MILLS CONNECTION IMPROVEMENTS	В	950	0	950	0	0	0	0	0	950
A project to provide a feasibility study, design and construction of enhancements to existing and potential	0	500	0	500	0	0	0	0	0	500
future connections over US29.	Total	1,450	0	1,450	0	0	0	0	0	1,450
BRIDGE PROJECTS Total		19,954	2,415	22,369	1,700	1,300	300	0	0	25,669

Howard County, MD FY2019 Executive Proposed Capital Budget (\$000) BRIDGE-BRIDGE PROJECTS

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	12,507	1,825	14,332
D	DEVELOPER CONTRIBUTION	42	0	42
G	GRANTS	4,750	260	5,010
0	OTHER SOURCES	500	30	530
Р	PAY AS YOU GO	2,155	300	2,455
Total		19,954	2,415	22,369

2019 Executive Proposed 5 Year Capital Budget Project Type Summary (BRIDGE-BRIDGE PROJECTS)

Rev	enue Source	Prior Approp	Current FY	2020	2021	2022	2023	2024	5 Year Total
В	BONDS	12,507	1,825	1,700	1,000	300	0	C	17,332
D	DEVELOPER CONTRIBUTION	42	0	0	0	0	0	C	42
G	GRANTS	4,750	260	0	0	0	0	C	5,010
0	OTHER SOURCES	500	30	0	0	0	0	C	530
Р	PAY AS YOU GO	2,155	300	0	300	0	0	C	2,755
Tot	al	19,954	2,415	1,700	1,300	300	0	0	25,669

Fiscal 2019 Capital Budget

Project: B3831-FY2007 RIVER ROAD BRIDGE-ROCKBURN (H0-6)

BRIDGE PROJECTS

Number: B3831

Description

A project for the design and construction of a replacement structure for the River Road bridge over Rockburn Branch. River Road is classified as a local road in the Plan Howard 2030.

Justification

The existing bridge is 26 feet long with 20 feet of pavement in a 30-foot right-of-way and is currently posted for 13 tons. The bridge is functionally obsolete due to its posted weight limit and narrow width.

Remarks

- 1. This bridge is not eligible for Federal Bridge Rehabilitation/Replacement Funds.
- 2. Project to be designed under scenic road guidelines.
- 3. Land acquisition requires park property.
- 4. Request represents latest engineer's estimate.

Project Schedule

FY19 - Begin Construction

FY20 - Construction

FY21 - Close

Operating Budget Impact

Annual Bond Redemption \$ \$68,625

Estimated annual maintenance costs upon completion: Decrease.



BRIDGE PROJECTS

Number: B3831

Project: FY2007 RIVER ROAD BRIDGE-ROCKBURN (H0-6)

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	490	0	490	0	0	0	0	0	0	0	0	0	0	490
LAND ACQUISITION	30	0	30	0	0	0	0	0	0	0	0	0	0	30
CONSTRUCTION	900	100	1,000	0	0	0	0	0	0	0	0	0	0	1,000
ADMINISTRATION	5	0	5	0	0	0	0	0	0	0	0	0	0	5
Total Expenditures	1,425	100	1,525	0	0	0	0	0	0	0	0	0	0	1,525
BONDS	1,425	100	1,525	0	0	0	0	0	0	0	0	0	0	1,525
Total Funding	1,425	100	1,525	0	0	0	0	0	0	0	0	0	0	1,525
\$350,822 spent and encumbered t \$350,822 spent and encumbered t Project Status : FY18 - This project	t is in land acqu	ary 2017 isition												
FY 2018 Budget	1,425	0	1,425	0	0	0	0	0	0	0	0	0		1,425
Difference 2018 / 2019	0	100	100	0	0	0	0	0	0	0	0	0	0	100

Fiscal 2019 Capital Budget

Project: B3835-FY2006 HENRYTON ROAD BRIDGE (H0-105)

Number: B3835

Description

A project for the design and construction of a replacement bridge for the Henryton Road bridge over a tributary to the Patapsco River. Henryton Road is classified as a local road in the Plan Howard 2030.

Justification

The existing bridge is 40 feet long with 25 feet of pavement in a 30-foot right-ofway and is currently posted for 12 tons. The new structure will be wider to meet AASHTO and County Standards.

Remarks

- 1. Grant represents Federal Bridge Rehabilitation/Replacement funds.
- 2. Scenic road characteristics will be preserved in the improvements.

Project Schedule

FY19 - Construction.

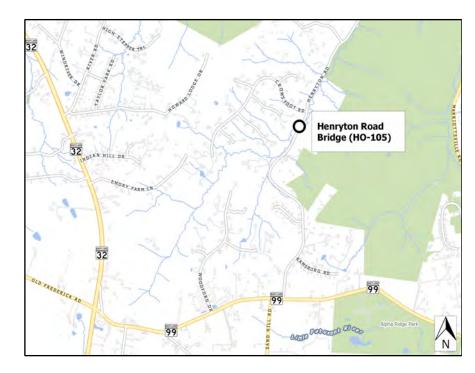
FY20 - Close.

Operating Budget Impact

Annual Bond Redemption \$ \$33,975

Estimated annual maintenance costs upon completion: Decrease.

BRIDGE PROJECTS



Number: B3835

Project: FY2006 HENRYTON ROAD BRIDGE (H0-105)

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	450	0	450	0	0	0	0	0	0	0	0	0	0	450
LAND ACQUISITION	25	0	25	0	0	0	0	0	0	0	0	0	0	25
CONSTRUCTION	1,200	0	1,200	0	0	0	0	0	0	0	0	0	0	1,200
ADMINISTRATION	40	0	40	0	0	0	0	0	0	0	0	0	0	40
Total Expenditures	1,715	0	1,715	0	0	0	0	0	0	0	0	0	0	1,715
BONDS	755	0	755	0	0	0	0	0	0	0	0	0	0	755
GRANTS	960	0	960	0	0	0	0	0	0	0	0	0	0	960
Total Funding	1,715	0	1,715	0	0	0	0	0	0	0	0	0	0	1,715
\$565,408 spent and encumbered the \$564,622 spent and encumbered the Project Status: FY18 - Advertising to	hrough Februa	ry 2017												
FY 2018 Budget	1,715	0	1,715	0	0	0	0	0	0	0	0	0		1,715
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Fiscal 2019 Capital Budget

Project: B3838-FY2006 PINDELL SCHOOL ROAD BRIDGE (H0-106)

BRIDGE PROJECTS
Number: B3838

Description

A project for the design and construction of a replacement structure for the Pindell School Road bridge over Hammond Branch. Pindell School Road is classified as a minor collector in the Plan Howard 2030.

Justification

The existing bridge is 22 feet long with 23 feet of pavement in a 30-foot right-of-way and is currently posted for 16 tons. The new structure will be wider to meet AASHTO and County standards.

Remarks

- 1. This bridge is not eligible for Federal Bridge Rehabilitation/Replacement Funds.
- 2. Request represents latest engineer's estimate.

Project Schedule

FY19 - Land acquisition and Construction.

FY20 - Construction.

FY21 - Close.

Operating Budget Impact

Annual Bond Redemption \$ \$73,575

Estimated annual maintenance costs upon completion: Decrease.



Number: B3838

Project: FY2006 PINDELL SCHOOL ROAD BRIDGE (H0-106)

(In Thousands)					Fiv	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	355	0	355	0	0	0	0	0	0	0	0	0	0	355
LAND ACQUISITION	30	0	30	0	0	0	0	0	0	0	0	0	0	30
CONSTRUCTION	1,150	100	1,250	0	0	0	0	0	0	0	0	0	0	1,250
Total Expenditures	1,535	100	1,635	0	0	0	0	0	0	0	0	0	0	1,635
BONDS	1,535	100	1,635	0	0	0	0	0	0	0	0	0	0	1,635
Total Funding	1,535	100	1,635	0	0	0	0	0	0	0	0	0	0	1,635

\$274,216 spent and encumbered through February 2018 \$252,196 spent and encumbered through February 2017 Project Status: FY18 - Design is complete.

Land acquisition is underway.

FY 2018 Budget	1,535	0	1,535	0	0	0	0	0	0	0	0	0		1,535
Difference 2018 / 2019	0	100	100	0	0	0	0	0	0	0	0	0	0	100

Fiscal 2019 Capital Budget

Project: B3849-FY1996 DAISY ROAD BRIDGE (H0-38)

Number: B3849

Description

A project for the design and construction of a replacement bridge and roadway tie-ins. The existing bridge is 32 feet long with a clear roadway of 23 feet and has a weight limit of 12 tons. Daisy Road is classified as a major collector in the Plan Howard 2030.

Justification

This bridge is functionally obsolete due to its narrow width and weight limit. It is on a six-month inspection cycle due to a greater posted load capacity (verified by testing) than would normally be allowed for a bridge of this construction. The new structure will be wider to meet AASHTO and County Standards.

Remarks

GRANT represents Federal Bridge Rehabilitation/Replacement funds.

Project Schedule

FY19 - Construction.

FY20 - Construction Complete.

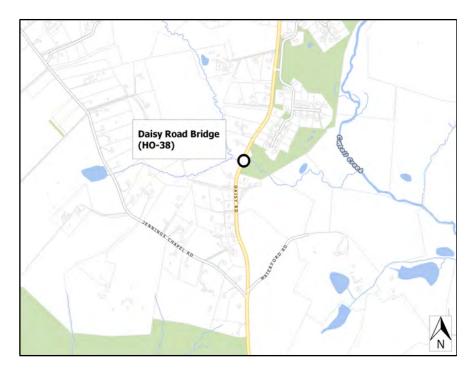
FY21 - Close.

Operating Budget Impact

Annual Bond Redemption \$ \$34,515

Estimated annual maintenance costs upon completion: Decrease.

BRIDGE PROJECTS



Project: FY1996 DAISY ROAD BRIDGE (H0-38)

Number: B3849

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	245	0	245	0	0	0	0	0	0	0	0	0	0	24
LAND ACQUISITION	75	0	75	0	0	0	0	0	0	0	0	0	0	7:
CONSTRUCTION	1,920	0	1,920	0	0	0	0	0	0	0	0	0	0	1,920
ADMINISTRATION	34	0	34	0	0	0	0	0	0	0	0	0	0	34
Total Expenditures	2,274	0	2,274	0	0	0	0	0	0	0	0	0	0	2,27
BONDS	767	0	767	0	0	0	0	0	0	0	0	0	0	76
DEVELOPER CONTRIBUTION	42	0	42	0	0	0	0	0	0	0	0	0	0	42
GRANTS	1,400	0	1,400	0	0	0	0	0	0	0	0	0	0	1,400
PAY AS YOU GO	65	0	65	0	0	0	0	0	0	0	0	0	0	6
Total Funding	2,274	0	2,274	0	0	0	0	0	0	0	0	0	0	2,27
\$375,784 spent and encumbered thre \$375,784 spent and encumbered thre Project Status: FY18 - Project to be a	ough Februa	ry 2017	on 2,274	0	0	0	0	0	0	0	0	0		2,27
Difference 2018 / 2019	0	0	. ,		0	0	0	0	0	0	0	0	0	

Fiscal 2019 Capital Budget

Project: B3850-FY2001 STRUCTURE INSPECTION PROGRAM

BRIDGE PROJECTS

Number: B3850

Description

A project to inspect Howard County bridges in accordance with the federally mandated National Bridge Inspection Standards. This work includes determining the structural condition and safe load carrying capacity of the structures. County owned retaining walls will also be inspected.

Justification

Howard County bridges are inspected on a two-year cycle for the safety of the traveling public, to qualify for FHWA Grant funding for all jurisdictional bridges, and to protect Howard County's infrastructure investment.

Remarks

Request represents program advancement.

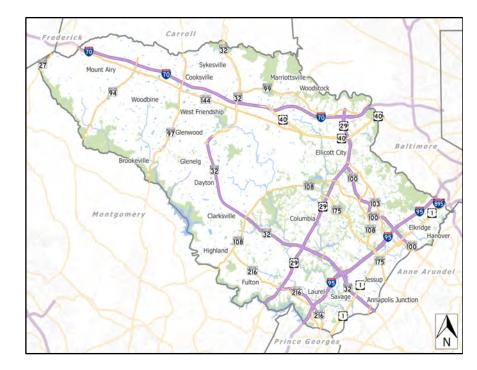
Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$9,000

Estimated annual maintenance costs upon completion: No Change.



BRIDGE PROJECTS

Project: FY2001 STRUCTURE INSPECTION PROGRAM Number: B3850

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,700	300	2,000	0	300	0	0	0	300	0	0	0	0	2,300
ADMINISTRATION	30	0	30	0	0	0	0	0	0	0	0	0	0	30
Total Expenditures	1,730	300	2,030	0	300	0	0	0	300	0	0	0	0	2,330
BONDS	200	0	200	0	0	0	0	0	0	0	0	0	0	200
PAY AS YOU GO	1,530	300	1,830	0	300	0	0	0	300	0	0	0	0	2,130
Total Funding	1,730	300	2,030	0	300	0	0	0	300	0	0	0	0	2,330
\$1,634,509 spent and encumbered \$1,470,451 spent and encumbered Project Status : FY18 - Inspections	through Febr													
FY 2018 Budget	1,730	300	2,030	0	300	0	0	0	300	0	0	C		2,330
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	C	0	0

Number: B3853

Project: B3853-FY2000 EMERGENCY STRUCTURE RECONSTRUCTION

Description

A fund for Howard County to undertake construction and repair of bridges, culverts and retaining walls requiring prompt action. Structures may suffer damage as a result of heavy storms or fail due to progressive deterioration or disasters and thereby require immediate action with these design and construction funds.

Justification

Without this fund, a roadway may be closed for an extended period of time thus creating a major inconvenience to citizens.

Remarks

- 1. Grant represents FEMA reimbursement and Federal Bridge Rehabilitation/Replacement funds.
- 2. OTHER represents Insurance reimbursement.
- 3. Old Stockbridge Road emergency culvert replacement in February 2018 will expend remaining funds.

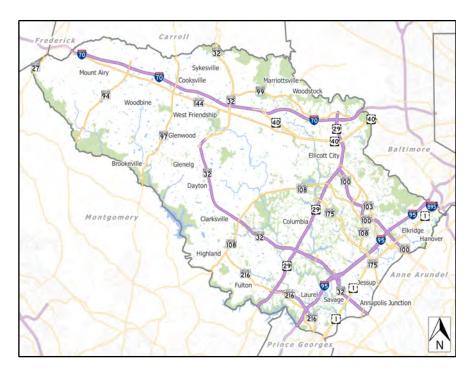
Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$197,775

Estimated annual maintenance costs upon completion: Decrease.



BRIDGE PROJECTS

Number: B3853

Project: FY2000 EMERGENCY STRUCTURE RECONSTRUCTION

(In Thousands)							Master I	Plan						
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	535	0	535	0	0	0	0	0	0	0	0	0	0	535
LAND ACQUISITION	165	0	165	0	0	0	0	0	0	0	0	0	0	165
CONSTRUCTION	4,009	1,290	5,299	0	0	0	0	0	0	0	0	0	0	5,299
ADMINISTRATION	20	0	20	0	0	0	0	0	0	0	0	0	0	20
Total Expenditures	4,729	1,290	6,019	0	0	0	0	0	0	0	0	0	0	6,019
BONDS	3,395	1,000	4,395	0	0	0	0	0	0	0	0	0	0	4,395
GRANTS	1,290	260	1,550	0	0	0	0	0	0	0	0	0	0	1,550
OTHER SOURCES	0	30	30	0	0	0	0	0	0	0	0	0	0	30
PAY AS YOU GO	44	0	44	0	0	0	0	0	0	0	0	0	0	44
Total Funding	4,729	1,290	6,019	0	0	0	0	0	0	0	0	0	0	6,019

\$3,323,128 spent and encumbered through February 2018 \$3,293,599 spent and encumbered through February 2017

Project Status: FY18 - Projects in progress: Old Stockbridge Road culvert replacement.

Projects complete: HO064 Old Columbia Road bridge parapet repair, Mulligan Hill Ln Retaining wall, Parking Lot E wall, Parking Lot D pedestrian bridge repair, HO112 - Cradlerock Way, HO3 - Ilchester Rd over Bonnie Branch Rd, HO015 - Volmerhausen Rd, HO126 - Snowden River Pkwy, HO162 - Landing Rd, HO194 - Guilford Rd, HO101X - Frederick Rd.

FY 2018 Budget	4,729	0	4,729	0	0	0	0	0	0	0	0	0		4,729
Difference 2018 / 2019	0	1,290	1,290	0	0	0	0	0	0	0	0	0	0	1,290

Number: B3857

Project: B3857-FY2001 SYSTEMIC STRUCTURE IMPROVEMENTS

Description

A project for specialized renovation items for bridges and retaining walls throughout the County.

Justification

This effort will reduce the need for closing of bridges by addressing problem items in a timely manner. Some items of work will be cleaning and painting structural steel to extend the useful life of the bridges, placing Class 2 riprap (up to 2,000-pound stones) to counter scour at abutments, concrete repairs and slope failures.

Remarks

- 1. This work is beyond the capabilities of the County Highway maintenance crews.
- 2. Request represents latest engineer's estimate.

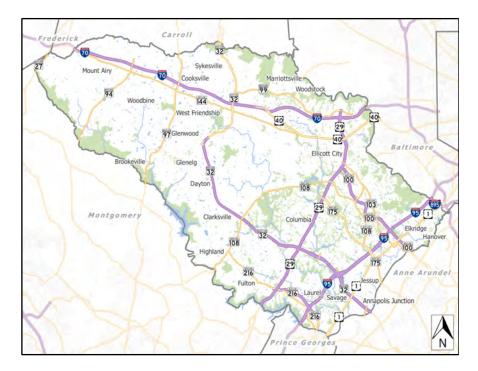
Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$89,100

Estimated annual maintenance costs upon completion: Decrease.



Number: B3857

Project: FY2001 SYSTEMIC STRUCTURE IMPROVEMENTS

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	740	0	740	20	0	0	0	0	20	0	0	0	0	760
CONSTRUCTION	1,346	300	1,646	80	0	0	0	0	80	0	0	0	0	1,726
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	2,096	300	2,396	100	0	0	0	0	100	0	0	0	0	2,496
BONDS	1,580	300	1,880	100	0	0	0	0	100	0	0	0	0	1,980
PAY AS YOU GO	516	0	516	0	0	0	0	0	0	0	0	0	0	516
Total Funding	2,096	300	2,396	100	0	0	0	0	100	0	0	0	0	2,496

\$1,383,282 spent and encumbered through February 2018

\$1,393,153 spent and encumbered through February 2017
Project Status: FY18 - This project has completed the repainting of the County's steel bridges. Lining of large metal culverts is the next contract for this program.

FY 2018 Budget	2,096	0	2,096	100	0	0	0	0	100	0	0	0		2,196
Difference 2018 / 2019	0	300	300	0	0	0	0	0	0	0	0	0	0	300

Project: B3858-FY2019 PFEFFERKORN ROAD BRIDGE (HO-31)

Number: B3858

BRIDGE PROJECTS

Description

A project for the design and construction of a bridge replacement for Pfefferkorn Road over Middle Patuxent River. Pfefferkorn Road is classified as a local road in the Plan Howard 2030.

Justification

The existing bridge is 36 feet long with 20 feet of pavement in a 30-foot right-of-way and is currently posted for 14 tons and 30 mph. The bridge is functionally obsolete due to its narrow width and posted weight limit.

Remarks

- 1. The bridge is not eligible for Federal Bridge Rehabilitation/Reconstruction funds.
- 2. Scenic road characteristics will be preserved in the improvements.
- 3. Request represents project initiation.

Project Schedule

FY19 - Design.

FY20 - Design and Land Acquisition.

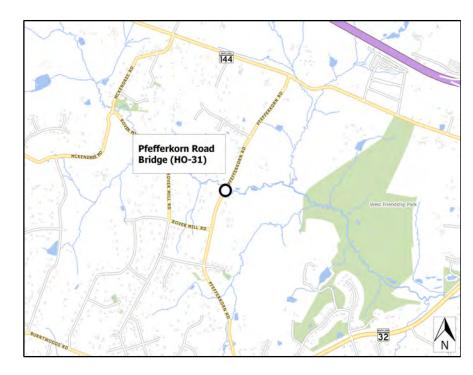
FY21 - Construction.

FY22 - Complete and Close.

Operating Budget Impact

Annual Bond Redemption \$ \$61,875

Estimated annual maintenance costs upon completion: Decrease.



BRIDGE PROJECTS

Number: B3858

Project: FY2019 PFEFFERKORN ROAD BRIDGE (HO-31)

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	275	275	0	100	0	0	0	100	0	0	0	0	375
LAND ACQUISITION	0	0	0	100	0	0	0	0	100	0	0	0	0	100
CONSTRUCTION	0	0	0	0	900	0	0	0	900	0	0	0	0	900
Total Expenditures	0	275	275	100	1,000	0	0	0	1,100	0	0	0	0	1,375
BONDS	0	275	275	100	1,000	0	0	0	1,100	0	0	0	0	1,375
Total Funding	0	275	275	100	1,000	0	0	0	1,100	0	0	0	0	1,375
\$0 spent and encumbered through spent and encumbered through F Project Status :		18												
FY 2018 Budget	0	275	275	100	1,000	0	0	0	1,100	0	0	0		1,375
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Number: B3860

Project: B3860-FY2016 CARROLL MILL ROAD BRIDGE REPLACEMENT (H0-23)

Description

A project for the design and construction of a replacement structure for the Carroll Mill Road bridge over Benson Branch. Carroll Mill Road is classified as a minor collector road in the Plan Howard 2030.

Justification

The deck beams and abutments are deteriorating making the bridge structurally deficient. It is expected that continued deterioration will require the bridge to be posted, decreasing its weight carrying capacity in the future. It is on an increased inspection schedule.

Remarks

- 1. May be eligible for Federal Funds in the future.
- 2. Request represents project advancement.

Project Schedule

FY19 - Land Acquisition.

FY20 - Construction.

FY21 - Close.

Operating Budget Impact

Annual Bond Redemption \$ \$72,000

Estimated annual maintenance costs upon completion: Decrease.



Number: B3860

Project: FY2016 CARROLL MILL ROAD BRIDGE REPLACEMENT (H0-23)

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	250	50	300	0	0	0	0	0	0	0	0	0	0	300
LAND ACQUISITION	100	0	100	0	0	0	0	0	0	0	0	0	0	100
CONSTRUCTION	0	0	0	1,200	0	0	0	0	1,200	0	0	0	0	1,200
Total Expenditures	350	50	400	1,200	0	0	0	0	1,200	0	0	0	0	1,600
BONDS	350	50	400	1,200	0	0	0	0	1,200	0	0	0	0	1,600
Total Funding	350	50	400	1,200	0	0	0	0	1,200	0	0	0	0	1,600
\$249,995 spent and encumbered to \$249,995 spent and encumbered to Project Status: FY18 - This project	hrough Februa	ary 2017												
FY 2018 Budget	350	950	1,300	0	0	0	0	0	0	0	0	0)	1,300
Difference 2018 / 2019	0	(900)	(900)	1,200	0	0	0	0	1,200	0	0	0	0	300

Project: B3862-FY2013 RETAINING WALLS

Number: B3862

Description

A Countywide project for the repair, re-conditioning and development of new retaining walls. It also includes slope stabilization when appropriate. The walls are at various locations both in and extending outside of the county right-of-way and vary in height and length.

Justification

These retaining walls require extensive rehabilitation/replacement which is beyond the scope of normal highway maintenance. This project may also address areas of slope failure where no wall currently exists.

Remarks

GRANT represents anticipated Federal Aid and State Aid funding for Woodstock Road reconstruction.

Project Schedule

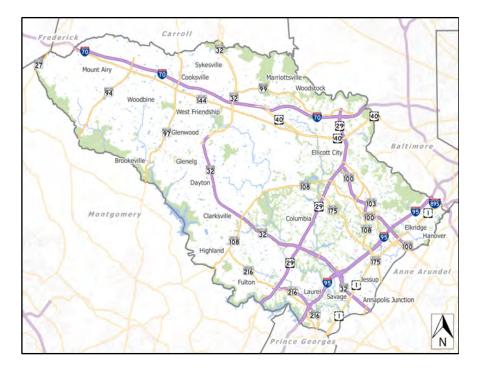
Program

Operating Budget Impact

Annual Bond Redemption \$ \$96,750

Estimated annual maintenance costs upon completion: Decrease.

BRIDGE PROJECTS



BRIDGE PROJECTS

Project: FY2013 RETAINING WALLS Number: B3862

(In Thousands)					Fiv	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	280	0	280	80	0	80	0	0	160	0	0	0	0	440
LAND ACQUISITION	60	0	60	10	0	10	0	0	20	0	0	0	0	80
CONSTRUCTION	2,310	0	2,310	210	0	210	0	0	420	0	0	0	0	2,730
Total Expenditures	2,650	0	2,650	300	0	300	0	0	600	0	0	0	0	3,250
BONDS	1,550	0	1,550	300	0	300	0	0	600	0	0	0	0	2,150
GRANTS	1,100	0	1,100	0	0	0	0	0	0	0	0	0	0	1,100
Total Funding	2,650	0	2,650	300	0	300	0	0	600	0	0	0	0	3,250

\$694,356 spent and encumbered through February 2018

\$668,885 spent and encumbered through February 2017
Project Status: FY18 - Study Complete: Lawyers Hill slope. Under construction: Phase II - Woodstock Road wall replacement.

Projects to start include: Loudon Ave wall, New Cut Rd wall and Old Stockbridge wall. Construction complete: Phase I - Woodstock Road wall replacement.

FY 2018 Budget	2,650	0	2,650	300	0	300	0	0	600	0	0	0		3,250
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

BRIDGE PROJECTS

Number: B3863

Project: B3863-FY2013 DOWNTOWN COLUMBIA-OAKLAND MILLS CONNECTION IMPROVEMENTS

Description

A project to provide a feasibility study, design and construction of enhancements to existing and potential future connections over US29.

Justification

Given the redevelopment plans for Downtown Columbia and planned multimodal path linking Howard County General Hospital and Howard Community College through Downtown over US29 to Blandair Park, this project is necessary to develop an effective crossing over US29.

Remarks

OTHER - Sources represents developer contribution.

Project Schedule

Existing Bridge Structure

FY17 - Design and engineering of selected alternate for safety, lighting and aesthetic improvements.

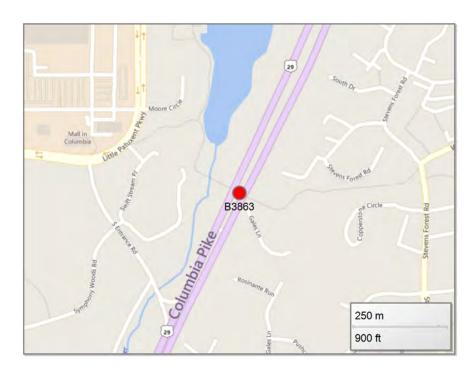
FY18 - Construction of selected alternate.

Future Bridge

FY18 - Transitway Study

Operating Budget Impact

Annual Bond Redemption \$ \$42,750



Number: B3863

Project: FY2013 DOWNTOWN COLUMBIA-OAKLAND MILLS CONNECTION IMPROVEMENTS

(In Thousands)					Fiv	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	450	0	450	0	0	0	0	0	0	0	0	0	0	450
CONSTRUCTION	1,000	0	1,000	0	0	0	0	0	0	0	0	0	0	1,000
Total Expenditures	1,450	0	1,450	0	0	0	0	0	0	0	0	0	0	1,450
BONDS	950	0	950	0	0	0	0	0	0	0	0	0	0	950
OTHER SOURCES	500	0	500	0	0	0	0	0	0	0	0	0	0	500
Total Funding	1,450	0	1,450	0	0	0	0	0	0	0	0	0	0	1,450

\$1,291,397 spent and encumbered through February 2018 \$188,991 spent and encumbered through February 2017 Project Status: Bridge Feasibility Study (Completed), and Transitway Study will be completed late 2017/2018.

FY 2018 Budget	1,450	0	1,450	0	0	0	0	0	0	0	0	0		1,450
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
C0182 FY1985 PUBLIC SAFETY EDUCATION CENTER A project for design and construction of a group of facilities	В	27,076	250	27,326	1,221	5,622	225	196	1,750	36,340
for training of public safety employees.	Т	250	0	250	0	0	0	0	0	250
	Total	27,326	250	27,576	1,221	5,622	225	196	1,750	36,590
C0214 FY199- CATEGORY CONTINGENCY FUND The fund is designed for use as a revenue source for	G	68,658	0	68,658	10,000	0	10,000	0	10,000	98,658
Transfers of Appropriation when either construction costs are higher than originally estimated, contributions from	0	1,100	0	1,100	0	0	0	0	0	1,100
grants vary from projections, or engineering must be advanced from future years to the present fiscal year for critical program needs; all subject to Council approval.	Total	69,758	0	69,758	10,000	0	10,000	0	10,000	99,758
C0256 ENVIRONMENTAL ASSESSMNT CONTINGENCY FUND	Р	546	0	546	26	50	26	50	26	724
Evaluation of environmental conditions of property and buildings which become available for purchase or use prior to a specific capital project being established or which are part of an existing project.	Total	546	0	546	26	50	26	50	26	724
C0285 FY2002 US1 CORRIDOR REVITALIZATION A project to plan, design and implement a series of	В	1,250	0	1,250	0	0	0	0	0	1,250
streetscape, pedestrian, bicycle, transportation and public green space improvements on public property in the US1	G	1,000	-174	826	0	0	0	0	0	826
Corridor.	0	1,200	-590	610	0	0	0	0	0	610
	Total	3,450	-764	2,686	0	0	0	0	0	2,686
C0286 FY2002 BUS STOP IMPROVEMENTS	В	320	0	320	0	0	0	0	0	320
A project to implement a series of systemic improvements to Howard Transit bus stops.	G	892	0	892	0	0	0	0	0	892
	0	245	0	245	0	0	0	0	0	245
	Р	262	0	262	0	0	0	0	0	262
	Total	1,719	0	1,719	0	0	0	0	0	1,719
C0287 FY2002 COMMUNITY RENEWAL / ENHANCEMENTS	В	895	0	895	0	0	0	0	0	895
A project to design and implement a series of pedestrian improvements, streetscape enhancements and repair or	G	100	0	100	0	0	0	0	0	100
enhancement of public green spaces.	0	44	0	44	0	0	0	0	0	44
	Р	350	0	350	0	0	0	0	0	350

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
C0287 FY2002 COMMUNITY RENEWAL / ENHANCEMENTS A project to design and implement a series of pedestrian improvements, streetscape enhancements and repair or	Total	1,389	0	1,389	0	0	0	0	0	1,389
enhancement of public green spaces.										
C0290 FY2019 COURTHOUSE RENOVATION/REPLACEMENT	В	112,895	-9,500	103,395	0	0	0	0	0	103,395
A project to renovate and replace the existing courthouse.	Р	985	0	985	0	0	0	0	0	985
	Total	113,880	-9,500	104,380	0	0	0	0	0	104,380
C0298 FY2005 US 40 CORRIDOR ENHANCEMENT A project to plan, design and implement improvements,	В	700	0	700	0	0	0	0	0	700
including sidewalks, landscaping, street trees, median and gateway enhancements within public right-of-way and to	G	50	-50	0	0	0	0	0	0	0
develop a corridor design manual to guide site design on adjacent properties.	0	100	-100	0	0	0	0	0	0	0
aujacent properties.	Р	200	0	200	0	0	0	0	0	200
	Total	1,050	-150	900	0	0	0	0	0	900
C0299 FY2005 WASTE MANAGEMENT MPROVEMENTS	В	5,269	0	5,269	4,698	4,703	4,687	0	859	20,216
A project for the design and construction of capital mprovements at the Alpha Ridge Solid Waste Facility,	0	17,597	2,640	20,237	0	0	0	0	0	20,237
New Cut and Carrs Mill Landfills.	Р	200	0	200	0	0	0	0	0	200
	Total	23,066	2,640	25,706	4,698	4,703	4,687	0	859	40,653
C0301 FY2005 TECHNOLOGY INFRASTRUCTURE UPGRADES	В	20,551	2,500	23,051	3,250	2,500	2,000	2,000	2,000	34,801
This project covers security, infrastructure hardware and network upgrades, as well as life-cycle replacement.	Р	885	0	885	0	0	0	0	0	885
network upgrades, as well as life-cycle replacement.	Total	21,436	2,500	23,936	3,250	2,500	2,000	2,000	2,000	35,686
C0311 FY2007 PUBLIC SAFETY RADIO SYSTEM ENHANCEMENTS	В	14,250	5,850	20,100	500	0	0	0	0	20,600
Enhancements to 800 MHz Motorola Astro trunking radio system for Public Safety.	L	10,400	0	10,400	0	0	0	0	0	10,400
System 15. 1 daile duroty.	0	500	0	500	0	0	0	0	0	500
	Total	25,150	5,850	31,000	500	0	0	0	0	31,500

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
C0312 FY2007 ENTERPRISE RESOURCE PLANNING SYSTEM	В	10,060	0	10,060	800	800	800	800	800	14,060
The County currently is utilizing SAP ERP software solution as the system of Financial Accounting, Purchasing	С	5,530	0	5,530	0	0	0	0	0	5,530
and Utility Water and Sewer billing.	Р	2,700	0	2,700	0	0	0	0	0	2,700
	Total	18,290	0	18,290	800	800	800	800	800	22,290
C0313 FY2008 ENVIRONMENTAL COMPLIANCE CONSTRUCTION	В	12,229	0	12,229	170	170	170	170	170	13,079
A project to support environmental compliance activities for County Facilities.	Р	200	0	200	0	0	0	0	0	200
,	Total	12,429	0	12,429	170	170	170	170	170	13,279
C0315 FY2009 PUBLIC SAFETY SYSTEM ENHANCEMENTS	В	4,770	900	5,670	1,000	1,000	1,000	1,000	1,000	10,670
This project will provide a variety of functionality enhancements for the County's existing Public Safety	0	950	0	950	0	0	0	0	0	950
System.	Total	5,720	900	6,620	1,000	1,000	1,000	1,000	1,000	11,620
C0317 FY2013 SYSTEMIC FACILITY IMPROVEMENTS A project to improve or upgrade the physical plant of public	В	46,775	13,730	60,505	9,638	5,913	4,660	4,672	4,672	90,060
buildings, their equipment and systems, to replace plants/systems which have deteriorated beyond routine	L	15,000	0	15,000	0	0	0	0	0	15,000
maintenance or provide for system management initiatives.	0	64	0	64	0	0	0	0	0	64
	Р	3,000	0	3,000	0	0	0	0	0	3,000
	Total	64,839	13,730	78,569	9,638	5,913	4,660	4,672	4,672	108,124
C0319 FY2010 TAX INCREMENT FINANCING PROJECTS	TIF	120,000	0	120,000	30,000	0	0	0	0	150,000
A project for funding of tax increment financing projects.	Total	120,000	0	120,000	30,000	0	0	0	0	150,000
C0322 FY2012 CENTRAL FLEET SYSTEMIC IMPROVEMENTS and FUEL SYSTEM	В	4,421	0	4,421	500	0	0	0	0	4,921
This is a project to fund improvements to the County's fuel storage/dispensing/monitoring systems, and to improve or	L	1,000	0	1,000	0	0	0	0	0	1,000
upgrade the physical plant of Fleet Equipment.	0	600	0	600	0	0	0	0	0	600
	Total	6,021	0	6,021	500	0	0	0	0	6,521
C0324 FY2012 GEODETIC NETWORK AUTOMATION A project to purchase survey global positioning system	В	145	0	145	0	25	40	0	0	210
(GPS) and digital survey equipment.	Р	290	0	290	15	15	10	0	0	330
	Total	435	0	435	15	40	50	0	0	540

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
C0327 FY2013 ENTERPRISE CONTENT MANAGEMENT (ECM)	В	750	0	750	0	0	0	0	0	750
The ECM will remove critical strain from the existing email system and replace our outdated records management	Р	1,846	0	1,846	0	0	0	0	0	1,846
system.	Total	2,596	0	2,596	0	0	0	0	0	2,596
C0329 FY2012 ENERGY MANAGEMENT/IMPROVEMENTS	В	250	0	250	0	0	0	0	0	250
A project to develop a 5-10 year business plan for energy performance optimization.	Р	650	0	650	0	0	0	0	0	650
ponormance optimization.	Total	900	0	900	0	0	0	0	0	900
C0331 FY2014 ELLICOTT CITY PARKING LOT ENHANCEMENT	R	200	0	200	1,000	0	0	0	0	1,200
A project to plan, design and implement a set of improvements to publicly owned land currently designated as Lot D in Ellicott City.	Total	200	0	200	1,000	0	0	0	0	1,200
C0332 FY2014 BUS STOP IMPROVEMENTS A project to implement a series of systemic improvements	В	240	0	240	0	0	0	0	0	240
to the Regional Transportation Agency (RTA) bus stops.	G	200	0	200	0	0	0	0	0	200
	Р	620	50	670	250	250	200	100	100	1,570
	Total	1,060	50	1,110	250	250	200	100	100	2,010
C0333 FY2015 DETENTION CENTER RENOVATIONS The Department of Corrections currently is facing severe	В	11,751	0	11,751	9,700	25,604	25,604	3,600	0	76,259
challenges and regulatory mandates that must be resolved through the renovation and expansion of the Detention Center.	Total	11,751	0	11,751	9,700	25,604	25,604	3,600	0	76,259
C0334 FY2014 EMERGENCY ALTERNATIVE POWER Relative to County facilities, implement a program to	В	1,000	0	1,000	500	0	0	0	0	1,500
ensure continuity of operations in County facilities for purposes relative to essential functions during various	G	300	0	300	0	0	0	0	0	300
emergency scenarios and make the necessary hardware modifications.	Total	1,300	0	1,300	500	0	0	0	0	1,800
C0335 FY2014 COMMUNITY RESOURCES and SERVICES FACILITY/PROGRAM ENHANCEMENTS	В	450	1,400	1,850	3,350	10,500	500	0	0	16,200
A project to renovate and expand the facilities for the Department of Community Resources and Services	Р	50	0	50	0	0	0	0	0	50
(DCRS).	Total	500	1,400	1,900	3,350	10,500	500	0	0	16,250
C0336 FY2014 LANDFILL RESOURCE MANAGEMENT A project for the design and construction of resource	В	400	0	400	0	0	0	0	0	400
improvements at the Alpha Ridge Landfill and Resident's Recycling and Demonstration Center.	Р	100	0	100	0	0	0	0	0	100

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
C0336 FY2014 LANDFILL RESOURCE MANAGEMENT A project for the design and construction of resource improvements at the Alpha Ridge Landfill and Resident's Recycling and Demonstration Center.	Total	500	0	500	0	0	0	0	0	500
C0337 FY2014 ELLICOTT CITY IMPROVEMENTS and ENHANCEMENTS	В	1,700	0	1,700	0	0	0	0	0	1,700
This is a project to provide a variety of repairs and improvements to public infrastructure and address other	D	0	165	165	0	0	0	0	0	165
community improvements and to make improvements to the downtown and historic district of the Howard County	G	170	1,250	1,420	0	0	0	0	0	1,420
Seat.	0	5	0	5	0	0	0	0	0	5
	Р	1,000	0	1,000	0	0	0	0	0	1,000
	R	1,500	0	1,500	0	0	0	0	0	1,500
	Total	4,375	1,415	5,790	0	0	0	0	0	5,790
C0338 FY2015 BROADBAND INSTALLATIONS The Broadband Installation project will improve the fiber	0	10,000	0	10,000	0	0	0	0	0	10,000
installed through the ICBN grant and extend services to various organizations including adding additional county facilities to our fiber network.	Total	10,000	0	10,000	0	0	0	0	0	10,000
C0339 FY2015 BROADBAND INSTALLATIONS NON- COUNTY GOVERNMENT	0	10,000	0	10,000	0	0	0	0	0	10,000
The Broadband Installation project will extend services to various non-county government organizations including adding facilities to our fiber network.	Total	10,000	0	10,000	0	0	0	0	0	10,000
C0340 FY2015 BROADBAND INSTALLATIONS NON- GOVERNMENT	0	10,000	0	10,000	0	0	0	0	0	10,000
The Broadband Installation project will extend services to non-government facilities to our fiber network.	Total	10,000	0	10,000	0	0	0	0	0	10,000
C0341 FY2015 TOWER GENERATOR REPLACEMENTS This project will allow the County to design, build and	0	5,000	0	5,000	0	0	0	0	0	5,000
operate diesel generators at all County Radio and Water Tower sites.	Total	5,000	0	5,000	0	0	0	0	0	5,000
C0342 FY2020 CLARKSVILLE PARKING GARAGE This project is for the design, construction and construction	В	0	0	0	475	5,050	0	0	0	5,525
management of a parking garage on Clarksville Pike, Clarksville Maryland.	Total	0	0	0	475	5,050	0	0	0	5,525
C0344 FY2016 SOUTHEAST INFRASTRUCTURE IMPROVEMENTS	В	300	0	300	0	0	0	0	0	300
A project to plan, design and construct a series of infrastructure improvements targeted within the southeast area of the US1 corridor.	G	100	70	170	0	0	0	0	0	170

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
C0344 FY2016 SOUTHEAST INFRASTRUCTURE IMPROVEMENTS	0	250	0	250	0	0	0	0	0	250
A project to plan, design and construct a series of infrastructure improvements targeted within the southeast area of the US1 corridor.	Total	650	70	720	0	0	0	0	0	720
C0348 FY2017 MODERNIZATION OF FLEET AND HIGHWAYS SHOPS	В	1,865	250	2,115	5,795	379	2,369	17,286	10,808	38,752
A project for the master planning, design, construction of new facilities and renovation of existing County Fleet and Highways Facilities to modernize the facilities.	Total	1,865	250	2,115	5,795	379	2,369	17,286	10,808	38,752
C0349 FY2017 ENVIRONMENTAL COMPLIANCE OPERATIONS	В	375	100	475	165	241	305	145	165	1,496
A project to support environmental compliance activities for County Facilities.	Total	375	100	475	165	241	305	145	165	1,496
C0350 FY2017 NEW BUDGET SYSTEM The Budget Application project has been established to	В	500	0	500	0	0	0	0	0	500
purchase and implement a new budget system for improved efficiencies, transparency and presentation.	Total	500	0	500	0	0	0	0	0	500
C0351 FY2017 HARRIET TUBMAN REMEDIATION and RESTORATION	В	270	500	770	1,500	0	0	0	0	2,270
This project will provide for Harriett Tubman High School remediation of hazardous containing material such as ACM, lead, PCB, fuel.	G	300	500	800	0	0	0	0	0	800
	Total	570	1,000	1,570	1,500	0	0	0	0	3,070
C0352 FY2017 SITE ACQUISITION FOR SCHOOL SITES AND ELEVATED WATER STORAGE FACILITIES	В	10,500	0	10,500	0	0	0	0	0	10,500
This project establishes a fund for school site acquisition that comes available on the market that meets the future	G	2,500	0	2,500	0	0	0	0	0	2,500
needs of the County specifically to serve the Public interest to add or enhance the school system sites for new schools.	М	5,000	1,800	6,800	0	0	0	0	0	6,800
to add or enhance the school system sites for new schools.	0	2,500	0	2,500	0	0	0	0	0	2,500
	Р	5,000	0	5,000	0	0	0	0	0	5,000
	Total	25,500	1,800	27,300	0	0	0	0	0	27,300
C0353 FY2020 TRANSIT CENTER A project for site selection, design and construction of a	0	0	0	0	700	650	650	7,500	0	9,500
transit center.	Total	0	0	0	700	650	650	7,500	0	9,500

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
C0354 FY2019 BUILDING ACCESS CONTROL AND SECURITY ENHANCEMENTS	В	0	100	100	180	0	0	0	0	280
This project includes design and implementation of new and improved existing electronic security systems at a number of county facilities.	Total	0	100	100	180	0	0	0	0	280
C0355 FY2018 NEW SCHOOL MAINTENANCE SITE RENOVATION	В	5,798	600	6,398	0	0	0	0	0	6,398
This project will provide space for the HCPSS Maintenance Shop.	Total	5,798	600	6,398	0	0	0	0	0	6,398
C0356 FY2018 REHABILITATION TREATMENT CENTER This project proposes to provide funding for a facility in	В	0	0	0	250	14,800	0	0	0	15,050
Howard County to meet the critical need to assist with one of the greatest health challenges of opioid addiction,	Р	250	0	250	0	0	0	0	0	250
overdoses and death.	Total	250	0	250	250	14,800	0	0	0	15,300
C0357 FY2018 ELLICOTT CITY PARKING AND STREETSCAPE IMPROVEMENTS	В	200	0	200	0	0	0	0	0	200
A project to plan, design and implement streetscape and on-street parking improvements in Ellicott City.	Total	200	0	200	0	0	0	0	0	200
C0358 FY2019 NORTH LAUREL COMMUNITY POOL A project to construct a swimming pool at North Laurel	В	0	5,000	5,000	11,000	0	0	0	0	16,000
Park.	Total	0	5,000	5,000	11,000	0	0	0	0	16,000
C0359 FY2019 TURF VALLEY SCHOOL SITE ACQUISITION	В	0	2,000	2,000	2,000	2,000	0	0	0	6,000
A project to purchase land for a new elementary school in the Turf Valley neighborhood of Ellicott City.	Total	0	2,000	2,000	2,000	2,000	0	0	0	6,000
C0360 FY2019 REAL ESTATE PLANNING AND DESIGN This project will provide funding for expenses related to	В	0	500	500	500	500	500	500	500	3,000
potential properties that become available and meet the future needs of the County to serve the public interest and no funded Capital Project exists.	Total	0	500	500	500	500	500	500	500	3,000
C0362 FY2019 GATEWAY INNOVATION CENTER RENOVATION	0	0	3,000	3,000	0	0	0	0	0	3,000
A project for renovations of the Gateway Building located at 6751 Columbia Gateway Drive to facilitate the implementation of the Gateway Innovation Center.	Total	0	3,000	3,000	0	0	0	0	0	3,000
C0363 FY2019 LINWOOD SCHOOL PARKING LOT A project to construct a parking lot adjacent to Linwood	В	0	100	100	0	0	0	0	0	100
School site located on Martha Bush Drive in Ellicott City.	G	0	100	100	0	0	0	0	0	100
	0	0	100	100	0	0	0	0	0	100

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
C0363 FY2019 LINWOOD SCHOOL PARKING LOT A project to construct a parking lot adjacent to Linwood School site located on Martha Bush Drive in Ellicott City.	Total	0	300	300	0	0	0	0	0	300
GENERAL COUNTY PROJECTS Total		610,394	33,041	643,435	99,183	80,772	53,746	38,019	32,850	948,005

Howard County, MD FY2019 Executive Proposed Capital Budget (\$000) GENCO-GENERAL COUNTY PROJECTS

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	297,955	24,280	322,235
С	UTILITY CASH	5,530	0	5,530
D	DEVELOPER CONTRIBUTION	0	165	165
G	GRANTS	74,270	1,696	75,966
L	LEASE	26,400	0	26,400
М	METRO DISTRICT BOND	5,000	1,800	6,800
0	OTHER SOURCES	60,155	5,050	65,205
Р	PAY AS YOU GO	19,134	50	19,184
R	STORMWATER UTILTY FUNDING	1,700	0	1,700
Т	TRANSFER TAX	250	0	250
TIF	TIF BONDS	120,000	0	120,000
Total		610,394	33,041	643,435

2019 Executive Proposed 5 Year Capital Budget Project Type Summary (GENCO-GENERAL COUNTY PROJECTS)

Rev	enue Source	Prior Approp	Current FY	2020	2021	2022	2023	2024	5 Year Total
В	BONDS	297,955	24,280	57,192	79,807	42,860	30,369	22,724	555,187
С	UTILITY CASH	5,530	0	0	0	0	0	0	5,530
D	DEVELOPER CONTRIBUTION	0	165	0	0	0	0	0	165
G	GRANTS	74,270	1,696	10,000	0	10,000	0	10,000	105,966
L	LEASE	26,400	0	0	0	0	0	0	26,400
М	METRO DISTRICT BOND	5,000	1,800	0	0	0	0	0	6,800
0	OTHER SOURCES	60,155	5,050	700	650	650	7,500	0	74,705
Р	PAY AS YOU GO	19,134	50	291	315	236	150	126	20,302
R	STORMWATER UTILTY FUNDING	1,700	0	1,000	0	0	0	0	2,700
Т	TRANSFER TAX	250	0	0	0	0	0	0	250
TIF	TIF BONDS	120,000	0	30,000	0	0	0	0	150,000
Tota	al	610,394	33,041	99,183	80,772	53,746	38,019	32,850	948,005

Project: C0182-FY1985 PUBLIC SAFETY EDUCATION CENTER

GENERAL COUNTY PROJECTS

Number: C0182

Description

A project for design and construction of a group of facilities for training of public safety employees. Facilities are intended to include a burn building and drill tower, offices, classrooms, laboratories, weapons training facilities, crime scene simulation facilities, ancillary buildings, and library/study for emergency service education programs.

Justification

This project is intended to meet combined training missions of both Police and Fire and Rescue. Critical training will be compromised if progress is not made in establishing both hands-on and classroom training facilities that are co-located close to the existing outdoor pistol range.

Remarks

The project has been revised to include modification of the existing 25M firing range, a new Reactionary Steel Range, a 50M Auxiliary Range, and a Breaching Range, to allow training year round.

Project Schedule

FY19 û Preliminary Design of Ranges. FY20 û Complete Design Ranges.

FY21 - Construction of Ranges.

Operating Budget Impact

Annual Bond Redemption \$ \$1,635,300

Estimated annual utility/custodial/operating costs upon construction completion for the planned renovations: \$26,000



GENERAL COUNTY PROJECTS

Number: C0182

Project: FY1985 PUBLIC SAFETY EDUCATION CENTER

(In Thousands)								Master I	Plan					
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	2,893	250	3,143	506	0	0	140	0	646	0	0	0	0	3,789
LAND ACQUISITION	945	0	945	0	0	0	0	0	0	0	0	0	0	945
CONSTRUCTION	21,225	0	21,225	715	5,622	0	0	1,750	8,087	0	0	0	0	29,312
ADMINISTRATION	93	0	93	0	0	0	56	0	56	0	0	0	0	149
EQUIPMENT & FURNISHINGS	2,170	0	2,170	0	0	225	0	0	225	0	0	0	0	2,395
Total Expenditures	27,326	250	27,576	1,221	5,622	225	196	1,750	9,014	0	0	0	0	36,590
BONDS	27,076	250	27,326	1,221	5,622	225	196	1,750	9,014	0	0	0	0	36,340
TRANSFER TAX	250	0	250	0	0	0	0	0	0	0	0	0	0	250
Total Funding	27,326	250	27,576	1,221	5,622	225	196	1,750	9,014	0	0	0	0	36,590

\$27,307,538 spent and encumbered through February 2018 \$27,307,538 spent and encumbered through February 2017

Project Status: Awaiting design & construction funds for planned improvements to the PSTC facilities that include addition to main building, new indoor firing range and renovations to tactical training facility.

FY 2018 Budget	27,326	775	28,101	696	5,622	225	196	1,750	8,489	0	0	0		36,590
Difference 2018 / 2019	0	(525)	(525)	525	0	0	0	0	525	0	0	0	0	0

Project: C0214-FY199- CATEGORY CONTINGENCY FUND

GENERAL COUNTY PROJECTS

Number: C0214

Description

The fund is designed for use as a revenue source for Transfers of Appropriation when either construction costs are higher than originally estimated, contributions from grants vary from projections, or engineering must be advanced from future years to the present fiscal year for critical program needs; all subject to Council approval.

Justification

This fund will allow for the timely completion of approved projects by contingency funding as-required.

Remarks

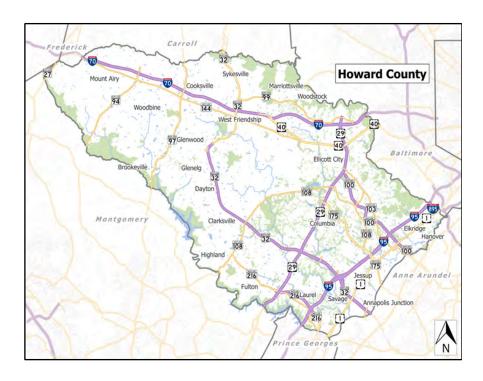
1. GRANT & OTHER funds represent only an appropriation that can be drawn from when an appropriation is needed by a recipient project that is underappropriated.

Prior Appropriation reflects TAO #1 - 2018, TAO #2 adopted October 5th, 2006.

- 2. TAO #1 and #3-2009.
- 3. TAO#1 and TAO#2-2011.
- 4. TAO #1, #2 -2014
- 5. TAO #1-2018.

Project Schedule

As Required



GENERAL COUNTY PROJECTS

0

0

0

0

Number: C0214

(742)

Project: FY199- CATEGORY CONTINGENCY FUND

(In Thousands)				Five Year Capital Program								Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	68,658	0	68,658	10,000	0	10,000	0	10,000	30,000	0	10,000	0	0	108,658
OTHER	1,100	0	1,100	0	0	0	0	0	0	0	0	0	0	1,100
Total Expenditures	69,758	0	69,758	10,000	0	10,000	0	10,000	30,000	0	10,000	0	0	109,758
GRANTS	68,658	0	68,658	10,000	0	10,000	0	10,000	30,000	0	10,000	0	0	108,658
OTHER SOURCES	1,100	0	1,100	0	0	0	0	0	0	0	0	0	0	1,100
Total Funding	69,758	0	69,758	10,000	0	10,000	0	10,000	30,000	0	10,000	0	0	109,758
\$0 spent and encumbered through spent and encumbered through Fe Project Status :	•	8												
FY 2018 Budget	70,500	0	70,500	10,000	0	10,000	0	10,000	30,000	0	10,000	0		110,500

(742)

0

TAO#1 - 2018 moves \$742,000 Grant revenue to H2014.

Difference 2018 / 2019

(742)

GENERAL COUNTY PROJECTS

Number: C0256

Project: C0256-ENVIRONMENTAL ASSESSMNT CONTINGENCY FUND

Description

Evaluation of environmental conditions of property and buildings which become available for purchase or use prior to a specific capital project being established or which are part of an existing project. This also applies to purchases under the Acquisition Contingency Fund. Phase I, II and/or III environmental assessments would be completed as necessary to evaluate the properties or buildings and may include various remediation measures under Phase III.

Justification

Acquisition of property can result in liability for environmental cleanups. Environmental assessments prior to property acquisition will assist the County in determining fair market value. Environmental assessments and remediation may also be required if problems are identified after acquisition.

Remarks

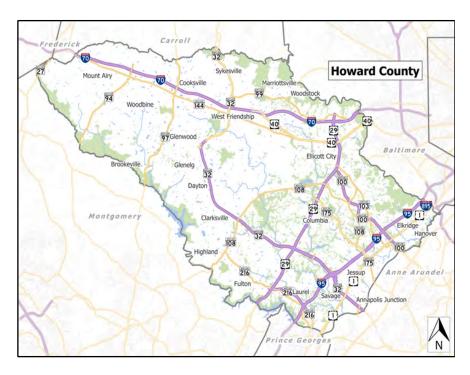
Assessments may be performed which determine that the site is not suitable and no purchase is made.

Project Schedule

Program

Operating Budget Impact

There is no operating cost impact.



GENERAL COUNTY PROJECTS

Number: C0256

Project: ENVIRONMENTAL ASSESSMNT CONTINGENCY FUND

(In Thousands)				Five	Master Plan									
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	500	0	500	0	50	0	50	0	100	50	0	50	0	700
CONSTRUCTION	46	0	46	26	0	26	0	26	78	0	26	0	26	176
Total Expenditures	546	0	546	26	50	26	50	26	178	50	26	50	26	876
PAY AS YOU GO	546	0	546	26	50	26	50	26	178	50	26	50	26	876
Total Funding	546	0	546	26	50	26	50	26	178	50	26	50	26	876

\$375,855 spent and encumbered through February 2018 \$335,761 spent and encumbered through February 2017

Project Status: Approximately \$35,000 utilized for the remediation of the historic barn at Belmont.

Approximately \$5,000 encumbered for the Phase I ESA of the old Roger Carter Neighborhood Center located at 3676 Fels Lane.

FY 2018 Budget	546	50	596	26	50	26	50	26	178	50	26	0		850
Difference 2018 / 2019	0	(50)	(50)	0	0	0	0	0	0	0	0	50	26	26

Project: C0285-FY2002 US1 CORRIDOR REVITALIZATION

GENERAL COUNTY PROJECTS

Number: C0285

Description

A project to plan, design and implement a series of streetscape, pedestrian, bicycle, transportation and public green space improvements on public property in the US1 Corridor. Acquisition for these improvements may be needed. Funding includes developer contributions. The County will either construct the improvements or have the developers construct the improvements for the County.

Justification

Revitalization of the US1 Corridor continues to be a priority area under PlanHoward 2030. The purpose is to invest public funds in community enhancement projects that will support and spur revitalization by the private sector, promote economic development and public safety and enhance the quality of life in existing, older neighborhoods in the Corridor. The project implements changes and improvements planned along the entire 11 mile corridor. Larger projects will implement improvements for the public benefit.

Remarks

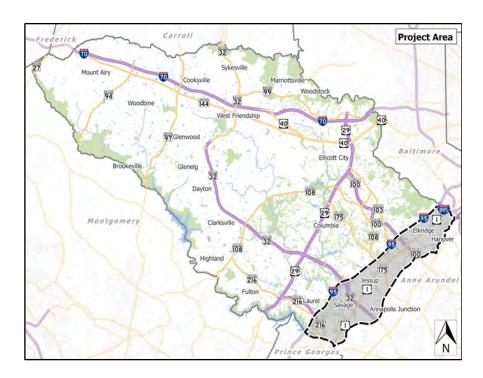
- 1. Future funding for this project determined by the Department of Planning and Zoning based on the outcomes of the Washington Boulevard Study. In 2011, Howard County commissioned a market analysis of US1. The study identified market issues and suggested that future redevelopment focus on commercial nodes. This study will evaluate conditions to identify market-based development concepts that refine and clarify the Corridor`s vision. Once complete, the study will guide implementation efforts and direct future funding for this project.
- 2. Pedestrian and bicycle improvements to promote public safety and access to State and Howard County public transportation services and MARC rail.
- 3. OTHER: Developer Contribution relating to CB2-2016.

Project Schedule

FY18-FY19 - Develop the Washington Boulevard Study.

Operating Budget Impact

Annual Bond Redemption \$ \$56,250



GENERAL COUNTY PROJECTS

Number: C0285

Project: FY2002 US1 CORRIDOR REVITALIZATION

(In Thousands)					Fiv	Master Plan								
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,200	0	1,200	0	0	0	0	0	0	0	0	0	0	1,200
CONSTRUCTION	2,250	(764)	1,486	0	0	0	0	0	0	0	0	0	0	1,486
Total Expenditures	3,450	(764)	2,686	0	0	0	0	0	0	0	0	0	0	2,686
BONDS	1,250	0	1,250	0	0	0	0	0	0	0	0	0	0	1,250
GRANTS	1,000	(174)	826	0	0	0	0	0	0	0	0	0	0	826
OTHER SOURCES	1,200	(590)	610	0	0	0	0	0	0	0	0	0	0	610
Total Funding	3,450	(764)	2,686	0	0	0	0	0	0	0	0	0	0	2,686

\$2,600,077 spent and encumbered through February 2018 \$1,376,614 spent and encumbered through February 2017 Project Status:

- 1. Engineering consultant was retained in FY09 to conduct a project planning study for a potential alignment of a section of US1 to accommodate the newly identified right-of-way and improvements. In FY10, SHA and property owners created a plan re alignment and financial obligations.
- 2. FY12 Three sidewalk improvements projects constructed totaling \$494,890 utilizing HUD grant and local funds.
- 3. FY15 SHA working on preliminary engineering for N Laurel Area improvements.

FY16 - Reduction to Grant Funds to align with grants received and spent.

- 5. FY17 Property acquisition for construction of sidewalk connectivity improvements near N Laurel Rd, in the median of the southbound lane of US1.
- 6. FY18 FY19 Projects to be identified in conjunction with the outcomes of the Washington Boulevard Study.

FY 2018 Budget	3,450	500	3,950	0	0	0	0	0	0	0	0	0		3,950
Difference 2018 / 2019	0	(1,264)	(1,264)	0	0	0	0	0	0	0	0	0	0	(1,264)

Project: C0286-FY2002 BUS STOP IMPROVEMENTS

GENERAL COUNTY PROJECTS

Number: C0286

Description

A project to implement a series of systemic improvements to Howard Transit bus stops. These improvements would include the installation of approach sidewalks, curb cuts (consistent with ADA requirements), bus shelters, concrete pads, bus stop signs, cross walks, route map holders and other improvements. Planning and Zoning, in conjunction with the Office of Transportation, will determine the location of these improvements.

Justification

A field survey of Howard Transit bus stops indicates that these improvements are needed for the safety, comfort and access of passengers, as well as to conform with ADA guidelines. The proposed improvements also reflect the County's desire to increase ridership on the local system by making stops more accessible and convenient.

Remarks

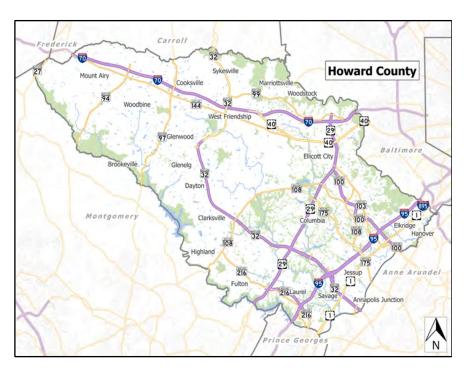
- 1. Installation of these improvements will comply with the Americans with Disabilities Act (ADA) regulations.
- 2. GRANT funds represent Federal American Recovery and Reinvestment Act (ARRA) funds of \$100,000. Additionally, New Freedom grant funds of \$320,000 with \$80,000 in local matching funds are being used for the construction of shelters and bus stop improvements.
- 3. OTHER funds represent potential BWI Airport Noise Zone Grants to communities that will be passed through to County. Potential fee-in-lieu from developer also included.

Project Schedule

In the Financial close out process. Replacement project C0332.

Operating Budget Impact

Annual Bond Redemption \$ \$14,400 No Operating Budget Impact



GENERAL COUNTY PROJECTS

Number: C0286

Project: FY2002 BUS STOP IMPROVEMENTS

(In Thousands)					Five	e Year Ca	Master Plan							
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	233	0	233	0	0	0	0	0	0	0	0	0	0	233
LAND ACQUISITION	320	0	320	0	0	0	0	0	0	0	0	0	0	320
CONSTRUCTION	1,136	0	1,136	0	0	0	0	0	0	0	0	0	0	1,136
ADMINISTRATION	30	0	30	0	0	0	0	0	0	0	0	0	0	30
Total Expenditures	1,719	0	1,719	0	0	0	0	0	0	0	0	0	0	1,719
BONDS	320	0	320	0	0	0	0	0	0	0	0	0	0	320
GRANTS	892	0	892	0	0	0	0	0	0	0	0	0	0	892
OTHER SOURCES	245	0	245	0	0	0	0	0	0	0	0	0	0	245
PAY AS YOU GO	262	0	262	0	0	0	0	0	0	0	0	0	0	262
Total Funding	1,719	0	1,719	0	0	0	0	0	0	0	0	0	0	1,719

\$1,242,539 spent and encumbered through February 2018 \$822,256 spent and encumbered through February 2017

Project Status : FY11 - Two (2) replacement bus shelters installed

FY12 - Eight (8) replacement and new bus shelters installed

FY13 - Continued bus shelter installation and ADA compliant access improvements

FY17 - Reconstruction of Harpers Choice Bus Shelter and other ADA compliant access improvements

FY18 - Close.

FY 2018 Budget	1,719	0	1,719	0	0	0	0	0	0	0	0	0		1,719
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

GENERAL COUNTY PROJECTS

Number: C0287

Project: C0287-FY2002 COMMUNITY RENEWAL / ENHANCEMENTS

Description

A project to design and implement a series of pedestrian improvements, streetscape enhancements and repair or enhancement of public green spaces. Pedestrian improvements such as sidewalks, curb and gutter, ramps or curb cuts; streetscape enhancements include signs, street trees or landscaping, benches, trash receptacles; and public green spaces such as paths, landscaping, signs and site furniture.

Justification

PlanHoward 2030 establishes numerous policies pertaining to community sustainability and the implementation of enhancement projects within existing communities.

Remarks

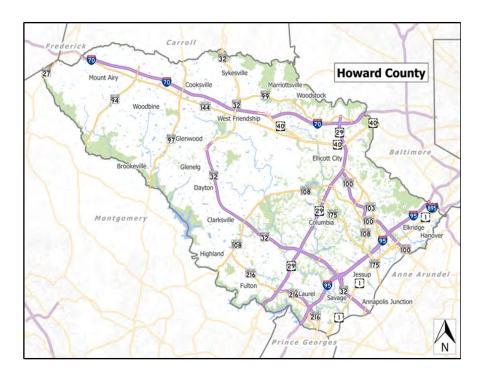
- 1. Project funding will target public property in neighborhoods with community enhancement committees or community associations that request and support the improvements.
- 2. Pedestrian improvements will comply with the Americans with Disabilities Act (ADA) and will be coordinated with and promote access to State and County public transportation services.
- 3. OTHER funding will allow projects that receive community contributions to be constructed on county property.

Project Schedule

FY18-FY19 - Planning, Design and Construction Continued.

Operating Budget Impact

Annual Bond Redemption \$ \$40,275



GENERAL COUNTY PROJECTS

Number: C0287

Project: FY2002 COMMUNITY RENEWAL / ENHANCEMENTS

(In Thousands)					Five	e Year Ca	pital Pro	gram		Master Plan						
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project		
PLANS & ENGINEERING	189	0	189	0	0	0	0	0	0	0	C	0	0	189		
CONSTRUCTION	1,190	0	1,190	0	0	0	0	0	0	0	C	0	0	1,190		
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	C	0	0	10		
Total Expenditures	1,389	0	1,389	0	0	0	0	0	0	0	O	0	0	1,389		
BONDS	895	0	895	0	0	0	0	0	0	0	C	0	0	895		
GRANTS	100	0	100	0	0	0	0	0	0	0	C	0	0	100		
OTHER SOURCES	44	0	44	0	0	0	0	0	0	0	C	0	0	44		
PAY AS YOU GO	350	0	350	0	0	0	0	0	0	0	C	0	0	350		
Total Funding	1,389	0	1,389	0	0	0	0	0	0	0	0	0	0	1,389		

\$531,382 spent and encumbered through February 2018 \$576,362 spent and encumbered through February 2017

Project Status: 1. FY04 - Retaining Wall in Village of Wilde Lake Complete.

- 2. FY05 Completed Bryant Square Landscape Revitalization Plan, Landscape Maintenance Manual, and Drainage and Sidewalk Improvements.
- 3. FY08-FY10 Village of Oakland Mills revitalization, Robert Oliver Place Enhancement. Completed in FY11.
- 4. FY14/15 Completed study and 30% design of Frederick Road/US144 mile marker enhancement along US40.
- 5. FY17-FY18 Funding requested to support Oakland Mills Streetscape improvements. The project will be implemented in conjunction with the recommendations of the FY17 Oakland Mills Village Center Feasibility Study.

FY 2018 Budget	1,389	0	1,389	0	0	0	0	0	0	0	0	0		1,389
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

GENERAL COUNTY PROJECTS

Number: C0290

Project: C0290-FY2019 COURTHOUSE RENOVATION/REPLACEMENT

Description

A project to renovate and replace the existing courthouse. The effort will be to construct a new Judicial Function Building/Parking Garage, while maintaining the exhisting facility. The Dorsey Building site on MD 108 will be used for the new facility.

Justification

The project will provide:

- 1. New judicial function building/parking garage which provides additional Court facilities short and intermediate-term requirements;
- 2. Single entry security checkpoint;
- 3. Two new civil courtrooms, with judges chambers;
- 4. Secure parking for judges and masters;
- 5. Greater functionality for lobby, jury assembly areas, waiting areas, and circulation atrium space;
- 6. Renovated existing functional space for court expanding requirements;
- 7. Site work revisions for judicial building/parking garage.

Remarks

- 1. All stakeholders of Circuit Court were interviewed and a complete set of program requirements were developed which identified current and future needs. Current funds to be used to maintain the existing Circuit Courthouse and P3 development process for new Courthouse.
- 2. Funding represents only public funding.
- 3. Title changed FY2018. Previous Title: Courthouse Renovation.
- 4. The County's financial system will allow tracking of spending related to renovation of existing Courthouse and proposed construction of new Courthouse separately within the same project.

Project Schedule

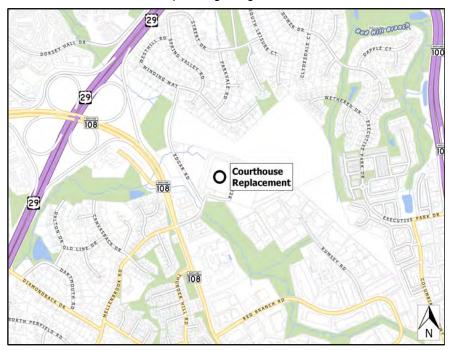
FY19 - Award P3 (Public Private Partnership) contract, start design/build

FY21 - Complete Construction

Operating Budget Impact

Annual Bond Redemption \$ \$4,652,775

Private financing through annual availability payment in multi-year contracts will be shown in operating budget.



GENERAL COUNTY PROJECTS

Number: C0290

Project: FY2019 COURTHOUSE RENOVATION/REPLACEMENT

(In Thousands)					Five	e Year Ca	Master Plan							
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	5,435	0	5,435	0	0	0	0	0	0	0	0	0	0	5,435
CONSTRUCTION	106,460	(12,500)	93,960	0	0	0	0	0	0	0	0	0	0	93,960
ADMINISTRATION	45	0	45	0	0	0	0	0	0	0	0	0	0	45
EQUIPMENT & FURNISHINGS	180	3,000	3,180	0	0	0	0	0	0	0	0	0	0	3,180
OTHER	1,760	0	1,760	0	0	0	0	0	0	0	0	0	0	1,760
Total Expenditures	113,880	(9,500)	104,380	0	0	0	0	0	0	0	0	0	0	104,380
BONDS	112,895	(9,500)	103,395	0	0	0	0	0	0	0	0	0	0	103,395
PAY AS YOU GO	985	0	985	0	0	0	0	0	0	0	0	0	0	985
Total Funding	113,880	(9,500)	104,380	0	0	0	0	0	0	0	0	0	0	104,380

\$8,892,214 spent and encumbered through February 2018 \$6,528,397 spent and encumbered through February 2017

Project Status : FY16 - Study of options for new courthouse and courthouse requirements completed.

FY17 - Continue preliminary evaluation of financial options.

FY18 - Complete Request for Qualifications and Request for Proposal.

FY 2018 Budget	113,880	0	113,880	0	0	0	0	0	0	0	0	0		113,880
Difference 2018 / 2019	0	(9,500)	(9,500)	0	0	0	0	0	0	0	0	0	0	(9,500)

GENERAL COUNTY PROJECTS

Number: C0298

Project: C0298-FY2005 US 40 CORRIDOR ENHANCEMENT

Description

A project to plan, design and implement improvements, including sidewalks, landscaping, street trees, median and gateway enhancements within public right-of-way and to develop a corridor design manual to guide site design on adjacent properties.

Justification

Enhancement of the US40 Corridor is a priority under PlanHoward 2030. The purpose is to invest public funds in corridor enhancement projects

Remarks

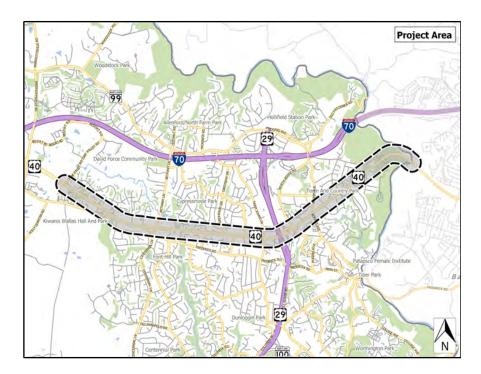
- 1. Projects that will promote economic development, encourage revitalization, guide redevelopment, improve public safety and enhance the quality of life along the corridor. The project area and specific enhancement strategies are identified in the US40 Design Manual and the US40 Streetscape Master Plan.
- 2. The county's collaboration with SHA on plan implementation is recognized in a Letter of Agreement (LOA) to improve the aesthetic character and certain operational aspects of the US40 corridor.

Project Schedule

FY17-FY19 - Continuation of enhancement projects.

Operating Budget Impact

Annual Bond Redemption \$ \$31,500



GENERAL COUNTY PROJECTS

Number: C0298

Project: FY2005 US 40 CORRIDOR ENHANCEMENT

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	250	0	250	0	0	0	0	0	0	0	0	0	0	250
CONSTRUCTION	800	(150)	650	0	0	0	0	0	0	0	0	0	0	650
Total Expenditures	1,050	(150)	900	0	0	0	0	0	0	0	0	0	0	900
BONDS	700	0	700	0	0	0	0	0	0	0	0	0	0	700
GRANTS	50	(50)	0	0	0	0	0	0	0	0	0	0	0	0
OTHER SOURCES	100	(100)	0	0	0	0	0	0	0	0	0	0	0	0
PAY AS YOU GO	200	0	200	0	0	0	0	0	0	0	0	0	0	200
Total Funding	1,050	(150)	900	0	0	0	0	0	0	0	0	0	0	900

\$613,389 spent and encumbered through February 2018

\$625,736 spent and encumbered through February 2017

Project Status : FY11 - Completion of Streetscape Master Plan.

FY11/12 - Design development, engineering and construction of initial two projects at Chatham Road and Wheaton Way.

FY14-FY15 - Design of Phase II to complete improvements in the Chatham Road area.

FY16-FY19 - Maintenance of median streetscape improvements and initiate planning and design of improvements in conjunction with Ellicott City Master Planning

FY 2018 Budget	1,050	0	1,050	0	0	0	0	0	0	0	0	0		1,050
Difference 2018 / 2019	0	(150)	(150)	0	0	0	0	0	0	0	0	0	0	(150)

Project: C0299-FY2005 WASTE MANAGEMENT IMPROVEMENTS

GENERAL COUNTY PROJECTS

Number: C0299

Description

A project for the design and construction of capital improvements at the Alpha Ridge Solid Waste Facility, New Cut and Carrs Mill Landfills. Scheduled improvements are detailed in the "Project Schedule" section. Unscheduled improvements may be under taken based on monitoring results or systems failures.

Justification

Improvements required to comply with State/Federal regulations, and to provide facilities adequate to serve long term waste management needs.

Remarks

- 1. Schedule for construction of new cell and capping of existing cell at landfill dependent on rate at which existing cell reaches capacity.
- 2. Improvements are for Alpha Ridge Solid Waste Facility except as noted.
- 3. OTHER funding represents Bonds financed by the Environmental Service Fund.

Project Schedule

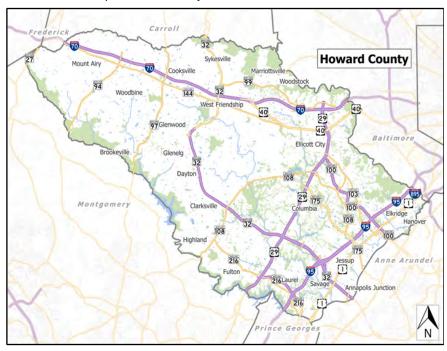
FY18-FY19 - Close New Cut groundwater remediation system, design compost Phase 2B, Cell 1 let downs, Cell 2A, construct Eastern Drop-off center, material storage shelters and reconfigure resident drop-off area at ARL.

FY20-FY24 - Design and Construct: leachate system upgrades, later phases of Compost Facility, material recovery facility and next landfill cell. Design existing cell closure.

Operating Budget Impact

Annual Bond Redemption \$ \$1,468,845

A project for the design and construction of capital improvements at the Alpha Ridge Solid Waste Facility, New Cut and Carrs Mill Landfills. Scheduled improvements are detailed in the "Project Schedule" section. Unscheduled improvements may be under taken.



GENERAL COUNTY PROJECTS

Number: C0299

Project: FY2005 WASTE MANAGEMENT IMPROVEMENTS

(In Thousands)					Five	Year Ca	pital Pro	gram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	2,150	786	2,936	305	480	0	0	550	1,335	150	350	80	0	4,851
CONSTRUCTION	20,280	1,800	22,080	4,275	4,100	4,550	0	300	13,225	7,500	0	4,000	0	46,805
ADMINISTRATION	636	54	690	118	123	137	0	9	387	225	0	120	0	1,422
Total Expenditures	23,066	2,640	25,706	4,698	4,703	4,687	0	859	14,947	7,875	350	4,200	0	53,078
BONDS	5,269	0	5,269	4,698	4,703	4,687	0	859	14,947	7,875	350	4,200	0	32,641
OTHER SOURCES	17,597	2,640	20,237	0	0	0	0	0	0	0	0	0	0	20,237
PAY AS YOU GO	200	0	200	0	0	0	0	0	0	0	0	0	0	200
Total Funding	23,066	2,640	25,706	4,698	4,703	4,687	0	859	14,947	7,875	350	4,200	0	53,078

\$21,067,982 spent and encumbered through February 2018

\$15,651,129 spent and encumbered through February 2017

Project Status: FY10 - Study yard waste composting, scalehouse scale replacement, design ongoing groundwater expansion.

FY11 - Ongoing design of landfill mining plan and transfer station expansion. Ongoing design and construct landfill gas to energy system. Begin constructing trailer storage area and groundwater expansion.

FY12 - Design and construction of pilot compost facility. Begin landfill leachate collection improvements. Continue construction of gas to energy system.

FY13 - Complete gas to energy system, leachate improvements and LFG capture improvements. Design and begin construction of full scale composting facility. Improve video surveyance. Design office space, gas collection and route truck access improvements.

FY14 - Complete trailer storage area and groundwater expansion, entrance road improvements, transfer station noise reduction equipment pole barn, Design leachate collection improvements and additional gas capture and continue full scale compost design.

FY15 - Complete blower 1 replacement, access road construction, compost facility design and construction groundwater system expansion, Construct residential recycling shelters, and maintenance shop yard improvements.

FY16 - Complete maintenance shop yard improvements, resurface residents` area, design gas capture improvements, replace leachate power back-up.

FY17 - Construct gas capture improvement, construct next phase of expanded compost facility, design groundwater upgrades.

FY18 - Construct Phase 2A compost facility, upgrade groundwater recovery at Alpha Ridge and Carrs Mill Landfills, transfer station repair.

FY 2018 Budget	23,066	4,453	27,519	2,661	4,962	4,197	0	859	12,679	7,875	350	4,200		52,623
Difference 2018 / 2019	0	(1,813)	(1,813)	2,037	(259)	490	0	0	2,268	0	0	0	0	455

GENERAL COUNTY PROJECTS

Number: C0301

Project: C0301-FY2005 TECHNOLOGY INFRASTRUCTURE UPGRADES

Description

This project covers security, infrastructure hardware and network upgrades, as well as life-cycle replacement. This includes the engineering assessment / analysis to ensure our computing environment meets the long term county objectives. The project also covers required disaster recovery, secure primary and secondary data centers, video conferencing equipment, and security cameras for the County as well as public WiFi.

Justification

A secure stable environment is required to support County-wide applications. We will ensure adequate bandwidth, storage, and computing capacity. We will also ensure there is adequate redundancy for key applications such as Public Safety Systems. The data center at Dorsey (currently used for network communications) must be replaced due to the pending demolition of the Dorsey Building.

Remarks

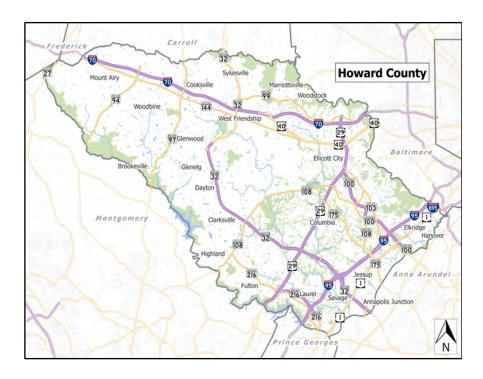
Current request is to complete the disaster recovery location (in Ashburn, VA, a site which is over 30 miles from the primary data center). This is designed for catastrophic events rendering our data centers unavailable. In addition to the current ONE data center, we will begin to establish secondary failover data center to ensure critical systems availability. A failover will also allow DTCS to perform necessary maintenance while minimizing disruption to operations.

Proiect Schedule

FY 19 -Expand public Wifi, specifically in Howard County parks; Outfit new locations with video conference capabilities and security cameras; Begin outfitting a second data center (2 year effort); Routine lifecycle replacement and upgrade of network, servers and security hardware

Operating Budget Impact

Annual Bond Redemption \$ \$1,566,045



GENERAL COUNTY PROJECTS

Number: C0301

Project: FY2005 TECHNOLOGY INFRASTRUCTURE UPGRADES

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	9,180	1,250	10,430	2,000	2,500	2,000	2,000	2,000	10,500	0	0	0	0	20,930
CONSTRUCTION	11,931	0	11,931	0	0	0	0	0	0	0	0	0	0	11,931
ADMINISTRATION	265	0	265	0	0	0	0	0	0	0	0	0	0	265
EQUIPMENT & FURNISHINGS	60	1,250	1,310	1,250	0	0	0	0	1,250	0	0	0	0	2,560
Total Expenditures	21,436	2,500	23,936	3,250	2,500	2,000	2,000	2,000	11,750	0	0	0	0	35,686
BONDS	20,551	2,500	23,051	3,250	2,500	2,000	2,000	2,000	11,750	0	0	0	0	34,801
PAY AS YOU GO	885	0	885	0	0	0	0	0	0	0	0	0	0	885
Total Funding	21,436	2,500	23,936	3,250	2,500	2,000	2,000	2,000	11,750	0	0	0	0	35,686

\$18,627,623 spent and encumbered through February 2018 \$16,088,583 spent and encumbered through February 2017

Project Status: FY 16 - WiFi and VOiP continue to be installed according to planned phased approach; equipment continues to be refreshed to ensure robust network. Cyber Security enhancements continue in order to strengthen the County's network infrastructure.

FY 17 - Completed new intranet and internet sites for the County, continued the phased approach to installing WiFi and VOiP county-wide, refreshed and upgraded County network infrastructure as well as enhancements to Cyber Security to ensure robust and secure network.

FY 18 - Refreshed and upgraded County network infrastructure to ensure robust and secure network. Furthered the initiative to install WiFi and VOiP county-wide in a phased approach.

FY 2018 Budget	21,436	2,500	23,936	2,500	2,500	2,500	2,500	0	10,000	0	0	0		33,936
Difference 2018 / 2019	0	0	0	750	0	(500)	(500)	2,000	1,750	0	0	0	0	1,750

GENERAL COUNTY PROJECTS

Number: C0311

Project: C0311-FY2007 PUBLIC SAFETY RADIO SYSTEM ENHANCEMENTS

Description

Enhancements to 800 MHz Motorola Astro trunking radio system for Public Safety. This first phase will replace all site radios including mobile radios on Fire and Police vehicles, along with FCC-mandated Narrowbanding for Howard County Fire Alert and Interoperability.

Justification

Howard County's 800 MHz Radio system is aging out of serviceability and by mid 2018 will no longer be manufactured nor supported by the vendor, creating vulnerabilities for functionality and interoperability. We are taking a phased approached, first upgrading the Radio Core and 911 radio consoles to P25 standards, replacement of all portable radios due to end-of-life cycle, and the addition of radio frequencies system and replacement of site infrastructure. This will allow us to stay in communications with Federal, State and other local area governments and public safety officers.

Remarks

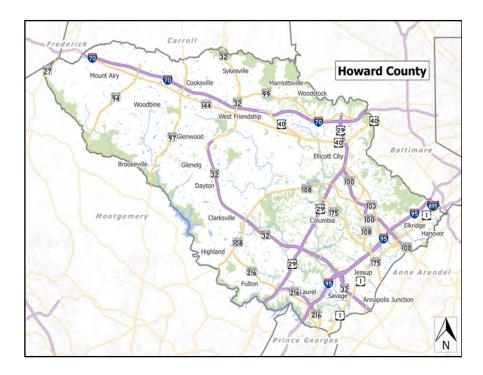
Approaching final phase (in FY 20) of a multi-year project to methodically replace Howard CountyÆs 800 MHz Radio system.

Project Schedule

FY 19 Continue replace radios and upgrade the equipment in the towers according to the plan. This project will continue in FY 20.

Operating Budget Impact

Annual Bond Redemption \$ \$927,000



GENERAL COUNTY PROJECTS

Number: C0311

Project: FY2007 PUBLIC SAFETY RADIO SYSTEM ENHANCEMENTS

(In Thousands)					Fiv	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	25,150	5,850	31,000	500	0	0	0	0	500	0	0	0	0	31,500
Total Expenditures	25,150	5,850	31,000	500	0	0	0	0	500	0	0	0	0	31,500
BONDS	14,250	5,850	20,100	500	0	0	0	0	500	0	0	0	0	20,600
OTHER SOURCES	500	0	500	0	0	0	0	0	0	0	0	0	0	500
LEASE	10,400	0	10,400	0	0	0	0	0	0	0	0	0	0	10,400
Total Funding	25,150	5,850	31,000	500	0	0	0	0	500	0	0	0	0	31,500

\$25,060,143 spent and encumbered through February 2018 \$17,958,554 spent and encumbered through February 2017

Project Status: FY16 - Achieved reliability enhancement to radio's main core by moving the radio core from Astro 3.0 core (which is no longer supported by manufacturer) to P25 Standard Core Platform. This is the first step to allow us to stay current with reliability and feature enhancements for our radio core and 911 consoles. Additionally, enhanced the interface between the new P25 radio core and 911 CAD server which is a vital link providing communications from radio system to CAD server.

FY17 - Began phased approach to replacement of end-of-life radios along with site infrastructure such as base station radios, antennas, lines, UPS and generators for reliability and interoperability with federal, state and local governments.

FY18 - Replacement and upgrade of public safety radios will be completed; radios will enter operations and maintenance phase in FY19. Capital project will enter close-out phase in FY19.

FY 2018 Budget	25,150	6,350	31,500	0	0	0	0	0	0	0	0	0		31,500
Difference 2018 / 2019	0	(500)	(500)	500	0	0	0	0	500	0	0	0	0	0

GENERAL COUNTY PROJECTS

Number: C0312

Project: C0312-FY2007 ENTERPRISE RESOURCE PLANNING SYSTEM

Description

The County currently is utilizing SAP ERP software solution as the system of Financial Accounting, Purchasing and Utility Water and Sewer billing.

Justification

The first three phases of SAP implementation, including Financial Accounting and Purchasing, Utility billing, and SAP Business Intelligence for Management for reporting and planning have been implemented by the County in prior fiscal years. The County continues to implement SAP functionalities to enhance the performance, efficiency and financial reporting internally. The new functionalities being implemented and planned to be implemented will require augmenting County resources with SAP consultants to provide quick resolution of issues and timely implementations.. In parallel County's SAP team is constantly engaged in fixing and continuous process improvement activities that require enhancing, modifying, and developing functionalities to meet changing business and legal accounting needs.

Remarks

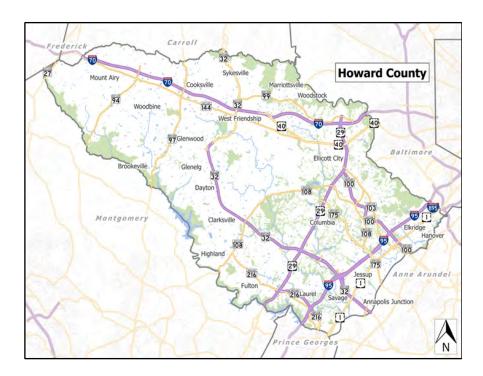
Current request to be able to support, enhance, modify and develop the current and new functionalities in SAP as well the newer Fleet Management and Inventory. This also includes funding for the County-wide Time and Attendance System and the Human Capital Management planning.

Project Schedule

Time and Attendance; Current system enhancements and upgrades; HCM Planning

Operating Budget Impact

Annual Bond Redemption \$ \$632,700



GENERAL COUNTY PROJECTS

Number: C0312

Project: FY2007 ENTERPRISE RESOURCE PLANNING SYSTEM

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	6,900	0	6,900	0	0	0	0	0	0	0	0	0	0	6,900
CONSTRUCTION	4,190	0	4,190	0	0	0	0	0	0	0	0	0	0	4,190
ADMINISTRATION	3,900	0	3,900	800	800	800	800	800	4,000	0	0	0	0	7,900
EQUIPMENT & FURNISHINGS	3,300	0	3,300	0	0	0	0	0	0	0	0	0	0	3,300
Total Expenditures	18,290	0	18,290	800	800	800	800	800	4,000	0	0	0	0	22,290
BONDS	10,060	0	10,060	800	800	800	800	800	4,000	0	0	0	0	14,060
UTILITY CASH	5,530	0	5,530	0	0	0	0	0	0	0	0	0	0	5,530
PAY AS YOU GO	2,700	0	2,700	0	0	0	0	0	0	0	0	0	0	2,700
Total Funding	18,290	0	18,290	800	800	800	800	800	4,000	0	0	0	0	22,290

\$14,666,578 spent and encumbered through February 2018

\$14,568,618 spent and encumbered through February 2017

Project Status : FY16 - Human Capital Management Process design FY18. The design will include Organization Management, Position Control, Employee Self-Service to record time and attendance directly in SAP.

FY17 - Implementation of Fleet Maintenance Management module and various upgrades of SAP completed.

FY18 - Inventory Management module and Human Capital Management implementation continues.

FY 2018 Budget	18,290	1,500	19,790	1,500	1,500	1,500	1,500	0	6,000	0	0	0		25,790
Difference 2018 / 2019	0	(1,500)	(1,500)	(700)	(700)	(700)	(700)	800	(2,000)	0	0	0	0	(3,500)

GENERAL COUNTY PROJECTS

Number: C0313

Project: C0313-FY2008 ENVIRONMENTAL COMPLIANCE CONSTRUCTION

Description

A project to support environmental compliance activities for County Facilities. Work may include the study, planning, design and construction of environmental protection and remediation measures.

Justification

Plans and improvements to comply with Federal/State regulations.

Remarks

Other money represents escrowed remediation expenses.

Project Schedule

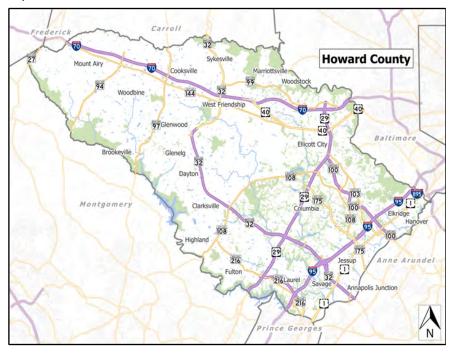
FY19 - Install stormwater treatment systems at Dayton and Mayfield vehicle maintenance shops. Remove USTs and ASTs and remediate contamination as necessary.

FY20-FY28 - Remove USTs and ASTs and remove contamination as necessary.

Operating Budget Impact

Annual Bond Redemption \$\$619,155

Vehicle wash pads require semi-annual service which costs \$10,000 per site, which is \$70,000 per year for the seven sites. Inspections and training costs are included in C0349-Environmental Compliance Operations.



GENERAL COUNTY PROJECTS

Number: C0313

Project: FY2008 ENVIRONMENTAL COMPLIANCE CONSTRUCTION

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	2,354	0	2,354	15	15	15	15	15	75	15	15	15	15	2,489
CONSTRUCTION	9,822	0	9,822	150	150	150	150	150	750	150	150	150	150	11,172
ADMINISTRATION	253	0	253	5	5	5	5	5	25	5	5	5	5	298
Total Expenditures	12,429	0	12,429	170	170	170	170	170	850	170	170	170	170	13,959
BONDS	12,229	0	12,229	170	170	170	170	170	850	170	170	170	170	13,759
PAY AS YOU GO	200	0	200	0	0	0	0	0	0	0	0	0	0	200
Total Funding	12,429	0	12,429	170	170	170	170	170	850	170	170	170	170	13,959

\$10,516,316 spent and encumbered through February 2018 \$9,108,111 spent and encumbered through February 2017

Project Status : Design:

Completed Regulatory Compliance Guide.

Prepared SPCC plans for all required facilities.

Prepared and updated SWPPPs at required facilities.

Conducted environmental compliance assessments of twelve facilities.

Trained staff annually on SPCC plans, SWPPPs, and handling hazardous wastes.

Prepared County-wide Hazard Communication Policy.

GIS inventory and database ongoing.

Set up hazardous waste collection program for Howard County sites.

Monitored stormwater.

Updated SPCC Plan and SWPPPs for all required facilities.

Construction:

Design and installation of vehicle wash pads and rainwater harvesting systems at seven fire stations complete and four park shops ongoing.

24 USTs removed.

Removal of leaking underground hydraulic lifts and contaminated soil completed at six sites.

Oil/water separator replacement completed at 8 sites.

Underground waste water storage tanks for truck wash pads and oil/water separators designed and installed at two sites.

Truck wash pad and trench drain replacement complete at Alpha Ridge Maintenance Shop.

Stormwater protection system installed at Cooksville fueling site.

FY 2018 Budget	12,429	170	12,599	170	170	170	170	170	850	170	170	170		13,959
Difference 2018 / 2019	0	(170)	(170)	0	0	0	0	0	0	0	0	0	170	0

GENERAL COUNTY PROJECTS

Number: C0315

Project: C0315-FY2009 PUBLIC SAFETY SYSTEM ENHANCEMENTS

Description

This project will provide a variety of functionality enhancements for the County's existing Public Safety System. Enhancements will include replacing the paper-based Fire emergency medical reporting system, upgrading the 911 system to the latest technology, and enabling Police field reporting.

Justification

The project builds on the existing Public Safety System, which is made up of software supporting 911, Police and Fire records, Detention Center management and Police, Fire and Sheriff mobile data computers. The system has been in use since 2001. The enhancements will provide electronic reporting for the Police and Fire Departments. The upgrade is needed to keep the existing systems up to speed with new technology advances.

Remarks

Current request is to continue the upgrade for Jail Management System and Computer-Aided Dispatch System. Additionally, the on-going upgrades to Police Records Management System and Field Based Reporting Systems will also continue to be supported.

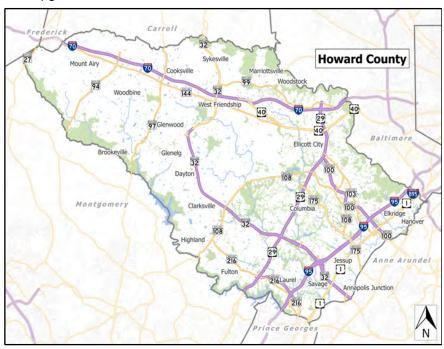
Project Schedule

FY19 - Continued replacement of hardware and software for Jail Management System (JMS) and Computer-Aided Dispatch (CAD) hardware. A phased replacement for Mobile Data Computers (MDCs) has been established and implementation of the scheduled replacement will continue.

Operating Budget Impact

Annual Bond Redemption \$ \$480,150

This project builds upon existing County computer systems. Any new hardware and software acquisitions will require ongoing maintenance and upgrades.



GENERAL COUNTY PROJECTS

Number: C0315

Project: FY2009 PUBLIC SAFETY SYSTEM ENHANCEMENTS

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	350	0	350	0	0	0	0	0	0	0	0	0	0	350
ADMINISTRATION	1,075	0	1,075	0	0	0	0	0	0	0	0	0	0	1,075
EQUIPMENT & FURNISHINGS	4,295	900	5,195	1,000	1,000	1,000	1,000	1,000	5,000	0	0	0	0	10,195
Total Expenditures	5,720	900	6,620	1,000	1,000	1,000	1,000	1,000	5,000	0	0	0	0	11,620
BONDS	4,770	900	5,670	1,000	1,000	1,000	1,000	1,000	5,000	0	0	0	0	10,670
OTHER SOURCES	950	0	950	0	0	0	0	0	0	0	0	0	0	950
Total Funding	5,720	900	6,620	1,000	1,000	1,000	1,000	1,000	5,000	0	0	0	0	11,620

\$4,919,804 spent and encumbered through February 2018 \$4,095,710 spent and encumbered through February 2017

Project Status: FY16 - Continue to replace MDCs for Police, Sheriff, Fire and continue with Web RMS and Field Reporting upgrades. FY17 - Implementation phase of web-based Police Records Management System (RMS) and automated Field Reporting solution. FY18 - Continued planned replacements and upgrades of hardware and software for Jail Management System and Computer Aided-Dispatch.

FY 2018 Budget	5,720	1,000	6,720	1,000	1,000	1,000	1,000	0	4,000	0	0	0		10,720
Difference 2018 / 2019	0	(100)	(100)	0	0	0	0	1,000	1,000	0	0	0	0	900

Project: C0317-FY2013 SYSTEMIC FACILITY IMPROVEMENTS

GENERAL COUNTY PROJECTS

Number: C0317

Description

A project to improve or upgrade the physical plant of public buildings, their equipment and systems, to replace plants/systems which have deteriorated beyond routine maintenance or provide for system management initiatives. The finish out and furnishing of space leased for various county operations is being performed under this project.

Justification

Building systems that exceeded their useful life, are inefficient, or have deteriorated beyond maintenance standards. Upgrades, replacement, or renovations are necessary to allow Facilities to maintain its' support function.

Remarks

- 1. Upgrade/improve building infrastructures to meet current facility standards/requirements; to meet changed/expanded/complex missions.
- 2. Construct lease space for employees moving out of the Dorsey Building, which is the site of the proposed Circuit Court. Construct lease space for employees moving out of the top three floors of the Gateway Building, which will be occupied by the MCE.

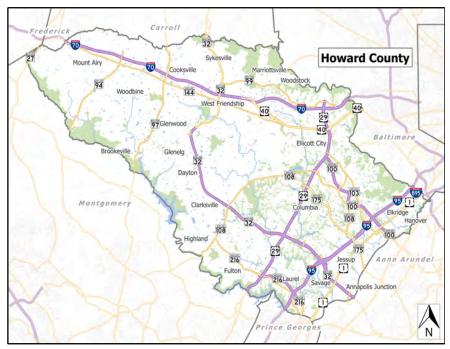
Project Schedule

FY19 - Design/Construction - Deferred Maintenance, Leased Space Renovations for Dorsey Staff, Unplanned Renovations and Relocations, Annual Roof Repairs. FY20 - Design/Construction, Deferred Maintenance and Unplanned Renovations and Relocations.

Operating Budget Impact

Annual Bond Redemption \$ \$4,216,500

Will provide future savings as a result of reduced maintenance and energy costs.



GENERAL COUNTY PROJECTS

Number: C0317

Project: FY2013 SYSTEMIC FACILITY IMPROVEMENTS

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	4,273	1,130	5,403	639	619	469	471	471	2,669	347	0	0	0	8,419
CONSTRUCTION	40,824	11,000	51,824	8,839	5,139	4,074	4,084	4,084	26,220	3,207	0	0	0	81,251
ADMINISTRATION	900	400	1,300	160	155	117	117	117	666	86	0	0	0	2,052
EQUIPMENT & FURNISHINGS	18,842	1,200	20,042	0	0	0	0	0	0	0	0	0	0	20,042
Total Expenditures	64,839	13,730	78,569	9,638	5,913	4,660	4,672	4,672	29,555	3,640	0	0	0	111,764
BONDS	46,775	13,730	60,505	9,638	5,913	4,660	4,672	4,672	29,555	3,640	0	0	0	93,700
OTHER SOURCES	64	0	64	0	0	0	0	0	0	0	0	0	0	64
PAY AS YOU GO	3,000	0	3,000	0	0	0	0	0	0	0	0	0	0	3,000
LEASE	15,000	0	15,000	0	0	0	0	0	0	0	0	0	0	15,000
Total Funding	64,839	13,730	78,569	9,638	5,913	4,660	4,672	4,672	29,555	3,640	0	0	0	111,764

\$43,514,558 spent and encumbered through February 2018 \$35,163,739 spent and encumbered through February 2017

Project Status: FY17 design and renovation of various County projects.

FY18 - Design/Construction - Leased space renovations for Dorsey staff, Deferred Maintenance, Howard Bld. renovations, Leased Space Renovations for Gateway Staff, Leased Space Renovations for CAC and Board of Elections, and Unplanned Renovations and Relocations. Expenditures for New school Maintenance site renovation until new FY18 capital project is effective.

FY 2018 Budget	64,839	15,041	79,880	8,993	8,140	8,152	8,152	8,120	41,557	8,120	0	0		129,557
Difference 2018 / 2019	0	(1,311)	(1,311)	645	(2,227)	(3,492)	(3,480)	(3,448)	(12,002)	(4,480)	0	0	0	(17,793)

GENERAL COUNTY PROJECTS

Number: C0319

Project: C0319-FY2010 TAX INCREMENT FINANCING PROJECTS

Description

A project for funding of tax increment financing projects.

Justification

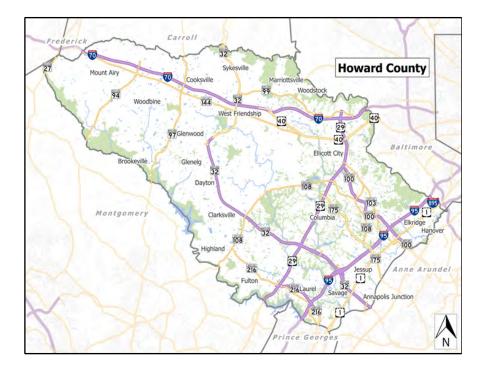
TIF Bonds of up to \$90 million have been authorized to enable construction of public improvements in the Cresent Special Tax Districts. The project also covers potential transit-oriented (TOD) public improvement needs, Special Tax Districts, the Laurel Park area, subject to developer application, County Executive approval and County Council approval.

Remarks

- 1. Downtown Columbia TIF Bonds project as planned per CB56-2016.
- 2. Laurel Park Special Tax District created in CR 111-2017.

Project Schedule

Budget request represents estimates of: \$30,000,000 for Laurel Park TIF projects \$90,000,000 for Downtown Columbia TIF FY20 - Potential future TIF project phases.



GENERAL COUNTY PROJECTS

Number: C0319

Project: FY2010 TAX INCREMENT FINANCING PROJECTS

Appr. Budget Total 2020 2021 2022 2023 2024 Total 2025 2026 2027 2028 Project 120,000 120,000 0 120,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(In Thousands)					Five	e Year Ca	apital Pro	gram				Master F	Plan	
Al Expenditures 120,000 0 120,000 30,000 0 0 0 0 30,000 0 0 0 0 150,000 BONDS 120,000 0 120,000 30,000 0 0 0 0 30,000 0 0 0 0 150,000 al Funding 120,000 0 120,000 30,000 0 0 0 0 30,000 0 0 0 150,000 611 spent and encumbered through February 2018 and encumbered through February 2017	Appropriation Object Class	_													
BONDS 120,000 0 120,000 30,000 0 0 0 0 30,000 0 0 0 0 150,000 al Funding 120,000 0 120,000 30,000 0 0 0 0 30,000 0 0 0 150,000 611 spent and encumbered through February 2018 and encumbered through February 2017	CONSTRUCTION	120,000	0	120,000	30,000	0	0	0	0	30,000	0	0	0	0	150,000
al Funding 120,000 0 120,000 30,000 0 0 0 0 30,000 0 0 0 0 150,000 611 spent and encumbered through February 2018 and encumbered through February 2017	Total Expenditures	120,000	0	120,000	30,000	0	0	0	0	30,000	0	0	0	0	150,000
611 spent and encumbered through February 2018 and encumbered through February 2017	TIF BONDS	120,000	0	120,000	30,000	0	0	0	0	30,000	0	0	0	0	150,000
and encumbered through February 2017	Total Funding	120,000	0	120,000	30,000	0	0	0	0	30,000	0	0	0	0	150,000
t Status: \$48,225,000 in TIF bonds were issued for the cresent in October 2017.	\$2,170,611 spent and encumbered spent and encumbered through F	d through February 2017	uary 2018				0	0	0	30,000	0	0	0	0	
	FY 2018 Budget	120,000	40,000	160,000	0	0	0	0	0	0	0	0	0		160,00

Difference 2018 / 2019 0 (40,000) (40,000) 30,000 0 0 0 30,000 0 0 0 0 (10,000)

GENERAL COUNTY PROJECTS

Number: C0322

Project: C0322-FY2012 CENTRAL FLEET SYSTEMIC IMPROVEMENTS and FUEL SYSTEM

Description

This is a project to fund improvements to the County's fuel storage/dispensing/monitoring systems, and to improve or upgrade the physical plant of Fleet Equipment.

Justification

These improvements to the County's fuel storage/dispensing/monitoring systems are needed to meet the Maryland Department of Environment (MDE) Code of Maryland Regulations (COMAR) 26.10.03.10A, including installing new above ground fuel storage systems to replace underground units, and technology upgrades to automate the collection and reporting of fuel data to increase the County's ability to manage fuel accountability.

Remarks

- 1. Upgrade/replace/improve fuel storage/dispensing/monitoring systems and fleet equipment infrastructures to meet current laws, regulations and standards/requirements; to meet changed/expanded/complex missions; to extend equipment life expectancy; to improve efficiency, effectiveness and life safety; and for environmental/safety corrections.
- 2. OTHER revenue represents central fleet funding.

Project Schedule

FY18/FY19 - Construction of Corridor Rd and Safety Complex Fuel Stations.

FY19 - Design Dayton Fuel Station, Closure of FS9 Fuel Station.

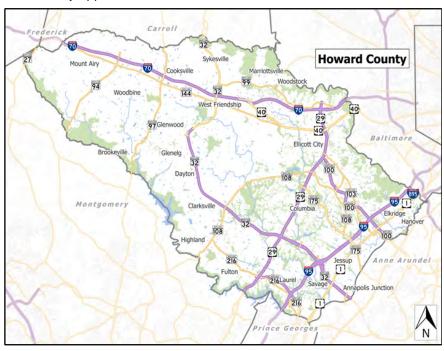
FY20 - Construct Dayton Fuel Station.

FY21 - Project Close.

Operating Budget Impact

Annual Bond Redemption \$ \$221,445

Bureau of Facilities O&M and annual inspections and testing will increase by approx \$20,000.



GENERAL COUNTY PROJECTS

Number: C0322

Project: FY2012 CENTRAL FLEET SYSTEMIC IMPROVEMENTS and FUEL SYSTEM

(In Thousands)					Fiv	e Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	497	0	497	0	0	0	0	0	0	0	C	0	0	497
CONSTRUCTION	5,524	0	5,524	500	0	0	0	0	500	0	C	0	0	6,024
Total Expenditures	6,021	0	6,021	500	0	0	0	0	500	0	0	0	0	6,521
BONDS	4,421	0	4,421	500	0	0	0	0	500	0	C	0	0	4,921
OTHER SOURCES	600	0	600	0	0	0	0	0	0	0	C) 0	0	600
LEASE	1,000	0	1,000	0	0	0	0	0	0	0	C	0	0	1,000
Total Funding	6,021	0	6,021	500	0	0	0	0	500	0	0	0	0	6,521

\$3,612,067 spent and encumbered through February 2018 \$3,299,132 spent and encumbered through February 2017

Project Status: FY17 - Corridor road and safety complex fuel stations are in design.

FY 2018 Budget	6,021	926	6,947	2,330	1,080	0	0	0	3,410	0	0	0		10,357
Difference 2018 / 2019	0	(926)	(926)	(1,830)	(1,080)	0	0	0	(2,910)	0	0	0	0	(3,836)

Project: C0324-FY2012 GEODETIC NETWORK AUTOMATION

GENERAL COUNTY PROJECTS

Number: C0324

Description

A project to purchase survey global positioning system (GPS) and digital survey equipment. To allow the County to take full advantage of the federal and international network of 120 satellites. To use existing County Geodetic Control Network for incident and small scale mapping. To provide computer management, asset management and staff training relating to GPS equipment.

Justification

Existing County equipment is over 20 years old and cannot utilize the full GPS network of 120 satellites. The supporting software for the existing equipment is in a format that is not supported by the manufacturer and current Howard County computers. This equipment is used to maintain the Howard County Geodetic Network of 1200 monuments. This network loses 20% of its monumentation each year and this equipment is used to replace that lose. The equipment and this network are used in every water, sewer, storm drain, park, building, site related capital project County wide and mapping for any general or homeland defense incidents. The network is used by FEMA in the determination of flood insurance credits for residence by Howard County.

Remarks

- 1. The County presently must maintain 1,200 Geodetic Control Network Monuments (Horizontal and Vertical). 20% must be re-established each year.
- 2. Upgrading the existing GPS and survey equipment will shorten field observation time by 50% enabling manpower to focus on additional projects.
- 3. Upgrading the existing GPS and survey equipment will allow the use of modern software that is compatible with current Howard County computers and communication network.
- 4. To purchase equipment to allow the Department of Public Works to be able to have incident and small scale mapping capabilities.
- 5. Upgrade computers and software to process point clouds. The upgraded computers will also be used with the national re-adjustment of the North American datum in 2022.

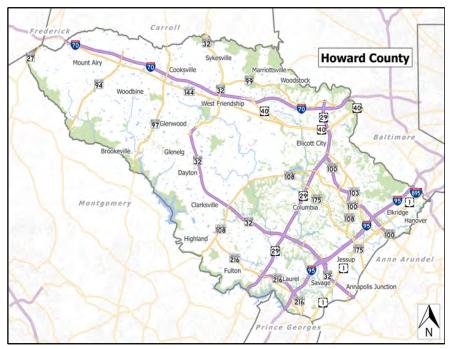
Project Schedule

FY19 - Purchase mapping and point cloud software.

Operating Budget Impact

Annual Bond Redemption \$ \$9,450

No impact for five (5) years as maintenance, software and training provided under initial purchase.



GENERAL COUNTY PROJECTS

Number: C0324

Project: FY2012 GEODETIC NETWORK AUTOMATION

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
ADMINISTRATION	60	0	60	15	15	10	0	0	40	0	0	0	0	100
EQUIPMENT & FURNISHINGS	375	0	375	0	25	40	0	0	65	0	0	0	0	440
Total Expenditures	435	0	435	15	40	50	0	0	105	0	0	0	0	540
BONDS	145	0	145	0	25	40	0	0	65	0	0	0	0	210
PAY AS YOU GO	290	0	290	15	15	10	0	0	40	0	0	0	0	330
Total Funding	435	0	435	15	40	50	0	0	105	0	0	0	0	540

\$113,705 spent and encumbered through February 2018

\$71,617 spent and encumbered through February 2017
Project Status: FY15 - Purchase HDS scanner, software and training.

FY16 - Purchased UAV equipment, software and training and HDS scanner, software and training.

FY18 - Purchased BLK360 scanner

FY 2018 Budget	435	15	450	40	0	0	0	0	40	0	0	0		490
Difference 2018 / 2019	0	(15)	(15)	(25)	40	50	0	0	65	0	0	0	0	50

GENERAL COUNTY PROJECTS

Number: C0327

Project: C0327-FY2013 ENTERPRISE CONTENT MANAGEMENT (ECM)

Description

The ECM will remove critical strain from the existing email system and replace our outdated records management system. Improved functionality includes enterprise archive, search and legal discovery/hold. Records management and archive functionality will be extended to enterprise systems like email, file shares, SharePoint and CRM.

Justification

The new system will solve a number of existing problems. The County's email system is severely strained. Without changes, it will fail. Unstructured data in other enterprise systems is largely unmanaged. Users spend large amounts of time searching for documents and County official records are easily lost. Existing eDiscovery processes are time intensive and subject to error. Once fully implemented in FY 2017, ECM will require a level of sustained system management and support in the outlying 5 years for the current 3 environments of Production, Training, and Development.

Remarks

Project will be closed.

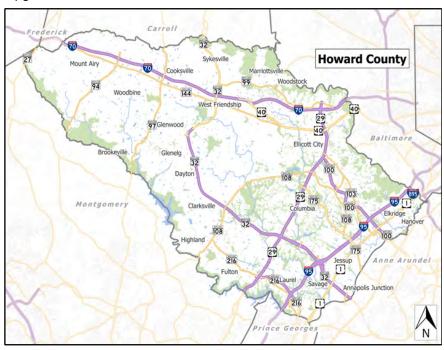
Project Schedule

FY 19- Records for 32 departments have been successfully transitioned to the new County Enterprise Records Management System. Police records are largely complete and funding already appropriated. Project is in the financial closeout process.

Operating Budget Impact

Annual Bond Redemption \$ \$33,750

New hardware and software will require ongoing maintenance and upgrades.



GENERAL COUNTY PROJECTS

Number: C0327

Project: FY2013 ENTERPRISE CONTENT MANAGEMENT (ECM)

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	401	0	401	0	0	0	0	0	0	0	0	0	0	401
CONSTRUCTION	2,195	0	2,195	0	0	0	0	0	0	0	0	0	0	2,195
Total Expenditures	2,596	0	2,596	0	0	0	0	0	0	0	0	0	0	2,596
BONDS	750	0	750	0	0	0	0	0	0	0	0	0	0	750
PAY AS YOU GO	1,846	0	1,846	0	0	0	0	0	0	0	0	0	0	1,846
Total Funding	2,596	0	2,596	0	0	0	0	0	0	0	0	0	0	2,596
\$2,587,960 spent and encumbered \$2,587,960 spent and encumbered Project Status : Project is in the clo	d through Febr	•												
FY 2018 Budget	2,596	0	2,596	0	0	0	0	0	0	0	0	0		2,596
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

GENERAL COUNTY PROJECTS

Number: C0329

Project: C0329-FY2012 ENERGY MANAGEMENT/IMPROVEMENTS

Description

A project to develop a 5-10 year business plan for energy performance optimization. This project allows the county to inventory and assess its facilities for the feasibility of energy improvements, especially those improvements that can be supported by rebates and incentives. Both current and alternative energy solutions will be considered for life-cycle cost-effectiveness.

Justification

This project supports the County's commitment to energy savings and environmental performance. It will allow the county to effectively pursue external energy-related rebates, incentives, demand response, and similar support as these become available. External support for energy improvements usually requires some matching commitment from recipients in the form of capital or analysis. This project will fund those potential matches. It will also support a program for scheduling of infrastructure replacement to minimize the future energy costs of all county operations.

Remarks

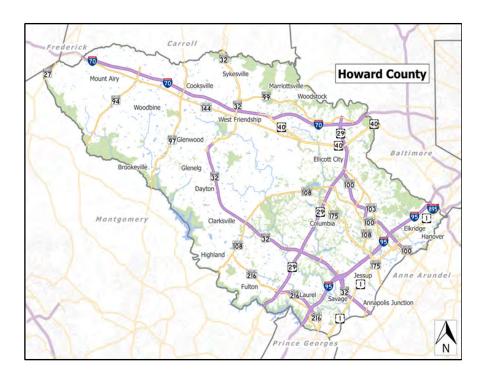
- 1. The funding for this will provide direction for decision making as it applies to energy use for public buildings, utilities, transportation, County and public works operations.
- 2. Initiate studies will be: Assessments of HVAC systems for B & O Museum, Northern District, Cedar Lane Park West and Detention center Intake Area; Assessment of Detention Center for improvements of Facility Exterior Lighting.

Project Schedule

FY18 - Implement study/analysis recommendations

Operating Budget Impact

Annual Bond Redemption \$ \$11,250



GENERAL COUNTY PROJECTS

Number: C0329

Project: FY2012 ENERGY MANAGEMENT/IMPROVEMENTS

(In Thousands)					Fiv	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	250	0	250	0	0	0	0	0	0	0	0	0	0	250
CONSTRUCTION	650	0	650	0	0	0	0	0	0	0	0	0	0	650
Total Expenditures	900	0	900	0	0	0	0	0	0	0	0	0	0	900
BONDS	250	0	250	0	0	0	0	0	0	0	0	0	0	250
PAY AS YOU GO	650	0	650	0	0	0	0	0	0	0	0	0	0	650
Total Funding	900	0	900	0	0	0	0	0	0	0	0	0	0	900

\$506,208 spent and encumbered through February 2018 \$506,208 spent and encumbered through February 2017

Project Status: FY17 - Selected Energy consultant & completed study/analysis; completed lighting retrofit at Mayfield & Cooksville; completed initial LEED EBOM plans

FY 2018 Budget	900	0	900	0	0	0	0	0	0	0	0	0		900
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Number: C0331

Project: C0331-FY2014 ELLICOTT CITY PARKING LOT ENHANCEMENT

Description

A project to plan, design and implement a set of improvements to publicly owned land currently designated as Lot D in Ellicott City. Funding will be utilized to improve and expand storm water management, to alter the traffic flow and movement and to more fully expose the Tiber-Hudson River as an amenity and natural resource.

Justification

The County's Watershed Implementation Plan requires a substantial reduction in the pollutants that enter the Patapsco River and the Chesapeake Bay. The extensive impervious surface in Ellicott City requires greater stormwater management in order to control pollution runoff from its parking lots. The Tiber-Hudson is currently channelized through the lot, but has the potential to be improved as a natural and visual amenity and public gathering place. The parking lot is not efficient and egress to Main Street has limited sight distance. Public funds will be used to address and better control stormwater runoff, to create a public amenity space for the community and to improve the parking on the County-owned lot.

Remarks

- 1. Funding to be generated from legislation CB-8 & CR21 for stormwater utility funding, known as Watershed Protection and Restoration fund.
- 2. Additional funding may be available through the State.

Project Schedule

FY19 - Design for opening of the river and addition of water quality treatment.



GENERAL COUNTY PROJECTS

Number: C0331

Project: FY2014 ELLICOTT CITY PARKING LOT ENHANCEMENT

(In Thousands)				Five	Year Ca	pital Pro	gram				Master I	Plan		
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	200	0	200	0	0	0	0	0	0	0	0	0	0	200
CONSTRUCTION	0	0	0	1,000	0	0	0	0	1,000	0	0	0	0	1,000
Total Expenditures	200	0	200	1,000	0	0	0	0	1,000	0	0	0	0	1,200
STORMWATER UTILTY FUNDING	200	0	200	1,000	0	0	0	0	1,000	0	0	0	0	1,200
Total Funding	200	0	200	1,000	0	0	0	0	1,000	0	0	0	0	1,200

Project Status: Designed Parking Lot D improvements concept

FY 2018 Budget	200	1,000	1,200	0	0	0	0	0	0	0	0	0		1,200
Difference 2018 / 2019	0	(1,000)	(1,000)	1,000	0	0	0	0	1,000	0	0	0	0	0

Project: C0332-FY2014 BUS STOP IMPROVEMENTS

GENERAL COUNTY PROJECTS

Number: C0332

Description

A project to implement a series of systemic improvements to the Regional Transportation Agency (RTA) bus stops. These improvements may include the installation and refurbishment of bus shelters, concrete pads, bus stop signs, connecting sidewalks, curb cuts (consistent with ADA requirements), crosswalks, route map holders, trashcans and other improvements. The Office of Transportation, in conjunction with the Department of Planning and Zoning, will determine the location and extent of these improvements.

Justification

A field survey of the RTA bus stops for the Pedestrian Master Plan indicates that these improvements are needed for passenger access, safety, and comfort as well as to conform with ADA guidelines. The proposed improvements also seek to increase ridership on the local system by making stops more accessible and convenient.

Remarks

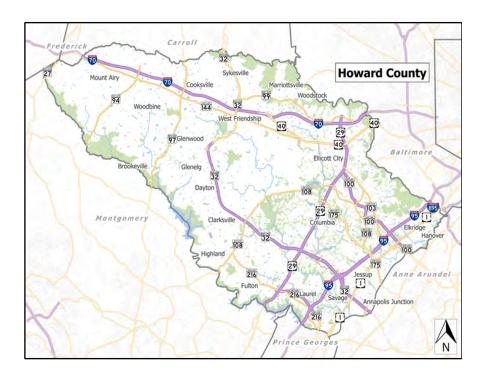
- 1. Installation of these improvements will comply with the Americans with Disabilities Act (ADA) regulations.
- 2. Grant funding through the Maryland Transit Administration for capital improvements is included in the budget.

Project Schedule

Program - Construction and Rehabilitation of bus stops.

Operating Budget Impact

Annual Bond Redemption \$ \$10,800



GENERAL COUNTY PROJECTS

Project: FY2014 BUS STOP IMPROVEMENTS Number: C0332

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	105	0	105	0	0	0	0	0	0	0	0	0	0	105
LAND ACQUISITION	85	0	85	0	0	0	0	0	0	0	0	0	0	85
CONSTRUCTION	870	50	920	250	250	200	100	100	900	100	100	0	0	2,020
Total Expenditures	1,060	50	1,110	250	250	200	100	100	900	100	100	0	0	2,210
BONDS	240	0	240	0	0	0	0	0	0	0	0	0	0	240
GRANTS	200	0	200	0	0	0	0	0	0	0	0	0	0	200
PAY AS YOU GO	620	50	670	250	250	200	100	100	900	100	100	0	0	1,770
Total Funding	1,060	50	1,110	250	250	200	100	100	900	100	100	0	0	2,210

\$366,129 spent and encumbered through February 2018
\$174,110 spent and encumbered through February 2017
Project Status: Identification of locations and construction of bus stop improvements. Construction and Rehabilitation of bus stops.

FY 2018 Budget	1,060	120	1,180	120	120	120	200	150	710	150	0	0		2,040
Difference 2018 / 2019	0	(70)	(70)	130	130	80	(100)	(50)	190	(50)	100	0	0	170

Project: C0333-FY2015 DETENTION CENTER RENOVATIONS

GENERAL COUNTY PROJECTS

Number: C0333

Description

The Department of Corrections currently is facing severe challenges and regulatory mandates that must be resolved through the renovation and expansion of the Detention Center.

Justification

- 1. The current medical unit lacks sufficient space to meet its operational needs and comply with HIPPA and PREA statutes.
- 2. The Federal Prison Rape Elimination Act (PREA) requires housing for juveniles charged as adults to be housed separately by sight and sound from adults.
- 3. The current intake/discharge area was built in 1982 and way beyond capacity, creating significant security & staff efficiency problems.
- 4. The current maximum security housing area is at maximum capacity and needs to be in close proximity to the intake/discharge area.
- 5. The Center's disciplinary segregation unit is not of the size or construction to safely & securely provide the necessary isolation and separation.
- 6. The Center's existing Control Center components & locking systems are antiquated relative to today's security requirements, and are falling apart.
- 7. Additionally, the existing Administrative area does not provide the effective space for the Center.

Remarks

- 1. A/E selection complete, master planning effort started in FY16.
- 2. Funding in prior fiscal years will allow completion of critical renovation work while identifying the long term requirements. A preliminary Draft Master Plan has been completed for the 20 year need of the Department of Corrections. Preliminary estimates are reflected in the budget. As the Master Plan is developed and adopted the Bureau of Facilities and the Department of Corrections may make adjustments to the funding requests in future years.

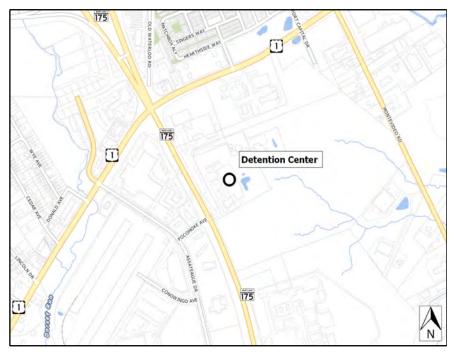
Project Schedule

- FY19 Explore alternative financing and project delivery approach.
- FY20 Site work for new Detention Center.
- FY21 Award Construction of Detention Center.
- FY22 Complete Construction.
- FY23 Install FFE and Complete Commissioning.

Operating Budget Impact

Annual Bond Redemption \$ \$3,431,655

Bur of Fac sees no additional impact in FY17. Earliest operating impact will be FY18.



GENERAL COUNTY PROJECTS

Number: C0333

Project: FY2015 DETENTION CENTER RENOVATIONS

(In Thousands)	nds) Five Year Capital Program											Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,391	0	1,391	2,500	0	0	0	0	2,500	0	0	0	0	3,891
CONSTRUCTION	9,586	0	9,586	6,700	25,604	25,604	0	0	57,908	0	0	0	0	67,494
ADMINISTRATION	20	0	20	500	0	0	0	0	500	0	0	0	0	520
EQUIPMENT & FURNISHINGS	754	0	754	0	0	0	3,600	0	3,600	0	0	0	0	4,354
Total Expenditures	11,751	0	11,751	9,700	25,604	25,604	3,600	0	64,508	0	0	0	0	76,259
BONDS	11,751	0	11,751	9,700	25,604	25,604	3,600	0	64,508	0	0	0	0	76,259
Total Funding	11,751	0	11,751	9,700	25,604	25,604	3,600	0	64,508	0	0	0	0	76,259

\$6,969,219 spent and encumbered through February 2018

\$1,950,248 spent and encumbered through February 2017
Project Status: Schematic design of new Detention Center and work release facility in process. Design to be completed in approximately 20 months.

FY 2018 Budget	11,751	9,700	21,451	25,604	25,604	3,600	0	0	54,808	0	0	0		76,259
Difference 2018 / 2019	0	(9,700)	(9,700)	(15,904)	0	22,004	3,600	0	9,700	0	0	0	0	0

Project: C0334-FY2014 EMERGENCY ALTERNATIVE POWER

GENERAL COUNTY PROJECTS

Number: C0334

Description

Relative to County facilities, implement a program to ensure continuity of operations in County facilities for purposes relative to essential functions during various emergency scenarios and make the necessary hardware modifications. Project changes may be undertaken based on lessons learned in actual or exercise scenarios.

Justification

Analyses of the County's ability to continue essential functions and deliver needed emergency services during major weather events has indicated the need for more emergency generation and/or emergency power generation connection capabilities for County facilities.

Remarks

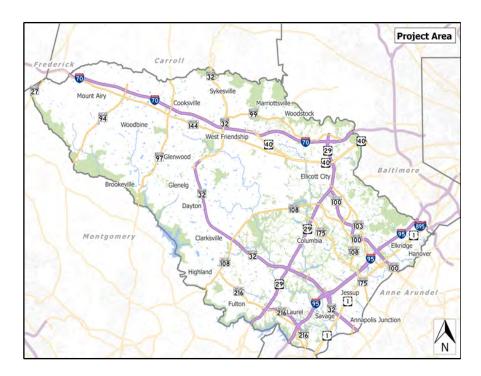
- 1. GRANT represents FEMA mitigation grant awarded July 2015 and federal and or state funding sought to maximize County funding.
- 2. Construction will be phased.
- 3. Request represents program advancement.

Project Schedule

FY20 - Design and construct generator at Ridge Road Shop. Plan emergency power approach for facilities going forward. Continue to implement upgrades until funds are fully utilized.

Operating Budget Impact

Annual Bond Redemption \$ \$67,500



GENERAL COUNTY PROJECTS

Number: C0334

Project: FY2014 EMERGENCY ALTERNATIVE POWER

(In Thousands)	n Thousands)						pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	300	0	300	50	0	0	0	0	50	0	0	0	0	350
CONSTRUCTION	1,000	0	1,000	450	0	0	0	0	450	0	0	0	0	1,450
Total Expenditures	1,300	0	1,300	500	0	0	0	0	500	0	0	0	0	1,800
BONDS	1,000	0	1,000	500	0	0	0	0	500	0	0	0	0	1,500
GRANTS	300	0	300	0	0	0	0	0	0	0	0	0	0	300
Total Funding	1,300	0	1,300	500	0	0	0	0	500	0	0	0	0	1,800

\$1,128,955 spent and encumbered through February 2018 \$654,988 spent and encumbered through February 2017

Project Status: Installations complete at Bureau of Útilities, Animal Control, and Station 5. Design comlpete for Ridge Road. FY19 request is to fund Ridge Road installation. This is a design/build project.

FY 2018 Budget	1,300	0	1,300	0	0	0	0	0	0	0	0	0		1,300
Difference 2018 / 2019	0	0	0	500	0	0	0	0	500	0	0	0	0	500

GENERAL COUNTY PROJECTS

Number: C0335

Project: C0335-FY2014 COMMUNITY RESOURCES and SERVICES FACILITY/PROGRAM ENHANCEMENTS

Description

A project to renovate and expand the facilities for the Department of Community Resources and Services (DCRS). This is to include 50+ Centers/ sites and space needs for other departmental programming.

Justification

As determined by the 2015 Master Plan, the existing 50+ Facilities are not adequate to support the tremendously increasing demand for such services/facilities, nor are the existing facilities necessarily located to effectively service all the expanding aging population.

Remarks

The Master Plan was completed in 2015. The next step is the identification for a site for a new 50+ Center or an expansion at the current East Columbia location. Additional funds are requested in FY19 to make immediate repairs and improvements to the Florence Bain Senior Center, the most actively used senior center in the County. We are currently assessing the exact needs for the building. Requested improvements include modifications to house a fitness room, upgrades to building HVAC, installation of perimeter lighting and other minor interior improvements.

Project Schedule

FY19 - Design and Renovation of Bain Center. Complete POR and design of New 50+ Center.

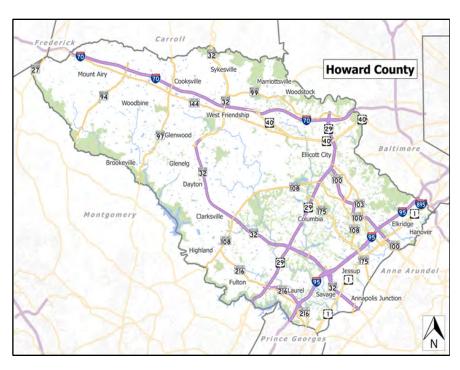
FY20 - Land Acquisition for New 50+ Center.

FY21 - Construct New 50+ Center.

FY22 - Furniture, Fixtures and Equipment for New 50+ Center. Project Close Out.

Operating Budget Impact

Annual Bond Redemption \$ \$729,000 Bureau of Facilities sees no impact to FY18 operating budget.



GENERAL COUNTY PROJECTS

Project: FY2014 COMMUNITY RESOURCES and SERVICES FACILITY/PROGRAM **ENHANCEMENTS**

Number: C0335

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	500	350	850	850	0	0	0	0	850	0	C	0	0	1,700
LAND ACQUISITION	0	0	0	2,500	0	0	0	0	2,500	0	C	0	0	2,500
CONSTRUCTION	0	1,050	1,050	0	10,500	0	0	0	10,500	0	C	0	0	11,550
EQUIPMENT & FURNISHINGS	0	0	0	0	0	500	0	0	500	0	C	0	0	500
Total Expenditures	500	1,400	1,900	3,350	10,500	500	0	0	14,350	0	0	0	0	16,250
BONDS	450	1,400	1,850	3,350	10,500	500	0	0	14,350	0	C) 0	0	16,200
PAY AS YOU GO	50	0	50	0	0	0	0	0	0	0	C	0	0	50
Total Funding	500	1,400	1,900	3,350	10,500	500	0	0	14,350	0	0	0	0	16,250

\$339,382 spent and encumbered through February 2018 \$296,982 spent and encumbered through February 2017

Project Status : Facility improvement study for Bain has begun. Programming/POR for 50+ Center to begin in early 2018 with EOI Architect.

FY 2018 Budget	500	1,200	1,700	3,550	10,500	500	0	0	14,550	0	0	0		16,250
Difference 2018 / 2019	0	200	200	(200)	0	0	0	0	(200)	0	0	0	0	0

GENERAL COUNTY PROJECTS

Number: C0336

Project: C0336-FY2014 LANDFILL RESOURCE MANAGEMENT

Description

A project for the design and construction of resource improvements at the Alpha Ridge Landfill and Resident's Recycling and Demonstration Center. The project will include implementing improvements to existing facilities within the landfill and Recycling Center using renewable and sustainable technologies; seek improvements at the Recycling Center in handling material recovery and reuse; and address storm water quality and watershed improvements in accordance with the latest National Pollutant Discharge Elimination System (NPDES) Industrial permit requirements.

Justification

The project will aide in meeting the NPDES and Municipal Separate Storm Sewer System (MS4) requirements at Alpha Ridge Landfill, reduce operating costs, and increase public awareness of improved storm water quality techniques and renewable/sustainable technologies.

Remarks

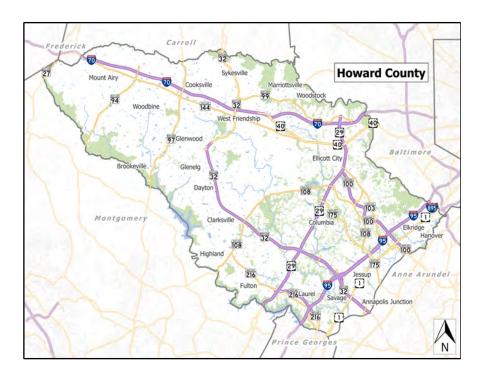
1. Projects directly related to municipal solid waste activities are funded under C-0299.

Project Schedule

FY19 - Solar Feasibility Study.

Operating Budget Impact

Annual Bond Redemption \$ \$18,000



GENERAL COUNTY PROJECTS

Number: C0336

Project: FY2014 LANDFILL RESOURCE MANAGEMENT

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	250	0	250	0	0	0	0	0	0	0	0	0	0	250
CONSTRUCTION	250	0	250	0	0	0	0	0	0	0	0	0	0	250
Total Expenditures	500	0	500	0	0	0	0	0	0	0	0	0	0	500
BONDS	400	0	400	0	0	0	0	0	0	0	0	0	0	400
PAY AS YOU GO	100	0	100	0	0	0	0	0	0	0	0	0	0	100
Total Funding	500	0	500	0	0	0	0	0	0	0	0	0	0	500

\$199,930 spent and encumbered through February 2018

\$199,930 spent and encumbered through February 2017

Project Status: FY14 - Design stormwater technologies demonstration area. Evaluate feasibility of wind energy. Expand HHW building to reduce stormwater impact. Develop wildlife work plan and begin pursuing certification.

FY15 - Plant/construct American Elm pilot reforestation.

FY16 - Monitor aforestation.

FY17 û Monitor wildlife projects.

FY 2018 Budget	500	0	500	0	0	0	0	0	0	0	0	0	•	500
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Number: C0337

Project: C0337-FY2014 ELLICOTT CITY IMPROVEMENTS and ENHANCEMENTS

Description

This is a project to provide a variety of repairs and improvements to public infrastructure and address other community improvements and to make improvements to the downtown and historic district of the Howard County Seat. This project may include land acquisition for water quality and drainage needs and other public improvements.

Justification

Community has requested improvements to the downtown Ellicott City area.

Remarks

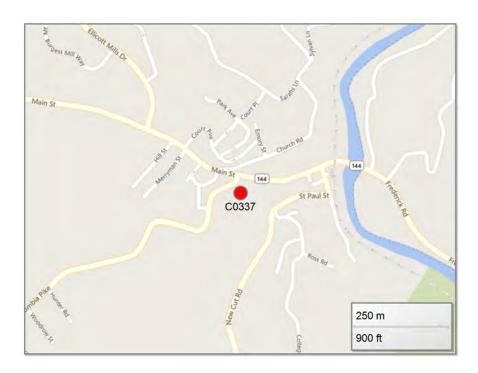
- 1. A portion of current request represents funding to be generated from legislation CB-8 & CR21 for stormwater utility funding, known as Watershed Protection and Restoration fund.
- 2. Construction of some projects may be dependent upon donation of the necessary easements and/or resident cost share participation.
- 3. TAO #3 2014 current pending legislation will add \$100,000 grant funding for Ellicott City Streetscape program.
- 4. Construction of some projects may be dependent on the donation of the necessary easements and/or property owner cost share participation.
- 5. OTHER SOURCES revenue represents homeowner contribution.
- 6. GRANT represents anticipated FEMA and State funding for Ellicott City.

Project Schedule

FY19 - Continue work to repair damage from July 2016 storm.

Operating Budget Impact

Annual Bond Redemption \$ \$76,500



GENERAL COUNTY PROJECTS

Number: C0337

Project: FY2014 ELLICOTT CITY IMPROVEMENTS and ENHANCEMENTS

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	500	0	500	0	0	0	0	0	0	0	0	0	0	500
LAND ACQUISITION	1,000	0	1,000	0	0	0	0	0	0	0	0	0	0	1,000
CONSTRUCTION	2,875	1,415	4,290	0	0	0	0	0	0	0	0	0	0	4,290
Total Expenditures	4,375	1,415	5,790	0	0	0	0	0	0	0	0	0	0	5,790
BONDS	1,700	0	1,700	0	0	0	0	0	0	0	0	0	0	1,700
DEVELOPER CONTRIBUTION	0	165	165	0	0	0	0	0	0	0	0	0	0	165
GRANTS	170	1,250	1,420	0	0	0	0	0	0	0	0	0	0	1,420
OTHER SOURCES	5	0	5	0	0	0	0	0	0	0	0	0	0	5
PAY AS YOU GO	1,000	0	1,000	0	0	0	0	0	0	0	0	0	0	1,000
STORMWATER UTILTY FUNDING	1,500	0	1,500	0	0	0	0	0	0	0	0	0	0	1,500
Total Funding	4,375	1,415	5,790	0	0	0	0	0	0	0	0	0	0	5,790

\$3,998,515 spent and encumbered through February 2018 \$2,723,815 spent and encumbered through February 2017

Project Status: Performed design for Main St. crosswalk.

Performed concept design for Parking Lot F improvements.

Partial funding for Parking Lot E improvements.

Performed design for water quality bumpout on Ellicott Mills Drive.

Performed inspection of stream walls and began repairs of walls.

Repair walls at Court Ave, Tonge Row, Lot E northeast corner, Precious Gifts, and 84 inch Culvert.

Perform re-paving of Main Street

Perform design for Courthouse Drive roadway stabilization.

FY 2018 Budget	4,375	2,800	7,175	0	0	0	0	0	0	0	0	0		7,175
Difference 2018 / 2019	0	(1,385)	(1,385)	0	0	0	0	0	0	0	0	0	0	(1,385)

GENERAL COUNTY PROJECTS

Project: C0338-FY2015 BROADBAND INSTALLATIONS Number: C0338

Description

The Broadband Installation project will improve the fiber installed through the ICBN grant and extend services to various organizations including adding additional county facilities to our fiber network. This will also be used for the equipment inside the building to light the fiber and provide services.

Justification

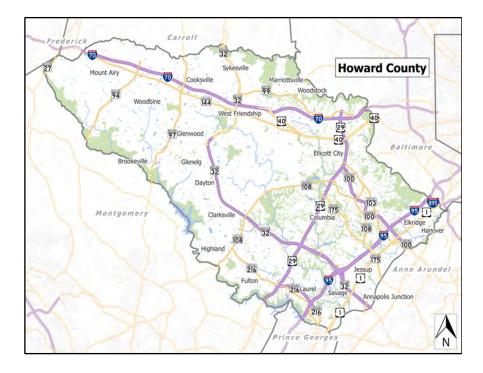
This is to help reduce overall leased line costs as well as provide equipment refreshes to support higher network speeds that are being requested.

Remarks

- 1. Build out and infrastructure upgrades continue through fiscal year as necessary.
- 2. Fiber build out of laterals and backbone will also continue throughout fiscal year as necessary.

Project Schedule

Provide fiber to County Government locations as needed.



GENERAL COUNTY PROJECTS

Project: FY2015 BROADBAND INSTALLATIONS Number: C0338

(In Thousands)					Fiv	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	10,000	0	10,000	0	0	0	0	0	0	0	0	0	0	10,000
Total Expenditures	10,000	0	10,000	0	0	0	0	0	0	0	0	0	0	10,000
OTHER SOURCES	10,000	0	10,000	0	0	0	0	0	0	0	0	0	0	10,000
Total Funding	10,000	0	10,000	0	0	0	0	0	0	0	0	0	0	10,000

\$878,362 spent and encumbered through February 2018
\$809,096 spent and encumbered through February 2017
Project Status: Several County facilities have been connected to the fiber network during prior fiscal years and will continue thereby reducing the County's cost for leased lines.

FY 2018 Budget	10,000	0	10,000	0	0	0	0	0	0	0	0	0		10,000
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Number: C0339

Project: C0339-FY2015 BROADBAND INSTALLATIONS NON-COUNTY GOVERNMENT

Description

The Broadband Installation project will extend services to various non-county government organizations including adding facilities to our fiber network. This will also be used for the equipment inside the building to light the fiber and provide services.

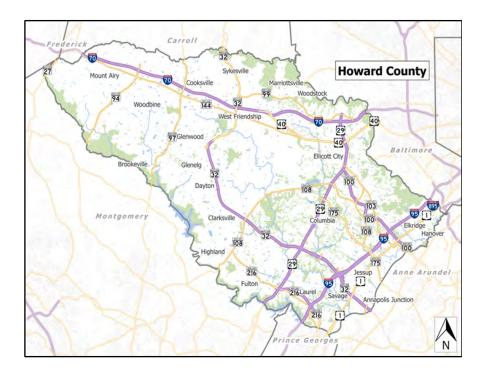
Justification

Remarks

OTHER revenues are generated from fee-supported bonds or capital lease.

Project Schedule

FY19 - Continue to add non-County government agencies to the fiber network as demand requires.



GENERAL COUNTY PROJECTS

Number: C0339

Project: FY2015 BROADBAND INSTALLATIONS NON-COUNTY GOVERNMENT

(In Thousands)					Fiv	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	10,000	0	10,000	0	0	0	0	0	0	0	C) 0	0	10,000
Total Expenditures	10,000	0	10,000	0	0	0	0	0	0	0	0) 0	0	10,000
OTHER SOURCES	10,000	0	10,000	0	0	0	0	0	0	0	C) 0	0	10,000
Total Funding	10,000	0	10,000	0	0	0	0	0	0	0	0) 0	0	10,000

\$1,849,768 spent and encumbered through February 2018

\$1,651,986 spent and encumbered through February 2017

Project Status: Several non-County government agencies, such as Howard County Public School System, Howard County Public Library System, and Howard Community College, were added to the fiber network in prior fiscal years. Additions will continue as demand requires in FY19 thereby continuing to generate revenue as customers sign long-term service contracts.

FY 2018 Budget	10,000	0	10,000	0	0	0	0	0	0	0	0	0		10,000
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

GENERAL COUNTY PROJECTS

Number: C0340

Project: C0340-FY2015 BROADBAND INSTALLATIONS NON-GOVERNMENT

Description

The Broadband Installation project will extend services to non-government facilities to our fiber network. This will also be used for the equipment inside the building to light the fiber and provide services.

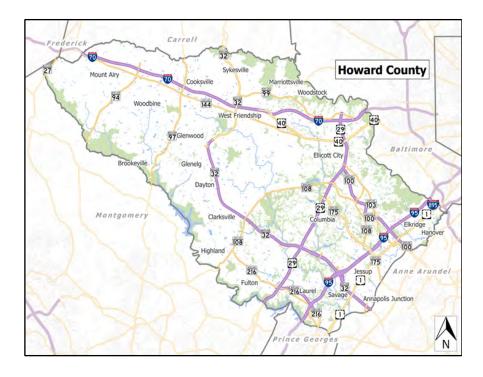
Justification

Remarks

OTHER revenues are generated from fee-supported bonds or capital lease.

Project Schedule

FY19 - Continue adding customers to the network as demand requires.



GENERAL COUNTY PROJECTS

Number: C0340

Project: FY2015 BROADBAND INSTALLATIONS NON-GOVERNMENT

(In Thousands)					Fiv	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	10,000	0	10,000	0	0	0	0	0	0	0	C) 0	0	10,000
Total Expenditures	10,000	0	10,000	0	0	0	0	0	0	0	0) 0	0	10,000
OTHER SOURCES	10,000	0	10,000	0	0	0	0	0	0	0	C) 0	0	10,000
Total Funding	10,000	0	10,000	0	0	0	0	0	0	0	0) 0	0	10,000

\$436,856 spent and encumbered through February 2018

\$381,017 spent and encumbered through February 2017

Project Status: FY15 - Connected several customers to the County fiber network.

FY16 - Plan to continue adding customers to the network as demand requires. FY 17 - Added customers to network as demand required. FY 18 - Continued to add customers to network as demand necessitates thereby continuing to generate revenue as customers sign long-term service contracts.

FY 2018 Budget	10,000	0	10,000	0	0	0	0	0	0	0	0	0		10,000
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

GENERAL COUNTY PROJECTS

Number: C0341

Project: C0341-FY2015 TOWER GENERATOR REPLACEMENTS

Description

This project will allow the County to design, build and operate diesel generators at all County Radio and Water Tower sites. A recent FCC ruling requires all cell phone carriers to have power backup for 8 hours for all cellular devices. This project will allow the County to provide the required generators and bill the carriers for this service. This will eliminate the need for each carrier to provide its own power backup. This capital project will reduce the number of generators located at each site, as well as the corresponding noise and environmental impacts. Moreover, security concerns can be better managed using this model.

Justification

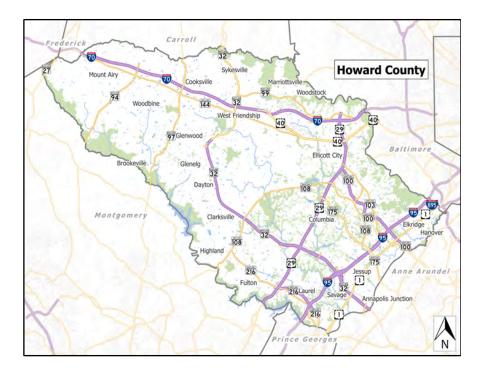
This project will allow the County to better manage its radio and tower sites subject to the new FCC ruling. It will also allow the County to be reimbursed for this service through billings to its vendors.

Remarks

OTHER revenues are generated from incoming matching revenues.

Project Schedule

FY19 - This project is in the financial closeout process.



GENERAL COUNTY PROJECTS

Number: C0341

Project: FY2015 TOWER GENERATOR REPLACEMENTS

(In Thousands)					Fiv	e Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	5,000	0	5,000	0	0	0	0	0	0	0	0	0	0	5,000
Total Expenditures	5,000	0	5,000	0	0	0	0	0	0	0	0) 0	0	5,000
OTHER SOURCES	5,000	0	5,000	0	0	0	0	0	0	0	0	0	0	5,000
Total Funding	5,000	0	5,000	0	0	0	0	0	0	0	0) 0	0	5,000

\$0 spent and encumbered through February 2018 spent and encumbered through February 2017 Project Status: FY18- project has not and will not be used; Technology will request from Finance that the capital project be closed.

FY 2018 Budget	5,000	0	5,000	0	0	0	0	0	0	0	0	0		5,000
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

GENERAL COUNTY PROJECTS

Number: C0342

Project: C0342-FY2020 CLARKSVILLE PARKING GARAGE

Description

This project is for the design, construction and construction management of a parking garage on Clarksville Pike, Clarksville Maryland. The parking garage will be located on an existing surface parking lot on the corner of Route 108 and Signal Bell Lane adjacent to the Ten Oaks Ballroom and Fifth District Volunteer Fire Department. As part of this project, Signal Bell Lane will be widened and ADA access will be upgraded to current standards. The garage will be a precast concrete structure.

Justification

The existing surface parking lot reaches capacity due to the use by commuters and people attending the Ten Oaks Ballroom. The existing parking patterns of the Ten Oaks Ballroom parking lot have reached capacity when commuter parking including bus passengers, individual park and ride carpools, and commercial vanpools are at the site during a moderate ballroom event.

Remarks

A Study dated September 2015 documents existing and latent parking demand at the parking lot, identifies alternatives to provide additional parking accommodations, summarizes the projected traffic impacts associated with the proposed expansion of the parking facility, and evaluates roadway improvements to mitigate adverse traffic impacts.

Project Schedule

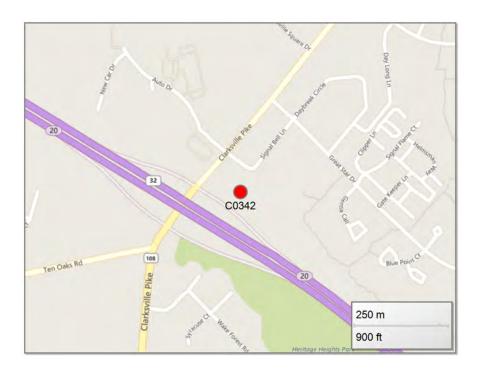
FY20 - Start design

FY21 - Complete design/start construction

FY22 - Complete construction

Operating Budget Impact

Annual Bond Redemption \$ \$248,625



GENERAL COUNTY PROJECTS

Project: FY2020 CLARKSVILLE PARKING GARAGE Number: C0342

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	0	0	450	550	0	0	0	1,000	0	0	0	0	1,000
LAND ACQUISITION	0	0	0	25	0	0	0	0	25	0	0	0	0	25
CONSTRUCTION	0	0	0	0	4,500	0	0	0	4,500	0	0	0	0	4,500
Total Expenditures	0	0	0	475	5,050	0	0	0	5,525	0	0	0	0	5,525
BONDS	0	0	0	475	5,050	0	0	0	5,525	0	0	0	0	5,525
Total Funding	0	0	0	475	5,050	0	0	0	5,525	0	0	0	0	5,525
\$0 spent and encumbered through spent and encumbered through F Project Status :	•	8												
FY 2018 Budget	0	475	475	5,050	0	0	0	0	5,050	0	0	C)	5,525
Difference 2018 / 2019	0	(475)	(475)	(4,575)	5,050	0	0	0	475	0	0	C	0	0

GENERAL COUNTY PROJECTS

Number: C0344

Project: C0344-FY2016 SOUTHEAST INFRASTRUCTURE IMPROVEMENTS

Description

A project to plan, design and construct a series of infrastructure improvements targeted within the southeast area of the US1 corridor. Projects will advance community, economic and environmental sustainability goals. Infrastructure includes storm water management, sidewalk and biking facilities, transit and community open space.

Justification

PlanHoward 2030 calls for the enhancement of established communities through sustainability and strategic public infrastructure investments. The project will target public funds in locations where additional infrastructure has been identified by the community and which promotes efficient use through multi-benefit returns on investment. The southeast area consists of the North Laurel - Savage communities which received State Sustainable Community designation in 2013. The designation allows the County to leverage State funding for more efficient and effective delivery of resources.

Remarks

A sustainable community plan has been prepared for the North Laurel-Savage community which provides a basis for implementing infrastructure improvements.

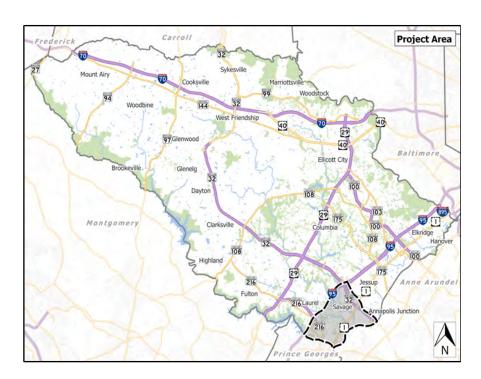
- 2. Public easements on private property may be needed to advance improvements.
- 3. OTHER: Developer Contribution relating to CB2-2016. GRANT added FY19 represents potential.

Project Schedule

FY19 - Planning, design and construction of identified improvements.

Operating Budget Impact

Annual Bond Redemption \$ \$13,500



GENERAL COUNTY PROJECTS

Number: C0344

Project: FY2016 SOUTHEAST INFRASTRUCTURE IMPROVEMENTS

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	150	0	150	0	0	0	0	0	0	0	0	0	0	150
CONSTRUCTION	500	70	570	0	0	0	0	0	0	0	0	0	0	570
Total Expenditures	650	70	720	0	0	0	0	0	0	0	0	0	0	720
BONDS	300	0	300	0	0	0	0	0	0	0	0	0	0	300
GRANTS	100	70	170	0	0	0	0	0	0	0	0	0	0	170
OTHER SOURCES	250	0	250	0	0	0	0	0	0	0	0	0	0	250
Total Funding	650	70	720	0	0	0	0	0	0	0	0	0	0	720

\$413,498 spent and encumbered through February 2018

spent and encumbered through February 2017

Project Status: FY18/19 - Design and construct Carroll Baldwin Hall improvements and sidewalk connections.

FY 2018 Budget	650	0	650	0	0	0	0	0	0	0	0	0		650
Difference 2018 / 2019	0	70	70	0	0	0	0	0	0	0	0	0	0	70

GENERAL COUNTY PROJECTS

Number: C0348

Project: C0348-FY2017 MODERNIZATION OF FLEET AND HIGHWAYS SHOPS

Description

A project for the master planning, design, construction of new facilities and renovation of existing County Fleet and Highways Facilities to modernize the facilities. This project will improve the efficiency of operations, improve the safety of the working conditions for employees and correct a number of site deficiencies.

Justification

The existing Fleet and Highway facilities have outlived their life. The building systems are inefficient, the building envelopes do not provide adequate insulation, adding to high operating costs and the building envelopes are in need of repair or replacement. The shop buildings can no longer accommodate the staff working on the vehicles. The administration buildings are mostly portable trailers that were placed throughout the years with any type of site master plan gradually restricting access and maneuverability on the site making operations inefficient for the Highways staff. The disjointed administration facilities do not lend themselves to a collaborative work environment reducing operational and managerial efficiencies. Bunk rooms and adequate showers are not present on many of the sites, causing additional expense to the County for any weather related emergency.

Remarks

1. Funding requested in FY17 for planning, design and emergency repairs. 2. Consolidate with C0346 funding.

Project Schedule

FY19 û Preliminary design new administration building including bunkroom and crew facilities at Mayfield Shop.

FY20 û Complete design and construct new administration building at Mayfield Shop.

FY22 - Design new maintenance bays and ancillary facilities for Mayfield.

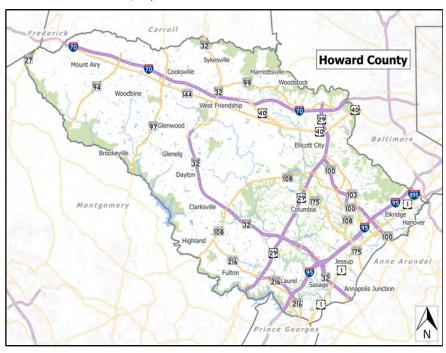
FY23 - Construct Mayfield, Plan Cooksville Maintenance.

FY24 - Construct Cooksville.

Operating Budget Impact

Annual Bond Redemption \$ \$1,743,840

Bur of Facilities estimates the annual impact in FY18 and beyond to O&M and utilities at \$16,000.



GENERAL COUNTY PROJECTS

Number: C0348

Project: FY2017 MODERNIZATION OF FLEET AND HIGHWAYS SHOPS

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	500	250	750	520	0	2,300	1,095	0	3,915	0	0	0	0	4,665
CONSTRUCTION	1,365	0	1,365	5,275	0	0	15,688	10,293	31,256	0	0	0	0	32,621
ADMINISTRATION	0	0	0	0	0	69	503	315	887	0	0	0	0	887
EQUIPMENT & FURNISHINGS	0	0	0	0	379	0	0	200	579	0	0	0	0	579
Total Expenditures	1,865	250	2,115	5,795	379	2,369	17,286	10,808	36,637	0	0	0	0	38,752
BONDS	1,865	250	2,115	5,795	379	2,369	17,286	10,808	36,637	0	0	0	0	38,752
Total Funding	1,865	250	2,115	5,795	379	2,369	17,286	10,808	36,637	0	0	0	0	38,752

\$446,379 spent and encumbered through February 2018 \$29,587 spent and encumbered through February 2017

Project Status : Cost are spread out to account for phasing of construction at Mayfield, Dayton, and Cooksville locations. Design of new sign shop at Cooksville to begin in January 2018.

FY 2018 Budget	1,865	4,158	6,023	5,795	379	2,369	17,286	10,808	36,637	0	0	0		42,660
Difference 2018 / 2019	0	(3,908)	(3,908)	0	0	0	0	0	0	0	0	0	0	(3,908)

GENERAL COUNTY PROJECTS

Number: C0349

Project: C0349-FY2017 ENVIRONMENTAL COMPLIANCE OPERATIONS

Description

A project to support environmental compliance activities for County Facilities. Work may include the study, planning, design and construction of environmental protection and remediation measures.

Justification

Plans and improvements to comply with Federal/State regulations.

Remarks

Other money represents escrowed remediation expenses.

Project Schedule

FY19 - Design: Conduct environmental compliance assessments at multiple facilities.

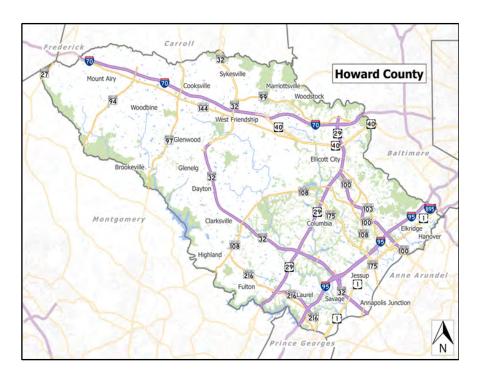
Train staff and conduct stormwater monitoring.

FY20-28 - Design: Conduct environmental compliance assessments of additional facilities. Update every five years. Update SPCC (Spill Prevention Control and Countermeasure) plans every five years.

Train staff and conduct stormwater monitoring.

Operating Budget Impact

Annual Bond Redemption \$ \$109,440



GENERAL COUNTY PROJECTS

Number: C0349

Project: FY2017 ENVIRONMENTAL COMPLIANCE OPERATIONS

(In Thousands)					Five	Year Ca	pital Pro	gram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	375	100	475	165	241	305	145	165	1,021	165	241	365	165	2,432
Total Expenditures	375	100	475	165	241	305	145	165	1,021	165	241	365	165	2,432
BONDS	375	100	475	165	241	305	145	165	1,021	165	241	365	165	2,432
Total Funding	375	100	475	165	241	305	145	165	1,021	165	241	365	165	2,432

\$186,672 spent and encumbered through February 2018 \$71,922 spent and encumbered through February 2017

Project Status : Design:

Completed Regulatory Compliance Guide.

Prepared SPCC plans for all required facilities.

Prepared and updated SWPPPs at required facilities.

Conducted environmental compliance assessments of twelve facilities.

Trained staff annually on SPCC plans, SWPPPs, and handling hazardous wastes.

Prepared County-wide Hazard Communication Policy.

GIS inventory and database ongoing.

Set up hazardous waste collection program for Howard County sites.

Monitored stormwater.

Updated SPCC Plan and SWPPPs for all required facilities.

Construction:

Design and installation of vehicle wash pads and rainwater harvesting systems at seven fire stations complete and four park shops ongoing.

24 USTs removed.

Removal of leaking underground hydraulic lifts and contaminated soil completed at six sites.

Oil/water separator replacement completed at 8 sites.

Underground waste water storage tanks for truck wash pads and oil/water separators designed and installed at two sites.

Truck wash pad and trench drain replacement complete at Alpha Ridge Maintenance Shop.

Stormwater protection system installed at Cooksville fueling site.

FY 2018 Budget	375	165	540	165	241	305	145	165	1,021	165	241	365		2,332
Difference 2018 / 2019	0	(65)	(65)	0	0	0	0	0	0	0	0	0	165	100

Project: C0350-FY2017 NEW BUDGET SYSTEM Number: C0350

Description

The Budget Application project has been established to purchase and implement a new budget system for improved efficiencies, transparency and presentation. Phase 1 funding will focus on a feasibility study and provide needed insight into budgeting systems currently on the market that are capable of addressing present and future operating and capital budgeting needs.

Justification

An enhanced budget application is needed to allow for additional analysis, forecasting, data-driven decision making, and integration with the ERP system. The passing of CB 54-2015 along with the integration of performance management added additional requirements to both the operating and capital budget processes. The incorporation of these changes and the desire for additional transparency makes it even more important to consider the future direction of both the industry and the County. The study in the first stage of the project will enable the County to examine the current needs of its existing budget processes and presentations as well as understand the technologies and functionalities being utilized in other jurisdictions. This process will help control the costs associated with a potential project as it will allow for long-term planning.

Remarks

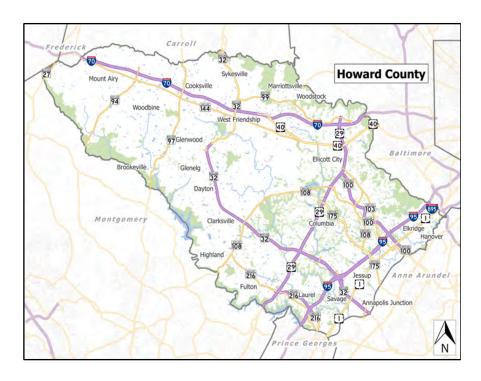
1. Future budget will be determined upon completion of Feasibility Study.

Project Schedule

FY19-Phase 3 - Implementation

Operating Budget Impact

Annual Bond Redemption \$ \$22,500



GENERAL COUNTY PROJECTS

GENERAL COUNTY PROJECTS

Project: FY2017 NEW BUDGET SYSTEM Number: C0350

(In Thousands)					Fiv	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	500	0	500	0	0	0	0	0	0	0	C	0	0	500
Total Expenditures	500	0	500	0	0	0	0	0	0	0	0) 0	0	500
BONDS	500	0	500	0	0	0	0	0	0	0	C) 0	0	500
Total Funding	500	0	500	0	0	0	0	0	0	0	0) 0	0	500

\$0 spent and encumbered through February 2018 spent and encumbered through February 2017 Project Status: FY18-Phase 2 - Procurement/Implementation

FY17-Phase 1 - Feasibility Study

FY 2018 Budget	500	500	1,000	0	0	0	0	0	0	0	0	0		1,000
Difference 2018 / 2019	0	(500)	(500)	0	0	0	0	0	0	0	0	0	0	(500)

GENERAL COUNTY PROJECTS

Number: C0351

Project: C0351-FY2017 HARRIET TUBMAN REMEDIATION and RESTORATION

Description

This project will provide for Harriett Tubman High School remediation of hazardous containing material such as ACM, lead, PCB, fuel.

Justification

Howard County will provide space for the HCPSS Maintenance Shop to relocate from the Harriet Tubman High School. Howard County will decommission the Harriet Tubman High School, remove any hazardous material, and complete renovations prior to transferring the property to the local nonprofit arrangement.

Remarks

Prior appropriated GRANT represents FY18 State Bond Bill. FY19 GRANT represents FY19 State Bond Bill.

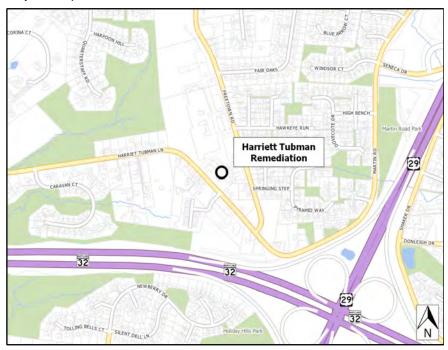
Project Schedule

FY20 - Plans & Engineering, remove hazardous material, renovate for code compliance

Operating Budget Impact

Annual Bond Redemption \$ \$102,150

Bur of Facilities estimates the annual budget once completed and beyond impact to O&M and utilities at \$100,000.



GENERAL COUNTY PROJECTS

Number: C0351

Project: FY2017 HARRIET TUBMAN REMEDIATION and RESTORATION

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	570	0	570	0	0	0	0	0	0	0	0	0	0	570
CONSTRUCTION	0	1,000	1,000	1,500	0	0	0	0	1,500	0	0	0	0	2,500
Total Expenditures	570	1,000	1,570	1,500	0	0	0	0	1,500	0	0	0	0	3,070
BONDS	270	500	770	1,500	0	0	0	0	1,500	0	0	0	0	2,270
GRANTS	300	500	800	0	0	0	0	0	0	0	0	0	0	800
Total Funding	570	1,000	1,570	1,500	0	0	0	0	1,500	0	0	0	0	3,070

\$555,356 spent and encumbered through February 2018 \$500,001 spent and encumbered through February 2017

Project Status: Environmental and building assessments completed. Building is completely unoccupied since HCPSS vacated the building in September 2017. Awaiting property transfer to Howard County.

FY 2018 Budget	570	2,500	3,070	250	0	0	0	0	250	0	0	0		3,320
Difference 2018 / 2019	0	(1,500)	(1,500)	1,250	0	0	0	0	1,250	0	0	0	0	(250)

TAO 3-2017 transferred \$480,000 to C0309 Land Acquisition Contingency Reserve.

GENERAL COUNTY PROJECTS

Number: C0352

Project: C0352-FY2017 SITE ACQUISITION FOR SCHOOL SITES AND ELEVATED WATER STORAGE

FACILITIES

Description

This project establishes a fund for school site acquisition that comes available on the market that meets the future needs of the County specifically to serve the Public interest to add or enhance the school system sites for new schools. This shall include title and appraisal reports, surveys, environmental assessments, etc. required for the acquisition of property. The acquisition will be sized for at least two school facilities and compatible recreational facilities. The Project will also be used to acquire the necessary property to design and construct an elevated water storage facility, including site access and pipeline construction, and entrance road will be constructed as part of this project.

Justification

Allows the County to move quickly on behalf of the school system for parcels that come on the market. Land resources available for development are becoming rare and it is essential that the County have the ability to move quickly to take advantage of opportunities for unique locations that meet the needs of the school system.

Remarks

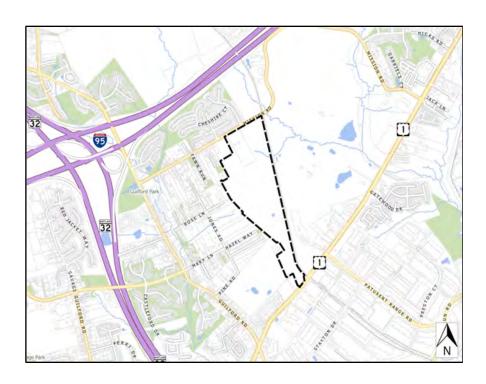
- 1. The project site is between Route 1 and Mission Road in the Southeast quadrant of the County.
- 2. The property to be purchased will be graded to its potential ultimate use configuration facilitates the construction of school facilities, the property will also be developed for public recreational purposes. The Board of Education and Recreation and Parks will develop a joint plan for the site that will accommodate school and recreational uses.
- 3. FY17 Project funds transferred to C0309.
- OTHER represents property disposition proceeds reflected in CR 68 & 69 -2015.
- 5. FY18 GRANT represents Program Open Space will be used for a \$2,500,000 portion of the property purchase.

Project Schedule

FY18/19 - Complete site acquistion contract. Rough grading of site and entrance road construction.

Operating Budget Impact

Annual Bond Redemption \$ \$795,500



Explanation of Changes

TAO3-2017 transferred \$2,500,000 appropriation to C0309 Land Acquisition Contintingency Reserve.

GENERAL COUNTY PROJECTS

Number: C0352

Project: FY2017 SITE ACQUISITION FOR SCHOOL SITES AND ELEVATED WATER STORAGE FACILITIES

Five Year Capital Program Master Plan (In Thousands) **Appropriation Object Class** Prior FY2019 Fiscal **Fiscal Fiscal** Sub Fiscal Fiscal Appr. Fiscal **Fiscal** Fiscal Fiscal Total **Total Budget** Total 2020 2021 2022 2023 2024 2025 2026 2027 2028 Project Appr. LAND ACQUISITION 25,500 1,800 27,300 0 0 0 0 0 0 0 0 0 0 27,300 **Total Expenditures** 25,500 1,800 27,300 0 0 0 0 0 0 0 0 0 0 27,300 0 **BONDS** 10,500 0 0 0 0 0 0 10,500 0 0 0 0 10,500 0 **GRANTS** 2,500 0 2,500 0 0 0 0 0 0 0 0 0 2,500 METRO DISTRICT BOND 5,000 0 0 0 0 0 0 0 0 0 1,800 6,800 0 6,800 0 OTHER SOURCES 2,500 0 2,500 0 0 0 0 0 0 0 0 0 2,500 PAY AS YOU GO 5,000 0 5,000 0 0 0 0 0 0 0 0 0 0 5,000 **Total Funding** 0 0 0 0 25,500 1,800 27,300 0 0 0 0 0 0 27,300

\$158,358 spent and encumbered through February 2018 \$64,105 spent and encumbered through February 2017

Project Status: FY17/18 - Identify and acquire multi-school sites. Acquire elevated water storage facility sites.

FY 2018 Budget	25,500	0	25,500	0	0	0	0	0	0	0	0	0		25,500
Difference 2018 / 2019	0	1,800	1,800	0	0	0	0	0	0	0	0	0	0	1,800

Request represents latest estimate.

Project: C0353-FY2020 TRANSIT CENTER Number: C0353

Description

A project for site selection, design and construction of a transit center. The center will serve as a hub for existing local and regional transit, including Regional Transit Agency (RTA) and Maryland Transit Administration (MTA) bus services, and bike share as well as future downtown circulator and bus rapid transit services. The center is envisioned as part of mixed-use development including affordable housing to be provided by Howard County Housing Commission.

Justification

The 2010 Downtown Columbia Plan (pages 43-44) calls for a transit center as part of downtown transportation demand management where passengers could transfer between lines in a comfortable, attractive and interesting environment.

Remarks

The Downtown Columbia plans Community Enhancements, Programs and Public Amenities (CEPPA) #14 requires the master developer to provide a location at no or nominal cost for a transit center prior to issuance of a building permit for the 1.3M SF of development (anticipated to occur in FY 2017). The Office of Transportation will complete a location and site selection study in FY 2018.

Project Schedule

FY18 - Analysis and site selection

FY19 - Exploration of Potential Temporary Sites

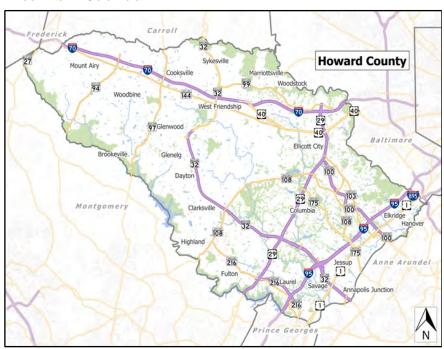
FY20 - Engineering and Design

FY20-FY22 - Construction

Operating Budget Impact

Zero. Design and construction funding envisioned to come from additional; revenue generated from Tax Increment Financing investment in downtown Columbia.

GENERAL COUNTY PROJECTS



GENERAL COUNTY PROJECTS

Project: FY2020 TRANSIT CENTER Number: C0353

(In Thousands)					Five	Year Ca	Master Plan							
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	0	0	700	650	650	7,500	0	9,500	0	0	0	0	9,500
Total Expenditures	0	0	0	700	650	650	7,500	0	9,500	0	0	0	0	9,500
OTHER SOURCES	0	0	0	700	650	650	7,500	0	9,500	0	0	0	0	9,500
Total Funding	0	0	0	700	650	650	7,500	0	9,500	0	0	0	0	9,500

\$0 spent and encumbered through February 2018 spent and encumbered through February 2017 Project Status: Analysis and site selection study underway. Study will be completed the late 2017/2018.

FY 2018 Budget	0	700	700	650	650	7,500	0	0	8,800	0	0	0		9,500
Difference 2018 / 2019	0	(700)	(700)	50	0	(6,850)	7,500	0	700	0	0	0	0	0

GENERAL COUNTY PROJECTS

Number: C0354

Project: C0354-FY2019 BUILDING ACCESS CONTROL AND SECURITY ENHANCEMENTS

Description

This project includes design and implementation of new and improved existing electronic security systems at a number of county facilities. Minor building design and construction required to accommodate these systems would also be included.

Justification

This project will address concerns that security at some county facilities might not be adequate to address possible threats to these facilities.

Remarks

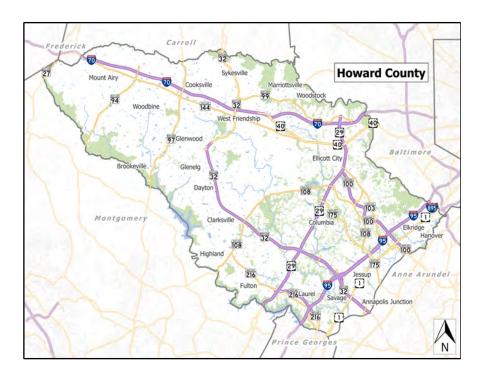
A number of secuity assessments performed in recent recommend some level of hardening for County Facilities.

Project Schedule

FY19/20 - Design and Construct a prototype security project at a County Facility.

Operating Budget Impact

Annual Bond Redemption \$ \$12,600



Difference 2018 / 2019

GENERAL COUNTY PROJECTS

180

0

0

Number: C0354

0

(720)

Project: FY2019 BUILDING ACCESS CONTROL AND SECURITY ENHANCEMENTS

0

(900)

(900)

180

(In Thousands)					Fiv	e Year Ca	apital Pro	gram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project	
PLANS & ENGINEERING	0	20	20	0	0	0	0	0	0	0	C	0	0	20	
CONSTRUCTION	0	80	80	180	0	0	0	0	180	0	C	0	0	260	
Total Expenditures	0	100	100	180	0	0	0	0	180	0	0	0	0	280	
BONDS	0	100	100	180	0	0	0	0	180	0	C	0	0	280	
Total Funding	0	100	100	180	0	0	0	0	180	0	0	0	0	280	
\$0 spent and encumbered through spent and encumbered through F Project Status :		18													
FY 2018 Budget	0	1,000	1,000	0	0	0	0	0	0	0	C) (1,000	

GENERAL COUNTY PROJECTS

Number: C0355

Project: C0355-FY2018 NEW SCHOOL MAINTENANCE SITE RENOVATION

Description

This project will provide space for the HCPSS Maintenance Shop. The project entails site design and construction to add additional parking, as well as design and renovation of the building interior to make it suitable for a variety of maintenance operations

Justification

The Harriet Tubman building, current base of operations for the Maintenance Shop is being turned over to a local non-profit organization. This facility will replace that building.

Remarks

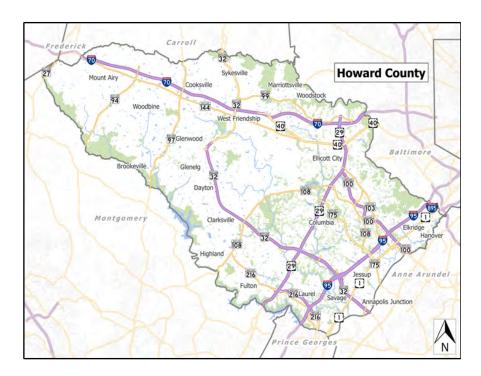
HCPPS has been operating in the building since September of 2017. Construction drawings for Police Evidence and Fire Rescue Service Quartermaster Storage are in process.

Project Schedule

FY18/19 - Obtain facility, begin and complete construction. Install hi-density storage for Police Evidence and Fire Rescue Quartermaster.

Operating Budget Impact

Annual Bond Redemption \$ \$287,910



GENERAL COUNTY PROJECTS

Number: C0355

Project: FY2018 NEW SCHOOL MAINTENANCE SITE RENOVATION

(In Thousands)					Fiv	e Year Ca		Master Plan						
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	500	0	500	0	0	0	0	0	0	0	0	0	0	500
CONSTRUCTION	5,298	0	5,298	0	0	0	0	0	0	0	0	0	0	5,298
EQUIPMENT & FURNISHINGS	0	600	600	0	0	0	0	0	0	0	0	0	0	600
Total Expenditures	5,798	600	6,398	0	0	0	0	0	0	0	0	0	0	6,398
BONDS	5,798	600	6,398	0	0	0	0	0	0	0	0	0	0	6,398
Total Funding	5,798	600	6,398	0	0	0	0	0	0	0	0	0	0	6,398

\$4,678,586 spent and encumbered through February 2018 spent and encumbered through February 2017

Project Status: Phase 1 work to fit-out space for HCPSS complete. Phase 2 work involves the fit-out for Fire & Rescue Quartermaster and Police evidence storage. Design to be complete mid January 2018. Occupancy anticipated in June 2018.

FY 2018 Budget	5,798	0	5,798	0	0	0	0	0	0	0	0	0		5,798
Difference 2018 / 2019	0	600	600	0	0	0	0	0	0	0	0	0	0	600

Project: C0356-FY2018 REHABILITATION TREATMENT CENTER

GENERAL COUNTY PROJECTS

Number: C0356

Description

This project proposes to provide funding for a facility in Howard County to meet the critical need to assist with one of the greatest health challenges of opioid addiction, overdoses and death. It will provide a place where residential treatment and crisis services can be provided within this community.

Justification

There is an immediate health need to have a residential treatment facility to provide programs that offer a comprehensive continuum of services for adults and adolescents who suffer from addiction and co-occurring mental health disorders. Services range from highly intensive residential treatment to low intensity services. The most intensive level of service includes medically monitored inpatient detoxification. This model allows treatment to be tailored to the individual needs of each client, especially those benefiting from a step down approach of decreasing intensity of services over time. The structured environment in combination with various levels of treatment and ancillary services, support and promote recovery. Residential treatment programs associated with a Crisis Stabilization Unit are able to divert appropriate patients from the hospital and jail in order to stabilize, detox, obtain history, notify significant others, and provide a referral to the appropriate level of substance use treatment, including residential and outpatient services.

Remarks

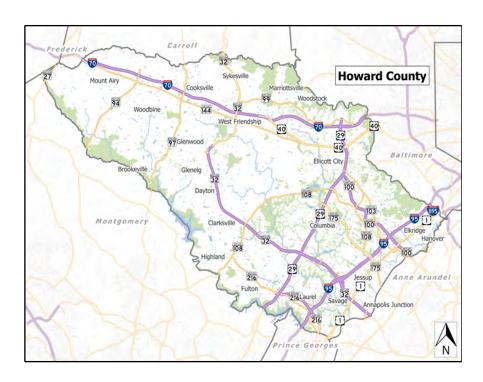
- 1. A more complete assessment will be completed to further determine requirements and budget for FY19.
- 2. The site that was previously considered for a Fire and Rescue Logistics Facility at the intersection of Meadowridge Road and Old Rockbridge Drive will be evaluated. (Adjacent to the Mayfield Maintenance Facility site)
- 3. Community health partners will be consulted for collaboration and contributions of joint efforts.

Project Schedule

- FY19 Complete assessment, POR and site evaluation.
- FY20 Begin design for New Rehabilitation Treatment Center.
- FY21 Complete design and begin construction of facility.
- FY22 Complete construction and provide furniture, fixtures and equipment for new Rehabilitation Treatment Center.
- FY23 Project Close-out.

Operating Budget Impact

Annual Bond Redemption \$ \$677,250



GENERAL COUNTY PROJECTS

Number: C0356

Project: FY2018 REHABILITATION TREATMENT CENTER

(In Thousands)				Five	Master Plan									
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	250	0	250	250	0	0	0	0	250	0	0	0	0	500
CONSTRUCTION	0	0	0	0	14,800	0	0	0	14,800	0	0	0	0	14,800
Total Expenditures	250	0	250	250	14,800	0	0	0	15,050	0	0	0	0	15,300
BONDS	0	0	0	250	14,800	0	0	0	15,050	0	0	0	0	15,050
PAY AS YOU GO	250	0	250	0	0	0	0	0	0	0	0	0	0	250
Total Funding	250	0	250	250	14,800	0	0	0	15,050	0	0	0	0	15,300

\$0 spent and encumbered through February 2018 spent and encumbered through February 2017 Project Status: FY18 - Commence needs assessment and program of requirements (POR) and site evaluation.

FY 2018 Budget	250	0	250	0	0	0	0	0	0	0	0	0		250
Difference 2018 / 2019	0	0	0	250	14,800	0	0	0	15,050	0	0	0	0	15,050

Number: C0357

Project: C0357-FY2018 ELLICOTT CITY PARKING AND STREETSCAPE IMPROVEMENTS

Description

A project to plan, design and implement streetscape and on-street parking improvements in Ellicott City. The Ellicott City Master Plan effort will identify strategies to address parking and pedestrian needs in downtown Ellicott City. Knowing that this is an immediate need, this project will be used to advance one or more strategies by supporting pre-development analyses and/or design immediately following the Master Plan effort.

Justification

As Ellicott City continues to rebuild from the tragic flood on July 30, 2016, one of the most frequent areas of improvement identified by the community has been with the post flood condition of the sidewalks and the current parking system. This project will be essential in developing strategies to improve street character, accommodate the parking demands of the community, and support the economic development of the town. The project supports Planhoward 2030 policy by fostering a diverse economy and future job and business growth opportunities.

Remarks

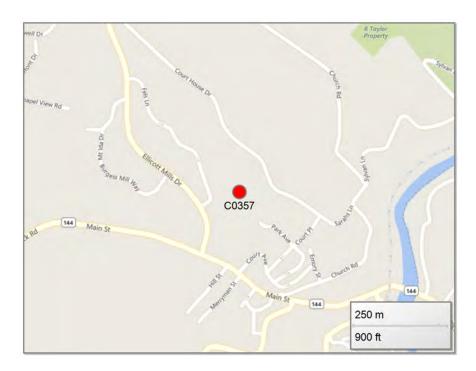
- 1. This project will rely on recommendations made through the master planning process starting in May 2017.
- 2. This project will refine and implement recommendations relating to sidewalks and on-street parking from the master plan.

Project Schedule

FY19 - Pending completion of the Ellicott City Master Plan

Operating Budget Impact

Annual Bond Redemption \$ \$9,000



GENERAL COUNTY PROJECTS

Number: C0357

Project: FY2018 ELLICOTT CITY PARKING AND STREETSCAPE IMPROVEMENTS

(In Thousands)					Five	e Year Ca		Master Plan						
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	200	0	200	0	0	0	0	0	0	0	0	0	0	200
Total Expenditures	200	0	200	0	0	0	0	0	0	0	0	0	0	200
BONDS	200	0	200	0	0	0	0	0	0	0	0	0	0	200
Total Funding	200	0	200	0	0	0	0	0	0	0	0	0	0	200
\$0 spent and encumbered through spent and encumbered through F Project Status:		8												
FY 2018 Budget	200	0	200	0	0	0	0	0	0	0	0	C		200
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

GENERAL COUNTY PROJECTS

Number: C0358

Project: C0358-FY2019 NORTH LAUREL COMMUNITY POOL

Description

A project to construct a swimming pool at North Laurel Park.

Justification

Remarks

The feasibility study for this pool was completed under project N3940 as a portion of the North Laurel Park.

Project Schedule

FY19 - Fund construction cost.

FY20 - Start construction.

FY21 - Complete construction and start project closeout.

Operating Budget Impact

Annual Bond Redemption \$ \$720,000



Original Project Budget FY19-Construction cost of pool moved from Recreation and Parks project N3940 to be completed under this new project.

GENERAL COUNTY PROJECTS

Number: C0358

Project: FY2019 NORTH LAUREL COMMUNITY POOL

n Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
ppropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	1,000	1,000	0	0	0	0	0	0	0	0	0	0	1,000
CONSTRUCTION	0	4,000	4,000	11,000	0	0	0	0	11,000	0	0	0	0	15,000
Total Expenditures	0	5,000	5,000	11,000	0	0	0	0	11,000	0	0	0	0	16,000
BONDS	0	5,000	5,000	11,000	0	0	0	0	11,000	0	0	0	0	16,000
Total Funding	0	5,000	5,000	11,000	0	0	0	0	11,000	0	0	0	0	16,000

GENERAL COUNTY PROJECTS

Number: C0359

Project: C0359-FY2019 TURF VALLEY SCHOOL SITE ACQUISITION

Description

A project to purchase land for a new elementary school in the Turf Valley neighborhood of Ellicott City. It will include all costs associated with the land acquisition.

Justification

The school system anticipates that growth will exceed 110% of utilization and will not be able to serve the anticipated growth of students at existing facilities. Enrollment projections show that the area will increase by 700 students over the next ten years. This growth will require new capacity.

Remarks

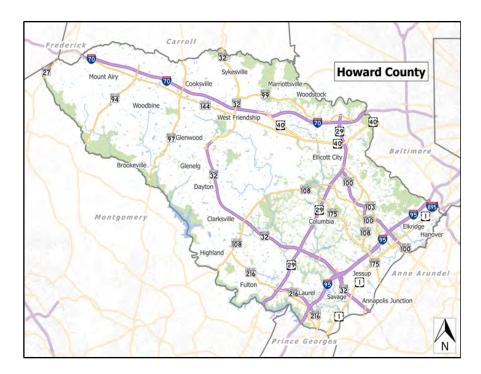
1. County will purchase land for the school system. All other costs of development will be included in a separate capital project managed by the Board of Education.

Project Schedule

FY19 - Negotiate agreement and purchase land.

Operating Budget Impact

Annual Bond Redemption \$ \$270,000



GENERAL COUNTY PROJECTS

Number: C0359

Project: FY2019 TURF VALLEY SCHOOL SITE ACQUISITION

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
LAND ACQUISITION	0	2,000	2,000	2,000	2,000	0	0	0	4,000	0	0	0	0	6,000
Total Expenditures	0	2,000	2,000	2,000	2,000	0	0	0	4,000	0	0	0	0	6,000
BONDS	0	2,000	2,000	2,000	2,000	0	0	0	4,000	0	0	0	0	6,000
Total Funding	0	2,000	2,000	2,000	2,000	0	0	0	4,000	0	0	0	0	6,000

Project: C0360-FY2019 REAL ESTATE PLANNING AND DESIGN

GENERAL COUNTY PROJECTS

Number: C0360

Description

This project will provide funding for expenses related to potential properties that become available and meet the future needs of the County to serve the public interest and no funded Capital Project exists. The project will also serve as a transfer source and to resolve other acquisition issues on projects that were closed or on those not funded by the Enterprise Fund. This shall include title and appraisal reports, surveys, environmental assessments, and all costs associated with and required for the acquisition of property.

Justification

This project will allow the County to best plan for potential purchases of parcels of land, real estate and properties that become available. Land resources are becoming rare and it is essential that the County have the ability for preliminary planning and consideration of the cost related to land parcels and properties before a new capital project is started. Also allows the ability for asset planning, master planning and to take advantage of unique opportunities for key locations and possibly prevent the future need for condemnation.

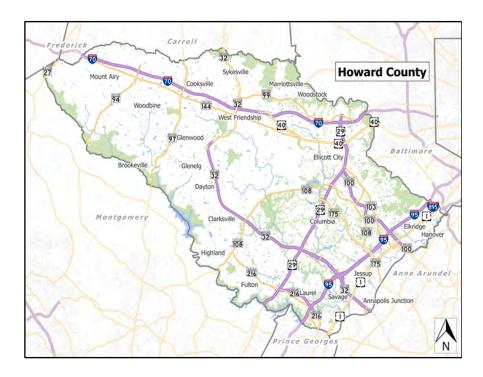
Remarks

Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$225,000



GENERAL COUNTY PROJECTS

Number: C0360

Project: FY2019 REAL ESTATE PLANNING AND DESIGN

Prior	FY2019	dget Total 2020 2021 2022 2023 2024 Tot								l l	Master P	rian	
Appr.	Budget							Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
0	500	500	500	500	500	500	500	2,500	500	500	500	500	5,000
0	500	500	500	500	500	500	500	2,500	500	500	500	500	5,000
0	500	500	500	500	500	500	500	2,500	500	500	500	500	5,000
0	500	500	500	500	500	500	500	2,500	500	500	500	500	5,000
	0 0	0 500 0 500 0 500	0 500 500 0 500 500 0 500 500	0 500 500 500 0 500 500 500 0 500 500 500	0 500 500 500 500 0 500 500 500 500 0 500 500 500 500	0 500 500 500 500 0 500 500 500 500 0 500 500 500 500	0 500 500 500 500 500 0 500 500 500 500 500 0 500 500 500 500 500	0 500 500 500 500 500 500 0 500 500 500 500 500 500 0 500 500 500 500 500 500	0 500 500 500 500 500 500 500 2,500 0 500 500 500 500 500 500 500 2,500 0 500 500 500 500 500 500 500 2,500	0 500 500 500 500 500 500 500 500 500 0 500 500 500 500 500 500 500 500 500 500 500 0 500 500 500 500 500 500 500 500 500	0 500	0 500	0 500

GENERAL COUNTY PROJECTS

Number: C0362

Project: C0362-FY2019 GATEWAY INNOVATION CENTER RENOVATION

Description

A project for renovations of the Gateway Building located at 6751 Columbia Gateway Drive to facilitate the implementation of the Gateway Innovation Center.

Justification

As an initiative of the Economic Development Authority (EDA) renovations are necessary as the Maryland Center for Entrepreneurship (MCE) moves from the Dorsey Building to the Gateway Building as an initial phase of the Innovation Center.

Remarks

- 1. OTHER revenue represents fundraising and payments of revenues paid from lease revenue generated from the operation of the MCE.
- 2. Required Public process, review and hearing with Planning board is scheduled for April 5, 2018.

Project Schedule

- FY19 Design/construction of building renovations.
- FY20 Complete first phase of construction and plan for any future demand.



GENERAL COUNTY PROJECTS

Number: C0362

Project: FY2019 GATEWAY INNOVATION CENTER RENOVATION

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	200	200	0	0	0	0	0	0	0	C) 0	0	200
CONSTRUCTION	0	2,800	2,800	0	0	0	0	0	0	0	C) 0	0	2,800
Total Expenditures	0	3,000	3,000	0	0	0	0	0	0	0	0	0	0	3,000
OTHER SOURCES	0	3,000	3,000	0	0	0	0	0	0	0	C) 0	0	3,000
Total Funding	0	3,000	3,000	0	0	0	0	0	0	0	0	0	0	3,000
\$0 spent and encumbered through F Project Status :		8		1						1				
Difference 2018 / 2019	0	3,000	3,000	0	0	0	0	0	0	0	C) (0	3,000

GENERAL COUNTY PROJECTS

Number: C0363

Project: C0363-FY2019 LINWOOD SCHOOL PARKING LOT

Description

A project to construct a parking lot adjacent to Linwood School site located on Martha Bush Drive in Ellicott City.

Justification

This project will provide overflow parking for the Linwood school program staff and visitors. The shortage of parking on the school site has been driven by changes to staffing requirements by the State.

Remarks

- 1. OTHER revenue represents Linwood School contribution. 2. GRANT revenue represents state funding.
- 3. Required Public process and hearing with Planning board is scheduled for April 5, 2018.

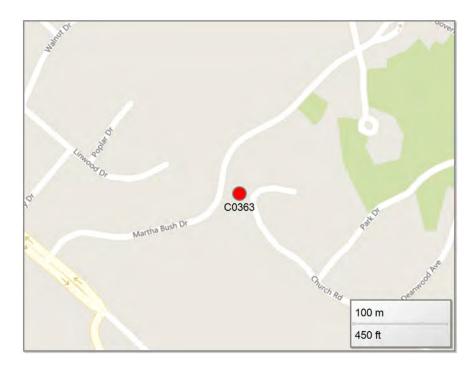
Project Schedule

FY19 - Design and site work.

FY20 - construction of parking lot.

Operating Budget Impact

Annual Bond Redemption \$ \$4,500



GENERAL COUNTY PROJECTS

Number: C0363

Project: FY2019 LINWOOD SCHOOL PARKING LOT

n Thousands)					Five	e Year Ca	pital Pro	gram				Master F	lan	
ppropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	50	50	0	0	0	0	0	0	0	0	0	0	5
CONSTRUCTION	0	250	250	0	0	0	0	0	0	0	0	0	0	25
Total Expenditures	0	300	300	0	0	0	0	0	0	0	0	0	0	30
BONDS	0	100	100	0	0	0	0	0	0	0	0	0	0	10
GRANTS	0	100	100	0	0	0	0	0	0	0	0	0	0	10
OTHER SOURCES	0	100	100	0	0	0	0	0	0	0	0	0	0	10
Total Funding	0	300	300	0	0	0	0	0	0	0	0	0	0	300

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
D1112 FY1997 DAVIS AVE AREA DRAINAGE	В	625	600	1,225	0	0	0	0	0	1,225
This project is for the design and construction of storm drainage facilities in the area of Davis Avenue in North	0	257	0	257	0	0	0	0	0	257
Laurel.	Р	5	0	5	0	0	0	0	0	5
	Total	887	600	1,487	0	0	0	0	0	1,487
D1124 FY2007 DRAINAGE IMPROVEMENT PROGRAM A project for the design and construction of small to	В	1,975	600	2,575	300	0	0	0	0	2,875
medium-sized drainage improvements requested by County residents and the Bureau of Highways.	0	10	0	10	0	0	0	0	0	10
County residents and the Bureau of Flighways.	Р	250	0	250	0	0	0	0	0	250
	S	950	0	950	225	0	0	0	0	1,175
	Total	3,185	600	3,785	525	0	0	0	0	4,310
D1125 FY2004 EMERGENCY STORM DRAIN RECONSTRUCTION	В	1,400	0	1,400	100	0	0	0	0	1,500
A fund for Howard County to undertake construction or repairs to storm drainage facilities on an as-needed basis	G	148	0	148	0	0	0	0	0	148
meeting the provisions of the County Code.	S	425	0	425	50	0	0	0	0	475
	Total	1,973	0	1,973	150	0	0	0	0	2,123
D1140 FY2005 PINE TREE/GLEN COURT STORM DRAIN SYSTEM	В	2,540	540	3,080	0	0	0	0	0	3,080
A project for the design and construction of a storm drain system along Pine Tree Road, Glen Court, and Guilford	S	240	0	240	0	0	0	0	0	240
Road.	Total	2,780	540	3,320	0	0	0	0	0	3,320
D1148 FY2007 NPDES WATERSHED MANAGEMENT PROGRAM	В	3,780	0	3,780	500	500	500	500	500	6,280
A project for permitting and implementing the requirements of the National Pollutant Discharge Elimination System	Р	650	0	650	0	0	0	0	0	650
(NPDES) to detect and reduce pollutants in stormwater system discharges and to perform studies related to storm	R	1,375	265	1,640	0	0	0	0	0	1,640
water utility financing.	Total	5,805	265	6,070	500	500	500	500	500	8,570
D1150 FY2005 HIGH RIDGE DRAINAGE	В	1,785	350	2,135	2,100	0	0	0	0	4,235
	Total	1,785	350	2,135	2,100	0	0	0	0	4,235

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
D1155 FY2006 LINCOLN DRIVE at CEDAR VIL PARK DRAINAGE	В	1,635	0	1,635	0	0	0	0	0	1,635
There is an inadequate drainage system to carry the runoff from the park side of the road to the outfall side of Lincoln Drive.	Total	1,635	0	1,635	0	0	0	0	0	1,635
D1157 FY2006 ST JOHNS LANE VICINITY DRAINAGE A project for the construction of drainage improvements along St Johns Lane, Northfield Road, Southfield Road, Cresent Road, Hawthorne Road, Crestleigh Road, Club Court and the adjacent neighborhoods.	В	1,415	0	1,415	0	0	0	0	0	1,415
	Total	1,415	0	1,415	0	0	0	0	0	1,415
D1158 FY2008 WATERSHED MANAGEMENT CONSTRUCTION	В	10,795	0	10,795	0	0	0	0	0	10,795
This project is for design and construction of stormwater facility improvements.	D	200	0	200	0	0	0	0	0	200
racinty improvements.	G	10,600	2,000	12,600	2,000	2,000	2,000	2,000	2,000	22,600
	0	6,100	4,000	10,100	15,000	15,000	15,000	16,000	16,000	87,100
	Р	1,000	0	1,000	0	0	0	0	0	1,000
	R	13,617	0	13,617	2,000	2,000	2,000	2,000	2,000	23,617
	S	850	0	850	0	0	0	0	0	850
	Т	0	0	0	1,000	1,000	1,000	0	0	3,000
	W	4,200	0	4,200	0	0	0	0	0	4,200
	Total	47,362	6,000	53,362	20,000	20,000	20,000	20,000	20,000	153,362
D1159 FY2007 STORMWATER MANAGEMENT	В	15,690	0	15,690	0	0	0	0	0	15,690
FACILITY RECONSTRUC A fund for Howard County to undertake construction or	G	450	0	450	0	0	0	0	0	450
repairs to stormwater management on an as-needed basis meeting the provisions of the County Code.	0	0	400	400	8,000	8,000	8,000	8,000	8,000	40,400
	R	13,350	5,000	18,350	0	0	0	0	0	18,350
	Total	29,490	5,400	34,890	8,000	8,000	8,000	8,000	8,000	74,890
D1160 FY2010 STORMWATER MANAGEMENT	В	6,890	0	6,890	0	0	0	0	0	6,890
RETROFITS A project for the retrofit of stormwater management facilities to include water quality management.	G	5,280	0	5,280	0	0	0	0	0	5,280

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
D1160 FY2010 STORMWATER MANAGEMENT RETROFITS	0	2,000	2,750	4,750	1,000	1,400	1,300	1,000	1,000	10,450
A project for the retrofit of stormwater management facilities to include water quality management.	R	4,900	0	4,900	2,000	2,000	2,000	2,000	2,000	14,900
, , ,	Total	19,070	2,750	21,820	3,000	3,400	3,300	3,000	3,000	37,520
01161 FY2019 SHAFFERSVILLE ROAD CULVERT	В	0	125	125	75	400	0	0	0	600
project to replace the existing culvert on Shaffersville toad (between Florence Road and Shaffers Mill Road).	Total	0	125	125	75	400	0	0	0	600
on 163 FY2012 TROTTER ROAD SLOPE STABILIZATION This project is for the design and construction of tabilization of the streambank of a tributary of the Middle Patuxent River and the adjacent roadway fill of Trotter Road.	В	755	0	755	0	0	0	0	0	755
	Total	755	0	755	0	0	0	0	0	755
1164 FY2013 COMMUNITY ENVIRONMENTAL ARTNERSHIPS	В	50	0	50	0	0	0	0	0	50
his project is for design and construction of nvironmental Site Design (ESD) small scale storm water	G	100	-100	0	0	0	0	0	0	0
acilities.	Р	1,400	0	1,400	0	0	0	0	0	1,400
	R	1,950	500	2,450	300	300	300	300	300	3,950
	Total	3,500	400	3,900	300	300	300	300	300	5,400
o1165 FY2013 FLOOD MITIGATION and STORMWATER/WATERWAY ENHANCEMENT	В	3,400	0	3,400	0	0	0	0	0	3,400
his project is for the study, design, and construction of bood mitigation and stormwater/waterway enhancement	G	2,787	0	2,787	0	0	0	0	0	2,787
fforts in downtown Ellicott City.	0	0	4,900	4,900	4,000	4,000	4,000	4,000	4,000	24,900
	Р	2,475	0	2,475	0	0	0	0	0	2,475
	R	2,400	0	2,400	500	500	500	500	500	4,900
	Total	11,062	4,900	15,962	4,500	4,500	4,500	4,500	4,500	38,462
1166 FY2015 CHESTNUT HILLS DRAINAGE MPROVEMENTS	В	365	150	515	0	0	0	0	0	515
project to design and construct drainage improvements the Chestnut Hills Community including but not limited Described Drive, Family Way Springway Road and Ivy ane.	Total	365	150	515	0	0	0	0	0	515

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
D1167 FY2015 GLENBROOK DRAINAGE	В	760	0	760	0	0	0	0	0	760
A project to design and construct drainage improvements in the Glenbrook Community including but not limited to: Walker Drive and Dogwood Drive.	Total	760	0	760	0	0	0	0	0	760
D1168 FY2015 MORGAN WOODBINE ROAD SLOPE STABILIZATION	В	200	25	225	700	0	0	0	0	925
A project to design and construct stabilization of the roadway embankment of Morgan Woodbine Road adjacent to the South Branch of the Patapsco River.	Total	200	25	225	700	0	0	0	0	925
D1169 FY2016 STORM DRAIN CULVERT REPLACEMENT PROGRAM	В	1,400	1,400	2,800	2,000	300	1,500	300	1,500	8,400
This program will provide for the replacement of failed storm drain pipes and culverts.	Total	1,400	1,400	2,800	2,000	300	1,500	300	1,500	8,400
D1170 FY2017 CARDINAL FOREST DRAINAGE IMPROVEMENTS A project to provide a drainage system to reduce the runoff from adjacent properties onto the properties at the north end of Dove's Fly Way.	В	200	0	200	0	0	0	0	0	200
	Total	200	0	200	0	0	0	0	0	200
D1171 FY2016 CISSELL AVENUE-HADDAWAY PLACE DRAINAGE IMPROVEMENTS	В	300	0	300	0	0	0	0	0	300
A project to acquire the necessary easements of the drainage channel that travels behind the homes of Cissell Avenue and Haddaway Place.	Total	300	0	300	0	0	0	0	0	300
D1173 FY2016 HARRIET TUBMAN LANE DRAINAGE IMPROVEMENTS	В	275	-225	50	0	0	0	0	0	50
A project to design and construct drainage improvements along Harriet Tubman Lane in the 7900 and 8000 block area.	Total	275	-225	50	0	0	0	0	0	50
D1174 FY2016 SPRING GLEN DRAINAGE IMPROVEMENTS	В	75	15	90	175	0	0	0	0	265
A project to design and construct drainage improvements in the Spring Glen Community including but not limited to: Ivy Spring Road and Cross Ivy Road.	Total	75	15	90	175	0	0	0	0	265
D1175 FY-2018 VALLEY MEDE/CHATHAM FLOOD MITIGATION	0	700	500	1,200	3,600	3,600	0	0	0	8,400
This project is for the study, design and construction of flood mitigation and stormwater/waterway improvement efforts in the Valley Mede and Chatham subwatersheds.	Total	700	500	1,200	3,600	3,600	0	0	0	8,400
DRAINAGE PROJECTS Total		134,979	23,795	158,774	45,625	41,000	38,100	36,600	37,800	357,899

Howard County, MD FY2019 Executive Proposed Capital Budget (\$000) DRAIN-DRAINAGE PROJECTS

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	56,310	3,580	59,890
D	DEVELOPER CONTRIBUTION	200	0	200
G	GRANTS	19,365	1,900	21,265
О	OTHER SOURCES	9,067	12,550	21,617
Р	PAY AS YOU GO	5,780	0	5,780
R	STORMWATER UTILTY FUNDING	37,592	5,765	43,357
S	STORM DRAINAGE FUND	2,465	0	2,465
Т	TRANSFER TAX	0	0	0
W	WATER QUALITY State Bond Loan	4,200	0	4,200
Total		134,979	23,795	158,774

2019 Executive Proposed 5 Year Capital Budget Project Type Summary (DRAIN-DRAINAGE PROJECTS)

Rev	enue Source	Prior Approp	Current FY	2020	2021	2022	2023	2024	5 Year Total
В	BONDS	56,310	3,580	5,950	1,200	2,000	800	2,000	71,840
D	DEVELOPER CONTRIBUTION	200	0	0	0	0	0	0	200
G	GRANTS	19,365	1,900	2,000	2,000	2,000	2,000	2,000	31,265
0	OTHER SOURCES	9,067	12,550	31,600	32,000	28,300	29,000	29,000	171,517
Р	PAY AS YOU GO	5,780	0	0	0	0	0	0	5,780
R	STORMWATER UTILTY FUNDING	37,592	5,765	4,800	4,800	4,800	4,800	4,800	67,357
S	STORM DRAINAGE FUND	2,465	0	275	0	0	0	0	2,740
Т	TRANSFER TAX	0	0	1,000	1,000	1,000	0	0	3,000
W	WATER QUALITY State Bond Loan	4,200	0	0	0	0	0	0	4,200
Tota	al	134,979	23,795	45,625	41,000	38,100	36,600	37,800	357,899

DRAINAGE PROJECTS

Number: D1112

Project: D1112-FY1997 DAVIS AVE AREA DRAINAGE IMPROVEMENTS

Description

This project is for the design and construction of storm drainage facilities in the area of Davis Avenue in North Laurel.

Justification

The existing storm drainage system is inadequate. Parts of the area were developed prior to the requirements for adequate storm drains and stormwater management facilities. Improvements will reduce flooding for Midway Village community downstream.

Remarks

- 1. A stormwater management pond has been built (Phase I). A storm drainage system and pond retrofit (Phase II) will be built.
- 2. OTHER funds are from County share of race track money.
- 3. The County is preparing an agreement with the developer to construct the County storm drain improvements.
- 4. Request represents project advancement.

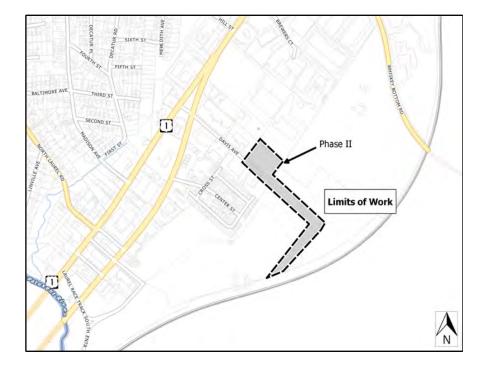
Project Schedule

FY19 - Land Acquisition and Construction (Phase II).

FY20 - Construction (Phase II) and Close.

Operating Budget Impact

Annual Bond Redemption \$\$55,125



Project: FY1997 DAVIS AVE AREA DRAINAGE IMPROVEMENTS

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	190	0	190	0	0	0	0	0	0	0	0	0	0	190
LAND ACQUISITION	115	0	115	0	0	0	0	0	0	0	0	0	0	115
CONSTRUCTION	580	600	1,180	0	0	0	0	0	0	0	0	0	0	1,180
ADMINISTRATION	2	0	2	0	0	0	0	0	0	0	0	0	0	2
Total Expenditures	887	600	1,487	0	0	0	0	0	0	0	0	0	0	1,487
BONDS	625	600	1,225	0	0	0	0	0	0	0	0	0	0	1,225
OTHER SOURCES	257	0	257	0	0	0	0	0	0	0	0	0	0	257
PAY AS YOU GO	5	0	5	0	0	0	0	0	0	0	0	0	0	5
Total Funding	887	600	1,487	0	0	0	0	0	0	0	0	0	0	1,487

\$321,312 spent and encumbered through February 2018 \$310,455 spent and encumbered through February 2017 Project Status: FY18: Storm drainage system design (Phase II) complete. SWM Pond complete (Phase I).

FY 2018 Budget	887	0	887	0	0	0	0	0	0	0	0	0		887
Difference 2018 / 2019	0	600	600	0	0	0	0	0	0	0	0	0	0	600

Project: D1124-FY2007 DRAINAGE IMPROVEMENT PROGRAM

DRAINAGE PROJECTS

Number: D1124

Description

A project for the design and construction of small to medium-sized drainage improvements requested by County residents and the Bureau of Highways.

Justification

Create improved drainage to safely convey surface runoff, to stop flow onto residential properties or to protect the traveled way.

Remarks

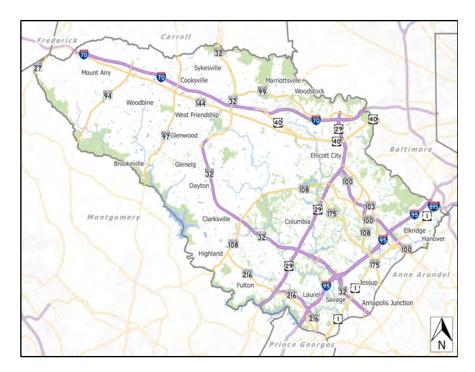
- 1. SDFUND represents Storm Drainage developer contributions derived as a result of 16.133e of the County Code.
- 2. Construction of some projects may be dependent upon donation of the necessary easements and/or resident cost share participation.
- 3. After initial investigation, projects over \$250,000 in construction costs may be split out as a separate Capital Project.
- 4. OTHER funds are resident cost share.
- 5. Project includes assistance with debris removal and assessment of flood mitigation opportunities in the Allview area.
- 6. Request represents program advancement.

Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$129,375



DRAINAGE PROJECTS

Project: FY2007 DRAINAGE IMPROVEMENT PROGRAM

Number: D1124

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,145	150	1,295	60	0	0	0	0	60	0	0	0	0	1,355
LAND ACQUISITION	130	50	180	15	0	0	0	0	15	0	0	0	0	195
CONSTRUCTION	1,900	400	2,300	450	0	0	0	0	450	0	0	0	0	2,750
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	3,185	600	3,785	525	0	0	0	0	525	0	0	0	0	4,310
BONDS	1,975	600	2,575	300	0	0	0	0	300	0	0	0	0	2,875
OTHER SOURCES	10	0	10	0	0	0	0	0	0	0	0	0	0	10
PAY AS YOU GO	250	0	250	0	0	0	0	0	0	0	0	0	0	250
STORM DRAINAGE FUND	950	0	950	225	0	0	0	0	225	0	0	0	0	1,175
Total Funding	3,185	600	3,785	525	0	0	0	0	525	0	0	0	0	4,310

\$2,738,280 spent and encumbered through February 2018 \$2,681,393 spent and encumbered through February 2017

Project Status: FY18 - There are several requests waiting to be started. These will be addressed in turn as other work is completed. The next projects on the list to address are: Globe Drive, Woodside Ct., and McKenzie Rd. Outfall.

Investigation complete: Lime Kiln Rd Culvert, Gudel Dr., Windermere, Walker Dr., Deerfield, Harriett Tubman.Design/land acquisition in progress: Montgomery Rd easement. Construction in progress: Ordway Drive.

Construction complete: Frederick Rd Slope, Maple Rock Drive, Frederick Road, US 40 Landscaping, Little Patuxent and Allview Debris Removal, Cradlerock Way channel wall, Abel St (Phase I and 2), Montgomery Rd., Patuxent Range Rd, Beechfield Ave.

FY 2018 Budget	3,185	700	3,885	425	0	0	0	0	425	0	0	0		4,310
Difference 2018 / 2019	0	(100)	(100)	100	0	0	0	0	100	0	0	0	0	0

Project: D1125-FY2004 EMERGENCY STORM DRAIN RECONSTRUCTION

Description

A fund for Howard County to undertake construction or repairs to storm drainage facilities on an as-needed basis meeting the provisions of the County Code. This program is envisioned to provide rapid assistance in emergency situations.

Justification

Howard County Code Subtitle 5, Section 18.500, which mandated extensive County involvement in storm drainage.

Remarks

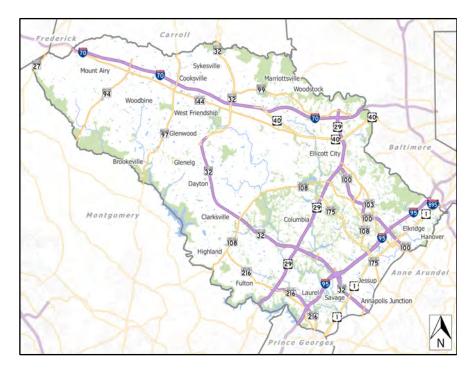
- 1. Construction of some projects may be dependent on donation of necessary easements and/or resident cost share participation.
- 2. SDFUND represents Storm Drainage developer contributions derived as a result of 16.133e of the County Code.
- 3. GRANT represents anticipated FEMA funding for Ellicott City.

Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$67,500



Project: FY2004 EMERGENCY STORM DRAIN RECONSTRUCTION

(In Thousands)					Five	Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	255	0	255	25	0	0	0	0	25	0	0	0	0	280
LAND ACQUISITION	65	0	65	5	0	0	0	0	5	0	0	0	0	70
CONSTRUCTION	1,628	0	1,628	120	0	0	0	0	120	0	0	0	0	1,748
ADMINISTRATION	25	0	25	0	0	0	0	0	0	0	0	0	0	25
Total Expenditures	1,973	0	1,973	150	0	0	0	0	150	0	0	0	0	2,123
BONDS	1,400	0	1,400	100	0	0	0	0	100	0	0	0	0	1,500
GRANTS	148	0	148	0	0	0	0	0	0	0	0	0	0	148
STORM DRAINAGE FUND	425	0	425	50	0	0	0	0	50	0	0	0	0	475
Total Funding	1,973	0	1,973	150	0	0	0	0	150	0	0	0	0	2,123

\$1,200,634 spent and encumbered through February 2018

\$1,220,835 spent and encumbered through February 2017

Project Status: FY18 - Study Complete: Columbia Gateway pipes, Red Clover.

Construction Complete: Henryton Rd. emergency repairs, Ellicott City emergency storm drain repairs, Hobbits Glen storm drain, Dorsey Run Tributary storm drain, Patuxent Range Rd. (Phase 1 and 2), Great Oaks outfall, New Country Lane outfall, Folly Quarter Rd. culvert, Sewall Ave., Danmark Dr., Golden Star Pl., Greenwood Pl.

FY 2018 Budget	1,973	298	2,271	150	0	0	0	0	150	0	0	0		2,421
Difference 2018 / 2019	0	(298)	(298)	0	0	0	0	0	0	0	0	0	0	(298)

Project: D1140-FY2005 PINE TREE/GLEN COURT STORM DRAIN SYSTEM

Description

A project for the design and construction of a storm drain system along Pine Tree Road, Glen Court, and Guilford Road.

Justification

Currently surface runoff is picked up by roadside ditches which have little grade and water stagnates in them. During heavy storms, the residents experience flooding. This work is requested by the residents and recommended by the Bureau of Highways.

Remarks

- 1. Construction project may be dependent on donation of necessary easements and/or resident cost share participation.
- 2. Project to be coordinated with Phase I of K5040.
- 3. Request represents Phase 4 project advancement.

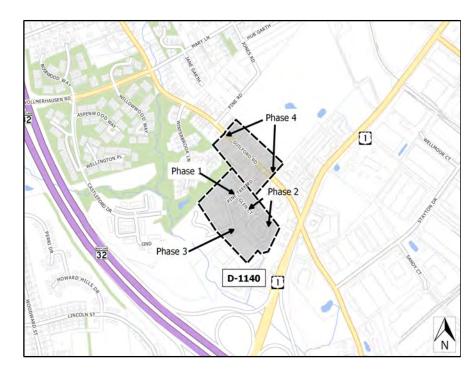
Project Schedule

FY19 - Construction of Phase 4, North side of Guilford Rd.

FY20 - Construction of Phase 4. South side of Guilford Rd.

Operating Budget Impact

Annual Bond Redemption \$ \$138,600



Project: FY2005 PINE TREE/GLEN COURT STORM DRAIN SYSTEM

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	715	(100)	615	0	0	0	0	0	0	0	0	0	0	615
LAND ACQUISITION	285	(50)	235	0	0	0	0	0	0	0	0	0	0	235
CONSTRUCTION	1,775	690	2,465	0	0	0	0	0	0	0	0	0	0	2,465
ADMINISTRATION	5	0	5	0	0	0	0	0	0	0	0	0	0	5
Total Expenditures	2,780	540	3,320	0	0	0	0	0	0	0	0	0	0	3,320
BONDS	2,540	540	3,080	0	0	0	0	0	0	0	0	0	0	3,080
STORM DRAINAGE FUND	240	0	240	0	0	0	0	0	0	0	0	0	0	240
Total Funding	2,780	540	3,320	0	0	0	0	0	0	0	0	0	0	3,320

\$2,548,332 spent and encumbered through February 2018

\$2,565,312 spent and encumbered through February 2017

Project Status: FY18 - Design of Phase 4 complete. Land acquisition underway. Phases 1, 2 and 3 - Construction complete.

FY 2018 Budget	2,780	75	2,855	600	0	0	0	0	600	0	0	0		3,455
Difference 2018 / 2019	0	465	465	(600)	0	0	0	0	(600)	0	0	0	0	(135)

Project: D1148-FY2007 NPDES WATERSHED MANAGEMENT PROGRAM

Description

A project for permitting and implementing the requirements of the National Pollutant Discharge Elimination System (NPDES) to detect and reduce pollutants in stormwater system discharges and to perform studies related to storm water utility financing.

Justification

This project is necessary to comply with the Federal Government's Clean Water Act.

Remarks

- 1. This project replaces Capital Project D1115.
- 2. A five year renewal NPDES permit was issued by MDE in June 2005.
- 3. The County was issued a new five-year permit on December 18, 2014.
- 4. A portion of funding generated from legislation CB-8 & CR21 for stormwater utility funding, known as Watershed Protection and Restoration fund.

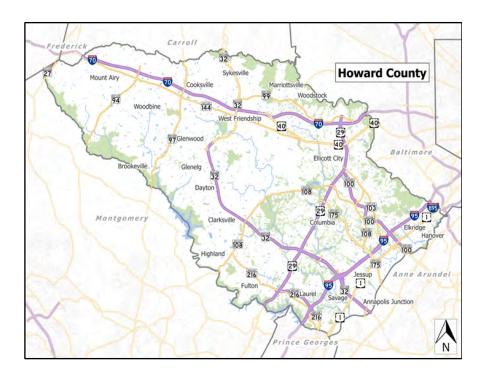
Project Schedule

FY19 - Perform work to assess and address Total Maximum Daily Loads (TMDL) and Watershed Implementation Plan (WIP) requirements to meet NPDES permit conditions.

Evaluate and refine nutrient load reductions in drainage areas where there are multiple BMP facilities as required by MDE (known as POI assessments). Continue database development for NPDES reporting requirements.

Operating Budget Impact

Annual Bond Redemption \$ \$336,600



DRAINAGE PROJECTS

Number: D1148

Project: FY2007 NPDES WATERSHED MANAGEMENT PROGRAM

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	5,805	265	6,070	500	500	500	500	500	2,500	300	300	300	300	9,770
Total Expenditures	5,805	265	6,070	500	500	500	500	500	2,500	300	300	300	300	9,770
BONDS	3,780	0	3,780	500	500	500	500	500	2,500	300	300	300	300	7,480
PAY AS YOU GO	650	0	650	0	0	0	0	0	0	0	0	0	0	650
STORMWATER UTILTY FUNDING	1,375	265	1,640	0	0	0	0	0	0	0	0	0	0	1,640
Total Funding	5,805	265	6,070	500	500	500	500	500	2,500	300	300	300	300	9,770

\$5,509,342 spent and encumbered through February 2018

\$5,443,838 spent and encumbered through February 2017

Project Status: Performed Upper Little Patuxent Watershed Study.

Prepared Watershed Treatment Model and generated input to State WIP II.

Performed stormwater utility fund financing study.

Performed site assessments for additional BMP implementation.

Partially funded Alliance for the Chesapeake Bay (READY) grant.

Design ESD BMPs at Rockburn Branch Park.

Completed draft and final Countywide Implementation Strategy (CIS) for meeting TMDL commitments and impervious cover treatment requirements.

Perform database creation and impervious cover baseline calculations for NPDES reporting requirements.

Performed historical BMP cleanup to meet MDE requirements.

Performed Little Patuxent and Middle Patuxent Watershed Assessments.

Perform Patapsco and Patuxent River watershed assessments.

Begin Point of Investigation assessment and reporting required by MDE.

FY 2018 Budget	5,805	800	6,605	500	500	500	500	0	2,000	0	0	0		8,605
Difference 2018 / 2019	0	(535)	(535)	0	0	0	0	500	500	300	300	300	300	1,165

Project: D1150-FY2005 HIGH RIDGE DRAINAGE

DRAINAGE PROJECTS

Number: D1150

Description

A project to design and construct storm drain improvements in the High Ridge area including, but not limited to: Old Scaggsville Road, Naylor Avenue, Hughes Avenue, Robinson Boulevard, Gross Avenue, Bryant Avenue, Grant Avenue, and Lyon Avenue

Justification

The High Ridge Community was initially developed before the current day standards for streets and drainage accommodations. The community has requested drainage improvements to the area.

Remarks

- 1. Construction project may be dependent on donation of necessary easements and/or resident cost share participation.
- 2. Request represents project advancement.

Project Schedule

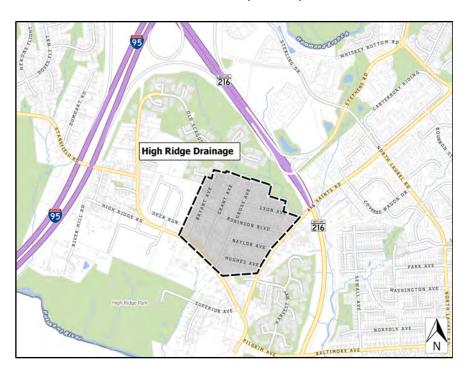
FY19 - Design and Land Acquisition (Robinson Blvd., Old Scaggsville, Hughes, Gross, All Saints and Lyon).

FY20 - Construction.

FY21 - Complete and Close.

Operating Budget Impact

Annual Bond Redemption \$ \$190,575



Project: FY2005 HIGH RIDGE DRAINAGE Number: D1150

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	605	350	955	0	0	0	0	0	0	0	0	0	0	955
LAND ACQUISITION	115	0	115	0	0	0	0	0	0	0	0	0	0	115
CONSTRUCTION	1,050	0	1,050	2,100	0	0	0	0	2,100	0	0	0	0	3,150
ADMINISTRATION	15	0	15	0	0	0	0	0	0	0	0	0	0	15
Total Expenditures	1,785	350	2,135	2,100	0	0	0	0	2,100	0	0	0	0	4,235
BONDS	1,785	350	2,135	2,100	0	0	0	0	2,100	0	0	0	0	4,235
Total Funding	1,785	350	2,135	2,100	0	0	0	0	2,100	0	0	0	0	4,235

\$1,562,196 spent and encumbered through February 2018

\$1,519,576 spent and encumbered through February 2017
Project Status: FY18 - Design (Robinson Blvd., All Saints Rd., Old Scaggsville, Hughes, Gross and Lyon). Construction complete for Bryant Ave. and Grant Ave.

FY 2018 Budget	1,785	1,950	3,735	0	0	0	0	0	0	0	0	0		3,735
Difference 2018 / 2019	0	(1,600)	(1,600)	2,100	0	0	0	0	2,100	0	0	0	0	500

Project: D1155-FY2006 LINCOLN DRIVE at CEDAR VIL PARK DRAINAGE

Description

There is an inadequate drainage system to carry the runoff from the park side of the road to the outfall side of Lincoln Drive. Additional drainage facilities are needed along Cedar Avenue, Georgia Avenue and Wye Avenue.

Justification

The Bureau of Highways requested this project to reduce annual maintenance costs.

Remarks

Project has been split into two phases to move project due to right-of-way issues. Phase 1 includes all work south of Georgia Avenue.

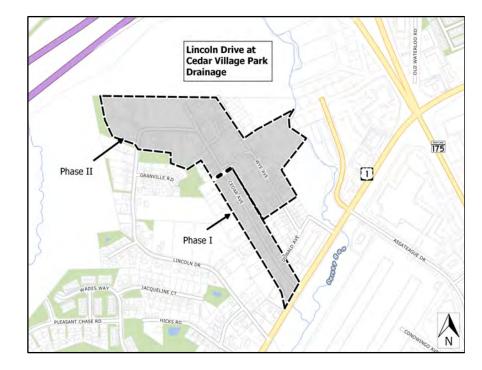
Phase 2 includes all other work, including work in vicinity of Wye Avenue.

Project Schedule

FY19 - Complete and Close.

Operating Budget Impact

Annual Bond Redemption \$ \$73,575



DRAINAGE PROJECTS

Number: D1155

Project: FY2006 LINCOLN DRIVE at CEDAR VIL PARK DRAINAGE

(In Thousands)					Fiv	e Year Ca	pital Pro	Master Plan						
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	170	0	170	0	0	0	0	0	0	0	0	0	0	170
LAND ACQUISITION	45	0	45	0	0	0	0	0	0	0	0	0	0	45
CONSTRUCTION	1,420	0	1,420	0	0	0	0	0	0	0	0	0	0	1,420
Total Expenditures	1,635	0	1,635	0	0	0	0	0	0	0	0	0	0	1,635
BONDS	1,635	0	1,635	0	0	0	0	0	0	0	0	0	0	1,635
Total Funding	1,635	0	1,635	0	0	0	0	0	0	0	0	0	0	1,635

\$629,189 spent and encumbered through February 2018 \$613,038 spent and encumbered through February 2017 Project Status: FY18 - Complete construction of Phase 1. Land acquisition and construction for Phase 2.

Land acquisition for Phase 1 complete.

FY 2018 Budget	1,635	0	1,635	0	0	0	0	0	0	0	0	0		1,635
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: D1157-FY2006 ST JOHNS LANE VICINITY DRAINAGE

DRAINAGE PROJECTS

Number: D1157

Description

A project for the construction of drainage improvements along St Johns Lane, Northfield Road, Southfield Road, Cresent Road, Hawthorne Road, Crestleigh Road, Club Court and the adjacent neighborhoods.

Justification

The Traffic Division has requested that the drainage of St. Johns Lane be improved and adjacent property owners have requested that the runoff from the road and other drainage issues in the adjacent neighborhoods be addressed.

Remarks

- 1. Construction of some projects may be dependent on donation of necessary easements and/or resident cost share participation.
- 2. Phase IV Drainage Improvements along Northfield Road and Southfield Road.
- 3. Phase V Drainage Improvements along Club Court. Dado Ct. added.

Project Schedule

FY19 - Construction

Operating Budget Impact

Annual Bond Redemption \$ \$63,675



DRAINAGE PROJECTS

Project: FY2006 ST JOHNS LANE VICINITY DRAINAGE

Number: D1157

(In Thousands)					Five	e Year Ca	pital Pro	gram		Master Plan						
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project		
PLANS & ENGINEERING	290	0	290	0	0	0	0	0	0	0	0	0	0	290		
LAND ACQUISITION	100	0	100	0	0	0	0	0	0	0	0	0	0	100		
CONSTRUCTION	1,020	0	1,020	0	0	0	0	0	0	0	0	0	0	1,020		
ADMINISTRATION	5	0	5	0	0	0	0	0	0	0	0	0	0	5		
Total Expenditures	1,415	0	1,415	0	0	0	0	0	0	0	0	0	0	1,415		
BONDS	1,415	0	1,415	0	0	0	0	0	0	0	0	0	0	1,415		
Total Funding	1,415	0	1,415	0	0	0	0	0	0	0	0	0	0	1,415		
\$1,044,117 spent and encumbered \$1,060,512 spent and encumbered Project Status : FY18 - Land acquis	through Febr	uary 2017	٠V.													
FY 2018 Budget	1,415	100	1,515	0	0	0	0	0	0	0	0	0		1,515		
Difference 2018 / 2019	0	(100)	(100)	0	0	0	0	0	0	0	0	0	0	(100)		

Project: D1158-FY2008 WATERSHED MANAGEMENT CONSTRUCTION

Description

This project is for design and construction of stormwater facility improvements. The project will include NPDES stormwater management implementation requirements, floodplain studies, including retrofitting of stormwater management ponds, restoration and certification of detention basins, continued improvement of flood alert systems, streambank restoration including bio-engineering, water quality devices (such as wetlands), channel restoration and water quality monitoring studies.

Justification

- 1. NPDES Program is required by EPA and MDE under the Clean Water Act.
- 2. Watershed management of floodplains is needed to provide additional protection for older communities.
- 3. Erosion of tributaries of Patapsco and Patuxent Rivers to be addressed.

Remarks

- 1. SDFUND represents fee-in-lieu of SWM construction by developers for County use in design or construction of other SWM facilities.
- 2. GRANT funds include local implementation grant from Chesapeake and Atlantic Coastal Bays 2010 Trust Fund and ARRA.
- 3. WQ Loan represents State Revolving Loan funding.
- 4. OTHER SOURCES represent Stormwater Bonds backed by Watershed Protection and Restoration fund, plus funds provided to County through Memorandums of Understandings for cost sharings.
- 5. Construction of some projects may be dependent upon donation of the necessary easements and/or property owner cost share participation.

Project Schedule

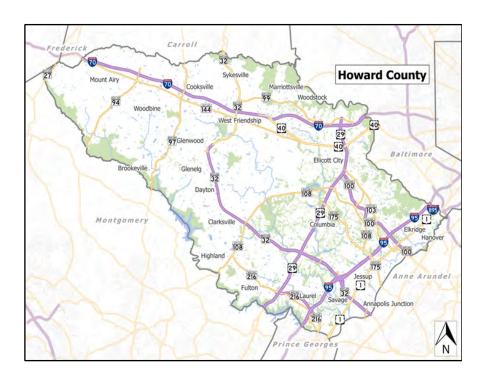
FY19 Designs: Phelps Luck, Sweet Hours, Plum Spring Lane, Gwynn Park Drive. FY19 Constructions: Patrick Farm, Little Patuxent River at Frederick Road, Willow Bend, Brentwood Manor, Wood Creek.

FY19 Design/Build: Font Hill Tributary at Centennial Lane West.

Continue to perform post construction stream monitoring at approximately 20 completed stream restoration projects.

Operating Budget Impact

Annual Bond Redemption \$\$586,575



DRAINAGE PROJECTS

Number: D1158

Project: FY2008 WATERSHED MANAGEMENT CONSTRUCTION

(In Thousands)			Five	Year Ca	pital Prog		Master Plan							
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	8,770	530	9,300	2,000	2,000	2,000	2,000	2,000	10,000	1,000	1,000	1,000	1,000	23,300
CONSTRUCTION	37,742	5,300	43,042	17,800	17,800	17,800	17,800	17,800	89,000	8,900	8,900	8,900	8,900	167,642
ADMINISTRATION	850	170	1,020	200	200	200	200	200	1,000	100	100	100	100	2,420
Total Expenditures	47,362	6,000	53,362	20,000	20,000	20,000	20,000	20,000	100,000	10,000	10,000	10,000	10,000	193,362
BONDS	10,795	0	10,795	0	0	0	0	0	0	0	0	0	0	10,795
DEVELOPER CONTRIBUTION	200	0	200	0	0	0	0	0	0	0	0	0	0	200
GRANTS	10,600	2,000	12,600	2,000	2,000	2,000	2,000	2,000	10,000	2,000	2,000	2,000	2,000	30,600
OTHER SOURCES	6,100	4,000	10,100	15,000	15,000	15,000	16,000	16,000	77,000	7,000	7,000	7,000	7,000	115,100
PAY AS YOU GO	1,000	0	1,000	0	0	0	0	0	0	0	0	0	0	1,000
STORM DRAINAGE FUND	850	0	850	0	0	0	0	0	0	0	0	0	0	850
TRANSFER TAX	0	0	0	1,000	1,000	1,000	0	0	3,000	0	0	0	0	3,000
WATER QUALITY State Bond Loan	4,200	0	4,200	0	0	0	0	0	0	0	0	0	0	4,200
STORMWATER UTILTY FUNDING	13,617	0	13,617	2,000	2,000	2,000	2,000	2,000	10,000	1,000	1,000	1,000	1,000	27,617
Total Funding	47,362	6,000	53,362	20,000	20,000	20,000	20,000	20,000	100,000	10,000	10,000	10,000	10,000	193,362

\$38,451,540 spent and encumbered through February 2018 \$25,545,342 spent and encumbered through February 2017

Project Status: Stream Restoration Projects:

1. Design initiated - Sunny Field Court, Wood Crest Drive, Cherry Tree Farms, Wood Creek, North Laurel Community Center.

2. Design completed - Ducketts Lane, Stonehouse Drive, Starling Road, Willow Bend Court, Woodlot Road, Mellen Court, Little Patuxent River at Frederick Road, Park Drive.

^{3.} Construction completed - Autumn Harvest - Phase 2, Bramhope La, Brightwood Ct, Dower Dr, Ducks Foot Ln - Phase 2, Elmmede Rd, Faulkner Ridge Circle, Great Drum Circle, Meadowbrook Park, Old Willow Way, Paul Mill Rd, Red Hill Way, Stone Trail Ct, Tall Maple Ct, Threshfield Ct, Tiller Dr, Tiller Dr - Phase 2, Tuscany Rd, Waverly Woods Retrofit, Wheatfield Way, Whiterock Ct, Windflower Dr, Southview Rd, Pinehurst Ct, Dorsey Hall Village Center, Bonnie Branch, Greenway Drive Drainage Improvements, Davis Branch, Swansfield Rd Trail, Howard Community College, Red Hill - Phase 2, Churchill Way, Dobbin Road RSC, Timbers of Troy, Dunloggin Middle School, 3505 Font Hill Bank Repair, Heatherland Court.

FY 2018 Budget	47,362	20,000	67,362	22,200	22,200	22,200	22,200	0	88,800	0	0	0		156,162
Difference 2018 / 2019	0	(14,000)	(14,000)	(2,200)	(2,200)	(2,200)	(2,200)	20,000	11,200	10,000	10,000	10,000	10,000	37,200

TAO 1-2017 received \$550,000 Grant revenue from D1165.

Project: D1159-FY2007 STORMWATER MANAGEMENT FACILITY RECONSTRUC

Description

A fund for Howard County to undertake construction or repairs to stormwater management on an as-needed basis meeting the provisions of the County Code. This program is envisioned to provide rapid assistance in emergency situations.

Justification

Howard County Code Section 18.900, which requires inspection and maintenance of storm water management facilities. Metal pipe pond barrels are deteriorating as they reach the end of their expected life and need to be repaired or replaced.

Remarks

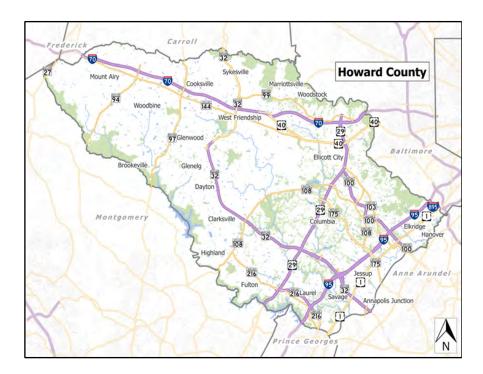
- 1. GRANT funds include local implementation grant from the Chesapeake and Atlantic Coastal Bays 2010 Trust Fund.
- 2. A portion of current request represents funding to be generated from legislation CB-8 & CR21 for stormwater utility funding, known as Watershed Protection and Restoration fund.
- 3. Construction of some projects may be dependent upon donation of the necessary easements and/or property owner cost share participation.
- 4. OTHER SOURCES represents Stormwater Bonds backed by Watershed Protection and Restoration fund.

Project Schedule

FY19 Designs - 4 barrel repairs/replacements FY19 Construction - 7 barrel repairs/replacements

Operating Budget Impact

Annual Bond Redemption \$ \$706,050



DRAINAGE PROJECTS

Number: D1159

Project: FY2007 STORMWATER MANAGEMENT FACILITY RECONSTRUC

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	5,200	300	5,500	400	400	400	400	400	2,000	400	400	400	400	9,100
CONSTRUCTION	23,375	5,000	28,375	7,500	7,500	7,500	7,500	7,500	37,500	7,500	7,500	7,500	7,500	95,875
ADMINISTRATION	915	100	1,015	100	100	100	100	100	500	100	100	100	100	1,915
Total Expenditures	29,490	5,400	34,890	8,000	8,000	8,000	8,000	8,000	40,000	8,000	8,000	8,000	8,000	106,890
BONDS	15,690	0	15,690	0	0	0	0	0	0	0	0	0	0	15,690
GRANTS	450	0	450	0	0	0	0	0	0	0	0	0	0	450
OTHER SOURCES	0	400	400	8,000	8,000	8,000	8,000	8,000	40,000	8,000	8,000	8,000	8,000	72,400
STORMWATER UTILTY FUNDING	13,350	5,000	18,350	0	0	0	0	0	0	0	0	0	0	18,350
Total Funding	29,490	5,400	34,890	8,000	8,000	8,000	8,000	8,000	40,000	8,000	8,000	8,000	8,000	106,890

\$25,551,550 spent and encumbered through February 2018 \$24,106,453 spent and encumbered through February 2017

Project Status: Designed: 82 pond repairs

Constructed: Red Clover Dam; Willow Brook; West Zone Highways Shop pond; Rockburn 2; Dunteachin pond; Cromwell Court; Falling Waters; Stratford Downs; Hickory Ridge Village Center; Gateway pond; Shadow Lane repair and dredging; Hickory Ridge LPP; Samuel Morse; Ivy Terrace infiltration; Bonnie Brae; Emily Fox; Bill Lilly; Cypress Bay Court; Lynn Buff; Beech Creek 2; Brightfield; Turf Valley Overlook pond 2; Weston Drive; Blue February; Chestnut Farms outfall; Wimbledon Court; Wetherburn; Angelas Valley; 10 trashrack replacements; Rhode Valley; Emily Fox Ct; Old Mill; Towering Oaks; North Laurel pipe repair; Red Cravat repair and dredging; Glenshire Town; Northgate Woods; Murray Hill 2; Mary Lee Lane; Montgomery Run Pond 2; Winding Star; Longridge Knolls; River Hill 3; Long Meadow pond; Long Meadow pond 2; North Ridge; Rusty Rim; Sweet Hours; Townhomes of Timberland; Velvet Path; Junction Industrial Park; Fairest Dream; Golden Star 1 and 2, Linden Chapel, Twin Oaks, Terra Maria, Beech Creek, Glenmar Section 2, Many Miles Mew, Kings Meade.

FY 2018 Budget	29,490	10,300	39,790	8,000	8,000	8,000	8,000	0	32,000	0	0	0		71,790
Difference 2018 / 2019	0	(4,900)	(4,900)	0	0	0	0	8,000	8,000	8,000	8,000	8,000	8,000	35,100

DRAINAGE PROJECTS

Number: D1160

Project: D1160-FY2010 STORMWATER MANAGEMENT RETROFITS

Description

A project for the retrofit of stormwater management facilities to include water quality management.

Justification

Numerous facilities built in the early period of stormwater management provide only water quality management. Howard County's Stormwater Management NPDES permit requires the County to improve water quality, in part, through retrofitting existing facilities designed only for water quality management.

Remarks

- 1. This project replaces D-1141.
- 2. Grant funds included from the American Recovery and Reinvestment Act and local implementation grant from Chesapeake and Atlantic Coastal Bays 2010 Trust Fund.
- 3. OTHER SOURCES represent Stormwater Bonds backed by Watershed Protection and Restoration fund, plus funds provided to County through Memorandum of Understanding of cost sharing.
- 4. Construction of some projects may be dependent upon donation of the necessary easements and/or property owner cost share participation.

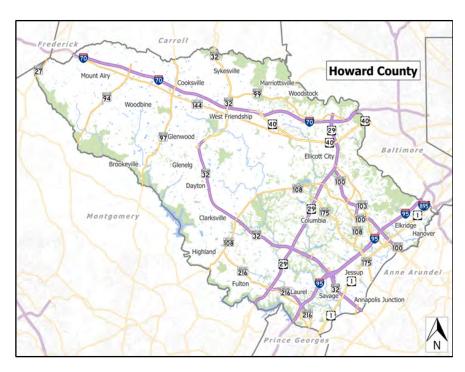
Project Schedule

FY19 Designs: Kesting Court; Village of Oakland Mills, Sec 3, Area 2; Golden Coin Court.

FY19 Construction: Country Meadows, Ashton Woods, Brentwood Manor

Operating Budget Impact

Annual Bond Redemption \$ \$310,050 Technical/administrative management support.



DRAINAGE PROJECTS

Number: D1160

Project: FY2010 STORMWATER MANAGEMENT RETROFITS

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	4,590	400	4,990	600	800	700	600	600	3,300	400	400	400	400	9,890
CONSTRUCTION	13,960	2,250	16,210	2,300	2,500	2,500	2,300	2,300	11,900	2,000	2,000	2,000	2,000	36,110
ADMINISTRATION	520	100	620	100	100	100	100	100	500	100	100	100	100	1,520
Total Expenditures	19,070	2,750	21,820	3,000	3,400	3,300	3,000	3,000	15,700	2,500	2,500	2,500	2,500	47,520
BONDS	6,890	0	6,890	0	0	0	0	0	0	0	0	0	0	6,890
GRANTS	5,280	0	5,280	0	0	0	0	0	0	0	0	0	0	5,280
OTHER SOURCES	2,000	2,750	4,750	1,000	1,400	1,300	1,000	1,000	5,700	2,500	2,500	2,500	2,500	20,450
STORMWATER UTILTY FUNDING	4,900	0	4,900	2,000	2,000	2,000	2,000	2,000	10,000	0	0	0	0	14,900
Total Funding	19,070	2,750	21,820	3,000	3,400	3,300	3,000	3,000	15,700	2,500	2,500	2,500	2,500	47,520

\$16,024,079 spent and encumbered through February 2018 \$12,834,449 spent and encumbered through February 2017

Project Status: In Design: Quaker Mill Court, Wood Crest Drive, Country Meadows, Patapsco Park Estates, Brentwood Manor.

Constructed: Lynwood Manor, Deep Earth Lane, Recreation and Parks HQ, Turf Valley Overlook Pond 3; Rockburn Branch Park; Country Lane (2 ponds); Oak West Drive; Wilde Lake HS; Turf Valley Overlook pond 2; Whitworth Way; Wimbledon Court; Stevens Forest ES; Dorsey Hall Village Center; Mt Hebron High School; Cedar Lane Park; Baltimore-Washington Industrial Park; Howard County Center for the Arts; St Johns Green; River Hill Shallow Marsh; Dorsey Building Parking Lot; Atholton Park; Ashmede Road pond; Salterforth ponds 1 and 2; Students Branching Out tree planting, Garland Road, Heritage Woods, Governor Martin outfall, Waiting Springs, Ellicott View.

FY 2018 Budget	19,070	3,000	22,070	3,400	3,300	3,000	3,000	0	12,700	0	0	0		34,770
Difference 2018 / 2019	0	(250)	(250)	(400)	100	300	0	3,000	3,000	2,500	2,500	2,500	2,500	12,750

DRAINAGE PROJECTS

Number: D1161

Project: D1161-FY2019 SHAFFERSVILLE ROAD CULVERT REPLACEMENT

Description

A project to replace the existing culvert on Shaffersville Road (between Florence Road and Shaffers Mill Road).

Justification

Requested by the Bureau of Highways. The existing culvert floods regularly necessitating the closure of the road. This is a maintenance problem for the Bureau of Highways and an inconvenience to the traveling public.

Remarks

- 1. Shaffersville Road is a scenic road.
- 2. Request represents project initiation.

Project Schedule

FY19 - Design.

FY20 - Land Acquisition.

FY21 - Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$27,000



DRAINAGE PROJECTS

Number: D1161

Project: FY2019 SHAFFERSVILLE ROAD CULVERT REPLACEMENT

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	125	125	0	0	0	0	0	0	0	0	0	0	125
LAND ACQUISITION	0	0	0	75	0	0	0	0	75	0	0	0	0	75
CONSTRUCTION	0	0	0	0	400	0	0	0	400	0	0	0	0	400
Total Expenditures	0	125	125	75	400	0	0	0	475	0	0	0	0	600
BONDS	0	125	125	75	400	0	0	0	475	0	0	0	0	600
Total Funding	0	125	125	75	400	0	0	0	475	0	0	0	0	600
\$0 spent and encumbered throug spent and encumbered through F Project Status :		18												
FY 2018 Budget	0	125	125	400	0	0	0	0	400	0	0	0		525
Difference 2018 / 2019	0	0	0	(325)	400	0	0	0	75	0	0	0	0	75

Project: D1163-FY2012 TROTTER ROAD SLOPE STABILIZATION

DRAINAGE PROJECTS

Number: D1163

Description

This project is for the design and construction of stabilization of the streambank of a tributary of the Middle Patuxent River and the adjacent roadway fill of Trotter Road.

Justification

The roadway embankment is being eroded by the force of the stream adjacent to the roadway fill.

Remarks

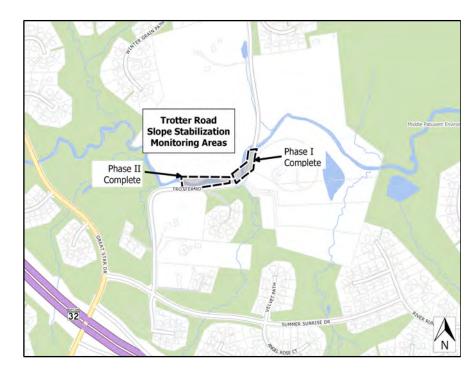
Trotter Road is a Scenic Road.

Project Schedule

FY19 - Complete and close.

Operating Budget Impact

Annual Bond Redemption \$ \$33,975



DRAINAGE PROJECTS

Number: D1163

Project: FY2012 TROTTER ROAD SLOPE STABILIZATION

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	200	0	200	0	0	0	0	0	0	0	0	0	0	200
LAND ACQUISITION	5	0	5	0	0	0	0	0	0	0	0	0	0	5
CONSTRUCTION	550	0	550	0	0	0	0	0	0	0	0	0	0	550
Total Expenditures	755	0	755	0	0	0	0	0	0	0	0	0	0	755
BONDS	755	0	755	0	0	0	0	0	0	0	0	0	0	755
Total Funding	755	0	755	0	0	0	0	0	0	0	0	0	0	755

\$748,408 spent and encumbered through February 2018 \$733,910 spent and encumbered through February 2017 Project Status: FY18 - Construction is complete. Continue monitoring project per permit requirements.

FY 2018 Budget	755	0	755	0	0	0	0	0	0	0	0	0		755
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: D1164-FY2013 COMMUNITY ENVIRONMENTAL PARTNERSHIPS Number: D1164

Description

This project is for design and construction of Environmental Site Design (ESD) small scale storm water facilities. The project will include retrofit of County owned roads, as well as, incentives for property owners to install ESD facilities and non-turf landscape alternatives to provide treatment of storm water runoff from impervious surfaces on their property.

Justification

Additional treatment of storm water runoff is needed to support efforts consistent with the Chesapeake Bay Total Maximum Daily Load for nitrogen and phosphorus established in 2010 by the US EPA. These requirements are further specified in Maryland's Phase II Watershed Implementation Plan, as well as, the Municipal Separate Storm Sewer discharge (MS4) permit issued to Howard County, both issued by the Maryland Department of the Environment in support of the TMDL.

Remarks

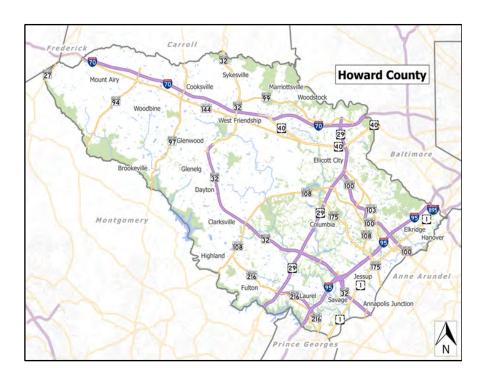
- 1. Participation by residents and landscape service companies will be encouraged by outreach and education efforts and by cost sharing ESD implementation and landscaping modifications with property owners.
- 2. A portion of current request represents funding to be generated from legislation CB-8 & CR21 for stormwater utility funding, known as Watershed Protection and Restoration fund.
- 3. Construction of some projects may be dependent upon donation of the necessary easements and/or property owner cost share participation.

Project Schedule

FY19 - Provide additional funding for Howard EcoWorks, formerly READY.

Operating Budget Impact

Annual Bond Redemption \$ \$2,250



Project: FY2013 COMMUNITY ENVIRONMENTAL PARTNERSHIPS

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	700	0	700	0	0	0	0	0	0	0	0	0	0	700
CONSTRUCTION	2,800	400	3,200	300	300	300	300	300	1,500	0	0	0	0	4,700
Total Expenditures	3,500	400	3,900	300	300	300	300	300	1,500	0	0	0	0	5,400
BONDS	50	0	50	0	0	0	0	0	0	0	0	0	0	50
GRANTS	100	(100)	0	0	0	0	0	0	0	0	0	0	0	0
PAY AS YOU GO	1,400	0	1,400	0	0	0	0	0	0	0	0	0	0	1,400
STORMWATER UTILTY FUNDING	1,950	500	2,450	300	300	300	300	300	1,500	0	0	0	0	3,950
Total Funding	3,500	400	3,900	300	300	300	300	300	1,500	0	0	0	0	5,400

\$3,400,000 spent and encumbered through February 2018 \$2,912,345 spent and encumbered through February 2017 Project Status:

Provided partial funding for Alliance for the Chesapeake Bay (READY) grant, a.k.a. Howard EcoWorks.

Performed concept grading, soil borings, and survey for Ellicott City Parking Lot E.

Performed design & construction for Savage Library water quality enhancements.

FY 2018 Budget	3,500	500	4,000	500	500	500	500	0	2,000	0	0	0		6,000
Difference 2018 / 2019	0	(100)	(100)	(200)	(200)	(200)	(200)	300	(500)	0	0	0	0	(600)

Project: D1165-FY2013 FLOOD MITIGATION and STORMWATER/WATERWAY ENHANCEMENT

Description

This project is for the study, design, and construction of flood mitigation and stormwater/waterway enhancement efforts in downtown Ellicott City. Projects may include drainage improvements, stormwater retrofits, flood control, stream improvements, and design of additional drainage facilities.

Justification

Ellicott City has the potential to suffer significant flood damage.

Remarks

- 1. Future years once projects cost/benefits determined, apply for FEMA grants. FY18 GRANT represents anticipated FEMA funding for Ellicott City.
- 2. OTHER SOURCES represents Stormwater Bonds backed by Watershed Protection and Restoration fund.
- 3. Construction of some projects may be dependent upon donation of the necessary easements and/or property owner cost share participation.
- 4. FY18 funding includes work to be completed for ongoing future flood mitigation projects and programs driven by the Historic Ellicott City Flood Workgroup and consultant modeling efforts.

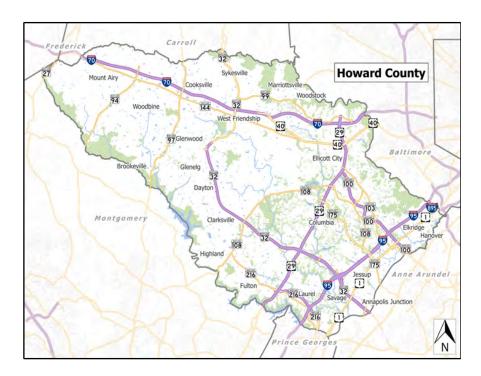
Project Schedule

FY19 - Design two flood mitigation projects.

FY19 - Construction - Quaker Mill Pond, Courthouse Drive Stream, one flood mitigation project.

Operating Budget Impact

Annual Bond Redemption \$ \$153,000



Project: FY2013 FLOOD MITIGATION and STORMWATER/WATERWAY ENHANCEMENT

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	2,125	400	2,525	500	500	500	500	500	2,500	500	500	500	500	7,025
LAND ACQUISITION	500	0	500	0	0	0	0	0	0	0	0	0	0	500
CONSTRUCTION	8,287	4,400	12,687	4,000	4,000	4,000	4,000	4,000	20,000	4,000	4,000	4,000	4,000	48,687
ADMINISTRATION	150	100	250	0	0	0	0	0	0	0	0	0	0	250
Total Expenditures	11,062	4,900	15,962	4,500	4,500	4,500	4,500	4,500	22,500	4,500	4,500	4,500	4,500	56,462
BONDS	3,400	0	3,400	0	0	0	0	0	0	0	0	0	0	3,400
GRANTS	2,787	0	2,787	0	0	0	0	0	0	0	0	0	0	2,787
OTHER SOURCES	0	4,900	4,900	4,000	4,000	4,000	4,000	4,000	20,000	4,000	4,000	4,000	4,000	40,900
PAY AS YOU GO	2,475	0	2,475	0	0	0	0	0	0	0	0	0	0	2,475
STORMWATER UTILTY FUNDING	2,400	0	2,400	500	500	500	500	500	2,500	500	500	500	500	6,900
Total Funding	11,062	4,900	15,962	4,500	4,500	4,500	4,500	4,500	22,500	4,500	4,500	4,500	4,500	56,462

\$4,300,873 spent and encumbered through February 2018

\$3,234,139 spent and encumbered through February 2017

Project Status: Performed 2-D floodplain model and identify possible mitigation projects based on Tropical Storm Lee.

Designed Parking Lot B water quality improvement.

Designed and constructed Parking Lot E including stormwater improvements.

Remove large debris from stream channel.

Performed 2-D floodplain model and identify possible mitigation projects for entire Tiber and Hudson Branches based on July 30, 2016 storm.

Perform Corps of Engineers flood proofing study.

Perform repairs due to July 30, 2016 storm at Maplewood pond, Ellicott Mills Brewery failed wall, Precious Gifts wall, 84" Culvert wall, Parking Lot E corner wall, HiHo Silver wall, Lot E/F wall, 8659 Main Street.

Preliminary design George Howard Building and Court House Parking Lot stormwater management.

Flood mitigation project designs - Pond T1 and H7, West End Diversion Pipe, 84" Culvert Expansion.

Design Courthouse Drive stream repair.

FY 2018 Budget	11,062	2,500	13,562	2,500	2,250	2,250	2,250	0	9,250	0	0	0		22,812
Difference 2018 / 2019	0	2,400	2,400	2,000	2,250	2,250	2,250	4,500	13,250	4,500	4,500	4,500	4,500	33,650

^{1.} TAO 1-2107 transferred \$550,000 Grant revenue to D1158. 2. CB3-2107 added \$1,700,000 in Pay as you Go funding for unanticipated expenses related to Ellicott City flood response and recovery efforts.

Project: D1166-FY2015 CHESTNUT HILLS DRAINAGE IMPROVEMENTS

Description

A project to design and construct drainage improvements in the Chestnut Hills Community including but not limited to: Deerfield Drive, Family Way Springway Road and Ivy Lane.

Justification

This community was built in the 1960s and 1970s with the drainage standards of the time (little or no storm drainage system and no stormwater management). Parts of the area suffer flooding during infrequent, large runoff events that would not be as damaging if the area were designed to today's drainage standards. This work is requested by residents of the area.

Remarks

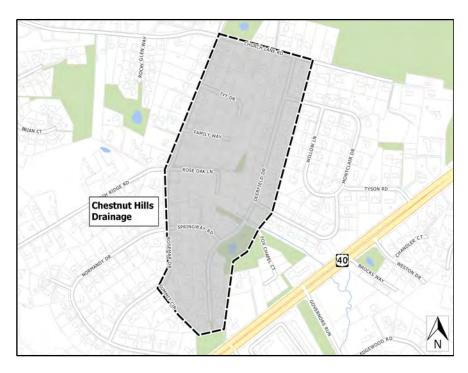
- 1. Construction project may be dependent on donation of necessary easements and/or resident cost share participation.
- 2. Request represents project advancement.

Project Schedule

FY19 - Land Acquisition and Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$23,175



Number: D1166

Project: FY2015 CHESTNUT HILLS DRAINAGE IMPROVEMENTS

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	225	25	250	0	0	0	0	0	0	0	0	0	0	250
LAND ACQUISITION	25	0	25	0	0	0	0	0	0	0	0	0	0	25
CONSTRUCTION	115	125	240	0	0	0	0	0	0	0	0	0	0	240
Total Expenditures	365	150	515	0	0	0	0	0	0	0	0	0	0	515
BONDS	365	150	515	0	0	0	0	0	0	0	0	0	0	515
Total Funding	365	150	515	0	0	0	0	0	0	0	0	0	0	515
\$162,610 spent and encumbered t \$53,362 spent and encumbered th Project Status : FY18 - Design com	rough Februar	y 2017	lerway.											
FY 2018 Budget	365	0	365	0	0	0	0	0	0	0	0	0)	365
Difference 2018 / 2019	0	150	150	0	0	0	0	0	0	0	0	0	0	150

Project: D1167-FY2015 GLENBROOK DRAINAGE IMPROVEMENTS

DRAINAGE PROJECTS

Number: D1167

Description

A project to design and construct drainage improvements in the Glenbrook Community including but not limited to: Walker Drive and Dogwood Drive.

Justification

This community was built in the 1960s and 1970s with the drainage standards of the time (little or no storm drainage system and no stormwater management). Parts of the area suffer flooding during infrequent, large runoff events that would not be as damaging if the area were designed to today's drainage standards. This work is requested by residents of the area.

Remarks

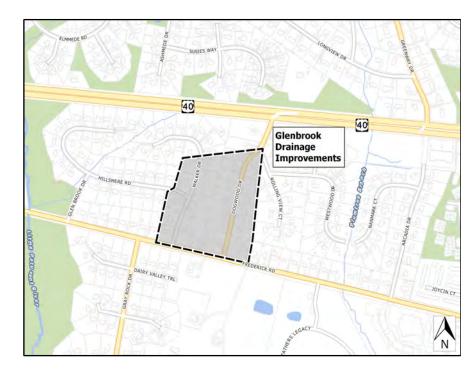
Construction project may be dependent on donation of necessary easements and/or resident cost share participation.

Project Schedule

FY19 - Construction and complete.

Operating Budget Impact

Annual Bond Redemption \$ \$34,200



DRAINAGE PROJECTS

Number: D1167

Project: FY2015 GLENBROOK DRAINAGE IMPROVEMENTS

In Thousands)					Five	Year Ca	pital Pro	gram				Master F	lan	
ppropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	130	0	130	0	0	0	0	0	0	0	0	0	0	130
LAND ACQUISITION	180	0	180	0	0	0	0	0	0	0	0	0	0	180
CONSTRUCTION	450	0	450	0	0	0	0	0	0	0	0	0	0	450
Total Expenditures	760	0	760	0	0	0	0	0	0	0	0	0	0	760
BONDS	760	0	760	0	0	0	0	0	0	0	0	0	0	760
Total Funding	760	0	760	0	0	0	0	0	0	0	0	0	0	760

Project Status : FY18 - Construction underway.

FY 2018 Budget	760	0	760	0	0	0	0	0	0	0	0	0		760
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DRAINAGE PROJECTS

Number: D1168

Project: D1168-FY2015 MORGAN WOODBINE ROAD SLOPE STABILIZATION

Description

A project to design and construct stabilization of the roadway embankment of Morgan Woodbine Road adjacent to the South Branch of the Patapsco River.

Justification

The roadway embankment is being eroded by the force of the river adjacent to the roadway. Previous attempts to stabilize the embankment have only been successful on a temporary basis. This project will develop a permanent stabilization. Project requested by the Bureau of Highways.

Remarks

Request represents project advancement.

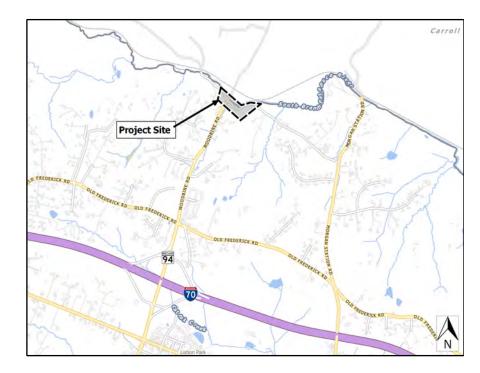
Project Schedule

FY19 - Land Acquisition.

FY20 - Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$41,625



DRAINAGE PROJECTS

Number: D1168

Project: FY2015 MORGAN WOODBINE ROAD SLOPE STABILIZATION

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	200	0	200	50	0	0	0	0	50	0	0	0	0	250
LAND ACQUISITION	0	25	25	0	0	0	0	0	0	0	0	0	0	25
CONSTRUCTION	0	0	0	650	0	0	0	0	650	0	0	0	0	650
Total Expenditures	200	25	225	700	0	0	0	0	700	0	0	0	0	925
BONDS	200	25	225	700	0	0	0	0	700	0	0	0	0	925
Total Funding	200	25	225	700	0	0	0	0	700	0	0	0	0	925
\$105,481 spent and encumbered t spent and encumbered through F Project Status : FY18 - Design in pi	ebruary 2017	ary 2018												
FY 2018 Budget	200	25	225	440	0	0	0	0	440	0	0	0		665
Difference 2018 / 2019	0	0	0	260	0	0	0	0	260	0	0	0	0	260

Project: D1169-FY2016 STORM DRAIN CULVERT REPLACEMENT PROGRAM

Description

This program will provide for the replacement of failed storm drain pipes and culverts. The County's storm drain infrastructure is aging and many of the metal pipe culverts installed from 1960 through the 1990s have reached the end of their service life. Currently no asset inventory with condition assessment exists; therefore no funding is programmed to systematic replacement of these pipes and culverts. The program will provide for emergency culvert replacement and funding assist in the development of an asset inventory program to better forecast future replacement needs. The program includes: storm water pipe and culvert replacement of both metal and concrete in less than six (6) feet in roadway longitudinal length, headwalls, end sections, replacement, or extension of culverts to assure positive flow of storm water and channeling of storm water into existing ditch lines or structures. Repairs include roadside pipe and culvert end treatment safety improvements to eliminate safety hazards. This project will not change the location or size of existing storm drainage structures.

Justification

Program addresses emergency pipe replacement of aging metal and concrete pipes that have reached the end of their service life. Pipe failures have resulted in unacceptable levels of deep depressions, sinkholes, sediment build up, open pipe joints and metal pipe inverts. Poor existing storm drain conditions. Needed repairs will improve safety and reduce the potential for hazards and associated public inconvenience. Failure of a storm drain pipe will require emergency repairs at much higher prices. This program will also provide some funding towards the development of an asset inventory of the storm drain system, including pipe and culvert conditions for future funding forecasting.

Remarks

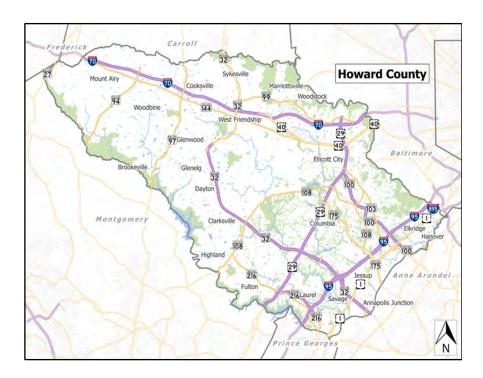
County owns and maintains approx. 3,543,100 linear feet (671 miles) of storm drains and approx. 13,000 each of storm drain inlet structures.

Project Schedule

Approximately 0.3 mile of storm drains (depends on the depth of deteriorated storm drains) replaced per \$1M budgeted. Close at program completion

Operating Budget Impact

Annual Bond Redemption \$ \$540,000



Difference 2018 / 2019

Project: FY2016 STORM DRAIN CULVERT REPLACEMENT PROGRAM

0

(500)

(500)

1,700

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	500	500	0	0	0	0	0	0	0	0	0	0	500
CONSTRUCTION	1,400	900	2,300	2,000	300	1,500	300	1,500	5,600	300	1,500	300	1,500	11,500
Total Expenditures	1,400	1,400	2,800	2,000	300	1,500	300	1,500	5,600	300	1,500	300	1,500	12,000
BONDS	1,400	1,400	2,800	2,000	300	1,500	300	1,500	5,600	300	1,500	300	1,500	12,000
Total Funding	1,400	1,400	2,800	2,000	300	1,500	300	1,500	5,600	300	1,500	300	1,500	12,000
\$1,399,397 spent and encumbered \$1,399,397 spent and encumbered Project Status :	•	•								1				
FY 2018 Budget	1,400	1,900	3,300	300	1,500	300	1,500	300	3,900	1,500	300	1,500		10,500

(1,200)

1,200

(1,200)

1,200

1,700

(1,200)

1,200

-1,200

1,500

1,500

DRAINAGE PROJECTS

Number: D1170

Project: D1170-FY2017 CARDINAL FOREST DRAINAGE IMPROVEMENTS

Description

A project to provide a drainage system to reduce the runoff from adjacent properties onto the properties at the north end of Dove's Fly Way.

Justification

The improvements were requested by property owners at the north end of Dove's Fly Way. They are concerned that the existing drainage issues that they have will be compounded by additional proposed development behind their homes.

Remarks

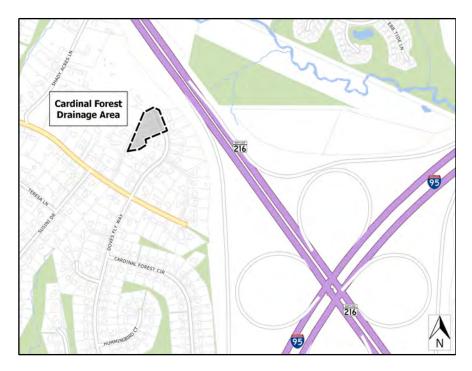
The project may be dependent on the donation of the necessary easements from the affected properties and/or cost share participation.

Project Schedule

FY19 - Land Acquisition and Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$9,000



Project: FY2017 CARDINAL FOREST DRAINAGE IMPROVEMENTS

(In Thousands)					Fiv	e Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	200	(100)	100	0	0	0	0	0	0	0	0	0	0	100
CONSTRUCTION	0	100	100	0	0	0	0	0	0	0	0	0	0	100
Total Expenditures	200	0	200	0	0	0	0	0	0	0	0	0	0	200
BONDS	200	0	200	0	0	0	0	0	0	0	0	0	0	200
Total Funding	200	0	200	0	0	0	0	0	0	0	0	0	0	200

\$47,138 spent and encumbered through February 2018 \$12,372 spent and encumbered through February 2017 Project Status: FY18 - Design and land acquisition in progress.

FY 2018 Budget	200	450	650	0	0	0	0	0	0	0	0	0		650
Difference 2018 / 2019	0	(450)	(450)	0	0	0	0	0	0	0	0	0	0	(450)

Project: D1171-FY2016 CISSELL AVENUE-HADDAWAY PLACE DRAINAGE IMPROVEMENTS

Description

A project to acquire the necessary easements of the drainage channel that travels behind the homes of Cissell Avenue and Haddaway Place. The County owns a storm drain system that travels about one-half of the way down this drainage channel. The storm drain outlets into a natural channel. The natural channel has become clogged with bamboo. This project will acquire easements along the channel area so that the Bureau of Highways is able to maintain the channel by removing the bamboo. Work may include providing a storm drain or clearing drainage impediments in the channel.

Justification

This older neighborhood has had drainage issues in the past and the County has constructed storm drain systems to try and improve the situation. Since the construction of those systems, bamboo has invaded the privately owned property of the natural drainage channel. Bamboo is a known invasive plant. It has clogged the channel and the drainage water floods out into the back yards of the adjacent homes. The Bureau of Highways is willing to maintain the channel if the County is able to obtain the necessary easements. The improvements were requested by adjacent property owners and the Bureau of Highways.

Remarks

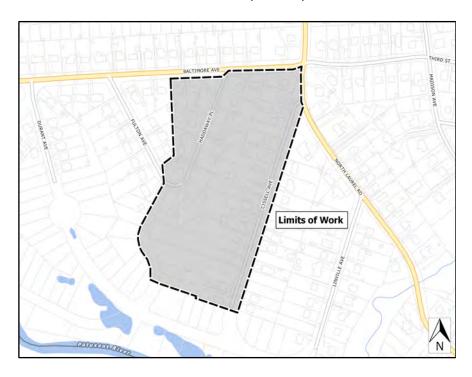
- 1. The project may be dependent on the donation of the necessary easements from the adjacent properties.
- 2. Project is contingent on regulatory approval.

Project Schedule

FY19 - Design and Land Acquisition.

Operating Budget Impact

Annual Bond Redemption \$ \$13,500



DRAINAGE PROJECTS

Number: D1171

Project: FY2016 CISSELL AVENUE-HADDAWAY PLACE DRAINAGE IMPROVEMENTS

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	75	0	75	0	0	0	0	0	0	0	0	0	0	75
LAND ACQUISITION	125	0	125	0	0	0	0	0	0	0	0	0	0	125
CONSTRUCTION	100	0	100	0	0	0	0	0	0	0	0	0	0	100
Total Expenditures	300	0	300	0	0	0	0	0	0	0	0	0	0	300
BONDS	300	0	300	0	0	0	0	0	0	0	0	0	0	300
Total Funding	300	0	300	0	0	0	0	0	0	0	0	0	0	300
\$260 spent and encumbered throu spent and encumbered through F Project Status : FY18 - Land acquis	ebruary 2017													
FY 2018 Budget	300	0	300	0	0	0	0	0	0	0	0	0		300
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DRAINAGE PROJECTS

Number: D1173

Project: D1173-FY2016 HARRIET TUBMAN LANE DRAINAGE IMPROVEMENTS

Description

A project to design and construct drainage improvements along Harriet Tubman Lane in the 7900 and 8000 block area.

Justification

While the roadway is old, the homes in the area are a mix of older and more recent construction. Because of the nature of the development -- individual lots -- there is not a well-designed drainage system to serve the area. This work would improve the drainage in the area. Improvements have been requested by the Bureau of Highways and residents of the area.

Remarks

Construction may be dependent on donation of necessary easements and/or resident cost share participation.

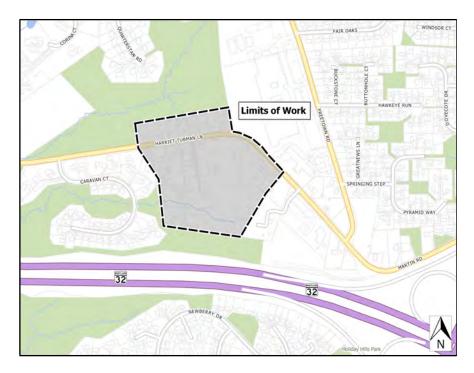
Project Schedule

FY18 - Design and Land Acquisition.

FY19 - Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$2,250



Difference 2018 / 2019

DRAINAGE PROJECTS

0

Number: D1173

(425)

Project: FY2016 HARRIET TUBMAN LANE DRAINAGE IMPROVEMENTS

0

(425)

Appropriation Object Class Prior Appropriation		FY2019	Ammu											
		Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	25	(75)	50	0	0	0	0	0	0	0	0	0	0	50
LAND ACQUISITION	50	(150)	0	0	0	0	0	0	0	0	0	0	0	(
Total Expenditures	275	(225)	50	0	0	0	0	0	0	0	0	0	0	50
BONDS 2	275	(225)	50	0	0	0	0	0	0	0	0	0	0	50
Total Funding 2	75	(225)	50	0	0	0	0	0	0	0	0	0	0	50

(425)

Project: D1174-FY2016 SPRING GLEN DRAINAGE IMPROVEMENTS Number: D1174

Description

A project to design and construct drainage improvements in the Spring Glen Community including but not limited to: Ivy Spring Road and Cross Ivy Road. The improvements to be considered include adding curb & gutter with storm drains and filling in the swales.

Justification

This community was built in the early 2000s using the new storm drainage design for subdivisions. The roads are narrow and open section (no curb & gutter). The plowing of snow tears up the adjacent grass areas. The yards have deep swales and are difficult to maintain.

The improvements were requested by the Homeowners Association and the Bureau of Highways.

Remarks

Request represents project advancement.

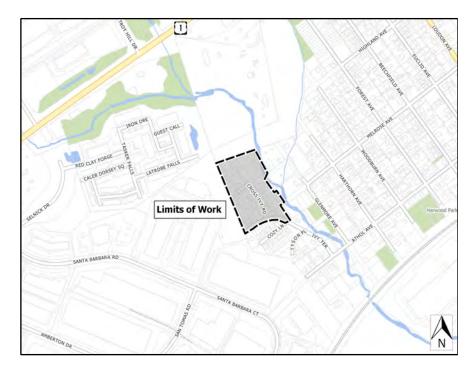
Project Schedule

FY19 - Design and Land Acquisition.

FY20 - Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$11,925



DRAINAGE PROJECTS

Number: D1174

Project: FY2016 SPRING GLEN DRAINAGE IMPROVEMENTS

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	75	0	75	25	0	0	0	0	25	0	0	0	0	100
LAND ACQUISITION	0	15	15	0	0	0	0	0	0	0	0	0	0	15
CONSTRUCTION	0	0	0	150	0	0	0	0	150	0	0	0	0	150
Total Expenditures	75	15	90	175	0	0	0	0	175	0	0	0	0	265
BONDS	75	15	90	175	0	0	0	0	175	0	0	0	0	265
Total Funding	75	15	90	175	0	0	0	0	175	0	0	0	0	265
\$53,363 spent and encumbered th spent and encumbered through F Project Status : FY18 - Design in p	ebruary 2017	ry 2018												
FY 2018 Budget	75	15	90	175	0	0	0	0	175	0	0	0		265
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: D1175-FY-2018 VALLEY MEDE/CHATHAM FLOOD MITIGATION

Description

This project is for the study, design and construction of flood mitigation and stormwater/waterway improvement efforts in the Valley Mede and Chatham subwatersheds. Projects may include drainage improvements, stormwater retrofits, flood control, stream improvements, and design of additional drainage facilities.

Justification

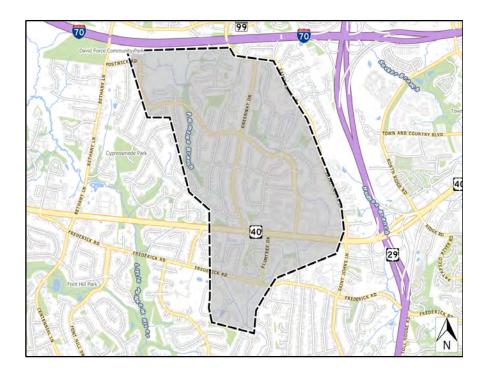
Valley Mede and Chatham subwatersheds have the potential to suffer significant flood damage.

Remarks

- 1. Future years once projects cost/benefits detrermined, apply for FEMA grants;
- 2. OTHER SOURCES represents Stormwater Bonds backed by Watershed Protection and Restoration fund.
- 3. Construction of some projects may be dependent upon donation of the necessary easements and/or property owner cost share participation.

Project Schedule

FY19 - Begin design of projects identified in Plumtree/Little Plumtree study.



DRAINAGE PROJECTS

Number: D1175

Project: FY-2018 VALLEY MEDE/CHATHAM FLOOD MITIGATION

In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
ppropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	500	500	500	500	0	0	0	1,000	0	0	0	0	1,500
CONSTRUCTION	700	0	700	3,000	3,000	0	0	0	6,000	0	0	0	0	6,700
ADMINISTRATION	0	0	0	100	100	0	0	0	200	0	0	0	0	200
Total Expenditures	700	500	1,200	3,600	3,600	0	0	0	7,200	0	0	0	0	8,400
OTHER SOURCES	700	500	1,200	3,600	3,600	0	0	0	7,200	0	0	0	0	8,400
Total Funding	700	500	1,200	3,600	3,600	0	0	0	7,200	0	0	0	0	8,400

spent and encumbered through February 2017
Project Status: Constructed Longview stream project.

FY 2018 Budget	700	3,800	4,500	2,200	0	0	0	0	2,200	0	0	0		6,700
Difference 2018 / 2019	0	(3,300)	(3,300)	1,400	3,600	0	0	0	5,000	0	0	0	0	1,700

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
E0973 FY2003 WAVERLY ELEM RENOVATION/PHASE	А	13,043	0	13,043	0	0	0	0	0	13,043
This project will be completed in two phases at Waverly	В	19,641	4,000	23,641	0	0	0	0	0	23,641
Elementary School.	Т	3,200	0	3,200	0	0	0	0	0	3,200
	Z	885	0	885	0	0	0	0	0	885
	Total	36,769	4,000	40,769	0	0	0	0	0	40,769
E0980 FY2004 SYSTEMIC RENOVATIONS	A	98,441	0	98,441	0	0	0	0	0	98,441
Improvements and installation of systemic renovations at various school sites, including projects of a critical nature	В	128,296	0	128,296	0	0	0	0	0	128,296
such as sprinkler repair, HVAC repair, window replacement, and other projects in support of the local CIP outlined in the HCPSS Comprehensive Maintenance Plan, as well as emergent projects on school properties.	Р	4,555	0	4,555	0	0	0	0	0	4,555
	Т	6,100	0	6,100	0	0	0	0	0	6,100
	Z	28,438	0	28,438	0	0	0	0	0	28,438
	Total	265,830	0	265,830	0	0	0	0	0	265,830
E0989 FY1989 BARRIER-FREE PROJECTS Installation of ramps; alteration of restrooms, fixtures and	В	3,850	0	3,850	0	0	0	0	0	3,850
drinking fountains; and various modifications to make all remaining spaces (school buildings and school sites)	Р	303	0	303	0	0	0	0	0	303
accessible to the public, students, teachers, and staff.	Т	1,450	0	1,450	200	200	200	200	200	2,450
	Total	5,603	0	5,603	200	200	200	200	200	6,603
E0990 FY2002 PLAYGROUND EQUIPMENT Improvements and installation of playground equipment at	В	2,350	0	2,350	250	250	250	250	250	3,600
various school sites.	Т	580	0	580	0	0	0	0	0	580
	Total	2,930	0	2,930	250	250	250	250	250	4,180
E0993 FY2004 RELOCATABLE CLASSROOMS PROGRAM	В	14,410	0	14,410	0	0	0	0	0	14,410
This request will provide funds for the relocation of existing portable classrooms or purchase of new portable	Т	4,600	0	4,600	0	0	0	0	0	4,600
classrooms to be placed at schools in need of additional	Z	1,100	0	1,100	0	0	0	0	0	1,100
capacity in August 2017.	Total	20,110	0	20,110	0	0	0	0	0	20,110

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
E0994 FY2004 ROOFING PROGRAM	Α	10,971	0	10,971	0	0	0	0	0	10,971
Reroofing for various schools including design and construction of repairs to existing roofs, old roof removal, new flashing and drains, and installation of new roofing	В	25,866	0	25,866	0	0	0	0	0	25,866
structure and material.	Т	3,251	0	3,251	0	0	0	0	0	3,251
	Z	4,500	0	4,500	0	0	0	0	0	4,500
	Total	44,588	0	44,588	0	0	0	0	0	44,588
E0995 SITE ACQUISITION and CONSTRUCTION RESERVE	A	911	0	911	0	0	0	0	0	911
This account is a contingency fund for site acquisition and school construction at various school sites.	В	9,425	0	9,425	0	0	0	0	0	9,425
school construction at various school sites.	Т	8,817	0	8,817	0	0	0	0	0	8,817
	Total	19,153	0	19,153	0	0	0	0	0	19,153
E1012 FY2008 SCHOOL PARKING LOT EXPANSION A project to provide for the construction of additional parking spaces, repairs, and modification of parking lots to improve traffic flow patterns at existing school sites.	A	1,421	0	1,421	0	0	0	0	0	1,421
	В	2,779	0	2,779	0	0	0	0	0	2,779
	Total	4,200	0	4,200	0	0	0	0	0	4,200
E1019 FY2023 HAMMOND HIGH SCHOOL RENOVATION/ADDITION	Α	0	0	0	17,640	17,640	17,640	0	0	52,920
A project to expand educational program spaces and renovate Hammond High School.	В	0	4,000	4,000	3,055	1,155	1,255	19,995	15,147	44,607
Tenovate Hammond High School.	Total	0	4,000	4,000	20,695	18,795	18,895	19,995	15,147	97,527
E1021 FY2011 TECHNOLOGY A capital project to provide and sustain a viable technology	В	4,986	0	4,986	0	0	0	0	0	4,986
infrastructure consistent with the HCPSS technology plan	Т	37,000	0	37,000	0	0	0	0	0	37,000
at various school sites.	Total	41,986	0	41,986	0	0	0	0	0	41,986
E1028 FY2016 NEW ELEMENTARY SCHOOL #42	A	14,908	0	14,908	0	0	0	0	0	14,908
A project to construct a new elementary school to relieve the Northeastern and Southeastern regions.	В	20,833	8,132	28,965	0	0	0	0	0	28,965
	Total	35,741	8,132	43,873	0	0	0	0	0	43,873
E1030 FY2014 DEEP RUN ELEM SCHOOL RENOVATION/ADDITION	Α	7,555	0	7,555	0	0	0	0	0	7,555
A project to expand educational program spaces and renovate Deep Run Elementary School.	В	16,456	0	16,456	0	0	0	0	0	16,456
Tonovato Boop Nan Elomoniary Concon.	Total	24,011	0	24,011	0	0	0	0	0	24,011

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
E1031 FY2014 WILDE LAKE MIDDLE SCHOOL REPLACEMENT	Α	15,359	0	15,359	0	0	0	0	0	15,359
A project to replace Wilde Lake Middle School.	В	23,168	-2,000	21,168	0	0	0	0	0	21,168
	Т	1,500	0	1,500	0	0	0	0	0	1,500
	Z	4,000	0	4,000	0	0	0	0	0	4,000
	Total	44,027	-2,000	42,027	0	0	0	0	0	42,027
E1033 FY2015 PATUXENT VALLEY MIDDLE SCHOOL RENOVATION	A	10,604	0	10,604	0	0	0	0	0	10,604
A project to expand educational program spaces and renovate Patuxent Valley Middle School.	В	17,531	-1,000	16,531	0	0	0	0	0	16,531
Tonorato : ataxon valloy iviladio conton.	Т	1,400	0	1,400	0	0	0	0	0	1,400
	Total	29,535	-1,000	28,535	0	0	0	0	0	28,535
E1034 FY2015 SWANSFIELD ELEM SCHOOL RENOVATION/ADDITION	Α	7,696	0	7,696	0	0	0	0	0	7,696
A project to expand educational program spaces and renovate Swansfield Elementary School.	В	19,206	0	19,206	0	0	0	0	0	19,206
	Total	26,902	0	26,902	0	0	0	0	0	26,902
E1035 FY2019 NEW HIGH SCHOOL #13 A project to construct a new high school to accommodate	Α	0	0	0	16,533	16,533	16,533	0	0	49,599
enrollment growth.	В	0	6,732	6,732	8,782	8,882	8,982	25,115	15,972	74,465
	Total	0	6,732	6,732	25,315	25,415	25,515	25,115	15,972	124,064
E1036 FY2024 OAKLAND MILLS MIDDLE SCHOOL RENOVATION	Α	0	0	0	0	0	0	0	0	0
The Oakland Mills Middle School project will renovate the existing facility.	В	0	0	0	0	0	0	0	9,003	9,003
Coloring radiity.	Total	0	0	0	0	0	0	0	9,003	9,003
E1037 FY2023 ELLICOTT MILLS MIDDLE SCHOOL ADDITION	Α	0	0	0	0	0	0	0	4,544	4,544
The Ellicott Mills Middle School project will add 156 seats of new capacity to the existing school.	В	0	0	0	0	0	0	1,000	1,871	2,871
. ,	Total	0	0	0	0	0	0	1,000	6,415	7,415
E1038 FY2017 PLANNING AND DESIGN The Planning and Design project has been established to	Т	600	100	700	400	400	300	300	300	2,400
provide funding for feasibility studies prior to the funding of individual projects.	Total	600	100	700	400	400	300	300	300	2,400

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
E1039 FY2020 NEW ELEM SCHOOL #43 The New Elementary School #43 will be a new facility.	Α	0	0	0	0	10,000	10,833	10,833	0	31,666
	В	0	0	0	6,000	1,500	4,382	7,094	8,000	26,976
	Total	0	0	0	6,000	11,500	15,215	17,927	8,000	58,642
E1040 FY2024 NEW ELEM SCHOOL #44 The New Elementary School #44 will be a new facility.	Α	0	0	0	0	0	0	0	0	0
	В	0	0	0	0	0	0	0	5,705	5,705
	Total	0	0	0	0	0	0	0	5,705	5,705
E1041 FY2026 NEW ELEM SCHOOL #45 The New Elementary School #45 will be a new facility.	В	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0
E1043 FY2019 TALBOTT SPRINGS ELEM SCHOOL RENOVATION/ADDITION A project to renovate and add capacity at Talbott Springs Elementary School.	Α	0	0	0	2,000	2,000	0	0	0	4,000
	В	750	2,600	3,350	12,250	12,218	6,550	0	0	34,368
	Z	1,000	0	1,000	0	0	0	0	0	1,000
	Total	1,750	2,600	4,350	14,250	14,218	6,550	0	0	39,368
E1044 FY2019 SYSTEMIC RENOVATIONS Improvements and installation of systemic renovations at	Α	0	2,789	2,789	0	0	8,074	0	8,776	19,639
various school sites, including projects of a critical nature such as sprinkler repair, HVAC repair, window	В	0	17,116	17,116	19,150	19,644	8,933	18,841	9,522	93,206
replacement, vehicles including but not limited to dump trucks, security initiatives including but not limited to high	Т	0	4,150	4,150	0	0	0	0	0	4,150
school door replacements/repairs, and other projects in support of the local CIP outlined in the HCPSS Comprehensive Maintenance Plan, as well as emergent projects on school properties.	Total	0	24,055	24,055	19,150	19,644	17,007	18,841	18,298	116,995
E1045 FY2019 RELOCATABLE CLASSROOMS This request will provide funds for the relocation of existing portable classrooms or purchase of new portable classrooms to be placed at schools in need of additional capacity in August 2018.	В	0	1,800	1,800	3,200	1,500	1,500	1,500	1,500	11,000
	Total	0	1,800	1,800	3,200	1,500	1,500	1,500	1,500	11,000
E1046 FY2019 ROOFING Reroofing for various schools including design and	Α	0	5,954	5,954	2,364	0	2,274	0	0	10,592
construction of repairs to existing roofs, old roof removal, new flashing and drains, and installation of new roofing	В	0	6,546	6,546	2,636	1,000	2,726	1,000	1,000	14,908
structure and material.	Total	0	12,500	12,500	5,000	1,000	5,000	1,000	1,000	25,500

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
E1047 FY2025 SITE ACQUISITION AND CONSTRUCTION RESERVE	В	0	0	0	0	0	0	0	0	0
This account is a contingency fund for site acquisition and school construction at various school sites.	Total	0	0	0	0	0	0	0	0	0
E1048 FY2019 TECHNOLOGY A capital project to provide and sustain a viable technology	Т	0	2,750	2,750	5,500	5,500	7,500	7,500	7,500	36,250
infrastructure consistent with the HCPSS technology plan at various school sites.	Total	0	2,750	2,750	5,500	5,500	7,500	7,500	7,500	36,250
E1049 FY2021 DUNLOGGIN MS RENOVATION/ADDITION A project to expand educational program spaces with 97 seats of new capacity and renovate the existing facility.	Α	0	0	0	0	0	5,502	10,502	5,000	21,004
	В	0	0	0	0	2,000	5,192	2,169	4,534	13,895
	Total	0	0	0	0	2,000	10,694	12,671	9,534	34,899
E1050 FY2024 CLARKSVILLE ES ADDITION The Clarksville Elementary School project will expand educational program spaces with 150 seats of new capacity for a new Elementary Regional Language Immersion Program.	В	0	0	0	0	0	0	0	2,000	2,000
	Total	0	0	0	0	0	0	0	2,000	2,000
E1051 FY2024 MS/HS CAREER DEVELOPMENT CENTER	Α	0	0	0	0	0	0	0	0	0
The MS/HS Career Development Center project will replace the aging Applications and Research Lab (ARL) school with a larger, more modern facility to facilitate the expansion of educational spaces to meet the growing curriculum.	В	0	0	0	0	0	0	0	11,232	11,232
	Total	0	0	0	0	0	0	0	11,232	11,232
SCHOOL SYSTEM PROJECTS Total		603,735	63,669	667,404	99,960	100,422	108,626	106,299	112,056	1,194,767

Howard County, MD FY2019 Executive Proposed Capital Budget (\$000) EDUC-SCHOOL SYSTEM PROJECTS

	Revenue Source	Prior Total	Current FY	Appropriation Total
А	STATE AID for SCHOOLS	180,909	8,743	189,652
В	BONDS	309,547	47,926	357,473
Р	PAY AS YOU GO	4,858	0	4,858
Т	TRANSFER TAX	68,498	7,000	75,498
Z	EDUCATION EXCISE BONDS	39,923	0	39,923
Total		603,735	63,669	667,404

2019 Executive Proposed 5 Year Capital Budget Project Type Summary (EDUC-SCHOOL SYSTEM PROJECTS)

Rev	venue Source	Prior Approp	Current FY	2020	2021	2022	2023	2024	5 Year Total
Α	STATE AID for SCHOOLS	180,909	8,743	38,537	46,173	60,856	21,335	18,320	374,873
В	BONDS	309,547	47,926	55,323	48,149	39,770	76,964	85,736	663,415
Р	PAY AS YOU GO	4,858	0	0	0	0	0	0	4,858
Т	TRANSFER TAX	68,498	7,000	6,100	6,100	8,000	8,000	8,000	111,698
Z	EDUCATION EXCISE BONDS	39,923	0	0	0	0	0	0	39,923
Tot	al	603,735	63,669	99,960	100,422	108,626	106,299	112,056	1,194,767

March 23, 2018 Howard County, MD Version : Executive Proposed

SCHOOL SYSTEM PROJECTS

Number: E0973

Project: E0973-FY2003 WAVERLY ELEM RENOVATION/PHASE II ADDITION

Description

This project will be completed in two phases at Waverly Elementary School. Phase I was a project to construct additional space for 125 students (5 classrooms) above previous capacity (Grades 1-5), additional space for 22 kindergarten students (1 classroom) and a cafetorium expansion and was completed in August 2007. Phase II will be a project to construct additional classroom and additional core infrastructure space and renovate the existing building. The complete scope of this project is defined by the BOE approved construction document (CD) brochures (see Policy 6020 for complete description of process) and any change orders approved subsequent to submittal of the CD brochures.

Justification

The addition is needed to support redistricting planned for 2018 from Manor Woods ES. Manor Woods cannot host additional capacity due to regulatory limitations on the operation of the on-site waste water treatment system.

Remarks

The original building was constructed in 1990. Phase I prior appropriations are included in this project.

Project Schedule

Phase I Complete.

Phase II will be accomplished concurrently with a renovation:

2015: Feasibility Study. 2015 - 2016: Planning.

2016 - 2018: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$1,103,670

Upon completion, the maintenance of this facility will be the responsibility of HCPSS Facilities Services. Operating cost impact is unknown at this time.



SCHOOL SYSTEM PROJECTS

Number: E0973

Project: FY2003 WAVERLY ELEM RENOVATION/PHASE II ADDITION

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,061	0	1,061	0	0	0	0	0	0	0	0	0	0	1,061
CONSTRUCTION	34,321	2,850	37,171	0	0	0	0	0	0	0	0	0	0	37,171
EQUIPMENT & FURNISHINGS	1,387	1,150	2,537	0	0	0	0	0	0	0	0	0	0	2,537
Total Expenditures	36,769	4,000	40,769	0	0	0	0	0	0	0	0	0	0	40,769
BONDS	19,641	4,000	23,641	0	0	0	0	0	0	0	0	0	0	23,641
STATE AID for SCHOOLS	13,043	0	13,043	0	0	0	0	0	0	0	0	0	0	13,043
TRANSFER TAX	3,200	0	3,200	0	0	0	0	0	0	0	0	0	0	3,200
EDUCATION EXCISE BONDS	885	0	885	0	0	0	0	0	0	0	0	0	0	885
Total Funding	36,769	4,000	40,769	0	0	0	0	0	0	0	0	0	0	40,769

\$16,914,813 spent and encumbered through February 2018

\$4,785,801 spent and encumbered through February 2017

Project Status: Phase I Completed in 2007. Phase II in Construction.

Timing: This project was originally scheduled for 2010 and has been moved out to 2018 based upon enrollment projections.

FY 2018 Budget	36,769	3,000	39,769	0	0	0	0	0	0	0	0	0		39,769
Difference 2018 / 2019	0	1,000	1,000	0	0	0	0	0	0	0	0	0	0	1,000

TAO2-2017 transferred \$1,700,000 in General Bond revenue to this project from several education projects, needed for higher than anticipated bid costs.

Project: E0980-FY2004 SYSTEMIC RENOVATIONS

Number: E0980

Description

Improvements and installation of systemic renovations at various school sites, including projects of a critical nature such as sprinkler repair, HVAC repair, window replacement, and other projects in support of the local CIP outlined in the HCPSS Comprehensive Maintenance Plan, as well as emergent projects on school properties. For larger systemic renovation projects (see schools listed in the remarks section) the complete scope of these projects are defined by the BOE approved construction documents (CD) brochure (see Policy 6020 for complete description of process) and any change orders approved subsequent to submittal of the CD brochure.

Justification

The systemic renovation program will include projects that are needed to bring older facilities up to current standards in lighting, electrical, HVAC systems, reconfiguring space, handicap accessible improvements, and provide for upgrades to other building systems.

Remarks

- 1. The systemic renovations project also supports emergency and deferred systemic capital projects.
- 2. Prior Appropriation includes transfers legislated by Council Resolution 1-2015.

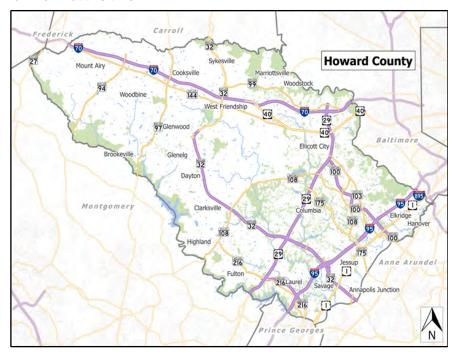
Project Schedule

Operating Budget Impact

Annual Bond Redemption \$ \$7,053,030

Upon completion, the maintenance of these facilities will be the responsibility of HCPSS Facilities Services. Operating cost impact is unknown at this time.

SCHOOL SYSTEM PROJECTS



SCHOOL SYSTEM PROJECTS

Number: E0980

Project: FY2004 SYSTEMIC RENOVATIONS

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	265,830	0	265,830	0	0	0	0	0	0	0	0	0	0	265,830
Total Expenditures	265,830	0	265,830	0	0	0	0	0	0	0	0	0	0	265,830
BONDS	128,296	0	128,296	0	0	0	0	0	0	0	0	0	0	128,296
PAY AS YOU GO	4,555	0	4,555	0	0	0	0	0	0	0	0	0	0	4,555
STATE AID for SCHOOLS	98,441	0	98,441	0	0	0	0	0	0	0	0	0	0	98,441
TRANSFER TAX	6,100	0	6,100	0	0	0	0	0	0	0	0	0	0	6,100
EDUCATION EXCISE BONDS	28,438	0	28,438	0	0	0	0	0	0	0	0	0	0	28,438
Total Funding	265,830	0	265,830	0	0	0	0	0	0	0	0	0	0	265,830

\$157,902,691 spent and encumbered through February 2018 \$155,921,380 spent and encumbered through February 2017 Project Status :

FY 2018 Budget	265,830	34,805	300,635	30,472	31,073	32,389	59,911	40,661	194,506	42,694	44,829	47,070		629,734
Difference 2018 / 2019	0	(34,805)	(34,805)	(30,472)	(31,073)	(32,389)	(59,911)	(40,661)	(194,506)	(42,694)	-44,829	-47,070	0	(363,904)

SCHOOL SYSTEM PROJECTS

Number: E0989

Project: E0989-FY1989 BARRIER-FREE PROJECTS

Description

Installation of ramps; alteration of restrooms, fixtures and drinking fountains; and various modifications to make all remaining spaces (school buildings and school sites) accessible to the public, students, teachers, and staff.

Justification

Federal, state, and local regulations require that school facilities be made accessible to persons with disabilities by removing barriers to access.

Remarks

- 1. Examples of projects include stadium bleacher ramps, play field access ramps, automatic door opening devices, and reconfiguration of bathroom fixtures and partitions to allow wheelchair access.
- 2. Other school specific projects that remove barriers as described in justification.

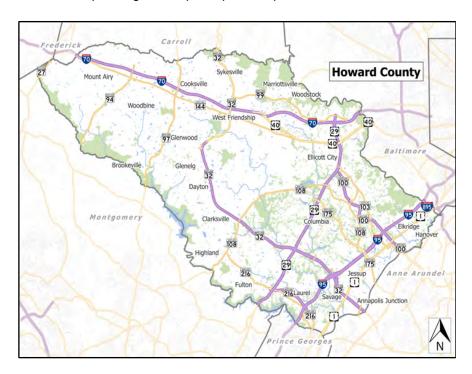
Project Schedule

Barrier-Free Projects are directly related to students, staff, and public need for facility modifications as they occur on an ongoing basis.

Operating Budget Impact

Annual Bond Redemption \$ \$173,250

Estimated operating cost impact upon completion: No increase



SCHOOL SYSTEM PROJECTS

Number: E0989

Project: FY1989 BARRIER-FREE PROJECTS

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	5,150	0	5,150	200	200	200	200	200	1,000	200	200	200	200	6,950
EQUIPMENT & FURNISHINGS	453	0	453	0	0	0	0	0	0	0	0	0	0	453
Total Expenditures	5,603	0	5,603	200	200	200	200	200	1,000	200	200	200	200	7,403
BONDS	3,850	0	3,850	0	0	0	0	0	0	0	0	0	0	3,850
PAY AS YOU GO	303	0	303	0	0	0	0	0	0	0	0	0	0	303
TRANSFER TAX	1,450	0	1,450	200	200	200	200	200	1,000	200	200	200	200	3,250
Total Funding	5,603	0	5,603	200	200	200	200	200	1,000	200	200	200	200	7,403
\$5,334,794 spent and encumbered the \$5,016,497 spent and encumbered the Project Status : Ongoing.														
FY 2018 Budget	5,603	200	5,803	200	200	200	200	200	1,000	200	200	200		7,403
Difference 2018 / 2019	0	(200)	(200)	0	0	0	0	0	0	0	0	0	200	0

March 23, 2018 Howard County, MD Version : Executive Proposed

SCHOOL SYSTEM PROJECTS

Number: E0990

Project: E0990-FY2002 PLAYGROUND EQUIPMENT

Description

Improvements and installation of playground equipment at various school sites.

Justification

The program will include projects that are needed to bring older schools' playgrounds up to current standards.

Remarks

Playgrounds at the following schools are under consideration for replacement:

- 1. Hollifield Station ES.
- 2. Manor Woods ES.
- 3. Triadelphia Ridge ES.

Project Schedule

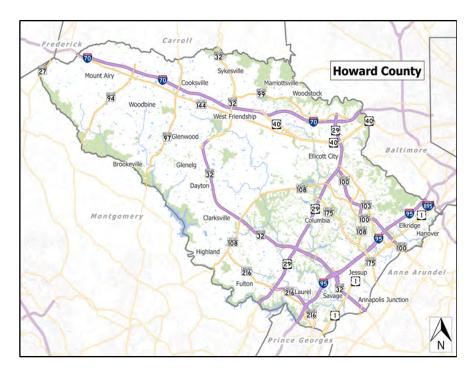
April 2018: Final Site Specific Selection and Requisition.

July 2018 - August 2018: Equipment Installation.

Operating Budget Impact

Annual Bond Redemption \$ \$252,000

Estimated operating cost impact upon completion: No increase



SCHOOL SYSTEM PROJECTS

Number: E0990

Project: FY2002 PLAYGROUND EQUIPMENT

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	2,930	0	2,930	250	250	250	250	250	1,250	500	500	500	500	6,180
Total Expenditures	2,930	0	2,930	250	250	250	250	250	1,250	500	500	500	500	6,180
BONDS	2,350	0	2,350	250	250	250	250	250	1,250	500	500	500	500	5,600
TRANSFER TAX	580	0	580	0	0	0	0	0	0	0	0	0	0	580
Total Funding	2,930	0	2,930	250	250	250	250	250	1,250	500	500	500	500	6,180

\$2,455,032 spent and encumbered through February 2018 \$2,321,569 spent and encumbered through February 2017

Project Status : Ongoing.

Timing: Hollifield Station ES and Manor Woods ES playground equipment have been deferred until FY19 due to funding constraints.

FY 2018 Budget	2,930	300	3,230	300	300	300	300	300	1,500	300	300	300		5,630
Difference 2018 / 2019	0	(300)	(300)	(50)	(50)	(50)	(50)	(50)	(250)	200	200	200	500	550

SCHOOL SYSTEM PROJECTS

Number: E0993

Project: E0993-FY2004 RELOCATABLE CLASSROOMS PROGRAM

Description

This request will provide funds for the relocation of existing portable classrooms or purchase of new portable classrooms to be placed at schools in need of additional capacity in August 2017. Relocation includes moving the buildings as well as installation of support services that make the buildings functional classrooms.

Justification

Additional classroom spaces are needed to help relieve overcapacity schools until such time as permanent classroom spaces are available.

Remarks

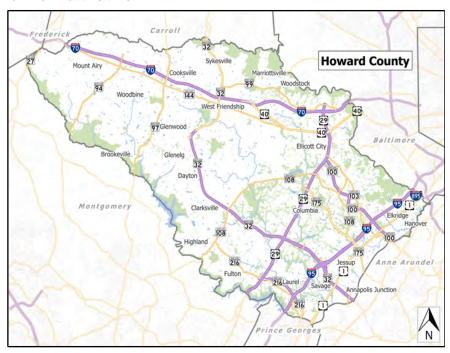
1. In September 2016, there were 244 relocatable/modular classrooms in use (four are used for administrative purposes at the Central Office, all others are at school sites). The school system will continue to conduct an annual review of all relocatables which will include condition and usage. The potential to either remove relocatables out-of-service, transport them to other locations where needed, or place them in excess to dispose of in an appropriate manner will be decided upon annually.

Project Schedule

Operating Budget Impact

Annual Bond Redemption \$ \$697,950

Upon completion, the maintenance of these facilities will be the responsibility of HCPSS Facilities Services. Operating cost impact is unknown at this time.



SCHOOL SYSTEM PROJECTS

Number: E0993

Project: FY2004 RELOCATABLE CLASSROOMS PROGRAM

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	20,110	0	20,110	0	0	0	0	0	0	0	C	0	0	20,110
Total Expenditures	20,110	0	20,110	0	0	0	0	0	0	0	0	0	0	20,110
BONDS	14,410	0	14,410	0	0	0	0	0	0	0	C	0	0	14,410
TRANSFER TAX	4,600	0	4,600	0	0	0	0	0	0	0	C	0	0	4,600
EDUCATION EXCISE BONDS	1,100	0	1,100	0	0	0	0	0	0	0	C	0	0	1,100
Total Funding	20,110	0	20,110	0	0	0	0	0	0	0	0	0	0	20,110

\$18,635,637 spent and encumbered through February 2018 \$17,603,894 spent and encumbered through February 2017 Project Status :

FY 2018 Budget	20,110	1,500	21,610	1,500	1,500	1,500	1,500	1,500	7,500	1,500	1,500	1,500		33,610
Difference 2018 / 2019	0	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)	(7,500)	(1,500)	-1,500	-1,500	0	(13,500)

Project: E0994-FY2004 ROOFING PROGRAM Number: E0994

Description

Reroofing for various schools including design and construction of repairs to existing roofs, old roof removal, new flashing and drains, and installation of new roofing structure and material.

Justification

The roof system is the largest single area of the building that must endure the most severe weather conditions. The roof protects the structural integrity of the building as well as equipment. Because of building age and environmental conditions, scheduled roof replacements must be completed to protect the investment that has been made in many facilities.

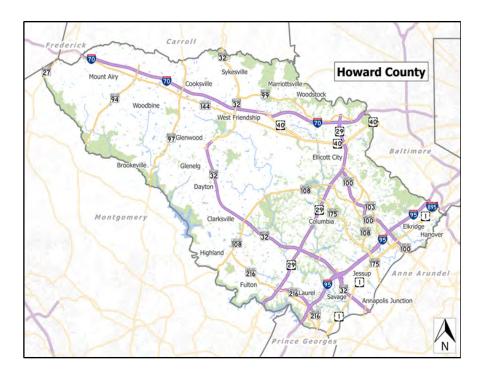
Remarks

When feasible, roofing projects will be considered in conjunction with systemic renovations.

Project Schedule

Operating Budget Impact

Annual Bond Redemption \$ \$1,366,470



SCHOOL SYSTEM PROJECTS

SCHOOL SYSTEM PROJECTS

Number: E0994

Project: FY2004 ROOFING PROGRAM

(In Thousands)					Fiv	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	44,588	0	44,588	0	0	0	0	0	0	0	C	0	0	44,588
Total Expenditures	44,588	0	44,588	0	0	0	0	0	0	0	0	0	0	44,588
BONDS	25,866	0	25,866	0	0	0	0	0	0	0	C	0	0	25,866
STATE AID for SCHOOLS	10,971	0	10,971	0	0	0	0	0	0	0	C	0	0	10,971
TRANSFER TAX	3,251	0	3,251	0	0	0	0	0	0	0	C	0	0	3,251
EDUCATION EXCISE BONDS	4,500	0	4,500	0	0	0	0	0	0	0	C	0	0	4,500
Total Funding	44,588	0	44,588	0	0	0	0	0	0	0	0	0	0	44,588

\$32,955,143 spent and encumbered through February 2018 \$32,184,493 spent and encumbered through February 2017 Project Status:

FY 2018 Budget	44,588	5,000	49,588	5,000	5,000	5,000	5,000	5,000	25,000	5,000	5,000	5,000		89,588
Difference 2018 / 2019	0	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(25,000)	(5,000)	-5,000	-5,000	0	(45,000)

SCHOOL SYSTEM PROJECTS

Number: E0995

Project: E0995-SITE ACQUISITION and CONSTRUCTION RESERVE

Description

This account is a contingency fund for site acquisition and school construction at various school sites. Recent emergent maintenance requirements have strained the school system's existing construction contingency accounts and additional funding is required to ensure that urgently needed repairs can be completed without delay.

Justification

This fund is needed as a contingency reserve providing funds for use on an asneeded basis.

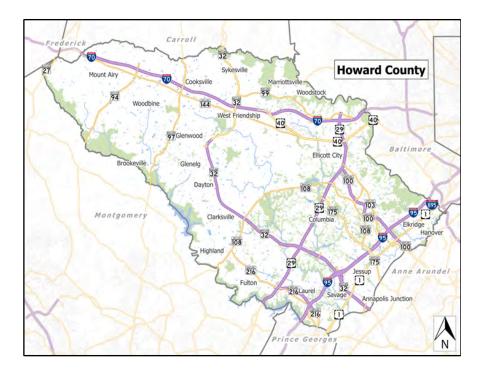
Remarks

1. Site funds are needed for future enrollment growth.

Project Schedule

Operating Budget Impact

Annual Bond Redemption \$ \$424,125



SCHOOL SYSTEM PROJECTS

Number: E0995

Project: SITE ACQUISITION and CONSTRUCTION RESERVE

(In Thousands)					Fiv	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
LAND ACQUISITION	19,153	0	19,153	0	0	0	C	0	0	0	0	0	0	19,153
Total Expenditures	19,153	0	19,153	0	0	0	0	0	0	0	0	0	0	19,153
BONDS	9,425	0	9,425	0	0	0	C	0	0	0	0	0	0	9,425
STATE AID for SCHOOLS	911	0	911	0	0	0	C	0	0	0	0	0	0	911
TRANSFER TAX	8,817	0	8,817	0	0	0	C	0	0	0	0	0	0	8,817
Total Funding	19,153	0	19,153	0	0	0	0	0	0	0	0	0	0	19,153

\$17,032,919 spent and encumbered through February 2018 \$16,206,615 spent and encumbered through February 2017 Project Status:

FY 2018 Budget	19,153	0	19,153	2,000	2,000	2,000	2,000	2,000	10,000	2,000	2,000	2,000	·	35,153
Difference 2018 / 2019	0	0	0	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(10,000)	(2,000)	-2,000	-2,000	0	(16,000)

Project: E1012-FY2008 SCHOOL PARKING LOT EXPANSION

SCHOOL SYSTEM PROJECTS

Number: E1012

Description

A project to provide for the construction of additional parking spaces, repairs, and modification of parking lots to improve traffic flow patterns at existing school sites.

Justification

Parking expansions and repairs are necessary due to the insufficient supply of spaces to meet existing demands. Funds are used for parking improvements on sites that are not slated for other construction projects.

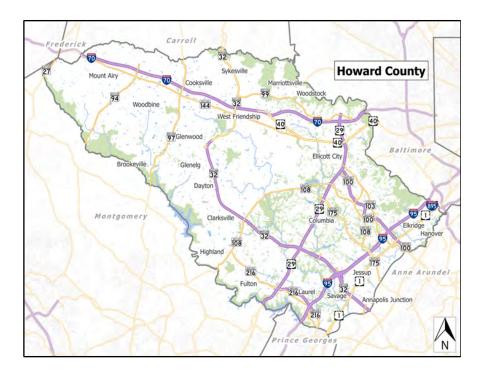
Remarks

1. Parking lot projects are to be determined.

Project Schedule

Operating Budget Impact

Annual Bond Redemption \$ \$233,055



SCHOOL SYSTEM PROJECTS

Number: E1012

Project: FY2008 SCHOOL PARKING LOT EXPANSION

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	240	0	240	0	0	0	0	0	0	60	60	60	60	480
CONSTRUCTION	3,960	0	3,960	0	0	0	0	0	0	540	540	540	540	6,120
Total Expenditures	4,200	0	4,200	0	0	0	0	0	0	600	600	600	600	6,600
BONDS	2,779	0	2,779	0	0	0	0	0	0	600	600	600	600	5,179
STATE AID for SCHOOLS	1,421	0	1,421	0	0	0	0	0	0	0	0	0	0	1,421
Total Funding	4,200	0	4,200	0	0	0	0	0	0	600	600	600	600	6,600

\$2,159,394 spent and encumbered through February 2018 \$2,159,394 spent and encumbered through February 2017 Project Status: Ongoing.

FY 2018 Budget	4,200	0	4,200	600	600	600	600	600	3,000	600	600	600		9,000
Difference 2018 / 2019	0	0	0	(600)	(600)	(600)	(600)	(600)	(3,000)	0	0	0	600	(2,400)

SCHOOL SYSTEM PROJECTS

Project: E1021-FY2011 TECHNOLOGY Number: E1021

Description

A capital project to provide and sustain a viable technology infrastructure consistent with the HCPSS technology plan at various school sites.

Justification

Funds are required for continuous improvements and upgrades to the HCPSS network infrastructure and computer systems to ensure that instruction and business technology needs are met in a standard and equitable manner. Technology refresh programs, known as "Replacement Plans," have been established to ensure that all HCPSS students and school-based staff are equipped with the appropriate computing and network resources. Replacement Plans are designed to ensure that these essential resources are kept current in order to meet instruction and business technology requirements.

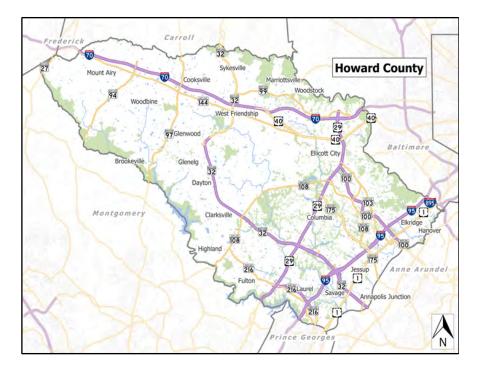
Remarks

Project Schedule

Operating Budget Impact

Annual Bond Redemption \$ \$224,370

Estimated operating cost impact upon completion: No increase



Fiscal 2019 Capital Budget Project: FY2011 TECHNOLOGY

SCHOOL SYSTEM PROJECTS

Number: E1021

(In Thousands)					Fiv	e Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
EQUIPMENT & FURNISHINGS	41,986	0	41,986	0	0	0	0	0	0	0	0	0	0	41,986
Total Expenditures	41,986	0	41,986	0	0	0	0	0	0	0	0	0	0	41,986
BONDS	4,986	0	4,986	0	0	0	0	0	0	0	0	0	0	4,986
TRANSFER TAX	37,000	0	37,000	0	0	0	0	0	0	0	0	0	0	37,000
Total Funding	41,986	0	41,986	0	0	0	0	0	0	0	0	0	0	41,986

\$38,870,295 spent and encumbered through February 2018 \$33,470,774 spent and encumbered through February 2017 Project Status :

FY 2018 Budget	41,986	5,500	47,486	5,500	5,500	7,500	7,500	7,500	33,500	7,500	7,500	7,500		103,486
Difference 2018 / 2019	0	(5,500)	(5,500)	(5,500)	(5,500)	(7,500)	(7,500)	(7,500)	(33,500)	(7,500)	-7,500	-7,500	0	(61,500)

Project: E1019-FY2023 HAMMOND HIGH SCHOOL RENOVATION/ADDITION

Description

A project to expand educational program spaces and renovate Hammond High School. Interior spaces will be reconfigured as needed. The project will address deficiencies in educational program space which were identified in a recent facilities assessment survey. The project will consist of a complete systemic renovation of the school that will replace the aging heating and cooling systems, upgrade the plumbing and electrical systems, supply new data technology and security systems, provide new interior finishes throughout the building, create ADA accessibility compliance throughout, repartition select areas of the school, and construct building additons as necessary to fulfill program deficiencies and add capacity. It is also the intent to concentrate on energy efficient systems and sustainable practices thus yielding another USGBC LEED certified facility. The complete scope of this project will be defined by the BOE approved construction documents (CD) brochure (see Policy 6020 for complete description of process) and any change orders approved subsequent to submittal of the CD brochure.

Justification

The recently completed high school facility needs assessment documented the necessity for this renovation. Additional capacity will also be added during this project to address capacity deficiency at the high school level.

Remarks

1. The original building was completed in 1976. It requires updating to align with current educational standards.

Project Schedule

2018: Feasibility Study. 2018 - 2020: Planning. 2020 - 2023: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$2,007,315

Upon completion, the maintenance of this facility will be the responsibility of the HCPSS Facilities Services. Operating cost impact is unknown at this time.



SCHOOL SYSTEM PROJECTS

Number: E1019

Project: FY2023 HAMMOND HIGH SCHOOL RENOVATION/ADDITION

(In Thousands)					Five	Year Ca	pital Prog	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	4,000	4,000	0	0	0	0	0	0	0	0	0	0	4,000
CONSTRUCTION	0	0	0	20,695	18,795	18,895	16,995	15,147	90,527	0	0	0	0	90,527
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	3,000	0	3,000	0	0	0	0	3,000
Total Expenditures	0	4,000	4,000	20,695	18,795	18,895	19,995	15,147	93,527	0	0	0	0	97,527
BONDS	0	4,000	4,000	3,055	1,155	1,255	19,995	15,147	40,607	0	0	0	0	44,607
STATE AID for SCHOOLS	0	0	0	17,640	17,640	17,640	0	0	52,920	0	0	0	0	52,920
Total Funding	0	4,000	4,000	20,695	18,795	18,895	19,995	15,147	93,527	0	0	0	0	97,527

\$0 spent and encumbered through February 2018 spent and encumbered through February 2017 Project Status: Planning.

FY 2018 Budget	0	0	0	0	0	0	2,800 25,748	28,548	17,099	15,099	11,099		71,845
Difference 2018 / 2019	0	4,000	4,000	20,695	18,795	18,895	17,195 (10,601)	64,979	(17,099)	-15,099	-11,099	0	25,682

Project: E1025-FY2023 CENTENNIAL HIGH SCHOOL RENOVATION

Description

A project to expand educational program spaces and renovate Centennial High School. Interior spaces will be reconfigured as needed. The project will partially address deficiencies in educational program space which were identified in a recent facilities assessment survey. The complete scope of this project will be defined by the BOE approved construction documents (CD) brochure (see Policy 6020 for complete description of process) and any change orders approved subsequent to submittal of the CD brochure.

Justification

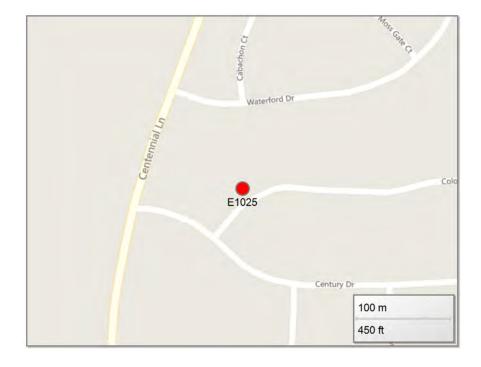
The recently completed high school facility needs assessment documented the necessity for this renovation.

Remarks

1. The original building was completed in 1977. It requires updating to align with current educational standards.

Project Schedule

Schedule to be determined.



SCHOOL SYSTEM PROJECTS

Number: E1025

Project: FY2023 CENTENNIAL HIGH SCHOOL RENOVATION

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
Total Expenditures	0	0	0	0	0	0	0	0	0	0	0	0	0	C
Total Funding	0	0	0	0	0	0	0	0	0	0	0	0	0	C
\$0 spent and encumbered throug spent and encumbered through I Project Status : Planning.														
•								-						
FY 2018 Budget	O	0	0	0	0	0	0	0	0	0	0	0		C

SCHOOL SYSTEM PROJECTS

Number: E1028

Project: E1028-FY2016 NEW ELEMENTARY SCHOOL #42

Description

A project to construct a new elementary school to relieve the Northeastern and Southeastern regions. The school will be constructed in accordance with requirements set forth in the June 2003 elementary educational specifications and have a capacity of 832 students. The complete scope of this project is defined by the BOE approved construction documents (CD) brochure (see Policy 6020 for complete description of process) and any change orders approved subsequent to submittal of the CD brochure.

Justification

The region will exceed 115 percent utilization in 2023 and require approximately 1.000 additional seats.

Remarks

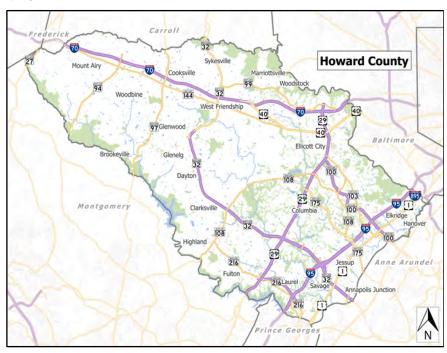
Project Schedule

2015: Feasibility Study. 2015 - 2016: Planning. 2016 - 2018: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$1,303,425

Upon completion, the maintenance of this facility will be the responsibility of HCPSS Facilities Services. Operating cost impact is unknown at this time.



SCHOOL SYSTEM PROJECTS

Project: FY2016 NEW ELEMENTARY SCHOOL #42 Number: E1028

(In Thousands)					Fiv	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	2,807	0	2,807	0	0	0	0	0	0	0	C	0	0	2,807
CONSTRUCTION	31,434	6,787	38,221	0	0	0	0	0	0	0	C	0	0	38,221
EQUIPMENT & FURNISHINGS	1,500	1,345	2,845	0	0	0	0	0	0	0	C	0	0	2,845
Total Expenditures	35,741	8,132	43,873	0	0	0	0	0	0	0	0	0	0	43,873
BONDS	20,833	8,132	28,965	0	0	0	0	0	0	0	C	0	0	28,965
STATE AID for SCHOOLS	14,908	0	14,908	0	0	0	0	0	0	0	C	0	0	14,908
Total Funding	35,741	8,132	43,873	0	0	0	0	0	0	0	0	0	0	43,873
\$14,306,386 spent and encumbered the spent and encumbered the Project Status: Under Construction.			3											
FY 2018 Budget	35,741	8,132	43,873	0	0	0	0	0	0	0	C	0		43,873
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	C	0	0	0

TAO2-2017 transferred \$250,000 in General Obligation Bonds to E0973.

Project: E1029-FY2022 OAKLAND MILLS HIGH SCHOOL RENOVATION

Description

A project to expand educational program spaces and renovate Oakland Mills High School. Interior spaces will be reconfigured as needed. The project will partially address deficiencies in educational program space which were identified in a recent facilities assessment survey. The complete scope of this project will be defined by the BOE approved construction documents (CD) brochure (see Policy 6020 for complete description of process) and any change orders approved subsequent to submittal of the CD brochure.

Justification

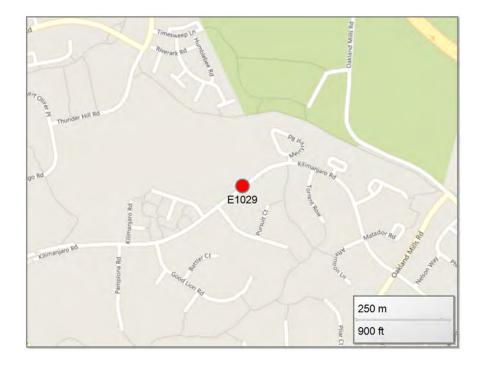
The recently completed high school facility needs assessment documented the necessity for this renovation.

Remarks

1. The original building was completed in 1973. It requires updating to align with current educational standards.

Project Schedule

Schedule to be determined.



Project: FY2022 OAKLAND MILLS HIGH SCHOOL RENOVATION

(In Thousands)					Fiv	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
Total Expenditures	0	0	0	0	0	0	0	0	0	0	0	0	0	O
Total Funding	0	0	0	0	0	0	0	0	0	0	0	0	0	O
\$0 spent and encumbered throug spent and encumbered through I Project Status : Planning.														
FY 2018 Budget	0	0	0	0	0	0	0	0	0	0	C	0		(
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	C	0	0	C

FY18 - Delayed project.

Project: E1030-FY2014 DEEP RUN ELEM SCHOOL RENOVATION/ADDITION

Description

A project to expand educational program spaces and renovate Deep Run Elementary School. Interior spaces will be reconfigured as needed. The project will partially address deficiencies in educational program space which were identified in a recent facilities assessment survey. This project will provide 100 seats of additional classroom space and additional core infrastructure space necessary to operate effectively at the larger capacity. The complete scope of this project is defined by the BOE approved construction documents (CD) brochure (see Policy 6020 for complete description of process) and any change orders approved subsequent to submittal of the CD brochure.

Justification

Significant enrollment growth is projected for the Northeastern Region. Deep Run ES and other schools in the region will be severely impacted by new development in the Corridor Activity Center zone along Route 1.

Remarks

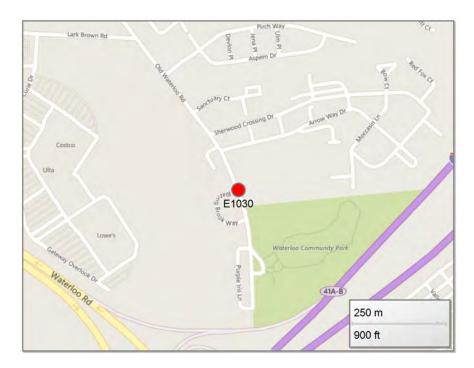
1. Prior Appropriation includes transfers legislated by Council Resolution 1-2015.

Project Schedule

September 2012 - April 2013: Feasibility Study. May 2013 - June 2014: Planning. September 2014 - November 2016: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$740,520



FY 2018 Budget

Difference 2018 / 2019

SCHOOL SYSTEM PROJECTS

Number: E1030

Project: FY2014 DEEP RUN ELEM SCHOOL RENOVATION/ADDITION

24,011

24,011

In Thousands)				Five	Year Ca	Master Plan								
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	23,961	0	23,961	0	0	0	0	0	0	0	0	0	0	23,96
EQUIPMENT & FURNISHINGS	50	0	50	0	0	0	0	0	0	0	0	0	0	50
Total Expenditures	24,011	0	24,011	0	0	0	0	0	0	0	0	0	0	24,01
BONDS	16,456	0	16,456	0	0	0	0	0	0	0	0	0	0	16,45
STATE AID for SCHOOLS	7,555	0	7,555	0	0	0	0	0	0	0	0	0	0	7,55
Total Funding	24,011	0	24,011	0	0	0	0	0	0	0	0	0	0	24,01

24,011

March 23, 2018 Howard County, MD Version : Executive Proposed

Project: E1031-FY2014 WILDE LAKE MIDDLE SCHOOL REPLACEMENT

Description

A project to replace Wilde Lake Middle School. The replacement school will provide capacity for 760 students. This building will be Net Zero and US Green Building Council (USGBC) LEED Certified. The building will be powered by solar voltaic cells on the roof. The architectural design is highly efficient considering building orientation, mass, and scale. The mechanical systems finely control electric lighting and HVAC and controls. These considerations position the new Wilde Lake Middle School to be the most energy conscious and efficient school in the state. Solar power will allow the net draw from the power grid over the course of a year to be zero. This kind of capital investment can defray operating expenses. The complete scope of this project is defined by the BOE approved construction documents (CD) brochure (see Policy 6020 for complete description of process) and any change orders approved subsequent to submittal of the CD brochure.

Justification

The projected capacity utilization for the Columbia West region, as well as Wilde Lake MS, exceeded 110% in 2015. This condition continues for the rest of the projection. A 2008 facility assessment concluded that the WLMS building had a net program area deficiency of 13.6 percent, the largest deficiency of educational program area of the 19 middle schools operating at that time. A subsequent feasibility study determined that the cost of an Americans with Disabilities Act (ADA) compliant renovation was comparable to a replacement.

Remarks

- 1. The original building was constructed in 1969.
- 2. TAO2-2018 transferred \$750,000 in General Obligation Bond revenue to E1043.

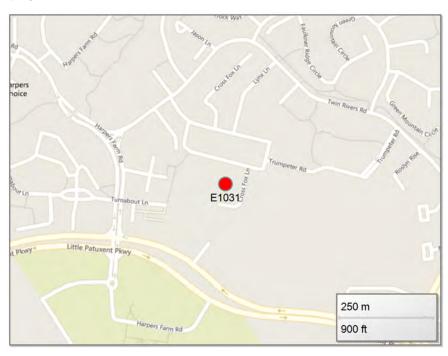
Project Schedule

July 2013 - December 2013: Feasibility Study. January 2014 - December 2014: Planning. May 2015 - August 2017: Construction. FY19 - Defunding due to cost savings.

Operating Budget Impact

Annual Bond Redemption \$ \$1,132,560

Upon completion, the maintenance of this facility will be the responsibility of HCPSS Facilities Services. Operating cost impact is unknown at this time.



SCHOOL SYSTEM PROJECTS

Number: E1031

Project: FY2014 WILDE LAKE MIDDLE SCHOOL REPLACEMENT

(In Thousands)		Five	e Year Ca	pital Pro	Master Plan									
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	2,658	0	2,658	0	0	0	0	0	0	0	0	0	0	2,658
CONSTRUCTION	41,119	(2,000)	39,119	0	0	0	0	0	0	0	0	0	0	39,119
EQUIPMENT & FURNISHINGS	250	0	250	0	0	0	0	0	0	0	0	0	0	250
Total Expenditures	44,027	(2,000)	42,027	0	0	0	0	0	0	0	0	0	0	42,027
BONDS	23,168	(2,000)	21,168	0	0	0	0	0	0	0	0	0	0	21,168
STATE AID for SCHOOLS	15,359	0	15,359	0	0	0	0	0	0	0	0	0	0	15,359
TRANSFER TAX	1,500	0	1,500	0	0	0	0	0	0	0	0	0	0	1,500
EDUCATION EXCISE BONDS	4,000	0	4,000	0	0	0	0	0	0	0	0	0	0	4,000
Total Funding	44,027	(2,000)	42,027	0	0	0	0	0	0	0	0	0	0	42,027
\$23,791,372 spent and encumbered \$20,827,028 spent and encumbered Project Status : Construction Comple	through Feb													
FY 2018 Budget	44,777	0	44,777	0	0	0	0	0	0	0	0	0		44,777
Difference 2018 / 2019	(750)	(2,000)	(2,750)	0	0	0	0	0	0	0	0	0	0	(2,750)

TAO2-2018 transferred \$750,000 in General Obligation Bond revenue to E1043.

Project: E1033-FY2015 PATUXENT VALLEY MIDDLE SCHOOL RENOVATION

Description

A project to expand educational program spaces and renovate Patuxent Valley Middle School. Interior spaces will be reconfigured as needed. The project will partially address deficiencies in educational program space which were identified in a recent facilities assessment survey. New spaces will be added as required. The complete scope of this project is defined by the BOE approved construction documents (CD) brochure (see Policy 6020 for complete description of process) and any change orders approved subsequent to submittal of the CD brochure.

Justification

The recently completed middle school facility needs assessment documented the necessity for this renovation.

Remarks

1. The original building was constructed in 1989. It requires updating to align with current educational standards.

Project Schedule

July 2013 - October 2013: Feasibility Study. November 2013 - September 2014: Planning. January 2015 - August 2017: Construction. FY19 - Defunding due to cost savings.

Operating Budget Impact

Annual Bond Redemption \$ \$743,895 Estimated operating cost impact upon completion: No increase



SCHOOL SYSTEM PROJECTS

Number: E1033

Project: FY2015 PATUXENT VALLEY MIDDLE SCHOOL RENOVATION

(In Thousands)					Five	Year Ca	pital Pro	Master Plan						
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,360	0	1,360	0	0	0	0	0	0	0	0	0	0	1,360
CONSTRUCTION	27,925	(1,000)	26,925	0	0	0	0	0	0	0	0	0	0	26,925
EQUIPMENT & FURNISHINGS	250	0	250	0	0	0	0	0	0	0	0	0	0	250
Total Expenditures	29,535	(1,000)	28,535	0	0	0	0	0	0	0	0	0	0	28,535
BONDS	17,531	(1,000)	16,531	0	0	0	0	0	0	0	0	0	0	16,531
STATE AID for SCHOOLS	10,604	0	10,604	0	0	0	0	0	0	0	0	0	0	10,604
TRANSFER TAX	1,400	0	1,400	0	0	0	0	0	0	0	0	0	0	1,400
Total Funding	29,535	(1,000)	28,535	0	0	0	0	0	0	0	0	0	0	28,535
\$15,002,951 spent and encumbered the spent and encumbered the Project Status : Construction Completed	rough Febr		ı											
FY 2018 Budget	29,535	0	29,535	0	0	0	0	0	0	0	0	0		29,535
Difference 2018 / 2019	0	(1,000)	(1,000)	0	0	0	0	0	0	0	0	0	0	(1,000)

March 23, 2018 Howard County, MD Version : Executive Proposed

Project: E1034-FY2015 SWANSFIELD ELEM SCHOOL RENOVATION/ADDITION

Description

A project to expand educational program spaces and renovate Swansfield Elementary School. Interior spaces will be reconfigured as needed. The project will partially address deficiencies in educational program space which were identified in a recent facilities assessment survey. New spaces will be added as required. The complete scope of this project is defined by the BOE approved construction documents (CD) brochure (see Policy 6020 for complete description of process) and any change orders approved subsequent to submittal of the CD brochure.

Justification

The recently completed elementary school facility needs assessment documented the necessity for this renovation.

Remarks

1. The original building was constructed in 1972. It requires updating to align with current educational standards.

Project Schedule

2015: Feasibility Study.

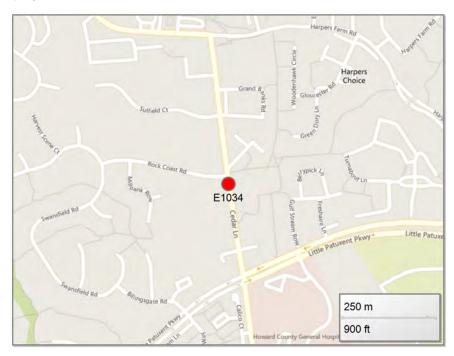
2015 - 2016: Planning.

2016 - 2018: Construction.

Operating Budget Impact

Annual Bond Redemption \$\$864,270

Upon completion, the maintenance of this facility will be the responsibility of HCPSS Facilities Services. Operating cost impact is unknown at this time.



SCHOOL SYSTEM PROJECTS

Number: E1034

Project: FY2015 SWANSFIELD ELEM SCHOOL RENOVATION/ADDITION

(In Thousands)					Five	ve Year Capital Program					Master Plan			
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,898	0	1,898	0	0	0	0	0	0	0	0	0	0	1,898
CONSTRUCTION	24,050	0	24,050	0	0	0	0	0	0	0	0	0	0	24,050
EQUIPMENT & FURNISHINGS	954	0	954	0	0	0	0	0	0	0	0	0	0	954
Total Expenditures	26,902	0	26,902	0	0	0	0	0	0	0	0	0	0	26,902
BONDS	19,206	0	19,206	0	0	0	0	0	0	0	0	0	0	19,206
STATE AID for SCHOOLS	7,696	0	7,696	0	0	0	0	0	0	0	0	0	0	7,696
Total Funding	26,902	0	26,902	0	0	0	0	0	0	0	0	0	0	26,902
\$15,431,123 spent and encumbered the \$9,891,517 spent and encumbered the Project Status: Under construction.			3											
FY 2018 Budget	26,902	0	26,902	0	0	0	0	0	0	0	0	0		26,902
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	C

Project: E1035-FY2019 NEW HIGH SCHOOL #13 Number: E1035

Description

A project to construct a new high school to accommodate enrollment growth. The complete scope of this project will be defined by the BOE approved construction documents (CD) brochure (see Policy 6020 for complete description of process) and any change orders approved subsequent to submittal of the CD brochure.

Justification

Based upon enrollment projections, at least one additional high school is needed to accommodate growth. Balanced capacity utilization in the northeast region alone would require 1,000 additional seats by 2019.

Remarks

Project Schedule

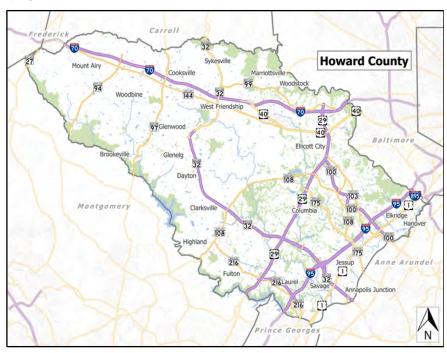
March 2016 - June 2018: Feasibility Study and Education Specifications. July 2018 - July 2020: Planning. July 2020 - August 2023: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$3,350,925

Upon completion, the maintenance of this facility will be the responsibility of HCPSS Facilities Services. Operating cost impact is unknown at this time.

SCHOOL SYSTEM PROJECTS



SCHOOL SYSTEM PROJECTS

Number: E1035

Project: FY2019 NEW HIGH SCHOOL #13

(In Thousands)					Five	Year Ca	pital Prog	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	6,732	6,732	0	0	0	0	0	0	0	0	0	0	6,732
CONSTRUCTION	0	0	0	25,315	25,415	25,515	20,115	15,972	112,332	0	0	0	0	112,332
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	5,000	0	5,000	0	0	0	0	5,000
Total Expenditures	0	6,732	6,732	25,315	25,415	25,515	25,115	15,972	117,332	0	0	0	0	124,064
BONDS	0	6,732	6,732	8,782	8,882	8,982	25,115	15,972	67,733	0	0	0	0	74,465
STATE AID for SCHOOLS	0	0	0	16,533	16,533	16,533	0	0	49,599	0	0	0	0	49,599
Total Funding	0	6,732	6,732	25,315	25,415	25,515	25,115	15,972	117,332	0	0	0	0	124,064

\$0 spent and encumbered through February 2018 spent and encumbered through February 2017

Project Status : Planning.

Scope: New High School to accommodate enrollment growth. Capacity proposed of 1,615 students.

Timing: Accelerated schedule from completion in 2027 to 2024 to 2022 to 2023 due to lack of site approval in response to projected High School enrollment from the most recent feasibility study.

FY 2018 Budget	0	0	0	10,950	28,250	27,200	26,500	19,325	112,225	0	0	0		112,225
Difference 2018 / 2019	0	6,732	6,732	14,365	(2,835)	(1,685)	(1,385)	(3,353)	5,107	0	0	0	0	11,839

SCHOOL SYSTEM PROJECTS

Number: E1036

Project: E1036-FY2024 OAKLAND MILLS MIDDLE SCHOOL RENOVATION

Description

The Oakland Mills Middle School project will renovate the existing facility. The project calls for a renovation of the existing building in accord with recommendations of a future feasibility study or scope of work review. Renovation may include new electrical, mechanical, plumbing, technology, roofing, and life safety systems as applicable per the scope of work. Some interior spaces will be reconfigured, new finishes provided, accessibility improved, and new spaces added as required, bringing the facility into compliance with the Howard County Public School System Guidance Manual for Renovations and Modernizations of Existing Schools. The complete scope of this project will be defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Justification

Oakland Mills Middle School opened in 1972 and was renovated in 1998. In August 2008, HCPSS engaged Gilbert Architects Inc. to conduct a facility assessment of middle schools. This project evaluated and scored each school according to the Council of Educational Facilities Planners, International (CEFPI) appraisal guidelines. The assessment included reviewing each school's plan layouts and measurements of spaces to compare to the educational specifications developed by HCPSS for middle schools. The report concluded that Oakland Mills MS had 8.8 percent deficiency of educational program area.

Remarks

Project Schedule

January 2022 - January 2023: Feasibility Study. January 2023 - July 2024: Planning. July 2024 - August 2026: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$745,470 Estimated operating cost impact upon completion: No increase



SCHOOL SYSTEM PROJECTS

Number: E1036

Project: FY2024 OAKLAND MILLS MIDDLE SCHOOL RENOVATION

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	0	0	0	0	0	0	0	9,003	9,003	14,404	9,603	2,000	0	35,010
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	0	0	0	0	1,000	0	0	1,000
Total Expenditures	0	0	0	0	0	0	0	9,003	9,003	14,404	10,603	2,000	0	36,010
BONDS	0	0	0	0	0	0	0	9,003	9,003	4,682	881	2,000	0	16,566
STATE AID for SCHOOLS	0	0	0	0	0	0	0	0	0	9,722	9,722	0	0	19,444
Total Funding	0	0	0	0	0	0	0	9,003	9,003	14,404	10,603	2,000	0	36,010

\$0 spent and encumbered through February 2018 spent and encumbered through February 2017

Project Status: Planning.

Scope: Project has been upgraded from a limited renovation to a complete renovation.

FY 2018 Budget	0	10,000	10,000	10,828	7,000	0	0	0	17,828	0	0	0		27,828
Difference 2018 / 2019	0	(10,000)	(10,000)	(10,828)	(7,000)	0	0	9,003	(8,825)	14,404	10,603	2,000	0	8,182

SCHOOL SYSTEM PROJECTS

Number: E1037

Project: E1037-FY2023 ELLICOTT MILLS MIDDLE SCHOOL ADDITION

Description

The Ellicott Mills Middle School project will add 156 seats of new capacity to the existing school. This project will include an addition and light renovation to ensure seamless operation of the expanded facility. The majority of existing walls will remain; therefore, most existing classrooms will remain as classrooms. The addition will be designed to retain the use of natural daylight. The cafeteria will be enlarged to meet educational program requirements. The complete scope of this project will be defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Justification

Ellicott Mills Middle School is the third iteration of the current middle school prototype and opened in 2001. The projections in the June 2014 Feasibility Study support the approved middle school capacity adjustments and the effort invested in redistricting. All middle schools in the Northeast were relieved of overcrowding by the opening of Thomas Viaduct MS, except Ellicott Mills MS. Redistricting scenarios using western capacity failed to resolve crowding and created unacceptable travel distances and unusually elongated attending areas. With these findings, planned expansion of Ellicott Mills MS was contemplated in the Feasibility Study. This project is a next logical step after study of middle school capacity and analysis of redistricting scenarios.

Remarks

Project Schedule

2021: Feasibility Study.

2022: Planning.

August 2023 - August 2024: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$174,195

Upon completion, the maintenance of this facility will be the responsibility of HCPSS Facilities Services. Operating cost impact is unknown at this time.



SCHOOL SYSTEM PROJECTS

Number: E1037

Project: FY2023 ELLICOTT MILLS MIDDLE SCHOOL ADDITION

(In Thousands)					Fiv	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	0	0	0	0	0	1,000	0	1,000	0	0	0	0	1,000
CONSTRUCTION	0	0	0	0	0	0	0	5,915	5,915	1,000	0	0	0	6,915
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	0	500	500	0	0	0	0	500
Total Expenditures	0	0	0	0	0	0	1,000	6,415	7,415	1,000	0	0	0	8,415
BONDS	0	0	0	0	0	0	1,000	1,871	2,871	1,000	0	0	0	3,871
STATE AID for SCHOOLS	0	0	0	0	0	0	0	4,544	4,544	0	0	0	0	4,544
Total Funding	0	0	0	0	0	0	1,000	6,415	7,415	1,000	0	0	0	8,415
\$0 spent and encumbered through F spent and encumbered through Fek Project Status : Planning.	oruary 2017	8												
FY 2018 Budget	0	0	0	0	0	0	544	5,404	5,948	0	0	0		5,948
Difference 2018 / 2019	0	0	0	0	0	0	456	1,011	1,467	1,000	0	0	0	2,467

March 23, 2018 Howard County, MD Version : Executive Proposed

Project: E1038-FY2017 PLANNING AND DESIGN Number: E1038

Description

The Planning and Design project has been established to provide funding for feasibility studies prior to the funding of individual projects. During the concept development stage, each project is summarized, supporting documentation is gathered, and necessary approvals are obtained before construction begins. A feasibility study provides the analysis to determine the scope of a project under consideration.

Justification

The value of these studies is having the flexibility to ask technical questions about projects before the formal design process. With these studies projects can be "right sized." Pricing for these studies is favorable because design consultants want to obtain the full design project. Through a feasibility study the Board of Education is able to examine the needs of an existing building as well as unexpected design circumstances. These studies ensure the selection of the most effective scope for each project. This process will reduce the costs associated with significant changes in scope which often occur in a compressed planning schedule. In the construction phase, the reduced number of change orders will lessen the impact on the construction schedule and decrease incremental costs.

Remarks

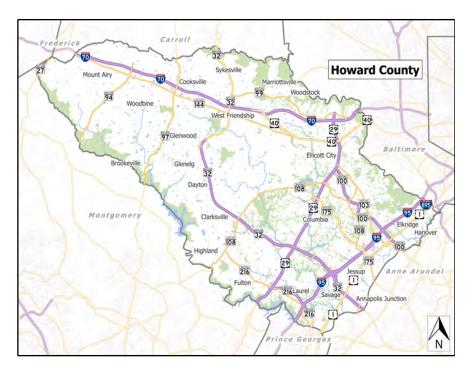
Project Schedule

Proposed Feasibility Studies in FY2019: New HS #13. High School Security Measures. MS/HS Career Development Center.

Operating Budget Impact

Estimated operating cost impact upon completion: No increase

SCHOOL SYSTEM PROJECTS



SCHOOL SYSTEM PROJECTS

Project: FY2017 PLANNING AND DESIGN

Number: E1038

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	600	100	700	400	400	300	300	300	1,700	300	300	300	300	3,600
Total Expenditures	600	100	700	400	400	300	300	300	1,700	300	300	300	300	3,600
TRANSFER TAX	600	100	700	400	400	300	300	300	1,700	300	300	300	300	3,600
Total Funding	600	100	700	400	400	300	300	300	1,700	300	300	300	300	3,600
\$343,037 spent and encumbered t \$167,390 spent and encumbered t Project Status : Planning.	•	,												
FY 2018 Budget	600	300	900	300	300	300	300	300	1,500	300	300	300		3,300
Difference 2018 / 2019	0	(200)	(200)	100	100	0	0	0	200	0	0	0	300	300

Project: E1039-FY2020 NEW ELEM SCHOOL #43 Number: E1039

Description

The New Elementary School #43 will be a new facility. The complete scope of this project will be defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Justification

The continued growth along the Route 1 Corridor continues to support the need for additional seats between the Northeastern and Southeastern regions. The needs of the southeast region are evident in the projections of Bollman Bridge Elementary School, Gorman Crossing Elementary School and Forest Ridge Elementary School. The location of ES #43 is to be determined. A location in close proximity to the planned Transit Oriented Development is desirable. This project includes the Elementary Regional Language Immersion Program.

Remarks

Project Schedule

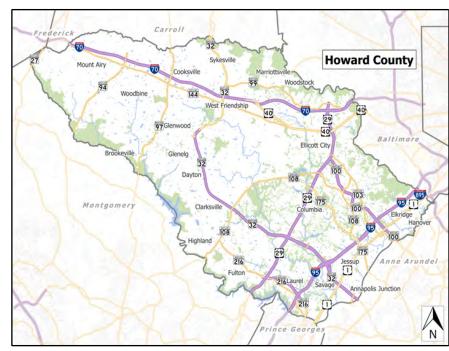
July 2020 - September 2020: Feasibility Study. October 2020 - September 2021: Planning. April 2022 - August 2023: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$1,213,920

Upon completion, maintenance of this facility will be the responsibility of HCPSS Facilities Services. Operating cost impact is unknown at this time.

SCHOOL SYSTEM PROJECTS



SCHOOL SYSTEM PROJECTS

Project: FY2020 NEW ELEM SCHOOL #43 Number: E1039

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	0	0	6,000	0	0	0	0	6,000	0	0	0	0	6,000
CONSTRUCTION	0	0	0	0	11,500	15,215	15,733	8,000	50,448	0	0	0	0	50,448
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	2,194	0	2,194	0	0	0	0	2,194
Total Expenditures	0	0	0	6,000	11,500	15,215	17,927	8,000	58,642	0	0	0	0	58,642
BONDS	0	0	0	6,000	1,500	4,382	7,094	8,000	26,976	0	0	0	0	26,976
STATE AID for SCHOOLS	0	0	0	0	10,000	10,833	10,833	0	31,666	0	0	0	0	31,666
Total Funding	0	0	0	6,000	11,500	15,215	17,927	8,000	58,642	0	0	0	0	58,642
\$0 spent and encumbered through F spent and encumbered through Feb Project Status : Planning.	•	8												
FY 2018 Budget	0	0	0	5,380	20,166	22,125	8,124	0	55,795	0	0	0		55,795
Difference 2018 / 2019	0	0	0	620	(8,666)	(6,910)	9,803	8,000	2,847	0	0	0	0	2,847

Project: E1040-FY2024 NEW ELEM SCHOOL #44 Number: E1040

Description

The New Elementary School #44 will be a new facility. The Columbia West region is projected to be at 119% capacity utilization in 2023. The complete scope of this project will be defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Justification

Running Brook ES (with expansion) is expected to exceed 110 percent utilization by 2019. A redistricting strategy alone, which uses nearby schools like Clarksville ES will not provide an adequate solution to accommodate the projected growth. Faulkner Ridge Center was closed on July 1, 2011. This site is a likely location for redevelopment as a future school.

Remarks

Project Schedule

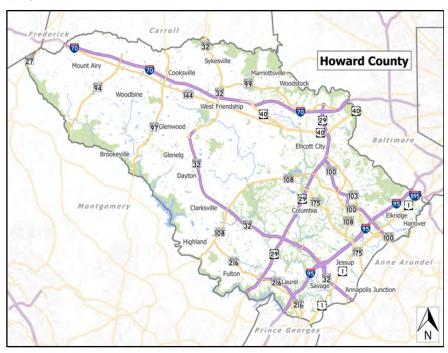
July 2024 - September 2024: Feasibility Study. October 2024 - September 2025: Planning. April 2026 - August 2027: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$1,213,965

Upon completion, the maintenance of this facility will be the responsibility of HCPSS Facilities Services. Operating cost impact is unknown at this time.

SCHOOL SYSTEM PROJECTS



SCHOOL SYSTEM PROJECTS

Project: FY2024 NEW ELEM SCHOOL #44 Number: E1040

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	0	0	0	0	0	0	5,705	5,705	0	0	0	0	5,705
CONSTRUCTION	0	0	0	0	0	0	0	0	0	15,881	21,175	13,687	0	50,743
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	0	0	0	0	0	2,194	0	2,194
Total Expenditures	0	0	0	0	0	0	0	5,705	5,705	15,881	21,175	15,881	0	58,642
BONDS	0	0	0	0	0	0	0	5,705	5,705	5,326	10,620	5,326	0	26,977
STATE AID for SCHOOLS	0	0	0	0	0	0	0	0	0	10,555	10,555	10,555	0	31,665
Total Funding	0	0	0	0	0	0	0	5,705	5,705	15,881	21,175	15,881	0	58,642
\$0 spent and encumbered through F spent and encumbered through Feb Project Status : Planning.		8								,				
FY 2018 Budget	0	0	0	0	0	0	0	5,380	5,380	23,099	17,906	9,410		55,795
Difference 2018 / 2019	0	0	0	0	0	0	0	325	325	(7,218)	3,269	6,471	0	2,847

Project: E1041-FY2026 NEW ELEM SCHOOL #45 Number: E1041

Description

The New Elementary School #45 will be a new facility. The Northern region is projected to be at 127% capacity utilization in 2026. The complete scope of this project will be defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Justification

Projections continue to support the need for elementary redistricting to relieve overcrowding at Manor Woods ES associated with Turf Valley growth. The addition at Waverly ES can absorb some growth. Considering the limited potential for expanding schools outside of the sewer service area, a Turf Valley school is planned. Land sites are being considered for this future school.

Remarks

Project Schedule

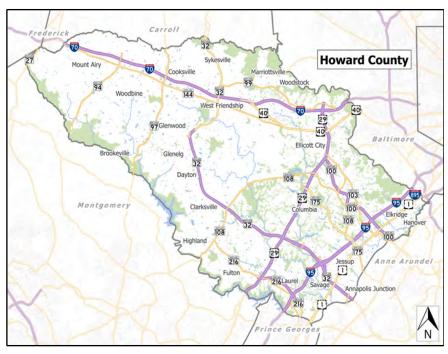
July 2026 - September 2026: Feasibility Study. October 2026 - September 2027: Planning. April 2028 - August 2029: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$1,924,245

Upon completion, the maintenance of this facility will be the responsibility of the HCPSS Facilities Services. Operating cost impact is unknown at this time.

SCHOOL SYSTEM PROJECTS



SCHOOL SYSTEM PROJECTS

Project: FY2026 NEW ELEM SCHOOL #45 Number: E1041

(In Thousands)					Five	Year Ca	pital Pro	gram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	0	0	0	0	0	0	0	0	0	5,705	0	0	5,705
CONSTRUCTION	0	0	0	0	0	0	0	0	0	0	0	15,881	21,175	37,056
Total Expenditures	0	0	0	0	0	0	0	0	0	0	5,705	15,881	21,175	42,761
BONDS	0	0	0	0	0	0	0	0	0	0	5,705	15,881	21,175	42,761
Total Funding	0	0	0	0	0	0	0	0	0	0	5,705	15,881	21,175	42,761
\$0 spent and encumbered through spent and encumbered through F Project Status : Planning.		8												
FY 2018 Budget	0	0	0	0	0	0	0	0	0	0	5,380	15,166		20,546
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	325	715	21,175	22,215

SCHOOL SYSTEM PROJECTS Project: E1042- NEW MIDDLE SCHOOL #21 Number: E1042

Description

The New Middle School #21 will be a new facility. The Northeast region is projected to be at 115% capacity utilization in 2025. The complete scope of this project will be defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

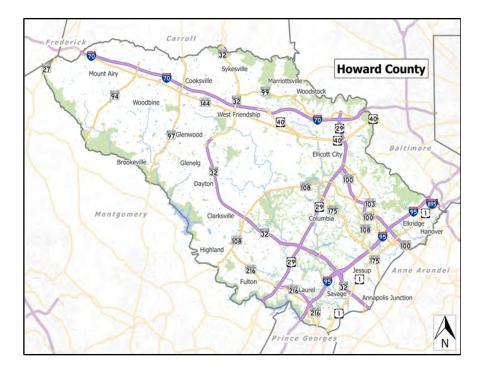
Justification

The opening of Thomas Viaduct MS in the 2014-2015 school year is a tangible reminder that growth is impacting middle school capacities as well. By 2025, two of five middle schools in Northeast region will have significant overcrowding. The same will be true for all three Southeastern region middle schools. Site acquisition efforts are underway.

Remarks

Project Schedule

Schedule to be determined.



SCHOOL SYSTEM PROJECTS

Project: NEW MIDDLE SCHOOL #21 Number: E1042

(In Thousands)					Fiv	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
Total Expenditures	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Funding	0	0	0	0	0	0	0	0	0	0	0	0	0	0
\$0 spent and encumbered through	h February 201	8												
spent and encumbered through I														
		0	0	0	0	0	0	0	0	0	0	0		0

SCHOOL SYSTEM PROJECTS

Number: E1043

Project: E1043-FY2019 TALBOTT SPRINGS ELEM SCHOOL RENOVATION/ADDITION

Description

A project to renovate and add capacity at Talbott Springs Elementary School. The planned scope of work for the school includes a full renovation and capacity addition to provide an energy efficient building with programmatic and physical upgrades as well as upgraded mechanical, electrical, and technology systems. This project also calls for an expansion (approx. 263 seats) for educational program spaces to address capacity needs and for the new Elementary Regional Languag Immersion Program. The complete scope of this project will be defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Justification

Talbott Springs Elementary School opened in 1973 and was renovated in 2000. The school was expanded in 2000 (art room and gymnasium) and 2008 (all day kindergarten). In April 2009, HCPSS engaged Gilbert Architects Inc. to conduct a facility assessment of elementary schools. The report concluded that Talbott Springs Elementary School had 18.7 percent deficiency of educational program area of the 40 elementary schools operating at that time.

Remarks

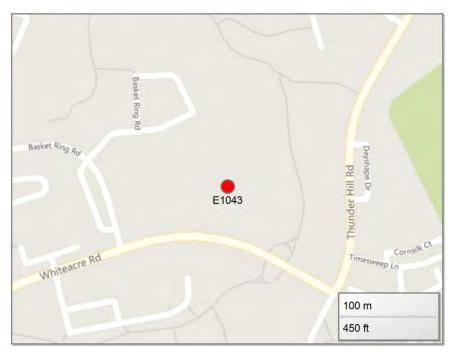
Project Schedule

2017: Feasibility Study. 2017 - 2018: Planning. 2019 - 2023: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$1,591,560

Upon completion, the maintenance of this facility will be the responsibility of HCPSS Facilities Services. Operating cost impact is unknown at this time.



Explanation of Changes

FY19 Title changed to further define by adding Addition.

SCHOOL SYSTEM PROJECTS

Number: E1043

Project: FY2019 TALBOTT SPRINGS ELEM SCHOOL RENOVATION/ADDITION

In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
ppropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,750	0	1,750	0	0	0	0	0	0	0	0	0	0	1,750
CONSTRUCTION	0	2,600	2,600	14,250	14,218	5,550	0	0	34,018	0	0	0	0	36,618
EQUIPMENT & FURNISHINGS	0	0	0	0	0	1,000	0	0	1,000	0	0	0	0	1,000
Total Expenditures	1,750	2,600	4,350	14,250	14,218	6,550	0	0	35,018	0	0	0	0	39,368
BONDS	750	2,600	3,350	12,250	12,218	6,550	0	0	31,018	0	0	0	0	34,368
STATE AID for SCHOOLS	0	0	0	2,000	2,000	0	0	0	4,000	0	0	0	0	4,000
EDUCATION EXCISE BONDS	1,000	0	1,000	0	0	0	0	0	0	0	0	0	0	1,000
Total Funding	1,750	2,600	4,350	14,250	14,218	6,550	0	0	35,018	0	0	0	0	39,368

spent and encumbered through February 2017 Project Status: Planning.

FY 2018 Budget	1,000	10,000	11,000	16,800	11,200	0	0	0	28,000	0	0	0		39,000
Difference 2018 / 2019	750	(7,400)	(6,650)	(2,550)	3,018	6,550	0	0	7,018	0	0	0	0	368

TAO2-2018 transferred \$750,000 in General Obligation Bond revenue from E1031.

Project: E1044-FY2019 SYSTEMIC RENOVATIONS

SCHOOL SYSTEM PROJECTS

Number: E1044

Description

Improvements and installation of systemic renovations at various school sites, including projects of a critical nature such as sprinkler repair, HVAC repair, window replacement, vehicles including but not limited to dump trucks, security initiatives including but not limited to high school door replacements/repairs, and other projects in support of the local CIP outlined in the HCPSS Comprehensive Maintenance Plan, as well as emergent projects on school properties. For larger systemic renovation projects (see schools listed in the remarks section) the complete scope of these projects are defined by the BOE approved construction documents (CD) brochure (see Policy 6020 for complete description of process) and any change orders approved subsequent to submittal of the CD brochure.

Justification

The systemic renovation program will include projects that are needed to bring older facilities up to current standards in lighting, electrical, HVAC systems, reconfiguring space, handicap accessible improvements, vehicle purchase including but not limited to dump trucks, and provide for upgrades of other building systems.

Remarks

1. The systemic renovations project also supports emergency and deferred systemic capital projects.

Project Schedule

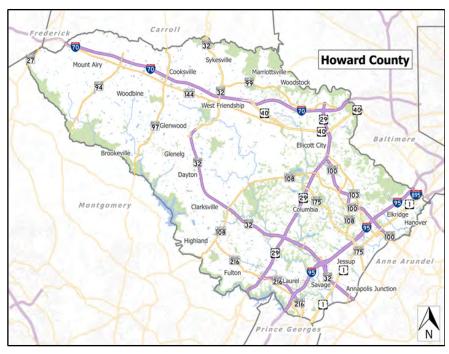
FY 2019 Capital Budget represents renovation work or planning for future construction at the following school facilities, as funding is available:

- 1. High School Security Measures
- 2. Mount View MS HVAC.
- 3. Pointers Run ES HVAC.
- 4. Rockburn ES HVAC.
- 5. Burleigh Manor MS HVAC.
- 6. Long Reach HS Building Envelope.
- 7. Glenwood MS Exterior Windows/Doors.
- 8. Special Education/Regional Program Needs.
- 9. Indoor Environmental Quality Project Repairs.

Operating Budget Impact

Annual Bond Redemption \$ \$7,272,000

Upon completion, the maintenance of these facilities will be the responsibility of HCPSS Facilities Services. Operating cost impact is unknown at this time.



SCHOOL SYSTEM PROJECTS

Project: FY2019 SYSTEMIC RENOVATIONS Number: E1044

(In Thousands)					Five	Year Ca	pital Pro	gram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	0	24,055	24,055	19,150	19,644	17,007	18,841	18,298	92,940	17,598	17,000	18,000	20,000	189,593
Total Expenditures	0	24,055	24,055	19,150	19,644	17,007	18,841	18,298	92,940	17,598	17,000	18,000	20,000	189,593
BONDS	0	17,116	17,116	19,150	19,644	8,933	18,841	9,522	76,090	13,394	17,000	18,000	20,000	161,600
STATE AID for SCHOOLS	0	2,789	2,789	0	0	8,074	0	8,776	16,850	4,204	0	0	0	23,843
TRANSFER TAX	0	4,150	4,150	0	0	0	0	0	0	0	0	0	0	4,150
Total Funding	0	24,055	24,055	19,150	19,644	17,007	18,841	18,298	92,940	17,598	17,000	18,000	20,000	189,593

\$0 spent and encumbered through February 2018 spent and encumbered through February 2017 Project Status: See Project Schedule. See Remarks. Ongoing.

Difference 2018 / 2019 0 24,055 24,055 19,150 19,644 17,007 18,841 18,298 92,940 17,598 17,000 18,000 20,000 18		0 24,0			,644 17,007	18,841 18,2	298 92,940	17,598 17,	,000 18,000 20,000	189,593
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Project: E1045-FY2019 RELOCATABLE CLASSROOMS

SCHOOL SYSTEM PROJECTS

Number: E1045

Description

This request will provide funds for the relocation of existing portable classrooms or purchase of new portable classrooms to be placed at schools in need of additional capacity in August 2018. Relocation includes moving the buildings as well as installation of support services that make the buildings functional classrooms.

Justification

Additional classroom spaces are needed to help relieve overcapacity schools until such time as permanent classroom spaces are available.

Remarks

1. In September 2017, there were 224 relocatable/modular classrooms in use (four are used for administrative purposes at the Central Office, all others are at school sites). The school system will continue to conduct an annual review of all relocatables which will include condition and usage. The potential to either remove relocatables out-of-service, transport them to other locations where needed, or place them in excess to dispose of in an appropriate manner will be decided upon annually.

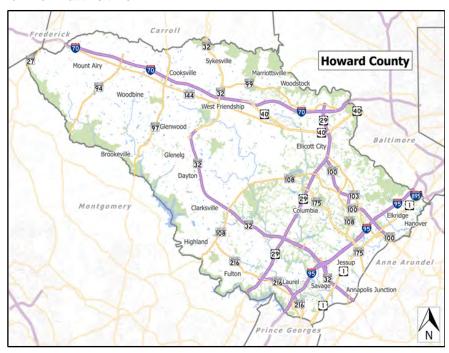
Project Schedule

Planned: Purchase of new relocatable classrooms for Elementary School, Middle School and High School locations.

Operating Budget Impact

Annual Bond Redemption \$ \$765,000

Upon completion, the maintenance of these facilities will be the responsibility of HCPSS Facilities Services. Operating cost impact is unknown at this time.



SCHOOL SYSTEM PROJECTS

Project: FY2019 RELOCATABLE CLASSROOMS Number: E1045

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	0	1,800	1,800	3,200	1,500	1,500	1,500	1,500	9,200	1,500	1,500	1,500	1,500	17,000
Total Expenditures	0	1,800	1,800	3,200	1,500	1,500	1,500	1,500	9,200	1,500	1,500	1,500	1,500	17,000
BONDS	0	1,800	1,800	3,200	1,500	1,500	1,500	1,500	9,200	1,500	1,500	1,500	1,500	17,000
Total Funding	0	1,800	1,800	3,200	1,500	1,500	1,500	1,500	9,200	1,500	1,500	1,500	1,500	17,000
\$0 spent and encumbered through spent and encumbered through F Project Status : Ongoing.	•	8												
Difference 2018 / 2019	0	1.800	1.800	3.200	1.500	1.500	1.500	1.500	9.200	1.500	1.500	1.500	1.500	17.000

SCHOOL SYSTEM PROJECTS

Project: E1046-FY2019 ROOFING Number: E1046

Description

Reroofing for various schools including design and construction of repairs to existing roofs, old roof removal, new flashing and drains, and installation of new roofing structure and material.

Justification

The roof system is the largest single area of the building that must endure the most severe weather conditions. The roof protects the structural integrity of the building as well as equipment. Because of building age and environmental conditions, scheduled roof replacements must be completed to protect the investment that has been made in many facilities.

Remarks

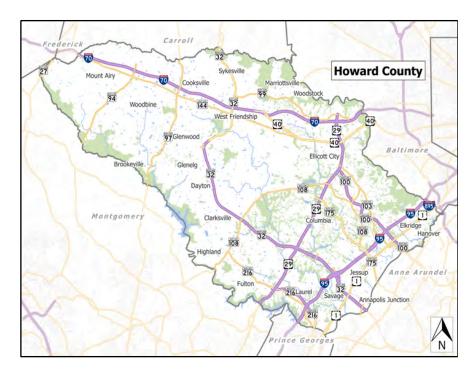
When feasible, roofing projects will be considered in conjunction with systemic renovations.

Project Schedule

Operating Budget Impact

Annual Bond Redemption \$ \$1,570,860

Estimated operating cost impact upon completion: No increase



SCHOOL SYSTEM PROJECTS

Project: FY2019 ROOFING Number: E1046

(In Thousands)					Five	Year Ca	pital Prog	gram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	0	12,500	12,500	5,000	1,000	5,000	1,000	1,000	13,000	5,000	5,000	5,000	5,000	45,500
Total Expenditures	0	12,500	12,500	5,000	1,000	5,000	1,000	1,000	13,000	5,000	5,000	5,000	5,000	45,500
BONDS	0	6,546	6,546	2,636	1,000	2,726	1,000	1,000	8,362	5,000	5,000	5,000	5,000	34,908
STATE AID for SCHOOLS	0	5,954	5,954	2,364	0	2,274	0	0	4,638	0	0	0	0	10,592
Total Funding	0	12,500	12,500	5,000	1,000	5,000	1,000	1,000	13,000	5,000	5,000	5,000	5,000	45,500

Difference 2018 / 2019	0	12,500	12,500	5,000	1,000	5,000	1,000	1,000	13,000	5,000	5,000	5,000	5,000	45,500

SCHOOL SYSTEM PROJECTS

Number: E1047

Project: E1047-FY2025 SITE ACQUISITION AND CONSTRUCTION RESERVE

Description

This account is a contingency fund for site acquisition and school construction at various school sites. Recent emergent maintenance requirements have strained the school system's existing construction contingency accounts and additional funding is required to ensure that urgently needed repairs can be completed without delay.

Justification

This fund is needed as a contingency reserve providing funds for use on an asneeded basis.

Remarks

1. Site funds are needed for future enrollment growth.

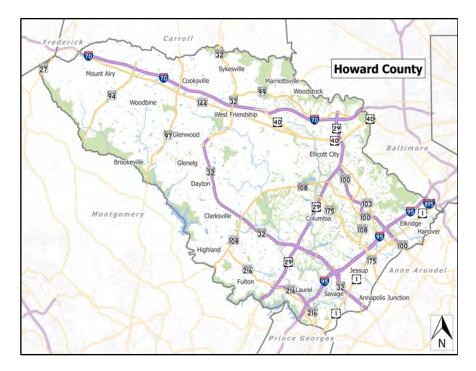
Project Schedule

Ongoing.

Operating Budget Impact

Annual Bond Redemption \$ \$360,000

Estimated operating cost impact upon completion: No increase



SCHOOL SYSTEM PROJECTS

Number: E1047

Project: FY2025 SITE ACQUISITION AND CONSTRUCTION RESERVE

			Five	e Year Ca	pital Pro	gram				Master P	lan			
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	0	0	0	0	0	0	0	0	0	2,000	2,000	2,000	2,000	8,000
Total Expenditures	0	0	0	0	0	0	0	0	0	2,000	2,000	2,000	2,000	8,000
BONDS	0	0	0	0	0	0	0	0	0	2,000	2,000	2,000	2,000	8,000
Total Funding	0	0	0	0	0	0	0	0	0	2,000	2,000	2,000	2,000	8,000

Project: E1048-FY2019 TECHNOLOGY Number: E1048

Description

A capital project to provide and sustain a viable technology infrastructure consistent with the HCPSS technology plan at various school sites.

Justification

Funds are required for continuous improvements and upgrades to the HCPSS network infrastructure and computer systems to ensure that instruction and business technology needs are met in a standard and equitable manner. Technology refresh programs, known as "Replacement Plans," have been established to ensure that all HCPSS students and school-based staff are equipped with the appropriate computing and network resources. Replacement Plans are designed to ensure that these essential resources are kept current in order to meet instruction and business technology requirements.

Remarks

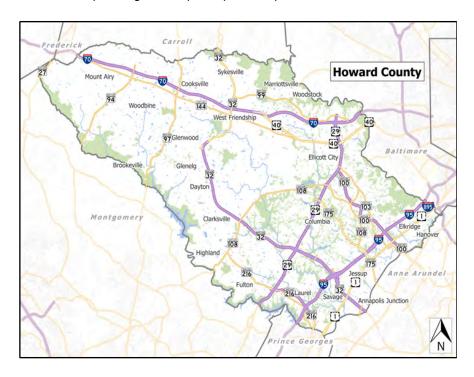
Project Schedule

Eligible Projects Include: School Servers, Wireless APs+Ctrls, Data Center Switches, VOIP Switches+Tel Sets, RP3.0 curriculum computers, Testing +Instructional computers, and HS labs computers.

Operating Budget Impact

Estimated operating cost impact upon completion: No increase

SCHOOL SYSTEM PROJECTS



SCHOOL SYSTEM PROJECTS

Project: FY2019 TECHNOLOGY Number: E1048

(In Thousands)		Five Year Capital Program									Master Plan							
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project				
EQUIPMENT & FURNISHINGS	0	2,750	2,750	5,500	5,500	7,500	7,500	7,500	33,500	7,500	7,500	7,500	7,500	66,250				
Total Expenditures	0	2,750	2,750	5,500	5,500	7,500	7,500	7,500	33,500	7,500	7,500	7,500	7,500	66,250				
TRANSFER TAX	0	2,750	2,750	5,500	5,500	7,500	7,500	7,500	33,500	7,500	7,500	7,500	7,500	66,250				
Total Funding	0	2,750	2,750	5,500	5,500	7,500	7,500	7,500	33,500	7,500	7,500	7,500	7,500	66,250				

\$0 spent and encumbered through February 2018 spent and encumbered through February 2017

Project Status: Scope/Timing: Partial deferrals from Technology Replacement Plans 1.0, 1.5, and 3.0 deferred from FY15, FY16, and FY17, respectively due to funding constraints. Included computer replacements at all levels for fixed labs, mobile labs, media centers, school MAP testing, and school curriculum programs. Also see Project Schedule.

SCHOOL SYSTEM PROJECTS

Number: E1049

Project: E1049-FY2021 DUNLOGGIN MS RENOVATION/ADDITION

Description

A project to expand educational program spaces with 97 seats of new capacity and renovate the existing facility. This project calls for an expasion of the educational program spaces and renovation of the existing facility. The renovation will include a complete systemic renovation of the existing building including new electrical, mechanical, plumbing, technology, roofing and life safety systems. The 97 seats of additional classroom space and core infrastructure space will allow the building to operate effctively at the larger capacity. Interior spaces will be reconfigured, new finishes provided, accessibility improved, and new spaces added as required to bring the facility into compliance with renovation specifications. The complete scope of this project is defined by the BOE approved construction documents (CD) brochure (see Policy 6020 for complete description of process) and any change orders approved subsequent to submittal of the CD brochure.

Justification

A 2008 facility assessment of middle schools concluded that Dunloggin Middle School has a 13.8 percent deficiency of educational program area of the 19 middle schools operating at that time.

Remarks

The original building was constructed in 1973.

Project Schedule

2020: Feasibility Study. 2020 - 2022: Planning. 2022 - 2024: Construction

Operating Budget Impact

Annual Bond Redemption \$ \$805,275

Upon completion, the maintenance of this facility will be the responsibility of HCPSS Facilities Services. Operating cost impact is unknow at this time.



SCHOOL SYSTEM PROJECTS

Number: E1049

Project: FY2021 DUNLOGGIN MS RENOVATION/ADDITION

n Thousands)					Five	Year Ca	pital Prog	gram				Master F	lan	
ppropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	0	0	0	2,000	0	0	0	2,000	0	0	0	0	2,000
CONSTRUCTION	0	0	0	0	0	10,694	12,671	8,534	31,899	4,000	0	0	0	35,899
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	0	1,000	1,000	0	0	0	0	1,000
Total Expenditures	0	0	0	0	2,000	10,694	12,671	9,534	34,899	4,000	0	0	0	38,899
BONDS	0	0	0	0	2,000	5,192	2,169	4,534	13,895	4,000	0	0	0	17,895
STATE AID for SCHOOLS	0	0	0	0	0	5,502	10,502	5,000	21,004	0	0	0	0	21,004
Total Funding	0	0	0	0	2,000	10,694	12,671	9,534	34,899	4,000	0	0	0	38,899

Project: E1050-FY2024 CLARKSVILLE ES ADDITION

SCHOOL SYSTEM PROJECTS

Number: E1050

Description

The Clarksville Elementary School project will expand educational program spaces with 150 seats of new capacity for a new Elementary Regional Language Immersion Program. The program is under development and project details are forthcoming. The complete scope of this project will be defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Justification

This project calls for an expansion of the educational program spaces to address space needed for the new Elementary Regional Language Immersion Program.

Remarks

The original building was built in 1964. The last renovation/additional was in 2002.

Project Schedule

2023-2024 Feasibility Study. 2024-2025 Planning. 2025-2026 Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$450,000

Upon completion, the maintenance of this facility will be the responsibility of HCPSS Facilities Services. Operating cost impact is unknow at this time.



SCHOOL SYSTEM PROJECTS

Project: FY2024 CLARKSVILLE ES ADDITION Number: E1050

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	0	0	0	0	0	0	2,000	2,000	0	0	0	0	2,000
CONSTRUCTION	0	0	0	0	0	0	0	0	0	7,000	500	0	0	7,500
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	0	0	0	0	500	0	0	500
Total Expenditures	0	0	0	0	0	0	0	2,000	2,000	7,000	1,000	0	0	10,000
BONDS	0	0	0	0	0	0	0	2,000	2,000	7,000	1,000	0	0	10,000
Total Funding	0	0	0	0	0	0	0	2,000	2,000	7,000	1,000	0	0	10,000

SCHOOL SYSTEM PROJECTS

Number: E1051

Project: E1051-FY2024 MS/HS CAREER DEVELOPMENT CENTER

Description

The MS/HS Career Development Center project will replace the aging Applications and Research Lab (ARL) school with a larger, more modern facility to facilitate the expansion of educational spaces to meet the growing curriculum. The complete scope of this project would be defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Justification

The current ARL campus includes multiple aging buildings constructed in various phases.

Remarks

The original building was built in 1968. The last renovation was in 1998.

Project Schedule

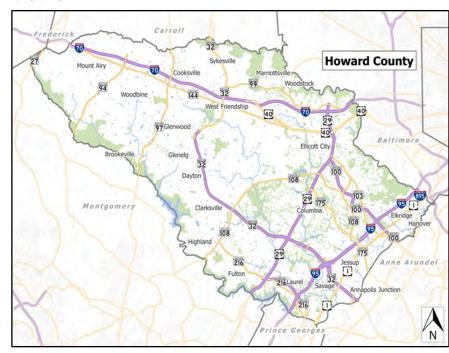
2022-2023: Feasibility Study/Ed Specification.

2023-2025: Plannning. 2025-2028: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$2,461,230

Upon competion, the maintenance of this facility will be the responsibility of the HCPSS Facilities Services. Operating cost impact is unknown at this time.



SCHOOL SYSTEM PROJECTS

Number: E1051

Project: FY2024 MS/HS CAREER DEVELOPMENT CENTER

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	0	0	0	0	0	0	11,232	11,232	0	0	0	0	11,232
CONSTRUCTION	0	0	0	0	0	0	0	0	0	22,566	30,850	31,686	17,566	102,668
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	0	0	0	0	0	0	5,000	5,000
Total Expenditures	0	0	0	0	0	0	0	11,232	11,232	22,566	30,850	31,686	22,566	118,900
BONDS	0	0	0	0	0	0	0	11,232	11,232	22,566	9,448	10,284	1,164	54,694
STATE AID for SCHOOLS	0	0	0	0	0	0	0	0	0	0	21,402	21,402	21,402	64,206
Total Funding	0	0	0	0	0	0	0	11,232	11,232	22,566	30,850	31,686	22,566	118,900

\$0 spent and encumbered through February 2018

spent and encumbered through February 2017

Project Status: A feasibility study is planned to determine the curricular and facility needs of the replacement building.

Howard County, MD FY2019 Executive Proposed Capital Budget Program: FIRE PROJECTS and EQUIPMENT

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
F5960 FY2001 FIRESTATION SYSTEMIC IMPROVEMENTS	В	3,223	400	3,623	300	300	300	300	300	5,123
An ongoing project to replace or renovate major systems, fixtures, or structures in various existing fire stations/PSTC.	P .	810	0	810	0	0	0	0	0	810
	Т	1,660	0	1,660	0	0	0	0	0	1,660
	Total	5,693	400	6,093	300	300	300	300	300	7,593
F5963 FY2004 EMERGENCY CONTROL SIGNAL SYSTEM	Т	245	0	245	0	0	0	0	0	245
A project to install priority control systems in authorized emergency vehicles and at several strategic traffic signals to allow pre-emption of the signal when responding to emergency calls.	Total	245	0	245	0	0	0	0	0	245
F5964 FY2012 FIRESTATION ONE RELOCATION A project to move Fire Station #1 to a more optimal location in Elkridge, close to the existing fire station location, but without the present site restrictions.	В	14,947	0	14,947	0	0	0	0	0	14,947
	G	500	0	500	0	0	0	0	0	500
	0	2,700	-2,700	0	0	0	0	0	0	0
	Т	1,350	2,300	3,650	0	0	0	0	0	3,650
	Total	19,497	-400	19,097	0	0	0	0	0	19,097
F5972 FY2008 RURAL FIRE PROTECTION PROGRAM A project to provide and augment fire protection systems in rural areas within the County, outside of the Water and Sewer Planned Service Area.	0	5,150	500	5,650	0	0	0	0	0	5,650
	Т	1,950	0	1,950	0	0	0	0	0	1,950
	Total	7,100	500	7,600	0	0	0	0	0	7,600
F5973 FY2010 LOGISTICS FACILITY Construction of a 17,000 SF facility to house the Department's Quartermaster, Breathing Apparatus Repair Shop, Equipment Repair Shop, Reserve Emergency Apparatus, Equipment Storage.	В	1,850	0	1,850	0	0	0	0	0	1,850
	Total	1,850	0	1,850	0	0	0	0	0	1,850
F5975 FY2010 ROUTE ONE FIRE STATION A project to construct a new 30,000 SF fire station at the intersection of RT1 & Port Capital Drive.	В	10,975	0	10,975	1,875	0	0	0	0	12,850
	0	2,005	0	2,005	0	0	0	0	0	2,005
	Т	2,300	0	2,300	0	0	0	0	0	2,300
	Total	15,280	0	15,280	1,875	0	0	0	0	17,155

March 23, 2018 Howard County, MD Version : Executive Proposed

Howard County, MD FY2019 Executive Proposed Capital Budget Program: FIRE PROJECTS and EQUIPMENT

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
F5976 FY2018 NORTH COLUMBIA FIRE STATION A project to construct a new 10,000 SF fire station to	В	400	700	1,100	4,355	0	0	0	0	5,455
establish emergency services in a strategic position in the North Columbia area that will serve to relieve the demands associated with increased population density and call demands in the area.	Total	400	700	1,100	4,355	0	0	0	0	5,455
FIRE PROJECTS and EQUIPMENT Total		50,065	1,200	51,265	6,530	300	300	300	300	58,995

Howard County, MD FY2019 Executive Proposed Capital Budget (\$000) FIRE-FIRE PROJECTS and EQUIPMENT

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	31,395	1,100	32,495
G	GRANTS	500	0	500
0	OTHER SOURCES	9,855	-2,200	7,655
Р	PAY AS YOU GO	810	0	810
Т	TRANSFER TAX	7,505	2,300	9,805
Total		50,065	1,200	51,265

2019 Executive Proposed 5 Year Capital Budget Project Type Summary (FIRE-FIRE PROJECTS and EQUIPMENT)

Re	venue Source	Prior Approp	Current FY	2020	2021	2022	2023	2024	5 Year Total
В	BONDS	31,395	1,100	6,530	300	300	300	300	40,225
G	GRANTS	500	0	0	0	0	0	0	500
0	OTHER SOURCES	9,855	-2,200	0	0	0	0	0	7,655
Р	PAY AS YOU GO	810	0	0	0	0	0	0	810
Т	TRANSFER TAX	7,505	2,300	0	0	0	0	0	9,805
Tot	al	50,065	1,200	6,530	300	300	300	300	58,995

March 23, 2018 Howard County, MD Version : Executive Proposed

FIRE PROJECTS and EQUIPMENT

Number: F5960

Project: F5960-FY2001 FIRESTATION SYSTEMIC IMPROVEMENTS

Description

An ongoing project to replace or renovate major systems, fixtures, or structures in various existing fire stations/PSTC.

Justification

Many components of these facilities have reached the end of their useful life and need replacement. Some facilities need upgraded capabilities in order to continue to operate efficiently.

Remarks

Miscellaneous repairs, modifications and improvements to County Fire Department Facilities are required on an ongoing basis.

Project Schedule

FY19-FY28 - Design and Construction of various improvements.

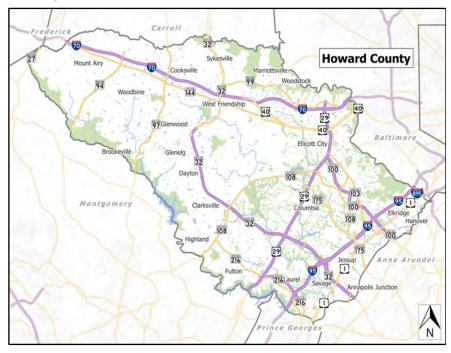
FY19 - New generators at the new FRS HQ.

FY20 - Replacement generators at Station 7 and 9.

Operating Budget Impact

Annual Bond Redemption \$ \$284,535

O&M and Utility Impact in FY17 and beyond is estimated to be \$28,000 annually.



Difference 2018 / 2019

FIRE PROJECTS and EQUIPMENT

Number: F5960

Project: FY2001 FIRESTATION SYSTEMIC IMPROVEMENTS

n Thousands)					Five	Year Ca	pital Prog	gram				Master F	Plan	
ppropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	645	30	675	30	30	30	30	30	150	30	30	30	30	94
CONSTRUCTION	4,968	370	5,338	270	270	270	270	270	1,350	270	270	270	270	7,768
ADMINISTRATION	60	0	60	0	0	0	0	0	0	0	0	0	0	60
EQUIPMENT & FURNISHINGS	20	0	20	0	0	0	0	0	0	0	0	0	0	20
Total Expenditures	5,693	400	6,093	300	300	300	300	300	1,500	300	300	300	300	8,79
BONDS	3,223	400	3,623	300	300	300	300	300	1,500	300	300	300	300	6,323
PAY AS YOU GO	810	0	810	0	0	0	0	0	0	0	0	0	0	810
TRANSFER TAX	1,660	0	1,660	0	0	0	0	0	0	0	0	0	0	1,660
Total Funding	5,693	400	6,093	300	300	300	300	300	1,500	300	300	300	300	8,793

March 23, 2018 Howard County, MD Version : Executive Proposed

FIRE PROJECTS and EQUIPMENT

Number: F5963

Project: F5963-FY2004 EMERGENCY CONTROL SIGNAL SYSTEM

Description

A project to install priority control systems in authorized emergency vehicles and at several strategic traffic signals to allow pre-emption of the signal when responding to emergency calls.

Justification

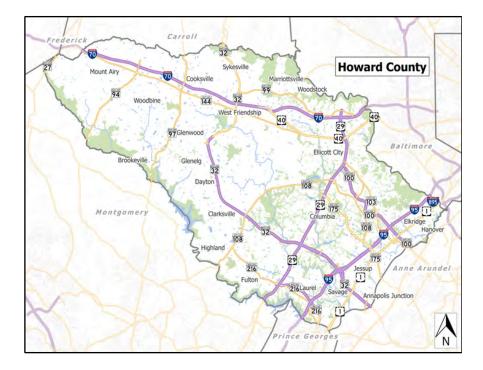
Congestion at red traffic signals impedes the response of emergency vehicles. Installation of priority control system equipment on strategic traffic signal approaches for the approaching emergency vehicle would help decrease response time and provide the safest driving condition.

Remarks

36 intersections have been completed as of November 22, 2013.

Project Schedule

FY19- Project is in the financial closeout process.



FIRE PROJECTS and EQUIPMENT

Number: F5963

Project: FY2004 EMERGENCY CONTROL SIGNAL SYSTEM

(In Thousands)					Fiv	e Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	50	0	50	0	0	0	0	0	0	0	0	0	0	50
EQUIPMENT & FURNISHINGS	195	0	195	0	0	0	0	0	0	0	0	0	0	195
Total Expenditures	245	0	245	0	0	0	0	0	0	0	0	0	0	245
TRANSFER TAX	245	0	245	0	0	0	0	0	0	0	0	0	0	245
Total Funding	245	0	245	0	0	0	0	0	0	0	0	0	0	245

\$228,443 spent and encumbered through February 2018
\$228,443 spent and encumbered through February 2017
Project Status: FY17 - Defund for other Fire priority project. Project will continue subject to approval of SHA and County approval process.

FY 2018 Budget	245	0	245	0	0	0	0	0	0	0	0	0		245
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: F5964-FY2012 FIRESTATION ONE RELOCATION

FIRE PROJECTS and EQUIPMENT

Number: F5964

Description

A project to move Fire Station #1 to a more optimal location in Elkridge, close to the existing fire station location, but without the present site restrictions. This project was recommended in the Fire and Rescue Facilities Study which was completed in FY04.

Justification

This project is required because the current fire station is old, deteriorating and inadequate to meet the growing demands of the local communities. The current site is insufficient to allow the necessary enlargement/improvement to the fire station. This project was recommended in the Fire and Rescue Facilities Study which was completed in FY04.

Remarks

- 1. Construction Bids received Oct. 2015 \$3.6 mil over estimated budget. Fire Department agreed to reduce scope in order to bring project back into approved budget.
- 2. The Elkridge Volunteer Fire Company (EVFC) will pay for the cost of a community hall with a commercial kitchen and a station tower desired by EVFC. The cost of the these additional improvements is \$2,300,000. Because the EVFC is unable to pay the total cost of additional improvements in a lump sum at this time, the County and EVFC are negotiating terms for the payment of the cost of the additional improvements by (i) a partial payment from EVFC and (ii) a portion of the transfer tax revenue allocated to fire protection which EFVC will reimburse the County over a number of years by (a) making annual payments, and (b) paying specified portions of the proceeds of the sale of EVFCs property (ies).

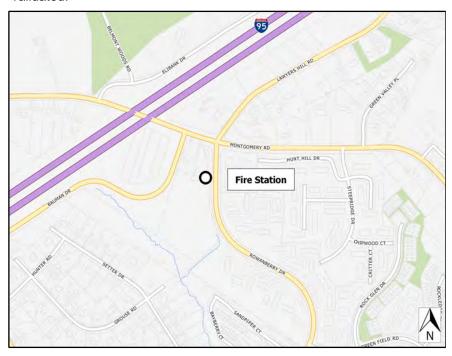
Project Schedule

FY19 - Project Closeout.

Operating Budget Impact

Annual Bond Redemption \$ \$672,615

Station is cost neutral from the perspective of the operating budget since this is a relocation. There is no additional need at this time for new personnel or new apparatus to staff either station, though both facilities were built large enough for potential future growth should that be validated.



Original Project Budget See remark 2.

FIRE PROJECTS and EQUIPMENT

Project: FY2012 FIRESTATION ONE RELOCATION Number: F5964

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,785	0	1,785	0	0	0	0	0	0	0	0	0	0	1,785
LAND ACQUISITION	1,600	0	1,600	0	0	0	0	0	0	0	0	0	0	1,600
CONSTRUCTION	15,577	(400)	15,177	0	0	0	0	0	0	0	0	0	0	15,177
ADMINISTRATION	30	0	30	0	0	0	0	0	0	0	0	0	0	30
EQUIPMENT & FURNISHINGS	505	0	505	0	0	0	0	0	0	0	0	0	0	505
Total Expenditures	19,497	(400)	19,097	0	0	0	0	0	0	0	0	0	0	19,097
BONDS	14,947	0	14,947	0	0	0	0	0	0	0	0	0	0	14,947
GRANTS	500	0	500	0	0	0	0	0	0	0	0	0	0	500
OTHER SOURCES	2,700	(2,700)	0	0	0	0	0	0	0	0	0	0	0	C
TRANSFER TAX	1,350	2,300	3,650	0	0	0	0	0	0	0	0	0	0	3,650
Total Funding	19,497	(400)	19,097	0	0	0	0	0	0	0	0	0	0	19,097

\$18,962,951 spent and encumbered through February 2018 \$17,690,109 spent and encumbered through February 2017 Project Status: FY16 - Redesign of Fire Station to accomodate available funds.

FY17 - Award Construction.

FY18 - Complete Construction.

Construction expected to be complete March 2018.

FY 2018 Budget	19,497	0	19,497	0	0	0	0	0	0	0	0	0		19,497
Difference 2018 / 2019	0	(400)	(400)	0	0	0	0	0	0	0	0	0	0	(400)

Project: F5972-FY2008 RURAL FIRE PROTECTION PROGRAM

FIRE PROJECTS and EQUIPMENT

Number: F5972

Description

A project to provide and augment fire protection systems in rural areas within the County, outside of the Water and Sewer Planned Service Area.

Justification

Increased development in rural areas of the County has created a need for additional water tankers, upgrades to emergency response equipment and access to strategically located water sources. The results will help ensure that water supplies are in place to adequately respond to fire demands.

Remarks

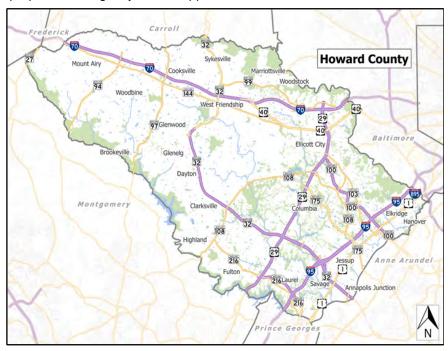
- 1. The project will install 2 to 5 emergency water supply systems per year for fire protection. It is anticipated that approximately 90 to 100 emergency water supply systems will be constructed under this capital project.
- 2. 43 cisterns have been installed and are operational.
- 3. The project will also upgrade or purchase new tankers and emergency equipment to ensure adequate response times to fire emergencies.
- 4. OTHER represents Pay as you Go generated from Fire Tax.
- 5. Request represents advancement of funds in the capital program.

Project Schedule

Ongoing project

Operating Budget Impact

\$5,000 per year represents the cost of operation and maintenance of the proposed emergency water supplies.



FIRE PROJECTS and EQUIPMENT

Number: F5972

Project: FY2008 RURAL FIRE PROTECTION PROGRAM

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	500	50	550	0	0	0	0	0	0	0	0	0	0	550
LAND ACQUISITION	1,250	50	1,300	0	0	0	0	0	0	0	0	0	0	1,300
CONSTRUCTION	4,500	400	4,900	0	0	0	0	0	0	0	0	0	0	4,900
ADMINISTRATION	5	0	5	0	0	0	0	0	0	0	0	0	0	5
EQUIPMENT & FURNISHINGS	845	0	845	0	0	0	0	0	0	0	0	0	0	845
Total Expenditures	7,100	500	7,600	0	0	0	0	0	0	0	0	0	0	7,600
OTHER SOURCES	5,150	500	5,650	0	0	0	0	0	0	0	0	0	0	5,650
TRANSFER TAX	1,950	0	1,950	0	0	0	0	0	0	0	0	0	0	1,950
Total Funding	7,100	500	7,600	0	0	0	0	0	0	0	0	0	0	7,600

\$5,356,256 spent and encumbered through February 2018 \$4,482,612 spent and encumbered through February 2017

Project Status: Complete: RT# 1- Tridelphia Mill Road at Highland Road RT# 2- Warfield Pond Park (McClintock Drive) RT# 3- Monticello Drive near Route-97 RT# 4- River Valley Chase at Route-32 RT # 5- Schooley Mill Park (Hall Shop Road) RT# 6- Route-97 at Longfield Road RT# 7- Big Branch Drive at Howard Road RT# 8- Daisy Road at Cliff View Road RT# 9- Sapling Ridge Drive near Tridelphia Mill Road RT# 10- Lisbon Park (Church Lane at Route-144) RT# 15- Long Corner Road at Hardy Road RT# 17- Starting Gate Court near Route-94 RT# 18- Tridelphia Road near Rosemary Lane (Benson Branch Park Property) RT# 23- Glenwood Fire Station #13 (14620 Carrs Mill Road) RT# 25- Pindell School Road near Wayneridge Street RT# 70- 14729 Carriage Mill Drive near Route-144 RT# 30 - Dayton Oaks Elementary School (Ten Oaks Road) RT# 96- Folly Quarter Road Middle School (Triadelphia Road) RT# 32- Julia Manor Way near East Ivory Road RT# 11- Roxbury Road near Edgewoods Way (near new Traffic Circle) RT# 13- 14827 Michelle Way RT# 14- Dorsey Mill Road at Clarks Meadow Drive RT# 60- Westmeath Drive near Brighton Dam Road RT# 105- Howard County Living Farm Complex (Route-144 across from the Fairgrounds) RT# 106- Doughregan Manor site RT# 27- Windsor Forest Road near Long Corner Road RT# 31- Hobbs Road near Glenwood Springs Drive RT# 33- Mink Hollow Road near Gardner Lane RT# 35- Route 32 near Day Road RT# 36- Watersville Road near Frederick Road RT# 48- Hunt Valley Road near Longfield Road RT# 50- Rte 32 at Linden Church RT# 51- Long Corner at Penn Shop Road RT# 20- Western Regional Park RT# 42- Simpson Road and Hall Shop Road RT# 106- Doughoregan Manor In Design: RT# 36- Poplar Springs Park RT# 48- Country Club Drive RT# 54- Florence Road & Cabin Branch Court

0 FY 2018 Budget 7.100 7,100 0 0 0 0 0 0 0 7,100 0 0 500 500 O 0 O n 0 0 0 O 0 500 Difference 2018 / 2019

Project: F5973-FY2010 LOGISTICS FACILITY

FIRE PROJECTS and EQUIPMENT

Number: F5973

Description

Construction of a 17,000 SF facility to house the Department's Quartermaster, Breathing Apparatus Repair Shop, Equipment Repair Shop, Reserve Emergency Apparatus, Equipment Storage.

Justification

The Department of Fire and Rescue Services, Bureau of Logistics supports the delivery of emergency services by providing supplies, equipment and apparatus throughout the Department. This includes repair and maintenance of Self Contained Breathing Apparatus (SCBA) and the storage and readiness of reserve emergency vehicles. The Bureau currently delivers these services from four locations; Fire and Rescue Headquarters (Gateway Building), Dorsey Building, Public Safety Training Center and Fire Station 2. It is imperative that the four sites be consolidated into one centrally located location meeting the growing demands of both internal and external F&R customers.

Remarks

Based upon a reassessment of priorities DFRS has reallocated funds from this project for other higher priorities.

Project Schedule

FY17/18 - Defund project available balance and use for priority projects.

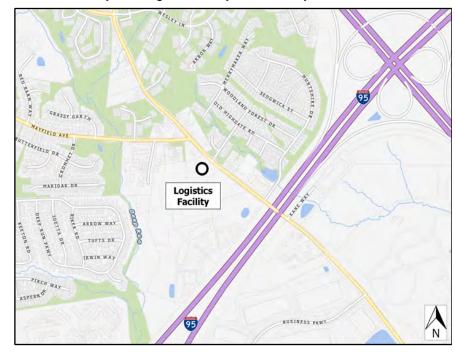
FY18 - Project on hold for funding pending DFRS priorities.

FY19 - Complete shared access road construction to include storm water management.

Operating Budget Impact

Annual Bond Redemption \$ \$83,250

Cost neutral from the perspective of the operating budget. It will provide a central location for the key support services like the Quartermaster and BA Shop. Personnel will be relocated to operate and staff this facility from the Dorsey Building where they are currently located.



FIRE PROJECTS and EQUIPMENT

Number: F5973

Project: FY2010 LOGISTICS FACILITY

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	700	0	700	0	0	0	0	0	0	0	C	0	0	700
LAND ACQUISITION	100	0	100	0	0	0	0	0	0	0	C	0	0	100
CONSTRUCTION	1,020	0	1,020	0	0	0	0	0	0	0	C) 0	0	1,020
ADMINISTRATION	30	0	30	0	0	0	0	0	0	0	C) 0	0	30
Total Expenditures	1,850	0	1,850	0	0	0	0	0	0	0	C) 0	0	1,850
BONDS	1,850	0	1,850	0	0	0	0	0	0	0	C	0	0	1,850
Total Funding	1,850	0	1,850	0	0	0	0	0	0	0	0	0	0	1,850

\$1,068,978 spent and encumbered through February 2018 \$668,578 spent and encumbered through February 2017

Project Status: FY18 - Completed joint development requirement with Merritt for construction of entrance.

FY 2018 Budget	1,850	0	1,850	0	0	0	0	0	0	0	0	0		1,850
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TAO #3-2017 transfers \$465,000 to C0309 Land Acq Contingency Reserve.

Project: F5975-FY2010 ROUTE ONE FIRE STATION

FIRE PROJECTS and EQUIPMENT

Number: F5975

Description

A project to construct a new 30,000 SF fire station at the intersection of RT1 & Port Capital Drive. Fire Station will be built on recently purchased County land and State-owned land that the County is presently in the process of acquiring.

Justification

This fire/EMS station is required to improve response times to a critically deficient geographic area of the County and prepare for additional demand along the Route 1 corridor and in association with BRAC.

Remarks

OTHER represents Pay as you Go generated from Fire Tax.

Project Schedule

FY19 - Land Acquisition, Bid, Start Construction. Complete Site Design, additional funds required for SDP and FFE.

FY20 - Complete Construction.

FY21 - Close Out.

Operating Budget Impact

Annual Bond Redemption \$ \$578,250

The Department is in the process of reviewing data and deployment plans to make final decisions regarding the assignment of apparatus and staffing in the new station proposed. Minimally, the request will include an engine staffed with four personnel 24/7 and a medical unit staffed with two personnel 24/7. Whether a second medic or a special service (a rescue squad, truck, etal) is needed will be determined following additional analysis.



FIRE PROJECTS and EQUIPMENT

Number: F5975

Project: FY2010 ROUTE ONE FIRE STATION

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	2,070	0	2,070	0	0	0	0	0	0	0	0	0	0	2,070
LAND ACQUISITION	1,130	0	1,130	870	0	0	0	0	870	0	0	0	0	2,000
CONSTRUCTION	11,500	0	11,500	1,000	0	0	0	0	1,000	0	0	0	0	12,500
ADMINISTRATION	30	0	30	5	0	0	0	0	5	0	0	0	0	35
EQUIPMENT & FURNISHINGS	550	0	550	0	0	0	0	0	0	0	0	0	0	550
Total Expenditures	15,280	0	15,280	1,875	0	0	0	0	1,875	0	0	0	0	17,155
BONDS	10,975	0	10,975	1,875	0	0	0	0	1,875	0	0	0	0	12,850
OTHER SOURCES	2,005	0	2,005	0	0	0	0	0	0	0	0	0	0	2,005
TRANSFER TAX	2,300	0	2,300	0	0	0	0	0	0	0	0	0	0	2,300
Total Funding	15,280	0	15,280	1,875	0	0	0	0	1,875	0	0	0	0	17,155

\$713,601 spent and encumbered through February 2018

\$327,583 spent and encumbered through February 2017

Project Status : Building design complete; SDP review to be complete in Spring 2018. Start of construction pending execution of land transfer with state.

FY 2018 Budget	15,280	0	15,280	0	0	0	0	0	0	0	0	0		15,280
Difference 2018 / 2019	0	0	0	1,875	0	0	0	0	1,875	0	0	0	0	1,875

Project: F5976-FY2018 NORTH COLUMBIA FIRE STATION

FIRE PROJECTS and EQUIPMENT

Number: F5976

Description

A project to construct a new 10,000 SF fire station to establish emergency services in a strategic position in the North Columbia area that will serve to relieve the demands associated with increased population density and call demands in the area.

Justification

This fire station will provide Columbia and surrounding areas with a new fire station that is strategically located so as to provide improved services. Growth pattern changes coupled with increased projected demands on the sole downtown fire station has dictated the need for a new fire station. Recent analysis substantiates the need for equipment to be maintained at this location

Remarks

Project Schedule

FY18 - Start limited Design.

FY19 - Plans and Engineering.

FY20 - Construction & FFE.

Operating Budget Impact

Annual Bond Redemption \$ \$245,475

The opening year's operating and maintenance cost will be approximately 2M. Subsequent costs are projected at 750K



FIRE PROJECTS and EQUIPMENT

Number: F5976

Project: FY2018 NORTH COLUMBIA FIRE STATION

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	400	700	1,100	0	0	0	0	0	0	0	0	0	0	1,100
CONSTRUCTION	0	0	0	4,000	0	0	0	0	4,000	0	0	0	0	4,000
ADMINISTRATION	0	0	0	105	0	0	0	0	105	0	0	0	0	105
EQUIPMENT & FURNISHINGS	0	0	0	250	0	0	0	0	250	0	0	0	0	250
Total Expenditures	400	700	1,100	4,355	0	0	0	0	4,355	0	0	0	0	5,455
BONDS	400	700	1,100	4,355	0	0	0	0	4,355	0	0	0	0	5,455
Total Funding	400	700	1,100	4,355	0	0	0	0	4,355	0	0	0	0	5,455
\$228,074 spent and encumbered through Feb project Status: FY16 - MOU with Boa	ruary 2017	-	acquisition	. FY18 - E	Begin desi	gn.								
FY 2018 Budget	400	1,500	1,900	4,555	0	0	0	0	4,555	0	0	0		6,455
Difference 2018 / 2019	0	(800)	(800)	(200)	0	0	0	0	(200)	0	0	0	0	(1,000)

Howard County, MD FY2019 Executive Proposed Capital Budget Program: AGRICULTURAL PRESERVATION

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
G0163 AGRICULTURAL LAND PRESERVATION PROGRAM	G	78	0	78	0	0	0	0	0	78
A voluntary program to preserve farmland by purchasing development rights from landowners via a perpetual	0	156,500	0	156,500	0	0	0	0	0	156,500
easement.	Т	14,030	0	14,030	0	0	0	0	0	14,030
	Total	170,608	0	170,608	0	0	0	0	0	170,608
GRICULTURAL PRESERVATION Total		170.608	0	170.608	0	0	0	0	0	170.608

Howard County, MD FY2019 Executive Proposed Capital Budget (\$000) AGPRES-AGRICULTURAL PRESERVATION

	Revenue Source	Prior Total	Current FY	Appro	priation Total
G	GRANTS	78	3	0	78
0	OTHER SOURCES	156,500)	0	156,500
Т	TRANSFER TAX	14,030)	0	14,030
Total		170,608	3	0	170,608

2019 Executive Proposed 5 Year Capital Budget Project Type Summary (AGPRES-AGRICULTURAL PRESERVATION)

Rev	enue Source	Prior Approp	Current FY	2020	2021	2022	2023	2024	5 Year Total
G	GRANTS	78	0	0	0	0	0	0	78
0	OTHER SOURCES	156,500	0	0	0	0	0	0	156,500
Т	TRANSFER TAX	14,030	0	0	0	0	0	0	14,030
Tota	al	170,608	0	0	0	0	0	0	170,608

March 23, 2018 Howard County, MD Version : Executive Proposed

AGRICULTURAL PRESERVATION

Number: G0163

Project: G0163-AGRICULTURAL LAND PRESERVATION PROGRAM

Description

A voluntary program to preserve farmland by purchasing development rights from landowners via a perpetual easement. The objective is to support the agricultural community by keeping the land base available for farming by reducing residential development in agricultural areas. The program is funded by two main sources: County Real Estate Transfer Tax, 1/4 of the 1% transfer tax on all real estate sales are dedicated to the program and constitute the largest revenue source; and State Agriculture Transfer Tax, 33% of the 5% state tax on all farmland converted to non-farming uses retained by the County for purchase of development rights.

Justification

Gives farmers an alternative to selling land for residential development. Comprehensive zoning regulations adopted in September, 1992 include cluster development and ability to exchange density from one parcel to another (DEO). Preservation tools: purchase of development rights, dedication of easements on cluster remainders, DEO sending parcels. Development rights may be acquired by County's Agricultural Land Preservation Program or State's Maryland Agricultural Land Preservation Foundation (MALPF).

Remarks

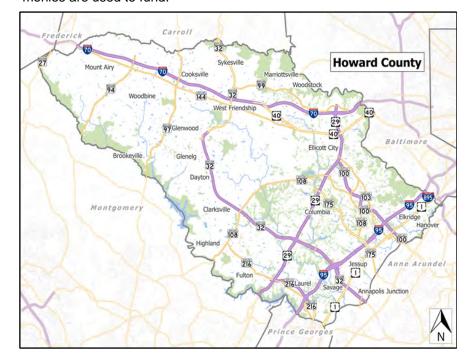
- 1. OTHER SOURCES represents authorization by the County Council to enter into installment purchase agreements to acquire development rights.
- 2. GRANT represents Federal Farmland Protection funds for MALPF easements.
- 3. All prior authorized funding was spent on Batch 14 acquisitions.
- 4. Additional spending authority of \$50 million was requested and approved in the FY14 budget for the purchase of easements.

Project Schedule

FY 19 - Potential acquisitions anticipated.

Operating Budget Impact

Salaries/Benefits (2 employees), Contractual Services, Supplies & Materials, Business & Education Expenses, Other Operating Expenses, all approximately = \$7 million.~One person serves as resource planner for program in Resource Conservation Division. No General Fund monies are used to fund.



AGRICULTURAL PRESERVATION

Number: G0163

Project: AGRICULTURAL LAND PRESERVATION PROGRAM

(In Thousands)					Fiv	e Year Ca	pital Pro	gram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project	
LAND ACQUISITION	170,608	0	170,608	0	0	0	C	0	0	0	0	0	0	170,608	
Total Expenditures	170,608	0	170,608	0	0	0	0	0	0	0	0	0	0	170,608	
GRANTS	78	0	78	0	0	0	C	0	0	0	0	0	0	78	
OTHER SOURCES	156,500	0	156,500	0	0	0	C	0	0	0	0	0	0	156,500	
TRANSFER TAX	14,030	0	14,030	0	0	0	C	0	0	0	0	0	0	14,030	
Total Funding	170,608	0	170,608	0	0	0	0	0	0	0	0	0	0	170,608	

\$139,735,191 spent and encumbered through February 2018

\$125,150,060 spent and encumbered through February 2017

Project Status: 1. Project was first funded in FY91.

- 2.County Installment Purchase Agreement (IPA) Batches 1 9 spent initial allocation of \$55 million through 1997.
- 3. Allocation of \$15 million approved by County Council in FY01 budget.
- 4.County IPA Batch 10 Purchased easements for \$2,475,090 on 400.5 acres in June 2002.
- 5. County IPA Batches 11 and 12 Purchase of easements on approximately 465 acres approved by County Council, but no purchases were completed.
- 6.County IPA Batch 13 Purchased two easements on approximately 218 acres in FY 08 for \$8,369,200. Purchased one easement on 35 acres in FY09 for \$893,000. 7.No FY 10 expenditures.
- 8.Remaining FY01 appropriation of \$3,262,710 was spent on first two Batch 14 properties which occurred In FY 11.
- 9.\$24,000,000 additional appropriation made available from FY 07 budget, and \$12,500,000 additional appropriation from FY 08 budget.
- 10. County IPA Batch 14 \$8,153,290 of FY 07 and FY 08 appropriations was spent on the acquisition of 374 acres on 4 parcels in FY 11.
- 11. County IPA Batch 14 28,057,000 of FY 07 and FY 08 appropriations was spent on the acquisition of 793 acres on 3 parcels in FY 12.
- 12. Allocation of \$50 million approved by County Council for FY 14.
- 13. To date, \$4.1 million, in cash payments for 2 properties totaling 146 acres.
- 14.To date, \$28.7 million in IPAs for 15 properties totaling 1,020 acres.

FY 2018 Budget	170,608	0 ′	170,608	0	0	0	0	0	0	0	0	0		170,608
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Howard County, MD FY2019 Executive Proposed Capital Budget Program: HIGHWAY RESURFACING

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
H2011 FY2013 MICRO SURFACING PROGRAM A program of applying polymer asphalt emulsion or paving	Р	3,500	0	3,500	0	0	0	0	0	3,500
abric over the existing surface of roads to provide an mpervious new wearing surface.	Total	3,500	0	3,500	0	0	0	0	0	3,500
H2013 FY2006 PARKING RESURFACING PROGRAM A project to provide milling and repaving for various	Р	1,510	0	1,510	0	0	0	0	0	1,510
parking lots in Main street of Ellicott City.	Total	1,510	0	1,510	0	0	0	0	0	1,510
H2014 FY2013 ROAD RESURFACING PROGRAM A project to provide resurfacing to various County roads.	G	1,742	750	2,492	750	750	750	750	750	6,242
. ,	Р	43,000	6,000	49,000	12,000	12,000	12,000	12,000	12,000	109,000
	Total	44,742	6,750	51,492	12,750	12,750	12,750	12,750	12,750	115,242
12015 FY2013 ROADWAY INFRASTRUCTURE NVENTORY AND ASSESSMENT	P	400	0	400	0	80	200	80	200	960
program to provide roadway images and pavement data ollection, perform pavement management repair ssessment, consulting services for optimization of avement repair recommendations, perform profile data atternational Roughness Index (IRI) and calculate avement Condition Index (PCI).	Total	400	0	400	0	80	200	80	200	960
H2016 FY2013 STREET TREE PROGRAM A program to comprehensively address the removal and	P	2,250	0	2,250	500	500	500	500	500	4,750
eplacement of street trees.	Total	2,250	0	2,250	500	500	500	500	500	4,750
18904 FY2007 COMMUNITY ROAD REVITALIZATION A project to upgrade streets, curbs and sidewalks in	В	500	0	500	500	500	500	500	500	3,000
stablished neighborhoods.	Р	3,225	0	3,225	0	0	0	0	0	3,225
	Total	3,725	0	3,725	500	500	500	500	500	6,225
HIGHWAY RESURFACING Total		56,127	6,750	62,877	13,750	13,830	13,950	13,830	13,950	132,187

March 23, 2018 Howard County, MD Version : Executive Proposed

Howard County, MD FY2019 Executive Proposed Capital Budget (\$000) RESURF-HIGHWAY RESURFACING

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	500	0	500
G	GRANTS	1,742	750	2,492
Р	PAY AS YOU GO	53,885	6,000	59,885
Total		56,127	6,750	62,877

2019 Executive Proposed 5 Year Capital Budget Project Type Summary (RESURF-HIGHWAY RESURFACING)

Rev	enue Source	Prior Approp	Current FY	2020	2021	2022	2023	2024	5 Year Total
В	BONDS	500	0	500	500	500	500	500	3,000
G	GRANTS	1,742	750	750	750	750	750	750	6,242
Р	PAY AS YOU GO	53,885	6,000	12,500	12,580	12,700	12,580	12,700	122,945
Tota	al	56,127	6,750	13,750	13,830	13,950	13,830	13,950	132,187

March 23, 2018 Howard County, MD Version : Executive Proposed

HIGHWAY RESURFACING

Number: H2011

Project: H2011-FY2013 MICRO SURFACING PROGRAM

Description

A program of applying polymer asphalt emulsion or paving fabric over the existing surface of roads to provide an impervious new wearing surface. The coating contains high quality aggregate and mineral fillers that provide rut filling capability.

Justification

A surface endurance extension program to extend the useful life of the existing road, delaying the cost and need for complete resurfacing.

Remarks

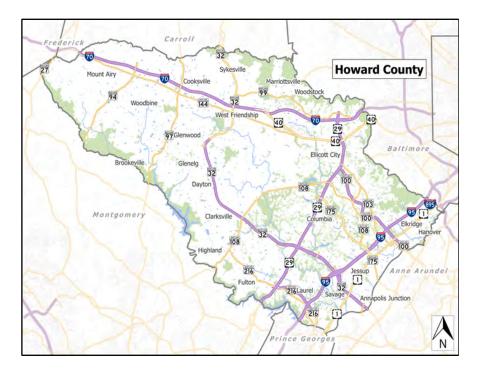
- 1. Roads not completed this fiscal year will be completed in subsequent fiscal years.
- 2. Companion project H2014.

Project Schedule

Approximately 20 miles of roads microsurfaced per \$1M budgeted. FY20 - program closed.

Operating Budget Impact

Reduce maintenance costs.



HIGHWAY RESURFACING

Project: FY2013 MICRO SURFACING PROGRAM Number: H2011

(In Thousands)					Fiv	e Year Ca	apital Pro	gram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project	
CONSTRUCTION	3,500	0	3,500	0	0	0	0	0	0	0	C	0	0	3,500	
Total Expenditures	3,500	0	3,500	0	0	0	0	0	0	0	0) 0	0	3,500	
PAY AS YOU GO	3,500	0	3,500	0	0	0	0	0	0	0	C) 0	0	3,500	
Total Funding	3,500	0	3,500	0	0	0	0	0	0	0	0) 0	0	3,500	

\$3,500,000 spent and encumbered through February 2018 \$3,500,000 spent and encumbered through February 2017 Project Status :

FY 2018 Budget	3,500	1,500	5,000	1,500	1,500	1,500	1,500	1,500	7,500	1,500	1,500	1,500		17,000
Difference 2018 / 2019	0	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)	(7,500)	(1,500)	-1,500	-1,500	0	(13,500)

Project: H2013-FY2006 PARKING RESURFACING PROGRAM

HIGHWAY RESURFACING

Number: H2013

Description

A project to provide milling and repaving for various parking lots in Main street of Ellicott City.

Justification

To restore the load bearing structural integrity of the parking network which has failed. This project acts as a program to extend the useful life of the existing road and parking areas by complete resurfacing.

Remarks

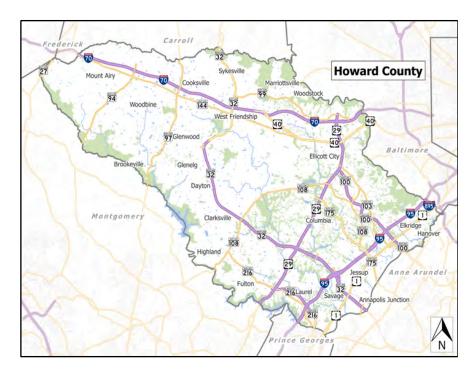
- 1. The selected deteriorated areas must be deep milled/patched prior to the placement of the smooth travel surface materials.
- 2. Companion project C0317.

Project Schedule

FY20 - Program closed.

Operating Budget Impact

Reduce maintenance costs



Difference 2018 / 2019

HIGHWAY RESURFACING

Number: H2013

3,260

(1,750)

Project: FY2006 PARKING RESURFACING PROGRAM

0

(250)

(250)

(In Thousands)			Five	e Year Ca	Master Plan									
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,475	0	1,475	0	0	0	0	0	0	0	0	0	0	1,475
ADMINISTRATION	35	0	35	0	0	0	0	0	0	0	0	0	0	35
Total Expenditures	1,510	0	1,510	0	0	0	0	0	0	0	0	0	0	1,510
PAY AS YOU GO	1,510	0	1,510	0	0	0	0	0	0	0	0	0	0	1,510
Total Funding	1,510	0	1,510	0	0	0	0	0	0	0	0	0	0	1,510

(250)

(250)

(250)

(250)

(1,250)

(250)

0

0

0

Project Status :

FY 2018 Budget 1,510 250 1,760 250 250 250 250 250 250 0 0

(250)

Project: H2014-FY2013 ROAD RESURFACING PROGRAM

HIGHWAY RESURFACING

Number: H2014

Description

A project to provide resurfacing to various County roads. The roads are selected and prioritized by the Pavement Management System (PMS). The PMS rates roads based on the actual observed conditions of the road surface. Milling, patching, shoulder improvements, surface-seal, curbs, pavement assessment, and other road preparation work may be required. High visibility lane markers may be installed to improve driving conditions. Currently, County maintains approximately 1,060 miles of roads.

Justification

The roads are rated based on observation and maintenance history and are impartially recommended for a priority relative to the needs of all other roads in the County system.

Remarks

- 1. Roads not completed this fiscal year will be completed in subsequent fiscal years.
- 2. Recent cuts in the paving budget have led to increasing deterioration in the pavement and more costly rehabilitation is required.
- 3. TAO #2-2018. TAO #2-2104.
- 4. FY15 \$1.5M Paygo funding utilized for operating budget revenue shortfall.
- 5. Grant represents County share of estimated Highway User revenue.

Project Schedule

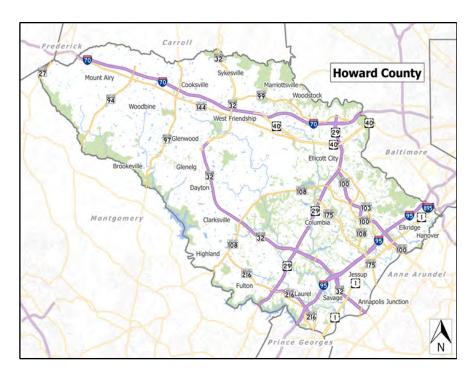
Approximately 6 miles of roads paved per \$1M budgeted.

Project completed as funding available.

Close at program completion.

Operating Budget Impact

Reduce maintenance costs



HIGHWAY RESURFACING

Project: FY2013 ROAD RESURFACING PROGRAM Number: H2014

(In Thousands)		Five Year Capital Program									Master Plan					
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project		
CONSTRUCTION	44,742	6,750	51,492	12,750	12,750	12,750	12,750	12,750	63,750	12,750	12,750	12,750	12,750	166,242		
Total Expenditures	44,742	6,750	51,492	12,750	12,750	12,750	12,750	12,750	63,750	12,750	12,750	12,750	12,750	166,242		
GRANTS	1,742	750	2,492	750	750	750	750	750	3,750	750	750	750	750	9,242		
PAY AS YOU GO	43,000	6,000	49,000	12,000	12,000	12,000	12,000	12,000	60,000	12,000	12,000	12,000	12,000	157,000		
Total Funding	44,742	6,750	51,492	12,750	12,750	12,750	12,750	12,750	63,750	12,750	12,750	12,750	12,750	166,242		

\$44,741,952 spent and encumbered through February 2018 \$38,958,370 spent and encumbered through February 2017 Project Status:

FY 2018 Budget	44,000	5,000	49,000	5,000	5,000	5,000	5,000	12,000	32,000	12,000	12,000	12,000		117,000
Difference 2018 / 2019	742	1,750	2,492	7,750	7,750	7,750	7,750	750	31,750	750	750	750	12,750	49,242

TAO#1 - 2018 adds \$742,000 Grant revenue from C0214.

HIGHWAY RESURFACING

Number: H2015

Project: H2015-FY2013 ROADWAY INFRASTRUCTURE INVENTORY AND ASSESSMENT

Description

A program to provide roadway images and pavement data collection, perform pavement management repair assessment, consulting services for optimization of pavement repair recommendations, perform profile data International Roughness Index (IRI) and calculate Pavement Condition Index (PCI).

Justification

A new pavement management system had replaced the old RMS System for the best use of the limited paving budget.

Remarks

- 1. Roads conditions are worsening due to the lack of funding for pavement preservation.
- 2. The new system is expected to assist with fixed asset management.

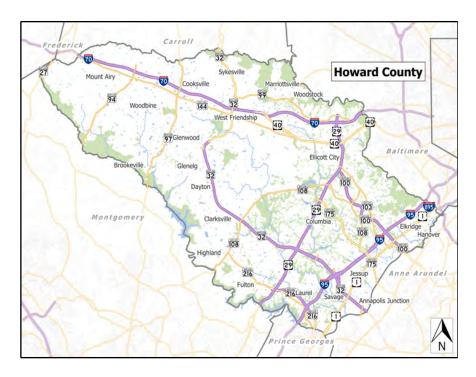
Project Schedule

FY16-FY18 - 3D automated image data collections & processing. Pavement distresses assessment & validation. Hardware purchase & implementation. Right-of-way assets collections & processing.

Project completed as funding available. Close at program completion.

Operating Budget Impact

Reduce maintenance costs



HIGHWAY RESURFACING

Number: H2015

Project: FY2013 ROADWAY INFRASTRUCTURE INVENTORY AND ASSESSMENT

(In Thousands)					Five	Year Ca		Master Plan						
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	300	0	300	0	0	200	0	200	400	0	0	0	0	700
ADMINISTRATION	20	0	20	0	50	0	50	0	100	0	0	0	0	120
EQUIPMENT & FURNISHINGS	50	0	50	0	0	0	0	0	0	0	0	0	0	50
OTHER	30	0	30	0	30	0	30	0	60	0	0	0	0	90
Total Expenditures	400	0	400	0	80	200	80	200	560	0	0	0	0	960
PAY AS YOU GO	400	0	400	0	80	200	80	200	560	0	0	0	0	960
Total Funding	400	0	400	0	80	200	80	200	560	0	0	0	0	960
\$389,275 spent and encumbered thro \$386,200 spent and encumbered thro Project Status :														
FY 2018 Budget	400	0	400	80	200	80	200	0	560	280	0	280		1,520
Difference 2018 / 2019	0	0	0	(80)	(120)	120	(120)	200	0	(280)	0	-280	0	(560)

Project: H2016-FY2013 STREET TREE PROGRAM Number: H2016

Description

A program to comprehensively address the removal and replacement of street trees.

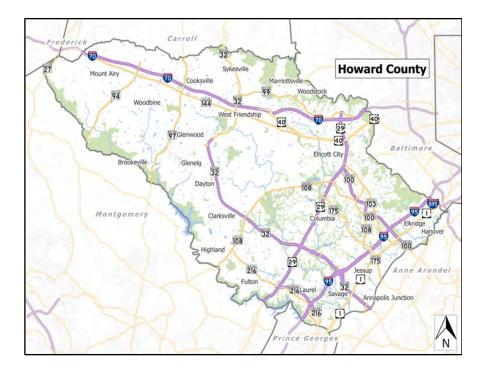
Justification

The County maintains approximately 260,000 street trees including approximately 20,000 Ash trees. The Emerald Ash Borer is in Howard County and the borer will kill every Ash tree in the County if nothing is done. The program will address Emerald Ash Borer by a combination of removal and replacement of infected trees and inoculation of high value trees. This program will also be used to remove and replace trees infected with other infestations.

Remarks

- 1. The Maryland Department of Agriculture issued a quarantine for Howard County on June 10, 2011 and expanded to all Maryland counties west of the Bay on July 11, 2011.
- 2. Administration costs in the first year will be used to update the Ash tree inventory.
- 2. Approximately 2,600 trees need to be removed and replanted.

Project Schedule



HIGHWAY RESURFACING

Number: H2016

Project: FY2013 STREET TREE PROGRAM

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	2,225	0	2,225	475	475	475	475	475	2,375	475	475	475	475	6,500
ADMINISTRATION	25	0	25	25	25	25	25	25	125	25	25	25	25	250
Total Expenditures	2,250	0	2,250	500	500	500	500	500	2,500	500	500	500	500	6,750
PAY AS YOU GO	2,250	0	2,250	500	500	500	500	500	2,500	500	500	500	500	6,750
Total Funding	2,250	0	2,250	500	500	500	500	500	2,500	500	500	500	500	6,750
\$2,249,834 spent and encumbered \$2,250,000 spent and encumbered Project Status :														
FY 2018 Budget	2,250	500	2,750	500	500	500	500	500	2,500	500	500	500		6,750
Difference 2018 / 2019	0	(500)	(500)	0	0	0	0	0	0	0	0	0	500	0

Project: H2017 HOT IN-PLACE RECYCLING PROGRAM Number: H2017

Description

A program to in-place re-profile roads surface to various County roads. The roads are selected and prioritized by the Pavement Management System (PMS). The PMS rated roads based on American Society for Testing & Materials (ASTM) standard practices for pavement condition index (PCI) measurement.

Justification

The selected and prioritized roads are based on observation and maintenance history from each Highways maintenance shop. The County roads, especially in the west zone were undertaken several chip seal layers of treatment; many roads are out of crown for drainage. Without proper road crown restoration, the road becomes slippery during the winter season and hydroplaning in the wet weather. The selected roads will be milled down through surface recycling, remixing, repaving, or reheating processes to obtain the same pavement strength as traditional mill/wedge levelling/overlay processes with less cost. The hot in-place sustainable asphalt recycling shall achieve the goals of carbon footprint reduction and reuse of valuable nature resource. It also provides safer roads for motorists.

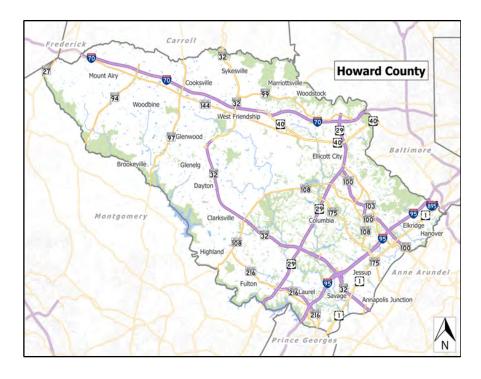
Remarks

- 1. The selected roads shall have a sound base for hot in-place asphalt recycling. Additional surface treatment may be added for a smooth surface.
- 2. Companion project H2014.

Project Schedule

Project completed as funding available.

FY20- Program closed.



HIGHWAY RESURFACING

Number: H2017

Project: HOT IN-PLACE RECYCLING PROGRAM

(In Thousands)		Five Year Capital Program										Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
Total Expenditures	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Funding	0	0	0	0	0	0	0	0	0	0	0	0	0	0

\$0 spent and encumbered through February 2018 spent and encumbered through February 2017 Project Status:

FY 2018 Budget	0	1,500	1,500	1,500	1,500	1,500	1,500	1,500	7,500	1,500	1,500	1,500		13,500
Difference 2018 / 2019	0	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)	(7,500)	(1,500)	-1,500	-1,500	0	(13,500)

Number: H2018

Description

A program to in-place reconstruct road base to various County roads. The roads are selected and prioritized by the Pavement Management System (PMS). The PMS rated roads based on American Society for Testing & Materals (ASTM) standard practices for pavement condition index (PCI) measurement.

Project: H2018 COLD IN-PLACE RECYCLING PROGRAM

Justification

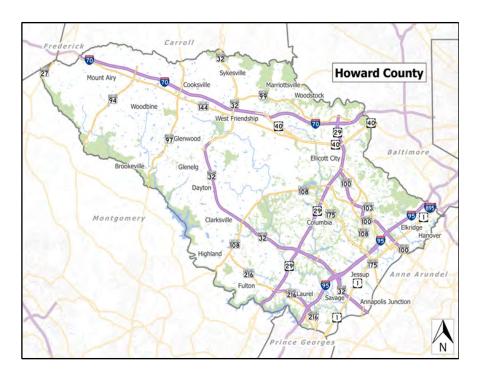
The selected and prioritized roads are based on observation and maintenance history from each maintenance shop. This program provides base course recycling through pulverization and rejuvenation processes. The roads constructed with less base course thickness could not undertake increased traffic road. Through base course recycling, the selected roads shall be reshaped for better road drainage and gain more strength with consistent depth in road bed. This program can be incorporated with resurfacing program for surface treatment. The treated road shall become more durable with longevity. This sustainable asphalt recycling reduces the costs for deep/patching, or/and road undercuts. Besides, this recycling process achieve the goals of carbon footprint reduction and reuse of valuable nature resources.

Remarks

The selected roads were beyond the ability of mill/patching. The road base needs to be restored prior to the road resurfacing. Coring of existing roads shall be performed before cold in-place process.

Project Schedule

Project completed as funding available. Close at program completion.



HIGHWAY RESURFACING

Project: COLD IN-PLACE RECYCLING PROGRAM

Number: H2018

(In Thousands)					Fiv	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
Total Expenditures	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Funding	0	0	0	0	0	0	0	0	0	0	0	0	0	0
\$0 spent and encumbered through	h Eobruary 201	0												
spent and encumbered through F		•												
		0	0	0	0	0	0	0	0	0	0	0		0

Project: H8904-FY2007 COMMUNITY ROAD REVITALIZATION

HIGHWAY RESURFACING

Number: H8904

Description

A project to upgrade streets, curbs and sidewalks in established neighborhoods.

Justification

A program to resurface streets in conjunction with curbs and sidewalk replacement. Streets in this program will require less than total reconstruction and more than pavement preservation.

Remarks

Targeted streets will be chosen by the annual pavement inspection, by needed drainage improvements and by community request.

Project Schedule

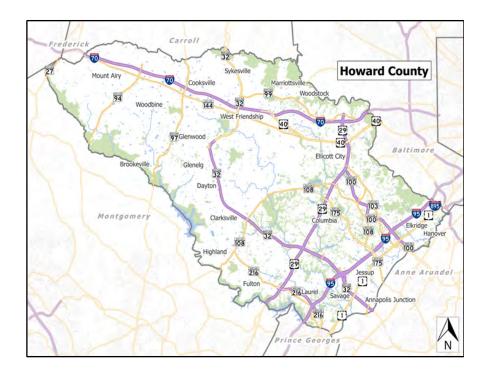
Project completed as funding available.

Close at program completion.

Operating Budget Impact

Annual Bond Redemption \$ \$225,000

Reduce maintenance costs



FY 2018 Budget

Difference 2018 / 2019

HIGHWAY RESURFACING

Number: H8904

8,225

0

Project: FY2007 COMMUNITY ROAD REVITALIZATION

3,725

0

(In Thousands)		, , , , , , , , , , , , , , , , , , ,										Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	3,725	0	3,725	500	500	500	500	500	2,500	500	500	500	500	8,225
Total Expenditures	3,725	0	3,725	500	500	500	500	500	2,500	500	500	500	500	8,225
BONDS	500	0	500	500	500	500	500	500	2,500	500	500	500	500	5,000
PAY AS YOU GO	3,225	0	3,225	0	0	0	0	0	0	0	0	0	0	3,225
Total Funding	3,725	0	3,725	500	500	500	500	500	2,500	500	500	500	500	8,225

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(500)

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
J4076 DEFAULTED DEVELOPER AGREEMENTS An appropriation is requested under this project to	D	8,700	0	8,700	0	0	0	0	0	8,700
construct roads, stormwater management, storm drains, street trees, or associated facilities where the developer has failed to build all facilities in accordance with the plans and Developer Agreement.	Total	8,700	0	8,700	0	0	0	0	0	8,700
J4099 CATEGORY CONTINGENCY FUND The fund is designed for use as a revenue source for	В	85	0	85	0	0	0	0	0	85
Transfers of Appropriation during a fiscal year.	0	380	0	380	0	0	0	0	0	380
	Х	250	0	250	0	0	0	0	0	250
	Total	715	0	715	0	0	0	0	0	715
J4110 FY1991 DORSEY RUN ROAD - SOUTH LINK	В	810	0	810	0	0	0	0	0	810
A project for design and construction of approximately 5,000 feet of Dorsey Run Road from Guilford Road north to	E	2,350	0	2,350	0	0	0	0	0	2,350
00 feet of Dorsey Run Road from Guilford Road north CSX railroad spur crossing.	G	100	0	100	0	0	0	0	0	100
	0	626	0	626	0	0	0	0	0	626
	Х	4,176	0	4,176	0	0	0	0	0	4,176
	Total	8,062	0	8,062	0	0	0	0	0	8,062
J4121 PRIVATE ROAD RECONSTRUCTION PROGRAM	В	805	0	805	0	0	0	0	0	805
This project will provide for the reconstruction of private roads to bring them to a minimum standard for an all-	0	23	0	23	0	0	0	0	0	23
weather roadway per Howard County Design Manual Volume III.	Total	828	0	828	0	0	0	0	0	828
J4142 FY1998 HALL SHOP ROAD IMPROVEMENTS	В	842	100	942	1,500	0	0	0	0	2,442
Reconstruct Hall Shop Road (a major collector) at two locations to improve sight distance and eliminate a sharp curve.	Total	842	100	942	1,500	0	0	0	0	2,442
J4148 FY2000 DORSEY RUN ROAD EXTENSION This project is for the extension of Dorsey Run Road from	В	1,543	75	1,618	0	0	0	0	0	1,618
MD103 to MD175, a total of approximately 3 miles.	D	2,275	0	2,275	0	0	0	0	0	2,275
	E	4,052	0	4,052	0	0	0	0	0	4,052
	G	130	0	130	0	0	0	0	0	130
	Р	185	0	185	0	0	0	0	0	185

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
J4148 FY2000 DORSEY RUN ROAD EXTENSION This project is for the extension of Dorsey Run Road from	Х	24,745	0	24,745	0	0	0	0	0	24,745
MD103 to MD175, a total of approximately 3 miles.	Total	32,930	75	33,005	0	0	0	0	0	33,005
J4154 FY1998 RETAINING WALL REPLACEMENTS A Countywide project for the design and construction of	В	2,129	0	2,129	0	0	0	0	0	2,129
replacement or rehabilitated retaining walls.	Р	215	0	215	0	0	0	0	0	215
	Total	2,344	0	2,344	0	0	0	0	0	2,344
J4155 FY2012 MARRIOTTSVILLE RD SAFETY IMPROVEMENTS	В	890	210	1,100	0	150	2,000	0	0	3,250
Reconstruct shoulders, replace guardrails and stabilize roadway embankment at numerous locations along 2.	D	0	15	15	0	0	0	0	0	15
Toduway embankment at humerous locations along 2.	Total	890	225	1,115	0	150	2,000	0	0	3,265
J4164 FY1997 ROADWAY CAPACITY IMPROVEMENTS A project to provide increased capacity and safety of	D	115	0	115	0	0	0	0	0	115
various County roads and intersections.	E	3,700	0	3,700	0	0	0	0	0	3,700
anous County loads and intersections.	X	4,406	0	4,406	0	0	0	0	0	4,406
	Total	8,221	0	8,221	0	0	0	0	0	8,221
J4167 FY2010 SNOWDEN RIVER/BROKEN LAND INTERSECT	В	0	0	0	0	1,175	0	0	0	1,175
A project for design and reconstruction of the Snowden River Parkway/Broken Land Parkway/Patuxent Woods	Χ	680	0	680	0	0	0	0	0	680
Drive intersection including westbound MD32 ramp to northbound Broken Land Parkway.	Total	680	0	680	0	1,175	0	0	0	1,855
J4168 FY1998 ROADWAY REHABILITATION/SAFETY PROGRAM	В	3,065	-1,070	1,995	0	0	0	0	0	1,995
A project to correct roadway failure/safety problems on existing roads at various intersections or along various	D	200	0	200	0	0	0	0	0	200
roadway segments.	Р	308	0	308	0	0	0	0	0	308
	Χ	270	0	270	0	0	0	0	0	270
	Total	3,843	-1,070	2,773	0	0	0	0	0	2,773
J4170 FY2004 ROGER'S AVENUE IMPROVEMENTS	В	575	0	575	0	0	0	0	0	575
A project for design and construction of approximately 1,500 LF of Rogers Avenue from existing improvements near US40 to Court House Drive.	D	120	0	120	0	0	0	0	0	120
near 0.540 to Court House Drive.	X	3,535	0	3,535	0	0	0	0	0	3,535
	Total	4,230	0	4,230	0	0	0	0	0	4,230

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
J4173 FY2000 HANOVER ROAD IMPROVEMENTS A project for the study, design and reconstruction of the	В	255	0	255	85	1,050	0	0	0	1,390
Hanover Road at Hi-Tech Road intersection.	D	15	0	15	0	0	0	0	0	15
	E	150	0	150	0	0	0	0	0	150
	X	230	0	230	0	0	0	0	0	230
	Total	650	0	650	85	1,050	0	0	0	1,785
J4177 FY2001 STATE ROAD CONSTRUCTION A project for cost sharing of new State roadway	В	0	2,325	2,325	0	0	0	0	0	2,325
construction within Howard County that is consistent with the objectives of the Plan Howard 2030.	D	120	0	120	0	0	0	0	0	120
the objectives of the Flan Howard 2030.	E	3,800	0	3,800	0	0	0	0	0	3,800
	X	17,845	0	17,845	0	0	0	0	0	17,845
	Total	21,765	2,325	24,090	0	0	0	0	0	24,090
J4178 FY2001 COUNTY / STATE NOISE ABATEMENT A program with SHA for the construction of noise reduction	В	7,135	0	7,135	200	800	0	0	0	8,135
sound walls to shield sections of residential communities.	Total	7,135	0	7,135	200	800	0	0	0	8,135
J4181 FY2003 GUILFORD RD (US1 to DORSEY RUN RD)	В	0	0	0	720	14,600	0	0	0	15,320
This project is to study, design, and reconstruct Guilford Road to three lanes from US1 to Old Dorsey Run Road; a	D	10	0	10	0	0	0	0	0	10
distance of 5,800 LF.	E	330	0	330	0	0	0	0	0	330
	Χ	1,535	0	1,535	0	0	0	0	0	1,535
	Total	1,875	0	1,875	720	14,600	0	0	0	17,195
J4182 FY2002 DORSEY RUN ROAD IMPROVEMENTS This project is to study, design and reconstruct Dorsey Rur	В	0	0	0	800	8,380	0	0	0	9,180
Road to four lanes from MD175 south to the CSX railroad spur crossing; a distance of 6,000 LF.	D	35	0	35	0	0	0	0	0	35
spur crossing, a distance of 6,000 LF.	E	2,540	0	2,540	0	0	0	0	0	2,540
	X	425	0	425	0	0	0	0	0	425
	Total	3,000	0	3,000	800	8,380	0	0	0	12,180
J4202 FY2004 STEPHENS ROAD IMPROVEMENTS	D	25	25	50	0	0	0	0	0	50
A project for the design and reconstruction of Stephens Road from Whiskey Bottom Road to Gorman Road.	Χ	9,135	-25	9,110	0	0	0	0	0	9,110

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
J4202 FY2004 STEPHENS ROAD IMPROVEMENTS A project for the design and reconstruction of Stephens Road from Whiskey Bottom Road to Gorman Road.	Total	9,160	0	9,160	0	0	0	0	0	9,160
J4205 FY2006 MARRIOTTSVILLE ROAD	В	0	0	0	0	20,375	0	0	0	20,375
A project to widen Marriottsville Road from MD99 to US40, including the Marriottsville Road bridge over I-70.	D	1,000	0	1,000	0	0	0	0	0	1,000
including the manifetismile road bridge over 1-70.	E	250	0	250	0	0	0	0	0	250
	X	4,875	0	4,875	0	0	0	0	0	4,875
	Total	6,125	0	6,125	0	20,375	0	0	0	26,500
J4206 FY2007 MONTEVIDEO ROAD IMPROVEMENTS A project to improve Montevideo Road as detailed in the	В	0	665	665	0	5,100	0	0	0	5,765
Montevideo Road Study.	D	190	0	190	0	0	0	0	0	190
	Χ	9,115	0	9,115	0	0	0	0	0	9,115
	Total	9,305	665	9,970	0	5,100	0	0	0	15,070
J4207 FY2009 OAKLAND MILLS ROAD IMPROVEMENTS	В	185	0	185	0	0	0	0	0	185
A project to improve Oakland Mills Road from Guilford Road northward to Carters Lane.	D	15	0	15	0	0	0	0	0	15
Noau northward to Carters Lane.	Χ	5,900	0	5,900	0	0	0	0	0	5,900
	Total	6,100	0	6,100	0	0	0	0	0	6,100
J4208 FY2006 WATERSVILLE ROAD SLOPE RECONSTRUCTION	В	550	0	550	0	0	0	0	0	550
A project to stabilize/reconstruct the slope that supports the roadbed of Watersville Road.	D	10	0	10	0	0	0	0	0	10
the roadbed of watersville Road.	Total	560	0	560	0	0	0	0	0	560
J4211 FY2007 ROADWAY CAPACITY IMPROVEMENTS A project to provide increased capacity and safety on	В	0	0	0	600	0	0	0	0	600
various County roads and intersections.	D	75	0	75	50	0	0	0	0	125
	X	1,300	0	1,300	0	0	0	0	0	1,300
	Total	1,375	0	1,375	650	0	0	0	0	2,025
J4212 FY2007 STATE ROAD CONSTRUCTION A project for cost sharing of new State roadway	D	350	0	350	0	0	0	0	0	350
construction within Howard County that is consistent with the objectives of the Plan Howard 2030.	Е	500	0	500	0	0	0	0	0	500

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
J4212 FY2007 STATE ROAD CONSTRUCTION A project for cost sharing of new State roadway	G	1,300	0	1,300	0	0	0	0	0	1,300
construction within Howard County that is consistent with the objectives of the Plan Howard 2030.	Χ	33,250	0	33,250	2,000	0	0	0	0	35,250
	Total	35,400	0	35,400	2,000	0	0	0	0	37,400
J4214 FY2007 GUILFORD AT VOLLMERHAUSEN IMPROVEMENTS	В	2,970	0	2,970	0	0	0	0	0	2,970
A project to design and construct improvements to the intersection of Guilford Road at Vollmerhausen Road and	D	5	0	5	0	0	0	0	0	5
along Guilford Road to the west towards Carroll Heights Ave.	Χ	570	0	570	0	0	0	0	0	570
	Total	3,545	0	3,545	0	0	0	0	0	3,545
J4215 FY2007 MARRIOTTSVILLE ROAD from US40 to MD144	В	0	0	0	1,500	2,400	0	0	0	3,900
Realignment and shoulder improvements to Marriottsville Road from US40 to MD144.	E	250	0	250	0	0	0	0	0	250
	Χ	5,490	0	5,490	0	0	0	0	0	5,490
	Total	5,740	0	5,740	1,500	2,400	0	0	0	9,640
J4219 FY2015 ENGINEERING STUDY PROGRAM A project for engineering roads to conform to the Plan	Р	200	0	200	50	0	0	0	0	250
Howard 2030 Highways Map to evaluate realignment schemes and to support the transportation and safety needs of the County.	Total	200	0	200	50	0	0	0	0	250
J4220 FY2014 DEVELOPER/COUNTY SHARED IMPROVEMENTS	D	350	75	425	0	0	0	0	0	425
A project to facilitate the design, land acquisition and construction of roadway modifications and their	Χ	500	-75	425	0	0	0	0	0	425
appurtenances at various intersections or roadway segments.	Total	850	0	850	0	0	0	0	0	850
J4222 FY2008 SNOWDEN RIVER PARKWAY WIDENING BROKENLAND TO OAKLAND MILLS	В	0	0	0	1,600	7,750	0	0	0	9,350
A project to design and construct a widening of Snowden River Parkway (intermediate arterial) by adding a third lane	D	130	0	130	0	0	0	0	0	130
and sidewalks from Broken Land Parkway to Oakland Mills Road.		2,795	0	2,795	0	0	0	0	0	2,795
	Total	2,925	0	2,925	1,600	7,750	0	0	0	12,275
J4225 FY2008 ELLICOTT CENTER DR CONNECTION to ROGERS	X	1,860	0	1,860	0	0	0	0	0	1,860
A project to design and construct a road to connect Ellicott Center Drive to Rogers Avenue.	Total	1,860	0	1,860	0	0	0	0	0	1,860

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
J4226 FY2008 ROAD PROJECTS CONTINGENCY FUND A project to provide funds for unanticipated needs related	В	550	0	550	200	0	0	0	0	750
to bridges and roadways.	Χ	1,450	0	1,450	0	0	0	0	0	1,450
	Total	2,000	0	2,000	200	0	0	0	0	2,200
J4229 FY2008 WHISKEY BOTTOM ROAD IMPROVEMENTS	D	300	0	300	0	0	0	0	0	300
A project to design and construct improvements to Whiskey Bottom Road from just west of US1 to the Anne	0	520	0	520	0	0	0	0	0	520
Arundel County Line.	Total	820	0	820	0	0	0	0	0	820
J4230 FY2017 SANNER ROAD IMPROVEMENTS A project to provide bicycle compatibility by widening the	В	150	50	200	250	2,200	0	0	0	2,650
existing 10-foot lanes to 12 feet and filling in the missing shoulders along both sides of the road.	Total	150	50	200	250	2,200	0	0	0	2,650
J4231 FY2013 ELKRIDGE MAIN STREET MPROVEMENTS	В	100	30	130	120	500	0	0	0	750
A project to replace the curb, gutter and sidewalks along Main Street from Old Washington Road to Brumbaugh Street in Elkridge.	Total	100	30	130	120	500	0	0	0	750
J4237 FY2010 MD175/OAKLAND MILLS ROAD INTERCHANGE	В	0	0	0	10,500	0	0	0	0	10,500
A project to design and construct a new MD175/Oakland Mills Road interchange and the re-alignment of Oakland	Χ	14,000	0	14,000	0	0	0	0	0	14,000
Mills Road through the proposed Blandair Park.	Total	14,000	0	14,000	10,500	0	0	0	0	24,500
J4239 FY2014 OLD ROXBURY ROAD	В	635	250	885	0	0	0	0	0	885
A project to design and construct improvements to Old Roxbury Road.	X	175	0	175	0	0	0	0	0	175
	Total	810	250	1,060	0	0	0	0	0	1,060
J4240 ROADWAY REHABILITATION/SAFETY PROGRAM	В	150	0	150	350	350	350	250	250	1,700
A project to correct safety or structural problems on existing roads.	Total	150	0	150	350	350	350	250	250	1,700
J4241 FY2011 US RT 1 RT 175 to MONTEVIDEO ROAD A project for the design and reconstruction of	В	750	0	750	12,100	0	0	0	0	12,850
A project for the design and reconstruction of approximately 2,500 feet of US1 from MD175 to Montevideo Road.	D	50	75	125	0	0	0	0	0	125
	Χ	4,750	-75	4,675	0	0	0	0	0	4,675
	Total	5,550	0	5,550	12,100	0	0	0	0	17,650

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
J4242 FY2014 BRIGHTON DAM ROAD at HIGHLAND ROAD ROUNDABOUT	В	0	0	0	100	1,800	0	0	0	1,900
A project to design and construct a roundabout at the intersection of Brighton Dam Road and Highland Road.	Χ	265	0	265	0	0	0	0	0	265
	Total	265	0	265	100	1,800	0	0	0	2,165
J4245 FY2016 SCENIC ROADS ENHANCEMENT A project to plan, design, and install enhancements at certain historic or high visibility locations along the National	B G	180 50	0 -50	180 0	0	0	0	0	0	180 0
Scenic Byway or County scenic roads.	Total	230	-50 -50	180	0	0	0	0	0	180
	- I Olai	230	-30	100						100
J4246 FY2018 OLD MONTGOMERY ROAD AT BRIGHTFIELD ROAD INTERSECTION IMPROVEMENTS A project to reconfigure the intersection of Old Montgomery Road and Brightfield Road for safety and increased capacity.		200	0	200	1,625	0	0	0	0	1,825
	Total	200	0	200	1,625	0	0	0	0	1,825
J4247 FY2017 KIT KAT ROAD A project to improve the safety of Kit Kat Road by widening	В	175	0	175	200	1,400	0	0	0	1,775
the road enough to allow for the traffic to be able to pass each other more easily.	Total	175	0	175	200	1,400	0	0	0	1,775
J4248 FY2017 SAVAGE AREA COMPLETE STREETS The project includes complete street improvements in	В	325	0	325	2,325	0	0	0	0	2,650
Savage, Maryland to enhance multimodal travel for pedestrians, bicyclists, transit, and automobiles.	Total	325	0	325	2,325	0	0	0	0	2,650
J4249 FY2017 MD 100 AT MD 103 A project to design and construct a replacement of the	В	250	0	250	0	0	0	0	0	250
roundabouts of MD103 on the north and south sides of MD100 with a diverging diamond interchange in order to	D	500	0	500	0	0	0	0	0	500
increase the capacity of the interchange.	0	3,250	0	3,250	0	0	0	0	0	3,250
	Χ	1,750	0	1,750	0	0	0	0	0	1,750
	Total	5,750	0	5,750	0	0	0	0	0	5,750
J4250 FY2020 HOWARD ROAD IMPROVEMENTS A project to improve the safety of Howard Road north of	В	0	0	0	75	25	350	0	0	450
Big Branch Drive.	Total	0	0	0	75	25	350	0	0	450
J4251 FY2018 LIME KILN ROAD IMPROVEMENTS	В	150	0	150	400	600	9,000	0	0	10,150
A project to improve the roadway and drainage along Lime Kiln Road between MD 216 and Reservoir Road.	Total	150	0	150	400	600	9,000	0	0	10,150

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
J4252 FY2019 SYSTEMIC INFRASTRUCTURE IMPROVEMENTS TO DNTN ELLICOTT CITY	В	0	1,350	1,350	1,200	0	0	0	0	2,550
A project to improve or upgrade road and drainage infrastructure systems as a result of the 2016 Ellicott City Flood.	Total	0	1,350	1,350	1,200	0	0	0	0	2,550
J4711 FY2011 DEVELOPER INSPECTION PROGRAM A project to provide engineering and related services.	D	9,000	1,000	10,000	3,000	0	3,000	0	3,000	19,000
computer management, asset management, inspection, testing, staff training, supplies, tools, equipment and vehicles necessary for site inspections for the implementation of developer projects that make additions to the public road and storm water management systems.	Total	9,000	1,000	10,000	3,000	0	3,000	0	3,000	19,000
ROAD CONSTRUCTION PROJECTS Total		229,530	4,950	234,480	41,550	68,655	14,700	250	3,250	362,885

Howard County, MD FY2019 Executive Proposed Capital Budget (\$000) ROAD-ROAD CONSTRUCTION PROJECTS

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	25,454	3,985	29,439
D	DEVELOPER CONTRIBUTION	23,590	1,190	24,780
Е	EXCISE TAX	17,922	0	17,922
G	GRANTS	1,580	-50	1,530
0	OTHER SOURCES	4,799	0	4,799
Р	PAY AS YOU GO	908	0	908
X	EXCISE TAX BACKED BONDS	155,277	-175	155,102
Total		229,530	4,950	234,480

2019 Executive Proposed 5 Year Capital Budget Project Type Summary (ROAD-ROAD CONSTRUCTION PROJECTS)

Rev	enue Source	Prior Approp	Current FY	2020	2021	2022	2023	2024	5 Year Total
В	BONDS	25,454	3,985	36,450	68,655	11,700	250	250	146,744
D	DEVELOPER CONTRIBUTION	23,590	1,190	3,050	0	3,000	0	3,000	33,830
Е	EXCISE TAX	17,922	0	0	0	0	0	0	17,922
G	GRANTS	1,580	-50	0	0	0	0	0	1,530
0	OTHER SOURCES	4,799	0	0	0	0	0	0	4,799
Р	PAY AS YOU GO	908	0	50	0	0	0	0	958
Χ	EXCISE TAX BACKED BONDS	155,277	-175	2,000	0	0	0	0	157,102
Tota	al	229,530	4,950	41,550	68,655	14,700	250	3,250	362,885

ROAD CONSTRUCTION PROJECTS

Number: J4076

Project: J4076-DEFAULTED DEVELOPER AGREEMENTS

Description

An appropriation is requested under this project to construct roads, stormwater management, storm drains, street trees, or associated facilities where the developer has failed to build all facilities in accordance with the plans and Developer Agreement. Also included is the cost of administration and any additional engineering that may be required. This project is implemented as a revolving fund account. In the event that the collection of the cash or bond proceeds from the surety are delayed, expenditures from this project are authorized when the County determines that continuing delays in the completion of the public improvements will cause significant negative impacts to the residents and the subdivision and/or the environment.

Justification

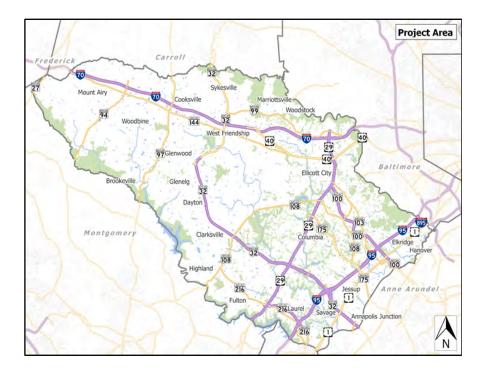
Upon developer's failure to complete construction, the surety of the developer is declared to be in default and the proceeds from the surety are placed in this account and used to finance construction.

Remarks

Construction as required. DEVELOPER CONTRIBUTION represents monies received from surety.

Project Schedule

Ongoing Program.



ROAD CONSTRUCTION PROJECTS

Number: J4076

Project: DEFAULTED DEVELOPER AGREEMENTS

(In Thousands)					Fiv	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	60	0	60	0	0	0	0	0	0	0	0	0	0	60
CONSTRUCTION	8,620	0	8,620	0	0	0	0	0	0	0	0	0	0	8,620
ADMINISTRATION	20	0	20	0	0	0	0	0	0	0	0	0	0	20
Total Expenditures	8,700	0	8,700	0	0	0	0	0	0	0	0	0	0	8,700
DEVELOPER CONTRIBUTION	8,700	0	8,700	0	0	0	0	0	0	0	0	0	0	8,700
Total Funding	8,700	0	8,700	0	0	0	0	0	0	0	0	0	0	8,700

\$1,101,149 spent and encumbered through February 2018 \$1,033,115 spent and encumbered through February 2017 Project Status: Defaulted Properties:

Project Status: Defaulted Properties: First Baptist Church of Guilford SDP-05-011. The Preserve at Clarksville F-06-072 Lots 1-32.

. . .

FY 2018 Budget	8,700	0	8,700	0	0	0	0	0	0	0	0	0		8,700
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: J4099-CATEGORY CONTINGENCY FUND

ROAD CONSTRUCTION PROJECTS

Number: J4099

Description

The fund is designed for use as a revenue source for Transfers of Appropriation during a fiscal year. Fund is used when construction costs are higher than originally estimated, contributions from grants vary from projections, or an effort must be advanced from future years to the present fiscal year for critical program needs, or creating a new capital project; subject to Council approval.

Justification

This fund will allow for the timely completion of approved projects by contingency funding as required with quick response to crucial situations. The fund is also needed to provide a buffer to the stringent bonding limits the County is operating under.

Remarks

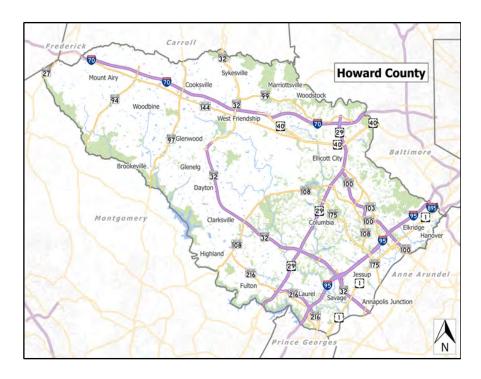
The appropriation can only be drawn from for transfer purposes and does not represent the authority to spend.

Project Schedule

As Required.

Operating Budget Impact

Annual Bond Redemption \$ \$15,075



ROAD CONSTRUCTION PROJECTS

Number: J4099

Project: CATEGORY CONTINGENCY FUND

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
OTHER	715	0	715	0	0	0	0	0	0	0	0	0	0	715
Total Expenditures	715	0	715	0	0	0	0	0	0	0	0	0	0	715
BONDS	85	0	85	0	0	0	0	0	0	0	0	0	0	85
OTHER SOURCES	380	0	380	0	0	0	0	0	0	0	0	0	0	380
EXCISE TAX BACKED BONDS	250	0	250	0	0	0	0	0	0	0	0	0	0	250
Total Funding	715	0	715	0	0	0	0	0	0	0	0	0	0	715
\$0 spent and encumbered through F spent and encumbered through Feb Project Status : Contingency Fund.	•	8												
FY 2018 Budget	715	0	715	0	0	0	0	0	0	0	0	C		715
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	C	0	0

Project: J4110-FY1991 DORSEY RUN ROAD - SOUTH LINK

ROAD CONSTRUCTION PROJECTS

Number: J4110

Description

A project for design and construction of approximately 5,000 feet of Dorsey Run Road from Guilford Road north to the CSX railroad spur crossing. The 2000 General Plan classifies this section of Dorsey Run Road as a major collector. The improvements will be completed in two phases. Phase I from Guilford Road to Old Dorsey Run Road. Phase II from Old Dorsey Run Road to the CSX railroad spur crossing.

Justification

Provides improved access for all properties in the project area. Provides truck access to MD32 and sight distance improvements.

Remarks

- 1. GRANT represents State Secondary Aid Program.
- 2. OTHER represents Race Track funds.

Project Schedule

FY19 - Construction.

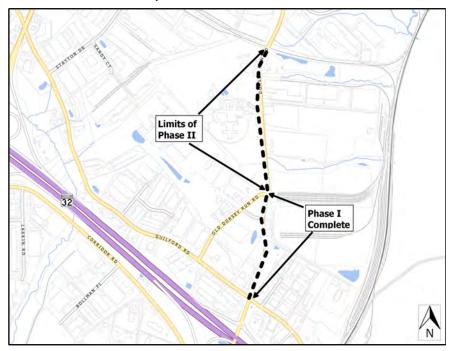
FY20 - Complete.

FY21 - Close.

Operating Budget Impact

Annual Bond Redemption \$ \$224,370

Estimated annual maintenance costs upon completion: \$19,000 per two lane mile of new roadway.



ROAD CONSTRUCTION PROJECTS

Number: J4110

Project: FY1991 DORSEY RUN ROAD - SOUTH LINK

n Thousands)					Five	Year Ca	pital Prog	gram				Master F	Plan	
ppropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	737	0	737	0	0	0	0	0	0	0	0	0	0	73
LAND ACQUISITION	2,295	0	2,295	0	0	0	0	0	0	0	0	0	0	2,29
CONSTRUCTION	5,021	0	5,021	0	0	0	0	0	0	0	0	0	0	5,02
ADMINISTRATION	9	0	9	0	0	0	0	0	0	0	0	0	0	!
Total Expenditures	8,062	0	8,062	0	0	0	0	0	0	0	0	0	0	8,06
BONDS	810	0	810	0	0	0	0	0	0	0	0	0	0	81
EXCISE TAX	2,350	0	2,350	0	0	0	0	0	0	0	0	0	0	2,35
GRANTS	100	0	100	0	0	0	0	0	0	0	0	0	0	10
OTHER SOURCES	626	0	626	0	0	0	0	0	0	0	0	0	0	62
EXCISE TAX BACKED BONDS	4,176	0	4,176	0	0	0	0	0	0	0	0	0	0	4,17
Total Funding	8,062	0	8,062	0	0	0	0	0	0	0	0	0	0	8,06

\$4,638,704 spent and encumbered through February 2017
Project Status: FY18 - Phase I has been completed. Finalizing Phase II design.

FY 2018 Budget	8,062	0	8,062	0	0	0	0	0	0	0	0	0		8,062
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: J4121-PRIVATE ROAD RECONSTRUCTION PROGRAM

ROAD CONSTRUCTION PROJECTS

Number: J4121

Description

This project will provide for the reconstruction of private roads to bring them to a minimum standard for an all-weather roadway per Howard County Design Manual Volume III. The road being petitioned must: serve at least five houses per mile; be connected to an existing State or County road; and the signers of the petition must be owners of either 2/3 of the assessable frontage or be 2/3 of the owners of the property abutting the road. The road must be used for vehicular traffic prior to January 1, 1981 for eligibility for participation in this program, and cannot be merely a paper or a platted rights-of-way.

Justification

This project is necessary to implement Section 18.250 of the Howard County Code so as to provide citizens currently living along private roads an improved all-weather roadway. Project was first funded in FY92.

Remarks

- 1. Two-thirds of the cost of these roads will be shared equally by the property owners abutting the roadway.
- 2. The remaining one-third of the cost of this effort will be funded by this project.
- 3. OTHER funds represent residents contribution.

Project Schedule

Possible Annual Efforts:

King's Gift Road Reconstruction (Inactive).

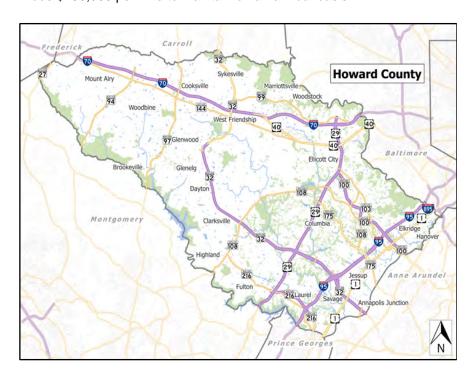
Lisbon Farm Road Reconstruction (Inactive).

Patapsco Ridge Road Reconstruction (Inactive).

Unnamed Street Off Thompson Drive Reconstruction (Inactive).

Operating Budget Impact

Annual Bond Redemption \$ \$36,225 Adds \$150,000 per mile to maintain on an annual basis.



ROAD CONSTRUCTION PROJECTS

Number: J4121

Project: PRIVATE ROAD RECONSTRUCTION PROGRAM

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	46	0	46	0	0	0	0	0	0	0	0	0	0	46
LAND ACQUISITION	15	0	15	0	0	0	0	0	0	0	0	0	0	15
CONSTRUCTION	753	0	753	0	0	0	0	0	0	0	0	0	0	753
ADMINISTRATION	14	0	14	0	0	0	0	0	0	0	0	0	0	14
Total Expenditures	828	0	828	0	0	0	0	0	0	0	0	0	0	828
BONDS	805	0	805	0	0	0	0	0	0	0	0	0	0	805
OTHER SOURCES	23	0	23	0	0	0	0	0	0	0	0	0	0	23
Total Funding	828	0	828	0	0	0	0	0	0	0	0	0	0	828
\$827,953 spent and encumbered t \$234,953 spent and encumbered t Project Status :										1				
FY 2018 Budget	828	0	828	0	0	0	0	0	0	0	0	0		828
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ROAD CONSTRUCTION PROJECTS

Number: J4142

Project: J4142-FY1998 HALL SHOP ROAD IMPROVEMENTS

Description

Reconstruct Hall Shop Road (a major collector) at two locations to improve sight distance and eliminate a sharp curve.

A. Guilford Road/Hall Shop Road intersection change to a 90-degree configuration.

B. Curve south of Simpson Road (logmile 1.07) improve safety characteristics of road.

Justification

Correction is needed due to deficient horizontal curvature, poor sight distance for vehicles entering Guilford Road from Hall Shop Road, and poor sight distance along southbound Simpson Road, and poor sight distance for vehicles entering onto Hall Shop Road from Simpson Road.

Remarks

See also J4164 to improve intersection at Browns Bridge Road.

Project Schedule

FY19 - Land acquisition.

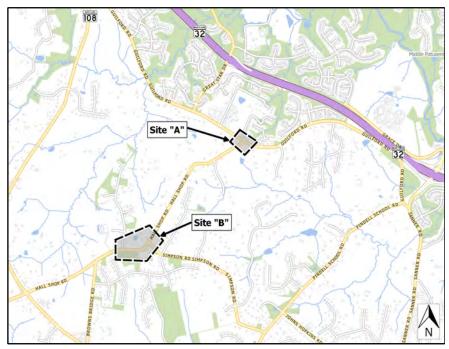
FY20 - Construction.

FY21 - Complete and close.

Operating Budget Impact

Annual Bond Redemption \$ \$109,890

Estimated annual maintenance costs upon construction completion: No Change.



ROAD CONSTRUCTION PROJECTS

Number: J4142

Project: FY1998 HALL SHOP ROAD IMPROVEMENTS

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	304	100	404	200	0	0	0	0	200	0	0	0	0	604
LAND ACQUISITION	365	0	365	0	0	0	0	0	0	0	0	0	0	365
CONSTRUCTION	170	0	170	1,300	0	0	0	0	1,300	0	0	0	0	1,470
ADMINISTRATION	3	0	3	0	0	0	0	0	0	0	0	0	0	3
Total Expenditures	842	100	942	1,500	0	0	0	0	1,500	0	0	0	0	2,442
BONDS	842	100	942	1,500	0	0	0	0	1,500	0	0	0	0	2,442
Total Funding	842	100	942	1,500	0	0	0	0	1,500	0	0	0	0	2,442

\$496,578 spent and encumbered through February 2018 \$501,194 spent and encumbered through February 2017

Project Status: Site A: construction complete.

Site B: Reducing scope of work due to land acquisition difficulties.
FY18 - Continue the land acquisition phase. Coordinate with new property owner.

FY 2018 Budget	842	1,500	2,342	0	0	0	0	0	0	0	0	0		2,342
Difference 2018 / 2019	0	(1,400)	(1,400)	1,500	0	0	0	0	1,500	0	0	0	0	100

Project: J4148-FY2000 DORSEY RUN ROAD EXTENSION

ROAD CONSTRUCTION PROJECTS

Number: J4148

Description

This project is for the extension of Dorsey Run Road from MD103 to MD175, a total of approximately 3 miles. Dorsey Run Road is classified as a major collector in the Plan Howard 2030. Old Jessup Road will be partially closed at its intersection with the new Dorsey Run Road.

Justification

This project is the implementation of the Plan Howard 2030. The construction of the roadway will enable industrial properties to have access and develop their individual frontages in a coordinated manner.

Remarks

- 1. This project will be coordinated with J4182 (Dorsey Run Road Improvements), J4206 (Montevideo Road Improvements) and W8292 (Water Main and Sewer).
- 2. Construction will be phased.
- 3. GRANT represents Secondary State Aid Funds.
- 4. An agreement with adjacent property owner/developer coordinates construction of developer's improvements and requires developer contribution to the project for proportionate cost of the improvements.
- 5. Request represents project advancement.

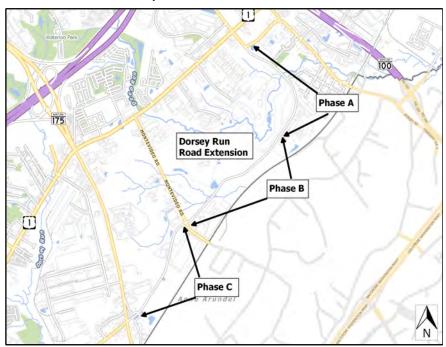
Project Schedule

FY19 - Complete and Close.

Operating Budget Impact

Annual Bond Redemption \$ \$1,186,335

Estimated annual maintenance costs upon completion: \$19,000 per two lane mile of new roadway.



ROAD CONSTRUCTION PROJECTS

Number: J4148

Project: FY2000 DORSEY RUN ROAD EXTENSION

(In Thousands)					Five	e Year Ca	pital Pro	gram			Master Plan					
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project		
PLANS & ENGINEERING	2,385	0	2,385	0	0	0	0	0	0	0	0	0	0	2,385		
LAND ACQUISITION	9,880	75	9,955	0	0	0	0	0	0	0	0	0	0	9,955		
CONSTRUCTION	20,650	0	20,650	0	0	0	0	0	0	0	0	0	0	20,650		
ADMINISTRATION	15	0	15	0	0	0	0	0	0	0	0	0	0	15		
Total Expenditures	32,930	75	33,005	0	0	0	0	0	0	0	0	0	0	33,005		
BONDS	1,543	75	1,618	0	0	0	0	0	0	0	0	0	0	1,618		
DEVELOPER CONTRIBUTION	2,275	0	2,275	0	0	0	0	0	0	0	0	0	0	2,275		
EXCISE TAX	4,052	0	4,052	0	0	0	0	0	0	0	0	0	0	4,052		
GRANTS	130	0	130	0	0	0	0	0	0	0	0	0	0	130		
PAY AS YOU GO	185	0	185	0	0	0	0	0	0	0	0	0	0	185		
EXCISE TAX BACKED BONDS	24,745	0	24,745	0	0	0	0	0	0	0	0	0	0	24,745		
Total Funding	32,930	75	33,005	0	0	0	0	0	0	0	0	0	0	33,005		

\$32,639,353 spent and encumbered through February 2018

\$32,614,183 spent and encumbered through February 2017
Project Status: FY18 - Phases A, B and C are complete. Finalizing remaining land acquisition from the State.

FY 2018 Budget	32,930	0	32,930	0	0	0	0	0	0	0	0	0		32,930
Difference 2018 / 2019	0	75	75	0	0	0	0	0	0	0	0	0	0	75

Project: J4154-FY1998 RETAINING WALL REPLACEMENTS

ROAD CONSTRUCTION PROJECTS

Number: J4154

Description

A Countywide project for the design and construction of replacement or rehabilitated retaining walls. The walls are at various County locations in/out of the rights-of-way and vary in height and length.

Justification

These retaining walls require extensive rehabilitation/replacement which is beyond the scope of normal highway maintenance.

Remarks

- 1. Project replaced by B3862.
- 2. Land acquisition requires park property.
- 3. Project coordinated with S6283.

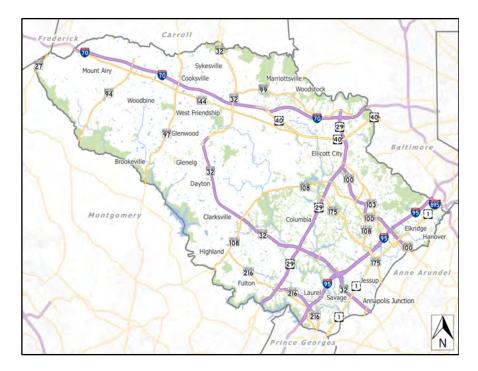
Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$95,805

Estimated annual maintenance costs upon completion: Decrease.



ROAD CONSTRUCTION PROJECTS

Number: J4154

Project: FY1998 RETAINING WALL REPLACEMENTS

(In Thousands)					Five Year Capital Program					Master Plan					
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project	
PLANS & ENGINEERING	463	0	463	0	0	0	0	0	0	0	C	0	0	463	
LAND ACQUISITION	29	0	29	0	0	0	0	0	0	0	C	0	0	29	
CONSTRUCTION	1,818	0	1,818	0	0	0	0	0	0	0	C	0	0	1,818	
ADMINISTRATION	34	0	34	0	0	0	0	0	0	0	C	0	0	34	
Total Expenditures	2,344	0	2,344	0	0	0	0	0	0	0	0	0	0	2,344	
BONDS	2,129	0	2,129	0	0	0	0	0	0	0	C	0	0	2,129	
PAY AS YOU GO	215	0	215	0	0	0	0	0	0	0	C	0	0	215	
Total Funding	2,344	0	2,344	0	0	0	0	0	0	0	0	0	0	2,344	

\$981,756 spent and encumbered through February 2018

\$981,756 spent and encumbered through February 2017

Project Status: FY18 - Construction complete - Bonnie Branch retaining wall, College Ave at Ross Rd, Bonnie Branch Rd, St. Paul St, New Cut Rd (#1), New Cut Rd (#2), and Old Columbia Pike.

Sylvan Lane retaining wall advanced from design and land acquisition stage to advertising for construction.

FY 2018 Budget	2,344	0	2,344	0	0	0	0	0	0	0	0	0		2,344
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ROAD CONSTRUCTION PROJECTS

Number: J4155

Project: J4155-FY2012 MARRIOTTSVILLE RD SAFETY IMPROVEMENTS

Description

Reconstruct shoulders, replace guardrails and stabilize roadway embankment at numerous locations along 2.75 miles of Marriottsville Road between MD99 and the Carroll County Line (spot safety improvement).

Justification

Requested by the Bureau of Highways. Marriottsville Road north of MD99 is classified as a minor arterial but is only a two-lane road. There are few shoulders and in areas the road embankment needs to be stabilized and the edge of paving reconstructed. The heavy traffic volume makes it difficult to maintain the road.

Remarks

- 1. This project will be coordinated with J4205.
- 2. Marriottsville Road north of MD99 is a Scenic Road.
- 3. The improvements will be in two phases. Phase 1 will be stabilizing the roadway embankment. Phase 2 will be the road improvements.
- 4. Request represents project advancement.

Project Schedule

FY19 - Slope design, land acquisition and construction (Phase 1)

FY20 - Slope Construction & Road Design (Phase 2)

FY21 - Road Design & Land Acquisition (Phase 2)

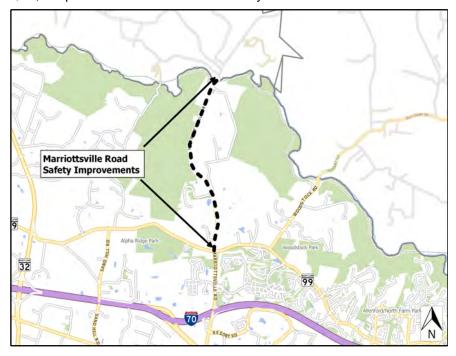
FY22 - Construction.

FY23 - Complete & Close.

Operating Budget Impact

Annual Bond Redemption \$ \$146,250

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane mile of new roadway.



ROAD CONSTRUCTION PROJECTS

Number: J4155

Project: FY2012 MARRIOTTSVILLE RD SAFETY IMPROVEMENTS

In Thousands)					Five	Year Ca	pital Pro		Master Plan					
ppropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	290	(100)	190	0	150	0	0	0	150	0	C	0	0	340
LAND ACQUISITION	50	225	275	0	0	0	0	0	0	0	C	0	0	27
CONSTRUCTION	550	100	650	0	0	2,000	0	0	2,000	0	C	0	0	2,650
Total Expenditures	890	225	1,115	0	150	2,000	0	0	2,150	0	0	0	0	3,265
BONDS	890	210	1,100	0	150	2,000	0	0	2,150	0	C	0	0	3,250
DEVELOPER CONTRIBUTION	0	15	15	0	0	0	0	0	0	0	C	0	0	15
Total Funding	890	225	1,115	0	150	2,000	0	0	2,150	0	0	0	0	3,265

Project Status : FY18 - This project is in the design phase for the road slope stabilization.

FY 2018 Budget	890	225	1,115	0	2,150	0	0	0	2,150	0	0	0		3,265
Difference 2018 / 2019	0	0	0	0	(2,000)	2,000	0	0	0	0	0	0	0	0

ROAD CONSTRUCTION PROJECTS

Project: J4164-FY1997 ROADWAY CAPACITY IMPROVEMENTS

Description

A project to provide increased capacity and safety of various County roads and intersections.

Justification

The project is consistent with recommendations provided in the Comprehensive Transportation Plan.

Remarks

- 1. Recommendations were compiled from the results of the existing and anticipated future traffic and roadways condition analysis as part of the County's master planning process for transportation projects.
- 2. Project to be replaced by J4211.
- 3. The County may enter into an agreement for the adjacent developer to construct the County improvements.

Project Schedule

FY19 - Construction FY20 - Close

Operating Budget Impact

Annual Bond Redemption \$ \$198,270

Estimated annual maintenance costs upon construction completion: Increase.

Number: J4164



ROAD CONSTRUCTION PROJECTS

Number: J4164

Project: FY1997 ROADWAY CAPACITY IMPROVEMENTS

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	660	0	660	0	0	0	0	0	0	0	0	0	0	660
LAND ACQUISITION	880	0	880	0	0	0	0	0	0	0	0	0	0	880
CONSTRUCTION	6,559	0	6,559	0	0	0	0	0	0	0	0	0	0	6,559
ADMINISTRATION	122	0	122	0	0	0	0	0	0	0	0	0	0	122
Total Expenditures	8,221	0	8,221	0	0	0	0	0	0	0	0	0	0	8,221
DEVELOPER CONTRIBUTION	115	0	115	0	0	0	0	0	0	0	0	0	0	115
EXCISE TAX	3,700	0	3,700	0	0	0	0	0	0	0	0	0	0	3,700
EXCISE TAX BACKED BONDS	4,406	0	4,406	0	0	0	0	0	0	0	0	0	0	4,406
Total Funding	8,221	0	8,221	0	0	0	0	0	0	0	0	0	0	8,221

\$6,763,707 spent and encumbered through February 2018 \$6,685,632 spent and encumbered through February 2017

Project Status: FY18 - Projects under construction - Browns Bridge Rd/Hall Shop Rd (construction Summer 2018).

Construction complete - Brighton Dam Rd at Ten Oaks Rd, Burntwoods Rd/Sharp Rd, McKenzie Rd, Harpers Farm Rd /Willow Bottom Dr, Highland/Ten Oaks Rd, Murray Hill Rd, Triadelphia Rd /Ten Oaks Rd, Long Corner Rd /Hardy Rd, Homewood Rd /Folly Quarter Rd, Triadelphia Mill Rd /Highland Rd, Tamar Dr and Roxbury Rd/Roxbury Mills Rd. Project discontinued - Redberry, due to opposition from the impacted property owner.

FY 2018 Budget	8,221	0	8,221	0	0	0	0	0	0	0	0	0		8,221
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ROAD CONSTRUCTION PROJECTS

Number: J4167

Project: J4167-FY2010 SNOWDEN RIVER/BROKEN LAND INTERSECT

Description

A project for design and reconstruction of the Snowden River Parkway/Broken Land Parkway/Patuxent Woods Drive intersection including westbound MD32 ramp to northbound Broken Land Parkway.

Justification

Traffic volumes have increased. In peak hours, the level of service of E-F is beyond capacity. Engineering review indicates that the intersection is at capacity and that an upgrade is required.

Remarks

Funding is programmed for a short-term improvement based on the conclusion of the study phase.

Project Schedule

FY19 - Complete study and design.

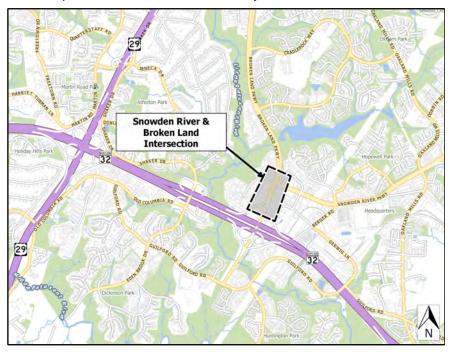
FY20 - Land Acquisition.

FY21 - Construction

Operating Budget Impact

Annual Bond Redemption \$ \$83,475

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane mile of new roadway.



ROAD CONSTRUCTION PROJECTS

Number: J4167

Project: FY2010 SNOWDEN RIVER/BROKEN LAND INTERSECT

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	580	0	580	0	215	0	0	0	215	0	0	0	0	795
LAND ACQUISITION	100	0	100	0	0	0	0	0	0	0	0	0	0	100
CONSTRUCTION	0	0	0	0	960	0	0	0	960	0	0	0	0	960
Total Expenditures	680	0	680	0	1,175	0	0	0	1,175	0	0	0	0	1,855
BONDS	0	0	0	0	1,175	0	0	0	1,175	0	0	0	0	1,175
EXCISE TAX BACKED BONDS	680	0	680	0	0	0	0	0	0	0	0	0	0	680
Total Funding	680	0	680	0	1,175	0	0	0	1,175	0	0	0	0	1,855

\$150,959 spent and encumbered through February 2018 \$150,959 spent and encumbered through February 2017 Project Status: FY18 - This project advanced from the study phase to the design phase for the capacity and safety improvements.

FY 2018 Budget	680	0	680	1,175	0	0	0	0	1,175	0	0	0		1,855
Difference 2018 / 2019	0	0	0	(1,175)	1,175	0	0	0	0	0	0	0	0	0

ROAD CONSTRUCTION PROJECTS

Number: J4168

Project: J4168-FY1998 ROADWAY REHABILITATION/SAFETY PROGRAM

Description

A project to correct roadway failure/safety problems on existing roads at various intersections or along various roadway segments. Types of projects include intersection widening for needed turn lanes on large radius curb returns, improvements to roadway geometrics to correct deficient vertical and/or horizontal curves, elimination of roadside hazards and correct base failures and pavement deformation, and constructing, reconstructing and/or relocating roads, including openings and closings.

Justification

Project is needed to correct deficiencies in the County road system where many old farm to market roads need improvements to correct safety problems. Attention will be given to eliminate/relocate fixed roadside hazards such as utility poles and drainage structures which are causing accidents and relocation of deficient intersections.

Remarks

- 1. The existing road connection of New Cut Road with MD103 has been made a one-way-in road. The one-way-in connection will be closed when the fruit stand is permanently closed for business.
- 2. Project to be replaced in FY18 by J4240.

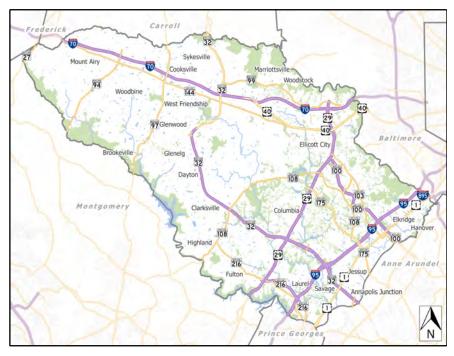
Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$101,925

Estimated annual maintenance costs upon construction completion: Decrease.



ROAD CONSTRUCTION PROJECTS

Number: J4168

Project: FY1998 ROADWAY REHABILITATION/SAFETY PROGRAM

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	245	0	245	0	0	0	0	0	0	0	0	0	0	245
LAND ACQUISITION	1,215	(226)	989	0	0	0	0	0	0	0	0	0	0	989
CONSTRUCTION	2,328	(844)	1,484	0	0	0	0	0	0	0	0	0	0	1,484
ADMINISTRATION	55	0	55	0	0	0	0	0	0	0	0	0	0	55
Total Expenditures	3,843	(1,070)	2,773	0	0	0	0	0	0	0	0	0	0	2,773
BONDS	3,065	(1,070)	1,995	0	0	0	0	0	0	0	0	0	0	1,995
DEVELOPER CONTRIBUTION	200	0	200	0	0	0	0	0	0	0	0	0	0	200
PAY AS YOU GO	308	0	308	0	0	0	0	0	0	0	0	0	0	308
EXCISE TAX BACKED BONDS	270	0	270	0	0	0	0	0	0	0	0	0	0	270
Total Funding	3,843	(1,070)	2,773	0	0	0	0	0	0	0	0	0	0	2,773

\$2,763,513 spent and encumbered through February 2018 \$2,775,689 spent and encumbered through February 2017

Project Status: FY18 - Construction complete - Port Capital/Harbour Dr./New Colony Blvd., Old Scaggsville Rd. at All Saints Rd., Harriet Tubman Ln, New Cut Rd, Highland Rd, Long Corner Rd/Penn Shop Rd.

Land acquisition complete - Burntwoods Rd.

FY 2018 Budget	3,843	0	3,843	0	0	0	0	0	0	0	0	0		3,843
Difference 2018 / 2019	0	(1,070)	(1,070)	0	0	0	0	0	0	0	0	0	0	(1,070)

ROAD CONSTRUCTION PROJECTS

Number: J4170

Project: J4170-FY2004 ROGER'S AVENUE IMPROVEMENTS

Description

A project for design and construction of approximately 1,500 LF of Rogers Avenue from existing improvements near US40 to Court House Drive. The Plan Howard 2030 lists Rogers Avenue as a minor arterial with a nominal 80 foot R/W. The proposed improvement will have a 50 feet width and center, left turn lane.

Justification

This portion of Rogers Avenue serves as a major link for commercial and residential activities to access the US40 and US29 corridor and Main Street Ellicott City.

Remarks

Project Schedule

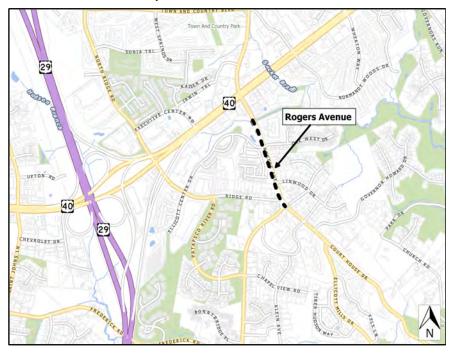
FY19 - Construction.

FY20 - Close

Operating Budget Impact

Annual Bond Redemption \$ \$184,950

Estimated annual maintenance costs upon completion: \$19,000 per two lane mile of new roadway.



Difference 2018 / 2019

ROAD CONSTRUCTION PROJECTS

Number: J4170

Project: FY2004 ROGER'S AVENUE IMPROVEMENTS

In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	490	0	490	0	0	0	0	0	0	0	0	0	0	490
LAND ACQUISITION	75	0	75	0	0	0	0	0	0	0	0	0	0	75
CONSTRUCTION	3,660	0	3,660	0	0	0	0	0	0	0	0	0	0	3,660
ADMINISTRATION	5	0	5	0	0	0	0	0	0	0	0	0	0	5
Total Expenditures	4,230	0	4,230	0	0	0	0	0	0	0	0	0	0	4,230
BONDS	575	0	575	0	0	0	0	0	0	0	0	0	0	575
DEVELOPER CONTRIBUTION	120	0	120	0	0	0	0	0	0	0	0	0	0	120
EXCISE TAX BACKED BONDS	3,535	0	3,535	0	0	0	0	0	0	0	0	0	0	3,535
Total Funding	4,230	0	4,230	0	0	0	0	0	0	0	0	0	0	4,230

March 23, 2018 Howard County, MD Version : Executive Proposed

ROAD CONSTRUCTION PROJECTS

Number: J4173

Project: J4173-FY2000 HANOVER ROAD IMPROVEMENTS

Description

A project for the study, design and reconstruction of the Hanover Road at Hi-Tech Road intersection. The project will realign the deficient horizontal and vertical curve to improve safety and capacity. Hanover Road and Hi-Tech Road are classified as minor collector roads.

Justification

This intersection provides access to Anne Arundel County from Hanover and Hi-Tech Roads. Hanover provides access to US1 and Hi-Tech provides access to MD100. The intersection has substandard horizontal and vertical geometry. Adjustments are also needed to coordinate with the State Highway Administration's future MD295 at Hanover Road interchange improvements.

Remarks

- 1. This project was identified in the Comprehensive Transportation Plan.
- 2. Project to be coordinated with SHA's MD295 at Hanover Road interchange improvements.

Project Schedule

FY19 - Design.

FY20 - Design and Land Acquisition.

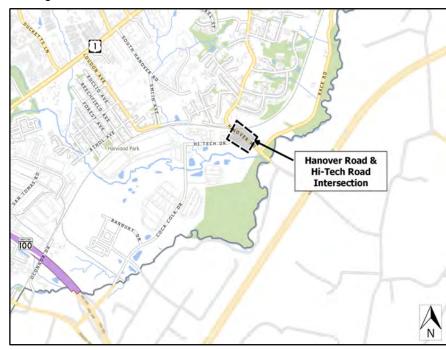
FY21 - Construction.

FY22 - Close.

Operating Budget Impact

Annual Bond Redemption \$ \$72,900

Estimated annual maintenance costs upon construction completion: No Change.



Difference 2018 / 2019

ROAD CONSTRUCTION PROJECTS

0

0

0

1,135

0

0

0

Number: J4173

0

0

Project: FY2000 HANOVER ROAD IMPROVEMENTS

(1,135)

0

(1,135)

85

1,050

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	175	0	175	85	0	0	0	0	85	0	0	0	0	260
LAND ACQUISITION	265	0	265	0	0	0	0	0	0	0	0	0	0	265
CONSTRUCTION	200	0	200	0	1,050	0	0	0	1,050	0	0	0	0	1,250
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	650	0	650	85	1,050	0	0	0	1,135	0	0	0	0	1,785
BONDS	255	0	255	85	1,050	0	0	0	1,135	0	0	0	0	1,390
DEVELOPER CONTRIBUTION	15	0	15	0	0	0	0	0	0	0	0	0	0	15
EXCISE TAX	150	0	150	0	0	0	0	0	0	0	0	0	0	150
EXCISE TAX BACKED BONDS	230	0	230	0	0	0	0	0	0	0	0	0	0	230
Total Funding	650	0	650	85	1,050	0	0	0	1,135	0	0	0	0	1,785
125,894 spent and encumbered thro 125,894 spent and encumbered thro roject Status: FY18 - Design in prog	ough Februa													
FY 2018 Budget	650	1,135	1,785	0	0	0	0	0	0	0	0	0		1,78

Project: J4177-FY2001 STATE ROAD CONSTRUCTION

ROAD CONSTRUCTION PROJECTS

Number: J4177

Description

A project for cost sharing of new State roadway construction within Howard County that is consistent with the objectives of the Plan Howard 2030.

Justification

The State Highway Administration (SHA) cannot proceed with these projects in a timely manner without financial assistance. The local funding will accelerate the construction of State roadways in order to address capacity and safety problems in the County network.

Remarks

- 1. Project will include, but not be limited to: MD108 at Centennial Lane intersection and US40 at Rogers Avenue intersection.
- 2. Request represents program advancement.

Project Schedule

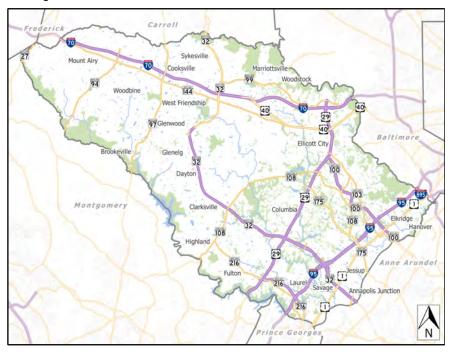
Program

Set by State Highway Administration.

Operating Budget Impact

Annual Bond Redemption \$ \$907,650

Estimated annual maintenance costs upon construction completion: No Change.



ROAD CONSTRUCTION PROJECTS

Number: J4177

Project: FY2001 STATE ROAD CONSTRUCTION

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	2,000	0	2,000	0	0	0	0	0	0	0	0	0	0	2,000
LAND ACQUISITION	1,500	0	1,500	0	0	0	0	0	0	0	0	0	0	1,500
CONSTRUCTION	18,265	2,325	20,590	0	0	0	0	0	0	0	0	0	0	20,590
Total Expenditures	21,765	2,325	24,090	0	0	0	0	0	0	0	0	0	0	24,090
BONDS	0	2,325	2,325	0	0	0	0	0	0	0	0	0	0	2,325
DEVELOPER CONTRIBUTION	120	0	120	0	0	0	0	0	0	0	0	0	0	120
EXCISE TAX	3,800	0	3,800	0	0	0	0	0	0	0	0	0	0	3,800
EXCISE TAX BACKED BONDS	17,845	0	17,845	0	0	0	0	0	0	0	0	0	0	17,845
Total Funding	21,765	2,325	24,090	0	0	0	0	0	0	0	0	0	0	24,090

\$18,521,084 spent and encumbered through February 2018 \$18,524,504 spent and encumbered through February 2017

Project Status: FY18 - Projects in Design: MD108 at Centennial Lane intersection.

Projects Complete: US40 at Rogers Avenue, I70/Marriottsville Rd Study, US29 (MD99 to MD100), MD216, and MD99 (Liter & Tiller).

FY 2018 Budget	21,765	2,500	24,265	0	0	0	0	0	0	0	0	0		24,265
Difference 2018 / 2019	0	(175)	(175)	0	0	0	0	0	0	0	0	0	0	(175)

ROAD CONSTRUCTION PROJECTS

Project: J4178-FY2001 COUNTY / STATE NOISE ABATEMENT Number: J4178

Description

A program with SHA for the construction of noise reduction sound walls to shield sections of residential communities.

Justification

The residents have requested relief from the noise along State highways.

Remarks

- 1. Program meets the requirements of the SHA retrofit noise abatement program and is contingent on the availability of funds at 80% State and 20% local share.
- 2. Funding shown is for Howard County's share.
- 3. Program locations include the following areas: Lawyers Hill (FY15), Dumhart Rd. community pending SHA funding (FY 20)
- 4. Schedule set by SHA.

Project Schedule

FY20 - Dumhart Road wall design.

Operating Budget Impact

Annual Bond Redemption \$ \$366,075

Estimated annual maintenance costs upon construction completion: No Change.



ROAD CONSTRUCTION PROJECTS

Number: J4178

Project: FY2001 COUNTY / STATE NOISE ABATEMENT

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,815	0	1,815	200	0	0	0	0	200	0	0	0	0	2,015
CONSTRUCTION	5,310	0	5,310	0	800	0	0	0	800	0	0	0	0	6,110
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	7,135	0	7,135	200	800	0	0	0	1,000	0	0	0	0	8,135
BONDS	7,135	0	7,135	200	800	0	0	0	1,000	0	0	0	0	8,135
Total Funding	7,135	0	7,135	200	800	0	0	0	1,000	0	0	0	0	8,135

\$6,513,956 spent and encumbered through February 2018 \$4,808,389 spent and encumbered through February 2017

Project Status: FY18 - Construction complete: Lawyers Hill, Timberview, Atholton Manor, US29 - MD108 to MD100, High Ridge, Orchards, Hunt Club Estates and Guilford Downs.

Study complete: Dumhart Road. Awaiting SHA program funding.

FY 2018 Budget	7,135	0	7,135	0	0	0	0	0	0	0	0	0		7,135
Difference 2018 / 2019	0	0	0	200	800	0	0	0	1,000	0	0	0	0	1,000

ROAD CONSTRUCTION PROJECTS

Number: J4181

Project: J4181-FY2003 GUILFORD RD (US1 to DORSEY RUN RD)

Description

This project is to study, design, and reconstruct Guilford Road to three lanes from US1 to Old Dorsey Run Road; a distance of 5,800 LF.

Justification

The existing road is sub-standard with varying width and limited capacity. Guilford Road is classified as a major collector in the Plan Howard 2030 and three lanes are needed to accommodate the increasing volume of commercial traffic.

Remarks

Construction of safety improvements at Guilford Road and Stayton Drive.

Project Schedule

FY19 - Design

FY20 - Design and Land acquisition.

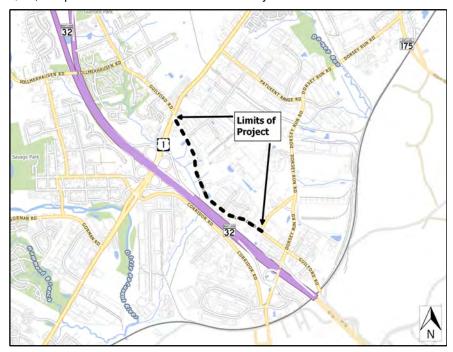
FY21 - Construction.

FY22 - Construction and Close.

Operating Budget Impact

Annual Bond Redemption \$ \$758,475

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane miles of new roadway.



ROAD CONSTRUCTION PROJECTS

Number: J4181

Project: FY2003 GUILFORD RD (US1 to DORSEY RUN RD)

In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
ppropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	830	0	830	720	100	0	0	0	820	0	0	0	0	1,650
LAND ACQUISITION	1,030	0	1,030	0	0	0	0	0	0	0	0	0	0	1,030
CONSTRUCTION	0	0	0	0	14,500	0	0	0	14,500	0	0	0	0	14,500
ADMINISTRATION	15	0	15	0	0	0	0	0	0	0	0	0	0	15
Total Expenditures	1,875	0	1,875	720	14,600	0	0	0	15,320	0	0	0	0	17,195
BONDS	0	0	0	720	14,600	0	0	0	15,320	0	0	0	0	15,320
DEVELOPER CONTRIBUTION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
EXCISE TAX	330	0	330	0	0	0	0	0	0	0	0	0	0	330
EXCISE TAX BACKED BONDS	1,535	0	1,535	0	0	0	0	0	0	0	0	0	0	1,535
Total Funding	1,875	0	1,875	720	14,600	0	0	0	15,320	0	0	0	0	17,195

\$648,447 spent and encumbered through February 2017 Project Status: FY18 - Design in progress.

FY 2018 Budget	1,875	0	1,875 14,520	0	0	0	0	14,520	0	0	0		16,395
Difference 2018 / 2019	0	0	0 (13,800)	14,600	0	0	0	800	0	0	0	0	800

ROAD CONSTRUCTION PROJECTS

Number: J4182

Project: J4182-FY2002 DORSEY RUN ROAD IMPROVEMENTS

Description

This project is to study, design and reconstruct Dorsey Run Road to four lanes from MD175 south to the CSX railroad spur crossing; a distance of 6,000 LF.

Justification

The existing road is sub-standard with varying width and limited capacity. Dorsey Run Road is classified in the Plan Howard 2030 as a major collector and four lanes are needed to accommodate the increasing volumes of traffic.

Remarks

This project will be coordinated with J4110-2 and J4148-C. This project will be constructed in one phase because all the utilities must be relocated before construction can begin.

Project Schedule

FY19 - Design and land acquisition.

FY20-21 - Land acquisition and Utility Relocation.

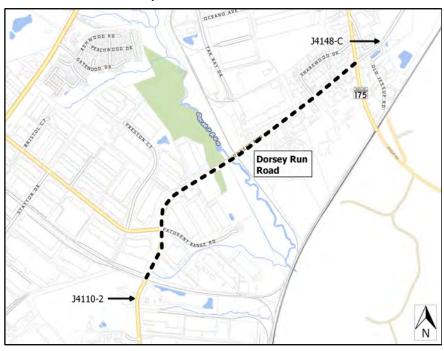
FY21 - Construction.

FY22 - Close.

Operating Budget Impact

Annual Bond Redemption \$ \$432,225

Estimated annual maintenance costs upon completion: \$19,000 per two lane mile of new roadway.



ROAD CONSTRUCTION PROJECTS

Number: J4182

Project: FY2002 DORSEY RUN ROAD IMPROVEMENTS

n Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
ppropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,540	0	1,540	800	0	0	0	0	800	0	0	0	0	2,340
LAND ACQUISITION	900	0	900	0	0	0	0	0	0	0	0	0	0	900
CONSTRUCTION	535	0	535	0	8,380	0	0	0	8,380	0	0	0	0	8,91
ADMINISTRATION	25	0	25	0	0	0	0	0	0	0	0	0	0	2
Total Expenditures	3,000	0	3,000	800	8,380	0	0	0	9,180	0	0	0	0	12,180
BONDS	0	0	0	800	8,380	0	0	0	9,180	0	0	0	0	9,180
DEVELOPER CONTRIBUTION	35	0	35	0	0	0	0	0	0	0	0	0	0	3
EXCISE TAX	2,540	0	2,540	0	0	0	0	0	0	0	0	0	0	2,540
EXCISE TAX BACKED BONDS	425	0	425	0	0	0	0	0	0	0	0	0	0	42
Total Funding	3,000	0	3,000	800	8,380	0	0	0	9,180	0	0	0	0	12,180

\$978,736 spent and encumbered through February 2017 Project Status : FY18 - Project under design.

FY 2018 Budget	3,000	800	3,800	10,000	0	0	0	0	10,000	0	0	0		13,800
Difference 2018 / 2019	0	(800)	(800)	(9,200)	8,380	0	0	0	(820)	0	0	0	0	(1,620)

Project: J4202-FY2004 STEPHENS ROAD IMPROVEMENTS

Number: J4202

Description

A project for the design and reconstruction of Stephens Road from Whiskey Bottom Road to Gorman Road.

Justification

The road and bridge need to be widened and raised out of the floodplain to accommodate the increased traffic due to growth in the vicinity.

Remarks

Developers have made improvements related to the adequate public facilities requirements.

Project Schedule

FY19 - Utility relocations and construction.

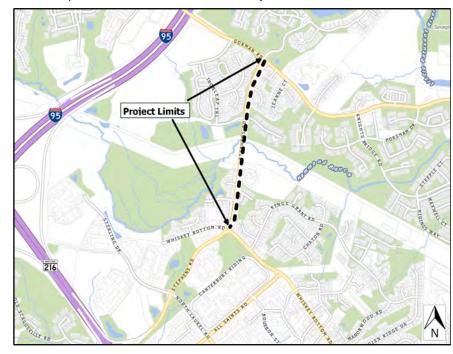
FY20 - Complete and Close.

Operating Budget Impact

Annual Bond Redemption \$ \$409,950

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane mile of new roadway.

ROAD CONSTRUCTION PROJECTS



ROAD CONSTRUCTION PROJECTS

Number: J4202

Project: FY2004 STEPHENS ROAD IMPROVEMENTS

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,455	0	1,455	0	0	0	0	0	0	0	C	0	0	1,455
LAND ACQUISITION	1,095	0	1,095	0	0	0	0	0	0	0	C	0	0	1,095
CONSTRUCTION	6,600	0	6,600	0	0	0	0	0	0	0	C	0	0	6,600
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	C	0	0	10
Total Expenditures	9,160	0	9,160	0	0	0	0	0	0	0	0	0	0	9,160
DEVELOPER CONTRIBUTION	25	25	50	0	0	0	0	0	0	0	C	0	0	50
EXCISE TAX BACKED BONDS	9,135	(25)	9,110	0	0	0	0	0	0	0	C	0	0	9,110
Total Funding	9,160	0	9,160	0	0	0	0	0	0	0	0	0	0	9,160

\$1,366,364 spent and encumbered through February 2018

\$1,159,112 spent and encumbered through February 2017

Project Status: FY18 - The project is in the land acquisition phase. Utility relocations are also underway.

FY 2018 Budget	9,160	0	9,160	0	0	0	0	0	0	0	0	0		9,160
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ROAD CONSTRUCTION PROJECTS

Number: J4205

Project: J4205-FY2006 MARRIOTTSVILLE ROAD IMPROVEMENTS

Description

A project to widen Marriottsville Road from MD99 to US40, including the Marriottsville Road bridge over I-70. Marriottsville Road is classified as an intermediate arterial.

Justification

Increased traffic and new development will necessitate the improvement of the road.

Remarks

- 1. The County may enter into agreements with the developers to construct the County improvements.
- 2. The County will coordinate with the State Highway Administration regarding design requirements.
- 3. Developers will be directly responsible for some of the construction and associated costs of the Marriottsville Road improvements.
- 4. Project to be coordinated with J4215 at US40 intersection.
- 5. The improvements will be constructed in four phases.

Phase I will be from I-70 to MD99 intersection.

Phase II will be the improvements to the ramp for I-70 eastbound.

Phase III will be the roadway portion south of the I-70 bridge.

Phase IV will be the construction of the I-70 bridge and road improvements.

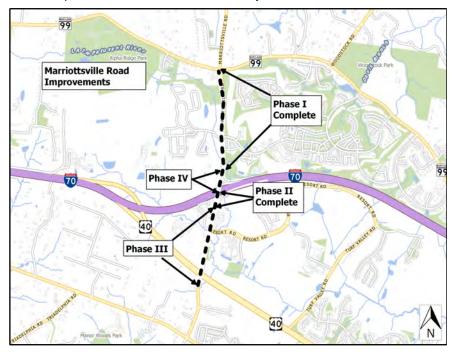
Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$1,136,250

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane mile of new roadway.



ROAD CONSTRUCTION PROJECTS

Number: J4205

Project: FY2006 MARRIOTTSVILLE ROAD IMPROVEMENTS

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	2,350	0	2,350	0	2,375	0	0	0	2,375	0	0	0	0	4,725
LAND ACQUISITION	800	0	800	0	0	0	0	0	0	0	0	0	0	800
CONSTRUCTION	2,975	0	2,975	0	18,000	0	0	0	18,000	0	0	0	0	20,975
Total Expenditures	6,125	0	6,125	0	20,375	0	0	0	20,375	0	0	0	0	26,500
BONDS	0	0	0	0	20,375	0	0	0	20,375	0	0	0	0	20,375
DEVELOPER CONTRIBUTION	1,000	0	1,000	0	0	0	0	0	0	0	0	0	0	1,000
EXCISE TAX	250	0	250	0	0	0	0	0	0	0	0	0	0	250
EXCISE TAX BACKED BONDS	4,875	0	4,875	0	0	0	0	0	0	0	0	0	0	4,875
Total Funding	6,125	0	6,125	0	20,375	0	0	0	20,375	0	0	0	0	26,500

\$1,288,027 spent and encumbered through February 2018
\$1,292,670 spent and encumbered through February 2017
Project Status: FY18 - Marriottsville Road south of I-70 (Phase III) and I-70 bridge (Phase IV) in design. Phase I construction complete. Phase II construction complete.

FY 2018 Budget	6,125	0	6,125 20,375	5 0	0	0	0	20,375	0	0	0		26,500
Difference 2018 / 2019	0	0	0 (20,375	20,375	0	0	0	0	0	0	0	0	0

ROAD CONSTRUCTION PROJECTS

Number: J4206

Project: J4206-FY2007 MONTEVIDEO ROAD IMPROVEMENTS

Description

A project to improve Montevideo Road as detailed in the Montevideo Road Study. These improvements include adjustments to vertical and horizontal alignment and will be made in two phases. Phase one will relocate the connection to US1 to be directly across from Port Capital Drive. Phase two will improve the section of the road from Dorsey Run Road to the end of the relocation. Montevideo Road is classified as a major collector roadway.

Justification

Montevideo Road is expected to have a significant increase in traffic in the coming years and these improvements will help accommodate that traffic.

Remarks

- 1. Project to be coordinated with J4148 (Dorsey Run Road Extended), J4241 (US1 MD175 to Montevideo Road) and F5975 (Route One Fire Station).
- 2. This project may be used as a funding source for public improvements constructed by others under an agreement approved by the County Council.

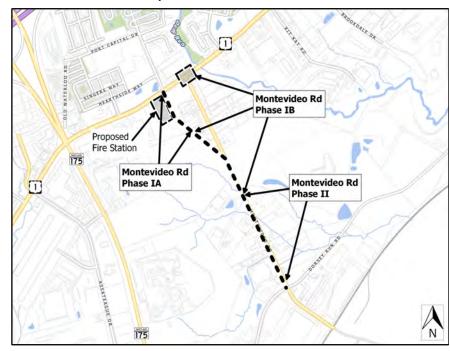
Project Schedule

- FY19 Phase 1A Construction Completed, Phase 1B Construction.
- FY20 Phase 1B Construction Completed, Phase 2 Land Acquisition.
- FY21 Phase 2 Construction.
- FY22 Phase 2 Complete and Close.

Operating Budget Impact

Annual Bond Redemption \$\$669,600

Estimated annual maintenance costs upon completion: \$19,000 per two lane mile of new roadway.



ROAD CONSTRUCTION PROJECTS

Number: J4206

Project: FY2007 MONTEVIDEO ROAD IMPROVEMENTS

In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
ppropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	960	320	1,280	0	0	0	0	0	0	0	0	0	0	1,280
LAND ACQUISITION	2,830	345	3,175	0	0	0	0	0	0	0	0	0	0	3,175
CONSTRUCTION	5,515	0	5,515	0	5,100	0	0	0	5,100	0	0	0	0	10,615
Total Expenditures	9,305	665	9,970	0	5,100	0	0	0	5,100	0	0	0	0	15,070
BONDS	0	665	665	0	5,100	0	0	0	5,100	0	0	0	0	5,76
DEVELOPER CONTRIBUTION	190	0	190	0	0	0	0	0	0	0	0	0	0	190
EXCISE TAX BACKED BONDS	9,115	0	9,115	0	0	0	0	0	0	0	0	0	0	9,11
Total Funding	9,305	665	9,970	0	5,100	0	0	0	5,100	0	0	0	0	15,070

\$1,787,792 spent and encumbered through February 2017
Project Status: FY18 - Phase 1A construction complete; Phase 1B in design.

FY 2018 Budget	9,305	665	9,970	5,100	0	0	0	0	5,100	0	0	0		15,070
Difference 2018 / 2019	0	0	0	(5,100)	5,100	0	0	0	0	0	0	0	0	0

ROAD CONSTRUCTION PROJECTS

Number: J4207

Project: J4207-FY2009 OAKLAND MILLS ROAD IMPROVEMENTS

Description

A project to improve Oakland Mills Road from Guilford Road northward to Carters Lane. The improvements would include road widening, sidewalk, curb and gutter and bicycle compatibility. At present this section of road is two lanes with no sidewalks and poor drainage. A traffic signal will be installed at the Oakland Mills/Guilford Road intersection.

Justification

Requested by the Bureau of Highways.

Remarks

- 1. This work will be coordinated with the church development at the corner of Guilford Road and Oakland Mills Road.
- 2. Project to incorporate former K5041 sidewalks.

Project Schedule

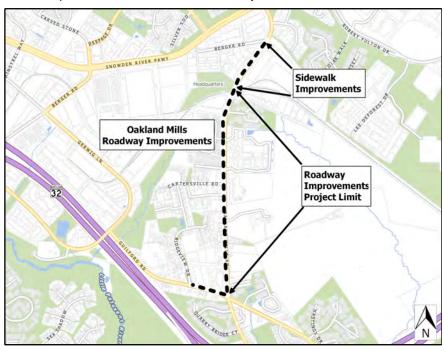
FY19 - Land acquisition and construction.

FY20 - Complete and close.

Operating Budget Impact

Annual Bond Redemption \$ \$273,825

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane mile of new roadway.



ROAD CONSTRUCTION PROJECTS

Number: J4207

Project: FY2009 OAKLAND MILLS ROAD IMPROVEMENTS

n Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
ppropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	600	0	600	0	0	0	0	0	0	0	C	0	0	600
LAND ACQUISITION	2,000	0	2,000	0	0	0	0	0	0	0	C	0	0	2,000
CONSTRUCTION	3,500	0	3,500	0	0	0	0	0	0	0	C	0	0	3,500
Total Expenditures	6,100	0	6,100	0	0	0	0	0	0	0	0	0	0	6,100
BONDS	185	0	185	0	0	0	0	0	0	0	C	0	0	185
DEVELOPER CONTRIBUTION	15	0	15	0	0	0	0	0	0	0	C	0	0	15
EXCISE TAX BACKED BONDS	5,900	0	5,900	0	0	0	0	0	0	0	C	0	0	5,900
Total Funding	6,100	0	6,100	0	0	0	0	0	0	0	0	0	0	6,100

\$460,585 spent and encumbered through February 2017

Project Status: FY18 - Land acquisition and utility relocations are in progress.

FY 2018 Budget	6,100	0	6,100	0	0	0	0	0	0	0	0	0		6,100
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ROAD CONSTRUCTION PROJECTS

Number: J4208

Project: J4208-FY2006 WATERSVILLE ROAD SLOPE RECONSTRUCTION

Description

A project to stabilize/reconstruct the slope that supports the roadbed of Watersville Road. The slope is squeezed between the road and railroad and is too steep to remain stable.

Justification

Requested by the Bureau of Highways. The Bureau's staff has done temporary repairs. The extent of permanent repair work needed is beyond their capabilities.

Remarks

- 1. Work to be coordinated with CSX Railroad.
- 2. Watersville Road is a scenic road.

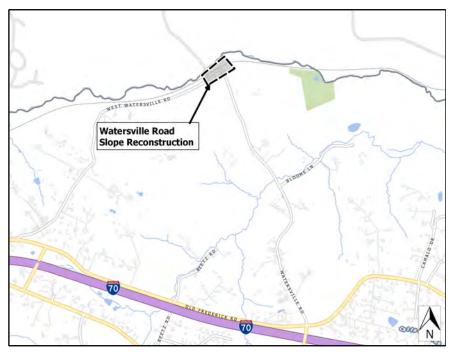
Project Schedule

FY19 - Complete and close.

Operating Budget Impact

Annual Bond Redemption \$ \$24,750

Estimated annual maintenance costs upon construction completion: Decrease.



ROAD CONSTRUCTION PROJECTS

Number: J4208

Project: FY2006 WATERSVILLE ROAD SLOPE RECONSTRUCTION

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	150	0	150	0	0	0	0	0	0	0	0	0	0	150
LAND ACQUISITION	15	0	15	0	0	0	0	0	0	0	0	0	0	15
CONSTRUCTION	395	0	395	0	0	0	0	0	0	0	0	0	0	395
Total Expenditures	560	0	560	0	0	0	0	0	0	0	0	0	0	560
BONDS	550	0	550	0	0	0	0	0	0	0	0	0	0	550
DEVELOPER CONTRIBUTION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Funding	560	0	560	0	0	0	0	0	0	0	0	0	0	560
\$537,064 spent and encumbered thr \$120,161 spent and encumbered thr Project Status: FY18 - Construction of	ough Februa completed.													
FY 2018 Budget	560	0	560	0	0	0	0	0	0	0	0	0		560
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

March 23, 2018 Howard County, MD Version : Executive Proposed

ROAD CONSTRUCTION PROJECTS

Number: J4211

Project: J4211-FY2007 ROADWAY CAPACITY IMPROVEMENTS

Description

A project to provide increased capacity and safety on various County roads and intersections.

Justification

This project is consistent with recommendations provided in the Comprehensive Transportation Plan.

Remarks

This project replaces J4164.

Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$85,500

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane mile of new roadway.



ROAD CONSTRUCTION PROJECTS

Number: J4211

Project: FY2007 ROADWAY CAPACITY IMPROVEMENTS

(In Thousands)					Five	Year Ca	pital Pro	gram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project	
PLANS & ENGINEERING	175	0	175	150	0	0	0	0	150	0	0	0	0	325	
LAND ACQUISITION	100	0	100	0	0	0	0	0	0	0	0	0	0	100	
CONSTRUCTION	1,100	0	1,100	500	0	0	0	0	500	0	0	0	0	1,600	
Total Expenditures	1,375	0	1,375	650	0	0	0	0	650	0	0	0	0	2,025	
BONDS	0	0	0	600	0	0	0	0	600	0	0	0	0	600	
DEVELOPER CONTRIBUTION	75	0	75	50	0	0	0	0	50	0	0	0	0	125	
EXCISE TAX BACKED BONDS	1,300	0	1,300	0	0	0	0	0	0	0	0	0	0	1,300	
Total Funding	1,375	0	1,375	650	0	0	0	0	650	0	0	0	0	2,025	

\$654,118 spent and encumbered through February 2018 \$654,118 spent and encumbered through February 2017

Project Status: FY18 - Gorman Road at Skylark Blvd. widening and Twin Rivers Road at Lynx Lane design underway.

Projects complete: Dobbin Rd at Dobbin Center Way, Long Gate Pkwy, Snowden River Pkwy near MD108, Snowden River Pkwy at Snowden Square Dr.

FY 2018 Budget	1,375	0	1,375	650	0	0	0	0	650	0	0	0		2,025
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: J4212-FY2007 STATE ROAD CONSTRUCTION

ROAD CONSTRUCTION PROJECTS

Number: J4212

Description

A project for cost sharing of new State roadway construction within Howard County that is consistent with the objectives of the Plan Howard 2030.

Justification

The State Highway Administration (SHA) cannot proceed with these projects in a timely manner without financial assistance. The local funding will accelerate the construction of State roadways in order to address capacity and safety problems in the County network.

Remarks

- 1. This project replaces J4177
- 2. Projects will be mutually identified by the State and County and prioritized by need.
- 3. Projects include: MD32 dualization, MD97 at Burntwoods Road, MD103 at Old Columbia Pike and US1 at MD103.
- 4. Grant represents State Aid Funds.
- 5. DEVELOPER CONTRIBUTION represents funds from adjacent development for the US1 and MD103 intersection improvements.

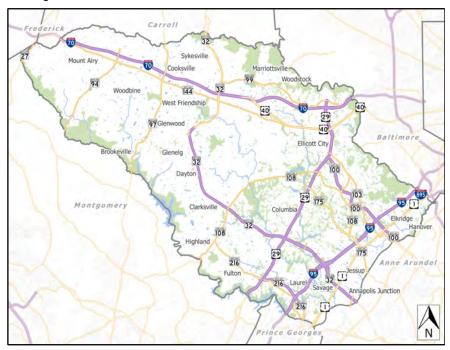
Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$1,586,250

Estimated annual maintenance costs upon construction completion: No Change.



ROAD CONSTRUCTION PROJECTS

Number: J4212

Project: FY2007 STATE ROAD CONSTRUCTION

(In Thousands)					Five		Master Plan							
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	3,200	0	3,200	0	0	0	0	0	0	0	C	0	0	3,200
LAND ACQUISITION	2,200	0	2,200	0	0	0	0	0	0	0	C	0	0	2,200
CONSTRUCTION	30,000	0	30,000	2,000	0	0	0	0	2,000	0	C	0	0	32,000
Total Expenditures	35,400	0	35,400	2,000	0	0	0	0	2,000	0	0	0	0	37,400
DEVELOPER CONTRIBUTION	350	0	350	0	0	0	0	0	0	0	C	0	0	350
EXCISE TAX	500	0	500	0	0	0	0	0	0	0	C	0	0	500
GRANTS	1,300	0	1,300	0	0	0	0	0	0	0	C	0	0	1,300
EXCISE TAX BACKED BONDS	33,250	0	33,250	2,000	0	0	0	0	2,000	0	C	0	0	35,250
Total Funding	35,400	0	35,400	2,000	0	0	0	0	2,000	0	0	0	0	37,400

\$32,535,831 spent and encumbered through February 2018 \$33,115,110 spent and encumbered through February 2017

Project Status : FY 18 - In design: MD32 dualization, Phase II from Linden Church Rd. to MD144, MD103 at Old Columbia Pike; US1 at MD103.

Project in Construction: MD32 dualization Phase I from MD108 to Linden Church Rd. MD97 at Burntwoods.

Completed: MD32 at Linden Church interchange.

FY 2018 Budget	35,400	0	35,400	0	0	0	0	0	0	0	0	0		35,400
Difference 2018 / 2019	0	0	0	2,000	0	0	0	0	2,000	0	0	0	0	2,000

ROAD CONSTRUCTION PROJECTS

Number: J4214

Project: J4214-FY2007 GUILFORD AT VOLLMERHAUSEN IMPROVEMENTS

Description

A project to design and construct improvements to the intersection of Guilford Road at Vollmerhausen Road and along Guilford Road to the west towards Carroll Heights Ave.

Justification

The vertical curve on Guilford Road creates problems for the traffic at the intersection with Vollmerhausen. Project was requested by the Traffic Division and the Community.

Remarks

- 1. A study determined the most feasible improvements include: improving a vertical curve, widening lanes, signalization at the intersection and pedestrian enhancements.
- 2. Project will be coordinated with K5040.
- 3. Project will be phased.
 - Phase 1: Install signal and relocate utilities.
 - Phase 2: Sight distance, pedestrian and drainage improvements.

Project Schedule

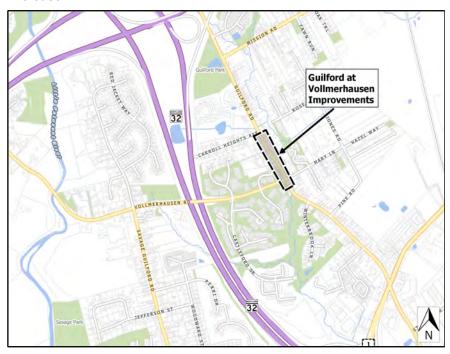
FY19 - Construction of Phase 2.

FY20 - Complete and close.

Operating Budget Impact

Annual Bond Redemption \$ \$159,300

Estimated annual maintenance costs upon construction completion: Increase.



ROAD CONSTRUCTION PROJECTS

Number: J4214

Project: FY2007 GUILFORD AT VOLLMERHAUSEN IMPROVEMENTS

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	470	0	470	0	0	0	0	0	0	0	0	0	0	470
LAND ACQUISITION	245	0	245	0	0	0	0	0	0	0	0	0	0	245
CONSTRUCTION	2,830	0	2,830	0	0	0	0	0	0	0	0	0	0	2,830
Total Expenditures	3,545	0	3,545	0	0	0	0	0	0	0	0	0	0	3,545
BONDS	2,970	0	2,970	0	0	0	0	0	0	0	0	0	0	2,970
DEVELOPER CONTRIBUTION	5	0	5	0	0	0	0	0	0	0	0	0	0	5
EXCISE TAX BACKED BONDS	570	0	570	0	0	0	0	0	0	0	0	0	0	570
Total Funding	3,545	0	3,545	0	0	0	0	0	0	0	0	0	0	3,545

\$1,153,954 spent and encumbered through February 2018 \$1,029,921 spent and encumbered through February 2017 Project Status: FY18 - Phase 2 construction underway. Design revisions complete.

Phase 1 Signal construction complete.

FY 2018 Budget	3,545	0	3,545	0	0	0	0	0	0	0	0	0		3,545
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ROAD CONSTRUCTION PROJECTS

Number: J4215

Project: J4215-FY2007 MARRIOTTSVILLE ROAD from US40 to MD144

Description

Realignment and shoulder improvements to Marriottsville Road from US40 to MD144. Marriottsville Road is classified as a Major Collector.

Justification

Increased traffic will necessitate the improvements to the road. Project requested by the Traffic Division.

Remarks

- 1. The County is coordinating with the State Highway Administration regarding the improvements at US40 and MD144.
- 2. Project to be coordinated with J4205 at US40.
- 3. The improvements will be constructed in phases. Phase 1 will be the US40 intersection and the road for approximately 850 feet to the south.
- 4. The County may enter into an agreement with the developer to construct the Marriottsville Road improvements.
- 5. Phase 2 will be the widening of Marriottsville Rd. from MD144 to the US40 intersection improvements.

Project Schedule

FY19-FY20 - Design, Land Acquisition and Construction (Phase 1)

FY21 - Design and Land Acquisition (Phase 2)

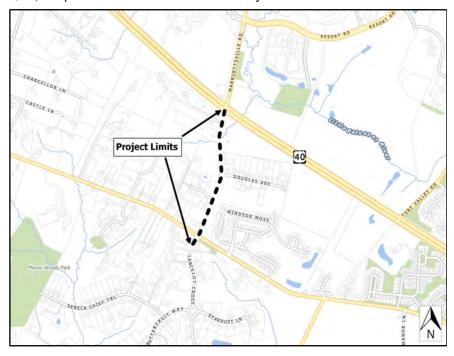
FY22 - Construction (Phase 2)

FY23 - Complete and close

Operating Budget Impact

Annual Bond Redemption \$ \$422,550

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane mile of new roadway.



Difference 2018 / 2019

ROAD CONSTRUCTION PROJECTS

Number: J4215

Project: FY2007 MARRIOTTSVILLE ROAD from US40 to MD144

1,500 (1,000)

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,040	0	1,040	0	400	0	0	0	400	0	0	0	0	1,440
LAND ACQUISITION	1,500	0	1,500	0	0	0	0	0	0	0	0	0	0	1,500
CONSTRUCTION	3,200	0	3,200	1,500	2,000	0	0	0	3,500	0	0	0	0	6,700
Total Expenditures	5,740	0	5,740	1,500	2,400	0	0	0	3,900	0	0	0	0	9,640
BONDS	0	0	0	1,500	2,400	0	0	0	3,900	0	0	0	0	3,900
EXCISE TAX	250	0	250	0	0	0	0	0	0	0	0	0	0	250
EXCISE TAX BACKED BONDS	5,490	0	5,490	0	0	0	0	0	0	0	0	0	0	5,490
Total Funding	5,740	0	5,740	1,500	2,400	0	0	0	3,900	0	0	0	0	9,640
\$952,798 spent and encumbered thro \$922,643 spent and encumbered thro Project Status : FY18 - Design and lar	ough Februa	ary 2017	S.											
FY 2018 Budget	5,740	0	5,740	0	3,400	0	0	0	3,400	0	0	0		9,140

March 23, 2018 Howard County, MD Version : Executive Proposed

ROAD CONSTRUCTION PROJECTS **Project: J4219-FY2015 ENGINEERING STUDY PROGRAM**

Description

A project for engineering roads to conform to the Plan Howard 2030 Highways Map to evaluate realignment schemes and to support the transportation and safety needs of the County. This effort will also address those roads identified by Department of Planning and Zoning as a result of traffic impact studies.

Justification

Preliminary engineering studies must be conducted to determine the right-of-way needs and alignments of future developer roads and existing roads impacted by the General Plan so that the resultant network is functional and safe. Studies done under this program are considered a refinement to the General Plan.

Remarks

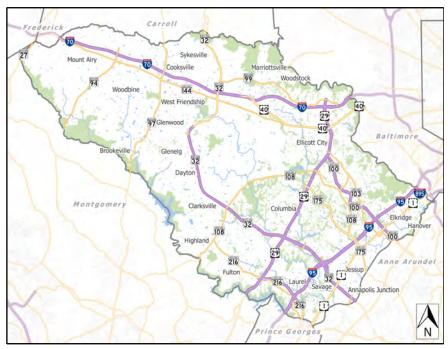
Project Schedule

Program

Operating Budget Impact

Estimated annual maintenance costs upon construction completion: No Change.

Number: J4219



ROAD CONSTRUCTION PROJECTS

Project: FY2015 ENGINEERING STUDY PROGRAM

Number: J4219

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	200	0	200	50	0	0	0	0	50	0	C	0	0	250
Total Expenditures	200	0	200	50	0	0	0	0	50	0	0	0	0	250
PAY AS YOU GO	200	0	200	50	0	0	0	0	50	0	C	0	0	250
Total Funding	200	0	200	50	0	0	0	0	50	0	0	0	0	250
\$80,293 spent and encumbered th \$118,518 spent and encumbered t Project Status : FY18 - Clarksville F	hrough Februa	ry 2017												
FY 2018 Budget	200	50	250	0	0	0	0	0	0	0	C	0		250
Difference 2018 / 2019	0	(50)	(50)	50	0	0	0	0	50	0	C	0	0	0

ROAD CONSTRUCTION PROJECTS

Number: J4220

Project: J4220-FY2014 DEVELOPER/COUNTY SHARED IMPROVEMENTS

Description

A project to facilitate the design, land acquisition and construction of roadway modifications and their appurtenances at various intersections or roadway segments. This occurs when the development of land is conducive to future comprehensive roadway development to which the current developer should contribute or when the roadway structural capacity, width transitions, bypass lanes, horizontal and vertical geometric changes for safety or to compliment developer improvements are anticipated in the near future. All improvements will be compatible with the General Plan and its engineering study refinements.

Justification

This project will serve as a receiving project to accumulate developer contributions for a future comprehensive capital project or for the immediate construction of improvements to improve traffic flow or safety along substandard segments.

Remarks

The County may enter into an agreement for the developer to construct the County's improvements.

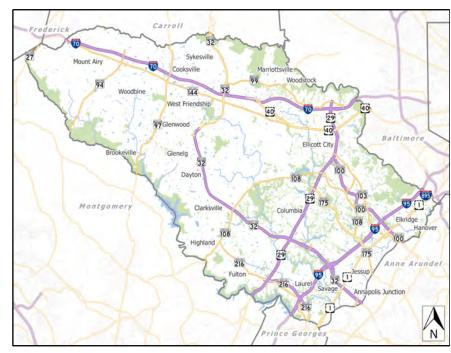
Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$19,125

Estimated annual maintenance costs upon construction completion: Increase.



ROAD CONSTRUCTION PROJECTS

Number: J4220

Project: FY2014 DEVELOPER/COUNTY SHARED IMPROVEMENTS

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	200	(75)	125	0	0	0	0	0	0	0	0	0	0	125
LAND ACQUISITION	75	0	75	0	0	0	0	0	0	0	0	0	0	75
CONSTRUCTION	575	75	650	0	0	0	0	0	0	0	0	0	0	650
Total Expenditures	850	0	850	0	0	0	0	0	0	0	0	0	0	850
DEVELOPER CONTRIBUTION	350	75	425	0	0	0	0	0	0	0	0	0	0	425
EXCISE TAX BACKED BONDS	500	(75)	425	0	0	0	0	0	0	0	0	0	0	425
Total Funding	850	0	850	0	0	0	0	0	0	0	0	0	0	850
\$0 spent and encumbered through F spent and encumbered through Feb Project Status :		8								1				
FY 2018 Budget	850	150	1,000	0	0	0	0	0	0	0	0	0		1,000
Difference 2018 / 2019	0	(150)	(150)	0	0	0	0	0	0	0	0	0	0	(150)

ROAD CONSTRUCTION PROJECTS

Project: J4222-FY2008 SNOWDEN RIVER PARKWAY WIDENING BROKENLAND TO OAKLAND MILLS Number: J4222

Description

A project to design and construct a widening of Snowden River Parkway (intermediate arterial) by adding a third lane and sidewalks from Broken Land Parkway to Oakland Mills Road.

Justification

This project will develop the third lane on each side between these two intersections, will increase the capacity of the roadway and provide an improved level of service. Project requested by the Traffic Division.

Remarks

- 1. Project will be phased.
- 2. The County may enter into an agreement(s) for adjacent developers to construct the County improvements.

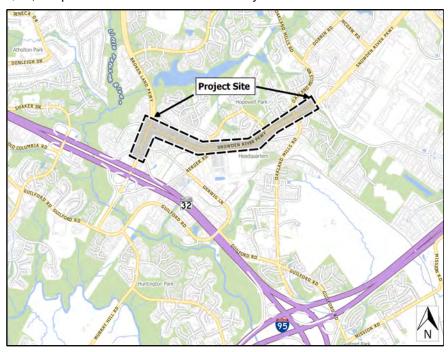
Project Schedule

FY19 - Design, land acquisition and SRP/BLP intersection construction. FY20-FY23 - Future construction phases.

Operating Budget Impact

Annual Bond Redemption \$ \$546,525

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane mile of new roadway.



Difference 2018 / 2019

ROAD CONSTRUCTION PROJECTS

Number: J4222

Project: FY2008 SNOWDEN RIVER PARKWAY WIDENING BROKENLAND TO OAKLAND MILLS

0

(9,350)

(9,350)

1,600

					Five	Year Ca	pital Prog	gram				Master F	Plan	
ppropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,060	0	1,060	100	750	0	0	0	850	0	0	0	0	1,910
LAND ACQUISITION	1,400	0	1,400	0	0	0	0	0	0	0	0	0	0	1,400
CONSTRUCTION	460	0	460	1,500	7,000	0	0	0	8,500	0	0	0	0	8,960
ADMINISTRATION	5	0	5	0	0	0	0	0	0	0	0	0	0	5
Total Expenditures	2,925	0	2,925	1,600	7,750	0	0	0	9,350	0	0	0	0	12,275
BONDS	0	0	0	1,600	7,750	0	0	0	9,350	0	0	0	0	9,350
DEVELOPER CONTRIBUTION	130	0	130	0	0	0	0	0	0	0	0	0	0	130
EXCISE TAX BACKED BONDS	2,795	0	2,795	0	0	0	0	0	0	0	0	0	0	2,795
Total Funding	2,925	0	2,925	1,600	7,750	0	0	0	9,350	0	0	0	0	12,275

7,750

0

0

0

9,350

0

0

0

0

0

March 23, 2018 Howard County, MD Version : Executive Proposed

ROAD CONSTRUCTION PROJECTS

Number: J4225

Project: J4225-FY2008 ELLICOTT CENTER DR CONNECTION to ROGERS

Description

A project to design and construct a road to connect Ellicott Center Drive to Rogers Avenue.

Justification

This connection will aid in the flow of traffic in the US29/US40/Ridge Road area.

Remarks

The County entered into an agreement for the developer to construct the County improvements.

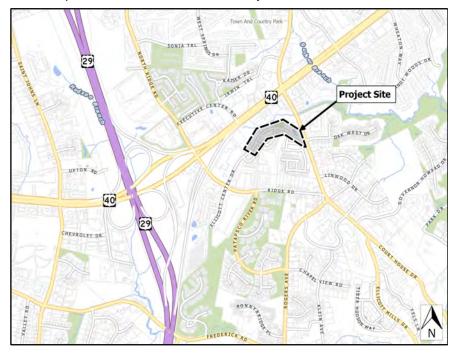
Project Schedule

FY19 - Complete, Close.

Operating Budget Impact

Annual Bond Redemption \$ \$83,700

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane mile of new roadway.



ROAD CONSTRUCTION PROJECTS

Number: J4225

Project: FY2008 ELLICOTT CENTER DR CONNECTION to ROGERS

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	345	0	345	0	0	0	0	0	0	0	0	0	0	345
LAND ACQUISITION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
CONSTRUCTION	1,500	0	1,500	0	0	0	0	0	0	0	0	0	0	1,500
ADMINISTRATION	5	0	5	0	0	0	0	0	0	0	0	0	0	5
Total Expenditures	1,860	0	1,860	0	0	0	0	0	0	0	0	0	0	1,860
EXCISE TAX BACKED BONDS	1,860	0	1,860	0	0	0	0	0	0	0	0	0	0	1,860
Total Funding	1,860	0	1,860	0	0	0	0	0	0	0	0	0	0	1,860
\$1,746,701 spent and encumbered th \$1,690,573 spent and encumbered th Project Status : FY18 - Construction o	rough Febr	uary 2017	npleted.											
FY 2018 Budget	1,860	0	1,860	0	0	0	0	0	0	0	0	0		1,860
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ROAD CONSTRUCTION PROJECTS

Number: J4226

Project: J4226-FY2008 ROAD PROJECTS CONTINGENCY FUND

Description

A project to provide funds for unanticipated needs related to bridges and roadways. This can include design, land acquisition and construction related to the bridge, storm drainage, roadway and pedestrian programs.

Justification

This fund would allow the County to act on situations where funding is needed before a formal capital project can be developed, or when additional funds are needed in existing capital projects. Examples include: when land comes available that meets the future needs of the County to serve the public interest and no funded Capital Project exists; for roadway improvements when project funding is needed sooner than anticipated; or, when a project's costs are higher than projected and delaying the project is not in the best public interest.

Remarks

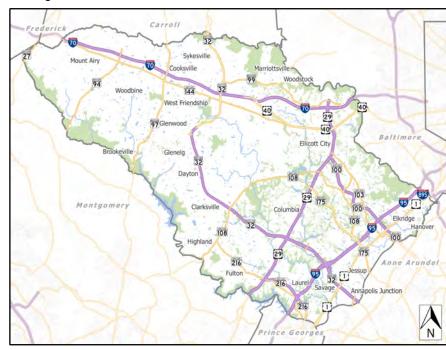
Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$99,000

Estimated annual maintenance costs upon construction completion: No Change.



ROAD CONSTRUCTION PROJECTS

Number: J4226

Project: FY2008 ROAD PROJECTS CONTINGENCY FUND

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	175	0	175	0	0	0	0	0	0	0	0	0	0	175
LAND ACQUISITION	825	0	825	100	0	0	0	0	100	0	0	0	0	925
CONSTRUCTION	1,000	0	1,000	100	0	0	0	0	100	0	0	0	0	1,100
Total Expenditures	2,000	0	2,000	200	0	0	0	0	200	0	0	0	0	2,200
BONDS	550	0	550	200	0	0	0	0	200	0	0	0	0	750
EXCISE TAX BACKED BONDS	1,450	0	1,450	0	0	0	0	0	0	0	0	0	0	1,450
Total Funding	2,000	0	2,000	200	0	0	0	0	200	0	0	0	0	2,200

\$1,028,843 spent and encumbered through February 2018 \$1,028,843 spent and encumbered through February 2017

Project Status: FY18 - US1/MD175 storm drain gunite repair, D1172 Tower Drive and Dorsey Run storm drain improvements, Crescent Walkway, Columbia East Marketplace Storm Drain, Savage study, Crescent sidewalk, Old Scaggsville Rd, Ten Oaks Rd, Main St sidewalk, K5044 St. Johns Ln sidewalk, Forest Conservation Mitigation land purchase, J4223 Burntwoods Rd construction, D1143 Naylor Ave construction, Tamar Dr roadbed purchase, J4157 land acquisition and J4142 environmental study for land acquisition.

FY 2018 Budget	2,000	0	2,000	200	0	0	0	0	200	0	0	0		2,200
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ROAD CONSTRUCTION PROJECTS

Number: J4229

Project: J4229-FY2008 WHISKEY BOTTOM ROAD IMPROVEMENTS

Description

A project to design and construct improvements to Whiskey Bottom Road from just west of US1 to the Anne Arundel County Line. Work will include the US1 / Whiskey Bottom Road intersection. Anticipated improvements include through lanes, turn lanes, intersection controls and pedestrian improvements.

Justification

Anticipated new development in the immediate area and increases in traffic associated with BRAC and its accompanying development will increase the traffic along US1 and Whiskey Bottom Road. The improvements will help to mitigate the expected increases in traffic.

Remarks

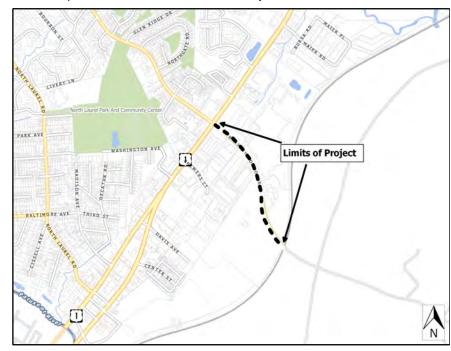
- 1. The project is supported by the Traffic Division.
- 2. A study will be conducted to develop the full scope of the project.
- 3. Developer contributions are expected to help fund the project.
- 4. This project may be used as a funding source for public improvements constructed by others under an agreement approved by the County Council.
- 5. Other funds are from County share of Race Track funds allocation.

Project Schedule

FY19 - Study and design.

Operating Budget Impact

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane mile of new roadway.



ROAD CONSTRUCTION PROJECTS

Number: J4229

Project: FY2008 WHISKEY BOTTOM ROAD IMPROVEMENTS

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	520	0	520	0	0	0	0	0	0	0	0	0	0	520
LAND ACQUISITION	300	0	300	0	0	0	0	0	0	0	0	0	0	300
Total Expenditures	820	0	820	0	0	0	0	0	0	0	0	0	0	820
DEVELOPER CONTRIBUTION	300	0	300	0	0	0	0	0	0	0	0	0	0	300
OTHER SOURCES	520	0	520	0	0	0	0	0	0	0	0	0	0	520
Total Funding	820	0	820	0	0	0	0	0	0	0	0	0	0	820
\$30 spent and encumbered through \$30 spent and encumbered through Project Status : FY18 - Study in progr	February 20													
FY 2018 Budget	820	0	820	0	0	0	0	0	0	0	0	0		820
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

March 23, 2018 Howard County, MD Version : Executive Proposed

Project: J4230-FY2017 SANNER ROAD IMPROVEMENTS

ROAD CONSTRUCTION PROJECTS

Number: J4230

Description

A project to provide bicycle compatibility by widening the existing 10-foot lanes to 12 feet and filling in the missing shoulders along both sides of the road. This work will include acquisition of the necessary land for the widening and the accompanying storm water management.

Justification

The current lanes are not a full 12 feet wide and should be upgraded for the current standard. The County has completed bicycle compatibility improvements on Guilford Road which connects to Sanner Road. There is a large contingent of bicyclists at the Johns Hopkins Applied Physics Laboratory that could make use of the shoulders. The shoulders will also provide for less maintenance of the road because the car and truck traffic will not be driving so close to the edge of the road upon completion of these improvements.

Remarks

- 1. Project is part of the County's Bicycle Master Plan.
- 2. Project to be coordinated with W8306.
- 3. Request represents project advancement.

Project Schedule

FY19 - Design.

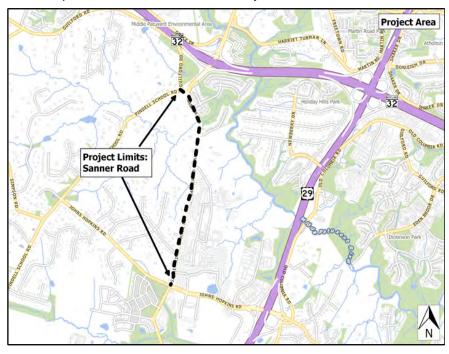
FY20 - Land Acquisition.

FY21 - Construction .

Operating Budget Impact

Annual Bond Redemption \$ \$119,250

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane mile of new roadway.



ROAD CONSTRUCTION PROJECTS

Project: FY2017 SANNER ROAD IMPROVEMENTS

Number: J4230

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	150	50	200	0	200	0	0	0	200	0	0	C	0	400
LAND ACQUISITION	0	0	0	250	0	0	0	0	250	0	0	C	0	250
CONSTRUCTION	0	0	0	0	2,000	0	0	0	2,000	0	0	C	0	2,000
Total Expenditures	150	50	200	250	2,200	0	0	0	2,450	0	0	C	0	2,650
BONDS	150	50	200	250	2,200	0	0	0	2,450	0	0	C	0	2,650
Total Funding	150	50	200	250	2,200	0	0	0	2,450	0	0	0	0	2,650
\$48,463 spent and encumbered the spent and encumbered through F Project Status :		y 2018												
FY 2018 Budget	150	55	205	725	0	0	0	0	725	0	0	C)	930
Difference 2018 / 2019	0	(5)	(5)	(475)	2,200	0	0	0	1,725	0	0	C	0	1,720

ROAD CONSTRUCTION PROJECTS

Number: J4231

Project: J4231-FY2013 ELKRIDGE MAIN STREET IMPROVEMENTS

Description

A project to replace the curb, gutter and sidewalks along Main Street from Old Washington Road to Brumbaugh Street in Elkridge.

Justification

Project was recommended by the Bureau of Highways at the request of the local citizens. The scope of work is beyond the capacity of the Bureau of Highways.

Remarks

- 1. Project development congintent upon donation of necessary right-of-way from adjacent property owners.
- 2. Request represents project advancement.

Project Schedule

FY19 - Design.

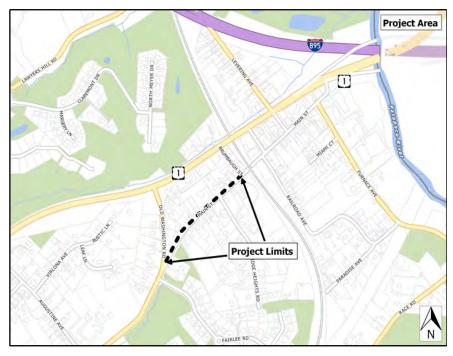
FY20 - Land Acquisition.

FY21 - Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$33,750

Estimated annual maintenance costs upon construction completion: Decrease.



ROAD CONSTRUCTION PROJECTS

Number: J4231

Project: FY2013 ELKRIDGE MAIN STREET IMPROVEMENTS

In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
ppropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	100	30	130	0	0	0	0	0	0	0	0	0	0	130
LAND ACQUISITION	0	0	0	120	0	0	0	0	120	0	0	0	0	120
CONSTRUCTION	0	0	0	0	500	0	0	0	500	0	0	0	0	500
Total Expenditures	100	30	130	120	500	0	0	0	620	0	0	0	0	750
BONDS	100	30	130	120	500	0	0	0	620	0	0	0	0	750
Total Funding	100	30	130	120	500	0	0	0	620	0	0	0	0	750

Project Status : FY18 - Design in progress.

FY 2018 Budget	100	50	150	500	0	0	0	0	500	0	0	0		650
Difference 2018 / 2019	0	(20)	(20)	(380)	500	0	0	0	120	0	0	0	0	100

March 23, 2018 Howard County, MD Version : Executive Proposed

ROAD CONSTRUCTION PROJECTS

Project: J4237-FY2010 MD175/OAKLAND MILLS ROAD INTERCHANGE Number: J4237

Description

A project to design and construct a new MD175/Oakland Mills Road interchange and the re-alignment of Oakland Mills Road through the proposed Blandair Park.

Justification

This project will provide access to the proposed Blandair Park as shown on the approved master plan for the park. The improvements will also provide vicinity roadway network connectivity and capacity for the area bordering the south side of the park.

Remarks

- 1. This project will be coordinated with Capital Project N3102.
- 2. Design will be consistent with the Blandair Park Master Plan.
- 3. This project will require approval by the State Highway Administration to establish a break in the MD175 right-of-way.
- 4. The improvements will be in two phases. Phase I will be the southern roadway improvements. Phase II will be the northern roadway and bridge construction.
- 5. FY19 Requested Excise Tax funds not available for project advancement.

Project Schedule

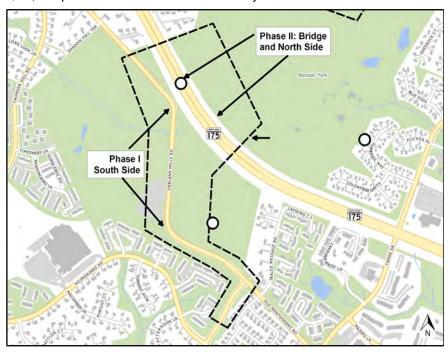
FY20 - Construction of Phase II.

FY21 - Construction of Phase II.

Operating Budget Impact

Annual Bond Redemption \$ \$1,102,500

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane mile of new roadway.



ROAD CONSTRUCTION PROJECTS

Number: J4237

Project: FY2010 MD175/OAKLAND MILLS ROAD INTERCHANGE

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	4,000	0	4,000	1,500	0	0	0	0	1,500	0	0	0	0	5,500
CONSTRUCTION	10,000	0	10,000	9,000	0	0	0	0	9,000	0	0	0	0	19,000
Total Expenditures	14,000	0	14,000	10,500	0	0	0	0	10,500	0	0	0	0	24,500
BONDS	0	0	0	10,500	0	0	0	0	10,500	0	0	0	0	10,500
EXCISE TAX BACKED BONDS	14,000	0	14,000	0	0	0	0	0	0	0	0	0	0	14,000
Total Funding	14,000	0	14,000	10,500	0	0	0	0	10,500	0	0	0	0	24,500

\$11,469,765 spent and encumbered through February 2018

\$10,660,177 spent and encumbered through February 2017
Project Status: FY18 - Phase I construction completed. Design of Phase II in progress.

FY 2018 Budget	14,000	9,500	23,500	0	0	0	0	0	0	0	0	0		23,500
Difference 2018 / 2019	0	(9,500)	(9,500)	10,500	0	0	0	0	10,500	0	0	0	0	1,000

Project deferred due to no available funding in Road Excise Tax.

Project: J4239-FY2014 OLD ROXBURY ROAD Number: J4239

Description

A project to design and construct improvements to Old Roxbury Road. Old Roxbury Road is classified as a local road.

Justification

Old Roxbury Road is a public road but it does not meet current standards. Recent development will increase the traffic on the road. The Community has requested the improvements and the request is supported by the Bureau of Highways. The improvements are beyond the capability of the Bureau of Highways.

Remarks

- 1. Construction may depend on donation of necessary easements and/or resident cost share participation.
- 2. Request represents program advancement.

Project Schedule

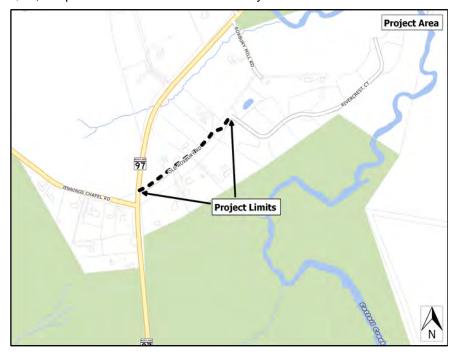
FY19 - Land acquisition and Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$47,700

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane mile of new roadway.

ROAD CONSTRUCTION PROJECTS



ROAD CONSTRUCTION PROJECTS

Project: FY2014 OLD ROXBURY ROAD Number: J4239

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	235	0	235	0	0	0	0	0	0	0	0	0	0	235
LAND ACQUISITION	75	0	75	0	0	0	0	0	0	0	0	0	0	75
CONSTRUCTION	500	250	750	0	0	0	0	0	0	0	0	0	0	750
Total Expenditures	810	250	1,060	0	0	0	0	0	0	0	0	0	0	1,060
BONDS	635	250	885	0	0	0	0	0	0	0	0	0	0	885
EXCISE TAX BACKED BONDS	175	0	175	0	0	0	0	0	0	0	0	0	0	175
Total Funding	810	250	1,060	0	0	0	0	0	0	0	0	0	0	1,060
\$109,476 spent and encumbered thre \$98,861 spent and encumbered thro Project Status : FY18 - Land acquisition	ugh Februar on in progres	ry 2017 ss.	940		0		0							046
FY 2018 Budget	810	0	810	0	0	0	0	0	0	0	0	0		810
Difference 2018 / 2019	0	250	250	0	0	0	0	0	0	0	0	0	0	250

ROAD CONSTRUCTION PROJECTS

Number: J4240

Project: J4240-ROADWAY REHABILITATION/SAFETY PROGRAM

Description

A project to correct safety or structural problems on existing roads. Projects include but are not limited to improvements to roadway geometrics, elimination of roadside hazards, pavement and/or base failures.

Justification

This project is intended to correct deficiencies in the County road system that have been identified in studies or recommended by the Bureau of Highways' Maintenance or Traffic Divisions.

Remarks

This project replaces J4168

Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$76,500

Estimated annual maintenance costs upon construction completion: Decrease.



ROAD CONSTRUCTION PROJECTS

Number: J4240

Project: ROADWAY REHABILITATION/SAFETY PROGRAM

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	150	0	150	50	50	50	0	0	150	0	C) 0	0	300
LAND ACQUISITION	0	0	0	50	50	50	0	0	150	0	C) 0	0	150
CONSTRUCTION	0	0	0	250	250	250	250	250	1,250	0	C) 0	0	1,250
Total Expenditures	150	0	150	350	350	350	250	250	1,550	0	C) 0	0	1,700
BONDS	150	0	150	350	350	350	250	250	1,550	0	C) 0	0	1,700
Total Funding	150	0	150	350	350	350	250	250	1,550	0	0) 0	0	1,700
\$0 spent and encumbered through spent and encumbered through F Project Status :		8												
FY 2018 Budget	150	350	500	350	350	250	250	0	1,200	0	C) (1,700
Difference 2018 / 2019	0	(350)	(350)	0	0	100	0	250	350	0	C) (0	0

ROAD CONSTRUCTION PROJECTS

Number: J4241

Project: J4241-FY2011 US RT 1 RT 175 to MONTEVIDEO ROAD

Description

A project for the design and reconstruction of approximately 2,500 feet of US1 from MD175 to Montevideo Road.

Justification

These improvements will be the first County capital project to implement the RT1 Corridor Improvement Strategy which includes a new roadway typical section. It is located proximate to two large mixed use developments and is a complement to developer installed improvements.

Remarks

- 1. Project to be designed and constructed by Howard County.
- 2. Project to be coordinated with J4206, Montevideo Road.

Project Schedule

FY19 - Land Acquisition.

FY20 - Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$788,625

Estimated annual maintenance costs upon construction completion: No Increase.



Difference 2018 / 2019

ROAD CONSTRUCTION PROJECTS

Number: J4241

Project: FY2011 US RT 1 RT 175 to MONTEVIDEO ROAD

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	750	0	750	1,100	0	0	0	0	1,100	0	0	0	0	1,850
LAND ACQUISITION	1,750	0	1,750	0	0	0	0	0	0	0	0	0	0	1,750
CONSTRUCTION	3,050	0	3,050	11,000	0	0	0	0	11,000	0	0	0	0	14,050
Total Expenditures	5,550	0	5,550	12,100	0	0	0	0	12,100	0	0	0	0	17,650
BONDS	750	0	750	12,100	0	0	0	0	12,100	0	0	0	0	12,850
DEVELOPER CONTRIBUTION	50	75	125	0	0	0	0	0	0	0	0	0	0	125
EXCISE TAX BACKED BONDS	4,750	(75)	4,675	0	0	0	0	0	0	0	0	0	0	4,675
Total Funding	5,550	0	5,550	12,100	0	0	0	0	12,100	0	0	0	0	17,650
Total Funding 675,856 spent and encumbered thro 675,856 spent and encumbered thro	5,550 ugh Februa ugh Februa	0 ary 2018 ary 2017	5,550	12,100						-				
	ary 2017	afety	evalu	ıation.										

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March 23, 2018 Howard County, MD Version : Executive Proposed

ROAD CONSTRUCTION PROJECTS

Number: J4242

Project: J4242-FY2014 BRIGHTON DAM ROAD at HIGHLAND ROAD ROUNDABOUT

Description

A project to design and construct a roundabout at the intersection of Brighton Dam Road and Highland Road. The current intersection is a four way stop.

Justification

Requested by the Traffic Division to reduce vehicular stops, delays and queues experienced at the four ways, stop controlled intersection.

Remarks

Project to be coordinated with F5972 for the installation of a water storage tank.

Project Schedule

FY19 - Design.

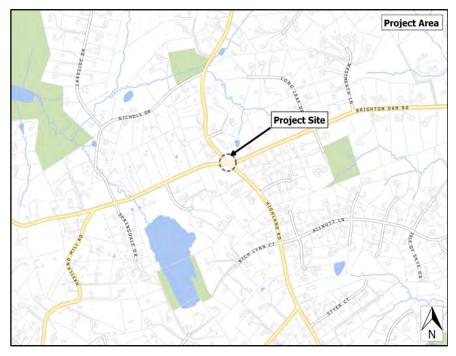
FY20 - Land Acquisition.

FY21 - Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$97,425

Estimated annual maintenance costs upon construction completion: Increase.



ROAD CONSTRUCTION PROJECTS

Number: J4242

Project: FY2014 BRIGHTON DAM ROAD at HIGHLAND ROAD ROUNDABOUT

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	265	0	265	0	0	0	0	0	0	0	0	0	0	26
LAND ACQUISITION	0	0	0	100	0	0	0	0	100	0	0	0	0	100
CONSTRUCTION	0	0	0	0	1,800	0	0	0	1,800	0	0	0	0	1,800
Total Expenditures	265	0	265	100	1,800	0	0	0	1,900	0	0	0	0	2,16
BONDS	0	0	0	100	1,800	0	0	0	1,900	0	0	0	0	1,900
EXCISE TAX BACKED BONDS	265	0	265	0	0	0	0	0	0	0	0	0	0	26
Total Funding	265	0	265	100	1,800	0	0	0	1,900	0	0	0	0	2,16

FY 2018 Budget	265	125	390	1,100	0	0	0	0	1,100	0	0	0		1,490
Difference 2018 / 2019	0	(125)	(125)	(1,000)	1,800	0	0	0	800	0	0	0	0	675

ROAD CONSTRUCTION PROJECTS Project: J4245-FY2016 SCENIC ROADS ENHANCEMENT Number: J4245

Description

A project to plan, design, and install enhancements at certain historic or high visibility locations along the National Scenic Byway or County scenic roads. Projects will preserve and enhance the intrinsic historic and scenic qualities of the roads and byways.

Justification

The Scenic Roads Act of 1994 established protections for features of designated roadways that contribute to the scenic character of the roadway. Certain historic features (e.g. mile markers, monuments) are often central to a roadway's designation and therefore, may be eligible for enhancements.

Remarks

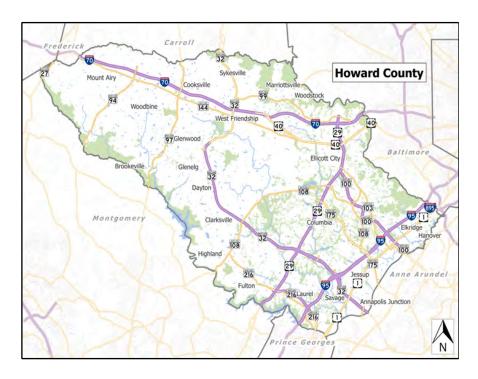
Funds may be used to acquire easements or ROW adjacent to the roadway/byway to accommodate the improvements.

Project Schedule

FY18/19 - Inventory potential sites for improvements; establish design goals; identify and design pilot, and construction.

Operating Budget Impact

Annual Bond Redemption \$ \$8,100



ROAD CONSTRUCTION PROJECTS

Number: J4245

Project: FY2016 SCENIC ROADS ENHANCEMENT

(In Thousands)					Fiv	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	30	0	30	0	0	0	0	0	0	0	0	0	0	30
CONSTRUCTION	200	(50)	150	0	0	0	0	0	0	0	0	0	0	150
Total Expenditures	230	(50)	180	0	0	0	0	0	0	0	0	0	0	180
BONDS	180	0	180	0	0	0	0	0	0	0	0	0	0	180
GRANTS	50	(50)	0	0	0	0	0	0	0	0	0	0	0	0
Total Funding	230	(50)	180	0	0	0	0	0	0	0	0	0	0	180

\$27,264 spent and encumbered through February 2018

spent and encumbered through February 2017

Project Status : Preliminary plans have been prepared for the mile marker 14 site at the corner of Frederick Rd and US40. Final design and construction in FY19.

FY 2018 Budget	230	0	230	0	0	0	0	0	0	0	0	0		230
Difference 2018 / 2019	0	(50)	(50)	0	0	0	0	0	0	0	0	0	0	(50)

ROAD CONSTRUCTION PROJECTS

Number: J4246

Project: J4246-FY2018 OLD MONTGOMERY ROAD AT BRIGHTFIELD ROAD INTERSECTION IMPROVEMENTS

Description

A project to reconfigure the intersection of Old Montgomery Road and Brightfield Road for safety and increased capacity. This project will determine the type of reconfiguration and then proceed to design, acquire the necessary land and construct the improvement.

Justification

The present intersection is a remnant of the time when Old Montgomery Road was a through road connecting Old Waterloo Road (MD108) to Montgomery Road (MD103). Old Montgomery Road no longer allows northbound traffic to access Montgomery Road (MD103); there is only a southbound movement from Montgomery Road to Old Montgomery Road. This significantly decreases the traffic on Old Montgomery Road north of Brightfield Road. The main traffic movement today is to and from Brightfield Road to Old Montgomery Road heading to the south toward Old Waterloo Road (MD108).

Remarks

Project to be coordinated with Trotter's Knoll development.

Project Schedule

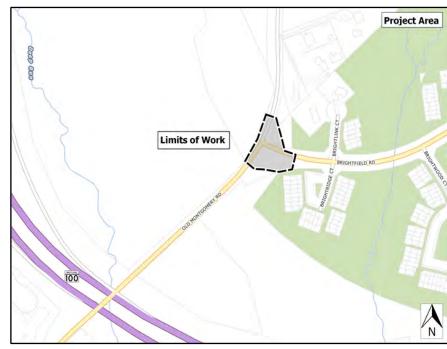
FY19 - Design.

FY20 - Land Acquisition and Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$82,125

Estimated annual maintenance costs upon construction completion: No Change.



ROAD CONSTRUCTION PROJECTS

Number: J4246

Project: FY2018 OLD MONTGOMERY ROAD AT BRIGHTFIELD ROAD INTERSECTION IMPROVEMENTS

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	200	0	200	75	0	0	0	0	75	0	0	0	0	275
LAND ACQUISITION	0	0	0	50	0	0	0	0	50	0	0	0	0	50
CONSTRUCTION	0	0	0	1,500	0	0	0	0	1,500	0	0	0	0	1,500
Total Expenditures	200	0	200	1,625	0	0	0	0	1,625	0	0	0	0	1,825
BONDS	200	0	200	1,625	0	0	0	0	1,625	0	0	0	0	1,825
Total Funding	200	0	200	1,625	0	0	0	0	1,625	0	0	0	0	1,825

\$0 spent and encumbered through February 2018 spent and encumbered through February 2017 Project Status:

FY 2018 Budget	200	50	250	1,575	0	0	0	0	1,575	0	0	0		1,825
Difference 2018 / 2019	0	(50)	(50)	50	0	0	0	0	50	0	0	0	0	0

ROAD CONSTRUCTION PROJECTS

Project: J4247-FY2017 KIT KAT ROAD Number: J4247

Description

A project to improve the safety of Kit Kat Road by widening the road enough to allow for the traffic to be able to pass each other more easily. Kit Kat Road is classified as a major collector road but is only built as a local road with a 20 feet width paving. It has significant truck traffic because of the types of businesses on the road.

Justification

The State Highway Administration is going to improve the intersection of US1 and Kit Kat Road by installing a traffic signal and deceleration lane. At the public hearing the public asked that the road be widened a little to make it easier to maneuver the road with all of the large trucks that use the road. The Traffic Division and the Engineering Division support this request.

Remarks

Project design to begin after the construction of SHA project to install a traffic light at the intersection of US-1 and Kit Kat Road.

Project Schedule

FY19 - Study and Design.

FY20 - Design and Land Acquisition.

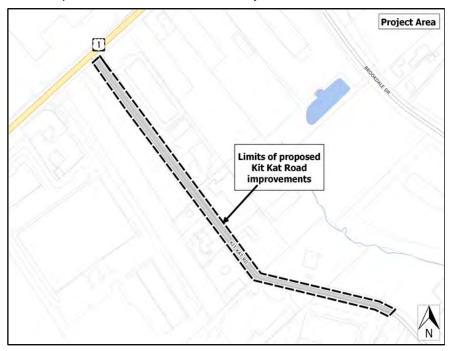
FY21 - Land acquisition.

FY22 - Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$79,875

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane mile of new roadway.



Fiscal 2019 Capital Budget Project: FY2017 KIT KAT ROAD

ROAD CONSTRUCTION PROJECTS

Number: J4247

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	175	0	175	0	0	0	0	0	0	0	0	0	0	175
LAND ACQUISITION	0	0	0	200	0	0	0	0	200	0	0	0	0	200
CONSTRUCTION	0	0	0	0	1,400	0	0	0	1,400	0	0	0	0	1,400
Total Expenditures	175	0	175	200	1,400	0	0	0	1,600	0	0	0	0	1,775
BONDS	175	0	175	200	1,400	0	0	0	1,600	0	0	0	0	1,775
Total Funding	175	0	175	200	1,400	0	0	0	1,600	0	0	0	0	1,775
\$0 spent and encumbered through spent and encumbered through F Project Status :		8												
FY 2018 Budget	175	200	375	0	1,400	0	0	0	1,400	0	0	0		1,775
Difference 2018 / 2019	0	(200)	(200)	200	0	0	0	0	200	0	0	0	0	C

Project: J4248-FY2017 SAVAGE AREA COMPLETE STREETS

ROAD CONSTRUCTION PROJECTS

Number: J4248

Description

The project includes complete street improvements in Savage, Maryland to enhance multimodal travel for pedestrians, bicyclists, transit, and automobiles. ESD/LID practices will also be implemented along the roadsides to enhance management of stormwater runoff.

Justification

A separate project (S6290) will relocate existing sewers currently located on private property to existing public right-of-way and/or utility easements. The sewer realignments will place several of the relocated sewer lines within the existing streets which will impact existing pavement, curbs, sidewalks and other roadside amenities. This project will enhance the required roadway rehabilitation by implementing complete streets improvements in conjunction with the utility improvements to minimize costs and impacts to the community. The proposed complete street improvements will include missing sidewalk segments, sidewalk upgrades meeting ADA guidelines, curb extensions (bulb-outs), intersection modifications, shared use pavement markings (sharrows), signing, microbioretention facilities, pervious pavement, and landscaping designed to reduce motor vehicle speeds, enhance pedestrian and bicycle travel and improve water quality treatment along the local streets. The stormwater ESD/LID practices will help the County achieve its Watershed Implementation Plan (WIP) objectives.

Remarks

- 1. 95% of plans and cost estimates were completed on October 30, 2017.
- 2. A community meeting was held on July 14, 2015 and June 23, 2016 to present the concepts to the Savage Community. The proposed improvements are supported by the community.
- 3. Request deferred project advancement due to lack of available funding.

Project Schedule

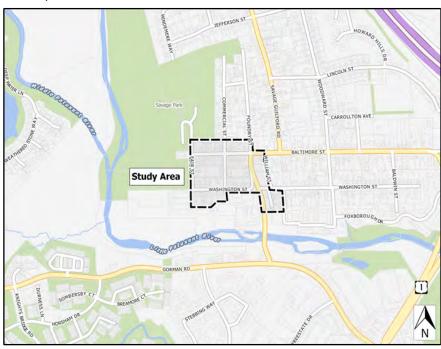
FY20 - Start Construction.

FY21 - Complete Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$119,250

Complete street improvements will not significantly affect future operating and maintenance requirements. Stormwater ESD/LID practices will require annual maintenance.



ROAD CONSTRUCTION PROJECTS

Number: J4248

Project: FY2017 SAVAGE AREA COMPLETE STREETS

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	300	0	300	300	0	0	0	0	300	0	0	0	0	600
LAND ACQUISITION	25	0	25	25	0	0	0	0	25	0	0	0	0	50
CONSTRUCTION	0	0	0	2,000	0	0	0	0	2,000	0	0	0	0	2,000
Total Expenditures	325	0	325	2,325	0	0	0	0	2,325	0	0	0	0	2,650
BONDS	325	0	325	2,325	0	0	0	0	2,325	0	0	0	0	2,650
Total Funding	325	0	325	2,325	0	0	0	0	2,325	0	0	0	0	2,650
\$325,000 spent and encumbered t \$296,806 spent and encumbered t Project Status : FY18 - Design Con	hrough Februa	•												
FY 2018 Budget	325	2,300	2,625	0	0	0	0	0	0	0	0	0		2,625
Difference 2018 / 2019	0	(2,300)	(2,300)	2,325	0	0	0	0	2,325	0	0	0	0	25

FY19 - Project on hold due to budget constraints.

ROAD CONSTRUCTION PROJECTS

Project: J4249-FY2017 MD 100 AT MD 103 Number: J4249

Description

A project to design and construct a replacement of the roundabouts of MD103 on the north and south sides of MD100 with a diverging diamond interchange in order to increase the capacity of the interchange. MD100 is a principal arterial and MD103 is a minor arterial.

Justification

The intersection is unable to handle the traffic at peak hours and restricts the movement of cars off of MD100 onto MD103 (Meadowridge Road).

Remarks

- 1. Project will require the cooperation of the State Highway Administration as most of the existing infrastructure and land is theirs.
- 2. OTHER represents State funding.

Project Schedule

FY19 - Design and Land Acquisition.

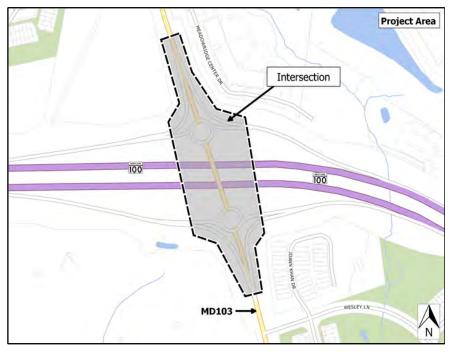
FY20 - Construction.

FY21 - Construction and Close.

Operating Budget Impact

Annual Bond Redemption \$ \$90,000

Estimated annual maintenance costs upon construction completion: No Change.



ROAD CONSTRUCTION PROJECTS

Project: FY2017 MD 100 AT MD 103 Number: J4249

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	750	0	750	0	0	0	0	0	0	0	C	0	0	750
CONSTRUCTION	5,000	0	5,000	0	0	0	0	0	0	0	C	0	0	5,000
Total Expenditures	5,750	0	5,750	0	0	0	0	0	0	0	0	0	0	5,750
BONDS	250	0	250	0	0	0	0	0	0	0	C	0	0	250
DEVELOPER CONTRIBUTION	500	0	500	0	0	0	0	0	0	0	C	0	0	500
OTHER SOURCES	3,250	0	3,250	0	0	0	0	0	0	0	C	0	0	3,250
EXCISE TAX BACKED BONDS	1,750	0	1,750	0	0	0	0	0	0	0	C	0	0	1,750
Total Funding	5,750	0	5,750	0	0	0	0	0	0	0	0	0	0	5,750

\$1,200 spent and encumbered through February 2018

spent and encumbered through February 2017
Project Status: FY18 - Coordinating with MDSHA on MOU for improvements. Preliminary design (30%) plans completed.

FY 2018 Budget	5,750	0	5,750	0	0	0	0	0	0	0	0	0		5,750
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ROAD CONSTRUCTION PROJECTS

Number: J4250

Project: J4250-FY2020 HOWARD ROAD IMPROVEMENTS

Description

A project to improve the safety of Howard Road north of Big Branch Drive. Howard Road is a scenic road.

Justification

Roadway improvements are requested by the Bureau of Highways. The existing sight distance for the road in this area is below standard and poses safety concerns for the travelling public.

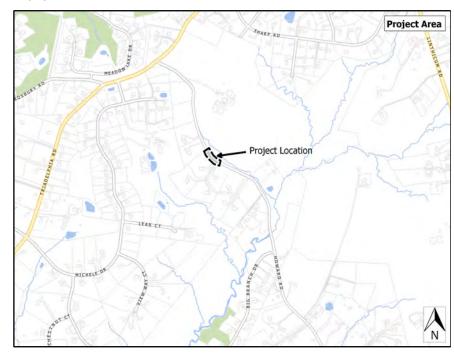
Remarks

Project Schedule

Operating Budget Impact

Annual Bond Redemption \$ \$20,250

Estimated annual maintenance costs upon construction completion: None.



ROAD CONSTRUCTION PROJECTS

Number: J4250

Project: FY2020 HOWARD ROAD IMPROVEMENTS

(In Thousands)	Five Year Capital Program												Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	0	0	75	0	0	0	0	75	0	0	0	0	75
LAND ACQUISITION	0	0	0	0	25	0	0	0	25	0	0	0	0	25
CONSTRUCTION	0	0	0	0	0	350	0	0	350	0	0	0	0	350
Total Expenditures	0	0	0	75	25	350	0	0	450	0	0	0	0	450
BONDS	0	0	0	75	25	350	0	0	450	0	0	0	0	450
Total Funding	0	0	0	75	25	350	0	0	450	0	0	0	0	450
\$0 spent and encumbered through spent and encumbered through F Project Status :		8												
FY 2018 Budget	0	75	75	25	350	0	0	0	375	0	0	C)	450
Difference 2018 / 2019	0	(75)	(75)	50	(325)	350	0	0	75	0	0	C	0	0

ROAD CONSTRUCTION PROJECTS

Number: J4251

Project: J4251-FY2018 LIME KILN ROAD IMPROVEMENTS

Description

A project to improve the roadway and drainage along Lime Kiln Road between MD 216 and Reservoir Road. Lime Kiln Road is a minor collector.

Justification

Culvert replacement has been requested by the Bureau of Highways. The existing culvert floods regularly, necessitating the closure of the roadway. This, along with the existing sub-standard roadway, causes a safety concern and an inconvenience to the travelling public. The project will be phased for short term culvert replacement and long term roadway improvements.

Remarks

Request represents project initiation.

Project Schedule

FY19 - Phase I Design and Land Acquisition.

FY20 - Phase I Land Acquisition and Phase II Design.

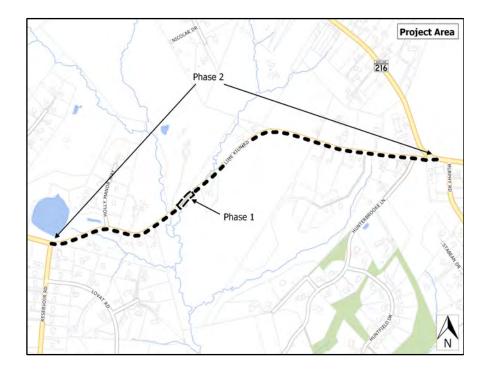
FY21 - Phase I Construction and Phase II Land Acquisition.

FY22 - Phase II Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$456,750

Estimated annual maintenance costs upon completion: Decrease.



FY 2018 Budget

Difference 2018 / 2019

ROAD CONSTRUCTION PROJECTS

Number: J4251

10,150

0

0

Project: FY2018 LIME KILN ROAD IMPROVEMENTS

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	150	0	150	350	0	0	0	0	350	0	0	0	0	50
LAND ACQUISITION	0	0	0	50	100	0	0	0	150	0	0	0	0	150
CONSTRUCTION	0	0	0	0	500	9,000	0	0	9,500	0	0	0	0	9,500
Total Expenditures	150	0	150	400	600	9,000	0	0	10,000	0	0	0	0	10,15
BONDS	150	0	150	400	600	9,000	0	0	10,000	0	0	0	0	10,150
Total Funding	150	0	150	400	600	9,000	0	0	10,000	0	0	0	0	10,15

9,000

(8,400)

0

9,000

0

0

0

9,600

400

0

0

550

(400)

150

400

(400)

600

(200)

ROAD CONSTRUCTION PROJECTS

Project: J4252-FY2019 SYSTEMIC INFRASTRUCTURE IMPROVEMENTS TO DNTN ELLICOTT CITY Number: J4252

Description

A project to improve or upgrade road and drainage infrastructure systems as a result of the 2016 Ellicott City Flood. Work will include, but not be limited to: paving, curb and gutter, storm drainage conveyance systems, sidewalks, streetscape, crosswalks, ADA ramps, street lighting, and traffic signal adjustments in the historic Ellicott City perimeter area.

Justification

The 2016 flood caused numerous and obvious road and drainage infrastructure deficiencies. DPW could only address the most urgent needs during the emergency declaration period. Main Street was temporarily repaired, but restoration is not complete. Roads and drainage systems surrounding Main Street such as Old Columbia Pike, Court Avenue, Church Street, Emory Street and Fels Lane also require attention. Upgrades, replacements, corrections and renovations are needed to sustain the public infrastructure into the future.

Remarks

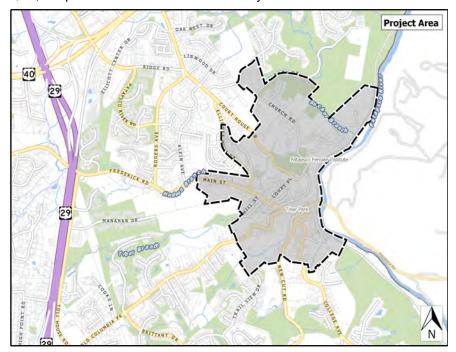
- 1. Project to be coordinated with C0337.
- 2. FY18 State Bond Bill not received.
- 3. Request represents project initiation.

Project Schedule

Operating Budget Impact

Annual Bond Redemption \$ \$114,750

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane mile of new roadway.



ROAD CONSTRUCTION PROJECTS

Number: J4252

Project: FY2019 SYSTEMIC INFRASTRUCTURE IMPROVEMENTS TO DNTN ELLICOTT CITY

(In Thousands)	n Thousands)						pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	250	250	100	0	0	0	0	100	0	0	0	0	350
LAND ACQUISITION	0	100	100	0	0	0	0	0	0	0	0	0	0	100
CONSTRUCTION	0	1,000	1,000	1,100	0	0	0	0	1,100	0	0	0	0	2,100
Total Expenditures	0	1,350	1,350	1,200	0	0	0	0	1,200	0	0	0	0	2,550
BONDS	0	1,350	1,350	1,200	0	0	0	0	1,200	0	0	0	0	2,550
Total Funding	0	1,350	1,350	1,200	0	0	0	0	1,200	0	0	0	0	2,550

\$0 spent and encumbered through February 2018

spent and encumbered through February 2017
Project Status: FY18 - Design underway for drainage improvements along Emory St. at Church Rd.; St. Paul at Maryland Ave.; and Old Columbia Pike at Main St.

FY 2018 Budget	0	2,700	2,700	0	0	0	0	0	0	0	0	0		2,700
Difference 2018 / 2019	0	(1,350)	(1,350)	1,200	0	0	0	0	1,200	0	0	0	0	(150)

March 23, 2018 **Howard County, MD Version: Executive Proposed**

ROAD CONSTRUCTION PROJECTS

Number: J4711

Project: J4711-FY2011 DEVELOPER INSPECTION PROGRAM

Description

A project to provide engineering and related services, computer management, asset management, inspection, testing, staff training, supplies, tools, equipment and vehicles necessary for site inspections for the implementation of developer projects that make additions to the public road and storm water management systems. All projects undertaken with this authority will be fully funded by private funds received from developers requesting such additions to the public system.

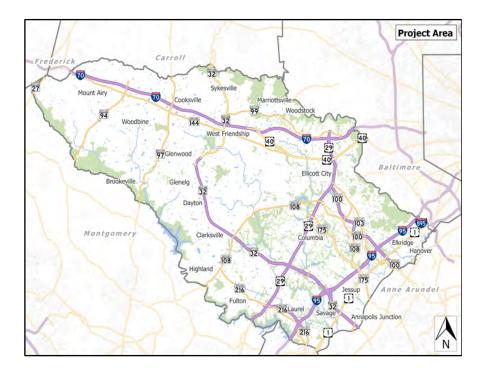
Justification

This project is necessary to provide an appropriation for engineering and inspection services. The services are necessary for determining the acceptability of developer work into the infrastructure of the County.

Remarks

Project Schedule

Ongoing Program



ROAD CONSTRUCTION PROJECTS

Number: J4711

Project: FY2011 DEVELOPER INSPECTION PROGRAM

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	9,000	1,000	10,000	3,000	0	3,000	0	3,000	9,000	0	0	0	0	19,000
Total Expenditures	9,000	1,000	10,000	3,000	0	3,000	0	3,000	9,000	0	0	0	0	19,000
DEVELOPER CONTRIBUTION	9,000	1,000	10,000	3,000	0	3,000	0	3,000	9,000	0	0	0	0	19,000
Total Funding	9,000	1,000	10,000	3,000	0	3,000	0	3,000	9,000	0	0	0	0	19,000
\$4,504,376 spent and encumbered th \$3,951,536 spent and encumbered the Project Status :														
FY 2018 Budget	9,000	3,000	12,000	0	3,000	0	3,000	0	6,000	0	0	0		18,000
Difference 2018 / 2019	0	(2,000)	(2,000)	3,000	(3,000)	3,000	(3,000)	3,000	3,000	0	0	0	0	1,000

Howard County, MD FY2019 Executive Proposed Capital Budget Program: SIDEWALKS

	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
K5035 FY1998 SCHOOL ROUTE PATHWAYS or SIDEWALKS	В	1,233	500	1,733	0	500	0	0	0	2,233
This project is for the installation of sidewalks and/or pathways to provide for improved routes for school	Р	155	0	155	0	0	0	0	0	155
children.	Total	1,388	500	1,888	0	500	0	0	0	2,388
K5036 FY1998 ROUTINE SIDEWALK / WALKWAY EXTENSIONS	В	1,020	600	1,620	0	800	0	0	0	2,420
A project to design and construct routine sidewalk and walkway extensions up to about 1,000 feet in length.	D	50	0	50	0	0	0	0	0	50
,	Total	1,070	600	1,670	0	800	0	0	0	2,470
K5040 FY2005 GUILFORD RD PEDESTRIAN/BIKE	В	685	0	685	450	0	0	0	0	1,135
A project for the design and construction of sidewalk on one or both sides of Guilford Road between Oakland Mills	Р	40	0	40	0	0	0	0	0	40
Road and US1.	Total	725	0	725	450	0	0	0	0	1,175
K5043 SIDEWALK REPAIR PROGRAM This project is for the repair of deteriorated sidewalks and	В	790	0	790	0	0	0	0	0	790
driveway aprons that are in the public rights-of-way.	0	481	0	481	35	25	25	25	25	616
	Р	3,394	200	3,594	965	975	975	975	975	8,459
	Total	4,665	200	4,865	1,000	1,000	1,000	1,000	1,000	9,865
K5054 FY2003 ROADSIDE IMPROVEMENT PROGRAM This project is to repair, replace or install sidewalks, ramps,	В	1,965	0	1,965	0	0	0	0	0	1,965
curbs, trees, and guardrails to comply with applicable Federal, State and County codes, and to reduce liabilities	D	350	0	350	0	0	0	0	0	350
due to deteriorating appurtenances within County rights-of- way.	Р	1,400	0	1,400	500	500	500	500	500	3,900
way.	Total	3,715	0	3,715	500	500	500	500	500	6,215
K5061 FY2007 PEDESTRIAN PLAN PROJECTS A project for the ongoing evaluation, design and	В	1,441	500	1,941	650	650	650	0	0	3,891
construction of pedestrian improvements listed in the Howard County Pedestrian Master Plan.	D	300	0	300	0	0	0	0	0	300
Tionard Sound Foundation Master Flam.	G	220	0	220	0	0	0	0	0	220
	0	0	650	650	0	0	0	0	0	650
	Р	750	0	750	0	0	0	0	0	750
	Total	2,711	1,150	3,861	650	650	650	0	0	5,811

March 23, 2018 Howard County, MD Version : Executive Proposed

Howard County, MD FY2019 Executive Proposed Capital Budget Program: SIDEWALKS

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
K5062 FY2009 STATE ROADS SIDEWALK RETROFIT PROGRAM	В	200	0	200	50	50	0	0	0	300
A project to design and construct improved pedestrian access along State roads.	G	100	0	100	50	50	0	0	0	200
	Total	300	0	300	100	100	0	0	0	500
K5063 FY2017 NORTH LAUREL ROAD SIDEWALK A project for the design and construction of a sidewalk	В	75	0	75	25	105	0	0	0	205
along the southwest side of North Laurel Road from Linville Ave to US1.	Total	75	0	75	25	105	0	0	0	205
K5064 FY2017 MISSION ROAD SIDEWALK A project to install sidewalk along parts of Mission Road.	В	75	60	135	200	0	0	0	0	335
A project to install sidewalk along parts of inission road.	Total	75	60	135	200	0	0	0	0	335
K5065 FY2018 DONCASTER DRIVE SIDEWALK	Р	50	145	195	0	0	0	0	0	195
A project to construct approximately 1,200 LF of sidewalk along Doncaster Drive from Roundhill Road to Hale Haven Road.	Total	50	145	195	0	0	0	0	0	195
K5066 FY2014 BICYCLE PLAN PROJECTS A project for the implementation of the comprehensive	В	1,816	800	2,616	1,250	1,250	1,600	2,400	2,400	11,516
Howard County Bicycle Master Plan.	D	104	0	104	100	100	100	100	100	604
	G	571	140	711	1,350	500	500	500	500	4,061
	Р	100	0	100	0	0	0	0	0	100
	Total	2,591	940	3,531	2,700	1,850	2,200	3,000	3,000	16,281
K5068 ADA RAMPS UPGRADE PROGRAM	В	900	600	1,500	3,000	3,000	3,000	3,000	3,000	16,500
A program to upgrade sidewalk ramps and curb cuts in compliance with Federal Americans with Disabilities Act 1990 (ADA) requirements.	Total	900	600	1,500	3,000	3,000	3,000	3,000	3,000	16,500
K5069 BITUMINOUS CURB and GUTTER REPLACEMENT PROGRAM	В	900	600	1,500	1,000	1,000	1,000	1,000	1,000	6,500
A program to replace deteriorated or damaged curbs.	Total	900	600	1,500	1,000	1,000	1,000	1,000	1,000	6,500
SIDEWALKS Total		19,165	4,795	23,960	9,625	9,505	8,350	8,500	8,500	68,440

March 23, 2018 Howard County, MD Version : Executive Proposed

Howard County, MD FY2019 Executive Proposed Capital Budget (\$000) SIDE-SIDEWALKS

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	11,100	3,660	14,760
D	DEVELOPER CONTRIBUTION	804	0	804
G	GRANTS	891	140	1,031
0	OTHER SOURCES	481	650	1,131
Р	PAY AS YOU GO	5,889	345	6,234
Total		19,165	4,795	23,960

2019 Executive Proposed 5 Year Capital Budget Project Type Summary (SIDE-SIDEWALKS)

Rev	renue Source	Prior Approp	Current FY	2020	2021	2022	2023	2024	5 Year Total
В	BONDS	11,100	3,660	6,625	7,355	6,250	6,400	6,400	47,790
D	DEVELOPER CONTRIBUTION	804	0	100	100	100	100	100	1,304
G	GRANTS	891	140	1,400	550	500	500	500	4,481
0	OTHER SOURCES	481	650	35	25	25	25	25	1,266
Р	PAY AS YOU GO	5,889	345	1,465	1,475	1,475	1,475	1,475	13,599
Tota	al	19,165	4,795	9,625	9,505	8,350	8,500	8,500	68,440

March 23, 2018 Howard County, MD Version : Executive Proposed

Project: K5035-FY1998 SCHOOL ROUTE PATHWAYS or SIDEWALKS

Description

This project is for the installation of sidewalks and/or pathways to provide for improved routes for school children.

Justification

The public school system requested the construction of sidewalks and pathways. Installation of these sidewalks and/or pathways are primarily for children walking to and from school. Other recreational and pedestrian transportation benefits can be gained by their installation.

Remarks

- 1. This project will be coordinated with the Public School System.
- 2. This project is compatible with the 1999 Sidewalk Policy for placing sidewalks in existing residential communities.
- 3. Sites next in priority to be evaluated are Deep Run Parkway connection to Mayfield MS, Winter's Lane, Florey Road, and Ilchester Road (Beechwood Point Court to Ellis Lane).
- 4. Request represents program advancement.

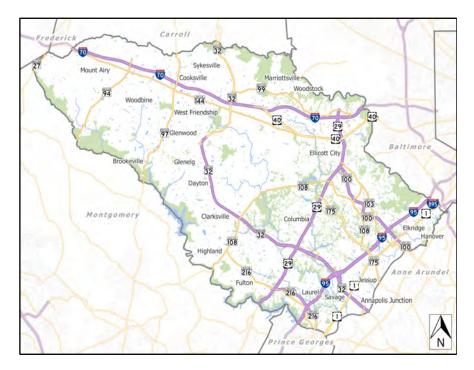
Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$100,485

Estimated annual maintenance costs upon completion: No Change.



SIDEWALKS Number: K5035

Project: FY1998 SCHOOL ROUTE PATHWAYS or SIDEWALKS

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	272	150	422	0	150	0	0	0	150	0	0	0	0	572
LAND ACQUISITION	135	0	135	0	0	0	0	0	0	0	0	0	0	135
CONSTRUCTION	973	350	1,323	0	350	0	0	0	350	0	0	0	0	1,673
ADMINISTRATION	8	0	8	0	0	0	0	0	0	0	0	0	0	8
Total Expenditures	1,388	500	1,888	0	500	0	0	0	500	0	0	0	0	2,388
BONDS	1,233	500	1,733	0	500	0	0	0	500	0	0	0	0	2,233
PAY AS YOU GO	155	0	155	0	0	0	0	0	0	0	0	0	0	155
Total Funding	1,388	500	1,888	0	500	0	0	0	500	0	0	0	0	2,388

\$798,383 spent and encumbered through February 2018 \$800,431 spent and encumbered through February 2017

Project Status: FY18 - Projects in design - Montgomery Road (Rowanberry to Lawyer's Hill Apts.).

Projects completed - Northfield Rd., Crescent Pathway, Gorman Rd, Old Waterloo Rd, Aladdin Dr, Vollmerhausen Rd, Pathway to Mt. Hebron HS, Pathway between Furrow Ave and Mist Haven Ct, St. Johns Ln and Corporate Ct.

FY 2018 Budget	1,388	500	1,888	0	0	0	0	0	0	0	0	0		1,888
Difference 2018 / 2019	0	0	0	0	500	0	0	0	500	0	0	0	0	500

Project: K5036-FY1998 ROUTINE SIDEWALK / WALKWAY EXTENSIONS

Description

A project to design and construct routine sidewalk and walkway extensions up to about 1,000 feet in length.

Justification

Projects will be initiated by public request or where a need is created by development or to connect existing walks.

Remarks

- 1. This project is compatible with the 1999 Sidewalk Policy for placing sidewalks in existing residential communities.
- 2. Construction of some projects may be dependent on donation of necessary easements.
- 3. Current project locations include: Old Annapolis Rd. (Oak Hill to Woodland), Sybert Dr. (Columbia Hills to Meadowbrook), MD108 at Jericho Rd.
- 4. Request represents program advancement.

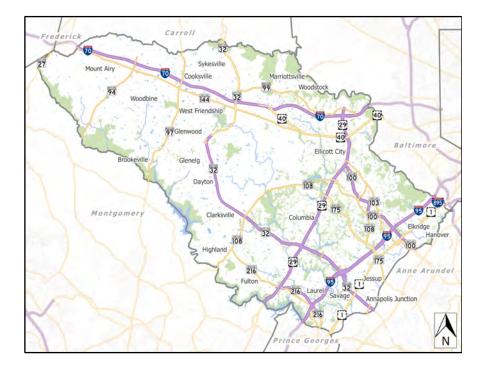
Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$108,900

Estimated annual maintenance costs upon completion: No Change.



Project: FY1998 ROUTINE SIDEWALK / WALKWAY EXTENSIONS

SIDEWALKS Number: K5036

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	275	150	425	0	150	0	0	0	150	0	C	0	0	575
LAND ACQUISITION	20	0	20	0	0	0	0	0	0	0	C	0	0	20
CONSTRUCTION	771	450	1,221	0	650	0	0	0	650	0	C	0	0	1,871
ADMINISTRATION	2	0	2	0	0	0	0	0	0	0	C	0	0	2
EQUIPMENT & FURNISHINGS	2	0	2	0	0	0	0	0	0	0	C	0	0	2
Total Expenditures	1,070	600	1,670	0	800	0	0	0	800	0	0	0	0	2,470
BONDS	1,020	600	1,620	0	800	0	0	0	800	0	C	0	0	2,420
DEVELOPER CONTRIBUTION	50	0	50	0	0	0	0	0	0	0	C	0	0	50
Total Funding	1,070	600	1,670	0	800	0	0	0	800	0	0	0	0	2,470

\$744,010 spent and encumbered through February 2018 \$714,937 spent and encumbered through February 2017

Project Status: FY18 - Montgomery Rd. at Lynn Ln construction.

Construction complete: Falls Run Rd., MD 108 at Snowden River Parkway, Burnside Dr., Mellenbrook Rd., Mayfield Ave., Stonecrest Dr., Freetown Rd. at Quarterstaff Rd., Montgomery Rd., Ridge Rd., Harmony Ln./King's Grant Pathway, Madison Ave., Font Hill Dr., Rivendell Ln., Whitworth Way, Executive Park Dr., St. John's Ln. and Springfield Dr. In Design: MD 108 at Richards Valley Rd.

Study Complete: Baltimore Ave., Old Waterloo Rd., Oakland Mills Rd. (Malindy Cir. N to BGE lines), Sybert Dr. (Columbia Hills Ct. to Meadowbrook)

FY 2018 Budget	1,070	800	1,870	0	0	0	0	0	0	0	0	0		1,870
Difference 2018 / 2019	0	(200)	(200)	0	800	0	0	0	800	0	0	0	0	600

Project: K5040-FY2005 GUILFORD RD PEDESTRIAN/BIKE IMPROVE

Description

A project for the design and construction of sidewalk on one or both sides of Guilford Road between Oakland Mills Road and US1.

Justification

Significant pedestrian and bicycle activity has been observed on Guilford Road. Housing in the area generates a substantial number of trips. The need for improvements to Guilford Road is cited in the Howard County Comprehensive Transportation Plan.

Remarks

- 1. Department of Recreation and Parks requested extension of sidewalks from US1 and Oakland Mills Road to Guilford Park.
- 2. Project to be coordinated with Phase 4 of D1140, and J4214 to be coordinated with Phase II.
- 3. Project to be completed in phases: Additional phasing to be determined in the future.
- 4. Construction of this project may be dependent upon donation of easements and/or resident cost share participation.

Project Schedule

FY19 - Phase I Land Acquisition.

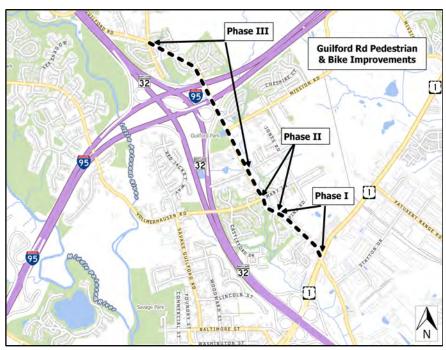
FY20 - Phase I Construction.

FY21-FY24 - Future Phases.

Operating Budget Impact

Annual Bond Redemption \$ \$51,075

Estimated annual maintenance costs upon completion: No change for sidewalks.



SIDEWALKS Number: K5040

Project: FY2005 GUILFORD RD PEDESTRIAN/BIKE IMPROVE

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	215	0	215	0	0	0	0	0	0	0	0	0	0	215
LAND ACQUISITION	320	0	320	0	0	0	0	0	0	0	0	0	0	320
CONSTRUCTION	180	0	180	450	0	0	0	0	450	0	0	0	0	630
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	725	0	725	450	0	0	0	0	450	0	0	0	0	1,175
BONDS	685	0	685	450	0	0	0	0	450	0	0	0	0	1,135
PAY AS YOU GO	40	0	40	0	0	0	0	0	0	0	0	0	0	40
Total Funding	725	0	725	450	0	0	0	0	450	0	0	0	0	1,175

\$317,318 spent and encumbered through February 2018 \$317,278 spent and encumbered through February 2017 Project Status: FY18 - Phase I Design complete; land acquisition needed for (23) properties. Phase II - Winterbrook to Vollmerhausen construction complete.

FY 2018 Budget	725	1,710	2,435	0	0	0	0	0	0	0	0	0		2,435
Difference 2018 / 2019	0	(1,710)	(1,710)	450	0	0	0	0	450	0	0	0	0	(1,260)

Project: K5043-SIDEWALK REPAIR PROGRAM

SIDEWALKS

Number: K5043

Description

This project is for the repair of deteriorated sidewalks and driveway aprons that are in the public rights-of-way.

Justification

Program has been developed in response to Council Bill #63/1988 for sidewalk repair by County contract, with the provision that abutting property owners shall reimburse the County for expenses or identified repairs over a five-year period.

Remarks

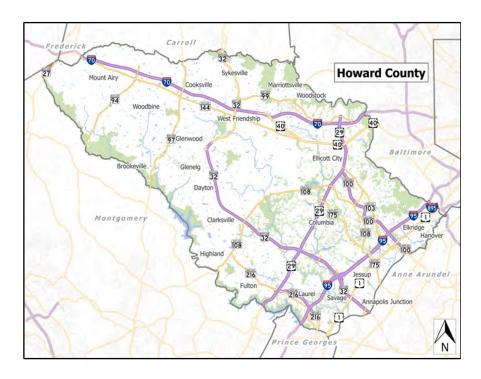
- 1. This project was first funded in FY99 as a replacement for one begun in FY92.
- 2. The programmed monies will be used on a first-come first-served basis.
- 3. OTHER funds represent private homeowner reimbursements.
- 4. County will be responsible for walks damaged by tree root and/or County water and sewer connections or related causes.
- 5. County owns and maintains approx.4,734,200 linear feet (900 miles) of sidewalks.

Project Schedule

Approximately 10 miles of sidewalks replaced per \$1M budgeted. Close at program completion.

Operating Budget Impact

Annual Bond Redemption \$ \$35,550



Project: SIDEWALK REPAIR PROGRAM

SIDEWALKS

Number: K5043

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	256	4	260	25	25	25	25	25	125	25	25	25	25	485
CONSTRUCTION	4,334	196	4,530	975	975	975	975	975	4,875	975	975	975	975	13,305
ADMINISTRATION	75	0	75	0	0	0	0	0	0	0	0	0	0	75
Total Expenditures	4,665	200	4,865	1,000	1,000	1,000	1,000	1,000	5,000	1,000	1,000	1,000	1,000	13,865
BONDS	790	0	790	0	0	0	0	0	0	0	0	0	0	790
OTHER SOURCES	481	0	481	35	25	25	25	25	135	25	25	25	25	716
PAY AS YOU GO	3,394	200	3,594	965	975	975	975	975	4,865	975	975	975	975	12,359
Total Funding	4,665	200	4,865	1,000	1,000	1,000	1,000	1,000	5,000	1,000	1,000	1,000	1,000	13,865

\$4,664,187 spent and encumbered through February 2018 \$3,850,470 spent and encumbered through February 2017 Project Status :

FY 2018 Budget	4,665	1,000	5,665	1,000	1,000	1,000	1,000	1,000	5,000	1,000	1,000	1,000		13,665
Difference 2018 / 2019	0	(800)	(800)	0	0	0	0	0	0	0	0	0	1,000	200

Project: K5054-FY2003 ROADSIDE IMPROVEMENT PROGRAM

SIDEWALKS Number: K5054

Description

This project is to repair, replace or install sidewalks, ramps, curbs, trees, and guardrails to comply with applicable Federal, State and County codes, and to reduce liabilities due to deteriorating appurtenances within County rights-of-way.

Justification

In accordance with Federal Americans with Disabilities Act and Council Resolution 195/1985 to provide disability ramps throughout the County, and to replace damaged curb, trees and guardrails that could pose other hazards.

Remarks

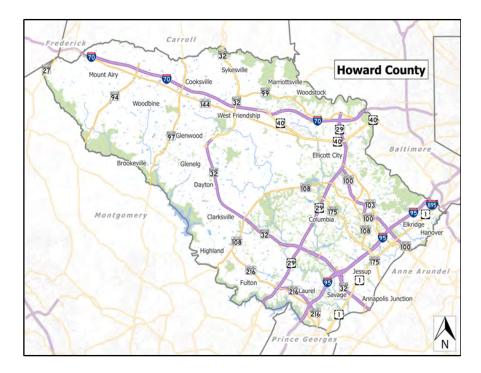
- 1. Locations to be determined on a requested or as needed basis.
- 2. Developer monies can be used in lieu of them making limited improvements.

Project Schedule

Project completed as funding available. Close at program completion.

Operating Budget Impact

Annual Bond Redemption \$\$88,425



Difference 2018 / 2019

SIDEWALKS

500

500

500

500

500

Number: K5054

2,000

Project: FY2003 ROADSIDE IMPROVEMENT PROGRAM

(500)

0

(500)

0

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	200	0	200	10	10	10	10	10	50	10	10	10	10	290
CONSTRUCTION	3,495	0	3,495	480	480	480	480	480	2,400	480	480	480	480	7,815
ADMINISTRATION	20	0	20	10	10	10	10	10	50	10	10	10	10	110
Total Expenditures	3,715	0	3,715	500	500	500	500	500	2,500	500	500	500	500	8,215
BONDS	1,965	0	1,965	0	0	0	0	0	0	0	0	0	0	1,965
DEVELOPER CONTRIBUTION	350	0	350	0	0	0	0	0	0	0	0	0	0	350
PAY AS YOU GO	1,400	0	1,400	500	500	500	500	500	2,500	500	500	500	500	5,900
Total Funding	3,715	0	3,715	500	500	500	500	500	2,500	500	500	500	500	8,215
\$3,714,838 spent and encumbered th \$3,457,838 spent and encumbered th Project Status :			· ·						, ,					<u> </u>
FY 2018 Budget	3,715	500	4,215	500	500	500	500	0	2,000	0	0	0		6,215

0

0

0

500

March 23, 2018 Howard County, MD Version : Executive Proposed

Project: K5061-FY2007 PEDESTRIAN PLAN PROJECTS

SIDEWALKS Number: K5061

Description

A project for the ongoing evaluation, design and construction of pedestrian improvements listed in the Howard County Pedestrian Master Plan. The candidate project list is updated annually by the Department of Planning and Zoning in coordination with the Department of Public Works.

Justification

Pedestrian projects in Howard County, both private sector and State/County funded, need to be implemented in a consistent ongoing manner derived from a comprehensive, systemic planning process. The Howard County Pedestrian Master Plan provides a comprehensive plan and ongoing process for prioritizing the use of capital funds directed at improving pedestrian safety, mobility, and access to transit, schools, parks etc.

Remarks

- 1. Project addresses collector classification roads. Local roads are addressed under other programs.
- 2. Project is a cooperative effort of the Department of Public Works and the Department of Planning and Zoning.
- 3. Grant represents Transportation Enhancement Grant from SHA.
- 4. Construction of some projects may be dependent on donation of necessary easements.
- 5. OTHER represents revenue from automated speed enforcement fund.
- 6. Request represents program advancement.

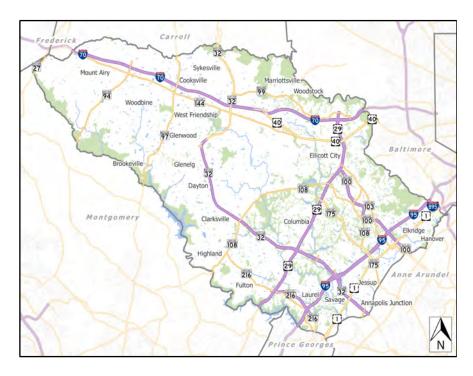
Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$175,095

Estimated annual maintenance costs upon completion: No Change.



Project: FY2007 PEDESTRIAN PLAN PROJECTS

SIDEWALKS

Number: K5061

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	890	100	990	100	100	100	0	0	300	0	0	0	0	1,290
LAND ACQUISITION	210	50	260	50	50	50	0	0	150	0	0	0	0	410
CONSTRUCTION	1,601	1,000	2,601	500	500	500	0	0	1,500	0	0	0	0	4,101
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	2,711	1,150	3,861	650	650	650	0	0	1,950	0	0	0	0	5,811
BONDS	1,441	500	1,941	650	650	650	0	0	1,950	0	0	0	0	3,891
DEVELOPER CONTRIBUTION	300	0	300	0	0	0	0	0	0	0	0	0	0	300
GRANTS	220	0	220	0	0	0	0	0	0	0	0	0	0	220
OTHER SOURCES	0	650	650	0	0	0	0	0	0	0	0	0	0	650
PAY AS YOU GO	750	0	750	0	0	0	0	0	0	0	0	0	0	750
Total Funding	2,711	1,150	3,861	650	650	650	0	0	1,950	0	0	0	0	5,811

\$1,659,250 spent and encumbered through February 2018

\$1,399,331 spent and encumbered through February 2017

Project Status: FY18 Projects in Design: Loc 146, Dobbin Rd. (175 N. to Columbia Crossing).; Loc 209, Frederick Rd. (Centennial to Grey Rock); Loc 125, MD108 (Richards Valley N. to Goldfinch); Loc 14, Hanover Rd. Corridor (Skipton to Hi-Tech); Oakland Mills to McGaw & Stanford, and Dobbin Rd. connections near MD175; Loc 42, Guilford Rd., US1 to 10408 Guilford at Community Center; Loc 104, US40 at Normandy Center.

Construction Complete: Loc 52, Segment A, Whiskey Bottom Rd. (Stephens to All Saints); Loc 214, Twin Rivers; Loc 155, Aladdin Dr. near Hammond School; Loc 45, Howard St.; Loc 60, Assateague Dr.; Loc 143, Broken Land Pathway.

FY 2018 Budget	2,711	650	3,361	650	650	650	0	0	1,950	0	0	0		5,311
Difference 2018 / 2019	0	500	500	0	0	0	0	0	0	0	0	0	0	500

Project: K5062-FY2009 STATE ROADS SIDEWALK RETROFIT PROGRAM

Description

A project to design and construct improved pedestrian access along State roads.

Justification

Many State roads are without sidewalks or shoulders for pedestrians. Citizens have expressed interest in improving access for residential areas and/or commercial industrial sites. These projects will reduce pedestrian accident potential.

Remarks

- 1. GRANT funds are State Retrofit Sidewalk Program available to complement County funds. The County must provide matching funds for each site.
- 2. Program is coordinated with SHA.
- 3. No matching State funding anticipated in FY19.

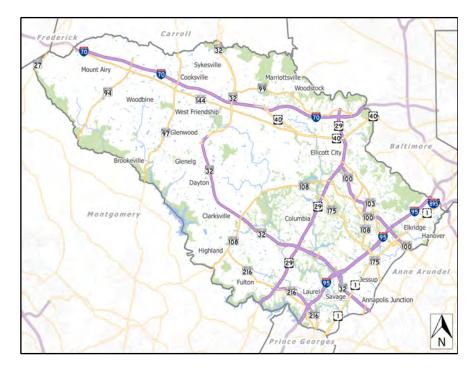
Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$13,500

Estimated annual maintenance costs upon completion: No Change.



SIDEWALKS
Number: K5062

Project: FY2009 STATE ROADS SIDEWALK RETROFIT PROGRAM

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	60	0	60	10	10	0	0	0	20	0	0	0	0	80
LAND ACQUISITION	85	0	85	5	5	0	0	0	10	0	0	0	0	95
CONSTRUCTION	155	0	155	85	85	0	0	0	170	0	0	0	0	325
Total Expenditures	300	0	300	100	100	0	0	0	200	0	0	0	0	500
BONDS	200	0	200	50	50	0	0	0	100	0	0	0	0	300
GRANTS	100	0	100	50	50	0	0	0	100	0	0	0	0	200
Total Funding	300	0	300	100	100	0	0	0	200	0	0	0	0	500

\$13,257 spent and encumbered through February 2018

\$13,257 spent and encumbered through February 2017

Project Status: FY18 - Projects in Design: US1 southbound from Crestmount to Cedar; US1 Southbound from Whiskey Bottom Rd. to County Line (on hold); US40 eastbound from Chatham Ln. to St. Johns; MD99 westbound from Raleigh Tavern to Wetherburn.

FY 2018 Budget	300	100	400	100	100	0	0	0	200	0	0	0		600
Difference 2018 / 2019	0	(100)	(100)	0	0	0	0	0	0	0	0	0	0	(100)

Project: K5063-FY2017 NORTH LAUREL ROAD SIDEWALK

Number: K5063

SIDEWALKS

Description

A project for the design and construction of a sidewalk along the southwest side of North Laurel Road from Linville Ave to US1.

Justification

This project was requested by the community, will complement the work done to extend the sidewalk from Baltimore Ave to Linville Ave and will provide a pedestrian connection to US1.

Remarks

- 1. The sidewalk will be approximately 1,100 feet in length.
- 2. Curb and gutter may be included if necessary.

Project Schedule

FY19 - Design.

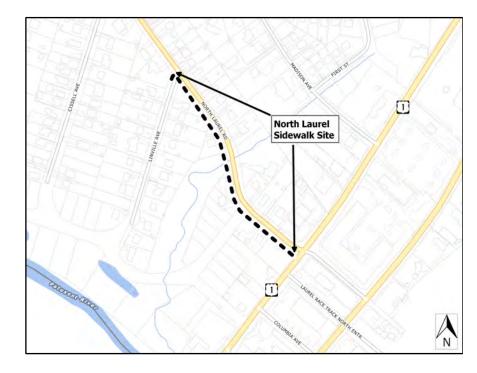
FY20 - Land Acquisition.

FY21 - Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$9,225

Estimated annual maintenance costs upon completion: No Change.



SIDEWALKS
Number: K5063

Project: FY2017 NORTH LAUREL ROAD SIDEWALK

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	75	0	75	0	0	0	0	0	0	0	0	0	0	75
LAND ACQUISITION	0	0	0	25	0	0	0	0	25	0	0	0	0	25
CONSTRUCTION	0	0	0	0	100	0	0	0	100	0	0	0	0	100
ADMINISTRATION	0	0	0	0	5	0	0	0	5	0	0	0	0	5
Total Expenditures	75	0	75	25	105	0	0	0	130	0	0	0	0	205
BONDS	75	0	75	25	105	0	0	0	130	0	0	0	0	205
Total Funding	75	0	75	25	105	0	0	0	130	0	0	0	0	205
\$0 spent and encumbered through spent and encumbered through F Project Status :		8												
FY 2018 Budget	75	25	100	120	0	0	0	0	120	0	0	0		220
Difference 2018 / 2019	0	(25)	(25)	(95)	105	0	0	0	10	0	0	0	0	(15)

Project: K5064-FY2017 MISSION ROAD SIDEWALK Number: K5064

Description

A project to install sidewalk along parts of Mission Road. Area 1 will install sidewalk from Pleasant Chase Road to the Ridgley's Run Community Center. This installation involves modification of the existing culvert in order to accommodate a sidewalk. Area 2 will address Mission Road from Guilford Road to Concord Drive.

Justification

Area 1 - There are a number of residents that could walk to the community center rather than drive if a sidewalk was installed. Area 2 - Some sidewalk already exists; this project will complete the system.

Remarks

Request represents project advancement.

Project Schedule

FY19 - Design and land acquisition.

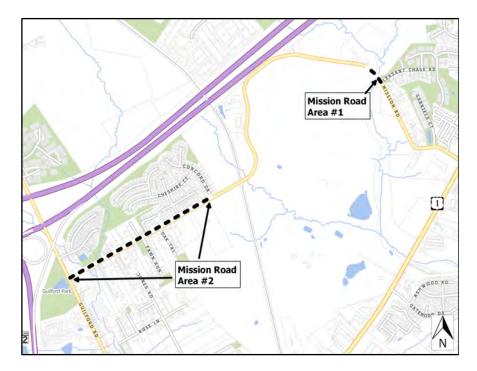
FY20 - Land acquisition and construction.

Operating Budget Impact

Annual Bond Redemption \$ \$15,075

Estimated annual maintenance costs upon completion: No Change.

SIDEWALKS



SIDEWALKS Number: K5064

Project: FY2017 MISSION ROAD SIDEWALK

(In Thousands)		Five Year Capital Program									Master Plan						
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project			
PLANS & ENGINEERING	75	50	125	0	0	0	0	0	0	0	0	0	0	125			
LAND ACQUISITION	0	10	10	0	0	0	0	0	0	0	0	0	0	10			
CONSTRUCTION	0	0	0	200	0	0	0	0	200	0	0	0	0	200			
Total Expenditures	75	60	135	200	0	0	0	0	200	0	0	0	0	335			
BONDS	75	60	135	200	0	0	0	0	200	0	0	0	0	335			
Total Funding	75	60	135	200	0	0	0	0	200	0	0	0	0	335			
\$0 spent and encumbered through spent and encumbered through F Project Status :		8															
FY 2018 Budget	75	210	285	0	0	0	0	0	0	0	0	0		285			
Difference 2018 / 2019	0	(150)	(150)	200	0	0	0	0	200	0	0	0	0	50			

Project: K5065-FY2018 DONCASTER DRIVE SIDEWALK

Description

A project to construct approximately 1,200 LF of sidewalk along Doncaster Drive from Roundhill Road to Hale Haven Road.

Justification

This missing piece of sidewalk has been requested by residents of the area and the school system.

Remarks

Request represents project advancement.

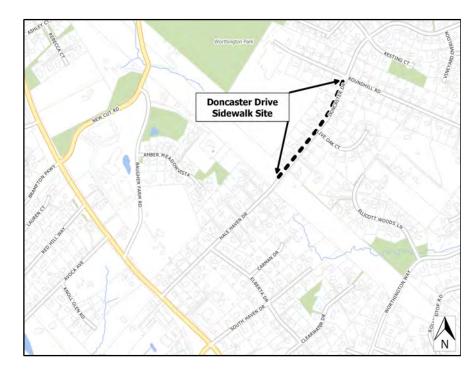
Project Schedule

FY19 - Land acquisition and construction.

FY20 - Construction.

Operating Budget Impact

Estimated annual maintenance costs upon completion: No Change.



SIDEWALKS

Number: K5065

Project: FY2018 DONCASTER DRIVE SIDEWALK

(In Thousands)					Five	e Year Ca	pital Pro		Master Plan						
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project	
PLANS & ENGINEERING	25	25	50	0	0	0	0	0	0	0	0	0	0	50	
LAND ACQUISITION	25	0	25	0	0	0	0	0	0	0	0	0	0	25	
CONSTRUCTION	0	120	120	0	0	0	0	0	0	0	0	0	0	120	
Total Expenditures	50	145	195	0	0	0	0	0	0	0	0	0	0	195	
PAY AS YOU GO	50	145	195	0	0	0	0	0	0	0	0	0	0	195	
Total Funding	50	145	195	0	0	0	0	0	0	0	0	0	0	195	
\$41,573 spent and encumbered th spent and encumbered through F Project Status :		y 2018													
FY 2018 Budget	50	60	110	0	0	0	0	0	0	0	0	0		110	
Difference 2018 / 2019	0	85	85	0	0	0	0	0	0	0	0	0	0	85	

Project: K5066-FY2014 BICYCLE PLAN PROJECTS

Number: K5066

SIDEWALKS

Description

A project for the implementation of the comprehensive Howard County Bicycle Master Plan. The candidate project list will be updated annually by the Office of Transportation in coordination with the Department of Public Works.

Justification

The Howard County Bicycle Master Plan, adopted in 2016, provides a comprehensive plan and ongoing process for prioritizing the use of capital funds directed at improving bicycle safety, mobility, and access to transit, schools, parks, retail and employment centers, etc.

Remarks

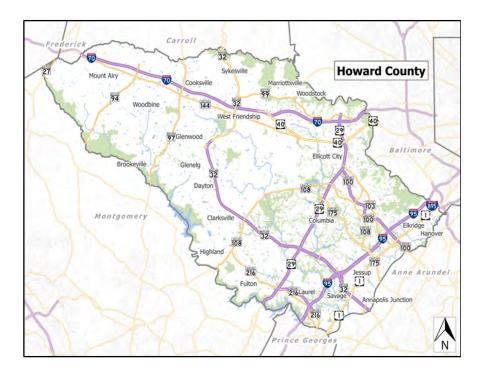
- 1. Project addresses collector classification roads and local roads.
- 2. Grant funding will be sought.
- 3. Construction of some projects may be dependent on donation of necessary easements.

Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$518,220



SIDEWALKS Number: K5066

Project: FY2014 BICYCLE PLAN PROJECTS

(In Thousands)		Five	Year Ca	pital Pro	Master Plan									
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	400	520	920	200	200	300	300	300	1,300	0	0	0	0	2,220
LAND ACQUISITION	210	0	210	100	100	300	300	300	1,100	0	0	0	0	1,310
CONSTRUCTION	1,981	420	2,401	2,400	1,550	1,600	2,400	2,400	10,350	0	0	0	0	12,751
Total Expenditures	2,591	940	3,531	2,700	1,850	2,200	3,000	3,000	12,750	0	0	0	0	16,281
BONDS	1,816	800	2,616	1,250	1,250	1,600	2,400	2,400	8,900	0	0	0	0	11,516
DEVELOPER CONTRIBUTION	104	0	104	100	100	100	100	100	500	0	0	0	0	604
GRANTS	571	140	711	1,350	500	500	500	500	3,350	0	0	0	0	4,061
PAY AS YOU GO	100	0	100	0	0	0	0	0	0	0	0	0	0	100
Total Funding	2,591	940	3,531	2,700	1,850	2,200	3,000	3,000	12,750	0	0	0	0	16,281

\$764,216 spent and encumbered through February 2018 \$548,298 spent and encumbered through February 2017

Project Status : Projects Completed in FY18:

Bike lanes along Centennial Ln from Old Annapolis Rd to Frederick Rd. (BikeHoward #18), Bike lanes in coordination with resurfacing and road repair on Thunder Hill Road, Mellenbrook Road, Old Dobbin Lane and Toll House Road.

Ongoing Projects:

Pedestrian/Bicycle Improvements Cedar Ln 100% plans and land acquisition FY18, construction in FY19, North Laurel connections planning and preliminary design FY16 (MD bikeway grant), 100% design FY19, construction and land acquisition FY20, Bike friendly grates replacements, Miscellaneous signs and stencils, Bike rack installations through MD Bikeways Grant, Pathway connections through Howard Community College (BikeHoward #10 partial) through MD Bikeways Grant, Automated bike/pedestrian counter installations through Recreational Trails Grant.

Proposed FY18 Projects:

Edgar Road and Meadowbrook Lane (BikeHoward #13 partial), River Road from Gun Road, Levering Avenue and Furnace Avenue to Anne Arundel County Line (BikeHoward #28 partial), Dobbin Road/McGaw Road 100% Plans (BikeHoward #56 partial), Robert Fulton Drive pathway preliminary design, Sebring to Hickory Ridge Road pathway connection preliminary design, Columbia Road from Old Annapolis Road to Grey Rock Drive (BikeHoward #19 partial) outreach and design, Harriet Tubman Lane and Martin Road West of Freetown Road (BikeHoward #2) outreach and design, Owen Brown from Martin Road to Jerrys Drive (BikeHoward #10) outreach and design, Oakland Mills Road and Tamar Drive road diet feasibility studies.

FY 2018 Budget	2,591	1,800	4,391	1,800	1,800	1,500	0	0	5,100	0	0	0		9,491
Difference 2018 / 2019	0	(860)	(860)	900	50	700	3,000	3,000	7,650	0	0	0	0	6,790

SIDEWALKS

Number: K5068

Description

A program to upgrade sidewalk ramps and curb cuts in compliance with Federal Americans with Disabilities Act 1990 (ADA) requirements. The upgrade shall be aligned with road resurfacing construction projects.

Justification

The sidewalk ramps upgrade are mandated by governmental laws. The current plan is to provide ramps at all road intersection locations where the resurfacing will take place, or other non-compliant ramp areas in various parts of the County. In the year 2013 through 2015, DPW has placed approximately 1,000 ramps at a cost of approximately \$3.5 million. The County currently has approximately 6,800 ramps that do not meet ADA requirements and will be replaced as the resurfacing program continues in the future. DPW has another program that repairs sidewalks. The sidewalk repair program is budgeted at \$650,000 per year and provides repairs to sidewalks with number of deficiencies.

Remarks

County owns and maintains approx. 7,800 each of sidewalk ramps.

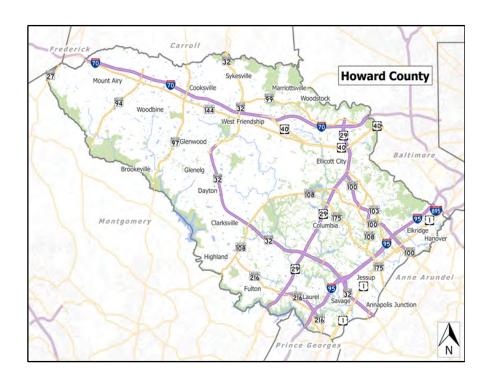
Project Schedule

Approximately 200 each of ramps upgraded to ADA compliance per \$1M budgeted.

Close at program completion.

Operating Budget Impact

Annual Bond Redemption \$ \$1,282,500



SIDEWALKS Number: K5068

Project: ADA RAMPS UPGRADE PROGRAM

(In Thousands)					Five	Year Ca	pital Prog	gram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	900	600	1,500	3,000	3,000	3,000	3,000	3,000	15,000	3,000	3,000	3,000	3,000	28,500
Total Expenditures	900	600	1,500	3,000	3,000	3,000	3,000	3,000	15,000	3,000	3,000	3,000	3,000	28,500
BONDS	900	600	1,500	3,000	3,000	3,000	3,000	3,000	15,000	3,000	3,000	3,000	3,000	28,500
Total Funding	900	600	1,500	3,000	3,000	3,000	3,000	3,000	15,000	3,000	3,000	3,000	3,000	28,500

\$900,000 spent and encumbered through February 2018 \$500,000 spent and encumbered through February 2017

Project Status: Approximately 800 each of ramps need to be upgraded prior to repaving of roads.

FY 2018 Budget	900	3,000	3,900	3,000	3,000	3,000	3,000	3,000	15,000	3,000	3,000	3,000		27,900
Difference 2018 / 2019	0	(2,400)	(2,400)	0	0	0	0	0	0	0	0	0	3,000	600

Project: K5069 BITUMINOUS CURB and GUTTER REPLACEMENT PROGRAM

SIDEWALKS Number: K5069

Description

A program to replace deteriorated or damaged curbs.

Justification

All curbs replacement is based on the age and maintenance and drainage history. The curbs in older subdivisions become brittle due to losing asphalt content and strength. The curbs receive damage annually because of the combination of snow removal and roadway drainage activities.

Remarks

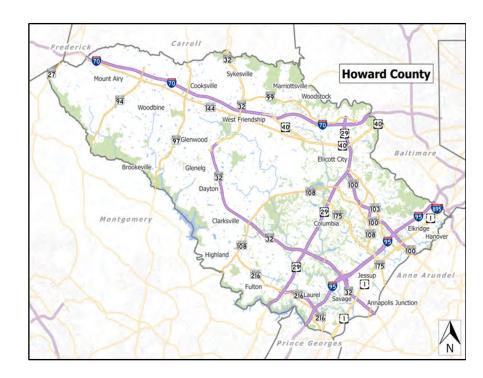
County owns and maintains approx. 1,000,000 linear feet (190 miles) of bituminous curbs and 5,205,700 linear feet (985 miles) of concrete curbs.

Project Schedule

Close at program completion.

Operating Budget Impact

Annual Bond Redemption \$ \$472,500



SIDEWALKS Number: K5069

Project: BITUMINOUS CURB and GUTTER REPLACEMENT PROGRAM

(In Thousands)					Five	Year Ca	pital Prog	gram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	900	600	1,500	1,000	1,000	1,000	1,000	1,000	5,000	1,000	1,000	1,000	1,000	10,500
Total Expenditures	900	600	1,500	1,000	1,000	1,000	1,000	1,000	5,000	1,000	1,000	1,000	1,000	10,500
BONDS	900	600	1,500	1,000	1,000	1,000	1,000	1,000	5,000	1,000	1,000	1,000	1,000	10,500
Total Funding	900	600	1,500	1,000	1,000	1,000	1,000	1,000	5,000	1,000	1,000	1,000	1,000	10,500

\$899,947 spent and encumbered through February 2018 \$500,000 spent and encumbered through February 2017 Project Status:

FY 2018 Budget	900	1,000	1,900	1,000	1,000	1,000	1,000	1,000	5,000	1,000	1,000	1,000		9,900
Difference 2018 / 2019	0	(400)	(400)	0	0	0	0	0	0	0	0	0	1,000	600

Howard County, MD FY2019 Executive Proposed Capital Budget Program: LIBRARY PROJECTS

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
L0015 FY2008 ELKRIDGE BRANCH/SENIOR CENTER A project to provide additional required public library &	В	29,321	-5,000	24,321	0	0	0	0	0	24,321
senior center space in the RT1 Corridor of Elkridge.	G	125	0	125	0	0	0	0	0	125
	0	665	0	665	0	0	0	0	0	665
	Total	30,111	-5,000	25,111	0	0	0	0	0	25,111
L0016 FY2012 RENOVATE CENTRAL & EAST COLUMBIA BRANCHES	В	4,935	0	4,935	0	0	0	0	0	4,935
While this project does not expand total square feet for the buildings, it converts former administrative space into	G	1,151	0	1,151	0	0	0	0	0	1,151
public service space, to the benefit of students of all ages.	Total	6,086	0	6,086	0	0	0	0	0	6,086
L0018 FY2018 GLENWOOD BRANCH RENOVATION A project to renovate the Glenwood Branch to include	В	730	0	730	850	0	0	0	0	1,580
much needed study rooms and classroom space for the benefit of students of all ages.	Total	730	0	730	850	0	0	0	0	1,580
L0019 FY2020 SOUTHWEST BRANCH Conduct a site survey and feasibility assessment for a new	В	0	0	0	285	5,211	32,960	2,575	0	41,031
HCLS Branch in Howard County's Southwest region.	Total	0	0	0	285	5,211	32,960	2,575	0	41,031
L0020 FY2021 NEW HCLS CENTRAL BRANCH & RELOCATION	В	0	0	0	0	488	487	0	0	975
Relocation of HCLS Central Branch due to Downtown Columbia Redevelopment Plans.	Total	0	0	0	0	488	487	0	0	975
LIBRARY PROJECTS Total		36,927	-5,000	31,927	1,135	5,699	33,447	2,575	0	74,783

March 23, 2018 Howard County, MD Version : Executive Proposed

Howard County, MD FY2019 Executive Proposed Capital Budget (\$000) LIBRA-LIBRARY PROJECTS

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	34,986	-5,000	29,986
G	GRANTS	1,276	0	1,276
0	OTHER SOURCES	665	0	665
Total		36,927	-5,000	31,927

2019 Executive Proposed 5 Year Capital Budget Project Type Summary (LIBRA-LIBRARY PROJECTS)

Rev	enue Source	Prior Approp	Current FY	2020	2021	2022	2023	2024	5 Year Total
В	BONDS	34,986	-5,000	1,135	5,699	33,447	2,575	(72,842
G	GRANTS	1,276	0	0	0	0	0	(1,276
0	OTHER SOURCES	665	0	0	0	0	0	(0 665
Tota	al	36,927	-5,000	1,135	5,699	33,447	2,575		74,783

March 23, 2018 Howard County, MD Version : Executive Proposed

Project: L0015-FY2008 ELKRIDGE BRANCH/SENIOR CENTER

LIBRARY PROJECTS

Number: L0015

Description

A project to provide additional required public library & senior center space in the RT1 Corridor of Elkridge. This project will satisfy the existing and projected 19,300 SF public library space deficit in the Elkridge area, as well as increase the amount of Senior Center space available. The library space and other functional requirements of this project are fully defined in the Howard County Library Facilities Assessment & Master Plan of December 2004.

Justification

The current Howard County Library Facilities Assessment & Master Plan, as approved by the HCL Board of Trustees, calls for 35,000 SF of library space for the Elkridge service area. The existing HCL Elkridge Branch is 15,700 SF. Furthermore, the size of the existing Senior Center will be increased to 10,000 SF. Additional space is needed to accommodate current and projected growth. This project will consider constraints and opportunities presented by land use, parking, and engineering; meet the goals and objectives of the RT1 Corridor Study; and be consistent with anticipated BRAC growth.

Remarks

1. OTHER represents funding from the liquidation of an HCLS liability to Howard County from a prior year. 2. State grant anticipated.

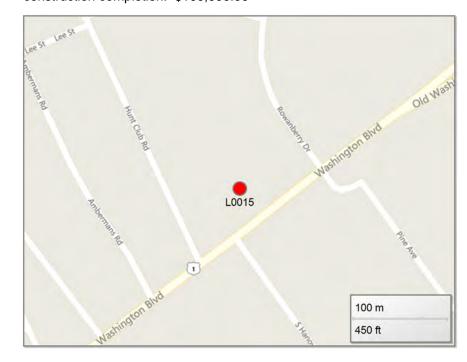
Project Schedule

FY19 - Project is in the financial close out process. Defunded due to conservative management and cost savings.

Operating Budget Impact

Annual Bond Redemption \$ \$1,094,445

Additional FTEs: 6 to 8 ~Estimated annual utility/custodial costs upon construction completion: \$100,000.00



Number: L0015

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	3,860	0	3,860	0	0	0	0	0	0	0	0	0	0	3,860
LAND ACQUISITION	338	0	338	0	0	0	0	0	0	0	0	0	0	338
CONSTRUCTION	24,568	(5,000)	19,568	0	0	0	0	0	0	0	0	0	0	19,568
ADMINISTRATION	30	0	30	0	0	0	0	0	0	0	0	0	0	30
EQUIPMENT & FURNISHINGS	1,315	0	1,315	0	0	0	0	0	0	0	0	0	0	1,315
Total Expenditures	30,111	(5,000)	25,111	0	0	0	0	0	0	0	0	0	0	25,111
BONDS	29,321	(5,000)	24,321	0	0	0	0	0	0	0	0	0	0	24,321
GRANTS	125	0	125	0	0	0	0	0	0	0	0	0	0	125
OTHER SOURCES	665	0	665	0	0	0	0	0	0	0	0	0	0	665
Total Funding	30,111	(5,000)	25,111	0	0	0	0	0	0	0	0	0	0	25,111

\$22,500,117 spent and encumbered through February 2018 \$20,811,060 spent and encumbered through February 2017

Project Status : FY18 - Construction complete. Start financial close out in process.

Project: FY2008 ELKRIDGE BRANCH/SENIOR CENTER

FY 2018 Budget	30,111	0	30,111	0	0	0	0	0	0	0	0	0		30,111
Difference 2018 / 2019	0	(5,000)	(5,000)	0	0	0	0	0	0	0	0	0	0	(5,000)

Number: L0016

Project: L0016-FY2012 RENOVATE CENTRAL & EAST COLUMBIA BRANCHES

Description

While this project does not expand total square feet for the buildings, it converts former administrative space into public service space, to the benefit of students of all ages. The project provides additional public space at both HCL's Central and East Columbia branches through the renovation of spaces vacated by HCL administrative and technical staff as specified in Capital Project L0014.

Justification

The HCL Facilities Assessment & Master Plan of December 2004 outlines the need for 142,000 SF of additional library space to meet current and anticipated public service needs in the Planned Service Area. This project will add 16,000 SF of public space in the two Columbia branches by renovating existing administrative space gained through the relocation of HCL administrative and technical staff. It will alleviate current overcrowding and registration close-outs of high-demand educational initiatives for adults, children, and teens. Initiatives that will realize an immediate benefit from this project include Project Literacy, a highly successful adult basic education initiative that annually teaches 500 adult students math, reading and writing skills through free, one-on-one tutoring and class sessions; and Teen Time, an A+ Partners in Education after-school academic initiative for at-risk youth. The project triples the amount of space for both by creating classroom, private tutoring, and individual study spaces in current demand.

Remarks

- 1. The nature and cost of this renovation project was outlined in the Howard County Library Facilities Assessment & Master Plan of December 2004.
- 2. Grant represents state funding from Maryland State Department of Education. FY12/13, HCL was awarded a total of \$1,105,000 for the renovated spaces at East Columbia and Central Branches.
- 3. Reallocated funds from L0012 & L0017.

Project Schedule

FY19 - Start the financial closeout process.

Operating Budget Impact

Annual Bond Redemption \$ \$222,075

The renovation of the space will have no impact on staffing or the operating budget. ~Estimated annual utility/custodial costs upon construction completion: No increase



LIBRARY PROJECTS

Number: L0016

Project: FY2012 RENOVATE CENTRAL & EAST COLUMBIA BRANCHES

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	633	0	633	0	0	0	0	0	0	0	0	0	0	633
CONSTRUCTION	4,390	0	4,390	0	0	0	0	0	0	0	0	0	0	4,390
ADMINISTRATION	35	0	35	0	0	0	0	0	0	0	0	0	0	3
EQUIPMENT & FURNISHINGS	1,028	0	1,028	0	0	0	0	0	0	0	0	0	0	1,028
Total Expenditures	6,086	0	6,086	0	0	0	0	0	0	0	0	0	0	6,080
BONDS	4,935	0	4,935	0	0	0	0	0	0	0	0	0	0	4,93
GRANTS	1,151	0	1,151	0	0	0	0	0	0	0	0	0	0	1,15
Total Funding	6,086	0	6,086	0	0	0	0	0	0	0	0	0	0	6,080

FY 2018 Budget	6,086	0	6,086	0	0	0	0	0	0	0	0	0		6,086
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: L0018-FY2018 GLENWOOD BRANCH RENOVATION

LIBRARY PROJECTS

Number: L0018

Description

A project to renovate the Glenwood Branch to include much needed study rooms and classroom space for the benefit of students of all ages. Refurbishment of interior spaces for teen areas, child reading rooms and restrooms will also be completed.

Other renovations include adding new passport cubicles (for privacy), installation of a sound barrier to help isolate noise from the Children/ Youth area, security upgrades and changes to the circulation desks.

Justification

There is currently only one study room at the Glenwood library. Interior finishes need replacement or substantial repair, teen area needs sound insulating modifications and child reading areas need improvements to lighting. Proposed modifications will improve the usability of the library.

Remarks

Project Schedule

FY18/19 - Design renovations and award construction contracts.

FY19/20 - Complete renovations, when funding becomes available.

Operating Budget Impact

Annual Bond Redemption \$ \$71,100

Bureau of Facilities estimates the year completed and beyond impact to annual O&M and utility costs at \$26,000.



LIBRARY PROJECTS

Project: FY2018 GLENWOOD BRANCH RENOVATION Number: L0018

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	80	0	80	110	0	0	0	0	110	0	0	0	0	190
CONSTRUCTION	650	0	650	435	0	0	0	0	435	0	0	0	0	1,085
ADMINISTRATION	0	0	0	5	0	0	0	0	5	0	0	0	0	5
EQUIPMENT & FURNISHINGS	0	0	0	300	0	0	0	0	300	0	0	0	0	300
Total Expenditures	730	0	730	850	0	0	0	0	850	0	0	0	0	1,580
BONDS	730	0	730	850	0	0	0	0	850	0	0	0	0	1,580
Total Funding	730	0	730	850	0	0	0	0	850	0	0	0	0	1,580
\$0 spent and encumbered through F spent and encumbered through Feb Project Status : Design will begin in e	oruary 2017 arly 2018 with													
FY 2018 Budget	730	0	730	0	0	0	0	0	0	0	0	0		730
Difference 2018 / 2019	0	0	0	850	0	0	0	0	850	0	0	0	0	850

Project: L0019-FY2020 SOUTHWEST BRANCH Number: L0019

Description

Conduct a site survey and feasibility assessment for a new HCLS Branch in Howard County's Southwest region.

Justification

Remarks

Project Schedule

FY20 - Complete Program of Requirements

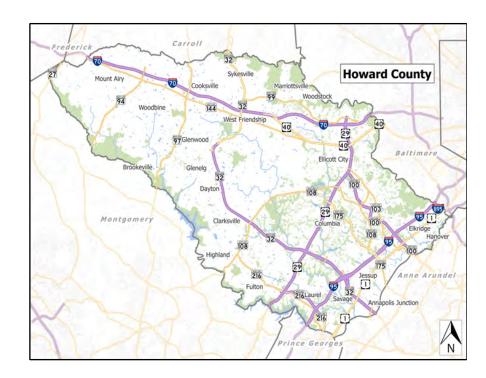
FY21 - Acquire Land for New Branch, Award Design.

FY22 - Award Construction.

FY23 - Complete Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$1,846,395



LIBRARY PROJECTS

LIBRARY PROJECTS

Number: L0019

Project: FY2020 SOUTHWEST BRANCH

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	0	0	277	2,560	0	0	0	2,837	0	0	0	0	2,837
LAND ACQUISITION	0	0	0	0	2,500	0	0	0	2,500	0	0	0	0	2,500
CONSTRUCTION	0	0	0	0	0	32,000	0	0	32,000	0	0	0	0	32,000
ADMINISTRATION	0	0	0	8	151	960	75	0	1,194	0	0	0	0	1,194
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	2,500	0	2,500	0	0	0	0	2,500
Total Expenditures	0	0	0	285	5,211	32,960	2,575	0	41,031	0	0	0	0	41,031
BONDS	0	0	0	285	5,211	32,960	2,575	0	41,031	0	0	0	0	41,031
Total Funding	0	0	0	285	5,211	32,960	2,575	0	41,031	0	0	0	0	41,031
\$0 spent and encumbered through Feb spent and encumbered through Feb Project Status: Awaiting Funding		18												
FY 2018 Budget	0	0	0	285	5,211	32,960	2,575	0	41,031	0	0	0)	41,031

FY 2018 Budget	0	0	0	285	5,211	32,960	2,575	0	41,031	0	0	0		41,031
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Number: L0020

Project: L0020-FY2021 NEW HCLS CENTRAL BRANCH & RELOCATION

Description

Relocation of HCLS Central Branch due to Downtown Columbia Redevelopment Plans.

Justification

Downtown Columbia redevelopment plans include the re-purposing of the current site of Central Branch. Fulfillment of the plan would necessitate a new building on a different site.

Remarks

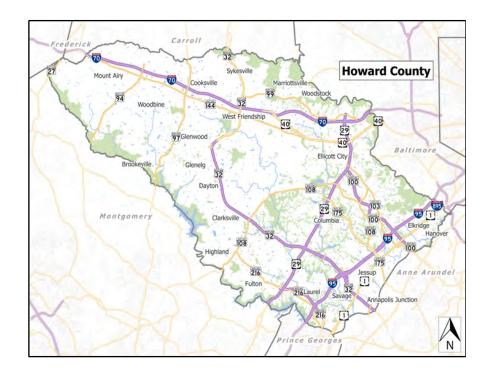
Project Schedule

FY21- Preliminary programing and site selection.

FY22- Building program confirmation.

Operating Budget Impact

Annual Bond Redemption \$ \$43,875



LIBRARY PROJECTS

Number: L0020

Project: FY2021 NEW HCLS CENTRAL BRANCH & RELOCATION

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	0	0	0	488	487	0	0	975	0	C) C	0	975
Total Expenditures	0	0	0	0	488	487	0	0	975	0	C	0	0	975
BONDS	0	0	0	0	488	487	0	0	975	0	C) C	0	975
Total Funding	0	0	0	0	488	487	0	0	975	0	C	0	0	975
\$0 spent and encumbered through spent and encumbered through F Project Status : FY18 - Project not	ebruary 2017													
FY 2018 Budget	0	0	0	0	488	487	0	0	975	0	C) ()	975
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0) (0	0

Howard County, MD FY2019 Executive Proposed Capital Budget Program: HOWARD COMMUNITY COLLEGE

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
M0536 FY2015 NURSING and ST BUILDING RENOVATIONS	В	13,109	9,249	22,358	0	0	0	0	0	22,358
Renovate the Nursing Building and ST Building of approximately 107,000 GSF following the move of health	G	11,173	9,888	21,061	0	0	0	0	0	21,061
sciences programs and science, engineering and technology programs into their new buildings.	Total	24,282	19,137	43,419	0	0	0	0	0	43,419
M0539 FY2020 MATHEMATICS AND ATHLETICS COMPLEX	В	0	0	0	1,750	1,750	13,000	13,000	10,100	39,600
The purpose of this complex is to design and construct a new facility that will unite both academics and athletics.	G	0	0	0	1,750	1,750	13,000	13,000	10,100	39,600
•	Total	0	0	0	3,500	3,500	26,000	26,000	20,200	79,200
M0542 FY2016 CAMPUS ROADWAYS and PARKING Provide required modifications to campus roadways and	В	2,683	0	2,683	0	0	0	0	0	2,683
parking to accommodate necessary changes to vehicular and pedestrian traffic patterns.	CC	7,717	0	7,717	0	0	0	0	0	7,717
	G	0	0	0	0	0	0	0	0	0
	Ο	6,000	0	6,000	0	0	0	0	0	6,000
	Total	16,400	0	16,400	0	0	0	0	0	16,400
M0543 FY2012 SCIENCE ENGINEERING and TECHNOLOGY BLDG	В	38,268	0	38,268	0	0	0	0	0	38,268
Design and construct a science, engineering, and technology building of approximately 145,300 GSF.	G	38,268	0	38,268	0	0	0	0	0	38,268
combined a approximately 1 10,000 cc.	0	230	0	230	0	0	0	0	0	230
	Total	76,766	0	76,766	0	0	0	0	0	76,766
M0545 FY2025 MAINTENANCE BUILDING The purpose of this project is to obtain a maintenance	В	0	0	0	0	0	0	0	0	0
building to support plant operations and facilities.	G	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0
M0547 FY2026 CONTINUING EDUCATION BUILDING Construct a new continuing education and workforce	В	0	0	0	0	0	0	0	0	0
development facility of approximately 60,000 GSF to support noncredit courses, contract credit courses, and	G	0	0	0	0	0	0	0	0	0
professional services to individuals, county agencies, and employers throughout the State of Maryland.	Total	0	0	0	0	0	0	0	0	0

March 23, 2018 Howard County, MD Version : Executive Proposed

Howard County, MD FY2019 Executive Proposed Capital Budget Program: HOWARD COMMUNITY COLLEGE

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
M0550 FY2017 SYSTEMIC RENOVATIONS This project addresses campuswide systemic renovations	В	4,456	2,000	6,456	11,176	11,498	1,407	1,809	3,110	35,456
and deferred maintenance.	Total	4,456	2,000	6,456	11,176	11,498	1,407	1,809	3,110	35,456
HOWARD COMMUNITY COLLEGE Total		121,904	21,137	143,041	14,676	14,998	27,407	27,809	23,310	251,241

March 23, 2018 Howard County, MD Version : Executive Proposed

Howard County, MD FY2019 Executive Proposed Capital Budget (\$000) HCC-HOWARD COMMUNITY COLLEGE

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	58,516	11,249	69,765
CC	COLLEGE REVENUE BACKED BOND	7,717	0	7,717
G	GRANTS	49,441	9,888	59,329
0	OTHER SOURCES	6,230	0	6,230
Total		121,904	21,137	143,041

2019 Executive Proposed 5 Year Capital Budget Project Type Summary (HCC-HOWARD COMMUNITY COLLEGE)

Rev	renue Source	Prior Approp	Current FY	2020	2021	2022	2023	2024	5 Year Total
В	BONDS	58,516	11,249	12,926	13,248	14,407	14,809	13,210	138,365
CC BOI	COLLEGE REVENUE BACKED	7,717	0	0	0	0	0	0	7,717
G	GRANTS	49,441	9,888	1,750	1,750	13,000	13,000	10,100	98,929
0	OTHER SOURCES	6,230	0	0	0	0	0	0	6,230
Tot	al	121,904	21,137	14,676	14,998	27,407	27,809	23,310	251,241

March 23, 2018 Howard County, MD Version : Executive Proposed

HOWARD COMMUNITY COLLEGE

Number: M0536

Project: M0536-FY2015 NURSING and ST BUILDING RENOVATIONS

Description

Renovate the Nursing Building and ST Building of approximately 107,000 GSF following the move of health sciences programs and science, engineering and technology programs into their new buildings. Once the space currently occupied by health sciences and science and technology is vacated, renovations will need to occur to provide classrooms, labs, collaborative study areas, teaching and learning services, as well as administrative areas.

Justification

The Nursing building was contructed in 1976 and is the second oldest building on campus. The building is connected to the ST building which was constructed in 1989. Currently, the buildings cannot support the demand for additional instructional spaces and is being used to its maximum capacity. This project is necessary following the move into the new buildings and will provide the necessary space for social sciences and teacher education divisions. It will also accommodate the center for service learning, teaching and learning services, honors center, faculty development center plus administrative offices. The college must expand its physical space and renovate its existing buildings in order to accommodate its students and staff.

Remarks

The construction phase of this renovation project is being proposed for splitfunding.

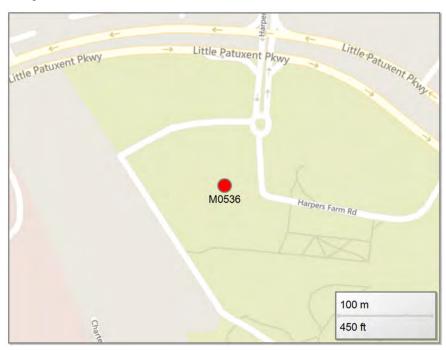
Project Schedule

FY15-FY17 - Plan and design renovations to existing buildings. FY18-FY19 - Construction phase for renovations to existing buildings. FY19 - Furnish and equip renovated buildings. The use of the funds for the upcoming fiscal year includes continuing the construction phase for the renovations, and procure the furniture and equipment needed to open the buildings.

Operating Budget Impact

Annual Bond Redemption \$ \$1,006,110

The projected impact of the completed project on the current expense budget: no increase.



HOWARD COMMUNITY COLLEGE

Number: M0536

Project: FY2015 NURSING and ST BUILDING RENOVATIONS

(In Thousands)					Five	Year Ca	pital Pro	gram		Master Plan						
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project		
PLANS & ENGINEERING	3,335	0	3,335	0	0	0	0	0	0	0	0	0	0	3,335		
CONSTRUCTION	20,947	15,560	36,507	0	0	0	0	0	0	0	0	0	0	36,507		
EQUIPMENT & FURNISHINGS	0	3,577	3,577	0	0	0	0	0	0	0	0	0	0	3,577		
Total Expenditures	24,282	19,137	43,419	0	0	0	0	0	0	0	0	0	0	43,419		
BONDS	13,109	9,249	22,358	0	0	0	0	0	0	0	0	0	0	22,358		
GRANTS	11,173	9,888	21,061	0	0	0	0	0	0	0	0	0	0	21,061		
Total Funding	24,282	19,137	43,419	0	0	0	0	0	0	0	0	0	0	43,419		

\$12,377,164 spent and encumbered through February 2018 \$2,441,349 spent and encumbered through February 2017

Project Status: FY18 - Construction is progressing on schedule. The scope of the project from the prior fiscal year included continuing with the construction phase. The timing of the project from the prior fiscal year included completing the first phase of construction in preparation for the second phase of construction, and then begin furniture and equipment procurement for the renovated buildings in FY19.

FY 2018 Budget	24,282	18,960	43,242	0	0	0	0	0	0	0	0	0		43,242
Difference 2018 / 2019	0	177	177	0	0	0	0	0	0	0	0	0	0	177

HOWARD COMMUNITY COLLEGE

Project: M0539-FY2020 MATHEMATICS AND ATHLETICS COMPLEX Number: M0539

Description

The purpose of this complex is to design and construct a new facility that will unite both academics and athletics. The proposed facility is approximately 150,000 gross square feet and will accommodate mathematics, athletics, recreation, student services functions, and multi-purpose event areas. Shared spaces will connect mathematics and athletics through instructional planning, student services tutoring, career counseling, and multi-functional programming.

Justification

Consultants were hired in FY18 to conduct a comprehensive capital planning analysis and feasibility study. The results included a recommendation to construct an innovative complex to house both academics and athletics. The College and Career Readiness and College Completion Act requires students to complete their required mathematics sequence within their first 24 credits. This legislation, along with math enrollment trends, the age and dilapidated condition of the existing athletic building, and the needs of the campus community, drive the college to identify this proposed facility as a critical need. The proposed project addresses programmatic issues for both mathematics and athletics and enhances pedestrian connections from the north to the south campus to facilitate a more discernable linkage. The project also helps integrate mathematics with the north campus academic core and can be planned with minimal impact to parking. Advances in technology, heightened global competition, fast-paced innovation, shifting demographics, and programmatic demands charge the college with responding to the needs of the county. The marriage of academics and athletics is an innovative approach to promoting sound mind and body while meeting the intellectual and physical needs of the college community.

Remarks

Project Schedule

FY20-FY21 - Plan and design new facility.

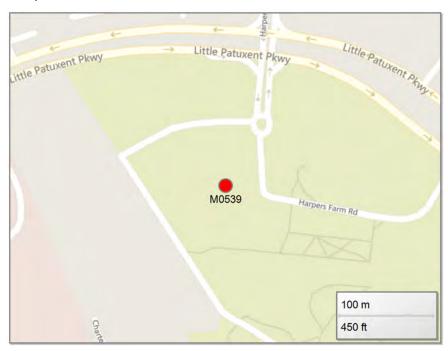
FY22-FY24 - Construct new facility in phases.

FY24 - Furnish and equip new facility. There are no funds requested for the upcoming fiscal year and no use of funds planned.

Operating Budget Impact

Annual Bond Redemption \$ \$1,782,000

The operations of this building will increase the operating budget by approximately \$21.25 per square foot. The projected impact of the completed project on the current expense budget: no increase until completed in FY24.



Explanation of Changes

FY19 Title changed to include functions for Athletics Complex, combining and closing separate project M0546.

HOWARD COMMUNITY COLLEGE

Number: M0539

Project: FY2020 MATHEMATICS AND ATHLETICS COMPLEX

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	0	C	3,500	3,500	0	0	0	7,000	0	C	0	0	7,000
CONSTRUCTION	0	0	C	0	0	26,000	26,000	13,000	65,000	0	C	0	0	65,000
EQUIPMENT & FURNISHINGS	0	0	C	0	0	0	0	7,200	7,200	0	C	0	0	7,200
Total Expenditures	0	0	0	3,500	3,500	26,000	26,000	20,200	79,200	0	0	0	0	79,200
BONDS	0	0	C	1,750	1,750	13,000	13,000	10,100	39,600	0	C	0	0	39,600
GRANTS	0	0	C	1,750	1,750	13,000	13,000	10,100	39,600	0	C	0	0	39,600
Total Funding	0	0	0	3,500	3,500	26,000	26,000	20,200	79,200	0	0	0	0	79,200

\$0 spent and encumbered through February 2018 spent and encumbered through February 2017

Project Status: There was no scope for this project from the prior fiscal year. There is no timing for this project from the prior fiscal year; design is scheduled to begin in FY20.

FY 2018 Budget	0	0	0	2,500	25,200	2,800	0	0	30,500	0	0	0		30,500
Difference 2018 / 2019	0	0	0	1,000 ((21,700)	23,200	26,000	20,200	48,700	0	0	0	0	48,700

HOWARD COMMUNITY COLLEGE

Number: M0542

Project: M0542-FY2016 CAMPUS ROADWAYS and PARKING

Description

Provide required modifications to campus roadways and parking to accommodate necessary changes to vehicular and pedestrian traffic patterns. Upgrade the existing roadway infrastructure to accommodate the college's enrollment growth. Provide additional parking facilities to address the severe parking shortage on campus.

Justification

The college must upgrade its campus roadways to provide safe driving conditions and address state and local codes and compliance. The college strives to keep automobile traffic on the periphery of campus to promote safety and provide a vehicular-free learning environment. This project will address ongoing roadway improvements as well as parking requirements for the college.

Remarks

The college will propose split-funding of construction for this project as eligible. Funds listed as "OTHER" are provided by the college. Funds listed as CC Bonds are county general obligation bonds that are paid for with funds from the college. The source of these funds is through college fund balances, student fees, and the operating budget.

Project Schedule

- FY17 Construction completed for East Garage Expansion.
- FY25 Design the north garage of 750 spaces.
- FY26 Construct the north garage of 750 spaces. There are no funds requested for the upcoming fiscal year and no use of funds planned.

Operating Budget Impact

Annual Bond Redemption \$ \$920,250

The projected impact of the completed project on the current expense budget: no increase.



HOWARD COMMUNITY COLLEGE

Number: M0542

Project: FY2016 CAMPUS ROADWAYS and PARKING

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	2,200	0	2,200	0	0	0	0	0	0	1,600	0	0	0	3,800
CONSTRUCTION	14,200	0	14,200	0	0	0	0	0	0	0	18,500	0	0	32,700
Total Expenditures	16,400	0	16,400	0	0	0	0	0	0	1,600	18,500	0	0	36,500
BONDS	2,683	0	2,683	0	0	0	0	0	0	800	9,250	0	0	12,733
COLLEGE REVENUE BACKED BOND	7,717	0	7,717	0	0	0	0	0	0	0	0	0	0	7,717
GRANTS	0	0	0	0	0	0	0	0	0	800	9,250	0	0	10,050
OTHER SOURCES	6,000	0	6,000	0	0	0	0	0	0	0	0	0	0	6,000
Total Funding	16,400	0	16,400	0	0	0	0	0	0	1,600	18,500	0	0	36,500

\$16,177,648 spent and encumbered through February 2018

\$13,466,740 spent and encumbered through February 2017

Project Status : FY18 - Construction is complete and garage opened for spring semester 2017; finalizing punchlist items in preparation for project closeout. The scope of the project from the prior fiscal year included completing the construction phase for the garage expansion. The timing of the project from the prior fiscal year included completing construction for garage opening in January 2017.

FY 2018 Budget	16,400	0	16,400	0	0	0	0	0	0	1,600	18,500	0		36,500
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

HOWARD COMMUNITY COLLEGE

Number: M0543

Project: M0543-FY2012 SCIENCE ENGINEERING and TECHNOLOGY BLDG

Description

Design and construct a science, engineering, and technology building of approximately 145,300 GSF. The new facility will support the science and technology disciplines and prepare students for a career in science, technology, and engineering. This new facility will help address local and state workforce shortage areas and supports STEM initiatives.

Justification

This new facility will provide students with appropriate classrooms, labs, and study areas to promote collaborative learning environments needed for the science, engineering and technology disciplines. The disciplines to be housed in this facility include biology, chemistry, physics, astronomy, meteorology, horticulture, physical science, geology, engineering technology, telecommunications, computer forensics, cyber forensics, cyber security, biomedical engineering, and advanced computer systems. This building addresses local and state workforce shortage areas and STEM initiatives. The building will provide the necessary facilities to educate and train students for a career in these fields.

Remarks

With consideration to the debt capacity and funding limitations for both the county and state, the college has requested multi-year funding for the construction phase of this project. Funds listed under "other" are provided by the college. The source of these funds is through the college fund balance, student fees, and the operating budget.

Project Schedule

FY14 - Completed design of new building.

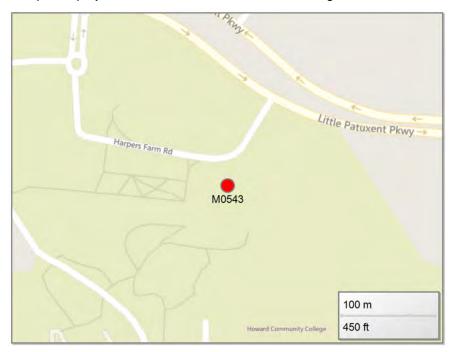
FY15-FY17 - Completed construction of new building.

FY17-FY18 - Completing the furnishing and equipping of new building. There are no funds proposed for the upcoming fiscal year; the project is being completed with installation of final equipment necessary for operations.

Operating Budget Impact

Annual Bond Redemption \$ \$1,722,060

The operations of this building will increase the operating budget by approximately \$18.70 per square foot. The projected impact of the completed project was accounted for in the FY18 budget.



HOWARD COMMUNITY COLLEGE

Number: M0543

Project: FY2012 SCIENCE ENGINEERING and TECHNOLOGY BLDG

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	6,166	0	6,166	0	0	0	0	0	0	0	0	0	0	6,166
CONSTRUCTION	62,400	0	62,400	0	0	0	0	0	0	0	0	0	0	62,400
EQUIPMENT & FURNISHINGS	8,200	0	8,200	0	0	0	0	0	0	0	0	0	0	8,200
Total Expenditures	76,766	0	76,766	0	0	0	0	0	0	0	0	0	0	76,766
BONDS	38,268	0	38,268	0	0	0	0	0	0	0	0	0	0	38,268
GRANTS	38,268	0	38,268	0	0	0	0	0	0	0	0	0	0	38,268
OTHER SOURCES	230	0	230	0	0	0	0	0	0	0	0	0	0	230
Total Funding	76,766	0	76,766	0	0	0	0	0	0	0	0	0	0	76,766

\$74,260,366 spent and encumbered through February 2018 \$61,888,826 spent and encumbered through February 2017

Project Status: FY18 - Furniture and equipment installation continues on schedule; preparing for project closeout in spring 2018. The scope of the project from the prior fiscal year included procurement and installation of furniture and equipment. The timing of the project from the prior fiscal year included completing the construction phase in preparation for equipping the building and project completion.

FY 2018 Budget	76,766	0	76,766	0	0	0	0	0	0	0	0	0		76,766
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: M0545-FY2025 MAINTENANCE BUILDING Number: M0545

Description

The purpose of this project is to obtain a maintenance building to support plant operations and facilities. As the college continues to grow, the campus maintenance area must also expand. The college's utilities also need to be upgraded to support future buildings and load requirements. This project will help increase efficiency between the utility plant and the maintenance building. It will assist the college in developing cost-savings programs that will enhance building efficiency and ultimately decrease operating costs.

Justification

In order to properly service campus buildings, infrastructure, and the college community, a maintenance building is needed. With the continued growth, the current area can no longer accommodate the demand. A proper maintenance and plant operations facility is required. Plant operations and maintenance also assure the cleanliness of all college facilities and grounds to sustain an environment conducive to learning. A new facility is required to provide responsive, reliable, and cost-effective services for a safe and comfortable environment for college students, faculty, and staff.

Remarks

Project Schedule

FY25 - Design new facility.

FY26 - Construct new facility.

FY26 - Furnish and equip new facility. There are no funds requested for the upcoming fiscal year and no use of funds planned.

Operating Budget Impact

Annual Bond Redemption \$ \$117,000

The operations of this building will increase the operating budget by approximately \$21.25 per square foot. The projected impact of the completed project on the current expense budget: no increase until completed in FY26.

HOWARD COMMUNITY COLLEGE



HOWARD COMMUNITY COLLEGE

Number: M0545

Project: FY2025 MAINTENANCE BUILDING

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	0	0	0	0	0	0	0	0	500	0	0	0	500
CONSTRUCTION	0	0	0	0	0	0	0	0	0	0	3,900	0	0	3,900
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	0	0	0	0	800	0	0	800
Total Expenditures	0	0	0	0	0	0	0	0	0	500	4,700	0	0	5,200
BONDS	0	0	0	0	0	0	0	0	0	250	2,350	0	0	2,600
GRANTS	0	0	0	0	0	0	0	0	0	250	2,350	0	0	2,600
Total Funding	0	0	0	0	0	0	0	0	0	500	4,700	0	0	5,200

\$0 spent and encumbered through February 2018 spent and encumbered through February 2017

Project Status : There was no scope for this project from the prior fiscal year. There is no timing for this project from the prior fiscal year; design is scheduled to begin in FY25 followed by construction in FY26.

FY 2018 Budget	0	0	0	0	0	0	0	0	0	500	4,700	0		5,200
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

HOWARD COMMUNITY COLLEGE Project: M0547-FY2026 CONTINUING EDUCATION BUILDING Number: M0547

Description

Construct a new continuing education and workforce development facility of approximately 60,000 GSF to support noncredit courses, contract credit courses, and professional services to individuals, county agencies, and employers throughout the State of Maryland.

Justification

Continuing education provides special services to the community as well as county and state agencies such as workforce development and contract training (credit and noncredit) in business management, healthcare, advanced technology, and other areas. Courses and programs are offered in a variety of formats and held at various sites throughout Howard County including the public schools, Ecker Business Training Center, and Laurel College Center. A new building is required to ensure that the college continues to provide quality services to the community including online and web accessibility.

Remarks

Project Schedule

FY26 - Plan and design new building.

FY27 - Construct new building.

FY28 - Furnish and equip new building. There are no funds requested for the upcoming fiscal year and no use of funds planned.

Operating Budget Impact

Annual Bond Redemption \$ \$481,500

The operations of this building will increase the operating budget by approximately \$21.25 per square foot. The projected impact of the completed project on the current expense budget: no increase until completed in FY28.



HOWARD COMMUNITY COLLEGE

Number: M0547

Project: FY2026 CONTINUING EDUCATION BUILDING

(In Thousands)					Fiv	e Year Ca	pital Pro	gram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	0	0	0	0	0	0	0	0	0	1,700	0	0	1,700
CONSTRUCTION	0	0	0	0	0	0	0	0	0	0	0	17,600	0	17,600
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	0	0	0	0	0	0	2,100	2,100
Total Expenditures	0	0	0	0	0	0	0	0	0	0	1,700	17,600	2,100	21,400
BONDS	0	0	0	0	0	0	0	0	0	0	850	8,800	1,050	10,700
GRANTS	0	0	0	0	0	0	0	0	0	0	850	8,800	1,050	10,700
Total Funding	0	0	0	0	0	0	0	0	0	0	1,700	17,600	2,100	21,400

\$0 spent and encumbered through February 2018 spent and encumbered through February 2017

Project Status: There was no scope for this project from the prior fiscal year. There is no timing for this project from the prior fiscal year; design is scheduled to begin in FY26.

FY 2018 Budget	0	0	0	0	0	0	0	0	0	0	1,700	19,700		21,400
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	-2,100	2,100	0

Project: M0550-FY2017 SYSTEMIC RENOVATIONS Number: M0550

Description

This project addresses campuswide systemic renovations and deferred maintenance. The project includes improvements to the college's physical plant, maintenance and repairs, facility renewals, as well as safety and code compliance at all college campuses.

Justification

The project was formerly known as Safety Compliance and Facility Renewals. It includes renovations and upgrades to address ADA requirements, life safety issues, code compliance, critical deferred maintenance and facility renewals.

Remarks

The college prioritizes and schedules its renovation needs as documented in the facilities condition assessment, facilities master plan, and identified by the renovations assessment committee.

Project Schedule

FY19-FY22 Includes campus-wide security system installation, phased cable TV/IT/AV upgrades, public restroom upgrades, athletic field resurfacing and modifications, signage installation, major interior improvements, deferred maintenance, and necessary modifications to all college buildings, facilities, and campuses.

The use of funds for the upcoming fiscal year addresses campuswide interior improvements and deferred maintenance; funds will be applied to cafe renovations, IT/AV/cable upgrades, restroom upgrades, interior upgrades.

Operating Budget Impact

Annual Bond Redemption \$ \$2,933,145

The projected impact of the completed project on the current expense budget: no increase.

HOWARD COMMUNITY COLLEGE



HOWARD COMMUNITY COLLEGE

Number: M0550

Project: FY2017 SYSTEMIC RENOVATIONS

(In Thousands)					Five	Year Ca	pital Prog	gram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	4,456	2,000	6,456	11,176	11,498	1,407	1,809	3,110	29,000	11,985	1,360	4,640	11,740	65,181
Total Expenditures	4,456	2,000	6,456	11,176	11,498	1,407	1,809	3,110	29,000	11,985	1,360	4,640	11,740	65,181
BONDS	4,456	2,000	6,456	11,176	11,498	1,407	1,809	3,110	29,000	11,985	1,360	4,640	11,740	65,181
Total Funding	4,456	2,000	6,456	11,176	11,498	1,407	1,809	3,110	29,000	11,985	1,360	4,640	11,740	65,181

\$1,348,814 spent and encumbered through February 2018 \$236,592 spent and encumbered through February 2017

Project Status: FY18 - Design and construction for academic studio repurposing, athletic field enhancements, major interior improvements, systemic renovations and deferred maintenance.

The scope for this project from the prior fiscal year included design and construction of interior improvements, systemic renovations and deferred maintenance. The timing of the project from the prior fiscal year included design and construction of systemic projects.

FY 2018 Budget	4,456	6,951	11,407	11,326	2,357	9,048	1,809	1,710	26,250	7,935	1,360	2,240		49,192
Difference 2018 / 2019	0	(4,951)	(4,951)	(150)	9,141	(7,641)	0	1,400	2,750	4,050	0	2,400	11,740	15,989

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
N3102 FY2000 BLANDAIR REGIONAL PARK A project to master plan, design, and construct a 298-acre	В	27,278	500	27,778	4,200	3,000	4,500	4,500	800	44,778
regional park, and restore the 19th century Blandair Mansion and out buildings located off MD175 in Columbia.	G	5,028	2,565	7,593	0	0	0	0	0	7,593
invariable and out buildings located on MD 173 in Columbia.	Т	1,730	100	1,830	0	0	0	0	0	1,830
	Total	34,036	3,165	37,201	4,200	3,000	4,500	4,500	800	54,201
N3103 FY2000 PARKLAND ACQUISITION PROGRAM This project establishes a fund for County-wide park land	G	19,586	-2,010	17,576	0	0	0	0	0	17,576
acquisition and related expenses.	0	2,938	0	2,938	0	0	0	0	0	2,938
	Р	354	0	354	0	0	0	0	0	354
	T	4,231	0	4,231	0	0	0	0	0	4,231
	Total	27,109	-2,010	25,099	0	0	0	0	0	25,099
N3107 FY2000 ROCKBURN BRANCH PARK A project to provide additional improvements at Rockburn	В	1,198	0	1,198	0	0	0	0	0	1,198
Park to include the synthetic turf field, parking, a restroom and utility extensions.	0	14	0	14	0	0	0	0	0	14
and unity extensions.	Р	510	0	510	0	0	0	0	0	510
	Т	4,057	0	4,057	0	0	0	0	0	4,057
	Total	5,779	0	5,779	0	0	0	0	0	5,779
N3108 FY2004 PARK SYSTEMIC IMPROVEMENTS	В	13,350	1,000	14,350	0	1,200	0	2,625	1,125	19,300
This project will provide replacement of all types of park facilities and related engineering to include equipment, or building elements which have deteriorated beyond routine	G	1,456	-100	1,356	0	0	0	0	0	1,356
maintenance efforts.	0	0	79	79	0	0	0	0	0	79
	Р	1,145	0	1,145	0	0	0	0	0	1,145
	Т	11,077	800	11,877	1,500	1,500	1,500	2,000	2,000	20,377
	Total	27,028	1,779	28,807	1,500	2,700	1,500	4,625	3,125	42,257
N3109 FY2004 PARKS RESURFACING PROGRAM	В	200	0	200	0	500	0	0	0	700
A project to fund roadway, pathway, trails, parking lot, playground and game court resurfacing, replacement and	G	298	0	298	0	0	0	0	0	298
additions within the County's park system.	Р	340	0	340	0	0	0	0	0	340

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
N3109 FY2004 PARKS RESURFACING PROGRAM A project to fund roadway, pathway, trails, parking lot,	Т	6,257	350	6,607	500	500	500	500	500	9,107
playground and game court resurfacing, replacement and additions within the County's park system.	Total	7,095	350	7,445	500	1,000	500	500	500	10,445
N3932 FY2000 WESTERN REGIONAL PARK A project to design and construct a 160-acre regional park	В	2,219	0	2,219	0	0	0	0	0	2,219
located northwest of the intersection of Carrs Mill Road and MD97.	D	17	0	17	0	0	0	0	0	17
	G	10,580	0	10,580	0	0	0	0	0	10,580
	Т	5,267	0	5,267	0	0	0	0	0	5,267
	Total	18,083	0	18,083	0	0	0	0	0	18,083
N3940 FY2000 NORTH LAUREL PARK A project to design and construct a 51-acre park and	В	5,461	0	5,461	0	0	0	0	0	5,461
swimming pool lying northeast of North Laurel Road and Washington Avenue.	D	30	0	30	0	0	0	0	0	30
washington / Worldo.	G	1,241	0	1,241	0	0	0	0	0	1,241
	Т	294	0	294	0	0	0	0	0	294
	Total	7,026	0	7,026	0	0	0	0	0	7,026
N3953 FY2000 CENTENNIAL LAKE RESTORATION A project to design and construct improvements to	В	21	0	21	0	0	0	0	0	21
Centennial Lake to include dredging, artificial aeration, and shoreline stabilization.	Р	66	0	66	0	0	0	0	0	66
Chorolino dadinizationi	Total	87	0	87	0	0	0	0	0	87
N3957 FY2003 TROY PARK & HISTORIC REHABILITATION	В	18,585	1,500	20,085	3,100	0	4,000	0	0	27,185
A project to acquire an additional 5 acres, rehabilitate an 1820 historic house, and design and construct a 106-acre	G	3,072	500	3,572	2,000	0	0	0	0	5,572
Regional Park and Community Center/Athletic Complex at MD100 and US1.	0	105	0	105	0	0	0	0	0	105
WE foo and Got.	Т	1,381	0	1,381	0	0	0	0	0	1,381
	Total	23,143	2,000	25,143	5,100	0	4,000	0	0	34,243
N3958 FY2003 HISTORIC STRUCTURES REHABILITATION	В	1,050	300	1,350	0	0	0	0	0	1,350
This project creates a fund for the preservation and rehabilitation of historic properties under the management	G	320	410	730	0	0	0	0	0	730
of the Department of Recreation and Parks.	0	4,055	-43	4,012	0	0	0	0	0	4,012
	Р	222	0	222	0	0	0	0	0	222

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
N3958 FY2003 HISTORIC STRUCTURES REHABILITATION	Т	3,871	350	4,221	500	500	500	500	500	6,721
This project creates a fund for the preservation and rehabilitation of historic properties under the management of the Department of Recreation and Parks.	Total	9,518	1,017	10,535	500	500	500	500	500	13,035
N3959 FY2005 PATAPSCO FEMALE INSTITUTE SITE WORK	В	1,150	0	1,150	0	0	0	0	0	1,150
A project to design and construct site improvements related to the historic Patapsco Female Institute located on	Т	387	0	387	0	0	0	0	0	387
Sarah's Lane in Ellicott City.	Total	1,537	0	1,537	0	0	0	0	0	1,537
N3960 FY2006 ROBINSON PROPERTY NATURE CENTER	В	12,355	0	12,355	0	0	0	0	0	12,355
A project to design and construct a nature center and related site improvements on the former Robinson property	G	2,333	0	2,333	0	0	0	0	0	2,333
located at Cedar Lane and Harriet Tubman Lane.	0	1,100	0	1,100	0	0	0	0	0	1,100
	Т	1,984	0	1,984	0	0	0	0	0	1,984
	Total	17,772	0	17,772	0	0	0	0	0	17,772
N3962 FY2008 CENTENNIAL PARK IMPROVEMENTS This project consists of improvements to Centennial Park	G	215	0	215	0	0	0	0	0	215
to include replacement of field lights, synthetic turf field, expanded parking, pond to stream retrofit, stream bank	Т	614	50	664	0	0	0	0	0	664
expanded parking, point to shearing earliering, are all bank stabilization, maintenance shop/office addition, boat rental expansion, roadway/parking repairs and upgrades, and new signage.	Total	829	50	879	0	0	0	0	0	879
N3963 FY2009 PATHWAY and TRAIL REHAB and EXPANSION	В	478	0	478	0	0	0	0	0	478
A project to rehabilitate and expand the existing Pathway and Trail System throughout the County.	G	1,092	0	1,092	0	0	0	0	0	1,092
	Т	1,035	100	1,135	100	100	100	100	0	1,535
	Total	2,605	100	2,705	100	100	100	100	0	3,105
N3965 FY2007 MIDDLE PATUXENT IMPROVEMENTS A project to design and construct a restroom, storage	В	950	0	950	0	0	0	0	0	950
building, parking improvements and bridges in the Middle Patuxent Environmental Area located southeast of the	G	150	0	150	0	0	0	0	0	150
intersection of MD108 and Trotter Road.	Р	25	0	25	0	0	0	0	0	25
	Т	745	0	745	0	0	0	0	0	745
	Total	1,870	0	1,870	0	0	0	0	0	1,870

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
N3967 FY2007 SOUTH BRANCH PARK A project to design and construct a seven-acre park	В	800	0	800	0	0	0	0	0	800
located at Old West Friendship Road and the Patapsco River just south of Sykesville.	G	100	0	100	0	0	0	0	0	100
,	0	8	0	8	0	0	0	0	0	8
	Р	10	0	10	0	0	0	0	0	10
	Т	550	0	550	0	0	0	0	0	550
	Total	1,468	0	1,468	0	0	0	0	0	1,468
N3970 FY2008 RECREATION and PARKS HEADQUARTERS EXPAN	Т	118	0	118	0	0	0	0	0	118
A project to design and construct site improvements and additional office and warehouse space for the Recreation and Parks Headquarters on Oakland Mills Road in Columbia.	Total	118	0	118	0	0	0	0	0	118
N3971 FY2009 FOREST CONSERVATION MITIGATION EASEMENT PGM	0	3,100	0	3,100	0	0	0	0	0	3,100
A project to conserve or create forested areas within the County through the use of developer fees in accordance with local and State forest mitigation requirements.	Total	3,100	0	3,100	0	0	0	0	0	3,100
N3972 FY2011 DEFAULTED FOREST CONSERVATION and LANDSCAPING	D	905	20	925	0	0	0	0	0	925
A project to provide for planting of shrubs, trees, as necessary in a subdivision or site where a developer failed to install the forest conservation improvements and landscape improvements in accordance with the approved forest conservation plan, landscape plan and developer agreement.	Total	905	20	925	0	0	0	0	0	925
N3973 FY2014 EAST COLUMBIA LIBRARY ATHLETIC FIELD and SITE IMPROVEMENTS	В	3,900	0	3,900	0	0	0	0	0	3,900
A project to upgrade the athletic fields at East Columbia Library, located off of Cradlerock in Columbia.	Total	3,900	0	3,900	0	0	0	0	0	3,900
N3976 FY2025 SOUTH FULTON PARK	В	0	0	0	0	0	0	0	0	0
A project to master plan, design and construct a 84-acre community park located off of Rt29 and Murphy Road, north of the Patuxent River.	Total	0	0	0	0	0	0	0	0	0
N3977 FY2019 KIWANIS PARK EXTENSION A project to master plan, design and construct an	В	0	180	180	180	0	0	0	0	360
additional 30-acre site adjacent to the existing Kiwanis Park and to improve the existing park site.	0	0	90	90	90	0	0	0	0	180
g pain one.	Total	0	270	270	270	0	0	0	0	540

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
N3978 FY2018 PARKLAND ACQUISTION PROGRAM This project establishes a fund for County-wide park land	G	80	3,780	3,860	1,000	1,000	1,000	1,000	0	7,860
acquisition and related expenses.	Т	50	50	100	50	50	50	50	0	300
	Total	130	3,830	3,960	1,050	1,050	1,050	1,050	0	8,160
PARKS PROJECTS Total		193,138	10,571	203,709	13,220	8,350	12,150	11,275	4,925	253,629

Howard County, MD FY2019 Executive Proposed Capital Budget (\$000) PARKS-PARKS PROJECTS

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	88,995	3,480	92,475
D	DEVELOPER CONTRIBUTION	952	20	972
G	GRANTS	45,551	5,145	50,696
0	OTHER SOURCES	11,320	126	11,446
Р	PAY AS YOU GO	2,672	0	2,672
Т	TRANSFER TAX	43,648	1,800	45,448
Total		193,138	10,571	203,709

2019 Executive Proposed 5 Year Capital Budget Project Type Summary (PARKS-PARKS PROJECTS)

Rev	enue Source	Prior Approp	Current FY	2020	2021	2022	2023	2024	5 Year Total
В	BONDS	88,995	3,480	7,480	4,700	8,500	7,125	1,925	122,205
D	DEVELOPER CONTRIBUTION	952	20	0	0	0	0	0	972
G	GRANTS	45,551	5,145	3,000	1,000	1,000	1,000	0	56,696
Ο	OTHER SOURCES	11,320	126	90	0	0	0	0	11,536
Р	PAY AS YOU GO	2,672	0	0	0	0	0	0	2,672
Т	TRANSFER TAX	43,648	1,800	2,650	2,650	2,650	3,150	3,000	59,548
Tota	al	193,138	10,571	13,220	8,350	12,150	11,275	4,925	253,629

Project: N3102-FY2000 BLANDAIR REGIONAL PARK

PARKS PROJECTS

Number: N3102

Description

A project to master plan, design, and construct a 298-acre regional park, and restore the 19th century Blandair Mansion and out buildings located off MD175 in Columbia.

Justification

Project identified in the 2005, 2012 and 2017 Land Preservation, Parks and Recreation Plan and is endorsed by the Recreation and Parks Advisory Board, and the Blandair Planning Committee.

Remarks

Prior funds include \$1,475,000 in State Bond Bill and FY11-\$219,000, FY12-\$438,000, FY13-\$440,000 and FY14-\$1,443,000 in Program Open Space funds. FY18 grant revenue adjustment (\$1,013,000).

FY19 request addresses funds for the continued construction of Phase III, the start of Phase IV Design, Equipment and Furnishings. Note: The funding for Phase IV construction will be proposed in the fiscal year 2020 budget. Phase IV construction cannot begin until the bridge that will be constructed over RT 175 to connect the southern side of Blandair to the northern side is completed. \$2,565,000, FY19 Program Open Space development funding.

Project Schedule

FY19 - Continue construction of Phase III and start the design of Phase IV.

FY20 - Finish the design of Phase IV, start construction of Phase IV and start the design of Phase V.

 $\ensuremath{\mathsf{FY21}}$ - Continue the construction of Phase IV and continue the design of Phase V

FY22 - Start construction of Phase V.

FY23 - Continue construction of Phase V.

FY24 - Start the design of Phase VI.

FY25 - Start construction of Phase VI and start the design of Phase VII.

FY26 - Start construction of Phase VII.

Operating Budget Impact

Annual Bond Redemption \$ \$2,757,510

The start-up costs for this entire regional park will be \$500,000. The operational costs after construction for each phase is estimated: Phase III - \$628,000, Phase IV - \$50,000, Phase V - \$764,000, Phase VI - \$700,000, Phase VII - \$414,000 and Historic Manor Hours/Area - \$650,000



Project: FY2000 BLANDAIR REGIONAL PARK Number: N3102

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	5,538	500	6,038	700	100	0	0	800	1,600	500	0	0	0	8,138
CONSTRUCTION	28,498	2,565	31,063	3,500	2,900	4,500	4,500	0	15,400	13,000	3,000	0	0	62,463
EQUIPMENT & FURNISHINGS	0	100	100	0	0	0	0	0	0	0	0	0	0	100
Total Expenditures	34,036	3,165	37,201	4,200	3,000	4,500	4,500	800	17,000	13,500	3,000	0	0	70,701
BONDS	27,278	500	27,778	4,200	3,000	4,500	4,500	800	17,000	13,500	3,000	0	0	61,278
GRANTS	5,028	2,565	7,593	0	0	0	0	0	0	0	0	0	0	7,593
TRANSFER TAX	1,730	100	1,830	0	0	0	0	0	0	0	0	0	0	1,830
Total Funding	34,036	3,165	37,201	4,200	3,000	4,500	4,500	800	17,000	13,500	3,000	0	0	70,701

\$25,281,517 spent and encumbered through February 2018 \$23,787,020 spent and encumbered through February 2017
Project Status: Phase I and II are completed. Started construction of Phase III.

FY 2018 Budget	34,036	500	34,536	4,000	3,400	4,000	4,000	800	16,200	13,500	3,000	0		67,236
Difference 2018 / 2019	0	2,665	2,665	200	(400)	500	500	0	800	0	0	0	0	3,465

Project: N3103-FY2000 PARKLAND ACQUISITION PROGRAM

PARKS PROJECTS

Number: N3103

Description

This project establishes a fund for County-wide park land acquisition and related expenses. This project allows the County to move quickly to acquire land which becomes available, and satisfies one or more of the following objectives: addresses State and County Greenway objectives, protects sensitive natural resources threatened by development, acquire additions to existing parks, and/or satisfies park and open space needs as identified in the 2005 and 2012 Land Preservation, Recreation and Recreation Plan.

Justification

This project has been endorsed by the Recreation and Parks Advisory Board and is supported by the 2005 and 2012 Land Preservation and Recreation Plan.

Remarks

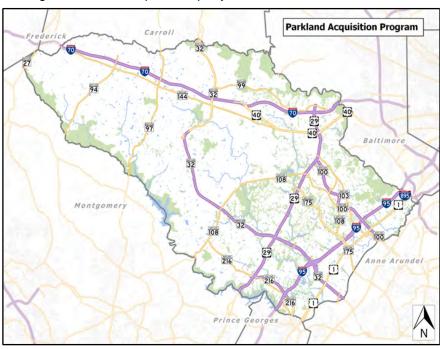
- 1. Acquire additional park land and County and State greenway property in accordance with our Land Preservation, Park & Recreation Plan (LPPRP).
- 2. A prior year (FY15) funding reduction of \$4,883,000 reduction in Program Open Space grants funds due to request versus award in prior open space funding. Request addresses Program Open Space funds for 2017 Land Preservation, Park & Recreation Plan, appraisals and environmental studies. \$300,000 (FY17) in other sources is from the subdivision regulation's fee-in-lieu of open space developer payments.
- 3. FY19, this capital project is in the close out process. Please refer to the new Parkland Acquisition Program Project N3978. The existing grant funding of \$2,010,000 will be transferred to the new Parkland Acquisition Program Project N3978.

Project Schedule

FY19 - This project is in the close out process. Please refer to the new Parkland Acquisition Program Capital Project N3978.

Operating Budget Impact

Operating costs of woodland and natural areas are absorbed within current operational budgets. Developed park areas are maintained at an average cost of \$3,900 per acre per year.



Project: FY2000 PARKLAND ACQUISITION PROGRAM Number: N3103

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	582	0	582	0	0	0	0	0	0	0	0	0	0	582
LAND ACQUISITION	26,527	(2,010)	24,517	0	0	0	0	0	0	0	0	0	0	24,517
Total Expenditures	27,109	(2,010)	25,099	0	0	0	0	0	0	0	0	0	0	25,099
GRANTS	19,586	(2,010)	17,576	0	0	0	0	0	0	0	0	0	0	17,576
OTHER SOURCES	2,938	0	2,938	0	0	0	0	0	0	0	0	0	0	2,938
PAY AS YOU GO	354	0	354	0	0	0	0	0	0	0	0	0	0	354
TRANSFER TAX	4,231	0	4,231	0	0	0	0	0	0	0	0	0	0	4,231
Total Funding	27,109	(2,010)	25,099	0	0	0	0	0	0	0	0	0	0	25,099
\$24,713,736 spent and encumbere \$24,267,701 spent and encumbere Project Status : Purchased Johnsor	d through Feb													
FY 2018 Budget	27,109	0	27,109	0	0	0	0	0	0	0	0	0		27,109
Difference 2018 / 2019	0	(2,010)	(2,010)	0	0	0	0	0	0	0	0	0	0	(2,010)

Project: N3107-FY2000 ROCKBURN BRANCH PARK Number: N3107

Description

A project to provide additional improvements at Rockburn Park to include the synthetic turf field, parking, a restroom and utility extensions. This park is located at Landing and Montgomery Roads.

Justification

This project is identified in the 1999, 2005, 2012 and 2017 Land Preservation, Parks and Recreation Plans, and is endorsed by the Recreation and Parks Advisory Board.

Remarks

Prior appropriation reflects TAO #2-FY2009

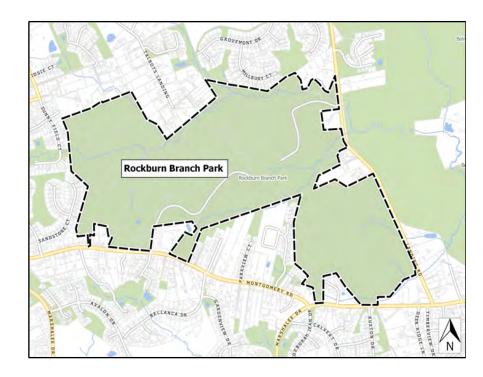
Project Schedule

FY25 - Phase III installation of light and synthetic field on field 15.

FY26 - Design and construction of restroom and utilities.

Operating Budget Impact

Annual Bond Redemption \$ \$155,160



Project: FY2000 ROCKBURN BRANCH PARK Number: N3107

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	659	0	659	0	0	0	0	0	0	50	200	0	0	909
CONSTRUCTION	5,120	0	5,120	0	0	0	0	0	0	1,200	800	0	0	7,120
Total Expenditures	5,779	0	5,779	0	0	0	0	0	0	1,250	1,000	0	0	8,029
BONDS	1,198	0	1,198	0	0	0	0	0	0	1,250	1,000	0	0	3,448
OTHER SOURCES	14	0	14	0	0	0	0	0	0	0	0	0	0	14
PAY AS YOU GO	510	0	510	0	0	0	0	0	0	0	0	0	0	510
TRANSFER TAX	4,057	0	4,057	0	0	0	0	0	0	0	0	0	0	4,057
Total Funding	5,779	0	5,779	0	0	0	0	0	0	1,250	1,000	0	0	8,029
\$5,773,832 spent and encumbered \$5,766,117 spent and encumbered Project Status :														
FY 2018 Budget	5,779	0	5,779	0	0	0	0	0	0	1,250	1,000	0		8,029
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: N3108-FY2004 PARK SYSTEMIC IMPROVEMENTS

Number: N3108

PARKS PROJECTS

Description

This project will provide replacement of all types of park facilities and related engineering to include equipment, or building elements which have deteriorated beyond routine maintenance efforts. This project will also address small park upgrades.

Justification

Project endorsed by the Recreation and Parks Board and is consistent with 1999, 2005, 2012 and 2017 Land Preservation and Recreation Plan.

Remarks

Prior funds FY17 - \$150,000 State Bond Bill for the relocation and construction of a basketball court, playground and pathway at Huntington Park.

Prior funds FY18 - \$87,000 Ellicott City FEMA grant, \$100,000 Design grant for Ellicott City Lot F and the old Roger Carter Recreation Center site with a \$100,000 match (T-tax).

FY19 - Ongoing Park improvements. Replacing Cedar Lane Park synthetic turf field #5 and Rockburn Branch Park synthetic turf field #6. \$78,875 (Other Sources) from Howard County Youth Program donation for ballfield lights to be installed on Field #7 at Kiwanis-Wallas Park.

FY-19 \hat{u} Fund reduction of \$100,000 in Grants due to not receiving design grant for Ellicott City Lot F and the old Roger Carter Recreation Center site.

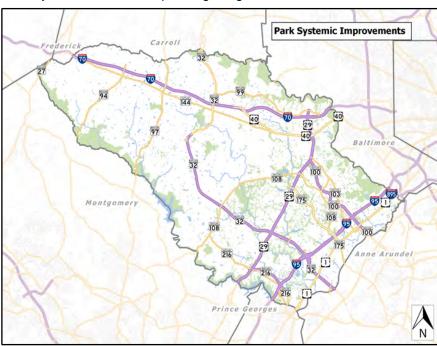
Project Schedule

FY19 - Planning and Construction Continues FY19-26 - Construction Continues

Operating Budget Impact

Annual Bond Redemption \$ \$1,059,750

No additional operating funds required. Projects are upgrades of existing facilities or small improvements where the operating expenses are already addressed in the operating budget.



Project: FY2004 PARK SYSTEMIC IMPROVEMENTS Number: N3108

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,222	200	1,422	100	100	100	100	100	500	100	100	0	0	2,122
CONSTRUCTION	25,806	1,579	27,385	1,400	2,600	1,400	4,525	3,025	12,950	3,650	4,400	0	0	48,385
Total Expenditures	27,028	1,779	28,807	1,500	2,700	1,500	4,625	3,125	13,450	3,750	4,500	0	0	50,507
BONDS	13,350	1,000	14,350	0	1,200	0	2,625	1,125	4,950	1,750	2,500	0	0	23,550
GRANTS	1,456	(100)	1,356	0	0	0	0	0	0	0	0	0	0	1,356
OTHER SOURCES	0	79	79	0	0	0	0	0	0	0	0	0	0	79
PAY AS YOU GO	1,145	0	1,145	0	0	0	0	0	0	0	0	0	0	1,145
TRANSFER TAX	11,077	800	11,877	1,500	1,500	1,500	2,000	2,000	8,500	2,000	2,000	0	0	24,377
Total Funding	27,028	1,779	28,807	1,500	2,700	1,500	4,625	3,125	13,450	3,750	4,500	0	0	50,507

\$25,347,383 spent and encumbered through February 2018 \$23,587,281 spent and encumbered through February 2017 Project Status: Replaced several pedestrian bridges. Installed shade canopies over existing playgrounds.

FY 2018 Budget	27,028	1,500	28,528	1,500	2,700	1,500	2,800	3,200	11,700	3,200	4,000	0		47,428
Difference 2018 / 2019	0	279	279	0	0	0	1,825	(75)	1,750	550	500	0	0	3,079

Project: N3109-FY2004 PARKS RESURFACING PROGRAM

Number: N3109

PARKS PROJECTS

Description

A project to fund roadway, pathway, trails, parking lot, playground and game court resurfacing, replacement and additions within the County's park system. Improvements may include speed humps, chokers or other traffic calming devices as needed.

Justification

This project is identified in the 1999, 2005, 2012 and 2017 Land Preservation, Parks and Recreation Plans, and is endorsed by the Recreation and Parks Advisory Board.

Remarks

Prior funding included \$139,000 Ellicott City FEMA grant. \$30,000 East Columbia Library pathway grant.

FY19 - Ongoing surface improvements throughout the parks system.

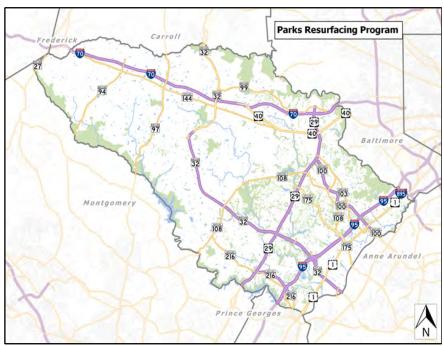
Project Schedule

FY19 - Construction continues FY19-24 - Construction continues

Operating Budget Impact

Annual Bond Redemption \$ \$31,500

No additional operating expense associated with this effort. These are resurfacing efforts on facilities already in operation.



Project: FY2004 PARKS RESURFACING PROGRAM

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	420	50	470	50	50	50	50	50	250	0	0	0	0	720
CONSTRUCTION	6,675	300	6,975	450	950	450	450	450	2,750	0	0	0	0	9,725
Total Expenditures	7,095	350	7,445	500	1,000	500	500	500	3,000	0	0	0	0	10,445
BONDS	200	0	200	0	500	0	0	0	500	0	0	0	0	700
GRANTS	298	0	298	0	0	0	0	0	0	0	0	0	0	298
PAY AS YOU GO	340	0	340	0	0	0	0	0	0	0	0	0	0	340
TRANSFER TAX	6,257	350	6,607	500	500	500	500	500	2,500	0	0	0	0	9,107
Total Funding	7,095	350	7,445	500	1,000	500	500	500	3,000	0	0	0	0	10,445

\$6,509,300 spent and encumbered through February 2018

\$5,907,860 spent and encumbered through February 2017

Project Status: Resurfaced and repaired the County's portion of Lake Elkhorn's pathway. Resurfaced and color coated several existing tennis courts. Resurfaced pathways.

FY 2018 Budget	7,095	500	7,595	500	500	500	0	0	1,500	0	0	0		9,095
Difference 2018 / 2019	0	(150)	(150)	0	500	0	500	500	1,500	0	0	0	0	1,350

Project: N3932-FY2000 WESTERN REGIONAL PARK

PARKS PROJECTS
Number: N3932

Description

A project to design and construct a 160-acre regional park located northwest of the intersection of Carrs Mill Road and MD97. Included will be concession, restroom, pavilion and all utilities.

Justification

This project is identified in the 1999, 2005, 2012 and 2017 Land Preservation, Parks and Recreation Plans, and is endorsed by the Recreation and Parks Advisory Board.

Remarks

Prior funds include Program Open Space funds. FY18 request (\$203,000 T-tax) addresses grant revenue that was budgeted but not received. \$284,000 grant reduction due to grants not received. \$3,000 developer contribution.

Project Schedule

FY26 - Design Phase V restroom/pavilion/concession building and parking.

FY27 - Construction Phase V.

Operating Budget Impact

Annual Bond Redemption \$ \$113,355

Estimated operating costs for Phase V restroom and concession building is estimated at \$20,000 annually.



Project: FY2000 WESTERN REGIONAL PARK Number: N3932

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	2,309	0	2,309	0	0	0	0	0	0	0	300	0	0	2,609
CONSTRUCTION	15,774	0	15,774	0	0	0	0	0	0	0	0	0	0	15,774
Total Expenditures	18,083	0	18,083	0	0	0	0	0	0	0	300	0	0	18,383
BONDS	2,219	0	2,219	0	0	0	0	0	0	0	300	0	0	2,519
DEVELOPER CONTRIBUTION	17	0	17	0	0	0	0	0	0	0	0	0	0	17
GRANTS	10,580	0	10,580	0	0	0	0	0	0	0	0	0	0	10,580
TRANSFER TAX	5,267	0	5,267	0	0	0	0	0	0	0	0	0	0	5,267
Total Funding	18,083	0	18,083	0	0	0	0	0	0	0	300	0	0	18,383
\$18,082,326 spent and encumbered \$18,083,624 spent and encumbered Project Status :														
FY 2018 Budget	18,083	0	18,083	0	0	0	0	0	0	0	300	0		18,383
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: N3940-FY2000 NORTH LAUREL PARK Number: N3940

Description

A project to design and construct a 51-acre park and swimming pool lying northeast of North Laurel Road and Washington Avenue. Facilities are being determined by a citizen's advisory committee and a master plan effort.

Justification

This project is identified in the 2005 and 2012 Land Preservation and Recreation Plan, and is endorsed by the North Laurel Planning Committee and the North Laurel Civic Association.

Remarks

Prior year funds available will address the construction of the park which consists of roads and parking, playground, pavilions, restrooms, skate park, basketball courts, tennis courts, baseball fields, and multi-purpose fields and design funds for swimming pool feasibility study. Prior appropriation reflects a TAO FY13 of a reduction of \$700,000. Begin the design process for the swimming pool. Please refer to Capital Project C-0358 for construction funding.

Project Schedule

FY19 - For construction funding schedule, please refer to Capital Project C-0358

Operating Budget Impact

Annual Bond Redemption \$ \$245,745 Annual operating costs for the park is estimated to be \$50,000.

PARKS PROJECTS



Project: FY2000 NORTH LAUREL PARK Number: N3940

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	891	0	891	0	0	0	0	0	0	0	0	0	0	891
LAND ACQUISITION	1,375	0	1,375	0	0	0	0	0	0	0	0	0	0	1,375
CONSTRUCTION	4,760	0	4,760	0	0	0	0	0	0	0	0	0	0	4,760
Total Expenditures	7,026	0	7,026	0	0	0	0	0	0	0	0	0	0	7,026
BONDS	5,461	0	5,461	0	0	0	0	0	0	0	0	0	0	5,461
DEVELOPER CONTRIBUTION	30	0	30	0	0	0	0	0	0	0	0	0	0	30
GRANTS	1,241	0	1,241	0	0	0	0	0	0	0	0	0	0	1,241
TRANSFER TAX	294	0	294	0	0	0	0	0	0	0	0	0	0	294
Total Funding	7,026	0	7,026	0	0	0	0	0	0	0	0	0	0	7,026
\$5,763,824 spent and encumbered the state of	rough Febru is completed	uary 2017 d.	44.500											
FY 2018 Budget	7,026	7,500	14,526	7,500	0	0	0	0	7,500	0	0	0		22,026
Difference 2018 / 2019	0	(7,500)	(7,500)	(7,500)	0	0	0	0	(7,500)	0	0	0	0	(15,000)

Project: N3953-FY2000 CENTENNIAL LAKE RESTORATION

PARKS PROJECTS

Number: N3953

Description

A project to design and construct improvements to Centennial Lake to include dredging, artificial aeration, and shoreline stabilization.

Justification

In 1995 a study was conducted by Coastal Environmental Services Inc. recommending that the above measures be taken to restore the health of the lake. This project is endorsed by the Recreation and Parks Advisory Board and is included in the 2005, 2012 and 2017 Land Preservation, Parks and Recreation Plan.

Remarks

FY17-The Department will use the remaining portion of the existing funds to initiate an updated profile survey of the existing lake bottom to determine the scope of work for the dredging project. Upon the completion of the survey, will then have current information to allow for the County to better determine the future design needs/costs and construction costs for dredging the lake. Project partly defunded.

Project Schedule

Operating Budget Impact

Annual Bond Redemption \$ \$945



Project: FY2000 CENTENNIAL LAKE RESTORATION

(In Thousands)					Fiv	e Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	87	0	87	0	0	0	0	0	0	0	0	0	0	87
Total Expenditures	87	0	87	0	0	0	0	0	0	0	0	0	0	87
BONDS	21	0	21	0	0	0	0	0	0	0	0	0	0	21
PAY AS YOU GO	66	0	66	0	0	0	0	0	0	0	0	0	0	66
Total Funding	87	0	87	0	0	0	0	0	0	0	0	0	0	87

\$59,738 spent and encumbered through February 2018

\$59,738 spent and encumbered through February 2017

Project Status: Lake bottom survey, sediment analysis, and dredging methods being evaluated in preparation for project design.

FY 2018 Budget	87	0	87	0	0	0	0	0	0	0	0	0		87
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: N3957-FY2003 TROY PARK & HISTORIC REHABILITATION

Description

A project to acquire an additional 5 acres, rehabilitate an 1820 historic house, and design and construct a 106-acre Regional Park and Community Center/Athletic Complex at MD100 and US1.

Justification

This project conforms to the goals and objectives of the 1999, 2005, 2012 and 2017 Land Preservation and Recreation Plan. This park will provide needed recreation facilities for the Elkridge Planning Area. The rehabilitation of the Troy House is endorsed by Preservation Howard County. This project is a key component to the US1 Corridor Revitalization effort.

Remarks

Prior funds include FY11-\$219,000 in Program Open Space Funds and, FY09-\$150,000 and FY10-\$455,000 in State Bond Bills.

FY18 - Request includes grant revenue adjustment (\$500,000). \$100,000 (Other Sources) National Park Service funds received due to services not rendered during design of Troy Mansion.

FY19 - Request addresses additional funding for the construction for the stadium field and completing the maintenance building design. \$500,000, Program Open Space development funding will be for partial funding for the maintenance building construction.

Project Schedule

FY19 - Start construction of Phase IIB, the Stadium Field and complete the design for Phase III maintenance building.

FY20 - Start Phase III maintenance building construction and start design of phase IV.

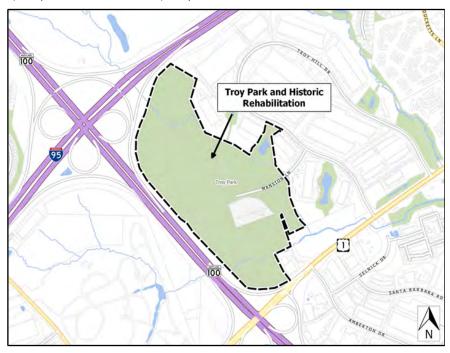
FY22 - Start construction of Phase IV.

FY26 - Start the Design of Phase V.

Operating Budget Impact

Annual Bond Redemption \$ \$1,268,325

The start up costs for this entire regional park will be \$500,000. Operational cost after construction for each phase is estimated: Phase I - \$20,000, Phase II - \$180,000, Phase III - \$640,000, Phase IV - \$320,000 and Phase V - \$900,000.



Project: FY2003 TROY PARK & HISTORIC REHABILITATION

In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	4,565	400	4,965	100	0	0	0	0	100	0	1,000	0	0	6,06
LAND ACQUISITION	1,753	0	1,753	0	0	0	0	0	0	0	0	0	0	1,75
CONSTRUCTION	16,825	1,600	18,425	5,000	0	4,000	0	0	9,000	0	0	0	0	27,42
Total Expenditures	23,143	2,000	25,143	5,100	0	4,000	0	0	9,100	0	1,000	0	0	35,24
BONDS	18,585	1,500	20,085	3,100	0	4,000	0	0	7,100	0	1,000	0	0	28,18
GRANTS	3,072	500	3,572	2,000	0	0	0	0	2,000	0	0	0	0	5,57
OTHER SOURCES	105	0	105	0	0	0	0	0	0	0	0	0	0	10
TRANSFER TAX	1,381	0	1,381	0	0	0	0	0	0	0	0	0	0	1,38
Total Funding	23,143	2,000	25,143	5,100	0	4,000	0	0	9,100	0	1,000	0	0	35,24

\$21,772,292 spent and encumbered through February 2017 Project Status: Completed Phase II construction.

FY 2018 Budget	23,143	4,000	27,143	3,100	3,000	0	0	0	6,100	0	1,000	0		34,243
Difference 2018 / 2019	0	(2,000)	(2,000)	2,000	(3,000)	4,000	0	0	3,000	0	0	0	0	1,000

Project: N3958-FY2003 HISTORIC STRUCTURES REHABILITATION

Description

This project creates a fund for the preservation and rehabilitation of historic properties under the management of the Department of Recreation and Parks. Work may include archeology studies, historical assessments, design and engineering related to historic buildings and site improvements.

Justification

This project is in compliance with the 2005, 2012 and 2017 Land Preservation, Parks and Recreation Plan, and it is endorsed by the Recreation and Parks Advisory Board and Preservation Howard County.

Remarks

- 1. Prior year OTHER funds represent insurance recovery on building loss at former Tisano property and revenue from the sale of property and development rights, grants and private contributions.
- 2. Prior Year OTHER sources may include revenue from the FY14 sale of the Dobbin property \$780,000, FY13 \$1,000,000, FY15 \$500,000, & FY16 \$1,740,000 for the sale of property development rights for the Belmont property and other properties, private contributions and \$125,000 for FY14 State Bond Bill. FY18 \$30,000 grant adjustment. A \$100,000 Maryland Heritage Areas Authorities Capital Grant for design work for the historic Bernard Fort House located in Ellicott City above Lot F with \$100,000 (T-tax) match.

FY19 - Request addresses funds for ongoing renovations/improvements on park historic structures/sites. \$150,000 State Bond Bill grant for the Bernard Fort House in Ellicott City and a \$150,000 State Bond Bill grant for the Ellicott City Baltimore & Ohio Railroad Station Museum and a County match for each project equaling \$300,000. \$75,000 Maryland Heritage Area Authority grant with a \$75,000 County match for the Caboose at the Ellicott City Baltimore & Ohio Railroad Station Museum and a \$35,000 Maryland Heritage Area Authority grant with a \$35,000 County match for the Diorama at the Ellicott City Baltimore & Ohio Railroad Station Museum. Reduce OTHER sources by \$43,000 due to less revenue received from the Dobbin property sale.

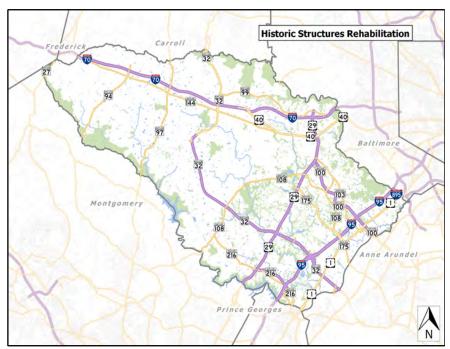
Project Schedule

FY19 - Construction FY19-24 - Construction Continues

Operating Budget Impact

Annual Bond Redemption \$ \$60,750

Upon completion of the renovation of a project, operating costs will be determined.



Difference 2018 / 2019

Number: N3958

Project: FY2003 HISTORIC STRUCTURES REHABILITATION

517

0

517

0

n Thousands)					Five	Year Ca	pital Prog	gram				Master F	lan	
propriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	600	100	700	20	20	20	20	20	100	0	0	0	0	80
CONSTRUCTION	8,918	842	9,760	480	480	480	480	480	2,400	0	0	0	0	12,16
ADMINISTRATION	0	75	75	0	0	0	0	0	0	0	0	0	0	7:
Total Expenditures	9,518	1,017	10,535	500	500	500	500	500	2,500	0	0	0	0	13,03
BONDS	1,050	300	1,350	0	0	0	0	0	0	0	0	0	0	1,350
GRANTS	320	410	730	0	0	0	0	0	0	0	0	0	0	730
OTHER SOURCES	4,055	(43)	4,012	0	0	0	0	0	0	0	0	0	0	4,012
PAY AS YOU GO	222	0	222	0	0	0	0	0	0	0	0	0	0	222
TRANSFER TAX	3,871	350	4,221	500	500	500	500	500	2,500	0	0	0	0	6,721
Total Funding	9,518	1,017	10,535	500	500	500	500	500	2,500	0	0	0	0	13,035

0

0

500

500

1,000

0

0

0

1,517

0

Project: N3959-FY2005 PATAPSCO FEMALE INSTITUTE SITE WORK Number: N3959

Description

A project to design and construct site improvements related to the historic Patapsco Female Institute located on Sarah's Lane in Ellicott City. The improvements will include: upgraded roads, parking, retaining wall reconstruction, walkway and stairway reconstruction, historic fencing, lighting, gazebos, restroom, storage space, caretaker's office, caterer's prep room and landscaping.

Justification

This project has been endorsed by the Friends of The Patapsco Female Institute, the Recreation and Parks Advisory Board, Preservation Howard County, Historic Ellicott City and the Ellicott City Restoration Foundation, and it meets the goals and objectives of the 2005, 2012 and 2017 Land Preservation, Parks and Recreation Plan related to park and historic site rehabilitation.

Remarks

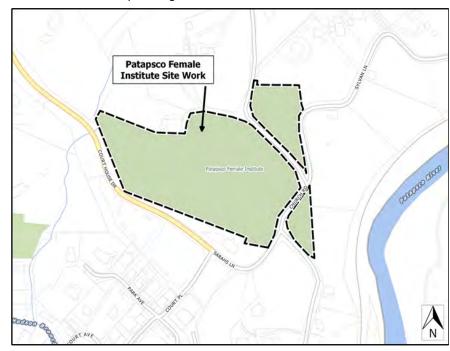
Prior year funds address design fees for site improvements and construction of the out building on the site.

Project Schedule

Operating Budget Impact

Annual Bond Redemption \$ \$51,750

Upon the total renovation work on this project, the estimated maintenance and operating cost in after construction will be \$150,000.



Project: FY2005 PATAPSCO FEMALE INSTITUTE SITE WORK

(In Thousands)					Fiv	e Year Ca	pital Pro	Master Plan						
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	586	0	586	0	0	0	0	0	0	0	C	0	0	586
CONSTRUCTION	951	0	951	0	0	0	0	0	0	0	C	0	0	951
Total Expenditures	1,537	0	1,537	0	0	0	0	0	0	0	0	0	0	1,537
BONDS	1,150	0	1,150	0	0	0	0	0	0	0	C	0	0	1,150
TRANSFER TAX	387	0	387	0	0	0	0	0	0	0	C	0	0	387
Total Funding	1,537	0	1,537	0	0	0	0	0	0	0	0	0	0	1,537

\$571,502 spent and encumbered through February 2018 \$571,502 spent and encumbered through February 2017

Project Status : The Institute is currently operational as a viable historic attraction for the County. It is managed and operated by County staff in cooperation with the Friends of The Patapsco Female Institute. Repairs are being made on the retaining walls and stairs. The design consultant is preparing a site development plan and has submitted schematics for restrooms, multipurpose room, maintenance and storage space. After SDP approval and MHT approval, the consultant will proceed with plan development.

FY 2018 Budget	1,537	0	1,537	0	0	0	0	0	0	0	0	0		1,537
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PARKS PROJECTS

Number: N3960

Project: N3960-FY2006 ROBINSON PROPERTY NATURE CENTER

Description

A project to design and construct a nature center and related site improvements on the former Robinson property located at Cedar Lane and Harriet Tubman Lane.

Justification

This project provides a nature center along the Middle Patuxent River as recommended in the 2005, 2012 and 2017 Land Preservation, Parks and Recreation Plan.

Remarks

Prior year OTHER funds indicate a \$700,000 donation received from the James and Ann Robinson Foundation, Inc., for future construction efforts. Also addresses \$800,000 in State Bond Bill Grants and the remaining \$400,000 donation including interest received from the James and Ann Robinson Foundation. Prior appropriation reflects TAO #2-FY2009 and TAO #1-FY2010 and a TAO FY2013 for a reduction of \$300,000. FY18 Grant adjustment.

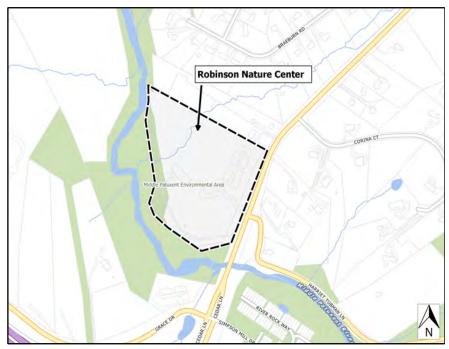
Project Schedule

In the process of closing this project

Operating Budget Impact

Annual Bond Redemption \$\$555,975

The operating costs of the final phases of this project will be absorbed within current operational budget.



Project: FY2006 ROBINSON PROPERTY NATURE CENTER

(In Thousands)	(In Thousands)							gram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project	
PLANS & ENGINEERING	1,971	0	1,971	0	0	0	0	0	0	0	0	0	0	1,971	
CONSTRUCTION	15,801	0	15,801	0	0	0	0	0	0	0	0	0	0	15,801	
Total Expenditures	17,772	0	17,772	0	0	0	0	0	0	0	0	0	0	17,772	
BONDS	12,355	0	12,355	0	0	0	0	0	0	0	0	0	0	12,355	
GRANTS	2,333	0	2,333	0	0	0	0	0	0	0	0	0	0	2,333	
OTHER SOURCES	1,100	0	1,100	0	0	0	0	0	0	0	0	0	0	1,100	
TRANSFER TAX	1,984	0	1,984	0	0	0	0	0	0	0	0	0	0	1,984	
Total Funding	17,772	0	17,772	0	0	0	0	0	0	0	0	0	0	17,772	

\$17,210,502 spent and encumbered through February 2018 \$17,073,544 spent and encumbered through February 2017 Project Status: FY12 - Construction of the Nature Center building is complete. FY16 - Construct additional structures such storage building and a nature playground.

FY 2018 Budget	17,772	0	17,772	0	0	0	0	0	0	0	0	0		17,772
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: N3962-FY2008 CENTENNIAL PARK IMPROVEMENTS

PARKS PROJECTS
Number: N3962

Description

This project consists of improvements to Centennial Park to include replacement of field lights, synthetic turf field, expanded parking, pond to stream retrofit, stream bank stabilization, maintenance shop/office addition, boat rental expansion, roadway/parking repairs and upgrades, and new signage.

Justification

This project is endorsed by the Recreation and Parks Advisory Board and is necessary to address the continued heavy usage of Centennial Park. This project is identified in the 2005, 2012 and 2017 Land Preservation, Parks and Recreation Plan.

Remarks

Prior funds address the required park improvements and design and construction. FY18-\$215,000 State Water Ways Grant adjustment for the boat dock improvement.

FY19 - Start preliminary design work on improving Centennial West area. Design would include redesigning the multipurpose fields, baseball fields, parking and lighting.

Project Schedule

FY19 - Start preliminary design for West area of the Park.

FY26 - Design synthetic turf field, replacement of ballfield lights and parking.

Operating Budget Impact

At this time the operating impact cannot be determined until we get closer to construction.



Number: N3962

Project: FY2008 CENTENNIAL PARK IMPROVEMENTS

(In Thousands)			Five	Year Ca	Master Plan									
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	114	50	164	0	0	0	0	0	0	0	300	0	0	464
CONSTRUCTION	715	0	715	0	0	0	0	0	0	0	0	0	0	715
Total Expenditures	829	50	879	0	0	0	0	0	0	0	300	0	0	1,179
GRANTS	215	0	215	0	0	0	0	0	0	0	0	0	0	215
TRANSFER TAX	614	50	664	0	0	0	0	0	0	0	300	0	0	964
Total Funding	829	50	879	0	0	0	0	0	0	0	300	0	0	1,179

\$599,281 spent and encumbered through February 2018 \$583,994 spent and encumbered through February 2017 Project Status: Design for pond to stream retrofit, stream bank stabilization.

FY 2018 Budget	829	0	829	0	0	0	0	0	0	0	300	0		1,129
Difference 2018 / 2019	0	50	50	0	0	0	0	0	0	0	0	0	0	50

Project: N3963-FY2009 PATHWAY and TRAIL REHAB and EXPANSION

Description

A project to rehabilitate and expand the existing Pathway and Trail System throughout the County. Rehabilitate and expand the existing pathway and trail systems which currently extends from Savage Park through Columbia to Dorsey's Search and throughout the County. Project includes an evaluation and possible improvements to the RT29 Pedestrian Bridge and its approaches.

Justification

This project is identified in the 2005, 2012 and 2017 Land Preservation, Parks and Recreation Plan and is endorsed by the Recreation and Parks Advisory Board and the Oakland Mills Master Plan Committee.

Remarks

Prior year funds address the evaluation and design of a pathway system from Savage Park to High Ridge Park and along the Little Patuxent River from Dorsey Search to Patapsco State Park. This project is meant to encompass three Counties. Grant represents funding from the TEA-21 Transportation Equity Act. Conduct a centerline survey of the existing Spinal Pathway System, perform a condition assessment, and \$100,000 reduction in Grant funds due to not receiving a Transportation Equity Act grant. FY17 - Continue trail and pathway assessments, and engineering on our County-wide trail/pathway system. Funds also address a \$1,092,000 Transportation Alternatives Program Grant and a match of \$278,000. FY18 - Request addresses additional funds for constructing an accessible natural surface trail and overlook at Haviland Mill Park. FY19 - Request addresses ongoing planning, engineering and Construction of our pathway and trail system.

Project Schedule

FY19 - Planning, Engineering and Construction

FY20 - Planning, Engineering and Construction

FY21 - Planning, Engineering and Construction

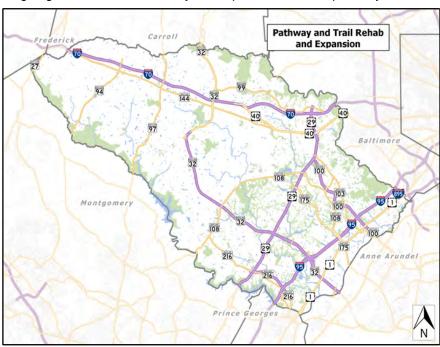
FY22 - Planning, Engineering and Construction

FY23 - Planning, Engineering and Construction

Operating Budget Impact

Annual Bond Redemption \$ \$21,510

Future rehabilitation of the existing pathway and trails will increase ongoing maintenance efforts by \$1.20 per linear foot of pathway or trail.



PARKS PROJECTS

Number: N3963

Project: FY2009 PATHWAY and TRAIL REHAB and EXPANSION

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	500	50	550	50	50	50	50	0	200	0	0	0	0	750
CONSTRUCTION	2,105	50	2,155	50	50	50	50	0	200	0	0	0	0	2,355
Total Expenditures	2,605	100	2,705	100	100	100	100	0	400	0	0	0	0	3,105
BONDS	478	0	478	0	0	0	0	0	0	0	0	0	0	478
GRANTS	1,092	0	1,092	0	0	0	0	0	0	0	0	0	0	1,092
TRANSFER TAX	1,035	100	1,135	100	100	100	100	0	400	0	0	0	0	1,535
Total Funding	2,605	100	2,705	100	100	100	100	0	400	0	0	0	0	3,105
\$639,297 spent and encumbered t \$409,152 spent and encumbered t Project Status :														
FY 2018 Budget	2,605	100	2,705	100	100	100	100	0	400	0	0	0)	3,105
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	(

Fiscal 2019 Capital Budget

Project: N3965-FY2007 MIDDLE PATUXENT IMPROVEMENTS

PARKS PROJECTS

Number: N3965

Description

A project to design and construct a restroom, storage building, parking improvements and bridges in the Middle Patuxent Environmental Area located southeast of the intersection of MD108 and Trotter Road.

Justification

This project is endorsed by the Recreation and Parks Advisory Board and will benefit school groups and trail users.

Remarks

Prior funds address funds for design and construction. FY14 funds include a \$150,000 State Bond Bill. Prior year funds will be used for the Bond Bill match. The FY17 request was for additional funds for construction.

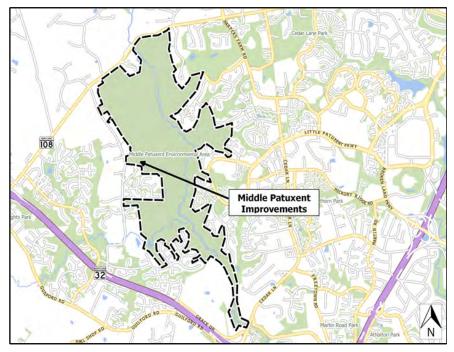
Project Schedule

FY20 - Close

Operating Budget Impact

Annual Bond Redemption \$ \$42,750

The estimated annual operating cost for start up for maintenance and utilities related to the restroom and storage shed is \$70,000.



Project: FY2007 MIDDLE PATUXENT IMPROVEMENTS

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	220	0	220	0	0	0	0	0	0	0	C) 0	0	220
CONSTRUCTION	1,650	0	1,650	0	0	0	0	0	0	0	C	0	0	1,650
Total Expenditures	1,870	0	1,870	0	0	0	0	0	0	0	O) 0	0	1,870
BONDS	950	0	950	0	0	0	0	0	0	0	C	0	0	950
GRANTS	150	0	150	0	0	0	0	0	0	0	C	0	0	150
PAY AS YOU GO	25	0	25	0	0	0	0	0	0	0	C) 0	0	25
TRANSFER TAX	745	0	745	0	0	0	0	0	0	0	C) 0	0	745
Total Funding	1,870	0	1,870	0	0	0	0	0	0	0	C) 0	0	1,870

\$1,828,449 spent and encumbered through February 2018

\$431,437 spent and encumbered through February 2017

Project Status: The design of the restroom, parking and storage building will be completed. Construction of the restroom, parking and storage building will begin.

FY 2018 Budget	1,870	0	1,870	0	0	0	0	0	0	0	0	0		1,870
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Fiscal 2019 Capital Budget

Project: N3967-FY2007 SOUTH BRANCH PARK Number: N3967

Description

A project to design and construct a seven-acre park located at Old West Friendship Road and the Patapsco River just south of Sykesville. Improvements include utility connections, building renovations, court games, playground, pathways, and parking.

Justification

This project is identified in the 2005, 2012 and 2017 Land Preservation, Parks and Recreation Plan and is endorsed by the Recreation and Parks Advisory Board.

Remarks

Prior year funds address the Town of Sykesville continued design and construction under lease agreement. FY17 request addressed parking lot construction funds. Funds also address a \$100,000 State Bond Bill. FY18 request addressed an \$8,000 reimbursement from the Town of Sykesville.

Project Schedule

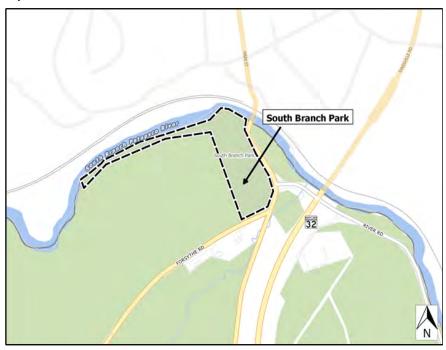
Start the parking lot construction.

Operating Budget Impact

Annual Bond Redemption \$ \$36,000

The estimated annual operating cost will be paid by the Town of Sykesville.

PARKS PROJECTS



Project: FY2007 SOUTH BRANCH PARK Number: N3967

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	450	0	450	0	0	0	0	0	0	0	0	0	0	450
CONSTRUCTION	1,018	0	1,018	0	0	0	0	0	0	0	0	0	0	1,018
Total Expenditures	1,468	0	1,468	0	0	0	0	0	0	0	0	0	0	1,468
BONDS	800	0	800	0	0	0	0	0	0	0	0	0	0	800
GRANTS	100	0	100	0	0	0	0	0	0	0	0	0	0	100
OTHER SOURCES	8	0	8	0	0	0	0	0	0	0	0	0	0	8
PAY AS YOU GO	10	0	10	0	0	0	0	0	0	0	0	0	0	10
TRANSFER TAX	550	0	550	0	0	0	0	0	0	0	0	0	0	550
Total Funding	1,468	0	1,468	0	0	0	0	0	0	0	0	0	0	1,468

\$885,836 spent and encumbered through February 2018
\$860,289 spent and encumbered through February 2017
Project Status: FY15 - Playground and pavilion were constructed. FY16 - Skate park was constructed. FY17 Parking lot designed.

FY 2018 Budget	1,468	0	1,468	0	0	0	0	0	0	0	0	0		1,468
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: N3970-FY2008 RECREATION and PARKS HEADQUARTERS EXPAN

Description

A project to design and construct site improvements and additional office and warehouse space for the Recreation and Parks Headquarters on Oakland Mills Road in Columbia.

Justification

This project is needed to address the growth of this Department since 1995 when the building was constructed.

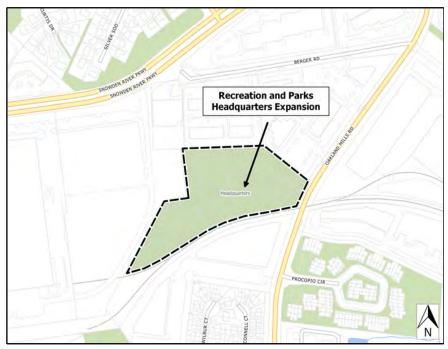
Remarks

Prior appropriation reflects TAO #2-FY2009.

Project Schedule

Operating Budget Impact

Currently the expansion potential has not been determined; therefore, an operating budget impact cannot be estimated.



PARKS PROJECTS

Number: N3970

Project: FY2008 RECREATION and PARKS HEADQUARTERS EXPAN

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	118	0	118	0	0	0	0	0	0	0	0	0	0	118
Total Expenditures	118	0	118	0	0	0	0	0	0	0	0	0	0	118
TRANSFER TAX	118	0	118	0	0	0	0	0	0	0	0	0	0	118
Total Funding	118	0	118	0	0	0	0	0	0	0	0	0	0	118
\$99,924 spent and encumbered th \$93,344 spent and encumbered th Project Status :														
FY 2018 Budget	118	0	118	0	0	0	0	0	0	0	0	0		118
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: N3971-FY2009 FOREST CONSERVATION MITIGATION EASEMENT PGM

Description

A project to conserve or create forested areas within the County through the use of developer fees in accordance with local and State forest mitigation requirements. This project will fund the acquisition of non-County owned property to create forest conservation mitigation easements and to undertake planting on the sites acquired utilizing fees paid in lieu of mitigation on individual development sites. This project will also hire a contractual employee to manage the program.

Justification

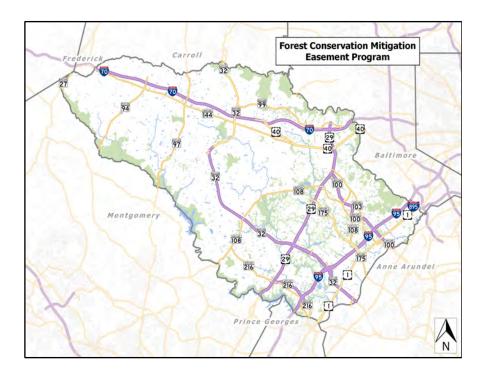
Forest areas are critical for air quality, water quality, erosion control and wildlife habitat. This program addresses the goals and objectives of the Howard County Forest Conservation Act of 1993.

Remarks

- 1. Prior year funds address developer fees collected by the Department of Planning and Zoning utilizing fees paid in lieu of mitigation on individual development sites in accordance with the Howard County Forest Conservation Act of 1993. Funding also consists of the Department of Public Works fee requirements for forest conservation.
- 2. FY15 Request addresses additional funds collected by the Department of Planning and Zoning utilizing fees paid in lieu of mitigation on individual development sites in accordance with the Howard County Forest Conservation Act of 1993.

Project Schedule

FY19 - Continue Land Acquisition and Planting



Project: FY2009 FOREST CONSERVATION MITIGATION EASEMENT PGM

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	450	0	450	0	0	0	0	0	0	0	0	0	0	450
LAND ACQUISITION	700	0	700	0	0	0	0	0	0	0	0	0	0	700
CONSTRUCTION	1,950	0	1,950	0	0	0	0	0	0	0	0	0	0	1,950
Total Expenditures	3,100	0	3,100	0	0	0	0	0	0	0	0	0	0	3,100
OTHER SOURCES	3,100	0	3,100	0	0	0	0	0	0	0	0	0	0	3,100
Total Funding	3,100	0	3,100	0	0	0	0	0	0	0	0	0	0	3,100
\$2,023,356 spent and encumbered \$2,015,556 spent and encumbered Project Status :														
FY 2018 Budget	3,100	0	3,100	0	0	0	0	0	0	0	0	0)	3,100
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0) (0	0

Project: N3972-FY2011 DEFAULTED FOREST CONSERVATION and LANDSCAPING

Description

A project to provide for planting of shrubs, trees, as necessary in a subdivision or site where a developer failed to install the forest conservation improvements and landscape improvements in accordance with the approved forest conservation plan, landscape plan and developer agreement.

Justification

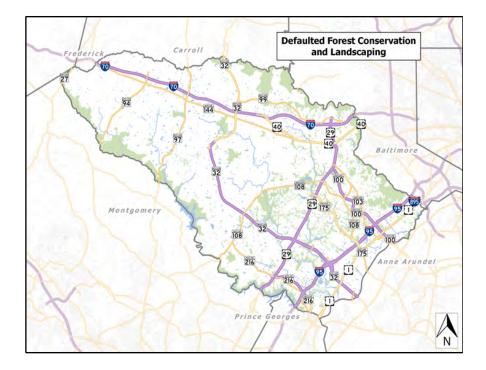
Upon developer's failure to complete construction, the surety of the developer is declared to be in default and the proceeds from the surety are placed in this account and used to finance construction.

Remarks

Developer funds indicate proceeds from the developer's defaulted surety.

Project Schedule

Program - Defaulted projects as they occur.



Project: FY2011 DEFAULTED FOREST CONSERVATION and LANDSCAPING

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	905	20	925	0	0	0	0	0	0	0	0	0	0	925
Total Expenditures	905	20	925	0	0	0	0	0	0	0	0	0	0	925
DEVELOPER CONTRIBUTION	905	20	925	0	0	0	0	0	0	0	0	0	0	925
Total Funding	905	20	925	0	0	0	0	0	0	0	0	0	0	925
\$658,260 spent and encumbered thr \$458,779 spent and encumbered thr Project Status: Defaulted properties:	ough Februa	ary 2018 ary 2017												
FY 2018 Budget	905	0	905	0		0	0	0	0	0	0	0		909
Difference 2018 / 2019	0	20	20	0	0	0	0	0	0	0	0	0	0	20

Project: N3973-FY2014 EAST COLUMBIA LIBRARY ATHLETIC FIELD and SITE IMPROVEMENTS

Description

A project to upgrade the athletic fields at East Columbia Library, located off of Cradlerock in Columbia. Upgrades will include no spill/glare ballfield lighting and synthetic turf fields.

Justification

This project is identified in the 2012 and 2017 Land Preservation, Parks and Recreation Plan and is endorsed by the Recreation and Parks Advisory Board. This project will provide a safer playing surface, and improve site utilization.

Remarks

Prior fund request addresses funds to start the design process to renovate the existing fields to add synthetic turf. FY18 request addresses construction management fees for construction.

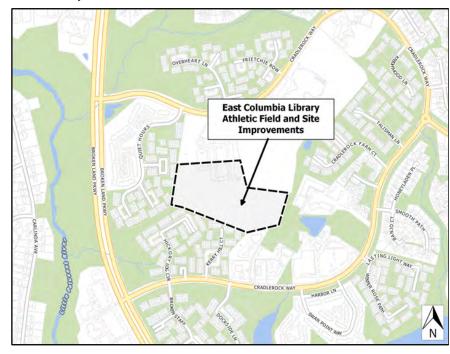
Project Schedule

Start of construction.

Operating Budget Impact

Annual Bond Redemption \$ \$175,500

The operational cost after construction for this project is estimated to be \$75,000 a year.



PARKS PROJECTS

Number: N3973

Project: FY2014 EAST COLUMBIA LIBRARY ATHLETIC FIELD and SITE IMPROVEMENTS

(In Thousands)					Fiv	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	200	0	200	0	0	0	0	0	0	0	C	0	0	200
CONSTRUCTION	3,700	0	3,700	0	0	0	0	0	0	0	C	0	0	3,700
Total Expenditures	3,900	0	3,900	0	0	0	0	0	0	0	C) 0	0	3,900
BONDS	3,900	0	3,900	0	0	0	0	0	0	0	C) 0	0	3,900
Total Funding	3,900	0	3,900	0	0	0	0	0	0	0	O) 0	0	3,900
\$162,205 spent and encumbered t \$153,960 spent and encumbered t Project Status :														
FY 2018 Budget	3,900	0	3,900	0	0	0	0	0	0	0	C) 0)	3,900
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	C) 0	0	0

Fiscal 2019 Capital Budget

Project: N3976-FY2025 SOUTH FULTON PARK Number: N3976

Description

A project to master plan, design and construct a 84-acre community park located off of Rt29 and Murphy Road, north of the Patuxent River. Facilities will be determined by a citizen's advisory committee and a master plan effort.

Justification

This project is identified in the 2012 and 2017 Land Preservation, Parks and Recreation Plan and is endorsed by the Recreation and Parks Advisory Board.

Remarks

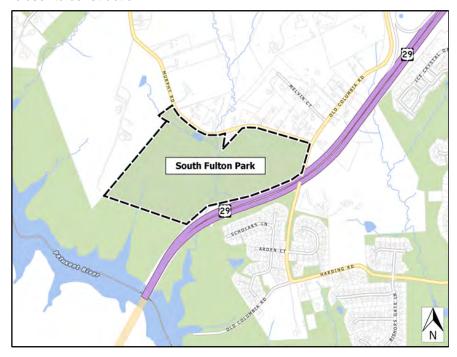
Project Schedule

Operating Budget Impact

Annual Bond Redemption \$ \$31,500

At this time the operating impact cannot be determined until we get closer to construction.

PARKS PROJECTS



Explanation of Changes

A project to master plan, design and construct a 84-acre community park located off of Rt29 and Murphy Road, north of the Patuxent River. Facilities will be determined by a citizen's advisory committee and a master plan effort.

Project: FY2025 SOUTH FULTON PARK Number: N3976

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	0	0	0	0	0	0	0	0	200	500	0	0	700
Total Expenditures	0	0	0	0	0	0	0	0	0	200	500	0	0	700
BONDS	0	0	0	0	0	0	0	0	0	200	500	0	0	700
Total Funding	0	0	0	0	0	0	0	0	0	200	500	0	0	700
\$0 spent and encumbered through spent and encumbered through F Project Status :		8												
FY 2018 Budget	0	0	0	0	0	0	0	0	0	200	500	0		700
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Fiscal 2019 Capital Budget

Project: N3977-FY2019 KIWANIS PARK EXTENSION Number: N3977

Description

A project to master plan, design and construct an additional 30-acre site adjacent to the existing Kiwanis Park and to improve the existing park site.

Justification

This project is identified in the 2012 and 2017 Land Preservation, Parks and Recreation Plan and is endorsed by the Recreation and Parks Advisory Board.

Remarks

FY19 - Install new ballfield lights on field #6 at Kiwanis Wallas Park. \$90,000 (Other Sources) From Howard County Youth Program donation for ballfield lights to be installed on Field #6 at Kiwanis-Wallas Park.

Project Schedule

FY19 - Install new light on Field #6

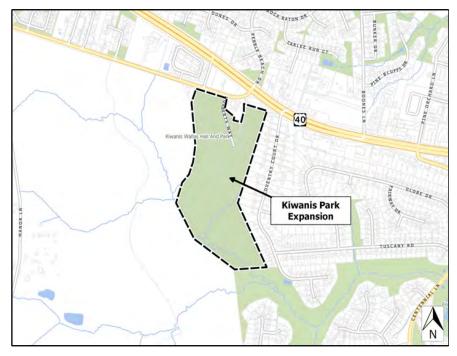
FY20 - Install new lights on Field #12

Operating Budget Impact

Annual Bond Redemption \$ \$47,700

At this time the operating impact cannot be determined until we get closer to construction.

PARKS PROJECTS



PARKS PROJECTS

Project: FY2019 KIWANIS PARK EXTENSION Number: N3977

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	0	0	0	0	0	0	0	0	200	500	0	0	700
CONSTRUCTION	0	270	270	270	0	0	0	0	270	0	0	0	0	540
Total Expenditures	0	270	270	270	0	0	0	0	270	200	500	0	0	1,240
BONDS	0	180	180	180	0	0	0	0	180	200	500	0	0	1,060
OTHER SOURCES	0	90	90	90	0	0	0	0	90	0	0	0	0	180
Total Funding	0	270	270	270	0	0	0	0	270	200	500	0	0	1,240
\$0 spent and encumbered through spent and encumbered through F Project Status :		18												
FY 2018 Budget	0	0	0	0	0	0	0	0	0	200	500	0	1	700
Difference 2018 / 2019	0	270	270	270	0	0	0	0	270	0	0	0	0	540

Fiscal 2019 Capital Budget

Project: N3978-FY2018 PARKLAND ACQUISTION PROGRAM

PARKS PROJECTS

Number: N3978

Description

This project establishes a fund for County-wide park land acquisition and related expenses. This project allows the County to move quickly to acquire land which becomes available, and satisfies one or more of the following objectives: addresses State and County Greenway objectives, protects sensitive natural resources threatened by development, acquire additional land adjacent to existing parks, and/or satisfies park and open space needs as identified in the Departments most recent Land Preservation, Parks and Recreation Plan (LPPRP).

Justification

This project has been endorsed by the Recreation and Parks Advisory Board and is supported by the 2005, 2012 and 2017 Land Preservation, Parks and Recreation Plan.

Remarks

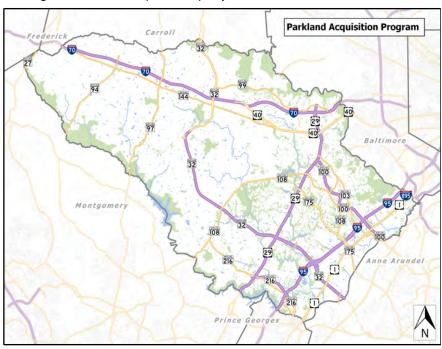
- 1. Prior Year Acquire additional park land and County and State greenway property in accordance with our Land Preservation, Park & Recreation Plan (LPPRP). Provide Program Open Space (POS) Acquisition funding for POS approved projects. FY18 \$80,000 request Program Open Space funds for future Land Preservation, Parks and Recreation Plan and land acquisition and remaining fund request addresses funds for appraisals and environmental studies.
- 2. FY19 Request addresses \$50,000 for acquisition incidentals such as appraisals and environmental studies. \$1,770,000 for FY19 Program Open Space acquisition funds received. \$2,010,000 in prior Program Open Space funding prior to FY18 that was transferred from the old Parkland Acquisition Program Capital Project N3103.

Project Schedule

FY19 - Land Acquisition and Development Continues

Operating Budget Impact

Operating costs of woodland and natural areas are absorbed within current operational budgets. Developed park areas are maintained at an average cost of \$3,900 per acre per year.



PARKS PROJECTS

Project: FY2018 PARKLAND ACQUISTION PROGRAM Number: N3978

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	50	50	100	50	50	50	50	0	200	0	0	0	0	300
LAND ACQUISITION	80	3,780	3,860	1,000	1,000	1,000	1,000	0	4,000	0	0	0	0	7,860
Total Expenditures	130	3,830	3,960	1,050	1,050	1,050	1,050	0	4,200	0	0	0	0	8,160
GRANTS	80	3,780	3,860	1,000	1,000	1,000	1,000	0	4,000	0	0	0	0	7,860
TRANSFER TAX	50	50	100	50	50	50	50	0	200	0	0	0	0	300
Total Funding	130	3,830	3,960	1,050	1,050	1,050	1,050	0	4,200	0	0	0	0	8,160
\$0 spent and encumbered through spent and encumbered through F Project Status: Purchased Johnson	ebruary 2017	8												
FY 2018 Budget	130	1,050	1,180	1,050	1,050	1,050	1,050	0	4,200	0	0	0		5,380
Difference 2018 / 2019	0	2,780	2,780	0	0	0	0	0	0	0	0	0	0	2,780

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
P4926 FY2009 CHILD ADVOCACY CENTER A project for the provision of a larger Child Advocacy	В	0	0	0	1,000	1,025	4,570	500	0	7,095
Center, maintaining a "child friendly" environment, but meeting the expanding facilities requirements for the present and future policing demands.	Total	0	0	0	1,000	1,025	4,570	500	0	7,095
P4928 FY2015 NEW/THIRD POLICE STATION & MODERNIZATION OF FACILITIES	В	3,600	415	4,015	570	2,640	38,241	19,150	1,680	66,296
Construct a third fully staffed 24-hour operation Police Station.	Total	3,600	415	4,015	570	2,640	38,241	19,150	1,680	66,296
POLICE PROJECTS Total		3,600	415	4,015	1,570	3,665	42,811	19,650	1,680	73,391

Howard County, MD FY2019 Executive Proposed Capital Budget (\$000) POLICE-POLICE PROJECTS

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	3,600	415	4,015
Total		3,600) 415	4,015

2019 Executive Proposed 5 Year Capital Budget Project Type Summary (POLICE-POLICE PROJECTS)

Re	venue Source	Prior Approp Cu	urrent FY	2020	2021	2022	2023	2024	5 Year Total
В	BONDS	3,600	415	1,570	3,665	42,811	19,650	1,680	73,391
Tot	tal	3,600	415	1,570	3,665	42,811	19,650	1,680	73,391

Fiscal 2019 Capital Budget

Project: P4926-FY2009 CHILD ADVOCACY CENTER

POLICE PROJECTS

Number: P4926

Description

A project for the provision of a larger Child Advocacy Center, maintaining a "child friendly" environment, but meeting the expanding facilities requirements for the present and future policing demands.

Justification

The prior facility (Latona House, 3421 Rogers Avenue) is outdated, and greatly undersized to meet the current police functions associated with the investigation and prosecution of physical and sexual abuse of children. The facility does not provide the environment necessary for the sensitive interactions required with young children and their families, nor for the effective operations of the police staff in performing this critical function. Additionally, the parking is wholly inadequate for both staff and clients. Therefore, the decision has been made to move the Center into rental space until the new facility can be funded, designed & constructed.

Remarks

- 1. This project will be accomplished by: (a) Developing a Family Justice Center which consolidates the multiple services of public governmental agencies and private non-governmental organizations under one roof in order to reduce the number of places victims of domestic violence, sexual abuse, child abuse and elderly abuse must go to receive needed services; or (b) by buying an existing residence in reasonable proximity to existing police facilities, and then converting it to meet the pertinent interior and parking requirements; or (c) by buying an acceptable lot and constructing a new facility that provides a residential environment, but with all the required operational spacing. The 1st option is the preferred option.
- 2. Previously provided Study Funds will be used to do the analysis to determine which option will be optimum for this project.

Project Schedule

FY20 - Location Analysis/Purchase

FY21 - Design

FY22 - Construction

FY23 - Close Out

Operating Budget Impact

Annual Bond Redemption \$\$319,275

Estimated annual utility/custodial costs upon construction completion: \$ 17,500.00



POLICE PROJECTS

Project: FY2009 CHILD ADVOCACY CENTER Number: P4926

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	0	0	0	1,005	0	0	0	1,005	0	0	0	0	1,005
LAND ACQUISITION	0	0	0	1,000	0	0	0	0	1,000	0	0	0	0	1,000
CONSTRUCTION	0	0	0	0	0	4,570	0	0	4,570	0	0	0	0	4,570
ADMINISTRATION	0	0	0	0	20	0	0	0	20	0	0	0	0	20
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	500	0	500	0	0	0	0	500
Total Expenditures	0	0	0	1,000	1,025	4,570	500	0	7,095	0	0	0	0	7,095
BONDS	0	0	0	1,000	1,025	4,570	500	0	7,095	0	0	0	0	7,095
Total Funding	0	0	0	1,000	1,025	4,570	500	0	7,095	0	0	0	0	7,095
\$0 spent and encumbered through F spent and encumbered through Feb Project Status :		18												
FY 2018 Budget	0	0	0	1,000	1,025	4,570	500	0	7,095	0	0	0		7,095
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Number: P4928

Project: P4928-FY2015 NEW/THIRD POLICE STATION & MODERNIZATION OF FACILITIES

Description

Construct a third fully staffed 24-hour operation Police Station. This project includes some work completed at other Police facilities.

Justification

Continued County growth and an engrained philosophy of Community Oriented Policing requires officers and their work site to be part of the Community which they serve. Policing services are operated from Ellicott City and Laurel, along with several neighborhood satellite offices. This affects response times. We have experienced a fifty percent (50%) increase in sworn staffing. Both the Warfield and Southern District buildings are occupied to, or in excess of, capacity. This option could also assist with space needed for overall Department growth referenced above.

Remarks

1. A Facilities Master Plan has been completed for the 20 year need of the Howard County Police Department. The Master Plan includes a new Central District Police Station, Property Management Building, Community Outreach Facility and subsequent renovations of North and South District existing facilities.

Project Schedule

FY19 - Begin Design of Police Station and other facilities.

FY21 - Complete design Central District Police Station Construction Award, Design Complete and Award Construction for New Property Management Building. Renovations to start in Northern and Southern Districts.

FY22 - Construction Complete for New Central District Station.

FY22 - Design New Property Management Building. Complete Renovations of Northern and Southern Districts.

FY23 - Award Construction for Property Management Building.

FY23 - Construction Complete for Property Management Building.

FY23 - Design Community Outreach Building.

FY23/24 - Award Construction for Community Outreach Building.

Operating Budget Impact

Annual Bond Redemption \$ \$3,309,570

Bureau of Facilities estimates the year of completion and beyond annual impact to O&M and utilites at \$30,000.



Number: P4928

Project: FY2015 NEW/THIRD POLICE STATION & MODERNIZATION OF FACILITIES

(In Thousands)	Five	Year Ca			Master Plan									
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	3,200	400	3,600	0	1,000	1,400	0	450	2,850	0	0	0	0	6,450
CONSTRUCTION	400	0	400	0	500	36,600	17,800	0	54,900	5,600	0	0	0	60,900
ADMINISTRATION	0	15	15	570	0	241	150	30	991	150	0	0	0	1,156
EQUIPMENT & FURNISHINGS	0	0	0	0	1,140	0	1,200	1,200	3,540	0	1,500	0	0	5,040
Total Expenditures	3,600	415	4,015	570	2,640	38,241	19,150	1,680	62,281	5,750	1,500	0	0	73,546
BONDS	3,600	415	4,015	570	2,640	38,241	19,150	1,680	62,281	5,750	1,500	0	0	73,546
Total Funding	3,600	415	4,015	570	2,640	38,241	19,150	1,680	62,281	5,750	1,500	0	0	73,546

\$3,528,181 spent and encumbered through February 2018 \$2,893,059 spent and encumbered through February 2017

Project Status: FY16 - MOU signed for Old Cedar Lane Elementary School site. FY18 Master plan complete.

FY 2018 Budget	3,600	1,515	5,115	18,170	20,140	9,641	11,150	1,680	60,781	5,750	1,500	0		73,146
Difference 2018 / 2019	0	(1,100)	(1,100)	(17,600) ((17,500)	28,600	8,000	0	1,500	0	0	0	0	400

FY19 Title changed to further define by adding Modernization of Facilities.

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
S6175 FY2001 LITTLE PATUXENT WATER/WASTEWATER PARALLEL SEWER	С	7,130	0	7,130	0	0	0	0	0	7,130
A project for the study, design and construction of the Little Patuxent Parallel Sewer.	I	800	0	800	0	0	0	0	0	800
	М	41,770	0	41,770	0	0	0	0	0	41,770
	W	3,530	0	3,530	0	0	0	0	0	3,530
	Total	53,230	0	53,230	0	0	0	0	0	53,230
S6214 SEWER CONTINGENCY FUND The fund is designed for use as a revenue source for (1)	С	500	0	500	0	0	0	0	0	500
transfers of appropriations when either construction costs are higher than originally estimated or engineering must be	D	0	1,000	1,000	0	0	0	0	0	1,000
advanced from future years to the present fiscal year for critical sewer needs.	G	10,000	0	10,000	0	0	0	0	0	10,000
cilical sewer fleeds.	М	40,045	-30,000	10,045	0	0	0	0	0	10,045
	0	5,000	0	5,000	0	0	0	0	0	5,000
	W	20,055	0	20,055	0	0	0	0	0	20,055
	Total	75,600	-29,000	46,600	0	0	0	0	0	46,600
S6232 FY2001 SEWER CORROSION CORRECTION PROGRAM	С	11,465	510	11,975	510	0	0	0	0	12,485
A project to televise sewer pipes in the County's sanitary sewer system for evidence of corrosion.	Total	11,465	510	11,975	510	0	0	0	0	12,485
S6237 FY2001 PATAPSCO CONVEY/TREAT FACILITIES	С	6,750	0	6,750	0	0	0	0	0	6,750
A project for Howard County's participation in the cost sharing for the capital funding of the Patapsco Treatment	I	5,499	0	5,499	0	0	0	0	0	5,499
Plant at Wagners Point and the related Patapsco Interceptor, Pump Station, and Force Main.	М	38,400	0	38,400	2,000	5,000	0	0	0	45,400
meroepior, i amp etation, and i eroe main.	W	351	0	351	0	0	0	0	0	351
	Total	51,000	0	51,000	2,000	5,000	0	0	0	58,000
S6249 DEFAULTED DEVELOPER AGREEMENTS An appropriation is requested under this project to	D	3,600	0	3,600	0	0	0	0	0	3,600
construct water, sewer and associated facilities where the developer has failed to build all facilities in accordance with the plans and Developer Agreement.	Total	3,600	0	3,600	0	0	0	0	0	3,600

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
S6264 FY2008 LPWRP CAPITAL REPAIRS A project to systematically repair, replace, or upgrade	С	14,683	0	14,683	0	0	0	0	0	14,683
existing facilities at the Little Patuxent Water Reclamation Plant (LPWRP), and existing water distribution and	М	14,405	3,825	18,230	3,825	3,825	3,825	3,825	3,825	37,355
wastewater collection system facilities.	Total	29,088	3,825	32,913	3,825	3,825	3,825	3,825	3,825	52,038
S6268 FY2008 PIPELINE REHABILITATION PROGRAM A project to protect and stabilize sewers and water mains in areas where stream and soil erosion have compromised the integrity of the system.	С	5,480	650	6,130	650	0	0	0	0	6,780
	Total	5,480	650	6,130	650	0	0	0	0	6,780
S6269 FY2009 ASHLEIGH KNOLLS SHARED SEWAGE DISP FAC UPGD	В	1,874	0	1,874	0	0	0	0	0	1,874
A project to design and install a wastewater treatment system for the Ashleigh Knolls Shared Septic Facility to	G	1,100	0	1,100	0	0	0	0	0	1,100
meet new Maryland Department of the Environment (MDE) discharge permit limits.	Р	162	0	162	0	0	0	0	0	162
	Total	3,136	0	3,136	0	0	0	0	0	3,136
S6274 FY2015 UPPER LITTLE PATUXENT PARALLEL SEWER	М	3,150	300	3,450	0	0	0	0	0	3,450
A project for the design and construction of 2,500 LF of parallel sewer including streambank protection, and water/sewer utilities stream crossing protection adjacent to the Little Patuxent Interceptor Sewer, north of MD108.	Total	3,150	300	3,450	0	0	0	0	0	3,450
S6275 FY2012 DANIELS AREA PUMPING STATION A project for the study, design and construction of a	М	2,500	0	2,500	0	0	0	0	0	2,500
wastewater pumping station and force main to serve the Daniels Area east of Old Frederick Road.	Total	2,500	0	2,500	0	0	0	0	0	2,500
S6276 FY2011 SEWER CLEANING MAPPING AND TELEVISION INSPECTION MAINTENANCE	I	8,107	1,230	9,337	1,230	1,230	1,230	1,230	1,230	15,487
Develop a Sewer Manhole and Line Segment Inspection and Cleaning Program to include all County-owned water sewer lines within the collection system.	Total	8,107	1,230	9,337	1,230	1,230	1,230	1,230	1,230	15,487
S6280 FY2013 HAMMOND/PATUXENT INTERCEPTOR IMPROVEMENTS	М	18,490	1,000	19,490	5,000	3,700	3,015	0	0	31,205
A project for the study, design and construction of 20,000 feet of parallel sewer in the Hammond Branch and Patuxent sewer drainage areas.	Total	18,490	1,000	19,490	5,000	3,700	3,015	0	0	31,205
S6281 FY2013 DORSEY/GUILFORD INTERCEPTOR IMPROVEMENTS	М	12,345	0	12,345	1,005	5	10	0	0	13,365
A project for the study, design and construction of 14,600 feet of parallel sewer in the Dorsey Run and Guilford Run sewer drainage areas.	Total	12,345	0	12,345	1,005	5	10	0	0	13,365

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
S6282 FY2013 BONNIE BRANCH/ROCKBURN INTERCEPTOR IMPROVEMENTS	М	5,325	0	5,325	0	0	0	0	0	5,325
A project for the design and rehabilitation of 6,100 feet of interceptor sewer in the Bonnie Branch sewer drainage area and the re-commissioning and upgrade of the Kerger Road Pumping Station and force main.	Total	5,325	0	5,325	0	0	0	0	0	5,325
S6283 FY2013 TIBER/SUCKER BRANCH INTERCEPTOR IMPROVEMENTS	M	9,400	805	10,205	995	6,500	0	0	0	17,700
A project for the design and construction of 18,250 feet of parallel sewer in the Tiber Branch and Sucker Branch sewer drainage areas.	Total	9,400	805	10,205	995	6,500	0	0	0	17,700
S6284 FY2013 DEEP RUN/SHALLOW RUN INTERCEPTOR IMPROVEMENTS	М	19,635	1,560	21,195	12,545	3,700	0	0	0	37,440
A project for the design and construction of 44,000 feet of parallel sewer in the Deep Run and Shallow Run sewer drainage areas.	Total	19,635	1,560	21,195	12,545	3,700	0	0	0	37,440
S6285 FY2017 MD108 PUMP STATION OUTFALL IMPROVEMENTS	M	115	180	295	1,005	0	0	0	0	1,300
A project for the design and construction of 1,585 feet of parallel sewer in the Tiber Branch sewer drainage area to support flows from the MD108 Pumping Station.	Total	115	180	295	1,005	0	0	0	0	1,300
S6286 FY2013 DORSEY RUN PUMP STATION UPGRADE A project to upgrade and increase the pumping capacity of the Dorsey Run Pumping Station.	М	4,637	500	5,137	0	0	0	0	0	5,137
	Total	4,637	500	5,137	0	0	0	0	0	5,137
S6287 FY2017 NORTH LAUREL PUMP STATION PARALLEL FORCE MAIN	M	2,510	0	2,510	0	0	0	0	0	2,510
A project for the design and construction of 4,600 feet of parallel force main to supplement the pumping capacity of the North Laurel Wastewater Pumping Station.	Total	2,510	0	2,510	0	0	0	0	0	2,510
S6288 FY2020 ROCKBURN PUMPING STATION UPGRADE	M	0	0	0	330	2,990	0	0	0	3,320
A project to upgrade and coordinate the pumping capacity of the Rockburn Pumping Station with the Kerger Road Pumping Station.	Total	0	0	0	330	2,990	0	0	0	3,320
S6290 FY2014 SAVAGE AREA SEWER STUDY and REALIGNMENT	М	4,250	0	4,250	0	0	0	0	0	4,250
A project for the study and realignment of 3,500 linear feet of sewer in the area of Baltimore Street and Washington Street, west of William Street in Savage, Maryland.	Total	4,250	0	4,250	0	0	0	0	0	4,250

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
S6293 FY2015 TURF VALLEY ROAD SEWER A project for the design and construction of 2,000 LF of	I	1,064	0	1,064	0	0	0	0	0	1,064
sewer to serve three properties located on US40.	Total	1,064	0	1,064	0	0	0	0	0	1,064
S6294 FY2015 ANNAPOLIS JUNCTION PUMPING STATION RENOVATION	I	355	500	855	0	0	0	0	0	855
A project for the renovation of the Annapolis Junction Pumping Station.	0	125	0	125	0	0	0	0	0	125
	Total	480	500	980	0	0	0	0	0	980
S6295 FY2016 LPWRP 8th ADDITION BIOSOLIDS PROCESSING FACILITIES	С	15,235	0	15,235	0	0	0	0	0	15,235
A project to design and construct new biosolids processing acilities at the Little Patuxent Water Reclamation Plant	М	87,000	11,240	98,240	1,000	0	0	0	0	99,240
(LPWRP) for the purpose of meeting new Maryland Department of the Environment (MDE) biosolids storage and disposal regulations, achieve biosolids volume reduction, and enhance biosolids quality for end-use purposes.	Total	102,235	11,240	113,475	1,000	0	0	0	0	114,475
S6296 FY2016 HARRIET TUBMAN LANE SEWER EXTENSION A project for the design and construction of 150 LF of sewer to serve one property on Harriet Tubman Lane.	С	440	0	440	0	0	0	0	0	440
	Total	440	0	440	0	0	0	0	0	440
S6297 FY2016 OLD FREDERICK ROAD PUMPING STATION UPGRADE	M	1,735	0	1,735	0	0	0	0	0	1,735
A project for the design and construction of upgrades to increase the pumping capacity of the Old Frederick Road Pumping Station.	Total	1,735	0	1,735	0	0	0	0	0	1,735
S6298 FY2018 DORSEY RUN ROAD SEWER EXTENSION	М	400	0	400	0	0	0	0	0	400
A project for the design and construction of 475 LF of 8- nch sewer main along Dorsey Run Road to serve one property with a failing septic system.	Total	400	0	400	0	0	0	0	0	400
S6500 FY2017 SEWER AREA ASSESSMENT AND MODELING	С	355	0	355	100	90	85	105	0	735
A project [program] for the study and evaluation of sewer areas and/or water zones.	Total	355	0	355	100	90	85	105	0	735
S6600 FY2019 WATER AND WASTEWATER FACILITIES CAPITAL REPAIRS AND UPGRADES	М	0	2,500	2,500	1,500	1,500	1,500	1,500	0	8,500
A project [program] to repair or upgrade existing water or sewer facilities.	Total	0	2,500	2,500	1,500	1,500	1,500	1,500	0	8,500

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
G6698 ROUTINE SEWER EXTENSION PROGRAM A project to design and construct routine sewer main	М	4,875	0	4,875	625	625	625	625	625	8,000
xtensions in the Metropolitan District requested by indowners.	Total	4,875	0	4,875	625	625	625	625	625	8,000
6699 ON SITE SEPTIC SYSTEM CONVERSION ROGRAM	М	6,000	0	6,000	3,000	3,000	3,000	0	0	15,000
project for the study, design and implementation of converting properties within the water and sewer Planned ervice Area that are currently on private on-site septic systems to public sewer service.	Total	6,000	0	6,000	3,000	3,000	3,000	0	0	15,000
6711 FY2011 DEVELOPER INSPECTION PROGRAM project to provide engineering or administrative services,	С	3,600	500	4,100	1,000	0	1,000	0	0	6,100
imputer management, asset management, inspection, sting, staff training, supplies, tools, equipment and	D	5,650	0	5,650	1,000	0	1,000	0	0	7,650
chicles necessary for site inspections for the applementation of developer projects to make additions to	0	500	-500	0	0	0	0	0	0	0
e public water and sewer systems.	Total	9,750	0	9,750	2,000	0	2,000	0	0	13,750
6950 DEVELOPER CONSTRUCTED HOUSE ONNECTIONS program for the reimbursement to developers for construction of water and sewer house connections to kisting lots outside of their subdivision.	С	180	0	180	0	0	0	0	0	180
	Total	180	0	180	0	0	0	0	0	180
6960 FY2015 DEVELOPER CONSTRUCTED MAJOR ACILITIES	С	3,000	0	3,000	0	0	0	0	0	3,000
project to reimburse developers for construction of major ater and sewer facilities as shown on the approved oward County Master Plan for Water and Sewerage.	Total	3,000	0	3,000	0	0	0	0	0	3,000
EWER PROJECTS Total		453,577	-4,200	449,377	37,320	32,165	15,290	7,285	5,680	547,117

Howard County, MD FY2019 Executive Proposed Capital Budget (\$000) SEWER-SEWER PROJECTS

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	1,874	0	1,874
С	UTILITY CASH	68,818	1,660	70,478
D	DEVELOPER CONTRIBUTION	9,250	1,000	10,250
G	GRANTS	11,100	0	11,100
I	IN-AID of CONSTRUCT UTILITIES	15,825	1,730	17,555
M	METRO DISTRICT BOND	316,987	-8,090	308,897
0	OTHER SOURCES	5,625	-500	5,125
Р	PAY AS YOU GO	162	0	162
W	WATER QUALITY State Bond Loan	23,936	0	23,936
Total		453,577	-4,200	449,377

2019 Executive Proposed 5 Year Capital Budget Project Type Summary (SEWER-SEWER PROJECTS)

Revenue Source		Prior Approp	Current FY	2020	2021	2022	2023	2024	5 Year Total
В	BONDS	1,874	0	0	0	0	0	0	1,874
С	UTILITY CASH	68,818	1,660	2,260	90	1,085	105	0	74,018
D	DEVELOPER CONTRIBUTION	9,250	1,000	1,000	0	1,000	0	0	12,250
G	GRANTS	11,100	0	0	0	0	0	0	11,100
I	IN-AID of CONSTRUCT UTILITIES	15,825	1,730	1,230	1,230	1,230	1,230	1,230	23,705
М	METRO DISTRICT BOND	316,987	-8,090	32,830	30,845	11,975	5,950	4,450	394,947
0	OTHER SOURCES	5,625	-500	0	0	0	0	0	5,125
Р	PAY AS YOU GO	162	0	0	0	0	0	0	162
W	WATER QUALITY State Bond Loan	23,936	0	0	0	0	0	0	23,936
Total		453,577	-4,200	37,320	32,165	15,290	7,285	5,680	547,117

Fiscal 2019 Capital Budget

SEWER PROJECTS

Number: S6175

Project: S6175-FY2001 LITTLE PATUXENT WATER/WASTEWATER PARALLEL SEWER

Description

A project for the study, design and construction of the Little Patuxent Parallel Sewer.

Justification

This project is needed to meet the existing and projected sewage flows of Little Patuxent (LP) Sewer service area as outlined in approved Master Plan for Water and Sewerage.

Remarks

- 1. Consists of four phases. Phase I Flow Monitoring/Modeling Study; Phase II Evaluation of Alternative; Phase III Design; and Phase IV Construction.
- 2. Phase I study has concluded that LP Interceptor Sewer has insufficient capacity to convey current wastewater flows. Ten and a half (10.5) miles of the LP Sewer will require paralleling between MD108 and LP Water Reclamation Plant to meet the year 2020 population projection of drainage area.
- 3. Phase II study for year 2035 population projection has concluded that another half mile of sewer will be required above MD108.
- 4. Contract 20-4536 received MDE stimulus funding approval.

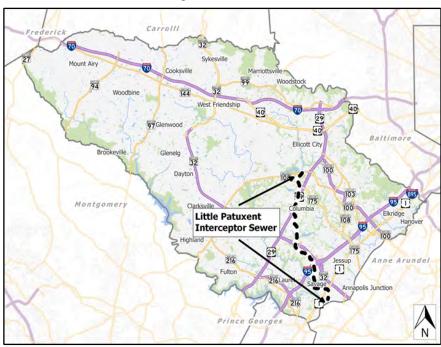
Project Schedule

FY19 - Mitigation Monitoring FY20 - Close

Operating Budget Impact

Annual Bond Redemption \$ \$2,068,795

\$3,300 per annum represents televising of sewer main and maintaining the easements over sewer alignment.



Number: S6175

Project: FY2001 LITTLE PATUXENT WATER/WASTEWATER PARALLEL SEWER

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	9,885	0	9,885	0	0	0	0	0	0	0	0	0	0	9,885
LAND ACQUISITION	1,100	0	1,100	0	0	0	0	0	0	0	0	0	0	1,100
CONSTRUCTION	42,235	0	42,235	0	0	0	0	0	0	0	0	0	0	42,235
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	53,230	0	53,230	0	0	0	0	0	0	0	0	0	0	53,230
UTILITY CASH	7,130	0	7,130	0	0	0	0	0	0	0	0	0	0	7,130
IN-AID of CONSTRUCT UTILITIES	800	0	800	0	0	0	0	0	0	0	0	0	0	800
METRO DISTRICT BOND	41,770	0	41,770	0	0	0	0	0	0	0	0	0	0	41,770
WATER QUALITY State Bond Loan	3,530	0	3,530	0	0	0	0	0	0	0	0	0	0	3,530
Total Funding	53,230	0	53,230	0	0	0	0	0	0	0	0	0	0	53,230

\$48,476,312 spent and encumbered through February 2018 \$48,954,709 spent and encumbered through February 2017

Project Status: 1. Phase I - Sewer monitoring and modeling completed.

- 2. Phase IIA- Evaluation of the alignment alternatives and the sewer system evaluation survey (SSES) report for infiltration/inflow completed.
- 3. Phase IIB- Evaluation of year 2035 population projection sewer flow completed.
- 4. Phase III- Design of twelve contracts completed.
- 5. Phase IIIB- Design of wetland enhancement and stream restoration completed.
- 6. Twelve contracts completed.
- 7. Two stream restoration contracts completed.
- 8. Wetland mitigation completed.
- 9. Wetland and stream mitigation Year 4 of 5 Year report completed.

FY 2018 Budget	53,230	0	53,230	0	0	0	0	0	0	0	0	0		53,230
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: S6214-SEWER CONTINGENCY FUND Number: S6214

Description

The fund is designed for use as a revenue source for (1) transfers of appropriations when either construction costs are higher than originally estimated or engineering must be advanced from future years to the present fiscal year for critical sewer needs. Additionally, this fund will be utilized for; (2) various costs such as advertising, printing, public hearing notices, enhanced nutrient removal, etc.; (3) to meet requirements when charges to individual projects are not feasible; and (4) construction and inspection services for sites that do not require formal developer agreements but require sewer service connections, short extensions of public sewer mains, or other appurtenances performed under water or sewer connection agreements with the County.

Justification

- 1. This fund will allow for the timely completion of approved projects by using contingency funding as required and will allow rapid response to critical situations.
- 2. Howard County Code section 20.608 establishes the requirements to charge for connections, and the requirements to receive payment prior to making or approving the connection.

Remarks

- 1. Prior appropriation reflects TAO #1-2008 in which Water Quality Bonds were transferred to S6251 as replacement for Metro Bonds; TAO #2-2009 in which Water Quality Bonds were transferred to S6214 as replacement for Metro Bonds.
- 2. This project will receive State Water Quality Loan funds prior to transfer of those funds into designated projects.
- 3. Collection of revenues for enhanced nutrient removal.
- 4. Other Sources also include developer contributions and reimbursements.
- 5. Installation of sewer service connections are made where none exist and new connections are required.
- 6. The County will only construct connections at the discretion of the Director of Public Works.
- 7. Revisions to the description and justification performed to allow consolidation and closing of projects S6812 and S6862.

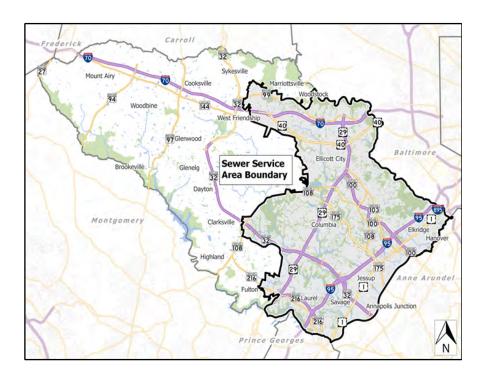
Project Schedule

Ongoing program

FY2019 Defunding adjustment analysis completed.

Operating Budget Impact

Annual Bond Redemption \$ \$958,458



Fiscal 2019 Capital Budget

Project: SEWER CONTINGENCY FUND Number: S6214

SEWER PROJECTS

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	75,600	(29,000)	46,600	0	0	0	0	0	0	0	C) 0	0	46,600
Total Expenditures	75,600	(29,000)	46,600	0	0	0	0	0	0	0	C) 0	0	46,600
UTILITY CASH	500	0	500	0	0	0	0	0	0	0	C) 0	0	500
DEVELOPER CONTRIBUTION	0	1,000	1,000	0	0	0	0	0	0	0	C) 0	0	1,000
GRANTS	10,000	0	10,000	0	0	0	0	0	0	0	C) 0	0	10,000
METRO DISTRICT BOND	40,045	(30,000)	10,045	0	0	0	0	0	0	0	C) 0	0	10,045
OTHER SOURCES	5,000	0	5,000	0	0	0	0	0	0	0	C	0	0	5,000
WATER QUALITY State Bond Loan	20,055	0	20,055	0	0	0	0	0	0	0	C) 0	0	20,055
Total Funding	75,600	(29,000)	46,600	0	0	0	0	0	0	0	C) 0	0	46,600

\$501,321 spent and encumbered through February 2018 \$499,287 spent and encumbered through February 2017

Project Status: Projects completed: FY17 and prior

1. Expenditures represent advertising expenses for the Utility Capital Programs since project inception.

2. This project was used as the source of transfers of appropriations for construction of S6224, Bonnie Branch at Ilchester Road Sewer; S6225, Orchard Avenue Sewer Upgrade; S6230, Mission Road Sewer Extension and S6277, Old Frederick Road Sewer

Completed Projects: FY18 - 1. Advertising expenses for the Utility Capital Programs.

FY 2018 Budget	75,600	0	75,600	0	0	0	0	0	0	0	0	0	75,600
Difference 2018 / 2019	0	(29,000)	(29,000)	0	0	0	0	0	0	0	0	0	0 (29,000)

Project: S6232-FY2001 SEWER CORROSION CORRECTION PROGRAM

Description

A project to televise sewer pipes in the County's sanitary sewer system for evidence of corrosion. The project will effect repairs in the areas of imminent failures and prioritize and perform rehabilitation and replacement efforts in areas where corrosion has compromised the integrity of the system. This project will also analyze the chemical composition (waste stream strength) of sewage in the County's sewer system to determine need for pipeline or structure coating requirements and various treatment options. This project will also provide protection of existing sewers under excessive outside pressures via structural lining.

Justification

The collapse of a 35 year old sewer adjacent to US1 in 1999 required an expensive and disruptive repair effort lasting several weeks and involving assistance from the adjoining municipality. The sewer in question was damaged by sulfide-induced corrosion. This project will provide a preventive approach, identifying and rehabilitating problem areas prior to their structural failure.

Remarks

- 1. An ongoing program for inspection and repair of interceptor and collector sewers.
- 2. The project will inspect 20,000 LF of sewer and rehabilitate 15,000 LF sewer per year.
- 3. Request represents the advancement of funds in the capital program.

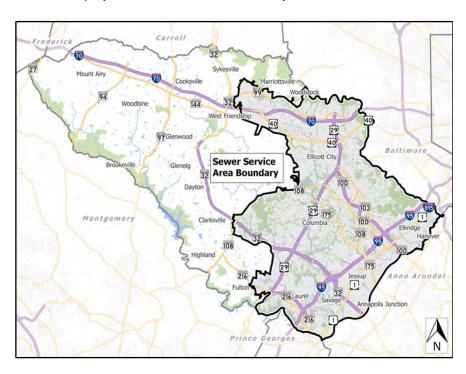
Project Schedule

Ongoing program

FY19 - 1. King Contrivance (4 contracts) 2. Sewells Orchard (3 contracts)

Operating Budget Impact

None. The project will reduce overtime and system maintenance costs.



Number: S6232

Project: FY2001 SEWER CORROSION CORRECTION PROGRAM

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	520	10	530	10	0	0	0	0	10	0	C	0	0	540
CONSTRUCTION	10,850	500	11,350	500	0	0	0	0	500	0	C	0	0	11,850
ADMINISTRATION	95	0	95	0	0	0	0	0	0	0	C	0	0	95
Total Expenditures	11,465	510	11,975	510	0	0	0	0	510	0	0	0	0	12,485
UTILITY CASH	11,465	510	11,975	510	0	0	0	0	510	0	C	0	0	12,485
Total Funding	11,465	510	11,975	510	0	0	0	0	510	0	0	0	0	12,485

\$10,081,371 spent and encumbered through February 2018 \$9,618,460 spent and encumbered through February 2017

Project Status: I Avenue, and Lynville Avenue

- 4. Savage Mill Sewer 5. Sections of the Valley Meade Subdivision
- 6. North Laurel Phase II
- 7. Various other short sections throughout the Howard County Metro District
- 8. Dreyers Outfall sewer 9. Early April Subdivision
- 10. Lake Kittamagundi Sewer
- 11. Murray Hill Subdivision
- 12. US Route 1
- 13. Oakland Mills Steven's Forest
- 14. Summer Blossom Lane
- 15. Rain Flower Way
- 16. Smith Avenue
- 17. Swansfield
- 18. Glenoaks
- 19. Mendenhall Ct

Project Completed FY18:

- 1. Glenoaks Laterals
- 2.Kings Contrivance (3 contracts)

FY 2018 Budget	11,465	510	11,975	510	0	0	0	0	510	0	0	0		12,485
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Fiscal 2019 Capital Budget

Project: S6237-FY2001 PATAPSCO CONVEY/TREAT FACILITIES

SEWER PROJECTS

Number: S6237

Description

A project for Howard County's participation in the cost sharing for the capital funding of the Patapsco Treatment Plant at Wagners Point and the related Patapsco Interceptor, Pump Station, and Force Main. The conveyance and treatment facilities will be expanded, paralleled or replaced.

Justification

The Patapsco Treatment Plant processes wastewater flows from the Howard County portion of Patapsco Drainage Area. Wastewater from the Elkridge and Ellicott City areas is conveyed to the Patapsco Plant by the Patapsco Interceptor, Pump Station and Force Main. Howard County along with Baltimore County and Anne Arundel County are required to participate in funding the cost of the improvements as a condition of use.

Remarks

- 1. This project is a continuation of capital projects S6076 and S6156.
- 2. The Patapsco Wastewater Treatment Plant is being expanded from 73 to 81 MGD. Howard County's share of Patapsco plant's ultimate 81 MGD capacity is 11.5 MGD.
- 3. The funds in the 5-year capital program represent an estimate of Howard County's agreement share of the Patapsco Treatment Plant's expansion costs.

Project Schedule

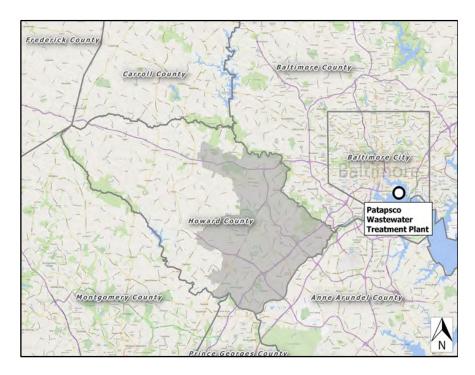
Ongoing program

FY18 - (at Patapsco Waste Water Treatment Plant) 1. ENR Modifications; 2. Chlorination/Dechlorination conversion; 3. EWT Assessment; 4. SW Diversion Pressure Sewer - Phase II; 5. Improvement to Liquid Oxygen Plant; 6. Denitrification Filters; 7. Grit Facility; 8. Sludge Blending Tanks; 9. Screen Storage at Facility; 10. Chlorine Contact Chambers; 11. Nitrification Filters; 12. Roof Replacement; 13. Arc Flash Improvements

Operating Budget Impact

Annual Bond Redemption \$ \$2,164,924

No impact. The Patapsco facilities are operated by Baltimore County.



Project: FY2001 PATAPSCO CONVEY/TREAT FACILITIES Number: S6237

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	51,000	0	51,000	2,000	5,000	0	0	0	7,000	0	0	C	0	58,000
Total Expenditures	51,000	0	51,000	2,000	5,000	0	0	0	7,000	0	0	0	0	58,000
UTILITY CASH	6,750	0	6,750	0	0	0	0	0	0	0	0	C	0	6,750
IN-AID of CONSTRUCT UTILITIES	5,499	0	5,499	0	0	0	0	0	0	0	0	C	0	5,499
METRO DISTRICT BOND	38,400	0	38,400	2,000	5,000	0	0	0	7,000	0	0	C	0	45,400
WATER QUALITY State Bond Loan	351	0	351	0	0	0	0	0	0	0	0	C	0	351
Total Funding	51,000	0	51,000	2,000	5,000	0	0	0	7,000	0	0	0	0	58,000

\$33,609,432 spent and encumbered through February 2018

\$31,502,068 spent and encumbered through February 2017

Project Status: Improvements to Patapsco Treatment and Conveyance Facilities are ongoing.

FY 2018 Budget	51,000	5,000	56,000	2,000	0	0	0	0	2,000	0	0	0		58,000
Difference 2018 / 2019	0	(5,000)	(5,000)	0	5,000	0	0	0	5,000	0	0	0	0	0

Project: S6249-DEFAULTED DEVELOPER AGREEMENTS Number: S6249

Description

An appropriation is requested under this project to construct water, sewer and associated facilities where the developer has failed to build all facilities in accordance with the plans and Developer Agreement. Also included is the cost of administration and any additional engineering that may be required. This project is implemented as a revolving fund account. In the event that the collection of the cash or bond proceeds from the surety are delayed, expenditures from this project are authorized when the County determines that continuing delays in the completion of the public improvements will cause significant negative impact to the residents and the subdivision and/or the environment.

Justification

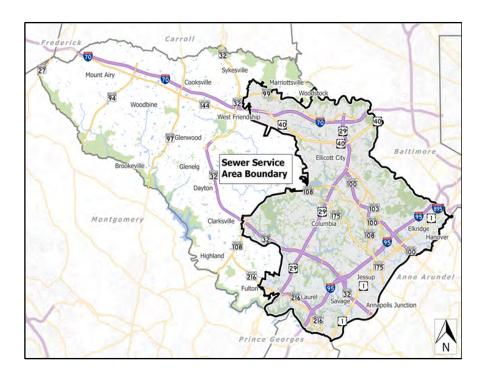
Upon developer's failure to complete construction, the surety of the developer is declared to be in default and the proceeds from the surety are placed in this account and used to finance construction.

Remarks

Construction as required. DEVELOPER CONTRIBUTION represents monies received from surety.

Project Schedule

Ongoing program



Project: DEFAULTED DEVELOPER AGREEMENTS Number: S6249

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	90	0	90	0	0	0	0	0	0	0	0	0	0	90
CONSTRUCTION	3,500	0	3,500	0	0	0	0	0	0	0	0	0	0	3,500
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	3,600	0	3,600	0	0	0	0	0	0	0	0	0	0	3,600
DEVELOPER CONTRIBUTION	3,600	0	3,600	0	0	0	0	0	0	0	0	0	0	3,600
Total Funding	3,600	0	3,600	0	0	0	0	0	0	0	0	0	0	3,600
\$83,648 spent and encumbered thro \$83,648 spent and encumbered thro Project Status :														
FY 2018 Budget	3,600	0	3,600	0	0	0	0	0	0	0	0	0		3,600
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Fiscal 2019 Capital Budget

Project: S6264-FY2008 LPWRP CAPITAL REPAIRS

SEWER PROJECTS

Number: S6264

Description

A project to systematically repair, replace, or upgrade existing facilities at the Little Patuxent Water Reclamation Plant (LPWRP), and existing water distribution and wastewater collection system facilities. Work may include the performance of energy audits, alternative power source up-grades and/or the installation of energy conservation techniques at the plant or system facilities.

Justification

Much of the infrastructure at the LPWRP and at Water/Wastewater Collection System Facilities is aging and is not currently scheduled for replacement by existing upgrades. These infrastructure facilities are beginning to experience age related failure, and systematic replacement and upgrades will extend their useful life.

Remarks

- 1. The project management will be performed by in-house LPWRP staff with possible professional services and requirements contract support.
- 2. This will be an ongoing project.

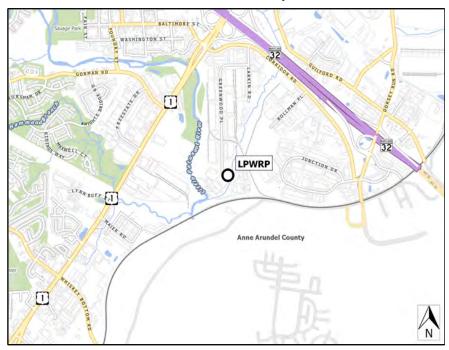
Project Schedule

FY08 - Project initiation Ongoing project, funded each year

Operating Budget Impact

Annual Bond Redemption \$ \$2,501,113

Reduction in the number and dollar amount of emergency repairs estimated to be in excess of \$100,000 annually.



Fiscal 2019 Capital Budget

SEWER PROJECTS

Project: FY2008 LPWRP CAPITAL REPAIRS Number: S6264

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,200	350	1,550	350	350	350	350	350	1,750	350	350	350	350	4,700
CONSTRUCTION	21,098	3,250	24,348	3,250	3,250	3,250	3,250	3,250	16,250	3,250	3,250	3,250	3,250	53,598
ADMINISTRATION	640	75	715	75	75	75	75	75	375	75	75	75	75	1,390
EQUIPMENT & FURNISHINGS	6,150	150	6,300	150	150	150	150	150	750	150	150	150	150	7,650
Total Expenditures	29,088	3,825	32,913	3,825	3,825	3,825	3,825	3,825	19,125	3,825	3,825	3,825	3,825	67,338
UTILITY CASH	14,683	0	14,683	0	0	0	0	0	0	0	0	0	0	14,683
METRO DISTRICT BOND	14,405	3,825	18,230	3,825	3,825	3,825	3,825	3,825	19,125	3,825	3,825	3,825	3,825	52,655
Total Funding	29,088	3,825	32,913	3,825	3,825	3,825	3,825	3,825	19,125	3,825	3,825	3,825	3,825	67,338

\$28,030,692 spent and encumbered through February 2018 \$23,718,113 spent and encumbered through February 2017

Project Status: FY19 Projects:

- (1) Increase to Storm Drain Rebuild \$150,000
- (2) Lab HVAC Replacement \$200,000
- (3) East/West Gallery Waste Upgrade \$500,000
- (4) Increase to Effluent Pipe Stabilization \$300,000
- (5) Upgrade Centrifuge Controls \$300,000
- (6) Engineering Redesign of the Septage Receiving facility \$100,000
- (7) Chamberlea, Mt. Hebron, Allenford and Patapsco pump station rehab design \$370,000
- (8) Unanticipated Projects \$500,000

FY 2018 Budget	29,088	3,325	32,413	3,325	3,325	3,325	3,325	0	13,300	0	0	0		45,713
Difference 2018 / 2019	0	500	500	500	500	500	500	3,825	5,825	3,825	3,825	3,825	3,825	21,625

Project: S6268-FY2008 PIPELINE REHABILITATION PROGRAM

Description

A project to protect and stabilize sewers and water mains in areas where stream and soil erosion have compromised the integrity of the system.

Justification

Streams and waterways can meander depending on the geomorphic properties of the stream, and soil conditions. Gravity sewer systems often parallel streams and waterways due to the need to collect waste from low-lying properties. Stream meanders and soil erosion have undercut and exposed the sewer system in many areas within the County. Similarly, water mains often cross streams and can become exposed when a stream undercuts the pipe crossing. This capital project will rehabilitate and stabilize the sewer and water systems in these areas.

Remarks

- 1. The project will prevent sewer system overflows and sewage spills thereby reducing environmental impacts and costly remediation measures and fines.
- 2. The rehabilitation efforts may include stabilizing and armoring the stream or repair/relocation of the sewer or water main.
- 3. The project will prevent costly water main breaks resulting from damage to exposed pipes.

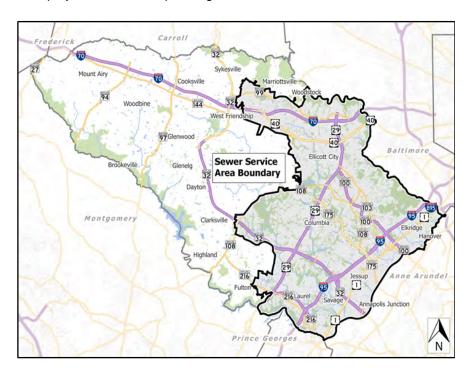
Project Schedule

Ongoing program

FY19 - 1. Mary Lane/Jones Road; 2. Mellow Wine Way; 3. Gales Lane; 4. Gragsmoor Road; 5. Bonnie Acres; 6. Phelps Luck Drive; 7. Bonnie Branch; 8. Willow Bend

Operating Budget Impact

The project will reduce operating costs.



Number: S6268

Project: FY2008 PIPELINE REHABILITATION PROGRAM

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	670	100	770	100	0	0	0	0	100	0	0	0	0	870
LAND ACQUISITION	990	50	1,040	50	0	0	0	0	50	0	0	0	0	1,090
CONSTRUCTION	3,805	500	4,305	500	0	0	0	0	500	0	0	0	0	4,805
ADMINISTRATION	15	0	15	0	0	0	0	0	0	0	0	0	0	15
Total Expenditures	5,480	650	6,130	650	0	0	0	0	650	0	0	0	0	6,780
UTILITY CASH	5,480	650	6,130	650	0	0	0	0	650	0	0	0	0	6,780
Total Funding	5,480	650	6,130	650	0	0	0	0	650	0	0	0	0	6,780

\$2,621,358 spent and encumbered through February 2018 \$2,458,521 spent and encumbered through February 2017

Project Status: Projects completed: FY17 and prior

- 1. Relocation of Town & Country sewer
- Rehabilitation of Lyndsey Way sewer
 Rehabilitation/Relocation of the Coca Cola Drive sewer mains (Deep and Shallow Run)
- 4. Shaker Drive
- 5. Thornbrook Road

Projects completed FY18:

1. Darkwood/Gatewood Emergency Repair

FY 2018 Budget	5,480	650	6,130	650	0	0	0	0	650	0	0	0	,	6,780
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: S6269-FY2009 ASHLEIGH KNOLLS SHARED SEWAGE DISP FAC UPGD

Description

A project to design and install a wastewater treatment system for the Ashleigh Knolls Shared Septic Facility to meet new Maryland Department of the Environment (MDE) discharge permit limits.

Justification

The original and subsequent MDE Groundwater Discharge Permits did not have effluent concentration limits for various nutrient loadings. The new permit, effective August 1, 2014, sets the treatment limits for BOD (30/mg/l), TSS (30 mg/l), and total nitrogen (8 mg/l). A wastewater treament system designed to meet these limits must be installed by March 31, 2019.

Remarks

- 1. Plans for the construction of the wastewater treatment facility were completed in July 2013.
- 2. Construction of the wastewater treatment plant will begin in FY19.
- 3. Howard County expected a Bay Restoration Fund grant in the amount of \$500,000 to \$1,000,000.
- 4. Howard County made the elegible list for funding in FY19.

Project Schedule

FY19 - Wastewater Treatment Plant construction

FY20 - Project Close

Operating Budget Impact

Annual Bond Redemption \$ \$84,330

The annual operation and maintenance of the new treatment system will be included in the Operating budget of the Bureau of Utilities, and is estimated initally to be approximately \$250,000. The cost of operation and maintenance is borne by the connected residential lots.



Number: S6269

Project: FY2009 ASHLEIGH KNOLLS SHARED SEWAGE DISP FAC UPGD

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	305	0	305	0	0	0	0	0	0	0	C	0	0	305
CONSTRUCTION	2,800	0	2,800	0	0	0	0	0	0	0	C	0	0	2,800
ADMINISTRATION	31	0	31	0	0	0	0	0	0	0	C	0	0	31
Total Expenditures	3,136	0	3,136	0	0	0	0	0	0	0	0	0	0	3,136
BONDS	1,874	0	1,874	0	0	0	0	0	0	0	C	0	0	1,874
GRANTS	1,100	0	1,100	0	0	0	0	0	0	0	C	0	0	1,100
PAY AS YOU GO	162	0	162	0	0	0	0	0	0	0	C	0	0	162
Total Funding	3,136	0	3,136	0	0	0	0	0	0	0	0	0	0	3,136

\$310,652 spent and encumbered through February 2018

\$310,652 spent and encumbered through February 2017

Project Status: 1. FY09 - Consultant Design Report complete, awaiting MDE review

- 2. FY10 Design 90% complete; project funding from MDE withdrawn
- 3. FY13 Complete design, if required. Current Estimate of full plant construction is \$1,500,000 also anticipate an increase in engineering costs of \$25,000
- 4. FY14 Design is 100% complete. The Discharge Permit has been modified so that the new compliance date for reducing the nutrients is now March 31, 2019
- 5. FY 15 Awaiting final MDE Decisions
- 6. FY18 Permit applications for the wastewater treatment system
- 7. FY19 Construction
- 8. FY20 Project Close

FY 2018 Budget	3,136	0	3,136	0	0	0	0	0	0	0	0	0		3,136
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: S6274-FY2015 UPPER LITTLE PATUXENT PARALLEL SEWER

Description

A project for the design and construction of 2,500 LF of parallel sewer including streambank protection, and water/sewer utilities stream crossing protection adjacent to the Little Patuxent Interceptor Sewer, north of MD108.

Justification

The project is required to provide for adequate sewer capacity in the Little Patuxent sewer between MD108 and the confluence with the Plum Tree Branch sewer. Computer modeling based on population projections from the Department of Planning and Zoning have indicated that 2,000 feet of the existing Little Patuxent Interceptor north of MD108 will flow surcharged by the year 2020 if the sewer is not paralleled.

Remarks

- 1. The project was brought before the Public Works Board on December 10, 2008.
- 2. The Little Patuxent Interceptor south of MD108 to the Water Reclamation Plant in Savage has been lined under capital project S-6273 and paralleled under capital project S-6175.
- 3. Request represents the advancement of funds in the capital program and latest engineering estimate.

Project Schedule

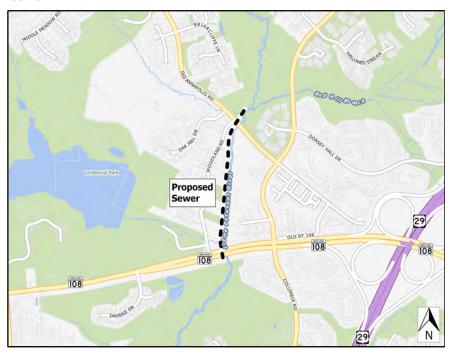
FY19 - Land Acquisition, Construction

FY20 - Project complete, Close

Operating Budget Impact

Annual Bond Redemption \$ \$163,875

\$5,275 per year represents the cost of operation and maintenance of the sewer



Project: FY2015 UPPER LITTLE PATUXENT PARALLEL SEWER

(In Thousands)					Fiv	e Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	500	0	500	0	0	0	0	0	0	0	C	0	0	500
LAND ACQUISITION	140	0	140	0	0	0	0	0	0	0	C	0	0	140
CONSTRUCTION	2,500	300	2,800	0	0	0	0	0	0	0	C	0	0	2,800
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	C	0	0	10
Total Expenditures	3,150	300	3,450	0	0	0	0	0	0	0	0	0	0	3,450
METRO DISTRICT BOND	3,150	300	3,450	0	0	0	0	0	0	0	C	0	0	3,450
Total Funding	3,150	300	3,450	0	0	0	0	0	0	0	0	0	0	3,450

\$514,706 spent and encumbered through February 2018

\$419,150 spent and encumbered through February 2017

Project Status: Sewer and stream bank study completed. Stream, stream bank and water/sewer utility stream crosssings completed. Land acquisition is in progress.

FY 2018 Budget	3,150	0	3,150	0	0	0	0	0	0	0	0	0		3,150
Difference 2018 / 2019	0	300	300	0	0	0	0	0	0	0	0	0	0	300

Fiscal 2019 Capital Budget

Project: S6275-FY2012 DANIELS AREA PUMPING STATION

SEWER PROJECTS

Number: S6275

Description

A project for the study, design and construction of a wastewater pumping station and force main to serve the Daniels Area east of Old Frederick Road.

Justification

It is Howard County policy to provide gravity sewer service whenever possible. A pumping station is required in order to provide gravity sewer service to the properties east of North Rogers Avenue between Old Frederick Road and I-70. The Master Plan for Water and Sewerage has identified the Sunell Property as a location for a future pumping station to provide gravity sewer service to this drainage area. In order to insure that the station is properly sited to meet the needs of the drainage area, the Department of Public Works will work with the property owner in constructing the pumping station and force main in return for the property owner providing the land and infrastructure (grading, roads, etc.) to access the site during the development of the property.

Remarks

- 1. The project was brought before the Public Works Board on January 12, 2010.
- 2. Land for the pumping station is required from a property owner abutting I-70. The property owner has agreed to reserve land for a pumping station during the development of his property at no cost to the County and provide adequate sewer easements to access the adjoining properties.
- 3. The property owner will construct the road and infrastructure to access the pumping station site.

Project Schedule

FY19 - Design

FY20 - Construction

FY21 - Project Complete, Close

Operating Budget Impact

Annual Bond Redemption \$ \$118,750

\$50,000 per year represents the cost of operation and maintenance of the pumping station.



Project: FY2012 DANIELS AREA PUMPING STATION Number: S6275

n Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
ppropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	410	0	410	0	0	0	0	0	0	0	C	0	0	410
LAND ACQUISITION	600	0	600	0	0	0	0	0	0	0	C	0	0	600
CONSTRUCTION	1,480	0	1,480	0	0	0	0	0	0	0	C	0	0	1,480
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	C	0	0	10
Total Expenditures	2,500	0	2,500	0	0	0	0	0	0	0	0	0	0	2,500
METRO DISTRICT BOND	2,500	0	2,500	0	0	0	0	0	0	0	C	0	0	2,500
Total Funding	2,500	0	2,500	0	0	0	0	0	0	0	0	0	0	2,500

\$228,583 spent and encumbered through February 2017

Project Status: Project is suspended because development is on-hold, pending allocation availability.

FY 2018 Budget	2,500	0	2,500	0	0	0	0	0	0	0	0	0		2,500
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: S6276-FY2011 SEWER CLEANING MAPPING AND TELEVISION INSPECTION MAINTENANCE

Description

Develop a Sewer Manhole and Line Segment Inspection and Cleaning Program to include all County-owned water sewer lines within the collection system. During the cleaning process, sewer lines will be inspected, power cleaned and their operability and condition verified. Deficiencies found during inspection will be prioritized for repairs using in-house staff or outside contractors, funded through this project. This project includes the services of a consultant to assisit with MDE Consent Agreement Compliance, to include on-site consultant services for compliance monitoring, development of a GIS mapping system for both water and sewer mains, as required by the Agreement and GIS mapping of areas cleaned, inspected, and repaired.

Justification

Howard County has entered into a Consent Agreement with the Maryland Department of the Environment (MDE) to reduce Sewer System Overflows (SSO's), and each of the activities included in this project are required by the Agreement.

Remarks

- 1. Sewer cleaning and inspections would commence by grids on an annual basis, including approximately one-fifth of all sewer lines in the system over a five year period.
- 2. There are approximately 1,000 miles of sewer line.
- 3. Preparation of a water/sewer GIS mapping layer linked to the Bureau's Hansen maintenance/management software is being developed by a consultant as part of the Consent Agreement with MDE.

Project Schedule

FY19 - Yearly cleaning, approximately 1/5 (200) miles of pipe per year, televised sewer inspections, smoke testing, on-going repairs and project management.

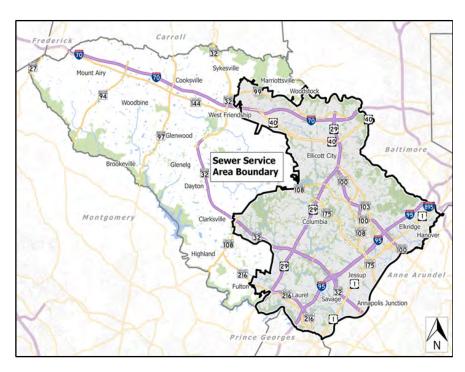
On-going projects:

Continued Sewer Maintenance program in accordance with the MDE Consent Agreement.

GIS integration with Hansen Asset Management Program.

Operating Budget Impact

Reduction in labor/administrative costs anticipated.



Number: S6276

Project: FY2011 SEWER CLEANING MAPPING AND TELEVISION INSPECTION MAINTENANCE

(In Thousands)					Five	Year Ca	pital Prog	gram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,875	200	2,075	200	200	200	200	200	1,000	200	200	200	200	3,875
CONSTRUCTION	6,050	1,000	7,050	1,000	1,000	1,000	1,000	1,000	5,000	1,000	1,000	1,000	1,000	16,050
ADMINISTRATION	182	30	212	30	30	30	30	30	150	30	30	30	30	482
Total Expenditures	8,107	1,230	9,337	1,230	1,230	1,230	1,230	1,230	6,150	1,230	1,230	1,230	1,230	20,407
IN-AID of CONSTRUCT UTILITIES	8,107	1,230	9,337	1,230	1,230	1,230	1,230	1,230	6,150	1,230	1,230	1,230	1,230	20,407
Total Funding	8,107	1,230	9,337	1,230	1,230	1,230	1,230	1,230	6,150	1,230	1,230	1,230	1,230	20,407

\$3,876,209 spent and encumbered through February 2018 \$3,767,394 spent and encumbered through February 2017

Project Status : 1. Contracts in place with outside contractors for sewer system inspection, cleaning, and rehabilitation.

2. County requirements contractors continuing to perform program cleaning in conformance with MDE Consent Order mandate. Cleaning efforts well in excess of mandated amounts.

For FY19, continued sewer cleaning, televised inspections, and smoke testing in upper and lower Little Patuxent basins. Repairs scheduled. Hold annual funding to FY18 levels. As GIS efforts are completed, additional repairs and investigative efforts will move forward.

FY 2018 Budget	8,107	1,230	9,337	1,230	1,230	1,230	1,230	0	4,920	0	0	0		14,257
Difference 2018 / 2019	0	0	0	0	0	0	0	1,230	1,230	1,230	1,230	1,230	1,230	6,150

Project: S6280-FY2013 HAMMOND/PATUXENT INTERCEPTOR IMPROVEMENTS

Description

A project for the study, design and construction of 20,000 feet of parallel sewer in the Hammond Branch and Patuxent sewer drainage areas.

Justification

The improvements are required to prevent potential wastewater overflows and surcharged flow conditions within the interceptor sewers under ultimate zoning densities.

Remarks

- 1. Computer modeling under capital project S-6255 has identified areas of potential overflow and surcharge flow conditions under current zoning build-out.
- 2. Phase I of the capital project will correct potential wastewater overflow conditions and will consist of 9,000 feet of parallel sewer.
- 3. Phase II of the capital project will correct potential surcharged flow conditions within the sewer and will consist of 11,000 feet of parallel sewer.
- 4. The project was brought before the Public Works Board on January 10, 2012.
- 5. An emergency repair of 1,100 LF was completed under S6232.
- 6. The request represents advancement of funds in the capital program and latest engineering estimate.

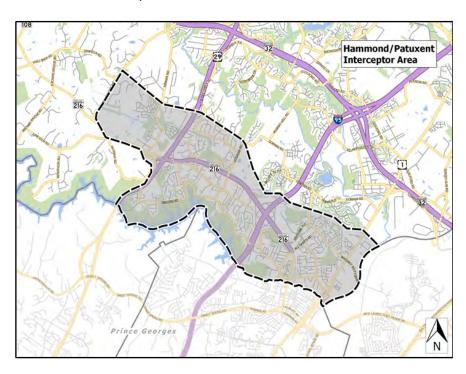
Project Schedule

FY19 - Permitting, Land Acquisition FY20-FY22 - Construction FY23 - Project complete, Close

Operating Budget Impact

Annual Bond Redemption \$ \$1,482,238

The annual cost of operation and maintenance of the sewer is \$7,500.



Project: FY2013 HAMMOND/PATUXENT INTERCEPTOR IMPROVEMENTS

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	2,730	0	2,730	0	0	0	0	0	0	0	0	0	0	2,730
LAND ACQUISITION	1,245	0	1,245	0	0	0	0	0	0	0	0	0	0	1,245
CONSTRUCTION	14,500	1,000	15,500	5,000	3,700	3,000	0	0	11,700	0	0	0	0	27,200
ADMINISTRATION	15	0	15	0	0	15	0	0	15	0	0	0	0	30
Total Expenditures	18,490	1,000	19,490	5,000	3,700	3,015	0	0	11,715	0	0	0	0	31,205
METRO DISTRICT BOND	18,490	1,000	19,490	5,000	3,700	3,015	0	0	11,715	0	0	0	0	31,205
Total Funding	18,490	1,000	19,490	5,000	3,700	3,015	0	0	11,715	0	0	0	0	31,205

\$3,512,330 spent and encumbered through February 2018 \$3,224,367 spent and encumbered through February 2017

Project Status: Phase I- Evaluation of the alignment alternatives and determination of environmental impacts completed. Geotechnical investigation completed. Design of sewer is completed. Design of wetland enhancement and stream restoration mitigation is in progress. MDE/USACE Joint Permit Application is in progress. Land acquisition is in progress.

FY 2018 Budget	18,490	5,000	23,490	3,000	5	10	0	0	3,015	0	0	0		26,505
Difference 2018 / 2019	0	(4,000)	(4,000)	2,000	3,695	3,005	0	0	8,700	0	0	0	0	4,700

Project: S6281-FY2013 DORSEY/GUILFORD INTERCEPTOR IMPROVEMENTS

Description

A project for the study, design and construction of 14,600 feet of parallel sewer in the Dorsey Run and Guilford Run sewer drainage areas.

Justification

The improvements are required to prevent potential wastewater overflows and surcharged flow conditions within the interceptor sewers under ultimate zoning densities.

Remarks

- 1. Computer modeling under capital project S-6255 has identified areas of potential overflow and surcharge flow conditions under current zoning build-out.
- 2. Phase I of the capital project will correct potential wastewater overflow conditions and will consist of construction of a new junction chamber and 600 feet of parallel sewer.
- 3. Phase II of the capital project will correct potential surcharged flow conditions within the sewer and will consist of 14,000 feet of parallel sewer.
- 4. The project was brought before the Public Works Board on January 10, 2012.

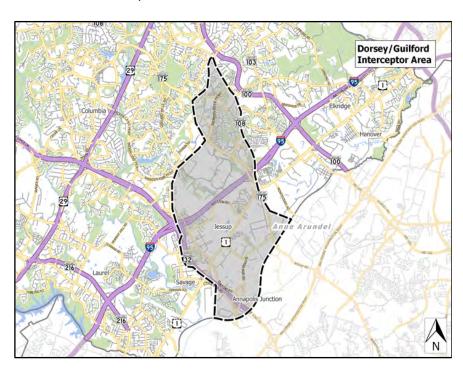
Project Schedule

FY19 - Design, Permitting, Land Acquisition FY20-FY22 - Construction FY23 - Project Complete, Close

Operating Budget Impact

Annual Bond Redemption \$ \$634,838

The annual cost of operation and maintenance of the sewer is \$5,500.



Project: FY2013 DORSEY/GUILFORD INTERCEPTOR IMPROVEMENTS

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,950	0	1,950	0	0	0	0	0	0	0	0	0	0	1,950
LAND ACQUISITION	900	0	900	0	0	0	0	0	0	0	0	0	0	900
CONSTRUCTION	9,480	0	9,480	1,000	0	0	0	0	1,000	0	0	0	0	10,480
ADMINISTRATION	10	0	10	5	5	10	0	0	20	0	0	0	0	30
OTHER	5	0	5	0	0	0	0	0	0	0	0	0	0	5
Total Expenditures	12,345	0	12,345	1,005	5	10	0	0	1,020	0	0	0	0	13,365
METRO DISTRICT BOND	12,345	0	12,345	1,005	5	10	0	0	1,020	0	0	0	0	13,365
Total Funding	12,345	0	12,345	1,005	5	10	0	0	1,020	0	0	0	0	13,365

\$1,106,028 spent and encumbered through February 2018

\$1,077,132 spent and encumbered through February 2017

Project Status: Evaluation of the alignment alternatives and determination of environmental impacts completed. Geotechnical investigation completed. Design of sewer is completed. Design of wetland enhancement and stream restoration mitigation is in progress. MDE/USACE Joint Permit Application is in progress. Land acquisition is in progress.

FY 2018 Budget	12,345	1,005	13,350	5	10	0	0	0	15	0	0	0		13,365
Difference 2018 / 2019	0	(1,005)	(1,005)	1,000	(5)	10	0	0	1,005	0	0	0	0	0

Project: S6282-FY2013 BONNIE BRANCH/ROCKBURN INTERCEPTOR IMPROVEMENTS

Description

A project for the design and rehabilitation of 6,100 feet of interceptor sewer in the Bonnie Branch sewer drainage area and the re-commissioning and upgrade of the Kerger Road Pumping Station and force main.

Justification

The improvements are required to prevent potential wastewater overflows and surcharged flow conditions within the interceptor sewers under ultimate zoning densities.

Remarks

- 1. Computer modeling under capital project S-6250 has identified areas of potential overflow and surcharge flow conditions under current zoning build-out.
- 2. Phase I of the capital project will consist of the re-commissioning of the Kerger Road Pumping Station.
- 3. Phase II of the capital project will correct potential surcharged flow conditions within the sewer and will consist of the rehabilitation of 6,100 feet of interceptor sewer including the construction of a new billing meter and vault.
- 4. The project was brought before the Public Works Board on January 10, 2012.
- 5. The project scope has been reduced due to the re-commissioning of the Kerger Road Pumping Station. The Kerger Road station will divert wastewater flows to the Shallow Run Interceptor reducing the improvements needed in the Bonnie Branch and Rockburn Interceptors.

Project Schedule

Phase II

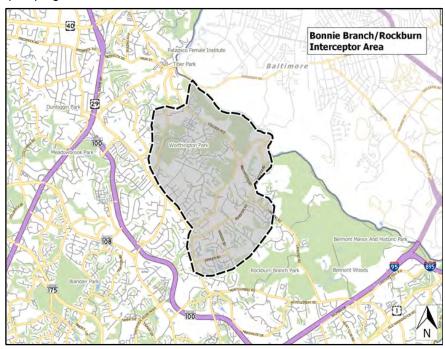
FY19 - Construction, Project Complete

FY20 - Project Close

Operating Budget Impact

Annual Bond Redemption \$ \$252,938

The annual cost of operation and maintenance of the sewer is \$12,000, and the annual cost of operation and maintenance of the sewage pumping station is \$50,000.



Number: S6282

Project: FY2013 BONNIE BRANCH/ROCKBURN INTERCEPTOR IMPROVEMENTS

(In Thousands)					Five	Year Ca	pital Pro		Master Plan					
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,250	0	1,250	0	0	0	0	0	0	0	0	0	0	1,250
LAND ACQUISITION	155	0	155	0	0	0	0	0	0	0	0	0	0	155
CONSTRUCTION	3,900	0	3,900	0	0	0	0	0	0	0	0	0	0	3,900
ADMINISTRATION	20	0	20	0	0	0	0	0	0	0	0	0	0	20
Total Expenditures	5,325	0	5,325	0	0	0	0	0	0	0	0	0	0	5,325
METRO DISTRICT BOND	5,325	0	5,325	0	0	0	0	0	0	0	0	0	0	5,325
Total Funding	5,325	0	5,325	0	0	0	0	0	0	0	0	0	0	5,325

\$1,875,175 spent and encumbered through February 2018 \$1,702,692 spent and encumbered through February 2017 Project Status: Phase 1: Complete. Phase II: Under construction.

FY 2018 Budget	5,325	0	5,325	0	0	0	0	0	0	0	0	0		5,325
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: S6283-FY2013 TIBER/SUCKER BRANCH INTERCEPTOR IMPROVEMENTS

Description

A project for the design and construction of 18,250 feet of parallel sewer in the Tiber Branch and Sucker Branch sewer drainage areas.

Justification

The improvements are required to prevent potential wastewater overflows and surcharged flow conditions within the interceptor sewers under ultimate zoning densities.

Remarks

- 1. Computer modeling under capital project S-6250 has identified areas of potential overflow and surcharge flow conditions under current zoning build-out.
- 2. Phase I of the capital project will correct potential wastewater overflow conditions and will consist of replacement of 8,720 feet of sewer on the Tiber Branch and replacement of a flow meter and 900 feet of sewer on the Sucker Branch.
- 3. Phase II of the capital project will correct potential surcharged flow conditions within the sewer and will consist of replacement of a flow meter and 130 feet of sewer on the Tiber Branch and 8,500 feet of parallel sewer on the Sucker Branch.
- 4. The project was brought before the Public Works Board on January 10, 2012.
- 5. Request represents the advancement of funds in the capital program and the latest engineer`s estimate.

Project Schedule

FY19 - Design, Permitting, Land Acquisition, Construction

FY20 - Construction

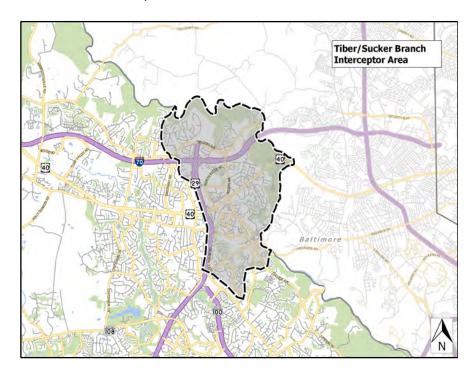
FY21 - Project complete

FY22 - Close

Operating Budget Impact

Annual Bond Redemption \$ \$840,750

The annual cost of operation and maintenance of the sewer is \$38,000.



Number: S6283

Project: FY2013 TIBER/SUCKER BRANCH INTERCEPTOR IMPROVEMENTS

(In Thousands)					Five	Year Ca	Master Plan							
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	2,350	500	2,850	690	0	0	0	0	690	0	0	0	0	3,540
LAND ACQUISITION	1,145	300	1,445	0	0	0	0	0	0	0	0	0	0	1,445
CONSTRUCTION	5,860	0	5,860	300	6,500	0	0	0	6,800	0	0	0	0	12,660
ADMINISTRATION	45	5	50	5	0	0	0	0	5	0	0	0	0	55
Total Expenditures	9,400	805	10,205	995	6,500	0	0	0	7,495	0	0	0	0	17,700
METRO DISTRICT BOND	9,400	805	10,205	995	6,500	0	0	0	7,495	0	0	0	0	17,700
Total Funding	9,400	805	10,205	995	6,500	0	0	0	7,495	0	0	0	0	17,700
\$3,888,177 spent and encumbered \$1,016,090 spent and encumbered Project Status : Project is under des	through Febr	•												
FY 2018 Budget	9,400	0	9,400	0	0	0	0	0	0	0	0	0		9,400
Difference 2018 / 2019	0	805	805	995	6,500	0	0	0	7,495	0	0	0	0	8,300

March 23, 2018 Howard County, MD Version : Executive Proposed

Project: S6284-FY2013 DEEP RUN/SHALLOW RUN INTERCEPTOR IMPROVEMENTS

Description

A project for the design and construction of 44,000 feet of parallel sewer in the Deep Run and Shallow Run sewer drainage areas.

Justification

The improvements are required to prevent potential wastewater overflows and surcharged flow conditions within the interceptor sewers under ultimate zoning densities.

Remarks

- 1. Computer modeling under capital project S-6250 has identified areas of potential overflow and surcharge flow conditions under current zoning build-out.
- 2. Phase I of the capital project will correct potential wastewater overflow conditions and will consist of 20,000 feet of parallel sewer.
- 3. Phase II of the capital project will correct potential surcharged flow conditions within the sewer and will consist of 24,000 feet of parallel sewer.
- 4. The project was brought before the Public Works Board on January 10, 2012.
- 5. Request represents the advancement of funds in the capital program and the latest engineer`s estimate.

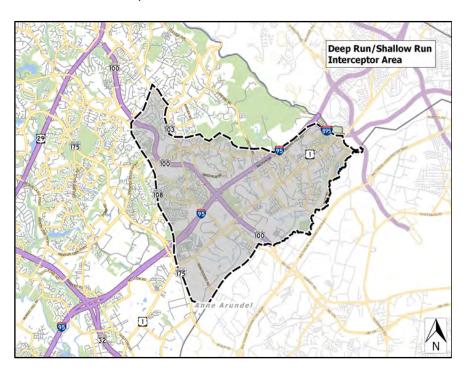
Project Schedule

FY19-FY20 - Design, permitting, land Acquisition, construction FY21 - Construction, project complete, close

Operating Budget Impact

Annual Bond Redemption \$ \$1,778,400

The annual cost of operation and maintenance of the sewer is \$14,500.



Project: FY2013 DEEP RUN/SHALLOW RUN INTERCEPTOR IMPROVEMENTS

(In Thousands)					Five	Year Ca	pital Pro	Master Plan						
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	4,885	0	4,885	395	0	0	0	0	395	0	0	0	0	5,280
LAND ACQUISITION	2,500	1,550	4,050	1,025	0	0	0	0	1,025	0	0	0	0	5,075
CONSTRUCTION	12,200	0	12,200	11,115	3,700	0	0	0	14,815	0	0	0	0	27,015
ADMINISTRATION	50	10	60	10	0	0	0	0	10	0	0	0	0	70
Total Expenditures	19,635	1,560	21,195	12,545	3,700	0	0	0	16,245	0	0	0	0	37,440
METRO DISTRICT BOND	19,635	1,560	21,195	12,545	3,700	0	0	0	16,245	0	0	0	0	37,440
Total Funding	19,635	1,560	21,195	12,545	3,700	0	0	0	16,245	0	0	0	0	37,440
\$4,227,178 spent and encumbered \$4,044,656 spent and encumbered Project Status : Project is under con	through Febr													
FY 2018 Budget	19,635	1,075	20,710	0	0	0	0	0	0	0	0	0		20,710
Difference 2018 / 2019	0	485	485	12,545	3,700	0	0	0	16,245	0	0	0	0	16,730

Project: S6285-FY2017 MD108 PUMP STATION OUTFALL IMPROVEMENTS

Description

A project for the design and construction of 1,585 feet of parallel sewer in the Tiber Branch sewer drainage area to support flows from the MD108 Pumping Station.

Justification

The improvements are required to prevent potential wastewater overflows and surcharged flow conditions within the interceptor sewers under ultimate zoning densities.

Remarks

- 1. Computer modeling under capital project S-6250 has identified areas of potential overflow and surcharge flow conditions under current zoning build-out.
- 2. During emergency conditions, the MD Route 108 Pumping Station diverts flow from the Little Patuxent sewer service area to the Patapsco sewer service area by way of the Cat Rock Branch / Tiber Branch Interceptor sewer. The improvements are necessary to allow an emergency diversion of wastewater flows into the Patapsco Interceptor without resulting in potential overflow or surcharged conditions.
- 3. The project was brought before the Public Works Board on January 10, 2012.
- 4. Request represents the advancement of funds in the capital program and the latest engineer's estimate.

Project Schedule

FY19 - Design, Permitting, Land Acquisition

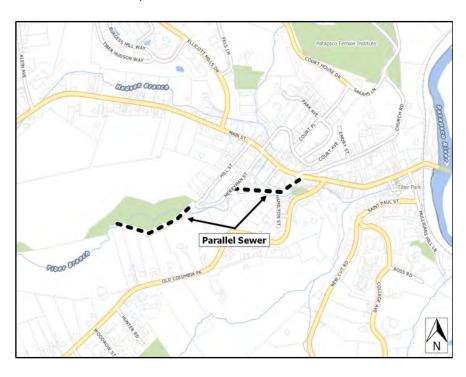
FY20 - Construction, Project complete

FY21 - Project close

Operating Budget Impact

Annual Bond Redemption \$ \$61,750

The annual cost of operation and maintenance of the sewer is \$700.



Number: S6285

Project: FY2017 MD108 PUMP STATION OUTFALL IMPROVEMENTS

(In Thousands)					Five	Master Plan								
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	110	80	190	0	0	0	0	0	0	0	0	0	0	190
LAND ACQUISITION	0	100	100	0	0	0	0	0	0	0	0	0	0	100
CONSTRUCTION	0	0	0	1,000	0	0	0	0	1,000	0	0	0	0	1,000
ADMINISTRATION	5	0	5	5	0	0	0	0	5	0	0	0	0	10
Total Expenditures	115	180	295	1,005	0	0	0	0	1,005	0	0	0	0	1,300
METRO DISTRICT BOND	115	180	295	1,005	0	0	0	0	1,005	0	0	0	0	1,300
Total Funding	115	180	295	1,005	0	0	0	0	1,005	0	0	0	0	1,300
\$91,706 spent and encumbered th spent and encumbered through F Project Status : Project is under des	ebruary 2017	y 2018												
FY 2018 Budget	115	685	800	500	0	0	0	0	500	0	0	0		1,300
Difference 2018 / 2019	0	(505)	(505)	505	0	0	0	0	505	0	0	0	0	0

Fiscal 2019 Capital Budget

Project: S6286-FY2013 DORSEY RUN PUMP STATION UPGRADE

SEWER PROJECTS

Number: S6286

Description

A project to upgrade and increase the pumping capacity of the Dorsey Run Pumping Station.

Justification

The pumping station is currently operating at full pumping capacity during rain events. The pumps, motors and drives are 25 years old and nearing the end of their useful life. Computer modeling under capital project S-6255 has identified the need to upgrade the capacity of the Dorsey Run Pumping Station to handle the ultimate projected flow conditions.

Remarks

- 1. The improvements are required under the Master Plan for Water and Sewerage.
- 2. The project was brought before the Public Works Board on January 10, 2012.
- 3. Request represents the latest engineering estimate.

Project Schedule

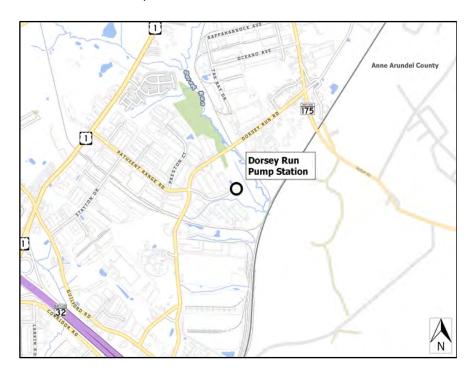
FY19 - Construction

FY20 - Project complete, close

Operating Budget Impact

Annual Bond Redemption \$ \$244,008

The annual cost of operation and maintenance of the sewer is \$50,000.



Project: FY2013 DORSEY RUN PUMP STATION UPGRADE Number: S6286

(In Thousands)					Five	Year Ca	pital Pro	gram		Master Plan						
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project		
PLANS & ENGINEERING	807	0	807	0	0	0	0	0	0	0	0	0	0	807		
CONSTRUCTION	3,820	500	4,320	0	0	0	0	0	0	0	0	0	0	4,320		
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10		
Total Expenditures	4,637	500	5,137	0	0	0	0	0	0	0	0	0	0	5,137		
METRO DISTRICT BOND	4,637	500	5,137	0	0	0	0	0	0	0	0	0	0	5,137		
Total Funding	4,637	500	5,137	0	0	0	0	0	0	0	0	0	0	5,137		
\$3,687,949 spent and encumbered the spent and	hrough Februa															
FY 2018 Budget	4,637	0	4,637	0	0	0	0	0	0	0	0	0)	4,637		
Difference 2018 / 2019	0	500	500	0	0	0	0	0	0	0	0	0	0	500		

Project: S6287-FY2017 NORTH LAUREL PUMP STATION PARALLEL FORCE MAIN

Description

A project for the design and construction of 4,600 feet of parallel force main to supplement the pumping capacity of the North Laurel Wastewater Pumping Station.

Justification

The parallel force main is required to allow for a greater pumping capacity with the existing pumps.

Remarks

- 1. Computer modeling under capital project S-6255 has identified the need to upgrade the capacity of the North Laurel Pumping Station to handle the ultimate projected flows.
- 2. The project was brought before the Public Works Board on January 10, 2012.
- 3. Project schedule revised from FY21 to FY17 due to results of condition assessment of existing FM.

Project Schedule

FY19 - Design, Permitting, Land Acquisition

FY20 - Construction

FY21 - Project complete, Close

Operating Budget Impact

Annual Bond Redemption \$ \$119,225

The annual cost of operation and maintenance of the sewer is \$ 20,000.



Number: S6287

Project: FY2017 NORTH LAUREL PUMP STATION PARALLEL FORCE MAIN

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	500	0	500	0	0	0	0	0	0	0	0	0	0	500
CONSTRUCTION	2,000	0	2,000	0	0	0	0	0	0	0	0	0	0	2,000
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	2,510	0	2,510	0	0	0	0	0	0	0	0	0	0	2,510
METRO DISTRICT BOND	2,510	0	2,510	0	0	0	0	0	0	0	0	0	0	2,510
Total Funding	2,510	0	2,510	0	0	0	0	0	0	0	0	0	0	2,510

\$147,780 spent and encumbered through February 2018

spent and encumbered through February 2017
Project Status: Alignment alternatives studies completed. Project is under design.

FY 2018 Budget	2,510	0	2,510	0	0	0	0	0	0	0	0	0		2,510
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Fiscal 2019 Capital Budget

SEWER PROJECTS

Number: S6288

Project: S6288-FY2020 ROCKBURN PUMPING STATION UPGRADE

Description

A project to upgrade and coordinate the pumping capacity of the Rockburn Pumping Station with the Kerger Road Pumping Station.

Justification

Computer modeling under capital project S-6250 has identified the need to upgrade the capacity of the Rockburn Pumping Station to handle the ultimate projected flow conditions. Analysis of the Bonnie Branch Interceptor has indicated potential for surcharging conditions.

Remarks

The project was brought before the Public Works Board on January 10, 2012.

Project Schedule

FY20 - Design

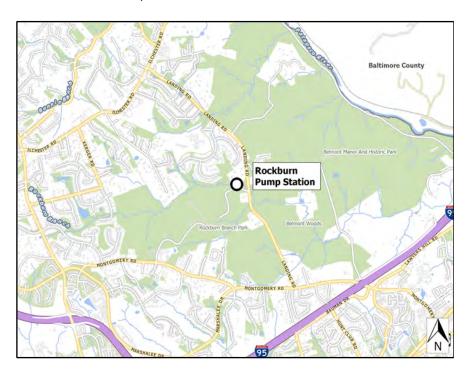
FY21 - Construction

FY22 - Project complete, Close

Operating Budget Impact

Annual Bond Redemption \$ \$157,700

The annual cost of operation and maintenance of the sewer is \$ 20,000.



Number: S6288

Project: FY2020 ROCKBURN PUMPING STATION UPGRADE

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	0	0	325	285	0	0	0	610	0	0	0	0	610
CONSTRUCTION	0	0	0	0	2,700	0	0	0	2,700	0	0	0	0	2,700
ADMINISTRATION	0	0	0	5	5	0	0	0	10	0	0	0	0	10
Total Expenditures	0	0	0	330	2,990	0	0	0	3,320	0	0	0	0	3,320
METRO DISTRICT BOND	0	0	0	330	2,990	0	0	0	3,320	0	0	0	0	3,320
Total Funding	0	0	0	330	2,990	0	0	0	3,320	0	0	0	0	3,320
\$0 spent and encumbered through spent and encumbered through F Project Status :		18												
FY 2018 Budget	0	0	0	330	2,990	0	0	0	3,320	0	0	C		3,320
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	C	0	0

Project: S6290-FY2014 SAVAGE AREA SEWER STUDY and REALIGNMENT

Description

A project for the study and realignment of 3,500 linear feet of sewer in the area of Baltimore Street and Washington Street, west of William Street in Savage, Maryland.

Justification

The existing sanitary sewers in this area of Savage were constructed as part of the original Savage Mill factory housing and accepted into the County public sewer system in the 1960s. The sanitary sewers were constructed in back yards, abutting the foundations of buildings and private homes without recorded easements. The capital project will study the feasibility of relocating the sewers into public roadways or easements under the current standards and reconnecting the buildings and homes into the new public sewer.

Remarks

- 1. Relocation of the sewers will reduce or eliminate the need for the County to enter onto private property and excavate adjacent to existing buildings and homes to maintain the public sewer.
- 2. The project was brought before the Public Works Board on December 11, 2012.

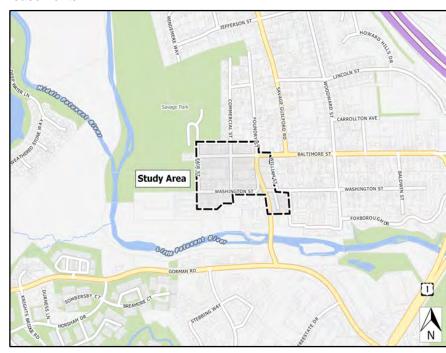
Project Schedule

FY19 - Close

Operating Budget Impact

Annual Bond Redemption \$ \$201,875

The cost of operation and maintenance will be reduced by relocating the public sewers to more accessible locations within public rights-of-way or easements.



Difference 2018 / 2019

0

0

0

Number: S6290

0

Project: FY2014 SAVAGE AREA SEWER STUDY and REALIGNMENT

0

0

In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
ppropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	210	0	210	0	0	0	0	0	0	0	0	0	0	21
LAND ACQUISITION	275	0	275	0	0	0	0	0	0	0	0	0	0	27
CONSTRUCTION	3,750	0	3,750	0	0	0	0	0	0	0	0	0	0	3,75
ADMINISTRATION	15	0	15	0	0	0	0	0	0	0	0	0	0	1:
Total Expenditures	4,250	0	4,250	0	0	0	0	0	0	0	0	0	0	4,25
METRO DISTRICT BOND	4,250	0	4,250	0	0	0	0	0	0	0	0	0	0	4,25
Total Funding	4,250	0	4,250	0	0	0	0	0	0	0	0	0	0	4,25

0

Project: S6293-FY2015 TURF VALLEY ROAD SEWER Number: S6293

Description

A project for the design and construction of 2,000 LF of sewer to serve three properties located on US40.

Justification

The project was requested by the owners of two parcels on US40. The parcels are located within the Metropolitan District. The properties are assessed advalorem charges and are eligible for public water and sewer service.

Remarks

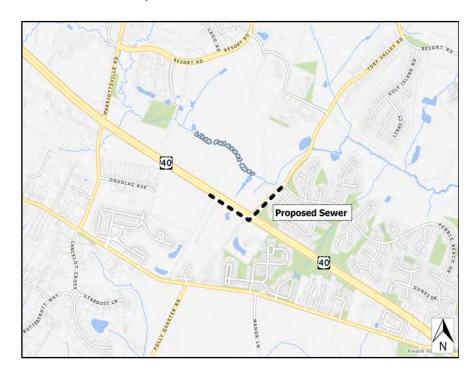
The project was brought before the Public Works Board on January 14, 2014.

Project Schedule

FY19 - Close

Operating Budget Impact

The annual cost of operation and maintenance of the sewer is \$4,200.



Project: FY2015 TURF VALLEY ROAD SEWER Number: S6293

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	330	0	330	0	0	0	0	0	0	0	0	0	0	330
LAND ACQUISITION	25	0	25	0	0	0	0	0	0	0	0	0	0	25
CONSTRUCTION	700	0	700	0	0	0	0	0	0	0	0	0	0	700
ADMINISTRATION	9	0	9	0	0	0	0	0	0	0	0	0	0	9
Total Expenditures	1,064	0	1,064	0	0	0	0	0	0	0	0	0	0	1,064
IN-AID of CONSTRUCT UTILITIES	1,064	0	1,064	0	0	0	0	0	0	0	0	0	0	1,064
Total Funding	1,064	0	1,064	0	0	0	0	0	0	0	0	0	0	1,064
\$943,278 spent and encumbered throu \$148,833 spent and encumbered throu Project Status : Project is complete.														
FY 2018 Budget	1,064	0	1,064	0	0	0	0	0	0	0	0	0		1,064
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	C

Project: S6294-FY2015 ANNAPOLIS JUNCTION PUMPING STATION RENOVATION

Description

A project for the renovation of the Annapolis Junction Pumping Station.

Justification

The County has been requested to make certain modifications to the existing Annapolis Junction Pumping Station to accommodate planned land use by the adjacent property owners. The modifications include fence relocations and installation of odor control facilities. The requested modifications will be paid for by adjacent land owners. Other desired station improvements will be cost shared between the County and the adjacent land owners.

Remarks

- 1. Requested modifications to the pumping station will be contingent on receipt of funds from those requesting the modifications.
- 2. Other sources represents developer contributions and funds received from the adjacent land owners.
- 3. The project was brought before the Public Works Board on January 14, 2014.
- 4. Request represents the latest engineer's estimate for construction.

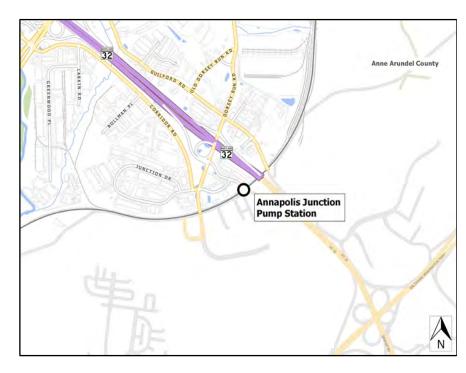
Project Schedule

FY19 - Construction

FY20 - Project complete, close

Operating Budget Impact

The annual cost of operation and maintenance will be unchanged.



Project: FY2015 ANNAPOLIS JUNCTION PUMPING STATION RENOVATION

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	85	0	85	0	0	0	0	0	0	0	0	0	0	85
CONSTRUCTION	380	500	880	0	0	0	0	0	0	0	0	0	0	880
ADMINISTRATION	15	0	15	0	0	0	0	0	0	0	0	0	0	15
Total Expenditures	480	500	980	0	0	0	0	0	0	0	0	0	0	980
IN-AID of CONSTRUCT UTILITIES	355	500	855	0	0	0	0	0	0	0	0	0	0	855
OTHER SOURCES	125	0	125	0	0	0	0	0	0	0	0	0	0	125
Total Funding	480	500	980	0	0	0	0	0	0	0	0	0	0	980
\$126,336 spent and encumbered through \$83,326 spent and encumbered through Project Status: Project is currently und	gh Februai	ry 2017												
FY 2018 Budget	480	0	480	0	0	0	0	0	0	0	0	0		480
Difference 2018 / 2019	0	500	500	0	0	0	0	0	0	0	0	0	0	500

Project: S6295-FY2016 LPWRP 8th ADDITION BIOSOLIDS PROCESSING FACILITIES

Description

A project to design and construct new biosolids processing facilities at the Little Patuxent Water Reclamation Plant (LPWRP) for the purpose of meeting new Maryland Department of the Environment (MDE) biosolids storage and disposal regulations, achieve biosolids volume reduction, and enhance biosolids quality for end-use purposes. Work may include the performance of energy audits, alternative power source upgrades and/or the installation of energy conservation techniques at the plant or system facilities.

Justification

Biosolids from Howard County's LPWRP are currently dewatered, treated using an advanced alkaline (lime) stabilization process, and applied in bulk as a fertilizer to agricultural fields within Maryland.

Remarks

- 1. Howard County completed a Biosolids Master Plan and Preliminary Engineering Report that recommend replacing the existing RDP advanced lime stabilization process with anaerobic digestion and direct heat drying to produce a Class A, exceptional quality (EQ), dried biosolids product.
- 2. The project is being designed and constructed via a Construction Manager at Risk (CMAR) alternative delivery process.
- 3. FY19 budget increase needed to account for more defined project scope with Phase II design started and completed

Project Schedule

FY17 - Preliminary engineering and conceptual design. Project at 50% design with construction manager acquiring actual bid prices for first phase of project. FY17-FY18 - Project Design and Permitting.

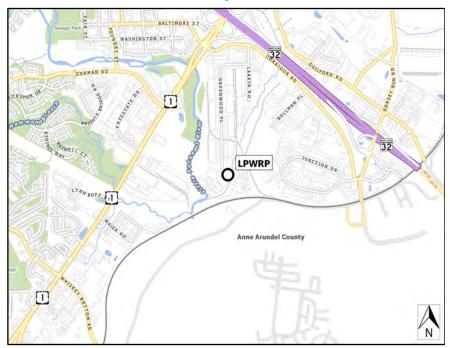
FY17-FY20 - Construction startup phase of new facilities. Approximate 36 month construction, and 6 month startup to achieve full operation.

FY21 - Project Complete and Close

Operating Budget Impact

Annual Bond Redemption \$ \$4,713,900

Annual Bond Redemption of \$4,132,500. The annual operation and maintenance of the new biosolids processing facilities will be included in the Operating Budget of the Bureau of Utilities, and the cost of operation and maintenance is recovered through the User Rates.



Explanation of Changes

FY18 budget increase needed for construction cost designed through the engineer's detailed design.

Number: S6295

Project: FY2016 LPWRP 8th ADDITION BIOSOLIDS PROCESSING FACILITIES

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	15,200	3,000	18,200	1,000	0	0	0	0	1,000	0	0	0	0	19,200
CONSTRUCTION	84,500	8,000	92,500	0	0	0	0	0	0	0	0	0	0	92,500
ADMINISTRATION	2,535	240	2,775	0	0	0	0	0	0	0	0	0	0	2,775
Total Expenditures	102,235	11,240	113,475	1,000	0	0	0	0	1,000	0	0	0	0	114,475
UTILITY CASH	15,235	0	15,235	0	0	0	0	0	0	0	0	0	0	15,235
METRO DISTRICT BOND	87,000	11,240	98,240	1,000	0	0	0	0	1,000	0	0	0	0	99,240
Total Funding	102,235	11,240	113,475	1,000	0	0	0	0	1,000	0	0	0	0	114,475

\$81,895,055 spent and encumbered through February 2018 \$81,110,876 spent and encumbered through February 2017

- Project Status: 1. Design contract has been awarded totaling \$7.4 million.

 2. Preconstruction Services contract for Construction Manager at Risk (CMAR) has been awarded totaling \$2.5 million.
- 3. Construction for Phase 1 of 2 began February 20, 2017 with a guaranteed maximum price of approximately \$65.5 million
- 4. Construction for Phase 2 of 2 is anticipated to begin April 1, 2018 and is currently at 60% design with a construction budget of \$92.5 million.

FY 2018 Budget	102,235	0	102,235	0	0	0	0	0	0	0	0	0		102,235
Difference 2018 / 2019	0	11,240	11,240	1,000	0	0	0	0	1,000	0	0	0	0	12,240

Project: S6296-FY2016 HARRIET TUBMAN LANE SEWER EXTENSION

Description

A project for the design and construction of 150 LF of sewer to serve one property on Harriet Tubman Lane.

Justification

The sewer extension was requested by one property owner located on Harriet Tubman Lane. The property is improved, is within the Metropolitian District and is eligible for public sewer service.

Remarks

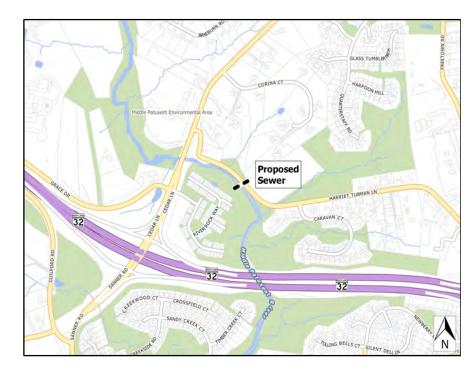
1. The project was brought before the Public Works Board on December 9, 2014.

Project Schedule

FY20 - Project close

Operating Budget Impact

The annual cost of operation and maintenance of the sewer is \$320.



Number: S6296

Project: FY2016 HARRIET TUBMAN LANE SEWER EXTENSION

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	100	0	100	0	0	0	0	0	0	0	0	0	0	100
LAND ACQUISITION	20	0	20	0	0	0	0	0	0	0	0	0	0	20
CONSTRUCTION	310	0	310	0	0	0	0	0	0	0	0	0	0	310
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	440	0	440	0	0	0	0	0	0	0	0	0	0	440
UTILITY CASH	440	0	440	0	0	0	0	0	0	0	0	0	0	440
Total Funding	440	0	440	0	0	0	0	0	0	0	0	0	0	440
\$381,349 spent and encumbered the \$49,366 spent and encumbered the Project Status: Project is complete.	rough Februai													
FY 2018 Budget	440	0	440	0	0	0	0	0	0	0	0	0		440
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: S6297-FY2016 OLD FREDERICK ROAD PUMPING STATION UPGRADE

Description

A project for the design and construction of upgrades to increase the pumping capacity of the Old Frederick Road Pumping Station. Work includes improvements to the station discharge force main and downstream interceptor sewer in conjunction with increasing the station capacity.

Justification

The pumping station is currently operating at capacity. A desktop analysis performed under capital project S6275 has indicated the need to upgrade capacity of the Old Frederick Pumping Station to handle projected flow conditions. The pumps, motors, controls and associated piping will be upgraded.

Remarks

Project Schedule

FY19 - Design and land acquisition

FY20 - Construction

FY21 - Construction, Project complete

FY22 - Project close

Operating Budget Impact

Annual Bond Redemption \$ \$82,413

The annual cost of operation and maintenance of the sewer pumping station is \$50,000.



Number: S6297

Project: FY2016 OLD FREDERICK ROAD PUMPING STATION UPGRADE

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	200	0	200	0	0	0	0	0	0	0	0	0	0	200
LAND ACQUISITION	30	0	30	0	0	0	0	0	0	0	0	0	0	30
CONSTRUCTION	1,500	0	1,500	0	0	0	0	0	0	0	0	0	0	1,500
ADMINISTRATION	5	0	5	0	0	0	0	0	0	0	0	0	0	5
Total Expenditures	1,735	0	1,735	0	0	0	0	0	0	0	0	0	0	1,735
METRO DISTRICT BOND	1,735	0	1,735	0	0	0	0	0	0	0	0	0	0	1,735
Total Funding	1,735	0	1,735	0	0	0	0	0	0	0	0	0	0	1,735
\$66,791 spent and encumbered th spent and encumbered through F Project Status : Project is under de	ebruary 2017	ry 2018												
FY 2018 Budget	1,735	0	1,735	0	0	0	0	0	0	0	0	0)	1,735
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	C

Fiscal 2019 Capital Budget

SEWER PROJECTS

Number: S6298

Project: S6298-FY2018 DORSEY RUN ROAD SEWER EXTENSION

Description

A project for the design and construction of 475 LF of 8-inch sewer main along Dorsey Run Road to serve one property with a failing septic system.

Justification

The requesting property is currently served by a septic system that is failing. The business, Praxair, requested that the County extend sewer service to allow connection to the public system.

Remarks

1. The project was brought before the Public Works Board on December 13, 2016.

Project Schedule

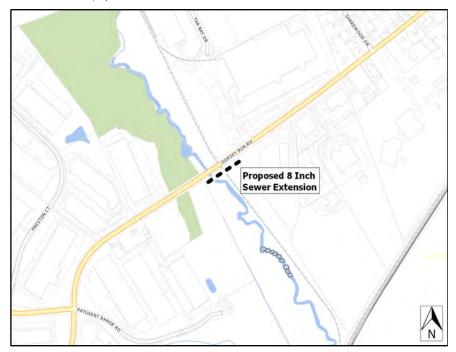
FY19 - Design; Construction; Project complete

FY20 - Project close

Operating Budget Impact

Annual Bond Redemption \$ \$19,000

The annual cost of operation and maintenance of the sewer main is estimated at \$1,400.



Number: S6298

Project: FY2018 DORSEY RUN ROAD SEWER EXTENSION

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	100	0	100	0	0	0	0	0	0	0	0	0	0	100
LAND ACQUISITION	50	0	50	0	0	0	0	0	0	0	0	0	0	50
CONSTRUCTION	245	0	245	0	0	0	0	0	0	0	0	0	0	245
ADMINISTRATION	5	0	5	0	0	0	0	0	0	0	0	0	0	5
Total Expenditures	400	0	400	0	0	0	0	0	0	0	0	0	0	400
METRO DISTRICT BOND	400	0	400	0	0	0	0	0	0	0	0	0	0	400
Total Funding	400	0	400	0	0	0	0	0	0	0	0	0	0	400
\$14,354 spent and encumbered th spent and encumbered through F Project Status : Project is under de	ebruary 2017	ry 2018												
FY 2018 Budget	400	0	400	0	0	0	0	0	0	0	0	0)	400
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	C

Project: S6500-FY2017 SEWER AREA ASSESSMENT AND MODELING

Description

A project [program] for the study and evaluation of sewer areas and/or water zones.

Justification

The project [program] was initiated by the Department of Public Works. This project [program] will be utilized to examine related needs within specific sewer areas or water zones when it is determined that a need exist to evaluate a sewer area or water zone due to emergency, future capital project(s), future development(s), etc.

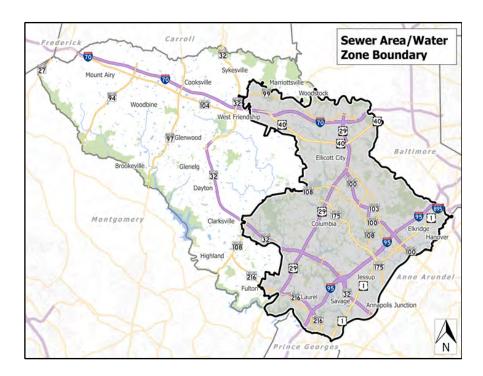
Remarks

- 1. The project [program] will be used to perform sewer system evaluation surveys (SSES) in areas of excessive infiltration and inflow.
- 2. Sewer and/or water modeling or other desktop analytical methods as well as minor field level evaluations will be performed.
- 3. The project was brought before the Public Works Board on December 8, 2015.

Project Schedule

Ongoing program

FY19 - Sewer area assessments and modeling as needed



Number: S6500

Project: FY2017 SEWER AREA ASSESSMENT AND MODELING

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	350	0	350	100	85	85	100	0	370	0	0	0	0	720
ADMINISTRATION	5	0	5	0	5	0	5	0	10	0	0	0	0	15
Total Expenditures	355	0	355	100	90	85	105	0	380	0	0	0	0	735
UTILITY CASH	355	0	355	100	90	85	105	0	380	0	0	0	0	735
Total Funding	355	0	355	100	90	85	105	0	380	0	0	0	0	735

\$143,424 spent and encumbered through February 2018 \$5,698 spent and encumbered through February 2017

Project Status: 1. Rockburn Drainage Area assessment. 2. Sewer model updated with semiannual new efforts.

FY 2018 Budget	355	105	460	100	90	85	0	0	275	0	0	0		735
Difference 2018 / 2019	0	(105)	(105)	0	0	0	105	0	105	0	0	0	0	0

Project: S6600-FY2019 WATER AND WASTEWATER FACILITIES CAPITAL REPAIRS AND UPGRADES

Description

A project [program] to repair or upgrade existing water or sewer facilities. Work may also include the performance of energy audits, alternative power source upgrades and/or the installation of energy conservation techniques at existing water or sewer facilities.

Justification

Existing facility infrastructure within the water/wastewater collection system is aging and upgrades are needed (beyond routine maintence) to extended the useful life of the asset or restore degrading functionality. This capital project provides programtic component replacement and upgrades to water/wastewater facilities external to the Little Patuxent Water Reclamation Plant.

Remarks

1. The project was brought before the Public Works Board on January 09, 2018.

Project Schedule

On-going Program

FY19 - Chamberlea SPS and Allenford SPS upgrades

FY20 - Mt. Hebron SPS, Patapsco SPS and Valley Lane SPS upgrades

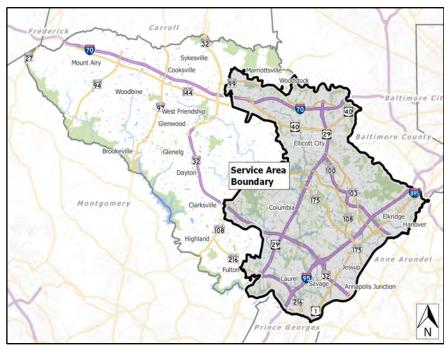
FY21 - Route 29 WPS and Route 40 SPS upgrades

FY22 - Waverly SPS upgrades

Operating Budget Impact

Annual Bond Redemption \$ \$403,750

Reduction in the number of unscheduled and therefore emergency repairs which are estimated to be in excess of \$100,000 annually.



Fiscal 2019 Capital Budget

Difference 2018 / 2019

SEWER PROJECTS

Number: S6600

0

8,500

Project: FY2019 WATER AND WASTEWATER FACILITIES CAPITAL REPAIRS AND UPGRADES

2,500

0

In Thousands)					Five	Year Ca	pital Prog	gram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	0	490	490	490	490	490	450	0	1,920	0	0	0	0	2,410
CONSTRUCTION	0	2,000	2,000	1,000	1,000	1,000	1,045	0	4,045	0	0	0	0	6,045
ADMINISTRATION	0	10	10	10	10	10	5	0	35	0	0	0	0	45
Total Expenditures	0	2,500	2,500	1,500	1,500	1,500	1,500	0	6,000	0	0	0	0	8,500
METRO DISTRICT BOND	0	2,500	2,500	1,500	1,500	1,500	1,500	0	6,000	0	0	0	0	8,500
Total Funding	0	2,500	2,500	1,500	1,500	1,500	1,500	0	6,000	0	0	0	0	8,500

1,500

1,500

1,500

0

6,000

0

0

1,500

2,500

Project: S6698-ROUTINE SEWER EXTENSION PROGRAM Number: S6698

Description

A project to design and construct routine sewer main extensions in the Metropolitan District requested by landowners.

- 1. To serve parcels with existing dwellings and existing dwellings in recorded residential subdivisions where sewer mains have not been constructed.
- 2. To serve existing dwellings or businesses on failing private systems as identified by the County Health Department.
- 3. These routine extensions must also meet the following criteria: a. A written request has been made by a property owner who is without a sewer main fronting their property. b. Properties to be served must abut a County or State road. c. The extension is less than 1,000 feet. d. The extension is a gravity sewer main and continues a gravity sewer system currently in service within the sewer shed. e. Acquisition of utility easements are not required. f. Capacity is available per section 18.122B of the County Code. g. The extension is supported by at least 50% of the abutting property owners.

Justification

This project will provide service in a shorter time frame for small extensions.

Remarks

1. See Capital Project W8698 for Routine Water Main Extension program.

Project Schedule

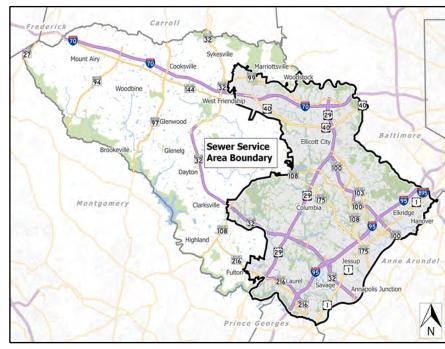
Ongoing program FY19 -

- 1. Boones Lane Routine Sewer Extension
- 2. Program eligible Metropolitan District sewer extension request as received

Operating Budget Impact

Annual Bond Redemption \$ \$380,000

\$2.15 per foot per year represents the estimated cost of maintenance of the sewer man (small diameter), manholes and easements over the utility.



Project: ROUTINE SEWER EXTENSION PROGRAM

Number: S6698

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	834	0	834	100	100	100	100	100	500	0	0	0	0	1,334
CONSTRUCTION	3,945	0	3,945	500	500	500	500	500	2,500	0	0	0	0	6,445
ADMINISTRATION	96	0	96	25	25	25	25	25	125	0	0	0	0	221
Total Expenditures	4,875	0	4,875	625	625	625	625	625	3,125	0	0	0	0	8,000
METRO DISTRICT BOND	4,875	0	4,875	625	625	625	625	625	3,125	0	0	0	0	8,000
Total Funding	4,875	0	4,875	625	625	625	625	625	3,125	0	0	0	0	8,000

\$2,804,626 spent and encumbered through February 2018 \$2,715,573 spent and encumbered through February 2017

Project Status: Projects completed: FY17 and prior - 1. Sunset Farm Road Sewer Extension; 2. Warwick Way Sewer Extension; 3. Old Frederick Road Sewer Extension; 4. Longview Road Sewer Extension; 5. Sylvan Lane Sewer Extension; 6. Boones Lane Sewer Extension; 7. Eliots Oak Road Sewer Extension; 8. MD216 at All Saints Road Sewer Extension; 9. Judy Lane Sewer Extension; 10. Millers Way Drive Sewer Extension; 11. Upton Road Sewer Extension; 12. US40 Water and Sewer Extension; 13. Whiskey Bottom Road Sewer Extension; 14. Guilford Road Sewer Extension; 15. Trotter Road Sewer Extension 16. Ten Mills Road Sewer Extension; 17. Hunting Lane Routine Sewer Extension Projects completed: FY18 - 1. Cedar Lane Routine Sewer Extension (under construction)

FY 2018 Budget	4,875	625	5,500	625	625	625	625	0	2,500	0	0	0		8,000
Difference 2018 / 2019	0	(625)	(625)	0	0	0	0	625	625	0	0	0	0	0

Project: S6699-ON SITE SEPTIC SYSTEM CONVERSION PROGRAM

Description

A project for the study, design and implementation of converting properties within the water and sewer Planned Service Area that are currently on private on-site septic systems to public sewer service.

Justification

Properties within the planned service area on private septic systems often produce a greater nutrient loading on the environment than waste treated at the County's water reclamation facilities. By providing improved properties access to public sewerage facilities, the County will be able to lower the overall nutrient impact on the County's watersheds.

Remarks

- 1. The project was brought before the Public Works Board on April 9, 2013.
- 2. The project will provide construction of the necessary infrastructure to allow properties to connect to the public sewer system.
- 3. Properties must be within the Planned Service Area and Metropolitan District prior to connection to the public sewer system.

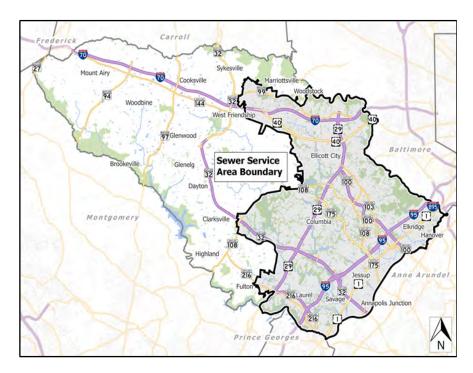
Project Schedule

Ongoing program

Operating Budget Impact

Annual Bond Redemption \$ \$712,500

The annual cost of operation and maintenance is \$10,000.



Project: ON SITE SEPTIC SYSTEM CONVERSION PROGRAM

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,000	0	1,000	500	500	500	0	0	1,500	0	0	0	0	2,500
LAND ACQUISITION	580	0	580	290	290	290	0	0	870	0	0	0	0	1,450
CONSTRUCTION	4,400	0	4,400	2,200	2,200	2,200	0	0	6,600	0	0	0	0	11,000
ADMINISTRATION	20	0	20	10	10	10	0	0	30	0	0	0	0	50
Total Expenditures	6,000	0	6,000	3,000	3,000	3,000	0	0	9,000	0	0	0	0	15,000
METRO DISTRICT BOND	6,000	0	6,000	3,000	3,000	3,000	0	0	9,000	0	0	0	0	15,000
Total Funding	6,000	0	6,000	3,000	3,000	3,000	0	0	9,000	0	0	0	0	15,000

\$22,140 spent and encumbered through February 2018 spent and encumbered through February 2017

Project Status: Study underway to select and prioritize program implementation areas and ways to increase program awareness.

FY 2018 Budget	6,000	3,000	9,000	3,000	3,000	0	0	0	6,000	0	0	0		15,000
Difference 2018 / 2019	0	(3,000)	(3,000)	0	0	3,000	0	0	3,000	0	0	0	0	0

Project: S6711-FY2011 DEVELOPER INSPECTION PROGRAM Number: S6711

Description

A project to provide engineering or administrative services, computer management, asset management, inspection, testing, staff training, supplies, tools, equipment and vehicles necessary for site inspections for the implementation of developer projects to make additions to the public water and sewer systems. All projects undertaken with this authority are primarily funded by private funds received from developers requesting such additions to the public system.

Justification

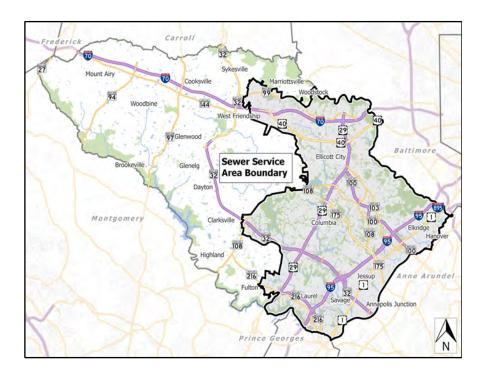
This project is necessary to provide an appropriation for engineering and inspection services. The services are necessary for determining the acceptability of developer work into the County system.

Remarks

- 1. Utility cash is requested as an additional revenue source to meet project goals during current economic conditions.
- 2. OTHER defunding represents Underground Utility Permit Fees deposited into Operating account.

Project Schedule

Ongoing program



Project: FY2011 DEVELOPER INSPECTION PROGRAM Number: S6711

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	9,750	0	9,750	2,000	0	2,000	0	0	4,000	0	C) 0	0	13,750
Total Expenditures	9,750	0	9,750	2,000	0	2,000	0	0	4,000	0	0) 0	0	13,750
UTILITY CASH	3,600	500	4,100	1,000	0	1,000	0	0	2,000	0	C) 0	0	6,100
DEVELOPER CONTRIBUTION	5,650	0	5,650	1,000	0	1,000	0	0	2,000	0	C) 0	0	7,650
OTHER SOURCES	500	(500)	0	0	0	0	0	0	0	0	C) 0	0	0
Total Funding	9,750	0	9,750	2,000	0	2,000	0	0	4,000	0	0) 0	0	13,750
\$4,372,735 spent and encumbered the \$3,968,017 spent and encumbered the Project Status :														
FY 2018 Budget	9,750	0	9,750	2,000	0	2,000	0	0	4,000	0	C) 0	1	13,750
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	C) 0	0	0

Project: S6950-DEVELOPER CONSTRUCTED HOUSE CONNECTIONS

Description

A program for the reimbursement to developers for construction of water and sewer house connections to existing lots outside of their subdivision.

Justification

A developer may be asked to provide water and/or sewer house connections to existing lots which are not part of the developer's subdivision. This capital project will allow reimbursement to developers for installation of water and sewer house connections outside of their subdivision.

Remarks

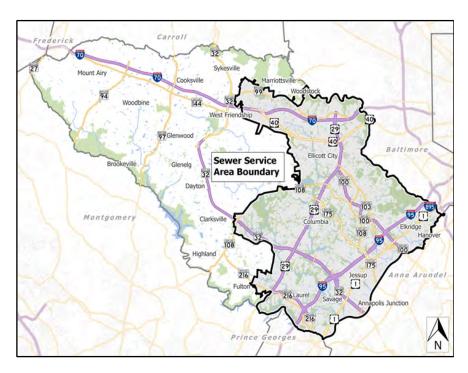
The installation of water and/or sewer house connections during construction of the mains is more cost effective and will prevent future traffic disruption, excavation and road repair required if these connections were constructed at a later date.

Project Schedule

Ongoing program

Operating Budget Impact

No impact on Operating Budget



Project: DEVELOPER CONSTRUCTED HOUSE CONNECTIONS

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	180	0	180	0	0	0	0	0	0	0	0	0	0	180
Total Expenditures	180	0	180	0	0	0	0	0	0	0	0	0	0	180
UTILITY CASH	180	0	180	0	0	0	0	0	0	0	0	0	0	180
Total Funding	180	0	180	0	0	0	0	0	0	0	0	0	0	180

\$61,364 spent and encumbered through February 2018

\$61,364 spent and encumbered through February 2017

Project Status: Projects completed: FY17 and prior - 1. Wake Forest Road and Tulane Drive (Clarks Glen North Development); 2. Trotter Road (Trotter Crossing Development);

3. Linwood Center Sewer (SHC to Church Road Resident)

FY 2018 Budget	180	0	180	0	0	0	0	0	0	0	0	0		180
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: S6960-FY2015 DEVELOPER CONSTRUCTED MAJOR FACILITIES

Description

A project to reimburse developers for construction of major water and sewer facilities as shown on the approved Howard County Master Plan for Water and Sewerage.

Justification

The Howard County Master Plan for Water and Sewerage allows for the systematic extension of the public water and sewer system to serve those properties within the water and sewer Planned Service Area and Metropolitan District. Existing and proposed major facilities such as transmission mains, pumping stations, elevated water storage facilities, major collector sewers and interceptor sewers are shown and noted in the master plan. Major facilities are intended to serve as the backbone of the public water and sewer system and to allow for the systematic extension of public water and sewer services. The construction of major facilities is normally undertaken by the County through capital projects. When a developer or land owner wishes to advance construction of a major facility that is required to serve an area of the County, the County will consider reimbursing the developer for the cost of construction of the major facility through this capital project.

Remarks

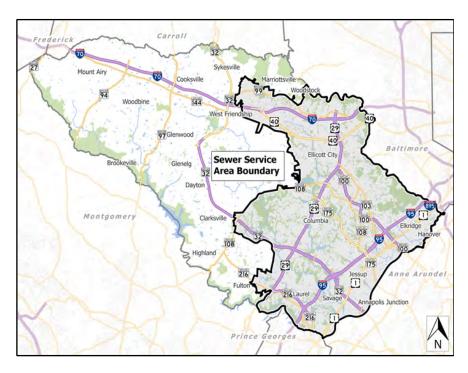
- 1. Reimbursements through this capital project will require the execution of a major facilities agreement between the developer and the County.
- 2. Reimbursement will include only the actual construction cost of the major facility.

Project Schedule

Ongoing program

Operating Budget Impact

No impact on Operating Budget



Project: FY2015 DEVELOPER CONSTRUCTED MAJOR FACILITIES

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	3,000	0	3,000	0	0	0	0	0	0	0	C	0	0	3,000
Total Expenditures	3,000	0	3,000	0	0	0	0	0	0	0	0	0	0	3,000
UTILITY CASH	3,000	0	3,000	0	0	0	0	0	0	0	C	0	0	3,000
Total Funding	3,000	0	3,000	0	0	0	0	0	0	0	0	0	0	3,000
\$0 spent and encumbered throug spent and encumbered through F Project Status : N/A		8												
FY 2018 Budget	3,000	0	3,000	0	0	0	0	0	0	0	C) 0		3,000
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	C) 0	0	0

Howard County, MD FY2019 Executive Proposed Capital Budget Program: TRAFFIC IMPROVEMENTS

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
T7087 FY1999 STREET LIGHT SETBACK SAFETY PROGRAM	Р	700	0	700	0	0	0	0	0	700
A program to provide safety improvements along arterial roadways in Columbia by setting back and upgrading all existing street lights.	Total	700	0	700	0	0	0	0	0	700
T7088 FY2001 SCHOOL CROSSWALK IMPROVEMENTS	В	493	0	493	50	50	50	50	100	793
This project is for the installation or modification of crosswalks, raised crosswalks, chokers, sidewalks, raised	G	300	-165	135	0	0	0	0	0	135
shoulders, signs, signals and/or other roadway retrofits to provide for an enhanced walking route for school children.	0	400	0	400	0	0	0	0	0	400
provide for all crimaticed walking route for school crimaters.	Р	100	0	100	0	0	0	0	0	100
	Χ	150	0	150	0	0	0	0	0	150
	Total	1,443	-165	1,278	50	50	50	50	100	1,578
T7089 FY2005 RESIDENTIAL TRAFFIC CALMING A project to construct geometric roadway changes to	В	250	0	250	0	0	0	0	0	250
reduce traffic speeding in residential areas.	0	275	50	325	0	0	0	0	0	325
	Р	985	0	985	100	0	0	0	0	1,085
	Total	1,510	50	1,560	100	0	0	0	0	1,660
T7094 FY2007 STREET LIGHTING PROGRAM This project is for the installation of new street lights in	В	665	0	665	0	0	0	0	0	665
existing communities and commercial/industrial areas, and	0	120	20	140	0	0	0	0	0	140
the conversion of existing street lights to LED fixtures.	Р	1,540	100	1,640	0	0	0	0	0	1,640
	Χ	200	0	200	0	0	0	0	0	200
	Total	2,525	120	2,645	0	0	0	0	0	2,645
T7101 FY2008 STATE/COUNTY SHARED INTERSECTIONS	D	200	0	200	0	0	0	0	0	200
A project for the design, review and construction funding of	Е	600	0	600	0	0	0	0	0	600
geometric and traffic control modifications at various intersections of State and / or County roads.	X	800	0	800	0	0	0	0	0	800
	Total	1,600	0	1,600	0	0	0	0	0	1,600

March 23, 2018 Howard County, MD Version : Executive Proposed

Howard County, MD FY2019 Executive Proposed Capital Budget Program: TRAFFIC IMPROVEMENTS

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
T7102 FY2008 STREET SIGN PROGRAM A project to provide street sign services and related line	В	240	0	240	0	0	0	0	0	240
striping that are included in the implementation of developer projects that expand the County road network of	D	350	50	400	50	30	30	30	30	570
public roads and upgrade signing and striping projects along existing County roads.	Р	120	0	120	0	0	0	0	0	120
along online, round	Total	710	50	760	50	30	30	30	30	930
T7103 FY2009 STATE/COUNTY SHARED TRAFFIC CONTROL	В	950	0	950	0	0	0	0	0	950
A project for design, review and construction funding of traffic control at various intersections of State and County	D	50	0	50	0	0	0	0	0	50
roads.	Total	1,000	0	1,000	0	0	0	0	0	1,000
T7104 FY2009 DEVELOPER/COUNTY SIGNALS A project to facilitate the design, construction, and	В	250	0	250	0	0	0	0	0	250
modification of traffic signals and appurtenances at various new development locations where warranted.	D	1,150	150	1,300	0	0	0	0	0	1,300
new development locations where warranted.	Total	1,400	150	1,550	0	0	0	0	0	1,550
T7105 FY2011-SIGNALIZATION PROGRAM A project for the design and construction of various traffic	В	1,000	300	1,300	300	300	300	300	0	2,500
signals when the MUTCD Warrants are met; also includes the modification and modernization of existing traffic	G	160	0	160	0	0	0	0	0	160
signals.	Χ	900	0	900	0	0	0	0	0	900
	Total	2,060	300	2,360	300	300	300	300	0	3,560
T7106 INTERSECTION OR CORRIDOR SAFETY IMPROVEMENT PROGRAM	В	2,200	300	2,500	300	300	300	300	0	3,700
This project is for the study, design and construction of geometric and pedestrian modifications to improve the	D	180	30	210	30	30	30	30	0	330
safety or increase capacity at various intersections.	X	650	0	650	0	0	0	0	0	650
	Total	3,030	330	3,360	330	330	330	330	0	4,680
T7107 FY2014 DOWNTOWN COLUMBIA PATUXENT BRANCH TRAIL EXTENSION	В	20	25	45	0	335	0	0	0	380
A project connecting Downtown Columbia at Lake Kittamaqundi and extending to the existing Patuxent	D	50	0	50	0	0	0	0	0	50
Branch Trail.	G	80	100	180	0	3,015	0	0	0	3,195
	Total	150	125	275	0	3,350	0	0	0	3,625

March 23, 2018 Howard County, MD Version : Executive Proposed

Howard County, MD FY2019 Executive Proposed Capital Budget Program: TRAFFIC IMPROVEMENTS

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
T7108 FY2016 CLARKSVILLE-RIVER HILL STREETSCAPE IMPROVEMENTS	В	200	275	475	225	700	1,900	1,000	100	4,400
A project to plan, design and construct road and related improvements including streetscape, storm water	G	200	0	200	100	100	100	0	0	500
management, pedestrian, bicycle, and public space enhancements in the Route 108 corridor.	Total	400	275	675	325	800	2,000	1,000	100	4,900
T7109 FY2016-DEVELOPER STREETLIGHT PROGRAM A project to facilitate the design, installation and modification of street lights in new developments.	D	1,200	400	1,600	400	400	400	400	0	3,200
	0	3,000	0	3,000	0	0	0	0	0	3,000
	Р	50	0	50	25	25	25	25	0	150
	Total	4,250	400	4,650	425	425	425	425	0	6,350
TRAFFIC IMPROVEMENTS Total		20,778	1,635	22,413	1,580	5,285	3,135	2,135	230	34,778

Howard County, MD FY2019 Executive Proposed Capital Budget (\$000) TRAF-TRAFFIC IMPROVEMENTS

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	6,268	900	7,168
D	DEVELOPER CONTRIBUTION	3,180	630	3,810
Е	EXCISE TAX	600	0	600
G	GRANTS	740	-65	675
0	OTHER SOURCES	3,795	70	3,865
Р	PAY AS YOU GO	3,495	100	3,595
Χ	EXCISE TAX BACKED BONDS	2,700	0	2,700
Total		20,778	1,635	22,413

2019 Executive Proposed 5 Year Capital Budget Project Type Summary (TRAF-TRAFFIC IMPROVEMENTS)

Rev	enue Source	Prior Approp	Current FY	2020	2021	2022	2023	2024	5 Year Total
В	BONDS	6,268	900	875	1,685	2,550	1,650	200	14,128
D	DEVELOPER CONTRIBUTION	3,180	630	480	460	460	460	30	5,700
Е	EXCISE TAX	600	0	0	0	0	0	0	600
G	GRANTS	740	-65	100	3,115	100	0	0	3,990
Ο	OTHER SOURCES	3,795	70	0	0	0	0	0	3,865
Р	PAY AS YOU GO	3,495	100	125	25	25	25	0	3,795
Χ	EXCISE TAX BACKED BONDS	2,700	0	0	0	0	0	0	2,700
Tota	al	20,778	1,635	1,580	5,285	3,135	2,135	230	34,778

TRAFFIC IMPROVEMENTS

Number: T7087

Project: T7087-FY1999 STREET LIGHT SETBACK SAFETY PROGRAM

Description

A program to provide safety improvements along arterial roadways in Columbia by setting back and upgrading all existing street lights.

Justification

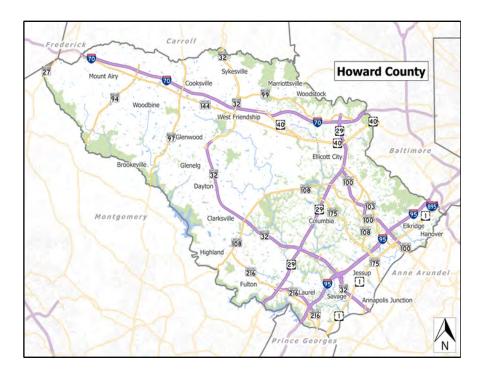
Most of the existing street light poles along arterial roadways in Columbia are located less than 2 feet behind the face of curb. There have been numerous accidents involving single vehicles running off the roadway and striking a street light pole. This project will relocate street light poles a minimum of 4 feet behind the face of curb and in some cases behind the sidewalk. In addition, each pole and arm will be upgraded to a 30 foot fiberglass pole with a 12 foot arm (existing poles use a 6 foot arm). The longer arm allows the pole to be set back and not reduce the existing level of illumination and in most cases the level and quality of illumination will be improved. This project will also address the number of damaged or peeling fixtures/poles as required.

Remarks

Prior year funds represented installation of new poles and LED fixtures along Governor Warfield Pkwy (from Windstream Dr to the Little Patuxent Pkwy/Banneker Rd intersection).

Project Schedule

Program FY19 - Close



Number: T7087

Project: FY1999 STREET LIGHT SETBACK SAFETY PROGRAM

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
EQUIPMENT & FURNISHINGS	700	0	700	0	0	0	0	0	0	0	0	0	0	700
Total Expenditures	700	0	700	0	0	0	0	0	0	0	0	0	0	700
PAY AS YOU GO	700	0	700	0	0	0	0	0	0	0	0	0	0	700
Total Funding	700	0	700	0	0	0	0	0	0	0	0	0	0	700

\$698,711 spent and encumbered through February 2018 \$698,711 spent and encumbered through February 2017

Project Status: Projects Completed - Twin Rivers Rd (from Governor Warfield Pkwy to Harpers Farm Rd), Harpers Farm Rd (from Little Patuxent Pkwy to Rivendell Lane), Little Patuxent Pkwy (from Broken Land Pkwy to Cedar Lane), Cedar Lane (from Hickory Ridge Rd to Little Patuxent Pkwy), Little Patuxent Pkwy (from Broken Land Pkwy to Columbia Rd) and Governor Warfield Pkwy (from Little Patuxent Pkwy to Windstream Dr).

Project in Design and Construction - Governor Warfield Pkwy (from Windstream Dr to the Little Patuxent Pkwy/Banneker Rd intersection).

FY 2018 Budget	700	0	700	0	0	0	0	0	0	0	0	0		700
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: T7088-FY2001 SCHOOL CROSSWALK IMPROVEMENTS Number: T7088

Description

This project is for the installation or modification of crosswalks, raised crosswalks, chokers, sidewalks, raised shoulders, signs, signals and/or other roadway retrofits to provide for an enhanced walking route for school children.

Justification

Installation of these devices improves safety for children walking to and from school. Outdated or malfunctioning equipment will need replacement to provide a desired level of performance. Other recreational and pedestrian transportation benefits can be gained by their installation.

Remarks

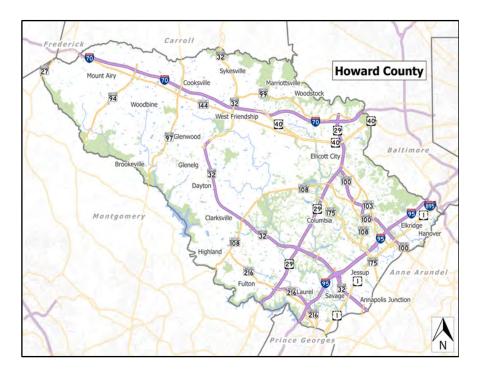
- 1. This project will not proceed until the School System endorses specific locations.
- 2. OTHER revenues are from speed automation enforcement.
- 3. Grant funding from Safe Routes To Schools (SRTS)

Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$55,935



Number: T7088

Project: FY2001 SCHOOL CROSSWALK IMPROVEMENTS

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	50	0	50	0	0	0	0	0	0	0	0	0	0	50
CONSTRUCTION	793	(165)	628	50	50	50	50	100	300	100	100	100	0	1,228
EQUIPMENT & FURNISHINGS	600	0	600	0	0	0	0	0	0	0	0	0	0	600
Total Expenditures	1,443	(165)	1,278	50	50	50	50	100	300	100	100	100	0	1,878
BONDS	493	0	493	50	50	50	50	100	300	100	100	100	0	1,093
GRANTS	300	(165)	135	0	0	0	0	0	0	0	0	0	0	135
OTHER SOURCES	400	0	400	0	0	0	0	0	0	0	0	0	0	400
PAY AS YOU GO	100	0	100	0	0	0	0	0	0	0	0	0	0	100
EXCISE TAX BACKED BONDS	150	0	150	0	0	0	0	0	0	0	0	0	0	150
Total Funding	1,443	(165)	1,278	50	50	50	50	100	300	100	100	100	0	1,878

\$516,802 spent and encumbered through February 2018

\$387,881 spent and encumbered through February 2017

Project Status: Projects Completed: Oakland Mills Rd at Old Montgomery Rd, Seneca Dr, Mayfield Ave and Snowden River Pkwy (south), Old Waterloo Rd at Deep Run ES Pedestrian refuge islands on: (1) Great Star Dr @ Fall Moon Dr. (2) Great Star Dr near Trumpet Sound Ct. (3) Great Star Dr near Daybreak Cir. (4) Linden Linthicum Ln near Little Bells Row.

400 feet of sidewalk on Great Star Dr near Eternal Oceans Pl.

ADA ramps, crosswalk and sidewalk on Linden Linthicum Ln.

ADA ramps at midblock crossings on Indian Summer Dr.

ADA ramps and sidewalks on Gorman Rd at Skylark Blvd, Summer Sky Path, Kilimanjaro Rd at Stevens Forest ES., Murray Hill Rd at Vollmerhausen Rd - pedestrian ramps and crosswalk; Freetown Rd at Fair Oaks Dr. - ADA ramps & crosswalk; ADA ramps and crosswalk on Stonehouse Dr. for Hollifield ES; pedestrian refuge island on Stevens Forest Rd for Stevens Forest ES - Green Mountain Circle at Windstream Drive - ADA ramps and crosswalks - ADA ramp on Ilchester Road at Wharff Lane Culverine Rd. @ Inkpen Pl. - school crosswalk, ADA ramps & signs

Projects Planned: Farewell Rd - ADA ramps and crosswalk. N. Laurel Rd. at Laurel Woods El. School, crosswalk, ADA ramps and signs Sidewalk / ramp replacement at various school walking areas.

School flasher equipment upgrade to permit programming of school closure schedule.

FY 2018 Budget	1,443	50	1,493	50	50	50	100	100	350	100	100	0		2,043
Difference 2018 / 2019	0	(215)	(215)	0	0	0	(50)	0	(50)	0	0	100	0	(165)

TRAFFIC IMPROVEMENTS

Number: T7089

Project: T7089-FY2005 RESIDENTIAL TRAFFIC CALMING

Description

A project to construct geometric roadway changes to reduce traffic speeding in residential areas.

Justification

Speeding on residential local and collector roadways has generated many requests to slow traffic by geometric changes as police enforcement is only partly effective.

Remarks

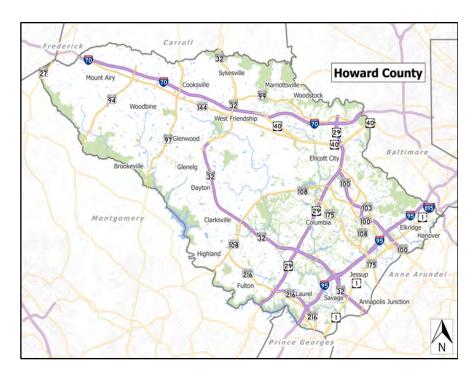
- 1. The installation of traffic calming devices must meet the warrants.
- 2. Community concurrence shall be achieved on qualified roads per County policy prior to construction or installing calming or geometric changes.
- 3. Speed tables and other calming devices may require community cost share.
- 4. Replacement/repairs of existing speed humps.
- 5. OTHER revenues represent Automated speed enforcement (ASE).

Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$11,250



Project: FY2005 RESIDENTIAL TRAFFIC CALMING

Number: T7089

(In Thousands)					Fiv	e Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	1,510	50	1,560	100	0	0	0	0	100	0	C	0	0	1,660
Total Expenditures	1,510	50	1,560	100	0	0	0	0	100	0	0	0	0	1,660
BONDS	250	0	250	0	0	0	0	0	0	0	C	0	0	250
OTHER SOURCES	275	50	325	0	0	0	0	0	0	0	C	0	0	325
PAY AS YOU GO	985	0	985	100	0	0	0	0	100	0	C	0	0	1,085
Total Funding	1,510	50	1,560	100	0	0	0	0	100	0	0	0	0	1,660

\$1,052,437 spent and encumbered through February 2018 \$980,486 spent and encumbered through February 2017

Project Status: Completed Projects:

Farewell Dr - humps; Summer Hollow Lane - humps; Gray Rock Dr - choker and driver feedback signs; Montgomery Meadows - chokers, humps; Valley Mead - hump reconstruction; Font Hill Dr - hump reconstruction; Carrigan Dr - hump reconstruction; Culverene Rd - hump reconstruction; St Johns Ln - humps - Complete 9/17/08; Chatham Rd - humps - complete 9/17/08; Hillsborough Rd - hump markings and signs - complete; Brittany Ln - remove median - complete 7/23/08; Mount View Rd - cancelled; Tamar Dr - humps complete 3/19/09; Patuxent Woods Dr - humps reconstruction 5/13/09; Breconshire Rd - hump reconstruction - complete 12/09; Hesperus Dr - hump reconstruction - complete 11/11; Rowanberry Dr - hump reconstruction 10/11; Furrow Ave 6/12; Rockburn Dr 11/13; Kerger Rd 10/13; Worthington Way 9/13; Thunder Hill Rd - N of MD175 11/13; Thunder Hill Rd - S of MD175 12/13

Humps Reconstruction: Doncaster Rd; Brittany Dr 11/13; Majors Ln 11/13; Tamar Dr (6000-6300s) 12/13; Wheatfield Way 8/14; N Chatham 11/14; Font Hill Dr 8/15; Gray Rock Dr 11/16.

Tiller Dr: Humps Constructed 6/2015.

Font Hill Dr (Vote Failed): Hunting Horn Dr (No Action): Roundhill Rd (No Action).

Potential Projects: Shady Lane

FY 2018 Budget	1,510	100	1,610	100	0	0	0	0	100	0	0	0		1,710
Difference 2018 / 2019	0	(50)	(50)	0	0	0	0	0	0	0	0	0	0	(50)

Project: T7094-FY2007 STREET LIGHTING PROGRAM

TRAFFIC IMPROVEMENTS

Number: T7094

Description

This project is for the installation of new street lights in existing communities and commercial/industrial areas, and the conversion of existing street lights to LED fixtures.

Justification

New street lights will be provided at warranted locations based on existing guidelines and the need to increase safety along County roads. Additional targeted locations will include major intersections along minor arterial, major collector and minor collector roadways that have inadequate levels of street lighting. Conversion of existing street lights to LED fixtures provides improved lighting with less energy consumption.

Remarks

- 1. Request represents installation of warranted new street lights and the conversion of existing fixtures to LED fixtures.
- 2. OTHER represents community contributions and developer/contractor payments for pole relocations.

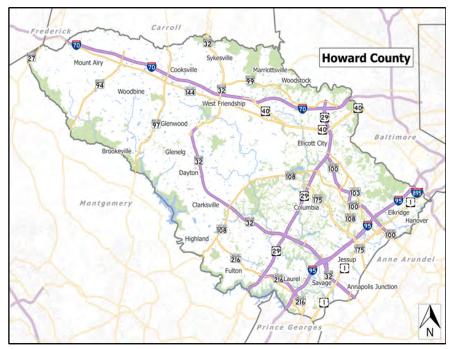
Project Schedule

PROGRAM. T-7094 to close in FY20. T-7094 will be replaced with T-7110.

Operating Budget Impact

Annual Bond Redemption \$ \$38,925

The Bond funding listed for this project includes both long term bond funding and the use of the master lease program as appropriate.



Project: FY2007 STREET LIGHTING PROGRAM Number: T7094

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	45	5	50	0	0	0	0	0	0	0	C	0	0	50
CONSTRUCTION	2,480	115	2,595	0	0	0	0	0	0	0	C	0	0	2,595
Total Expenditures	2,525	120	2,645	0	0	0	0	0	0	0	0	0	0	2,645
BONDS	665	0	665	0	0	0	0	0	0	0	C	0	0	665
OTHER SOURCES	120	20	140	0	0	0	0	0	0	0	C	0	0	140
PAY AS YOU GO	1,540	100	1,640	0	0	0	0	0	0	0	C	0	0	1,640
EXCISE TAX BACKED BONDS	200	0	200	0	0	0	0	0	0	0	C	0	0	200
Total Funding	2,525	120	2,645	0	0	0	0	0	0	0	0	0	0	2,645

\$1,987,565 spent and encumbered through February 2018

\$1,987,565 spent and encumbered through February 2017

Project Status: PROJECTS IN PLANNING STAGE for upgraded or new street lights:

Broken Land Pkwy (between Hickory Ridge Rd and Little Patuxent Pkwy), Doves Fly Away (Ped Xing), Riderwood Community, Pebble Beach Community, Clock Tower Lane area, Old Stockbridge Drive, Bolling Brook Farms community, Ridge Road, River Meadows Dr, Conowingo Ave @ Assateague Dr, Maple Lawn (LED).

CONVERSION PROGRAM: The Villages listed will be converted directly to LED fixtures - Villages of Owen Brown, Dorsey Search, Kings Contrivance and Hickory Ridge. Conversion Program Completed (HPS vapor) - Villages of Wilde Lake, Oakland Mills, Harpers Choice and Long Reach. PROJECTS COMPLETED:

(2016) - Willow Green Way, Dorsey Choice Townhouse Community, Heather Glen Way, Ellicott Center Drive, Melba Road, Mount Etna Circle, South Entrance Rd, Thunder Hill Rd @ Whiteacre Rd, Lark Brown Rd (OH), Old Columbia Pike (OH), Jacqueline Ct, Grove Rd @ MD 104, Gorman Rd @ Foundry St, Golden Bell Way and Amberton Drive. (2017) - Stevens Forest Rd (between Whiteacre Rd and Robert Oliver Pl), Stevens Forest @ Woodside Ct, Ellicott City LED Change, Garden Walk, Daniels Rd (OH), Heritage Green T.A., Madison St - Lisbon (OH), River Meadow Dr, Timberland Circle, Woodnote Ln, Wye Ave (OH), Centennial Lane @ Ped Xing, Port Capital Dr (Traffic Circle), Little Patuxent Pkwy @ Wincopin Cir, Sutton Ct, Wetherborn Rd @ Waverly ES Ent, Old Columbia Rd Off US 29 (OH), Glenmore Ave (OH), Ten Oaks Rd (OH), Painted Rock Rd & Stairtop Ct, Broken Land Pkwy (ES) - between Divided Sky Lane & LPP, and Brookdale Dr @ US 1.

FY 2018 Budget	2,525	225	2,750	205	0	0	0	0	205	0	0	0		2,955
Difference 2018 / 2019	0	(105)	(105)	(205)	0	0	0	0	(205)	0	0	0	0	(310)

TRAFFIC IMPROVEMENTS

Number: T7101

Project: T7101-FY2008 STATE/COUNTY SHARED INTERSECTIONS

Description

A project for the design, review and construction funding of geometric and traffic control modifications at various intersections of State and / or County roads. Project may include flattening of curves, adjusting utilities, road reconstruction/repair, adding auxiliary lanes and roundabouts.

Justification

This project will be used to share funding on the State or County improvements that will provide increased capacity and/or increased safety, or improved roadway conditions. This project may be used as a funding source for public improvements constructed by others under an agreement approved by the County Council.

Remarks

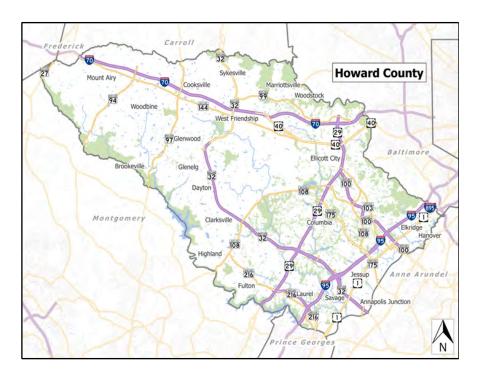
- 1. The program of improvements will be developed jointly by State and County personnel.
- 2. Funding represents County share of improvement costs.
- 3. This project may be used as a funding source for public improvements constructed by others under an agreement approved by the County Council.
- 4. Any evaluation undertaken for purposes of this paragraph shall include the Route 108 corridor between Route 32 and Linden Linthicum Lane. TAO 2011-1 transferred appropriation of \$600,000 into FY2012 prior appropriation.

Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$36,000



Number: T7101

Project: FY2008 STATE/COUNTY SHARED INTERSECTIONS

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	600	0	600	0	0	0	0	0	0	0	0	0	0	600
CONSTRUCTION	1,000	0	1,000	0	0	0	0	0	0	0	0	0	0	1,000
Total Expenditures	1,600	0	1,600	0	0	0	0	0	0	0	0	0	0	1,600
DEVELOPER CONTRIBUTION	200	0	200	0	0	0	0	0	0	0	0	0	0	200
EXCISE TAX	600	0	600	0	0	0	0	0	0	0	0	0	0	600
EXCISE TAX BACKED BONDS	800	0	800	0	0	0	0	0	0	0	0	0	0	800
Total Funding	1,600	0	1,600	0	0	0	0	0	0	0	0	0	0	1,600

\$301,742 spent and encumbered through February 2018

\$301,742 spent and encumbered through February 2017
Project Status: MD108 between MD32 and Linden Linthicum La (widening & resurfacing - complete).

MD108 at Trotter Rd (design for intersection sight distance project - complete).

MD108 Clarksville traffic study.

FY 2018 Budget	1,600	0	1,600	0	0	0	0	0	0	0	0	0		1,600
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: T7102-FY2008 STREET SIGN PROGRAM Number: T7102

Description

A project to provide street sign services and related line striping that are included in the implementation of developer projects that expand the County road network of public roads and upgrade signing and striping projects along existing County roads. Developer projects undertaken with this appropriation authority will be fully funded by private funds received from developers who create new roads to serve their subdivisions.

Justification

This project is necessary to provide an appropriation for materials, manufacturing, installation of street signs, and related striping for all new public roads. The County has assumed this responsibility to ensure that there are uniform standards of signage and materials employed throughout the County for ease of utilization and maintenance.

Remarks

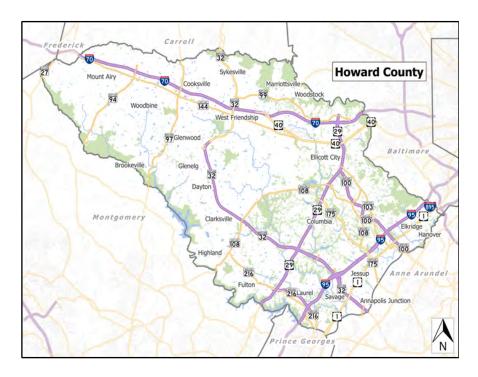
Request represents up to an estimated 250 signs per year.

Project Schedule

PROGRAM

Operating Budget Impact

Annual Bond Redemption \$ \$10,800



TRAFFIC IMPROVEMENTS

TRAFFIC IMPROVEMENTS

Number: T7102

Project: FY2008 STREET SIGN PROGRAM

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	710	50	760	50	30	30	30	30	170	0	0	0	0	930
Total Expenditures	710	50	760	50	30	30	30	30	170	0	0	0	0	930
BONDS	240	0	240	0	0	0	0	0	0	0	0	0	0	240
DEVELOPER CONTRIBUTION	350	50	400	50	30	30	30	30	170	0	0	0	0	570
PAY AS YOU GO	120	0	120	0	0	0	0	0	0	0	0	0	0	120
Total Funding	710	50	760	50	30	30	30	30	170	0	0	0	0	930
\$299,353 spent and encumbered thre \$299,353 spent and encumbered thre Project Status :														
FY 2018 Budget	710	30	740	30	30	30	30	0	120	0	0	0	1	860
Difference 2018 / 2019	0	20	20	20	0	0	0	30	50	0	0	0	0	70

Number: T7103

Project: T7103-FY2009 STATE/COUNTY SHARED TRAFFIC CONTROL

Description

A project for design, review and construction funding of traffic control at various intersections of State and County roads.

Justification

When State Highway Administration has analyzed the traffic volumes and determined that the signal warrants have been met, the County is responsible for its net share of the State expense based on the number of legs of the intersection under its ownership. Therefore, this project acts as a funding source when a critical intersection is at issue for signalization or other types of traffic control such as a roundabout, or the addition of geometric improvement to an existing signalized intersection, and/or the replacement of vehicle detection on County approaches resulting from a County project.

Remarks

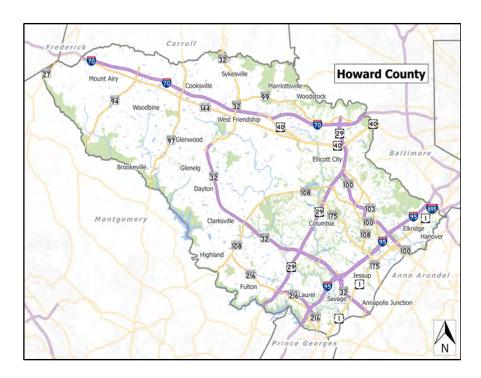
- 1. Design and construction will be by the State Highway Administration.
- 2. Cost of each new signal: \$50,000 per approach.
- 3. Project includes cost share for LED conversion on state maintained signals.

Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$42,750



TRAFFIC IMPROVEMENTS

Number: T7103

Project: FY2009 STATE/COUNTY SHARED TRAFFIC CONTROL

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	1,000	0	1,000	0	0	0	0	0	0	0	0	0	0	1,000
Total Expenditures	1,000	0	1,000	0	0	0	0	0	0	0	0	0	0	1,000
BONDS	950	0	950	0	0	0	0	0	0	0	0	0	0	950
DEVELOPER CONTRIBUTION	50	0	50	0	0	0	0	0	0	0	0	0	0	50
Total Funding	1,000	0	1,000	0	0	0	0	0	0	0	0	0	0	1,000

\$311,802 spent and encumbered through February 2018

\$311,802 spent and encumbered through February 2017

Project Status: Installation of vehicle detection - Replacement of traffic signal detection impacted by County projects (ongoing)

State to pick up County share. US1 at Port Capital Dr (new signal - completed Nov 2013), MD108 at Sheppard Ln (new signal - completed 2012), MD144 at Folly Quarter Rd/John Bernard Dr (new signal - completed 2011), MD144 at Marriottsville Rd/Lancelot Cross (new signal - completed 2011), Installation of video detection - US1 at Whiskey Bottom Rd, MD108 at Phelps Luck Dr/Centre Park Dr, US40 at Pine Orchard Ln/Frederick Rd, MD108 at Mayfield Ave, MD108 at Harpers Farm Rd/Homewood Rd, Installation of LEDs, Installation of Battery Backup Systems, MD97 at Old Frederick Rd (new signal - completed), MD175 at Oceano Ave (signal modification - completed).

FY 2018 Budget	1,000	0	1,000	0	0	0	0	0	0	0	0	0		1,000
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TRAFFIC IMPROVEMENTS Project: T7104-FY2009 DEVELOPER/COUNTY SIGNALS Number: T7104

Description

A project to facilitate the design, construction, and modification of traffic signals and appurtenances at various new development locations where warranted. New or modified traffic signals are considered where land development increases traffic to levels where design warrants are met, in accordance with the Manual on Uniform Traffic Control Devices (MUTCD).

Justification

- 1. This project will provide a funding source to accumulate developer contributions to traffic signal capital construction and have a project in place to expedite the construction of signals when the warrants are met.
- 2. This project will be used to implement the Adequate Public Facilities Ordinance (APFO) based on need and traffic studies. It will also be used as a conduit for mitigation under APFO.
- 3. This project will fund the County's portion of cost share agreements.

Remarks

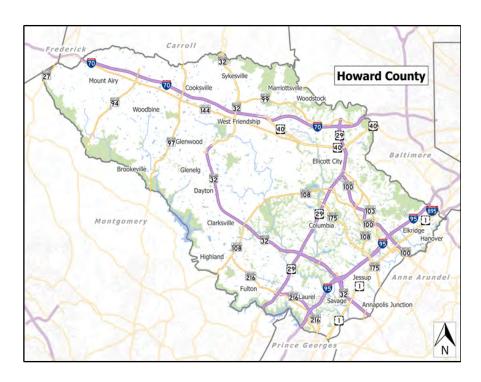
- 1. The capital cost of design, construction and modification of traffic signals required for a development shall be paid for by the proposed development.
- 2. Project will allow the County to complement developer construction with minor needed ancillary improvements such as additional detection and minor curb modification.
- 3. This project may be used as a funding source for public improvements constructed by others under an agreement approved by the County Council.

Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$11,250



Project: FY2009 DEVELOPER/COUNTY SIGNALS

Number: T7104

(In Thousands)					Fiv	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	1,400	150	1,550	0	0	0	0	0	0	0	0	0	0	1,550
Total Expenditures	1,400	150	1,550	0	0	0	0	0	0	0	0	0	0	1,550
BONDS	250	0	250	0	0	0	0	0	0	0	0	0	0	250
DEVELOPER CONTRIBUTION	1,150	150	1,300	0	0	0	0	0	0	0	0	0	0	1,300
Total Funding	1,400	150	1,550	0	0	0	0	0	0	0	0	0	0	1,550

\$675,708 spent and encumbered through February 2018 \$633,403 spent and encumbered through February 2017

Project Status: Under Construction: Broken Land Pkwy at Hickory Ridge Rd (signal mod/reconstruct - completed Spring 2018), Snowden River Pkwy at Lincoln Tech Inst (future signal - under construction).

Under Design: Governor Warfield Pky at Twin Rivers Rd (signal mod), Little Patuxent Pky at Symphony Woods (signal reconstruction - in design), Columbia Gateway Dr at Robert Fulton Dr (future signal - under design), Stephens Rd at Sterling Dr/North Laurel Rd (future signal - design complete), Broken Land Parkway at Twin Rivers Road (future signal under warrant analysis).

Construction Complete: Little Patuxent Pkwy at Governor Warfield Pky (signal mod - July, 2016), Rogers Ave at Orchard Ave/Patapsco Valley Dr (signal mod - January 2017), Snowden River Pkwy at Minstrel Way (future signal mod/reconstruct - partial construction complete), Little Patuxent Pkwy at Harpers Farm Rd/Campus Way (signal mod - completed Sept 2015), Little Patuxent Pkwy at Broken Land Pky (signal mod - completed Oct 2015), Little Patuxent Pkwy at S. Entrance Rd (signal mod - completed Aug 2014), Coca Cola Dr at Park Circle Dr (signal mod - completed Oct 2014), Broken Land Pky at Town Center/Columbia Mall (signal mod - completed Dec 2014), Little Patuxent Pky at Whole Foods (new signal - completed Aug 2014), Little Patuxent Pkwy at Rouse Bldg/Columbia Mall (signal mod - completed Aug 2014), Marriottsville Rd at Resort Rd/All Beth Rd (new signal - completed Apr 2013), Marriottsville Rd at Warwick Way/Barnsley Way (signal mod - completed Apr 2011), Gorman Rd at Stephens Rd (new signal - completed Jun 2011), Columbia Rd at Old Annapolis Rd (signal mod - completed Sep 2011), Johns Hopkins Rd at APL West Access (new signal - completed Oct 2011), Snowden River Pkwy at McGaw Rd (signal mod completed Feb 2012), McGaw Rd at Stanford Blvd/Wegmans Entrance (new signal - completed Apr 2012).

FY 2018 Budget	1,400	150	1,550	0	0	0	0	0	0	0	0	0		1,550
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: T7105 FY2011-SIGNALIZATION PROGRAM

TRAFFIC IMPROVEMENTS

Number: T7105

Description

A project for the design and construction of various traffic signals when the MUTCD Warrants are met; also includes the modification and modernization of existing traffic signals.

Justification

An inventory of equipment needs to be developed for both new and existing traffic signals to include: poles, mast arms, signal heads, pedestrian signals, detection equipment, controllers, and cabinet hardware. When a new signal is warranted, construction plans are designed to be utilized by the contractor. Once installed, the signal requires routine maintenance to maximize the benefits of a signal while minimizing overall intersection delay. Outdated or malfunctioning equipment needs replacement to provide a desired level of performance. Includes connecting to improved communications such as fiber-optics. Also includes the installation of weather information systems at traffic signals. Timing optimization studies need to be performed and implemented for existing signal systems that need to be updated to account for increases in traffic volumes. Traffic signal modification includes ADA upgrades.

Remarks

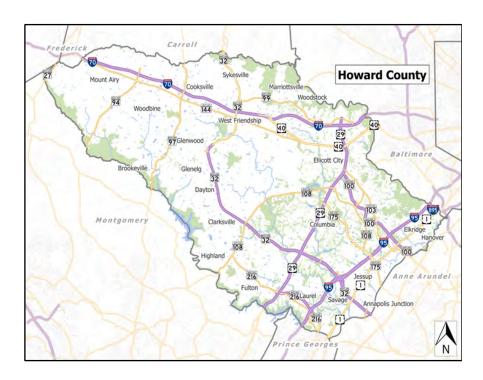
- 1. Cost of a new signal is \$50,000 per approach.
- 2. Project includes funds for emergency battery backup systems.

Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$153,000



Project: FY2011-SIGNALIZATION PROGRAM Number: T7105

(In Thousands)					Five	Year Ca	pital Prog	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	2,060	300	2,360	300	300	300	300	0	1,200	0	0	0	0	3,560
Total Expenditures	2,060	300	2,360	300	300	300	300	0	1,200	0	0	0	0	3,560
BONDS	1,000	300	1,300	300	300	300	300	0	1,200	0	0	0	0	2,500
GRANTS	160	0	160	0	0	0	0	0	0	0	0	0	0	160
EXCISE TAX BACKED BONDS	900	0	900	0	0	0	0	0	0	0	0	0	0	900
Total Funding	2,060	300	2,360	300	300	300	300	0	1,200	0	0	0	0	3,560

\$1,526,104 spent and encumbered through February 2018

\$1,232,118 spent and encumbered through February 2017

Project Status: Under Construction: Upgrade to fiber optic communication (underway). Snowden River timing optimization from Broken Land to McGaw (under implementation), Little Patuxent at Cedar (reconstruct), Harpers Farm at Eliots Oak (reconstruct), Guilford Road at Eden Brook Drive (reconstruct), Cedar Lane at Hickory Ridge Road (reconstruct), Twin Rivers Road at Harpers Farm Road (ADA/APS improvements). Various detection upgrade/replacement (ongoing).

In Design: Little Patuxent at Governor Warfield (partial reconstruct), Murray Hill at Guilford (reconstruct), Dobbin at Oakland Mills (reconstruct), Oakland Mills at Oak Hall (APS/ADA), Rogers at Town and Country (reconstruct). Centre Park Drive at Executive Drive (future signal), Montgomery Road at Landing Road (under warrant analysis). Construction Complete: Main St timing optimization (under implementation), Upgrade to traffic signal operating software, Columbia at Dorsey Hall /Leyden (APS, mod - May 2017), Timing optimization on Little Patuxent from Columbia to S Entrance (implemented Dec 2015), Timing optimization Col Gateway from Columbia Gateway to Alexander Bell (implemented June 2015), Gorman at Foundry (new signal - Dec 2016), Snowden River at Commerce Dr (APS - Dec 2016), Governor Warfield at Twin Rivers (APS - Dec 2016), Old Columbia at Shaker/Eden Brook (APS - April 2016), Main at Maryland (upgrade - April 2016), Main at Old Columbia (upgrade - April 2016), Dorsey Run at Junction (New signal - May 2015), Marshalee at Avalon (new signal - Feb 2012), Centennial at Centennial H.S./Burleigh Manor M.S. Parking Lot (new signal - Aug 2011 Installation of video detection - Centennial and Old Annapolis /Breconshire, Great Star at Summer Sunrise, Dobbin at McGaw, Twin Rivers at Lynx.

FY 2018 Budget	2,060	300	2,360	300	300	300	300	0	1,200	0	0	0		3,560
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Number: T7106

Project: T7106-INTERSECTION OR CORRIDOR SAFETY IMPROVEMENT PROGRAM

Description

This project is for the study, design and construction of geometric and pedestrian modifications to improve the safety or increase capacity at various intersections. The project may include flattening of vertical curves, adjusting utilities, widening or adding turn lanes, adding traffic islands or signage, acceleration/deceleration lanes and center turn lanes.

Justification

Modifications may reduce driver delays which will subsequently reduce driver error and accidents under the physical conditions encountered at the intersection. Capacity and level of service may be improved. Vehicular and pedestrian safety may be improved.

Remarks

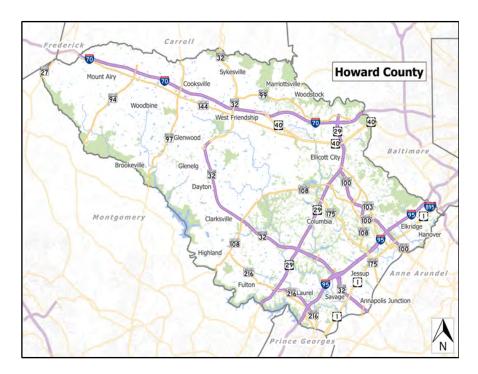
Title modified in FY2018 to include section of roadway. Previous title: INTERSECTION IMPROVEMENT PROGRAM

Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$195,750



Number: T7106

Project: INTERSECTION OR CORRIDOR SAFETY IMPROVEMENT PROGRAM

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	400	50	450	50	50	50	50	0	200	0	0	0	0	650
LAND ACQUISITION	180	30	210	30	30	30	30	0	120	0	0	0	0	330
CONSTRUCTION	2,450	250	2,700	250	250	250	250	0	1,000	0	0	0	0	3,700
Total Expenditures	3,030	330	3,360	330	330	330	330	0	1,320	0	0	0	0	4,680
BONDS	2,200	300	2,500	300	300	300	300	0	1,200	0	0	0	0	3,700
DEVELOPER CONTRIBUTION	180	30	210	30	30	30	30	0	120	0	0	0	0	330
EXCISE TAX BACKED BONDS	650	0	650	0	0	0	0	0	0	0	0	0	0	650
Total Funding	3,030	330	3,360	330	330	330	330	0	1,320	0	0	0	0	4,680

\$1,367,736 spent and encumbered through February 2018 \$1.154,414 spent and encumbered through February 2017

Project Status: Completed: Mayfield Ave - Replace speed humps Oct 12. Marshalee Dr @ Maplecrest Rd - Right turn lane extension Nov 12. Grateful Heart Gate - Median islands 1/13. Homespun Dr - 2 Pedestrian chokers 6/13. Broken Land Pkwy @ Guilford Rd - Street Print islands 10/11. Savage-Guilford Rd @ Jefferson St, Lincoln St and Madison St - Ramps & crosswalk 4/12. Vollmerhausen Rd @ Wild Grass Ct & Indigo Ct - Pedestrian island and crosswalk 5/12. Charter Dr - roundabout 6/12. Great Star Dr - Pedestrian island/diverter - Bicycle retrofit 10/12. Grateful Heart Gate @ Quiet Night Ride and Ripe Apple - Median rebuild - 1/13. Montpelier Rd - Pedestrian islands - 11/13. Brampton Pkwy @ Yorkshire Dr/Red Hill Way - Mini roundabout 11/14. Thunder Hill Rd @ Lightning View Rd - Pedestrian refuge island 10/14. Old Montgomery Rd @ Tamar Dr (Jeffers Hill) - Roundabout feasibility study. Little Patuxent Parkway at new Howard Community College access - geometric improvements and traffic signal (completed Dec 2016); Stevens Forest Rd at Farewell Rd (100% design complete)

Proposed Projects: Governor Warfield Parkway @ Little Patuxent Parkway "T" Roundabout feasibility study. Downtown - Cordon line study. Warwick Way/Birmingham Way/Enfield Dr/Star Chaser Cir - Mini roundabout - Design Underway.

In construction: HiTech Rd at Coca-Cola Dr - Right turn island. Other Oakland Mills intersection and bicycle improvements. Marshalee Dr/ Montgomery Road/Deborah Jean Dr - Roundabout. Old Montgomery Rd @ Tamar Dr (Jeffers Hill) - Design & Construct (FY17 Engineer's Estimate \$1.2M). Stevens Forest Rd at Farewell Rd - mini roundabout- in construction (Engineer's Estimate \$275K).

FY 2018 Budget	3,030	330	3,360	330	0	0	0	0	330	0	0	0		3,690
Difference 2018 / 2019	0	0	0	0	330	330	330	0	990	0	0	0	0	990

TRAFFIC IMPROVEMENTS

Number: T7107

Project: T7107-FY2014 DOWNTOWN COLUMBIA PATUXENT BRANCH TRAIL EXTENSION

Description

A project connecting Downtown Columbia at Lake Kittamaqundi and extending to the existing Patuxent Branch Trail. This project would provide a car-free connection from Downtown Columbia to Savage; including the existing portion of the trail, and will connect to the planned east-west Hospital to Blandair Park multi-use pathway.

Justification

To complete the missing link in the off-road pathway between the existing Patuxent Branch Trail and the planned Downtown Columbia multi-use pathway. The project study considered multiple alignments between Columbia and the existing Patuxent Branch Trail.

Remarks

- 1. Project addresses the need for a major off-road pathway connection.
- 2. Grant funding from the state of MD was approved September 2014. Project has been approved for preliminary plans and engineering for Phase 1. Additional grant funding will be sought for construction.
- 3. Project will be done in partnership with the Columbia Association (CA).
- 4. DEVELOPER CONTRIBUTION represents funding from CA.
- 5. The feasibility study is complete and recommended the project to be completed in two phases. Phase 1 is for alignment from Columbia Town Center to Stevens Forest Road only. Phase 1 offers a flat off road alternative connection to cross under US29 and Broken Land Parkway.

Project Schedule

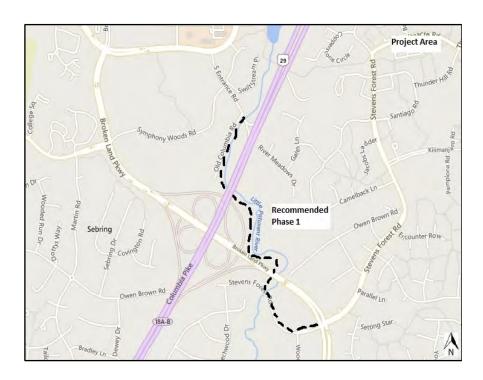
FY17 - Completion of 30% Phase 1 design.

FY19/20 - 100% of Phase 1 design completion and permitting application.

FY21 - Construction of Phase 1.

Operating Budget Impact

Annual Bond Redemption \$ \$17,100



TRAFFIC IMPROVEMENTS

Number: T7107

Project: FY2014 DOWNTOWN COLUMBIA PATUXENT BRANCH TRAIL EXTENSION

(In Thousands)					Five	Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	150	125	275	0	0	0	0	0	0	0	0	0	0	275
CONSTRUCTION	0	0	0	0	3,350	0	0	0	3,350	0	0	0	0	3,350
Total Expenditures	150	125	275	0	3,350	0	0	0	3,350	0	0	0	0	3,625
BONDS	20	25	45	0	335	0	0	0	335	0	0	0	0	380
DEVELOPER CONTRIBUTION	50	0	50	0	0	0	0	0	0	0	0	0	0	50
GRANTS	80	100	180	0	3,015	0	0	0	3,015	0	0	0	0	3,195
Total Funding	150	125	275	0	3,350	0	0	0	3,350	0	0	0	0	3,625

\$90,039 spent and encumbered through February 2018 \$90,039 spent and encumbered through February 2017
Project Status: FY14 - Feasibility study-complete.
FY17 - Phase I preliminary design completed (MD bikeway grant).
FY19 - Phase I 60% design (MD bikeway grant).

FY 2018 Budget	150	3,665	3,815	0	0	0	0	0	0	0	0	0		3,815
Difference 2018 / 2019	0	(3,540)	(3,540)	0	3,350	0	0	0	3,350	0	0	0	0	(190)

Number: T7108

Project: T7108-FY2016 CLARKSVILLE-RIVER HILL STREETSCAPE IMPROVEMENTS

Description

A project to plan, design and construct road and related improvements -- including streetscape, storm water management, pedestrian, bicycle, and public space enhancements -- in the Route 108 corridor.

Justification

PlanHoward 2030 calls for the enhancement of established communities through strategic public infrastructure investments (Policy 10.1). Projects will improve the transportation system, increase safety, accessibility and mobility, improve treatment of storm water runoff and will implement the community-based vision for street, pedestrian and bike circulation and public open space design.

Remarks

- 1. The County is working with the community to implement road related improvements and design guidelines that address the public right-of-way along Route 108 and adjacent private property.
- 2. Public easements on private property will be needed to advance certain improvements.

Project Schedule

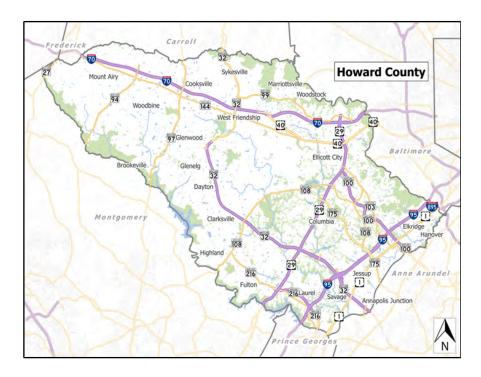
FY17 - Community design guidelines and permit approval.

FY19 - Short term improvement design and land acquisition.

FY20-FY21 - Short term improvement Project construction.

Operating Budget Impact

Annual Bond Redemption \$ \$198,000



Number: T7108

Project: FY2016 CLARKSVILLE-RIVER HILL STREETSCAPE IMPROVEMENTS

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	400	275	675	125	0	0	0	0	125	0	0	0	0	800
LAND ACQUISITION	0	0	0	200	800	0	0	0	1,000	0	0	0	0	1,000
CONSTRUCTION	0	0	0	0	0	2,000	1,000	100	3,100	0	0	0	0	3,100
Total Expenditures	400	275	675	325	800	2,000	1,000	100	4,225	0	0	0	0	4,900
BONDS	200	275	475	225	700	1,900	1,000	100	3,925	0	0	0	0	4,400
GRANTS	200	0	200	100	100	100	0	0	300	0	0	0	0	500
Total Funding	400	275	675	325	800	2,000	1,000	100	4,225	0	0	0	0	4,900

\$0 spent and encumbered through February 2018 spent and encumbered through February 2017

Project Status: Draft design guidelines were prepared in FY15 and was adopted by the Council as resolution CR169-2015. A State Highway Administration (SHA) design waiver process will be initiated. Design development will follow SHA's permitting process.

FY 2018 Budget	400	300	700	900	2,000	1,000	100	0	4,000	0	0	0		4,700
Difference 2018 / 2019	0	(25)	(25)	(575)	(1,200)	1,000	900	100	225	0	0	0	0	200

Project: T7109 FY2016-DEVELOPER STREETLIGHT PROGRAM Number: T7109

Description

A project to facilitate the design, installation and modification of street lights in new developments. New street lights are planned for most new residential developments and many site development plans based on DPZ and DPW guidelines.

Justification

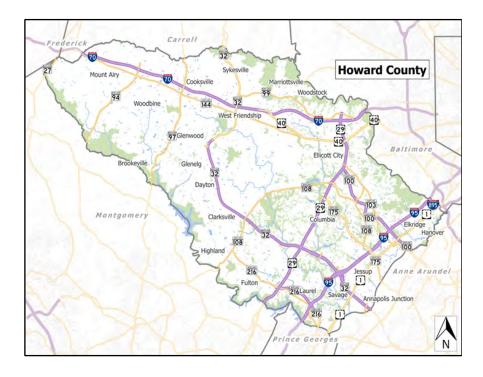
This project will provide a funding source to accumulate developer street light funds collected as part of the developer agreement process and to pay BGE for the installation of the street lights when the development is constructed.

Remarks

- 1. The capital cost of the construction and installation of the street lights for each development will be paid for by the funds collected for that development when the developer agreement was signed.
- 2. OTHER represents the existing developer street light funds that are being transferred from the developer street light balance sheet account to this project.
- 3. Request represents funding to allow the County to make minor improvements/upgrades to the developer street light plan.

Project Schedule

PROGRAM



Number: T7109

Project: FY2016-DEVELOPER STREETLIGHT PROGRAM

(In Thousands)			Five Year Capital Program								Master Plan				
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project	
CONSTRUCTION	4,250	400	4,650	425	425	425	425	0	1,700	0	0	0	0	6,350	
Total Expenditures	4,250	400	4,650	425	425	425	425	0	1,700	0	0	0	0	6,350	
DEVELOPER CONTRIBUTION	1,200	400	1,600	400	400	400	400	0	1,600	0	0	0	0	3,200	
OTHER SOURCES	3,000	0	3,000	0	0	0	0	0	0	0	0	0	0	3,000	
PAY AS YOU GO	50	0	50	25	25	25	25	0	100	0	0	0	0	150	
Total Funding	4,250	400	4,650	425	425	425	425	0	1,700	0	0	0	0	6,350	

\$2,022,398 spent and encumbered through February 2018 \$1,622,398 spent and encumbered through February 2017 Project Status: DEVELOPMENT STREET LIGHT PROJECTS

Installed in 2016: Autumn River (Phase 3), Cascade Overlook (Phase 4), Centennial Lake Overlook (Phases 1 and 2A), Downtown Columbia Multi-Use Path (Phase 2A), Guilford Overlook, Grovemont Overlook, High Ridge Meadows (Roundabout Area and Phase 1), Kindler Overlook (Phase 1), Maple Lawn (Garden District, Area 1), Mt. Hebron Meadows, Rivers Corporate Park, Blevins Property, Wincopia Farms (Phase 3), Maple Lawn (Westside, Area 4) and Trotter Landing.

Installed or Plan to be Installed FY17: Annapolis Junction Town Center (Phases 2 & 3), Maple Lawn (Garden District, Area 2), Cypress Springs, Downtown Columbia Multi-Use Path (Phases 2B, 3 and 4), Wincopia Farms (Phase 4), Emerson (Area 3/Phase 7), Emerson Campus (Sterling Drive Area), Estates at Patapsco Park (Phases 1 and 2), Morris Place, Riverwatch, Turf Valley (Villages 2, 4 and 5), Turf Valley (The Bluffs, Town Square Pkwy Extension and Fairways (Phase 1)), Downtown Columbia Crescent Neighborhood (Phase 1 - Merriweather Dr and Divided Sky Lane), Centennial Lake Overlook (Phase 2B), High Ridge Meadows (Phase 2), Kaiser Orchard and Locust Chapel. Installed in 2017: Annapolis Jct Town Center (Phase 2), Centennial Lake Overlook (Phase 2), Downtown Columbia, Cresecent Neighborhood and Merriweather Drive, Divided Sky

Lane, Hickory Ridge Rd and Signal at BLP & Hickory Ridge Rd, Columbia Town Center (Wincopin Circle), Blue Stream Dr Extension, Day Resource Center, Estates at Patapsco Park (Phase 2), Hebron Manor, Kindler Overlook II, Shipley's Grant (Phase V), Trotter Point, Greenberry and Cypress Springs.

FY 2018 Budget	4,250	425	4,675	425	425	425	0	0	1,275	0	0	0		5,950
Difference 2018 / 2019	0	(25)	(25)	0	0	0	425	0	425	0	0	0	0	400

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
W8206 FY1995 METALLIC PIPELINE CORROSION STUDIES	С	4,380	1,710	6,090	1,010	1,010	1,010	1,010	1,010	11,140
A project to fund the study, maintenance, and remediation of corrosion related failures at various locations throughout the County.	Total	4,380	1,710	6,090	1,010	1,010	1,010	1,010	1,010	11,140
W8218 WATER CONTINGENCY FUND The fund is designed for use as a revenue source for (1)	С	1,265	0	1,265	0	0	0	0	0	1,265
the transfer of appropriations when either the construction costs are higher than originally estimated or engineering	D	0	3,000	3,000	0	0	0	0	0	3,000
costs must be advanced from future years to the present fiscal year for critical water needs; (2) construction and	M	300	0	300	0	0	0	0	0	300
inspection services and ordering of large water meters for sites that do not require formal developer agreements but	0	85	0	85	0	0	0	0	0	85
require water service connections, fire hydrants, short extensions of public water mains, or other appurtenances performed under water or sewer connection agreements with the County.	Total	1,650	3,000	4,650	0	0	0	0	0	4,650
W8220 FY1998 SHARED WATER FACILITY IMPROVEMENTS	С	15,150	0	15,150	0	0	0	0	0	15,150
A project for the planning, design and construction of major water facilities, mains, pumping stations, reservoirs and	M	25,900	-22,000	3,900	0	0	0	0	0	3,900
treatment plants in the Baltimore City Central Water System.	Total	41,050	-22,000	19,050	0	0	0	0	0	19,050
W8245 FY2003 RIGHT of WAY RESTORATION PROGRAM	С	5,610	1,003	6,613	1,003	1,003	1,003	1,003	1,003	11,628
State and County roads, sidewalks and curbs that are damaged, primarily by water main breaks, require permanent restoration.	Total	5,610	1,003	6,613	1,003	1,003	1,003	1,003	1,003	11,628
W8262 FY2004 GUILFORD ELEVATED WATER TANK A project for the design and construction of a 2.	С	5,530	1,110	6,640	7,600	0	0	0	0	14,240
A project for the design and constitution of a 2.	M	0	3,500	3,500	0	0	0	0	0	3,500
	Total	5,530	4,610	10,140	7,600	0	0	0	0	17,740
W8265 FY2005 US 29 WATER MAIN/RIVERS MEADOWS DR to BROKEN LAND PKWY	С	3,680	0	3,680	0	0	0	0	0	3,680
A project for the rehabilitation of the water transmission main located in the vicinity of Broken Land Parkway and	1	800	0	800	0	0	0	0	0	800
US29.	Total	4,480	0	4,480	0	0	0	0	0	4,480
W8267 FY2005 WATER VALVE MANAGEMENT SYSTEM	С	1,427	0	1,427	0	0	0	0	0	1,427
The purpose of this project is to exercise and maintain all County owned valves within the water distribution system.	I	1,120	0	1,120	520	520	520	520	520	3,720

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
W8267 FY2005 WATER VALVE MANAGEMENT SYSTEM	М	0	520	520	0	0	0	0	0	520
The purpose of this project is to exercise and maintain all County owned valves within the water distribution system.	Total	2,547	520	3,067	520	520	520	520	520	5,667
W8269 FY2005 PARTICIPATION 3RD ZONE WATER SUPPLY	С	1,000	0	1,000	0	0	0	0	0	1,000
A project for the construction of major water transmission and distribution mains to convey water from Baltimore City	М	15,000	0	15,000	19,000	0	0	0	0	34,000
to Howard County.	Total	16,000	0	16,000	19,000	0	0	0	0	35,000
W8274 FY 2007 SCADA SYSTEM UPGRADE A project to upgrade the Supervisory Control and Data Acquisition System (SCADA) at the Bureau of Utilities Apperations building and all remote sites.	С	4,069	2,006	6,075	890	890	890	890	890	10,525
	Total	4,069	2,006	6,075	890	890	890	890	890	10,525
V8289 FY2009 WATER METER BATTERY REPLACEMENT	С	10,033	0	10,033	0	0	0	0	0	10,033
'his project is to provide for the replacement of the battery ystems, radios and meters in the County's existing	I	3,763	0	3,763	3,090	3,090	3,090	0	0	13,033
esidential and commercial radio read water metering ystem that have reached the end of their projected ten	L	3,000	0	3,000	0	0	0	0	0	3,000
10) year lives.	М	2,060	0	2,060	0	0	0	0	0	2,060
	Total	18,856	0	18,856	3,090	3,090	3,090	0	0	28,126
V8291 FY2009 ELEVATED WATER TANK RECOATING project to study and prioritize the cleaning, repairing and	С	4,481	0	4,481	1,493	1,493	1,493	1,493	1,493	11,946
coating of the County water system's existing elevated rater storage tanks.	1	1,143	0	1,143	0	0	0	0	0	1,143
tato, otorago tarmo.	Total	5,624	0	5,624	1,493	1,493	1,493	1,493	1,493	13,089
V8296 FY2010 US29 WATER MAIN/MD108 TO SOUTH	М	27,500	0	27,500	0	0	0	0	0	27,500
A project for the design and construction of 18,000 LF of 36-inch water main within the US29 corridor from MD108 o South Entrance Road.	Total	27,500	0	27,500	0	0	0	0	0	27,500
W8300 FY2011 LEVERING AVENUE WATER MAIN A project for the design and construction of 6,350 LF of 12-	С	550	0	550	0	0	0	0	0	550
ach water main from Gun Road in the Patapsco State ark in Baltimore County to Levering Avenue in Howard	М	2,946	1,250	4,196	0	0	0	0	0	4,196
County to US1.	Total	3,496	1,250	4,746	0	0	0	0	0	4,746
N8303 FY2018 ANDERSON AVE/MOUND STREET NATER MAIN	M	120	460	580	0	0	0	0	0	580
or the design and construction of 1,000 LF of 12- nch water main along Anderson Avenue from Mound street to Hanover Road.	Total	120	460	580	0	0	0	0	0	580

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
W8304 FY2015 COLUMBIA WATER PUMPING STATION IMPROVEMENTS	ı	1,010	0	1,010	0	0	0	0	0	1,010
A project to upgrade the Columbia Water Pumping Station.	М	240	0	240	0	0	0	0	0	240
	Total	1,250	0	1,250	0	0	0	0	0	1,250
W8305 FY2018 LANDING ROAD WATER MAIN LOOP A project for the design and construction of 4,300 LF of 12-inch water main along Landing Road to connect the water	M Total	170 170	1,580 1,580	1,750 1,750	0 0	0 0	0 0	0 0	0 0	1,750 1,750
mains between Ilchester Road and Montgomery Road.	Total	170	1,360	1,730		U				1,730
W8307 FY2013 BROKEN LAND PKWY WATER MAIN A project for the design and construction of 4,100 LF of 30-	М	5,600	0	5,600	0	0	0	0	0	5,600
inch water main along Broken Land Parkway from Stevens Forest Road to Cradlerock Way.	Total	5,600	0	5,600	0	0	0	0	0	5,600
W8309 FY2014 MISSION ROAD WATER MAIN LOOP A project for the design and construction of 4,500 LF of 12-inch water main along Mission Road to Columbia Gateway Drive.	М	2,360	0	2,360	0	0	0	0	0	2,360
	Total	2,360	0	2,360	0	0	0	0	0	2,360
W8313 FY2011 FIRE HYDRANT INSPECTION PROGRAM	С	1,746	0	1,746	0	0	0	0	0	1,746
Develop a Fire Hydrant Inspection Program that will include all County owned fire hydrants within the	1	2,508	0	2,508	873	873	873	873	873	6,873
distribution system.	М	1,746	873	2,619	0	0	0	0	0	2,619
	Total	6,000	873	6,873	873	873	873	873	873	11,238
W8318 FY2013 MONTGOMERY ROAD WATER MAIN REHABILITATION	М	6,610	0	6,610	0	0	0	0	0	6,610
A project for the rehabilitation of 12,000 feet of 12-inch water main within Montgomery Road from Lawyers Hill Road to Rockburn Drive.	Total	6,610	0	6,610	0	0	0	0	0	6,610
W8320 FY2013 WHISKEY BOTTOM PUMP STATION RELOCATION	М	5,000	500	5,500	0	0	0	0	0	5,500
A project to relocate the Whiskey Bottom Road pumping station and related suction and discharge pipelines and to increase pumping capacity.	Total	5,000	500	5,500	0	0	0	0	0	5,500
W8322 FY2013 WILDE LAKE WATER MAIN STUDY and REHABILITATION	М	1,700	3,015	4,715	2,010	0	0	0	0	6,725
A project to determine the condition of 44,000 feet of water main in the Wilde Lake area and to perform necessary repairs or replacements.	Total	1,700	3,015	4,715	2,010	0	0	0	0	6,725

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
W8324 FY2014 WATER SYSTEM LOOPING/FIRE PROTECTION UPGRADE	М	2,500	500	3,000	500	500	0	0	0	4,000
A project for the design and construction of various water system upgrades and improvements to meet County standards for water system redundancy, pressure and flow rates requirements for fire protection.	Total	2,500	500	3,000	500	500	0	0	0	4,000
W8325 FY2014 RECLAIMED WATER SYSTEM DEVELOPMENT	М	4,573	0	4,573	0	973	973	0	0	6,519
Develop, design, and construct a reclaimed water system to serve various parts of the County with reclaimed water from the Little Patuxent Water Reclamation Plant, or a stand-alone system constructed under this project.	Total	4,573	0	4,573	0	973	973	0	0	6,519
W8327 FY2015 OLD LAWYER HILL ROAD WATER SUPPLY MAIN REPLACEMENT	М	1,060	0	1,060	0	0	0	0	0	1,060
A project for the replacement of 2,300 LF of 8-inch water main in Old Lawyers Hill Road.	Total	1,060	0	1,060	0	0	0	0	0	1,060
W8328 FY2015 630 WEST ZONE WATER PUMPING STATION	М	10,000	0	10,000	0	0	0	0	0	10,000
A project for the design and construction of a pumping station to serve the Elevation 630 West water zone.	Total	10,000	0	10,000	0	0	0	0	0	10,000
W8329 FY2015 PCCP STUDY AND FAILURE MITIGATION A project to investigate and determine the condition of all prestressed concrete cylinder pipe (PCCP) transmission mains in the water distribution system.	С	3,000	500	3,500	500	500	500	500	0	5,500
	Total	3,000	500	3,500	500	500	500	500	0	5,500
W8330 FY2017 OLD COLUMBIA PIKE WATER MAIN REHABILITATION/REPLACEMENT	М	4,015	0	4,015	0	0	0	0	0	4,015
A project to rehabilitate/replace 9,850 LF of 4-inch, 6-inch and 8-inch diameter water mains in Old Columbia Pike between Montgomery Road (MD Route 103) and Main Street (MD Route 144).	Total	4,015	0	4,015	0	0	0	0	0	4,015
W8331 FY2017 TWIN RIVERS ROAD WATER MAIN REPLACEMENT	М	2,565	0	2,565	0	0	0	0	0	2,565
A project to replace 6,000 LF of 12-inch diameter water main within Twins Rivers Road; between Governor Warfield Parkway and Harpers Farm Road.	Total	2,565	0	2,565	0	0	0	0	0	2,565

Project Information	Funding Source	Prior Appro.	FY 2019	Total	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Fiscal Budget 2023	Fiscal Budget 2024	Total
W8332 FY2018 HERITAGE HEIGHTS WATER AND SEWER EXTENSIONS	М	900	0	900	0	0	0	0	0	900
A project for the design and construction of 700 LF of 8-inch water main within Thompson Drive, 700 LF of 8-inch sewer main within Thompson Drive and 700 LF of 8-inch sewer main within Tulane Road in the Heritage Heights community.	Total	900	0	900	0	0	0	0	0	900
W8600 UTILITY SYSTEMIC ADDITIONS / IMPROVEMENTS	С	4,000	0	4,000	0	0	0	0	0	4,000
A project for the design and construction of various additions and improvements to the water and sewer	G	915	0	915	0	0	0	0	0	915
system or its associated infrastructure.	M	8,000	0	8,000	0	0	0	0	0	8,000
	Total	12,915	0	12,915	0	0	0	0	0	12,915
W8601 FY2016 ACQUISITION CONTINGENCY FUND Project funding will be used to resolve easement and	С	705	0	705	155	0	155	0	0	1,015
rights-of-way issues on water and sewer projects which have been constructed or special quick response projects	1	100	0	100	50	0	50	0	0	200
of a capital nature requiring title research, appraisals and acquisition.	Total	805	0	805	205	0	205	0	0	1,215
W8602 FY2016 SLEEVES RELOCATIONS AND APPURTENANCES	С	2,000	0	2,000	0	0	0	0	0	2,000
A project for funding design and construction of sewer and water lines in conjunction with Maryland State Highway	1	0	0	0	500	500	0	0	0	1,000
Administration (SHA) and Howard County projects prior to construction.	M	2,050	0	2,050	500	500	0	0	0	3,050
	Total	4,050	0	4,050	1,000	1,000	0	0	0	6,050
W8698 ROUTINE WATER EXTENSION PROGRAM A project to design and construct routine water main	M	4,275	0	4,275	625	625	625	625	625	7,400
extensions in the Metropolitan District requested by landowners.	Total	4,275	0	4,275	625	625	625	625	625	7,400
WATER PROJECTS Total		220,260	-473	219,787	40,319	12,477	11,182	6,914	6,414	297,093

Howard County, MD FY2019 Executive Proposed Capital Budget (\$000) WATER-WATER PROJECTS

	Revenue Source	Prior Total	Current FY	Appropriation Total
С	UTILITY CASH	68,626	6,329	74,955
D	DEVELOPER CONTRIBUTION	0	3,000	3,000
G	GRANTS	915	0	915
I	IN-AID of CONSTRUCT UTILITIES	10,444	0	10,444
L	LEASE	3,000	0	3,000
M	METRO DISTRICT BOND	137,190	-9,802	127,388
0	OTHER SOURCES	85	0	85
Total		220,260	-473	219,787

2019 Executive Proposed 5 Year Capital Budget Project Type Summary (WATER-WATER PROJECTS)

Rev	venue Source	Prior Approp	Current FY	2020	2021	2022	2023	2024	5 Year Total
С	UTILITY CASH	68,626	6,329	12,651	4,896	5,051	4,896	4,396	106,845
D	DEVELOPER CONTRIBUTION	0	3,000	0	0	0	0	0	3,000
G	GRANTS	915	0	0	0	0	0	0	915
I	IN-AID of CONSTRUCT UTILITIES	10,444	0	5,033	4,983	4,533	1,393	1,393	27,779
L	LEASE	3,000	0	0	0	0	0	0	3,000
М	METRO DISTRICT BOND	137,190	-9,802	22,635	2,598	1,598	625	625	155,469
0	OTHER SOURCES	85	0	0	0	0	0	0	85
Tot	al	220,260	-473	40,319	12,477	11,182	6,914	6,414	297,093

Fiscal 2019 Capital Budget

Project: W8206-FY1995 METALLIC PIPELINE CORROSION STUDIES

WATER PROJECTS

Number: W8206

Description

A project to fund the study, maintenance, and remediation of corrosion related failures at various locations throughout the County. Work will include testing soil for chlorides, sulfides, acidity, redox potential, soil voltage potential and electrical resistivity. The project also includes funding to install sacrificial anodes, monitor existing test stations, test coating thicknesses, maintain the computer corrosion database, purchase corrosion investigation equipment and replacement of water and sewer mains damaged as a result of corrosion. The project will also provide review and analysis of Developer generated corrosion reports.

Justification

Corrosion problems usually develop long after the capital project has been financially closed out. As problems arise and corrosion is suspected, corrosion testing and mitigation will be performed to extend the service life of the facility. This project will also support the County's Corrosion Control Program and monitoring of existing test stations.

Remarks

- 1. Project is an ongoing program to investigate water main failures due to corrosion.
- 2. The project will reduce main failures and thereby reduce operating cost.
- 3. A "Hot Spot" protection program will be initiated under this Capital Project.
- 4. Set up and maintain the GIS corrosion database.
- 5. Request represents the advancement of funds in the Capital Program and latest engineer's estimate.

Project Schedule

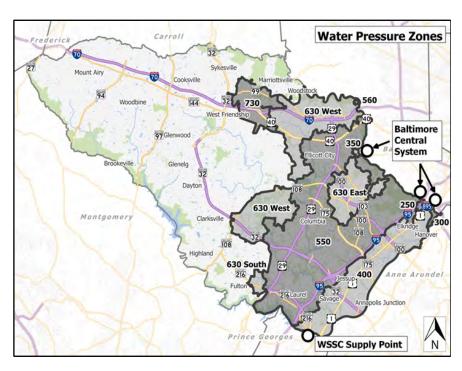
Ongoing program

FY19 - Corrosion Study and Evaluation at High Tor Hill, Mission Road, Red Jacket Way, and Dunloggin Road.

Other areas as needs develop.

Operating Budget Impact

The project will reduce operating costs.



Project: FY1995 METALLIC PIPELINE CORROSION STUDIES

	_			•		•	•		•	_	_		•	
(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,800	200	2,000	100	100	100	100	100	500	100	100	100	100	2,900
CONSTRUCTION	2,400	1,500	3,900	900	900	900	900	900	4,500	1,000	1,000	1,000	1,000	12,400
ADMINISTRATION	180	10	190	10	10	10	10	10	50	10	10	10	10	280
Total Expenditures	4,380	1,710	6,090	1,010	1,010	1,010	1,010	1,010	5,050	1,110	1,110	1,110	1,110	15,580
UTILITY CASH	4,380	1,710	6,090	1,010	1,010	1,010	1,010	1,010	5,050	1,110	1,110	1,110	1,110	15,580
Total Funding	4,380	1,710	6,090	1,010	1,010	1,010	1,010	1,010	5,050	1,110	1,110	1,110	1,110	15,580

\$3,906,475 spent and encumbered through February 2018 \$3,323,050 spent and encumbered through February 2017

Project Status: Projects completed: FY15 and prior - A program to incorporate corrosion studies into the County's GIS is ongoing

Projects completed: FY17 - Corrosion study and evaluation - Route 1 Corridor and Toll House Road; GIS Database maintenance; Painted Cup Court

Projects completed: FY18 - Toll House Road anode and road repair; Various corrosion reports and studies related to county wide breaks

FY 2018 Budget	4,380	260	4,640	260	260	260	260	0	1,040	0	0	0		5,680
Difference 2018 / 2019	0	1,450	1,450	750	750	750	750	1,010	4,010	1,110	1,110	1,110	1,110	9,900

Project: W8218-WATER CONTINGENCY FUND Number: W8218

Description

The fund is designed for use as a revenue source for (1) the transfer of appropriations when either the construction costs are higher than originally estimated or engineering costs must be advanced from future years to the present fiscal year for critical water needs; (2) construction and inspection services and ordering of large water meters for sites that do not require formal developer agreements but require water service connections, fire hydrants, short extensions of public water mains, or other appurtenances performed under water or sewer connection agreements with the County.

Justification

- 1. This fund will allow for the timely completion of approved projects by contingency funding as required and rapid response to critical situations.
- 2. Howard County Code section 20.608 establishes the requirements to charge for connections, and the requirements to receive payment prior to making or approving the connection.

Remarks

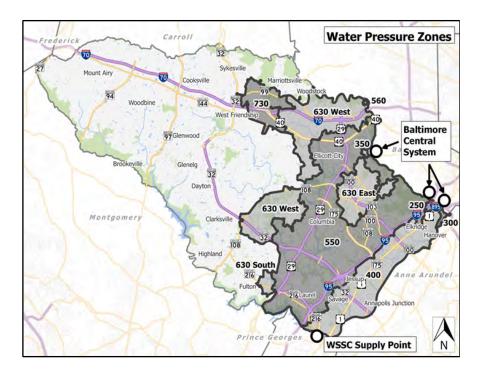
- 1. Installation of water service connections are made where none exist and new connections are required.
- 2. The County will only construct connections at the discretion of the Director of Public Works.
- 3. Revisions to the description and justification performed to allow consolidation and closing of projects W8812 and W8862.

Project Schedule

Ongoing program

Operating Budget Impact

Annual Bond Redemption \$ \$14,250 None



Project: WATER CONTINGENCY FUND Number: W8218

(In Thousands)					Fiv	e Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	1,650	3,000	4,650	0	0	0	0	0	0	0	0	0	0	4,650
Total Expenditures	1,650	3,000	4,650	0	0	0	0	0	0	0	0	0	0	4,650
UTILITY CASH	1,265	0	1,265	0	0	0	0	0	0	0	0	0	0	1,265
DEVELOPER CONTRIBUTION	0	3,000	3,000	0	0	0	0	0	0	0	0	0	0	3,000
METRO DISTRICT BOND	300	0	300	0	0	0	0	0	0	0	0	0	0	300
OTHER SOURCES	85	0	85	0	0	0	0	0	0	0	0	0	0	85
Total Funding	1,650	3,000	4,650	0	0	0	0	0	0	0	0	0	0	4,650

\$4,017 spent and encumbered through February 2018

\$4,017 spent and encumbered through February 2017

Project Status: This project was used as the source of transfers of appropriation for construction of capital projects.

Projects completed: FY16 and prior

1. W8229, Scarlet Oak Drive Water Main Extension

2. W8223, Cedar Acres Water Main

FY 2018 Budget	1,650	0	1,650	0	0	0	0	0	0	0	0	0		1,650
Difference 2018 / 2019	0	3,000	3,000	0	0	0	0	0	0	0	0	0	0	3,000

Project: W8220-FY1998 SHARED WATER FACILITY IMPROVEMENTS

Description

A project for the planning, design and construction of major water facilities, mains, pumping stations, reservoirs and treatment plants in the Baltimore City Central Water System. The improvements are required in order to insure reliability and dependability of the water supply to Howard County.

Justification

The project is a joint effort between Baltimore City, Baltimore County, Anne Arundel County and Howard County. The effort is necessary in order to meet the goals of the Howard County Master Plan for Water and Sewerage.

Remarks

- 1. Construction funding will be determined based on cost ratios from the planning estimates received from the various jurisdictions.
- 2. This project is a continuation of Capital Project W8082.

Project Schedule

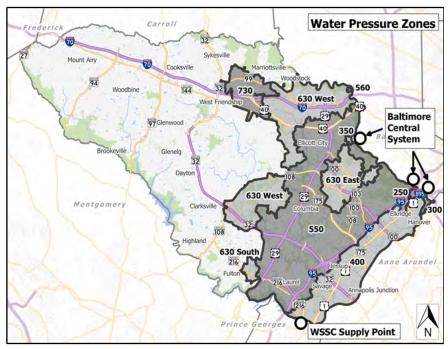
Ongoing program
FY19 - Guilford Reservoir (covers)

FY20 - Project complete, project close

Operating Budget Impact

Annual Bond Redemption \$ \$185,250

No impact on the Howard County operating budget. Construction is outside of Howard County. Reimbursement of operating cost will be made to Baltimore City through the Baltimore City water user rate charges.



Number: W8220

Project: FY1998 SHARED WATER FACILITY IMPROVEMENTS

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,140	0	1,140	0	0	0	0	0	0	0	0	0	0	1,140
CONSTRUCTION	39,910	(22,000)	17,910	0	0	0	0	0	0	0	0	0	0	17,910
Total Expenditures	41,050	(22,000)	19,050	0	0	0	0	0	0	0	0	0	0	19,050
UTILITY CASH	15,150	0	15,150	0	0	0	0	0	0	0	0	0	0	15,150
METRO DISTRICT BOND	25,900	(22,000)	3,900	0	0	0	0	0	0	0	0	0	0	3,900
Total Funding	41,050	(22,000)	19,050	0	0	0	0	0	0	0	0	0	0	19,050

\$13,606,609 spent and encumbered through February 2018

\$12,677,650 spent and encumbered through February 2017

Project Status: Projects completed: FY17 and prior - 1. Hillen/Ashburton Transmission Main and Pumping Station; 2. Hillen/Ashburton 64 - inch Bypass Main; 3. The Fullerton Filtration Plant Study

FY18 - Guilford Reservoir (covers) are under construction

FY 2018 Budget	41,050	20,000	61,050	20,000	20,000	20,000	0	0	60,000	0	0	0		121,050
Difference 2018 / 2019	0	(42,000)	(42,000)	(20,000)	(20,000) ((20,000)	0	0	(60,000)	0	0	0	0	(102,000)

Number: W8245

Project: W8245-FY2003 RIGHT of WAY RESTORATION PROGRAM

Description

State and County roads, sidewalks and curbs that are damaged, primarily by water main breaks, require permanent restoration. This effort will provide the capability to repair these facilities to their original condition.

Justification

This project will restore road surfaces, sidewalks and curbs to State/County specifications.

Remarks

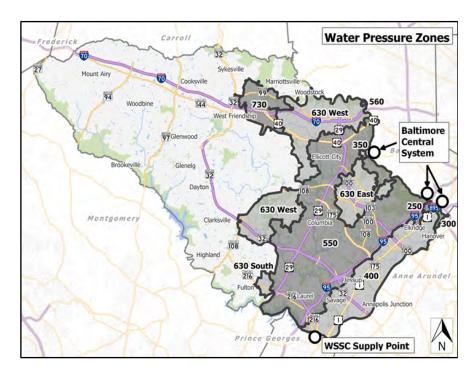
- 1. Project is a replacement of Capital Project W-8183 first funded in FY92
- 2. Contract services will be utilized to complete these efforts estimated at 100 incidents per year.

Project Schedule

FY19 - Ongoing program.

Operating Budget Impact

None



Total Funding

Number: W8245

15,640

Project: FY2003 RIGHT of WAY RESTORATION PROGRAM

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
CONSTRUCTION	5,447	1,000	6,447	1,000	1,000	1,000	1,000	1,000	5,000	1,000	1,000	1,000	1,000	15,447
ADMINISTRATION	163	3	166	3	3	3	3	3	15	3	3	3	3	193
Total Expenditures	5,610	1,003	6,613	1,003	1,003	1,003	1,003	1,003	5,015	1,003	1,003	1,003	1,003	15,640
UTILITY CASH	5,610	1,003	6,613	1,003	1,003	1,003	1,003	1,003	5,015	1,003	1,003	1,003	1,003	15,640

\$5,154,629 spent and encumbered through February 2018 \$4,270,392 spent and encumbered through February 2017

Project Status: There are approximately 100 incidents per year @ \$75,000 per incident.

5,610

1,003

6,613

1,003

FY 2018 Budget	5,610	1,003	6,613	1,003	1,003	1,003	1,003	0	4,012	0	0	0		10,625
Difference 2018 / 2019	0	0	0	0	0	0	0	1,003	1,003	1,003	1,003	1,003	1,003	5,015

1,003

1,003

1,003

1,003

5,015

1,003

1,003

1,003

1,003

Fiscal 2019 Capital Budget

Project: W8262-FY2004 GUILFORD ELEVATED WATER TANK

WATER PROJECTS

Number: W8262

Description

A project for the design and construction of a 2.5 million gallon elevated water storage tank, access roadway and related tank utilities. The new tank will serve the elevation 400 water zone.

Justification

The project was initiated by the Department of Public Works in response to the needs of the County's approved Master Plan for Water and Sewerage. The elevated water tank is required in order to stabilize the pressures in the 400 water zone and meet the future water needs of the area.

Remarks

- 1. The project was brought before the Public Works Board on December 10, 2002.
- 2. Request represents the latest engineer's estimate.

Project Schedule

FY19 - Design & Construction

FY20 - Construction & Project Complete

FY21 - Close project

Operating Budget Impact

Annual Bond Redemption \$ \$166,250

\$50,000 per year represents the cost of operation and maintenance of the tank.



Number: W8262

Project: FY2004 GUILFORD ELEVATED WATER TANK

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	685	1,110	1,795	0	0	0	0	0	0	0	0	0	0	1,795
CONSTRUCTION	4,820	3,500	8,320	7,600	0	0	0	0	7,600	0	0	0	0	15,920
ADMINISTRATION	25	0	25	0	0	0	0	0	0	0	0	0	0	25
Total Expenditures	5,530	4,610	10,140	7,600	0	0	0	0	7,600	0	0	0	0	17,740
UTILITY CASH	5,530	1,110	6,640	7,600	0	0	0	0	7,600	0	0	0	0	14,240
METRO DISTRICT BOND	0	3,500	3,500	0	0	0	0	0	0	0	0	0	0	3,500
Total Funding	5,530	4,610	10,140	7,600	0	0	0	0	7,600	0	0	0	0	17,740
\$819,153 spent and encumbered to \$306,706 spent and encumbered to Project Status : Design in progress.	hrough Februa													
FY 2018 Budget	5,530	0	5,530	0	0	0	0	0	0	0	0	0		5,530
Difference 2018 / 2019	0	4,610	4,610	7,600	0	0	0	0	7,600	0	0	0	0	12,210

March 23, 2018 Howard County, MD Version : Executive Proposed

Project: W8265-FY2005 US 29 WATER MAIN/RIVERS MEADOWS DR to BROKEN LAND PKWY

Description

A project for the rehabilitation of the water transmission main located in the vicinity of Broken Land Parkway and US29. Phase 1 - Design and construction of 2,400 LF of 36 Inch diameter water main to parallel the existing water transmission main. Phase 2 - Design and replacement of 1,000 LF of 30 Inch Diameter water transmission main.

Justification

The 30 inch diameter transmission main is the major water supply serving this area of Howard County. A acoustic monitoring of the transmission main revealed premature failures of the prestressing wires in the reinforced concrete cylinder pipe. The failures are attributed to stray electrical currents in the area. The capital project will replace the affected portions of the pipeline and provide protective measures against future failures. The parallel main is needed to meet the increased demands as outlined in the Master Plan.

Remarks

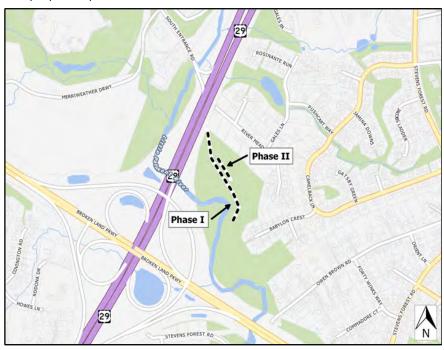
The project was brought before the Public Works Board on December 9, 2003.
 Title changed FY2018 to clarify project location. Previous Title: US29 WATER MAIN/BROKEN LAND PARKWAY 30inch WATER.

Project Schedule

FY19 - Construction, Project Complete FY20 - Close

Operating Budget Impact

\$3,500 per annum represents the cost of operation and maintenance of the proposed parallel water main.



Number: W8265

Project: FY2005 US 29 WATER MAIN/RIVERS MEADOWS DR to BROKEN LAND PKWY

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	515	0	515	0	0	0	0	0	0	0	0	0	0	515
CONSTRUCTION	3,945	0	3,945	0	0	0	0	0	0	0	0	0	0	3,945
ADMINISTRATION	20	0	20	0	0	0	0	0	0	0	0	0	0	20
Total Expenditures	4,480	0	4,480	0	0	0	0	0	0	0	0	0	0	4,480
UTILITY CASH	3,680	0	3,680	0	0	0	0	0	0	0	0	0	0	3,680
IN-AID of CONSTRUCT UTILITIES	800	0	800	0	0	0	0	0	0	0	0	0	0	800
Total Funding	4,480	0	4,480	0	0	0	0	0	0	0	0	0	0	4,480

\$2,883,946 spent and encumbered through February 2018 \$2,847,534 spent and encumbered through February 2017 Project Status: Phase 1 - Complete. Phase 2 - Under Design.

FY 2018 Budget	4,480	0	4,480	0	0	0	0	0	0	0	0	0		4,480
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: W8267-FY2005 WATER VALVE MANAGEMENT SYSTEM

Description

The purpose of this project is to exercise and maintain all County owned valves within the water distribution system. That initial phase has been completed. There is an ongoing need to keep a routine valve inspection program.

Justification

Water valves routinely get covered over during paving by property owners or developers. New development can change grades, covering valves and removing tie landmarks. Roadway boxes will fill with debris, and covers can be damaged by traffic, particularly snowplows. For all these reasons, there is a need to operate a program to routinely look at all water system valves. At this point, it is more cost effective to handle this work with contract services as opposed to hiring additional Howard County employees. Valves need to be operational in order to properly operate the water distribution system.

Remarks

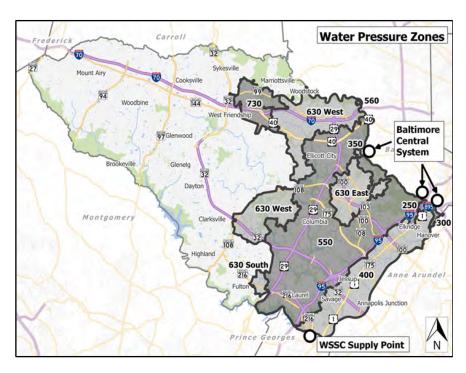
- 1. The valve inspections would start with the largest valves, i.e. 4-inch through 12-inch, on a biannual basis.
- 2. There are approximately 16,000 valves.

Project Schedule

FY19 - Ongoing program

Operating Budget Impact

Annual Bond Redemption \$ \$24,700 No impact on the operating budget.



Project: FY2005 WATER VALVE MANAGEMENT SYSTEM

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	15	5	20	5	5	5	5	5	25	5	5	5	5	65
CONSTRUCTION	2,412	500	2,912	500	500	500	500	500	2,500	500	500	500	500	7,412
ADMINISTRATION	80	15	95	15	15	15	15	15	75	15	15	15	15	230
EQUIPMENT & FURNISHINGS	40	0	40	0	0	0	0	0	0	0	0	0	0	40
Total Expenditures	2,547	520	3,067	520	520	520	520	520	2,600	520	520	520	520	7,747
UTILITY CASH	1,427	0	1,427	0	0	0	0	0	0	0	0	0	0	1,427
IN-AID of CONSTRUCT UTILITIES	1,120	0	1,120	520	520	520	520	520	2,600	520	520	520	520	5,800
METRO DISTRICT BOND	0	520	520	0	0	0	0	0	0	0	0	0	0	520
Total Funding	2,547	520	3,067	520	520	520	520	520	2,600	520	520	520	520	7,747

\$2,502,276 spent and encumbered through February 2018 \$1,939,178 spent and encumbered through February 2017

Project Status : FY18 - As of November 2017, 6,000 valves have been inspected.

FY19 - The Bureau of Utilities anticipates inspecting 5,000 valves @ \$57 per valve plus additional costs for repairing valves.

FY 2018 Budget	2,547	520	3,067	520	520	520	520	0	2,080	0	0	0		5,147
Difference 2018 / 2019	0	0	0	0	0	0	0	520	520	520	520	520	520	2,600

Project: W8269-FY2005 PARTICIPATION 3RD ZONE WATER SUPPLY

Description

A project for the construction of major water transmission and distribution mains to convey water from Baltimore City to Howard County. The project will fund a cost sharing agreement between Baltimore City, Baltimore County and Howard County on improvements to Baltimore City's Western Third Water Zone.

Justification

This project is necessary to achieve the objectives of the approved Master Plan for Water and Sewerage by providing sufficient water to meet the County's future needs.

Remarks

1. See project schedule for projects to be included in this effort.

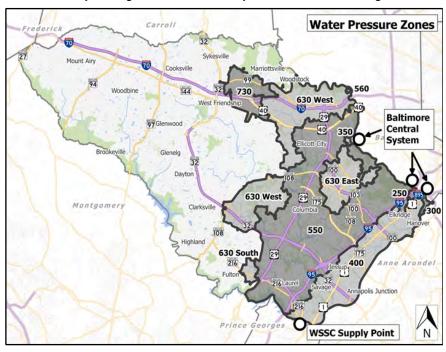
Project Schedule

Ongoing program

Operating Budget Impact

Annual Bond Redemption \$ \$1,615,000

Construction is outside of Howard County. No impact on Howard County operating budget. Reimbursement of operating costs will be made to Baltimore City through the Baltimore City water user rate changes.



Project: FY2005 PARTICIPATION 3RD ZONE WATER SUPPLY

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	2,000	0	2,000	0	0	0	0	0	0	0	0	0	0	2,000
CONSTRUCTION	14,000	0	14,000	19,000	0	0	0	0	19,000	0	0	0	0	33,000
Total Expenditures	16,000	0	16,000	19,000	0	0	0	0	19,000	0	0	0	0	35,000
UTILITY CASH	1,000	0	1,000	0	0	0	0	0	0	0	0	0	0	1,000
METRO DISTRICT BOND	15,000	0	15,000	19,000	0	0	0	0	19,000	0	0	0	0	34,000
Total Funding	16,000	0	16,000	19,000	0	0	0	0	19,000	0	0	0	0	35,000

\$14,156,689 spent and encumbered through February 2018 \$12,693,449 spent and encumbered through February 2017

Project Status : Projects completed: FY17 and prior - 1. Catonsville Reservoir, East bay and chlorination; 2. The Catonsville 42-Inch Diameter Transmission Main - Section 3 (US40); 3. Rolling Road WTM

FY 2018 Budget	16,000	19,000	35,000	0	0	0	0	0	0	0	0	0		35,000
Difference 2018 / 2019	0	(19,000)	(19,000)	19,000	0	0	0	0	19,000	0	0	0	0	0

Project: W8274-FY 2007 SCADA SYSTEM UPGRADE Number: W8274

Description

A project to upgrade the Supervisory Control and Data Acquisition System (SCADA) at the Bureau of Utilities Operations building and all remote sites. The upgrade will transform the current fixed telephone based system into a multi-user, web-based system that allows for enhanced system controls and operation from both the Utilities Operation Center and the LPWRP.

Justification

The existing SCADA system was originally installed in 1993, and upgraded in 1998. The present system allows for point-to-point communication and control over leased telephone lines. A web-based system will allow for each remote terminal unit to have a high speed internet connection that can be accessed from individual desktop units for superior monitoring. In addition, there will be a reduction in the leased line telephone costs.

Remarks

This project will be managed by the Bureau of Utilities. Improvements include: 1) remote web access for better monitoring, control and maintenance of the SCADA system; 2) older RTUs that were not replaced under Phase I of this project will be upgraded; 3) Phase III replacement/upgrade of buried telephone service lines from the property line to the water/sewer facility as part of a fiber optic upgrade to connect with the new County system.

Project Schedule

- 1. FY16-FY19 Twelve (12) sewage pump stations have been converted to cellular and testing has been initiated.
- 2. FY10-FY20 Expected to convert 10 sewage pumping stations per year.
- 3. FY19 Project is being accelerated due to the degradation of service from Verizon.
- 4. FY19 Additional \$2 Million requested for ICBN network up-grade. This up-grade is necessary as back-up communication for the existing dedicated phone lines that is needed to monitor stations when the primary communication has failed. The ICBN will be in place if-and-when the dedicated phone lines are no longer available or no longer serviced.



Project: FY 2007 SCADA SYSTEM UPGRADE Number: W8274

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	125	0	125	125	125	125	125	125	625	125	125	125	125	1,250
CONSTRUCTION	2,200	2,000	4,200	500	500	500	500	500	2,500	500	500	500	500	8,700
ADMINISTRATION	94	6	100	15	15	15	15	15	75	15	15	15	15	235
EQUIPMENT & FURNISHINGS	1,650	0	1,650	250	250	250	250	250	1,250	250	250	250	250	3,900
Total Expenditures	4,069	2,006	6,075	890	890	890	890	890	4,450	890	890	890	890	14,085
UTILITY CASH	4,069	2,006	6,075	890	890	890	890	890	4,450	890	890	890	890	14,085
Total Funding	4,069	2,006	6,075	890	890	890	890	890	4,450	890	890	890	890	14,085

\$1,475,531 spent and encumbered through February 2018

\$1,420,158 spent and encumbered through February 2017

Project Status: FY19 - Continued conversion of leased telephone lines (copper services) to cellular-based system.

FY 2018 Budget	4,069	765	4,834	765	765	765	765	0	3,060	0	0	0		7,894
Difference 2018 / 2019	0	1,241	1,241	125	125	125	125	890	1,390	890	890	890	890	6,191

Project: W8289-FY2009 WATER METER BATTERY REPLACEMENT

Description

This project is to provide for the replacement of the battery systems, radios and meters in the County's existing residential and commercial radio read water metering system that have reached the end of their projected ten (10) year lives. As part of the program, the County will use new integral radio/battery technology more directly related to the meters.

Justification

The water meters (with radio read registers) installed beginning 9 years ago are reaching the end of their battery life. New battery technologies will enable the installation of systems with a 20-year battery life and associated guarantees.

Remarks

- 1. Early and later installations with smaller numbers.
- 2. Changeout insides by appointment.
- 3. Bureau of Utilities to utilize outside contractors and in-house staff to perform changeouts.

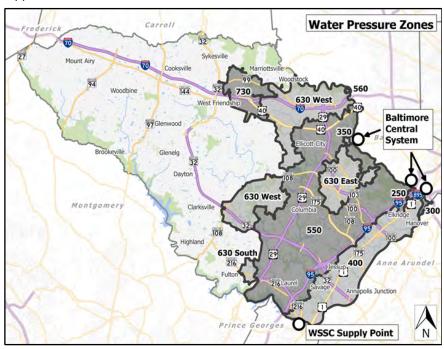
Project Schedule

FY16-FY21 - Continued changeouts

Operating Budget Impact

Annual Bond Redemption \$ \$97,850

Meter radio changeouts being performed by outside contractors and Bureau of Utilities personnel; some overtime expended for inside appointments.



Project: FY2009 WATER METER BATTERY REPLACEMENT

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	10	0	10	0	0	0	0	0	0	0	0	0	0	10
CONSTRUCTION	1,100	0	1,100	0	0	0	0	0	0	0	0	0	0	1,100
ADMINISTRATION	346	0	346	90	90	90	0	0	270	0	0	0	0	616
EQUIPMENT & FURNISHINGS	17,400	0	17,400	3,000	3,000	3,000	0	0	9,000	0	0	0	0	26,400
Total Expenditures	18,856	0	18,856	3,090	3,090	3,090	0	0	9,270	0	0	0	0	28,126
UTILITY CASH	10,033	0	10,033	0	0	0	0	0	0	0	0	0	0	10,033
IN-AID of CONSTRUCT UTILITIES	3,763	0	3,763	3,090	3,090	3,090	0	0	9,270	0	0	0	0	13,033
METRO DISTRICT BOND	2,060	0	2,060	0	0	0	0	0	0	0	0	0	0	2,060
LEASE	3,000	0	3,000	0	0	0	0	0	0	0	0	0	0	3,000
Total Funding	18,856	0	18,856	3,090	3,090	3,090	0	0	9,270	0	0	0	0	28,126

\$10,240,877 spent and encumbered through February 2018

\$9,649,568 spent and encumbered through February 2017

Project Status: As of November 2017 - 25,000 meter radio registers were changed out in this program. Approximately 45,000 radio registers remain to be changed.

FY 2018 Budget	18,856	3,000	21,856	3,000	0	0	0	0	3,000	0	0	0		24,856
Difference 2018 / 2019	0	(3,000)	(3,000)	90	3,090	3,090	0	0	6,270	0	0	0	0	3,270

Project: W8291-FY2009 ELEVATED WATER TANK RECOATING

Description

A project to study and prioritize the cleaning, repairing and recoating of the County water system's existing elevated water storage tanks.

Justification

The County's water system has eleven (11) existing elevated water tanks, ranging in age from 2 to 45 years. One (1) tank is being converted to a reclaimed water tank, one (1) replacement tank for the converted reclaimed tank is under design, and a Fort Meade Reclaimed Tank is completed and being prepared for ownership transfer to American Water. It is necessary to establish and maintain a rehabilitiation program to insure continued reliable operation.

Remarks

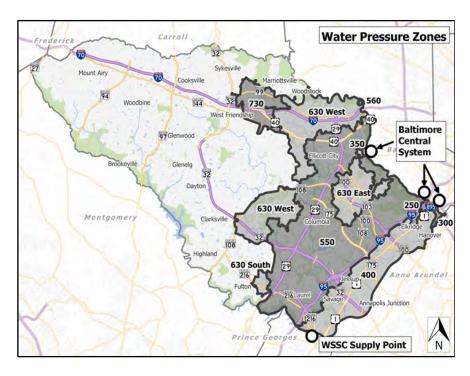
This project will be managed by the Bureau of Utilities.

Project Schedule

FY18-FY19 - Routine maintenance of existing water tanks. FY19-FY23 - Various cleaning, painting and top coating projects.

Operating Budget Impact

No operating budget impact.



Project: FY2009 ELEVATED WATER TANK RECOATING

Number: W8291

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	10	0	10	50	50	50	50	50	250	0	0	0	0	260
CONSTRUCTION	5,450	0	5,450	1,400	1,400	1,400	1,400	1,400	7,000	0	0	0	0	12,450
ADMINISTRATION	164	0	164	43	43	43	43	43	215	0	0	0	0	379
Total Expenditures	5,624	0	5,624	1,493	1,493	1,493	1,493	1,493	7,465	0	0	0	0	13,089
UTILITY CASH	4,481	0	4,481	1,493	1,493	1,493	1,493	1,493	7,465	0	0	0	0	11,946
IN-AID of CONSTRUCT UTILITIES	1,143	0	1,143	0	0	0	0	0	0	0	0	0	0	1,143
Total Funding	5,624	0	5,624	1,493	1,493	1,493	1,493	1,493	7,465	0	0	0	0	13,089

\$3,323,496 spent and encumbered through February 2018 \$3,101,940 spent and encumbered through February 2017

Project Status : FY19 Planned: Routine maintenance of existing water tanks and cleaning the interior and exterior of the Alpha Ridge tank.

FY20 Planned: Guilford Tank \$900,000

FY 2018 Budget	5,624	1,493	7,117	1,493	1,493	1,493	1,493	0	5,972	0	0	0		13,089
Difference 2018 / 2019	0	(1,493)	(1,493)	0	0	0	0	1,493	1,493	0	0	0	0	0

Project: W8296-FY2010 US29 WATER MAIN/MD108 TO SOUTH ENTRANCE ROAD

Description

A project for the design and construction of 18,000 LF of 36-inch water main within the US29 corridor from MD108 to South Entrance Road.

Justification

The project will provide additional hydraulic capacity and increased water supply to the 3 million gallon Scaggsville Elevated Water Tank. The improvement is part of the Howard County central water system, providing water to the upper 630 and 730 zones as well as to the lower 400 zone. The improvement is required under the 2008 Howard County Master Plan for Water and Sewerage and is needed to provide for adequate domestic water supply and fire protection for the County.

Remarks

- 1. The project was brought before the Public Works Board on December 10, 2008.
- 2. The project has been split into 2 phases. Phase I South Entrance Road to Little Patuxent Parkway. Phase II Little Patuxent Parkway to Route 29 Booster Pumping Station.

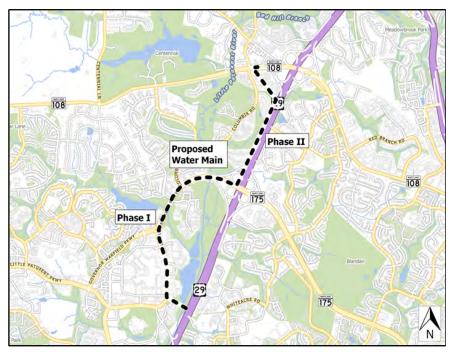
Project Schedule

FY19 - Construction, Project Complete, Close

Operating Budget Impact

Annual Bond Redemption \$ \$1,306,250

\$27,000 per year represents the cost of operation and maintenance of the water main



Project: FY2010 US29 WATER MAIN/MD108 TO SOUTH ENTRANCE ROAD

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	3,800	0	3,800	0	0	0	0	0	0	0	0	0	0	3,800
LAND ACQUISITION	190	0	190	0	0	0	0	0	0	0	0	0	0	190
CONSTRUCTION	23,500	0	23,500	0	0	0	0	0	0	0	0	0	0	23,500
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	27,500	0	27,500	0	0	0	0	0	0	0	0	0	0	27,500
METRO DISTRICT BOND	27,500	0	27,500	0	0	0	0	0	0	0	0	0	0	27,500
Total Funding	27,500	0	27,500	0	0	0	0	0	0	0	0	0	0	27,500
\$18,930,555 spent and encumbere \$18,195,033 spent and encumbere Project Status : This project is curre	ed through Feb	ruary 2017												
FY 2018 Budget	27,500	0	27,500	0	0	0	0	0	0	0	0	0		27,500
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Fiscal 2019 Capital Budget

Project: W8300-FY2011 LEVERING AVENUE WATER MAIN

Number: W8300

WATER PROJECTS

Description

A project for the design and construction of 6,350 LF of 12-inch water main from Gun Road in the Patapsco State Park in Baltimore County to Levering Avenue in Howard County to US1.

Justification

The water demands in the elevation 400 zone are operating under very high pressure in the existing old (1934) cast iron water main. The proposed 12-inch transmission main will increase the reliability of the water supply in the 400 zone. The improvement is required under the 2008 Howard County Master Plan for Water and Sewerage and is needed to provide for adequate domestic water supply and fire protection.

Remarks

- 1. The project was brought before the Public Works Board on December 10, 2008 and January 12, 2010.
- 2. The water main within the Patapsco State Park was constructed in 1935 and is the feed to the Howard County Gun Road Water Supply from Baltimore County. The Department of Natural Resources (DNR) has informed Howard County that the water main within the park has had several failures and presents a hazard to the park. DNR is requiring that the water main through the Park be repaired or replaced.
- 3. Request represents Engineer's latest estimate.

Project Schedule

FY19 - Construction, Project Complete, Close

Operating Budget Impact

Annual Bond Redemption \$ \$199,310

\$9,500 represents the cost of operation and maintenance of the water main.



Project: FY2011 LEVERING AVENUE WATER MAIN Number: W8300

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	706	0	706	0	0	0	0	0	0	0	0	0	0	706
LAND ACQUISITION	60	140	200	0	0	0	0	0	0	0	0	0	0	200
CONSTRUCTION	2,720	1,100	3,820	0	0	0	0	0	0	0	0	0	0	3,820
ADMINISTRATION	10	10	20	0	0	0	0	0	0	0	0	0	0	20
Total Expenditures	3,496	1,250	4,746	0	0	0	0	0	0	0	0	0	0	4,746
UTILITY CASH	550	0	550	0	0	0	0	0	0	0	0	0	0	550
METRO DISTRICT BOND	2,946	1,250	4,196	0	0	0	0	0	0	0	0	0	0	4,196
Total Funding	3,496	1,250	4,746	0	0	0	0	0	0	0	0	0	0	4,746
\$318,777 spent and encumbered t \$303,845 spent and encumbered t Project Status: 1. The project is un	hrough Februa	ry 2017												
FY 2018 Budget	3,496	0	3,496	0	0	0	0	0	0	0	0	0		3,496
Difference 2018 / 2019	0	1,250	1,250	0	0	0	0	0	0	0	0	0	0	1,250

Project: W8303-FY2018 ANDERSON AVE/MOUND STREET WATER MAIN

Description

A project for the design and construction of 1,000 LF of 12-inch water main along Anderson Avenue from Mound Street to Hanover Road.

Justification

Projected water demands have indicated that a secondary water main loop will be required to provide adequate flows and pressures for the area. The improvement is required under the Howard County Master Plan for Water and Sewerage and is needed to provide for adequate domestic water supply and fire protection.

Remarks

- 1. The project was brought before the Public Works Board on January 13, 2009.
- 2. Project schedule revised from FY14 to FY18 to reflect Master Plan priority.
- 3. Request represents the advancement of funds in the capital program.
- 4. Title changed FY2019 to clarify project location.

Project Schedule

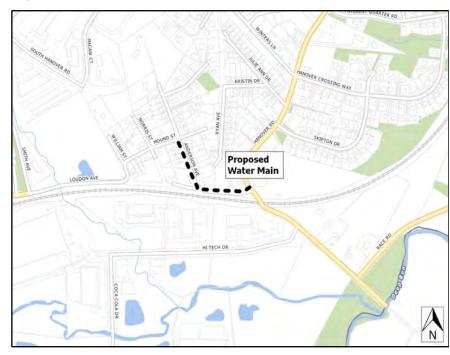
FY19 - Construction, Project complete

FY20 - Project close

Operating Budget Impact

Annual Bond Redemption \$ \$27,550

\$4,500 represents the cost of operation and maintenance of the water main.



Number: W8303

Project: FY2018 ANDERSON AVE/MOUND STREET WATER MAIN

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	100	55	155	0	0	0	0	0	0	0	0	0	0	155
LAND ACQUISITION	15	0	15	0	0	0	0	0	0	0	0	0	0	15
CONSTRUCTION	0	400	400	0	0	0	0	0	0	0	0	0	0	400
ADMINISTRATION	5	5	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	120	460	580	0	0	0	0	0	0	0	0	0	0	580
METRO DISTRICT BOND	120	460	580	0	0	0	0	0	0	0	0	0	0	580
Total Funding	120	460	580	0	0	0	0	0	0	0	0	0	0	580
\$118,354 spent and encumbered t spent and encumbered through F Project Status : Project is under de	ebruary 2017	ary 2018												
FY 2018 Budget	120	880	1,000	0	0	0	0	0	0	0	0	0		1,000
Difference 2018 / 2019	0	(420)	(420)	0	0	0	0	0	0	0	0	0	0	(420)

Project: W8304-FY2015 COLUMBIA WATER PUMPING STATION IMPROVEMENTS

Description

A project to upgrade the Columbia Water Pumping Station.

Justification

The project will upgrade and increase the pumping capacity at the Columbia Water Pumping Station by upgrading pumps, motors and station controls. The improvement is required under the Howard County Master Plan for Water and Sewerage and is needed to provide for adequate domestic water supply and fire protection to meet the anticipated increased demands in the 630 water zone.

Remarks

1. The project was brought before the Public Works Board on January 13, 2009.

Project Schedule

FY19 - Design

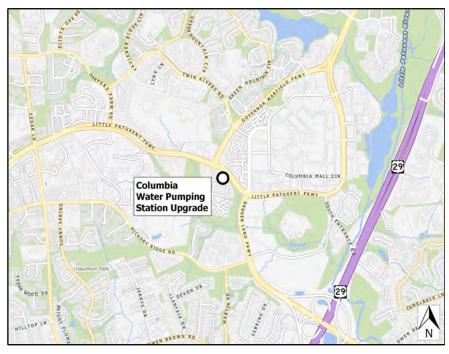
FY20 - Construction

FY21 - Project complete, close

Operating Budget Impact

Annual Bond Redemption \$ \$11,400

\$50,000 represents the additional cost of operation and maintenance of the station.



Project: FY2015 COLUMBIA WATER PUMPING STATION IMPROVEMENTS

(In Thousands)			Fiv	e Year Ca	apital Pro	Master Plan								
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	230	0	230	0	0	0	0	0	0	0	0	0	0	230
CONSTRUCTION	1,000	0	1,000	0	0	0	0	0	0	0	0	0	0	1,000
ADMINISTRATION	20	0	20	0	0	0	0	0	0	0	0	0	0	20
Total Expenditures	1,250	0	1,250	0	0	0	0	0	0	0	0	0	0	1,250
IN-AID of CONSTRUCT UTILITIES	1,010	0	1,010	0	0	0	0	0	0	0	0	0	0	1,010
METRO DISTRICT BOND	240	0	240	0	0	0	0	0	0	0	0	0	0	240
Total Funding	1,250	0	1,250	0	0	0	0	0	0	0	0	0	0	1,250
\$0 spent and encumbered through Fe spent and encumbered through Febr Project Status : Design will start mid-late	uary 2017	8												
FY 2018 Budget	1,250	0	1,250	0	0	0	0	0	0	0	0	0)	1,250
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Fiscal 2019 Capital Budget

Project: W8305-FY2018 LANDING ROAD WATER MAIN LOOP

WATER PROJECTS

Number: W8305

Description

A project for the design and construction of 4,300 LF of 12-inch water main along Landing Road to connect the water mains between Ilchester Road and Montgomery Road.

Justification

The project will complete the loop of the elevation 550 water system in Landing Road and provide for an emergency connection to the elevation 630 east water zone. The improvement is required under the Howard County Master Plan for Water and Sewerage and is needed to provide for adequate domestic water supply and fire protection.

Remarks

- 1. The project was brought before the Public Works Board on January 13, 2009.
- 2. Project schedule revised from FY15 to FY18 to reflect Master Plan priority.
- 3. Request represents the advancement of funds in the capital program and latest engineers estimate.

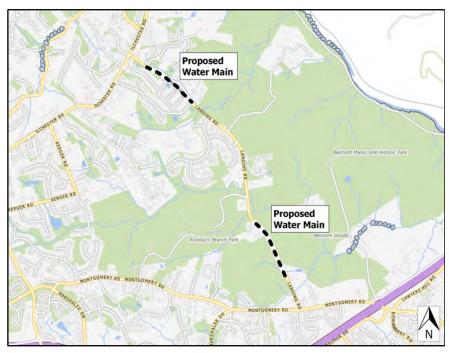
Project Schedule

FY19 - Design, Construction FY20 - Project Complete, Close

Operating Budget Impact

Annual Bond Redemption \$ \$83,125

\$6,400 represents the cost of operation and maintenance of the water main.



Project: FY2018 LANDING ROAD WATER MAIN LOOP Number: W8305

(In Thousands)					Five	Year Ca	Master Plan							
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	160	80	240	0	0	0	0	0	0	0	0	0	0	240
CONSTRUCTION	0	1,500	1,500	0	0	0	0	0	0	0	0	0	0	1,500
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	170	1,580	1,750	0	0	0	0	0	0	0	0	0	0	1,750
METRO DISTRICT BOND	170	1,580	1,750	0	0	0	0	0	0	0	0	0	0	1,750
Total Funding	170	1,580	1,750	0	0	0	0	0	0	0	0	0	0	1,750
\$169,505 spent and encumbered the spent and encumbered through F Project Status: Project is under des	ebruary 2017	ary 2018												
FY 2018 Budget	170	1,330	1,500	0	0	0	0	0	0	0	0	0		1,500
Difference 2018 / 2019	0	250	250	0	0	0	0	0	0	0	0	0	0	250

Fiscal 2019 Capital Budget

Project: W8307-FY2013 BROKEN LAND PKWY WATER MAIN

WATER PROJECTS

Number: W8307

Description

A project for the design and construction of 4,100 LF of 30-inch water main along Broken Land Parkway from Stevens Forest Road to Cradlerock Way.

Justification

The project will provide a secondary loop for the water systems, improving integration of the major water supplies from US40 and the Elkridge area. The improvement is required under the Howard County Master Plan for Water and Sewerage and is needed to provide for adequate domestic water supply and fire protection.

Remarks

1. The project was brought before the Public Works Board on January 13, 2009.

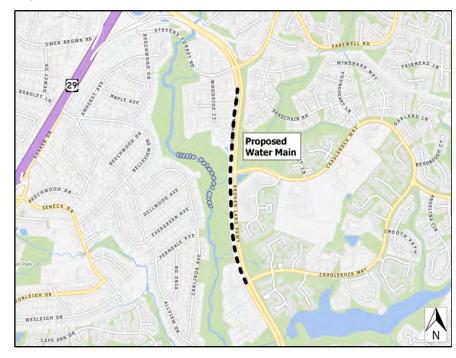
Project Schedule

FY19 - Construction, Complete, and Close Project.

Operating Budget Impact

Annual Bond Redemption \$ \$266,000

\$6,100 represents the cost of operation and maintenance of the water main.



Project: FY2013 BROKEN LAND PKWY WATER MAIN Number: W8307

(In Thousands)					Five	e Year Ca	pital Pro	gram		Master Plan						
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project		
PLANS & ENGINEERING	985	0	985	0	0	0	0	0	0	0	0	0	0	985		
CONSTRUCTION	4,600	0	4,600	0	0	0	0	0	0	0	0	0	0	4,600		
ADMINISTRATION	15	0	15	0	0	0	0	0	0	0	0	0	0	15		
Total Expenditures	5,600	0	5,600	0	0	0	0	0	0	0	0	0	0	5,600		
METRO DISTRICT BOND	5,600	0	5,600	0	0	0	0	0	0	0	0	0	0	5,600		
Total Funding	5,600	0	5,600	0	0	0	0	0	0	0	0	0	0	5,600		
\$226,517 spent and encumbered t \$184,568 spent and encumbered t Project Status : Project under const	hrough Februa															
FY 2018 Budget	5,600	0	5,600	0	0	0	0	0	0	0	0	0		5,600		
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

Fiscal 2019 Capital Budget

Project: W8309-FY2014 MISSION ROAD WATER MAIN LOOP

WATER PROJECTS

Number: W8309

Description

A project for the design and construction of 4,500 LF of 12-inch water main along Mission Road to Columbia Gateway Drive.

Justification

The project will complete the loop of the elevation 550 water zone along the I-95 corridor. The improvement is required under the Howard County Master Plan for Water and Sewerage and is needed to provide for adequate domestic water supply and fire protection.

Remarks

- 1. The project was brought before the Public Works Board on January 13, 2009.
- 2. Project schedule revised from FY22 to FY14 due to the need to loop the water system to provide for adequate fire protection.

Project Schedule

FY19 - Design, Construction

FY20 - Construction

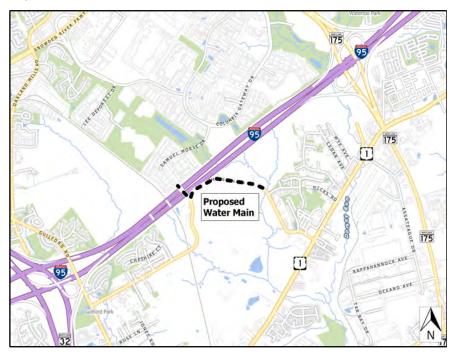
FY21 - Project complete

FY22 - Project close

Operating Budget Impact

Annual Bond Redemption \$ \$112,100

\$6,705 represents the cost of operation and maintenance of the water main.



Project: FY2014 MISSION ROAD WATER MAIN LOOP Number: W8309

(In Thousands)			Five	Year Ca	Master Plan									
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	250	0	250	0	0	0	0	0	0	0	0	0	0	250
LAND ACQUISITION	400	0	400	0	0	0	0	0	0	0	0	0	0	400
CONSTRUCTION	1,700	0	1,700	0	0	0	0	0	0	0	0	0	0	1,700
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	2,360	0	2,360	0	0	0	0	0	0	0	0	0	0	2,360
METRO DISTRICT BOND	2,360	0	2,360	0	0	0	0	0	0	0	0	0	0	2,360
Total Funding	2,360	0	2,360	0	0	0	0	0	0	0	0	0	0	2,360
\$220,531 spent and encumbered t \$176,849 spent and encumbered t Project Status : Project is under de	hrough Februa	ary 2017												
FY 2018 Budget	2,360	0	2,360	0	0	0	0	0	0	0	0	0		2,360
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Fiscal 2019 Capital Budget

Project: W8313-FY2011 FIRE HYDRANT INSPECTION PROGRAM

WATER PROJECTS

Number: W8313

Description

Develop a Fire Hydrant Inspection Program that will include all County owned fire hydrants within the distribution system. The data will be stored in our current database, cataloging specific fire hydrant information such as manufacturer, year installed, size, number of turns, turn direction, and cataloged inspection data for each scheduled inspection. During the inspection process, fire hydrants are to be exercised and their operability verified, and hydrant valves located and exercised. Fire hydrants damaged during the inspection process or found damaged are to be repaired or replaced in this project. Simple lubrication and maintenance will be performed during the inspections.

Justification

Howard County Fire and Rescue has requested that the Bureau of Utilities perform annual inspections on each fire hydrant as part of their ISO program. This will include populating the existing Hansen Database with fire hydrant information for speedier reporting of fire hydrant status, creation of fire hydrant reports, and documentation of inspection information. Exercising the fire hydrants during inspection will verify that the fire hydrants are operational in the event of a fire, and ensure the Fire Department's certification of the fire hydrant inspection requirement. The Bureau of Utilities owns and maintains approximately 10,000 fire hydrants. HCFR is requesting hydraulic modeling of various sites for fire flows from time to time.

Remarks

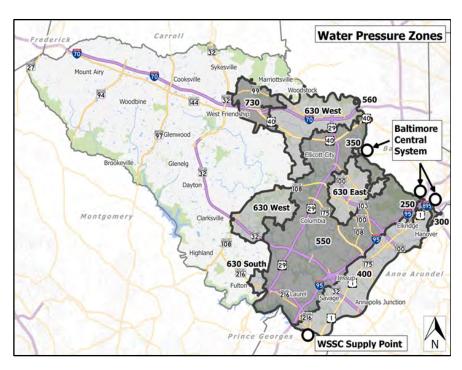
- 1. Fire hydrant inspections are done by grids on an annual basis. It is the goal to do a thorough inspection of every Howard County owned fire hydrant once a vear.
- 2. There are approximately 10,000 fire hydrants owned by Howard County.
- 3. HCFR requirements for modeling and inspections are followed throughout.

Project Schedule

FY19 - Continued hydrant inspections and repairs.

Operating Budget Impact

Annual Bond Redemption \$ \$124,403 No operating budget impact.



Project: FY2011 FIRE HYDRANT INSPECTION PROGRAM

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	600	100	700	100	100	100	100	100	500	100	100	100	100	1,600
CONSTRUCTION	5,240	750	5,990	750	750	750	750	750	3,750	750	750	750	750	12,740
ADMINISTRATION	160	23	183	23	23	23	23	23	115	23	23	23	23	390
Total Expenditures	6,000	873	6,873	873	873	873	873	873	4,365	873	873	873	873	14,730
UTILITY CASH	1,746	0	1,746	0	0	0	0	0	0	0	0	0	0	1,746
IN-AID of CONSTRUCT UTILITIES	2,508	0	2,508	873	873	873	873	873	4,365	873	873	873	873	10,365
METRO DISTRICT BOND	1,746	873	2,619	0	0	0	0	0	0	0	0	0	0	2,619
Total Funding	6,000	873	6,873	873	873	873	873	873	4,365	873	873	873	873	14,730

\$1,263,729 spent and encumbered through February 2018

\$1,303,272 spent and encumbered through February 2017

Project Status: FY19 - Anticipated to inspect 10,000 hydrants @ \$65 per hydrant plus additional testing.

FY 2018 Budget	6,000	873	6,873	873	873	873	873	0	3,492	0	0	0		10,365
Difference 2018 / 2019	0	0	0	0	0	0	0	873	873	873	873	873	873	4,365

Project: W8318-FY2013 MONTGOMERY ROAD WATER MAIN REHABILITATION

Description

A project for the rehabilitation of 12,000 feet of 12-inch water main within Montgomery Road from Lawyers Hill Road to Rockburn Drive.

Justification

The water main was constructed in 1962 and has ruptured numerous times. The project will determine the cause of the failures and repair or replace defective portions of the water main.

Remarks

1. The project was brought before the Public Works Board on December 13, 2011.

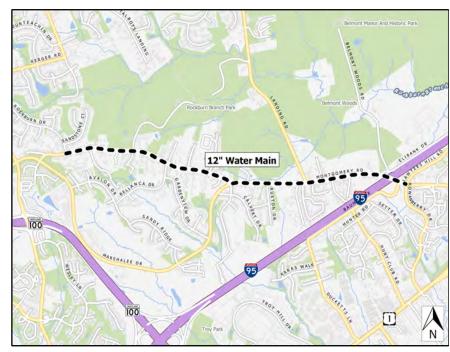
Project Schedule

FY19 - Construction, Project Complete, Close

Operating Budget Impact

Annual Bond Redemption \$ \$313,975

The cost of operation and maintenance will be reduced by the reduction of main breaks in this area.



Difference 2018 / 2019

WATER PROJECTS

0

0

0

Number: W8318

0

Project: FY2013 MONTGOMERY ROAD WATER MAIN REHABILITATION

0

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,095	0	1,095	0	0	0	0	0	0	0	0	0	0	1,095
CONSTRUCTION	5,500	0	5,500	0	0	0	0	0	0	0	0	0	0	5,500
ADMINISTRATION	15	0	15	0	0	0	0	0	0	0	0	0	0	15
Total Expenditures	6,610	0	6,610	0	0	0	0	0	0	0	0	0	0	6,610
METRO DISTRICT BOND	6,610	0	6,610	0	0	0	0	0	0	0	0	0	0	6,610
Total Funding	6,610	0	6,610	0	0	0	0	0	0	0	0	0	0	6,610
\$6,046,150 spent and encumbered \$6,205,637 spent and encumbered Project Status : Project is under con	l through Febr													
FY 2018 Budget	6,610	0	6,610	0	0	0	0	0	0	0	0	0		6,610

0

0

0

March 23, 2018 **Howard County, MD Version: Executive Proposed**

Project: W8320-FY2013 WHISKEY BOTTOM PUMP STATION RELOCATION

Description

A project to relocate the Whiskey Bottom Road pumping station and related suction and discharge pipelines and to increase pumping capacity.

Justification

New agreements with the Washington Suburban Sanitary Commission (WSSC) will allow Howard County to increase the water supply from 5 MGD to 10 MGD. The improvements to the Whiskey Bottom Road pumping station and pipelines will allow Howard County to pump the additional water from WSSC from the elevation 400 water zone to the elevation 550 water zone.

Remarks

- 1. The project was brought before the Public Works Board on December 13, 2011.
- 2. Request represents latest Engineer's estimate of construction cost.

Project Schedule

FY19 - Construction

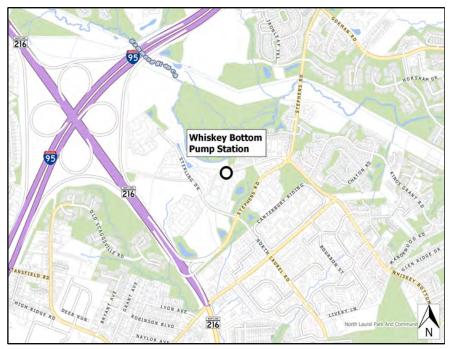
FY20 - Complete

FY21 - Close project

Operating Budget Impact

Annual Bond Redemption \$ \$261,250

The annual additional power cost and the cost of operation and maintenance of the pipelines is estimate at \$25,000.



Difference 2018 / 2019

WATER PROJECTS

Number: W8320

Project: FY2013 WHISKEY BOTTOM PUMP STATION RELOCATION

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	590	0	590	0	0	0	0	0	0	0	0	0	0	590
LAND ACQUISITION	400	0	400	0	0	0	0	0	0	0	0	0	0	400
CONSTRUCTION	4,000	500	4,500	0	0	0	0	0	0	0	0	0	0	4,500
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	5,000	500	5,500	0	0	0	0	0	0	0	0	0	0	5,500
METRO DISTRICT BOND	5,000	500	5,500	0	0	0	0	0	0	0	0	0	0	5,500
Total Funding	5,000	500	5,500	0	0	0	0	0	0	0	0	0	0	5,500
64,751,871 spent and encumbered to 5568,772 spent and encumbered to project Status:	hrough Februa													
FY 2018 Budget	5,000	0	5,000	0	0	0	0	0	0	l о	0	0)	5,000

Project: W8322-FY2013 WILDE LAKE WATER MAIN STUDY and REHABILITATION

Description

A project to determine the condition of 44,000 feet of water main in the Wilde Lake area and to perform necessary repairs or replacements.

Justification

There have been over 35 water main breaks in the Wilde Lake area. A preliminary study of the water mains in the Wilde Lake area has determined that the cast iron water mains may be subject to corrosion due to stray currents from gas mains and the low resistivity soils in the area, causing corrosion pitting and failure of the iron pipe.

Remarks

- 1. The project was brought before the Public Works Board on December 13, 2011.
- 2. Study is complete.
- 3. Rehabilitation of corroded areas to begin.
- 4. Request represents latest engineering estimate.

Project Schedule

FY19 - Design, Construction

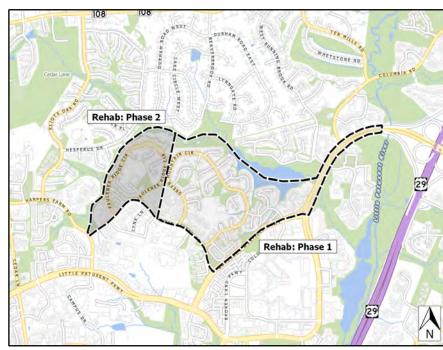
FY20 - Construction

FY21 - Project complete, Close

Operating Budget Impact

Annual Bond Redemption \$ \$319,438

The cost of operation and maintenance will be reduced by the reduction of main breaks in this area.



Project: FY2013 WILDE LAKE WATER MAIN STUDY and REHABILITATION

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	835	500	1,335	0	0	0	0	0	0	0	0	0	0	1,335
CONSTRUCTION	850	2,500	3,350	2,000	0	0	0	0	2,000	0	0	0	0	5,350
ADMINISTRATION	15	15	30	10	0	0	0	0	10	0	0	0	0	40
Total Expenditures	1,700	3,015	4,715	2,010	0	0	0	0	2,010	0	0	0	0	6,725
METRO DISTRICT BOND	1,700	3,015	4,715	2,010	0	0	0	0	2,010	0	0	0	0	6,725
Total Funding	1,700	3,015	4,715	2,010	0	0	0	0	2,010	0	0	0	0	6,725

\$1,568,000 spent and encumbered through February 2018

\$1,551,032 spent and encumbered through February 2017

Project Status: 1. Piloting of new rehabilitation techniques is complete. Rehabilitation design is underway.

FY 2018 Budget	1,700	0	1,700	0	0	0	0	0	0	0	0	0		1,700
Difference 2018 / 2019	0	3,015	3,015	2,010	0	0	0	0	2,010	0	0	0	0	5,025

Project: W8324-FY2014 WATER SYSTEM LOOPING/FIRE PROTECTION UPGRADE

Description

A project for the design and construction of various water system upgrades and improvements to meet County standards for water system redundancy, pressure and flow rates requirements for fire protection.

Justification

Howard County standards require a 1,500 gallon per minute (gpm) fire flow rate with a 20 psi residual pressure for residential multi-family, commercial, industrial, educational and institutional areas. As development occurs and water use increases, certain areas within the County may require additional water supply loops to maintain the required pressure and flow rates to meet fire protection requirements. The project will provide for minor water main extensions to meet water system requirements.

Remarks

- 1. Each new project for water system upgrades required for redundancy, pressure or flow will be brought before the Public Works Board for consideration and approval.
- 2. The project was brought before the Public Works Board on December 11, 2012
- 3. Request represents the advancement of funds in the capital program.

Project Schedule

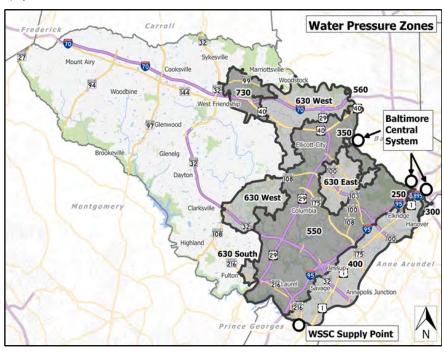
Ongoing program

FY19 - 1. Shaker Drive/Allview Loop; 2. Swan Point Loop

Operating Budget Impact

Annual Bond Redemption \$ \$190,000

The annual cost of operation and maintenance of the water mains is \$1,200.



Number: W8324

Project: FY2014 WATER SYSTEM LOOPING/FIRE PROTECTION UPGRADE

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	400	80	480	80	80	0	0	0	160	0	0	0	0	640
LAND ACQUISITION	330	65	395	65	65	0	0	0	130	0	0	0	0	525
CONSTRUCTION	1,750	350	2,100	350	350	0	0	0	700	0	0	0	0	2,800
ADMINISTRATION	20	5	25	5	5	0	0	0	10	0	0	0	0	35
Total Expenditures	2,500	500	3,000	500	500	0	0	0	1,000	0	0	0	0	4,000
METRO DISTRICT BOND	2,500	500	3,000	500	500	0	0	0	1,000	0	0	0	0	4,000
Total Funding	2,500	500	3,000	500	500	0	0	0	1,000	0	0	0	0	4,000

\$605,897 spent and encumbered through February 2018 \$251,337 spent and encumbered through February 2017

Project Status: Projects completed: FY17 and prior - 1. Charted Drive Water Main Loop; 2. Corridor Road Water Main Loop
Projects completed: FY18 - 1. Waters Edge Water Main Loop; 2. Southern District Police Headerquater Loop

FY 2018 Budget	2,500	500	3,000	500	500	0	0	0	1,000	0	0	0		4,000
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: W8325-FY2014 RECLAIMED WATER SYSTEM DEVELOPMENT

Description

Develop, design, and construct a reclaimed water system to serve various parts of the County with reclaimed water from the Little Patuxent Water Reclamation Plant, or a stand-alone system constructed under this project. This project is to complete and extend the system that was initially constructed under Capital Project S6245, with expansion to other areas of the County's Metropolitan District as customers are identified.

Justification

The first phase of the County's reclaimed water system was constructed under capital project S6245, a project that was initiated for the reduction of nitrogen in the discharge of the Little Patuxent Water Reclamation Plant's effluent by the construction of the Enhanced Nutrient Removal Facilities (ENR) and the initial construction of the Reclaimed Water System. This construction has been completed, and the Maryland Department of the Environment (MDE) has released its regulations for the use of Class IV Effluent (Reclaimed Water). The County's reclaimed water system is ready for additional features to enhance its functionality and expand to meet customer demand.

Remarks

- 1. The existing reclaimed water system consists of a pumping station located at the LPWRP, a pumping station and pipeline to Fort Meade, and a reclaimed water pipeline that extends to the property line of the Dreyer's Ice Cream facility. 2. Initial design and construction funded under this project will be to extend a second reclaimed water pipeline from the pumping station to the exisiting 3 million gallon Guilford Water Storage Tank on US Rt 1, and to upgrade the Guilford Water Storage Tank to accept reclaimed water. Additional pipelines connecting the tank and other potential users in the vicinity are also expected to be constructed as continuing phases of this project.
- 3. Additional customers may include construction of scalping plants.

Project Schedule

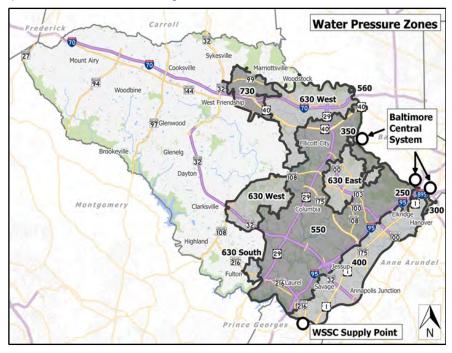
FY19 - Alignment study and land acquisition for a reclaimed water pipeline from the LPWRP to the existing Guilford Water Storage Tank.
FY20 - Design

FY20-21 - Design and construction of system extensions.

Operating Budget Impact

Annual Bond Redemption \$ \$309,653

The operating costs associated with the operation and maintenance of the Reclaimed Water System will be offset by a Reclaimed Water volumetric rate charge approved by the County Council as part of the annual User Fee charges. Revenues generated are anticipated to offset purchased water and sewage treatment cost increases.



Project: FY2014 RECLAIMED WATER SYSTEM DEVELOPMENT

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	700	0	700	0	200	200	0	0	400	0	0	0	0	1,100
CONSTRUCTION	3,750	0	3,750	0	750	750	0	0	1,500	0	0	0	0	5,250
ADMINISTRATION	123	0	123	0	23	23	0	0	46	0	0	0	0	169
Total Expenditures	4,573	0	4,573	0	973	973	0	0	1,946	0	0	0	0	6,519
METRO DISTRICT BOND	4,573	0	4,573	0	973	973	0	0	1,946	0	0	0	0	6,519
Total Funding	4,573	0	4,573	0	973	973	0	0	1,946	0	0	0	0	6,519

\$138,689 spent and encumbered through February 2018 spent and encumbered through February 2017

Project Status: 1. Reclaimed Water System Master Plan developed.

2. Study performed on scalping plant in Fulton.

3. Alignment Study & Land Acquisition Study for Reclaimed Pipeline to Existing Guilford Tank underway.

FY 2018 Budget	4,573	973	5,546	973	0	0	0	0	973	0	0	0		6,519
Difference 2018 / 2019	0	(973)	(973)	(973)	973	973	0	0	973	0	0	0	0	0

Project: W8327-FY2015 OLD LAWYER HILL ROAD WATER SUPPLY MAIN REPLACEMENT

Description

A project for the replacement of 2,300 LF of 8-inch water main in Old Lawyers Hill Road.

Justification

The existing water main was constructed in 1956 and is cast iron pipe. The water main is a supply source from the Baltimore City water system and operates between 130 and 150 psi, with pressures exceeding 200 psi at its connection to the water main in River Road. Test pits performed on the water main have shown significant corrosion. The replacement of the main is needed to ensure long term fire protection and domestic water supply for the residents along Old Lawyers Hill Road and to maintain a vital water supply source from the Baltimore City water system.

Remarks

- 1. The water mains on either end of the Old Lawyers Hill Road water main have been replaced or are in the process of being replaced.
- 2. The project was brought before the Public Works Board on January 14, 2014.
- 3. The map has been updated to reflect the revised limits of proposed work. The segment north of I895 is now included in the scope of W8300.

Project Schedule

FY19 - Design, Construction

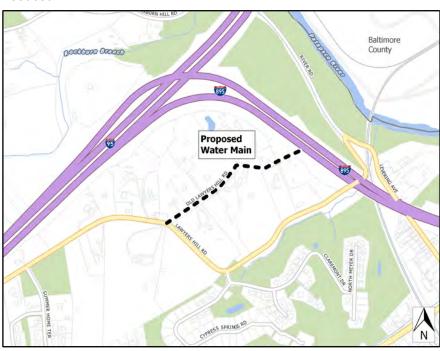
FY20 - Construction, Project complete

FY21 - Project close

Operating Budget Impact

Annual Bond Redemption \$\$50,350

The annual cost of operation and maintenance of the water main will be reduced.



FY 2018 Budget

Difference 2018 / 2019

WATER PROJECTS

Number: W8327

Project: FY2015 OLD LAWYER HILL ROAD WATER SUPPLY MAIN REPLACEMENT

1,060

1,060

In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	160	0	160	0	0	0	0	0	0	0	0	0	0	160
CONSTRUCTION	880	0	880	0	0	0	0	0	0	0	0	0	0	880
ADMINISTRATION	20	0	20	0	0	0	0	0	0	0	0	0	0	20
Total Expenditures	1,060	0	1,060	0	0	0	0	0	0	0	0	0	0	1,060
METRO DISTRICT BOND	1,060	0	1,060	0	0	0	0	0	0	0	0	0	0	1,060
Total Funding	1,060	0	1,060	0	0	0	0	0	0	0	0	0	0	1,06

1,060

Project: W8328-FY2015 630 WEST ZONE WATER PUMPING STATION

Description

A project for the design and construction of a pumping station to serve the Elevation 630 West water zone.

Justification

The Elevation 630 West water zone extends from Centennial Lane to Guilford Road and encompasses the Villages of Harper's Choice and River Hill and includes portions of Hickory Ridge and Wilde Lake. The zone is supplied primarily by one pumping station, located in the vicinity of Banneker Road in Columbia, and an elevated water storage tank located at Harper's Choice. Any failure of the Columbia Pumping Station will affect Howard County's ability to supply water to the residents and critical institutions located within the 630 West water zone, impacting schools and the Howard County General Hospital.

Remarks

1. The project was brought before the Public Works Board on January 14, 2014.

Project Schedule

FY19 - Construction

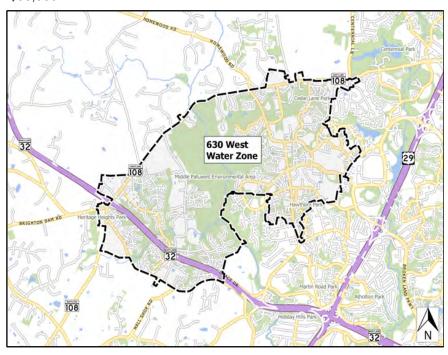
FY20 - Construction, Project complete

FY21 - Close

Operating Budget Impact

Annual Bond Redemption \$ \$475,000

The annual cost of operation and maintenance of the pumping station is \$50,000.



Number: W8328

Project: FY2015 630 WEST ZONE WATER PUMPING STATION

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,750	0	1,750	0	0	0	0	0	0	0	0	0	0	1,750
LAND ACQUISITION	325	0	325	0	0	0	0	0	0	0	0	0	0	325
CONSTRUCTION	7,900	0	7,900	0	0	0	0	0	0	0	0	0	0	7,900
ADMINISTRATION	25	0	25	0	0	0	0	0	0	0	0	0	0	25
Total Expenditures	10,000	0	10,000	0	0	0	0	0	0	0	0	0	0	10,000
METRO DISTRICT BOND	10,000	0	10,000	0	0	0	0	0	0	0	0	0	0	10,000
Total Funding	10,000	0	10,000	0	0	0	0	0	0	0	0	0	0	10,000
\$1,148,300 spent and encumbered \$554,988 spent and encumbered t Project Status : Project is under co	hrough Februanstruction.													
FY 2018 Budget	10,000	0	10,000	0	0	0	0	0	0	0	0	0		10,000
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: W8329-FY2015 PCCP STUDY AND FAILURE MITIGATION Number: W8329

Description

A project to investigate and determine the condition of all prestressed concrete cylinder pipe (PCCP) transmission mains in the water distribution system. The project will include: internal and external inspections; design and construction of inspection facilitating structures; purchasing of repair pipe, parts, and equipment for inspection; and participation in acoustical monitoring and internal inspection of PCCP to maximize the service life.

Justification

Howard County has experienced multiple failures of Prestressed Concrete Cylinder Pipe (PCCP) transmission mains. This project will allow the County to inspect the condition and structural integrity of the PCCP water mains and replace defective portions of the mains before failures occur.

Remarks

- 1. Project is an ongoing program to inspect PCCP.
- 2. This project replaced capital project W8207, FY1995 PCCP Study and Failure Mitigation, to allow the capitalization of funds spent under W8207. W8207 was closed after FY2015.
- 3. Request represents the advancement of funds in the capital project.

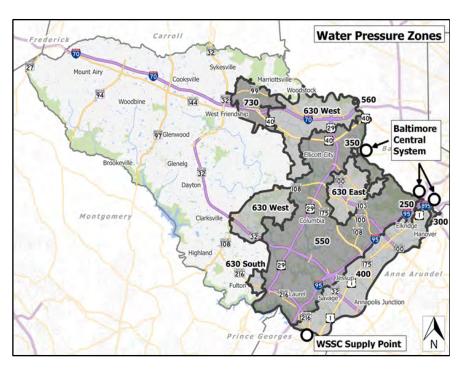
Project Schedule

Ongoing program

- FY19
 1. Scheduled and routine PCCP monitoring and inspection
- 2. Evaluate non-replaced segments of the Southwest Transmission Main

Operating Budget Impact

No impact on operating budget.



Number: W8329

Project: FY2015 PCCP STUDY AND FAILURE MITIGATION

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	350	50	400	50	50	50	50	0	200	0	0	0	0	600
CONSTRUCTION	2,125	375	2,500	375	375	375	375	0	1,500	0	0	0	0	4,000
ADMINISTRATION	95	15	110	15	15	15	15	0	60	0	0	0	0	170
EQUIPMENT & FURNISHINGS	430	60	490	60	60	60	60	0	240	0	0	0	0	730
Total Expenditures	3,000	500	3,500	500	500	500	500	0	2,000	0	0	0	0	5,500
UTILITY CASH	3,000	500	3,500	500	500	500	500	0	2,000	0	0	0	0	5,500
Total Funding	3,000	500	3,500	500	500	500	500	0	2,000	0	0	0	0	5,500

\$631,933 spent and encumbered through February 2018 \$530,707 spent and encumbered through February 2017

Project Status: Projects completed: FY18 and prior - 1. Inspection and monitoring of prestressed concrete cylinder pipe.

2. Replacement of pipe section 26-5 on the SWTM

FY 2018 Budget	3,000	500	3,500	500	500	500	0	0	1,500	0	0	0		5,000
Difference 2018 / 2019	0	0	0	0	0	0	500	0	500	0	0	0	0	500

Project: W8330-FY2017 OLD COLUMBIA PIKE WATER MAIN REHABILITATION/REPLACEMENT

Description

A project to rehabilitate/replace 9,850 LF of 4-inch, 6-inch and 8-inch diameter water mains in Old Columbia Pike between Montgomery Road (MD Route 103) and Main Street (MD Route 144). Scope includes the study, design and construction necessary to relocate and/or replace defective or inadequate portions of pipeline.

Justification

Numerous failures on the water mains installed within the project area have occurred over the past several years. Project area mains are in close proximity to large diameter gas transmission mains which are protected with impressed currents, are located in areas known to have corrosive soils and stray current impacts; each of which are conditions likely to lead to metallic pipe deterioration and/or failure.

Remarks

1. The project was brought before the Public Works Board on December 8, 2015.

Project Schedule

FY19 - Design, Construction

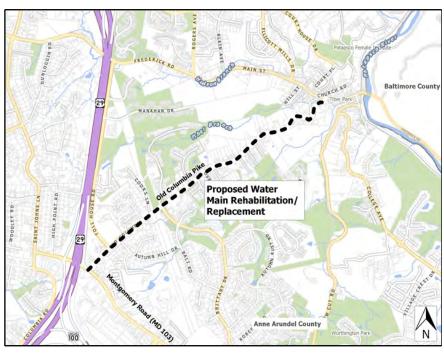
FY20 - Construction, project complete

FY21 - Project Close

Operating Budget Impact

Annual Bond Redemption \$ \$190,713

The cost of operation and maintenance will be reduced by the reduction of main breaks in this area.



Fiscal 2019 Capital Budget

Difference 2018 / 2019

WATER PROJECTS

Number: W8330

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Project: FY2017 OLD COLUMBIA PIKE WATER MAIN REHABILITATION/REPLACEMENT

0

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(In Thousands)					Five	e Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	500	0	500	0	0	0	0	0	0	0	0	0	0	500
CONSTRUCTION	3,500	0	3,500	0	0	0	0	0	0	0	0	0	0	3,500
ADMINISTRATION	15	0	15	0	0	0	0	0	0	0	0	0	0	15
Total Expenditures	4,015	0	4,015	0	0	0	0	0	0	0	0	0	0	4,015
METRO DISTRICT BOND	4,015	0	4,015	0	0	0	0	0	0	0	0	0	0	4,015
Total Funding	4,015	0	4,015	0	0	0	0	0	0	0	0	0	0	4,015
\$0 spent and encumbered through spent and encumbered through F Project Status : Project is under deal	ebruary 2017	8								-				
FY 2018 Budget	4,015	0	4,015	0	0	0	0	0	0	0	0	0)	4,015

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Project: W8331-FY2017 TWIN RIVERS ROAD WATER MAIN REPLACEMENT

Description

A project to replace 6,000 LF of 12-inch diameter water main within Twins Rivers Road; between Governor Warfield Parkway and Harpers Farm Road. Scope includes the design and construction necessary to replace the deteriorating water main.

Justification

Under W8321, a condition assessment was performed on water mains within the Village of Wilde Lake. The results of which determined that there were areas of stray currents as well as corrosive soils in the vicinity; each of which are conditions likely to lead to metallic pipe deterioration and/or failure. Collected data indicates that the Wilde Lake community has experienced a high rate of water mains breaks (35 over the past 15 years). The study determined that the Twin Rivers Road 12-inch diameter water main segment was a priority for replacement.

Remarks

1. The project was brought before the Public Works Board on December 8, 2015.

Project Schedule

FY19 - Design, construction

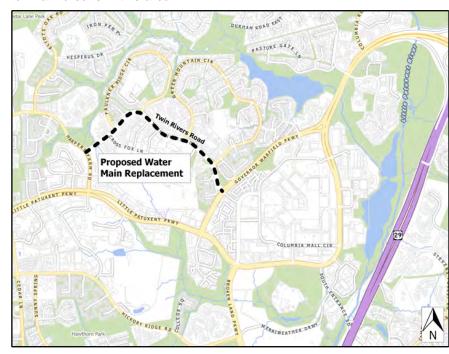
FY20 - Construction, project complete

FY21 - Project Close

Operating Budget Impact

Annual Bond Redemption \$ \$121,838

The cost of operation and maintenance will be reduced by the reduction of main breaks in this area.



Number: W8331

Project: FY2017 TWIN RIVERS ROAD WATER MAIN REPLACEMENT

In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
ppropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	500	0	500	0	0	0	0	0	0	0	0	0	0	500
CONSTRUCTION	2,050	0	2,050	0	0	0	0	0	0	0	0	0	0	2,050
ADMINISTRATION	15	0	15	0	0	0	0	0	0	0	0	0	0	15
Total Expenditures	2,565	0	2,565	0	0	0	0	0	0	0	0	0	0	2,565
METRO DISTRICT BOND	2,565	0	2,565	0	0	0	0	0	0	0	0	0	0	2,565
Total Funding	2,565	0	2,565	0	0	0	0	0	0	0	0	0	0	2,565

Project Status: Project is under design.

FY 2018 Budget	2,565	0	2,565	0	0	0	0	0	0	0	0	0		2,565
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: W8332-FY2018 HERITAGE HEIGHTS WATER AND SEWER EXTENSIONS

Description

A project for the design and construction of 700 LF of 8-inch water main within Thompson Drive, 700 LF of 8-inch sewer main within Thompson Drive and 700 LF of 8-inch sewer main within Tulane Road in the Heritage Heights community.

Justification

An extension of water and sewer service was initially requested by two (2) property owners located on Thompson Drive. After receipt of this initial request notifications were distributed to each owner along Thompson Drive and Tulane Road seeking their input and interest in having the water and sewer system completed (in full) therein. The returned responses indicated support for this capital project to complete water and sewer service along Thompson Drive and Tulane Road.

Remarks

1. The project was brought before the Public Works Board on December 13, 2016.

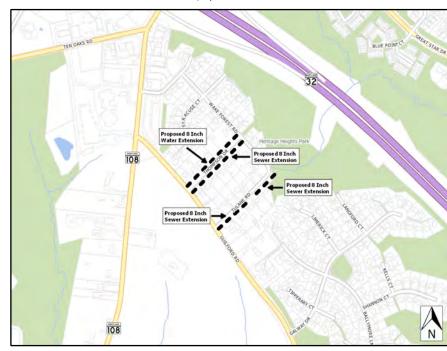
Project Schedule

FY19 - Construction; Project complete FY20 - Project close

Operating Budget Impact

Annual Bond Redemption \$ \$42,750

The annual cost of operation and maintenance of the sewer main is estimated at \$1,400. The annual cost of operation and maintenance of the water main is estimated at \$1,050.



Difference 2018 / 2019

WATER PROJECTS

Number: W8332

0

0

Project: FY2018 HERITAGE HEIGHTS WATER AND SEWER EXTENSIONS

0

0

0

0

(In Thousands)					Five	Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	225	0	225	0	0	0	0	0	0	0	0	0	0	225
CONSTRUCTION	670	0	670	0	0	0	0	0	0	0	0	0	0	670
ADMINISTRATION	5	0	5	0	0	0	0	0	0	0	0	0	0	5
Total Expenditures	900	0	900	0	0	0	0	0	0	0	0	0	0	900
METRO DISTRICT BOND	900	0	900	0	0	0	0	0	0	0	0	0	0	900
Total Funding	900	0	900	0	0	0	0	0	0	0	0	0	0	900
\$91,006 spent and encumbered th spent and encumbered through F Project Status : Project is under de	ebruary 2017	y 2018												
FY 2018 Budget	900	0	900	0	0	0	0	0	0	0	0	0		900

0

0

0

0

Fiscal 2019 Capital Budget

Project: W8600-UTILITY SYSTEMIC ADDITIONS / IMPROVEMENTS

WATER PROJECTS

Number: W8600

Description

A project for the design and construction of various additions and improvements to the water and sewer system or its associated infrastructure.

Justification

Water and Sewer, or related system components, deteriorate or become outdated with use and time requiring major improvements or correction beyond routine maintenance.

Remarks

- 1. The County's operations require modern infrastructure to provide and sustain the level of service to meet the needs of the citizens of the Metropolitan District.
- 2. This project may be implemented in conjunction with other capital projects.
- 3. GRANT represents anticipated FEMA funding for Ellicott City.

Project Schedule

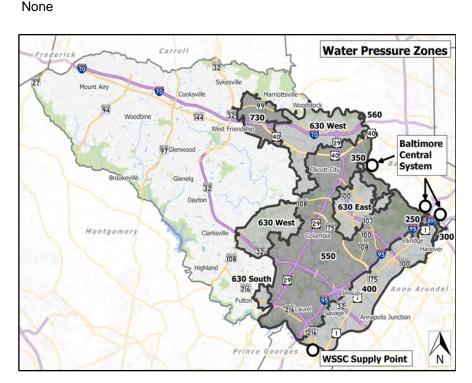
Ongoing program

FY19 -

- 1. Decommissioning of the North Laurel Waste Water Pumping Station
- 2. Decommissioning of replaced sections of the SW Transmission Main FY20 -
- 1. Decommissioning of the Whiskey Bottom Water Pump Station

Operating Budget Impact

Annual Bond Redemption \$ \$380,000



Project: UTILITY SYSTEMIC ADDITIONS / IMPROVEMENTS

(In Thousands)					Five	e Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,215	0	1,215	0	0	0	0	0	0	0	0	0	0	1,215
CONSTRUCTION	9,200	0	9,200	0	0	0	0	0	0	0	0	0	0	9,200
EQUIPMENT & FURNISHINGS	2,500	0	2,500	0	0	0	0	0	0	0	0	0	0	2,500
Total Expenditures	12,915	0	12,915	0	0	0	0	0	0	0	0	0	0	12,915
UTILITY CASH	4,000	0	4,000	0	0	0	0	0	0	0	0	0	0	4,000
GRANTS	915	0	915	0	0	0	0	0	0	0	0	0	0	915
METRO DISTRICT BOND	8,000	0	8,000	0	0	0	0	0	0	0	0	0	0	8,000
Total Funding	12,915	0	12,915	0	0	0	0	0	0	0	0	0	0	12,915

\$9,680,778 spent and encumbered through February 2018 \$9,021,896 spent and encumbered through February 2017

Project Status: Projects completed: FY17 and prior -

- 1. Elevation 400 Water Zone Optimization Study
- 2. Utility security assessment
- 3. Old Landing Road Pumping Station replacement pumps
- 4. Portable emergency pump
- 5. Emergency generator sets at the following sewage pumping stations Pine Valley, Meadowridge Road, Mount Hebron and Patapsco
- 6. Dorsey Run Sewage Pumping Station replacement pumps
- 7. Safety and fall protection at various elevated water tanks
- 8. Electronic archiving of as-built water and sewer plans
- 9. Decommissioning of Nottingham Way Pumping Station
- 10. GIS and Utility Management Support Services
- 11. Ellicott City July 2016 Storm related repairs

Projects completed FY18: - 1. Tiber Alley Water and Sewer; 2. Partidge Court Sewer

FY 2018 Budget	12,915	0	12,915	0	0	0	0	0	0	0	0	0		12,915
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: W8601-FY2016 ACQUISITION CONTINGENCY FUND Number: W8601

Description

Project funding will be used to resolve easement and rights-of-way issues on water and sewer projects which have been constructed or special quick response projects of a capital nature requiring title research, appraisals and acquisition.

Justification

This project is provided as a contingency fund for plats, legal fees, title research, appraisal and acquisition on projects that do not have monies funded for this type of work.

Remarks

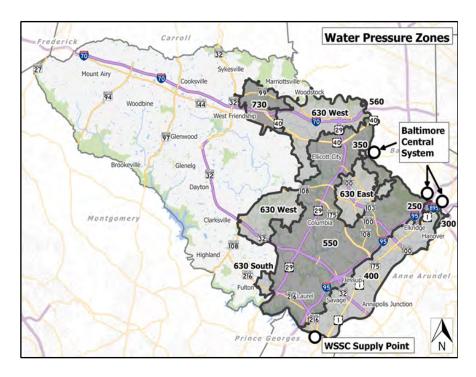
- 1. Land acquisition as required.
- 2. W8601 replaced capital project W8146, Acquisition Contingency Fund, to allow the capitalization of funds spent under W8146.

Project Schedule

Ongoing program

Operating Budget Impact

None



Project: FY2016 ACQUISITION CONTINGENCY FUND Number: W8601

(In Thousands)					Fiv	e Year Ca	pital Pro	gram				Master I	Plan	
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	300	0	300	100	0	100	0	0	200	0	0	0	0	500
LAND ACQUISITION	495	0	495	100	0	100	0	0	200	0	0	0	0	695
ADMINISTRATION	10	0	10	5	0	5	0	0	10	0	0	0	0	20
Total Expenditures	805	0	805	205	0	205	0	0	410	0	0	0	0	1,215
UTILITY CASH	705	0	705	155	0	155	0	0	310	0	0	0	0	1,015
IN-AID of CONSTRUCT UTILITIES	100	0	100	50	0	50	0	0	100	0	0	0	0	200
Total Funding	805	0	805	205	0	205	0	0	410	0	0	0	0	1,215

\$4,014 spent and encumbered through February 2018

\$3,107 spent and encumbered through February 2017
Project Status: Projects completed: FY17 and prior - Old Frederick Road Water Easement
Projects completed: FY18 - Hunting Lane Sewer Easement

FY 2018 Budget	805	0	805	205	0	205	0	0	410	0	0	0		1,215
Difference 2018 / 2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: W8602-FY2016 SLEEVES RELOCATIONS AND APPURTENANCES

Description

A project for funding design and construction of sewer and water lines in conjunction with Maryland State Highway Administration (SHA) and Howard County projects prior to construction. This funding will be used to relocate the existing sewer and water mains in the SHA's rights-of-way as a result of road construction, or construct lines prior to capital project initiation in the Howard County construction program. The project will also provide funding for the addition of valves and fire hydrants on the existing system, inspection testing, supplies, and equipment for the implementation of the existing system.

Justification

These sleeves, mains, relocations, and appurtenances are required in conjunction with future Howard County and SHA projects. This early construction will reduce construction expenditures in the future.

Remarks

1. W8602 replaced capital project W8248, FY2002 Sleeves Relocations & Appurtenances, to allow the capitalization of funds spent under W8248.

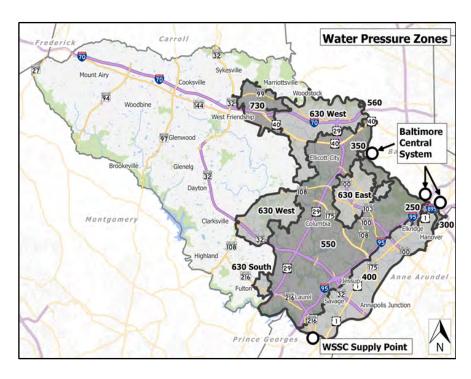
Project Schedule

Ongoing program FY19 -

- 1. Patapsco Female Institute sewer Extension
- 2. SHA Kit Kat Road Improvements

Operating Budget Impact

Annual Bond Redemption \$ \$144,875 None.



Number: W8602

Project: FY2016 SLEEVES RELOCATIONS AND APPURTENANCES

n Thousands)					Five	Year Ca	pital Prog	gram				Master F	Plan	
ppropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project
PLANS & ENGINEERING	1,000	0	1,000	500	500	0	0	0	1,000	0	0	0	0	2,000
CONSTRUCTION	3,000	0	3,000	500	500	0	0	0	1,000	0	0	0	0	4,000
ADMINISTRATION	50	0	50	0	0	0	0	0	0	0	0	0	0	50
Total Expenditures	4,050	0	4,050	1,000	1,000	0	0	0	2,000	0	0	0	0	6,050
UTILITY CASH	2,000	0	2,000	0	0	0	0	0	0	0	0	0	0	2,000
IN-AID of CONSTRUCT UTILITIES	0	0	0	500	500	0	0	0	1,000	0	0	0	0	1,000
METRO DISTRICT BOND	2,050	0	2,050	500	500	0	0	0	1,000	0	0	0	0	3,050
Total Funding	4,050	0	4,050	1,000	1,000	0	0	0	2,000	0	0	0	0	6,050

Project Status: N/A

FY 2018 Budget	4,050	1,000	5,050	1,000	0	0	0	0	1,000	0	0	0		6,050
Difference 2018 / 2019	0	(1,000)	(1,000)	0	1,000	0	0	0	1,000	0	0	0	0	0

Fiscal 2019 Capital Budget

Project: W8698-ROUTINE WATER EXTENSION PROGRAM

Number: W8698

WATER PROJECTS

Description

A project to design and construct routine water main extensions in the Metropolitan District requested by landowners.

- 1. To serve parcels with existing dwellings or an existing dwelling in recorded residential subdivisions where water mains have not been constructed.
- 2. To serve existing dwellings or businesses on failing private systems as identified by the County Health Department.
- 3. The routine extensions must also meet the following criteria: a. A written request has been made by a property owner who is without a water main fronting their property. b. Property to be served must abut a County or State road. c. The extension is less than 1,000 feet. d. The extension must be a continuation of a water main currently in service in the same pressure zone. e. Acquisition of utility easements are not required. f. Capacity is available per section 18.122B of the County Code. g. The extension is supported by at least 50% of the abutting property owners.

Justification

This project will provide service in a shorter time frame for small extensions.

Remarks

1. See capital project S6698 for Routine Sewer Extensions.

Project Schedule

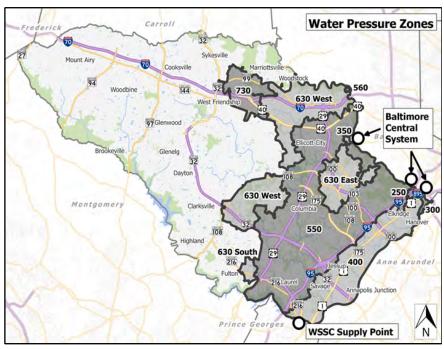
Ongoing program

Program eligible Metropolitan District water extension request

Operating Budget Impact

Annual Bond Redemption \$ \$467,400

\$1.50 per foot per year represents the estimated cost of maintenance of water mains (small diameter), valves and easement over the utility.



Number: W8698

Project: ROUTINE WATER EXTENSION PROGRAM

(In Thousands)		Five Year Capital Program									Master Plan					
Appropriation Object Class	Prior Appr.	FY2019 Budget	Appr. Total	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024	Sub Total	Fiscal 2025	Fiscal 2026	Fiscal 2027	Fiscal 2028	Total Project		
PLANS & ENGINEERING	767	0	767	100	100	100	100	100	500	100	100	100	100	1,667		
CONSTRUCTION	3,409	0	3,409	500	500	500	500	500	2,500	500	500	500	500	7,909		
ADMINISTRATION	99	0	99	25	25	25	25	25	125	10	10	10	10	264		
Total Expenditures	4,275	0	4,275	625	625	625	625	625	3,125	610	610	610	610	9,840		
METRO DISTRICT BOND	4,275	0	4,275	625	625	625	625	625	3,125	610	610	610	610	9,840		
Total Funding	4,275	0	4,275	625	625	625	625	625	3,125	610	610	610	610	9,840		

\$2,539,140 spent and encumbered through February 2018 \$2,722,560 spent and encumbered through February 2017

Project Status: Projects completed: FY17 and prior - 1. Meadowridge Water Main Extension; 2. O'Connor Lane Water Main Extension; 3. Trotter Road Water Main Extension; 4. Howes Lane Water Main Extension; 5. Rodona Drive Water and Sewer Extension; 6. Landing Road Water Main Extension; 7. Hill Street Water Main Extension; 8. US40 Water Main Extension; 9. Mission Road Water Main Extension; 10. Talbots Landing Water and Sewer Extension; 11. Trotter Road Water and Sewer Extension Projects completed: FY18 - N/A

FY 2018 Budget	4,275	625	4,900	625	625	625	625	0	2,500	0	0	0		7,400
Difference 2018 / 2019	0	(625)	(625)	0	0	0	0	625	625	610	610	610	610	2,440