Howard County Maryland

Approved Capital Budget Fiscal Year 2017



Allan H. Kittleman, County Executive



TABLE OF CONTENTS

GUIDE:

How to read the Capital Budget Budget symbols for fund Types

SUMMARIES:

Sources of Funds, Capital Improvement Program, and Extended County Map of Council Approved FY17 funded projects

Bridge Improvement Program	В	Library Projects	L
General County Projects	С	Community College Projects	М
Storm Drainage Projects	D	Recreation & Parks	N
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 = Master Lease

Master 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 2017 Budget	TOTAL Appropriation	5Yr Capital Improvement Program	Extended Program Total	TOTAL PROJECT
EDUCATION	791,188	100,112	891,300	617,120	632,026	2,140,446
GENERAL COUNTY PROGRAM	572,122	114,713	686,835	361,428	27,533	1,075,796
OTHER PROGRAMS	176,531	0	176,531	0	0	176,531
RECREATION PARKS	185,775	10,819	196,594	53,200	39,750	289,544
TRANSPORTATION	390,434	45,936	436,370	344,510	46,860	827,740
WATER and SEWER	686,942	44,597	731,539	255,356	0	986,895
	2,802,992	316,177	3,119,169	1,631,614	746,169	5,496,952
Revenues						
BONDS	883,765	93,400	977,165	1,015,125	641,957	2,634,247
COLLEGE REVENUE BACKED BOND	7,717	0	7,717	0	0	7,717
DEVELOPER CONTRIBUTION	37,558	3,694	41,252	14,360	0	55,612
EDUCATION EXCISE BONDS	40,923	2,000	42,923	10,000	0	52,923
EXCISE TAX	19,027	-505	18,522	0	0	18,522
EXCISE TAX BACKED BONDS	147,717	10,260	157,977	0	0	157,977
GRANTS	223,652	14,974	238,626	76,053	46,250	360,929
IN-AID of CONSTRUCT UTILITIES	25,464	5,805	31,269	16,355	0	47,624
MASTER LEASE	15,000	11,400	26,400	15,000	0	41,400
METRO DISTRICT BOND	479,460	38,943	518,403	120,621	0	639,024
OTHER SOURCES	269,687	1,974	271,661	21,839	100	293,600
PAY AS YOU GO	97,321	6,714	104,035	30,218	21,562	155,815
STATE AID for SCHOOLS	184,302	33,256	217,558	66,188	0	283,746
STORM DRAINAGE FUND	2,315	100	2,415	325	0	2,740
STORWATER UTILTY FUNDING	22,075	6,717	28,792	34,400	0	63,192
TIF BONDS	67,000	70,000	137,000	40,000	0	177,000
TRANSFER TAX	119,826	10,500	130,326	54,500	36,300	221,126
UTILITY CASH	136,247	3,745	139,992	116,630	0	256,622
WATER QUALITY State Bond Loan	23,936	3,200	27,136	0	0	27,136
	2,802,992	316,177	3,119,169	1,631,614	746,169	5,496,952

Howard County, MD

Council Approved 2017 Capital Budget by Source of Funds

(In Thousands of \$)

Program Title	Current	Pay		Ed Excise		Storm Drain	GO	Dev	0.11		Trans	Utility	Water Quality	Metro	Storm water		TIF	Mast.
	FY 2,234	Go 94	Bonds 0	Bonds 0	PSIAC -	Fund	Bonds 1,550	Contrib.	Other	Grants 590	Tax	Fund	Bonds	Bonds	Utility	IAC	Bonds	Lease
Bridge Improvements	2,234	94	U	U	-	-	1,550	-	-	590	-	-	-	-	-	-	-	-
Storm Drainage	21,122	-	0	0	-	100	8,855	-	-	1,450	-	-	3,200	-	7,517	-	-	-
Road Resurfacing	5,000	5,000	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Road Construction	13,920	50	10,260	0	-	-	1,890	2,100	-	125	-	-	-	-	-	-	-	-
Sidewalk/Curb Projects	1,750	-	0	0	-	-	1,556	130	-	64	-	-	-	-	-	-	-	-
Traffic Improvements	1,910	225	0	0	-	-	755	810	20	100	-	-	-	-	-	-	-	-
General County	99,682	639	0	0	-	-	16,418	-	(1,896)	(1,079)	-	-	-	5,000	(800)	-	70,000	11,400
Fire	10,070	-	0	0	-	-	5,770	-	3,300	-	1,000	-	-	-	-	-	-	-
Library	3,961	-	0	0	-	-	3,836	-	-	125	-	-	-	-	-	-	-	-
Police	1,000	-	0	0	-	-	1,000	-	-	-	-	-	-	-	-	-	-	-
Recreation & Parks	10,819	706	0	0	-	-	4,028	-	300	3,285	2,500	-	-	-	-	-	-	-
Sewer	34,789	-	0	0	-	-	200	504	250	-	-	2,225	-	30,198	-	1,412	-	-
Water	9,808	-	0	0	-	-	-	150	-	-	-	1,520	-	3,745	-	4,393	-	-
Board of Education	77,256	-	0	2000	33,256	-	35,000	-	-	-	7,000	-	-	-	-	-	-	-
Community College	22,856	-	0	0	-	-	12,542	-	-	10,314	-	-	-	-	-	-	-	-
Total Capital	316,177	6,714	10,260	2000	33,256	100	93,400	3,694	1,974	14,974	10,500	3,745	3,200	38,943	6,717	5,805	70,000	11,400

June 01, 2016 Howard County, MD Version : Council Approved

Howard County, MD

Council Approved 2017 Year Capital Improvement Program Summary

(In Thousands of \$)

Program Title	Prior Appropriation	Fiscal 2017 Budget	Total Appropriation	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Total
Bridge Improvements	17,349	2,234	19,583	1,450	1,350	1,400	300	300	24,383
Storm Drainage	88,572	21,122	109,694	39,795	36,320	36,350	23,800	17,300	263,259
Road Resurfacing	40,885	5,000	45,885	3,000	3,000	3,330	3,450	3,330	61,995
Road Construction	211,615	13,920	225,535	46,330	58,230	13,220	1,925	3,250	348,490
Sidewalk/Curb Projects	14,605	1,750	16,355	8,070	7,345	8,270	6,180	5,430	51,650
Traffic Improvements	17,408	1,910	19,318	3,560	2,925	3,325	1,775	200	31,103
General County	448,229	99,682	547,911	115,172	55,598	46,483	27,928	26,630	819,722
Fire	42,895	10,070	52,965	2,570	770	770	770	770	58,615
Library	74,398	3,961	78,359	3,907	5,060	32,000	2,500	-	121,826
Police	6,600	1,000	7,600	17,530	3,055	13,670	1,675	4,570	48,100
Recreation & Parks	185,775	10,819	196,594	8,700	14,800	14,700	7,800	7,200	249,794
Agricultural Preservation	170,608	-	170,608	-	-	-	-	-	170,608
Community Renewal	5,923	-	5,923	-	-	-	-	-	5,923
Sewer	409,343	34,789	444,132	34,715	17,650	12,135	9,795	5,795	524,222
Water	277,599	9,808	287,407	73,021	31,221	24,243	23,538	23,243	462,673
Board of Education	653,098	77,256	730,354	96,886	89,106	113,379	109,298	121,256	1,260,279
Community College	138,090	22,856	160,946	25,579	20,925	4,626	27,307	8,758	248,141
Total Capital	2,802,992	316,177	3,119,169	480,285	347,355	327,901	248,041	228,032	4,750,783

Howard County, MD

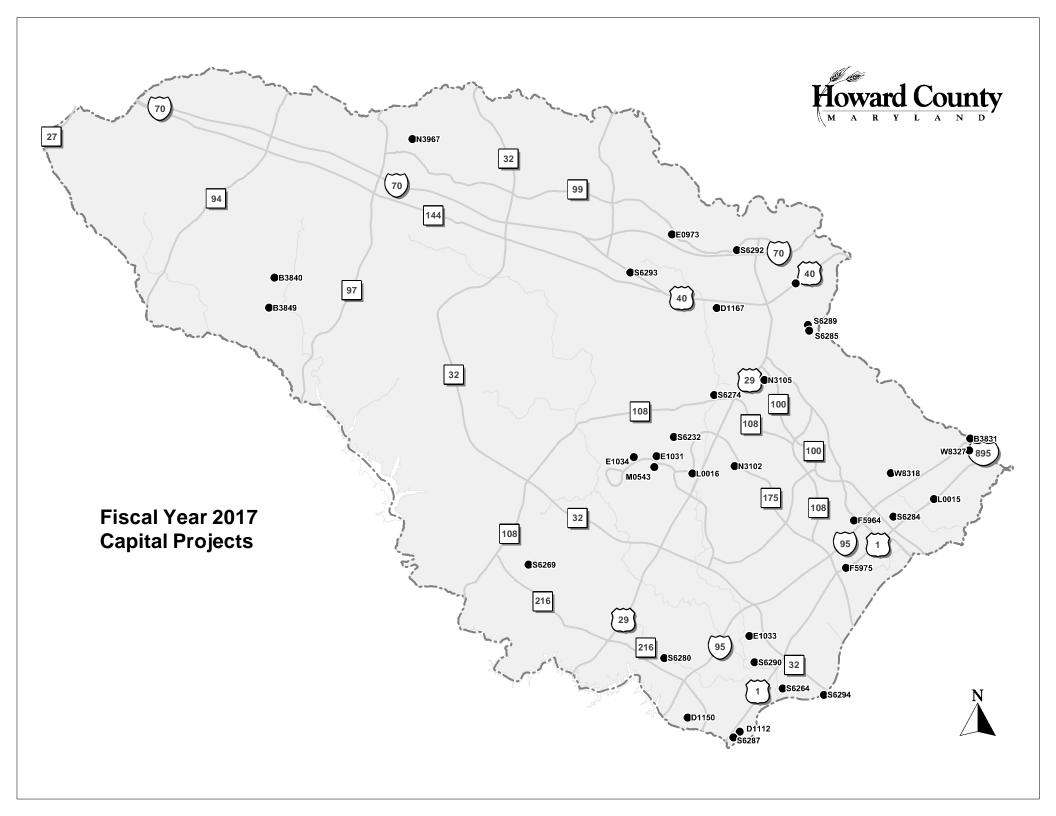
Council Approved Capital Budget Extended Summary For Fiscal Year 2017

(In Thousands of \$)

Program Title	Appropriation Total	5 Yr Capital Program	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Extended Capital Program
Bridge Improvements	19,583	4,800	-	-	-	-	24,383
Storm Drainage	109,694	153,565	3,100	4,300	3,100	2,500	276,259
Road Resurfacing	45,885	16,110	3,250	3,530	3,250	3,280	75,305
Road Construction	225,535	122,955	250	-	-	-	348,740
Sidewalk/Curb Projects	16,355	35,295	5,000	5,000	5,000	5,000	71,650
Traffic Improvements	19,318	11,785	100	100	100	-	31,403
General County	547,911	271,811	5,252	4,459	12,168	5,154	846,755
Fire	52,965	5,650	-	-	-	-	58,615
Library	78,359	43,467	-	-	-	-	121,826
Police	7,600	40,500	500	-	-	-	48,600
Recreation & Parks	196,594	53,200	6,800	4,000	18,350	10,600	289,544
Agricultural Preservation	170,608	-	-	-	-	-	170,608
Community Renewal	5,923	-	-	-	-	-	5,923
Sewer	444,132	80,090	-	-	-	-	524,222
Water	287,407	175,266	-	-	-	-	462,673
Board of Education	730,354	529,925	148,129	118,921	128,472	136,665	1,792,466
Community College	160,946	87,195	21,909	21,810	9,560	46,560	347,980
Total Capital	3,119,169	1,631,614	194,290	162,120	180,000	209,759	5,496,952

Council Approved 2017 5 Year Capital Budget Revenue Summary

Source	Prior Approp	Current FY	2018	2019	2020	2021	2021	Total
BONDS	883,765	93,400	237,081	248,463	229,961	152,834	146,786	1,992,290
COLLEGE REVENUE BACKED BOND	7,717	0	0	0	0	0	0	7,717
DEVELOPER CONTRIBUTION	37,558	3,694	4,835	575	4,550	400	4,000	55,612
EDUCATION EXCISE BONDS	40,923	2,000	2,000	2,000	2,000	2,000	2,000	52,923
EXCISE TAX	19,027	-505	0	0	0	0	0	18,522
EXCISE TAX BACKED BONDS	147,717	10,260	0	0	0	0	0	157,977
GRANTS	223,652	14,974	22,942	11,011	13,050	14,150	14,900	314,679
IN-AID of CONSTRUCT UTILITIES	25,464	5,805	7,183	4,893	1,443	1,393	1,443	47,624
MASTER LEASE	15,000	11,400	14,000	250	250	250	250	41,400
METRO DISTRICT BOND	479,460	38,943	74,603	20,943	10,910	10,080	4,085	639,024
OTHER SOURCES	269,687	1,974	8,023	4,175	5,044	4,322	275	293,500
PAY AS YOU GO	97,321	6,714	5,741	5,475	6,321	6,875	5,806	134,253
STATE AID for SCHOOLS	184,302	33,256	19,127	8,360	13,147	15,527	10,027	283,746
STORM DRAINAGE FUND	2,315	100	50	225	50	0	0	2,740
STORMWATER UTILTY FUNDING	22,075	6,717	8,600	6,600	6,600	7,600	5,000	63,192
TIF BONDS	67,000	70,000	40,000	0	0	0	0	177,000
TRANSFER TAX	119,826	10,500	10,900	11,100	11,300	10,500	10,700	184,826
UTILITY CASH	136,247	3,745	25,200	23,285	23,275	22,110	22,760	256,622
WATER QUALITY State Bond Loan	23,936	3,200	0	0	0	0	0	27,136
Total	2,802,992	316,177	480,285	347,355	327,901	248,041	228,032	4,750,783



Fiscal Year 2017 Budget Summary

	Columbia Area FY 2017 Capital Projects Map
Project#	<u>Name</u>
C0351	FY2017 HARRIET TUBMAN REMEDIATION
E1031	FY2014 WILDE LAKE MIDDLE SCHOOL REPLACEMENT
E1034	FY2015 SWANSFIELD ELEM SCHOOL RENOVATION/ADDITION
J4167	FY2010 SNOWDEN RIVER/BROKEN LAND INTERSECT
L0016	FY2012 RENOVATE CENTRAL & EAST COLUMBIA BRANCHES
M0543	FY2012 SCIENCE ENGINEERING and TECHNOLOGY BLDG
M0550	FY2017 SYSTEMIC RENOVATIONS
N3102	FY2000 BLANDAIR REGIONAL PARK
N3963	FY2009 PATHWAY and TRAIL REHAB and EXPANSION
N3965	FY2007 MIDDLE PATUXENT IMPROVEMENTS
P4928	FY2015 NEW/THIRD POLICE STATION
S6232	FY2001 SEWER CORROSION CORRECTION PROGRAM
S6274	FY2015 UPPER LITTLE PATUXENT PARALLEL SEWER
T7108	FY2016 CLARKSVILLE-RIVER HILL STREETSCAPE IMPROVEMENTS
W8331	FY2017 TWIN RIVERS ROAD WATER MAIN REPLACEMENT
	Elkridge Area FY 2017 Capital Projects Map
Project#	<u>Name</u>
B3831	FY2007 RIVER ROAD BRIDGE-ROCKBURN (H0-6)
E1028	FY2016 NEW ELEMENTARY SCHOOL #42
F5964	FY2012 FIRESTATION ONE RELOCATION
J4110	FY1991 DORSEY RUN ROAD - SOUTH LINK
J4244	FY2015 BUSINESS PARKWAY-BLUESTREAM DRIVE EMERGENCY ACCESS
L0015	FY2008 ELKRIDGE BRANCH/SENIOR CENTER
N3105	FY1995 MEADOWBROOK PARK
S6282	FY2013 BONNIE BRANCH/ROCKBURN INTERCEPTOR IMPROVEMENTS

Fiscal Year 2017 Budget Summary

	Elkridge Area FY 2017 Capital Projects Map
S6284	FY2013 DEEP RUN/SHALLOW RUN INTERCEPTOR IMPROVEMENTS
S6289	FY2014 PARK AVENUE SEWER EXTENSION
W8327	FY2015 OLD LAWYER HILL ROAD WATER SUPPLY MAIN REPLACEMENT
	Ellicott City Area FY 2017 Capital Projects Map
Project#	<u>Name</u>
C0264	FY1998 SYSTEMIC FACILITY IMPROVEMENTS
C0337	FY2014 ELLICOTT CITY IMPROVEMENTS and ENHANCEMENTS
D1112	FY1997 DAVIS AVE AREA DRAINAGE IMPROVEMENTS
D1167	FY2015 GLENBROOK DRAINAGE IMPROVEMENTS
E0973	FY2003 WAVERLY ELEM RENOVATION/PHASE II ADDITION
J4155	FY2012 MARRIOTTSVILLE RD SAFETY IMPROVEMENTS
S6283	FY2013 TIBER/SUCKER BRANCH INTERCEPTOR IMPROVEMENTS
S6285	FY2017 MD108 PUMP STATION OUTFALL IMPROVEMENTS
S6292	FY2015 OLD FREDERICK ROAD SEWER
S6293	FY2015 TURF VALLEY ROAD SEWER
W8318	FY2013 MONTGOMERY ROAD WATER MAIN REHABILITATION
W8330	FY2017 OLD COLUMBIA PIKE WATER MAIN REHABILITATION/REPLACEMENT
	North Laurel Area FY 2017 Capital Projects Map
Project#	<u>Name</u>
D1150	FY2005 HIGH RIDGE DRAINAGE
F5975	FY2010 ROUTE ONE FIRE STATION
J4229	FY2008 WHISKEY BOTTOM ROAD IMPROVEMENTS
S6280	FY2013 HAMMOND/PATUXENT INTERCEPTOR IMPROVEMENTS
S6287	FY2017 NORTH LAUREL PUMP STATION PARALLEL FORCE MAIN
	Savage Area FY 2017 Capital Projects Map
Project#	<u>Name</u>

Fiscal Year 2017 Budget Summary

	Savage Area FY 2017 Capital Projects Map
C0289	FY2002 TRANSIT OPERATION REPAIR FACILITY
C0352	FY2017 SITE ACQUISITION FOR SCHOOL SITES AND ELEVATED WATER STORAGE FACILITIES
E1033	FY2015 PATUXENT VALLEY MIDDLE SCHOOL RENOVATION
J4148	FY2000 DORSEY RUN ROAD EXTENSION
J4248	FY2017 SAVAGE AREA COMPLETE STREETS
S6264	FY2008 LPWRP CAPITAL REPAIRS
S6281	FY2013 DORSEY/GUILFORD INTERCEPTOR IMPROVEMENTS
S6290	FY2014 SAVAGE AREA SEWER STUDY and REALIGNMENT
S6294	FY2015 ANNAPOLIS JUNCTION PUMPING STATION RENOVATION
S6295	FY2016 LPWRP 8th ADDITION BIOSOLIDS PROCESSING FACILITIES
	Western County Area FY 2017 Capital Projects Map
Project#	<u>Name</u>
B3840	FY1996 DAISY ROAD BRIDGE (H0-41)
B3849	FY1996 DAISY ROAD BRIDGE (H0-38)
F5972	FY2008 RURAL FIRE PROTECTION PROGRAM
J4239	FY2014 OLD ROXBURY ROAD
N3967	FY2007 SOUTH BRANCH PARK
S6269	FY2009 ASHLEIGH KNOLLS SHARED SEWAGE DISP FAC UPGD

Howard County, MD FY2017 Council Approved Capital Budget Program: BRIDGE PROJECTS

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
B3831 FY2007 RIVER ROAD BRIDGE-ROCKBURN (H0-6)	В	1,325	100	1,425	0	0	0	0	0	1,425
A project for the design and construction of a replacement structure for the River Road bridge over Rockburn Branch.	Total	1,325	100	1,425	0	0	0	0	0	1,425
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
bridge for the Henryton Road bridge over a tributary to the Patansco River.	G	960	0	960	0	0	0	0	0	960
ratapsco River.	Total	1,715	0	1,715	0	0	0	0	0	1,715
B3838 FY2006 PINDELL SCHOOL ROAD BRIDGE (H0-106)	В	1,360	0	1,360	175	0	0	0	0	1,535
A project for the design and construction of a replacement structure for the Pindell School Road bridge over Hammond Branch.	Total	1,360	0	1,360	175	0	0	0	0	1,535
B3840 FY1996 DAISY ROAD BRIDGE (H0-41) A project for the design and construction of a replacement	В	574	300	874	0	0	0	0	0	874
bridge for the Daisy Road bridge over Cattail Creek.	G	1,030	0	1,030	0	0	0	0	0	1,030
	Total	1,604	300	1,904	0	0	0	0	0	1,904
B3849 FY1996 DAISY ROAD BRIDGE (H0-38)	В	509	300	809	0	0	0	0	0	809
A project for the design and construction of a replacement bridge and roadway tie-ins.	G	1,400	0	1,400	0	0	0	0	0	1,400
	Р	65	0	65	0	0	0	0	0	65
	Total	1,974	300	2,274	0	0	0	0	0	2,274
B3850 FY2001 STRUCTURE INSPECTION PROGRAM	В	200	0	200	0	0	0	0	0	200
A project to inspect Howard County bridges in accordance with the federally mandated National Bridge Inspection	Р	1,230	300	1,530	0	300	0	300	0	2,130
Standards.	Total	1,430	300	1,730	0	300	0	300	0	2,330
B3853 FY2000 EMERGENCY STRUCTURE	В	2,895	500	3,395	0	0	0	0	0	3,395
RECONSTRUCTION A fund for Howard County to undertake construction and	G	700	590	1,290	0	0	0	0	0	1,290
repair of bridges, culverts and retaining walls requiring prompt action.	Р	250	-206	44	0	0	0	0	0	44

June 01, 2016 Howard County, MD Version : Council Approved

Howard County, MD FY2017 Council Approved Capital Budget Program: BRIDGE PROJECTS

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
B3853 FY2000 EMERGENCY STRUCTURE RECONSTRUCTION A fund for Howard County to undertake construction and repair of bridges, culverts and retaining walls requiring prompt action.	Total	3,845	884	4,729	0	0	0	0	0	4,729
B3857 FY2001 SYSTEMIC STRUCTURE IMPROVEMENTS	В	1,480	0	1,480	100	0	100	0	0	1,680
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	1,996	0	1,996	100	0	100	0	0	2,196
B3858 FY2018 PFEFFERKORN ROAD BRIDGE (HO-31) A project for the design and construction of a bridge replacement for Pfefferkorn Road over Middle Patuxent River.	В	0	0	0	275	100	1,000	0	0	1,375
	Total	0	0	0	275	100	1,000	0	0	1,375
B3860 FY2016 CARROLL MILL ROAD BRIDGE REPLACEMENT (H0-23)	В	250	0	250	100	950	0	0	0	1,300
A project for the design and construction of a replacement structure for the Carroll Mill Road bridge over Benson Branch.	Total	250	0	250	100	950	0	0	0	1,300
B3862 FY2013 RETAINING WALLS A Countywide project for the repair, re-conditioning and	В	1,250	0	1,250	300	0	300	0	300	2,150
development of new retaining walls.	Total	1,250	0	1,250	300	0	300	0	300	2,150
B3863 FY2013 DOWNTOWN COLUMBIA-OAKLAND MILLS CONNECTION IMPROVEMENTS	В	100	350	450	500	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
ure connections over US29.	Total	600	350	950	500	0	0	0	0	1,450
BRIDGE PROJECTS Total		17,349	2,234	19,583	1,450	1,350	1,400	300	300	24,383

June 01, 2016 Howard County, MD Version : Council Approved

Howard County, MD FY2017 Council Approved Capital Budget (\$000) BRIDGE-BRIDGE PROJECTS

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	10,698	1,550	12,248
G	GRANTS	4,090	590	4,680
0	OTHER SOURCES	500	0	500
Р	PAY AS YOU GO	2,061	94	2,155
Total		17,349	2,234	19,583

2017 Council Approved 5 Year Capital Budget Project Type Summary (BRIDGE-BRIDGE PROJECTS)

Rev	renue Source	Prior Approp	Current FY	2018	2019	2020	2021	2022	5 Year Total
В	BONDS	10,698	1,550	1,450	1,050	1,400	0	300	16,448
G	GRANTS	4,090	590	0	0	0	0	0	4,680
0	OTHER SOURCES	500	0	0	0	0	0	0	500
Р	PAY AS YOU GO	2,061	94	0	300	0	300	0	2,755
Tot	al	17,349	2,234	1,450	1,350	1,400	300	300	24,383

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

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

FY17 - Begin Construction

FY18 - Construction

FY19 - Close

Operating Budget Impact

Annual Bond Redemption \$ \$64,125

Estimated annual maintenance costs upon completion: Decrease.

BRIDGE PROJECTS



Number: B3831

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

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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	800	100	900	0	0	0	0	0	0	0	0	0	0	900
ADMINISTRATION	5	0	5	0	0	0	0	0	0	0	0	0	0	5
Total Expenditures	1,325	100	1,425	0	0	0	0	0	0	0	0	0	0	1,425
BONDS	1,325	100	1,425	0	0	0	0	0	0	0	0	0	0	1,425
Total Funding	1,325	100	1,425	0	0	0	0	0	0	0	0	0	0	1,425

Project Status:

\$350,822 spent and encumbered through February 2016
FY16 - This project advanced from the design stage to land acquisition.

BRIDGE PROJECTS

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-of-way 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

FY17 - Construction.

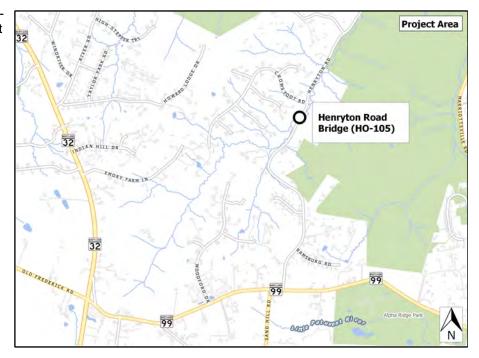
FY18 - Continue construction.

FY19 - Close.

Operating Budget Impact

Annual Bond Redemption \$ \$33,975

Estimated annual maintenance costs upon completion: Decrease.



Fiscal 2017 Capital Budget

BRIDGE PROJECTS

Number: B3835

Project: FY2006 HENRYTON ROAD BRIDGE (H0-105)

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status:

\$561,105 spent and encumbered through February 2016

FY16 - Land Acquisition completed.

This project advanced from the design and land acquisition stage to advertising for construction.

Number: B3838

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

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

This bridge is not eligible for Federal Bridge Rehabilitation/Replacement Funds.

Project Schedule

FY17 - Land acquisition.

FY18 - Construction.

FY19 - Construction.

FY20 - Close.

Operating Budget Impact

Annual Bond Redemption \$ \$69,075

Estimated annual maintenance costs upon completion: Decrease.



Fiscal 2017 Capital Budget

BRIDGE PROJECTS

Number: B3838

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

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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	975	0	975	175	0	0	0	0	175	0	0	0	0	1,150
Total Expenditures	1,360	0	1,360	175	0	0	0	0	175	0	0	0	0	1,535
BONDS	1,360	0	1,360	175	0	0	0	0	175	0	0	0	0	1,535
Total Funding	1,360	0	1,360	175	0	0	0	0	175	0	0	0	0	1,535

Project Status:

\$252,196 spent and encumbered through February 2016

FY16 - Design is complete.

This project advanced from the design stage to land acquisition.

BRIDGE PROJECTS

Project: B3840-FY1996 DAISY ROAD BRIDGE (H0-41)

Number: B3840

Description

A project for the design and construction of a replacement bridge for the Daisy Road bridge over Cattail Creek. Daisy Road is classified as a major collector in the Plan Howard 2030.

Justification

The existing bridge is 46 feet long with 23 feet of pavement in a 30-foot right-of-way and is currently posted for 23 tons. The new structure will be wider to meet AASHTO and County standards.

Remarks

- 1. GRANT represents Federal Bridge Rehabilitation/Replacement funds.
- 2. Request represents latest engineer's estimate.

Project Schedule

FY17 - Construction.

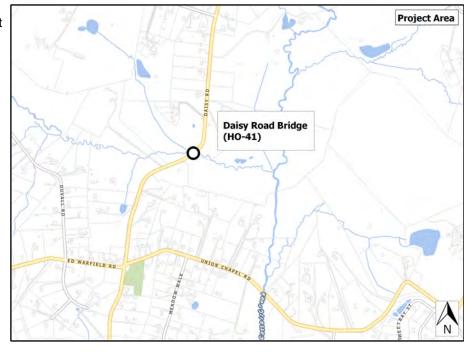
FY18 - Construction Complete.

FY19 - Close.

Operating Budget Impact

Annual Bond Redemption \$ \$39,330

Estimated annual maintenance costs upon completion: Decrease.



Fiscal 2017 Capital Budget

BRIDGE PROJECTS

Number: B3840

Project: FY1996 DAISY ROAD BRIDGE (H0-41)

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	358	0	358	0	0	0	0	0	0	0	0	0	0	358
LAND ACQUISITION	22	0	22	0	0	0	0	0	0	0	0	0	0	22
CONSTRUCTION	1,180	300	1,480	0	0	0	0	0	0	0	0	0	0	1,480
ADMINISTRATION	44	0	44	0	0	0	0	0	0	0	0	0	0	44
Total Expenditures	1,604	300	1,904	0	0	0	0	0	0	0	0	0	0	1,904
BONDS	574	300	874	0	0	0	0	0	0	0	0	0	0	874
GRANTS	1,030	0	1,030	0	0	0	0	0	0	0	0	0	0	1,030
Total Funding	1,604	300	1,904	0	0	0	0	0	0	0	0	0	0	1,904

Project Status:

\$432,364 spent and encumbered through February 2016
FY16 - This project advanced from the design & land acquisition stage to construction.

BRIDGE PROJECTS

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

- 1. GRANT represents Federal Bridge Rehabilitation/Replacement funds.
- 2. Request represents latest engineer's estimate.

Project Schedule

FY17 - Construction.

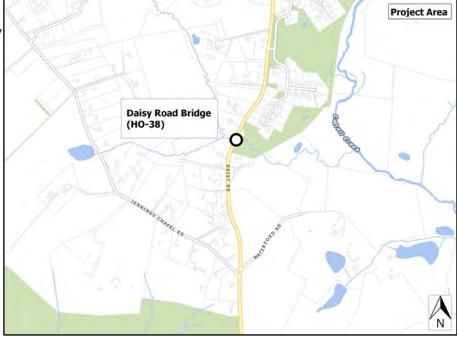
FY18 - Construction Complete.

FY19 - Close.

Operating Budget Impact

Annual Bond Redemption \$ \$36,405

Estimated annual maintenance costs upon completion: Decrease.



Fiscal 2017 Capital Budget

BRIDGE PROJECTS

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

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	225	20	245	0	0	0	0	0	0	0	0	0	0	245
LAND ACQUISITION	75	0	75	0	0	0	0	0	0	0	0	0	0	75
CONSTRUCTION	1,640	280	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	1,974	300	2,274	0	0	0	0	0	0	0	0	0	0	2,274
BONDS	509	300	809	0	0	0	0	0	0	0	0	0	0	809
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	65
Total Funding	1,974	300	2,274	0	0	0	0	0	0	0	0	0	0	2,274

Project Status:
\$212,042 spent and encumbered through February 2016
FY16 - Project to be advertised for construction bids in 2016.

This project advanced from the design & land acquisition stage to advertising for construction.

BRIDGE PROJECTS

Project: B3850-FY2001 STRUCTURE INSPECTION PROGRAM 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 Estimated annual maintenance costs upon completion: No Change. owned retaining walls will also be inspected.

Operating Budget Impact

Annual Bond Redemption \$ \$9,000

Justification

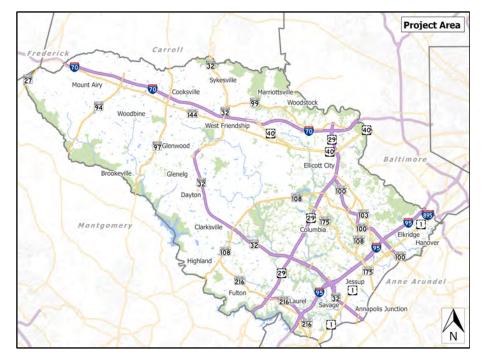
Howard County bridges are inspected on a two-year cycle for the safety of the traveling public, to qualify for FHWA Grant funding for all jurisdictional bridges, and to protect Howard County's infrastructure investment.

Remarks

Request represents program advancement

Project Schedule

Program



Fiscal 2017 Capital Budget

BRIDGE PROJECTS

Number: B3850

Project: FY2001 STRUCTURE INSPECTION PROGRAM

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,400	300	1,700	0	300	0	300	0	600	0	0	0	0	2,300
ADMINISTRATION	30	0	30	0	0	0	0	0	0	0	0	0	0	30
Total Expenditures	1,430	300	1,730	0	300	0	300	0	600	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	1,230	300	1,530	0	300	0	300	0	600	0	0	0	0	2,130
Total Funding	1,430	300	1,730	0	300	0	300	0	600	0	0	0	0	2,330

Project Status:

\$1,370,331 spent and encumbered through February 2016 FY16 - Inspections continuing.

Number: B3853

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 possible FEMA reimbursement.
- 2. Request represents funding for emergency projects.

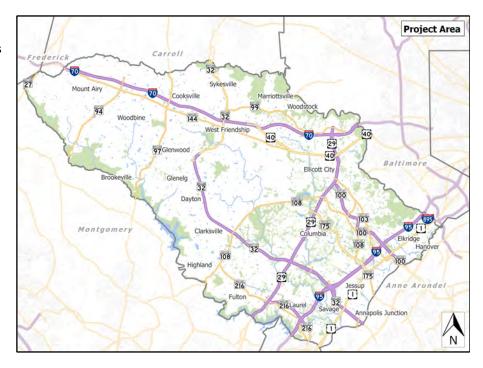
Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$152,775

Estimated annual maintenance costs upon completion: Decrease.



Number: B3853

Project: FY2000 EMERGENCY STRUCTURE RECONSTRUCTION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	435	100	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	3,225	784	4,009	0	0	0	0	0	0	0	0	0	0	4,009
ADMINISTRATION	20	0	20	0	0	0	0	0	0	0	0	0	0	20
Total Expenditures	3,845	884	4,729	0	0	0	0	0	0	0	0	0	0	4,729
BONDS	2,895	500	3,395	0	0	0	0	0	0	0	0	0	0	3,395
GRANTS	700	590	1,290	0	0	0	0	0	0	0	0	0	0	1,290
PAY AS YOU GO	250	(206)	44	0	0	0	0	0	0	0	0	0	0	44
Total Funding	3,845	884	4,729	0	0	0	0	0	0	0	0	0	0	4,729

Project Status:

\$3,324,800 spent and encumbered through February 2016

FY16 - Projects in progress:

Projects complete: 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.

Project: B3857-FY2001 SYSTEMIC STRUCTURE IMPROVEMENTS Number: B3857

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

This work is beyond the capabilities of the County Highway maintenance crews.

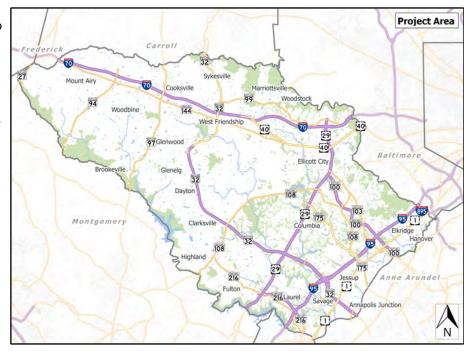
Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$75,600

Estimated annual maintenance costs upon completion: Decrease.



Number: B3857

Project: FY2001 SYSTEMIC STRUCTURE IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	720	0	720	20	0	20	0	0	40	0	0	0	0	760
CONSTRUCTION	1,266	0	1,266	80	0	80	0	0	160	0	0	0	0	1,426
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	1,996	0	1,996	100	0	100	0	0	200	0	0	0	0	2,196
BONDS	1,480	0	1,480	100	0	100	0	0	200	0	0	0	0	1,680
PAY AS YOU GO	516	0	516	0	0	0	0	0	0	0	0	0	0	516
Total Funding	1,996	0	1,996	100	0	100	0	0	200	0	0	0	0	2,196

Project Status:

\$1,364,801 spent and encumbered through February 2016

FY16

Painting contract #1 is complete.

Painting contract #2 is complete.

Painting contract #3 is complete.

This project has completed the repainting of the County's steel bridges.

BRIDGE PROJECTS

Project: B3858-FY2018 PFEFFERKORN ROAD BRIDGE (HO-31)

Number: B3858

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-ofway 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.

Project Schedule

FY18 - Design.

FY19 - Design and Land Acquisition.

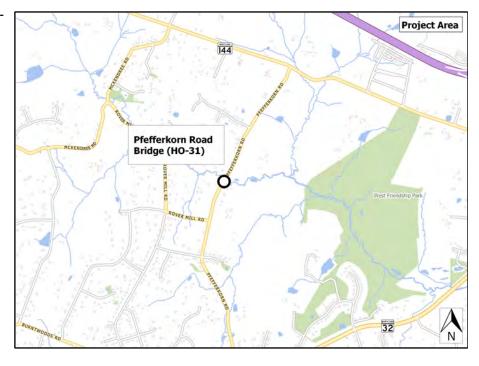
FY20 - Construction.

FY21 - Complete and Close.

Operating Budget Impact

Annual Bond Redemption \$ \$61,875

Estimated annual maintenance costs upon completion: Decrease.



BRIDGE PROJECTS

Number: B3858

Project: FY2018 PFEFFERKORN ROAD BRIDGE (HO-31)

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	0	0	275	0	100	0	0	375	0	0	0	0	375
LAND ACQUISITION	0	0	0	0	100	0	0	0	100	0	0	0	0	100
CONSTRUCTION	0	0	0	0	0	900	0	0	900	0	0	0	0	900
Total Expenditures	0	0	0	275	100	1,000	0	0	1,375	0	0	0	0	1,375
BONDS	0	0	0	275	100	1,000	0	0	1,375	0	0	0	0	1,375
Total Funding	0	0	0	275	100	1,000	0	0	1,375	0	0	0	0	1,375

Project Status : \$0 spent and encumbered through February 2016

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.

Operating Budget Impact

Annual Bond Redemption \$\$58,500

Estimated annual maintenance costs upon completion: Decrease.

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

May be eligible for Federal Funds in the future.

Project Schedule

FY17 - Design.

FY18 - Land Acquisition.

FY19 - Construction.

FY20 - Close.



BRIDGE PROJECTS

Number: B3860

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

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	250	0	250	0	50	0	0	0	50	0	0	0	0	300
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	250	0	250	100	950	0	0	0	1,050	0	0	0	0	1,300
BONDS	250	0	250	100	950	0	0	0	1,050	0	0	0	0	1,300
Total Funding	250	0	250	100	950	0	0	0	1,050	0	0	0	0	1,300

Project Status:

\$0 spent and encumbered through February 2016 FY16 - This project has advanced to the design stage.

BRIDGE PROJECTS

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

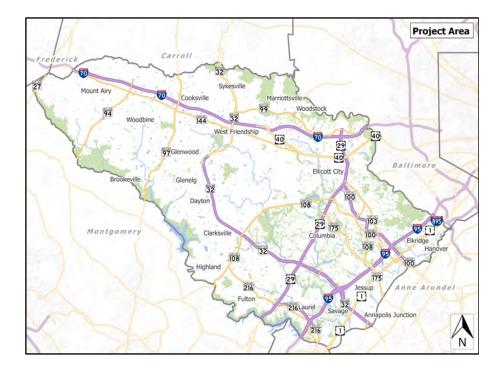
Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$96,750

Estimated annual maintenance costs upon completion: Decrease.



BRIDGE PROJECTS

Project: FY2013 RETAINING WALLS Number: B3862

(In Thousands)					Five	Year Ca	pital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	200	0	200	80	0	80	0	80	240	0	0	0	0	440
LAND ACQUISITION	50	0	50	10	0	10	0	10	30	0	0	0	0	80
CONSTRUCTION	1,000	0	1,000	210	0	210	0	210	630	0	0	0	0	1,630
Total Expenditures	1,250	0	1,250	300	0	300	0	300	900	0	0	0	0	2,150
BONDS	1,250	0	1,250	300	0	300	0	300	900	0	0	0	0	2,150
Total Funding	1,250	0	1,250	300	0	300	0	300	900	0	0	0	0	2,150

Project Status:

\$246,668 spent and encumbered through February 2016
FY16 - Study Complete: Lawyers Hill slope.
Projects to start include: Loudon Ave wall, New Cut Rd wall and Old Stockbridge wall.

Project: B3863-FY2013 DOWNTOWN COLUMBIA-OAKLAND MILLS CONNECTION

IMPROVEMENTS

Description

BRIDGE PROJECTS Number: B3863

Operating Budget Impact

A project to provide a feasibility study, design and construction of enhancements Annual Bond Redemption \$ \$42,750 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.

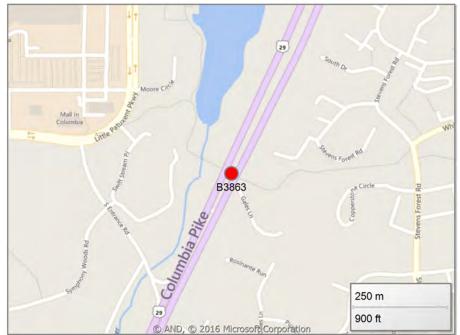
Remarks

OTHER - Sources represents developer contribution.

Project Schedule

FY17 - NEPPA study.

FY18 - Begin planning implementation of NEPPA study outcome.



BRIDGE PROJECTS

Number: B3863

Project: FY2013 DOWNTOWN COLUMBIA-OAKLAND MILLS CONNECTION IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	100	350	450	0	0	0	0	0	0	0	0	0	0	450
CONSTRUCTION	500	0	500	500	0	0	0	0	500	0	0	0	0	1,000
Total Expenditures	600	350	950	500	0	0	0	0	500	0	0	0	0	1,450
BONDS	100	350	450	500	0	0	0	0	500	0	0	0	0	950
OTHER SOURCES	500	0	500	0	0	0	0	0	0	0	0	0	0	500
Total Funding	600	350	950	500	0	0	0	0	500	0	0	0	0	1,450

Project Status:

\$69,982 spent and encumbered through February 2016 Feasibility study complete

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
C0182 FY1985 PUBLIC SAFETY EDUCATION CENTER A project for design and construction of a group of facilities	В	27,076	0	27,076	1,223	7,144	1,765	2,432	200	39,840
or training of public safety employees.	T	250	0	250	0	0	0	0	0	250
	Total	27,326	0	27,326	1,223	7,144	1,765	2,432	200	40,090
10214 FY199- CATEGORY CONTINGENCY FUND he fund is designed for use as a revenue source for	G	69,400	0	69,400	10,000	0	10,000	0	10,000	99,400
ransfers of Appropriation when either construction costs re higher than originally estimated, contributions from	0	1,100	0	1,100	0	0	0	0	0	1,100
rants vary from projections, or engineering must be dvanced from future years to the present fiscal year for ritical program needs; all subject to Council approval.	Total	70,500	0	70,500	10,000	0	10,000	0	10,000	100,500
0256 ENVIRONMENTAL ASSESSMNT CONTINGENCY UND	Р	520	0	520	26	50	26	50	26	698
Evaluation of environmental conditions of property and buildings which become available for purchase or use prior of a specific capital project being established or which are part of an existing project.	Total	520	0	520	26	50	26	50	26	698
0264 FY1998 SYSTEMIC FACILITY IMPROVEMENTS project to improve or upgrade the physical plant of public	В	7,385	1,901	9,286	0	0	0	0	0	9,286
uildings, their equipment and systems, to replace lants/systems which have deteriorated beyond routine	0	7,600	-1,901	5,699	0	0	0	0	0	5,699
naintenance, or to provide for system management nitiatives, energy initiatives, or environmental initiatives.	Р	11,995	0	11,995	0	0	0	0	0	11,995
maaroo, onorgy maaroo, or on mornar maaroo.	Total	26,980	0	26,980	0	0	0	0	0	26,980
20285 FY2002 US1 CORRIDOR REVITALIZATION	В	4,250	-3,000	1,250	500	500	0	0	0	2,250
project to plan, design and implement a series of treetscape, pedestrian, bicycle, transportation and public reen space improvements on public property in the US1	G	1,000	0	1,000	0	0	0	0	0	1,000
Corridor.	0	800	0	800	0	0	0	0	0	800
	Total	6,050	-3,000	3,050	500	500	0	0	0	4,050
20286 FY2002 BUS STOP IMPROVEMENTS 2 project to implement a series of systemic improvements	В	320	0	320	0	0	0	0	0	320
o Howard Transit bus stops.	G	892	0	892	0	0	0	0	0	892
	Ο	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

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
C0287 FY2002 COMMUNITY RENEWAL / ENHANCEMENTS	В	595	300	895	0	0	0	0	0	895
A project to design and implement a series of pedestrian	G	0	100	100	0	0	0	0	0	100
improvements, streetscape enhancements and repair or enhancement of public green spaces.	0	44	0	44	0	0	0	0	0	44
	Р	250	100	350	0	0	0	0	0	350
	Total	889	500	1,389	0	0	0	0	0	1,389
C0289 FY2002 TRANSIT OPERATION REPAIR	В	3,521	365	3,886	0	0	0	0	0	3,886
FACILITY A project for site selection, acquisition, design and	G	8,411	-505	7,906	0	0	0	0	0	7,906
construction of a multi-jurisdictional transit facility.	0	1,264	0	1,264	0	0	0	0	0	1,264
	Р	2,423	140	2,563	0	0	0	0	0	2,563
	Total	15,619	0	15,619	0	0	0	0	0	15,619
C0290 FY2003 COURTHOUSE RENOVATION	В	7,895	0	7,895	0	0	0	0	0	7,895
A project to expand and renovate the existing courthouse.	Р	985	0	985	0	0	0	0	0	985
	Total	8,880	0	8,880	0	0	0	0	0	8,880
C0298 FY2005 US 40 CORRIDOR ENHANCEMENT	В	700	0	700	150	0	0	0	0	850
A project to plan, design and implement improvements, including sidewalks, landscaping, street trees, median and	G	50	0	50	0	0	0	0	0	50
gateway enhancements within public right-of-way and to develop a corridor design manual to guide site design on	0	100	0	100	0	0	0	0	0	100
adjacent properties.	Р	200	0	200	0	0	0	0	0	200
	Total	1,050	0	1,050	150	0	0	0	0	1,200
C0299 FY2005 WASTE MANAGEMENT	В	5,269	0	5,269	503	503	503	503	0	7,281
IMPROVEMENTS A project for the design and construction of capital	0	17,597	0	17,597	3,253	3,925	4,759	4,047	0	33,581
improvements at the Alpha Ridge Solid Waste Facility, New Cut and Carrs Mill Landfills.	Р	200	0	200	0	0	0	0	0	200
	Total	23,066	0	23,066	3,756	4,428	5,262	4,550	0	41,062
C0301 FY2005 TECHNOLOGY INFRASTRUCTURE	В	16,426	2,375	18,801	2,375	2,375	2,375	2,375	2,375	30,676
UPGRADES A project to upgrade infrastructure of the County's Local Area Networks and Wide Area Networks.	Р	760	125	885	125	125	125	125	125	1,510

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
C0301 FY2005 TECHNOLOGY INFRASTRUCTURE UPGRADES	Total	17,186	2,500	19,686	2,500	2,500	2,500	2,500	2,500	32,186
A project to upgrade infrastructure of the County's Local Area Networks and Wide Area Networks.										
C0309 FY2007 LAND ACQUISITION CONTINGENCY RESERVE	В	26,700	-8,250	18,450	0	0	0	0	0	18,450
A fund for acquisition of land that comes available on the market that meets the future needs of the County to serve	0	4,000	-2,500	1,500	0	0	0	0	0	1,500
the public interest and no funded Capital Project exists.	Р	5,300	0	5,300	0	0	0	0	0	5,300
	Total	36,000	-10,750	25,250	0	0	0	0	0	25,250
C0311 FY2007 PUBLIC SAFETY RADIO SYSTEM ENHANCEMENTS	В	8,100	0	8,100	0	0	0	0	0	8,100
Enhancements to 800 MHz Motorola Astro trunking radio system for Public Safety.	L	0	10,400	10,400	14,000	250	250	250	250	25,400
	0	500	0	500	0	0	0	0	0	500
	Total	8,600	10,400	19,000	14,000	250	250	250	250	34,000
C0312 FY2007 ENTERPRISE RESOURCE PLANNING SYSTEM	В	10,060	0	10,060	750	750	750	750	750	13,810
The County currently is utilizing SAP ERP software solution as the system of Financial Accounting, Purchasing	С	5,530	0	5,530	500	500	500	500	500	8,030
and Utility Water and Sewer billing.	Р	2,700	0	2,700	250	250	250	250	250	3,950
	Total	18,290	0	18,290	1,500	1,500	1,500	1,500	1,500	25,790
C0313 FY2008 ENVIRONMENTAL COMPLIANCE CONSTRUCTION	В	10,726	0	10,726	0	0	0	0	0	10,726
A project to support environmental compliance activities for County Facilities.	Р	200	0	200	0	0	0	0	0	200
	Total	10,926	0	10,926	0	0	0	0	0	10,926
C0315 FY2009 PUBLIC SAFETY SYSTEM ENHANCEMENTS	В	2,895	775	3,670	1,000	1,000	1,000	1,000	1,000	8,670
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	3,845	775	4,620	1,000	1,000	1,000	1,000	1,000	9,620
C0317 FY2013 SYSTEMIC FACILITY IMPROVEMENTS A project to improve or upgrade the physical plant of public	В	25,000	9,975	34,975	8,843	8,843	8,843	8,843	8,843	79,190
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.	Total	40,000	9,975	49,975	8,843	8,843	8,843	8,843	8,843	94,190

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
C0318 FY2010 MARC SAVAGE STATION GARAGE	TIF	17,000	0	17,000	0	0	0	0	0	17,000
A project to fund the construction of a public parking garage adjacent to the MARC Savage Commuter Rail Station located at 9009 Dorsey Run Road, Annapolis Junction.	Total	17,000	0	17,000	0	0	0	0	0	17,000
C0319 FY2010 TAX INCREMENT FINANCING PROJECTS	TIF	50,000	70,000	120,000	40,000	0	0	0	0	160,000
A project for funding of tax increment financing projects.	Total	50,000	70,000	120,000	40,000	0	0	0	0	160,000
C0322 FY2012 CENTRAL FLEET SYSTEMIC IMPROVEMENTS and FUEL SYSTEM	В	3,295	702	3,997	1,290	1,138	0	0	0	6,425
This is a project to fund improvements to the County's fuel storage/dispensing/monitoring systems, and to improve or	L	0	1,000	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	3,895	1,702	5,597	1,290	1,138	0	0	0	8,025
C0323 FY2011 BUS/VEHICLE ACQUISTION A project for the purchase of fixed route and paratransit	G	625	0	625	0	0	0	0	0	625
vehicles for the Howard Transit and HT Ride systems respectively.	Total	625	0	625	0	0	0	0	0	625
C0324 FY2012 GEODETIC NETWORK AUTOMATION A project to purchase survey global positioning system	В	145	0	145	0	25	0	0	0	170
(GPS) and digital survey equipment.	Р	290	0	290	15	15	0	0	0	320
	Total	435	0	435	15	40	0	0	0	490
C0325 FY2013 BUS/VEHICLE ACQUISTION A project for the purchase of fixed route and paratransit	G	504	-74	430	0	0	0	0	0	430
vehicles for the Howard Transit and HT Ride systems respectively.	Р	366	74	440	0	0	0	0	0	440
	Total	870	0	870	0	0	0	0	0	870
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
C0328 FY2012 BUS/VEHICLE ACQUISTION	G	821	50	871	0	0	0	0	0	871
	Total	821	50	871	0	0	0	0	0	871
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

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
C0329 FY2012 ENERGY MANAGEMENT/IMPROVEMENTS A project to develop a 5-10 year business plan for energy performance optimization.	Total	900	0	900	0	0	0	0	0	900
C0331 FY2014 ELLICOTT CITY PARKING LOT ENHANCEMENT	R	1,000	-800	200	0	0	0	0	0	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	1,000	-800	200	0	0	0	0	0	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 Howard Transit bus stops.	G	100	50	150	100	50	50	50	50	450
	Р	100	200	300	100	100	100	100	100	800
	Total	440	250	690	200	150	150	150	150	1,490
C0333 FY2015 DETENTION CENTER RENOVATIONS The Department of Corrections currently is facing severe	В	8,951	0	8,951	14,837	14,602	11,364	0	0	49,754
challenges and regulatory mandates that must be resolved through the renovation and expansion of the Detention Center.	Total	8,951	0	8,951	14,837	14,602	11,364	0	0	49,754
C0334 FY2014 EMERGENCY ALTERNATIVE POWER Relative to County facilities, implement a program to	В	1,000	0	1,000	1,110	1,110	1,110	1,110	1,110	6,550
ensure continuity of operations in County facilities for purposes relative to essential functions during various	G	1,000	-700	300	0	0	0	0	0	300
emergency scenarios and make the necessary hardware modifications.	Total	2,000	-700	1,300	1,110	1,110	1,110	1,110	1,110	6,850
C0335 FY2014 CITIZEN SERVICES FACILITY/PROGRAM ENHANCEMENTS	В	250	0	250	0	0	0	0	0	250
A project to determine the additional facility needs for the Department of Citizen Services.	Р	50	0	50	0	0	0	0	0	50
.,	Total	300	0	300	0	0	0	0	0	300
C0336 FY2014 LANDFILL RESOURCE MANAGEMENT	В	400	0	400	0	0	0	0	0	400
project for the design and construction of resource approvements at the Alpha Ridge Landfill and Resident's	Р	100	0	100	0	0	0	0	0	100
Recycling and Demonstration Center.	Total	500	0	500	0	0	0	0	0	500

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
C0337 FY2014 ELLICOTT CITY IMPROVEMENTS and ENHANCEMENTS	В	1,700	0	1,700	1,000	1,000	0	0	0	3,700
This is a project to provide a variety of repairs and improvements to public infrastructure and address other	G	100	0	100	0	0	0	0	0	100
community improvements and to make improvements to the downtown and historic district of the Howard County	0	0	5	5	0	0	0	0	0	5
Seat.	Р	1,000	0	1,000	500	500	0	0	0	2,000
	R	1,500	0	1,500	0	500	0	0	0	2,000
	Total	4,300	5	4,305	1,500	2,000	0	0	0	7,805
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 The Broadband Installation project will extend services to non-government facilities to our fiber network.	0	10,000	0	10,000	0	0	0	0	0	10,000
	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 FY2018 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
C0343 FY2016 SALT STORAGE FACILITY This project will provide for the storage of salt and liquid	В	1,000	0	1,000	0	0	0	0	0	1,000
de-icing material for the winter season.	Total	1,000	0	1,000	0	0	0	0	0	1,000
C0344 FY2016 SOUTHEAST INFRASTRUCTURE IMPROVEMENTS	В	50	0	50	500	0	0	0	0	550
A project to plan, design and construct a series of	G	100	0	100	0	0	0	0	0	100
infrastructure improvements targeted within the southeast area of the Route 1 corridor.	Total	150	0	150	500	0	0	0	0	650

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
C0346 FY2017 DAYTON ADMINISTRATION BUILDING This project will provide for the replacement of an aging	В	0	1,000	1,000	1,000	0	0	0	0	2,000
trailer currently used for the Highways Administration functions.	Total	0	1,000	1,000	1,000	0	0	0	0	2,000
C0348 FY2017 MODERNIZATION OF FLEET AND HIGHWAYS SHOPS	В	0	900	900	1,750	5,000	2,200	5,000	800	15,650
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	0	900	900	1,750	5,000	2,200	5,000	800	15,650
C0349 FY2017 ENVIRONMENTAL COMPLIANCE OPERATIONS	В	0	375	375	247	293	513	543	251	2,222
A project to support environmental compliance activities for County Facilities.	Total	0	375	375	247	293	513	543	251	2,222
C0350 FY2017 NEW BUDGET SYSTEM The Budget Application project has been established to	В	0	250	250	0	0	0	0	0	250
purchase and implement a new budget system for improved efficiencies, transparency and presentation.	Total	0	250	250	0	0	0	0	0	250
C0351 FY2017 HARRIET TUBMAN REMEDIATION This project will provide for Harriett Tubman High School	В	0	500	500	0	0	0	0	0	500
remediation of hazardous containing material such as ACM, lead, PCB, fuel.	Total	0	500	500	0	0	0	0	0	500
C0352 FY2017 SITE ACQUISITION FOR SCHOOL SITES AND ELEVATED WATER STORAGE FACILITIES	В	0	8,250	8,250	5,500	0	0	0	0	13,750
This project establishes a fund for school site acquisition that comes available on the market that meets the future	M	0	5,000	5,000	0	0	0	0	0	5,000
needs of the County secifically to serve the Public interest to add or enhance the school system sites for new schools.	0	0	2,500	2,500	3,250	0	0	0	0	5,750
to add or enhance the school system sites for new schools.	Total	0	15,750	15,750	8,750	0	0	0	0	24,500
GENERAL COUNTY PROJECTS Total		448,229	99,682	547,911	115,172	55,598	46,483	27,928	26,630	819,722

Howard County, MD FY2017 Council Approved Capital Budget (\$000) GENCO-GENERAL COUNTY PROJECTS

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	174,949	16,418	191,367
С	UTILITY CASH	5,530	0	5,530
G	GRANTS	83,003	-1,079	81,924
L	MASTER LEASE	15,000	11,400	26,400
M	METRO DISTRICT BOND	0	5,000	5,000
0	OTHER SOURCES	69,800	-1,896	67,904
Р	PAY AS YOU GO	30,197	639	30,836
R	STORMWATER UTILTY FUNDING	2,500	-800	1,700
Т	TRANSFER TAX	250	0	250
TIF	TIF BONDS	67,000	70,000	137,000
Total		448,229	99,682	547,911

2017 Council Approved 5 Year Capital Budget Project Type Summary (GENCO-GENERAL COUNTY PROJECTS)

Rev	enue Source	Prior Approp	Current FY	2018	2019	2020	2021	2022	5 Year Total
В	BONDS	174,949	16,418	43,053	49,333	30,423	22,556	15,329	352,061
С	UTILITY CASH	5,530	0	500	500	500	500	500	8,030
G	GRANTS	83,003	-1,079	10,100	50	10,050	50	10,050	112,224
L	MASTER LEASE	15,000	11,400	14,000	250	250	250	250	41,400
М	METRO DISTRICT BOND	0	5,000	0	0	0	0	0	5,000
0	OTHER SOURCES	69,800	-1,896	6,503	3,925	4,759	4,047	0	87,138
Р	PAY AS YOU GO	30,197	639	1,016	1,040	501	525	501	34,419
R	STORMWATER UTILTY FUNDING	2,500	-800	0	500	0	0	0	2,200
Т	TRANSFER TAX	250	0	0	0	0	0	0	250
TIF	TIF BONDS	67,000	70,000	40,000	0	0	0	0	177,000
Tota	ıl	448,229	99,682	115,172	55,598	46,483	27,928	26,630	819,722

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

Facility receives over 25,000 visitors annually. The project budget has been revised in FY17 request to include design of an addition to main training building to accommodate two additional classrooms and two breakout rooms, upgrade of existing kitchen and seating area; Design of Phase I of indoor firing range to accommodate small arms training and reduce noise to near by residents. FY17 has been revised to reflect the construction of the addition to the main training facility, construction of Phase I of the indoor firing range.

Project Schedule

FY18 - Design of Enclosed Firing Range Phase I, Classroom Addition, Renovations to Main Bldg and improvements to tactical training facility and renovations to tactical training facility

FY19 - Construction of Classroom Addition Main Bldg; Construction of Enclosed Firing Range Phase I

FY20 - Design of Enclosed Firing Range Phase II;

FY21 - Construction of Enclosed Firing Range Phase II

FY22 - Project Close Out

Operating Budget Impact

Annual Bond Redemption \$ \$1,792,800

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)					Five	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	2,893	0	2,893	528	46	165	0	0	739	0	0	0	0	3,632
LAND ACQUISITION	945	0	945	0	0	0	0	0	0	0	0	0	0	945
CONSTRUCTION	21,225	0	21,225	650	6,890	650	2,362	0	10,552	0	0	0	0	31,777
ADMINISTRATION	93	0	93	35	208	51	70	0	364	0	0	0	0	457
EQUIPMENT & FURNISHINGS	2,170	0	2,170	10	0	899	0	200	1,109	0	0	0	0	3,279
Total Expenditures	27,326	0	27,326	1,223	7,144	1,765	2,432	200	12,764	0	0	0	0	40,090
BONDS	27,076	0	27,076	1,223	7,144	1,765	2,432	200	12,764	0	0	0	0	39,840
TRANSFER TAX	250	0	250	0	0	0	0	0	0	0	0	0	0	250
Total Funding	27,326	0	27,326	1,223	7,144	1,765	2,432	200	12,764	0	0	0	0	40,090

Project Status:

\$27,045,303 spent and encumbered through February 2016

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

Project: C0214-FY199- CATEGORY CONTINGENCY FUND 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 #2 adopted October 5th, 2006.

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

Project Schedule

As Required



GENERAL COUNTY PROJECTS

Number: C0214

Project: FY199- CATEGORY CONTINGENCY FUND

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	69,400	0	69,400	10,000	0	10,000	0	10,000	30,000	0	0	0	0	99,400
OTHER	1,100	0	1,100	0	0	0	0	0	0	0	0	0	0	1,100
Total Expenditures	70,500	0	70,500	10,000	0	10,000	0	10,000	30,000	0	0	0	0	100,500
GRANTS	69,400	0	69,400	10,000	0	10,000	0	10,000	30,000	0	0	0	0	99,400
OTHER SOURCES	1,100	0	1,100	0	0	0	0	0	0	0	0	0	0	1,100
Total Funding	70,500	0	70,500	10,000	0	10,000	0	10,000	30,000	0	0	0	0	100,500

Project Status : \$0 spent and encumbered through February 2016

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 There is no operating cost impact. 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.

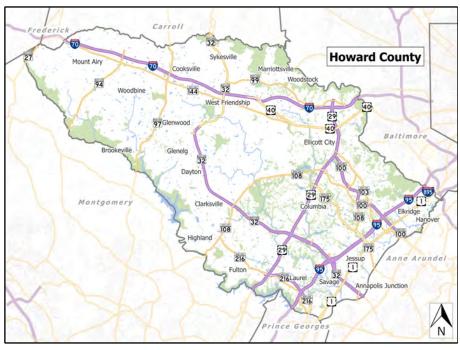
Remarks

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

Project Schedule

Program

Operating Budget Impact



GENERAL COUNTY PROJECTS

Number: C0256

Project: ENVIRONMENTAL ASSESSMNT CONTINGENCY FUND

(In Thousands)					Five	Year Ca	pital Pro	gram		Master Plan				
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	500	0	500	0	50	0	50	0	100	50	0	50	0	700
CONSTRUCTION	20	0	20	26	0	26	0	26	78	0	26	0	26	150
Total Expenditures	520	0	520	26	50	26	50	26	178	50	26	50	26	850
PAY AS YOU GO	520	0	520	26	50	26	50	26	178	50	26	50	26	850
Total Funding	520	0	520	26	50	26	50	26	178	50	26	50	26	850

Project Status:

\$329,444 spent and encumbered through February 2016
9335 Old Scaggsville Road û Approximately \$8,000 utilized for intrusive ACM sampling, PCB building material sampling and UST investigation performed prior to demolition.

GENERAL COUNTY PROJECTS

Number: C0264

Project: C0264-FY1998 SYSTEMIC FACILITY IMPROVEMENTS

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 to provide for system management initiatives, energy initiatives, or environmental initiatives.

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

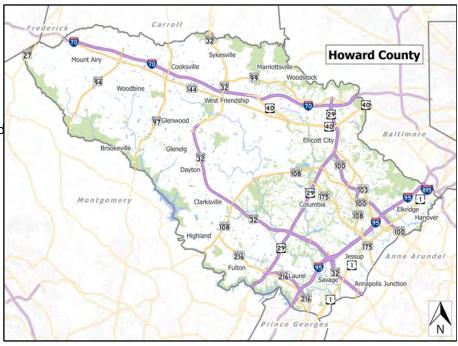
- 1. Upgrade/improve building infrastructures to meet current facility standards/requirements; to meet changed/expanded/complex missions; to extend facility life expectancy; to improve environmental and energy efficiency, effectiveness and life safety: Roofing Systems, Window Systems, HVAC Systems, Electrical Systems, Fire Protection Systems, Safety Systems, Energy Management and Conservation Systems, Environmental Systems, Green Building Initiatives, ADA Requirements.
- 2. TAO #1-2009.
- 3. Financial adjustment necessary to close project.

Project Schedule

FY17 - Financiall adjustment required to close out project.

Operating Budget Impact

Annual Bond Redemption \$ \$417,870



Number: C0264

Project: FY1998 SYSTEMIC FACILITY IMPROVEMENTS

(In Thousands)	·						apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	2,874	0	2,874	0	0	0	0	0	0	0	0	0	0	2,874
CONSTRUCTION	23,222	0	23,222	0	0	0	0	0	0	0	0	0	0	23,222
ADMINISTRATION	70	0	70	0	0	0	0	0	0	0	0	0	0	70
EQUIPMENT & FURNISHINGS	300	0	300	0	0	0	0	0	0	0	0	0	0	300
OTHER	514	0	514	0	0	0	0	0	0	0	0	0	0	514
Total Expenditures	26,980	0	26,980	0	0	0	0	0	0	0	0	0	0	26,980
BONDS	7,385	1,901	9,286	0	0	0	0	0	0	0	0	0	0	9,286
OTHER SOURCES	7,600	(1,901)	5,699	0	0	0	0	0	0	0	0	0	0	5,699
PAY AS YOU GO	11,995	0	11,995	0	0	0	0	0	0	0	0	0	0	11,995
Total Funding	26,980	0	26,980	0	0	0	0	0	0	0	0	0	0	26,980

Project Status:

\$26,391,452 spent and encumbered through February 2016

- FY02 Completed Rockland Arts Center Structural Repairs; Boiler Replacement at Mayfield, Cooksville, Dayton and Utilities Building; Repair of Howard Lower Level Walkways, Stairs, Sidewalks, and Ramp.
- FY03 Completed Banneker Room ADA Upgrade; Completed Detention Center Structural Analysis.
- FY04 Dorsey/Gateway Buildings Upgrade/Renovations to Meet F&R and Circuit Court Requirements. FY05 Replaced Howard Building Roof.
- FY06 Clerk of Court infrastructure; asbestos abatement and refurbishment Carroll Bldg; Courthouse roof; Animal Control HVAC & roof; Florence Bain roof
- FY07 Renovate Southern District central booking area to office space; significant roofing repairs at several buildings.
- FY08 New security fencing system; security camera system; storage system improvements for Detention Center; Howard & Dorsey bldg renovations to meet customer requirements; Energy efficiency investments from energy performance contracts. Dorsey modifications to meet changed operation requirements.
- FY09 Energy efficiency investments from energy performance contract.
- FY10 Upgrades to Detention Center security camera system & converted space to Interview Rm; Developed desig replacement Rockland Arts Center roof & structural supports.
- FY11 Renovated Ligon & Carroll Bldgs; added Interview Room in Detention Center; repaired Detention Center water damage from boiler pipe break; added larger access security door for Detention Center kitchen area.
- FY12/13/14 Installed new roof on Center for the Arts; installed new Emergency Generator for the Public Safety Complex, Scaggsville; constructed new roof & structural supports for Centennial Park Maintenance Bldg; built new Board of Educ Data Center in the Dorsey Bldg; renovated the Utilities Hdqtrs Bldg; Design the Dept of Health Dept relocation to Ascend 1; designed/built new Technology Data Center for Dorsey Bldg
- FY15 Provided new HVAC system at B&O Museum; designed new HVAC system for Fire Station No. 9; Provided new office area at the Detention Center; renovations in the Gateway, Carroll and Howard Buildings.
- Planned projects, including an addition and renovation at Cooksville Shop and renovations at the Dorsey building spent the balance of the funds in this project.

FY16 - Closeout in process.

Project: C0285-FY2002 US1 CORRIDOR REVITALIZATION 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 Bond funding listed for this project includes both long term bond 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 improvement and public safety and enhance the quality of life in existing, older neighborhoods in the Corridor. 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 Blvd Commercial Implementation Plan. In 2011, Howard Co. commissioned a market analysis of Rte 1. The study identified market issues and suggested that future redevelopment focus on commercial nodes. While the study identified an approach to revitalization, it did not provide an implementation plan. Once complete, the WBCIP will allow for strategic redevelopment and direct future funding for this project.;
- 2. Pedestrian and bicycle improvements to be coordinated with, and promote access to State and Howard Co. public transportation services and MARC rail; 3. OTHER: Developer Contribution.

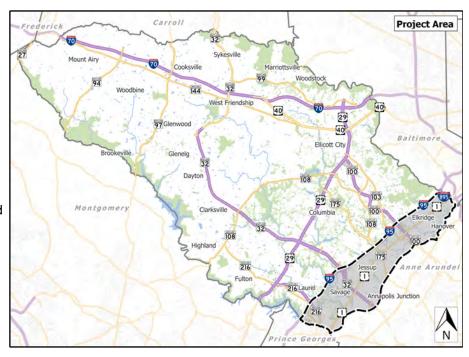
Project Schedule

FY17 - Prior bond authorization not needed until further studies are completed. No bond issuance expected for several years. Due to budget constraints and other critical needs, this prior authorization is needed for other projects.

Operating Budget Impact

Annual Bond Redemption \$ \$101,250

and the use of the master lease program as appropriate.



GENERAL COUNTY PROJECTS

Number: C0285

Project: FY2002 US1 CORRIDOR REVITALIZATION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,500	(300)	1,200	0	0	0	0	0	0	0	0	0	0	1,200
CONSTRUCTION	4,550	(2,700)	1,850	500	500	0	0	0	1,000	0	0	0	0	2,850
Total Expenditures	6,050	(3,000)	3,050	500	500	0	0	0	1,000	0	0	0	0	4,050
BONDS	4,250	(3,000)	1,250	500	500	0	0	0	1,000	0	0	0	0	2,250
GRANTS	1,000	0	1,000	0	0	0	0	0	0	0	0	0	0	1,000
OTHER SOURCES	800	0	800	0	0	0	0	0	0	0	0	0	0	800
Total Funding	6,050	(3,000)	3,050	500	500	0	0	0	1,000	0	0	0	0	4,050

Project Status:

\$1,372,761 spent and encumbered through February 2016

FY17 - Property acquisition and construction of sidewalk connectivity improvements near N Laurel Rd, in the median of the southbound lane of Rte 1 will be completed.

FY15 - SHA working on preliminary engineering for N Laurel Area improvements.

^{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 FY 10, 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.} FY16 - Reduction to Grant Funds to align with grants received and spent.

Version: Council Approved

Project: C0286-FY2002 BUS STOP IMPROVEMENTS Number: C0286

Description

A project to implement a series of systemic improvements to Howard Transit bus Annual Bond Redemption \$ \$14,400 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.

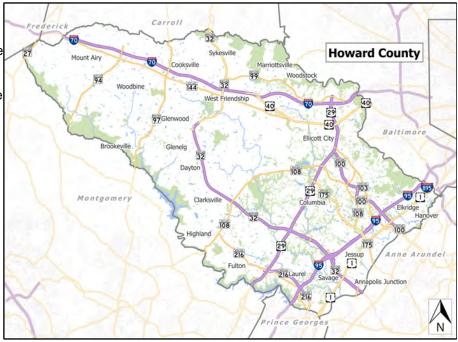
Remarks

- 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

- 1. FY11 Two (2) replacement bus shelters installed
- 2. FY12 Eight (8) replacement and new bus shelters installed
- 3. FY13 Continued bus shelter installation and ADA compliant access improvements
- 4. FY17 Reconstruction of Harpers Choice Bus Shelter and other ADA compliant access improvements. Close.

Operating Budget Impact



GENERAL COUNTY PROJECTS

Number: C0286

Project: FY2002 BUS STOP IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status: \$861,488 spent and encumbered through February 2016

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

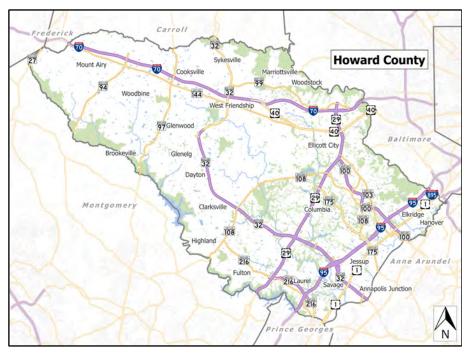
- 1. Project funding will target public property in neighborhoods with community enhancement committees or community associations that request and support the improvements.
- 2. Pedestrian improvements will comply with the Americans with Disabilities Act (ADA) and will be coordinated with and promote 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

FY17 - 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	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	89	100	189	0	0	0	0	0	0	0	0	0	0	189
CONSTRUCTION	790	400	1,190	0	0	0	0	0	0	0	0	0	0	1,190
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	889	500	1,389	0	0	0	0	0	0	0	0	0	0	1,389
BONDS	595	300	895	0	0	0	0	0	0	0	0	0	0	895
GRANTS	0	100	100	0	0	0	0	0	0	0	0	0	0	100
OTHER SOURCES	44	0	44	0	0	0	0	0	0	0	0	0	0	44
PAY AS YOU GO	250	100	350	0	0	0	0	0	0	0	0	0	0	350
Total Funding	889	500	1,389	0	0	0	0	0	0	0	0	0	0	1,389

Project Status:

\$571,362 spent and encumbered through February 2016

- 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/Route 144 mile marker enhancement along Route 40.
- 5. FY17 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.

Project: C0289-FY2002 TRANSIT OPERATION REPAIR FACILITY Number: C0289

Description

A project for site selection, acquisition, design and construction of a multijurisdictional transit facility. The facility will support the County's fixed route and paratransit services including such functions as dispatch, vehicle maintenance, parts storage, revenue collection and handling, vehicle storage, management and within eight years. The facility is expected to have a useful life of at least 30 administrative office space, and similar functions.

Justification

MTA will provide at least 80% of the funding. Development of the facility allows Howard County to respond to future transportation requirements engendered by redevelopment of US 1, BRAC and Downtown Columbia.

Remarks

- 1. Facility funding is predicated on Federal/State GRANTS. MTA has designated project as eligible to receive transit facility funding. Prior Approp OTHER includes Federal funding through MTA and Anne Arundel County. Requested FY14 OTHER funding will be sought from project partners for wash bays.
- 2. Land acquisition of approximately 6 usable acres allowing total fleet capacity of 100 vehicles and attendant services.
- 3. County has entered into joint agreements with MTA and Anne Arundel County (Total Contribution \$1,921,000) to establish leasing and/or cost-sharing arrangements.
- 4. Facility to open on July 1, 2014.
- 5. Additional funds programed for equipment acquisition in FY 2014.
- 6. Additional funds programed for LEED Silver certification and projected final costs of construction.

Project Schedule

FY17 - Financial adjustment required; Close.

Operating Budget Impact

Annual Bond Redemption \$ \$174,870

County is estimated to recover its local share of the investment in the facility vears.



GENERAL COUNTY PROJECTS

Number: C0289

Project: FY2002 TRANSIT OPERATION REPAIR FACILITY

(In Thousands)							apital Pro				Master F	Plan		
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,072	0	1,072	0	0	0	0	0	0	0	0	0	0	1,072
LAND ACQUISITION	3,030	0	3,030	0	0	0	0	0	0	0	0	0	0	3,030
CONSTRUCTION	10,217	0	10,217	0	0	0	0	0	0	0	0	0	0	10,217
EQUIPMENT & FURNISHINGS	1,300	0	1,300	0	0	0	0	0	0	0	0	0	0	1,300
Total Expenditures	15,619	0	15,619	0	0	0	0	0	0	0	0	0	0	15,619
BONDS	3,521	365	3,886	0	0	0	0	0	0	0	0	0	0	3,886
GRANTS	8,411	(505)	7,906	0	0	0	0	0	0	0	0	0	0	7,906
OTHER SOURCES	1,264	0	1,264	0	0	0	0	0	0	0	0	0	0	1,264
PAY AS YOU GO	2,423	140	2,563	0	0	0	0	0	0	0	0	0	0	2,563
Total Funding	15,619	0	15,619	0	0	0	0	0	0	0	0	0	0	15,619

Project Status:

\$15,133,519 spent and encumbered through February 2016

FY09 - FY10 - Planning, site assessment, agency coordination and NEPA. FTA to grant NEPA approval for site purchase. FY11 - Land Acquisition, NEPA Documents, Preliminary Engineering

FY13 - Design, Procurement (contractor/construction inspection)

FY14/15 Construction; FY15 Acquire Equipment.

FY16 Acquire Equipment; Close.

Project: C0290-FY2003 COURTHOUSE RENOVATION Number: C0290

Description

A project to expand and renovate the existing courthouse. The effort will be to construct a new Judicial Function Building/Parking Garage, to add a new building addition to the Courthouse, and to renovate/upgrade interior spaces of the existing courthouse. An alternative possibility is to construct a new courthouse on up tp 6 additional FTE supporting Judicial function, and 4 FTE for a different site

Justification

The project will provide:

- 1. New Judicial Function Building/Parking Garage which provides additional Court facilities as a short term & intermediate term requirements;
- 2. Single Entry Security Checkpoint with a sky bridge connection to existing Courthouse:
- 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

Initial programming phase of this project determination maded that original proposed solution of two additional courtrooms and a sky bridge from existing parking lot would not meet long term needs of Circuit Court. All stakeholders of Circuit Court were interviewed and a complete set of program

of requirements were developed which identified current and future needs.

Project Schedule

FY17 - The county will persue the acquistion of a new courthouse using a public private partnership (P3). The remaining funding will be used for the acquisition process and to maintain the existing courthouse.

Operating Budget Impact

Annual Bond Redemption \$ \$355,275

FY16 - 1 FTE increase to County General fund budget. Accomodations for Sheriff/Security. Will be re-evaluated closer to construction completion.



GENERAL COUNTY PROJECTS

Number: C0290

Project: FY2003 COURTHOUSE RENOVATION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	5,435	0	5,435	0	0	0	0	0	0	0	0	0	0	5,435
CONSTRUCTION	1,460	0	1,460	0	0	0	0	0	0	0	0	0	0	1,460
ADMINISTRATION	45	0	45	0	0	0	0	0	0	0	0	0	0	45
EQUIPMENT & FURNISHINGS	180	0	180	0	0	0	0	0	0	0	0	0	0	180
OTHER	1,760	0	1,760	0	0	0	0	0	0	0	0	0	0	1,760
Total Expenditures	8,880	0	8,880	0	0	0	0	0	0	0	0	0	0	8,880
BONDS	7,895	0	7,895	0	0	0	0	0	0	0	0	0	0	7,895
PAY AS YOU GO	985	0	985	0	0	0	0	0	0	0	0	0	0	985
Total Funding	8,880	0	8,880	0	0	0	0	0	0	0	0	0	0	8,880

Project Status:

\$6,172,471 spent and encumbered through February 2016
FY16 - Study of options for new courthouse and courthouse requirements completed.

Project: C0298-FY2005 US 40 CORRIDOR ENHANCEMENT Number: C0298

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 RT40 Corridor is a priority under PlanHoward 2030. The purpose is to invest public funds in community enhancement

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 RT40 Design Manual and the RT40 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.

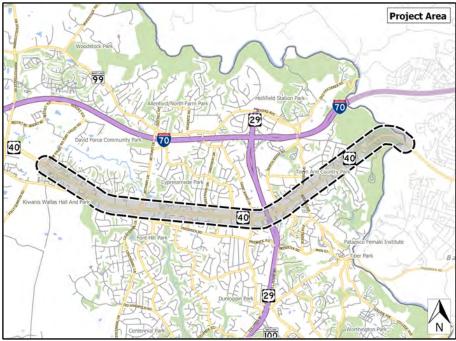
Project Schedule

FY17-FY19 - Continuation of enhancement projects.

Operating Budget Impact

Annual Bond Redemption \$ \$38,250

The Bond funding listed for this project includes both long term bond funding and the use of the master lease program as appropriate.



GENERAL COUNTY PROJECTS

Number: C0298

Project: FY2005 US 40 CORRIDOR ENHANCEMENT

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	250	0	250	50	0	0	0	0	50	0	0	0	0	300
CONSTRUCTION	800	0	800	100	0	0	0	0	100	0	0	0	0	900
Total Expenditures	1,050	0	1,050	150	0	0	0	0	150	0	0	0	0	1,200
BONDS	700	0	700	150	0	0	0	0	150	0	0	0	0	850
GRANTS	50	0	50	0	0	0	0	0	0	0	0	0	0	50
OTHER SOURCES	100	0	100	0	0	0	0	0	0	0	0	0	0	100
PAY AS YOU GO	200	0	200	0	0	0	0	0	0	0	0	0	0	200
Total Funding	1,050	0	1,050	150	0	0	0	0	150	0	0	0	0	1,200

Project Status:

\$612,082 spent and encumbered through February 2016

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-FY17 - Complete design and construction Phase II median streetscape improvements and initiate planning and design of improvements within selected corridor parkway medians and the Frederick Road intersection.

GENERAL COUNTY PROJECTS

Project: C0299-FY2005 WASTE MANAGEMENT IMPROVEMENTS

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.
- 4. FY17 Gas Capture Improvement will remedy that ARL lined cell is modeled as the major producer of fugitive methane (greenhouse gas) in the County.

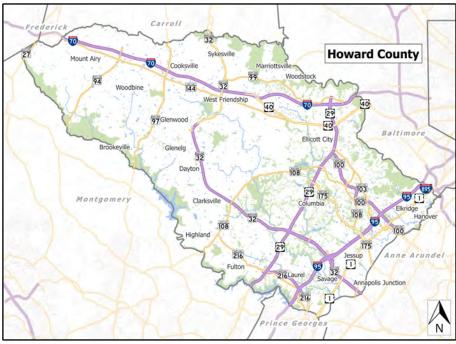
Project Schedule

FY17 û Construct gas capture improvement. Delayed due to funding constraints: construct next portion of expanded compost facility, upgrade compactors. FY18-FY22 û Design and construct Cell 1 regrading, Materials Recovery Facility, satellite recycling drop-off. Repair/replace û pumping stations, scale, and TS Floor. As required design and construct groundwater treatment upgrades and Cell 2A.

Operating Budget Impact

Annual Bond Redemption \$ \$923,175

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 tak



GENERAL COUNTY PROJECTS

Number: C0299

Project: FY2005 WASTE MANAGEMENT IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	2,150	0	2,150	820	1,055	35	80	0	1,990	500	0	150	430	5,220
CONSTRUCTION	20,280	0	20,280	2,850	3,275	5,075	4,350	0	15,550	300	0	7,500	4,000	47,630
ADMINISTRATION	636	0	636	86	98	152	120	0	456	9	0	225	120	1,446
Total Expenditures	23,066	0	23,066	3,756	4,428	5,262	4,550	0	17,996	809	0	7,875	4,550	54,296
BONDS	5,269	0	5,269	503	503	503	503	0	2,012	809	0	7,875	4,550	20,515
OTHER SOURCES	17,597	0	17,597	3,253	3,925	4,759	4,047	0	15,984	0	0	0	0	33,581
PAY AS YOU GO	200	0	200	0	0	0	0	0	0	0	0	0	0	200
Total Funding	23,066	0	23,066	3,756	4,428	5,262	4,550	0	17,996	809	0	7,875	4,550	54,296

Project Status:

\$15,057,420 spent and encumbered through February 2016

- FY07 Residents convenience area and sediment/storm water basin construction. Phase I of video surveillance system installed. Front security gate at Alpha Ridge installed.
- FY08 Residents convenience area and ponds. Perimeter security fencing at landfills and improvements to scalehouse completed. Design of trailer storage area, groundwater remediation system expansion and LFG generation system on-going.
- FY09 Design of shop pond pipe lining, overall facility design, groundwater remediation system expansion, trailer storage area, and yard waste compost facility. Construction of outbound scale replacement, shop pond pipe relining.
- 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 û 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 û Complete maintenance shop yard improvements, resurface residentsÆ area, design gas capture improvements, replace leachate power back-up.

Project: C0301-FY2005 TECHNOLOGY INFRASTRUCTURE UPGRADES

Description

Operating Budget Impact

A project to upgrade infrastructure of the County's Local Area Networks and Wide Annual Bond Redemption \$ \$1,380,420 Area Networks. This includes engineering assessment/analysis to define upgrades necessary to overcome existing and projected deficiencies, and meet longer term objectives. Installation of optical fiber plant, replacement of network funding. infrastructure hardware (switches, routers, etc.) as necessary to provide a Gigabit Backbone Network.

The Bond funding listed for this project includes both long term bond

Justification

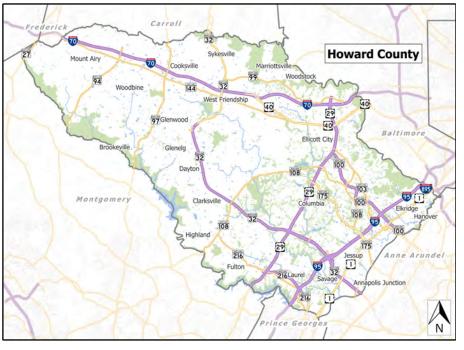
The County is currently in process of migrating to more client/server based processing with more robust applications, which are requiring higher bandwidth for adequate response time, particularly in the areas of Public Safety Systems (Intergraph 911/Records Management) which spans several campuses. Upgrades will enable the speed and response time of technology devices to remain within acceptable levels of performance. Proactive improvement of the infrastructure will enable the County to move forward with its application development without constraining the end product because of bandwidth issue.

Remarks

Rebuilding and refreshing to include cable modernization, hardware infrastructure upgrades, installation of WiFi and VOIP in those areas where it previously did not exist. Additionally this project will be used for the planning and development of new County intranet and internet websites.

Project Schedule

FY17 - Continuation of refresh, refurbish and upgrade projects and necessary Cyber Security enhancements. Add WiFi and VOIP to County facilities in a phased approach; plan and develop new County intranet and internet sites.



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.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	4,930	2,500	7,430	2,500	2,500	2,500	2,500	2,500	12,500	0	0	0	0	19,930
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	0	60	0	0	0	0	0	0	0	0	0	0	60
Total Expenditures	17,186	2,500	19,686	2,500	2,500	2,500	2,500	2,500	12,500	0	0	0	0	32,186
BONDS	16,426	2,375	18,801	2,375	2,375	2,375	2,375	2,375	11,875	0	0	0	0	30,676
PAY AS YOU GO	760	125	885	125	125	125	125	125	625	0	0	0	0	1,510
Total Funding	17,186	2,500	19,686	2,500	2,500	2,500	2,500	2,500	12,500	0	0	0	0	32,186

Project Status:

\$13,133,915 spent and encumbered through February 2016

FY07 - Phase III - Finish rewire of county buildings. FY08 - Continuance of Phase III - The Howard County Detention Center only building remaining to be rewired. FY09 - On Target. FY10 - Install backbone segments to core County facilities. FY11 - Portion of backbone complete and up to six county facilities to be connected. Continual elimination of leased phone lines. FY12 - Continuation of the project. FY13 - Continuation of the project. FY14 - Backbone completed and additional facilities connected. FY15 - Additional facilities connected, Cyber Security enhancements initiated. FY16 - 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.

Project: C0309-FY2007 LAND ACQUISITION CONTINGENCY RESERVE

Description

A fund for acquisition of land that comes available on the market that meets 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, etc. required for the acquisition of property.

Justification

Allows the County to move quickly on parcels that come on the market. Land resources are becoming rare and it is essential that the County have the ability to move quickly to take advantage of unique opportunities for unique locations and possibly prevent the future need for condemnation.

Remarks

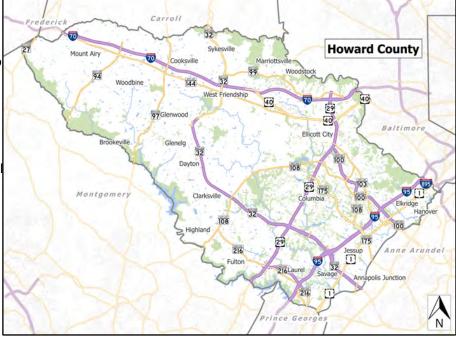
1. OTHER revenues represents property disposition proceeds reflected in CR 125-2014, and 67, 68 & 69-2015, to assist the county with purchase of a potential 13th high school site.

Project Schedule

FY16 - Identify and purchase 13th high school site. Defund and create new capital project C0352.

Operating Budget Impact

Annual Bond Redemption \$ \$1,201,500



GENERAL COUNTY PROJECTS

Number: C0309

Project: FY2007 LAND ACQUISITION CONTINGENCY RESERVE

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
LAND ACQUISITION	36,000	(10,750)	25,250	0	0	0	0	0	0	0	0	0	0	25,250
Total Expenditures	36,000	(10,750)	25,250	0	0	0	0	0	0	0	0	0	0	25,250
BONDS	26,700	(8,250)	18,450	0	0	0	0	0	0	0	0	0	0	18,450
OTHER SOURCES	4,000	(2,500)	1,500	0	0	0	0	0	0	0	0	0	0	1,500
PAY AS YOU GO	5,300	0	5,300	0	0	0	0	0	0	0	0	0	0	5,300
Total Funding	36,000	(10,750)	25,250	0	0	0	0	0	0	0	0	0	0	25,250

Project Status:

\$23,231,613 spent and encumbered through February 2016

FY09 - Purchased Ellicott City Post Office

FY10 - Purchased property to be used for Route One Fire Station (F5975)

FY12 - Purchased the Refuse Collection Facility

FY14 - Purchased Court Place, Fels Lane, Little Patuxent Parkway, TSC/Route 32.

FY15 - Purchased 10750 Little Patuxent Parkway*, 8518 Frederick Road*, Long Reach Village Center, 9770 & 9790 Washington Boulevard*.

^{*} See remarks under project status.

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.

Operating Budget Impact

Annual Bond Redemption \$ \$364,500

The Bond funding listed for this project includes long term bond funding.

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

- 1. Replace radio core equipment/software and 911 consoles.
- 2. Replace tower light systems and GPS timing systems at all sites
- 3. Replace all portable radios
- 4. Replace site controller, UPS, generators, antennas, and lines.
- 5. Building improvement at Howard High.
- 6. Prior Year OTHER revenue represents paygo generated from Fire Tax revenues.
- 7. Current FY17 request represents Master Lease.

Project Schedule

FY17 - Replace end-of-life radios which by mid 2018 will not be manufactured nor supported by the vendor with APX series radios to allow for interoperability . Replace all site infrastructure such as base station radios, antennas, lines, UPS and generators for reliability and interoperability with Federal, State and local governments. FY18 - Complete replacement and upgrade to portable radios.



GENERAL COUNTY PROJECTS

Number: C0311

Project: FY2007 PUBLIC SAFETY RADIO SYSTEM ENHANCEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	8,600	10,400	19,000	14,000	250	250	250	250	15,000	0	0	0	0	34,000
Total Expenditures	8,600	10,400	19,000	14,000	250	250	250	250	15,000	0	0	0	0	34,000
BONDS	8,100	0	8,100	0	0	0	0	0	0	0	0	0	0	8,100
OTHER SOURCES	500	0	500	0	0	0	0	0	0	0	0	0	0	500
MASTER LEASE	0	10,400	10,400	14,000	250	250	250	250	15,000	0	0	0	0	25,400
Total Funding	8,600	10,400	19,000	14,000	250	250	250	250	15,000	0	0	0	0	34,000

Project Status:

\$8,588,567 spent and encumbered through February 2016

FY08 - Ongoing delivery of Site Ten materials and installation. Microwave material received. Continued negotiation and purchase of upgrade equipment and systems. FY09 - On target. FY10 - Mobile Tower Unit (MTU) to be outfitted with equipment; wireless AP Site for WEBEOC, 800MHZ single site Conventional Channel, 100 handheld low grade radios base site; Motorbridge CMARC to Southern Backup 911; Timbers of Troy shelter replacement. FY11 - CMARC Motorbridge has been completed. Timbers of Troy shelter replacement completed. FY12 - Start first phase of Project 25 radio system by upgrading all radio sites with GTR radios. Upgrade of Police and Fire vehicles radios to new Motorola APX 6500, 700/800 MHz radio Project 25. This will enhance public safety with interoperability with Prince George County, Baltimore County, Baltimore City and State of Maryland Project 25 state wide radio system. This will also enhance Howard County 800 MHz public safety radio capabilities to expand the operations of Fire and Police with more talk groups and flexibly to manage radios inside of vehicles. Future funding from Technology fund. FY13 - Narrowbanding of radio frequencies completed. FY16 - Achieved reliability enhancement to radioÆs main core by moving the radio core form 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.

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 CountyÆs 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

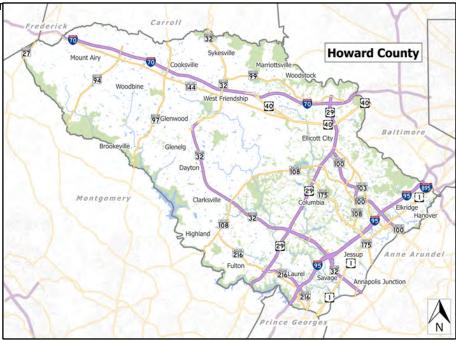
Current request is to able to support, enhance modify and develop the current and new functionalities in SAP as well as support the new Fleet Management, Inventory, and Human Capital Management initiatives.

Project Schedule

FY17 - Human Capital Management Process design is expected to be completed. The RFP and award for the implementation is expected to be completed in FY17.

Operating Budget Impact

Annual Bond Redemption \$ \$621,450



GENERAL COUNTY PROJECTS

Number: C0312

Project: FY2007 ENTERPRISE RESOURCE PLANNING SYSTEM

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	6,900	0	6,900	500	500	500	500	500	2,500	0	0	0	0	9,400
CONSTRUCTION	4,190	0	4,190	1,000	1,000	1,000	1,000	1,000	5,000	0	0	0	0	9,190
ADMINISTRATION	3,900	0	3,900	0	0	0	0	0	0	0	0	0	0	3,900
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	1,500	1,500	1,500	1,500	1,500	7,500	0	0	0	0	25,790
BONDS	10,060	0	10,060	750	750	750	750	750	3,750	0	0	0	0	13,810
UTILITY CASH	5,530	0	5,530	500	500	500	500	500	2,500	0	0	0	0	8,030
PAY AS YOU GO	2,700	0	2,700	250	250	250	250	250	1,250	0	0	0	0	3,950
Total Funding	18,290	0	18,290	1,500	1,500	1,500	1,500	1,500	7,500	0	0	0	0	25,790

Project Status:

\$14,425,223 spent and encumbered through February 2016

FY08 - Planning and Change Management ongoing. FY10 - Utility Implementation to begin third quarter of FY2010. FY11 - Utility implementation finished. FY12 - Start Business Intelligence, SRM upgrade and begins the RFP for Human Resources. FY13 - SRM upgrade completed, Business Intelligence (BW) implemented for operational users. FY14 - Business Intelligence-Dashboard rollout in process. First phases of Human Resources Implementation, SAP Financials and Utilities Upgrade underway. FY15 - Business Objects dashboard rolled out to Capital Projects team. Dashboard for Grants Management and Advanced Query reporting for Finance has planned implementation in FY15. Business Process Improvement Assessment was completed and approved; recommendations expected to be completed in FY15. FY16- SAP Fleet Maintenance Management Implementation begun and roll out of inventory barcoding solution for Fleet Inventory Locations. Upgrade of SAP Portal to establish Enterprise Single Sign-on based on Windows account is expected to go live by end of FY16. Human Capital Management Process design is expected to begin mid FY16. The design will include Organization Management, Position Control. Employee Self-service to record time and attendance directly in SAP.

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.

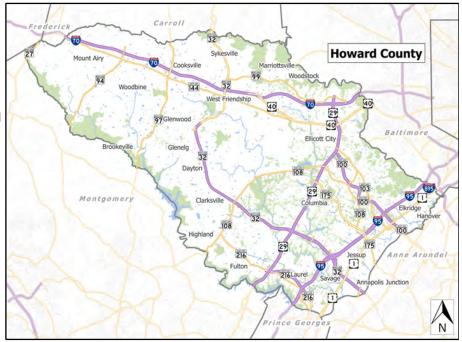
Project Schedule

FY17 - Make upgrades at vehicle maintenance shops. Install a vehicle wash pad in FY16 and three in FY17.

Operating Budget Impact

Annual Bond Redemption \$ \$482,670

The Bond funding listed for this project includes both long term bond funding and the use of the master lease program as appropriate. 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	e Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	2,323	0	2,323	0	0	0	0	0	0	0	0	0	0	2,323
CONSTRUCTION	8,384	0	8,384	0	0	0	0	0	0	0	0	0	0	8,384
ADMINISTRATION	219	0	219	0	0	0	0	0	0	0	0	0	0	219
Total Expenditures	10,926	0	10,926	0	0	0	0	0	0	0	0	0	0	10,926
BONDS	10,726	0	10,726	0	0	0	0	0	0	0	0	0	0	10,726
PAY AS YOU GO	200	0	200	0	0	0	0	0	0	0	0	0	0	200
Total Funding	10,926	0	10,926	0	0	0	0	0	0	0	0	0	0	10,926

Project Status:

\$10,147,624 spent and encumbered through February 2016

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 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.

Construction:

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

24 USTs removed.

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

Oil/water seperator replacement completed at 7 sites.

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

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

Stormwater protection system installed at Cooksville fueling site.

Updated SPCC Plans and SWPPPs for all required facilities.

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

- 1. Electronic Fire EMS system complete.
- 2. Field reporting pilot complete. Decisions pending on future direction.
- 3. 911 upgrade scheduled for FY14.
- 4. Legacy incident report conversion to searchable format underway.
- 5. OTHER represents Pay as you Go generated by Fire Tax.

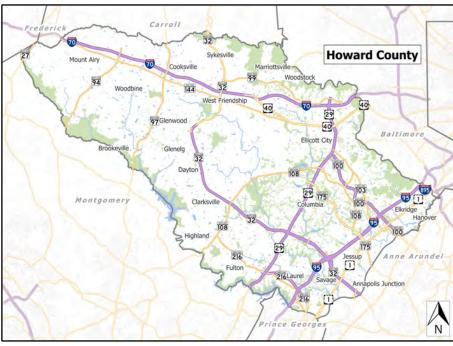
Project Schedule

FY17 - Continue to replace and support the RMS and Automated Field Reporting solution; phased approach to replacing MDTs for Police and Fire.

Operating Budget Impact

Annual Bond Redemption \$ \$390,150

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	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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	2,420	775	3,195	1,000	1,000	1,000	1,000	1,000	5,000	0	0	0	0	8,195
Total Expenditures	3,845	775	4,620	1,000	1,000	1,000	1,000	1,000	5,000	0	0	0	0	9,620
BONDS	2,895	775	3,670	1,000	1,000	1,000	1,000	1,000	5,000	0	0	0	0	8,670
OTHER SOURCES	950	0	950	0	0	0	0	0	0	0	0	0	0	950
Total Funding	3,845	775	4,620	1,000	1,000	1,000	1,000	1,000	5,000	0	0	0	0	9,620

Project Status:

\$3,593,746 spent and encumbered through February 2016

FY09 - Police and Fire MDT reassessment completed. FY10 - Netmotion installed. Police field reporting and Fire ambulance field reporting started. FY11 - System upgrades completed. FY12 - Police field reporting pilot underway. FY13 - Police field reporting completed. FY14 - Legacy records conversion and 911 upgrade ongoing. FY15 - Web RMS and Field Reporting System upgrade and implementation continued. FY16 - Continue to replace MDTs for Police, Sheriff, Fire and continue with Web RMS and Field Reporting upgrade.

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.

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. Energy Performance Contract approved by Council Bill #52-2014.
- 2. Upgrade/improve building infrastructures to meet current facility standards/requirements; to meet changed/expanded/complex missions; to extend facility life expectancy; to improve efficiency, effectiveness and life safety: for roofing systems, window systems, HVAC systems, electrical systems, fire protection systems, energy management & control systems, and for environmental/safety corrections.
- 3. Prior appropriation restated with the creation of a new funding category of master lease (which used to be included in ôOtherö in this project).

Project Schedule

FY17 - Design/Construction. Required Glenwood County facility water and waste water facility planned at an estimated cost of \$2.9M. Complete air quality assessments for mold in several Howard County schools.

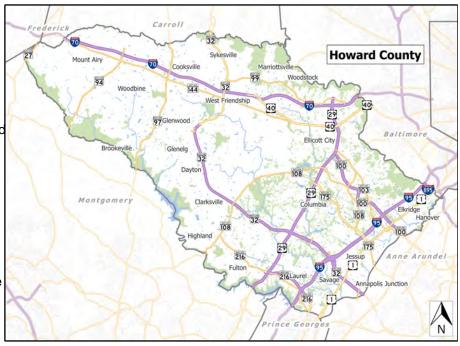
FY18 - Design/Construction

FY19 - Design/Construction

Operating Budget Impact

Annual Bond Redemption \$ \$4,103,550

The Bond funding listed for this project includes long term bond funding.~Will provide future savings as a result of reduced maintenance and energy costs.



GENERAL COUNTY PROJECTS

Number: May 26

Project: FY2013 SYSTEMIC FACILITY IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	2,950	800	3,750	400	400	400	400	400	2,000	400	400	400	0	6,950
CONSTRUCTION	20,750	8,300	29,050	8,100	8,100	8,100	8,100	8,100	40,500	3,500	3,500	3,500	0	80,050
ADMINISTRATION	400	200	600	243	243	243	243	243	1,215	0	0	0	0	1,815
EQUIPMENT & FURNISHINGS	15,900	675	16,575	100	100	100	100	100	500	100	100	100	0	17,375
Total Expenditures	40,000	9,975	49,975	8,843	8,843	8,843	8,843	8,843	44,215	4,000	4,000	4,000	0	106,190
BONDS	25,000	9,975	34,975	8,843	8,843	8,843	8,843	8,843	44,215	4,000	4,000	4,000	0	91,190
MASTER LEASE	15,000	0	15,000	0	0	0	0	0	0	0	0	0	0	15,000
Total Funding	40,000	9,975	49,975	8,843	8,843	8,843	8,843	8,843	44,215	4,000	4,000	4,000	0	106,190

Project Status:

\$19,920,438 spent and encumbered through February 2016 FY17 design and renovation of various County projects.

Project: C0318-FY2010 MARC SAVAGE STATION GARAGE Number: C0318

Description

A project to fund the construction of a public parking garage adjacent to the MARC Savage Commuter Rail Station located at 9009 Dorsey Run Road, Annapolis Junction.

Justification

The construction of a parking garage for commuter rail patrons will permit the transfer of approximately 10.5 acres of surface parking lots owned by the State of Maryland to private ownership and assessment of real property taxes on the multi-use development proposed for the site. The construction of the garage will be funded by the issuance of Tax Increment Financing Bonds. The debt service will be funded by the incremental real property taxes and special district taxes to be collected from the owners of the property and potentinal BRAC Revitalization and Incentive Zone funds from the State.

Remarks

Separate legislation to establish the tax increment financing development and special tax districts and an ordinance to authorize the issuance of the bonds are required for tax increment financing projects.

Project Schedule

FY17 - The bond proceeds included Capitalized Interest to fund interest on the debt through the development phase.

Operating Budget Impact

Tax Increment Financing Bonds are not a general obligation of the County.



GENERAL COUNTY PROJECTS

Number: C0318

Project: FY2010 MARC SAVAGE STATION GARAGE

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	17,000	0	17,000	0	0	0	0	0	0	0	0	0	0	17,000
Total Expenditures	17,000	0	17,000	0	0	0	0	0	0	0	0	0	0	17,000
TIF BONDS	17,000	0	17,000	0	0	0	0	0	0	0	0	0	0	17,000
Total Funding	17,000	0	17,000	0	0	0	0	0	0	0	0	0	0	17,000

Project Status:

\$12,527,152 spent and encumbered through February 2016 Project construction phase completed.

Garage turned over for MTA management.

GENERAL COUNTY PROJECTS

Number: C0319

Project: C0319-FY2010 TAX INCREMENT FINANCING PROJECTS

Description

A project for funding of tax increment financing projects.

Justification

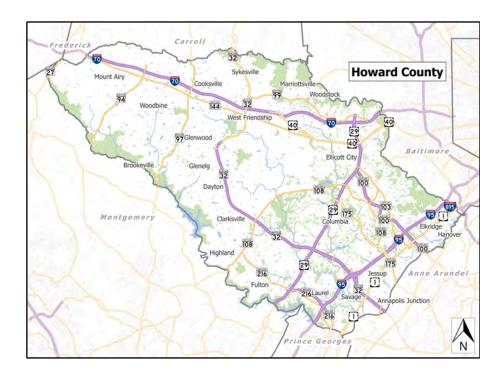
TIF Bonds will be sold to enable the construction necessary.

Remarks

1. TIF Bonds project as planned.

Project Schedule

2. Budget request represents estimates of: \$50,000,000 for Other financing TIF projects \$70,000,000 for Downtown Columbia TIF FY18-Potential future TIF



GENERAL COUNTY PROJECTS

Number: C0319

Project: FY2010 TAX INCREMENT FINANCING PROJECTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	50,000	70,000	120,000	40,000	0	0	0	0	40,000	0	0	0	0	160,000
Total Expenditures	50,000	70,000	120,000	40,000	0	0	0	0	40,000	0	0	0	0	160,000
TIF BONDS	50,000	70,000	120,000	40,000	0	0	0	0	40,000	0	0	0	0	160,000
Total Funding	50,000	70,000	120,000	40,000	0	0	0	0	40,000	0	0	0	0	160,000

Project Status: \$0 spent and encumbered through February 2016

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. Prior Year OTHER revenue represents central fleet funding.
- 3. Current FY17 request represents Master Lease.

Project Schedule

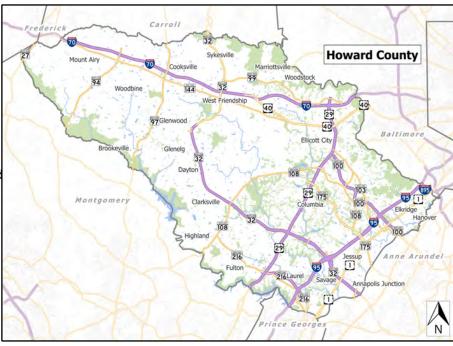
FY17- Design/Construction

FY18- Construction; Project Close Out

Operating Budget Impact

Annual Bond Redemption \$ \$289,125

The Bond funding listed for this project includes long term bond funding. 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)					Five	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	375	122	497	0	148	0	0	0	148	0	0	0	0	645	
CONSTRUCTION	3,520	1,580	5,100	1,290	990	0	0	0	2,280	0	0	0	0	7,380	
Total Expenditures	3,895	1,702	5,597	1,290	1,138	0	0	0	2,428	0	0	0	0	8,025	
BONDS	3,295	702	3,997	1,290	1,138	0	0	0	2,428	0	0	0	0	6,425	
OTHER SOURCES	600	0	600	0	0	0	0	0	0	0	0	0	0	600	
MASTER LEASE	0	1,000	1,000	0	0	0	0	0	0	0	0	0	0	1,000	
Total Funding	3,895	1,702	5,597	1,290	1,138	0	0	0	2,428	0	0	0	0	8,025	

Project Status:

\$3,208,103 spent and encumbered through February 2016
Mayfield ABT instsalled old underground tank removed. Alpha Ridge Tank design complete. Top tank upgrade of Banneker Fire Station complete. Dayton and Guilford Aabove ground tank in design.

Project: C0323-FY2011 BUS/VEHICLE ACQUISTION Number: C0323

Description

A project for the purchase of fixed route and paratransit vehicles for the Howard Transit and HT Ride systems respectively. Project includes the purchase of necessary equipment for the operation of the fixed route and paratransit buses.

Justification

The continued replacement of transit buses with diesel/electric hybrid buses enables the fixed route and paratransit systems to replace obsolete buses with reliable, energy efficient models. Federal and State grant funds support a portion of the cost of the vehicles.

Remarks

The purchase of hybrid buses is based on need to replace equipment after its useful life has been achieved and to advance County goals for energy efficiency and environmental protection.

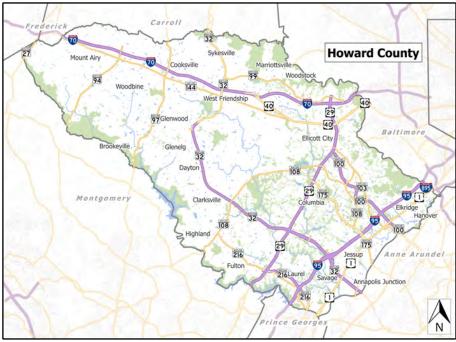
- 1. Federal American Recovery and Reinvestment Act (ARRA) funds cover all purchases scheduled for FY10.
- 2. FY11 thru FY15 requests are based on a five-year Transportation Development Plan. Federal/State grant funds are requested annually.

Project Schedule

FY16 - Project to be completed and closed.

Operating Budget Impact

This project continues the funding for transit vehicles to support the Howard Transit and HT Ride systems.



GENERAL COUNTY PROJECTS

Number: C0323

Project: FY2011 BUS/VEHICLE ACQUISTION

(In Thousands)					Five	Year Ca	apital Pro	ogram	Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
EQUIPMENT & FURNISHINGS	625	0	625	0	0	0	0	0	0	0	0	0	0	625
Total Expenditures	625	0	625	0	0	0	0	0	0	0	0	0	0	625
GRANTS	625	0	625	0	0	0	0	0	0	0	0	0	0	625
Total Funding	625	0	625	0	0	0	0	0	0	0	0	0	0	625

Project Status:

\$486,532 spent and encumbered through February 2016

FY11 - \$475,000 - Federal Grants; \$149,985 - State Grants. Fixed Route System: 3 medium hybrid buses through a Congressional Earmark; Paratransit System: 3 Small Hybrid Paratransit buses; and 2 hybrid sedans.

Project: C0324-FY2012 GEODETIC NETWORK AUTOMATION 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.

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.

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.

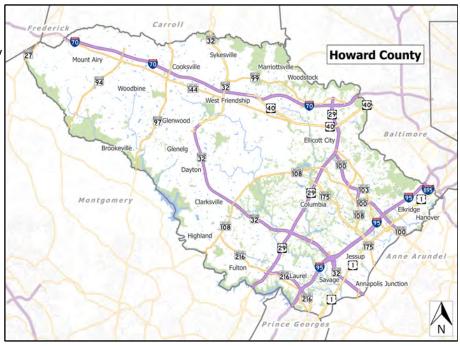
Project Schedule

FY17 - Purchase mapping and point cloud software.

Operating Budget Impact

Annual Bond Redemption \$ \$7,650

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	apital Pro	ogram	Master Plan								
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
ADMINISTRATION	60	0	60	15	15	0	0	0	30	0	0	0	0	90
EQUIPMENT & FURNISHINGS	375	0	375	0	25	0	0	0	25	0	0	0	0	400
Total Expenditures	435	0	435	15	40	0	0	0	55	0	0	0	0	490
BONDS	145	0	145	0	25	0	0	0	25	0	0	0	0	170
PAY AS YOU GO	290	0	290	15	15	0	0	0	30	0	0	0	0	320
Total Funding	435	0	435	15	40	0	0	0	55	0	0	0	0	490

Project Status:

\$66,622 spent and encumbered through February 2016
FY15 - Purchase HDS scanner, software and training.
FY16 - Purchased UAV equipment, software and training and HDS scanner, software and training.

Description

A project for the purchase of fixed route and paratransit vehicles for the Howard Transit and HT Ride systems respectively. Project includes the purchase of necessary equipment for the operation of the fixed route and paratransit buses for FY 2013.

Project: C0325-FY2013 BUS/VEHICLE ACQUISTION

Justification

The continued replacement of transit buses with diesel/electric hybrid buses enables the fixed route and paratransit systems to continue the replacement of buses that are beyond their useful life. It is anticipated that Federal and State grant funds will support a portion of the cost of the vehicles.

Remarks

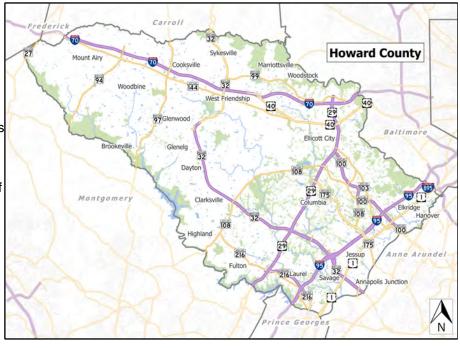
The purchase of hybrid buses is based on the need to replace equipment after its useful life has been achieved. The purchase of hybrid vehicles meets Howard County's goals for energy efficiency and environmental protection.

1.Congestion Mitigation Air Quality (CMAQ) grant to purchase four (4) hybrid sedans and one (1) paratransit bus. This grant covers the hybridization portion of the purchase of the vehicles. The base costs are covered through County funds. 2.Annual Preventive Maintenance (PM) grant of \$150,000 from the MTA for maintenance efforts on current Howard Transit fixed route and paratransit vehicles.

In FY 2014, grant funds have been reduced to the level that was actually received in the grant agreements from the MTA. Plans and Engineering appropriation for the study, design and development of the recharging station for the electric bus project have been added.

Project Schedule

FY17 - Financial adjustment required.



GENERAL COUNTY PROJECTS

Number: C0325

Project: FY2013 BUS/VEHICLE ACQUISTION

(In Thousands)					Five	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	65	0	65	0	0	0	0	0	0	0	0	0	0	65	
EQUIPMENT & FURNISHINGS	655	0	655	0	0	0	0	0	0	0	0	0	0	655	
OTHER	150	0	150	0	0	0	0	0	0	0	0	0	0	150	
Total Expenditures	870	0	870	0	0	0	0	0	0	0	0	0	0	870	
GRANTS	504	(74)	430	0	0	0	0	0	0	0	0	0	0	430	
PAY AS YOU GO	366	74	440	0	0	0	0	0	0	0	0	0	0	440	
Total Funding	870	0	870	0	0	0	0	0	0	0	0	0	0	870	

Project Status:

\$754,157 spent and encumbered through February 2016
FY13 - Fixed Route System: 1 Medium Duty Hybrid Transit Bus; Paratransit System: 4 hybrid sedans and 1 paratransit bus through CMAQ grant; 2 additional paratransit buses through the Annual MTA Transportation Grant; Annual PM grant

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, funding and the use of the master lease program as appropriate.~New 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

Most County departments are live in the ECM system as of the end of FY 2016. Email management functions are in place removing strain from the County's email system. Federated Search has streamlined legal discovery searching for electronic documents.

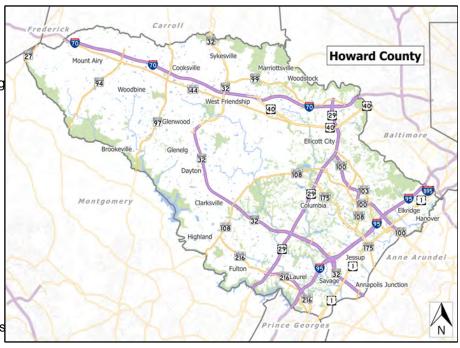
Project Schedule

FY17 - Planned completion of migration of legacy documents from file shares, integration of existing County systems and an evaluation of the cost effectiveness of integrating ECM with SAP and SharePoint.

Operating Budget Impact

Annual Bond Redemption \$ \$33,750

The Bond funding listed for this project includes both long term bond hardware and software will require ongoing maintenance and upgrades.



GENERAL COUNTY PROJECTS

Number: C0327

Project: FY2013 ENTERPRISE CONTENT MANAGEMENT (ECM)

(In Thousands)					Five	Year Ca	apital Pro	ogram	Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status:

\$2,398,629 spent and encumbered through February 2016

FY13 - Initiated project and began Phase I - Replace records management system, implement email archive and eDiscovery. Train users County-wide.

FY14 - Continuation of Phase I implementation & training. Began Phase II - Pilot and subsequently implement, email archive. Extend ECM to include records and eDiscovery for file shares, SharePoint and CRM files.

FY15 - Implementation, training, email archive, email management and eDiscovery largely complete.

FY16 - Completion of migration of legacy documents and completion of employee training.

Project: C0328-FY2012 BUS/VEHICLE ACQUISTION

Number: C0328

Description

A project for the purchase, upgrade, and maintenance of Automatic Vehicle Locator System and Automatic Passenger Counter System to be utilized on all buses servicing Howard County

Justification

The purchase and replacement of Automatic Vehicle Locator (AVL) Bus Stop Annunciator provides for operating a real-time mapping and location system for its fixed-route system and ADA compliance by having prerecorded messages announcing bus stops on fixed route systems.

The purchase and replacement of Automatic Passenger Counters (APC) provides for separation of ADA/General Paratransit authorization cards with picture ID and ability to preload fare for trips and taxi voucher program.

Remarks

The purchase of Automatic Vehicle Locator (AVL) and Automatic Passenger Counter (APC) is based on the need to purchase, upgrade, replace equipment after its useful life has been achieved.

Equipment brings Howard County buses into modern age of most transit systems as well as ADA compliance.

In order to have an effective system of predicting next arrivals for customers, allow dispatchers to effectively monitor the system, and collect accurate boarding and alighting data, the vast majority of the fleet must be outfitted with functional equipment.

In addition, such a system would support improvements for customers such as digital maps at large stations such as The Mall in Columbia, so that even customers without smart phones could see where arriving buses were located. These maps are currently in use in surrounding jurisdictions, and are seen as a great benefit by customers.

Project Schedule

FY16 û Release Request for Proposals FY17 û Purchase, upgrade AVL/APC systems



GENERAL COUNTY PROJECTS

Number: C0328

Project: FY2012 BUS/VEHICLE ACQUISTION

(In Thousands)					Five	Year Ca	apital Pro	ogram	Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
EQUIPMENT & FURNISHINGS	821	50	871	0	0	0	0	0	0	0	0	0	0	871
Total Expenditures	821	50	871	0	0	0	0	0	0	0	0	0	0	871
GRANTS	821	50	871	0	0	0	0	0	0	0	0	0	0	871
Total Funding	821	50	871	0	0	0	0	0	0	0	0	0	0	871

Project Status:
\$787,166 spent and encumbered through February 2016
This project continues the funding for AVL/APC systems

Project: C0329-FY2012 ENERGY MANAGEMENT/IMPROVEMENTS

Number: C0329

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

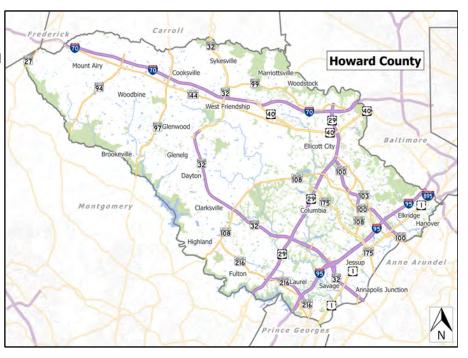
- 1. The funding for this will provide direction for decision making as it applies to energy use for public buildings, utilities, transportation, County and public works operations.
- 2. Initiate studies will be: Assessments of HVAC systems for B & O Museum, Northern District, Cedar Lane Park West and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

Project Schedule

FY15 - Implement study/analysis recommendations

Operating Budget Impact

Annual Bond Redemption \$ \$11,250



GENERAL COUNTY PROJECTS

Number: C0329

Project: FY2012 ENERGY MANAGEMENT/IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status:

\$506,842 spent and encumbered through February 2016
FY12/13/14 - Selected Energy consultant & completed study/analysis; completed lighting retrofit at Mayfield & Cooksville; completed initial LEED EBOM plans

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. 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. Additional funding may be available through the State.

Project Schedule

FY17 - 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	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	200	0	200	0	0	0	0	0	0	0	0	0	0	200
CONSTRUCTION	800	(800)	0	0	0	0	0	0	0	0	0	0	0	0
Total Expenditures	1,000	(800)	200	0	0	0	0	0	0	0	0	0	0	200
STORMWATER UTILTY FUNDING	1,000	(800)	200	0	0	0	0	0	0	0	0	0	0	200
Total Funding	1,000	(800)	200	0	0	0	0	0	0	0	0	0	0	200

Project Status:

\$45,600 spent and encumbered through February 2016
Designed Parking Lot D improvements concept

Project: C0332-FY2014 BUS STOP IMPROVEMENTS Number: C0332

Description

A project to implement a series of systemic improvements to Howard Transit bus Annual Bond Redemption \$ \$10,800 stops. These improvements may include the installation of bus shelters, concrete pads, bus stop signs, connecting sidewalks, curb cuts (consistent with ADA requirements), crosswalks, route map holders 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 Howard Transit bus stops 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.

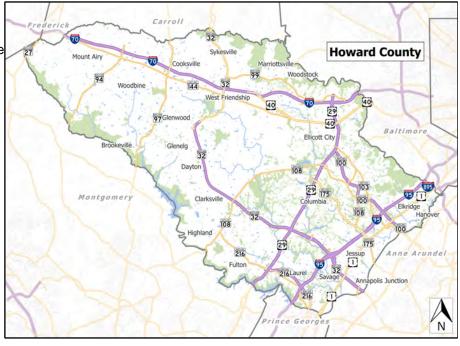
Remarks

- 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

- FY15 Identification of locations and construction of bus stop improvements.
- FY16 Engineering and Construction of bus stop improvements.
- FY17 Engineering, Construction and Rehabilitation of bus stops.

Operating Budget Impact



GENERAL COUNTY PROJECTS

Number: C0332

Project: FY2014 BUS STOP IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	60	25	85	20	20	20	20	20	100	20	20	0	0	22
LAND ACQUISITION	60	25	85	20	20	20	20	20	100	20	20	0	0	22
CONSTRUCTION	320	200	520	110	110	110	110	110	550	110	110	0	0	1,29
EQUIPMENT & FURNISHINGS	0	0	0	50	0	0	0	0	50	0	0	0	0	50
Total Expenditures	440	250	690	200	150	150	150	150	800	150	150	0	0	1,79
BONDS	240	0	240	0	0	0	0	0	0	0	0	0	0	24
GRANTS	100	50	150	100	50	50	50	50	300	50	50	0	0	550
PAY AS YOU GO	100	200	300	100	100	100	100	100	500	100	100	0	0	1,000
Total Funding	440	250	690	200	150	150	150	150	800	150	150	0	0	1,79

Project Status:

\$74,110 spent and encumbered through February 2016
FY17 - Engineering, Construction and Rehabilitation of bus stops.

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. 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.

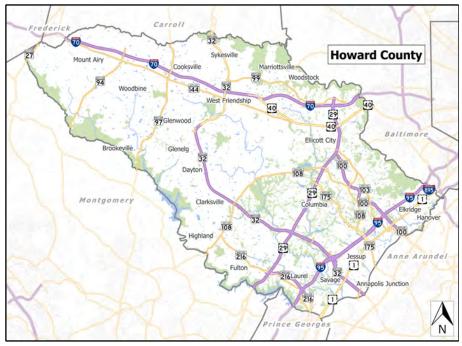
Project Schedule

FY17 Master Plan to start, identification of most critical repairs to be identified and renovations to commence.

Operating Budget Impact

Annual Bond Redemption \$ \$2,238,930

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)					Five	Year Ca	pital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,391	0	1,391	1,238	1,238	0	0	0	2,476	0	0	0	0	3,867
CONSTRUCTION	6,786	0	6,786	12,773	12,773	10,773	0	0	36,319	0	0	0	0	43,105
ADMINISTRATION	20	0	20	0	0	0	0	0	0	0	0	0	0	20
EQUIPMENT & FURNISHINGS	754	0	754	826	591	591	0	0	2,008	0	0	0	0	2,762
Total Expenditures	8,951	0	8,951	14,837	14,602	11,364	0	0	40,803	0	0	0	0	49,754
BONDS	8,951	0	8,951	14,837	14,602	11,364	0	0	40,803	0	0	0	0	49,754
Total Funding	8,951	0	8,951	14,837	14,602	11,364	0	0	40,803	0	0	0	0	49,754

Project Status:

\$846,306 spent and encumbered through February 2016 FY16 A/E selection complete, facility evaluation started.

Project: C0334-FY2014 EMERGENCY ALTERNATIVE POWER 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.

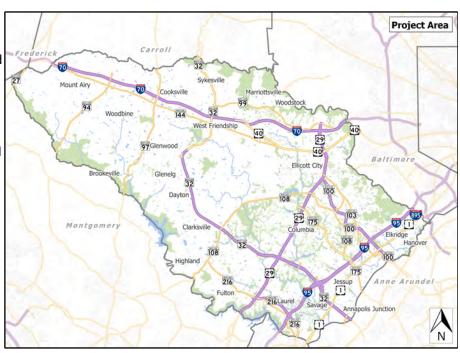
Project Schedule

FY17-21 - Continue to implement upgrades.

Operating Budget Impact

Annual Bond Redemption \$ \$294,750

The Bond funding listed for this project includes both long term bond funding and the use of the master lease program as appropriate.



GENERAL COUNTY PROJECTS

Number: C0334

Project: FY2014 EMERGENCY ALTERNATIVE POWER

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	300	0	300	100	100	100	100	100	500	0	0	0	0	800
CONSTRUCTION	1,700	(700)	1,000	1,000	1,000	1,000	1,000	1,000	5,000	0	0	0	0	6,000
ADMINISTRATION	0	0	0	10	10	10	10	10	50	0	0	0	0	50
Total Expenditures	2,000	(700)	1,300	1,110	1,110	1,110	1,110	1,110	5,550	0	0	0	0	6,850
BONDS	1,000	0	1,000	1,110	1,110	1,110	1,110	1,110	5,550	0	0	0	0	6,550
GRANTS	1,000	(700)	300	0	0	0	0	0	0	0	0	0	0	300
Total Funding	2,000	(700)	1,300	1,110	1,110	1,110	1,110	1,110	5,550	0	0	0	0	6,850

Project Status:

\$802,117 spent and encumbered through February 2016

Construction of backup generator improvements complete at Bureau of Utilities (phase 1). Ridge Road Generator Design Complete, Animal Control in Design. FY16 - Hazard mitigation grant awarded July 31, 2015 under disaster FEMA-DR-4170-0014; for DFRS Station 5 generator. Design for station 5 under way.

Project: C0335-FY2014 CITIZEN SERVICES FACILITY/PROGRAM ENHANCEMENTS

Description

A project to determine the additional facility needs for the Department of Citizen Services. This is to include Senior Centers, Senior Center Plus sites and space needs for other departmental programming.

Justification

Existing Senior Centers/Senior+ 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. We need to develop a master plan to define how we can best serve this growing segment of the County population. In order to prepare for plan development, we will conduct a comprehensive needs assessment to determine community needs and identify gaps in existing services.

Remarks

Master Plan is complete. Next step is the identification for a site for a new 50+ center.

Project Schedule

FY17 - obtain property and complete POR for new 50+ center. Project on hold for further analysis, and consideration with reorganization.

Operating Budget Impact

Annual Bond Redemption \$ \$11,250

Bur of Facilities sees no impact to FY17 operating budget.



GENERAL COUNTY PROJECTS

Number: C0335

Project: FY2014 CITIZEN SERVICES FACILITY/PROGRAM ENHANCEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	300	0	300	0	0	0	0	0	0	0	0	0	0	300
Total Expenditures	300	0	300	0	0	0	0	0	0	0	0	0	0	300
BONDS	250	0	250	0	0	0	0	0	0	0	0	0	0	250
PAY AS YOU GO	50	0	50	0	0	0	0	0	0	0	0	0	0	50
Total Funding	300	0	300	0	0	0	0	0	0	0	0	0	0	300

Project Status:

\$296,982 spent and encumbered through February 2016 FY16 Master Plan for Citizens Services Complete.

Project: C0336-FY2014 LANDFILL RESOURCE MANAGEMENT Number: C0336

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

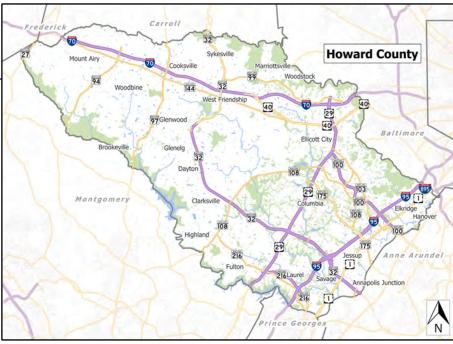
1. Projects directly related to municipal solid waste activities are funded under C-0299.

Project Schedule

FY17 - Monitor wildlife projects.

Operating Budget Impact

Annual Bond Redemption \$ \$18,000



GENERAL COUNTY PROJECTS

Number: C0336

Project: FY2014 LANDFILL RESOURCE MANAGEMENT

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	'lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status:

\$199,535 spent and encumbered through February 2016

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. Construct Pond Habitat Improvements.

FY16 û Monitor aforestation.

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.

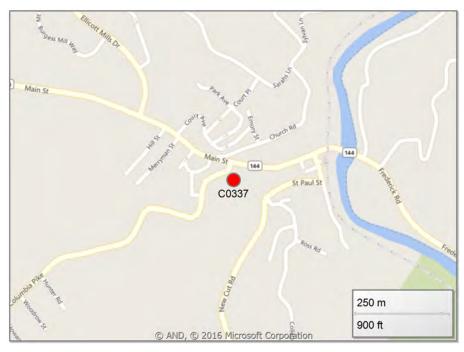
 OTHER revenue represents homeowner contribution.

Project Schedule

FY17 - Continue work to repair failing stream retaining walls.

Operating Budget Impact

Annual Bond Redemption \$ \$166,500



GENERAL COUNTY PROJECTS

Number: C0337

Project: FY2014 ELLICOTT CITY IMPROVEMENTS and ENHANCEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	500	0	500	200	300	0	0	0	500	0	0	0	0	1,000
LAND ACQUISITION	1,000	0	1,000	400	500	0	0	0	900	0	0	0	0	1,900
CONSTRUCTION	2,800	5	2,805	900	1,200	0	0	0	2,100	0	0	0	0	4,905
Total Expenditures	4,300	5	4,305	1,500	2,000	0	0	0	3,500	0	0	0	0	7,805
BONDS	1,700	0	1,700	1,000	1,000	0	0	0	2,000	0	0	0	0	3,700
GRANTS	100	0	100	0	0	0	0	0	0	0	0	0	0	100
OTHER SOURCES	0	5	5	0	0	0	0	0	0	0	0	0	0	5
PAY AS YOU GO	1,000	0	1,000	500	500	0	0	0	1,000	0	0	0	0	2,000
STORMWATER UTILTY FUNDING	1,500	0	1,500	0	500	0	0	0	500	0	0	0	0	2,000
Total Funding	4,300	5	4,305	1,500	2,000	0	0	0	3,500	0	0	0	0	7,805

Project Status:

\$2,453,866 spent and encumbered through February 2016

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 repair of walls.

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

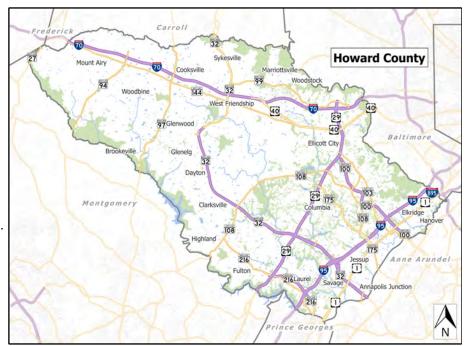
This is to help reduce overall leased line costs as well as provide equipment refreshes to support higher network speeds that are being requested.

Remarks

- 1. OTHER revenue is generated by Master Lease program.
- 2. Build out and infrastructure upgrades continue through fiscal year.
- 3. Fiber build out of laterals and backbone will also continue throughout fiscal year.

Project Schedule

Completion of infrastructure upgrades and begin expansion of fiber network to begin as soon as possible. Project is to be ongoing as need and demand exists.



GENERAL COUNTY PROJECTS

Number: C0338

Project: FY2015 BROADBAND INSTALLATIONS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status:

\$346,426 spent and encumbered through February 2016

Several County facilities have been connected to the fiber network during FY15 and will continue throughout FY16 thereby reducing the County's cost for leased lines.

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.

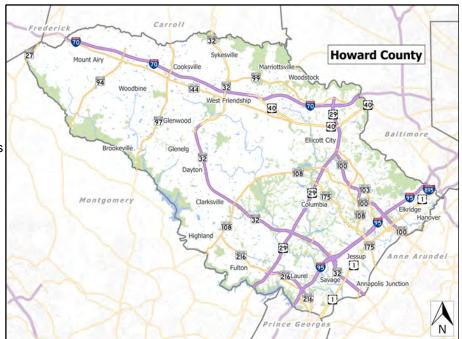
Justification

Remarks

OTHER revenue is generated by master lease.

Project Schedule

FY16 - 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)					Five	Year Ca	apital Pro	ogram				Master F	ʻlan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status:

\$1,363,908 spent and encumbered through February 2016

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 FY15. Additions will continue as demand requires in FY16.

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.

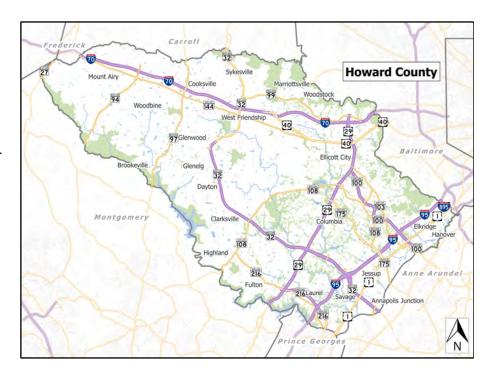
Justification

Remarks

OTHER revenues are generated from master lease.

Project Schedule

FY16 - Plan to continue adding customers to the network as demand requires.



GENERAL COUNTY PROJECTS

Number: C0340

Project: FY2015 BROADBAND INSTALLATIONS NON-GOVERNMENT

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status:

\$318,163 spent and encumbered through February 2016
FY15 - Connected several customers to the County fiber network.
FY16 - Plan to continue adding customers to the network as demand requires.

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

FY15 - Construction

FY16 - Complete and Close



GENERAL COUNTY PROJECTS

Number: C0341

Project: FY2015 TOWER GENERATOR REPLACEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status: \$0 spent and encumbered through February 2016

Project: C0342-FY2018 CLARKSVILLE PARKING GARAGE Number: C0342

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

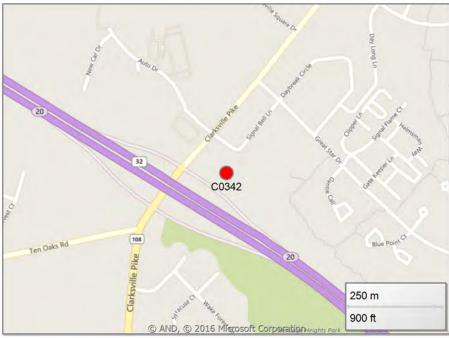
FY18 - Start design

FY19 - Complete design/start construction

FY20 - Complete construction

Operating Budget Impact

Annual Bond Redemption \$ \$248,625



GENERAL COUNTY PROJECTS

Number: C0342

Project: FY2018 CLARKSVILLE PARKING GARAGE

(In Thousands)		Five	Year Ca	apital Pro	ogram	Master Plan								
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status : \$0 spent and encumbered through February 2016

Project: C0343-FY2016 SALT STORAGE FACILITY

Number: C0343

Description

This project will provide for the storage of salt and liquid de-icing material for the winter season. The storage facility will be a barn-type structure capable of storing about 10,000 tons, located at the Dayton Repair facility.

Justification

This project will provide additional needed storage capacity and will be centrally located to increase the efficiency of Highways snow removal operations.

Remarks

Location of salt dome selected. Type of Dome Selected.

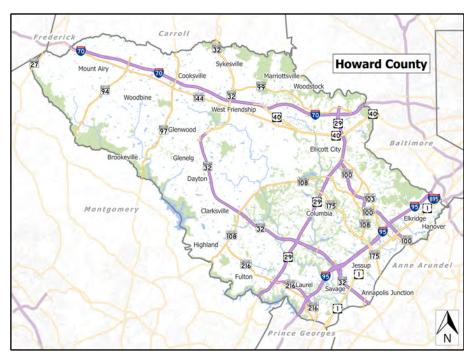
Project Schedule

FY16 Design Complete. FY17 Award and Complete Construction. FY18 Project Closeout.

Operating Budget Impact

Annual Bond Redemption \$ \$45,000

Bur of Facilities estimates the annual impact in FY17 and beyond to O&M and utilities at \$10,000.



GENERAL COUNTY PROJECTS

Project: FY2016 SALT STORAGE FACILITY Number: C0343

(In Thousands)		Five	Year Ca	apital Pro	ogram	Master Plan								
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	50	0	50	0	0	0	0	0	0	0	0	0	0	50
LAND ACQUISITION	300	0	300	0	0	0	0	0	0	0	0	0	0	300
CONSTRUCTION	650	0	650	0	0	0	0	0	0	0	0	0	0	650
Total Expenditures	1,000	0	1,000	0	0	0	0	0	0	0	0	0	0	1,000
BONDS	1,000	0	1,000	0	0	0	0	0	0	0	0	0	0	1,000
Total Funding	1,000	0	1,000	0	0	0	0	0	0	0	0	0	0	1,000

Project Status:

\$7,420 spent and encumbered through February 2016 Project is in design on schedule.

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 Route 1 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

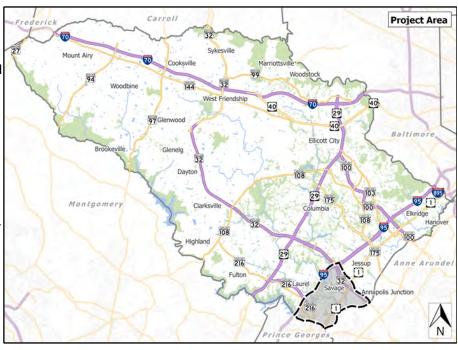
- 1. A sustainable community plan has been prepared for the North Laurel-Savage community which provides a basis for implementing infrastructure improvements.
- 2. Public easements on private property may be needed to advance improvements.

Project Schedule

FY17 - Project on hold for funding. FY18 - If funding is available; Planning, design and construction of identified improvements.

Operating Budget Impact

Annual Bond Redemption \$ \$24,750



GENERAL COUNTY PROJECTS

Number: C0344

Project: FY2016 SOUTHEAST INFRASTRUCTURE IMPROVEMENTS

(In Thousands)		Five	Year Ca	apital Pro	ogram	Master Plan								
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	150	0	150	0	0	0	0	0	0	0	0	0	0	150
CONSTRUCTION	0	0	0	500	0	0	0	0	500	0	0	0	0	500
Total Expenditures	150	0	150	500	0	0	0	0	500	0	0	0	0	650
BONDS	50	0	50	500	0	0	0	0	500	0	0	0	0	550
GRANTS	100	0	100	0	0	0	0	0	0	0	0	0	0	100
Total Funding	150	0	150	500	0	0	0	0	500	0	0	0	0	650

Project Status:

\$0 spent and encumbered through February 2016

GENERAL COUNTY PROJECTS

Project: C0346-FY2017 DAYTON ADMINISTRATION BUILDING

Number: C0346

Description

This project will provide for the replacement of an aging trailer currently used for the Highways Administration functions. It houses eight full-time employees. It has no bathroom facility, no meeting or conference room and no room to expand.

Justification

This program will address the need for a permanent Administration building for the Bureau. The existing trailer has reached its useful life. The trailer has constant issues with the HVAC, leaking roof/doors/windows. The new building will accommodate a sleeping quarter to be utilized in emergency situations, a conference room, a DOC room and a restroom with showers for the staff.

Remarks

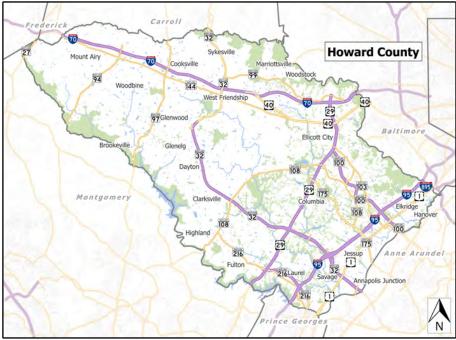
Project Schedule

Planning & Design in FY17, award construction late FY17, complete construction FY18

Operating Budget Impact

Annual Bond Redemption \$ \$90,000

Bur of Facilities sees no impact to budget in FY17, earliest impact to budget would be FY18.



GENERAL COUNTY PROJECTS

Number: C0346

Project: FY2017 DAYTON ADMINISTRATION BUILDING

(In Thousands)		Five	Year Ca	apital Pro	ogram	Master Plan								
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	50	50	50	0	0	0	0	50	0	0	0	0	100
CONSTRUCTION	0	950	950	950	0	0	0	0	950	0	0	0	0	1,900
Total Expenditures	0	1,000	1,000	1,000	0	0	0	0	1,000	0	0	0	0	2,000
BONDS	0	1,000	1,000	1,000	0	0	0	0	1,000	0	0	0	0	2,000
Total Funding	0	1,000	1,000	1,000	0	0	0	0	1,000	0	0	0	0	2,000

Project Status:

\$0 spent and encumbered through February 2016
Awaiting funding in FY17. Construction of new Facility at Dayton Highways for admin facility as well as repairs to other misc facilities at Daytom Highways Site.

Project: C0348-FY2017 MODERNIZATION OF FLEET AND HIGHWAYS SHOPS

Description

Operating Budget Impact

A project for the master planning, design, construction of new facilities and renovation of existing County Fleet and Highways Facilities to modernize the

Annual Bond Redemption \$ \$704,250

facilities. This project will improve the efficiency of operations, improve the safety Bur of Facilities estimates the annual impact in FY17 and beyond to O&M of the working conditions for employees and correct a number of site deficiencies.and utilities at \$16,000.

Justification

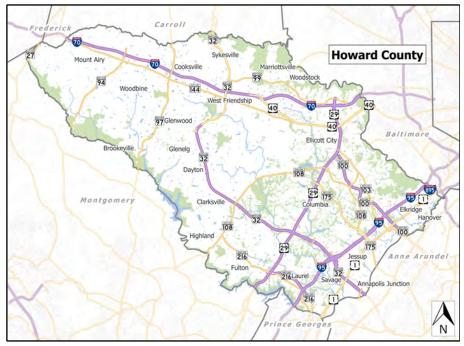
The existing Fleet and Highway facilities have outlived their useful life. The building systems are inefficient, the building envelopes donÆt provide adequate insulation adding to high operating costs and the building envelopes are in need of repair or replacement. The shops buildings can no longer accommodate the larger size vehicles of the modern day and this provides challenges for the shop 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 addiotnal expense to the County for any weather related emergency.

Remarks

Funding requested in FY17 for planning, design and emergecny repairs.

Project Schedule

FY17 master planning for all sites. Design and construction for emergency repairs as needed to current facilities.



GENERAL COUNTY PROJECTS

Number: C0348

Project: FY2017 MODERNIZATION OF FLEET AND HIGHWAYS SHOPS

(In Thousands)		Five	Year Ca	apital Pro	ogram		Master Plan							
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	500	500	1,700	0	1,200	0	0	2,900	0	0	0	0	3,400
CONSTRUCTION	0	400	400	0	4,880	0	5,000	0	9,880	0	0	0	0	10,280
ADMINISTRATION	0	0	0	50	120	0	0	0	170	0	0	0	0	170
EQUIPMENT & FURNISHINGS	0	0	0	0	0	1,000	0	800	1,800	0	0	0	0	1,800
Total Expenditures	0	900	900	1,750	5,000	2,200	5,000	800	14,750	0	0	0	0	15,650
BONDS	0	900	900	1,750	5,000	2,200	5,000	800	14,750	0	0	0	0	15,650
Total Funding	0	900	900	1,750	5,000	2,200	5,000	800	14,750	0	0	0	0	15,650

Project Status:

\$0 spent and encumbered through February 2016
Awaiting funding. Renovations will be made to Dayton, Cookesville, Ridge Road, Mayfield and othe rmisc Bureau of Highways and Fleet Department Facilities.

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

FY17 - Design: Conduct environmental compliance assessments at multiple facilities. Complete environmental remediation as necessary at current and new properties and remove USTs as necessary.

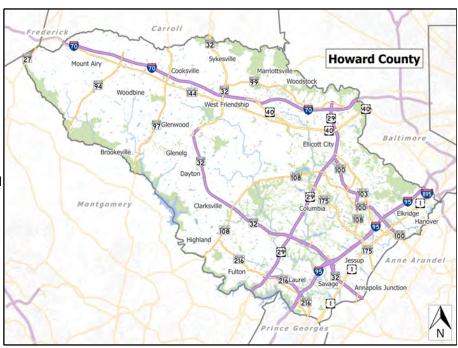
FY18-26 - Design: Conduct environmental compliance assessments of additional facilities. Update every five years. Update SPCC (Spill Prevention Control and Countermeasure) plans every five years.

Construction: Complete environmental remediation as necessary and remove USTs as necessary.

Operating Budget Impact

Annual Bond Redemption \$ \$160,605

Annual Bond Redemption \$~The Bond funding listed for this project includes both long term bond funding and the use of the master lease program as appropriate.



GENERAL COUNTY PROJECTS

Number: C0349

Project: FY2017 ENVIRONMENTAL COMPLIANCE OPERATIONS

(In Thousands)		Five	Year Ca	apital Pro	gram		Master Plan							
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	375	375	92	138	358	388	96	1,072	88	128	88	423	2,174
CONSTRUCTION	0	0	0	150	150	150	150	150	750	150	150	150	150	1,350
ADMINISTRATION	0	0	0	5	5	5	5	5	25	5	5	5	5	45
Total Expenditures	0	375	375	247	293	513	543	251	1,847	243	283	243	578	3,569
BONDS	0	375	375	247	293	513	543	251	1,847	243	283	243	578	3,569
Total Funding	0	375	375	247	293	513	543	251	1,847	243	283	243	578	3,569

Project Status:

\$0 spent and encumbered through February 2016

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 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.

Construction:

Design and installation of vehicle wash pads and rainwater harvesting systems at fire stations 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 7 sites and ongoing at one site.

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 ongoing at Alpha Ridge Maintenance Shop.

Stormwater protection system installed at Cooksville fueling site.

Updated SPCC Plan and SWPPPs for all required facilities.

Project: C0350-FY2017 NEW BUDGET SYSTEM Number: C0350

Description

Operating Budget Impact

The Budget Application project has been established to purchase and implement Annual Bond Redemption \$ \$11,250 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

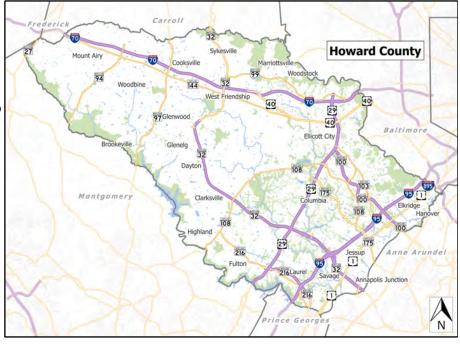
An enhanced budget application is needed to allow for additional analysis, forecasting, data-driven decision making, and integration with the ERP system. The passing of CB 54-2015 along with the integration of performance management added additional requirements to both the operating and capital budget processes. The incorporation of these changes over the next two fiscal years and the desire for additional transparency makes it even more important to consider the future directions 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

FY17-Phase 1 - Feasibility Study FY18-Phase 2 - Procurement/Implementation FY19-Phase 3 û Implementation



GENERAL COUNTY PROJECTS

Number: C0350

Project: FY2017 NEW BUDGET SYSTEM

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	250	250	0	0	0	0	0	0	0	0	0	0	250
Total Expenditures	0	250	250	0	0	0	0	0	0	0	0	0	0	250
BONDS	0	250	250	0	0	0	0	0	0	0	0	0	0	250
Total Funding	0	250	250	0	0	0	0	0	0	0	0	0	0	250

Project Status: \$0 spent and encumbered through February 2016

GENERAL COUNTY PROJECTS

Project: C0351-FY2017 HARRIET TUBMAN REMEDIATION Number: C0351

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 and remove any hazardous material prior to transferring the property to the local non profit arrangement.

Remarks

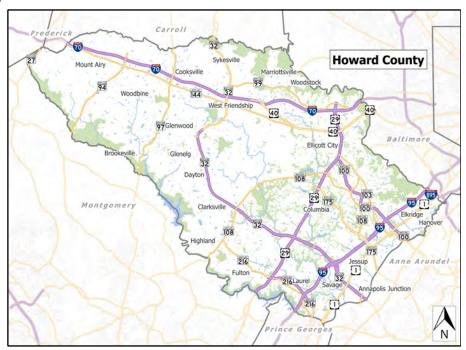
Project Schedule

FY17-Obtain space for HCPSS, remove hazardous material from Harriett Tubman High School, Subdivide property and transfer to non-profit agency.

Operating Budget Impact

Annual Bond Redemption \$ \$22,500

Bur of Facilities estimates the annual FY17 and beyond impact to O&M and utilities at \$100,000.



GENERAL COUNTY PROJECTS

Number: C0351

Project: FY2017 HARRIET TUBMAN REMEDIATION

(In Thousands)					Five	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	0	100	100	0	0	0	0	0	0	0	0	0	0	100	
CONSTRUCTION	0	385	385	0	0	0	0	0	0	0	0	0	0	385	
ADMINISTRATION	0	15	15	0	0	0	0	0	0	0	0	0	0	15	
Total Expenditures	0	500	500	0	0	0	0	0	0	0	0	0	0	500	
BONDS	0	500	500	0	0	0	0	0	0	0	0	0	0	500	
Total Funding	0	500	500	0	0	0	0	0	0	0	0	0	0	500	

Project Status:

\$0 spent and encumbered through February 2016

Letter of Intent signed by the HCPSS and the County for the County to provide lease space for the HCPSS O&M program vacating the Harriet Tubman High School. Awaiting relocation of HCPSS and funding for the remediation of any hazardous material. Environmental Assement for ACM and lead completed.

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 secifically 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 contruct an elevated water storage facility, including site access and pipeline construction.

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.

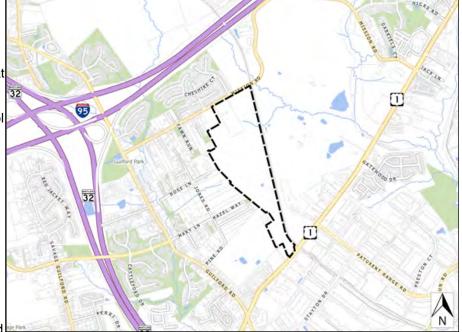
Remarks

- 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. Project funds transferred from C0309.

Project will be purchased with an installment purchase agreement. Other revenues represent revenues from CR 125-2014, 67, 68 and 69-2015 and Program Open Space.

Project Schedule

FY17 - Identify and acquire multi-school sites (including the 13th high school). Acquire elevated water storage facility sites.



GENERAL COUNTY PROJECTS

Number: C0352

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

(In Thousands)				Five Year Capital Program						Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
LAND ACQUISITION	0	15,750	15,750	8,750	0	0	0	0	8,750	0	0	0	0	24,500	
Total Expenditures	0	15,750	15,750	8,750	0	0	0	0	8,750	0	0	0	0	24,500	
BONDS	0	8,250	8,250	5,500	0	0	0	0	5,500	0	0	0	0	13,750	
METRO DISTRICT BOND	0	5,000	5,000	0	0	0	0	0	0	0	0	0	0	5,000	
OTHER SOURCES	0	2,500	2,500	3,250	0	0	0	0	3,250	0	0	0	0	5,750	
Total Funding	0	15,750	15,750	8,750	0	0	0	0	8,750	0	0	0	0	24,500	

Project Status : \$0 spent and encumbered through February 2016

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
D1112 FY1997 DAVIS AVE AREA DRAINAGE	В	425	200	625	300	0	0	0	0	925
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	687	200	887	300	0	0	0	0	1,187
D1124 FY2007 DRAINAGE IMPROVEMENT PROGRAM A project for the design and construction of small to	В	1,675	300	1,975	600	200	0	0	0	2,775
medium size drainage improvements requested by County residents and the Bureau of Highways.	0	10	0	10	0	0	0	0	0	10
residents and the bureau of ringhways.	Р	250	0	250	0	0	0	0	0	250
	S	850	100	950	0	225	0	0	0	1,175
	Total	2,785	400	3,185	600	425	0	0	0	4,210
D1125 FY2004 EMERGENCY STORM DRAIN RECONSTRUCTION	В	1,200	200	1,400	100	0	100	0	0	1,600
A fund for Howard County to undertake construction or repairs to storm drainage facilities on an as-needed basis	S	375	0	375	50	0	50	0	0	475
meeting the provisions of the County Code.	Total	1,575	200	1,775	150	0	150	0	0	2,075
D1140 FY2005 PINE TREE/GLEN COURT STORM DRAIN SYSTEM	В	2,540	0	2,540	330	615	0	0	0	3,485
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	0	2,780	330	615	0	0	0	3,725
D1148 FY2007 NPDES WATERSHED MANAGEMENT PROGRAM	В	3,780	0	3,780	600	600	600	600	0	6,180
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	R	1,375	0	1,375	400	400	400	400	0	2,975
system discharges and to perform studies related to storm water utility financing.	Total	5,805	0	5,805	1,000	1,000	1,000	1,000	0	9,805
D1150 FY2005 HIGH RIDGE DRAINAGE	В	1,500	285	1,785	0	990	0	0	0	2,775
	Total	1,500	285	1,785	0	990	0	0	0	2,775

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	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	В	1,515	-100	1,415	0	0	0	0	0	1,415
along St Johns Lane, Northfield Road, Southfield Road, Cresent Road, Hawthorne Road, Crestleigh Road, Club Court and the adjacent neighborhoods.	Total	1,515	-100	1,415	0	0	0	0	0	1,415
D1158 FY2008 WATERSHED MANAGEMENT CONSTRUCTION	В	7,295	2,800	10,095	16,000	15,000	16,000	6,000	6,000	69,095
This project is for design and construction of stormwater facility improvements.	D	200	0	200	0	0	0	0	0	200
, ,	G	5,980	1,450	7,430	1,000	1,000	1,000	1,000	1,000	12,430
	Р	1,000	0	1,000	0	0	0	0	0	1,000
	R	4,950	4,017	8,967	4,000	1,500	2,000	3,500	3,000	22,967
	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	0	3,200	3,200	0	0	0	0	0	3,200
	Total	20,275	11,467	31,742	22,000	18,500	20,000	10,500	10,000	112,742
D1159 FY2007 STORMWATER MANAGEMENT FACILITY RECONSTRUC	В	13,690	2,000	15,690	5,000	5,000	5,000	5,000	0	35,690
A fund for Howard County to undertake construction or repairs to stormwater management on an as-needed basis	G	450	0	450	0	0	0	0	0	450
meeting the provisions of the County Code.	R	7,650	900	8,550	1,000	1,000	1,000	1,000	0	12,550
	Total	21,790	2,900	24,690	6,000	6,000	6,000	6,000	0	48,690
D1160 FY2010 STORMWATER MANAGEMENT RETROFITS	В	6,890	0	6,890	1,000	1,400	1,300	1,000	1,000	12,590
A project for the retrofit of stormwater management facilities to include water quality management.	G	4,250	0	4,250	0	0	0	0	0	4,250
assumes to morado water quality management.	R	2,500	1,400	3,900	2,000	2,000	2,000	2,000	2,000	13,900
	Total	13,640	1,400	15,040	3,000	3,400	3,300	3,000	3,000	30,740

June 01, 2016 Howard County, MD Version : Council Approved

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
D1161 FY2018 SHAFFERSVILLE ROAD CULVERT REPLACEMENT	В	0	0	0	100	25	400	0	0	525
A project to replace the existing culvert on Shaffersville Road (between Florence Road and Shaffers Mill Road).	Total	0	0	0	100	25	400	0	0	525
D1162 FY2012 DRAINAGE EASEMENT ACQUISITION/REFURBISH	В	1,150	0	1,150	0	0	0	0	0	1,150
A project for the purchase of easements as required and repairs for pipes under County roads in the older sections	Р	500	0	500	0	0	0	0	0	500
of the County.	Total	1,650	0	1,650	0	0	0	0	0	1,650
D1163 FY2012 TROTTER ROAD SLOPE STABILIZATION	В	755	0	755	0	0	0	0	0	755
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.	Total	755	0	755	0	0	0	0	0	755
D1164 FY2013 COMMUNITY ENVIRONMENTAL PARTNERSHIPS	В	50	0	50	0	0	0	0	0	50
This project is for design and construction of Environmental Site Design (ESD) small scale storm water	G	100	0	100	0	0	0	0	0	100
facilities.	Р	1,400	0	1,400	500	500	500	500	1,000	4,400
	R	1,700	200	1,900	700	700	700	700	0	4,700
	Total	3,250	200	3,450	1,200	1,200	1,200	1,200	1,000	9,250
D1165 FY2013 FLOOD MITIGATION and STORMWATER/WATERWAY ENHANCEMENT	В	600	1,800	2,400	1,800	1,800	1,800	1,800	1,800	11,400
This project is for the study, design, and construction of flood mitigation and stormwater/waterway enhancement	G	3,250	0	3,250	0	0	0	0	0	3,250
efforts in downtown Ellicott City.	Р	775	0	775	500	500	500	0	0	2,275
	R	1,400	1,000	2,400	500	500	500	0	0	3,900
	Total	6,025	2,800	8,825	2,800	2,800	2,800	1,800	1,800	20,825
D1166 FY2015 CHESTNUT HILLS DRAINAGE IMPROVEMENTS	В	225	140	365	100	0	0	0	0	465
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.	Total	225	140	365	100	0	0	0	0	465

June 01, 2016 Howard County, MD Version : Council Approved

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
D1167 FY2015 GLENBROOK DRAINAGE IMPROVEMENTS	В	280	480	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	280	480	760	0	0	0	0	0	760
D1168 FY2015 MORGAN WOODBINE ROAD SLOPE STABILIZATION	В	200	0	200	25	440	0	0	0	665
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	0	200	25	440	0	0	0	665
D1169 FY2016 STORM DRAIN CULVERT REPLACEMENT PROGRAM	В	1,200	200	1,400	1,500	300	1,500	300	1,500	6,500
This program will provide for the replacement of failed storm drain pipes and culverts.	Total	1,200	200	1,400	1,500	300	1,500	300	1,500	6,500
D1170 FY2017 CARDINAL FOREST DRAINAGE IMPROVEMENTS	В	0	200	200	50	450	0	0	0	700
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.	Total	0	200	200	50	450	0	0	0	700
D1171 FY2016 CISSELL AVENUE-HADDAWAY PLACE DRAINAGE IMPROVEMENTS A project to acquire the necessary easements of the drainage channel that travels behind the homes of Cissell Avenue and Haddaway Place.	В	100	200	300	0	0	0	0	0	300
	Total	100	200	300	0	0	0	0	0	300
D1172 FY2016 DORSEY RUN TRIBUTARY STORM DRAIN REPAIR	В	700	0	700	0	0	0	0	0	700
A project to repair the storm drain that carries drainage from the MD175 area just east of US1 through and from the Columbia East Marketplace to the outfall just south of Assateague Drive and adjacent to US1.	Total	700	0	700	0	0	0	0	0	700
D1173 FY2016 HARRIET TUBMAN LANE DRAINAGE IMPROVEMENTS	В	125	150	275	625	0	0	0	0	900
A project to design and construct drainage improvements along Harriet Tubman Lane in the 7900 and 8000 block area.	Total	125	150	275	625	0	0	0	0	900
D1174 FY2016 SPRING GLEN DRAINAGE IMPROVEMENTS	В	75	0	75	15	175	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	0	75	15	175	0	0	0	265
DRAINAGE PROJECTS Total		88,572	21,122	109,694	39,795	36,320	36,350	23,800	17,300	263,259

June 01, 2016 Howard County, MD Version : Council Approved

Howard County, MD FY2017 Council Approved Capital Budget (\$000) DRAIN-DRAINAGE PROJECTS

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	47,605	8,855	56,460
D	DEVELOPER CONTRIBUTION	200	0	200
G	GRANTS	14,030	1,450	15,480
0	OTHER SOURCES	267	0	267
Р	PAY AS YOU GO	4,580	0	4,580
R	STORMWATER UTILTY FUNDING	19,575	7,517	27,092
S	STORM DRAINAGE FUND	2,315	100	2,415
Т	TRANSFER TAX	0	0	0
W	WATER QUALITY State Bond Loan	0	3,200	3,200
Total		88,572	21,122	109,694

2017 Council Approved 5 Year Capital Budget Project Type Summary (DRAIN-DRAINAGE PROJECTS)

Rev	enue Source	Prior Approp	Current FY	2018	2019	2020	2021	2022	5 Year Total
В	BONDS	47,605	8,855	28,145	26,995	26,700	14,700	10,300	163,300
D	DEVELOPER CONTRIBUTION	200	0	0	0	0	0	0	200
G	GRANTS	14,030	1,450	1,000	1,000	1,000	1,000	1,000	20,480
0	OTHER SOURCES	267	0	0	0	0	0	0	267
Р	PAY AS YOU GO	4,580	0	1,000	1,000	1,000	500	1,000	9,080
R	STORMWATER UTILTY FUNDING	19,575	7,517	8,600	6,100	6,600	7,600	5,000	60,992
S	STORM DRAINAGE FUND	2,315	100	50	225	50	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	0	3,200	0	0	0	0	0	3,200
Tota	al	88,572	21,122	39,795	36,320	36,350	23,800	17,300	263,259

Project: D1112-FY1997 DAVIS AVE AREA DRAINAGE IMPROVEMENTS

DRAINAGE PROJECTS

Number: D1112

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.

Remarks

- 1. A stormwater management pond (Phase I) and a storm drainage system (Phase II) will be built.
- 2. OTHER funds are from County share of race track money.
- 3. The County may enter into an agreement for the developer to construct the County improvements.
- 4. Request represents latest engineer's estimate.

Project Schedule

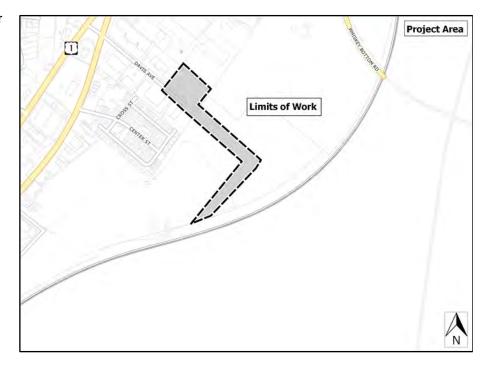
FY17 - Design and Construction (Phase II).

FY18 - Close.

Operating Budget Impact

Annual Bond Redemption \$ \$41,625

Estimated annual maintenance costs upon completion: Decrease.



DRAINAGE PROJECTS

Number: D1112

Project: FY1997 DAVIS AVE AREA DRAINAGE IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	115	75	190	0	0	0	0	0	0	0	0	0	0	190
LAND ACQUISITION	65	50	115	0	0	0	0	0	0	0	0	0	0	115
CONSTRUCTION	505	75	580	300	0	0	0	0	300	0	0	0	0	880
ADMINISTRATION	2	0	2	0	0	0	0	0	0	0	0	0	0	2
Total Expenditures	687	200	887	300	0	0	0	0	300	0	0	0	0	1,187
BONDS	425	200	625	300	0	0	0	0	300	0	0	0	0	925
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	687	200	887	300	0	0	0	0	300	0	0	0	0	1,187

Project Status:
\$310,424 spent and encumbered through February 2016
SWM Pond complete (Phase I).

FY16: Storm drainage system (Phase II) under design.

Project: D1124-FY2007 DRAINAGE IMPROVEMENT PROGRAM

Description

A project for the design and construction of small to medium size 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.

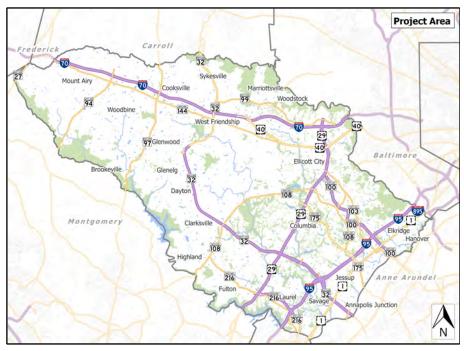
Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$124,875

Estimated annual maintenance costs upon completion: Decrease.



DRAINAGE PROJECTS

Number: D1124

Project: FY2007 DRAINAGE IMPROVEMENT PROGRAM

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	845	300	1,145	0	60	0	0	0	60	0	0	0	0	1,205
LAND ACQUISITION	130	0	130	0	15	0	0	0	15	0	0	0	0	145
CONSTRUCTION	1,800	100	1,900	600	350	0	0	0	950	0	0	0	0	2,850
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	2,785	400	3,185	600	425	0	0	0	1,025	0	0	0	0	4,210
BONDS	1,675	300	1,975	600	200	0	0	0	800	0	0	0	0	2,775
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	850	100	950	0	225	0	0	0	225	0	0	0	0	1,175
Total Funding	2,785	400	3,185	600	425	0	0	0	1,025	0	0	0	0	4,210

Project Status:

\$1,972,936 spent and encumbered through February 2016

FY16 - There are 11 requests waiting to be started. These will be addressed in turn as other work is completed. The next 5 projects on the list to address are: Owen Brown Rd., Chaucer Ridge Ct., Thompson Dr., Woodside Ct., and McKenzie Rd. Outfall.

Investigation complete: Gudel Dr., Windemere, Walker Dr., Deerfield, Harriett Tubman.

Design/land acquisition in progress: Maple Rock, Montgomery Rd easement.

Construction in progress: Frederick Rd Slope.

Construction complete: Cradlerock Way channel wall, Abel St (Phase I and 2), Montgomery Rd., Patuxent Range Rd, Beechfield Ave.

Project: D1125-FY2004 EMERGENCY STORM DRAIN RECONSTRUCTION

Description

Operating Budget Impact

A fund for Howard County to undertake construction or repairs to storm drainage Annual Bond Redemption \$ \$72,000 facilities on an as-needed basis meeting the provisions of the County Code. This program is envisioned to provide rapid assistance in emergency situations.

Estimated annual maintenance costs upon completion: Decrease.

Justification

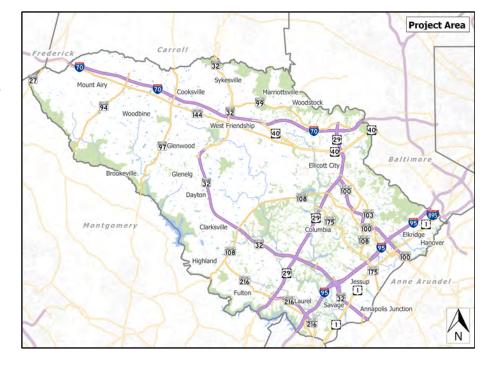
Howard County Code Subtitle 5, Section 18.500, which mandated extensive County involvement in storm drainage.

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. Request represents program advancement.

Project Schedule

Program



Project: FY2004 EMERGENCY STORM DRAIN RECONSTRUCTION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	205	50	255	25	0	25	0	0	50	0	0	0	0	305
LAND ACQUISITION	65	0	65	5	0	5	0	0	10	0	0	0	0	75
CONSTRUCTION	1,280	150	1,430	120	0	120	0	0	240	0	0	0	0	1,670
ADMINISTRATION	25	0	25	0	0	0	0	0	0	0	0	0	0	25
Total Expenditures	1,575	200	1,775	150	0	150	0	0	300	0	0	0	0	2,075
BONDS	1,200	200	1,400	100	0	100	0	0	200	0	0	0	0	1,600
STORM DRAINAGE FUND	375	0	375	50	0	50	0	0	100	0	0	0	0	475
Total Funding	1,575	200	1,775	150	0	150	0	0	300	0	0	0	0	2,075

Project Status:

\$951,863 spent and encumbered through February 2016

FY16 - Study complete: Columbia Gateway pipes, Red Clover.

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

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

Description

Operating Budget Impact

A project for the design and construction of a storm drain system along Pine Tree Annual Bond Redemption \$ \$156,825 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 residences experience flooding. This work is requested by the residents and recommended by the Bureau of Highways.

Remarks

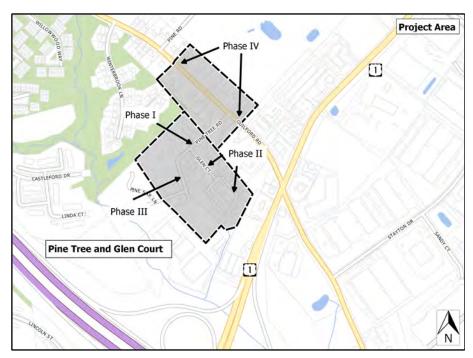
Construction project may be dependent on donation of necessary easements and/or resident cost share participation.

Project Schedule

FY17 - Construction of Phase 2, Design of Phase 4.

FY18 - Construction of Phase 3 and Land acquisition of Phase 4.

FY19 - Construction of Phase 4.



Estimated annual maintenance costs upon completion: Decrease.

DRAINAGE PROJECTS

Number: D1140

Project: FY2005 PINE TREE/GLEN COURT STORM DRAIN SYSTEM

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	715	0	715	45	115	0	0	0	160	0	0	0	0	875
LAND ACQUISITION	285	0	285	0	0	0	0	0	0	0	0	0	0	285
CONSTRUCTION	1,775	0	1,775	285	500	0	0	0	785	0	0	0	0	2,560
ADMINISTRATION	5	0	5	0	0	0	0	0	0	0	0	0	0	5
Total Expenditures	2,780	0	2,780	330	615	0	0	0	945	0	0	0	0	3,725
BONDS	2,540	0	2,540	330	615	0	0	0	945	0	0	0	0	3,485
STORM DRAINAGE FUND	240	0	240	0	0	0	0	0	0	0	0	0	0	240
Total Funding	2,780	0	2,780	330	615	0	0	0	945	0	0	0	0	3,725

Project Status:

\$1,663,983 spent and encumbered through February 2016 Phase I - Construction complete.

FY16 - Construction of Phase 2, Design of Phase 4.

Project: D1148-FY2007 NPDES WATERSHED MANAGEMENT PROGRAM

Description

Operating Budget Impact

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.

Annual Bond Redemption \$ \$278,100

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.

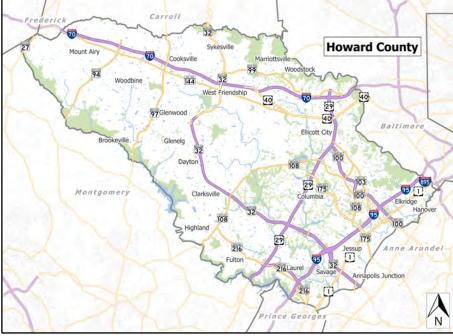
Project Schedule

FY17 - Perform work to assess and address Total Maximum Daily Loads (TMDL) and Watershed Implementation Plan (WIP) requirements to meet NPDES permit conditions.

Perform additional assessments and public education required by second year of new NPDES permit.

Continue database development to comply with NPDES reporting requirements. Perform additional watershed studies needed for NPDES permit and TMDL requirements.

FY22 - Close.



Project: FY2007 NPDES WATERSHED MANAGEMENT PROGRAM

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	5,805	0	5,805	1,000	1,000	1,000	1,000	0	4,000	0	0	0	0	9,805
Total Expenditures	5,805	0	5,805	1,000	1,000	1,000	1,000	0	4,000	0	0	0	0	9,805
BONDS	3,780	0	3,780	600	600	600	600	0	2,400	0	0	0	0	6,180
PAY AS YOU GO	650	0	650	0	0	0	0	0	0	0	0	0	0	650
STORMWATER UTILTY FUNDING	1,375	0	1,375	400	400	400	400	0	1,600	0	0	0	0	2,975
Total Funding	5,805	0	5,805	1,000	1,000	1,000	1,000	0	4,000	0	0	0	0	9,805

Project Status:

\$4,087,611 spent and encumbered through February 2016

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.

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

Perform historical BMP cleanup to meet MDE requirements.

Performed Little Patuxent and Middle Patuxent Watershed Assessments.

Began Patapsco and Patuxent River watershed assessments.

Project: D1150-FY2005 HIGH RIDGE DRAINAGE

Number: D1150

Description

Operating Budget Impact

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

Annual Bond Redemption \$ \$124,875

Avenue, Robinson Boulevard, Gross Avenue, Bryant Avenue, Grant Avenue, and Estimated annual maintenance costs upon completion: Decrease. 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

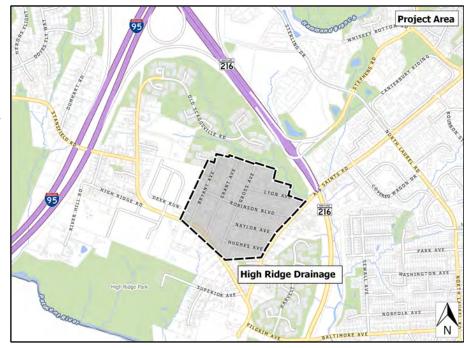
- 1. Construction project may be dependent on donation of necessary easements and/or resident cost share participation.
- 2. Request represents latest engineer's estimate.

Project Schedule

FY17-18 - Design and Land Acquisition (Old Scaggsville, Hughes, Gross and Lyon).

FY19 - Construction (Old Scaggsville, Gross, Hughes and Lyon).

FY20 - Complete and Close.



DRAINAGE PROJECTS

Number: D1150

Project: FY2005 HIGH RIDGE DRAINAGE

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	535	70	605	0	0	0	0	0	0	0	0	0	0	605
LAND ACQUISITION	100	15	115	0	0	0	0	0	0	0	0	0	0	115
CONSTRUCTION	850	200	1,050	0	990	0	0	0	990	0	0	0	0	2,040
ADMINISTRATION	15	0	15	0	0	0	0	0	0	0	0	0	0	15
Total Expenditures	1,500	285	1,785	0	990	0	0	0	990	0	0	0	0	2,775
BONDS	1,500	285	1,785	0	990	0	0	0	990	0	0	0	0	2,775
Total Funding	1,500	285	1,785	0	990	0	0	0	990	0	0	0	0	2,775

Project Status:

\$1,407,389 spent and encumbered through February 2016 Construction complete for Bryant Ave and Grant Ave.

Design underway for Old Scaggsville, Hughes, Gross and Lyon Ave. FY16 - Design and Land acquisition (Old Scaggsville, Hughes, Gross and Lyon).

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 despite 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

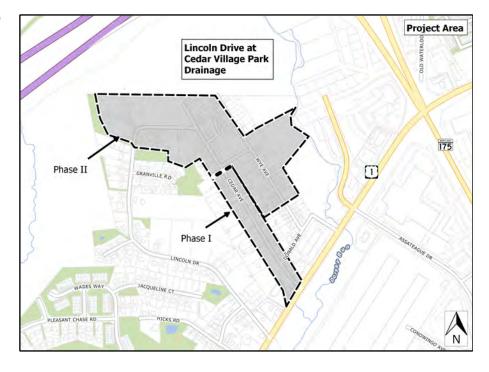
FY17 - Land acquisition and construction of Phase 2.

FY18 - Complete and Close.

Operating Budget Impact

Annual Bond Redemption \$ \$73,575

Estimated annual maintenance costs upon completion: Decrease.



Project: FY2006 LINCOLN DRIVE at CEDAR VIL PARK DRAINAGE

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status:

\$249,057 spent and encumbered through February 2016 FY16 - Land acquisition for Phase 1.

Construction of Phase 1 and land acquisition for Phase 2 in progress.

Project: D1157-FY2006 ST JOHNS LANE VICINITY DRAINAGE

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.

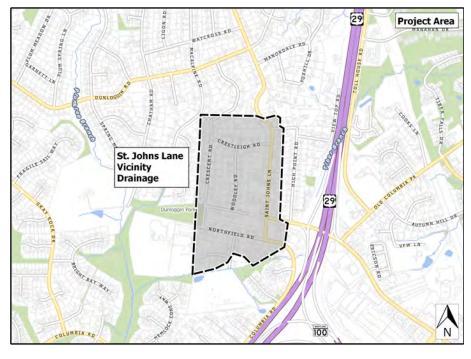
Project Schedule

- FY17 Design, Land Acquisition and Construction.
- FY18 Complete, Close.

Operating Budget Impact

Annual Bond Redemption \$ \$63,675

Estimated annual maintenance costs upon completion: Decrease.



Project: FY2006 ST JOHNS LANE VICINITY DRAINAGE

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	290	0	290	0	0	0	0	0	0	0	0	0	0	290
LAND ACQUISITION	150	(50)	100	0	0	0	0	0	0	0	0	0	0	100
CONSTRUCTION	1,070	(50)	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	1,515	(100)	1,415	0	0	0	0	0	0	0	0	0	0	1,415
BONDS	1,515	(100)	1,415	0	0	0	0	0	0	0	0	0	0	1,415
Total Funding	1,515	(100)	1,415	0	0	0	0	0	0	0	0	0	0	1,415

Project Status:

\$926,539 spent and encumbered through February 2016
FY16 - Design and land acquisition in progress for Phase V. Construction complete for Phase I and IV.
Phase II and Phase III deleted.

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.
- 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.
- 5. Construction of some projects may be dependent upon donation of the necessary easements and/or property owner cost share participation.

Project Schedule

FY17 û Designs: Threshfield Court û Phase 2, Cradlerock Way. Stream Restoration at multiple Sewer Repair Projects.

FY17 Construction: Davis Branch, Swansfield Rd Trail, Howard Community College, Greenway Dr Drainage Improve, Willow Bend Ct, Stonehouse Dr, Ducketts Ln, Patrick Farm, Dobbin Rd Regenerative Stream Conveyance, Heatherland Ct, Dunloggin, Plumtree, Rockburn Park.

Continue to perform post construction stream monitoring (Cherry Creek, Meadowbrook, Threshfield, Brampton Hills, Dorsey Hall, Turf Valley, Dower, Great Oaks, HiTech, Old Willow, Paul Mill, Stone

Trail, Whiterock, Elmmede, Tiller, Tuscany, Wheatfield, Windflower).

Operating Budget Impact

Annual Bond Redemption \$ \$3,186,075



Project: FY2008 WATERSHED MANAGEMENT CONSTRUCTION

(In Thousands)	,					Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	5,120	2,450	7,570	3,000	3,000	3,000	1,500	1,500	12,000	0	0	0	0	19,570
CONSTRUCTION	14,505	8,917	23,422	18,800	15,300	16,800	8,900	8,400	68,200	0	0	0	0	91,622
ADMINISTRATION	650	100	750	200	200	200	100	100	800	0	0	0	0	1,550
Total Expenditures	20,275	11,467	31,742	22,000	18,500	20,000	10,500	10,000	81,000	0	0	0	0	112,742
BONDS	7,295	2,800	10,095	16,000	15,000	16,000	6,000	6,000	59,000	0	0	0	0	69,095
DEVELOPER CONTRIBUTION	200	0	200	0	0	0	0	0	0	0	0	0	0	200
GRANTS	5,980	1,450	7,430	1,000	1,000	1,000	1,000	1,000	5,000	0	0	0	0	12,430
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	0	3,200	3,200	0	0	0	0	0	0	0	0	0	0	3,200
STORMWATER UTILTY FUNDING	4,950	4,017	8,967	4,000	1,500	2,000	3,500	3,000	14,000	0	0	0	0	22,967
Total Funding	20,275	11,467	31,742	22,000	18,500	20,000	10,500	10,000	81,000	0	0	0	0	112,742

Project Status:

\$16,734,769 spent and encumbered through February 2016

Stream Restoration Projects:

^{1.} Design initiated - Patrick Farm, Willow Bend, Font Hill Park, Starling Road, Howard Community College, Davis Branch, Swansfield Road Trail, Stonehouse Drive, Ducketts Lane, Mellen Court, Heatherland Court, Char Lil Court, and Montpelier Road.

^{2.} Design completed - Greenway Drive Drainage Improvements

^{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, Woodlot Road.

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.

Operating Budget Impact

Annual Bond Redemption \$ \$1,606,050

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

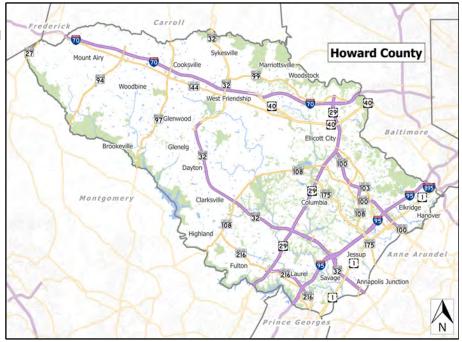
- 1. GRANT funds include local implementation grant from the Chesapeake and Atlantic Coastal Bays 2010 Trust Fund.
- 2. A portion of current request represents funding to be generated from legislation CB-8 & CR21 for stormwater utility funding, known as Watershed Protection and Restoration fund.
- 3.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

Project Schedule

FY17 - Designs: 4 barrel repairs/replacements.

FY17 - Construction: 14 barrel repairs/replacements.

FY21 - Close.



Project: FY2007 STORMWATER MANAGEMENT FACILITY RECONSTRUC

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	4,700	200	4,900	1,500	1,500	1,500	1,500	0	6,000	0	0	0	0	10,900
CONSTRUCTION	16,375	2,600	18,975	4,400	4,400	4,400	4,400	0	17,600	0	0	0	0	36,575
ADMINISTRATION	715	100	815	100	100	100	100	0	400	0	0	0	0	1,215
Total Expenditures	21,790	2,900	24,690	6,000	6,000	6,000	6,000	0	24,000	0	0	0	0	48,690
BONDS	13,690	2,000	15,690	5,000	5,000	5,000	5,000	0	20,000	0	0	0	0	35,690
GRANTS	450	0	450	0	0	0	0	0	0	0	0	0	0	450
STORMWATER UTILTY FUNDING	7,650	900	8,550	1,000	1,000	1,000	1,000	0	4,000	0	0	0	0	12,550
Total Funding	21,790	2,900	24,690	6,000	6,000	6,000	6,000	0	24,000	0	0	0	0	48,690

Project Status:

\$18,163,023 spent and encumbered through February 2016

Designed: 72 pond repairs

Constructed: Red Clover Dam; Willow Brook; West Zone Highways Shop; 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; Warfields Range; Mary Lee Lane; Montgomery Run; Winding Star; Longridge Knolls; River Hill pond 2; River Hill pond 3; Long Meadow pond 1; Long Meadow pond 2; North Ridge; Rusty Rim; Tiller Drive stream repair; Ellicott City Lot E repairs; Sweet Hours; Townhomes of Timberland; Velvet Path; Woodland Park; Murray Hill 1; Junction Industrial.

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. 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.
- 4. Construction of some projects may be dependent upon donation of the necessary easements and/or property owner cost share participation.

Project Schedule

FY17 - Designs: Patapsco Park Estates pond, Carriage Hills Drive pond, Diversified Lane pond, George Howard Building.

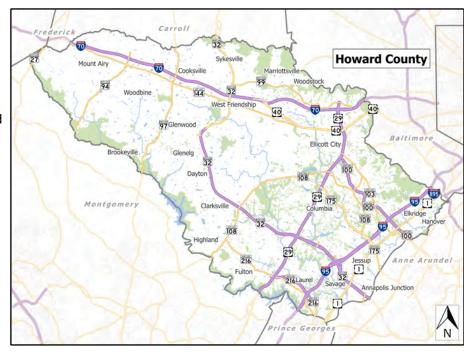
FY17 - Constructions: Heron's Flight pond, Ashton Woods pond, Garand Road pond

FY22 - Close.

Operating Budget Impact

Annual Bond Redemption \$ \$566,550

Technical/administrative management support.



Project: FY2010 STORMWATER MANAGEMENT RETROFITS

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	3,990	200	4,190	600	800	700	600	600	3,300	0	0	0	0	7,490
CONSTRUCTION	9,330	1,100	10,430	2,300	2,500	2,500	2,300	2,300	11,900	0	0	0	0	22,330
ADMINISTRATION	320	100	420	100	100	100	100	100	500	0	0	0	0	920
Total Expenditures	13,640	1,400	15,040	3,000	3,400	3,300	3,000	3,000	15,700	0	0	0	0	30,740
BONDS	6,890	0	6,890	1,000	1,400	1,300	1,000	1,000	5,700	0	0	0	0	12,590
GRANTS	4,250	0	4,250	0	0	0	0	0	0	0	0	0	0	4,250
STORMWATER UTILTY FUNDING	2,500	1,400	3,900	2,000	2,000	2,000	2,000	2,000	10,000	0	0	0	0	13,900
Total Funding	13,640	1,400	15,040	3,000	3,400	3,300	3,000	3,000	15,700	0	0	0	0	30,740

Project Status:

\$9,489,989 spent and encumbered through February 2016

Students Branching Out - CBTF grant for tree planting at schools and at County parks.

Designed: Ashton Woods, Heron's Flight, Garand Road.

Constructed: Heritage Woods, 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 HS, Cedar Lane Park, Baltimore-Washington Industrial Park, Howard County Center for the Arts, St. Johns Green pond, River Hill Shallow Marsh, Dorsey Building parking lot, Atholton Park, Ashmede Road, Salterforth Ponds 1 and 2.

Project: D1161-FY2018 SHAFFERSVILLE ROAD CULVERT REPLACEMENT

Description

A project to replace the existing culvert on Shaffersville Road (between Florence Annual Bond Redemption \$ \$23,625 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

Shaffersville Road is a scenic road.

Project Schedule

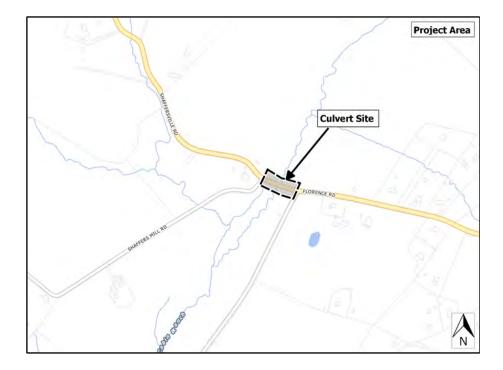
FY18 - Design.

FY19 - Land Acquisition.

FY20 - Construction.

Operating Budget Impact

Estimated annual maintenance costs upon completion: Decrease.



DRAINAGE PROJECTS

Number: D1161

Project: FY2018 SHAFFERSVILLE ROAD CULVERT REPLACEMENT

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	0	0	100	0	0	0	0	100	0	0	0	0	100
LAND ACQUISITION	0	0	0	0	25	0	0	0	25	0	0	0	0	25
CONSTRUCTION	0	0	0	0	0	400	0	0	400	0	0	0	0	400
Total Expenditures	0	0	0	100	25	400	0	0	525	0	0	0	0	525
BONDS	0	0	0	100	25	400	0	0	525	0	0	0	0	525
Total Funding	0	0	0	100	25	400	0	0	525	0	0	0	0	525

Project Status : \$0 spent and encumbered through February 2016

Project: D1162-FY2012 DRAINAGE EASEMENT ACQUISITION/REFURBISH

Description

A project for the purchase of easements as required and repairs for pipes under County roads in the older sections of the County.

Justification

The County may not have easements to access the ends of pipes under the road and thus cannot maintain the pipes.

Remarks

- 1. The County will seek donation of these easements but may have to purchase them in some cases.
- 2. Project is conditional upon reaching agreement which is satisfactory to the County, the homeowner association, and/or private property owners.

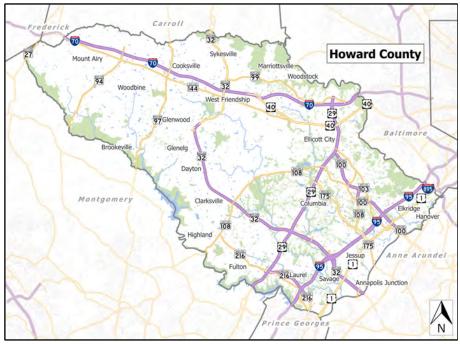
Project Schedule

FY16 - Program Funded.

Operating Budget Impact

Annual Bond Redemption \$ \$51,750

Annual Bond Redemption \$51,750



DRAINAGE PROJECTS

Number: D1162

Project: FY2012 DRAINAGE EASEMENT ACQUISITION/REFURBISH

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	60	0	60	0	0	0	0	0	0	0	0	0	0	60
LAND ACQUISITION	285	0	285	0	0	0	0	0	0	0	0	0	0	285
CONSTRUCTION	1,200	0	1,200	0	0	0	0	0	0	0	0	0	0	1,200
ADMINISTRATION	105	0	105	0	0	0	0	0	0	0	0	0	0	105
Total Expenditures	1,650	0	1,650	0	0	0	0	0	0	0	0	0	0	1,650
BONDS	1,150	0	1,150	0	0	0	0	0	0	0	0	0	0	1,150
PAY AS YOU GO	500	0	500	0	0	0	0	0	0	0	0	0	0	500
Total Funding	1,650	0	1,650	0	0	0	0	0	0	0	0	0	0	1,650

Project Status:

\$1,349,695 spent and encumbered through February 2016

Project: D1163-FY2012 TROTTER ROAD SLOPE STABILIZATION

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.

Operating Budget Impact

Annual Bond Redemption \$ \$33,975

Estimated annual maintenance costs upon completion: Decrease.

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

FY17-18 - Complete and Close.



DRAINAGE PROJECTS

Number: D1163

Project: FY2012 TROTTER ROAD SLOPE STABILIZATION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	Appr. Budget Total			Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status:

\$750,859 spent and encumbered through February 2016 FY16 - Continue monitoring project per permit requirements.

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

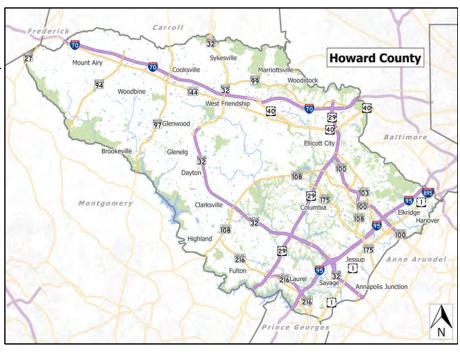
- 1. Participation by residents and landscape service companies will be encouraged by outreach and education efforts and by cost sharing ESD implementation and landscaping modifications with property owners.
- 2. A portion of current request represents funding to be generated from legislation CB-8 & 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

FY17 - Identify roadways or neighborhoods with retrofit opportunities, establish outreach program to County residents and perform concept design. Provide additional funding for Alliance for the Chesapeake Bay (READY) grant.

Operating Budget Impact

Annual Bond Redemption \$ \$2,250



DRAINAGE PROJECTS

Number: D1164

Project: FY2013 COMMUNITY ENVIRONMENTAL PARTNERSHIPS

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	700	0	700	200	200	200	200	200	1,000	200	200	200	200	2,500
CONSTRUCTION	2,550	200	2,750	1,000	1,000	1,000	1,000	800	4,800	800	800	800	800	10,750
Total Expenditures	3,250	200	3,450	1,200	1,200	1,200	1,200	1,000	5,800	1,000	1,000	1,000	1,000	13,250
BONDS	50	0	50	0	0	0	0	0	0	0	0	0	0	50
GRANTS	100	0	100	0	0	0	0	0	0	0	0	0	0	100
PAY AS YOU GO	1,400	0	1,400	500	500	500	500	1,000	3,000	1,000	1,000	1,000	1,000	8,400
STORMWATER UTILTY FUNDING	1,700	200	1,900	700	700	700	700	0	2,800	0	0	0	0	4,700
Total Funding	3,250	200	3,450	1,200	1,200	1,200	1,200	1,000	5,800	1,000	1,000	1,000	1,000	13,250

Project Status:

\$2,350,932 spent and encumbered through February 2016

Provided partial funding for Alliance for the Chesapeake Bay (READY) grant. Performed concept grading, soil borings, and survey for Ellicott City Parking Lot E. Performed design & construction for Savage Library water quality enhancements.

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

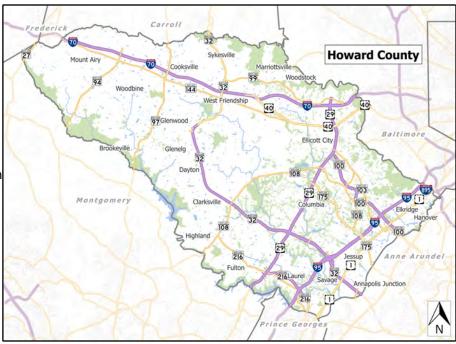
- 1. Future years once projects cost/benefits determined, apply for FEMA grants.
- 2. A portion of current request represents funding to be generated from legislation CB-8 & CR21 for stormwater utility funding, known as Watershed Protection and Restoration fund.
- 3. Construction of some projects may be dependent upon donation of the necessary easements and/or property owner cost share participation.
- 4. FY17 funding includes work to be completed for ongoing future flood mitigation projects and programs driven by the Historic Ellicott City Flood Workgroup. Future years include appropriate funding.

Project Schedule

FY17 - Begin design and repair of stream retaining walls.

Operating Budget Impact

Annual Bond Redemption \$ \$756,000



DRAINAGE PROJECTS

Number: D1165

Project: FY2013 FLOOD MITIGATION and STORMWATER/WATERWAY ENHANCEMENT

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	900	650	1,550	250	250	250	0	0	750	0	0	0	0	2,300
LAND ACQUISITION	500	0	500	0	0	0	0	0	0	0	0	0	0	500
CONSTRUCTION	4,600	2,050	6,650	2,550	2,550	2,550	1,800	1,800	11,250	1,800	1,800	1,800	0	23,300
ADMINISTRATION	25	100	125	0	0	0	0	0	0	0	0	0	0	125
Total Expenditures	6,025	2,800	8,825	2,800	2,800	2,800	1,800	1,800	12,000	1,800	1,800	1,800	0	26,225
BONDS	600	1,800	2,400	1,800	1,800	1,800	1,800	1,800	9,000	1,800	1,800	1,800	0	16,800
GRANTS	3,250	0	3,250	0	0	0	0	0	0	0	0	0	0	3,250
PAY AS YOU GO	775	0	775	500	500	500	0	0	1,500	0	0	0	0	2,275
STORMWATER UTILTY FUNDING	1,400	1,000	2,400	500	500	500	0	0	1,500	0	0	0	0	3,900
Total Funding	6,025	2,800	8,825	2,800	2,800	2,800	1,800	1,800	12,000	1,800	1,800	1,800	0	26,225

Project Status:

\$1,708,971 spent and encumbered through February 2016 Performed 2-D floodplain model and identify possible mitigation projects. Designed Parking Lot B water quality improvement. Designed and constructed Parking Lot E including stormwater improvements.

Remove large debris from stream channel.

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.

Operating Budget Impact

Annual Bond Redemption \$ \$20,925

Estimated annual maintenance costs upon completion: Decrease.

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.

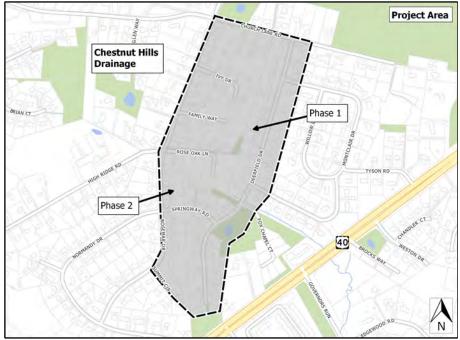
Remarks

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

Project Schedule

FY17 - Phase 1 construction and Phase 2 design and Land Acquisition.

FY18 - Phase 2 Construction.



DRAINAGE PROJECTS

Number: D1166

Project: FY2015 CHESTNUT HILLS DRAINAGE IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	150	75	225	0	0	0	0	0	0	0	0	0	0	225
LAND ACQUISITION	75	(50)	25	0	0	0	0	0	0	0	0	0	0	25
CONSTRUCTION	0	115	115	100	0	0	0	0	100	0	0	0	0	215
Total Expenditures	225	140	365	100	0	0	0	0	100	0	0	0	0	465
BONDS	225	140	365	100	0	0	0	0	100	0	0	0	0	465
Total Funding	225	140	365	100	0	0	0	0	100	0	0	0	0	465

Project Status:

\$53,362 spent and encumbered through February 2016 FY16 - Project in design.

Project: D1167-FY2015 GLENBROOK DRAINAGE IMPROVEMENTS

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

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

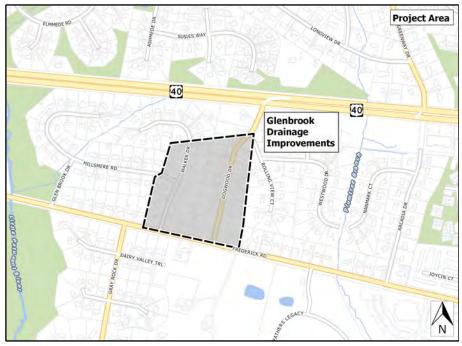
Project Schedule

FY17 - Design, Land Acquisition and Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$34,200

Estimated annual maintenance costs upon completion: Decrease.



DRAINAGE PROJECTS

Number: D1167

Project: FY2015 GLENBROOK DRAINAGE IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	100	30	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	0	450	450	0	0	0	0	0	0	0	0	0	0	450
Total Expenditures	280	480	760	0	0	0	0	0	0	0	0	0	0	760
BONDS	280	480	760	0	0	0	0	0	0	0	0	0	0	760
Total Funding	280	480	760	0	0	0	0	0	0	0	0	0	0	760

Project Status:

\$10,700 spent and encumbered through February 2016 FY16 - Design and Land Acquisition in progress.

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

Project Schedule

FY17 - Design.

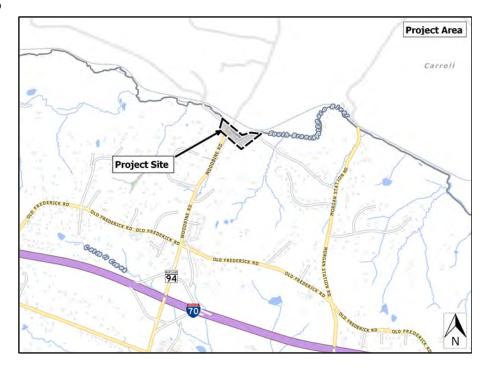
FY18 - Design and Land Acquisition.

FY19 - Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$29,925

Estimated annual maintenance costs upon completion: Decrease.



DRAINAGE PROJECTS

Number: D1168

Project: FY2015 MORGAN WOODBINE ROAD SLOPE STABILIZATION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	200	0	200	0	40	0	0	0	40	0	0	0	0	240
LAND ACQUISITION	0	0	0	25	0	0	0	0	25	0	0	0	0	25
CONSTRUCTION	0	0	0	0	400	0	0	0	400	0	0	0	0	400
Total Expenditures	200	0	200	25	440	0	0	0	465	0	0	0	0	665
BONDS	200	0	200	25	440	0	0	0	465	0	0	0	0	665
Total Funding	200	0	200	25	440	0	0	0	465	0	0	0	0	665

Project Status:

\$0 spent and encumbered through February 2016 FY16 - Design in progress.

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 unaccpetable levels of deep depressions, sinkholes, sediment build up, open pipe joins 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 \$ \$454,500



DRAINAGE PROJECTS

Number: D1169

Project: FY2016 STORM DRAIN CULVERT REPLACEMENT PROGRAM

(In Thousands)					Five	Year Ca	apital Pro	gram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	1,200	200	1,400	1,500	300	1,500	300	1,500	5,100	300	1,500	300	1,500	10,100
Total Expenditures	1,200	200	1,400	1,500	300	1,500	300	1,500	5,100	300	1,500	300	1,500	10,100
BONDS	1,200	200	1,400	1,500	300	1,500	300	1,500	5,100	300	1,500	300	1,500	10,100
Total Funding	1,200	200	1,400	1,500	300	1,500	300	1,500	5,100	300	1,500	300	1,500	10,100

Project Status: \$1,104,519 spent and encumbered through February 2016

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

- 1. The project may be dependent on the donation of the necessary easements from the affected properties and/or cost share participation.
- 2. Request represents project initiation.

Project Schedule

FY17 - Design

FY18 - Land Acquistion

FY19 - Construction

Operating Budget Impact

Annual Bond Redemption \$ \$31,500

Estimated annual maintenance costs upon completion: Decrease.



DRAINAGE PROJECTS

Number: D1170

Project: FY2017 CARDINAL FOREST DRAINAGE IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	200	200	0	0	0	0	0	0	0	0	0	0	200
LAND ACQUISITION	0	0	0	50	0	0	0	0	50	0	0	0	0	50
CONSTRUCTION	0	0	0	0	450	0	0	0	450	0	0	0	0	450
Total Expenditures	0	200	200	50	450	0	0	0	500	0	0	0	0	700
BONDS	0	200	200	50	450	0	0	0	500	0	0	0	0	700
Total Funding	0	200	200	50	450	0	0	0	500	0	0	0	0	700

Project Status : \$0 spent and encumbered through February 2016

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.
- 3. Request represents program advancement.

Project Schedule

FY17 - Design and Land Acquisition.

Operating Budget Impact

Annual Bond Redemption \$ \$13,500

Estimated annual maintenance costs upon completion: Increase.



DRAINAGE PROJECTS

Number: D1171

Project: FY2016 CISSELL AVENUE-HADDAWAY PLACE DRAINAGE IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	25	50	75	0	0	0	0	0	0	0	0	0	0	75
LAND ACQUISITION	75	50	125	0	0	0	0	0	0	0	0	0	0	125
CONSTRUCTION	0	100	100	0	0	0	0	0	0	0	0	0	0	100
Total Expenditures	100	200	300	0	0	0	0	0	0	0	0	0	0	300
BONDS	100	200	300	0	0	0	0	0	0	0	0	0	0	300
Total Funding	100	200	300	0	0	0	0	0	0	0	0	0	0	300

Project Status:

\$0 spent and encumbered through February 2016 FY16 - Land acquisition in progress.

Project: D1172-FY2016 DORSEY RUN TRIBUTARY STORM DRAIN REPAIR

Description

Operating Budget Impact

A project to repair the storm drain that carries drainage from the MD175 area just Annual Bond Redemption \$ \$31,500 east of US1 through and from the Columbia East Marketplace to the outfall just south of Assateague Drive and adjacent to US1.

Estimated annual maintenance costs upon completion: Decrease.

Justification

The storm drain is a metal pipe that has rusted out along the bottom and is failing. Sink holes are developing over the pipe. Emergency repairs were made of one section and inspections will determine the extent of additional repairs that are needed for the remainder of the pipe.

Remarks

Project Schedule

FY17 - Complete Construction and Close.



Project: FY2016 DORSEY RUN TRIBUTARY STORM DRAIN REPAIR

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Appr. Budget Total			Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	150	0	150	0	0	0	0	0	0	0	0	0	0	150
CONSTRUCTION	550	0	550	0	0	0	0	0	0	0	0	0	0	550
Total Expenditures	700	0	700	0	0	0	0	0	0	0	0	0	0	700
BONDS	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

Project Status:

\$699,999 spent and encumbered through February 2016 FY16 - Replacement of collapsed pipe sections is complete. Pipe has been lined with concrete.

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

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

Project Schedule

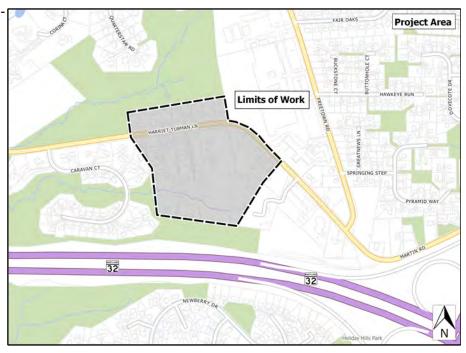
FY17 - Design and Land Acquisition.

FY18 - Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$40,500

Estimated annual maintenance costs upon completion: Decrease.



DRAINAGE PROJECTS

Number: D1173

Project: FY2016 HARRIET TUBMAN LANE DRAINAGE IMPROVEMENTS

(In Thousands)	Five Year Capital Program							Master Plan						
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	125	0	125	50	0	0	0	0	50	0	0	0	0	175
LAND ACQUISITION	0	150	150	0	0	0	0	0	0	0	0	0	0	150
CONSTRUCTION	0	0	0	575	0	0	0	0	575	0	0	0	0	575
Total Expenditures	125	150	275	625	0	0	0	0	625	0	0	0	0	900
BONDS	125	150	275	625	0	0	0	0	625	0	0	0	0	900
Total Funding	125	150	275	625	0	0	0	0	625	0	0	0	0	900

Project Status:

\$48,444 spent and encumbered through February 2016 FY16 - Design in progress

Project: D1174-FY2016 SPRING GLEN DRAINAGE IMPROVEMENTS

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.

Operating Budget Impact

Annual Bond Redemption \$ \$11,925

Estimated annual maintenance costs upon completion: Decrease.

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

Project Schedule

FY17 - Design.

FY18 - Design and Land Acquisition.

FY19 - Construction.



DRAINAGE PROJECTS

Number: D1174

Project: FY2016 SPRING GLEN DRAINAGE IMPROVEMENTS

(In Thousands)	In Thousands)						Five Year Capital Program							Master Plan				
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project				
PLANS & ENGINEERING	75	0	75	0	25	0	0	0	25	0	0	0	0	100				
LAND ACQUISITION	0	0	0	15	0	0	0	0	15	0	0	0	0	15				
CONSTRUCTION	0	0	0	0	150	0	0	0	150	0	0	0	0	150				
Total Expenditures	75	0	75	15	175	0	0	0	190	0	0	0	0	265				
BONDS	75	0	75	15	175	0	0	0	190	0	0	0	0	265				
Total Funding	75	0	75	15	175	0	0	0	190	0	0	0	0	265				

Project Status:

\$0 spent and encumbered through February 2016 FY16 - Design in progress.

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
E0973 FY2003 WAVERLY ELEM RENOVATION/PHASE II ADDITION	Α	1,393	9,589	10,982	5,650	0	0	0	0	16,632
This project will be completed in two phases at Waverly Elementary School.	В	6,691	0	6,691	12,746	0	0	0	0	19,437
Elementary oction.	Total	8,084	9,589	17,673	18,396	0	0	0	0	36,069
E0980 FY2004 SYSTEMIC RENOVATIONS Improvements and installation of systemic renovations at	Α	80,429	2,072	82,501	3,460	2,500	8,500	4,500	0	101,461
various school sites, including projects of a critical nature such as sprinkler repair, HVAC repair, window	В	121,424	6,872	128,296	25,634	39,345	36,084	19,333	23,350	272,042
replacement, and other projects in support of the local CIP outlined in the HCPSS Comprehensive Maintenance Plan,		4,555	0	4,555	0	0	0	0	0	4,555
as well as emergent projects on school properties.	Т	6,100	0	6,100	200	400	600	800	1,000	9,100
	Z	26,323	2,000	28,323	2,000	2,000	2,000	2,000	2,000	38,323
	Total	238,831	10,944	249,775	31,294	44,245	47,184	26,633	26,350	425,481
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	Р	303	0	303	0	0	0	0	0	303
remaining spaces (school buildings and school sites) accessible to the public, students, teachers, and staff.	Т	1,250	200	1,450	200	200	200	200	200	2,450
	Total	5,403	200	5,603	200	200	200	200	200	6,603
E0990 FY2002 PLAYGROUND EQUIPMENT	В	1,800	300	2,100	300	300	300	300	300	3,600
Improvements and installation of playground equipment at various school sites.	Т	580	0	580	0	0	0	0	0	580
	Total	2,380	300	2,680	300	300	300	300	300	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	Т	1,600	1,500	3,100	1,500	1,500	1,500	1,500	1,500	10,600
portable classrooms or purchase of new portable 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 2015.	Total	17,110	1,500	18,610	1,500	1,500	1,500	1,500	1,500	26,110
E0994 FY2004 ROOFING PROGRAM Reroofing for various schools including design and	Α	10,971	0	10,971	0	0	0	0	0	10,971
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	5,000	5,000	5,000	40,866
structure and material.	Т	3,251	0	3,251	0	0	0	0	0	3,251

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
E0994 FY2004 ROOFING PROGRAM Reroofing for various schools including design and	Z	4,500	0	4,500	0	0	0	0	0	4,500
construction of repairs to existing roofs, old roof removal, new flashing and drains, and installation of new roofing structure and material.	Total	44,588	0	44,588	0	0	5,000	5,000	5,000	59,588
E0995 SITE ACQUISITION and CONSTRUCTION RESERVE	Α	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	2,000	2,000	2,000	2,000	2,000	19,425
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	2,000	2,000	2,000	2,000	2,000	29,153
E0999 FY2006 FACILITY MODERNIZATION	В	6,400	0	6,400	0	0	0	0	0	6,400
A facility assessment survey was conducted for all schools	Total	6,400	0	6,400	0	0	0	0	0	6,400
E1007 FY 2007 RUNNING BROOK ELEM ADDITION A project to expand the existing Running Brook Elementary	A	1,073	0	1,073	0	0	0	0	0	1,073
School to provide capacity which will serve enrollment growth in the Columbia West and Southeastern Regions.	В	714	0	714	0	0	0	0	0	714
growth in the Columbia west and Southeastern Regions.	Т	4,000	0	4,000	0	0	0	0	0	4,000
	Total	5,787	0	5,787	0	0	0	0	0	5,787
E1012 FY2008 SCHOOL PARKING LOT EXPANSION A project to provide for the construction of additional	A	1,421	0	1,421	0	0	0	0	0	1,421
parking spaces and modification of parking lots to improve traffic flow patterns at existing school sites.	В	2,779	0	2,779	600	600	600	600	600	5,779
traille flow patterns at existing school sites.	Total	4,200	0	4,200	600	600	600	600	600	7,200
E1015 FY2011 ATHOLTON HIGH RENOVATION A project to expand educational program spaces and	A	18,286	0	18,286	0	0	0	0	0	18,286
renovate Atholton High School.	В	36,783	0	36,783	0	0	0	0	0	36,783
	Z	5,000	0	5,000	0	0	0	0	0	5,000
	Total	60,069	0	60,069	0	0	0	0	0	60,069
E1020 FY2011 NEW ELEMENTARY SCHOOL #41 A project to construct a new elementary school to relieve	Α	9,700	0	9,700	0	0	0	0	0	9,700
the Northeastern and Northern regions.	В	24,747	0	24,747	0	0	0	0	0	24,747
	Total	34,447	0	34,447	0	0	0	0	0	34,447

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
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 at various school sites.	Т	29,500	5,000	34,500	5,000	5,000	5,000	5,000	5,000	59,500
	Total	34,486	5,000	39,486	5,000	5,000	5,000	5,000	5,000	64,486
E1022 FY2013 GORMAN CROSSING ELEM SCHOOL A project to expand the existing Gorman Crossing	Α	1,996	0	1,996	0	0	0	0	0	1,996
Elementary School to provide capacity which served enrollment growth in the Southeastern Region.	В	3,387	0	3,387	0	0	0	0	0	3,387
Cinomical growth in the SouthCastern Region.	Total	5,383	0	5,383	0	0	0	0	0	5,383
E1023 FY2013 NEW MIDDLE SCHOOL #20 A project to construct a new middle school to relieve the	Α	13,723	0	13,723	0	0	0	0	0	13,723
Northeastern and Southeastern regions in 2014.	В	18,632	0	18,632	0	0	0	0	0	18,632
	D	4,000	0	4,000	0	0	0	0	0	4,000
	Total	36,355	0	36,355	0	0	0	0	0	36,355
E1024 FY2018 HAMMOND HIGH SCHOOL RENOVATION	A	0	0	0	0	0	4,647	4,677	4,677	14,001
A project to expand educational program spaces and renovate Hammond High School.	В	0	0	0	2,800	9,748	10,452	15,422	15,422	53,844
	Total	0	0	0	2,800	9,748	15,099	20,099	20,099	67,845
E1025 FY2023 CENTENNIAL HIGH SCHOOL RENOVATION	В	0	0	0	0	0	0	0	0	0
A project to expand educational program spaces and renovate Centennial High School.	Total	0	0	0	0	0	0	0	0	0
E1026 FY2012 PHELPS LUCK ELEM RENOVATION A project to expand educational program spaces and	A	5,514	0	5,514	0	0	0	0	0	5,514
renovate Phelps Luck Elementary School.	В	12,327	0	12,327	0	0	0	0	0	12,327
	Total	17,841	0	17,841	0	0	0	0	0	17,841
E1027 FY2013 LONGFELLOW ELEM ADDITION A project to expand educational program spaces and	A	4,916	0	4,916	0	0	0	0	0	4,916
renovate Longfellow Elementary School.	В	12,714	0	12,714	0	0	0	0	0	12,714
	Total	17,630	0	17,630	0	0	0	0	0	17,630
E1028 FY2016 NEW ELEMENTARY SCHOOL #42	A	0	12,000	12,000	6,718	2,718	0	0	0	21,436
A project to construct a new elementary school to relieve the Northeastern and Southeastern regions.	В	2,807	2,526	5,333	13,940	1,414	0	0	0	20,687
	Total	2,807	14,526	17,333	20,658	4,132	0	0	0	42,123

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
E1029 FY2022 OAKLAND MILLS HIGH SCHOOL RENOVATION	В	0	0	0	0	0	0	0	7,738	7,738
A project to expand educational program spaces and renovate Oakland Mills High School.	Total	0	0	0	0	0	0	0	7,738	7,738
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
Terrovate Beep Ruit Elementary Corloon.	Total	24,011	0	24,011	0	0	0	0	0	24,011
E1031 FY2014 WILDE LAKE MIDDLE SCHOOL REPLACEMENT	Α	13,303	2,056	15,359	0	0	0	0	0	15,359
A project to replace Wilde Lake Middle School.	В	10,289	12,229	22,518	0	0	0	0	0	22,518
	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	29,092	14,285	43,377	0	0	0	0	0	43,377
E1032 FY2014 LAUREL WOODS ELEM SCHOOL ADDITION	Α	2,507	0	2,507	0	0	0	0	0	2,507
A project to expand educational program spaces at Laurel Woods Elementary School.	В	6,316	0	6,316	0	0	0	0	0	6,316
woods Elementary School.	Total	8,823	0	8,823	0	0	0	0	0	8,823
E1033 FY2015 PATUXENT VALLEY MIDDLE SCHOOL RENOVATION	Α	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	6,141	9,890	16,031	0	0	0	0	0	16,031
Tonorate Fatazioni Valley Miladio Goneoli.	Т	1,400	0	1,400	0	0	0	0	0	1,400
	Total	18,145	9,890	28,035	0	0	0	0	0	28,035
E1034 FY2015 SWANSFIELD ELEM SCHOOL RENOVATION/ADDITION	Α	0	7,539	7,539	157	0	0	0	0	7,696
A project to expand educational program spaces and renovate Swansfield Elementary School.	В	11,773	3,183	14,956	1,250	0	0	0	0	16,206
15.15.445 Gwarlonda Elementary Geriool.	Total	11,773	10,722	22,495	1,407	0	0	0	0	23,902
E1035 FY2018 NEW HIGH SCHOOL #13 A project to construct a new high school to provide the	В	0	0	0	3,300	9,950	23,250	27,500	36,500	100,500
HCPSS with the opportunity to expand college and career readiness programs for high school students across the county.	Total	0	0	0	3,300	9,950	23,250	27,500	36,500	100,500

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
E1036 FY2018 OAKLAND MILLS MIDDLE SCHOOL RENOVATION	А	0	0	0	3,142	3,142	0	0	0	6,284
The Oakland Mills Middle School project will renovate the existing facility.	В	0	0	0	5,989	7,989	7,566	0	0	21,544
	Total	0	0	0	9,131	11,131	7,566	0	0	27,828
1037 FY2022 ELLICOTT MILLS MIDDLE SCHOOL	В	0	0	0	0	0	0	0	544	544
The Ellicott Mills Middle School project will add 156 seats of new capacity to the existing school.	Total	0	0	0	0	0	0	0	544	544
1038 FY2017 PLANNING AND DESIGN he Planning and Design project has been established to	Т	300	300	600	300	300	300	300	300	2,100
rovide funding for feasibility studies prior to the funding of advidual projects.	Total	300	300	600	300	300	300	300	300	2,100
1039 FY2020 NEW ELEM SCHOOL #43 The New Elementary School #43 will be a new facility.	Α	0	0	0	0	0	0	6,350	5,350	11,700
,	В	0	0	0	0	0	5,380	13,816	9,775	28,971
	Total	0	0	0	0	0	5,380	20,166	15,125	40,671
1040 FY2024 NEW ELEM SCHOOL #44 he New Elementary School #44 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
1041 FY2025 NEW ELEM SCHOOL #45 he 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
1042 FY2026 NEW MIDDLE SCHOOL #21 he New Middle School #21 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
CHOOL SYSTEM PROJECTS Total		653,098	77,256	730,354	96,886	89,106	113,379	109,298	121,256	1,260,279

Howard County, MD FY2017 Council Approved Capital Budget (\$000) EDUC-SCHOOL SYSTEM PROJECTS

	Revenue Source	Prior Total	Current FY	Appropriation Total
А	STATE AID for SCHOOLS	184,302	33,256	217,558
В	BONDS	360,717	35,000	395,717
D	DEVELOPER CONTRIBUTION	4,000	0	4,000
Р	PAY AS YOU GO	4,858	0	4,858
Т	TRANSFER TAX	58,298	7,000	65,298
Z	EDUCATION EXCISE BONDS	40,923	2,000	42,923
Total		653,098	77,256	730,354

2017 Council Approved 5 Year Capital Budget Project Type Summary (EDUC-SCHOOL SYSTEM PROJECTS)

Rev	enue Source	Prior Approp	Current FY	2018	2019	2020	2021	2022	5 Year Total
Α	STATE AID for SCHOOLS	184,302	33,256	19,127	8,360	13,147	15,527	10,027	283,746
В	BONDS	360,717	35,000	68,559	71,346	90,632	83,971	101,229	811,454
D	DEVELOPER CONTRIBUTION	4,000	0	0	0	0	0	0	4,000
Р	PAY AS YOU GO	4,858	0	0	0	0	0	0	4,858
Т	TRANSFER TAX	58,298	7,000	7,200	7,400	7,600	7,800	8,000	103,298
Z	EDUCATION EXCISE BONDS	40,923	2,000	2,000	2,000	2,000	2,000	2,000	52,923
Tota	al	653,098	77,256	96,886	89,106	113,379	109,298	121,256	1,260,279

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.

Project Schedule

Phase I Complete.

Phase II will be accomplished concurrently with a renovation:

2015: Feasibility Study. 2015-2016: Planning. 2017-2018: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$946,170

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	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,061	0	1,061	0	0	0	0	0	0	0	0	0	0	1,061
CONSTRUCTION	6,786	9,589	16,375	17,246	0	0	0	0	17,246	0	0	0	0	33,621
EQUIPMENT & FURNISHINGS	237	0	237	1,150	0	0	0	0	1,150	0	0	0	0	1,387
Total Expenditures	8,084	9,589	17,673	18,396	0	0	0	0	18,396	0	0	0	0	36,069
BONDS	6,691	0	6,691	12,746	0	0	0	0	12,746	0	0	0	0	19,437
STATE AID for SCHOOLS	1,393	9,589	10,982	5,650	0	0	0	0	5,650	0	0	0	0	16,632
Total Funding	8,084	9,589	17,673	18,396	0	0	0	0	18,396	0	0	0	0	36,069

Project Status:

\$3,211,031 spent and encumbered through February 2016 Phase I Completed in 2007. Phase II in planning.

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

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 Upon completion, the maintenance of these facilities will be 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

- 1. FY 2017 Capital Budget request represents renovation work or planning for future construction at the following school facilities, as funding is available:
- 2. Glenwood MS Boiler/Water Heater: Construction Summer 2016.
- 3. Bonnie Branch MS HVAC: Construction Summer 2016.
- 4. Manor Woods ES: Construction Summer 2016.
- 5. Talbott Springs ES Renovation: Construction 2018-2019.
- 6. Oakland Mills Village Area Pre-K Expansion: Construction 2017.

Operating Budget Impact

Annual Bond Redemption \$ \$21,316,680

responsibility of HCPSS Facilities Services. Operating cost impact is unknown at this time.



SCHOOL SYSTEM PROJECTS

Project: FY2004 SYSTEMIC RENOVATIONS Number: E0980

(In Thousands)					Five	Year Ca	apital Pro	gram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	238,831	10,944	249,775	31,294	44,245	47,184	26,633	26,350	175,706	38,995	40,945	42,992	45,141	593,554
Total Expenditures	238,831	10,944	249,775	31,294	44,245	47,184	26,633	26,350	175,706	38,995	40,945	42,992	45,141	593,554
BONDS	121,424	6,872	128,296	25,634	39,345	36,084	19,333	23,350	143,746	38,995	40,945	42,992	45,141	440,115
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	80,429	2,072	82,501	3,460	2,500	8,500	4,500	0	18,960	0	0	0	0	101,461
TRANSFER TAX	6,100	0	6,100	200	400	600	800	1,000	3,000	0	0	0	0	9,100
EDUCATION EXCISE BONDS	26,323	2,000	28,323	2,000	2,000	2,000	2,000	2,000	10,000	0	0	0	0	38,323
Total Funding	238,831	10,944	249,775	31,294	44,245	47,184	26,633	26,350	175,706	38,995	40,945	42,992	45,141	593,554

Project Status:

\$146,057,512 spent and encumbered through February 2016 See Project Schedule. See Remarks. Ongoing.

Project: E0989-FY1989 BARRIER-FREE PROJECTS Number: E0989

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.

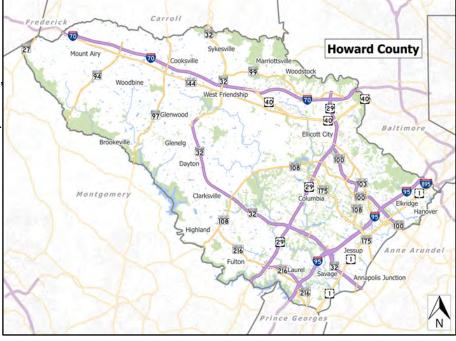
Project Schedule

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

Project: FY1989 BARRIER-FREE PROJECTS Number: E0989

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	4,950	200	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	5,403	200	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	1,250	200	1,450	200	200	200	200	200	1,000	200	200	200	200	3,250
Total Funding	5,403	200	5,603	200	200	200	200	200	1,000	200	200	200	200	7,403

Project Status : \$4,755,081 spent and encumbered through February 2016 Ongoing.

Project: E0990-FY2002 PLAYGROUND EQUIPMENT Number: E0990

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.

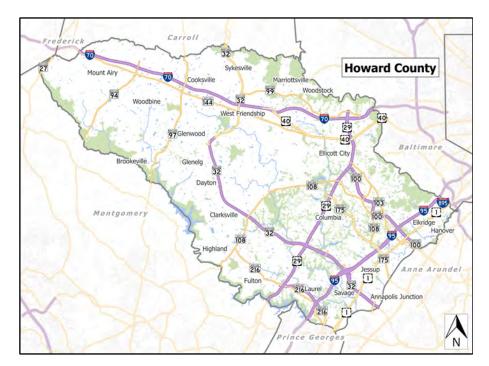
Project Schedule

April 2016: Final Site Specific Selection and Requisition. July 2016 - August 2016: Equipment Installation.

Operating Budget Impact

Annual Bond Redemption \$ \$216,000

The Bond funding listed for this project includes both long term bond funding and the use of the master lease program as appropriate. ~Estimated operating cost impact upon completion: No increase



SCHOOL SYSTEM PROJECTS

Project: FY2002 PLAYGROUND EQUIPMENT Number: E0990

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	2,380	300	2,680	300	300	300	300	300	1,500	300	300	300	300	5,380
Total Expenditures	2,380	300	2,680	300	300	300	300	300	1,500	300	300	300	300	5,380
BONDS	1,800	300	2,100	300	300	300	300	300	1,500	300	300	300	300	4,800
TRANSFER TAX	580	0	580	0	0	0	0	0	0	0	0	0	0	580
Total Funding	2,380	300	2,680	300	300	300	300	300	1,500	300	300	300	300	5,380

Project Status: \$2,321,569 spent and encumbered through February 2016

Timing: Hollifield Station ES and Manor Woods ES playground equipment have been deferred until FY17 due to funding constraints.

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 2015. 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 2015, there were 237 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: Relocatable Classrooms Assessment Study.

Potential: Purchase of six new relocatable classrooms at two Elementary School and two Middle School locations.

Operating Budget Impact

Annual Bond Redemption \$ \$697,950

The Bond funding listed for this project includes both long term bond funding and the use of the master lease program as appropriate. ~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	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	17,110	1,500	18,610	1,500	1,500	1,500	1,500	1,500	7,500	1,500	1,500	1,500	1,500	32,110
Total Expenditures	17,110	1,500	18,610	1,500	1,500	1,500	1,500	1,500	7,500	1,500	1,500	1,500	1,500	32,110
BONDS	14,410	0	14,410	0	0	0	0	0	0	0	0	0	0	14,410
TRANSFER TAX	1,600	1,500	3,100	1,500	1,500	1,500	1,500	1,500	7,500	1,500	1,500	1,500	1,500	16,600
EDUCATION EXCISE BONDS	1,100	0	1,100	0	0	0	0	0	0	0	0	0	0	1,100
Total Funding	17,110	1,500	18,610	1,500	1,500	1,500	1,500	1,500	7,500	1,500	1,500	1,500	1,500	32,110

Project Status:

\$16,327,134 spent and encumbered through February 2016 Ongoing.

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.

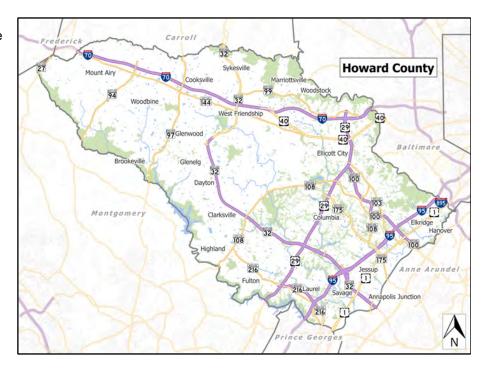
Remarks

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

Project Schedule

Operating Budget Impact

Annual Bond Redemption \$ \$2,941,470



SCHOOL SYSTEM PROJECTS

Project: FY2004 ROOFING PROGRAM Number: E0994

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	44,588	0	44,588	0	0	5,000	5,000	5,000	15,000	5,000	5,000	5,000	5,000	79,588
Total Expenditures	44,588	0	44,588	0	0	5,000	5,000	5,000	15,000	5,000	5,000	5,000	5,000	79,588
BONDS	25,866	0	25,866	0	0	5,000	5,000	5,000	15,000	5,000	5,000	5,000	5,000	60,866
STATE AID for SCHOOLS	10,971	0	10,971	0	0	0	0	0	0	0	0	0	0	10,971
TRANSFER TAX	3,251	0	3,251	0	0	0	0	0	0	0	0	0	0	3,251
EDUCATION EXCISE BONDS	4,500	0	4,500	0	0	0	0	0	0	0	0	0	0	4,500
Total Funding	44,588	0	44,588	0	0	5,000	5,000	5,000	15,000	5,000	5,000	5,000	5,000	79,588

Project Status:

\$29,485,096 spent and encumbered through February 2016

Due to the age and current condition of school facilities roofs, HCPSS will not request funds for roof replacement in FY 2017.

Number: E0995

Project: E0995-SITE ACQUISITION and CONSTRUCTION RESERVE

Description

This account is a contingency fund for site acquisition and school construction at Annual Bond Redemption \$ \$1,234,125 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.

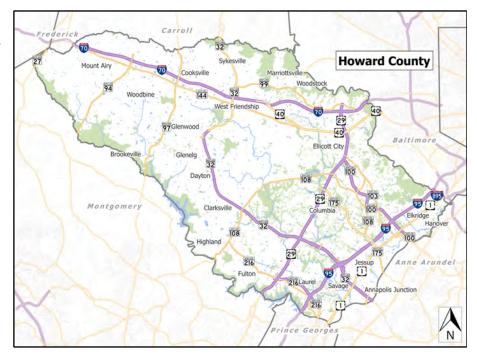
Remarks

1. Site funds are needed for future enrollment growth.

Project Schedule

Ongoing.

Operating Budget Impact



SCHOOL SYSTEM PROJECTS

Number: E0995

Project: SITE ACQUISITION and CONSTRUCTION RESERVE

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
LAND ACQUISITION	19,153	0	19,153	2,000	2,000	2,000	2,000	2,000	10,000	2,000	2,000	2,000	2,000	37,153
Total Expenditures	19,153	0	19,153	2,000	2,000	2,000	2,000	2,000	10,000	2,000	2,000	2,000	2,000	37,153
BONDS	9,425	0	9,425	2,000	2,000	2,000	2,000	2,000	10,000	2,000	2,000	2,000	2,000	27,425
STATE AID for SCHOOLS	911	0	911	0	0	0	0	0	0	0	0	0	0	911
TRANSFER TAX	8,817	0	8,817	0	0	0	0	0	0	0	0	0	0	8,817
Total Funding	19,153	0	19,153	2,000	2,000	2,000	2,000	2,000	10,000	2,000	2,000	2,000	2,000	37,153

Project Status:

\$15,827,236 spent and encumbered through February 2016 Ongoing.

Project: E0999-FY2006 FACILITY MODERNIZATION Number: E0999

Description

Operating Budget Impact

A facility assessment survey was conducted for all schools. The remainder of the Annual Bond Redemption \$ \$288,000 funds are being utilized to fund planning for projects at Thunder Hill ES, Bollman Bridge ES, Stevens Forest ES and other future systemic renovations at school sites.

Justification

The results of the facility assessment were used to assist the Board of Education in the prioritization of near term planning of renovation requirements in FY10 and determination of fiscal needs over the long term.

Remarks

Design Completion of:

- 1. Thunder Hill ES Construction Complete.
- 2. Bollman Bridge ES Construction Complete.
- 3. Stevens Forest ES Construction complete.
- 4. Hammond ES/MS Construction complete.

Project Schedule

Project Complete.



SCHOOL SYSTEM PROJECTS

Number: E0999

Project: FY2006 FACILITY MODERNIZATION

(In Thousands)					Five	e Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	4,200	0	4,200	0	0	0	0	0	0	0	0	0	0	4,200
CONSTRUCTION	2,200	0	2,200	0	0	0	0	0	0	0	0	0	0	2,200
Total Expenditures	6,400	0	6,400	0	0	0	0	0	0	0	0	0	0	6,400
BONDS	6,400	0	6,400	0	0	0	0	0	0	0	0	0	0	6,400
Total Funding	6,400	0	6,400	0	0	0	0	0	0	0	0	0	0	6,400

Project Status:

\$6,344,942 spent and encumbered through February 2016

Design.

Project: E1007-FY 2007 RUNNING BROOK ELEM ADDITION

SCHOOL SYSTEM PROJECTS

Number: E1007

Description

A project to expand the existing Running Brook Elementary School to provide capacity which will serve enrollment growth in the Columbia West and Southeastern Regions. 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 in the Columbia and Southeastern Regions. Available capacity in this region, as well as adjacent regions, is not sufficient to absorb long-term projected enrollment growth. Without the addition, Running Brook ES was projected to exceed 110% capacity utilization in 2019.

Remarks

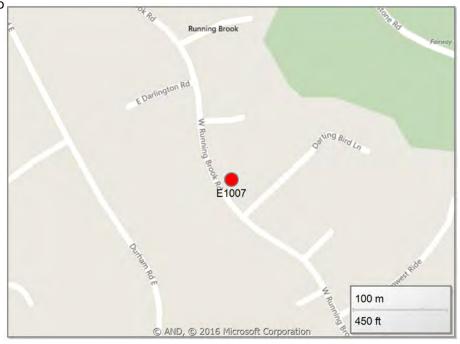
Project Schedule

August 2012 - April 2013: Planning. June 2013 - August 2014: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$32,130

The Bond funding listed for this project includes both long term bond funding and the use of the master lease program as appropriate.



SCHOOL SYSTEM PROJECTS

Number: E1007

Project: FY 2007 RUNNING BROOK ELEM ADDITION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	125	0	125	0	0	0	0	0	0	0	0	0	0	125
CONSTRUCTION	5,612	0	5,612	0	0	0	0	0	0	0	0	0	0	5,612
EQUIPMENT & FURNISHINGS	50	0	50	0	0	0	0	0	0	0	0	0	0	50
Total Expenditures	5,787	0	5,787	0	0	0	0	0	0	0	0	0	0	5,787
BONDS	714	0	714	0	0	0	0	0	0	0	0	0	0	714
STATE AID for SCHOOLS	1,073	0	1,073	0	0	0	0	0	0	0	0	0	0	1,073
TRANSFER TAX	4,000	0	4,000	0	0	0	0	0	0	0	0	0	0	4,000
Total Funding	5,787	0	5,787	0	0	0	0	0	0	0	0	0	0	5,787

Project Status:

\$4,667,384 spent and encumbered through February 2016 Construction complete.

Project: E1012-FY2008 SCHOOL PARKING LOT EXPANSION Number: E1012

Description

Operating Budget Impact

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

Annual Bond Redemption \$ \$368,055

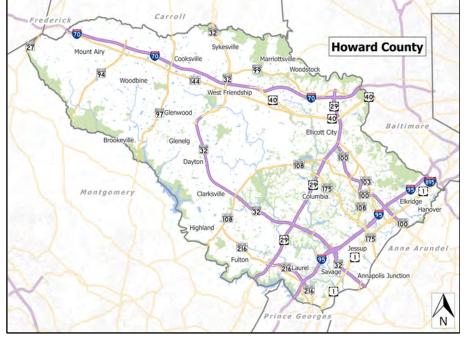
Justification

Parking expansions 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. There are no parking lot projects scheduled for the 2015-2016 year.

Project Schedule



SCHOOL SYSTEM PROJECTS

Number: E1012

Project: FY2008 SCHOOL PARKING LOT EXPANSION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	240	0	240	60	60	60	60	60	300	60	60	60	60	780
CONSTRUCTION	3,960	0	3,960	540	540	540	540	540	2,700	540	540	540	540	8,820
Total Expenditures	4,200	0	4,200	600	600	600	600	600	3,000	600	600	600	600	9,600
BONDS	2,779	0	2,779	600	600	600	600	600	3,000	600	600	600	600	8,179
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	600	600	600	600	600	3,000	600	600	600	600	9,600

Project Status:

\$2,159,394 spent and encumbered through February 2016

Ongoing.

Number: E1015

Project: E1015-FY2011 ATHOLTON HIGH RENOVATION

Description

A project to expand educational program spaces and renovate Atholton 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. New spaces will be added as required. The funding and the use of the master lease program as appropriate. 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 high school facility needs assessment documented the necessity for this renovation.

Remarks

- 1. The original building was constructed in 1966. It requires updating to align with current educational standards.
- 2. Prior appropriation reflects TAO 1-2015.

Project Schedule

July 2010 - March 2012: Planning.

May 2012 - April 2013: Phase I - New addition.

May 2013 - December 2013: Phase II & IIA - Auditorium/media center renovations.

January 2014 - June 1014: Phase III - 2nd floor science & classroom renovation, cafeteria addition.

June 2014 - December 2014: Phase IV - Art and athletic renovations.

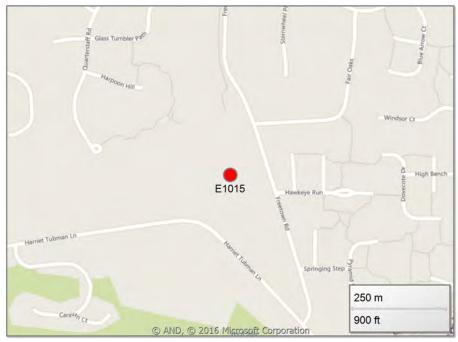
January 2015 - June 2015: Phase V - Gym and administrative area renovations.

June 2015 - August 2015: Phase VA - Parking, main entrance, and main mechanical room renovations.

Operating Budget Impact

Annual Bond Redemption \$ \$1,880,235

The Bond funding listed for this project includes both long term bond



SCHOOL SYSTEM PROJECTS

Number: E1015

Project: FY2011 ATHOLTON HIGH RENOVATION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	6,362	0	6,362	0	0	0	0	0	0	0	0	0	0	6,362
CONSTRUCTION	53,207	0	53,207	0	0	0	0	0	0	0	0	0	0	53,207
EQUIPMENT & FURNISHINGS	500	0	500	0	0	0	0	0	0	0	0	0	0	500
Total Expenditures	60,069	0	60,069	0	0	0	0	0	0	0	0	0	0	60,069
BONDS	36,783	0	36,783	0	0	0	0	0	0	0	0	0	0	36,783
STATE AID for SCHOOLS	18,286	0	18,286	0	0	0	0	0	0	0	0	0	0	18,286
EDUCATION EXCISE BONDS	5,000	0	5,000	0	0	0	0	0	0	0	0	0	0	5,000
Total Funding	60,069	0	60,069	0	0	0	0	0	0	0	0	0	0	60,069

Project Status: \$38,824,132 spent and encumbered through February 2016 Construction complete.

Project: E1020-FY2011 NEW ELEMENTARY SCHOOL #41 Number: E1020

Description

A project to construct a new elementary school to relieve the Northeastern and Northern regions. New Elementary School #41 was named Ducketts Lane Elementary School. The school was constructed in accordance with requirements The Bond funding listed for this project includes both long term bond set forth in the new elementary educational specifications and has a capacity of 600 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

Without this project, the number of elementary students in the Northeastern region was expected to exceed capacity by 875 students in 2013. Capacity utilization in the Northeastern region is exceeding 100% through and beyond the long range planning period without this facility. Particularly acute concerns include Bellows Spring ES, Deep Run ES, and Elkridge ES, which will all be at 115% or more utilization in 2013. A school site on Ducketts Lane was acquired. The Board of Education approved redistricting for New ES #41 on November 15, 2012.

Remarks

Project Schedule

October 2011 - December 2011: Construction Documents. February 2012 - March 2012: Bid Process. April 2012 - August 2013: Construction Complete.

Operating Budget Impact

Annual Bond Redemption \$ \$1,113,615

funding and the use of the master lease program as appropriate.



SCHOOL SYSTEM PROJECTS

Number: E1020

Project: FY2011 NEW ELEMENTARY SCHOOL #41

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	2,696	0	2,696	0	0	0	0	0	0	0	0	0	0	2,696
CONSTRUCTION	29,751	0	29,751	0	0	0	0	0	0	0	0	0	0	29,751
EQUIPMENT & FURNISHINGS	2,000	0	2,000	0	0	0	0	0	0	0	0	0	0	2,000
Total Expenditures	34,447	0	34,447	0	0	0	0	0	0	0	0	0	0	34,447
BONDS	24,747	0	24,747	0	0	0	0	0	0	0	0	0	0	24,747
STATE AID for SCHOOLS	9,700	0	9,700	0	0	0	0	0	0	0	0	0	0	9,700
Total Funding	34,447	0	34,447	0	0	0	0	0	0	0	0	0	0	34,447

Project Status:

\$23,674,093 spent and encumbered through February 2016 Construction complete.

Project: E1021-FY2011 TECHNOLOGY

SCHOOL SYSTEM PROJECTS

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

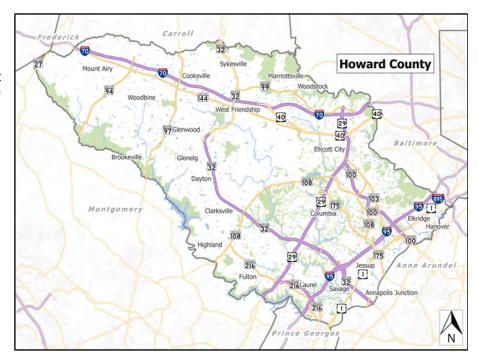
Technology Replacement Plan 2.0: school administrative positions/offices computers, printers, and MFDs at all levels.

Partial Technology Replacement Plan 3.0: school curriculum programs printer and partial computer replacement at all levels.

Operating Budget Impact

Annual Bond Redemption \$ \$224,370

Estimated operating cost impact upon completion: No increase



SCHOOL SYSTEM PROJECTS

Project: FY2011 TECHNOLOGY Number: E1021

(In Thousands)					Five	Year Ca	apital Pro	gram	Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
EQUIPMENT & FURNISHINGS	34,486	5,000	39,486	5,000	5,000	5,000	5,000	5,000	25,000	5,000	5,000	5,000	5,000	84,486
Total Expenditures	34,486	5,000	39,486	5,000	5,000	5,000	5,000	5,000	25,000	5,000	5,000	5,000	5,000	84,486
BONDS	4,986	0	4,986	0	0	0	0	0	0	0	0	0	0	4,986
TRANSFER TAX	29,500	5,000	34,500	5,000	5,000	5,000	5,000	5,000	25,000	5,000	5,000	5,000	5,000	79,500
Total Funding	34,486	5,000	39,486	5,000	5,000	5,000	5,000	5,000	25,000	5,000	5,000	5,000	5,000	84,486

Project Status:

\$32,939,396 spent and encumbered through February 2016
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.

Project: E1022-FY2013 GORMAN CROSSING ELEM SCHOOL Number: E1022

Description

A project to expand the existing Gorman Crossing Elementary School to provide Annual Bond Redemption \$ \$152,415 capacity which served enrollment growth in the Southeastern Region. An existing design originally proposed in the FY04 Capital Budget was updated for this project. This project provided 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 in the Southeastern Region. Redistricting was aproved for 2012, but available capacity in this region, as well as adjacent regions, is not sufficient to absorb long-term projected enrollment growth.

Remarks

1. Prior Appropriation includes transfers legislated by Council Resolution 1-2015.

Project Schedule

August 2011 - March 2012: Planning. July 2012 - August 2013: Construction Complete.

Operating Budget Impact



SCHOOL SYSTEM PROJECTS

Number: E1022

Project: FY2013 GORMAN CROSSING ELEM SCHOOL

(In Thousands)		Five	Year Ca	apital Pro	ogram		Master Plan							
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	810	0	810	0	0	0	0	0	0	0	0	0	0	810
CONSTRUCTION	4,273	0	4,273	0	0	0	0	0	0	0	0	0	0	4,273
EQUIPMENT & FURNISHINGS	300	0	300	0	0	0	0	0	0	0	0	0	0	300
Total Expenditures	5,383	0	5,383	0	0	0	0	0	0	0	0	0	0	5,383
BONDS	3,387	0	3,387	0	0	0	0	0	0	0	0	0	0	3,387
STATE AID for SCHOOLS	1,996	0	1,996	0	0	0	0	0	0	0	0	0	0	1,996
Total Funding	5,383	0	5,383	0	0	0	0	0	0	0	0	0	0	5,383

Project Status:

\$3,256,747 spent and encumbered through February 2016 Construction Complete.

Project: E1023-FY2013 NEW MIDDLE SCHOOL #20 Number: E1023

Description

A project to construct a new middle school to relieve the Northeastern and Southeastern regions in 2014. New Middle School #20 was named Thomas Viaduct Middle School. 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

Both Northeastern and Southeastern regions are oriented to the northern portion of Route 1 in Howard County where new residential growth has been planned. It is clear that existing capacity and redistricting alone cannot accommodate anticipated enrollment growth and a site has been secured within the proposed Oxford Square development. Since most of the need is focused in the Route 1 Corridor a single school may aid both regions.

Remarks

- 1. The Northeastern region includes Bonnie Branch MS, Elkridge Landing MS, and Ellicott Mills MS as well as Mayfield Woods MS.
- 2. The Southeastern region includes Hammond MS, Murray Hill MS, and Patuxent Valley MS.
- 3. Bellows Spring ES, Deep Run ES, Guilford ES, Ducketts Lane ES and Rockburn ES feed Thomas Viaduct Middle School.
- 4. Prior Appropriation includes transfers legislated by Council Resolution 1-2015.

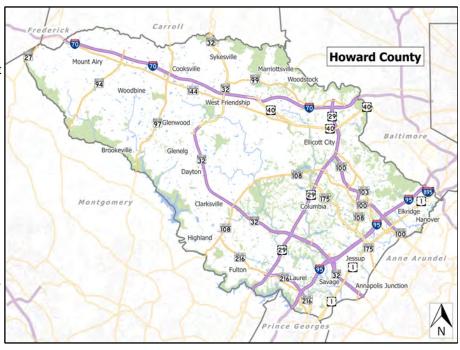
Project Schedule

August 2012 - January 2013: Construction Documents. February 2013 - March 2013: Bid/Award Phase. April 2013 - August 2014: Construction Complete.

Operating Budget Impact

Annual Bond Redemption \$ \$838,440

The Bond funding listed for this project includes both long term bond funding and the use of the master lease program as appropriate.



SCHOOL SYSTEM PROJECTS

Project: FY2013 NEW MIDDLE SCHOOL #20 Number: E1023

(In Thousands)		Five	Year Ca	apital Pro	ogram		Master Plan							
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	35,355	0	35,355	0	0	0	0	0	0	0	0	0	0	35,355
EQUIPMENT & FURNISHINGS	1,000	0	1,000	0	0	0	0	0	0	0	0	0	0	1,000
Total Expenditures	36,355	0	36,355	0	0	0	0	0	0	0	0	0	0	36,355
BONDS	18,632	0	18,632	0	0	0	0	0	0	0	0	0	0	18,632
DEVELOPER CONTRIBUTION	4,000	0	4,000	0	0	0	0	0	0	0	0	0	0	4,000
STATE AID for SCHOOLS	13,723	0	13,723	0	0	0	0	0	0	0	0	0	0	13,723
Total Funding	36,355	0	36,355	0	0	0	0	0	0	0	0	0	0	36,355

Project Status:

\$18,454,862 spent and encumbered through February 2016 Construction complete.

Project: E1024-FY2018 HAMMOND HIGH SCHOOL RENOVATION Number: E1024

Description

A project to expand educational program spaces and renovate Hammond 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 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 high school facility needs assessment documented the necessity for this renovation.

Remarks

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

Project Schedule

2018: Feasibility Study. 2018 - 2019: Planning. 2020 - 2023: Construction.

Work will be Completed in Phases.

Operating Budget Impact

Annual Bond Redemption \$ \$3,327,480



SCHOOL SYSTEM PROJECTS

Number: E1024

Project: FY2018 HAMMOND HIGH SCHOOL RENOVATION

(In Thousands)		Five	Year Ca	apital Pro	gram		Master Plan							
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	0	0	2,800	0	0	0	0	2,800	0	0	0	0	2,800
CONSTRUCTION	0	0	0	0	9,748	15,099	20,099	20,099	65,045	19,850	0	0	0	84,895
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	0	0	0	250	0	0	0	250
Total Expenditures	0	0	0	2,800	9,748	15,099	20,099	20,099	67,845	20,100	0	0	0	87,945
BONDS	0	0	0	2,800	9,748	10,452	15,422	15,422	53,844	20,100	0	0	0	73,944
STATE AID for SCHOOLS	0	0	0	0	0	4,647	4,677	4,677	14,001	0	0	0	0	14,001
Total Funding	0	0	0	2,800	9,748	15,099	20,099	20,099	67,845	20,100	0	0	0	87,945

Project Status:

\$0 spent and encumbered through February 2016 Planning.

Number: E1025

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 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 high school facility needs assessment documented the necessity for this renovation.

Remarks

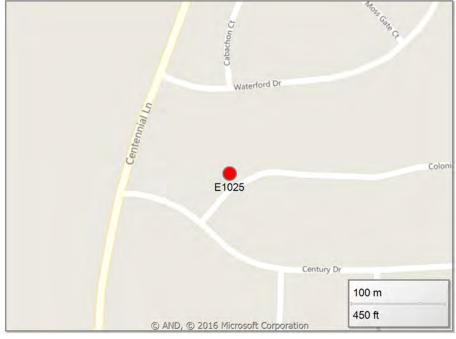
1. The original building was completed in 1977. It requires updating to align with current educational standards.

Project Schedule

October 2022 - December 2022: Feasibility Study. January 2023 - January 2024: Planning. August 2024 - August 2027: Construction. Work will be Completed in Phases.

Operating Budget Impact

Annual Bond Redemption \$ \$3,277,485



SCHOOL SYSTEM PROJECTS

Number: E1025

Project: FY2023 CENTENNIAL HIGH SCHOOL RENOVATION

(In Thousands)				Five Year Capital Program							Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project		
PLANS & ENGINEERING	0	0	0	0	0	0	0	0	0	7,652	0	0	0	7,652		
CONSTRUCTION	0	0	0	0	0	0	0	0	0	0	24,443	24,443	16,295	65,181		
Total Expenditures	0	0	0	0	0	0	0	0	0	7,652	24,443	24,443	16,295	72,833		
BONDS	0	0	0	0	0	0	0	0	0	7,652	24,443	24,443	16,295	72,833		
Total Funding	0	0	0	0	0	0	0	0	0	7,652	24,443	24,443	16,295	72,833		

Project Status:

\$0 spent and encumbered through February 2016

Planning.

Project: E1026-FY2012 PHELPS LUCK ELEM RENOVATION Number: E1026

Description

A project to expand educational program spaces and renovate Phelps Luck Elementary School. Interior spaces were reconfigured as needed. The project partially addressed deficiencies in educational program space which were identified in a recent facilities assessment survey. 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 required updating to align with current educational standards.
- 2. \$5 million has been transferred by amendment into this project from the prior appropriations of the Mt Hebron High School Renovation project (E1005).
- 3. Prior Appropriation includes transfers legislated by Council Resolution 1-2015.

Project Schedule

June 2010 - August 2011: Planning. November 2011 - Bid Project.

January 2012 - August 2013: Construction Complete.

Operating Budget Impact

Annual Bond Redemption \$ \$554,715



SCHOOL SYSTEM PROJECTS

Number: E1026

Project: FY2012 PHELPS LUCK ELEM RENOVATION

(In Thousands)		Five	e Year Ca	apital Pro	ogram	Master Plan								
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	17,791	0	17,791	0	0	0	0	0	0	0	0	0	0	17,791
EQUIPMENT & FURNISHINGS	50	0	50	0	0	0	0	0	0	0	0	0	0	50
Total Expenditures	17,841	0	17,841	0	0	0	0	0	0	0	0	0	0	17,841
BONDS	12,327	0	12,327	0	0	0	0	0	0	0	0	0	0	12,327
STATE AID for SCHOOLS	5,514	0	5,514	0	0	0	0	0	0	0	0	0	0	5,514
Total Funding	17,841	0	17,841	0	0	0	0	0	0	0	0	0	0	17,841

Project Status:

\$12,317,684 spent and encumbered through February 2016 Construction Complete.

Project: E1027-FY2013 LONGFELLOW ELEM ADDITION Number: E1027

Description

A project to expand educational program spaces and renovate Longfellow 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 funding and the use of the master lease program as appropriate. 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 1970. It requires updating to align with current educational standards. 2. Prior appropriation reflects TAO 1-2015.

Project Schedule

July 2012 - September 2012: Updated Feasibility Study. October 2012 - January 2014: Planning. February 2014 - August 2015: Construction Complete.

Operating Budget Impact

Annual Bond Redemption \$ \$572,130

The Bond funding listed for this project includes both long term bond



SCHOOL SYSTEM PROJECTS

Project: FY2013 LONGFELLOW ELEM ADDITION Number: E1027

(In Thousands)					Five	e Year Ca	apital Pro	ogram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	17,580	0	17,580	0	0	0	0	0	0	0	0	0	0	17,580
EQUIPMENT & FURNISHINGS	50	0	50	0	0	0	0	0	0	0	0	0	0	50
Total Expenditures	17,630	0	17,630	0	0	0	0	0	0	0	0	0	0	17,630
BONDS	12,714	0	12,714	0	0	0	0	0	0	0	0	0	0	12,714
STATE AID for SCHOOLS	4,916	0	4,916	0	0	0	0	0	0	0	0	0	0	4,916
Total Funding	17,630	0	17,630	0	0	0	0	0	0	0	0	0	0	17,630

Project Status:

\$11,328,815 spent and encumbered through February 2016 Construction Complete.

Project: E1028-FY2016 NEW ELEMENTARY SCHOOL #42 Number: E1028

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 788 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 2021 and require approximately 950 additional seats.

Remarks

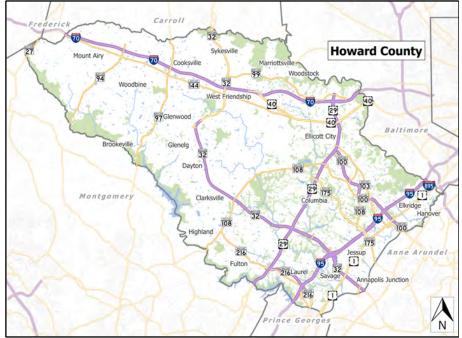
Project Schedule

2015: Feasibility Study. 2015 - 2016: Planning. 2017-2018: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$1,072,440

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: E1028

Project: FY2016 NEW ELEMENTARY SCHOOL #42

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	2,807	0	2,807	0	0	0	0	0	0	0	0	0	0	2,807
CONSTRUCTION	0	14,526	14,526	19,158	2,787	0	0	0	21,945	0	0	0	0	36,471
EQUIPMENT & FURNISHINGS	0	0	0	1,500	1,345	0	0	0	2,845	0	0	0	0	2,845
Total Expenditures	2,807	14,526	17,333	20,658	4,132	0	0	0	24,790	0	0	0	0	42,123
BONDS	2,807	2,526	5,333	13,940	1,414	0	0	0	15,354	0	0	0	0	20,687
STATE AID for SCHOOLS	0	12,000	12,000	6,718	2,718	0	0	0	9,436	0	0	0	0	21,436
Total Funding	2,807	14,526	17,333	20,658	4,132	0	0	0	24,790	0	0	0	0	42,123

Project Status:

\$1,161,613 spent and encumbered through February 2016 Planning.

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 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 high school facility needs assessment documented the necessity for this renovation.

Remarks

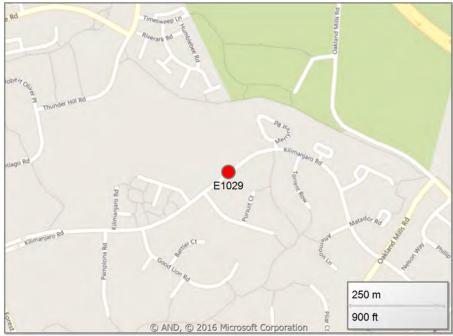
1. The original building was completed in 1973. It requires updating to align with current educational standards.

Project Schedule

October 2021 - December 2021: Feasibility Study. June 2022 - December 2022: Planning. August 2024 - August 2026: Construction. Work will be Completed in Phases.

Operating Budget Impact

Annual Bond Redemption \$ \$4,054,635



SCHOOL SYSTEM PROJECTS

Number: E1029

Project: FY2022 OAKLAND MILLS HIGH SCHOOL RENOVATION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	0	0	0	0	0	0	7,738	7,738	0	0	0	0	7,738
CONSTRUCTION	0	0	0	0	0	0	0	0	0	20,591	20,591	20,591	20,342	82,115
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	0	0	0	0	0	0	250	250
Total Expenditures	0	0	0	0	0	0	0	7,738	7,738	20,591	20,591	20,591	20,592	90,103
BONDS	0	0	0	0	0	0	0	7,738	7,738	20,591	20,591	20,591	20,592	90,103
Total Funding	0	0	0	0	0	0	0	7,738	7,738	20,591	20,591	20,591	20,592	90,103

Project Status:

\$0 spent and encumbered through February 2016

Planning.

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.

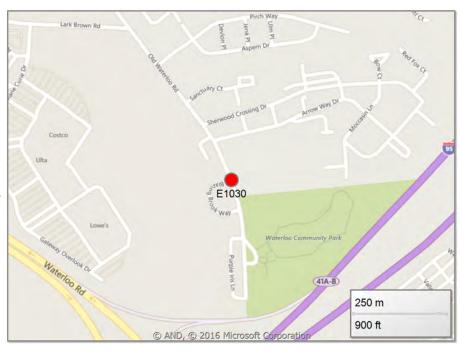
Project Schedule

September 2012 - April 2013: Feasibility Study. May 2013 - June 2014: Planning. September 2014 - November 2016: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$740,520

The Bond funding listed for this project includes both long term bond funding and the use of the master lease program as appropriate.



SCHOOL SYSTEM PROJECTS

Number: E1030

Project: FY2014 DEEP RUN ELEM SCHOOL RENOVATION/ADDITION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	23,961	0	23,961	0	0	0	0	0	0	0	0	0	0	23,961
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	24,011
BONDS	16,456	0	16,456	0	0	0	0	0	0	0	0	0	0	16,456
STATE AID for SCHOOLS	7,555	0	7,555	0	0	0	0	0	0	0	0	0	0	7,555
Total Funding	24,011	0	24,011	0	0	0	0	0	0	0	0	0	0	24,011

Project Status:

\$8,325,104 spent and encumbered through February 2016

Under construction.

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, exceeds 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.

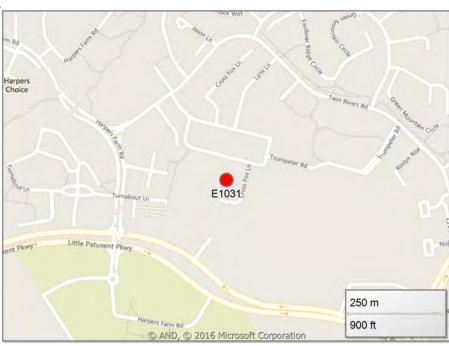
Project Schedule

July 2014 - September 2014: Feasibility Study. October 2014 - October 2015: Planning. March 2016 - August 2017: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$1,193,310

The Bond funding listed for this project includes both long term bond funding and the use of the master lease program as appropriate. ~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	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	2,658	0	2,658	0	0	0	0	0	0	0	0	0	0	2,658
CONSTRUCTION	26,384	14,085	40,469	0	0	0	0	0	0	0	0	0	0	40,469
EQUIPMENT & FURNISHINGS	50	200	250	0	0	0	0	0	0	0	0	0	0	250
Total Expenditures	29,092	14,285	43,377	0	0	0	0	0	0	0	0	0	0	43,377
BONDS	10,289	12,229	22,518	0	0	0	0	0	0	0	0	0	0	22,518
STATE AID for SCHOOLS	13,303	2,056	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	29,092	14,285	43,377	0	0	0	0	0	0	0	0	0	0	43,377

Project Status:

\$3,962,449 spent and encumbered through February 2016

Under Construction.

Project: E1032-FY2014 LAUREL WOODS ELEM SCHOOL ADDITION

Description

A project to expand educational program spaces at Laurel Woods Elementary School. 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

Future enrollment growth is projected. The approved 2012 redistricting plans acknowledged the need for additional capacity at Laurel Woods ES within the near term. Without the addition, Laurel Woods ES was projected to be above 110% capacity utilization in 2018.

Remarks

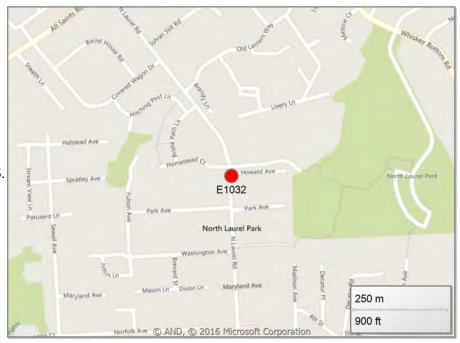
1. Prior Appropriation includes transfers legislated by Council Resolution 1-2015.

Project Schedule

July 2013 - May 2014: Planning. June 2014 - August 2015: Construction Complete.

Operating Budget Impact

Annual Bond Redemption \$ \$284,220



SCHOOL SYSTEM PROJECTS

Number: E1032

Project: FY2014 LAUREL WOODS ELEM SCHOOL ADDITION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	8,723	0	8,723	0	0	0	0	0	0	0	0	0	0	8,723
EQUIPMENT & FURNISHINGS	100	0	100	0	0	0	0	0	0	0	0	0	0	100
Total Expenditures	8,823	0	8,823	0	0	0	0	0	0	0	0	0	0	8,823
BONDS	6,316	0	6,316	0	0	0	0	0	0	0	0	0	0	6,316
STATE AID for SCHOOLS	2,507	0	2,507	0	0	0	0	0	0	0	0	0	0	2,507
Total Funding	8,823	0	8,823	0	0	0	0	0	0	0	0	0	0	8,823

Project Status:

\$6,108,861 spent and encumbered through February 2016 Construction Complete.

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 Estimated operating cost impact upon completion: No increase 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

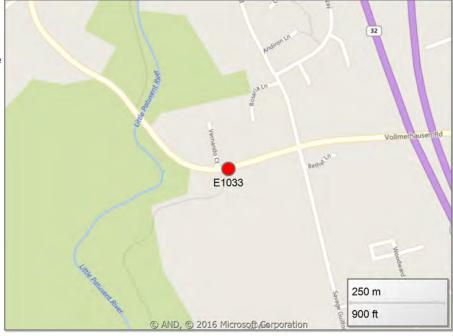
1. The original building was constructed in 1989. It requires updating to align with current educational standards.

Project Schedule

July 2013 - October 2013: Feasibility Study. November 2013 - September 2014: Planning. January 2015 - August 2017: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$721,395



SCHOOL SYSTEM PROJECTS

Number: E1033

Project: FY2015 PATUXENT VALLEY MIDDLE SCHOOL RENOVATION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,360	0	1,360	0	0	0	0	0	0	0	0	0	0	1,360
CONSTRUCTION	16,785	9,640	26,425	0	0	0	0	0	0	0	0	0	0	26,425
EQUIPMENT & FURNISHINGS	0	250	250	0	0	0	0	0	0	0	0	0	0	250
Total Expenditures	18,145	9,890	28,035	0	0	0	0	0	0	0	0	0	0	28,035
BONDS	6,141	9,890	16,031	0	0	0	0	0	0	0	0	0	0	16,031
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	18,145	9,890	28,035	0	0	0	0	0	0	0	0	0	0	28,035

Project Status: \$2,529,681 spent and encumbered through February 2016

Under Construction.

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 HCPSS Facilities Services. Operating cost impact is unknown at this time. 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.

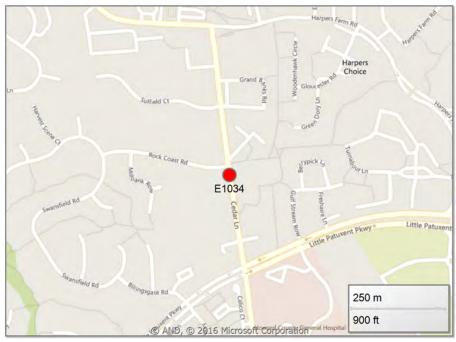
Project Schedule

2015: Feasibility Study. 2015 - 2016: Planning. 2017 - 2018: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$729,270

Upon completion, the maintenance of this facility will be the responsibility of



SCHOOL SYSTEM PROJECTS

Number: E1034

Project: FY2015 SWANSFIELD ELEM SCHOOL RENOVATION/ADDITION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,898	0	1,898	0	0	0	0	0	0	0	0	0	0	1,898
CONSTRUCTION	9,875	10,722	20,597	453	0	0	0	0	453	0	0	0	0	21,050
EQUIPMENT & FURNISHINGS	0	0	0	954	0	0	0	0	954	0	0	0	0	954
Total Expenditures	11,773	10,722	22,495	1,407	0	0	0	0	1,407	0	0	0	0	23,902
BONDS	11,773	3,183	14,956	1,250	0	0	0	0	1,250	0	0	0	0	16,206
STATE AID for SCHOOLS	0	7,539	7,539	157	0	0	0	0	157	0	0	0	0	7,696
Total Funding	11,773	10,722	22,495	1,407	0	0	0	0	1,407	0	0	0	0	23,902

Project Status:

\$1,742,100 spent and encumbered through February 2016

Planning.

Project: E1035-FY2018 NEW HIGH SCHOOL #13 Number: E1035

Description

A project to construct a new high school to provide the HCPSS with the opportunity to expand college and career readiness programs for high school students across the county. Given the significant cost to build new facilities, it is recommended that this new high school be built to a larger capacity, 1,600 -1,800 HCPSS Facilities Services. Operating cost impact is unknown at this time. 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

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

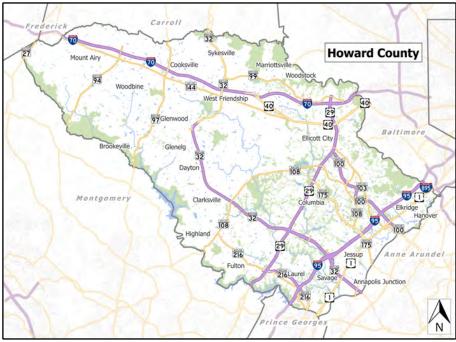
Project Schedule

March 2016 - June 2017: Feasibility Study and Education Specifications. July 2018 - July 2020: Planning. January 2021 - August 2024: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$6,233,625

Upon completion, the maintenance of this facility will be the responsibility of



SCHOOL SYSTEM PROJECTS

Project: FY2018 NEW HIGH SCHOOL #13 Number: E1035

(In Thousands)					Five	Year Ca	pital Pro	gram				Master P	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	0	0	3,300	0	0	0	0	3,300	0	0	0	0	3,300
CONSTRUCTION	0	0	0	0	9,950	23,250	27,500	36,500	97,200	27,525	5,500	0	0	130,225
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	0	0	0	0	5,000	0	0	5,000
Total Expenditures	0	0	0	3,300	9,950	23,250	27,500	36,500	100,500	27,525	10,500	0	0	138,525
BONDS	0	0	0	3,300	9,950	23,250	27,500	36,500	100,500	27,525	10,500	0	0	138,525
Total Funding	0	0	0	3,300	9,950	23,250	27,500	36,500	100,500	27,525	10,500	0	0	138,525

Project Status:

\$0 spent and encumbered through February 2016

Planning.

Scope: New High School to expand college and career readiness programs. Increased capacity proposed from 1,615 to a range of 1,600 to 1,800 students. Timing: Accelerated schedule from completion in 2027 to 2023 in response to projected High School enrollment from the most recent feasibility study.

Project: E1036-FY2018 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 is 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. The FY 2016 capital budget introduces this project to the Capital Improvement Plan. In previous budgets, it was listed as a systemic renovation.

Remarks

Project Schedule

April 2016 - June 2016: Feasibility Study. July 2017 - July 2018: Planning. January 2019 - August 2020: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$969,480

Estimated operating cost impact upon completion: No increase



SCHOOL SYSTEM PROJECTS

Number: E1036

Project: FY2018 OAKLAND MILLS MIDDLE SCHOOL RENOVATION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	0	0	0	9,131	11,131	6,441	0	0	26,703	0	0	0	0	26,703
EQUIPMENT & FURNISHINGS	0	0	0	0	0	1,125	0	0	1,125	0	0	0	0	1,125
Total Expenditures	0	0	0	9,131	11,131	7,566	0	0	27,828	0	0	0	0	27,828
BONDS	0	0	0	5,989	7,989	7,566	0	0	21,544	0	0	0	0	21,544
STATE AID for SCHOOLS	0	0	0	3,142	3,142	0	0	0	6,284	0	0	0	0	6,284
Total Funding	0	0	0	9,131	11,131	7,566	0	0	27,828	0	0	0	0	27,828

Project Status:

\$0 spent and encumbered through February 2016

Planning

Scope: Project has been upgraded from a limited renovation to a complete renovation.

Project: E1037-FY2022 ELLICOTT MILLS MIDDLE SCHOOL ADDITION

Description

The Ellicott Mills Middle School project will add 156 seats of new capacity to the Annual Bond Redemption \$ \$267,660 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 is 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

October 2021 - December 2021: Feasibility Study.

January 2022 - January 2023: Planning.

August 2023 - August 2024: Construction.

Operating Budget Impact



SCHOOL SYSTEM PROJECTS

Number: E1037

Project: FY2022 ELLICOTT MILLS MIDDLE SCHOOL ADDITION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	0	0	0	0	0	0	544	544	0	0	0	0	544
CONSTRUCTION	0	0	0	0	0	0	0	0	0	3,242	1,912	0	0	5,154
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	0	0	0	0	250	0	0	250
Total Expenditures	0	0	0	0	0	0	0	544	544	3,242	2,162	0	0	5,948
BONDS	0	0	0	0	0	0	0	544	544	3,242	2,162	0	0	5,948
Total Funding	0	0	0	0	0	0	0	544	544	3,242	2,162	0	0	5,948

Project Status:

\$0 spent and encumbered through February 2016

Planning.

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 and breadth 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 FY2018: New HS #13. Dunloggin MS Renovation/Addition. Hammond HS Renovation. Talbott Springs ES Renovation. West Friendship ES MBR.

Operating Budget Impact

Estimated operating cost impact upon completion: No increase



SCHOOL SYSTEM PROJECTS

Project: FY2017 PLANNING AND DESIGN Number: E1038

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	300	300	600	300	300	300	300	300	1,500	300	300	300	300	3,300
Total Expenditures	300	300	600	300	300	300	300	300	1,500	300	300	300	300	3,300
TRANSFER TAX	300	300	600	300	300	300	300	300	1,500	300	300	300	300	3,300
Total Funding	300	300	600	300	300	300	300	300	1,500	300	300	300	300	3,300

Project Status: \$51,000 spent and encumbered through February 2016 Planning.

Project: E1039-FY2020 NEW ELEM SCHOOL #43 Number: E1039

Description

The New Elementary School #43 will be a new facility. The Southeast region is projected to be at 116% capacity utilization in 2023. The complete scope of this project is 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 recently completed comprehensive zoning increased the entire housing projection this year by 996 units, most of which was in the East. New ES #42 will be built in the Northeast region at Oxford Square. The needs of the southeast region are evident in the projections of Bollman Bridge ES and Forest Ridge ES. The location of New ES #43 is to be determined. A location in close proximity to the planned Transit Oriented Development is desirable.

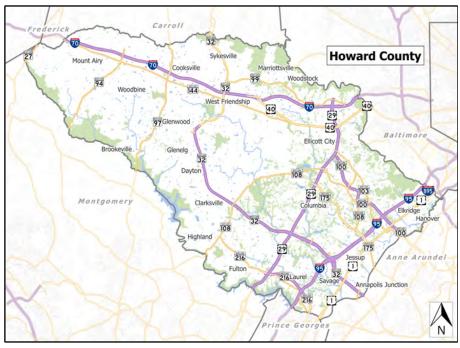
Remarks

Project Schedule

July 2020 - September 2020: Feasibility Study. October 2020 - September 2021: Planning. April 2022 - August 2023: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$1,984,275



SCHOOL SYSTEM PROJECTS

Project: FY2020 NEW ELEM SCHOOL #43 Number: E1039

(In Thousands)	Five Year Capital Program						Master Plan							
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	0	0	0	0	5,380	0	0	5,380	0	0	0	0	5,380
CONSTRUCTION	0	0	0	0	0	0	20,166	15,125	35,291	12,624	0	0	0	47,915
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	0	0	0	2,500	0	0	0	2,500
Total Expenditures	0	0	0	0	0	5,380	20,166	15,125	40,671	15,124	0	0	0	55,795
BONDS	0	0	0	0	0	5,380	13,816	9,775	28,971	15,124	0	0	0	44,095
STATE AID for SCHOOLS	0	0	0	0	0	0	6,350	5,350	11,700	0	0	0	0	11,700
Total Funding	0	0	0	0	0	5,380	20,166	15,125	40,671	15,124	0	0	0	55,795

Project Status: \$0 spent and encumbered through February 2016 Planning.

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 115% capacity utilization in 2025. The complete scope of this project is 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 2016. 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.

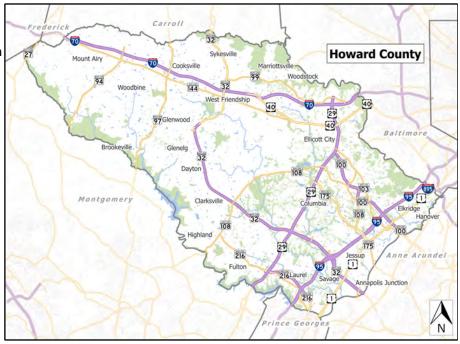
Remarks

Project Schedule

July 2024 - September 2024: Feasibility Study. October 2024 - September 2025: Planning. April 2026 - August 2027: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$1,830,195



SCHOOL SYSTEM PROJECTS

Project: FY2024 NEW ELEM SCHOOL #44 Number: E1040

(In Thousands)					Five Year Capital Program						Master Plan			
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	0	0	0	0	0	0	0	0	0	5,380	0	0	5,380
CONSTRUCTION	0	0	0	0	0	0	0	0	0	0	0	20,166	15,125	35,291
Total Expenditures	0	0	0	0	0	0	0	0	0	0	5,380	20,166	15,125	40,671
BONDS	0	0	0	0	0	0	0	0	0	0	5,380	20,166	15,125	40,671
Total Funding	0	0	0	0	0	0	0	0	0	0	5,380	20,166	15,125	40,671

Project Status: \$0 spent and encumbered through February 2016 Planning.

Project: E1041-FY2025 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 133% capacity utilization in 2026. The complete scope of this project is 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 is being acquired for this future school.

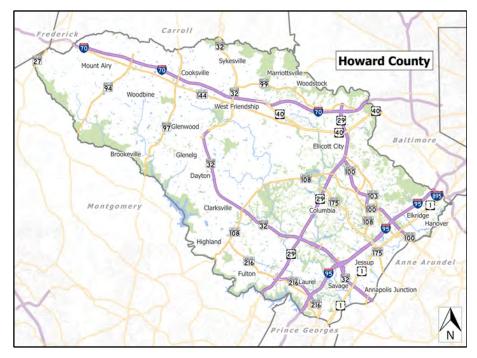
Remarks

Project Schedule

July 2025 - September 2025: Feasibility Study. October 2025 - September 2026: Planning. April 2027 - August 2028: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$1,149,570



SCHOOL SYSTEM PROJECTS

Project: FY2025 NEW ELEM SCHOOL #45 Number: E1041

(In Thousands)					Five Year Capital Program						Master Plan			
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	0	0	0	0	0	0	0	0	0	0	5,380	0	5,380
CONSTRUCTION	0	0	0	0	0	0	0	0	0	0	0	0	20,166	20,166
Total Expenditures	0	0	0	0	0	0	0	0	0	0	0	5,380	20,166	25,546
BONDS	0	0	0	0	0	0	0	0	0	0	0	5,380	20,166	25,546
Total Funding	0	0	0	0	0	0	0	0	0	0	0	5,380	20,166	25,546

Project Status: \$0 spent and encumbered through February 2016 Planning.

Project: E1042-FY2026 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 120% capacity utilization in 2025. The complete scope of this project is 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, three 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.

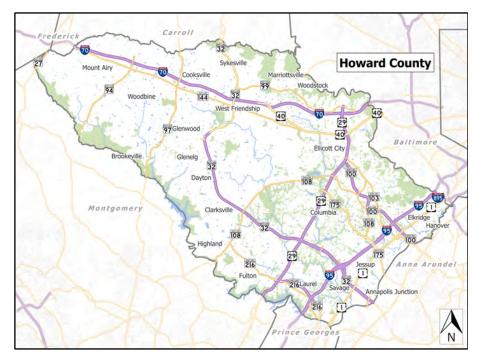
Remarks

Project Schedule

July 2026 - September 2026: Feasibility Study. October 2026 - September 2027: Planning. April 2028 - August 2030: Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$200,070



SCHOOL SYSTEM PROJECTS

Project: FY2026 NEW MIDDLE SCHOOL #21 Number: E1042

(In Thousands)				Five Year Capital Program					Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	0	0	0	0	0	0	0	0	0	0	0	4,446	4,446
Total Expenditures	0	0	0	0	0	0	0	0	0	0	0	0	4,446	4,446
BONDS	0	0	0	0	0	0	0	0	0	0	0	0	4,446	4,446
Total Funding	0	0	0	0	0	0	0	0	0	0	0	0	4,446	4,446

Project Status: \$0 spent and encumbered through February 2016 Planning.

Howard County, MD FY2017 Council Approved Capital Budget Program: FIRE PROJECTS and EQUIPMENT

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
F5551 FY2004 BANNEKER FIRESTATION REDEVELOPMENT	В	30	0	30	0	0	0	0	0	30
A project for the design and construction of a new 30,000 SF fire station to replace the present obsolete Banneker	Т	5	0	5	0	0	0	0	0	5
Fire Station.	Total	35	0	35	0	0	0	0	0	35
F5960 FY2001 FIRESTATION SYSTEMIC IMPROVEMENTS	В	2,853	370	3,223	770	770	770	770	770	7,073
An ongoing project to replace or renovate major systems, fixtures, or structures in various existing fire stations/PSTC.	Р	810	0	810	0	0	0	0	0	810
,	Т	1,360	0	1,360	0	0	0	0	0	1,360
	Total	5,023	370	5,393	770	770	770	770	770	9,243
F5962 FY2010 GLENWOOD FIRESTATION A project to complete the community center service	В	2,305	-150	2,155	0	0	0	0	0	2,155
complex with a Fire/EMS station at Glenwood.	0	1,795	0	1,795	0	0	0	0	0	1,795
	Total	4,100	-150	3,950	0	0	0	0	0	3,950
F5963 FY2004 EMERGENCY CONTROL SIGNAL SYSTEM	Т	595	-350	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	595	-350	245	0	0	0	0	0	245
F5964 FY2012 FIRESTATION ONE RELOCATION A project to move Fire Station #1 to a more optimal	В	14,397	550	14,947	0	0	0	0	0	14,947
location in Elkridge, close to the existing fire station location, but without the present site restrictions.	G	500	0	500	0	0	0	0	0	500
location, but without the present site restrictions.	0	0	2,700	2,700	0	0	0	0	0	2,700
	Т	1,000	350	1,350	0	0	0	0	0	1,350
	Total	15,897	3,600	19,497	0	0	0	0	0	19,497
F5972 FY2008 RURAL FIRE PROTECTION PROGRAM A project to provide and augment fire protection systems in	0	4,050	600	4,650	1,250	0	0	0	0	5,900
rural areas within the County, outside of the Water and Sewer Planned Service Area.	Т	1,950	0	1,950	0	0	0	0	0	1,950
	Total	6,000	600	6,600	1,250	0	0	0	0	7,850

June 01, 2016 Howard County, MD Version : Council Approved

Howard County, MD FY2017 Council Approved Capital Budget Program: FIRE PROJECTS and EQUIPMENT

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
F5973 FY2010 LOGISTICS FACILITY Construction of a 17,000 SF facility to house the	В	5,715	-3,000	2,715	0	0	0	0	0	2,715
Department's Quartermaster, Breathing Apparatus Repair Shop, Equipment Repair Shop, Reserve Emergency Apparatus, Equipment Storage.	Total	5,715	-3,000	2,715	0	0	0	0	0	2,715
F5975 FY2010 ROUTE ONE FIRE STATION A project to construct a new 30,000 SF fire station at the	В	2,975	8,000	10,975	550	0	0	0	0	11,525
intersection of RT1 & Port Capital Drive.	0	2,005	0	2,005	0	0	0	0	0	2,005
	Т	550	1,000	1,550	0	0	0	0	0	1,550
	Total	5,530	9,000	14,530	550	0	0	0	0	15,080
FIRE PROJECTS and EQUIPMENT Total		42,895	10,070	52,965	2,570	770	770	770	770	58,615

Howard County, MD FY2017 Council Approved Capital Budget (\$000) FIRE-FIRE PROJECTS and EQUIPMENT

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	28,275	5,770	34,045
G	GRANTS	500	0	500
0	OTHER SOURCES	7,850	3,300	11,150
Р	PAY AS YOU GO	810	0	810
Т	TRANSFER TAX	5,460	1,000	6,460
Total		42,895	10,070	52,965

2017 Council Approved 5 Year Capital Budget Project Type Summary (FIRE-FIRE PROJECTS and EQUIPMENT)

Rev	enue Source	Prior Approp	Current FY	2018	2019	2020	2021	2022	5 Year Total
В	BONDS	28,275	5,770	1,320	770	770	770	770	38,445
G	GRANTS	500	0	0	0	0	0	0	500
0	OTHER SOURCES	7,850	3,300	1,250	0	0	0	0	12,400
Р	PAY AS YOU GO	810	0	0	0	0	0	0	810
Т	TRANSFER TAX	5,460	1,000	0	0	0	0	0	6,460
Tot	al	42,895	10,070	2,570	770	770	770	770	58,615

June 01, 2016 Howard County, MD Version : Council Approved

Number: F5551

Project: F5551-FY2004 BANNEKER FIRESTATION REDEVELOPMENT

Description

A project for the design and construction of a new 30,000 SF fire station to replace the present obsolete Banneker Fire Station. This is considered a more cost-effective approach to meeting the present Banneker Fire Station requirements than to attempt to renovate, modify, and add to the existing facility.

Justification

The present fire/EMS station is more than 40 years old and is exceeding its useful life expectancy. The station is poorly laid out as a result of having numerous additions added over time, as the mission of the station changed, not necessarily in an efficient manner. Additionally, this station has the greatest demand on it of any station in the County, and thus should be placed in a location that enables the provision of service in an effective and efficient manner. Given that time is always critical in the mission of emergency services, equipment must be maintained at this location to be able to travel to the point of need in the shortest possible time.

Remarks

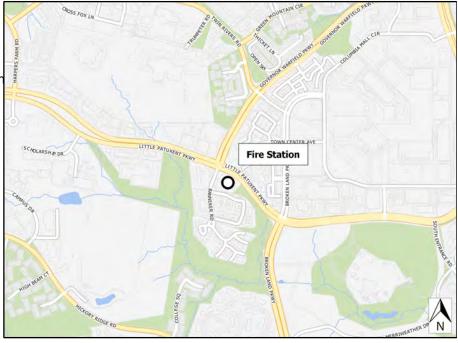
- 1. Based on recent Fire & Rescue Dept. analyses, this station needs to be increased in capacity to a six (6) bay (30,000 SF) station to meet present and future service requirements.
- 2. Prior Appropriation reflects TAO #3-2006.

Project Schedule

Project on hold.

Operating Budget Impact

Annual Bond Redemption \$ \$1,350



FIRE PROJECTS and EQUIPMENT

Number: F5551

Project: FY2004 BANNEKER FIRESTATION REDEVELOPMENT

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	605	0	605	0	0	0	0	0	0	0	0	0	0	605
LAND ACQUISITION	525	0	525	0	0	0	0	0	0	0	0	0	0	525
CONSTRUCTION	(1,285)	0	(1,285)	0	0	0	0	0	0	0	0	0	0	(1,285)
ADMINISTRATION	60	0	60	0	0	0	0	0	0	0	0	0	0	60
EQUIPMENT & FURNISHINGS	130	0	130	0	0	0	0	0	0	0	0	0	0	130
Total Expenditures	35	0	35	0	0	0	0	0	0	0	0	0	0	35
BONDS	30	0	30	0	0	0	0	0	0	0	0	0	0	30
TRANSFER TAX	5	0	5	0	0	0	0	0	0	0	0	0	0	5
Total Funding	35	0	35	0	0	0	0	0	0	0	0	0	0	35

Project Status:

\$4,407 spent and encumbered through February 2016
Proejct on hold awaiting decision on new location or renovation.

Project: F5960-FY2001 FIRESTATION SYSTEMIC IMPROVEMENTS

Number: F5960

Description

Operating Budget Impact

An ongoing project to replace or renovate major systems, fixtures, or structures in Annual Bond Redemption \$ \$318,285 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.

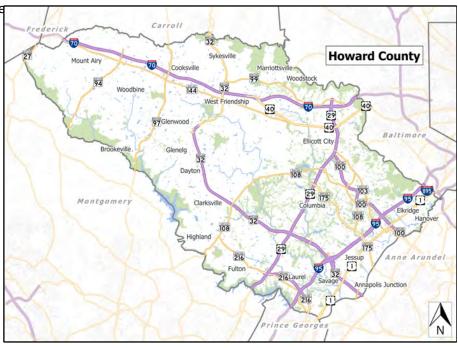
Remarks

Misc repairs, modifications and improvements to County Fire Department Facilities are required on an ongoing basis.

Project Schedule

FY17 design and construction.

O&M and Utility Impact in FY17 and beyond is estimated to be \$28,000 annualy.



FIRE PROJECTS and EQUIPMENT

Number: F5960

Project: FY2001 FIRESTATION SYSTEMIC IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	545	70	615	70	70	70	70	70	350	0	0	0	0	965
CONSTRUCTION	4,398	300	4,698	700	700	700	700	700	3,500	0	0	0	0	8,198
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	5,023	370	5,393	770	770	770	770	770	3,850	0	0	0	0	9,243
BONDS	2,853	370	3,223	770	770	770	770	770	3,850	0	0	0	0	7,073
PAY AS YOU GO	810	0	810	0	0	0	0	0	0	0	0	0	0	810
TRANSFER TAX	1,360	0	1,360	0	0	0	0	0	0	0	0	0	0	1,360
Total Funding	5,023	370	5,393	770	770	770	770	770	3,850	0	0	0	0	9,243

Project Status: \$4,366,187 spent and encumbered through February 2016

Design, renovations, repairs.

Project: F5962-FY2010 GLENWOOD FIRESTATION

FIRE PROJECTS and EQUIPMENT

Number: F5962

Description

A project to complete the community center service complex with a Fire/EMS station at Glenwood. The fire station will be economically co-located with the Library and Community Center in a County service complex and will provide for more timely emergency services to the area.

Justification

The Community Center, park, and fire station projects in addition to existing new library, are intended to provide western Howard County with consolidated government services in a "one-stop shop" area. This plan to consolidate locations meets the objectives of the General Plan.

Remarks

Initial Fire Station Complete. However MDE is requiring the construction of a waste water treatment plan that will serve the Fire Station, Glenwood Library and Glennwood Rec Ctr. Construction must be complete by June 2017

Project Schedule

FY16 - Complete design of waste water treatment plant. FY17-Defund and Close.

Operating Budget Impact

Annual Bond Redemption \$\$96,975

Opening year Fire Department operation and maintenance costs will be \$ 1,495,000. Subsequent costs are projected to be \$628,000. Bur. of Facilities FY17 and beyond annual O&M and Utility impact estimated at \$76,000.



FIRE PROJECTS and EQUIPMENT

Project: FY2010 GLENWOOD FIRESTATION Number: F5962

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	600	0	600	0	0	0	0	0	0	0	0	0	0	600
CONSTRUCTION	2,820	(150)	2,670	0	0	0	0	0	0	0	0	0	0	2,670
ADMINISTRATION	30	0	30	0	0	0	0	0	0	0	0	0	0	30
EQUIPMENT & FURNISHINGS	650	0	650	0	0	0	0	0	0	0	0	0	0	650
Total Expenditures	4,100	(150)	3,950	0	0	0	0	0	0	0	0	0	0	3,950
BONDS	2,305	(150)	2,155	0	0	0	0	0	0	0	0	0	0	2,155
OTHER SOURCES	1,795	0	1,795	0	0	0	0	0	0	0	0	0	0	1,795
Total Funding	4,100	(150)	3,950	0	0	0	0	0	0	0	0	0	0	3,950

Project Status:

\$3,947,539 spent and encumbered through February 2016 FY16 - Design at 95% complete will be complete by end of FY16.

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

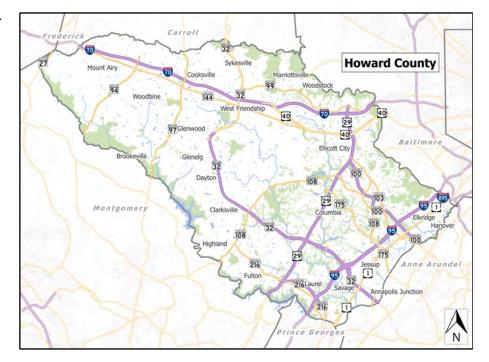
Congestion at red traffic signals impedes the response of emergency vehicles. Installation of priority control system equipment on strategic traffic signal approaches for the approaching emergency vehicle would help decrease response time and provide the safest driving condition.

Remarks

1. 36 intersections have been completed as of November 22, 2013.

Project Schedule

FY17 - Defund for other Fire priority project. Project will continue subject to approval of SHA and County approval process.



FIRE PROJECTS and EQUIPMENT

Number: F5963

Project: FY2004 EMERGENCY CONTROL SIGNAL SYSTEM

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	50	0	50	0	0	0	0	0	0	0	0	0	0	50
EQUIPMENT & FURNISHINGS	EQUIPMENT & FURNISHINGS 545 (350) 19					0	0	0	0	0	0	0	0	195
Total Expenditures	595	(350)	245	0	0	0	0	0	0	0	0	0	0	245
TRANSFER TAX	595	(350)	245	0	0	0	0	0	0	0	0	0	0	245
Total Funding	595	(350)	245	0	0	0	0	0	0	0	0	0	0	245

Project Status: \$228,443 spent and encumbered through February 2016

Project: F5964-FY2012 FIRESTATION ONE RELOCATION 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. Working with Fire Department to reduce scope in order to bring project back into approved budget. 2. OTHER represents funding from EVFC.

Project Schedule

FY16 - Redesign of Fire Station to accomodate available funds.

FY17 Award Construction.

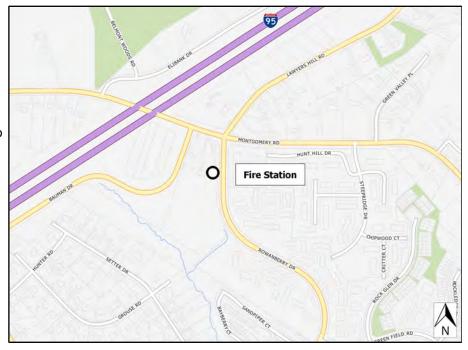
FY18 Complete Construction.

FY19 Project Closeout.

Operating Budget Impact

Annual Bond Redemption \$ \$672,615

The Bond funding listed for this project includes both long term bond funding and the use of the master lease program as appropriate.~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.



FIRE PROJECTS and EQUIPMENT

Number: F5964

Project: FY2012 FIRESTATION ONE RELOCATION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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	11,977	3,600	15,577	0	0	0	0	0	0	0	0	0	0	15,577
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	15,897	3,600	19,497	0	0	0	0	0	0	0	0	0	0	19,497
BONDS	14,397	550	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	0	2,700	2,700	0	0	0	0	0	0	0	0	0	0	2,700
TRANSFER TAX	1,000	350	1,350	0	0	0	0	0	0	0	0	0	0	1,350
Total Funding	15,897	3,600	19,497	0	0	0	0	0	0	0	0	0	0	19,497

Project Status:

\$3,275,456 spent and encumbered through February 2016 Redesign station to reduce scope to match available funds.

Project: F5972-FY2008 RURAL FIRE PROTECTION PROGRAM 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

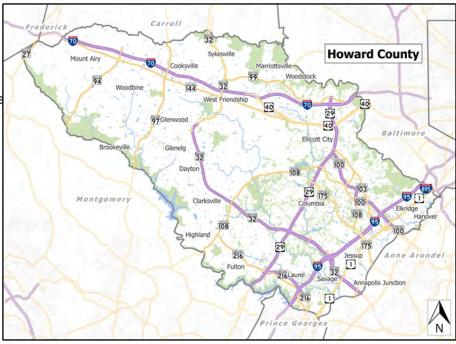
- 1. The project will install 5 to 10 emergency water supply systems per year for fire protection. It is anticipated that approximately 90 to 100 emergency water supply systems will be constructed under this capital project.
- 2. 33 cisterns have been installed and are operational.
- 3. The project will 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	apital Pro	ogram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	400	50	450	50	0	0	0	0	50	0	0	0	0	500
LAND ACQUISITION	850	200	1,050	200	0	0	0	0	200	0	0	0	0	1,25
CONSTRUCTION	3,900	350	4,250	1,000	0	0	0	0	1,000	0	0	0	0	5,25
ADMINISTRATION	5	0	5	0	0	0	0	0	0	0	0	0	0	
EQUIPMENT & FURNISHINGS	845	0	845	0	0	0	0	0	0	0	0	0	0	84
Total Expenditures	6,000	600	6,600	1,250	0	0	0	0	1,250	0	0	0	0	7,85
OTHER SOURCES	4,050	600	4,650	1,250	0	0	0	0	1,250	0	0	0	0	5,90
TRANSFER TAX	1,950	0	1,950	0	0	0	0	0	0	0	0	0	0	1,95
Total Funding	6,000	600	6,600	1,250	0	0	0	0	1,250	0	0	0	0	7,85

Project Status:

\$4,338,092 spent and encumbered through February 2016

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 RY#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)

In Design: 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 # 54 Florence Road near Cabin Branch Drive.

Project: F5973-FY2010 LOGISTICS FACILITY

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

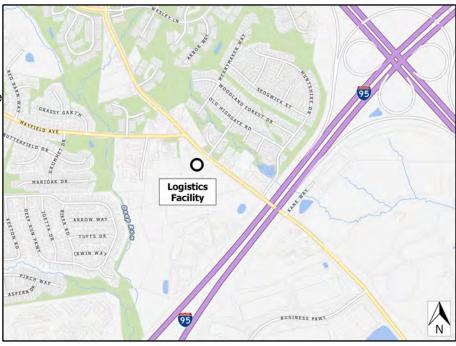
FY17 - Defund project available balance and use for priority projects. Complete shared access road construction to include storm water management.

FY18 - Project on hold for funding pending DFRS priorities.

Operating Budget Impact

Annual Bond Redemption \$ \$122,175

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	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	980	(280)	700	0	0	0	0	0	0	0	0	0	0	700
LAND ACQUISITION	0	100	100	0	0	0	0	0	0	0	0	0	0	100
CONSTRUCTION	4,455	(2,570)	1,885	0	0	0	0	0	0	0	0	0	0	1,885
ADMINISTRATION	30	0	30	0	0	0	0	0	0	0	0	0	0	30
EQUIPMENT & FURNISHINGS	250	(250)	0	0	0	0	0	0	0	0	0	0	0	0
Total Expenditures	5,715	(3,000)	2,715	0	0	0	0	0	0	0	0	0	0	2,715
BONDS	5,715	(3,000)	2,715	0	0	0	0	0	0	0	0	0	0	2,715
Total Funding	5,715	(3,000)	2,715	0	0	0	0	0	0	0	0	0	0	2,715

Project Status:

\$599,290 spent and encumbered through February 2016
FY16 - Contract award for entrance and associated site work anticipated. Construction cost of new access road to be shared by county and adjacent land owner.

Project: F5975-FY2010 ROUTE ONE FIRE STATION 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

1. OTHER represents Pay as you Go generated from Fire Tax.

Project Schedule

FY16 - Project on hold for funding. FY17 - Bid/Award; Building Construction

FY18 - Construction completion; Project Close Out

Operating Budget Impact

Annual Bond Redemption \$ \$518,625

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 be 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. A complete overview of the anticipated operating impact information will be available next fall and provided with the DepartmentÆs FY15 Capital Budget request.



FIRE PROJECTS and EQUIPMENT

Number: F5975

Project: FY2010 ROUTE ONE FIRE STATION

(In Thousands)	Prior Appr. FY2017 Budget NS & ENGINEERING 1,870 0 D ACQUISITION 1,130 0 NSTRUCTION 2,500 9,000 MINISTRATION 30 0 MIPMENT & FURNISHINGS 0 0 II Expenditures 5,530 9,000 MDS 2,975 8,000				Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class			Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,870	0	1,870	0	0	0	0	0	0	0	0	0	0	1,870
LAND ACQUISITION	1,130	0	1,130	0	0	0	0	0	0	0	0	0	0	1,130
CONSTRUCTION	2,500	9,000	11,500	0	0	0	0	0	0	0	0	0	0	11,500
ADMINISTRATION	30	0	30	0	0	0	0	0	0	0	0	0	0	30
EQUIPMENT & FURNISHINGS	0	0	0	550	0	0	0	0	550	0	0	0	0	550
Total Expenditures	5,530	9,000	14,530	550	0	0	0	0	550	0	0	0	0	15,080
BONDS	2,975	8,000	10,975	550	0	0	0	0	550	0	0	0	0	11,525
OTHER SOURCES	2,005	0	2,005	0	0	0	0	0	0	0	0	0	0	2,005
TRANSFER TAX	550	1,000	1,550	0	0	0	0	0	0	0	0	0	0	1,550
Total Funding	5,530	9,000	14,530	550	0	0	0	0	550	0	0	0	0	15,080

Project Status:

\$230,662 spent and encumbered through February 2016
FY 16 - Building design complete; SDP review of site pending execution of land lease with state.

Howard County, MD FY2017 Council Approved Capital Budget Program: AGRICULTURAL PRESERVATION

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	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
AGRICULTURAL PRESERVATION Total		170,608	0	170,608	0	0	0	0	0	170,608

Howard County, MD FY2017 Council Approved 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

2017 Council Approved 5 Year Capital Budget Project Type Summary (AGPRES-AGRICULTURAL PRESERVATION)

Rev	enue Source	Prior Approp	Current FY	2018	2019	2020	2021	2022	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

June 01, 2016 Howard County, MD Version : Council Approved

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

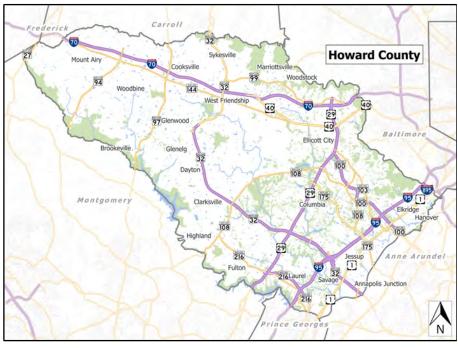
- 1. OTHER SOURCES represents authorization by the County Council to enter into installment purchase agreements to acquire development rights.
- 2. GRANT represents Federal Farmland Protection funds for MALPF easements.
- 3. All prior authorized funding was spent on Batch 14 acquisitions.
- 4. Additional spending authority was requested in the FY14 budget for the purchase of easements.

Project Schedule

FY 16 - New acquisitions anticipated.

Operating Budget Impact

Salaries/Benefits (3 employees), Contractual Services, Supplies & Materials, Business & Education Expenses, Other operating Expenses all = \$0.~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)					Five	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
LAND ACQUISITION	170,608	0	170,608	0	0	0	0	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	0	0	0	0	0	0	0	78	
OTHER SOURCES	156,500	0	156,500	0	0	0	0	0	0	0	0	0	0	156,500	
TRANSFER TAX	14,030	0	14,030	0	0	0	0	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	

Project Status:

\$123,517,701 spent and encumbered through February 2016

\$119,931,556 spent and encumbered through February 2015.

- 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, \$10.8 million in IPAÆs for 7 properties totaling 400 acres.
- 15.To date, 5 other applicants in various stages of acquisition process for a total of \$13.2 million comprised of 391 acres.

Howard County, MD FY2017 Council Approved Capital Budget Program: HIGHWAY RESURFACING

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	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
fabric over the existing surface of roads to provide an impervious 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 County	Р	1,510	0	1,510	0	0	250	250	250	2,260
facilities' parking.	Total	1,510	0	1,510	0	0	250	250	250	2,260
H2014 FY2013 ROAD RESURFACING PROGRAM A project to provide resurfacing to various County roads.	G	1,000	0	1,000	0	0	0	0	0	1,000
, ,,,	Р	28,500	5,000	33,500	3,000	3,000	3,000	3,000	3,000	48,500
	Total	29,500	5,000	34,500	3,000	3,000	3,000	3,000	3,000	49,500
H2015 FY2013 ROADWAY INFRASTRUCTURE INVENTORY AND ASSESSMENT	Р	400	0	400	0	0	80	200	80	760
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).	Total	400	0	400	0	0	80	200	80	760
H2016 FY2013 STREET TREE PROGRAM A program to comprehensively address the removal and	Р	2,250	0	2,250	0	0	0	0	0	2,250
replacement of street trees.	Total	2,250	0	2,250	0	0	0	0	0	2,250
H8904 FY2007 COMMUNITY ROAD REVITALIZATION A project to upgrade streets, curbs and sidewalks in	В	500	0	500	0	0	0	0	0	500
established neighborhoods.	Р	3,225	0	3,225	0	0	0	0	0	3,225
	Total	3,725	0	3,725	0	0	0	0	0	3,725
HIGHWAY RESURFACING Total		40,885	5,000	45,885	3,000	3,000	3,330	3,450	3,330	61,995

June 01, 2016 Howard County, MD Version : Council Approved

Howard County, MD FY2017 Council Approved Capital Budget (\$000) RESURF-HIGHWAY RESURFACING

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	500	0	500
G	GRANTS	1,000	0	1,000
Р	PAY AS YOU GO	39,385	5,000	44,385
Total		40,885	5,000	45,885

2017 Council Approved 5 Year Capital Budget Project Type Summary (RESURF-HIGHWAY RESURFACING)

Rev	enue Source	Prior Approp	Current FY	2018	2019	2020	2021	2022	5 Year Total
В	BONDS	500	0	0	0	0	0	0	500
G	GRANTS	1,000	0	0	0	0	0	0	1,000
Р	PAY AS YOU GO	39,385	5,000	3,000	3,000	3,330	3,450	3,330	60,495
Tota	al	40,885	5,000	3,000	3,000	3,330	3,450	3,330	61,995

June 01, 2016 Howard County, MD Version : Council Approved

Project: H2011-FY2013 MICRO SURFACING PROGRAM

HIGHWAY RESURFACING

Number: H2011

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.

Operating Budget Impact

Reduce maintenance costs.

Justification

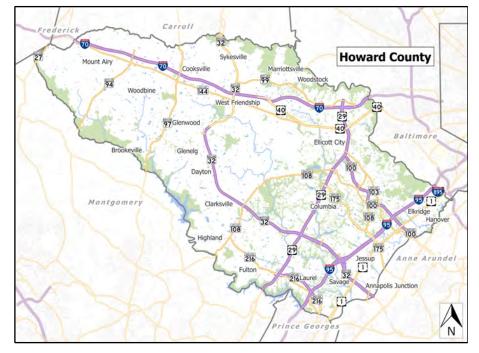
A surface endurance extension program to extend the useful life of the existing road, delaying the cost and need for complete resurfacing.

Remarks

Roads not completed this fiscal year will be completed in subsequent years.

Project Schedule

Approximately 20 miles of roads microsurfaced per \$1M budgeted. Close at program completion. Project work driven by available funding.



HIGHWAY RESURFACING

Number: H2011

Project: FY2013 MICRO SURFACING PROGRAM

(In Thousands)		Five	Year Ca	apital Pro	ogram	Master Plan								
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	3,500	0	3,500	0	0	0	0	0	0	0	0	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	0	0	0	3,500
Total Funding	3,500	0	3,500	0	0	0	0	0	0	0	0	0	0	3,500

Project Status: \$3,491,040 spent and encumbered through February 2016

HIGHWAY RESURFACING

Project: H2013-FY2006 PARKING RESURFACING PROGRAM Number: H2013

Description

A project to provide milling and repaving for various County facilities' parking.

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

The select deteriorated areas must be deep milled/patched prior to the placement of the smooth travel surface materials.

Project Schedule

FY27 - Close at program completion. Project on hold for available funding.

Operating Budget Impact

Reduce maintenance costs



HIGHWAY RESURFACING

Number: H2013

Project: FY2006 PARKING RESURFACING PROGRAM

(In Thousands)		Five	Year Ca	apital Pro	ogram		Master Plan							
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,475	0	1,475	0	0	245	245	245	735	245	245	245	0	2,945
ADMINISTRATION	35	0	35	0	0	5	5	5	15	5	5	5	0	65
Total Expenditures	1,510	0	1,510	0	0	250	250	250	750	250	250	250	0	3,010
PAY AS YOU GO	1,510	0	1,510	0	0	250	250	250	750	250	250	250	0	3,010
Total Funding	1,510	0	1,510	0	0	250	250	250	750	250	250	250	0	3,010

Project Status: \$1,509,908 spent and encumbered through February 2016

Project: H2014-FY2013 ROAD RESURFACING PROGRAM 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

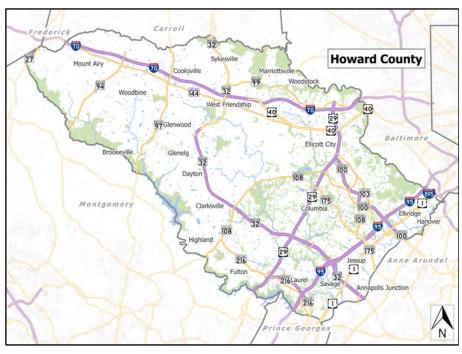
- 1. Roads not completed this fiscal year will be completed in subsequent fiscal years.
- 2. Recent cuts in the paving budget have led to increasing deterioration in the pavement and more costly rehabilitation is required.
- 3. TAO #2-2104.
- 4. FY15 \$1.5M Paygo funding utilized for operating budget revenue shortfall.

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

Number: H2014

Project: FY2013 ROAD RESURFACING PROGRAM

(In Thousands)		Five	Year Ca	apital Pro	ogram		Master Plan							
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	29,500	5,000	34,500	3,000	3,000	3,000	3,000	3,000	15,000	3,000	3,000	3,000	3,000	61,500
Total Expenditures	29,500	5,000	34,500	3,000	3,000	3,000	3,000	3,000	15,000	3,000	3,000	3,000	3,000	61,500
GRANTS	1,000	0	1,000	0	0	0	0	0	0	0	0	0	0	1,000
PAY AS YOU GO	28,500	5,000	33,500	3,000	3,000	3,000	3,000	3,000	15,000	3,000	3,000	3,000	3,000	60,500
Total Funding	29,500	5,000	34,500	3,000	3,000	3,000	3,000	3,000	15,000	3,000	3,000	3,000	3,000	61,500

Project Status: \$29,479,745 spent and encumbered through February 2016

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).

Operating Budget Impact

Reduce maintenance costs

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.

Close at program completion. Project on hold for available funding.



HIGHWAY RESURFACING

Number: H2015

Project: FY2013 ROADWAY INFRASTRUCTURE INVENTORY AND ASSESSMENT

(In Thousands)					Five	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	300	0	300	0	0	0	200	0	200	0	200	0	200	900	
ADMINISTRATION	20	0	20	0	0	50	0	50	100	0	50	0	50	220	
EQUIPMENT & FURNISHINGS	50	0	50	0	0	0	0	0	0	0	0	0	0	50	
OTHER	30	0	30	0	0	30	0	30	60	0	30	0	30	150	
Total Expenditures	400	0	400	0	0	80	200	80	360	0	280	0	280	1,320	
PAY AS YOU GO	400	0	400	0	0	80	200	80	360	0	280	0	280	1,320	
Total Funding	400	0	400	0	0	80	200	80	360	0	280	0	280	1,320	

Project Status : \$386,200 spent and encumbered through February 2016

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 230,000 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.

Project Schedule



HIGHWAY RESURFACING

Number: H2016

Project: FY2013 STREET TREE PROGRAM

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	2,225	0	2,225	0	0	0	0	0	0	0	0	0	0	2,225
ADMINISTRATION	25	0	25	0	0	0	0	0	0	0	0	0	0	25
Total Expenditures	2,250	0	2,250	0	0	0	0	0	0	0	0	0	0	2,250
PAY AS YOU GO	2,250	0	2,250	0	0	0	0	0	0	0	0	0	0	2,250
Total Funding	2,250	0	2,250	0	0	0	0	0	0	0	0	0	0	2,250

Project Status: \$2,184,447 spent and encumbered through February 2016

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.

Project: H2017 HOT IN-PLACE RECYCLING PROGRAM

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

The selected roads shall have a sound base for hot in-place asphalt recycling. Additional surface treatment may be added for a smooth surface.

Project Schedule

Project on hold for available funding. Close at program completion.



HIGHWAY RESURFACING

Number: H2017

Project: HOT IN-PLACE RECYCLING PROGRAM

(In Thousands)					Five	e Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status:

\$0 spent and encumbered through February 2016

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

Close at program completion.



HIGHWAY RESURFACING

Number: H2018

Project: COLD IN-PLACE RECYCLING PROGRAM

(In Thousands)					Five	e Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status:

\$0 spent and encumbered through February 2016

Project: H8904-FY2007 COMMUNITY ROAD REVITALIZATION Number: H8904

Description

A project to upgrade streets, curbs and sidewalks in established neighborhoods. Annual Bond Redemption \$ \$22,500

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

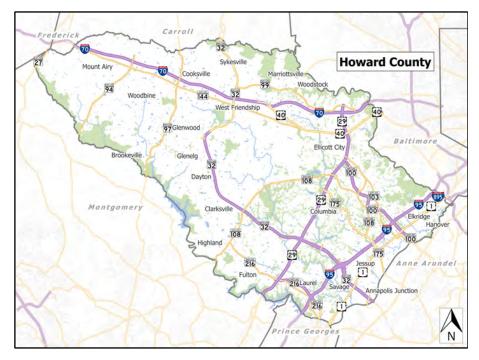
Targeted streets will be chosen by the annual pavement inspection, by needed drainage improvements and by community request.

Project Schedule

Close at program completion. Project on hold for available funding.

Operating Budget Impact

Reduce maintenance costs



HIGHWAY RESURFACING

Number: H8904

Project: FY2007 COMMUNITY ROAD REVITALIZATION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	3,725	0	3,725	0	0	0	0	0	0	0	0	0	0	3,725
Total Expenditures	3,725	0	3,725	0	0	0	0	0	0	0	0	0	0	3,725
BONDS	500	0	500	0	0	0	0	0	0	0	0	0	0	500
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	0	0	0	0	0	0	0	0	0	0	3,725

Project Status: \$3,720,454 spent and encumbered through February 2016

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
J4076 DEFAULTED DEVELOPER AGREEMENTS	D	8,700	0	8,700	0	0	0	0	0	8,700
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.	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
Fransfers 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
14110 FY1991 DORSEY RUN ROAD - SOUTH LINK	В	810	0	810	0	0	0	0	0	810
project for design and construction of approximately 000 feet of Dorsey Run Road from Guilford Road north to e CSX railroad spur crossing.	Е	2,350	0	2,350	0	0	0	0	0	2,350
	G	100	0	100	0	0	0	0	0	100
	0	626	0	626	0	0	0	0	0	626
	X	4,051	125	4,176	0	0	0	0	0	4,176
	Total	7,937	125	8,062	0	0	0	0	0	8,062
14121 PRIVATE ROAD RECONSTRUCTION PROGRAM This project will provide for the reconstruction of private	В	805	0	805	0	0	0	0	0	805
oads 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	0	842	1,500	0	0	0	0	2,342
Reconstruct Hall Shop Road (a major collector) at two ocations to improve sight distance and eliminate a sharp curve.	Total	842	0	842	1,500	0	0	0	0	2,342
J4148 FY2000 DORSEY RUN ROAD EXTENSION This project is for the extension of Dorsey Run Road from	В	1,543	0	1,543	0	0	0	0	0	1,543
In project is for the extension of Dorsey Run Road from I/D103 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 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
J4148 FY2000 DORSEY RUN ROAD EXTENSION This project is for the extension of Dorsey Run Road from	Х	25,545	900	26,445	0	0	0	0	0	26,445
MD103 to MD175, a total of approximately 3 miles.	Total	33,730	900	34,630	0	0	0	0	0	34,630
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	225	665	890	150	225	2,150	0	0	3,415
Reconstruct shoulders, replace guardrails and stabilize roadway embankment at numerous locations along 2.	Total	225	665	890	150	225	2,150	0	0	3,415
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
	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	Х	250	430	680	0	0	0	0	0	680
Drive intersection including westbound MD32 ramp to northbound Broken Land Parkway.	Total	250	430	680	0	1,175	0	0	0	1,855
J4168 FY1998 ROADWAY REHABILITATION/SAFETY PROGRAM	В	3,065	0	3,065	0	0	0	0	0	3,065
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
	X	270	0	270	0	0	0	0	0	270
	Total	3,843	0	3,843	0	0	0	0	0	3,843
J4170 FY2004 ROGER'S AVENUE IMPROVEMENTS A project for design and construction of approximately	D	120	0	120	0	0	0	0	0	120
1,500 LF of Rogers Avenue from existing improvements near US40 to Court House Drive.	Χ	3,535	0	3,535	0	0	0	0	0	3,535
US40 to Court House Drive.	Total	3,655	0	3,655	0	0	0	0	0	3,655

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
J4173 FY2000 HANOVER ROAD IMPROVEMENTS A project for the study, design and reconstruction of the	В	255	0	255	0	1,135	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	0	1,135	0	0	0	1,785
J4177 FY2001 STATE ROAD CONSTRUCTION	D	120	0	120	0	0	0	0	0	120
A project for cost sharing of new State roadway construction within Howard County that is consistent with	E	3,800	0	3,800	0	0	0	0	0	3,800
the objectives of the Plan Howard 2030.	X	17,845	0	17,845	0	0	0	0	0	17,845
	Total	21,765	0	21,765	0	0	0	0	0	21,765
J4178 FY2001 COUNTY / STATE NOISE ABATEMENT	В	7,000	135	7,135	0	0	0	0	0	7,135
program with SHA for the construction of noise reduction und walls to shield sections of residential communities.	Total	7,000	135	7,135	0	0	0	0	0	7,135
J4181 FY2003 GUILFORD RD (US1 to DORSEY RUN RD)	В	0	0	0	0	14,520	0	0	0	14,520
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	0	14,520	0	0	0	16,395
J4182 FY2002 DORSEY RUN ROAD IMPROVEMENTS	В	0	0	0	0	15,800	0	0	0	15,800
This project is to study, design and reconstruct Dorsey Run Road to four lanes from MD175 south to the CSX railroad	D	35	0	35	0	0	0	0	0	35
spur crossing; a distance of 6,000 LF.	E	3,045	-505	2,540	0	0	0	0	0	2,540
	Χ	1,420	-995	425	0	0	0	0	0	425
	Total	4,500	-1,500	3,000	0	15,800	0	0	0	18,800
J4202 FY2004 STEPHENS ROAD IMPROVEMENTS	D	25	0	25	0	0	0	0	0	25
A project for the design and reconstruction of Stephens Road from Whiskey Bottom Road to Gorman Road.	X	9,135	0	9,135	0	0	0	0	0	9,135
	Total	9,160	0	9,160	0	0	0	0	0	9,160

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
J4205 FY2006 MARRIOTTSVILLE ROAD IMPROVEMENTS	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
Ç Ç	E	250	0	250	0	0	0	0	0	250
	Χ	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	0	0	0	0	5,420	0	0	5,420
Montevideo Road Study.	D	190	0	190	0	0	0	0	0	190
	Χ	9,165	0	9,165	0	0	0	0	0	9,165
	Total	9,355	0	9,355	0	0	5,420	0	0	14,775
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
Node Hortiward to Garters Earle.	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	600	0	0	1,200
various County roads and intersections.	D	75	0	75	50	0	50	0	0	175
	X	1,300	0	1,300	0	0	0	0	0	1,300
	Total	1,375	0	1,375	650	0	650	0	0	2,675
J4212 FY2007 STATE ROAD CONSTRUCTION	D	0	350	350	0	0	0	0	0	350
project for cost sharing of new State roadway onstruction within Howard County that is consistent with e objectives of the Plan Howard 2030.	Е	500	0	500	0	0	0	0	0	500
	G	1,225	75	1,300	0	0	0	0	0	1,300
	Χ	23,250	10,000	33,250	0	0	0	0	0	33,250

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
J4212 FY2007 STATE ROAD CONSTRUCTION A project for cost sharing of new State roadway construction within Howard County that is consistent with the objectives of the Plan Howard 2030.	Total	24,975	10,425	35,400	0	0	0	0	0	35,400
J4214 FY2007 GUILFORD AT VOLLMERHAUSEN IMPROVEMENTS	В	2,845	0	2,845	0	0	0	0	0	2,845
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	3,420	0	3,420	0	0	0	0	0	3,420
J4215 FY2007 MARRIOTTSVILLE ROAD from US40 to MD144	В	0	0	0	3,400	0	0	0	0	3,400
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	3,400	0	0	0	0	9,140
J4219 FY2015 ENGINEERING STUDY PROGRAM A project for engineering roads to conform to the Plan	Р	150	50	200	50	50	0	0	0	300
Howard 2030 Highways Map to evaluate realignment schemes and to support the transportation and safety needs of the County.	Total	150	50	200	50	50	0	0	0	300
J4220 FY2014 DEVELOPER/COUNTY SHARED IMPROVEMENTS	В	0	0	0	75	75	0	0	0	150
A project to facilitate the design, land acquisition and construction of roadway modifications and their	D	175	50	225	75	75	0	0	0	375
appurtenances at various intersections or roadway segments.	Χ	500	0	500	0	0	0	0	0	500
cogc.nc.	Total	675	50	725	150	150	0	0	0	1,025
J4222 FY2008 SNOWDEN RIVER PARKWAY WIDENING BROKENLAND TO OAKLAND MILLS	В	0	0	0	9,350	0	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	9,350	0	0	0	0	12,275
J4225 FY2008 ELLICOTT CENTER DR CONNECTION to ROGERS	X	2,060	-200	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	2,060	-200	1,860	0	0	0	0	0	1,860

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
J4226 FY2008 ROAD PROJECTS CONTINGENCY FUND A project to provide funds for unanticipated needs related	В	550	0	550	200	0	200	0	0	950
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	200	0	0	2,400
J4228 FY2008 ILCHESTER and LANDING ROAD INTERSECT	В	1,085	-160	925	0	0	0	0	0	925
A project to realign the intersection of Landing Road with Ilchester Road so that Landing Road intersects Ilchester	D	75	0	75	0	0	0	0	0	75
Road directly across from Ilchester Point Court.	Total	1,160	-160	1,000	0	0	0	0	0	1,000
J4229 FY2008 WHISKEY BOTTOM ROAD IMPROVEMENTS	D	100	200	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	620	200	820	0	0	0	0	0	820
J4230 FY2017 SANNER ROAD IMPROVEMENTS A project to provide bicycle compatibility by widening the	В	0	150	150	55	725	0	0	0	930
existing 10-foot lanes to 12 feet and filling in the missing shoulders along both sides of the road.	Total	0	150	150	55	725	0	0	0	930
J4231 FY2013 ELKRIDGE MAIN STREET IMPROVEMENTS	В	100	0	100	50	500	0	0	0	650
A project to replace the curb, gutter and sidewalks along Main Street from Old Washington Road to Brumbaugh Street in Elkridge.	Total	100	0	100	50	500	0	0	0	650
J4237 FY2010 MD175/OAKLAND MILLS ROAD INTERCHANGE	В	0	0	0	9,000	0	0	0	0	9,000
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	9,000	0	0	0	0	23,000
J4239 FY2014 OLD ROXBURY ROAD A project to design and construct improvements to Old	В	0	135	135	600	0	0	0	0	735
Roxbury Road.	Χ	175	0	175	0	0	0	0	0	175
	Total	175	135	310	600	0	0	0	0	910
J4240 ROADWAY REHABILITATION/SAFETY PROGRAM	В	0	0	0	150	350	350	350	250	1,450
A project to correct safety or structural problems on existing roads.	Total	0	0	0	150	350	350	350	250	1,450

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
J4241 FY2011 US RT 1 RT 175 to MONTEVIDEO ROAD	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	0	50	0	0	0	0	0	50
	Χ	4,750	0	4,750	0	0	0	0	0	4,750
	Total	5,550	0	5,550	12,100	0	0	0	0	17,650
J4242 FY2014 BRIGHTON DAM ROAD at HIGHLAND ROAD ROUNDABOUT	В	0	0	0	125	1,100	0	0	0	1,225
A project to design and construct a roundabout at the intersection of Brighton Dam Road and Highland Road.	X	265	0	265	0	0	0	0	0	265
	Total	265	0	265	125	1,100	0	0	0	1,490
J4244 FY2015 BUSINESS PARKWAY-BLUESTREAM DRIVE EMERGENCY ACCESS	В	45	185	230	0	0	0	0	0	230
A project to design and construct a connection between Business Parkway and Bluestream Drive to act as an emergency access or exit.	Total	45	185	230	0	0	0	0	0	230
J4245 FY2016 SCENIC ROADS ENHANCEMENT A project to plan, design, and install enhancements at	В	0	180	180	0	0	0	0	0	180
certain historic or high visibility locations along the National Scenic Byway or County scenic roads.	G	0	50	50	0	0	0	0	0	50
. , ,	Total	0	230	230	0	0	0	0	0	230
J4246 FY2018 OLD MONTGOMERY ROAD AT BRIGHTFIELD ROAD INTERSECTION IMPROVEMENTS	В	0	0	0	75	200	50	1,575	0	1,900
A project to reconfigure the intersection of Old Montgomery Road and Brightfield Road for safety and increased capacity.	Total	0	0	0	75	200	50	1,575	0	1,900
J4247 FY2017 KIT KAT ROAD A project to improve the safety of Kat Kat Road by	В	0	25	25	150	200	1,400	0	0	1,775
widening the road enough to allow for the traffic to be able to pass each other more easily.	Total	0	25	25	150	200	1,400	0	0	1,775
J4248 FY2017 SAVAGE AREA COMPLETE STREETS	В	0	325	325	575	1,725	0	0	0	2,625
the project includes complete street improvements in lavage, Maryland to enhance multimodal travel for edestrians, bicyclists, transit, and automobiles.	Total	0	325	325	575	1,725	0	0	0	2,625
J4249 FY2017 MD 100 AT MD 103	В	0	250	250	5,000	0	0	0	0	5,250
n project to design and construct a replacement of the coundabouts of MD103 on the north and south sides of MD100 with a diverging diamond interchange in order to	D	0	500	500	0	0	0	0	0	500
increase the capacity of the interchange.	Total	0	750	750	5,000	0	0	0	0	5,750

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
J4711 FY2011 DEVELOPER INSPECTION PROGRAM A project to provide engineering and related services,	D	8,000	1,000	9,000	3,000	0	3,000	0	3,000	18,000
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	8,000	1,000	9,000	3,000	0	3,000	0	3,000	18,000
ROAD CONSTRUCTION PROJECTS Total		211,615	13,920	225,535	46,330	58,230	13,220	1,925	3,250	348,490

Howard County, MD FY2017 Council Approved Capital Budget (\$000) ROAD-ROAD CONSTRUCTION PROJECTS

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	22,869	1,890	24,759
D	DEVELOPER CONTRIBUTION	21,440	2,100	23,540
E	EXCISE TAX	18,427	-505	17,922
G	GRANTS	1,455	125	1,580
0	OTHER SOURCES	1,549	0	1,549
Р	PAY AS YOU GO	858	50	908
Χ	EXCISE TAX BACKED BONDS	145,017	10,260	155,277
Total		211,615	13,920	225,535

2017 Council Approved 5 Year Capital Budget Project Type Summary (ROAD-ROAD CONSTRUCTION PROJECTS)

Rev	enue Source	Prior Approp	Current FY	2018	2019	2020	2021	2022	5 Year Total
В	BONDS	22,869	1,890	43,155	58,105	10,170	1,925	250	138,364
D	DEVELOPER CONTRIBUTION	21,440	2,100	3,125	75	3,050	0	3,000	32,790
Е	EXCISE TAX	18,427	-505	0	0	0	0	0	17,922
G	GRANTS	1,455	125	0	0	0	0	0	1,580
0	OTHER SOURCES	1,549	0	0	0	0	0	0	1,549
Р	PAY AS YOU GO	858	50	50	50	0	0	0	1,008
Χ	EXCISE TAX BACKED BONDS	145,017	10,260	0	0	0	0	0	155,277
Tot	al	211,615	13,920	46,330	58,230	13,220	1,925	3,250	348,490

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

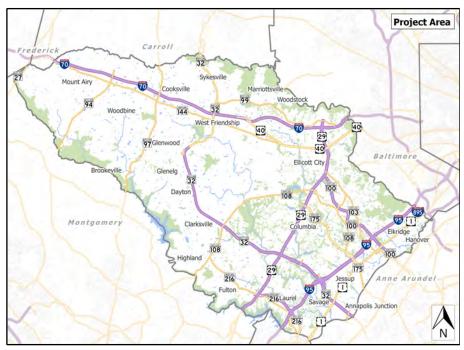
Upon developer's failure to complete construction, the surety of the developer is declared to be in default and the proceeds from the surety are placed in this account and used to finance construction.

Remarks

Construction as required. DEVELOPER CONTRIBUTION represent monies received from surety.

Project Schedule

Ongoing Program.



ROAD CONSTRUCTION PROJECTS

Number: J4076

Project: DEFAULTED DEVELOPER AGREEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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	

Project Status:

\$518,841 spent and encumbered through February 2016
Defaulted Properties:
First Baptist Church of Guilford SDP-05-011.

The Preserve at Clarksville F-06-072 Lots 1-32.

Project: J4099-CATEGORY CONTINGENCY FUND Number: J4099

Description

The fund is designed for use as a revenue source for Transfers of Appropriation Annual Bond Redemption \$ \$15,075 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.

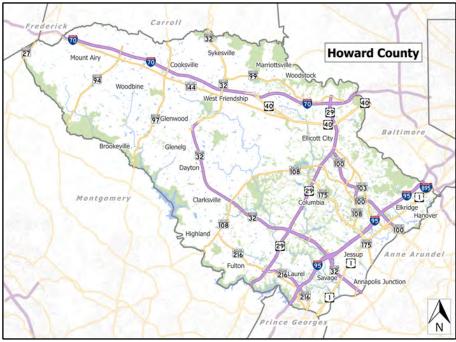
Remarks

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



ROAD CONSTRUCTION PROJECTS

Number: J4099

Project: CATEGORY CONTINGENCY FUND

(In Thousands)				Five Year Capital Program							Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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		

Project Status:

\$0 spent and encumbered through February 2016 Contingency Fund.

Project: J4110-FY1991 DORSEY RUN ROAD - SOUTH LINK Number: J4110

Description

A project for design and construction of approximately 5,000 feet of Dorsey Run Annual Bond Redemption \$ \$224,370 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 Estimated annual maintenance costs upon completion: \$19,000 per two 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.
- 3. Request represents latest engineer's estimate.

Project Schedule

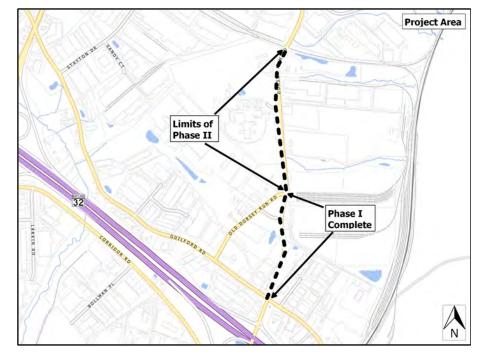
FY17 - Construction.

FY18 - Complete.

FY19 - Close.

Operating Budget Impact

lane mile of new roadway.



ROAD CONSTRUCTION PROJECTS

Project: FY1991 DORSEY RUN ROAD - SOUTH LINK Number: J4110

(In Thousands)	n Thousands)						apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	737	0	737	0	0	0	0	0	0	0	0	0	0	737
LAND ACQUISITION	2,295	0	2,295	0	0	0	0	0	0	0	0	0	0	2,295
CONSTRUCTION	4,896	125	5,021	0	0	0	0	0	0	0	0	0	0	5,021
ADMINISTRATION	9	0	9	0	0	0	0	0	0	0	0	0	0	9
Total Expenditures	7,937	125	8,062	0	0	0	0	0	0	0	0	0	0	8,062
BONDS	810	0	810	0	0	0	0	0	0	0	0	0	0	810
EXCISE TAX	2,350	0	2,350	0	0	0	0	0	0	0	0	0	0	2,350
GRANTS	100	0	100	0	0	0	0	0	0	0	0	0	0	100
OTHER SOURCES	626	0	626	0	0	0	0	0	0	0	0	0	0	626
EXCISE TAX BACKED BONDS	4,051	125	4,176	0	0	0	0	0	0	0	0	0	0	4,176
Total Funding	7,937	125	8,062	0	0	0	0	0	0	0	0	0	0	8,062

Project Status:

\$4,638,704 spent and encumbered through February 2016

FY16 - Phase I - Completed.

Phase II - Design and Land Acquisition completed. Utility relocation completed. Project advertised for construction bids.

Number: J4121

Project: J4121-PRIVATE ROAD RECONSTRUCTION PROGRAM

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.

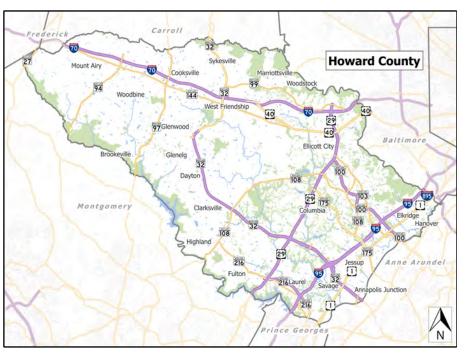
Project Schedule

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).
FY19 - Close.

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 Year Capital Program							Master Plan				
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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	

Project Status:

\$234,953 spent and encumbered through February 2016

Project: J4142-FY1998 HALL SHOP ROAD IMPROVEMENTS Number: J4142

Description

Reconstruct Hall Shop Road (a major collector) at two locations to improve sight Annual Bond Redemption \$ \$105,390 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

FY17 - Land acquisition.

FY18 - Construction.

FY19 - Complete and close.

Operating Budget Impact

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane mile of new roadway.



ROAD CONSTRUCTION PROJECTS

Number: J4142

Project: FY1998 HALL SHOP ROAD IMPROVEMENTS

(In Thousands)				Five Year Capital Program							Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project		
PLANS & ENGINEERING	304	0	304	200	0	0	0	0	200	0	0	0	0	504		
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	0	842	1,500	0	0	0	0	1,500	0	0	0	0	2,342		
BONDS	842	0	842	1,500	0	0	0	0	1,500	0	0	0	0	2,342		
Total Funding	842	0	842	1,500	0	0	0	0	1,500	0	0	0	0	2,342		

Project Status:

\$501,194 spent and encumbered through February 2016 Site A: construction complete.

Site B: Reducing scope of work due to land acquisition difficulties. FY16 - Continue the land acquisition phase.

Project: J4148-FY2000 DORSEY RUN ROAD EXTENSION 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.

Operating Budget Impact

Annual Bond Redemption \$ \$1,259,460

Estimated annual maintenance costs upon completion: \$19,000 per two lane mile of new roadway.

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

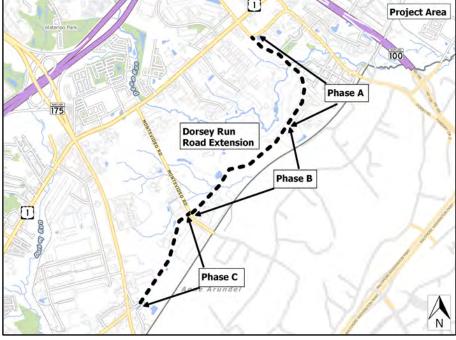
- 1. This project will be coordinated with J4182 (Dorsey Run Road Improvements), J4206 (Montevideo Road Improvements) and W8292 (Water Main and Sewer).
- 2. Construction will be phased.
- 3. GRANT represents Secondary State Aid Funds.
- 4. An agreement with adjacent property owner/developer coordinates construction of developer's improvements and requires developer contribution to the project for proportionate cost of the improvements.
- 5. Request represents latest project costs.

Project Schedule

FY16 - Continue construction of Phase B.

FY17 - Complete construction.

FY18 - Close.



ROAD CONSTRUCTION PROJECTS

Number: J4148

Project: FY2000 DORSEY RUN ROAD EXTENSION

(In Thousands)							apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	2,335	50	2,385	0	0	0	0	0	0	0	0	0	0	2,385
LAND ACQUISITION	9,750	130	9,880	0	0	0	0	0	0	0	0	0	0	9,880
CONSTRUCTION	21,630	720	22,350	0	0	0	0	0	0	0	0	0	0	22,350
ADMINISTRATION	15	0	15	0	0	0	0	0	0	0	0	0	0	15
Total Expenditures	33,730	900	34,630	0	0	0	0	0	0	0	0	0	0	34,630
BONDS	1,543	0	1,543	0	0	0	0	0	0	0	0	0	0	1,543
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	25,545	900	26,445	0	0	0	0	0	0	0	0	0	0	26,445
Total Funding	33,730	900	34,630	0	0	0	0	0	0	0	0	0	0	34,630

Project Status:

\$31,927,632 spent and encumbered through February 2016
FY16 - Phase A - Construction complete.
Phase B - Construction in progress.
Phase C - Construction complete.

ROAD CONSTRUCTION PROJECTS

Project: J4154-FY1998 RETAINING WALL REPLACEMENTS

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 \$6283.

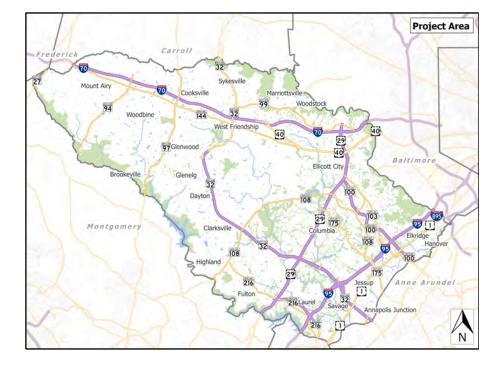
Project Schedule

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 Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	463	0	463	0	0	0	0	0	0	0	0	0	0	463
LAND ACQUISITION	29	0	29	0	0	0	0	0	0	0	0	0	0	29
CONSTRUCTION	1,818	0	1,818	0	0	0	0	0	0	0	0	0	0	1,818
ADMINISTRATION	34	0	34	0	0	0	0	0	0	0	0	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	0	0	0	2,129
PAY AS YOU GO	215	0	215	0	0	0	0	0	0	0	0	0	0	215
Total Funding	2,344	0	2,344	0	0	0	0	0	0	0	0	0	0	2,344

Project Status:

\$936,910 spent and encumbered through February 2016
FY16 - Construction complete - Bonnie Branch retaining wall, College Ave at Ross Rd, Bonnie Branch Rd, St. Paul St, New Cut Rd (#1), and Old Columbia Pike. Sylvan Lane retaining wall advanced from design and land acquisition stage to advertising for construction.

Number: J4155

Project: J4155-FY2012 MARRIOTTSVILLE RD SAFETY IMPROVEMENTS

Description

Reconstruct shoulders, replace guardrails and stabilize roadway embankment at Annual Bond Redemption \$ \$153,675 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

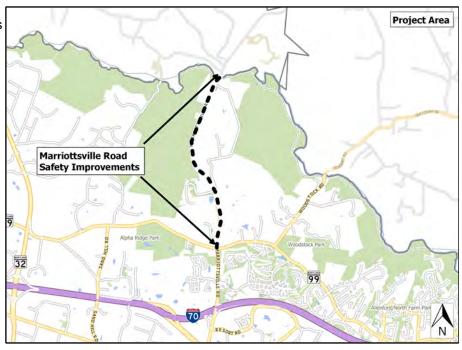
- 1. This project will be coordinated with J4205.
- 2. Marriottsville Road north of MD99 is a Scenic Road.
- 3. The improvements will be in two phases. Phase 1 will be stabilizing the roadway embankment. Phase 2 will be the road improvements.
- 4. Request represents program advancement.

Project Schedule

- FY17 Slope design, land acquisition and construction.
- FY18 Slope Construction & Road Design
- FY19 Road Design & Land Acquisition
- FY20 Construction.
- FY21 Complete & Close.

Operating Budget Impact

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 Capital Program							Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project		
PLANS & ENGINEERING	225	65	290	150	0	150	0	0	300	0	0	0	0	590		
LAND ACQUISITION	0	50	50	0	225	0	0	0	225	0	0	0	0	275		
CONSTRUCTION	0	550	550	0	0	2,000	0	0	2,000	0	0	0	0	2,550		
Total Expenditures	225	665	890	150	225	2,150	0	0	2,525	0	0	0	0	3,415		
BONDS	225	665	890	150	225	2,150	0	0	2,525	0	0	0	0	3,415		
Total Funding	225	665	890	150	225	2,150	0	0	2,525	0	0	0	0	3,415		

Project Status:

\$122,603 spent and encumbered through February 2016
FY16 - This project advanced from the study phase to the design phase for the road slope maintenance.

ROAD CONSTRUCTION PROJECTS

Project: J4164-FY1997 ROADWAY CAPACITY IMPROVEMENTS

Number: J4164

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

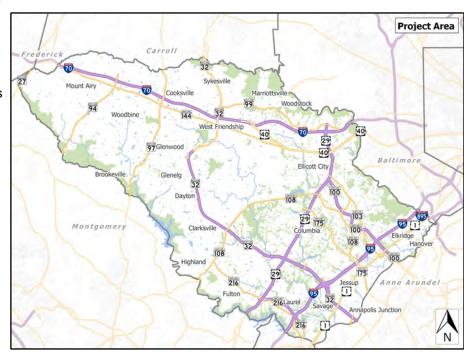
FY17 - Construction

FY18 - Close

Operating Budget Impact

Annual Bond Redemption \$ \$198,270

Estimated annual maintenance costs upon construction completion: Increase.



ROAD CONSTRUCTION PROJECTS

Number: J4164

Project: FY1997 ROADWAY CAPACITY IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status:

\$6,666,686 spent and encumbered through February 2016

FY16 - Projects under design - Browns Bridge Rd/Hall Shop Rd (construction Summer 2016).

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.

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

- 1. Funding is programmed for a short-term improvement based on the conclusion of the study phase.
- 2. Request represents program advancement.

Project Schedule

FY17 - Complete study and design.

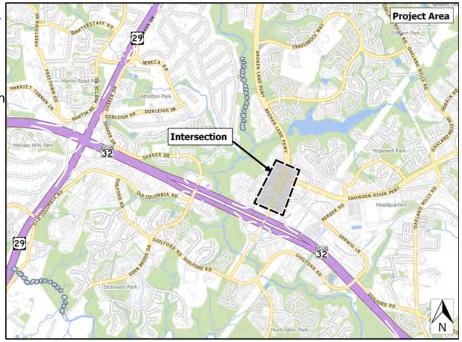
FY18 - Land Acquisition.

FY19 - 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	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	250	330	580	0	215	0	0	0	215	0	0	0	0	795
LAND ACQUISITION	0	100	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	250	430	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	250	430	680	0	0	0	0	0	0	0	0	0	0	680
Total Funding	250	430	680	0	1,175	0	0	0	1,175	0	0	0	0	1,855

Project Status:

\$150,959 spent and encumbered through February 2016
FY16 - This project advanced from the study phase to the design phase for the capacity and safety improvements.

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 \$ \$150,075

Estimated annual maintenance costs upon construction completion: Decrease.



ROAD CONSTRUCTION PROJECTS

Number: J4168

Project: FY1998 ROADWAY REHABILITATION/SAFETY PROGRAM

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	245	0	245	0	0	0	0	0	0	0	0	0	0	245
LAND ACQUISITION	1,215	0	1,215	0	0	0	0	0	0	0	0	0	0	1,215
CONSTRUCTION	2,328	0	2,328	0	0	0	0	0	0	0	0	0	0	2,328
ADMINISTRATION	55	0	55	0	0	0	0	0	0	0	0	0	0	55
Total Expenditures	3,843	0	3,843	0	0	0	0	0	0	0	0	0	0	3,843
BONDS	3,065	0	3,065	0	0	0	0	0	0	0	0	0	0	3,065
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	0	3,843	0	0	0	0	0	0	0	0	0	0	3,843

Project Status:

\$2,532,324 spent and encumbered through February 2016
FY16 - Construction complete - Harriet Tubman Ln, New Cut Rd, Highland Rd, Long Corner Rd/Penn Shop Rd.

Land acquisition complete - Burntwoods Rd.

Design in progress- Port Capital Dr/Harbour Dr/New Colony Blvd (construction Summer 2016), Old Scaggsville Rd at All Saints Rd.

Project: J4170-FY2004 ROGER'S AVENUE IMPROVEMENTS Number: J4170

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. Estimated annual maintenance costs upon completion: \$19,000 per two 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

Request represents latest Engineer's estimate.

Project Schedule

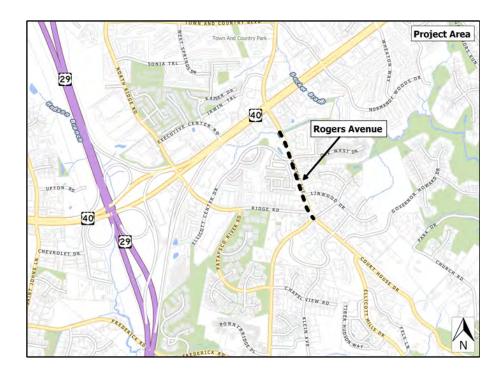
FY17 - Complete Design and land acquisition.

FY18 - Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$159,075

lane mile of new roadway.



ROAD CONSTRUCTION PROJECTS

Number: J4170

Project: FY2004 ROGER'S AVENUE IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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	3,085	0	3,085	0	0	0	0	0	0	0	0	0	0	3,085
ADMINISTRATION	5	0	5	0	0	0	0	0	0	0	0	0	0	5
Total Expenditures	3,655	0	3,655	0	0	0	0	0	0	0	0	0	0	3,655
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	3,655	0	3,655	0	0	0	0	0	0	0	0	0	0	3,655

Project Status :

\$492,873 spent and encumbered through February 2016 FY16 - Design and land acquisition in progress.

Project: J4173-FY2000 HANOVER ROAD IMPROVEMENTS

Number: J4173

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

FY17 - Design.

FY18 - Design and Land Acquisition.

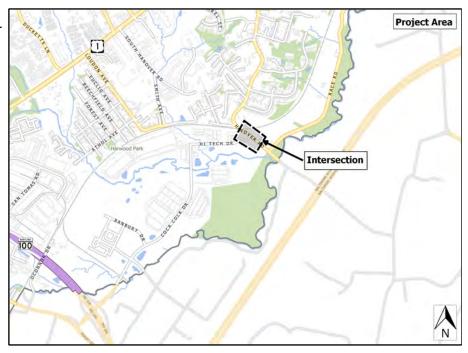
FY19 - Construction.

FY20 - Close.

Operating Budget Impact

Annual Bond Redemption \$ \$72,900

Estimated annual maintenance costs upon construction completion: No Change.



ROAD CONSTRUCTION PROJECTS

Number: J4173

Project: FY2000 HANOVER ROAD IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	175	0	175	0	85	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	0	1,135	0	0	0	1,135	0	0	0	0	1,785
BONDS	255	0	255	0	1,135	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	0	1,135	0	0	0	1,135	0	0	0	0	1,785

Project Status: \$125,889 spent and encumbered through February 2016 FY16 - Design in progress.

ROAD CONSTRUCTION PROJECTS

Project: J4177-FY2001 STATE ROAD CONSTRUCTION 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

Project will include, but not be limited to: MD108 (Woodland Road thru Centennial Lane) and US40 at Rogers Avenue intersection.

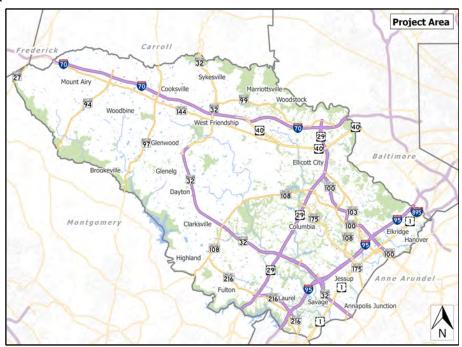
Project Schedule

Program
Set by State Highway Administration.

Operating Budget Impact

Annual Bond Redemption \$ \$803,025

Estimated annual maintenance costs upon construction completion: No Change.



ROAD CONSTRUCTION PROJECTS

Number: J4177

Project: FY2001 STATE ROAD CONSTRUCTION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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	0	18,265	0	0	0	0	0	0	0	0	0	0	18,265
Total Expenditures	21,765	0	21,765	0	0	0	0	0	0	0	0	0	0	21,765
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	0	21,765	0	0	0	0	0	0	0	0	0	0	21,765

Project Status:

\$17,926,345 spent and encumbered through February 2016

FY16 - Projects in Design: MD108

Projects in Construction: US40 at Rogers Ave.
Projects Complete: I70/Marriottsville Rd Study, US29 (MD99 to MD100), MD216, and MD99 (Liter & Tiller).

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 Annual Bond Redemption \$ \$321,075 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)
- 4. Schedule set by SHA.
- 5. Request represents latest engineers estimate.

Project Schedule

FY17 - Lawyers Hill construction.

Operating Budget Impact

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	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,815	0	1,815	0	0	0	0	0	0	0	0	0	0	1,815
CONSTRUCTION	5,175	135	5,310	0	0	0	0	0	0	0	0	0	0	5,310
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	7,000	135	7,135	0	0	0	0	0	0	0	0	0	0	7,135
BONDS	7,000	135	7,135	0	0	0	0	0	0	0	0	0	0	7,135
Total Funding	7,000	135	7,135	0	0	0	0	0	0	0	0	0	0	7,135

Project Status:

\$4,034,115 spent and encumbered through February 2016
FY16 - Construction complete: Timberview, Atholton Manor, US29 - MD108 to MD100, High Ridge, Orchards, Hunt Club Estates and Guilford Downs. Construction underway: Lawyers Hill.

Project: J4181-FY2003 GUILFORD RD (US1 to DORSEY RUN RD)

Description

Operating Budget Impact

This project is to study, design, and reconstruct Guilford Road to three lanes from Annual Bond Redemption \$ \$722,475 US1 to Old Dorsey Run Road; a distance of 5,800 LF.

Justification

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane miles of new roadway.

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

Project Schedule

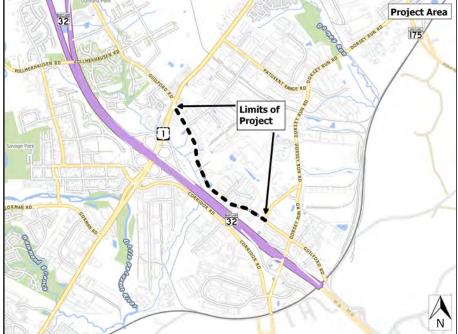
FY17 - Design and Land acquisition.

FY18 - Design and Land acquisition.

FY19 - Construction.

FY20 - Construction.

FY21 - Close



ROAD CONSTRUCTION PROJECTS

Number: J4181

Project: FY2003 GUILFORD RD (US1 to DORSEY RUN RD)

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	830	0	830	0	720	0	0	0	720	0	0	0	0	1,550
LAND ACQUISITION	1,030	0	1,030	0	0	0	0	0	0	0	0	0	0	1,030
CONSTRUCTION	0	0	0	0	13,800	0	0	0	13,800	0	0	0	0	13,800
ADMINISTRATION	15	0	15	0	0	0	0	0	0	0	0	0	0	15
Total Expenditures	1,875	0	1,875	0	14,520	0	0	0	14,520	0	0	0	0	16,395
BONDS	0	0	0	0	14,520	0	0	0	14,520	0	0	0	0	14,520
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	0	14,520	0	0	0	14,520	0	0	0	0	16,395

Project Status:

\$648,447 spent and encumbered through February 2016

FY16 - Design in progress.

Project: J4182-FY2002 DORSEY RUN ROAD IMPROVEMENTS

Number: J4182

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 and J4148. This project will be constructed in (2) two phases. Phase 1 will be to complete the intersection improvements at MD175.

Project Schedule

FY17 - Phase 1 design and land acquisition.

FY18 - Phase 1 land acquisition and construction, Phase 2 design.

FY19 - Phase 1 construction completion, Phase 2 design and land acquisition.

FY20 - Phase 2 land acquisition and construction.

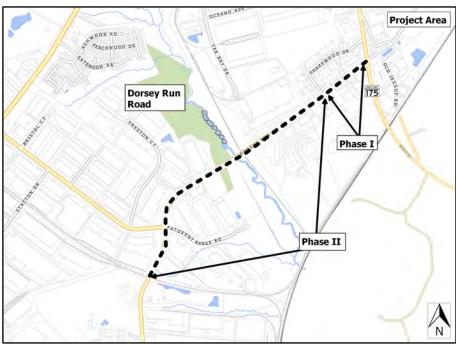
FY21 - Phase 2 construction continues.

FY22 - Phase 2 complete and close.

Operating Budget Impact

Annual Bond Redemption \$ \$707,400

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

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,540	0	1,540	0	800	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	2,035	(1,500)	535	0	15,000	0	0	0	15,000	0	0	0	0	15,535
ADMINISTRATION	25	0	25	0	0	0	0	0	0	0	0	0	0	25
Total Expenditures	4,500	(1,500)	3,000	0	15,800	0	0	0	15,800	0	0	0	0	18,800
BONDS	0	0	0	0	15,800	0	0	0	15,800	0	0	0	0	15,800
DEVELOPER CONTRIBUTION	35	0	35	0	0	0	0	0	0	0	0	0	0	35
EXCISE TAX	3,045	(505)	2,540	0	0	0	0	0	0	0	0	0	0	2,540
EXCISE TAX BACKED BONDS	1,420	(995)	425	0	0	0	0	0	0	0	0	0	0	425
Total Funding	4,500	(1,500)	3,000	0	15,800	0	0	0	15,800	0	0	0	0	18,800

Project Status:

\$978,736 spent and encumbered through February 2016 FY16 - Project under design.

ROAD CONSTRUCTION PROJECTS

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

FY17 - Land Acquisition and Construction.

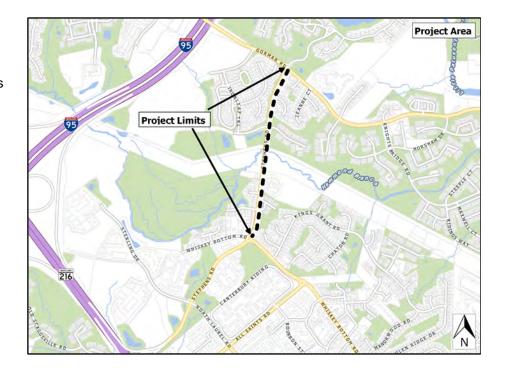
FY18 - Construction.

FY19 - Complete and Close.

Operating Budget Impact

Annual Bond Redemption \$ \$411,075

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane mile of new roadway.



ROAD CONSTRUCTION PROJECTS

Number: J4202

Project: FY2004 STEPHENS ROAD IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,455	0	1,455	0	0	0	0	0	0	0	0	0	0	1,455
LAND ACQUISITION	1,095	0	1,095	0	0	0	0	0	0	0	0	0	0	1,095
CONSTRUCTION	6,600	0	6,600	0	0	0	0	0	0	0	0	0	0	6,600
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	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	0	25	0	0	0	0	0	0	0	0	0	0	25
EXCISE TAX BACKED BONDS	9,135	0	9,135	0	0	0	0	0	0	0	0	0	0	9,135
Total Funding	9,160	0	9,160	0	0	0	0	0	0	0	0	0	0	9,160

Project Status:

\$1,039,623 spent and encumbered through February 2016
FY16 - The project is in the final design phase and land acquisition is in progress.

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 one will be from I-70 to MD99 intersection.
 Phase two will be the improvements to the ramp for I-70 eastbound.
 Phase three will be the roadway portion south of the I-70 bridge.
 - Phase four will be the construction of the I-70 bridge.

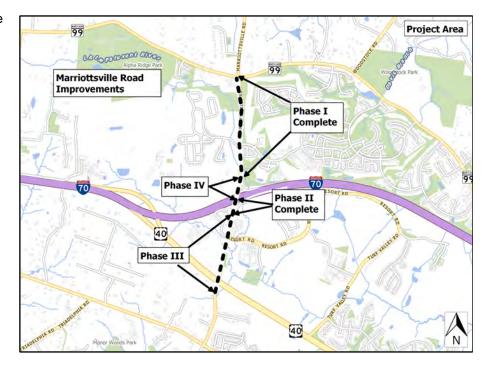
Project Schedule

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	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status: \$950,948 spent and encumbered through February 2016

Phase 1 construction - complete.

Phase 2 construction - complete.
FY16 - Marriottsville Road south of I-70 in design and I-70 bridge in design.

Project: J4206-FY2007 MONTEVIDEO ROAD IMPROVEMENTS

Number: J4206

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.

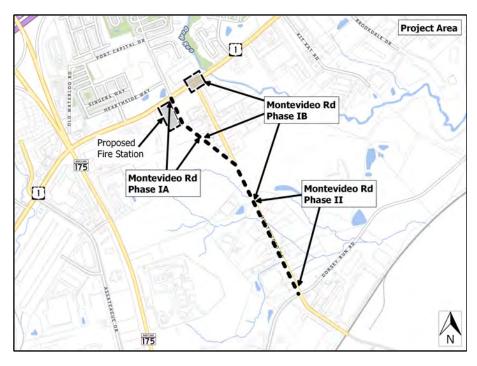
Project Schedule

- FY17 Phase 1A Land acquisition and construction, Phase 1B Design and land acquisition.
- FY18 Phase 1B Construction, Phase 2 Design and land acquisition.
- FY19 Phase 2 Land acquisition and construction.
- FY20 Phase 2 Construction.
- FY21 Phase 2 Complete and close.

Operating Budget Impact

Annual Bond Redemption \$ \$656,325

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	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	960	0	960	0	0	320	0	0	320	0	0	0	0	1,280
LAND ACQUISITION	2,830	0	2,830	0	0	0	0	0	0	0	0	0	0	2,830
CONSTRUCTION	5,565	0	5,565	0	0	5,100	0	0	5,100	0	0	0	0	10,665
Total Expenditures	9,355	0	9,355	0	0	5,420	0	0	5,420	0	0	0	0	14,775
BONDS	0	0	0	0	0	5,420	0	0	5,420	0	0	0	0	5,420
DEVELOPER CONTRIBUTION	190	0	190	0	0	0	0	0	0	0	0	0	0	190
EXCISE TAX BACKED BONDS	9,165	0	9,165	0	0	0	0	0	0	0	0	0	0	9,165
Total Funding	9,355	0	9,355	0	0	5,420	0	0	5,420	0	0	0	0	14,775

Project Status:

\$1,613,605 spent and encumbered through February 2016 FY16 - Phase 1A in construction, Phase 1B in design.

Project: J4207-FY2009 OAKLAND MILLS ROAD IMPROVEMENTS

Description

A project to improve Oakland Mills Road from Guilford Road northward to Carters Annual Bond Redemption \$ \$273,825 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.

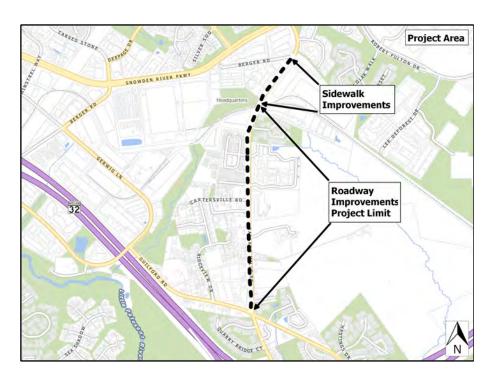
Project Schedule

FY17 - Land acquisition and construction.

FY18 - Complete and close.

Operating Budget Impact

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

(In Thousands)					Five	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	600	0	600	0	0	0	0	0	0	0	0	0	0	600	
LAND ACQUISITION	2,000	0	2,000	0	0	0	0	0	0	0	0	0	0	2,000	
CONSTRUCTION	3,500	0	3,500	0	0	0	0	0	0	0	0	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	0	0	0	185	
DEVELOPER CONTRIBUTION	15	0	15	0	0	0	0	0	0	0	0	0	0	15	
EXCISE TAX BACKED BONDS	5,900	0	5,900	0	0	0	0	0	0	0	0	0	0	5,900	
Total Funding	6,100	0	6,100	0	0	0	0	0	0	0	0	0	0	6,100	

Project Status:

\$433,660 spent and encumbered through February 2016
FY16 - The project is in the final design phase and land acquisition is in progress.

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

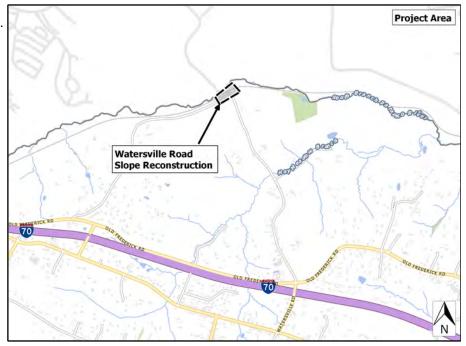
FY17 - Construction.

FY18 - 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	Year Ca	apital Pro	ogram		Master Plan							
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status:

\$120,161 spent and encumbered through February 2016
FY16 - Revised design to address CSX comments.
Design complete. CSX coordination ongoing.

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.

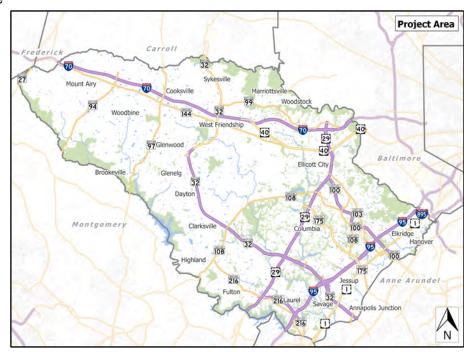
Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$112,500

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	apital Pro	ogram		Master Plan							
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	175	0	175	150	0	150	0	0	300	0	0	0	0	475
LAND ACQUISITION	100	0	100	0	0	0	0	0	0	0	0	0	0	100
CONSTRUCTION	1,100	0	1,100	500	0	500	0	0	1,000	0	0	0	0	2,100
Total Expenditures	1,375	0	1,375	650	0	650	0	0	1,300	0	0	0	0	2,675
BONDS	0	0	0	600	0	600	0	0	1,200	0	0	0	0	1,200
DEVELOPER CONTRIBUTION	75	0	75	50	0	50	0	0	100	0	0	0	0	175
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	650	0	0	1,300	0	0	0	0	2,675

Project Status:

\$654,118 spent and encumbered through February 2016
FY16 - Projects complete: Dobbin Rd at Dobbin Center Way, Long Gate Pkwy, Snowden River Pkwy near MD108, Snowden River Pkwy at Snowden Square Dr.

ROAD CONSTRUCTION PROJECTS

Project: J4212-FY2007 STATE ROAD CONSTRUCTION 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.
- 6. Request represents latest engineer's estimate.

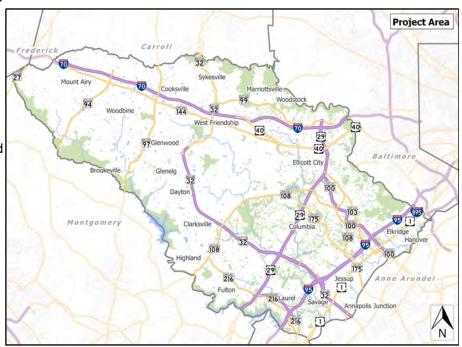
Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$1,833,750

Estimated annual maintenance costs upon construction completion: No Change.



ROAD CONSTRUCTION PROJECTS

Number: J4212

Project: FY2007 STATE ROAD CONSTRUCTION

(In Thousands)					Five	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	2,875	325	3,200	0	0	0	0	0	0	0	0	0	0	3,200	
LAND ACQUISITION	2,175	25	2,200	0	0	0	0	0	0	0	0	0	0	2,200	
CONSTRUCTION	19,925	10,075	30,000	0	0	0	0	0	0	0	0	0	0	30,000	
Total Expenditures	24,975	10,425	35,400	0	0	0	0	0	0	0	0	0	0	35,400	
DEVELOPER CONTRIBUTION	0	350	350	0	0	0	0	0	0	0	0	0	0	350	
EXCISE TAX	500	0	500	0	0	0	0	0	0	0	0	0	0	500	
GRANTS	1,225	75	1,300	0	0	0	0	0	0	0	0	0	0	1,300	
EXCISE TAX BACKED BONDS	23,250	10,000	33,250	0	0	0	0	0	0	0	0	0	0	33,250	
Total Funding	24,975	10,425	35,400	0	0	0	0	0	0	0	0	0	0	35,400	

Project Status:

\$16,614,986 spent and encumbered through February 2016
FY 16 - In design: MD32 dualization. MD97 at Burntwoods; MD103 at Old Columbia Pike; US1 at MD103.
Completed: MD32 at Linden Church.

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 reducing a crest vertical curve, widening lanes, signalization at the intersection and pedestrian improvements.
- 2. Project will be coordinated with K5040.
- 3. Project will be phased.

Phase 1: Install signal. Phase 2: Lower crest.

Project Schedule

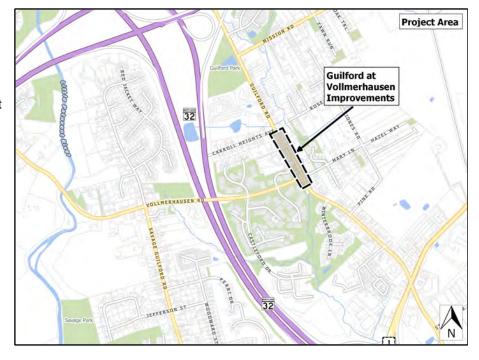
FY17 - Land acquisition and construction of Phase 2.

FY18 - Complete and close.

Operating Budget Impact

Annual Bond Redemption \$ \$153,675

Estimated annual maintenance costs upon construction completion: Increase.



ROAD CONSTRUCTION PROJECTS

Number: J4214

Project: FY2007 GUILFORD AT VOLLMERHAUSEN IMPROVEMENTS

(In Thousands)		Five	Year Ca	apital Pro	ogram		Master Plan							
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	345	0	345	0	0	0	0	0	0	0	0	0	0	345
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	3,420	0	3,420	0	0	0	0	0	0	0	0	0	0	3,420
BONDS	2,845	0	2,845	0	0	0	0	0	0	0	0	0	0	2,845
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	3,420	0	3,420	0	0	0	0	0	0	0	0	0	0	3,420

Project Status:

\$987,215 spent and encumbered through February 2016
FY16 - Design complete. Phase 1: Signal construction complete. Phase 2: Continuing land acquisition, finalizing design and permitting.

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 one 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 County improvements.

Project Schedule

FY17-18 - Design, Land Acquisition and Construction (Phase one).

FY19 - Construction (Phase two).

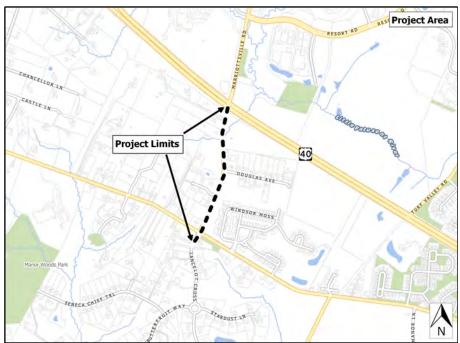
FY20 - Construction.

FY21 - Complete and close.

Operating Budget Impact

Annual Bond Redemption \$ \$400,050

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane mile of new roadway.



ROAD CONSTRUCTION PROJECTS

Number: J4215

Project: FY2007 MARRIOTTSVILLE ROAD from US40 to MD144

(In Thousands)		Five	Year Ca	apital Pro	ogram		Master Plan							
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,040	0	1,040	400	0	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	3,000	0	0	0	0	3,000	0	0	0	0	6,200
Total Expenditures	5,740	0	5,740	3,400	0	0	0	0	3,400	0	0	0	0	9,140
BONDS	0	0	0	3,400	0	0	0	0	3,400	0	0	0	0	3,400
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	3,400	0	0	0	0	3,400	0	0	0	0	9,140

Project Status:

\$480,450 spent and encumbered through February 2016 FY 16 - Design and land acquistion in progress.

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

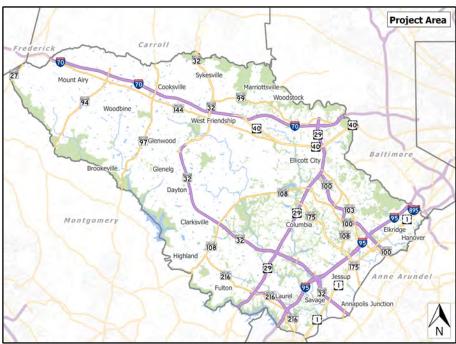
Request represents program advancement.

Project Schedule

Program

Operating Budget Impact

Estimated annual maintenance costs upon construction completion: No Change.



ROAD CONSTRUCTION PROJECTS

Number: J4219

Project: FY2015 ENGINEERING STUDY PROGRAM

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	150	50	200	50	50	0	0	0	100	0	0	0	0	300
Total Expenditures	150	50	200	50	50	0	0	0	100	0	0	0	0	300
PAY AS YOU GO	150	50	200	50	50	0	0	0	100	0	0	0	0	300
Total Funding	150	50	200	50	50	0	0	0	100	0	0	0	0	300

Project Status:
\$118,518 spent and encumbered through February 2016
FY 16 - Clarksville Parking Study completed.

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

- 1. Replaces Capital Project J4134
- 2. The County may enter into an agreement for the developer to construct the County's improvements.
- 3. Request represents program advancement.

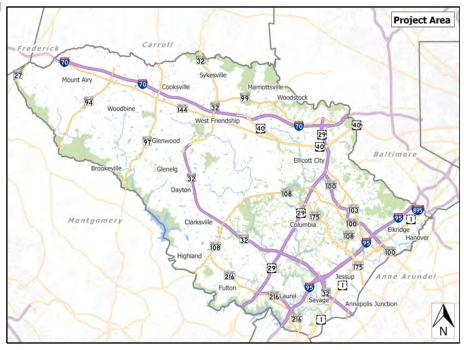
Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$29,250

Estimated annual maintenance costs upon construction completion: Increase.



ROAD CONSTRUCTION PROJECTS

Number: J4220

Project: FY2014 DEVELOPER/COUNTY SHARED IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	200	0	200	25	25	0	0	0	50	0	0	0	0	250
LAND ACQUISITION	75	0	75	0	0	0	0	0	0	0	0	0	0	75
CONSTRUCTION	400	50	450	125	125	0	0	0	250	0	0	0	0	700
Total Expenditures	675	50	725	150	150	0	0	0	300	0	0	0	0	1,025
BONDS	0	0	0	75	75	0	0	0	150	0	0	0	0	150
DEVELOPER CONTRIBUTION	175	50	225	75	75	0	0	0	150	0	0	0	0	375
EXCISE TAX BACKED BONDS	500	0	500	0	0	0	0	0	0	0	0	0	0	500
Total Funding	675	50	725	150	150	0	0	0	300	0	0	0	0	1,025

Project Status:

\$0 spent and encumbered through February 2016 FY16 - No projects assigned yet.

Project: J4222-FY2008 SNOWDEN RIVER PARKWAY WIDENING BROKENLAND TO

OAKLAND MILLS

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.
- 3. Developer Contribution funds represent payment in-lieu-of construction.

Project Schedule

FY17 - Design and land acquisition.

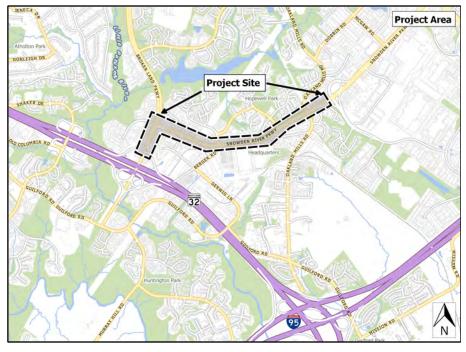
FY18 - Construction.

FY19-21 - 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.



ROAD CONSTRUCTION PROJECTS

Number: J4222

Project: FY2008 SNOWDEN RIVER PARKWAY WIDENING BROKENLAND TO OAKLAND MILLS

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,060	0	1,060	850	0	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	8,500	0	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	9,350	0	0	0	0	9,350	0	0	0	0	12,275
BONDS	0	0	0	9,350	0	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	9,350	0	0	0	0	9,350	0	0	0	0	12,275

Project Status:

\$625,197 spent and encumbered through February 2016

FY16 - Design in progress.

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.

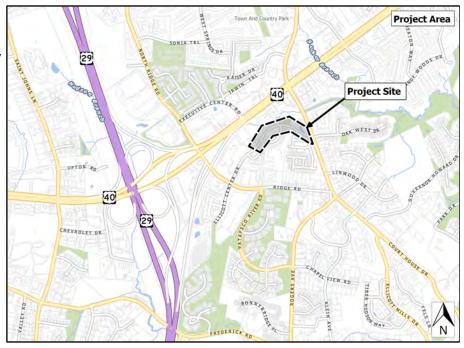
Project Schedule

FY17 - 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	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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	1,700	(200)	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	2,060	(200)	1,860	0	0	0	0	0	0	0	0	0	0	1,860
EXCISE TAX BACKED BONDS	2,060	(200)	1,860	0	0	0	0	0	0	0	0	0	0	1,860
Total Funding	2,060	(200)	1,860	0	0	0	0	0	0	0	0	0	0	1,860

Project Status:

\$1,700,238 spent and encumbered through February 2016 FY16 - Construction of this project will be completed.

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 \$ \$108,000

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	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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	100	0	0	200	0	0	0	0	1,025
CONSTRUCTION	1,000	0	1,000	100	0	100	0	0	200	0	0	0	0	1,200
Total Expenditures	2,000	0	2,000	200	0	200	0	0	400	0	0	0	0	2,400
BONDS	550	0	550	200	0	200	0	0	400	0	0	0	0	950
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	200	0	0	400	0	0	0	0	2,400

Project Status:

\$969,774 spent and encumbered through February 2016

FY16 - Funds used for 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.

Project: J4228-FY2008 ILCHESTER and LANDING ROAD INTERSECT

Description

Operating Budget Impact

A project to realign the intersection of Landing Road with Ilchester Road so that Landing Road intersects Ilchester Road directly across from Ilchester Point Court.

Annual Bond Redemption \$ \$41,625

Estimated annual maintenance costs upon construction completion: No Change.

Justification

The current intersections of Landing Road and Ilchester Point Court with Ilchester Road are offset. A new development at the corner of Landing Road has provided the land for the realignment of the road. The Traffic Division supports the realignment of the intersection.

Remarks

- 1. Both Ilchester and Landing are Scenic Roads.
- 2. The County has entered into an agreement for the developer to construct the County improvements.
- 3. Request represents latest engineer's estimate.

Project Schedule

FY17 - Design, Land Acquisition and Construction.

FY18 - Close.



ROAD CONSTRUCTION PROJECTS

Number: J4228

Project: FY2008 ILCHESTER and LANDING ROAD INTERSECT

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	290	0	290	0	0	0	0	0	0	0	0	0	0	290
LAND ACQUISITION	70	0	70	0	0	0	0	0	0	0	0	0	0	70
CONSTRUCTION	800	(160)	640	0	0	0	0	0	0	0	0	0	0	640
Total Expenditures	1,160	(160)	1,000	0	0	0	0	0	0	0	0	0	0	1,000
BONDS	1,085	(160)	925	0	0	0	0	0	0	0	0	0	0	925
DEVELOPER CONTRIBUTION	75	0	75	0	0	0	0	0	0	0	0	0	0	75
Total Funding	1,160	(160)	1,000	0	0	0	0	0	0	0	0	0	0	1,000

Project Status:

\$857,717 spent and encumbered through February 2016
FY16 - The project requires additional work to address drainage. New pathway is no longer being considered.

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

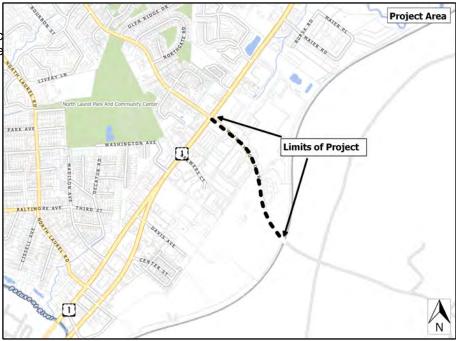
- 1. The project is supported by the Traffic Division.
- 2. A study will be conducted to develop the full scope of the project.
- 3. Developer contributions are expected to help fund the project.
- 4. This project may be used as a funding source for public improvements constructed by others under an agreement approved by the County Council.
- 5. Other funds are from County share of Race Track funds allocation.

Project Schedule

FY17 - Study.

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	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Appr. Budget				Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	420	100	520	0	0	0	0	0	0	0	0	0	0	520
LAND ACQUISITION	200	100	300	0	0	0	0	0	0	0	0	0	0	300
Total Expenditures	620	200	820	0	0	0	0	0	0	0	0	0	0	820
DEVELOPER CONTRIBUTION	100	200	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	620	200	820	0	0	0	0	0	0	0	0	0	0	820

Project Status:

\$0 spent and encumbered through February 2016 FY16 - Study in progress.

Project: J4230-FY2017 SANNER ROAD IMPROVEMENTS Number: J4230

Description

A project to provide bicycle compatibility by widening the existing 10-foot lanes to Annual Bond Redemption \$ \$41,850 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.

Operating Budget Impact

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane mile of new roadway.

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

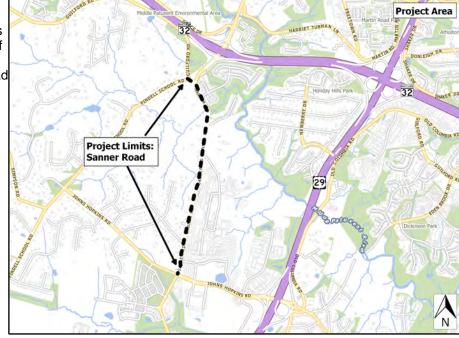
- 1. Project is part of the County's Bicycle Master Plan.
- 2. Project to be coordinated with W8306.
- 3. Request represents project initiation.

Project Schedule

FY17 - Design.

FY18 - Land Acquisition.

FY19 - Construction.



ROAD CONSTRUCTION PROJECTS

Number: J4230

Project: FY2017 SANNER ROAD IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	150	150	0	65	0	0	0	65	0	0	0	0	215
LAND ACQUISITION	0	0	0	55	0	0	0	0	55	0	0	0	0	55
CONSTRUCTION	0	0	0	0	660	0	0	0	660	0	0	0	0	660
Total Expenditures	0	150	150	55	725	0	0	0	780	0	0	0	0	930
BONDS	0	150	150	55	725	0	0	0	780	0	0	0	0	930
Total Funding	0	150	150	55	725	0	0	0	780	0	0	0	0	930

Project Status : \$0 spent and encumbered through February 2016

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

Project Schedule

FY17 - Study and Design.

FY18 - Design and land acquisition.

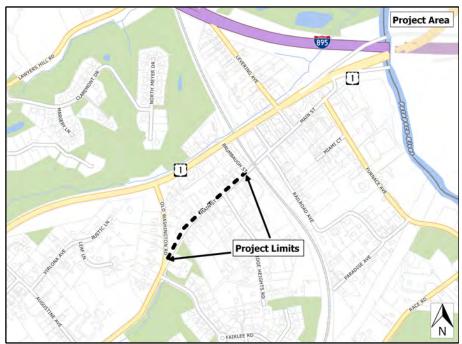
FY19 - Construction.

FY20 - Complete and close.

Operating Budget Impact

Annual Bond Redemption \$ \$29,250

Estimated annual maintenance costs upon construction completion: Decrease.



ROAD CONSTRUCTION PROJECTS

Number: J4231

Project: FY2013 ELKRIDGE MAIN STREET IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	100	0	100	0	0	0	0	0	0	0	0	0	0	100
LAND ACQUISITION	0	0	0	50	0	0	0	0	50	0	0	0	0	50
CONSTRUCTION	0	0	0	0	500	0	0	0	500	0	0	0	0	500
Total Expenditures	100	0	100	50	500	0	0	0	550	0	0	0	0	650
BONDS	100	0	100	50	500	0	0	0	550	0	0	0	0	650
Total Funding	100	0	100	50	500	0	0	0	550	0	0	0	0	650

Project Status:

\$0 spent and encumbered through February 2016 FY16 - Design in progress.

Project: J4237-FY2010 MD175/OAKLAND MILLS ROAD INTERCHANGE

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. One will be the southern portion. Phase two will be the northern roadway and bridge construction.

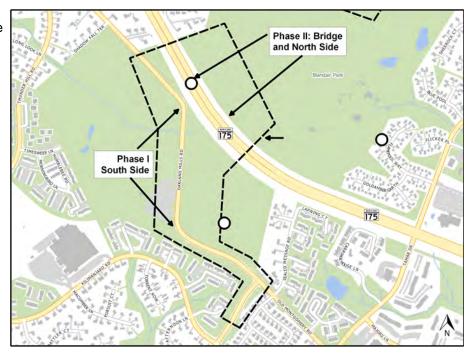
Project Schedule

- FY17 Construction of phase 1 continues, design of phase 2.
- FY18 Construction of phase 2.
- FY19 Phase 2 construction continues.
- FY20 Complete.

Operating Budget Impact

Annual Bond Redemption \$ \$1,035,000

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	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	4,000	0	4,000	1,000	0	0	0	0	1,000	0	0	0	0	5,000
CONSTRUCTION	10,000	0	10,000	8,000	0	0	0	0	8,000	0	0	0	0	18,000
Total Expenditures	14,000	0	14,000	9,000	0	0	0	0	9,000	0	0	0	0	23,000
BONDS	0	0	0	9,000	0	0	0	0	9,000	0	0	0	0	9,000
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	9,000	0	0	0	0	9,000	0	0	0	0	23,000

Project Status:

\$9,847,199 spent and encumbered through February 2016
FY16 - Phase 1 construction continues. Design of Phase 2 in progress.

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

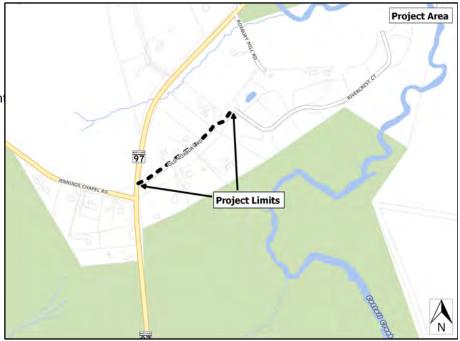
FY17 - Complete design, land acquisition.

FY18 - Construction and close.

Operating Budget Impact

Annual Bond Redemption \$ \$40,950

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane mile of new roadway.



ROAD CONSTRUCTION PROJECTS

Project: FY2014 OLD ROXBURY ROAD Number: J4239

(In Thousands)					Five	e Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	175	60	235	0	0	0	0	0	0	0	0	0	0	235
LAND ACQUISITION	0	75	75	0	0	0	0	0	0	0	0	0	0	75
CONSTRUCTION	0	0	0	600	0	0	0	0	600	0	0	0	0	600
Total Expenditures	175	135	310	600	0	0	0	0	600	0	0	0	0	910
BONDS	0	135	135	600	0	0	0	0	600	0	0	0	0	735
EXCISE TAX BACKED BONDS	175	0	175	0	0	0	0	0	0	0	0	0	0	175
Total Funding	175	135	310	600	0	0	0	0	600	0	0	0	0	910

Project Status:

\$67,068 spent and encumbered through February 2016 FY16 - Design in progress.

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 will replace J4168 in FY18.

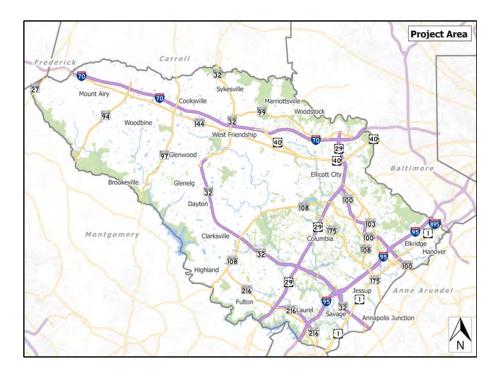
Project Schedule

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	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	0	0	150	50	50	50	0	300	0	0	0	0	300
LAND ACQUISITION	0	0	0	0	50	50	50	0	150	0	0	0	0	150
CONSTRUCTION	0	0	0	0	250	250	250	250	1,000	250	0	0	0	1,250
Total Expenditures	0	0	0	150	350	350	350	250	1,450	250	0	0	0	1,700
BONDS	0	0	0	150	350	350	350	250	1,450	250	0	0	0	1,700
Total Funding	0	0	0	150	350	350	350	250	1,450	250	0	0	0	1,700

Project Status:

\$0 spent and encumbered through February 2016

Project: J4241-FY2011 US RT 1 RT 175 to MONTEVIDEO ROAD Number: J4241

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

FY17 - Design, land acquisition and utility construction.

FY18 - Construction.

FY19 - Close.

Operating Budget Impact

Annual Bond Redemption \$ \$792,000

Estimated annual maintenance costs upon construction completion: No Increase.



ROAD CONSTRUCTION PROJECTS

Number: J4241

Project: FY2011 US RT 1 RT 175 to MONTEVIDEO ROAD

(In Thousands)		Five	Year Ca	apital Pro	gram		Master Plan							
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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	0	50	0	0	0	0	0	0	0	0	0	0	50
EXCISE TAX BACKED BONDS	4,750	0	4,750	0	0	0	0	0	0	0	0	0	0	4,750
Total Funding	5,550	0	5,550	12,100	0	0	0	0	12,100	0	0	0	0	17,650

Project Status:

\$675,856 spent and encumbered through February 2016 FY16 - Design and land acquisition in progress.

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

FY17 - Design.

FY18 - Design and Land Acquisition.

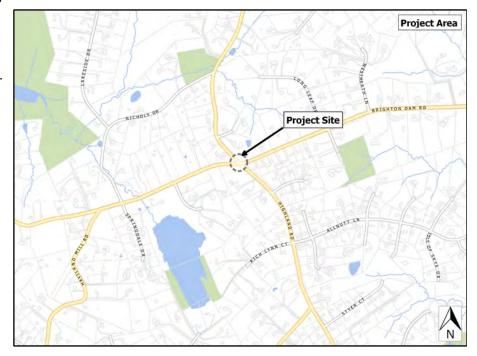
FY19 - Construction.

FY20 - Close.

Operating Budget Impact

Annual Bond Redemption \$ \$67,050

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	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	265	0	265	0	100	0	0	0	100	0	0	0	0	365	
LAND ACQUISITION	0	0	0	125	0	0	0	0	125	0	0	0	0	125	
CONSTRUCTION	0	0	0	0	1,000	0	0	0	1,000	0	0	0	0	1,000	
Total Expenditures	265	0	265	125	1,100	0	0	0	1,225	0	0	0	0	1,490	
BONDS	0	0	0	125	1,100	0	0	0	1,225	0	0	0	0	1,225	
EXCISE TAX BACKED BONDS	265	0	265	0	0	0	0	0	0	0	0	0	0	265	
Total Funding	265	0	265	125	1,100	0	0	0	1,225	0	0	0	0	1,490	

Project Status:

\$0 spent and encumbered through February 2016 FY16 - Design in progress.

Project: J4244-FY2015 BUSINESS PARKWAY-BLUESTREAM DRIVE EMERGENCY ACCESS

Description

A project to design and construct a connection between Business Parkway and Bluestream Drive to act as an emergency access or exit. This connection will be approximately 500 feet in length.

Justification

The Fire and Police Departments prefer to have more than one way in and out of the Bluestream Development and a connection between Business Parkway and Bluestream will be provided for emergency access/egress only. This connection will also provide a place for the Trinity Episcopal Church to unload their hearse in a location that provides easier access to the adjacent cemetery.

Remarks

Request represents program advancement.

Project Schedule

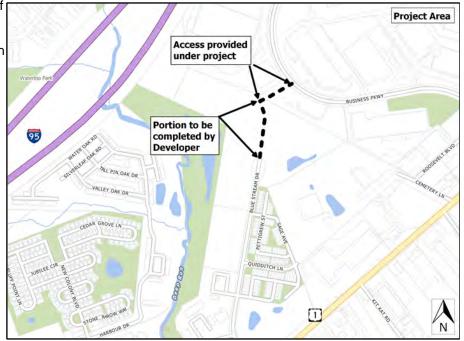
FY17 - Land acquisition and construction.

FY18 - Construction and Close.

Operating Budget Impact

Annual Bond Redemption \$ \$10,350

Estimated annual maintenance costs upon construction completion: \$19,000 per two lane mile of new roadway.



ROAD CONSTRUCTION PROJECTS

Number: J4244

Project: FY2015 BUSINESS PARKWAY-BLUESTREAM DRIVE EMERGENCY ACCESS

(In Thousands)					Five	Year Ca	apital Pro	ogram	Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	35	10	45	0	0	0	0	0	0	0	0	0	0	45
LAND ACQUISITION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
CONSTRUCTION	0	175	175	0	0	0	0	0	0	0	0	0	0	175
Total Expenditures	45	185	230	0	0	0	0	0	0	0	0	0	0	230
BONDS	45	185	230	0	0	0	0	0	0	0	0	0	0	230
Total Funding	45	185	230	0	0	0	0	0	0	0	0	0	0	230

Project Status:

\$23 spent and encumbered through February 2016 FY16 - Design in progress.

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

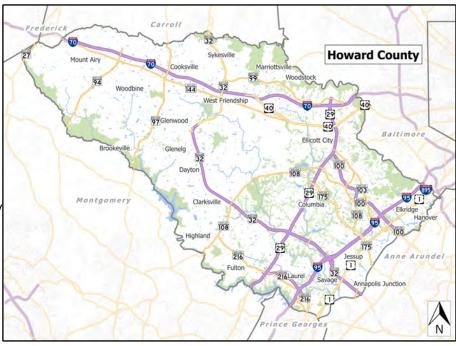
Funds may be used to acquire easements or ROW adjacent to the roadway/byway to accommodate the improvements.

Project Schedule

FY17 - 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)		Five	Year Ca	apital Pro	ogram	Master Plan								
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	30	30	0	0	0	0	0	0	0	0	0	0	30
CONSTRUCTION	0	200	200	0	0	0	0	0	0	0	0	0	0	200
Total Expenditures	Total Expenditures 0 23		230	0	0	0	0	0	0	0	0	0	0	230
BONDS	0	180	180	0	0	0	0	0	0	0	0	0	0	180
GRANTS	0	50	50	0	0	0	0	0	0	0	0	0	0	50
Total Funding	0	230	230	0	0	0	0	0	0	0	0	0	0	230

Project Status:

\$0 spent and encumbered through February 2016
Preliminary plans have been prepared for the mile marker 14 site at the corner of Frederick Rd and US40. Final design requirements and potential cost sharing arrangements are being determined by State Highway Administration.

Project: J4246-FY2018 OLD MONTGOMERY ROAD AT BRIGHTFIELD ROAD INTERSECTION

IMPROVEMENTS

Description

A project to reconfigure the intersection of Old Montgomery Road and Brightfield Annual Bond Redemption \$ \$85,500 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 Schedule

FY18 - Study.

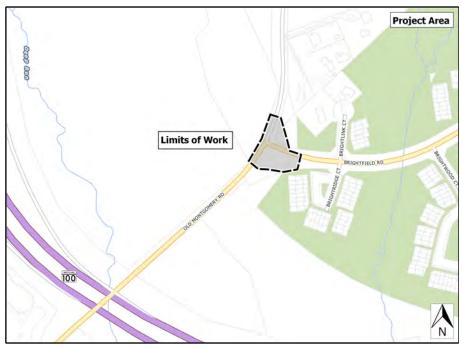
FY19 - Design.

FY20 - Land Acquisition.

FY21 - Construction.

Operating Budget Impact

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	Year Ca	apital Pro	gram	Master Plan								
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	0	0	75	200	0	75	0	350	0	0	0	0	350
LAND ACQUISITION	0	0	0	0	0	50	0	0	50	0	0	0	0	50
CONSTRUCTION	0	0	0	0	0	0	1,500	0	1,500	0	0	0	0	1,500
Total Expenditures	0	0	0	75	200	50	1,575	0	1,900	0	0	0	0	1,900
BONDS	0	0	0	75	200	50	1,575	0	1,900	0	0	0	0	1,900
Total Funding	0	0	0	75	200	50	1,575	0	1,900	0	0	0	0	1,900

Project Status : \$0 spent and encumbered through February 2016

Project: J4247-FY2017 KIT KAT ROAD Number: J4247

Description

A project to improve the safety of Kat 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 \$19,000 per two lane mile of new roadway. the road.

Operating Budget Impact

Annual Bond Redemption \$ \$79,875

Estimated annual maintenance costs upon construction completion:

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

- 1. Project to be coordinated with SHA's project to install a traffic light at the intersection of US1 and Kit Kat Road.
- 2. Request represents project initiation.

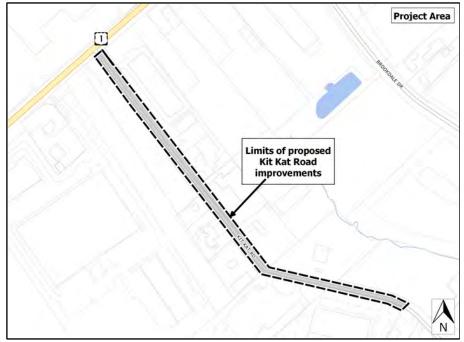
Project Schedule

FY17 - Study.

FY18 - Design.

FY19 - Land acquisition.

FY20 - Construction.



ROAD CONSTRUCTION PROJECTS

Project: FY2017 KIT KAT ROAD Number: J4247

(In Thousands)	(In Thousands)						apital Pro	ogram	Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	25	25	150	0	0	0	0	150	0	0	0	0	175
LAND ACQUISITION	0	0	0	0	200	0	0	0	200	0	0	0	0	200
CONSTRUCTION	0	0	0	0	0	1,400	0	0	1,400	0	0	0	0	1,400
Total Expenditures	0	25	25	150	200	1,400	0	0	1,750	0	0	0	0	1,775
BONDS	0	25	25	150	200	1,400	0	0	1,750	0	0	0	0	1,775
Total Funding	0	25	25	150	200	1,400	0	0	1,750	0	0	0	0	1,775

Project Status : \$0 spent and encumbered through February 2016

Project: J4248-FY2017 SAVAGE AREA COMPLETE STREETS 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. Concept plans and cost estimates were completed on June 15, 2015.
- 2. A community meeting was held on July 14, 2015 to present the concepts to the Savage Community. The proposed improvements are supported by the community.

Project Schedule

- FY17 Start Design.
- FY18 Complete Design/Start Construction.
- FY19 Complete Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$118,125

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	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	300	300	75	225	0	0	0	300	0	0	0	0	600
LAND ACQUISITION	0	25	25	0	0	0	0	0	0	0	0	0	0	25
CONSTRUCTION	0	0	0	500	1,500	0	0	0	2,000	0	0	0	0	2,000
Total Expenditures	0	325	325	575	1,725	0	0	0	2,300	0	0	0	0	2,625
BONDS	0	325	325	575	1,725	0	0	0	2,300	0	0	0	0	2,625
Total Funding	0	325	325	575	1,725	0	0	0	2,300	0	0	0	0	2,625

Project Status : \$0 spent and encumbered through February 2016

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 Annual Bond Redemption \$ \$236,250 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. Request represents project initiation.

Project Schedule

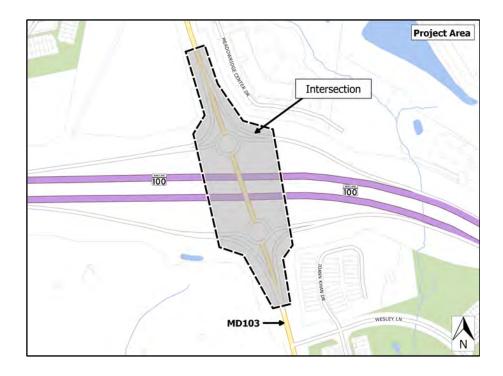
FY17 - Design.

FY18 - Design and Construction.

FY19/20 - Construction and Close.

Operating Budget Impact

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	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	750	750	0	0	0	0	0	0	0	0	0	0	750
CONSTRUCTION	0	0	0	5,000	0	0	0	0	5,000	0	0	0	0	5,000
Total Expenditures	0	750	750	5,000	0	0	0	0	5,000	0	0	0	0	5,750
BONDS	0	250	250	5,000	0	0	0	0	5,000	0	0	0	0	5,250
DEVELOPER CONTRIBUTION	0	500	500	0	0	0	0	0	0	0	0	0	0	500
Total Funding	0	750	750	5,000	0	0	0	0	5,000	0	0	0	0	5,750

Project Status : \$0 spent and encumbered through February 2016

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

Request represents additional funds required for inspection services.

Project Schedule

Ongoing Program



ROAD CONSTRUCTION PROJECTS

Number: J4711

Project: FY2011 DEVELOPER INSPECTION PROGRAM

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	8,000	1,000	9,000	3,000	0	3,000	0	3,000	9,000	0	0	0	0	18,000
Total Expenditures	8,000	1,000	9,000	3,000	0	3,000	0	3,000	9,000	0	0	0	0	18,000
DEVELOPER CONTRIBUTION	8,000	1,000	9,000	3,000	0	3,000	0	3,000	9,000	0	0	0	0	18,000
Total Funding	8,000	1,000	9,000	3,000	0	3,000	0	3,000	9,000	0	0	0	0	18,000

Project Status: \$3,381,967 spent and encumbered through February 2016

Howard County, MD FY2017 Council Approved Capital Budget Program: SIDEWALKS

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
K5035 FY1998 SCHOOL ROUTE PATHWAYS or SIDEWALKS	В	833	100	933	0	500	0	0	0	1,433
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	988	100	1,088	0	500	0	0	0	1,588
K5036 FY1998 ROUTINE SIDEWALK / WALKWAY EXTENSIONS	В	700	120	820	550	0	0	0	0	1,370
A project to design and construct routine sidewalk and walkway extensions up to about 1,000 feet in length.	D	20	30	50	0	0	0	0	0	50
The state of the s	Total	720	150	870	550	0	0	0	0	1,420
K5040 FY2005 GUILFORD RD PEDESTRIAN/BIKE	В	685	0	685	770	0	400	80	430	2,365
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	770	0	400	80	430	2,405
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	0	0	35	25	25	566
	Р	2,899	0	2,899	0	0	965	975	975	5,814
	Total	4,170	0	4,170	0	0	1,000	1,000	1,000	7,170
K5054 FY2003 ROADSIDE IMPROVEMENT PROGRAM This project is to repair, replace or install sidewalks and	В	1,965	0	1,965	0	0	0	0	0	1,965
ramps for disability areas, curbs, trees, and guardrails to comply with applicable Federal, State and County codes,	D	350	0	350	0	0	0	0	0	350
and to reduce liabilities due to deteriorating appurtenances within County rights-of-way.	Р	1,400	0	1,400	0	0	500	500	0	2,400
within County rights-or-way.	Total	3,715	0	3,715	0	0	500	500	0	4,715
K5061 FY2007 PEDESTRIAN PLAN PROJECTS	В	1,091	100	1,191	650	650	650	0	0	3,141
A project for the ongoing evaluation, design and construction of pedestrian improvements listed in the Howard County Pedestrian Master Plan.	D	200	100	300	0	0	0	0	0	300
The state of the s	G	386	0	386	0	0	0	0	0	386
	Р	750	0	750	0	0	0	0	0	750
	Total	2,427	200	2,627	650	650	650	0	0	4,577

June 01, 2016 Howard County, MD Version : Council Approved

Howard County, MD FY2017 Council Approved Capital Budget Program: SIDEWALKS

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
K5062 FY2009 STATE ROADS SIDEWALK RETROFIT PROGRAM	В	100	100	200	50	50	50	0	0	350
A project to design and construct improved pedestrian access along State roads.	G	100	0	100	50	50	50	0	0	250
•	Total	200	100	300	100	100	100	0	0	600
K5063 FY2017 NORTH LAUREL ROAD SIDEWALK A project for the design and construction of a sidewalk	В	0	0	0	75	25	120	0	0	220
along the southwest side of North Laurel Road from Linville Ave to US1.	Total	0	0	0	75	25	120	0	0	220
K5064 FY2017 MISSION ROAD SIDEWALK A project to install sidewalk along parts of Mission Road.	В	0	0	0	75	210	0	0	0	285
A project to install sidewalk along parts of ivission road.	Total	0	0	0	75	210	0	0	0	285
K5065 FY2018 DONCASTER DRIVE SIDEWALK A project to construct approximately 1,200 LF of sidewalk	Р	0	0	0	50	60	0	0	0	110
along Doncaster Drive from Roundhill Road to Hale Haven Road.	Total	0	0	0	50	60	0	0	0	110
K5066 FY2014 BICYCLE PLAN PROJECTS A project for the implementation of the comprehensive	В	1,180	136	1,316	1,600	1,600	1,300	0	0	5,816
Howard County Bicycle Master Plan.	D	100	0	100	100	100	100	0	0	400
	G	380	64	444	100	100	100	0	0	744
	Total	1,660	200	1,860	1,800	1,800	1,500	0	0	6,960
K5067 ADA RAMPS COMPREHENSIVE STUDY PROGRAM	P	0	0	0	0	0	0	600	0	600
A program to self-evaluate Countywide ramps and curb cuts in compliance with American with Disabilities Act 1990 (ADA) requirements.	Total	0	0	0	0	0	0	600	0	600
K5068 ADA RAMPS UPGRADE PROGRAM A program to upgrade sidewalk ramps and curb cuts in	В	0	500	500	3,000	3,000	3,000	3,000	3,000	15,500
compliance with Federal Americans with Disabilities Act 1990 (ADA) requirements.	Total	0	500	500	3,000	3,000	3,000	3,000	3,000	15,500
K5069 BITUMINOUS CURB REPLACEMENT PROGRAM A program to replace bituminous curbs with concrete ones.	В	0	500	500	1,000	1,000	1,000	1,000	1,000	5,500
A program to replace bituininous curbs with collete ones.	Total	0	500	500	1,000	1,000	1,000	1,000	1,000	5,500
SIDEWALKS Total		14,605	1,750	16,355	8,070	7,345	8,270	6,180	5,430	51,650

June 01, 2016 Howard County, MD Version : Council Approved

Howard County, MD FY2017 Council Approved Capital Budget (\$000) SIDE-SIDEWALKS

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	7,344	1,556	8,900
D	DEVELOPER CONTRIBUTION	670	130	800
G	GRANTS	866	64	930
0	OTHER SOURCES	481	0	481
Р	PAY AS YOU GO	5,244	0	5,244
Total		14,605	1,750	16,355

2017 Council Approved 5 Year Capital Budget Project Type Summary (SIDE-SIDEWALKS)

Rev	renue Source	Prior Approp	Current FY	2018	2019	2020	2021	2022	5 Year Total
В	BONDS	7,344	1,556	7,770	7,035	6,520	4,080	4,430	38,735
D	DEVELOPER CONTRIBUTION	670	130	100	100	100	0	0	1,100
G	GRANTS	866	64	150	150	150	0	0	1,380
0	OTHER SOURCES	481	0	0	0	35	25	25	566
Р	PAY AS YOU GO	5,244	0	50	60	1,465	2,075	975	9,869
Tota	al	14,605	1,750	8,070	7,345	8,270	6,180	5,430	51,650

SIDEWALKS

Number: K5035

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 Old Frederick Road, Montgomery Road, Crescent Road/Northfield Road, Winter's Lane and Florey Road.
- 4. Request represents program advancement.

Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$64,485



Project: FY1998 SCHOOL ROUTE PATHWAYS or SIDEWALKS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	222	0	222	0	150	0	0	0	150	0	0	0	0	372
LAND ACQUISITION	135	0	135	0	0	0	0	0	0	0	0	0	0	135
CONSTRUCTION	623	100	723	0	350	0	0	0	350	0	0	0	0	1,073
ADMINISTRATION	8	0	8	0	0	0	0	0	0	0	0	0	0	8
Total Expenditures	988	100	1,088	0	500	0	0	0	500	0	0	0	0	1,588
BONDS	833	100	933	0	500	0	0	0	500	0	0	0	0	1,433
PAY AS YOU GO	155	0	155	0	0	0	0	0	0	0	0	0	0	155
Total Funding	988	100	1,088	0	500	0	0	0	500	0	0	0	0	1,588

SIDEWALKS

Number: K5035

Project Status:

\$454,894 spent and encumbered through February 2016 FY16 - Projects in design - Northfield Road, Montgomery Road.

Projects completed - 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.

Number: K5036

Description

A project to design and construct routine sidewalk and walkway extensions up to Annual Bond Redemption \$ \$61,650 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.

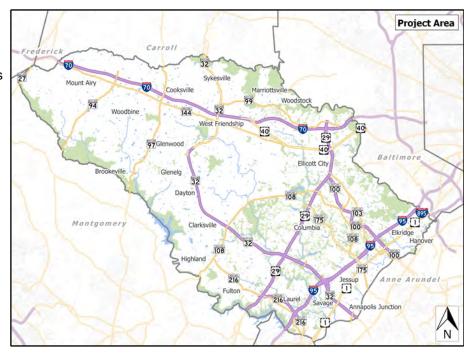
Remarks

- 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: Montgomery Rd at Lynn Ct, Elberta Dr at South Haven Dr., Falls Run Rd., and MD108 at Jericho Rd.
- 4. Request represents program advancement.

Project Schedule

Program

Operating Budget Impact



Project: FY1998 ROUTINE SIDEWALK / WALKWAY EXTENSIONS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	140	110	250	0	0	0	0	0	0	0	0	0	0	250
LAND ACQUISITION	5	15	20	0	0	0	0	0	0	0	0	0	0	20
CONSTRUCTION	571	25	596	550	0	0	0	0	550	0	0	0	0	1,146
ADMINISTRATION	2	0	2	0	0	0	0	0	0	0	0	0	0	2
EQUIPMENT & FURNISHINGS	2	0	2	0	0	0	0	0	0	0	0	0	0	2
Total Expenditures	720	150	870	550	0	0	0	0	550	0	0	0	0	1,420
BONDS	700	120	820	550	0	0	0	0	550	0	0	0	0	1,370
DEVELOPER CONTRIBUTION	20	30	50	0	0	0	0	0	0	0	0	0	0	50
Total Funding	720	150	870	550	0	0	0	0	550	0	0	0	0	1,420

SIDEWALKS

Number: K5036

Project Status:

\$597,140 spent and encumbered through February 2016

FY16 - Construction complete - 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. Johns Ln and Springfield Dr.

SIDEWALKS

Number: K5040

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 D1140 and J4214.
- 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

FY17 - Phase 1 Design and Land Acquisition.

FY18 - Phase 1 Land Acquisition and Construction.

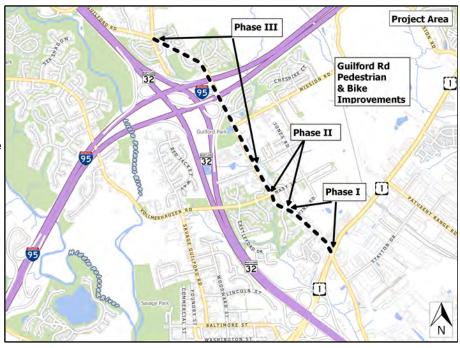
FY19 - Phase 1 Construction.

FY20-24 - Future Phases.

Operating Budget Impact

Annual Bond Redemption \$ \$106,425

Estimated annual maintenance costs upon completion: \$19,000 per two lane miles of additional roadway. No change for sidewalks.



Project: FY2005 GUILFORD RD PEDESTRIAN/BIKE IMPROVE

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	215	0	215	40	0	50	50	30	170	0	0	0	0	388
LAND ACQUISITION	320	0	320	30	0	0	30	0	60	0	0	0	0	380
CONSTRUCTION	180	0	180	700	0	350	0	400	1,450	0	0	0	0	1,630
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	725	0	725	770	0	400	80	430	1,680	0	0	0	0	2,40
BONDS	685	0	685	770	0	400	80	430	1,680	0	0	0	0	2,36
PAY AS YOU GO	40	0	40	0	0	0	0	0	0	0	0	0	0	40
Total Funding	725	0	725	770	0	400	80	430	1,680	0	0	0	0	2,40

SIDEWALKS

Number: K5040

Project Status:

\$317,278 spent and encumbered through February 2016
FY16 - Phase 1 - Study complete, design in progress.
Phase 2 - Winterbrook to Vollmerhausen construction complete.

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

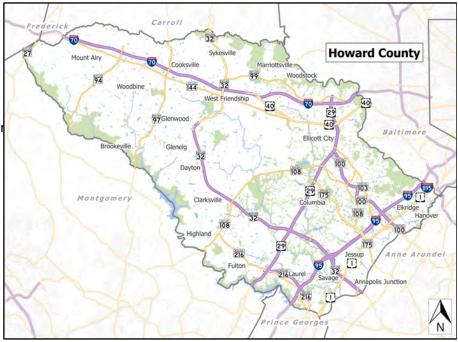
- 1. This project was first funded in FY99 as a replacement for one begun in FY92.
- 2. The programmed monies will be used on a first-come first-served basis.
- 3. OTHER funds represent private homeowner reimbursements.
- 4. County will be responsible for walks damaged by tree root and/or County water 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 Number: K5043

SIDEWALKS

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	256	0	256	0	0	25	25	25	75	25	25	25	25	431
CONSTRUCTION	3,840	0	3,840	0	0	975	975	975	2,925	975	975	975	975	10,665
ADMINISTRATION	74	0	74	0	0	0	0	0	0	0	0	0	0	74
Total Expenditures	4,170	0	4,170	0	0	1,000	1,000	1,000	3,000	1,000	1,000	1,000	1,000	11,170
BONDS	790	0	790	0	0	0	0	0	0	0	0	0	0	790
OTHER SOURCES	481	0	481	0	0	35	25	25	85	25	25	25	25	666
PAY AS YOU GO	2,899	0	2,899	0	0	965	975	975	2,915	975	975	975	975	9,714
Total Funding	4,170	0	4,170	0	0	1,000	1,000	1,000	3,000	1,000	1,000	1,000	1,000	11,170

Project Status: \$3,855,015 spent and encumbered through February 2016

SIDEWALKS

Number: K5054

Description

This project is to repair, replace or install sidewalks and ramps for disability areas, 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

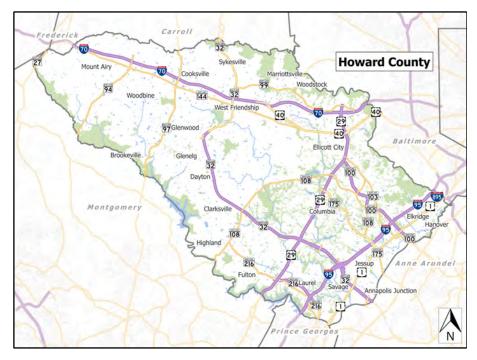
- 1. Locations to be determined on a requested or as needed basis.
- 2. Developer monies can be used in lieu of them making limited improvements.

Project Schedule

FY17 - Program funding not available. Close at program completion.

Operating Budget Impact

Annual Bond Redemption \$\$88,425



Project: FY2003 ROADSIDE IMPROVEMENT PROGRAM

(In Thousands)					Five	e Year Ca	apital Pro	gram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	200	0	200	0	0	10	10	0	20	0	0	0	0	220	
CONSTRUCTION	3,495	0	3,495	0	0	480	480	0	960	0	0	0	0	4,455	
ADMINISTRATION	20	0	20	0	0	10	10	0	20	0	0	0	0	40	
Total Expenditures	3,715	0	3,715	0	0	500	500	0	1,000	0	0	0	0	4,715	
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	0	0	500	500	0	1,000	0	0	0	0	2,400	
Total Funding	3,715	0	3,715	0	0	500	500	0	1,000	0	0	0	0	4,715	

SIDEWALKS

Number: K5054

Project Status: \$3,278,401 spent and encumbered through February 2016

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

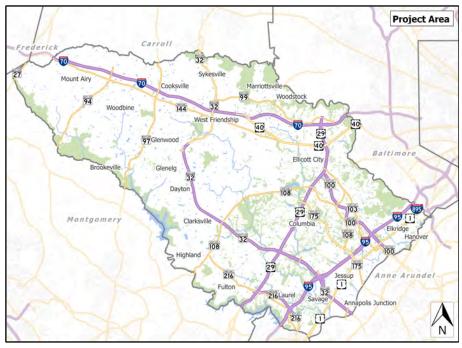
- 1. Project addresses collector classification roads. Local roads are addressed under other programs.
- 2. Project is a cooperative effort of the Department of Public Works and the Department of Planning and Zoning.
- 3. Grant represents Transportation Enhancement Grant from SHA.
- 4. Construction of some projects may be dependent on donation of necessary easements.
- 5. Request represents program advancement.

Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$141,345



Project: FY2007 PEDESTRIAN PLAN PROJECTS Number: K5061

SIDEWALKS

(In Thousands)					Five	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	490	200	690	100	100	100	0	0	300	0	0	0	0	990	
LAND ACQUISITION	160	0	160	50	50	50	0	0	150	0	0	0	0	310	
CONSTRUCTION	1,767	0	1,767	500	500	500	0	0	1,500	0	0	0	0	3,267	
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10	
Total Expenditures	2,427	200	2,627	650	650	650	0	0	1,950	0	0	0	0	4,577	
BONDS	1,091	100	1,191	650	650	650	0	0	1,950	0	0	0	0	3,141	
DEVELOPER CONTRIBUTION	200	100	300	0	0	0	0	0	0	0	0	0	0	300	
GRANTS	386	0	386	0	0	0	0	0	0	0	0	0	0	386	
PAY AS YOU GO	750	0	750	0	0	0	0	0	0	0	0	0	0	750	
Total Funding	2,427	200	2,627	650	650	650	0	0	1,950	0	0	0	0	4,577	

Project Status:

\$1,208,757 spent and encumbered through February 2016
FY16 Projects in design: Loc 52 - Whiskey Bottom Road (7 segments); Loc 160 - Guilford Road; Loc 214 - Twin Rivers.
Construction Complete: Loc 45 - Howard St.; Loc 60 - Assateague Drive; Loc 143 - Broken Land Pathway.

Number: K5062

Description

A project to design and construct improved pedestrian access along State roads. Annual Bond Redemption \$\$15,750

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.

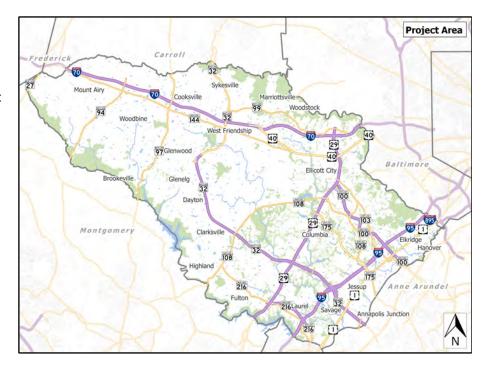
Remarks

- 1. GRANT funds are State Retrofit Sidewalk Program available to complement County funds. The County must provide matching funds for each site.
- 2. Request represents program advancement.
- 3. Program is coordinated with SHA.

Project Schedule

Program

Operating Budget Impact



SIDEWALKS Number: K5062

Project: FY2009 STATE ROADS SIDEWALK RETROFIT PROGRAM

(In Thousands)					Five	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	50	10	60	10	10	10	0	0	30	0	0	0	0	90	
LAND ACQUISITION	80	5	85	5	5	5	0	0	15	0	0	0	0	100	
CONSTRUCTION	70	85	155	85	85	85	0	0	255	0	0	0	0	410	
Total Expenditures	200	100	300	100	100	100	0	0	300	0	0	0	0	600	
BONDS	100	100	200	50	50	50	0	0	150	0	0	0	0	350	
GRANTS	100	0	100	50	50	50	0	0	150	0	0	0	0	250	
Total Funding	200	100	300	100	100	100	0	0	300	0	0	0	0	600	

Project Status:

\$0 spent and encumbered through February 2016
FY16 - Projects in design: US1 Southbound from Whiskey Bottom to County Line; US1 Southbound from Crestmount to Cedar; US40 Eastbound from Chatham to St. Johns; MD99 Westbound from Raleigh Tavern to Wetherburn.

Number: K5063

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

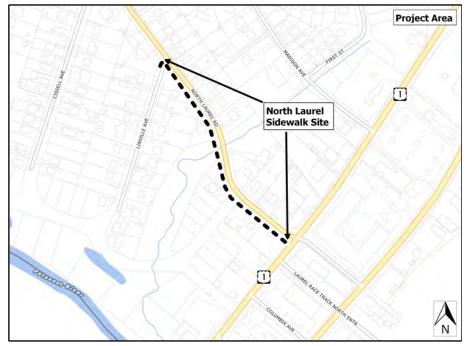
FY18 - Design.

FY19 - Design and Land Acquisition.

FY20 - Construction.

Operating Budget Impact

Annual Bond Redemption \$ \$9,900



Project: FY2017 NORTH LAUREL ROAD SIDEWALK Number: K5063

(In Thousands)					Five	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	0	0	0	75	0	15	0	0	90	0	0	0	0	90	
LAND ACQUISITION	0	0	0	0	25	0	0	0	25	0	0	0	0	25	
CONSTRUCTION	0	0	0	0	0	100	0	0	100	0	0	0	0	100	
ADMINISTRATION	0	0	0	0	0	5	0	0	5	0	0	0	0	5	
Total Expenditures	0	0	0	75	25	120	0	0	220	0	0	0	0	220	
BONDS	0	0	0	75	25	120	0	0	220	0	0	0	0	220	
Total Funding	0	0	0	75	25	120	0	0	220	0	0	0	0	220	

SIDEWALKS

Project Status : \$0 spent and encumbered through February 2016

Project: K5064-FY2017 MISSION ROAD SIDEWALK

SIDEWALKS

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

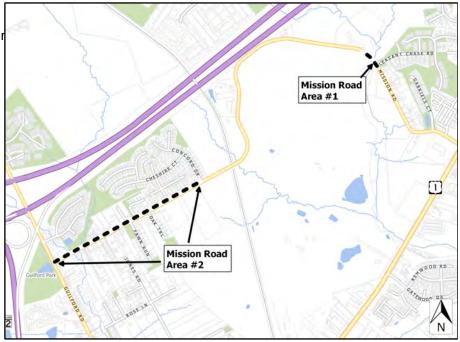
Project Schedule

FY18 - Design.

FY19 - Land acquisition and construction.

Operating Budget Impact

Annual Bond Redemption \$ \$12,825



Project: FY2017 MISSION ROAD SIDEWALK Number: K5064

SIDEWALKS

(In Thousands)	n Thousands)						apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	0	0	0	75	0	0	0	0	75	0	0	0	0	75	
LAND ACQUISITION	0	0	0	0	10	0	0	0	10	0	0	0	0	10	
CONSTRUCTION	0	0	0	0	200	0	0	0	200	0	0	0	0	200	
Total Expenditures	0	0	0	75	210	0	0	0	285	0	0	0	0	285	
BONDS	0	0	0	75	210	0	0	0	285	0	0	0	0	285	
Total Funding	0	0	0	75	210	0	0	0	285	0	0	0	0	285	

Project Status : \$0 spent and encumbered through February 2016

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.

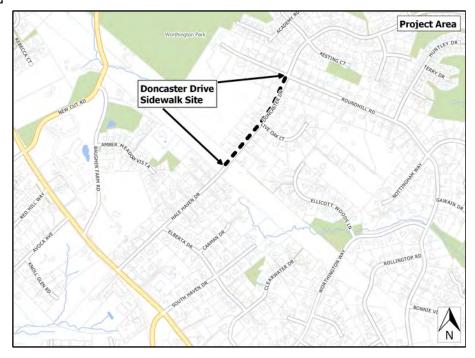
Remarks

Project Schedule

FY18 - Design and land acquisition.

FY19 - Construction.

Operating Budget Impact



Project: FY2018 DONCASTER DRIVE SIDEWALK Number: K5065

SIDEWALKS

(In Thousands)					Five	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	0	0	0	25	0	0	0	0	25	0	0	0	0	25	
LAND ACQUISITION	0	0	0	25	0	0	0	0	25	0	0	0	0	25	
CONSTRUCTION	0	0	0	0	60	0	0	0	60	0	0	0	0	60	
Total Expenditures	0	0	0	50	60	0	0	0	110	0	0	0	0	110	
PAY AS YOU GO	0	0	0	50	60	0	0	0	110	0	0	0	0	110	
Total Funding	0	0	0	50	60	0	0	0	110	0	0	0	0	110	

Project Status : \$0 spent and encumbered through February 2016

Project: K5066-FY2014 BICYCLE PLAN PROJECTS

SIDEWALKS

Number: K5066

Description

A project for the implementation of the comprehensive Howard County Bicycle Master Plan. The candidate project list will be updated annually by the Department of Planning and Zoning in coordination with the Department of Public Works and the Office of Transportation.

Justification

The FY2013 Howard County Bicycle Master Plan will provide 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.
- 4. Replacing unsafe storm drainage grates for cyclists.

Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$261,720



Project: FY2014 BICYCLE PLAN PROJECTS Number: K5066

SIDEWALKS

(In Thousands)					Five	Year Ca	pital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	200	200	400	300	300	200	0	0	800	0	0	0	0	1,200	
LAND ACQUISITION	210	0	210	300	300	200	0	0	800	0	0	0	0	1,010	
CONSTRUCTION	1,250	0	1,250	1,200	1,200	1,100	0	0	3,500	0	0	0	0	4,750	
Total Expenditures	1,660	200	1,860	1,800	1,800	1,500	0	0	5,100	0	0	0	0	6,960	
BONDS	1,180	136	1,316	1,600	1,600	1,300	0	0	4,500	0	0	0	0	5,816	
DEVELOPER CONTRIBUTION	100	0	100	100	100	100	0	0	300	0	0	0	0	400	
GRANTS	380	64	444	100	100	100	0	0	300	0	0	0	0	744	
Total Funding	1,660	200	1,860	1,800	1,800	1,500	0	0	5,100	0	0	0	0	6,960	

Project Status:

\$335,920 spent and encumbered through February 2016

Projects completed: Pedestrian/Bicycle Improvements Cedar Ln and Dobbin Rd/McGaw Rd 30% Concept Plans January 15. Bike lanes along Gorman Road from I95 bridge to US 1 (Bike Howard Project #4); Bike lanes along Freestate Drive from Gorman Road to US1; Stevens Forest Road from Broken Land Parkway to Beechwood Drive (Bike Howard Mid Term Network recommendation); Bike lanes along Vollmerhausen Road from Murray Hill Road to Guilford Road (Bike Howard Project #7); Bike lanes along North Chatham Road from US40 to Ramblewood Road (Bike Howard Project #27); Bike lanes along Old Stockbridge Road from MD103 to MD108 (Bike Howard Long Term Network recommendation); N. Ridge Road from Town and Country Blvd to Rogers Ave (Bike Howard Mid Term Network recommendation); Brightfield Road from Old Montgomery Road to MD103 (Bike Howard Project #26); Homespun Drive from Oakland Mills Road to Cradlerock Way (Bike Howard Long Term Network recommendation).

Proposed Projects: Bike lanes along Centennial Ln from Old Annapolis Rd to Frederick Rd. (Bike Howard Project #18); Pedestrian/Bicycle Improvements Cedar Ln 100% Plans and land acquisition FY16, Construction in FY17. Sidewalk and ADA ramp upgrades at Shaker Drive near Cape Ann Drive; Pedestrian/Bicycle Improvements Dobbin Road/McGaw Road 100% Plans; North Laurel connections planning and preliminary design FY16 (MD bikeway grant), 100% design FY17, Construction and land acquisition FY18. Fort Meade/NSA bike sign installations; bike rack installations (MD grant over two years); bike friendly grates replacements.

FY18 proposed projects including Bike Howard Structured Projects No. 16, 25, 7 (partial), 14 (partial), 13 (partial) and other non-structured segments.

FY 19 proposed projects including Bike Howard Structured Projects No. 21, 2, 10, 61 and other non-structured sections.

FY 20 proposed projects including Bike Howard Structured Projects No. 57.

Number: K5067

Description

A program to self-evaluate Countywide ramps and curb cuts in compliance with American with Disabilities Act 1990 (ADA) requirements. The purpose of the self-evaluation is to evaluate County roadway network and facilities for accessibility.

Justification

A. Self-Evaluation Assessment - The sidewalk ramp upgrades are mandated by governmental laws. Field surveys are conducted for all sidewalks along County roadways including sidewalks, curb ramps, curb cuts, and detectable warning pads. Design elements include width, slope, gaps.

B. Transition Plan - Develop a transition plan to identify deficiencies, outline steps to address, prioritize and plan for the improvements. The current plan is to provide ramps at all locations where the resurfacing will take place in various parts of the County. In the years 2013 through 2015, DPW has placed approximately 1,000 ramps at a cost of approximately \$3.5 million. The County will continue upgrading the remaining ramps and curb cuts through road resurfacing construction to meet ADA requirements. The new element that needs to be provided is to have an inspector inspect the work done to make sure it is in compliance with the latest ADA requirements.

Remarks

County owns and maintains approx. 7,800 each sidewalk ramps.

Project Schedule

FY17 - Program funding not available. Close at program completion.



Project: ADA RAMPS COMPREHENSIVE STUDY PROGRAM

(In Thousands)					Five	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	0	0	0	0	0	0	600	0	600	0	0	0	0	600	
Total Expenditures	0	0	0	0	0	0	600	0	600	0	0	0	0	600	
PAY AS YOU GO	0	0	0	0	0	0	600	0	600	0	0	0	0	600	
Total Funding	0	0	0	0	0	0	600	0	600	0	0	0	0	600	

SIDEWALKS

Number: K5067

Project Status: \$0 spent and encumbered through February 2016

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.

Operating Budget Impact

Annual Bond Redemption \$ \$1,237,500

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.



Project: ADA RAMPS UPGRADE PROGRAM Number: K5068

SIDEWALKS

(In Thousands)					Five	Year Ca	pital Pro	gram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	0	500	500	3,000	3,000	3,000	3,000	3,000	15,000	3,000	3,000	3,000	3,000	27,500
Total Expenditures	0	500	500	3,000	3,000	3,000	3,000	3,000	15,000	3,000	3,000	3,000	3,000	27,500
BONDS	0	500	500	3,000	3,000	3,000	3,000	3,000	15,000	3,000	3,000	3,000	3,000	27,500
Total Funding	0	500	500	3,000	3,000	3,000	3,000	3,000	15,000	3,000	3,000	3,000	3,000	27,500

Project Status: \$0 spent and encumbered through February 2016

Number: K5069

Description

A program to replace bituminous curbs with concrete ones.

Justification

Bituminous curbs replacement is based on the age and maintenance and drainage history. The bituminous 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. Each maintenance shop has spent tremendous efforts in repair, backfill, seed and mulch the affected areas. The homeowners have been constantly concerned that the new replaced bituminous curbs are not matching the color and shape of the old ones. The concrete curb will have a life of 50 years, which is three times more than bituminous curbs. In the long run, installing concrete curb in lieu of bituminous curb is very cost effective.

Remarks

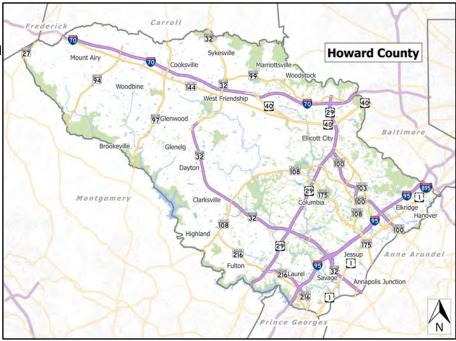
County owns and maintains approx. 1,000,000 linear feet (190 miles) of bituminous curbs and 5,205,700 linear feet (985 miles) of concrete curbs.

Project Schedule

Close at program completion.

Operating Budget Impact

Annual Bond Redemption \$ \$427,500



Project: BITUMINOUS CURB REPLACEMENT PROGRAM

(In Thousands)					Five	Year Ca	pital Pro	ogram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	0	500	500	1,000	1,000	1,000	1,000	1,000	5,000	1,000	1,000	1,000	1,000	9,500
Total Expenditures	0	500	500	1,000	1,000	1,000	1,000	1,000	5,000	1,000	1,000	1,000	1,000	9,500
BONDS	0	500	500	1,000	1,000	1,000	1,000	1,000	5,000	1,000	1,000	1,000	1,000	9,500
Total Funding	0	500	500	1,000	1,000	1,000	1,000	1,000	5,000	1,000	1,000	1,000	1,000	9,500

SIDEWALKS

Number: K5069

Project Status: \$0 spent and encumbered through February 2016

Howard County, MD FY2017 Council Approved Capital Budget Program: LIBRARY PROJECTS

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
L0012 FY2007 MILLER BRANCH/HISTORICAL CENTER A project to replace Howard County Library's (HCL)	В	26,235	0	26,235	0	0	0	0	0	26,235
existing Miller Branch with a new, up-to-date facility on a separate parcel of land.	G	1,710	0	1,710	0	0	0	0	0	1,710
	Total	27,945	0	27,945	0	0	0	0	0	27,945
L0014 FY2011 MILLER BRANCH PHASE II: LIBRARY SPACE CONVERSION	В	6,029	0	6,029	0	0	0	0	0	6,029
This project repurposes the obsolete Howard County Library, Miller Branch into consolidated HCL business	G	2,492	0	2,492	0	0	0	0	0	2,492
offices (23,000sf).	Total	8,521	0	8,521	0	0	0	0	0	8,521
L0015 FY2008 ELKRIDGE BRANCH/SENIOR CENTER A project to provide additional required public library &	В	28,267	1,190	29,457	2,400	0	0	0	0	31,857
senior center space in the RT1 Corridor of Elkridge.	G	0	125	125	0	0	0	0	0	125
	Ο	665	0	665	0	0	0	0	0	665
	Р	0	0	0	500	0	0	0	0	500
	Total	28,932	1,315	30,247	2,900	0	0	0	0	33,147
L0016 FY2012 RENOVATE CENTRAL & EAST COLUMBIA BRANCHES	В	1,774	2,646	4,420	0	0	0	0	0	4,420
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	2,925	2,646	5,571	0	0	0	0	0	5,571
L0017 FY2008 SAVAGE BRANCH A project to provide additional required public library space	В	6,075	0	6,075	0	0	0	0	0	6,075
in the RT1 Corridor of North Laurel.	Total	6,075	0	6,075	0	0	0	0	0	6,075
L0018 FY2017 GLENWOOD BRANCH RENOVATION A project to renovate the Glenwood Branch to include	В	0	0	0	730	0	0	0	0	730
much needed study rooms and classroom space for the benefit of students of all ages.	Total	0	0	0	730	0	0	0	0	730
L0019 FY2018 SOUTHWEST BRANCH Conduct a site survey and feasibility assessment for a new	В	0	0	0	277	5,060	32,000	2,500	0	39,837
HCLS Branch in Howard County's Southwest region.	Total	0	0	0	277	5,060	32,000	2,500	0	39,837
LIBRARY PROJECTS Total		74,398	3,961	78,359	3,907	5,060	32,000	2,500	0	121,826

June 01, 2016 Howard County, MD Version : Council Approved

Howard County, MD FY2017 Council Approved Capital Budget (\$000) LIBRA-LIBRARY PROJECTS

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	68,380	3,836	72,216
G	GRANTS	5,353	125	5,478
0	OTHER SOURCES	665	0	665
Р	PAY AS YOU GO	0	0	0
Total		74,398	3,961	78,359

2017 Council Approved 5 Year Capital Budget Project Type Summary (LIBRA-LIBRARY PROJECTS)

Rev	venue Source	Prior Approp	Current FY	2018	2019	2020	2021	2022	5 Year Total
В	BONDS	68,380	3,836	3,407	5,060	32,000	2,500		0 115,183
G	GRANTS	5,353	125	0	0	0	0		0 5,478
0	OTHER SOURCES	665	0	0	0	0	0		0 665
Р	PAY AS YOU GO	0	0	500	0	0	0		0 500
Tot	al	74,398	3,961	3,907	5,060	32,000	2,500		0 121,826

Project: L0012-FY2007 MILLER BRANCH/HISTORICAL CENTER

Description

A project to replace Howard County Library's (HCL) existing Miller Branch with a Annual Bond Redemption \$ \$1,180,575 new, up-to-date facility on a separate parcel of land. The space and other functional requirements of the new facility are fully defined in the Howard County Library Facilities Assessment & Master Plan of December 2004.

Justification

Based on the Howard County Library Long-Range Facilities Report updated by the HCL Board of Trustees in 1992, 1994, and 1999, the Miller Branch required renovation by the year 2005. The Howard County Library Facilities Assessment & Master Plan of December 2004 determined that the current facility is undersized by a factor of three, and that a 63,000 SF building is required to meet current needs in the Ellicott City service area. The existing Miller Branch will be converted to HCL Business Office space under a separate project (L0014).

Remarks

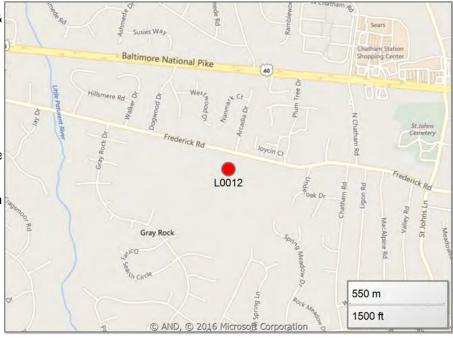
- 1. The HCL Miller Branch was expanded in 1985 from 5,000 SF to 23,500 SF. Initial analysis indicated that renovations/expansion would result in an inadequate facility that would not meet the near term space requirements. The nature and cost of the new facility is outlined in the Howard County Library Facilities Assessment & Master Plan of December 2004. The new Charles E. Miller Branch & Historical Center will include a unique emphasis on history, health, and environmental education. This project has benefited significantly from the new State Capital Grants Program for Public Libraries through the Maryland State Department of Education.
- 2. FY11/12 \$1.7M was added to the project for the initial book collection (\$1M), Teaching Garden (\$200K), and Radio Frequency Identification System (automated tracking, borrowing, and security system) (\$500K).

Project Schedule

FY17 - Project Close Out

Operating Budget Impact

The renovated HCL facility will begin operation in FY12. While Howard County Library Facilities Assessment & Master Plan estimates the facility will require an additional 21 FTEs, HCL's assessment of the implementation of RFID Technology along with the building's efficient design reduces this number to 12 FTEs. Estimated annual utility/custodial costs upon construction completion: \$325,000.00



Project: FY2007 MILLER BRANCH/HISTORICAL CENTER

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	4,700	0	4,700	0	0	0	0	0	0	0	0	0	0	4,700
LAND ACQUISITION	1,000	0	1,000	0	0	0	0	0	0	0	0	0	0	1,000
CONSTRUCTION	19,800	0	19,800	0	0	0	0	0	0	0	0	0	0	19,800
ADMINISTRATION	45	0	45	0	0	0	0	0	0	0	0	0	0	45
EQUIPMENT & FURNISHINGS	2,400	0	2,400	0	0	0	0	0	0	0	0	0	0	2,400
Total Expenditures	27,945	0	27,945	0	0	0	0	0	0	0	0	0	0	27,945
BONDS	26,235	0	26,235	0	0	0	0	0	0	0	0	0	0	26,235
GRANTS	1,710	0	1,710	0	0	0	0	0	0	0	0	0	0	1,710
Total Funding	27,945	0	27,945	0	0	0	0	0	0	0	0	0	0	27,945

Project Status:

\$27,718,245 spent and encumbered through February 2016

FY07/08 - The necessary parcel of land, adjacent to the existing Miller Branch, for this project, has been acquired and a Phase I Environmental Assessment completed.

FY09 - Design underway

FY10 - Design completed; Site Work construction underway; Building construction contract awarded.

FY11/12/13/14 - Site Work & Building construction complete; site & building contracts closed out; contract executed with the Civil Engineer doing the site design for Lutheran Village at Miller's Grant, for the inclusion of the design of the bridge interconnection; design is at the 75% level; finalization of the Lutheran Village SDP and interconnection is somewhat on hold due to the development's inability to reach the critical number of committments to move forward.

FY15 - Design of the bridge is 90% complete. Construction will begin in FY15

FY16 - Bridge construction complete; FY16-17 possible adjustments to bridge approach.

Project: L0014-FY2011 MILLER BRANCH PHASE II: LIBRARY SPACE CONVERSION

Description

This project repurposes the obsolete Howard County Library, Miller Branch into consolidated HCL business offices (23,000sf). Once converted, HCLS administrative staff members, currently working in two locations (HCL Central Branch in a 7,000 SF area, and East Columbia Branch in a 9,000 SF area), will relocate to this unified location, enhancing operating efficiencies and educational opportunities. The building will also provide space for the adjoining senior center activities and other community use.

Justification

Capital Project L0014 renovates the existing Miller Branch into consolidated offices, to include employee work areas, IT support services, meeting spaces, and instructional space for staff training requirements. This project will enhance administrative efficiencies called for in the HCL Facilities Assessment & Master Plan of December 2004.

Remarks

- 1. The former Miller Branch collection has been moved to the Miller Branch & Historical Center, the old facility will be renovated to provide consolidated HCL Business Office space and senior center wellness activities space.
- 2. GRANT represents state funding from Maryland State Department of Education. While HCL requested \$3,799,000 for FY12 & FY13, HCL was awarded a total of \$2,492,335 for the new Administrative Branch.

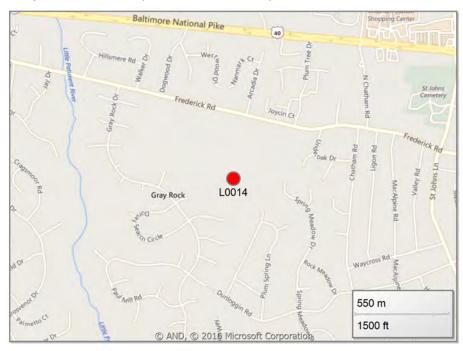
Project Schedule

FY17 - Complete/Project Close Out

Operating Budget Impact

Annual Bond Redemption \$ \$271,305

The Bond funding listed for this project includes both long term bond funding and the use of the master lease program as appropriate.~The renovated HCL business offices will begin operation in FY2014. There will be no impact on ongoing operating costs for HCL. ~Estimated annual utility/custodial costs upon construction completion: No increase



Project: FY2011 MILLER BRANCH PHASE II: LIBRARY SPACE CONVERSION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	750	0	750	0	0	0	0	0	0	0	0	0	0	750
CONSTRUCTION	7,071	0	7,071	0	0	0	0	0	0	0	0	0	0	7,071
ADMINISTRATION	30	0	30	0	0	0	0	0	0	0	0	0	0	30
EQUIPMENT & FURNISHINGS	670	0	670	0	0	0	0	0	0	0	0	0	0	670
Total Expenditures	8,521	0	8,521	0	0	0	0	0	0	0	0	0	0	8,521
BONDS	6,029	0	6,029	0	0	0	0	0	0	0	0	0	0	6,029
GRANTS	2,492	0	2,492	0	0	0	0	0	0	0	0	0	0	2,492
Total Funding	8,521	0	8,521	0	0	0	0	0	0	0	0	0	0	8,521

Project Status:

\$7,997,635 spent and encumbered through February 2016
FY16 - Complete. Project is Close Out.
FY16/17 - Construction of free standing signs.

Description

A project to provide additional required public library & senior center space in the Annual Bond Redemption \$ \$1,433,565 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 The Bond funding listed for this project includes both long term bond amount of Senior Center space available. The library space and other functional funding and the use of the master lease program as appropriate.~Additional 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

FY17 - Begin construction.

FY18 - Construction Complete and Project Close Out.

Operating Budget Impact

FTEs: 6 to 8 ~Estimated annual utility/custodial costs upon construction completion: \$100,000.00



LIBRARY PROJECTS

Number: L0015

Project: FY2008 ELKRIDGE BRANCH/SENIOR CENTER

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	3,860	0	3,860	0	0	0	0	0	0	0	0	0	0	3,860
LAND ACQUISITION	0	338	338	0	0	0	0	0	0	0	0	0	0	338
CONSTRUCTION	25,042	(338)	24,704	0	0	0	0	0	0	0	0	0	0	24,704
ADMINISTRATION	30	0	30	0	0	0	0	0	0	0	0	0	0	30
EQUIPMENT & FURNISHINGS	0	1,315	1,315	2,900	0	0	0	0	2,900	0	0	0	0	4,215
Total Expenditures	28,932	1,315	30,247	2,900	0	0	0	0	2,900	0	0	0	0	33,147
BONDS	28,267	1,190	29,457	2,400	0	0	0	0	2,400	0	0	0	0	31,857
GRANTS	0	125	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
PAY AS YOU GO	0	0	0	500	0	0	0	0	500	0	0	0	0	500
Total Funding	28,932	1,315	30,247	2,900	0	0	0	0	2,900	0	0	0	0	33,147

Project Status:

\$2,278,054 spent and encumbered through February 2016

County is acquiring adjacent property in order to reduce the construction cost. Redesign of project to take place in FY16 based upon acquistion of additional land. Construction Documents are 98% complete. Project is scheduled to bid at the end of March 2016, with select demolition of the existing building to begin in June 2016.

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

 The nature and cost of this renovation project was outlined in the Howard County Library Facilities Assessment & Master Plan of December 2004.
 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.

Project Schedule

FY16 - Limited construction completion.

FY17 - Additional Construction required.

Operating Budget Impact

Annual Bond Redemption \$ \$198,900

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



Project: FY2012 RENOVATE CENTRAL & EAST COLUMBIA BRANCHES

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	445	188	633	0	0	0	0	0	0	0	0	0	0	633
CONSTRUCTION	1,770	2,120	3,890	0	0	0	0	0	0	0	0	0	0	3,890
ADMINISTRATION	20	0	20	0	0	0	0	0	0	0	0	0	0	20
EQUIPMENT & FURNISHINGS	690	338	1,028	0	0	0	0	0	0	0	0	0	0	1,028
Total Expenditures	2,925	2,646	5,571	0	0	0	0	0	0	0	0	0	0	5,571
BONDS	1,774	2,646	4,420	0	0	0	0	0	0	0	0	0	0	4,420
GRANTS	1,151	0	1,151	0	0	0	0	0	0	0	0	0	0	1,151
Total Funding	2,925	2,646	5,571	0	0	0	0	0	0	0	0	0	0	5,571

Project Status:

\$718,731 spent and encumbered through February 2016
FY17 additional funds requested for design, construction and furnishings.

Project: L0017-FY2008 SAVAGE BRANCH Number: L0017

Description

Operating Budget Impact

A project to provide additional required public library space in the RT1 Corridor of Annual Bond Redemption \$ \$273,375 North Laurel. This project is designed to address the insufficient meeting, classroom, and public service space. Leveraging the vacated space at the former Senior Center & Health Center facilities, this project will renovate the three funding and the use of the master lease program as appropriate.~Additional distinct spaces to create a unified building with common public spaces in accordance with current codes. The project will enable site modifications that are upon construction completion: Bur. of Facilities estimates the FY17 and in alignment with the Chesapeake Watershed objectives for water and land conservation.

Justification

A leader and innovator among the nationÆs great library systems, HCLS has been recognized nationally for its unprecedented and innovative approach to deliver education, for all ages. The current HCLS Facilities Assessment & Master Plan calls for 35,000 SF of library space for Savage service area based on anticipate population growth rate. This project enables HCLS to become more closely aligned with the Master Plan and national standards for libraries based on population and use data.

Remarks

A feasibility study was conducted in FY2009 to determine whether a 35,000 SF branch could be constructed at same site. The study concluded that, while construction of a new 35,000 SF building is possible at current site, an accompanying parking garage would be required. Based on this study, further analysis is needed to determine the pace of growth, best location and schedule. The renovation completed for L0014 resolve some of the immediate spatial concerns. State Grant funds requested for FY14 were not approved.

Project Schedule

FY17 - Project Close out

The Bond funding listed for this project includes both long term bond FTEs: 6 to 8 (35,000 SF Branch), ~Estimated annual utility/custodial costs beyond annual impact to O&M and utilities at \$163,000.



LIBRARY PROJECTS

Number: L0017

Project: FY2008 SAVAGE BRANCH

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	750	0	750	0	0	0	0	0	0	0	0	0	0	750
CONSTRUCTION	4,090	0	4,090	0	0	0	0	0	0	0	0	0	0	4,090
ADMINISTRATION	20	0	20	0	0	0	0	0	0	0	0	0	0	20
EQUIPMENT & FURNISHINGS	1,215	0	1,215	0	0	0	0	0	0	0	0	0	0	1,215
Total Expenditures	6,075	0	6,075	0	0	0	0	0	0	0	0	0	0	6,075
BONDS	6,075	0	6,075	0	0	0	0	0	0	0	0	0	0	6,075
Total Funding	6,075	0	6,075	0	0	0	0	0	0	0	0	0	0	6,075

Project Status:

\$5,106,591 spent and encumbered through February 2016
FY13 - Renovation design completed
FY14 - Construction complete
FY16/17 - Construction enhanced parking lot lighting.

Description

A project to renovate the Glenwood Branch to include much needed study rooms Annual Bond Redemption \$ \$32,850 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.

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.

Remarks

Project Schedule

FY17 - On hold for funding.

Future date: Design renovations and award construction contracts.

Operating Budget Impact

Bure of Facilities estimates the FY17 and beyond impact to annual O&M and utility costs at \$26,000.



Project: FY2017 GLENWOOD BRANCH RENOVATION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	0	0	80	0	0	0	0	80	0	0	0	0	80
CONSTRUCTION	0	0	0	650	0	0	0	0	650	0	0	0	0	650
Total Expenditures	0	0	0	730	0	0	0	0	730	0	0	0	0	730
BONDS	0	0	0	730	0	0	0	0	730	0	0	0	0	730
Total Funding	0	0	0	730	0	0	0	0	730	0	0	0	0	730

Project Status:

\$0 spent and encumbered through February 2016 Awaiting funding.

Project: L0019-FY2018 SOUTHWEST BRANCH

LIBRARY PROJECTS

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

FY18 - Conduct Feasibility Study

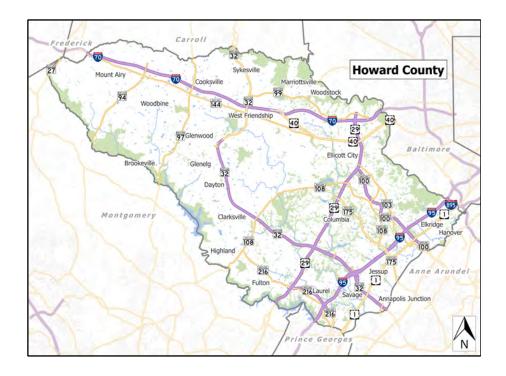
FY19 - Procure Land and complete design

FY20 - Award Construction Contract

FY21 - Complete Construction and Close Out project

Operating Budget Impact

Annual Bond Redemption \$ \$1,792,665



LIBRARY PROJECTS

Project: FY2018 SOUTHWEST BRANCH Number: L0019

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	2,500	0	2,500	0	0	0	0	2,500
Total Expenditures	0	0	0	277	5,060	32,000	2,500	0	39,837	0	0	0	0	39,837
BONDS	0	0	0	277	5,060	32,000	2,500	0	39,837	0	0	0	0	39,837
Total Funding	0	0	0	277	5,060	32,000	2,500	0	39,837	0	0	0	0	39,837

Project Status:

\$0 spent and encumbered through February 2016 Awaiting Funding

Howard County, MD FY2017 Council Approved Capital Budget Program: HOWARD COMMUNITY COLLEGE

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
M0532 FY2010 ALLIED HEALTH INSTRUCTIONAL BUILDING	В	26,472	0	26,472	0	0	0	0	0	26,472
The design and construction of a health sciences building of approximately 112,692 GSF and 67,036 NASF.	G	24,235	0	24,235	0	0	0	0	0	24,235
or approximately 112,002 GGF and 61,000 IV.GF.	Total	50,707	0	50,707	0	0	0	0	0	50,707
M0536 FY2015 NURSING and ST BUILDING RENOVATIONS	В	1,679	0	1,679	11,248	9,249	0	0	0	22,176
Renovate the Nursing Building and ST Building of approximately 107,000 GSF following the move of health	G	1,581	0	1,581	10,592	8,711	0	0	0	20,884
sciences programs and science, engineering and technology programs into their new buildings.	Total	3,260	0	3,260	21,840	17,960	0	0	0	43,060
M0539 FY2020 MATHEMATICS BUILDING The purpose of this project is to design and construct a	В	0	0	0	0	0	1,250	12,600	1,400	15,250
new mathematics building of approximately 70,000 GSF.	G	0	0	0	0	0	1,250	12,600	1,400	15,250
	Total	0	0	0	0	0	2,500	25,200	2,800	30,500
M0540 FY2008 SAFETY COMPLIANCE and FACILITY RENEWALS	В	8,637	0	8,637	0	0	0	0	0	8,637
This project will provide campuswide improvements and modifications to address safety, compliance, and facility	G	1,974	0	1,974	0	0	0	0	0	1,974
renewals in accordance with accepted county and state codes.	0	974	0	974	0	0	0	0	0	974
codes.	Total	11,585	0	11,585	0	0	0	0	0	11,585
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
and possessian manner parterner	G	0	0	0	0	0	0	0	0	0
	0	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	27,954	10,314	38,268	0	0	0	0	0	38,268
Design and construct a science, engineering, and technology building of approximately 145,300 GSF.	G	27,954	10,314	38,268	0	0	0	0	0	38,268
5, 1 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0	230	0	230	0	0	0	0	0	230
	Total	56,138	20,628	76,766	0	0	0	0	0	76,766

June 01, 2016 Howard County, MD Version : Council Approved

Howard County, MD FY2017 Council Approved Capital Budget Program: HOWARD COMMUNITY COLLEGE

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
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
M0546 FY2022 ATHLETIC and FITNESS CENTER Construct a new athletic and fitness center of	В	0	0	0	0	0	0	0	1,950	1,950
approximately 110,000 gross square feet to replace the existing facility constructed in 1969.	G	0	0	0	0	0	0	0	1,950	1,950
	Total	0	0	0	0	0	0	0	3,900	3,900
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
M0550 FY2017 SYSTEMIC RENOVATIONS This project addresses campuswide systemic renovations	В	0	2,228	2,228	3,739	2,965	2,126	2,107	2,058	15,223
and deferred maintenance.	Total	0	2,228	2,228	3,739	2,965	2,126	2,107	2,058	15,223
HOWARD COMMUNITY COLLEGE Total		138,090	22,856	160,946	25,579	20,925	4,626	27,307	8,758	248,141

June 01, 2016 Howard County, MD Version : Council Approved

Howard County, MD FY2017 Council Approved Capital Budget (\$000) HCC-HOWARD COMMUNITY COLLEGE

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	67,425	12,542	79,967
CC	COLLEGE REVENUE BACKED BOND	7,717	0	7,717
G	GRANTS	55,744	10,314	66,058
0	OTHER SOURCES	7,204	0	7,204
Total		138,090	22,856	160,946

2017 Council Approved 5 Year Capital Budget Project Type Summary (HCC-HOWARD COMMUNITY COLLEGE)

Rev	enue Source	Prior Approp	Current FY	2018	2019	2020	2021	2022	5 Year Total
В	BONDS	67,425	12,542	14,987	12,214	3,376	14,707	5,408	130,659
CC BON	COLLEGE REVENUE BACKED	7,717	0	0	0	0	0	0	7,717
G	GRANTS	55,744	10,314	10,592	8,711	1,250	12,600	3,350	102,561
0	OTHER SOURCES	7,204	0	0	0	0	0	0	7,204
Tota	al	138,090	22,856	25,579	20,925	4,626	27,307	8,758	248,141

June 01, 2016 Howard County, MD Version : Council Approved

Number: M0532

Project: M0532-FY2010 ALLIED HEALTH INSTRUCTIONAL BUILDING

Description

The design and construction of a health sciences building of approximately 112,692 GSF and 67,036 NASF. This new building will provide the needed facilities necessary to prepare a student for a career in health sciences and related fields. The Health Sciences Division offers programs that include nursing, cardiovascular technology, emergency medical services, exercise science, life fitness, health care, health education, human services, nutrition, rediologic technology, dental hygienist, physical therapist assistant, medical laboratory technician, medical diagnostic sonography, and public health. The proposed building is necessary to support health sciences, allied health, and medical careers disciplines.

Justification

Interest in the health sciences careers has increased significantly. Maryland projects the greatest job-growth in the nursing and allied health fields. Currently there is an unprecedented nursing crises. The college must expand its physical space and renovate its existing buildings and utility services in order to accommodate these new students and faculty. The new facility will include a large assembly hall, classrooms, general labs, specialized labs, skills labs, simulation suites, study and collaboration areas, and administrative and faculty offices.

Remarks

Split-funding for construction was received for this building in FY11 and FY12. The FY13 request was for the project completion phase and included funds for furniture and equipment. The new facility is scheduled to open spring semester 2013.

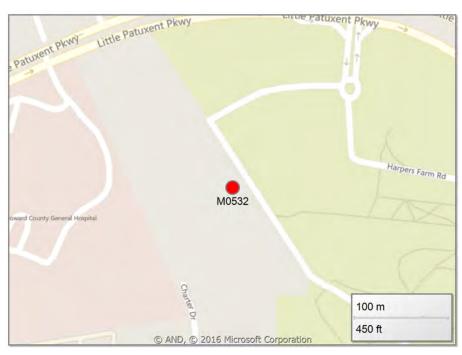
Project Schedule

FY16 - Project complete; ready for closeout. There are no funds requested for the upcoming fiscal year and no use of funds planned.

Operating Budget Impact

Annual Bond Redemption \$ \$1,191,240

The projected impact of the completed project on the current expense budget: no increase. The project is complete and the building is open, the project will be closed-out this fiscal year in FY16.



HOWARD COMMUNITY COLLEGE

Number: M0532

Project: FY2010 ALLIED HEALTH INSTRUCTIONAL BUILDING

(In Thousands)					Five	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	4,008	0	4,008	0	0	0	0	0	0	0	0	0	0	4,008	
CONSTRUCTION	38,817	0	38,817	0	0	0	0	0	0	0	0	0	0	38,817	
EQUIPMENT & FURNISHINGS	7,882	0	7,882	0	0	0	0	0	0	0	0	0	0	7,882	
Total Expenditures	50,707	0	50,707	0	0	0	0	0	0	0	0	0	0	50,707	
BONDS	26,472	0	26,472	0	0	0	0	0	0	0	0	0	0	26,472	
GRANTS	24,235	0	24,235	0	0	0	0	0	0	0	0	0	0	24,235	
Total Funding	50,707	0	50,707	0	0	0	0	0	0	0	0	0	0	50,707	

Project Status:

\$50,237,876 spent and encumbered through February 2016

FY16 - Closeout project. The scope of the project from the prior fiscal year included procuring the remaining furniture and equipment needed for program operations in the building. The timing of the project from the prior fiscal year included installing the remaining furniture and equipment, completing punchlist items, and preparing for closeout of the project in FY16.

Project: M0536-FY2015 NURSING and ST BUILDING RENOVATIONS Number: M0536

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 The projected impact of the completed project on the current expense by health sciences and science and technology is vacated, renovations will need budget: no increase. 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. There are no funds requested for the upcoming fiscal year; the project is continuing in the design phase.

Operating Budget Impact

Annual Bond Redemption \$ \$997,920



HOWARD COMMUNITY COLLEGE

Number: M0536

Project: FY2015 NURSING and ST BUILDING RENOVATIONS

(In Thousands)					Five	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	3,260	0	3,260	0	0	0	0	0	0	0	0	0	0	3,260	
CONSTRUCTION	0	0	0	21,840	14,560	0	0	0	36,400	0	0	0	0	36,400	
EQUIPMENT & FURNISHINGS	0	0	0	0	3,400	0	0	0	3,400	0	0	0	0	3,400	
Total Expenditures	3,260	0	3,260	21,840	17,960	0	0	0	39,800	0	0	0	0	43,060	
BONDS	1,679	0	1,679	11,248	9,249	0	0	0	20,497	0	0	0	0	22,176	
GRANTS	1,581	0	1,581	10,592	8,711	0	0	0	19,303	0	0	0	0	20,884	
Total Funding	3,260	0	3,260	21,840	17,960	0	0	0	39,800	0	0	0	0	43,060	

Project Status:

\$1,380,949 spent and encumbered through February 2016

FY16 - Design is progressing as scheduled. The scope of the project from the prior fiscal year included continuing with the design phase. The timing of the project from the prior fiscal year included completing the schematic design phase and moving into design development documents and then construction documents.

Project: M0539-FY2020 MATHEMATICS BUILDING Number: M0539

Description

The purpose of this project is to design and construct a new mathematics building Annual Bond Redemption \$\$486,250 of approximately 70,000 GSF. The math division currently shares the Hickory Ridge Building with continuing education. The construction of this new facility will accommodate the increased enrollment growth and future needs for math instructional space as well as support STEM initiatives.

Justification

Over the past five years, the math division has grown by 37 percent. The projected enrollment growth is expected to increase by 33 percent by 2024 and with this continued growth, the current classrooms will no longer be able to accommodate the demand.

Remarks

Project Schedule

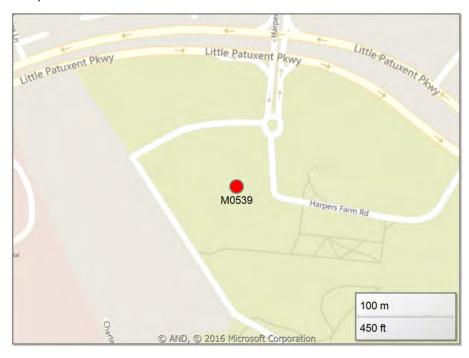
FY20 - Plan and design new building.

FY21 - Construct new building.

FY22 - Furnish and equip new building. There are no funds requested for the upcoming fiscal year and no use of funds planned.

Operating Budget Impact

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 FY22.



HOWARD COMMUNITY COLLEGE

Number: M0539

Project: FY2020 MATHEMATICS BUILDING

(In Thousands)					Five	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	0	0	0	0	0	2,500	0	0	2,500	0	0	0	0	2,500	
CONSTRUCTION	0	0	0	0	0	0	25,200	0	25,200	0	0	0	0	25,200	
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	0	2,800	2,800	0	0	0	0	2,800	
Total Expenditures	0	0	0	0	0	2,500	25,200	2,800	30,500	0	0	0	0	30,500	
BONDS	0	0	0	0	0	1,250	12,600	1,400	15,250	0	0	0	0	15,250	
GRANTS	0	0	0	0	0	1,250	12,600	1,400	15,250	0	0	0	0	15,250	
Total Funding	0	0	0	0	0	2,500	25,200	2,800	30,500	0	0	0	0	30,500	

Project Status:

\$0 spent and encumbered through February 2016
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.

Number: M0540

Project: M0540-FY2008 SAFETY COMPLIANCE and FACILITY RENEWALS

Description

This project will provide campuswide improvements and modifications to address Annual Bond Redemption \$ \$388,665 safety, compliance, and facility renewals in accordance with accepted county and state codes.

Justification

This project was formerly known as Campuswide Systemic Renovations. This project has evolved and its purpose is to address a multitude of campus improvements, deferred maintenance, and facility renewals. Modifications and upgrades directly impact ADA requirements, life safety issues, code compliance, and address critical deferred maintenance and facility renewals.

Remarks

The college completed a facilities condition assessment in coordination with its 2010-2020 Facilities Master Plan. Funds listed as "other" are provided by the college. The source of these funds is provided through college fund balances, student fees, and the operating budget.

Project Schedule

FY15-FY16 - Project requests deferred. FY16 - Will be closing out project; project completed. There are no funds requested for the upcoming fiscal year; the project is complete and will be closed-out this fiscal year in FY16.

Operating Budget Impact

The projected impact of the completed project on the current expense budget: no increase.



HOWARD COMMUNITY COLLEGE

Number: M0540

Project: FY2008 SAFETY COMPLIANCE and FACILITY RENEWALS

(In Thousands)	(In Thousands)					Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
CONSTRUCTION	11,585	0	11,585	0	0	0	0	0	0	0	0	0	0	11,585	
Total Expenditures	11,585	0	11,585	0	0	0	0	0	0	0	0	0	0	11,585	
BONDS	8,637	0	8,637	0	0	0	0	0	0	0	0	0	0	8,637	
GRANTS	1,974	0	1,974	0	0	0	0	0	0	0	0	0	0	1,974	
OTHER SOURCES	974	0	974	0	0	0	0	0	0	0	0	0	0	974	
Total Funding	11,585	0	11,585	0	0	0	0	0	0	0	0	0	0	11,585	

Project Status:

\$10,577,556 spent and encumbered through February 2016

FY16 - Construction complete for campuswide utilities upgrade and major interior improvements; prepare for project closeout. There was no scope for this project from the prior fiscal year, projects requested in FY15 and FY16 were deferred. The timing of the project from the prior fiscal year included preparing for closeout of the project in FY16.

Project: M0542-FY2016 CAMPUS ROADWAYS and PARKING Number: M0542

Description

Operating Budget Impact

Provide required modifications to campus roadways and parking to accommodate Annual Bond Redemption \$ \$920,250 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.

The projected impact of the completed project on the current expense budget: no increase.

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

FY16 - Construction for the garage expansion of 750 spaces at the East Garage.

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.



HOWARD COMMUNITY COLLEGE

Number: M0542

Project: FY2016 CAMPUS ROADWAYS and PARKING

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	2,200	0	2,200	0	0	0	0	0	0	0	0	1,600	0	3,800
CONSTRUCTION	14,200	0	14,200	0	0	0	0	0	0	0	0	0	18,500	32,700
Total Expenditures	16,400	0	16,400	0	0	0	0	0	0	0	0	1,600	18,500	36,500
BONDS	2,683	0	2,683	0	0	0	0	0	0	0	0	800	9,250	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	0	0	800	9,250	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	0	0	1,600	18,500	36,500

Project Status:

\$1,169,890 spent and encumbered through February 2016

FY16 - Design is complete and construction will commence for the east garage expansion; project completion proposed for spring 2017. The scope of the project from the prior fiscal year included completing the design phase for the garage expansion. The timing of the project from the prior fiscal year included completing design and preparing for construction of the garage expansion project with new roadway entrance.

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 - Complete design of new building.

FY15-FY17 - Construct new building.

FY17 - Furnish and equip new building. The use of the funds for the upcoming fiscal year includes continuing the planned construction phase of the building; funds will be applied to the completion of construction and the procurement of furniture and equipment needed to open the building.

Operating Budget Impact

Annual Bond Redemption \$ \$1,722,060

The Bond funding listed for this project includes both long term bond funding and the use of the master lease program as appropriate. The operations of this building will increase the operating budget by approximately \$18.70 per square foot. The projected impact of the completed project on the current expense budget: no increase until completed in FY18.



HOWARD COMMUNITY COLLEGE

Number: M0543

Project: FY2012 SCIENCE ENGINEERING and TECHNOLOGY BLDG

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	6,166	0	6,166	0	0	0	0	0	0	0	0	0	0	6,166
CONSTRUCTION	49,972	12,428	62,400	0	0	0	0	0	0	0	0	0	0	62,400
EQUIPMENT & FURNISHINGS	0	8,200	8,200	0	0	0	0	0	0	0	0	0	0	8,200
Total Expenditures	56,138	20,628	76,766	0	0	0	0	0	0	0	0	0	0	76,766
BONDS	27,954	10,314	38,268	0	0	0	0	0	0	0	0	0	0	38,268
GRANTS	27,954	10,314	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	56,138	20,628	76,766	0	0	0	0	0	0	0	0	0	0	76,766

Project Status:

\$24,100,349 spent and encumbered through February 2016

FY16 - construction on schedule; project completion proposed for spring 2017. 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 construction phase in preparation for equipping the building and project completion.

Project: M0545-FY2025 MAINTENANCE BUILDING

HOWARD COMMUNITY COLLEGE

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 approximately \$21.25 per square foot. The projected impact of the 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

With the recent construction and renovations on campus, the college's total oncampus gross square feet is 774,368. In order to properly service the campus buildings, infrastructure, and 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 completed project on the current expense budget; no increase until completed in FY26.



HOWARD COMMUNITY COLLEGE

Number: M0545

Project: FY2025 MAINTENANCE BUILDING

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	0	0	0	0	0	0	0	0	0	0	500	0	500
CONSTRUCTION	0	0	0	0	0	0	0	0	0	0	0	0	3,900	3,900
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	0	0	0	0	0	0	800	800
Total Expenditures	0	0	0	0	0	0	0	0	0	0	0	500	4,700	5,200
BONDS	0	0	0	0	0	0	0	0	0	0	0	250	2,350	2,600
GRANTS	0	0	0	0	0	0	0	0	0	0	0	250	2,350	2,600
Total Funding	0	0	0	0	0	0	0	0	0	0	0	500	4,700	5,200

Project Status:

\$0 spent and encumbered through February 2016
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.

Project: M0546-FY2022 ATHLETIC and FITNESS CENTER Number: M0546

Description

Construct a new athletic and fitness center of approximately 110,000 gross square feet to replace the existing facility constructed in 1969. Since the existing building requires significant repair beyond its structural life, the college must plan for a new facility to house athletics and fitness.

Justification

While the college has been maintaining the existing facility, it was determined that the cost of renovation exceeds the cost of new construction. The existing building consists of cast-in-place concrete walls and floor slab. The condition of the concrete has spalled and cracked at the walls, floors, and beams making it structurally unsound. In addition, the leaching of chemicals and mineral deposits has had an adverse affect on the overall life of the building. Because the building requires significant repair beyond its structural life, the college is proposing a new multi-level facility.

Remarks

The construction phase of this facility will be proposed for split-funding.

Project Schedule

FY22 - Plan and design new facility.

FY23-FY24 - Construct new facility.

FY25- Furnish and equip new facility. There are no funds requested in teh upcoming fiscal year and no use of funds planned.

Operating Budget Impact

Annual Bond Redemption \$ \$1,113,750

The operations of this building will increase the operating budget by approximately \$20.24 per square foot. The projected impact of the completed project on the current expense budget: no increase until completed in FY25.



HOWARD COMMUNITY COLLEGE

Number: M0546

Project: FY2022 ATHLETIC and FITNESS CENTER

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master P	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	0	0	0	0	0	0	3,900	3,900	0	0	0	0	3,900
CONSTRUCTION	0	0	0	0	0	0	0	0	0	20,100	20,100	0	0	40,200
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	0	0	0	0	0	5,400	0	5,400
Total Expenditures	0	0	0	0	0	0	0	3,900	3,900	20,100	20,100	5,400	0	49,500
BONDS	0	0	0	0	0	0	0	1,950	1,950	10,050	10,050	2,700	0	24,750
GRANTS	0	0	0	0	0	0	0	1,950	1,950	10,050	10,050	2,700	0	24,750
Total Funding	0	0	0	0	0	0	0	3,900	3,900	20,100	20,100	5,400	0	49,500

Project Status:

\$0 spent and encumbered through February 2016
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 FY22.

HOWARD COMMUNITY COLLEGE

Number: M0547

Project: M0547-FY2026 CONTINUING EDUCATION BUILDING

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, Laurel College Center, and Mt. Airy 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)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	0	0	0	0	0	0	0	0	0	0	0	1,700	1,700
CONSTRUCTION	0	0	0	0	0	0	0	0	0	0	0	0	17,600	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	0	0	21,400	21,400
BONDS	0	0	0	0	0	0	0	0	0	0	0	0	10,700	10,700
GRANTS	0	0	0	0	0	0	0	0	0	0	0	0	10,700	10,700
Total Funding	0	0	0	0	0	0	0	0	0	0	0	0	21,400	21,400

Project Status:

\$0 spent and encumbered through February 2016
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.

HOWARD COMMUNITY COLLEGE

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. Funds listed under "other" are provided by the college. The source of these funds is provided through college fund balances, student fees, and the operating budget.

Project Schedule

FY17-FY21 Includes HVAC upgrades, cafe renovations, IT/AV/cable upgrades, public restroom upgrades, 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 \$ \$1,024,290

The projected impact of the completed project on the current expense budget: no increase.



HOWARD COMMUNITY COLLEGE

Number: M0550

Project: FY2017 SYSTEMIC RENOVATIONS

(In Thousands)					Five	Year Ca	pital Pro	gram				Master P	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	0	2,228	2,228	3,739	2,965	2,126	2,107	2,058	12,995	1,809	1,710	2,060	1,960	22,762
Total Expenditures	0	2,228	2,228	3,739	2,965	2,126	2,107	2,058	12,995	1,809	1,710	2,060	1,960	22,762
BONDS	0	2,228	2,228	3,739	2,965	2,126	2,107	2,058	12,995	1,809	1,710	2,060	1,960	22,762
Total Funding	0	2,228	2,228	3,739	2,965	2,126	2,107	2,058	12,995	1,809	1,710	2,060	1,960	22,762

Project Status:

\$0 spent and encumbered through February 2016

FY17 - Design and construction for major interior improvements, systemic renovations and deferred maintenance.

There was no scope for this project from the prior fiscal year, this is a new sytemic project for FY17. There is no timing for this project from the prior year; the project will begin in FY17.

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
N3102 FY2000 BLANDAIR REGIONAL PARK A project to master plan, design, and construct a 298 acre	В	23,328	3,250	26,578	0	100	4,000	3,400	4,000	38,078
regional park, and restore the 19th century Blandair Mansion and out buildings located off MD175 in Columbia.	G	4,015	0	4,015	0	0	0	0	0	4,015
Mansion and out buildings located on MD175 in Columbia.	Т	1,730	0	1,730	0	0	0	0	0	1,730
	Total	29,073	3,250	32,323	0	100	4,000	3,400	4,000	43,823
N3103 FY2000 PARKLAND ACQUISITION PROGRAM This project establishes a fund for County-wide park land	G	17,643	1,943	19,586	500	500	500	500	500	22,086
acquisition and related expenses.	0	2,638	300	2,938	0	0	0	0	0	2,938
	Р	354	0	354	0	0	0	0	0	354
	Т	3,906	325	4,231	100	100	100	100	100	4,731
	Total	24,541	2,568	27,109	600	600	600	600	600	30,109
N3105 FY1995 MEADOWBROOK PARK A project to master plan, design, and develop an 84-acre park located southeast of MD100/US29.	В	1,181	0	1,181	0	0	0	0	0	1,181
	G	5,566	0	5,566	0	0	0	0	0	5,566
	Р	0	206	206	0	0	0	0	0	206
	Т	1,726	0	1,726	0	0	0	0	0	1,726
	Total	8,473	206	8,679	0	0	0	0	0	8,679
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	0	14	0	14	0	0	0	0	0	14
and utility 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	12,950	0	12,950	1,000	0	0	1,200	0	15,150
This project will provide replacement of all types of park facilities and related engineering to include equipment, or published by a deterior stand beyond routing.	G	1,119	150	1,269	0	0	0	0	0	1,269
uilding elements which have deteriorated beyond routine naintenance efforts.	Р	645	500	1,145	0	0	0	0	0	1,145
	Т	7,287	1,300	8,587	1,500	1,500	1,500	1,500	1,500	16,087

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
N3108 FY2004 PARK SYSTEMIC IMPROVEMENTS 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.	Total	22,001	1,950	23,951	2,500	1,500	1,500	2,700	1,500	33,651
N3109 FY2004 PARKS RESURFACING PROGRAM	G	129	0	129	0	0	0	0	0	129
A project to fund roadway, pathway, trails, parking lot, playground and game court resurfacing, replacement and additions within the County's park system.	Р	340	0	340	0	0	0	0	0	340
	Т	5,671	440	6,111	500	500	500	500	500	8,611
	Total	6,140	440	6,580	500	500	500	500	500	9,080
N3932 FY2000 WESTERN REGIONAL PARK	В	2,219	0	2,219	0	0	0	0	0	2,219
A project to design and construct a 160-acre regional park located northwest of the intersection of Carrs Mill Road	D	14	0	14	0	0	0	0	0	14
nd MD97.	G	10,864	0	10,864	0	0	0	0	0	10,864
	Т	5,064	0	5,064	0	0	0	0	0	5,064
	Total	18,161	0	18,161	0	0	0	0	0	18,161
N3940 FY2000 NORTH LAUREL PARK	В	4,961	0	4,961	500	7,500	7,500	0	0	20,461
A project to design and construct a 51-acre park and swimming pool lying northeast of North Laurel Road and Washington Avenue.	D	30	0	30	0	0	0	0	0	30
washington Avenue.	G	1,241	0	1,241	0	0	0	0	0	1,241
	Т	294	0	294	0	0	0	0	0	294
	Total	6,526	0	6,526	500	7,500	7,500	0	0	22,026
N3947 FY1999 NEIGHBORHOOD PLAYGROUND	В	40	11	51	0	0	0	0	0	51
PROGRAM This project will develop neighborhood playground facilities on County parkland or open space throughout the County	0	24	0	24	0	0	0	0	0	24
where community need has been demonstrated.	Р	4	0	4	0	0	0	0	0	4
	Т	160	0	160	0	0	0	0	0	160
	Total	228	11	239	0	0	0	0	0	239
N3953 FY2000 CENTENNIAL LAKE RESTORATION	В	21	0	21	0	0	0	0	0	21
A project to design and construct improvements to Centennial Lake to include dredging, artificial aeration, and shoreline stabilization.	Р	66	0	66	0	0	0	0	0	66

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
N3953 FY2000 CENTENNIAL LAKE RESTORATION A project to design and construct improvements to	Т	600	-600	0	0	0	0	0	0	0
Centennial Lake to include dredging, artificial aeration, and shoreline stabilization.	Total	687	-600	87	0	0	0	0	0	87
N3957 FY2003 TROY PARK & HISTORIC REHABILITATION	В	18,585	0	18,585	4,000	4,000	0	0	0	26,585
A project to acquire an additional 5 acres, rehabilitate an 1820 historic house, and design and construct a 106 acre	G	2,572	0	2,572	0	0	0	0	0	2,572
Regional Park at MD100 and US1.	Ο	5	0	5	0	0	0	0	0	5
	Т	1,381	0	1,381	0	0	0	0	0	1,381
	Total	22,543	0	22,543	4,000	4,000	0	0	0	30,543
N3958 FY2003 HISTORIC STRUCTURES REHABILITATION	В	900	0	900	0	0	0	0	0	900
This project creates a fund for the preservation and rehabilitation of historic properties under the management	G	190	0	190	0	0	0	0	0	190
of the Department of Recreation and Parks.	0	4,055	0	4,055	0	0	0	0	0	4,055
	Р	222	0	222	0	0	0	0	0	222
	Т	3,371	400	3,771	500	500	500	500	500	6,271
	Total	8,738	400	9,138	500	500	500	500	500	11,638
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	1,864	0	1,864	0	0	0	0	0	1,864
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	17,303	0	17,303	0	0	0	0	0	17,303

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
N3962 FY2008 CENTENNIAL PARK IMPROVEMENTS This project consists of improvements to Centennial Park	Т	614	0	614	0	0	0	0	0	614
to include replacement of field lights, synthetic turf field, expanded parking, pond to stream retrofit, stream bank stabilization, pier and boat ramp upgrades, shop/office addition, boat rental expansion, pavilion and restroom upgrades, stage renovations, roadway/parking repairs and upgrades, court renovations, pathway and seating area renovation, and new signage.	Total	614	0	614	0	0	0	0	0	614
N3963 FY2009 PATHWAY and TRAIL REHAB and EXPANSION	В	0	278	278	0	0	0	0	0	278
A project to rehabilitate and expand the existing Pathway and Trail System throughout the County.	G	0	1,092	1,092	0	0	0	0	0	1,092
	Т	1,000	35	1,035	100	100	100	100	100	1,535
	Total	1,000	1,405	2,405	100	100	100	100	100	2,905
1964 FY2007 ALPHA RIDGE PARK ADDITIONS project to design and construct a restroom, a lighted	В	425	0	425	0	0	0	0	0	425
pavilion over the existing roller hockey rink, parking expansion, a pathway and parking lot courtesy lights within	G	75	0	75	0	0	0	0	0	75
Alpha Ridge Park located on RT99 just east of Sand Hill Road.	Т	170	0	170	0	0	0	0	0	170
	Total	670	0	670	0	0	0	0	0	670
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	145	600	745	0	0	0	0	0	745
	Total	1,270	600	1,870	0	0	0	0	0	1,870
N3967 FY2007 SOUTH BRANCH PARK A project to design and construct a seven-acre park	В	300	500	800	0	0	0	0	0	800
project to design and construct a seven-acre park cated at Old West Friendship Road and the Patapsco ver just south of Sykesville.	G	0	100	100	0	0	0	0	0	100
	Р	10	0	10	0	0	0	0	0	10
	Т	550	0	550	0	0	0	0	0	550
	Total	860	600	1,460	0	0	0	0	0	1,460

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
N3968 FY2007 CEDAR LANE ATHLETIC FIELD	В	680	-11	669	0	0	0	0	0	669
A project to upgrade the athletic field lighting and fencing at Cedar Lane Park located at MD108 and Cedar Lane.	Т	1,573	0	1,573	0	0	0	0	0	1,573
	Total	2,253	-11	2,242	0	0	0	0	0	2,242
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	460	0	460	0	0	0	0	0	460
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	460	0	460	0	0	0	0	0	460
N3973 FY2014 EAST COLUMBIA LIBRARY ATHLETIC FIELD and SITE IMPROVEMENTS	В	3,700	0	3,700	0	0	0	0	0	3,700
A project to upgrade the athletic fields at East Columbia Library, located off of Cradlerock in Columbia.	Total	3,700	0	3,700	0	0	0	0	0	3,700
N3976 FY2025 SOUTH FULTON PARK A project to master plan, design and construct a 84-acre	В	0	0	0	0	0	0	0	0	0
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 FY2025 KIWANIS PARK EXTENSION A project to master plan, design and construct an	В	0	0	0	0	0	0	0	0	0
additional 30-acre site adjacent to the existing Kiwanis Park and to improve the existing park site.	Total	0	0	0	0	0	0	0	0	0
PARKS PROJECTS Total		185,775	10,819	196,594	8,700	14,800	14,700	7,800	7,200	249,794

Howard County, MD FY2017 Council Approved Capital Budget (\$000) PARKS-PARKS PROJECTS

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	84,943	4,028	88,971
D	DEVELOPER CONTRIBUTION	504	0	504
G	GRANTS	45,428	3,285	48,713
0	OTHER SOURCES	10,936	300	11,236
Р	PAY AS YOU GO	2,176	706	2,882
Т	TRANSFER TAX	41,788	2,500	44,288
Total		185,775	10,819	196,594

2017 Council Approved 5 Year Capital Budget Project Type Summary (PARKS-PARKS PROJECTS)

Rev	enue Source	Prior Approp	Current FY	2018	2019	2020	2021	2022	5 Year Total
В	BONDS	84,943	4,028	5,500	11,600	11,500	4,600	4,000	126,171
D	DEVELOPER CONTRIBUTION	504	0	0	0	0	0	0	504
G	GRANTS	45,428	3,285	500	500	500	500	500	51,213
0	OTHER SOURCES	10,936	300	0	0	0	0	0	11,236
Р	PAY AS YOU GO	2,176	706	0	0	0	0	0	2,882
Т	TRANSFER TAX	41,788	2,500	2,700	2,700	2,700	2,700	2,700	57,788
Tota	al	185,775	10,819	8,700	14,800	14,700	7,800	7,200	249,794

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 and 2012 Land Preservation and Recreation Plan and is endorsed by the Recreation and Parks Advisory Board, and the Blandair Planning Committee.

Remarks

- 1. 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.
- 2. FY17 request addresses continued restoration of mansion and outbuildings and start construction of Phase III and start the design of Phase IV. Note: The funding for Phase 4 construction will be proposed in the fiscal year 2020 budget. Phase 4 construction cannot begin until the bridge that will be constructed over RT 175 to connects the southern side of Blandair to the northern side is completed.

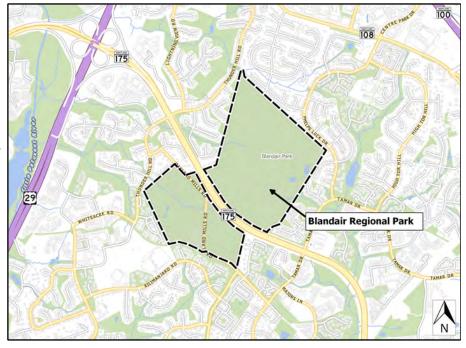
Project Schedule

- FY17 Continued restoration of mansion and outbuildings and start construction of Phase III and start the design of Phase IV.
- FY19 Finalizing the design of Phase IV.
- FY20 Start construction of Phase IV and start the design of Phase V.
- 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 \$ \$2,672,010

The Bond funding listed for this project includes both long term bond funding and the use of the master lease program as appropriate. The start up costs for this entire regional park will be \$422,000. The operational costs after construction for each phase is estimated: Phase II -\$182,000, Phase III - \$137,600, Phase IV - \$126,500, Phase V - \$250,000, Phase VI - \$400,000, Phase VII - \$100,000



PARKS PROJECTS

Project: FY2000 BLANDAIR REGIONAL PARK Number: N3102

(In Thousands)	,							ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	5,138	400	5,538	0	100	500	500	0	1,100	0	800	500	0	7,938	
CONSTRUCTION	23,935	2,850	26,785	0	0	3,500	2,900	4,000	10,400	4,000	0	13,000	3,000	57,185	
Total Expenditures	29,073	3,250	32,323	0	100	4,000	3,400	4,000	11,500	4,000	800	13,500	3,000	65,123	
BONDS	23,328	3,250	26,578	0	100	4,000	3,400	4,000	11,500	4,000	800	13,500	3,000	59,378	
GRANTS	4,015	0	4,015	0	0	0	0	0	0	0	0	0	0	4,015	
TRANSFER TAX	1,730	0	1,730	0	0	0	0	0	0	0	0	0	0	1,730	
Total Funding	29,073	3,250	32,323	0	100	4,000	3,400	4,000	11,500	4,000	800	13,500	3,000	65,123	

Project Status:

\$23,384,278 spent and encumbered through February 2016 Construction of Phase II. Started design of Phase III and VI.

Number: N3103

Project: N3103-FY2000 PARKLAND ACQUISITION PROGRAM

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

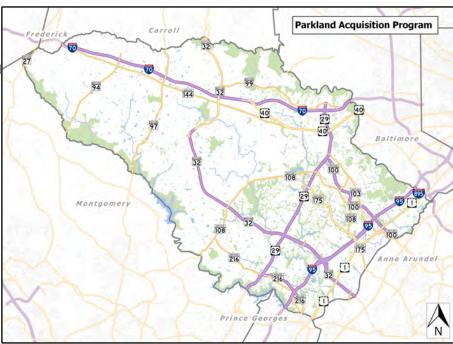
1. Additional community park sites are programmed for Fulton North, Fulton South, Harding Road, Clarksville, Brighton Dam Road, Homewood Road, and Cabin Branch. Also additional acquisitions on the County and State Greenways. 2. A prior year (FY15) funding reduction of \$4,883,000 reduction in Program Open Space grants funds due to request versus award in prior open space funding. Request addresses Program Open Space funds for 2017 Land Preservation & Recreation Plan, appraisals and environmental studies 3. FY17 Request addresses additional funds for property acquisition, appraisals, title reports and environmental studies and Program Open Space grant for land acquisition. \$300,000 in other sources is from the subdivision regulation's fee-inlieu of open space developer payments.

Project Schedule

FY17 - Land Acquisition 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

Number: N3103

Project: FY2000 PARKLAND ACQUISITION PROGRAM

(In Thousands)	Thousands)							gram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	552	30	582	100	100	100	100	100	500	0	0	0	0	1,082	
LAND ACQUISITION	23,989	2,538	26,527	500	500	500	500	500	2,500	0	0	0	0	29,027	
Total Expenditures	24,541	2,568	27,109	600	600	600	600	600	3,000	0	0	0	0	30,109	
GRANTS	17,643	1,943	19,586	500	500	500	500	500	2,500	0	0	0	0	22,086	
OTHER SOURCES	2,638	300	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	3,906	325	4,231	100	100	100	100	100	500	0	0	0	0	4,731	
Total Funding	24,541	2,568	27,109	600	600	600	600	600	3,000	0	0	0	0	30,109	

Project Status:

\$23,892,690 spent and encumbered through February 2016 Purchased Masback Property.

PARKS PROJECTS

Project: N3105-FY1995 MEADOWBROOK PARK Number: N3105

Description

A project to master plan, design, and develop an 84-acre park located southeast of MD100/US29. Facilities have been determined by the master plan and citizen input.

Justification

This project conforms to the goals and objectives of the 2005 and 2012 Land Preservation and Recreation Plan. It has been endorsed by the Recreation and Parks Advisory Board and the Meadowbrook Park Citizen Planning Committee.

Remarks

Prior funds include State Program Open Space and State Transportation Equity Act funds. Prior appropriation reflects TAO #2-FY2009 and TAO #1-FY2010.

Project Schedule

FY17 - Financial adjustment required, Close.

Operating Budget Impact

Annual Bond Redemption \$ \$53,145

The operating costs are absorbed within current operational budget.



PARKS PROJECTS

Project: FY1995 MEADOWBROOK PARK Number: N3105

(In Thousands)								ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	1,518	0	1,518	0	0	0	0	0	0	0	0	0	0	1,518	
CONSTRUCTION	6,955	206	7,161	0	0	0	0	0	0	0	0	0	0	7,161	
Total Expenditures	8,473	206	8,679	0	0	0	0	0	0	0	0	0	0	8,679	
BONDS	1,181	0	1,181	0	0	0	0	0	0	0	0	0	0	1,181	
GRANTS	5,566	0	5,566	0	0	0	0	0	0	0	0	0	0	5,566	
PAY AS YOU GO	0	206	206	0	0	0	0	0	0	0	0	0	0	206	
TRANSFER TAX	1,726	0	1,726	0	0	0	0	0	0	0	0	0	0	1,726	
Total Funding	8,473	206	8,679	0	0	0	0	0	0	0	0	0	0	8,679	

Project Status:

\$8,460,192 spent and encumbered through February 2016 Completed additional landscaping.

PARKS PROJECTS

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 and 2012 Land Preservation 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

Utility and maintenance costs for the future restroom \$11,000 annually. The new ballfield lights proposed in FY18 and the new synthetic turf field proposed for FY18 will be replacing existing lights and a natural turf field which operating costs are absorbed within current operational budget.



PARKS PROJECTS

Project: FY2000 ROCKBURN BRANCH PARK Number: N3107

(In Thousands)	Thousands)							ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	659	0	659	0	0	0	0	0	0	0	0	50	200	909	
CONSTRUCTION	5,120	0	5,120	0	0	0	0	0	0	0	0	1,200	800	7,120	
Total Expenditures	5,779	0	5,779	0	0	0	0	0	0	0	0	1,250	1,000	8,029	
BONDS	1,198	0	1,198	0	0	0	0	0	0	0	0	1,250	1,000	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	0	0	1,250	1,000	8,029	

Project Status: \$5,757,810 spent and encumbered through February 2016

Number: N3108

Project: N3108-FY2004 PARK SYSTEMIC IMPROVEMENTS

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, associations. 2005 and 2012 Land Preservation and Recreation Plan.

Remarks

FY17 - Ongoing park improvements. Funds also address Timbers at Troy Golf Course improvements and a \$150,000 State Bond Bill for the relocation and construction of a basketball court, playground and pathway at Huntington Park.

Project Schedule

FY17 - Planning and Construction Continues FY17-22 - Construction Continues

Operating Budget Impact

Annual Bond Redemption \$ \$915,750

The Bond funding listed for this project includes both long term bond funding and the use of the master lease program as appropriate. 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, or sites are maintained by community associations.



PARKS PROJECTS

Number: N3108

Project: FY2004 PARK SYSTEMIC IMPROVEMENTS

(In Thousands)	n Thousands)							gram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	822	100	922	100	100	100	100	100	500	100	100	100	100	1,822	
CONSTRUCTION	21,179	1,850	23,029	2,400	1,400	1,400	2,600	1,400	9,200	2,700	3,100	3,100	3,900	45,029	
Total Expenditures	22,001	1,950	23,951	2,500	1,500	1,500	2,700	1,500	9,700	2,800	3,200	3,200	4,000	46,851	
BONDS	12,950	0	12,950	1,000	0	0	1,200	0	2,200	800	1,200	1,200	2,000	20,350	
GRANTS	1,119	150	1,269	0	0	0	0	0	0	0	0	0	0	1,269	
PAY AS YOU GO	645	500	1,145	0	0	0	0	0	0	0	0	0	0	1,145	
TRANSFER TAX	7,287	1,300	8,587	1,500	1,500	1,500	1,500	1,500	7,500	2,000	2,000	2,000	2,000	24,087	
Total Funding	22,001	1,950	23,951	2,500	1,500	1,500	2,700	1,500	9,700	2,800	3,200	3,200	4,000	46,851	

Project Status:

\$21,051,869 spent and encumbered through February 2016
Replaced playground at Holiday Hills Park. Installation of three High School synthetic turf fields.

Project: N3109-FY2004 PARKS RESURFACING PROGRAM

Number: N3109

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 endorsed by the Recreation and Parks Board and is consistent with the 1999, 2005 and 2012 Land Preservation and Recreation Plan.

Remarks

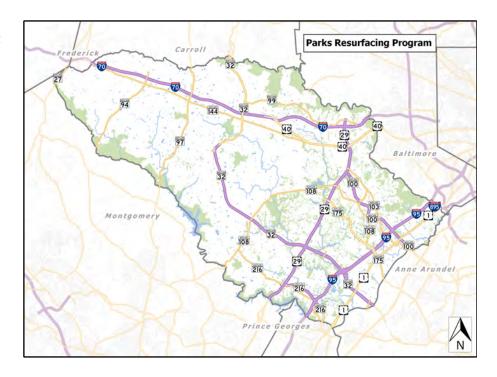
FY17 - Ongoing surface improvements throughout the parks system.

Project Schedule

FY17 - Construction continues FY17-22 - Construction continues

Operating Budget Impact

No additional operating expense associated with this effort. These are resurfacing efforts on facilities already in operation.



Number: N3109

Project: FY2004 PARKS RESURFACING PROGRAM

(In Thousands)					Five	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	320	50	370	50	50	50	50	50	250	0	0	0	0	620	
CONSTRUCTION	5,820	390	6,210	450	450	450	450	450	2,250	0	0	0	0	8,460	
Total Expenditures	6,140	440	6,580	500	500	500	500	500	2,500	0	0	0	0	9,080	
GRANTS	129	0	129	0	0	0	0	0	0	0	0	0	0	129	
PAY AS YOU GO	340	0	340	0	0	0	0	0	0	0	0	0	0	340	
TRANSFER TAX	5,671	440	6,111	500	500	500	500	500	2,500	0	0	0	0	8,611	
Total Funding	6,140	440	6,580	500	500	500	500	500	2,500	0	0	0	0	9,080	

Project Status:

\$5,503,245 spent and encumbered through February 2016
Resurfaced Centennial, Hammond, High Ridge, Holiday Hills, Dayton Parks and Warfield's Pond Park's tennis and basketball courts. Resurfaced pathways.

PARKS PROJECTS Project: N3932-FY2000 WESTERN REGIONAL PARK

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 and 2012 Land Preservation and Recreation Plans. This project has been endorsed by the Recreation and Parks Advisory Board.

Remarks

Prior funds include Program Open Space funds.

Project Schedule

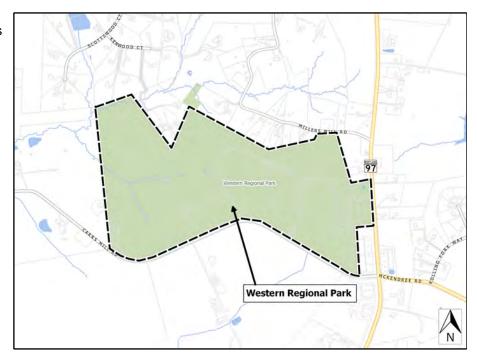
FY26 - Design Phase V restroom/pavilion/concession building and parking.

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.



PARKS PROJECTS

Project: FY2000 WESTERN REGIONAL PARK Number: N3932

(In Thousands)	Thousands)							ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	2,309	0	2,309	0	0	0	0	0	0	0	0	0	300	2,609	
CONSTRUCTION	15,852	0	15,852	0	0	0	0	0	0	0	0	0	0	15,852	
Total Expenditures	18,161	0	18,161	0	0	0	0	0	0	0	0	0	300	18,461	
BONDS	2,219	0	2,219	0	0	0	0	0	0	0	0	0	300	2,519	
DEVELOPER CONTRIBUTION	14	0	14	0	0	0	0	0	0	0	0	0	0	14	
GRANTS	10,864	0	10,864	0	0	0	0	0	0	0	0	0	0	10,864	
TRANSFER TAX	5,064	0	5,064	0	0	0	0	0	0	0	0	0	0	5,064	
Total Funding	18,161	0	18,161	0	0	0	0	0	0	0	0	0	300	18,461	

Project Status: \$18,083,624 spent and encumbered through February 2016

PARKS PROJECTS

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. Prior appropriation reflects a TAO FY13 of a reduction of \$700,000.

FY17 - Prior funding will be used to begin the design process for the swimming pool.

Project Schedule

FY18 - Continue with swimming pool design.

FY19- Fund construction cost of a swimming pool.

FY20 - Start swimming pool construction.

Operating Budget Impact

Annual Bond Redemption \$ \$920,745

Annual operating costs for the future community park are estimated to be \$95,000.



PARKS PROJECTS

Project: FY2000 NORTH LAUREL PARK Number: N3940

(In Thousands)	,						apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	391	0	391	500	0	0	0	0	500	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	7,500	7,500	0	0	15,000	0	0	0	0	19,760	
Total Expenditures	6,526	0	6,526	500	7,500	7,500	0	0	15,500	0	0	0	0	22,026	
BONDS	4,961	0	4,961	500	7,500	7,500	0	0	15,500	0	0	0	0	20,461	
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	6,526	0	6,526	500	7,500	7,500	0	0	15,500	0	0	0	0	22,026	

Project Status:

\$5,690,774 spent and encumbered through February 2016
The park construction is completed.

Number: N3947

Project: N3947-FY1999 NEIGHBORHOOD PLAYGROUND PROGRAM

Description

This project will develop neighborhood playground facilities on County parkland or open space throughout the County where community need has been demonstrated.

Justification

This project is endorsed by the Recreation and Parks Advisory Board and is consistent with the 2005 Land Preservation, Recreation and Parks Plan.

Remarks

- 1. To participate in this program the community must contribute 10% of the equipment cost not to exceed \$4,000.
- 2. Prior funds represent 10% contribution from the Governor's Run HOA towards playground replacement in the future.

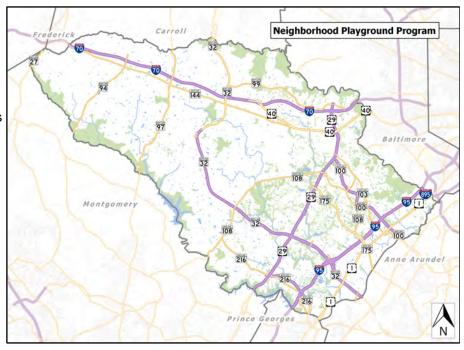
Project Schedule

FY17 - Close

Operating Budget Impact

Annual Bond Redemption \$ \$2,295

Annual Maintenance costs average \$3,000 per playground.



Project: FY1999 NEIGHBORHOOD PLAYGROUND PROGRAM

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	11	0	11	0	0	0	0	0	0	0	0	0	0	11
CONSTRUCTION	217	11	228	0	0	0	0	0	0	0	0	0	0	228
Total Expenditures	228	11	239	0	0	0	0	0	0	0	0	0	0	239
BONDS	40	11	51	0	0	0	0	0	0	0	0	0	0	51
OTHER SOURCES	24	0	24	0	0	0	0	0	0	0	0	0	0	24
PAY AS YOU GO	4	0	4	0	0	0	0	0	0	0	0	0	0	4
TRANSFER TAX	160	0	160	0	0	0	0	0	0	0	0	0	0	160
Total Funding	228	11	239	0	0	0	0	0	0	0	0	0	0	239

Project Status: \$227,855 spent and encumbered through February 2016

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 and 2012 Land Preservation and Recreation Plan.

Remarks

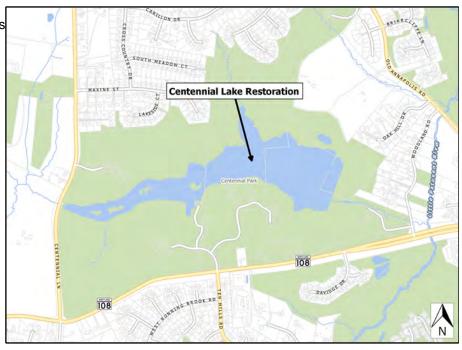
FY17-The Department will use the remaining portion of the existing funds to initiate an updated profile survey of the existing lake bottom to detemine the scope of work for the dredging project. Upon the completion of the survey, will then have current information to allow for the County to better determine the future design needs/costs and construciton costs for dredging the lake. Project partly defunded.

Project Schedule

Operating Budget Impact

Annual Bond Redemption \$ \$945

No additional operating costs will be associated with this project other than the electricity required to operate the potential aeration pumps which is estimated at less than \$1000 per year.



Project: FY2000 CENTENNIAL LAKE RESTORATION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Class Prior FY2017 App Appr. Budget To				Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	587	(500)	87	0	0	0	0	0	0	0	0	0	0	87
CONSTRUCTION	100	(100)	0	0	0	0	0	0	0	0	0	0	0	C
Total Expenditures	687	(600)	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
TRANSFER TAX	600	(600)	0	0	0	0	0	0	0	0	0	0	0	C
Total Funding	687	(600)	87	0	0	0	0	0	0	0	0	0	0	87

Project Status:

\$59,738 spent and encumbered through February 2016
Lake bottom survey, sediment analysis, and dredging methods being evaluated in preparation for project design.

Description

A project to acquire an additional 5 acres, rehabilitate an 1820 historic house, and design and construct a 106 acre Regional Park at MD100 and US1.

Justification

This project conforms to the goals and objectives of the 1999, 2005 and 2012 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.

Project Schedule

- FY18 Continue construction of Phase II and start the design of Phase III.
- FY19 Start construction of Phase III.
- FY26 Start the Design of Phase IV.

Operating Budget Impact

Annual Bond Redemption \$ \$1,241,325

The Bond funding listed for this project includes both long term bond funding and the use of the master lease program as appropriate. The start up costs for this entire regional park will be \$422,000. Operational cost after construction for each phase is estimated: Phase I - \$20,000, Phase II - \$156,000, Phase III - \$132,000, Phase IV - \$500,000 and Phase V - \$130,000.



Fiscal 2017 Capital Budget

PARKS PROJECTS

Number: N3957

Project: FY2003 TROY PARK & HISTORIC REHABILITATION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	4,465	0	4,465	100	100	0	0	0	200	0	0	0	1,000	5,665
LAND ACQUISITION	1,753	0	1,753	0	0	0	0	0	0	0	0	0	0	1,753
CONSTRUCTION	16,325	0	16,325	3,900	3,900	0	0	0	7,800	0	0	0	0	24,125
Total Expenditures	22,543	0	22,543	4,000	4,000	0	0	0	8,000	0	0	0	1,000	31,543
BONDS	18,585	0	18,585	4,000	4,000	0	0	0	8,000	0	0	0	1,000	27,585
GRANTS	2,572	0	2,572	0	0	0	0	0	0	0	0	0	0	2,572
OTHER SOURCES	5	0	5	0	0	0	0	0	0	0	0	0	0	5
TRANSFER TAX	1,381	0	1,381	0	0	0	0	0	0	0	0	0	0	1,381
Total Funding	22,543	0	22,543	4,000	4,000	0	0	0	8,000	0	0	0	1,000	31,543

Project Status:

\$12,665,845 spent and encumbered through February 2016 Completed Phase I construction.

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 and 2012 Land Preservation 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.
- 3. FY17 Request addresses funds for ongoing renovations/improvements on park historic structures/sites.

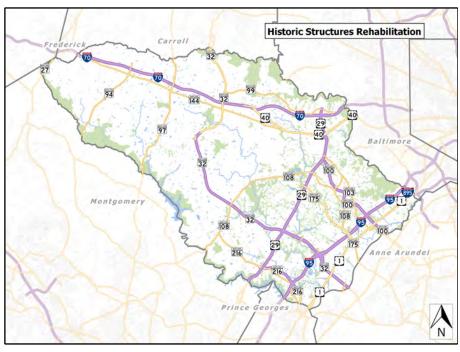
Project Schedule

FY17 - Construction FY17-22 - Construction Continues

Operating Budget Impact

Annual Bond Redemption \$ \$40,500

All of these structures are operational and part of current operating budgets; no increase will result from these improvements.



Fiscal 2017 Capital Budget

PARKS PROJECTS

Number: N3958

Project: FY2003 HISTORIC STRUCTURES REHABILITATION

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	480	20	500	20	20	20	20	20	100	0	0	0	0	600
CONSTRUCTION	8,258	380	8,638	480	480	480	480	480	2,400	0	0	0	0	11,038
Total Expenditures	8,738	400	9,138	500	500	500	500	500	2,500	0	0	0	0	11,638
BONDS	900	0	900	0	0	0	0	0	0	0	0	0	0	900
GRANTS	190	0	190	0	0	0	0	0	0	0	0	0	0	190
OTHER SOURCES	4,055	0	4,055	0	0	0	0	0	0	0	0	0	0	4,055
PAY AS YOU GO	222	0	222	0	0	0	0	0	0	0	0	0	0	222
TRANSFER TAX	3,371	400	3,771	500	500	500	500	500	2,500	0	0	0	0	6,271
Total Funding	8,738	400	9,138	500	500	500	500	500	2,500	0	0	0	0	11,638

Project Status:

\$4,751,744 spent and encumbered through February 2016

Project: N3959-FY2005 PATAPSCO FEMALE INSTITUTE SITE WORK

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, This site is already operational at a cost of \$13,000 annually. The estimated 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 and 2012 Land Preservation and Recreation Plan related to park and historic site rehabilitation.

Remarks

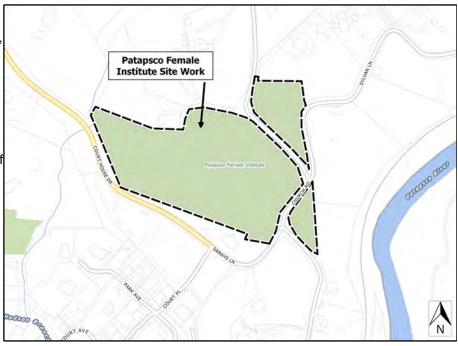
Prior year funds addresses design fees for site improvements and construction of the out building on the site.

Project Schedule

Operating Budget Impact

Annual Bond Redemption \$ \$51,750

maintenance and operating cost in after construction, will be \$75,000.



Project: FY2005 PATAPSCO FEMALE INSTITUTE SITE WORK

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	•				Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	586	0	586	0	0	0	0	0	0	0	0	0	0	586
CONSTRUCTION	951	0	951	0	0	0	0	0	0	0	0	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	0	0	0	1,150
TRANSFER TAX	387	0	387	0	0	0	0	0	0	0	0	0	0	387
Total Funding	1,537	0	1,537	0	0	0	0	0	0	0	0	0	0	1,537

Project Status:

\$560,388 spent and encumbered through February 2016

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.

Project: N3960-FY2006 ROBINSON PROPERTY NATURE CENTER Number: N3960

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 Land Preservation, Recreation and Parks Plan.

Remarks

Prior year OTHER funds indicates a \$700,000 donation received from the Middle Patuxent Nature Center 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 Middle Patuxent Nature Center Foundation, Inc. Prior appropriation reflects TAO #2-FY2009 and TAO #1-FY2010 and a TAO FY2013 for a reduction of \$300,000.

Project Schedule

FY17 - Close

Operating Budget Impact

Annual Bond Redemption \$ \$555,975

The operating costs are absorbed within current operational budget.



Project: FY2006 ROBINSON PROPERTY NATURE CENTER

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,971	0	1,971	0	0	0	0	0	0	0	0	0	0	1,971
CONSTRUCTION	15,332	0	15,332	0	0	0	0	0	0	0	0	0	0	15,332
Total Expenditures	17,303	0	17,303	0	0	0	0	0	0	0	0	0	0	17,303
BONDS	12,355	0	12,355	0	0	0	0	0	0	0	0	0	0	12,355
GRANTS	1,864	0	1,864	0	0	0	0	0	0	0	0	0	0	1,864
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	17,303	0	17,303	0	0	0	0	0	0	0	0	0	0	17,303

Project Status:

\$17,023,061 spent and encumbered through February 2016 FY12 - Construction of the Nature Center building is complete.

FY16 - Construct additional structures such storage building and a nature playground.

Project: N3962-FY2008 CENTENNIAL PARK IMPROVEMENTS 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, pier and boat ramp upgrades, shop/office addition, boat rental expansion, pavilion and restroom upgrades, stage renovations, roadway/parking repairs and upgrades, court renovations, pathway and seating area renovation, 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 and 2012 Land Preservation and Recreation Plan.

Remarks

Prior funds address the required park improvements and design and construction.

Project Schedule

FY26 - Design synthetic turf field, replacement of ballfield lights and parking.

Operating Budget Impact

These improvements will not increase operating expenses. There will be savings as a result of the synthetic turf and high efficiency lights.



Project: FY2008 CENTENNIAL PARK IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Appr. Budget Total			Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	114	0	114	0	0	0	0	0	0	0	0	0	300	414
CONSTRUCTION	500	0	500	0	0	0	0	0	0	0	0	0	0	500
Total Expenditures	614	0	614	0	0	0	0	0	0	0	0	0	300	914
TRANSFER TAX	614	0	614	0	0	0	0	0	0	0	0	0	300	914
Total Funding	614	0	614	0	0	0	0	0	0	0	0	0	300	914

Project Status:

\$583,994 spent and encumbered through February 2016 Design for pond to stream retrofit, stream bank stabilization.

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 system which currently extends from Savage Park through Columbia to Dorsey's Search. At the current time the operating impacts cannot be determined until a Project includes an evaluation and possible improvements to the RT29 Pedestrian Bridge and its approaches and connections to the County's borders. and rehabilitation of existing pathway and trail systems.

Justification

This project is identified in the 2005 and 2012 Land Preservation and Recreation Plan and is endorsed by the Recreation and Parks Advisory Board and the Oakland Mills Master Plan Committee.

Remarks

- 1. 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.
- 2. Grant represents funding from the TEA-21 Transportation Equity Act.
- 3. Conduct a centerline survey of the existing Spinal Pathway System, perform a condition assessment, and evaluate the RT29 Bridge and its approaches for possible upgrades and \$100,000 reduction in Grant funds due to not receiving a Transportation Equity Act grant.
- 4. 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.

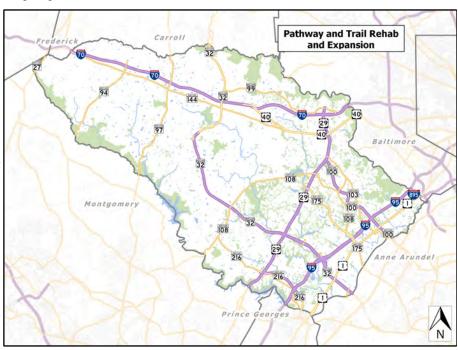
Project Schedule

- FY17 Planning, Engineering and Construction
- FY18 Planning, Engineering and Construction
- FY19 Planning, Engineering and Construction
- FY20 Planning, Engineering and Construction
- FY21 Planning, Engineering and Construction
- FY22 Planning, Engineering and Construction

Operating Budget Impact

Annual Bond Redemption \$ \$12,510

feasibility study is done for the pathway expansion or Rt. 29 Bridge enhancements. Future rehabilitation of the existing pathway will reduce ongoing maintenance efforts.



Project: FY2009 PATHWAY and TRAIL REHAB and EXPANSION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	350	150	500	50	50	50	50	50	250	0	0	0	0	750
CONSTRUCTION	650	1,255	1,905	50	50	50	50	50	250	0	0	0	0	2,155
Total Expenditures	1,000	1,405	2,405	100	100	100	100	100	500	0	0	0	0	2,905
BONDS	0	278	278	0	0	0	0	0	0	0	0	0	0	278
GRANTS	0	1,092	1,092	0	0	0	0	0	0	0	0	0	0	1,092
TRANSFER TAX	1,000	35	1,035	100	100	100	100	100	500	0	0	0	0	1,535
Total Funding	1,000	1,405	2,405	100	100	100	100	100	500	0	0	0	0	2,905

Project Status:

\$407,277 spent and encumbered through February 2016

Project: N3964-FY2007 ALPHA RIDGE PARK ADDITIONS

Number: N3964

Description

A project to design and construct a restroom, a lighted pavilion over the existing roller hockey rink, parking expansion, a pathway and parking lot courtesy lights within Alpha Ridge Park located on RT99 just east of Sand Hill Road.

Justification

This project is identified in the 2005 and 2012 Land Preservation and Recreation Plan and is endorsed by the Recreation and Parks Advisory Board.

Remarks

Prior funds include a FY10 \$75,000 State Bond Bill.

Project Schedule

FY17 - Close

Operating Budget Impact

Annual Bond Redemption \$ \$19,125

This park is currently operational. Future restroom and hockey pavilion maintenance is estimated \$20,000 annually.



Project: FY2007 ALPHA RIDGE PARK ADDITIONS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	208	0	208	0	0	0	0	0	0	0	0	0	0	208
CONSTRUCTION	462	0	462	0	0	0	0	0	0	0	0	0	0	462
Total Expenditures	670	0	670	0	0	0	0	0	0	0	0	0	0	670
BONDS	425	0	425	0	0	0	0	0	0	0	0	0	0	425
GRANTS	75	0	75	0	0	0	0	0	0	0	0	0	0	75
TRANSFER TAX	170	0	170	0	0	0	0	0	0	0	0	0	0	170
Total Funding	670	0	670	0	0	0	0	0	0	0	0	0	0	670

Project Status:

\$669,909 spent and encumbered through February 2016
Construction of a restroom, additional parking and observatory foundation will start construction.

Project: N3965-FY2007 MIDDLE PATUXENT IMPROVEMENTS

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

- 1. Prior funds address funds for design and construction.
- 2. FY14 funds include a \$150,000 State Bond Bill. Prior year funds will be used for the Bond Bill match.
- 3. FY17-Request reflects additional funds for cosntruction.

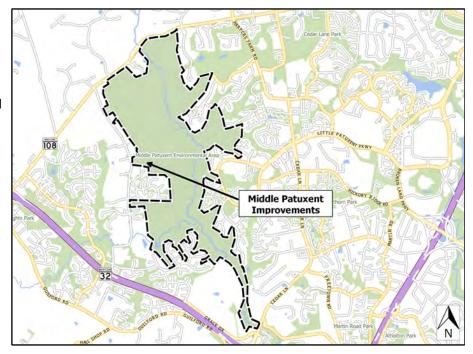
Project Schedule

FY17 - Close

Operating Budget Impact

Annual Bond Redemption \$ \$42,750

The estimated annual operating cost for maintenance and utilities related to the restroom and storage shed is \$15,000 annually.



Project: FY2007 MIDDLE PATUXENT IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	220	0	220	0	0	0	0	0	0	0	0	0	0	220
CONSTRUCTION	1,050	600	1,650	0	0	0	0	0	0	0	0	0	0	1,650
Total Expenditures	1,270	600	1,870	0	0	0	0	0	0	0	0	0	0	1,870
BONDS	950	0	950	0	0	0	0	0	0	0	0	0	0	950
GRANTS	150	0	150	0	0	0	0	0	0	0	0	0	0	150
PAY AS YOU GO	25	0	25	0	0	0	0	0	0	0	0	0	0	25
TRANSFER TAX	145	600	745	0	0	0	0	0	0	0	0	0	0	745
Total Funding	1,270	600	1,870	0	0	0	0	0	0	0	0	0	0	1,870

Project Status:

\$390,417 spent and encumbered through February 2016
The design of the restroom, parking and storage building will be completed. Construction of the restroom, parking and storage building will begin.

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 and 2012 Land Preservation and Recreation Plan and is endorsed by the Recreation and Parks Advisory Board.

Remarks

- 1. Prior year funds address the Town of Sykesville continued design and construction under lease agreement.
- 2. FY17 request addresses parking lot construction funds. Funds also address a \$100.000 State Bond Bill

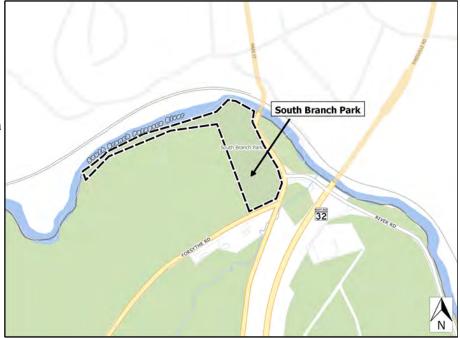
Project Schedule

FY17 - Begin 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.



Project: FY2007 SOUTH BRANCH PARK Number: N3967

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	350	100	450	0	0	0	0	0	0	0	0	0	0	450
CONSTRUCTION	510	500	1,010	0	0	0	0	0	0	0	0	0	0	1,010
Total Expenditures	860	600	1,460	0	0	0	0	0	0	0	0	0	0	1,460
BONDS	300	500	800	0	0	0	0	0	0	0	0	0	0	800
GRANTS	0	100	100	0	0	0	0	0	0	0	0	0	0	100
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	860	600	1,460	0	0	0	0	0	0	0	0	0	0	1,460

Project Status:

\$771,872 spent and encumbered through February 2016
FY15 - Playground and pavilion were constructed. FY16 - Skate park was constructed.

Number: N3968

Project: N3968-FY2007 CEDAR LANE ATHLETIC FIELD IMPROVEMENTS

Description

A project to upgrade the athletic field lighting and fencing at Cedar Lane Park located at MD108 and Cedar Lane. Upgrades will include no spill lights for all existing lighted fields.

Justification

This project is endorsed by the Recreation and Parks Advisory Board. It will provide a safer playing surface and reduce light spill into adjacent communities.

Remarks

Prior appropriation reflects TAO #2-FY2009.

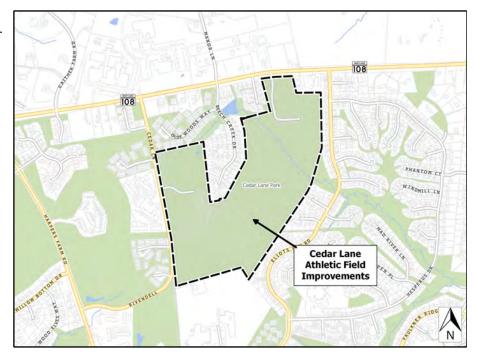
Project Schedule

FY17 - Close

Operating Budget Impact

Annual Bond Redemption \$ \$30,105

There is no increase in operating cost associated with these improvements.



Project: FY2007 CEDAR LANE ATHLETIC FIELD IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Appr. Budget T			Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	223	0	223	0	0	0	0	0	0	0	0	0	0	223
CONSTRUCTION	2,030	(11)	2,019	0	0	0	0	0	0	0	0	0	0	2,019
Total Expenditures	2,253	(11)	2,242	0	0	0	0	0	0	0	0	0	0	2,242
BONDS	680	(11)	669	0	0	0	0	0	0	0	0	0	0	669
TRANSFER TAX	1,573	0	1,573	0	0	0	0	0	0	0	0	0	0	1,573
Total Funding	2,253	(11)	2,242	0	0	0	0	0	0	0	0	0	0	2,242

Project Status:

\$2,241,094 spent and encumbered through February 2016

Number: N3970

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.

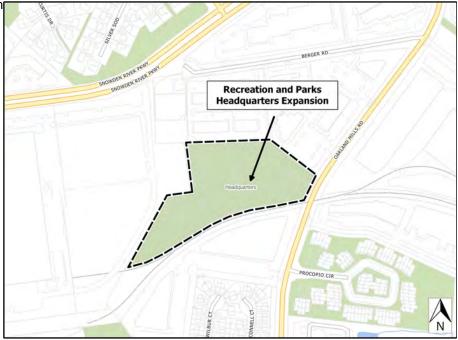
Remarks

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.



Project: FY2008 RECREATION and PARKS HEADQUARTERS EXPAN

(In Thousands)					Five	Year Ca	apital Pro	ogram	Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status: \$93,344 spent and encumbered through February 2016

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 addresses 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

FY17 - Continue Land Acquisition and Planting



Project: FY2009 FOREST CONSERVATION MITIGATION EASEMENT PGM

(In Thousands)					Five	Year Ca	apital Pro	ogram	Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status:

\$2,004,356 spent and encumbered through February 2016

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 Year Capital Program							Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project			
CONSTRUCTION	460	0	460	0	0	0	0	0	0	0	0	0	0	460			
Total Expenditures	460	0	460	0	0	0	0	0	0	0	0	0	0	460			
DEVELOPER CONTRIBUTION	460	0	460	0	0	0	0	0	0	0	0	0	0	460			
Total Funding	460	0	460	0	0	0	0	0	0	0	0	0	0	460			

Project Status:

\$150,434 spent and encumbered through February 2016

Defaulted properties: Nordau Acres (F-97-036), Hebb Property (F-05-147), Holly Hills (F-96-0074), Frosty Pines (F-00140), Bethel Crossing (F-00-150), Brantwood Section One (F-98-138), and Boulevard Metals (SDP-96-077).

Number: N3973

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 will provide a safer playing surface, reduce maintenance costs and improve site utilization.

Remarks

Prior fund request addresses funds to start the design process to renovate the existing fields to add synthetic turf.

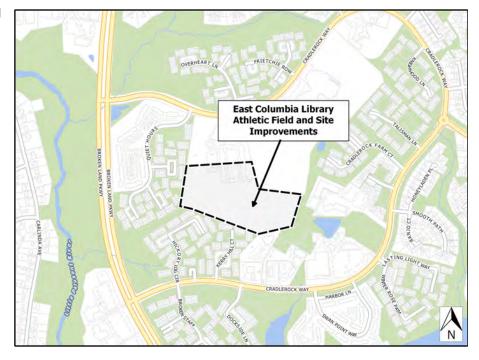
Project Schedule

FY17 - Construction

Operating Budget Impact

Annual Bond Redemption \$ \$166,500

The operational costs after construction for this project is estimated: \$120,000



Project: FY2014 EAST COLUMBIA LIBRARY ATHLETIC FIELD and SITE IMPROVEMENTS

(In Thousands)					Five Year Capital Program							Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project			
PLANS & ENGINEERING	200	0	200	0	0	0	0	0	0	0	0	0	0	200			
CONSTRUCTION	3,500	0	3,500	0	0	0	0	0	0	0	0	0	0	3,500			
Total Expenditures	3,700	0	3,700	0	0	0	0	0	0	0	0	0	0	3,700			
BONDS	3,700	0	3,700	0	0	0	0	0	0	0	0	0	0	3,700			
Total Funding	3,700	0	3,700	0	0	0	0	0	0	0	0	0	0	3,700			

Project Status: \$143,240 spent and encumbered through February 2016

Project: N3976-FY2025 SOUTH FULTON PARK

PARKS PROJECTS

Number: N3976

Description

Operating Budget Impact

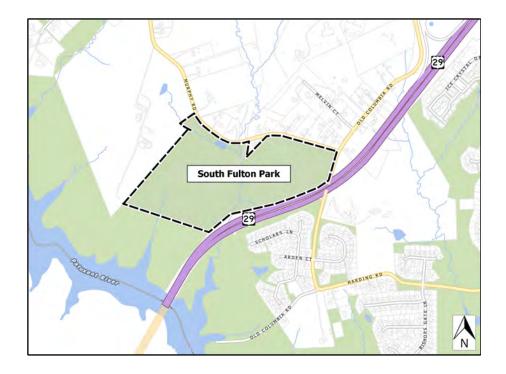
A project to master plan, design and construct a 84-acre community park located Annual Bond Redemption \$ \$31,500 off of Rt29 and Murphy Road, north of the Patuxent River. Facilities will be determined by a citizen's advisory committee and a master plan effort.

Justification

This project is identified in the 2012 Land Preservation and Recreation Plan.

Remarks

Project Schedule



Project: FY2025 SOUTH FULTON PARK Number: N3976

(In Thousands)				Five Year Capital Program							Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project		
PLANS & ENGINEERING	0	0	0	0	0	0	0	0	0	0	0	200	500	700		
Total Expenditures	0	0	0	0	0	0	0	0	0	0	0	200	500	700		
BONDS	0	0	0	0	0	0	0	0	0	0	0	200	500	700		
Total Funding	0	0	0	0	0	0	0	0	0	0	0	200	500	700		

Project Status: \$0 spent and encumbered through February 2016

Project: N3977-FY2025 KIWANIS PARK EXTENSION Number: N3977

Description

A project to master plan, design and construct an additional 30-acre site adjacent Annual Bond Redemption \$ \$31,500 to the existing Kiwanis Park and to improve the existing park site.

Justification

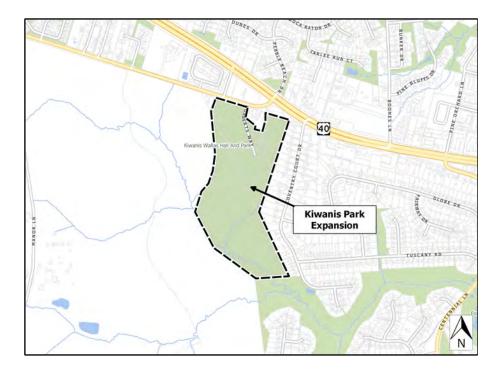
This project is identified in the 2012 Land Preservation and Recreation Plan.

Remarks

Project Schedule

Operating Budget Impact

At the current time the operating impacts cannot be determined until a feasibility study is completed.



Project: FY2025 KIWANIS PARK EXTENSION Number: N3977

(In Thousands)				Five Year Capital Program							Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project		
PLANS & ENGINEERING	0	0	0	0	0	0	0	0	0	0	0	200	500	700		
Total Expenditures	0	0	0	0	0	0	0	0	0	0	0	200	500	700		
BONDS	0	0	0	0	0	0	0	0	0	0	0	200	500	700		
Total Funding	0	0	0	0	0	0	0	0	0	0	0	200	500	700		

Project Status: \$0 spent and encumbered through February 2016

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
P4920 FY2001 MOBILE DATA POLICE COMPUTERS Project for the purchase, installation and support of mobile	G	250	0	250	0	0	0	0	0	250
computers for police operations in the field.	0	200	0	200	0	0	0	0	0	200
	Р	4,050	0	4,050	0	0	0	0	0	4,050
	Total	4,500	0	4,500	0	0	0	0	0	4,500
P4926 FY2009 CHILD ADVOCACY CENTER A project for the provision of a larger Child Advocacy	В	0	0	0	0	0	1,000	1,025	4,570	6,595
Center, maintaining a "child friendly" environment, but meeting the expanding facilities requirements for the present and future policing demands.	Total	0	0	0	0	0	1,000	1,025	4,570	6,595
P4927 FY2009 CRIMINAL INVESTIGATIONS BUREAU BLDG/WARFIELD ADDITION	В	0	0	0	0	1,645	9,270	650	0	11,565
A project for the construction of new Criminal Investigations space and space for the relocation of Police forces from the Gateway Building, as an addition to the present Northern District Police Station.	Total	0	0	0	0	1,645	9,270	650	0	11,565
P4928 FY2015 NEW/THIRD POLICE STATION Construct a third fully staffed 24-hour operation Police	В	2,100	1,000	3,100	17,530	1,410	3,400	0	0	25,440
Station.	Total	2,100	1,000	3,100	17,530	1,410	3,400	0	0	25,440
POLICE PROJECTS Total	1	6,600	1,000	7,600	17,530	3,055	13,670	1,675	4,570	48,100

Howard County, MD FY2017 Council Approved Capital Budget (\$000) POLICE-POLICE PROJECTS

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	2,100	1,000	3,100
G	GRANTS	250	0	250
0	OTHER SOURCES	200	0	200
Р	PAY AS YOU GO	4,050	0	4,050
Total		6,600	1,000	7,600

2017 Council Approved 5 Year Capital Budget Project Type Summary (POLICE-POLICE PROJECTS)

Rev	renue Source	Prior Approp	Current FY	2018	2019	2020	2021	2022	5 Year Total
В	BONDS	2,100	1,000	17,530	3,055	13,670	1,675	4,570	43,600
G	GRANTS	250	0	0	0	0	0	0	250
0	OTHER SOURCES	200	0	0	0	0	0	0	200
Р	PAY AS YOU GO	4,050	0	0	0	0	0	0	4,050
Tota	al	6,600	1,000	17,530	3,055	13,670	1,675	4,570	48,100

Number: P4920

Description

Project for the purchase, installation and support of mobile computers for police operations in the field.

Justification

could generate police reports, run queries, and more efficiently respond to routine completed. calls for service. Purchase of hardware and software for e-citations.

Remarks

- 1. OTHER funds represent Federal Drug Forfeiture Dollars.
- 2. GRANT represents US Department of Justice funds.

Project Schedule

FY16-17 - Complete automated field reporting project.

FY18 - Complete and close.

Operating Budget Impact

Accounts funding installation and maintenance will have to be increased. Staff will have to expand to provide hardware and software technical support. Periodic upgrading and replacement of computer equipment and Project has the goal of providing officers with computers in the field on which they software will be needed on an annual basis once the system has been



Number: P4920

Project: FY2001 MOBILE DATA POLICE COMPUTERS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	160	0	160	0	0	0	0	0	0	0	0	0	0	160
ADMINISTRATION	2	0	2	0	0	0	0	0	0	0	0	0	0	2
EQUIPMENT & FURNISHINGS	4,338	0	4,338	0	0	0	0	0	0	0	0	0	0	4,338
Total Expenditures	4,500	0	4,500	0	0	0	0	0	0	0	0	0	0	4,500
GRANTS	250	0	250	0	0	0	0	0	0	0	0	0	0	250
OTHER SOURCES	200	0	200	0	0	0	0	0	0	0	0	0	0	200
PAY AS YOU GO	4,050	0	4,050	0	0	0	0	0	0	0	0	0	0	4,050
Total Funding	4,500	0	4,500	0	0	0	0	0	0	0	0	0	0	4,500

Project Status:

\$4,454,140 spent and encumbered through February 2016

FY09 - Purchased replacement hardware and software for 1/3 MDC units. Begin implementation of e-citations. Began MDC docking station replacements.

Purchased 1/3 replacement hardward and software for MDCs. Continued expansion of e-citation program.

FY10 - Purchased replacement hardware and software for 38 MDC's (actual need was 133). Encumbered \$100,000 for future automated field reporting software modifications.

FY11- No MDC units purchased.

FY12 - 25 MDC units purchased.

FY13 - MDC upfit hardware for 23 vehicles.

FY14 - No activity.

FY15 - Vendor selection in process.

Project: P4926-FY2009 CHILD ADVOCACY CENTER Number: P4926

Description

A project for the provision of a larger Child Advocacy Center, maintaining a "child Annual Bond Redemption \$ \$319,275 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

Estimated annual utility/custodial costs upon construction completion: \$ 17.500.00



Fiscal 2017 Capital Budget

POLICE PROJECTS

Project: FY2009 CHILD ADVOCACY CENTER Number: P4926

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	0	0	0	0	0	1,005	0	1,005	0	0	0	0	1,005
LAND ACQUISITION	0	0	0	0	0	1,000	0	0	1,000	0	0	0	0	1,000
CONSTRUCTION	0	0	0	0	0	0	0	4,570	4,570	0	0	0	0	4,570
ADMINISTRATION	0	0	0	0	0	0	20	0	20	0	0	0	0	20
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	0	0	0	500	0	0	0	500
Total Expenditures	0	0	0	0	0	1,000	1,025	4,570	6,595	500	0	0	0	7,095
BONDS	0	0	0	0	0	1,000	1,025	4,570	6,595	500	0	0	0	7,095
Total Funding	0	0	0	0	0	1,000	1,025	4,570	6,595	500	0	0	0	7,095

Project Status:

\$0 spent and encumbered through February 2016

Number: P4927

Description

A project for the construction of new Criminal Investigations space and space for Annual Bond Redemption \$ \$520,425 the relocation of Police forces from the Gateway Building, as an addition to the present Northern District Police Station. The dedicated Criminal Investigations Bureau space will meet the tremendous demands which are being placed on the \$135,000.00 very limited space provided in the Northern & Southern District Police Stations.

Operating Budget Impact

Estimated annual utility/custodial costs upon construction completion

Justification

The new facility will provide the professional space required for the effective operation of the Criminal Investigations Bureau, both for the present and future, as well as provide the necessary space for Police forces being relocated from the Gateway Building. The present space for the Bureau is wholly inadequate, disjointed, inefficient, and without the professional amenities necessary to allow effective operations.

Remarks

Study funds previously provided are being used to define the feasibility of expanding the Northern District Police Station, and how to best integrate space between District Police Stations.

Project Schedule

FY19 - A/E Selection; Design Initiation FY20 - Design Completion; Construction

FY21 - Construction Completion

FY22 - Project Close Out



Number: P4927

Project: FY2009 CRIMINAL INVESTIGATIONS BUREAU BLDG/WARFIELD ADDITION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	0	0	0	1,615	0	0	0	1,615	0	0	0	0	1,615
CONSTRUCTION	0	0	0	0	0	9,270	0	0	9,270	0	0	0	0	9,270
ADMINISTRATION	0	0	0	0	30	0	0	0	30	0	0	0	0	30
EQUIPMENT & FURNISHINGS	0	0	0	0	0	0	650	0	650	0	0	0	0	650
Total Expenditures	0	0	0	0	1,645	9,270	650	0	11,565	0	0	0	0	11,565
BONDS	0	0	0	0	1,645	9,270	650	0	11,565	0	0	0	0	11,565
Total Funding	0	0	0	0	1,645	9,270	650	0	11,565	0	0	0	0	11,565

Project Status : \$0 spent and encumbered through February 2016

Project: P4928-FY2015 NEW/THIRD POLICE STATION

POLICE PROJECTS

Number: P4928

Description

Construct a third fully staffed 24-hour operation Police Station.

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

This project will include the construction of new Third District Police Station in the Harpers Choice area, the posssible relocation of staff from the Warfield and Scaggsville Police Stations possible consolidation of long term evidence storage and subsequernt renovations a Warfield and Scaggsville Police Stations.

Project Schedule

FY16 - Manpower/Service/Distribution Analysis/Study. Begin Programming and Planning

FY16/17 - Land will be acquired from HCPSS, Design Complete

FY18 Start Construction of new station.

FY19 - Design renovations in Northern and Southern Districts

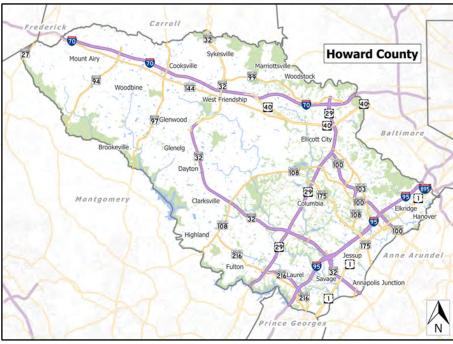
FY20 - Construction Complete of new 3rd District Station and Start Construction in Northern and Southern Districts

FY21 - Complete Construction in Northern and Southern Districts and Project Close Out for new 3rd District and renovation Project Closeout.

Operating Budget Impact

Annual Bond Redemption \$ \$1,144,800

Bur. Of Facilities estimates the FY17 and beyond annual impact to O&M and utilities at \$30,000.



Number: P4928

Project: FY2015 NEW/THIRD POLICE STATION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,700	1,000	2,700	0	210	0	0	0	210	0	0	0	0	2,910
CONSTRUCTION	400	0	400	17,500	0	3,000	0	0	20,500	0	0	0	0	20,900
ADMINISTRATION	0	0	0	30	0	0	0	0	30	0	0	0	0	30
EQUIPMENT & FURNISHINGS	0	0	0	0	1,200	400	0	0	1,600	0	0	0	0	1,600
Total Expenditures	2,100	1,000	3,100	17,530	1,410	3,400	0	0	22,340	0	0	0	0	25,440
BONDS	2,100	1,000	3,100	17,530	1,410	3,400	0	0	22,340	0	0	0	0	25,440
Total Funding	2,100	1,000	3,100	17,530	1,410	3,400	0	0	22,340	0	0	0	0	25,440

Project Status:

\$233,197 spent and encumbered through February 2016
FY16 - MOU signed for Old Cedar Lane Elementary School site, A/E selection complete for design of New 3rd District Staion, contract pending. Design & renovation of Grempler Bldg for Pathway Patrol underway, construction award scheduled Spring 2016.

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	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
Tatazent Tatailei Gewei.	M	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
S6189 FY2001 N LAUREL PUMP STATION A project for the design and replacement of the North	С	552	0	552	0	0	0	0	0	552
Laurel Wastewater Pump Station to increase the pumping capacity of the station to meet projected wastewater flows.	1	2,770	0	2,770	0	0	0	0	0	2,770
capacity of the station to meet projected wastewater nows.	М	5,808	0	5,808	0	0	0	0	0	5,808
	Total	9,130	0	9,130	0	0	0	0	0	9,130
S6214 SEWER CONTINGENCY FUND The fund is designed for use as a revenue source for	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	G	10,000	0	10,000	0	0	0	0	0	10,000
advanced from future years to the present fiscal year for critical sewer needs.	М	40,045	0	40,045	0	0	0	0	0	40,045
Citical Sewel Heeds.	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	0	75,600	0	0	0	0	0	75,600
S6232 FY2001 SEWER CORROSION CORRECTION PROGRAM	С	10,445	510	10,955	510	510	0	0	0	11,975
A project to televise sewer pipes in the County's sanitary sewer system for evidence of corrosion.	Total	10,445	510	10,955	510	510	0	0	0	11,975
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	5,000	2,000	0	0	0	45,400
	W	351	0	351	0	0	0	0	0	351
	Total	51,000	0	51,000	5,000	2,000	0	0	0	58,000

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
S6249 DEFAULTED DEVELOPER AGREEMENTS	D	3,600	0	3,600	0	0	0	0	0	3,600
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.	Total	3,600	0	3,600	0	0	0	0	0	3,600
S6260 FY2007 ROCKBURN HILL ROAD SEWER A project to provide sewer service to properties along	С	745	0	745	0	0	0	0	0	745
Rockburn Hill Road.	I	410	0	410	0	0	0	0	0	410
	М	2,870	0	2,870	0	0	0	0	0	2,870
	Total	4,025	0	4,025	0	0	0	0	0	4,025
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	М	11,580	2,825	14,405	2,825	2,825	2,825	2,825	2,825	28,530
Plant (LPWRP), and existing water distribution and wastewater collection system facilities.	Total	26,263	2,825	29,088	2,825	2,825	2,825	2,825	2,825	43,213
S6268 FY2008 PIPELINE REHABILITATION PROGRAM	С	4,830	650	5,480	650	650	0	0	0	6,780
A project to protect and stabilize sewers and water mains in areas where stream and soil erosion have compromised the integrity of the system.	Total	4,830	650	5,480	650	650	0	0	0	6,780
S6269 FY2009 ASHLEIGH KNOLLS SHARED SEWAGE DISP FAC UPGD	В	1,674	200	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
discharge permit imitis.	Total	2,936	200	3,136	0	0	0	0	0	3,136
S6271 FY2010 DEEP RUN INTERCEPTOR IMPROVEMENTS	С	285	0	285	0	0	0	0	0	285
A project for the design and construction of 1,400 LF of replacement sewer, a third 150-foot 18-inch siphon and	М	1,375	0	1,375	0	0	0	0	0	1,375
junction chambers on the Deep Run Interceptor in the vicinity of the Patapsco River.	Total	1,660	0	1,660	0	0	0	0	0	1,660
S6273 FY2011 LITTLE PATUXENT INTERCEPTOR IMPROVEMENTS	С	2,000	0	2,000	0	0	0	0	0	2,000
A project to reline and repair the 10 1/2 miles of the original Little Patuxent Interceptor from the Water Reclamation	М	10,000	0	10,000	0	0	0	0	0	10,000
Plant to RT108.	Total	12,000	0	12,000	0	0	0	0	0	12,000

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
S6274 FY2015 UPPER LITTLE PATUXENT PARALLEL SEWER	М	500	1,500	2,000	550	0	0	0	0	2,550
A project for the design and construction of 2,500 LF of parallel sewer, adjacent to the Little Patuxent Interceptor Sewer, north of MD108.	Total	500	1,500	2,000	550	0	0	0	0	2,550
6275 FY2012 DANIELS AREA PUMPING STATION project for the study, design and construction of a	М	2,500	0	2,500	0	0	0	0	0	2,500
rastewater pumping station and force main to serve the paniels Area east of Old Frederick Road and approvements/upgrades to the Old Frederick Road rumping station.	Total	2,500	0	2,500	0	0	0	0	0	2,500
6276 FY2011 SEWER CLEANING MAPPING AND ELEVISION INSPECTION MAINTENANCE	I	5,647	1,230	6,877	1,230	0	0	0	0	8,107
evelop a Sewer Manhole and Line Segment Inspection and Cleaning Program to include all County-owned water ewer lines within the collection system.	Total	5,647	1,230	6,877	1,230	0	0	0	0	8,107
6279 FY2013 MEADOWRIDGE FORCE MAIN EPLACEMENT	M	1,900	0	1,900	0	0	0	0	0	1,900
project for the design and construction of 2,500 LF of 8-ch replacement force main and improvements to the eadowridge Wastewater Pumping Station.										
	Total	1,900	0	1,900	0	0	0	0	0	1,900
6280 FY2013 HAMMOND/PATUXENT INTERCEPTOR	M	6,345	8,150	14,495	3,995	5,000	3,000	5	10	26,505
project for the study, design and construction of 20,000 et of parallel sewer in the Hammond Branch and atuxent sewer drainage areas.	Total	6,345	8,150	14,495	3,995	5,000	3,000	5	10	26,505
5281 FY2013 DORSEY/GUILFORD INTERCEPTOR IPROVEMENTS	М	1,560	5,360	6,920	5,425	1,005	5	10	0	13,365
project for the study, design and construction of 14,600 et of parallel sewer in the Dorsey Run and Guilford Run ewer drainage areas.	Total	1,560	5,360	6,920	5,425	1,005	5	10	0	13,365
6282 FY2013 BONNIE BRANCH/ROCKBURN ITERCEPTOR IMPROVEMENTS	М	3,370	1,955	5,325	0	0	0	0	0	5,325
project for the design and construction of 5,700 feet of arallel sewer in the Bonnie Branch sewer drainage area and the re-commissioning and upgrade of the Kerger Road umping Station and force main.	Total	3,370	1,955	5,325	0	0	0	0	0	5,325
6283 FY2013 TIBER/SUCKER BRANCH ITERCEPTOR IMPROVEMENTS	M	6,275	1,520	7,795	1,405	105	0	0	0	9,305
project for the design and construction of 18,000 feet of a callel sewer in the Tiber Branch and Sucker Branch swer drainage areas.	Total	6,275	1,520	7,795	1,405	105	0	0	0	9,305

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
S6284 FY2013 DEEP RUN/SHALLOW RUN INTERCEPTOR IMPROVEMENTS	М	12,615	3,560	16,175	2,960	1,075	0	0	0	20,210
A project for the design and construction of 46,000 feet of parallel sewer in the Deep Run and Shallow Run sewer drainage areas.	Total	12,615	3,560	16,175	2,960	1,075	0	0	0	20,210
S6285 FY2017 MD108 PUMP STATION OUTFALL IMPROVEMENTS	М	0	115	115	685	500	0	0	0	1,300
A project for the design and construction of 1,700 feet of parallel sewer in the Tiber Branch sewer drainage area and connection into the Patapsco Interceptor to support flows from the MD108 Pumping Station.	Total	0	115	115	685	500	0	0	0	1,300
S6286 FY2013 DORSEY RUN PUMP STATION UPGRADE	М	4,567	0	4,567	0	0	0	0	0	4,567
A project to upgrade and increase the pumping capacity of the Dorsey Run Pumping Station.	Total	4,567	0	4,567	0	0	0	0	0	4,567
S6287 FY2017 NORTH LAUREL PUMP STATION PARALLEL FORCE MAIN	М	0	505	505	2,005	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	0	505	505	2,005	0	0	0	0	2,510
S6288 FY2020 ROCKBURN PUMPING STATION UPGRADE A project to upgrade and increase the pumping capacity of the Rockburn Pumping Station.	М	0	0	0	0	0	330	2,990	0	3,320
	Total	0	0	0	0	0	330	2,990	0	3,320
S6289 FY2014 PARK AVENUE SEWER EXTENSION A project for the design and construction of 350 LF of 8-	М	225	35	260	0	0	0	0	0	260
inch sewer to serve three properties on Park Avenue in Ellicott City.	Total	225	35	260	0	0	0	0	0	260
S6290 FY2014 SAVAGE AREA SEWER STUDY and REALIGNMENT	М	3,250	1,000	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	3,250	1,000	4,250	0	0	0	0	0	4,250
S6292 FY2015 OLD FREDERICK ROAD SEWER	М	300	48	348	0	0	0	0	0	348
A project for the design and construction of 900 LF of sewer to serve four properties located on Old Frederick Road.	Total	300	48	348	0	0	0	0	0	348
S6293 FY2015 TURF VALLEY ROAD SEWER A project for the design and construction of 2,000 LF of	I	700	77	777	0	0	0	0	0	777
sewer to serve three properties located on US40.	Total	700	77	777	0	0	0	0	0	777

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
S6294 FY2015 ANNAPOLIS JUNCTION PUMPING STATION RENOVATION	I	150	105	255	0	0	0	0	0	255
A project for the renovation of the Annapolis Junction Pumping Station.	0	125	0	125	0	0	0	0	0	125
	Total	275	105	380	0	0	0	0	0	380
66295 FY2016 LPWRP 8th ADDITION BIOSOLIDS PROCESSING FACILITIES	М	84,000	3,000	87,000	0	0	0	0	0	87,000
A project to design and construct new biosolids processing acilities 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 eduction, and enhance biosolids quality for end-use purposes.	Total	84,000	3,000	87,000	0	0	0	0	0	87,000
6296 FY2016 HARRIET TUBMAN LANE SEWER EXTENSION	С	130	310	440	0	0	0	0	0	440
project for the design and construction of 150 linear feet sewer to serve one property on Harriet Tubman Lane.	Total	130	310	440	0	0	0	0	0	440
6297 FY2016 OLD FREDERICK ROAD PUMPING TATION UPGRADE project for the design and construction of upgrades to crease the pumping capacity of the Old Frederick Road umping Station.	M	235	0	235	1,500	0	0	0	0	1,735
	Total	235	0	235	1,500	0	0	0	0	1,735
6500 FY2017 SEWER AREA ASSESSMENT AND ODELING	С	0	255	255	100	105	100	90	85	735
project [program] for the study and evaluation of sewer reas and/or water zones.	Total	0	255	255	100	105	100	90	85	735
6698 ROUTINE SEWER EXTENSION PROGRAM project to design and construct routine sewer main	М	4,250	625	4,875	625	625	625	625	625	8,000
xtensions in the Metropolitan District requested by indowners.	Total	4,250	625	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	3,000	0	18,000
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 ystems to public sewer service.	Total	6,000	0	6,000	3,000	3,000	3,000	3,000	0	18,000

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
S6711 FY2011 DEVELOPER INSPECTION PROGRAM A project to provide engineering or administrative services,	С	2,100	500	2,600	1,000	0	1,000	0	1,000	5,600
computer management, asset management, inspection, testing, staff training, supplies, tools, equipment and	D	4,150	500	4,650	1,000	0	1,000	0	1,000	7,650
vehicles necessary for site inspections for the implementation of developer projects to make additions to	0	250	250	500	250	250	250	250	250	1,750
the public water and sewer systems.	Total	6,500	1,250	7,750	2,250	250	2,250	250	2,250	15,000
S6812 FY2012 ADV DEPOSIT LARGE HSE CONNECTIONS	D	150	2	152	0	0	0	0	0	152
A project to provide for the construction and inspection services for sites that do not require formal developer agreements, but instead require Advanced Deposit Order (ADO) agreements for water services 8 inches and larger, short main extensions, or other appurtenances.	Total	150	2	152	0	0	0	0	0	152
S6862 FY2012 SEWER HOUSE CONNECTIONS A project to provide for the construction of sewer house	D	150	2	152	0	0	0	0	0	152
connections by the Bureau of Utilities for 4 and 6 inch residential sewers.	Total	150	2	152	0	0	0	0	0	152
S6950 DEVELOPER CONSTRUCTED HOUSE CONNECTIONS	С	180	0	180	0	0	0	0	0	180
A program for the reimbursement to developers for construction of water and sewer house connections to existing lots outside of their subdivision.	Total	180	0	180	0	0	0	0	0	180
S6960 FY2015 DEVELOPER CONSTRUCTED MAJOR FACILITIES	С	3,000	0	3,000	0	0	0	0	0	3,000
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.	Total	3,000	0	3,000	0	0	0	0	0	3,000
SEWER PROJECTS Total		409,343	34,789	444,132	34,715	17,650	12,135	9,795	5,795	524,222

Howard County, MD FY2017 Council Approved Capital Budget (\$000) SEWER-SEWER PROJECTS

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	1,674	200	1,874
С	UTILITY CASH	53,330	2,225	55,555
D	DEVELOPER CONTRIBUTION	8,050	504	8,554
G	GRANTS	11,100	0	11,100
1	IN-AID of CONSTRUCT UTILITIES	15,976	1,412	17,388
М	METRO DISTRICT BOND	289,740	30,198	319,938
О	OTHER SOURCES	5,375	250	5,625
Р	PAY AS YOU GO	162	0	162
W	WATER QUALITY State Bond Loan	23,936	0	23,936
Total		409,343	34,789	444,132

2017 Council Approved 5 Year Capital Budget Project Type Summary (SEWER-SEWER PROJECTS)

Rev	venue Source	Prior Approp	Current FY	2018	2019	2020	2021	2022	5 Year Total
В	BONDS	1,674	200	0	0	0	0	0	1,874
С	UTILITY CASH	53,330	2,225	2,260	1,265	1,100	90	1,085	61,355
D	DEVELOPER CONTRIBUTION	8,050	504	1,000	0	1,000	0	1,000	11,554
G	GRANTS	11,100	0	0	0	0	0	0	11,100
I	IN-AID of CONSTRUCT UTILITIES	15,976	1,412	1,230	0	0	0	0	18,618
М	METRO DISTRICT BOND	289,740	30,198	29,975	16,135	9,785	9,455	3,460	388,748
0	OTHER SOURCES	5,375	250	250	250	250	250	250	6,875
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
Tot	al	409,343	34,789	34,715	17,650	12,135	9,795	5,795	524,222

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.

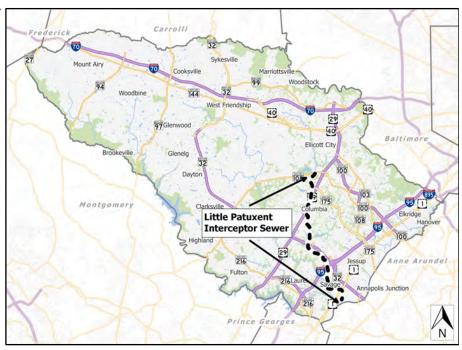
Project Schedule

FY17-19 - 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.



Project: FY2001 LITTLE PATUXENT WATER/WASTEWATER PARALLEL SEWER

(In Thousands)														
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018									Fiscal 2026	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

Project Status:

\$49,287,664 spent and encumbered through February 2016

- 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 2 of 5 Year report completed.

SEWER PROJECTS

Project: S6189-FY2001 N LAUREL PUMP STATION Number: S6189

Description

A project for the design and replacement of the North Laurel Wastewater Pump Station to increase the pumping capacity of the station to meet projected wastewater flows.

Justification

This project is needed to meet the increased demands as outlined in the Master Plan for Water and Sewerage.

Remarks

1. Improvements include interim replacement of existing variable speed drives with new variable frequency drives and the replacement of pump control valves.

2. The new station will be constructed above the 100-year floodplain.

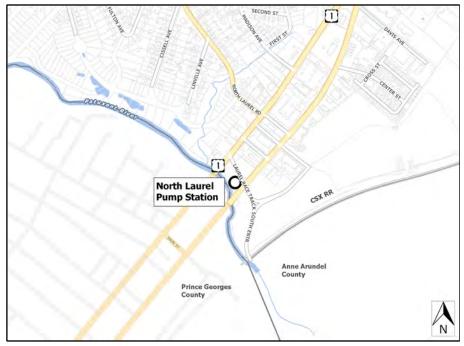
Project Schedule

FY17 - Close

Operating Budget Impact

Annual Bond Redemption \$ \$275,880

The annual cost of operation and maintenance of the pumping station is \$50,000.



Fiscal 2017 Capital Budget

SEWER PROJECTS

Project: FY2001 N LAUREL PUMP STATION Number: S6189

(In Thousands)					2018 2019 2020 2021 2022 Total 2023 2024 2025 2026 0 <									
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018									Fiscal 2026	Total Project
PLANS & ENGINEERING	1,700	0	1,700	0	0	0	0	0	0	0	0	0	0	1,700
LAND ACQUISITION	140	0	140	0	0	0	0	0	0	0	0	0	0	140
CONSTRUCTION	7,250	0	7,250	0	0	0	0	0	0	0	0	0	0	7,250
ADMINISTRATION	40	0	40	0	0	0	0	0	0	0	0	0	0	40
Total Expenditures	9,130	0	9,130	0	0	0	0	0	0	0	0	0	0	9,130
UTILITY CASH	552	0	552	0	0	0	0	0	0	0	0	0	0	552
IN-AID of CONSTRUCT UTILITIES	2,770	0	2,770	0	0	0	0	0	0	0	0	0	0	2,770
METRO DISTRICT BOND	5,808	0	5,808	0	0	0	0	0	0	0	0	0	0	5,808
Total Funding	9,130	0	9,130	0	0	0	0	0	0	0	0	0	0	9,130

Project Status:

\$8,598,648 spent and encumbered through February 2016 Project is complete.

Project: S6214-SEWER CONTINGENCY FUND

Number: S6214

Description

The fund is designed for use as a revenue source for 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 various costs such as advertising, printing, public hearing notices, enhanced nutrient removal, etc., to meet requirements when charges to individual projects are not feasible.

Justification

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.

Remarks

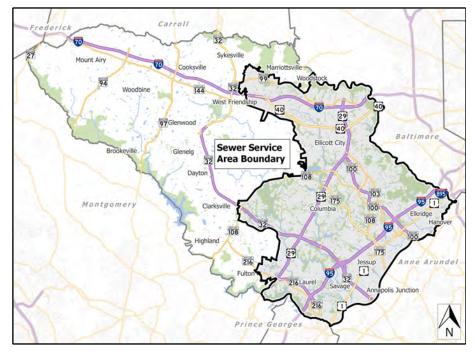
- 1. Prior appropriation reflects TAO #1-2008 in which Water Quality Bonds were transferred to S6251 as replacement for Metro Bonds.
- 2. Prior appropriation reflects TAO #2-2009 in which Water Quality Bonds were transferred to S6214 as replacement for Metro Bonds.
- 3. This project will receive State Water Quality Loan funds prior to transfer of those funds into designated projects.
- 4. Collection of revenues for enhanced nutrient removal.
- 5. Other Sources also include developer contributions and reimbursements.

Project Schedule

Ongoing program

Operating Budget Impact

Annual Bond Redemption \$ \$2,383,458



Project: SEWER CONTINGENCY FUND

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	75,600	0	75,600	0	0	0	0	0	0	0	0	0	0	75,600
Total Expenditures	75,600	0	75,600	0	0	0	0	0	0	0	0	0	0	75,600
UTILITY CASH	500	0	500	0	0	0	0	0	0	0	0	0	0	500
GRANTS	10,000	0	10,000	0	0	0	0	0	0	0	0	0	0	10,000
METRO DISTRICT BOND	40,045	0	40,045	0	0	0	0	0	0	0	0	0	0	40,045
OTHER SOURCES	5,000	0	5,000	0	0	0	0	0	0	0	0	0	0	5,000
WATER QUALITY State Bond Loan	20,055	0	20,055	0	0	0	0	0	0	0	0	0	0	20,055
Total Funding	75,600	0	75,600	0	0	0	0	0	0	0	0	0	0	75,600

Project Status:

\$558,775 spent and encumbered through February 2016

Projects completed: FY15 and prior

 Expenditures represent advertising expenses for the Utility Capital Programs since project inception.
 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; and S6230, Mission Road Sewer Extension

Completed Projects: FY16

1. S6277, Old Frederick Road Sewer

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 None. The project will reduce overtime and system maintenance costs. 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.

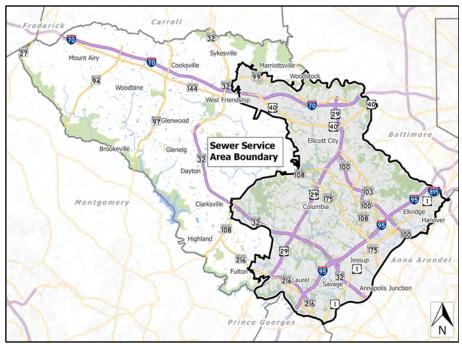
Remarks

- 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

Operating Budget Impact



Project: FY2001 SEWER CORROSION CORRECTION PROGRAM

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	500	10	510	10	10	0	0	0	20	0	0	0	0	530
CONSTRUCTION	9,850	500	10,350	500	500	0	0	0	1,000	0	0	0	0	11,350
ADMINISTRATION	95	0	95	0	0	0	0	0	0	0	0	0	0	95
Total Expenditures	10,445	510	10,955	510	510	0	0	0	1,020	0	0	0	0	11,975
UTILITY CASH	10,445	510	10,955	510	510	0	0	0	1,020	0	0	0	0	11,975
Total Funding	10,445	510	10,955	510	510	0	0	0	1,020	0	0	0	0	11,975

Project Status:

\$9,292,722 spent and encumbered through February 2016

Projects completed: FY15 and prior

- 1. The Wilde Lake and Bryant Woods.
- 2. Allenford, Mount Hebron, Chamberly, Patapsco Pumping station outfalls.
- 3. The Oaks, Chestnut Hills, Harwood Park, and Sections of North Laurel Park along North Laurel Road, Cissel 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

Projects completed: FY16

- 1. Summer Blossom Lane
- 2. Rain Flower Way
- 3. Smith Avenue

Project: S6237-FY2001 PATAPSCO CONVEY/TREAT FACILITIES

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

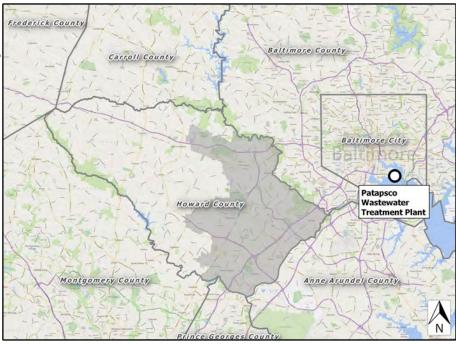
Ongoing program

FY17 - (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.



Fiscal 2017 Capital Budget

SEWER PROJECTS

Number: S6237

Project: FY2001 PATAPSCO CONVEY/TREAT FACILITIES

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	51,000	0	51,000	5,000	2,000	0	0	0	7,000	0	0	0	0	58,000
Total Expenditures	51,000	0	51,000	5,000	2,000	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	0	0	6,750
IN-AID of CONSTRUCT UTILITIES	5,499	0	5,499	0	0	0	0	0	0	0	0	0	0	5,499
METRO DISTRICT BOND	38,400	0	38,400	5,000	2,000	0	0	0	7,000	0	0	0	0	45,400
WATER QUALITY State Bond Loan	351	0	351	0	0	0	0	0	0	0	0	0	0	351
Total Funding	51,000	0	51,000	5,000	2,000	0	0	0	7,000	0	0	0	0	58,000

Project Status:

\$29,836,163 spent and encumbered through February 2016
Improvements to Patapsco Treatment and Conveyance Facilities are ongoing.

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.

Project: S6249-DEFAULTED DEVELOPER AGREEMENTS

Justification

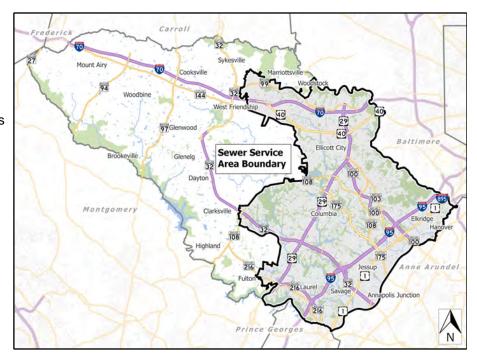
Upon developer's failure to complete construction, the surety of the developer is declared to be in default and the proceeds from the surety are placed in this account and used to finance construction.

Remarks

Construction as required. DEVELOPER CONTRIBUTION represent monies received from surety.

Project Schedule

Ongoing program



Project: DEFAULTED DEVELOPER AGREEMENTS Number: S6249

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status:

\$83,648 spent and encumbered through February 2016
Defaulted property: Homeland, Parcel A & Parcel B, 44-4143D

Project: S6260-FY2007 ROCKBURN HILL ROAD SEWER Number: S6260

Description

A project to provide sewer service to properties along Rockburn Hill Road.

Justification

The project is in response to requests received from 3 property owners on Rockburn Hill Road. The properties are within the Metropolitan District and are eligible for public sewer service. An additional 8 properties in the Metropolitan District may be served by the proposed sewer system. An additional 6 properties in the adjacent Planned Service Area may also be served by the proposed sewer system.

Remarks

- 1. The project was brought before the Public Works Board on December 13, 2005 and January 12, 2010.
- 2. The project will include a pumping station and force main in addition to a gravity collector sewer.
- 3. The construction schedule will be coordinated with the River Road bridge construction as needed.

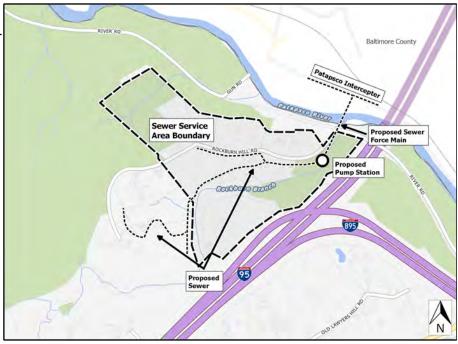
Project Schedule

FY17- Close

Operating Budget Impact

Annual Bond Redemption \$ \$136,325

\$21,400 represents the annual maintenance cost for the proposed sewer utilities.



Fiscal 2017 Capital Budget

SEWER PROJECTS

Project: FY2007 ROCKBURN HILL ROAD SEWER Number: S6260

(In Thousands)														
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018										Total Project
PLANS & ENGINEERING	760	0	760	0	0	0	0	0	0	0	0	0	0	760
LAND ACQUISITION	450	0	450	0	0	0	0	0	0	0	0	0	0	450
CONSTRUCTION	2,800	0	2,800	0	0	0	0	0	0	0	0	0	0	2,800
ADMINISTRATION	15	0	15	0	0	0	0	0	0	0	0	0	0	15
Total Expenditures	4,025	0	4,025	0	0	0	0	0	0	0	0	0	0	4,025
UTILITY CASH	745	0	745	0	0	0	0	0	0	0	0	0	0	745
IN-AID of CONSTRUCT UTILITIES	410	0	410	0	0	0	0	0	0	0	0	0	0	410
METRO DISTRICT BOND	2,870	0	2,870	0	0	0	0	0	0	0	0	0	0	2,870
Total Funding	4,025	0	4,025	0	0	0	0	0	0	0	0	0	0	4,025

Project Status: \$3,568,473 spent and encumbered through February 2016 Project is complete.

SEWER PROJECTS

Project: S6264-FY2008 LPWRP CAPITAL REPAIRS 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.

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

FY17 Projects:

- 1. Second IDI filter rebuild \$400,000
- 2. Storm drain @ FEB \$200,000
- 3. Effluent pipe stabilization \$350,000
- 4. Increase to Foxboro instrumentation upgrade \$500,000
- 5. Additional storage facilities @ LPWRP \$350,000
- 6. MCC replacement MCC 5 \$750,000
- 7. Elkridge WPS pump replacement \$150,000
- 8. Eight DO boxes for FC \$160,000
- 9. Upgrade to Foxboro system \$1,000,000
- 10. Replace 2 influent pumps MSP \$500,000
- 11. Unanticipated Projects \$500,000

Operating Budget Impact

Annual Bond Redemption \$ \$1,355,175

Reduction in the number and dollar amount of emergency repairs estimated to be in excess of \$100,000 annually.



SEWER PROJECTS

Project: FY2008 LPWRP CAPITAL REPAIRS Number: S6264

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,100	100	1,200	100	100	100	100	100	500	0	0	0	0	1,700
CONSTRUCTION	18,598	2,500	21,098	2,500	2,500	2,500	2,500	2,500	12,500	0	0	0	0	33,598
ADMINISTRATION	565	75	640	75	75	75	75	75	375	0	0	0	0	1,015
EQUIPMENT & FURNISHINGS	6,000	150	6,150	150	150	150	150	150	750	0	0	0	0	6,900
Total Expenditures	26,263	2,825	29,088	2,825	2,825	2,825	2,825	2,825	14,125	0	0	0	0	43,213
UTILITY CASH	14,683	0	14,683	0	0	0	0	0	0	0	0	0	0	14,683
METRO DISTRICT BOND	11,580	2,825	14,405	2,825	2,825	2,825	2,825	2,825	14,125	0	0	0	0	28,530
Total Funding	26,263	2,825	29,088	2,825	2,825	2,825	2,825	2,825	14,125	0	0	0	0	43,213

Project Status:

\$21,548,855 spent and encumbered through February 2016

FY17 Projects:

- 1. Feasibility study for RR Crossing to HC Land \$100,000
- 2. Install new D.O. reducing chutes to all final clarifiers \$160,000
- 3. Run water line under roadway at FC 12 \$45,000
- 4. Automate FC scum pits on North & East side, including installation check valves and float systems \$20,000
- 5. IDI filter rebuild @ \$400,000
- 6. Influent pump efficiency study \$100,000
- 7. All Saints WPS Generator \$100,000
- 8. Centrifuge VFD replace Phase I \$200,000
- 9. Gravity thickener #2 rehab \$150,000
- 10. Replace fence @ Snowden Tank \$100,000
- 11. Unanticipated Projects \$500,000

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.
- 4. Request represents the advancement of funds in the capital program.

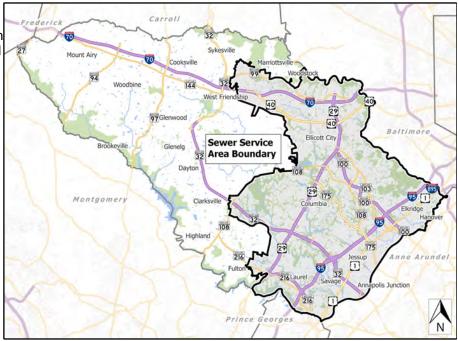
Project Schedule

Ongoing program

FY17 - 1. Shaker Drive (under construction); 2. Mary Lane (under construction); 3. Mellow Wine Way; 4. Bright Passage; 5. Thornbrook Road; 6. Athol Avenue; 7. Gales Lane

Operating Budget Impact

The project will reduce operating costs.



Project: FY2008 PIPELINE REHABILITATION PROGRAM

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	570	100	670	100	100	0	0	0	200	0	0	0	0	870
LAND ACQUISITION	940	50	990	50	50	0	0	0	100	0	0	0	0	1,090
CONSTRUCTION	3,305	500	3,805	500	500	0	0	0	1,000	0	0	0	0	4,805
ADMINISTRATION	15	0	15	0	0	0	0	0	0	0	0	0	0	15
Total Expenditures	4,830	650	5,480	650	650	0	0	0	1,300	0	0	0	0	6,780
UTILITY CASH	4,830	650	5,480	650	650	0	0	0	1,300	0	0	0	0	6,780
Total Funding	4,830	650	5,480	650	650	0	0	0	1,300	0	0	0	0	6,780

Project Status:

\$2,230,067 spent and encumbered through February 2016 Projects completed: FY15 and prior

1. Relocation of Town & Country sewer

2. Rehabilitation of Lyndsey Way sewer

Projects completed: FY 16

1. Rehabilitation/Relocation of the Coca Cola Drive sewer mains (Deep and Shallow Run)

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

Plans for the construction of the wastewater treatment facility were completed in July 2013. Nutrient trading was not implemented by March 2015. Construction of the wastewater treatment plant will begin in FY17 with a Bay Restoration Fund grant of \$550,000 to \$1,100,000. Final grant amount will depend on household income of each resident.

Project Schedule

FY17 - Wastewater treatment plant construction.

FY18 - 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.



Project: FY2009 ASHLEIGH KNOLLS SHARED SEWAGE DISP FAC UPGD

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	105	200	305	0	0	0	0	0	0	0	0	0	0	305
CONSTRUCTION	2,800	0	2,800	0	0	0	0	0	0	0	0	0	0	2,800
ADMINISTRATION	31	0	31	0	0	0	0	0	0	0	0	0	0	31
Total Expenditures	2,936	200	3,136	0	0	0	0	0	0	0	0	0	0	3,136
BONDS	1,674	200	1,874	0	0	0	0	0	0	0	0	0	0	1,874
GRANTS	1,100	0	1,100	0	0	0	0	0	0	0	0	0	0	1,100
PAY AS YOU GO	162	0	162	0	0	0	0	0	0	0	0	0	0	162
Total Funding	2,936	200	3,136	0	0	0	0	0	0	0	0	0	0	3,136

Project Status:

\$283,356 spent and encumbered through February 2016

- 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. FY15 Awaiting final MDE decisions.
- 6. FY16 Construction of the wastewater treatment system will begin.
- 7. FY17 Construction expected to start in mid-2016. Increased Plans and Engineering Budget to account for Construction phase services

Project: S6271-FY2010 DEEP RUN INTERCEPTOR IMPROVEMENTS

Description

A project for the design and construction of 1,400 LF of replacement sewer, a third 150-foot 18-inch siphon and junction chambers on the Deep Run Interceptor in the vicinity of the Patapsco River.

Justification

The project will provide the additional flow capacity required in the approved 2008 Howard County Master Plan for Water and Sewerage.

Remarks

1. The project was brought before the Public Works Board on December 10, 2008.

Project Schedule

FY17- Close

Operating Budget Impact

Annual Bond Redemption \$ \$65,313

\$500 per year represents the cost of operation and maintenance of the proposed parallel sewer and siphon.



Fiscal 2017 Capital Budget

SEWER PROJECTS

Number: S6271

Project: FY2010 DEEP RUN INTERCEPTOR IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	450	0	450	0	0	0	0	0	0	0	0	0	0	450
CONSTRUCTION	1,200	0	1,200	0	0	0	0	0	0	0	0	0	0	1,200
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	1,660	0	1,660	0	0	0	0	0	0	0	0	0	0	1,660
UTILITY CASH	285	0	285	0	0	0	0	0	0	0	0	0	0	285
METRO DISTRICT BOND	1,375	0	1,375	0	0	0	0	0	0	0	0	0	0	1,375
Total Funding	1,660	0	1,660	0	0	0	0	0	0	0	0	0	0	1,660

Project Status:

\$1,584,412 spent and encumbered through February 2016
The project is complete.

Description

A project to reline and repair the 10 1/2 miles of the original Little Patuxent Interceptor from the Water Reclamation Plant to RT108.

Justification

The Little Patuxent Interceptor sewer was first constructed in 1966. Preliminary inspection and metering efforts have revealed that portions of the sewer are subject to stream erosion and groundwater infiltration. The capital project will reduce groundwater infiltration into the sewer and correct areas affected by stream erosion; thereby extending the useful life of the sewer and protecting the environment.

Remarks

- 1. The project was brought before the Public Works Board on December 10, 2008.
- 2. The flow capacity of the existing sewer is augmented by a paralleled sewer constructed under capital project S-6175. Following construction of the Little Patuxent Parallel Sewer, the flows will be diverted into the new sewer to allow an internal inspection and repair of the original interceptor sewer.
- 3. The project consists of several stages of inspection, design and construction as the new segments of parallel interceptor have been completed under Capital Project S-6175 and are now available to divert flow.

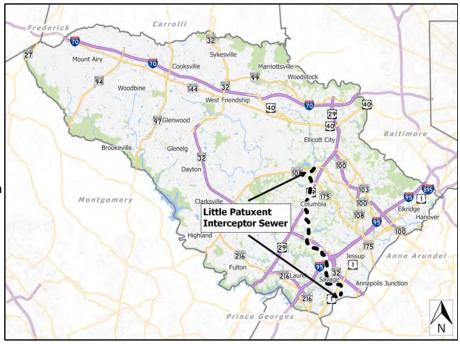
Project Schedule

FY17 - Construction, Project complete, Close

Operating Budget Impact

Annual Bond Redemption \$ \$475,000

The project will reduce the cost of operation and maintenance of the existing system.



Project: FY2011 LITTLE PATUXENT INTERCEPTOR IMPROVEMENTS

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,950	0	1,950	0	0	0	0	0	0	0	0	0	0	1,950
CONSTRUCTION	10,000	0	10,000	0	0	0	0	0	0	0	0	0	0	10,000
ADMINISTRATION	50	0	50	0	0	0	0	0	0	0	0	0	0	50
Total Expenditures	12,000	0	12,000	0	0	0	0	0	0	0	0	0	0	12,000
UTILITY CASH	2,000	0	2,000	0	0	0	0	0	0	0	0	0	0	2,000
METRO DISTRICT BOND	10,000	0	10,000	0	0	0	0	0	0	0	0	0	0	10,000
Total Funding	12,000	0	12,000	0	0	0	0	0	0	0	0	0	0	12,000

Project Status:

\$9,336,701 spent and encumbered through February 2016
1. 60% of the project has been completed

2. 40% of the project is in construction

Project: S6274-FY2015 UPPER LITTLE PATUXENT PARALLEL SEWER

Description

A project for the design and construction of 2,500 LF of parallel sewer, 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 Departmen 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

FY17 - Design, Land Acquisition

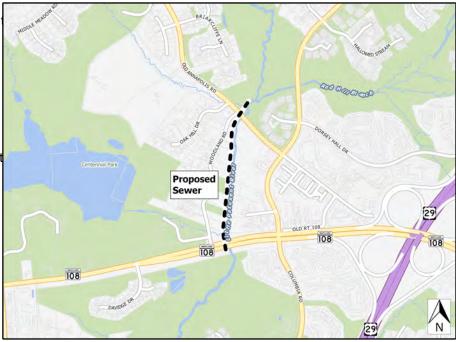
FY18 - Construction

FY19 - Project complete, Close

Operating Budget Impact

Annual Bond Redemption \$ \$121,125

\$5,275 per year represents the cost of operation and maintenance of the sewer



Project: FY2015 UPPER LITTLE PATUXENT PARALLEL SEWER

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	350	0	350	50	0	0	0	0	50	0	0	0	0	400
LAND ACQUISITION	140	0	140	0	0	0	0	0	0	0	0	0	0	140
CONSTRUCTION	0	1,500	1,500	500	0	0	0	0	500	0	0	0	0	2,000
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	500	1,500	2,000	550	0	0	0	0	550	0	0	0	0	2,550
METRO DISTRICT BOND	500	1,500	2,000	550	0	0	0	0	550	0	0	0	0	2,550
Total Funding	500	1,500	2,000	550	0	0	0	0	550	0	0	0	0	2,550

Project Status:

\$284,664 spent and encumbered through February 2016 Sewer alignment study completed.

Project: S6275-FY2012 DANIELS AREA PUMPING STATION Number: S6275

Description

A project for the study, design and construction of a wastewater pumping station Annual Bond Redemption \$ \$118,750 and force main to serve the Daniels Area east of Old Frederick Road and improvements/upgrades to the Old Frederick Road Pumping station.

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 sewel easements to access the adjoining properties.
- 3. The property owner will construct the road and infrastructure to access the pumping station site.

Project Schedule

FY17 - Design, Construction

FY18 - Project Complete, Close

Operating Budget Impact

\$50,000 per year represents the cost of operation and maintenance of the pumping station.



Project: FY2012 DANIELS AREA PUMPING STATION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	410	0	410	0	0	0	0	0	0	0	0	0	0	410
LAND ACQUISITION	600	0	600	0	0	0	0	0	0	0	0	0	0	600
CONSTRUCTION	1,480	0	1,480	0	0	0	0	0	0	0	0	0	0	1,480
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	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	0	0	0	2,500
Total Funding	2,500	0	2,500	0	0	0	0	0	0	0	0	0	0	2,500

Project Status:

\$228,583 spent and encumbered through February 2016 Project is under design.

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

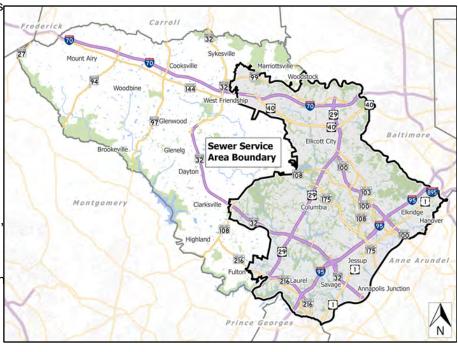
- 1. Sewer cleaning and inspections would commence by grids on an annual basis, including approximately one-fifth of all sewer lines in the system over a five year period.
- 2. There are approximately 1,000 miles of sewer line.
- 3. Preparation of a water/sewer GIS mapping layer linked to the Bureau's Hanser maintenance/management software is being developed by a consultant as part of the Consent Agreement with MDE.

Project Schedule

- 1. FY17 Yearly cleaning, approximately 1/5th (200 miles) of pipe per year, televised sewer inspections, smoke testing, ongoing repairs, and project management. Consultant prepared a GIS layer for the water system that was delivered at the end of FY15.
- 2. FY18 -FY20 Continued Sewer Maintenance program in accordance with the MDE Consent Agreement. Project to close at the end of FY20.

Operating Budget Impact

Reduction in labor/administrative costs anticipated.



SEWER PROJECTS

Number: S6276

Project: FY2011 SEWER CLEANING MAPPING AND TELEVISION INSPECTION MAINTENANCE

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,475	200	1,675	200	0	0	0	0	200	0	0	0	0	1,875
CONSTRUCTION	4,050	1,000	5,050	1,000	0	0	0	0	1,000	0	0	0	0	6,050
ADMINISTRATION	122	30	152	30	0	0	0	0	30	0	0	0	0	182
Total Expenditures	5,647	1,230	6,877	1,230	0	0	0	0	1,230	0	0	0	0	8,107
IN-AID of CONSTRUCT UTILITIES	5,647	1,230	6,877	1,230	0	0	0	0	1,230	0	0	0	0	8,107
Total Funding	5,647	1,230	6,877	1,230	0	0	0	0	1,230	0	0	0	0	8,107

Project Status:

\$3,043,835 spent and encumbered through February 2016

- 1. Contracts in place with outside contractors for sewer system inspection, cleaning, and rehabilitation.
- 2. Contract in place with professional services consultant for on-site CMOM compliance monitoring assistance and GIS mapping development.
- 3. County requirements contractors continuing to perform program cleaning in conformance with MDE Consent Order mandate. Cleaning efforts well in excess of mandated amounts. For FY16, continued sewer cleaning, televised inspections, and smoke testing in upper and lower Little Patuxent basins. Repairs scheduled. Will continue to fund CMOM assistance consultant through this project. As GIS efforts are completed, additional repairs and investigative efforts will move forward.

Project: S6279-FY2013 MEADOWRIDGE FORCE MAIN REPLACEMENT

Description

A project for the design and construction of 2,500 LF of 8-inch replacement force Annual Bond Redemption \$\$90,250 main and improvements to the Meadowridge Wastewater Pumping Station.

Justification

The ductile iron force main has failed 3 times since 2010. A corrosion evaluation has revealed that the source of the failures is stray currents from two parallel gas mains in US1 coupled with low resistivity soils, causing corrosion pitting and failures of the iron pipe. Additionally, the original pumps are 33 years old and need to be replaced.

Remarks

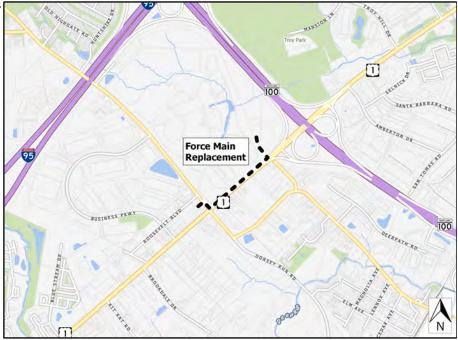
The project was brought before the Public Works Board on December 13, 2011.

Project Schedule

FY17 - Project Complete FY18 - Close

Operating Budget Impact

The cost of operation and maintenance will be reduced by the reduction of main breaks in this area.



Fiscal 2017 Capital Budget

SEWER PROJECTS

Number: S6279

Project: FY2013 MEADOWRIDGE FORCE MAIN REPLACEMENT

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	170	0	170	0	0	0	0	0	0	0	0	0	0	170
CONSTRUCTION	1,725	0	1,725	0	0	0	0	0	0	0	0	0	0	1,725
ADMINISTRATION	5	0	5	0	0	0	0	0	0	0	0	0	0	5
Total Expenditures	1,900	0	1,900	0	0	0	0	0	0	0	0	0	0	1,900
METRO DISTRICT BOND	1,900	0	1,900	0	0	0	0	0	0	0	0	0	0	1,900
Total Funding	1,900	0	1,900	0	0	0	0	0	0	0	0	0	0	1,900

Project Status:

\$1,338,572 spent and encumbered through February 2016
This project is under construction.

Version: Council Approved

Number: S6280

Project: S6280-FY2013 HAMMOND/PATUXENT INTERCEPTOR IMPROVEMENTS

Description

Operating Budget Impact

A project for the study, design and construction of 20,000 feet of parallel sewer in Annual Bond Redemption \$ \$1,258,988 the Hammond Branch and Patuxent sewer drainage areas.

The annual cost of operation and maintenance of the sewer is \$7,500.

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 lates engineering estimate.

Project Schedule

Phase I

FY17 - Design, Permitting, Land Acquisition

FY18 - Construction

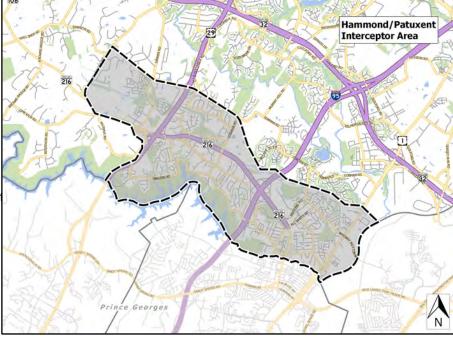
FY19 - Phase I complete

Phase II

FY19 -20 - Design, Land Acquisition

FY21 -22 - Construction

FY23 - Phase II complete, Close



Project: FY2013 HAMMOND/PATUXENT INTERCEPTOR IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	2,280	0	2,280	450	0	0	0	0	450	0	0	0	0	2,730
LAND ACQUISITION	550	150	700	545	0	0	0	0	545	0	0	0	0	1,245
CONSTRUCTION	3,500	8,000	11,500	3,000	5,000	3,000	0	0	11,000	0	0	0	0	22,500
ADMINISTRATION	15	0	15	0	0	0	5	10	15	0	0	0	0	30
Total Expenditures	6,345	8,150	14,495	3,995	5,000	3,000	5	10	12,010	0	0	0	0	26,505
METRO DISTRICT BOND	6,345	8,150	14,495	3,995	5,000	3,000	5	10	12,010	0	0	0	0	26,505
Total Funding	6,345	8,150	14,495	3,995	5,000	3,000	5	10	12,010	0	0	0	0	26,505

Project Status:

\$1,400,825 spent and encumbered through February 2016
Phase I- Evaluation of the alignment alternatives and determination of environmental impacts studies completed. Design of sewer is in progress. Design of wetland enhancement and stream restoration mitigation is in progress.

Project: S6281-FY2013 DORSEY/GUILFORD INTERCEPTOR IMPROVEMENTS

Description

Operating Budget Impact

A project for the study, design and construction of 14,600 feet of parallel sewer in Annual Bond Redemption \$\$\$\$ \$634,838 the Dorsey Run and Guilford Run sewer drainage areas.

The annual cost of operation and maintenance of the sewer is \$5,500.

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.
- 5. Request represents advancement of funds in the capital program and latest engineering estimate.

Project Schedule

Phase I

FY17 - Design, Permitting, Land Acquisition

FY18 - Construction

FY19 - Phase I Complete

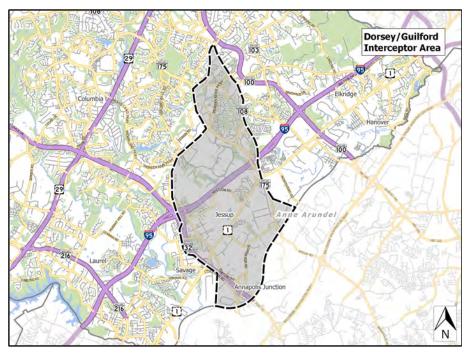
Phase II

FY19 - Design, Land Acquisition

FY20 - 21 -Construction

FY22 - Phase II Complete

FY23 - Close



Project: FY2013 DORSEY/GUILFORD INTERCEPTOR IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,025	0	1,025	925	0	0	0	0	925	0	0	0	0	1,950
LAND ACQUISITION	40	860	900	0	0	0	0	0	0	0	0	0	0	900
CONSTRUCTION	480	4,500	4,980	4,500	1,000	0	0	0	5,500	0	0	0	0	10,480
ADMINISTRATION	10	0	10	0	5	5	10	0	20	0	0	0	0	30
OTHER	5	0	5	0	0	0	0	0	0	0	0	0	0	5
Total Expenditures	1,560	5,360	6,920	5,425	1,005	5	10	0	6,445	0	0	0	0	13,365
METRO DISTRICT BOND	1,560	5,360	6,920	5,425	1,005	5	10	0	6,445	0	0	0	0	13,365
Total Funding	1,560	5,360	6,920	5,425	1,005	5	10	0	6,445	0	0	0	0	13,365

Project Status:

\$1,077,132 spent and encumbered through February 2016
Phase I - Evaluation of the alignment alternatives and determination of environmental impacts studies completed. Design of sewer is in progress. Design of wetland enhancement and stream restoration mitigation is in progress.

Description

A project for the design and construction of 5,700 feet of parallel 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 5,700 feet of parallel sewer.
- 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

FY17 - Design, Permitting, Land Acquisition, Construction

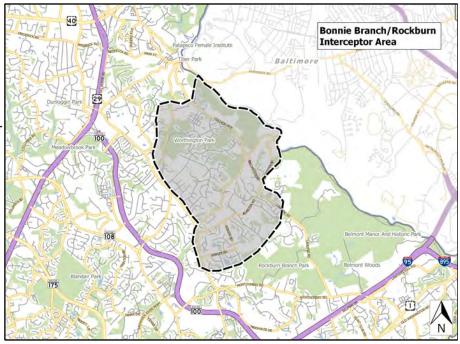
FY18 - Construction

FY19 - Project complete, 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.



Project: FY2013 BONNIE BRANCH/ROCKBURN INTERCEPTOR IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,100	150	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	2,100	1,800	3,900	0	0	0	0	0	0	0	0	0	0	3,900
ADMINISTRATION	15	5	20	0	0	0	0	0	0	0	0	0	0	20
Total Expenditures	3,370	1,955	5,325	0	0	0	0	0	0	0	0	0	0	5,325
METRO DISTRICT BOND	3,370	1,955	5,325	0	0	0	0	0	0	0	0	0	0	5,325
Total Funding	3,370	1,955	5,325	0	0	0	0	0	0	0	0	0	0	5,325

Project Status:

\$1,700,141 spent and encumbered through February 2016 Project is under design.

Project: S6283-FY2013 TIBER/SUCKER BRANCH INTERCEPTOR IMPROVEMENTS

Description

A project for the design and construction of 18,000 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 a flow meter and 350 feet of parallel sewer on the Tiber Branch and 4,000 feet of parallel 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 8,500 feet of parallel sewer on the Tiber Branch and 5,400 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.

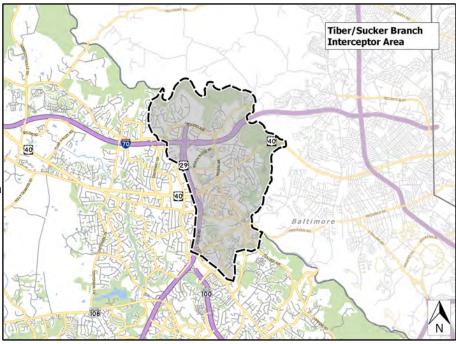
Project Schedule

FY17 - Design, Permitting, Land Acquisition, Construction FY18-19 - Construction FY20 - Project complete, Close

Operating Budget Impact

Annual Bond Redemption \$ \$441,988

The annual cost of operation and maintenance of the sewer is \$38,000.



Project: FY2013 TIBER/SUCKER BRANCH INTERCEPTOR IMPROVEMENTS

(In Thousands)		Five	Year Ca	apital Pro	gram		Master Plan							
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,750	200	1,950	200	100	0	0	0	300	0	0	0	0	2,250
LAND ACQUISITION	1,145	0	1,145	0	0	0	0	0	0	0	0	0	0	1,145
CONSTRUCTION	3,350	1,310	4,660	1,200	0	0	0	0	1,200	0	0	0	0	5,860
ADMINISTRATION	30	10	40	5	5	0	0	0	10	0	0	0	0	50
Total Expenditures	6,275	1,520	7,795	1,405	105	0	0	0	1,510	0	0	0	0	9,305
METRO DISTRICT BOND	6,275	1,520	7,795	1,405	105	0	0	0	1,510	0	0	0	0	9,305
Total Funding	6,275	1,520	7,795	1,405	105	0	0	0	1,510	0	0	0	0	9,305

Project Status:

\$815,257 spent and encumbered through February 2016 Project is under design.

Description

A project for the design and construction of 46,000 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 22,000 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 approved capital improvement program.

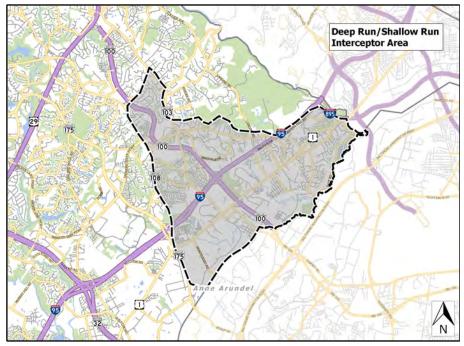
Project Schedule

FY17-18 - Design, Permitting, Land Acquisition, Construction FY19-20 - Construction, Project Complete FY21 - Close

Operating Budget Impact

Annual Bond Redemption \$ \$959,975

The annual cost of operation and maintenance of the sewer is \$14,500.



Fiscal 2017 Capital Budget

SEWER PROJECTS

Number: S6284

Project: FY2013 DEEP RUN/SHALLOW RUN INTERCEPTOR IMPROVEMENTS

(In Thousands)		Five	Year Ca	apital Pro	ogram		Master Plan							
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	3,585	700	4,285	100	75	0	0	0	175	0	0	0	0	4,460
LAND ACQUISITION	2,500	0	2,500	0	0	0	0	0	0	0	0	0	0	2,500
CONSTRUCTION	6,500	2,850	9,350	2,850	1,000	0	0	0	3,850	0	0	0	0	13,200
ADMINISTRATION	30	10	40	10	0	0	0	0	10	0	0	0	0	50
Total Expenditures	12,615	3,560	16,175	2,960	1,075	0	0	0	4,035	0	0	0	0	20,210
METRO DISTRICT BOND	12,615	3,560	16,175	2,960	1,075	0	0	0	4,035	0	0	0	0	20,210
Total Funding	12,615	3,560	16,175	2,960	1,075	0	0	0	4,035	0	0	0	0	20,210

Project Status:

\$2,717,677 spent and encumbered through February 2016 Project is under design.

Project: S6285-FY2017 MD108 PUMP STATION OUTFALL IMPROVEMENTS

Description

A project for the design and construction of 1,700 feet of parallel sewer in the Tiber Branch sewer drainage area and connection into the Patapsco Interceptor 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.

Project Schedule

FY17 - Design

FY18 - Design, Permitting, Land Acquisition

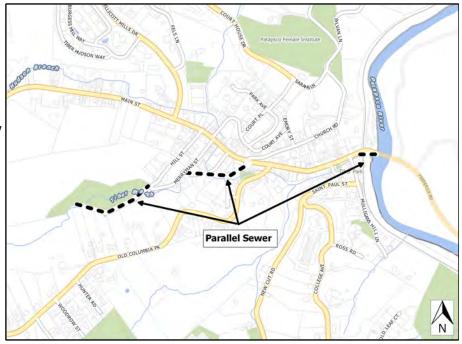
FY19 - Construction

FY20 - Project complete, Close

Operating Budget Impact

Annual Bond Redemption \$ \$61,750

The annual cost of operation and maintenance of the sewer is \$700.



Project: FY2017 MD108 PUMP STATION OUTFALL IMPROVEMENTS

(In Thousands)		Five	Year Ca	apital Pro	gram		Master Plan							
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	110	110	80	0	0	0	0	80	0	0	0	0	190
LAND ACQUISITION	0	0	0	100	0	0	0	0	100	0	0	0	0	100
CONSTRUCTION	0	0	0	500	500	0	0	0	1,000	0	0	0	0	1,000
ADMINISTRATION	0	5	5	5	0	0	0	0	5	0	0	0	0	10
Total Expenditures	0	115	115	685	500	0	0	0	1,185	0	0	0	0	1,300
METRO DISTRICT BOND	0	115	115	685	500	0	0	0	1,185	0	0	0	0	1,300
Total Funding	0	115	115	685	500	0	0	0	1,185	0	0	0	0	1,300

Project Status: \$0 spent and encumbered through February 2016

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.

Project Schedule

FY17 - Design, Construction

FY18 - Construction

FY19 - Project complete, close

Operating Budget Impact

Annual Bond Redemption \$ \$216,933

The annual cost of operation and maintenance of the sewer is \$50,000.



SEWER PROJECTS

Number: S6286

Project: FY2013 DORSEY RUN PUMP STATION UPGRADE

(In Thousands)					Five	Year Ca	apital Pro	ogram	Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	807	0	807	0	0	0	0	0	0	0	0	0	0	807
CONSTRUCTION	3,750	0	3,750	0	0	0	0	0	0	0	0	0	0	3,750
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	4,567	0	4,567	0	0	0	0	0	0	0	0	0	0	4,567
METRO DISTRICT BOND	4,567	0	4,567	0	0	0	0	0	0	0	0	0	0	4,567
Total Funding	4,567	0	4,567	0	0	0	0	0	0	0	0	0	0	4,567

Project Status:

\$73,011 spent and encumbered through February 2016 Project is under design.

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.
- 4. Request represents the advancement of funds in the Capital Program and latest engineer's estimate.

Project Schedule

FY17 - Design

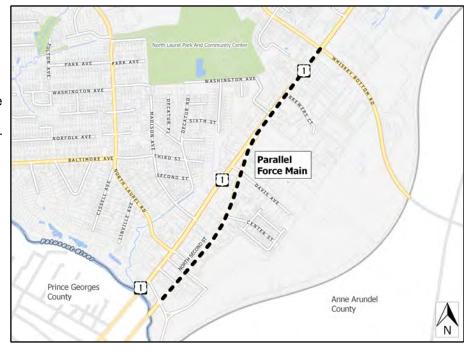
FY18 - Construction

FY19 - Project complete, Close

Operating Budget Impact

Annual Bond Redemption \$ \$119,225

The annual cost of operation and maintenance of the sewer is \$ 20,000.



Project: FY2017 NORTH LAUREL PUMP STATION PARALLEL FORCE MAIN

(In Thousands)		Five	Year Ca	apital Pro	ogram	Master Plan								
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	500	500	0	0	0	0	0	0	0	0	0	0	500
CONSTRUCTION	0	0	0	2,000	0	0	0	0	2,000	0	0	0	0	2,000
ADMINISTRATION	0	5	5	5	0	0	0	0	5	0	0	0	0	10
Total Expenditures	0	505	505	2,005	0	0	0	0	2,005	0	0	0	0	2,510
METRO DISTRICT BOND	0	505	505	2,005	0	0	0	0	2,005	0	0	0	0	2,510
Total Funding	0	505	505	2,005	0	0	0	0	2,005	0	0	0	0	2,510

Project Status : \$0 spent and encumbered through February 2016

Project: S6288-FY2020 ROCKBURN PUMPING STATION UPGRADE

Description

A project to upgrade and increase the pumping capacity of the Rockburn 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.

Remarks

The project was brought before the Public Works Board on January 10, 2012.

Project Schedule

FY20 - Design

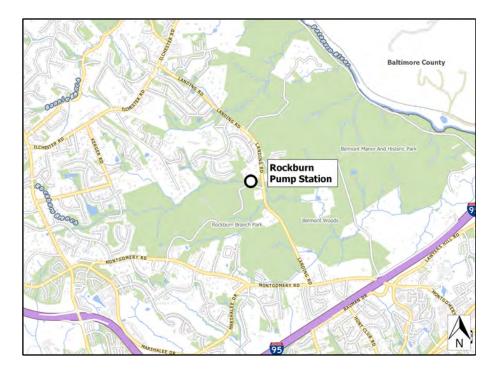
FY21 - Construction

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.



Project: FY2020 ROCKBURN PUMPING STATION UPGRADE

(In Thousands)					Five	Year Ca	apital Pro	gram	Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	0	0	0	0	325	285	0	610	0	0	0	0	610
CONSTRUCTION	0	0	0	0	0	0	2,700	0	2,700	0	0	0	0	2,700
ADMINISTRATION	0	0	0	0	0	5	5	0	10	0	0	0	0	10
Total Expenditures	0	0	0	0	0	330	2,990	0	3,320	0	0	0	0	3,320
METRO DISTRICT BOND	0	0	0	0	0	330	2,990	0	3,320	0	0	0	0	3,320
Total Funding	0	0	0	0	0	330	2,990	0	3,320	0	0	0	0	3,320

Project Status : \$0 spent and encumbered through February 2016

Project: S6289-FY2014 PARK AVENUE SEWER EXTENSION

Description

Operating Budget Impact

\$750.

A project for the design and construction of 350 LF of 8-inch sewer to serve three Annual Bond Redemption \$\$12,350 properties on Park Avenue in Ellicott City.

Justification

The three properties are currently served by a private shared sewer house connection. The shared private sewer is located under one of the homes being served. Shared private sewer house connections serving multiple properties are not permitted under current County regulations.

Remarks

- 1. The capital project will replace the shared private sewer with a public sewer relocated out from under the private home.
- 2. All easements required for the construction of the sewer will be provided by the property owners being served at no cost to the County.
- 3. The project was brought before the Public Works Board on December 11, 2012.
- 4. Request represents additional engineering cost necessary to complete design plans and land acquisition documents.

Project Schedule

FY17 - Construction, Project complete, Close



The annual cost of operation and maintenance of the sewer is estimated at

Project: FY2014 PARK AVENUE SEWER EXTENSION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	35	30	65	0	0	0	0	0	0	0	0	0	0	65
CONSTRUCTION	185	0	185	0	0	0	0	0	0	0	0	0	0	185
ADMINISTRATION	5	5	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	225	35	260	0	0	0	0	0	0	0	0	0	0	260
METRO DISTRICT BOND	225	35	260	0	0	0	0	0	0	0	0	0	0	260
Total Funding	225	35	260	0	0	0	0	0	0	0	0	0	0	260

Project Status:

\$64,887 spent and encumbered through February 2016
This project is currently under design & land acquisition.

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 Annual Bond Redemption \$ \$201,875 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.
- Request represents the latest Engineers Estimate of construction cost. Budget estimate revision represents predicted cost of project based on further refinement of design and predicted market conditions at bidding.

Project Schedule

FY17 - Land Acquisition, Design, Construction

FY18 - Construction, Project complete

FY19 - Close

Operating Budget Impact

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.



Project: FY2014 SAVAGE AREA SEWER STUDY and REALIGNMENT

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	210	0	210	0	0	0	0	0	0	0	0	0	0	210
LAND ACQUISITION	275	0	275	0	0	0	0	0	0	0	0	0	0	275
CONSTRUCTION	2,750	1,000	3,750	0	0	0	0	0	0	0	0	0	0	3,750
ADMINISTRATION	15	0	15	0	0	0	0	0	0	0	0	0	0	15
Total Expenditures	3,250	1,000	4,250	0	0	0	0	0	0	0	0	0	0	4,250
METRO DISTRICT BOND	3,250	1,000	4,250	0	0	0	0	0	0	0	0	0	0	4,250
Total Funding	3,250	1,000	4,250	0	0	0	0	0	0	0	0	0	0	4,250

Project Status:

\$291,577 spent and encumbered through February 2016
This project is currently under land acquisition and final design.

SEWER PROJECTS

Project: S6292-FY2015 OLD FREDERICK ROAD SEWER Number: S6292

Description

A project for the design and construction of 900 LF of sewer to serve four properties located on Old Frederick Road.

Justification

The project was requested by three property owners located on Old Frederick Road in the vicinity of Toby Lane. The properties are within the Metropolitan District. The properties are assessed ad-valorem charges and are eligible for public water and sewer service.

Remarks

- 1. The project was brought before the Public Works Board on January 14, 2014.
- 2. Request represents the latest engineer's estimate.

Project Schedule

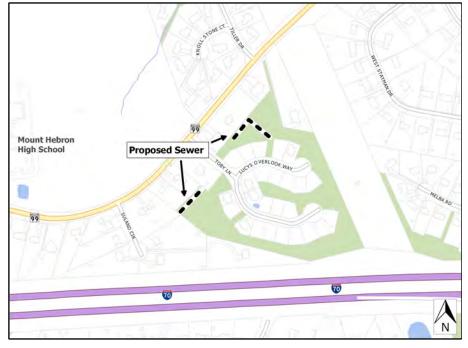
FY17 - Design, Land acquisition

FY18 - Construction, Project complete, Close

Operating Budget Impact

Annual Bond Redemption \$ \$16,530

The annual cost of operation and maintenance of the sewer is \$2,000.



Project: FY2015 OLD FREDERICK ROAD SEWER Number: S6292

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	68	30	98	0	0	0	0	0	0	0	0	0	0	98
CONSTRUCTION	230	10	240	0	0	0	0	0	0	0	0	0	0	240
ADMINISTRATION	2	8	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	300	48	348	0	0	0	0	0	0	0	0	0	0	348
METRO DISTRICT BOND	300	48	348	0	0	0	0	0	0	0	0	0	0	348
Total Funding	300	48	348	0	0	0	0	0	0	0	0	0	0	348

Project Status:

\$9,707 spent and encumbered through February 2016 Project is currently under design.

SEWER PROJECTS

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

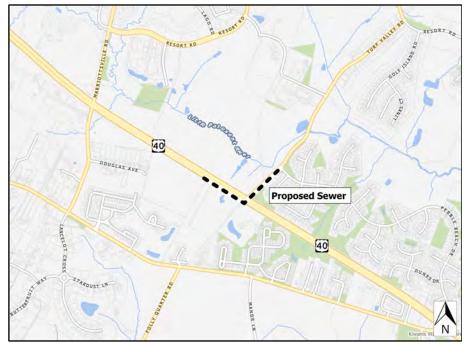
- 1. The project was brought before the Public Works Board on January 14, 2014.
- 2. Request represents Engineer's latest estimate.

Project Schedule

FY17 - Construction, Project Complete, Close

Operating Budget Impact

The annual cost of operation and maintenance of the sewer is \$4,200.



Project: FY2015 TURF VALLEY ROAD SEWER

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	155	25	180	0	0	0	0	0	0	0	0	0	0	180
CONSTRUCTION	540	50	590	0	0	0	0	0	0	0	0	0	0	590
ADMINISTRATION	5	2	7	0	0	0	0	0	0	0	0	0	0	7
Total Expenditures	700	77	777	0	0	0	0	0	0	0	0	0	0	777
IN-AID of CONSTRUCT UTILITIES	700	77	777	0	0	0	0	0	0	0	0	0	0	777
Total Funding	700	77	777	0	0	0	0	0	0	0	0	0	0	777

Project Status:

\$127,531 spent and encumbered through February 2016 Project is under design.

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 completing design and construction. Budget estimate revisions result from an increased level of effort necessary to meet state guidelines for the improvements.

Project Schedule

FY17 - Design, Construction FY18 - Project complete, Close

Operating Budget Impact

The annual cost of operation and maintenance will be unchanged.



SEWER PROJECTS

Number: S6294

Project: FY2015 ANNAPOLIS JUNCTION PUMPING STATION RENOVATION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	20	65	85	0	0	0	0	0	0	0	0	0	0	85
CONSTRUCTION	250	30	280	0	0	0	0	0	0	0	0	0	0	280
ADMINISTRATION	5	10	15	0	0	0	0	0	0	0	0	0	0	15
Total Expenditures	275	105	380	0	0	0	0	0	0	0	0	0	0	380
IN-AID of CONSTRUCT UTILITIES	150	105	255	0	0	0	0	0	0	0	0	0	0	255
OTHER SOURCES	125	0	125	0	0	0	0	0	0	0	0	0	0	125
Total Funding	275	105	380	0	0	0	0	0	0	0	0	0	0	380

Project Status:

\$83,313 spent and encumbered through February 2016 Project is currently under design.

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 facilities will be included in the Operating Budget of the Bureau of Utilities, end-use purposes.

Justification

Biosolids from Howard County's Little Patuxent Water Reclamation Plant (LPWRP) are currently dewatered, treated using an advanced alkaline (lime) stabilization process, and applied in bulk as a fertilizer to agricultural fields within Maryland. Recent and emerging regulatory changes in Maryland prohibit winter land application and could prohibit continued application of biosolids on a large number of farms in the state. These changes also threaten the long-term viability and cost-effectiveness of the County's current biosolids management practices. Regulatory uncertainty coupled with the cost and increasing operational demands of lime stabilization has prompted the County to evaluate other long-term biosolids management alternatives.

Remarks

Howard County recently completed a Biosolids Master Plan for the LPWRP that recommends 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. The County desires a versatile product capable of being distributed to many outlets.

Project Schedule

FY17 - Project Design and Permitting.

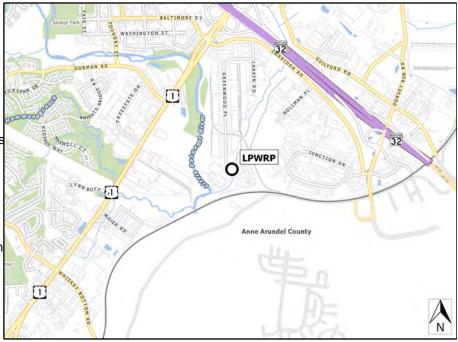
FY18-19 - Construction and startup phase of new facilities. Approximate 18 month construction, and six month startup to achieve full operation.

FY20 - Project Complete and Close.

Operating Budget Impact

Annual Bond Redemption \$ \$4,132,500

The annual operation and maintenance of the new biosolids processing and the cost of operation and maintenance is recovered through the User Rates.



SEWER PROJECTS

Number: S6295

Project: FY2016 LPWRP 8th ADDITION BIOSOLIDS PROCESSING FACILITIES

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	11,900	3,000	14,900	0	0	0	0	0	0	0	0	0	0	14,900
CONSTRUCTION	70,000	0	70,000	0	0	0	0	0	0	0	0	0	0	70,000
ADMINISTRATION	2,100	0	2,100	0	0	0	0	0	0	0	0	0	0	2,100
Total Expenditures	84,000	3,000	87,000	0	0	0	0	0	0	0	0	0	0	87,000
METRO DISTRICT BOND	84,000	3,000	87,000	0	0	0	0	0	0	0	0	0	0	87,000
Total Funding	84,000	3,000	87,000	0	0	0	0	0	0	0	0	0	0	87,000

Project Status:

\$7,492,966 spent and encumbered through February 2016

1. Design contract has been awarded to HDR Engineering totaling \$7.2 million.

2. Construction management contract to be awarded beginning FY17

Project: S6296-FY2016 HARRIET TUBMAN LANE SEWER EXTENSION

Description

A project for the design and construction of 150 linear feet 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.
- 2. Request represents the advancement of funds in the capital program.

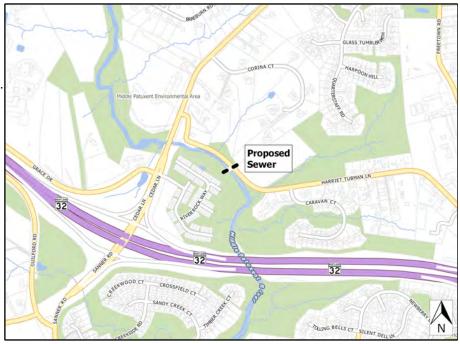
Project Schedule

FY17 - Design, Construction.

FY18 - Project complete, Close

Operating Budget Impact

The annual cost of operation and maintenance of the sewer is \$320.



Fiscal 2017 Capital Budget

SEWER PROJECTS

Number: S6296

Project: FY2016 HARRIET TUBMAN LANE SEWER EXTENSION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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	0	310	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	130	310	440	0	0	0	0	0	0	0	0	0	0	440
UTILITY CASH	130	310	440	0	0	0	0	0	0	0	0	0	0	440
Total Funding	130	310	440	0	0	0	0	0	0	0	0	0	0	440

Project Status:

\$0 spent and encumbered through February 2016 Project is currently under design.

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

FY17 - Study, design and land acquisition

FY18 - Construction

FY19 - Construction, Project complete

FY20 - 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.



Project: FY2016 OLD FREDERICK ROAD PUMPING STATION UPGRADE

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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	0	0	0	1,500	0	0	0	0	1,500	0	0	0	0	1,500
ADMINISTRATION	5	0	5	0	0	0	0	0	0	0	0	0	0	5
Total Expenditures	235	0	235	1,500	0	0	0	0	1,500	0	0	0	0	1,735
METRO DISTRICT BOND	235	0	235	1,500	0	0	0	0	1,500	0	0	0	0	1,735
Total Funding	235	0	235	1,500	0	0	0	0	1,500	0	0	0	0	1,735

Project Status:

\$0 spent and encumbered through February 2016 Project is under study.

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

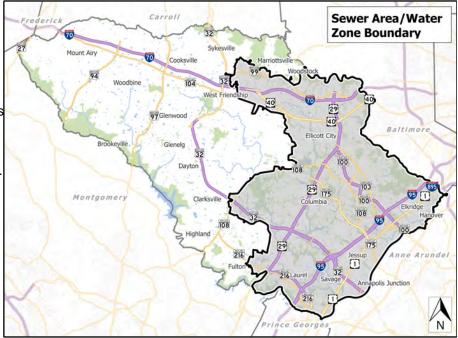
The project [program] was initiated by the Department of Public Works. This project [program] will be utilized to examine related needs within specific sewer areas or water zones when it is determined that a need exist to evaluate a sewer area or water zone due to emergency, future capital project(s), 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



Project: FY2017 SEWER AREA ASSESSMENT AND MODELING

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	250	250	100	100	100	85	85	470	0	0	0	0	720
ADMINISTRATION	0	5	5	0	5	0	5	0	10	0	0	0	0	15
Total Expenditures	0	255	255	100	105	100	90	85	480	0	0	0	0	735
UTILITY CASH	0	255	255	100	105	100	90	85	480	0	0	0	0	735
Total Funding	0	255	255	100	105	100	90	85	480	0	0	0	0	735

Project Status: \$0 spent and encumbered through February 2016

Project: S6698-ROUTINE SEWER EXTENSION PROGRAM

SEWER PROJECTS

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.
- 2. Request represents the advancement of funds in the capital program.

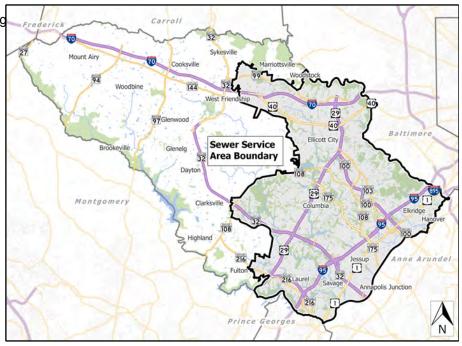
Project Schedule

Ongoing program

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

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	734	100	834	100	100	100	100	100	500	0	0	0	0	1,334
CONSTRUCTION	3,445	500	3,945	500	500	500	500	500	2,500	0	0	0	0	6,445
ADMINISTRATION	71	25	96	25	25	25	25	25	125	0	0	0	0	221
Total Expenditures	4,250	625	4,875	625	625	625	625	625	3,125	0	0	0	0	8,000
METRO DISTRICT BOND	4,250	625	4,875	625	625	625	625	625	3,125	0	0	0	0	8,000
Total Funding	4,250	625	4,875	625	625	625	625	625	3,125	0	0	0	0	8,000

Project Status:

\$2,710,140 spent and encumbered through February 2016

Projects completed: FY15 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

Projects completed: FY16 - 1. Ten Mills Road Sewer Extension; 2. Hunting Lane Routine Sewer Extension

Project: S6699-ON SITE SEPTIC SYSTEM CONVERSION PROGRAM

Description

Operating Budget Impact

A project for the study, design and implementation of converting properties within Annual Bond Redemption \$ \$855,000 the water and sewer Planned Service Area that are currently on private on-site septic systems to public sewer service.

The annual cost of operation and maintenance is \$10,000.

Justification

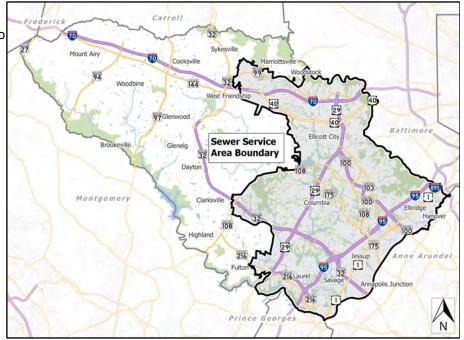
Properties within the planned service area on private septic systems often produce a greater nutrient loading on the environment than waste treated at the County's water reclamation facilities. By providing improved properties access to public sewerage facilities, the County will be able to lower the 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



Project: ON SITE SEPTIC SYSTEM CONVERSION PROGRAM

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,000	0	1,000	500	500	500	500	0	2,000	0	0	0	0	3,000
LAND ACQUISITION	580	0	580	290	290	290	290	0	1,160	0	0	0	0	1,740
CONSTRUCTION	4,400	0	4,400	2,200	2,200	2,200	2,200	0	8,800	0	0	0	0	13,200
ADMINISTRATION	20	0	20	10	10	10	10	0	40	0	0	0	0	60
Total Expenditures	6,000	0	6,000	3,000	3,000	3,000	3,000	0	12,000	0	0	0	0	18,000
METRO DISTRICT BOND	6,000	0	6,000	3,000	3,000	3,000	3,000	0	12,000	0	0	0	0	18,000
Total Funding	6,000	0	6,000	3,000	3,000	3,000	3,000	0	12,000	0	0	0	0	18,000

Project Status : \$0 spent and encumbered through February 2016

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

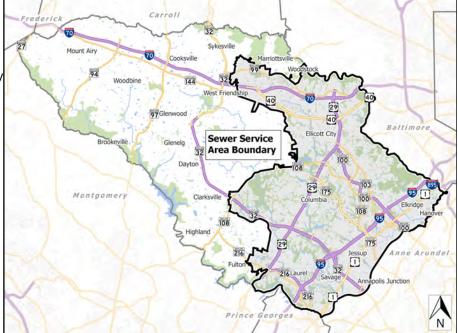
This project is necessary to provide an appropriation for engineering and inspection services. The services are necessary for determining the acceptability of developer work into the County system.

Remarks

- 1. Utility cash is requested as an additional revenue source to meet project goals during current economic conditions.
- 2. OTHER represents Underground Utility Permit Fees.
- 3. Request represents additional funds required for inspection services.

Project Schedule

Ongoing program



Project: FY2011 DEVELOPER INSPECTION PROGRAM

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	6,500	1,250	7,750	2,250	250	2,250	250	2,250	7,250	0	0	0	0	15,000
Total Expenditures	6,500	1,250	7,750	2,250	250	2,250	250	2,250	7,250	0	0	0	0	15,000
UTILITY CASH	2,100	500	2,600	1,000	0	1,000	0	1,000	3,000	0	0	0	0	5,600
DEVELOPER CONTRIBUTION	4,150	500	4,650	1,000	0	1,000	0	1,000	3,000	0	0	0	0	7,650
OTHER SOURCES	250	250	500	250	250	250	250	250	1,250	0	0	0	0	1,750
Total Funding	6,500	1,250	7,750	2,250	250	2,250	250	2,250	7,250	0	0	0	0	15,000

Project Status : \$3,275,217 spent and encumbered through February 2016

Project: S6812-FY2012 ADV DEPOSIT LARGE HSE CONNECTIONS

Description

A project to provide for the construction and inspection services for sites that do not require formal developer agreements, but instead require Advanced Deposit Order (ADO) agreements for water services 8 inches and larger, short main extensions, or other appurtenances. Construction work limited to 200 feet (combined water/sewer). The following criteria must be met: 1. Extensions are necessary to provide frontage to existing lots or parcels within the Metropolitan District. 2. Developer is responsible for all engineering, plans, and construction stakeout. 3. Parcels or lots are not subdivideable. 4. Acquisition of utility easements is not required. 5. Front foot benefit charge affects the ADO requester only.

Justification

The Howard County Code Section 20.308 establishes the requirements to charge for connections, and the requirement to receive payment prior to making the connection.

Remarks

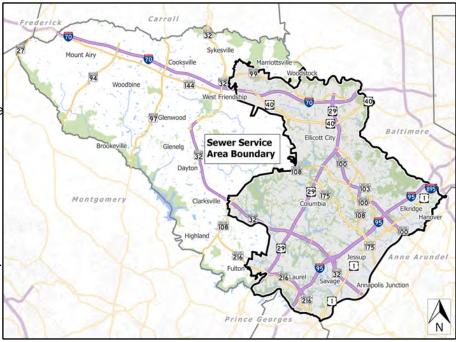
1. An ADO agreement provides for the contractual basis for the connection request. Each connection's cost is accounted for separately against this project. 2. After August 1, 2007, developers will hire Howard County licensed on-site utility contractors, at their cost, to perform the work. The County will continue to construct these connections only at the discretion of the Director of Public Works.

Project Schedule

Ongoing program

Operating Budget Impact

There is no Operating Budget impact associated with this project.



Project: FY2012 ADV DEPOSIT LARGE HSE CONNECTIONS

(In Thousands)	Five Year Capital Program							Master Plan						
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	150	0	150	0	0	0	0	0	0	0	0	0	0	150
ADMINISTRATION	0	2	2	0	0	0	0	0	0	0	0	0	0	2
Total Expenditures	150	2	152	0	0	0	0	0	0	0	0	0	0	152
DEVELOPER CONTRIBUTION	150	2	152	0	0	0	0	0	0	0	0	0	0	152
Total Funding	150	2	152	0	0	0	0	0	0	0	0	0	0	152

Project Status:

\$0 spent and encumbered through February 2016

1. FY17 - Ongoing Program, Renewed for FY17.

2. Beginning in FY12 - project to be an ongoing program.

Project: S6862-FY2012 SEWER HOUSE CONNECTIONS Number: S6862

Description

A project to provide for the construction of sewer house connections by the Bureau of Utilities for 4 and 6 inch residential sewers. These connections are made when new connections are required for lots or homes where none exist. Connections installed by developer agreement, capital project, or by developer's utility contractor under County inspection (post August 1, 2007) are not included.

Justification

The Howard County Code Section 20.308 establishes the requirements to charge for connections. This capital project allows for the installation costs to be capitalized and incorporated into the County's asset management system.

Remarks

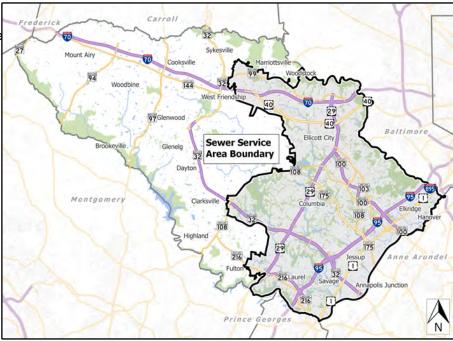
- 1. Sewer house connection charges are collected when the property owner submits an application to connect to the public system.
- 2. Funds collected from the connection charges are credited to this project when the connections are not existing.
- 3. House connections previously installed by the Bureau of Utilities are to be installed by the developer's utility contractor under County inspection (post Aug. 1, 2007). Bureau of Utilities will install connections only at the discretion of the Director of Public Works.

Project Schedule

- 1. FY17 Construction.
- 2. Project to remain as an ongoing program

Operating Budget Impact

There is no Operating Budget impact for this project.



Project: FY2012 SEWER HOUSE CONNECTIONS Number: S6862

(In Thousands)		Five	Year Ca	apital Pro	ogram	Master Plan								
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	150	0	150	0	0	0	0	0	0	0	0	0	0	150
ADMINISTRATION	0	2	2	0	0	0	0	0	0	0	0	0	0	2
Total Expenditures	150	2	152	0	0	0	0	0	0	0	0	0	0	152
DEVELOPER CONTRIBUTION	150	2	152	0	0	0	0	0	0	0	0	0	0	152
Total Funding	150	2	152	0	0	0	0	0	0	0	0	0	0	152

Project Status:
\$0 spent and encumbered through February 2016
Ongoing program

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

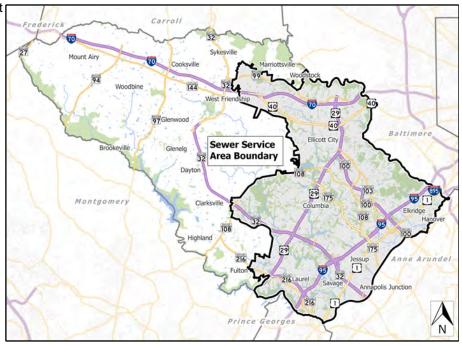
The installation of water and/or sewer house connections during construction of the mains is more cost effective and will prevent future traffic disruption, excavation and road repair required if these connections were constructed at a later date.

Project Schedule

Ongoing program

Operating Budget Impact

No impact on Operating Budget



Project: DEVELOPER CONSTRUCTED HOUSE CONNECTIONS

(In Thousands)					Five	Year Ca	apital Pro	ogram	Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status:

\$61,364 spent and encumbered through February 2016
Projects completed: FY15 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)

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

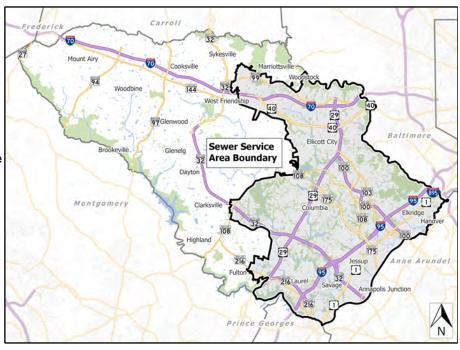
- 1. Reimbursements through this capital project will require the execution of a major facilities agreement between the developer and the County.
- 2. Reimbursement will include only the actual construction cost of the major facility.

Project Schedule

Ongoing program

Operating Budget Impact

No impact on Operating Budget



Project: FY2015 DEVELOPER CONSTRUCTED MAJOR FACILITIES

(In Thousands)	Five Year Capital Program							Master Plan						
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	3,000	0	3,000	0	0	0	0	0	0	0	0	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	0	0	0	3,000
Total Funding	3,000	0	3,000	0	0	0	0	0	0	0	0	0	0	3,000

Project Status: \$0 spent and encumbered through February 2016

Howard County, MD FY2017 Council Approved Capital Budget Program: TRAFFIC IMPROVEMENTS

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
T7087 FY1999 STREET LIGHT SETBACK SAFETY PROGRAM	Р	600	100	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	600	100	700	0	0	0	0	0	700
T7088 FY2001 SCHOOL CROSSWALK IMPROVEMENTS	В	243	50	293	50	50	50	50	100	593
This project is for the installation or modification of crosswalks, raised crosswalks, chokers, sidewalks, raised	G	300	0	300	0	0	0	0	0	300
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 an ennanced walking route for school children.	Р	100	0	100	0	0	0	0	0	100
	Χ	150	0	150	0	0	0	0	0	150
	Total	1,193	50	1,243	50	50	50	50	100	1,543
T7089 FY2005 RESIDENTIAL TRAFFIC CALMING	В	250	0	250	0	0	0	0	0	250
A project to construct geometric roadway changes to reduce traffic speeding in residential areas.	0	275	0	275	0	0	0	0	0	275
	Р	785	100	885	100	0	0	0	0	985
	Total	1,310	100	1,410	100	0	0	0	0	1,510
T7094 FY2007 STREET LIGHTING PROGRAM This project is for the installation of new street lights in	В	460	205	665	205	0	0	0	0	870
existing communities and commercial/industrial areas, and	0	100	20	120	20	0	0	0	0	140
the conversion of existing street lights to high pressure sodium vapor (HPS) and/or LED fixtures.	Р	1,335	0	1,335	0	0	0	0	0	1,335
	Х	200	0	200	0	0	0	0	0	200
	Total	2,095	225	2,320	225	0	0	0	0	2,545
T7101 FY2008 STATE/COUNTY SHARED INTERSECTIONS	D	0	200	200	0	0	0	0	0	200
A project for the design, review and construction funding of	E	600	0	600	0	0	0	0	0	600
geometric and traffic control modifications at various intersections of State and / or County roads.	Х	800	0	800	0	0	0	0	0	800
	Total	1,400	200	1,600	0	0	0	0	0	1,600

Howard County, MD FY2017 Council Approved Capital Budget Program: TRAFFIC IMPROVEMENTS

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	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	270	30	300	30	0	0	0	0	330
public roads and upgrade signing and striping projects along existing County roads.	Р	120	0	120	0	0	0	0	0	120
	Total	630	30	660	30	0	0	0	0	690
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	1,000	150	1,150	150	0	0	0	0	1,300
new development locations where warranted.	Total	1,250	150	1,400	150	0	0	0	0	1,550
T7105 FY2011-SIGNALIZATION PROGRAM A project for the design and construction of various traffic	В	700	200	900	200	300	300	300	0	2,000
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	1,760	200	1,960	200	300	300	300	0	3,060
T7106 INTERSECTION IMPROVEMENT PROGRAM This project is for the study, design and construction of	В	1,650	200	1,850	200	0	0	0	0	2,050
geometric and pedestrian modifications to improve the safety or increase capacity at various intersections.	D	120	30	150	30	0	0	0	0	180
salety of increase capacity at various intersections.	Χ	650	0	650	0	0	0	0	0	650
	Total	2,420	230	2,650	230	0	0	0	0	2,880
T7107 FY2014 DOWNTOWN COLUMBIA PATUXENT BRANCH TRAIL EXTENSION	В	20	0	20	1,350	750	550	0	0	2,670
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	0	80	500	500	0	0	0	1,080
	Total	150	0	150	1,850	1,250	550	0	0	3,800

Howard County, MD FY2017 Council Approved Capital Budget Program: TRAFFIC IMPROVEMENTS

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
T7108 FY2016 CLARKSVILLE-RIVER HILL STREETSCAPE IMPROVEMENTS	В	100	100	200	200	800	1,900	1,000	100	4,200
A project to plan, design and construct road and related improvements including streetscape, storm water	G	100	100	200	100	100	100	0	0	500
management, pedestrian, bicycle, and public space enhancements in the Route 108 corridor.	Total	200	200	400	300	900	2,000	1,000	100	4,700
T7109 FY2016-DEVELOPER STREETLIGHT PROGRAM A project to facilitate the design, installation and	D	400	400	800	400	400	400	400	0	2,400
modification of street lights in new developments.	0	3,000	0	3,000	0	0	0	0	0	3,000
	Р	0	25	25	25	25	25	25	0	125
	Total	3,400	425	3,825	425	425	425	425	0	5,525
TRAFFIC IMPROVEMENTS Total		17,408	1,910	19,318	3,560	2,925	3,325	1,775	200	31,103

Howard County, MD FY2017 Council Approved Capital Budget (\$000) TRAF-TRAFFIC IMPROVEMENTS

	Revenue Source	Prior Total	Current FY	Appropriation Total
В	BONDS	4,863	755	5,618
D	DEVELOPER CONTRIBUTION	1,890	810	2,700
Е	EXCISE TAX	600	0	600
G	GRANTS	640	100	740
0	OTHER SOURCES	3,775	20	3,795
Р	PAY AS YOU GO	2,940	225	3,165
Χ	EXCISE TAX BACKED BONDS	2,700	0	2,700
Total		17,408	1,910	19,318

2017 Council Approved 5 Year Capital Budget Project Type Summary (TRAF-TRAFFIC IMPROVEMENTS)

Rev	enue Source	Prior Approp	Current FY	2018	2019	2020	2021	2022	5 Year Total
В	BONDS	4,863	755	2,205	1,900	2,800	1,350	200	14,073
D	DEVELOPER CONTRIBUTION	1,890	810	610	400	400	400	0	4,510
Е	EXCISE TAX	600	0	0	0	0	0	0	600
G	GRANTS	640	100	600	600	100	0	0	2,040
0	OTHER SOURCES	3,775	20	20	0	0	0	0	3,815
Р	PAY AS YOU GO	2,940	225	125	25	25	25	0	3,365
Χ	EXCISE TAX BACKED BONDS	2,700	0	0	0	0	0	0	2,700
Tota	al	17,408	1,910	3,560	2,925	3,325	1,775	200	31,103

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

Request represents installing new poles and LED fixtures along Governor Warfield Pkwy (from Windstream Dr to the Little Patuxent Pkwy/Banneker Rd intersection).

Project Schedule

Program FY18 - Close



Number: T7087

Project: FY1999 STREET LIGHT SETBACK SAFETY PROGRAM

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
EQUIPMENT & FURNISHINGS	600	100	700	0	0	0	0	0	0	0	0	0	0	700
Total Expenditures	600	100	700	0	0	0	0	0	0	0	0	0	0	700
PAY AS YOU GO	600	100	700	0	0	0	0	0	0	0	0	0	0	700
Total Funding	600	100	700	0	0	0	0	0	0	0	0	0	0	700

Project Status:

\$586,211 spent and encumbered through February 2016

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 Parkway (from Broken Land Pkwy to Columbia Rd) and Governor Warfield Pkwy (from Little Patuxent Pkwy to Windstream Dr).

Project Planned - Governor Warfield Pkwy (from Windstream Dr to the Little Patuxent Pkwy/Banneker Rd intersection).

Project: T7088-FY2001 SCHOOL CROSSWALK IMPROVEMENTS Number: T7088

Description

Operating Budget Impact

This project is for the installation or modification of crosswalks, raised crosswalks, Annual Bond Redemption \$ \$46,935 chokers, sidewalks, raised shoulders, signs, signals and/or other roadway retrofits to provide for an enhanced walking route for school children.

Justification

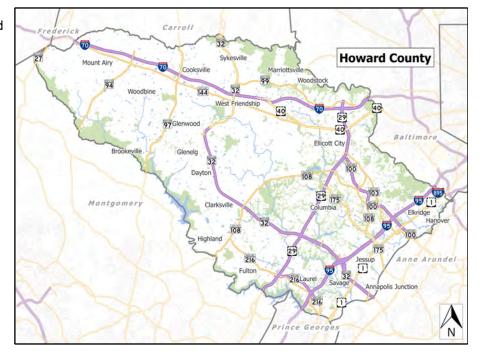
Installation of these devices improves safety for children walking to and from school. Other recreational and pedestrian transportation benefits can be gained by their installation.

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



TRAFFIC IMPROVEMENTS

Number: T7088

Project: FY2001 SCHOOL CROSSWALK IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	50	0	50	0	0	0	0	0	0	0	0	0	0	50
CONSTRUCTION	543	50	593	50	50	50	50	100	300	100	100	100	0	1,193
EQUIPMENT & FURNISHINGS	600	0	600	0	0	0	0	0	0	0	0	0	0	600
Total Expenditures	1,193	50	1,243	50	50	50	50	100	300	100	100	100	0	1,843
BONDS	243	50	293	50	50	50	50	100	300	100	100	100	0	893
GRANTS	300	0	300	0	0	0	0	0	0	0	0	0	0	300
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	1,193	50	1,243	50	50	50	50	100	300	100	100	100	0	1,843

Project Status:

\$392,497 spent and encumbered through February 2016

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

Projects Planned: Farewell Rd - bump outs and crosswalk.

Sidewalk / ramp replacement at various school walking areas.

School flasher equipment upgrade to permit programming of school closure schedule.

Project: T7089-FY2005 RESIDENTIAL TRAFFIC CALMING

Number: T7089

Description

Operating Budget Impact

A project to construct geometric roadway changes to reduce traffic speeding in residential areas.

Annual Bond Redemption \$ \$11,250

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



TRAFFIC IMPROVEMENTS

Number: T7089

Project: FY2005 RESIDENTIAL TRAFFIC CALMING

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	1,310	100	1,410	100	0	0	0	0	100	0	0	0	0	1,510
Total Expenditures	1,310	100	1,410	100	0	0	0	0	100	0	0	0	0	1,510
BONDS	250	0	250	0	0	0	0	0	0	0	0	0	0	250
OTHER SOURCES	275	0	275	0	0	0	0	0	0	0	0	0	0	275
PAY AS YOU GO	785	100	885	100	0	0	0	0	100	0	0	0	0	985
Total Funding	1,310	100	1,410	100	0	0	0	0	100	0	0	0	0	1,510

Project Status:

\$918,124 spent and encumbered through February 2016

Completed Projects:

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.

Stonehouse Dr: Vote Failed.

Tiller Dr: Humps Constructed 6/2015.

Font Hill Dr (Voting 11/15); Hunting Horn Dr (No Action); Roundhill Rd (No Action).

Potential Projects:

Farewell Dr: TAC Disbanded & Reformed

Project: T7094-FY2007 STREET LIGHTING PROGRAM Number: T7094

Description

This project is for the installation of new street lights in existing communities and Annual Bond Redemption \$ \$48,150 commercial/industrial areas, and the conversion of existing street lights to high pressure sodium vapor (HPS) and/or 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 high pressure sodium vapor (HPS) or LED fixtures provides improved lighting with less energy consumption.

Remarks

1. Request represents installation of warranted new street lights, conversion of existing mercury vapor fixtures to LED fixtures and to supplement developer funds for new lights in new developments for the added cost of LED fixtures. 2. OTHER represents community contributions and developer/contractor payments for pole relocations.

Project Schedule

PROGRAM

Operating Budget Impact

The Bond funding listed for this project includes both long term bond funding and the use of the master lease program as appropriate.



Number: T7094

Project: FY2007 STREET LIGHTING PROGRAM

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	35	5	40	5	0	0	0	0	5	0	0	0	0	45
CONSTRUCTION	2,060	220	2,280	220	0	0	0	0	220	0	0	0	0	2,500
Total Expenditures	2,095	225	2,320	225	0	0	0	0	225	0	0	0	0	2,545
BONDS	460	205	665	205	0	0	0	0	205	0	0	0	0	870
OTHER SOURCES	100	20	120	20	0	0	0	0	20	0	0	0	0	140
PAY AS YOU GO	1,335	0	1,335	0	0	0	0	0	0	0	0	0	0	1,335
EXCISE TAX BACKED BONDS	200	0	200	0	0	0	0	0	0	0	0	0	0	200
Total Funding	2,095	225	2,320	225	0	0	0	0	225	0	0	0	0	2,545

Project Status:

\$1,489,413 spent and encumbered through February 2016

PROJECTS IN PLANNING STAGE for upgraded or new street lights:

Willow Green Way, Dorsey Choice Townhouse Community, Pebble Beach Community, Clock Tower Lane area, Meadow Wood Way, Heather Glen Way, Old Stockbridge Drive, Bolling Brook Farms community, Ridge Road, and Warfield Range community.

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:

(2013) - Basket Ring Rd & Stevens Forest Rd, Foreland Garth, Hammond Dr & Hillcrest Dr, Ilchester Rd (near the State Park), Great Star Dr & Linden Linthicum Ln (installed LED fixtures at the crosswalk islands), Mendenhall Ct, North Ridge Rd @ Town & Country Blvd, Park Circle Dr (LED), Pindell Woods community, Service Road off US 40 near Frederick Rd, Southern Star Terr, Whithorn Way and numerous single street light locations.

(2014) The Birches (VWL) community, Port Capital Dr (along the west side of Howard Square), Fulton Ridge Dr, Gray Rock Dr, Preakness Circle Ln, Brampton Pkwy at Yorkshire Dr, Court House Dr (upgrade fixture to LED), Stevens Forest Rd at new pedestrian crossing, Timesweep Ln, Triadelphia Rd at Evergreen Way, and numerous single street light locations.

(2015) Rusty Rim community, Emerson Hill community, Gate Sill, Live Oak Ct, Stabean Dr, Temora Manor Ln, Fall River Row Ct, College Square, Bethany Lane (OH), Ellicott Center Dr, Gold Needle Way, Marriottsville Rd @ Douglas Ave (OH), Port Capital Dr, Quarter Staff Rd @ Stern Wheel Pl, South Carlinda Ave, Summer Hollow La, @ Broken Timber Way, Three Apple Downs and Tide Rock Square.

Project: T7101-FY2008 STATE/COUNTY SHARED INTERSECTIONS Number: T7101

Description

Operating Budget Impact

A project for the design, review and construction funding of geometric and traffic Annual Bond Redemption \$ \$36,000 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

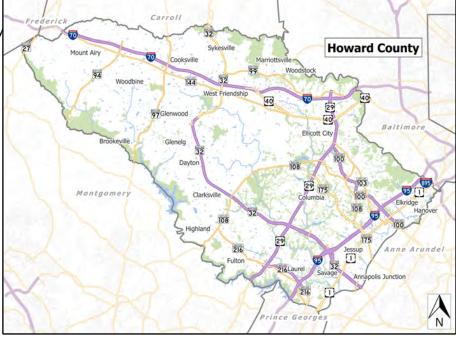
This project will be used to share funding on the State or County improvements that will provide increased capacity and/or increased safety, or improved roadway conditions. This project may be used as a funding source for public improvements constructed by others under an agreement approved by the County 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



TRAFFIC IMPROVEMENTS

Number: T7101

Project: FY2008 STATE/COUNTY SHARED INTERSECTIONS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	600	0	600	0	0	0	0	0	0	0	0	0	0	600
CONSTRUCTION	800	200	1,000	0	0	0	0	0	0	0	0	0	0	1,000
Total Expenditures	1,400	200	1,600	0	0	0	0	0	0	0	0	0	0	1,600
DEVELOPER CONTRIBUTION	0	200	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	1,400	200	1,600	0	0	0	0	0	0	0	0	0	0	1,600

Project Status:

\$301,742 spent and encumbered through February 2016
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.

Project: T7102-FY2008 STREET SIGN PROGRAM Number: T7102

Description

A project to provide street sign services and related line striping that are included Annual Bond Redemption \$ \$10,800 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.

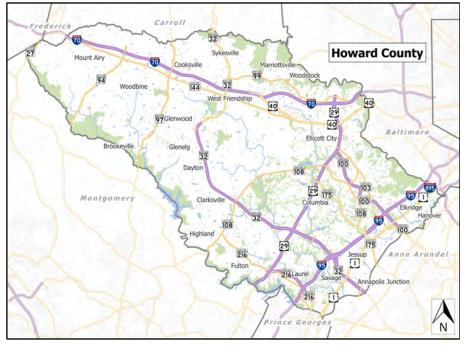
Remarks

Request represents up to an estimated 250 signs per year.

Project Schedule

PROGRAM

Operating Budget Impact



TRAFFIC IMPROVEMENTS

Number: T7102

Project: FY2008 STREET SIGN PROGRAM

(In Thousands)					Five	e Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	630	30	660	30	0	0	0	0	30	0	0	0	0	690
Total Expenditures	630	30	660	30	0	0	0	0	30	0	0	0	0	690
BONDS	240	0	240	0	0	0	0	0	0	0	0	0	0	240
DEVELOPER CONTRIBUTION	270	30	300	30	0	0	0	0	30	0	0	0	0	330
PAY AS YOU GO	120	0	120	0	0	0	0	0	0	0	0	0	0	120
Total Funding	630	30	660	30	0	0	0	0	30	0	0	0	0	690

Project Status : \$271,195 spent and encumbered through February 2016

Project: T7103-FY2009 STATE/COUNTY SHARED TRAFFIC CONTROL Number: T7103

Description

Operating Budget Impact

A project for design, review and construction funding of traffic control at various intersections of State and County roads.

Annual Bond Redemption \$ \$42,750

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



Number: T7103

Project: FY2009 STATE/COUNTY SHARED TRAFFIC CONTROL

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status:

\$299,764 spent and encumbered through February 2016

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).

Project: T7104-FY2009 DEVELOPER/COUNTY SIGNALS Number: T7104

Operating Budget Impact

Description

A project to facilitate the design, construction, and modification of traffic signals Annual Bond Redemption \$ \$11,250 and appurtenances at various new development locations where warranted. New or modified traffic signals are considered where land development increases 150000 traffic to levels where design warrants are met, in accordance with the Manual on Uniform Traffic Control Devices (MUTCD).

Justification

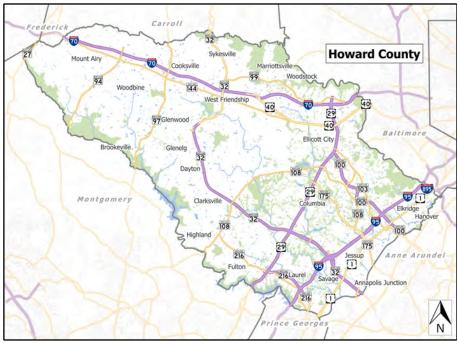
- 1. This project will provide a funding source to accumulate developer contributions to traffic signal capital construction and have a project in place to expedite the construction of signals when the warrants are met.
- 2. This project will be used to implement the Adequate Public Facilities Ordinance (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



TRAFFIC IMPROVEMENTS

Number: T7104

Project: FY2009 DEVELOPER/COUNTY SIGNALS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	'lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	1,250	150	1,400	150	0	0	0	0	150	0	0	0	0	1,550
Total Expenditures	1,250	150	1,400	150	0	0	0	0	150	0	0	0	0	1,550
BONDS	250	0	250	0	0	0	0	0	0	0	0	0	0	250
DEVELOPER CONTRIBUTION	1,000	150	1,150	150	0	0	0	0	150	0	0	0	0	1,300
Total Funding	1,250	150	1,400	150	0	0	0	0	150	0	0	0	0	1,550

Project Status:

\$631,585 spent and encumbered through February 2016

Broken Land Parkway at Hickory Ridge Road (signal modification/reconstruction - in design), Little Patuxent Parkway at Governor Warfield Parkway (signal modification - in design), Little Patuxent Parkway 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), Rogers Avenue at Orchard Avenue/Patapsco Valley Drive (signal modification - in design), Snowden River Parkway at Lincoln Technical Institute (future signal - under construction), Snowden River Parkway at Minstrel Way (future signal modification/reconstruction - construction complete), Little Patuxent Parkway at Harpers Farm Road/Campus Way (signal modification - completed Sept 2015), Little Patuxent Parkway at Broken Land Parkway (signal modification - completed Aug 2014), Broken Land Parkway at Town Center/Columbia Mall (signal modification - completed Dec 2014), Little Patuxent Parkway at Whole Foods Driveway (new signal - completed Aug 2014), Little Patuxent Parkway at Rouse Bldg/Columbia Mall (signal modification - completed Aug 2014), Marriottsville Road at Resort Road/All Beth Road (new signal - completed Apr 2013), Marriottsville Road at Warwick Way/Barnsley Way (signal modification - completed Apr 2011), Gorman Rd at Stephens Rd (new signal - completed Jun 2011), Columbia Rd at Old Annapolis Rd (signal modification - completed Sep 2011), Johns Hopkins Rd at APL West Access (new signal - completed Apr 2012).

Project: T7105 FY2011-SIGNALIZATION PROGRAM

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, video detection cameras, 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 fiberoptics. 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.
- 3. GRANT revenue represents the Baltimore Metropolitan Council (BMC) grant to upgrade our communications to traffic signals.

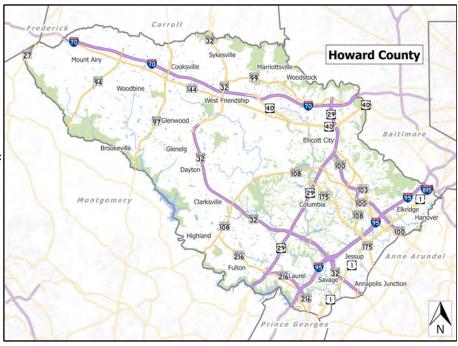
Project Schedule

Program

Operating Budget Impact

Annual Bond Redemption \$ \$130,500

\$245,000 ~~ The Bond funding listed for this project includes both long term bond funding and the use of the master lease program as appropriate.



TRAFFIC IMPROVEMENTS

Project: FY2011-SIGNALIZATION PROGRAM Number: T7105

(In Thousands)					Five	Year Ca	pital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	1,760	200	1,960	200	300	300	300	0	1,100	0	0	0	0	3,060
Total Expenditures	1,760	200	1,960	200	300	300	300	0	1,100	0	0	0	0	3,060
BONDS	700	200	900	200	300	300	300	0	1,100	0	0	0	0	2,000
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	1,760	200	1,960	200	300	300	300	0	1,100	0	0	0	0	3,060

Project Status:

\$577,904 spent and encumbered through February 2016

Traffic signal timing optimization - Snowden River Parkway from Minstrel Way to McGaw Road (in design), Main Street from Maryland Avenue to Ellicott Mills Drive (in design), Little Patuxent Parkway from Columbia Road to South Entrance Road (implemented), Columbia Gateway Drive from Columbia Gateway Drive to Alexander Bell Drive (implemented)

New traffic signal/traffic signal reconstruction - Gorman Road at Foundry Street (new signal - in design), Little Patuxent Parkway at Governor Warfield Parkway (partial reconstruction - in design), Little Patuxent Parkway at Cedar Lane (reconstruction - in design), Harpers Farm Road at Eliots Oak Road (reconstruction - in design), Main Street at Maryland Avenue (signal equipment upgrade - in construction), Main Street at Old Columbia Pike (signal equipment upgrade - in construction), Dorsey Run Rd at Junction Dr (New signal - completed May 2015), Marshalee Drive at Avalon Drive (new signal - completed Feb 2012), Centennial Lane at Centennial H.S./Burleigh Manor M.S. Parking Lot (new signal - completed Aug 2011

Traffic signal modifications and/or ADA improvements at traffic signals (in design) - Old Columbia Road at Shaker Drive (APS), Murray Hill Road at Guilford Road (ADA/APS), Dobbin Road at Oakland Mills Road (ADA/APS) upgrade and cabinet controller replacement), Oakland Mills Road at Oak Hall Lane (ADA/APS), Columbia Road at Dorsey Hall Drive/Leyden Way (signal modification - completed), Installation of video detection - Centennial Lane and Old Annapolis Road/Breconshire, Great Star Drive at Summer Sunrise, Dobbin Road at McGaw Rd (Completed)

Upgrade to traffic signal operating software (complete)

Upgrade to fiber optic communication (underway)

Project: T7106-INTERSECTION IMPROVEMENT PROGRAM

Number: T7106

Description

Operating Budget Impact

This project is for the study, design and construction of geometric and pedestrian Annual Bond Redemption \$ \$121,500 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

Project Schedule

Program

Mount Airy

Woodbine

Idd

Sykesville

Marriottsville

West Friendship

West Friendship

Bröökeville

Glenelg

Dayton

Clarksville

Columbia

Colu

TRAFFIC IMPROVEMENTS

Number: T7106

Project: INTERSECTION IMPROVEMENT PROGRAM

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	200	150	350	50	0	0	0	0	50	0	0	0	0	400
LAND ACQUISITION	120	30	150	30	0	0	0	0	30	0	0	0	0	180
CONSTRUCTION	2,100	50	2,150	150	0	0	0	0	150	0	0	0	0	2,300
Total Expenditures	2,420	230	2,650	230	0	0	0	0	230	0	0	0	0	2,880
BONDS	1,650	200	1,850	200	0	0	0	0	200	0	0	0	0	2,050
DEVELOPER CONTRIBUTION	120	30	150	30	0	0	0	0	30	0	0	0	0	180
EXCISE TAX BACKED BONDS	650	0	650	0	0	0	0	0	0	0	0	0	0	650
Total Funding	2,420	230	2,650	230	0	0	0	0	230	0	0	0	0	2,880

Project Status:

\$476,194 spent and encumbered through February 2016

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.

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 . 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. Little Patuxent Parkway at new Howard Community College access - geometric improvements and traffic signal.

Number: T7107

Project: T7107-FY2014 DOWNTOWN COLUMBIA PATUXENT BRANCH TRAIL EXTENSION

Description

Operating Budget Impact

A project connecting Downtown Columbia at Lake Kittamaqundi and extending to Annual Bond Redemption \$ \$120,150 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. The pathway could also serve as a primary path with potential future secondary connections to other nearby attractions.

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. Phase 2 is to connect from Stevens Forest Road to the Patuxent Branch Trail. Phase 2 will require further evaluation prior to design or construction.

Project Area Blandar Park Recommended Phase I Fisher Park Arbotron Park Arbo

Project Schedule

FY16/17 - Design of Phase 1. FY18/19 - Construction of Phase 1. Community input, additional evaluation and possible design of Phase 2 and begin construction. FY20 - Possible completion of construction for Phase 2.

TRAFFIC IMPROVEMENTS

Number: T7107

Project: FY2014 DOWNTOWN COLUMBIA PATUXENT BRANCH TRAIL EXTENSION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	150	0	150	350	50	50	0	0	450	0	0	0	0	600
LAND ACQUISITION	0	0	0	700	0	0	0	0	700	0	0	0	0	700
CONSTRUCTION	0	0	0	800	1,200	500	0	0	2,500	0	0	0	0	2,500
Total Expenditures	150	0	150	1,850	1,250	550	0	0	3,650	0	0	0	0	3,800
BONDS	20	0	20	1,350	750	550	0	0	2,650	0	0	0	0	2,670
DEVELOPER CONTRIBUTION	50	0	50	0	0	0	0	0	0	0	0	0	0	50
GRANTS	80	0	80	500	500	0	0	0	1,000	0	0	0	0	1,080
Total Funding	150	0	150	1,850	1,250	550	0	0	3,650	0	0	0	0	3,800

Project Status:

\$4,773 spent and encumbered through February 2016 FY14 - Feasibility study - complete.

FY16 - Phase I preliminary design underway (MD bikeway grant).

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.

FY18 - Short term improvement design and land acquisition.

FY19/FY20 - Short term improvement Project construction.

Operating Budget Impact

Annual Bond Redemption \$ \$189,000



Number: T7108

Project: FY2016 CLARKSVILLE-RIVER HILL STREETSCAPE IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	200	200	400	100	100	0	0	0	200	0	0	0	0	600
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	200	200	400	300	900	2,000	1,000	100	4,300	0	0	0	0	4,700
BONDS	100	100	200	200	800	1,900	1,000	100	4,000	0	0	0	0	4,200
GRANTS	100	100	200	100	100	100	0	0	300	0	0	0	0	500
Total Funding	200	200	400	300	900	2,000	1,000	100	4,300	0	0	0	0	4,700

Project Status:

\$0 spent and encumbered through February 2016

Draft design guidelines were prepared in FY15 and will be reviewed by the DAP. Upon completion and adoption by the Council as a resolution, a State Highway Administrantion (SHA) design waiver process will be initiated. Design development will follow SHA's permitting process.

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



TRAFFIC IMPROVEMENTS

Number: T7109

Project: FY2016-DEVELOPER STREETLIGHT PROGRAM

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	3,400	425	3,825	425	425	425	425	0	1,700	0	0	0	0	5,525
Total Expenditures	3,400	425	3,825	425	425	425	425	0	1,700	0	0	0	0	5,525
DEVELOPER CONTRIBUTION	400	400	800	400	400	400	400	0	1,600	0	0	0	0	2,400
OTHER SOURCES	3,000	0	3,000	0	0	0	0	0	0	0	0	0	0	3,000
PAY AS YOU GO	0	25	25	25	25	25	25	0	100	0	0	0	0	125
Total Funding	3,400	425	3,825	425	425	425	425	0	1,700	0	0	0	0	5,525

Project Status:

\$272,675 spent and encumbered through February 2016

DEVELOPMENT STREET LIGHT PROJECTS

Installed in FY15, but Invoiced in FY16: Annapolis Junction Town Center (Phase 1), Autumn Overlook (Phase 1), Autumn River (Phase 2), Cascade Overlook (Phase 3), Cherrytree View, Clarks Meadow, Claremont Overlook, Debra Court, Downtown Columbia Multi-Use Path (Phase 1), Howard Square Development, Mill River Overlook, Mt. Hebron Overlook, Owings Property, Rocky Gorge Overlook, Shady Lane Crossing, Shipley's Grant (Phase 4), Villages at Turf Valley (Phase 2/Section 1), Walnut Creek, and Wincopia Farms (Phases 1 & 2).

To be Installed in FY16: Annapolis Junction Town Center (Phases 2 & 3), Autumn River (Phase 3), Cascade Overlook (Phase 4), Centennial Lake Overlook (Phase 1), Centennial Lake Overlook (Phase 2A), Cypress Springs, Downtown Columbia Multi-Use Path (Phase 2), Guilford Overlook, Grovemont Overlook, High Ridge Meadows (roundabout), Kindler Overlook (Phase 1), Maple Lawn (Garden District, Area 1), Maple Lawn (Westside, Area 4), Mt. Hebron Meadows, Rivers Corporate Park and Trotter Landing.

Howard County, MD FY2017 Council Approved Capital Budget Program: COMMUNITY RENEWAL

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
U7097 FY2012 NEW ROGER CARTER RECREATION CENTER	В	1,423	0	1,423	0	0	0	0	0	1,423
This project is for the design and construction of a community recreation center on Ellicott Mills Drive in	0	4,500	0	4,500	0	0	0	0	0	4,500
Ellicott City.	Total	5,923	0	5,923	0	0	0	0	0	5,923
COMMUNITY RENEWAL Total		5,923	0	5,923	0	0	0	0	0	5,923

Howard County, MD FY2017 Council Approved Capital Budget (\$000) URBAN-COMMUNITY RENEWAL

	Revenue Source	Prior Total	Current FY	Approp	riation Total
В	BONDS	1,42	23	0	1,423
0	OTHER SOURCES	4,50	00	0	4,500
Total		5,92	23	0	5,923

2017 Council Approved 5 Year Capital Budget Project Type Summary (URBAN-COMMUNITY RENEWAL)

Rev	venue Source	Prior Approp (Current FY	2018	2019	2020	2021	2022	5 Year Total
В	BONDS	1,423	0	0	0	0	0	0	1,423
0	OTHER SOURCES	4,500	0	0	0	0	0	0	4,500
Tot	al	5,923	0	0	0	0	0	0	5,923

June 01, 2016 Howard County, MD Version : Council Approved

COMMUNITY RENEWAL

Number: U7097

Project: U7097-FY2012 NEW ROGER CARTER RECREATION CENTER

Description

This project is for the design and construction of a community recreation center on Ellicott Mills Drive in Ellicott City.

Justification

This project is part of a joint effort among the Department of Housing and Community Development, the Department of Recreation and Parks, and the Howard County Housing Commission to redevelop of the Hilltop Apartments, Ellicott Terrace Apartments, and Roger Carter Center properties as a 278-unit, mixed-income residential community and public recreational facility. The County Council approved the transfer of the property to the Housing Commission in Council Resolution 24-2011.

Remarks

The Commission will finance a portion of the design and construction costs of the recreation facility by issuing bonds. The lease will provide for annual lease payments in the amounts that will pay the annual debt service on the Commission's bonds. Additional funding will come from (a) approximately \$1.4 million of County general obligation bonds to be transferred from Capital Projects U-7095 and U-7096 and (b) approximately a \$4.5 million loan from the U.S. Department of Housing Urban Development (HUD) Community Development Block Grant (CDBG) Section 108 loan program.

Project Schedule

FY2015 - Project To Be Closed Out

Operating Budget Impact

Annual Bond Redemption \$ \$64,035

Annual Lease Payment of \$550,000 (approx.)



Number: U7097

Project: FY2012 NEW ROGER CARTER RECREATION CENTER

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	472	0	472	0	0	0	0	0	0	0	0	0	0	472
CONSTRUCTION	5,133	0	5,133	0	0	0	0	0	0	0	0	0	0	5,133
ADMINISTRATION	318	0	318	0	0	0	0	0	0	0	0	0	0	318
Total Expenditures	5,923	0	5,923	0	0	0	0	0	0	0	0	0	0	5,923
BONDS	1,423	0	1,423	0	0	0	0	0	0	0	0	0	0	1,423
OTHER SOURCES	4,500	0	4,500	0	0	0	0	0	0	0	0	0	0	4,500
Total Funding	5,923	0	5,923	0	0	0	0	0	0	0	0	0	0	5,923

Project Status:

\$1,423,000 spent and encumbered through February 2016 FY 2012 - Design and Construction

FY 2013 - Construction Complete

FY2014 Project substantially completed and center is open. As of November 2013, over 90% of funding has been drawn and received. Will close capital project in FY2015.

Howard County, MD FY2017 Council Approved Capital Budget Program: WATER PROJECTS

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
W8206 FY1995 METALLIC PIPELINE CORROSION STUDIES	С	3,860	260	4,120	260	260	260	260	260	5,420
A project to fund the study, maintenance, and remediation of corrosion related failures at various locations throughout the County.	Total	3,860	260	4,120	260	260	260	260	260	5,420
W8218 WATER CONTINGENCY FUND The fund is designed for use as a revenue source for the	С	1,265	0	1,265	0	0	0	0	0	1,265
transfer of appropriations when either the construction costs are higher than originally estimated or engineering	М	300	0	300	0	0	0	0	0	300
costs must be advanced from future years to the present fiscal year for critical water needs.	0	85	0	85	0	0	0	0	0	85
note your to one and note house.	Total	1,650	0	1,650	0	0	0	0	0	1,650
W8220 FY1998 SHARED WATER FACILITY IMPROVEMENTS	С	15,150	0	15,150	20,000	20,000	20,000	20,000	20,000	115,150
A project for the planning, design and construction of major water facilities, mains, pumping stations, reservoirs and	М	5,900	0	5,900	0	0	0	0	0	5,900
treatment plants in the Baltimore City Central Water System.	Total	21,050	0	21,050	20,000	20,000	20,000	20,000	20,000	121,050
W8245 FY2003 RIGHT of WAY RESTORATION PROGRAM	С	3,816	760	4,576	760	760	760	760	760	8,376
State and County roads, sidewalks and curbs that are damaged, primarily by water main breaks, require permanent restoration.	Total	3,816	760	4,576	760	760	760	760	760	8,376
W8248 FY2002 SLEEVES RELOCATIONS & APPURTENANCES	С	3,050	0	3,050	0	0	0	0	0	3,050
A project for funding design and construction of sewer and water lines in conjunction with Maryland State Highway	1	1,600	0	1,600	0	0	0	0	0	1,600
Administration (SHA) and Howard County projects prior to construction.	M	3,000	0	3,000	0	0	0	0	0	3,000
	Total	7,650	0	7,650	0	0	0	0	0	7,650
W8262 FY2004 GUILFORD ELEVATED WATER TANK A project for the design and construction of a 2.	С	5,530	0	5,530	0	0	0	0	0	5,530
A project for the design and constitution of a 2.	Total	5,530	0	5,530	0	0	0	0	0	5,530
W8265 FY2005 US 29/BROKEN LAND PARKWAY 30inch WATER	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	I	800	0	800	0	0	0	0	0	800
US29.	Total	4,480	0	4,480	0	0	0	0	0	4,480

June 01, 2016 Howard County, MD Version : Council Approved

Howard County, MD FY2017 Council Approved Capital Budget Program: WATER PROJECTS

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
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	80	520	600	520	520	520	520	520	3,200
,	Total	1,507	520	2,027	520	520	520	520	520	4,627
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 to Howard County.	М	15,000	0	15,000	19,000	0	0	0	0	34,000
	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	С	3,304	0	3,304	765	0	0	0	0	4,069
Acquisition System (SCADA) at the Bureau of Utilities Operations building and all remote sites.	Total	3,304	0	3,304	765	0	0	0	0	4,069
W8276 FY2007 SOUTHWEST TRANSMISSION MAIN REPLACEMENT	С	5,000	0	5,000	0	0	0	0	0	5,000
A project to assess the condition of 38,000 LF of 54-inch and 36-inch diameter water mains in Baltimore City,	M	20,500	0	20,500	0	0	0	0	0	20,500
Baltimore County and Howard County and to relocate and/or replace defective or inadequate portions of pipeline.	Total	25,500	0	25,500	0	0	0	0	0	25,500
W8289 FY2009 WATER METER BATTERY REPLACEMENT	С	10,033	0	10,033	0	0	0	0	0	10,033
This project is to provide for the replacement of the battery systems, radios and meters in the County's existing	I	763	3,000	3,763	3,000	3,000	0	0	0	9,763
residential and commercial radio read water metering system that have reached the end of their projected ten	M	2,060	0	2,060	0	0	0	0	0	2,060
(10) year lives.	Total	12,856	3,000	15,856	3,000	3,000	0	0	0	21,856
W8290 FY2009 BUREAU of UTILITIES MAINT YARD UPGRADE	С	2,390	0	2,390	0	0	0	0	0	2,390
A project to study, design, and reconstruct the Bureau of Utilities maintenance yard.	1	290	0	290	0	0	0	0	0	290
	Total	2,680	0	2,680	0	0	0	0	0	2,680
W8291 FY2009 ELEVATED WATER TANK RECOATING A project to study and prioritize the cleaning, repairing and	С	4,481	0	4,481	0	0	0	0	0	4,481
recoating of the County water system's exisiting elevated water storage tanks.	I	1,143	0	1,143	0	0	0	0	0	1,143
	Total	5,624	0	5,624	0	0	0	0	0	5,624

June 01, 2016 Howard County, MD Version : Council Approved

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
W8292 FY2009 DORSEY RUN ROAD PHASE B WATER	С	1,900	0	1,900	0	0	0	0	0	1,900
A project for the design and construction of 5,500 LF of 12- inch water main and relocation of 1,500 LF of sewer within proposed Dorsey Run Road from existing Dorsey Run Road to Montevideo Road.	Total	1,900	0	1,900	0	0	0	0	0	1,900
W8296 FY2010 US29 WATER MAIN/MD108 TO SOUTH ENTRANCE ROAD	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 to 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 16-	С	550	0	550	0	0	0	0	0	550
nch water main from Gun Road in the Patapsco State Park in Baltimore County to Levering Avenue in Howard	М	2,736	0	2,736	0	0	0	0	0	2,736
County to US1.	Total	3,286	0	3,286	0	0	0	0	0	3,286
W8303 FY2018 LOUDON AVE/RAILROAD STREET WATER MAIN A project for the design and construction of 3,000 LF of 8-nch and 12-inch water main along Loudon Avenue and Railroad Street to Hanover Road.	M	0	0	0	120	880	0	0	0	1,000
	Total	0	0	0	120	880	0	0	0	1,000
W8304 FY2015 COLUMBIA WATER PUMPING STATION MPROVEMENTS	I	0	0	0	1,010	0	0	0	0	1,010
A project to upgrade the Columbia Water Pumping Station.	M	240	0	240	0	0	0	0	0	240
	Total	240	0	240	1,010	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-	М	0	0	0	170	1,330	0	0	0	1,500
nch water main along Landing Road to connect the water mains between Ilchester Road and Montgomery Road.	Total	0	0	0	170	1,330	0	0	0	1,500
N8306 FY2013 SANNER ROAD WATER MAIN LOOP	М	2,000	0	2,000	0	0	0	0	0	2,000
A project for the design and construction of approximately 750 LF of 12-inch water main on Johns Hopkins Road east of Sanner Road.	Total	2,000	0	2,000	0	0	0	0	0	2,000
W8307 FY2013 BROKEN LAND PKWY WATER MAIN A project for the design and construction of 4.100 LF of 30-	М	5,100	0	5,100	0	0	0	0	0	5,100
nch water main along Broken Land Parkway from Stevens Forest Road to Cradlerock Way.	Total	5,100	0	5,100	0	0	0	0	0	5,100

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
W8308 FY2013 US29 WATER MAIN/MD32 TO MD216 A project for the design and construction of 14,000 LF of	М	1,490	0	1,490	9,010	0	0	0	0	10,500
4-inch water main parallel to US29 from MD32 to MD216.	Total	1,490	0	1,490	9,010	0	0	0	0	10,500
V8309 FY2014 MISSION ROAD WATER MAIN LOOP a project for the design and construction of 4,500 LF of 12-	M	2,360	0	2,360	0	0	0	0	0	2,360
nch water main along Mission Road to Columbia Gateway Irive.	Total	2,360	0	2,360	0	0	0	0	0	2,360
V8312 FY2011 ROCKBURN HILL (CROSSVIEW RD) VATER MAIN	С	505	0	505	0	0	0	0	0	505
a project for the design and construction of 1,200 LF of 8- nch water main from the terminus of County owned	М	200	0	200	0	0	0	0	0	200
Rockburn Hill Road, west to Crossview Road to serve 6 properties.	Total	705	0	705	0	0	0	0	0	705
V8313 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 nclude all County owned fire hydrants within the	I	762	873	1,635	873	873	873	873	873	6,000
listribution system.	М	1,746	0	1,746	0	0	0	0	0	1,746
	Total	4,254	873	5,127	873	873	873	873	873	9,492
V8316 FY2013 ILCHESTER ROAD WATER MAIN REHABILITATION	М	3,050	0	3,050	0	0	0	0	0	3,050
A project for the rehabilitation of 5,800 feet of 12-inch vater main within Ilchester Road from Montgomery Road o Ellis Lane and reinforcement of the 630 zone.	Total	3,050	0	3,050	0	0	0	0	0	3,050
V8317 FY2013 ELKRIDGE PUMP STATION MPROVEMENTS	М	3,100	0	3,100	0	0	0	0	0	3,100
A project for the design and installation of a 1,250 kW emergency generator and electrical, mechanical, and structural improvements at the Elkridge Water Pumping Station.	Total	3,100	0	3,100	0	0	0	0	0	3,100
N8318 FY2013 MONTGOMERY ROAD WATER MAIN REHABILITATION	М	5,610	1,000	6,610	0	0	0	0	0	6,610
A project for the rehabilitation of 12,000 feet of 12-inch vater main within Montgomery Road from Lawyers Hill Road to Rockburn Drive.	Total	5,610	1,000	6,610	0	0	0	0	0	6,610
V8320 FY2013 WHISKEY BOTTOM PUMP STATION RELOCATION	М	5,000	0	5,000	0	0	0	0	0	5,000
A project to relocate the Whiskey Bottom Road pumping tation and related suction and discharge pipelines and to acrease pumping capacity.	Total	5,000	0	5,000	0	0	0	0	0	5,000

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
W8321 FY2013 PIRCH WAY/ASPERN DRIVE WATER REPLACEMENT	С	150	0	150	0	0	0	0	0	150
A project for the design and construction of 3,000 LF of 8-inch water main within the Pirch Way/Aspern Drive	М	1,165	0	1,165	0	0	0	0	0	1,165
community.	Total	1,315	0	1,315	0	0	0	0	0	1,315
W8322 FY2013 WILDE LAKE WATER MAIN STUDY and REHABILITATION	М	1,700	0	1,700	0	0	0	0	0	1,700
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	0	1,700	0	0	0	0	0	1,700
W8323 FY2013 FORT MEADE RECLAIMED WATER A project for the design and construction of a diversion	М	57,000	0	57,000	0	0	0	0	0	57,000
structure, pumping station, elevated storage tank and reclaimed water lines to supply Fort Meade with reclaimed water to be used for non-potable purposes.	Total	57,000	0	57,000	0	0	0	0	0	57,000
W8324 FY2014 WATER SYSTEM LOOPING/FIRE PROTECTION UPGRADE	М	2,000	500	2,500	500	500	500	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	2,000	500	2,500	500	500	500	0	0	4,000
W8325 FY2014 RECLAIMED WATER SYSTEM DEVELOPMENT	М	4,573	0	4,573	973	973	0	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	973	973	0	0	0	6,519
W8326 FY2015 SAINT PAUL STREET WATER MAIN A project for the design and construction of 400 LF of 8-	М	400	0	400	0	0	0	0	0	400
inch water main in Saint Paul Street in Ellicott City.	Total	400	0	400	0	0	0	0	0	400
W8327 FY2015 OLD LAWYER HILL ROAD WATER SUPPLY MAIN REPLACEMENT	М	950	110	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	950	110	1,060	0	0	0	0	0	1,060
W8328 FY2015 630 WEST ZONE WATER PUMPING STATION	М	1,340	0	1,340	8,660	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	1,340	0	1,340	8,660	0	0	0	0	10,000
W8329 FY2015 PCCP STUDY AND FAILURE MITIGATION	С	2,000	500	2,500	500	500	500	500	0	4,500
A project to investigate and determine the condition of all prestressed concrete cylinder pipe (PCCP) transmission mains in the water distribution system.	Total	2,000	500	2,500	500	500	500	500	0	4,500

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
W8330 FY2017 OLD COLUMBIA PIKE WATER MAIN REHABILITATION/REPLACEMENT	М	0	755	755	3,260	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	0	755	755	3,260	0	0	0	0	4,015
W8331 FY2017 TWIN RIVERS ROAD WATER MAIN REPLACEMENT	М	0	755	755	1,810	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	0	755	755	1,810	0	0	0	0	2,565
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	115	0	115	0	0	0	0	0	115
system or its associated infrastructure.	М	8,000	0	8,000	0	0	0	0	0	8,000
	Total	12,115	0	12,115	0	0	0	0	0	12,115
W8601 FY2016 ACQUISITION CONTINGENCY FUND Project funding will be used to resolve easement and	С	550	0	550	155	0	155	0	155	1,015
rights-of-way issues on water and sewer projects which have been constructed or special quick response projects	1	50	0	50	50	0	50	0	50	200
of a capital nature requiring title research, appraisals and acquisition.	Total	600	0	600	205	0	205	0	205	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	I	0	0	0	500	500	0	0	0	1,000
Administration (SHA) and Howard County projects prior to construction.	М	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	М	3,650	625	4,275	625	625	625	625	625	7,400
extensions in the Metropolitan District requested by landowners.	Total	3,650	625	4,275	625	625	625	625	625	7,400
W8812 FY2012 ADV DEPOSIT LARGE WATER HOUSE CONNECTIONS	D	252	0	252	0	0	0	0	0	252
A project to provide for the construction, inspection services, and ordering of large water meters for sites that do not require formal developer agreements, but instead require Advanced Deposit Order (ADO) agreements for water services larger than 1 inch, fire hydrants, short main extensions, or other appurtenances.	Total	252	0	252	0	0	0	0	0	252

Project Information	Funding Source	Prior Appro.	FY 2017	Total	Fiscal Budget 2018	Fiscal Budget 2019	Fiscal Budget 2020	Fiscal Budget 2021	Fiscal Budget 2022	Total
W8862 FY2012 WATER HOUSE CONNECTIONS A project to provide for the construction of water house connections by the Bureau of Utilities for residential size up to 1 inch.	D Total	552 552	150 150	702 702	0 0	0 0	0 0	0 0	0 0	702 702
W8913 FY2013 DEVELOPER REBATES WATER & SEWER	I	4,000	0	4,000	0	0	0	0	0	4,000
Land developers in Howard County desiring to provide public water and/or sewer services to a proposed development, request the County to permit them to extend the existing systems to serve their proposed developments through pre-financing of these extensions under terms of a developer's agreement.	Total	4,000	0	4,000	0	0	0	0	0	4,000
WATER PROJECTS Total		277,599	9,808	287,407	73,021	31,221	24,243	23,538	23,243	462,673

Howard County, MD FY2017 Council Approved Capital Budget (\$000) WATER-WATER PROJECTS

	Revenue Source	Prior Total	Current FY	Appropriation Total
С	UTILITY CASH	77,387	1,520	78,907
D	DEVELOPER CONTRIBUTION	804	150	954
G	GRANTS	115	0	115
1	IN-AID of CONSTRUCT UTILITIES	9,488	4,393	13,881
M	METRO DISTRICT BOND	189,720	3,745	193,465
Ο	OTHER SOURCES	85	0	85
Total		277,599	9,808	287,407

2017 Council Approved 5 Year Capital Budget Project Type Summary (WATER-WATER PROJECTS)

Rev	venue Source	Prior Approp	Current FY	2018	2019	2020	2021	2022	5 Year Total
С	UTILITY CASH	77,387	1,520	22,440	21,520	21,675	21,520	21,175	187,237
D	DEVELOPER CONTRIBUTION	804	150	0	0	0	0	0	954
G	GRANTS	115	0	0	0	0	0	0	115
I	IN-AID of CONSTRUCT UTILITIES	9,488	4,393	5,953	4,893	1,443	1,393	1,443	29,006
М	METRO DISTRICT BOND	189,720	3,745	44,628	4,808	1,125	625	625	245,276
0	OTHER SOURCES	85	0	0	0	0	0	0	85
Tot	al	277,599	9,808	73,021	31,221	24,243	23,538	23,243	462,673

Project: W8206-FY1995 METALLIC PIPELINE CORROSION STUDIES

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. The project will reduce operating costs. 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.

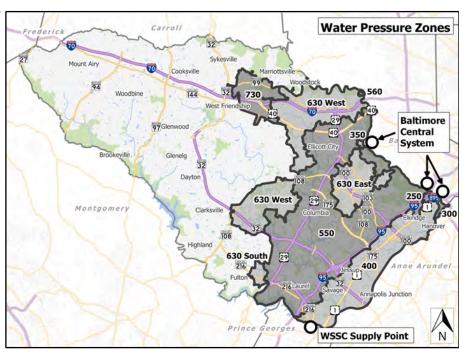
Remarks

- 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 Project.

Project Schedule

Ongoing program FY17 - 1. GIS database maintenance

Operating Budget Impact



Project: FY1995 METALLIC PIPELINE CORROSION STUDIES

(In Thousands)					Five	Year Ca	apital Pro	gram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	1,600	100	1,700	100	100	100	100	100	500	0	0	0	0	2,200	
CONSTRUCTION	2,100	150	2,250	150	150	150	150	150	750	0	0	0	0	3,000	
ADMINISTRATION	160	10	170	10	10	10	10	10	50	0	0	0	0	220	
Total Expenditures	3,860	260	4,120	260	260	260	260	260	1,300	0	0	0	0	5,420	
UTILITY CASH	3,860	260	4,120	260	260	260	260	260	1,300	0	0	0	0	5,420	
Total Funding	3,860	260	4,120	260	260	260	260	260	1,300	0	0	0	0	5,420	

Project Status:

\$3,202,229 spent and encumbered through February 2016

Projects completed: FY15 and prior

1. A program to incorporate corrosion studies into the County's GIS is ongoing Projects completed: FY16

1. Corrosion study and evaluation - Route 1 Corridor, Toll House Road

2. GIS Database maintenance

Project: W8218-WATER CONTINGENCY FUND

WATER PROJECTS

Number: W8218

Description

The fund is designed for use as a revenue source for 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.

Justification

This fund will allow for the timely completion of approved projects by contingency funding as required and rapid response to critical situations.

Remarks

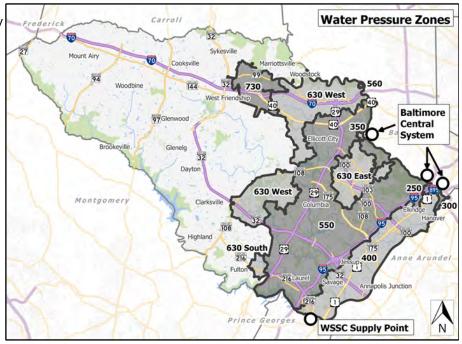
Project Schedule

Ongoing program

Operating Budget Impact

Annual Bond Redemption \$ \$14,250

None



Fiscal 2017 Capital Budget

WATER PROJECTS

Number: W8218

Project: WATER CONTINGENCY FUND

(In Thousands)					Five	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
CONSTRUCTION	1,650	0	1,650	0	0	0	0	0	0	0	0	0	0	1,650	
Total Expenditures	1,650	0	1,650	0	0	0	0	0	0	0	0	0	0	1,650	
UTILITY CASH	1,265	0	1,265	0	0	0	0	0	0	0	0	0	0	1,265	
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	0	1,650	0	0	0	0	0	0	0	0	0	0	1,650	

Project Status:

\$4,017 spent and encumbered through February 2016
This project was used as the source of transfers of appropriation for construction of capital projects.
Projects completed: FY15 and prior

1. W8229, Scarlet Oak Drive Water Main Extension

2. W8223, Cedar Acres Water Main

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

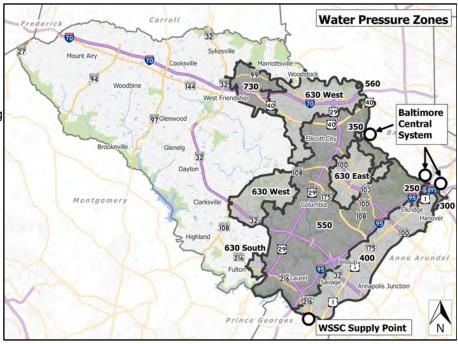
Ongoing program

FY17 - 1. Fullerton Reservoir; 2. Fullerton Pumping Station Second Zone Modifications; 3. Fullerton Filtration Plant; 4. Guilford Reservoir; 5. Druid Reservoir; 6. Ashburton Reservoir

Operating Budget Impact

Annual Bond Redemption \$ \$280,250

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.



Project: FY1998 SHARED WATER FACILITY IMPROVEMENTS

(In Thousands)				Five Year Capital Program							Master Plan						
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project			
PLANS & ENGINEERING	1,140	0	1,140	0	0	0	0	0	0	0	0	0	0	1,140			
CONSTRUCTION	19,910	0	19,910	20,000	20,000	20,000	20,000	20,000	100,000	0	0	0	0	119,910			
Total Expenditures	21,050	0	21,050	20,000	20,000	20,000	20,000	20,000	100,000	0	0	0	0	121,050			
UTILITY CASH	15,150	0	15,150	20,000	20,000	20,000	20,000	20,000	100,000	0	0	0	0	115,150			
METRO DISTRICT BOND	5,900	0	5,900	0	0	0	0	0	0	0	0	0	0	5,900			
Total Funding	21,050	0	21,050	20,000	20,000	20,000	20,000	20,000	100,000	0	0	0	0	121,050			

Project Status:

\$12,140,868 spent and encumbered through February 2016
Projects completed: FY15 and prior - 1. Hillen/Ashburton Transmission Main and Pumping Station; 2. Hillen/Ashburton 64 - inch Bypass Main; 3. The Fullerton Filtration Plant Study

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

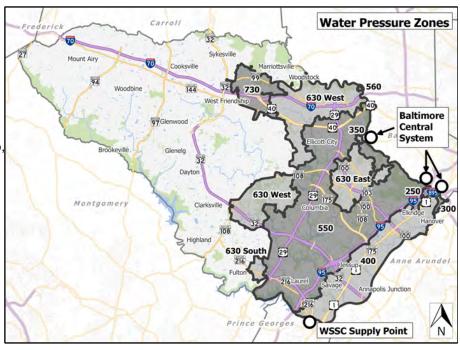
- 1. Project is replacement of Capital Project W-8183 first funded in FY92.
- 2. Contract services will be utilized to complete these efforts estimated at 100 incidents per year.
- 3. This is a request for an increase in funding. Due to increased water and sewer main repair projects, it difficult to have crews performing the concrete curb, sidewalk and driveway apron restoration work so those jobs are being added to the contract.

Project Schedule

Ongoing program.

Operating Budget Impact

None



Project: FY2003 RIGHT of WAY RESTORATION PROGRAM

(In Thousands)					Five	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
CONSTRUCTION	3,697	750	4,447	750	750	750	750	750	3,750	0	0	0	0	8,197	
ADMINISTRATION	119	10	129	10	10	10	10	10	50	0	0	0	0	179	
Total Expenditures	3,816	760	4,576	760	760	760	760	760	3,800	0	0	0	0	8,376	
UTILITY CASH	3,816	760	4,576	760	760	760	760	760	3,800	0	0	0	0	8,376	
Total Funding	3,816	760	4,576	760	760	760	760	760	3,800	0	0	0	0	8,376	

Project Status:

\$3,358,511 spent and encumbered through February 2016
There are approximately 100 incidents per year @ \$75,000 per incident.

Project: W8248-FY2002 SLEEVES RELOCATIONS & 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. This project is a continuation of Capital Project W8212.
- 2. This project will close after FY17 and be replaced by capital project W8602, Sleeves, Relocations & Appurtenances.

Project Schedule

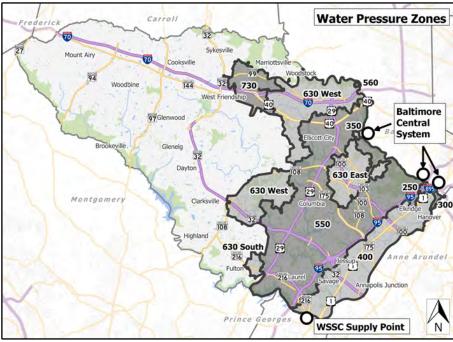
Ongoing program

FY17 - 1. Montevideo Road Water and Sewer Relocation design completed; 2. Gerwig Lane Water Main design completed; 3. Project close

Operating Budget Impact

Annual Bond Redemption \$ \$142,500

None. This is a project to relocate existing utilities.



Project: FY2002 SLEEVES RELOCATIONS & APPURTENANCES

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	500	0	500	0	0	0	0	0	0	0	0	0	0	500
CONSTRUCTION	7,100	0	7,100	0	0	0	0	0	0	0	0	0	0	7,100
ADMINISTRATION	50	0	50	0	0	0	0	0	0	0	0	0	0	50
Total Expenditures	7,650	0	7,650	0	0	0	0	0	0	0	0	0	0	7,650
UTILITY CASH	3,050	0	3,050	0	0	0	0	0	0	0	0	0	0	3,050
IN-AID of CONSTRUCT UTILITIES	1,600	0	1,600	0	0	0	0	0	0	0	0	0	0	1,600
METRO DISTRICT BOND	3,000	0	3,000	0	0	0	0	0	0	0	0	0	0	3,000
Total Funding	7,650	0	7,650	0	0	0	0	0	0	0	0	0	0	7,650

Project Status:

\$2,512,781 spent and encumbered through February 2016

Projects completed: FY16 and prior - 1. MD216 Relocation construction completed; 2. Union Dam Demolition construction completed; 3. US1 from Brewers Court to Whiskey Bottom Road construction completed; 4. US29 South Entrance Road construction completed; 5. US40 Bridge over Patapsco River construction completed; 6. US29 NB Widening at Old Columbia Road under construction; 7. Upper Little Patuxent Stream design

Project: W8262-FY2004 GUILFORD ELEVATED WATER TANK

Number: W8262

Description

A project for the design and construction of a 2.5 million gallon elevated water storage tank and related piping to serve the elevation 400 water service 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 wate zone and meet the future water needs of the area.

Remarks

The project was brought before the Public Works Board on December 10, 2002.

Project Schedule

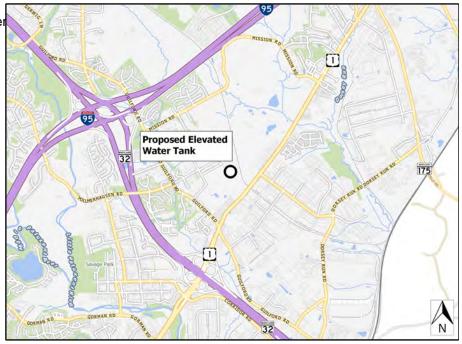
FY17 - Land Acquisition, Design

FY18 - Construction

FY19 - Construction, Complete and close project

Operating Budget Impact

\$50,000 per year represents the cost of operation and maintenance of the tank.



WATER PROJECTS

Number: W8262

Project: FY2004 GUILFORD ELEVATED WATER TANK

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	685	0	685	0	0	0	0	0	0	0	0	0	0	685
CONSTRUCTION	4,820	0	4,820	0	0	0	0	0	0	0	0	0	0	4,820
ADMINISTRATION	25	0	25	0	0	0	0	0	0	0	0	0	0	25
Total Expenditures	5,530	0	5,530	0	0	0	0	0	0	0	0	0	0	5,530
UTILITY CASH	5,530	0	5,530	0	0	0	0	0	0	0	0	0	0	5,530
Total Funding	5,530	0	5,530	0	0	0	0	0	0	0	0	0	0	5,530

Project Status:

\$260,389 spent and encumbered through February 2016
1. Land acquisition and design in progress.
2. Land acquisition issues continue to be a challenge.

Project: W8265-FY2005 US 29/BROKEN LAND PARKWAY 30inch WATER

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.

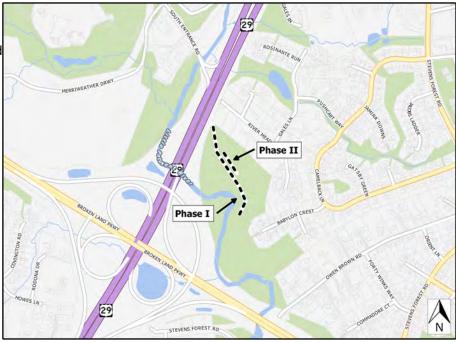
Project Schedule

FY17 - Phase 2 - Design, Construction

FY18 - Project complete, Close

Operating Budget Impact

\$3,500 per annum represents the cost of operation and maintenance of the proposed parallel water main.



Project: FY2005 US 29/BROKEN LAND PARKWAY 30inch WATER

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status:

\$2,847,534 spent and encumbered through February 2016 Phase 1 - Complete.

Phase 2 - Under Design.

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

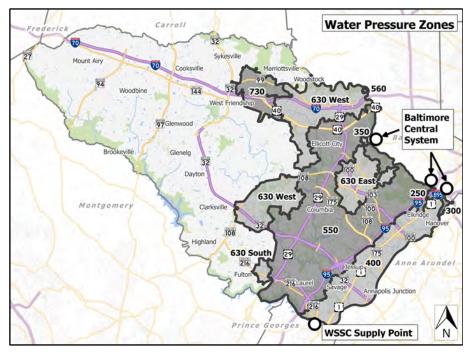
- 1. The valve inspections would start with the largest valves, i.e. 12-inch through 48-inch, on a biannual basis.
- 2. There are approximately 21,000 valves.

Project Schedule

FY17-FY18 - Ongoing program, to close at end of FY18.

Operating Budget Impact

This enhanced inspection schedule will increase the Bureau of Utilities' operating budget by approximately \$35,000/year with one (1) contingent employee to monitor and inspect the progress of the contractor(s), and one (1) regulation inspector.



Project: FY2005 WATER VALVE MANAGEMENT SYSTEM

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	5	5	10	5	5	5	5	5	25	0	0	0	0	35
CONSTRUCTION	1,412	500	1,912	500	500	500	500	500	2,500	0	0	0	0	4,412
ADMINISTRATION	50	15	65	15	15	15	15	15	75	0	0	0	0	140
EQUIPMENT & FURNISHINGS	40	0	40	0	0	0	0	0	0	0	0	0	0	40
Total Expenditures	1,507	520	2,027	520	520	520	520	520	2,600	0	0	0	0	4,627
UTILITY CASH	1,427	0	1,427	0	0	0	0	0	0	0	0	0	0	1,427
IN-AID of CONSTRUCT UTILITIES	80	520	600	520	520	520	520	520	2,600	0	0	0	0	3,200
Total Funding	1,507	520	2,027	520	520	520	520	520	2,600	0	0	0	0	4,627

Project Status:

\$1,208,117 spent and encumbered through February 2016 1. FY16 - As of 8/28/2015 2,615 valves have been inspected.

^{2.} FY17 - The Bureau of Utilities anticipates inspecting 5,000 valves @ \$57 per valve plus additional costs for repairing valves.

WATER PROJECTS

Number: W8269

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

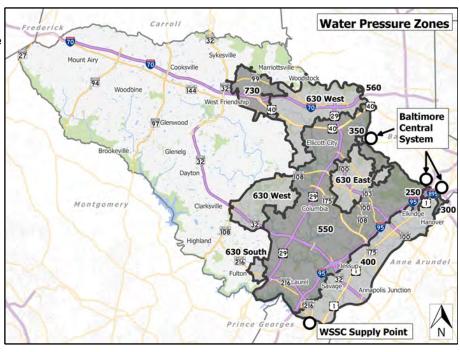
Ongoing program

FY17 - 1. Catonsville Reservoir - Second Bay; 2. Rolling Road 16-inch diameter Transmission Main; 3. Melvin Avenue Cleaning and Lining; 4. Harlem Lane Cleaning and Lining; 5. Rolling Road Cleaning and Lining; 6. Rolling Road Transmission Main (under construction)

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	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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	

Project Status:

\$12,643,449 spent and encumbered through February 2016
Projects completed: FY15 and prior - 1. Catonsville Reservoir, East bay and chlorination; 2. The Catonsville 42-Inch Diameter Transmission Main - Section 3 (US40)

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 uprade to connect with the new County system.

Project Schedule

- 1. FY16 Six sewage pump stations have been converted to cellular and testing has been initiated.
- 2. FY17-19 Conversion of remaining water and sewer facilities.
- 3. FY19 Project close.



Project: FY 2007 SCADA SYSTEM UPGRADE

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	125	0	125	0	0	0	0	0	0	0	0	0	0	125
CONSTRUCTION	1,700	0	1,700	500	0	0	0	0	500	0	0	0	0	2,200
ADMINISTRATION	79	0	79	15	0	0	0	0	15	0	0	0	0	94
EQUIPMENT & FURNISHINGS	1,400	0	1,400	250	0	0	0	0	250	0	0	0	0	1,650
Total Expenditures	3,304	0	3,304	765	0	0	0	0	765	0	0	0	0	4,069
UTILITY CASH	3,304	0	3,304	765	0	0	0	0	765	0	0	0	0	4,069
Total Funding	3,304	0	3,304	765	0	0	0	0	765	0	0	0	0	4,069

Project Status:

^{\$1,197,112} spent and encumbered through February 2016

1. FY17 - Continued conversion of leased telephone lines (copper services) to cellular-based system.

Description

A project to assess the condition of 38,000 LF of 54-inch and 36-inch diameter water mains in Baltimore City, Baltimore County and Howard County and to relocate and/or replace defective or inadequate portions of pipeline.

Justification

The project was initiated by the Department of Public Works. The Southwest Transmission Main conveys potable water from Baltimore City through Baltimore County to serve Howard County and is the main water supply to the southern par of Howard County. The transmission main was constructed in 1975 with prestressed concrete cylinder pipe manufactured by the Interpace Corporation. The pipe has exhibited a history of failures in Howard County.

Remarks

- 1. The project was brought before the Public Works Board on December 13, 2005.
- 2. Much of the 38,000 LF of main has been found to be defective. Howard County will cost share in the repair/replacement of the main with surrounding jurisdictions.
- 3. Request represents latest engineer's estimate for construction, monitoring and emergency repairs on the Southwest Transmission Main.

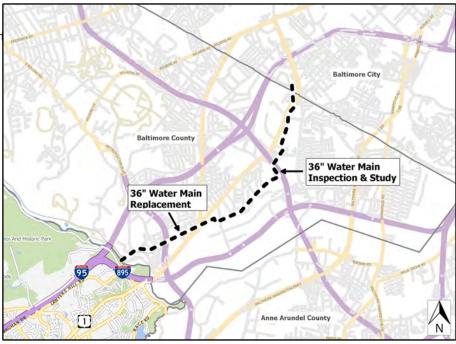
Project Schedule

FY17 - Project close.

Operating Budget Impact

Annual Bond Redemption \$ \$973,750

The majority of the water main replacement will be within Baltimore County. Operation and maintenance costs will be included in the Baltimore City water rates.



Project: FY2007 SOUTHWEST TRANSMISSION MAIN REPLACEMENT

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	2,800	0	2,800	0	0	0	0	0	0	0	0	0	0	2,800
LAND ACQUISITION	400	0	400	0	0	0	0	0	0	0	0	0	0	400
CONSTRUCTION	22,200	0	22,200	0	0	0	0	0	0	0	0	0	0	22,200
ADMINISTRATION	100	0	100	0	0	0	0	0	0	0	0	0	0	100
Total Expenditures	25,500	0	25,500	0	0	0	0	0	0	0	0	0	0	25,500
UTILITY CASH	5,000	0	5,000	0	0	0	0	0	0	0	0	0	0	5,000
METRO DISTRICT BOND	20,500	0	20,500	0	0	0	0	0	0	0	0	0	0	20,500
Total Funding	25,500	0	25,500	0	0	0	0	0	0	0	0	0	0	25,500

Project Status:

\$23,311,164 spent and encumbered through February 2016 1. 7,800 LF of 36-inch main is has been constructed by Howard County.

- 2. 4,600 LF of 54-inch main has been constructed by Baltimore County and an additional 20 pipes were repaired using carbon fiber.
- 3. 80 sections of 36-inch main have been repaired or replaced.
- 4. This project is complete.

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 personnel; some overtime expended for inside appointments. more directly related to the meters.

Operating Budget Impact

Annual Bond Redemption \$ \$97,850

Meter radio changeouts being performed by in-house Bureau of Utilities

Justification

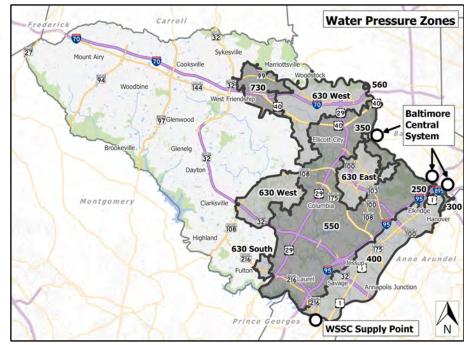
The water meters (with radio read registers) installed beginning 9 years ago are reaching the end of their battery life. New battery technologies will enable the installation of systems with a 20-year battery life and associated guarantees.

Remarks

- 1. Early and later installations with smaller numbers.
- 2. Changeout insides by appointment.
- 3. Bureau of Utilities to utilize in-house staff to perform changeouts.

Project Schedule

- 1) FY16-FY20 Continued changeouts
- 2) FY20 Final year of changeouts, project close.



Project: FY2009 WATER METER BATTERY REPLACEMENT

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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	0	0	0	0	0	0	0	0	0	0	346
EQUIPMENT & FURNISHINGS	11,400	3,000	14,400	3,000	3,000	0	0	0	6,000	0	0	0	0	20,400
Total Expenditures	12,856	3,000	15,856	3,000	3,000	0	0	0	6,000	0	0	0	0	21,856
UTILITY CASH	10,033	0	10,033	0	0	0	0	0	0	0	0	0	0	10,033
IN-AID of CONSTRUCT UTILITIES	763	3,000	3,763	3,000	3,000	0	0	0	6,000	0	0	0	0	9,763
METRO DISTRICT BOND	2,060	0	2,060	0	0	0	0	0	0	0	0	0	0	2,060
Total Funding	12,856	3,000	15,856	3,000	3,000	0	0	0	6,000	0	0	0	0	21,856

Project Status:

\$7,668,148 spent and encumbered through February 2016

As of September 2014 - 44,032 meter radio registers were changed out in this program. Approximately 26,807 radio registers remain to be changed, at approximately 8000 per year.

Description

A project to study, design, and reconstruct the Bureau of Utilities maintenance yard. This will include improving stormwater management reorganized areas, yard enhancements, addition of truck washdown area and replacement of existing outbuildings.

Justification

The existing Bureau of Utilities yard was designed and constructed in 1975, with various structures added over time. The revamped yard will have better material and vehicle flow patterns as well as utility equipment storage.

Remarks

Project will be managed by the Bureau of Utilities and Utility Design Division with assistance from the Bureau of Facilities.

Project Schedule

FY17 - Close

Operating Budget Impact

0



Fiscal 2017 Capital Budget

WATER PROJECTS

Number: W8290

Project: FY2009 BUREAU of UTILITIES MAINT YARD UPGRADE

(In Thousands)					Five	e Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	420	0	420	0	0	0	0	0	0	0	0	0	0	420
CONSTRUCTION	2,200	0	2,200	0	0	0	0	0	0	0	0	0	0	2,200
ADMINISTRATION	60	0	60	0	0	0	0	0	0	0	0	0	0	60
Total Expenditures	2,680	0	2,680	0	0	0	0	0	0	0	0	0	0	2,680
UTILITY CASH	2,390	0	2,390	0	0	0	0	0	0	0	0	0	0	2,390
IN-AID of CONSTRUCT UTILITIES	290	0	290	0	0	0	0	0	0	0	0	0	0	290
Total Funding	2,680	0	2,680	0	0	0	0	0	0	0	0	0	0	2,680

Project Status:

\$2,449,999 spent and encumbered through February 2016 Project is complete.

Description

A project to study and prioritize the cleaning, repairing and recoating of the County water system's exisitng 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

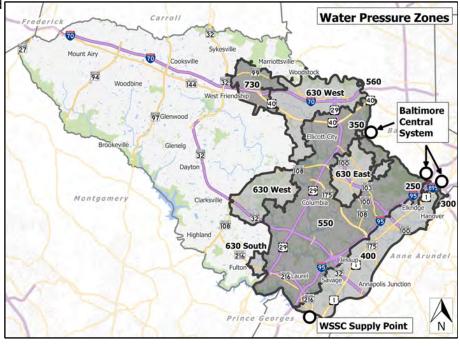
This project will be managed by the Bureau of Utilities.

Project Schedule

- 1. FY16 Interior/exterior of Snowden River tank completed.
- 2. FY 17 Interior and exterior painting of the Oakland tank to be completed.
- 3. FY18-20 Various cleaning, painting and top coating projects.

Operating Budget Impact

0



Project: FY2009 ELEVATED WATER TANK RECOATING

(In Thousands)	·					Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	10	0	10	0	0	0	0	0	0	0	0	0	0	10
CONSTRUCTION	5,450	0	5,450	0	0	0	0	0	0	0	0	0	0	5,450
ADMINISTRATION	164	0	164	0	0	0	0	0	0	0	0	0	0	164
Total Expenditures	5,624	0	5,624	0	0	0	0	0	0	0	0	0	0	5,624
UTILITY CASH	4,481	0	4,481	0	0	0	0	0	0	0	0	0	0	4,481
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	0	0	0	0	0	0	0	0	0	0	5,624

Project Status:

\$3,103,450 spent and encumbered through February 2016

1. FY16 Requested: Interior/exterior of Snowden River tank, \$1,000,000

2. FY17 Planned: Interior and exterior painting of the Oakland tank to be completed, \$750,000

Description

A project for the design and construction of 5,500 LF of 12-inch water main and relocation of 1,500 LF of sewer within proposed Dorsey Run Road from existing Dorsey Run Road to Montevideo Road.

Justification

The project was initiated by the Department of Public Works in conjunction with capital project J-4148 for the construction of Dorsey Run Road from the existing Dorsey Run Road to Montevideo Road. The project will enable the installation and relocation of the utilities prior to the construction of the road.

Remarks

- 1. The project was brought before the Public Works Board on December 11, 2007.
- 2. The construction will be coordinated with capital project J-4148.

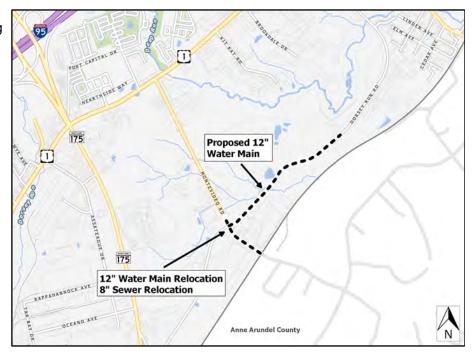
Project Schedule

FY17 - Complete project

FY18 - Close

Operating Budget Impact

\$12,000 per year represents the increased cost of operation and maintenance of the proposed water and sewer mains.



Project: FY2009 DORSEY RUN ROAD PHASE B WATER MAIN

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	335	0	335	0	0	0	0	0	0	0	0	0	0	335
CONSTRUCTION	1,555	0	1,555	0	0	0	0	0	0	0	0	0	0	1,555
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	1,900	0	1,900	0	0	0	0	0	0	0	0	0	0	1,900
UTILITY CASH	1,900	0	1,900	0	0	0	0	0	0	0	0	0	0	1,900
Total Funding	1,900	0	1,900	0	0	0	0	0	0	0	0	0	0	1,900

Project Status:

\$842,806 spent and encumbered through February 2016 Project is complete.

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

FY17 - Construction

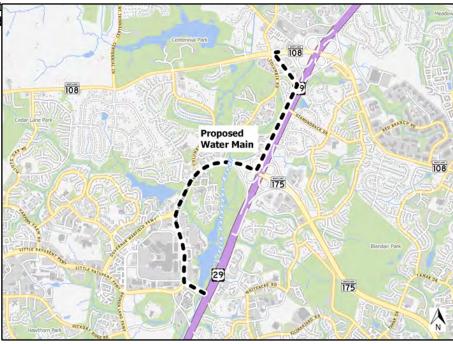
FY18 - Construction, Project Complete

FY19 - 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	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status:

\$10,048,570 spent and encumbered through February 2016 This project is currently under construction.

Description

A project for the design and construction of 6,350 LF of 16-inch water main from Gun Road in the Patapsco State Park in Baltimore County to Levering Avenue in Howard County to US1.

Operating Budget Impact

Annual Bond Redemption \$ \$129,960

\$9,500 represents the cost of operation and maintenance of the water main.

Justification

The anticipated water demands in the elevation 400 zone will produce excessive velocities and head losses in the existing 12-inch main. The proposed 16-inch transmission main will reduce the velocities in the system and 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.

Project Schedule

FY17 - Construction

FY18 - Project Complete, Close



WATER PROJECTS

Number: W8300

Project: FY2011 LEVERING AVENUE WATER MAIN

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	706	0	706	0	0	0	0	0	0	0	0	0	0	706
LAND ACQUISITION	50	0	50	0	0	0	0	0	0	0	0	0	0	50
CONSTRUCTION	2,520	0	2,520	0	0	0	0	0	0	0	0	0	0	2,520
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	3,286	0	3,286	0	0	0	0	0	0	0	0	0	0	3,286
UTILITY CASH	550	0	550	0	0	0	0	0	0	0	0	0	0	550
METRO DISTRICT BOND	2,736	0	2,736	0	0	0	0	0	0	0	0	0	0	2,736
Total Funding	3,286	0	3,286	0	0	0	0	0	0	0	0	0	0	3,286

Project Status:

\$303,813 spent and encumbered through February 2016
1. The project is in final design.

Description

A project for the design and construction of 3,000 LF of 8-inch and 12-inch water Annual Bond Redemption \$ \$47,500 main along Loudon Avenue and Railroad 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.

Project Schedule

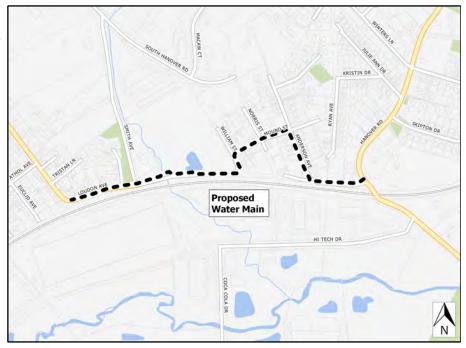
FY18 - Design

FY19 - Construction

FY20 - Project Complete, Close

Operating Budget Impact

\$4,500 represents the cost of operation and maintenance of the water main.



Project: FY2018 LOUDON AVE/RAILROAD STREET WATER MAIN

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	0	0	100	55	0	0	0	155	0	0	0	0	155
LAND ACQUISITION	0	0	0	15	0	0	0	0	15	0	0	0	0	15
CONSTRUCTION	0	0	0	0	820	0	0	0	820	0	0	0	0	820
ADMINISTRATION	0	0	0	5	5	0	0	0	10	0	0	0	0	10
Total Expenditures	0	0	0	120	880	0	0	0	1,000	0	0	0	0	1,000
METRO DISTRICT BOND	0	0	0	120	880	0	0	0	1,000	0	0	0	0	1,000
Total Funding	0	0	0	120	880	0	0	0	1,000	0	0	0	0	1,000

Project Status : \$0 spent and encumbered through February 2016

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

FY17 - Design

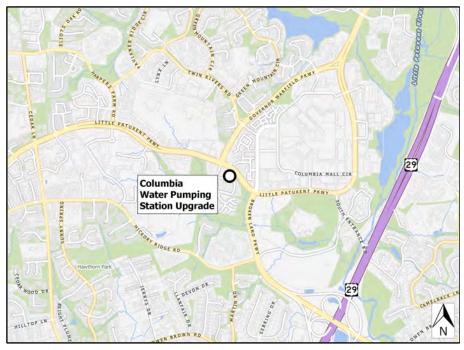
FY18 - Construction

FY19 - 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)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	230	0	230	0	0	0	0	0	0	0	0	0	0	230
CONSTRUCTION	0	0	0	1,000	0	0	0	0	1,000	0	0	0	0	1,000
ADMINISTRATION	10	0	10	10	0	0	0	0	10	0	0	0	0	20
Total Expenditures	240	0	240	1,010	0	0	0	0	1,010	0	0	0	0	1,250
IN-AID of CONSTRUCT UTILITIES	0	0	0	1,010	0	0	0	0	1,010	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	240	0	240	1,010	0	0	0	0	1,010	0	0	0	0	1,250

Project Status:

\$0 spent and encumbered through February 2016

Project: W8305-FY2018 LANDING ROAD WATER MAIN LOOP

Description

Operating Budget Impact

A project for the design and construction of 4,300 LF of 12-inch water main along Annual Bond Redemption \$ \$71,250 Landing Road to connect the water mains between Ilchester Road and Montgomery Road. \$6,400 represents the cost of operation and maintenance of the water main.

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

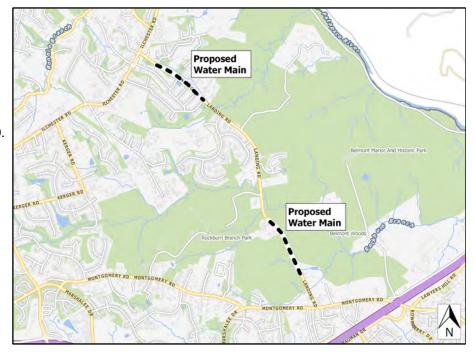
- 1. The project was brought before the Public Works Board on January 13, 2009.
- 2. Project schedule revised from FY15 to FY18 to reflect Master Plan priority.

Project Schedule

FY18 - Design

FY19 - Construction

FY20 - Project Complete, Close



WATER PROJECTS

Number: W8305

Project: FY2018 LANDING ROAD WATER MAIN LOOP

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	0	0	160	80	0	0	0	240	0	0	0	0	240
CONSTRUCTION	0	0	0	0	1,250	0	0	0	1,250	0	0	0	0	1,250
ADMINISTRATION	0	0	0	10	0	0	0	0	10	0	0	0	0	10
Total Expenditures	0	0	0	170	1,330	0	0	0	1,500	0	0	0	0	1,500
METRO DISTRICT BOND	0	0	0	170	1,330	0	0	0	1,500	0	0	0	0	1,500
Total Funding	0	0	0	170	1,330	0	0	0	1,500	0	0	0	0	1,500

Project Status : \$0 spent and encumbered through February 2016

Project: W8306-FY2013 SANNER ROAD WATER MAIN LOOP Number: W8306

Description

A project for the design and construction of approximately 750 LF of 12-inch water main on Johns Hopkins Road east of Sanner Road.

Justification

The project will extend the 630 water zone east along Johns Hopkins Road and provide 630 zone water service to the Johns Hopkins Applied Physics Laboratory.

Remarks

- 1. The project was brought before the Public Works Board on January 13, 2009.
- 2. Subsequent computer modeling has revealed that the extension of the water main along Sanner Road will not provide the desired redundancy in the water supply to the Howard County General Hospital. The length of the water main extension has been reduced from 5,800 feet to 4,000 feet. The modified scope will allow 630 zone water service to the Johns Hopkins Applied Physics Lab Campuses for fire protection and water supply.
- 3. The Alignment Report prepared during the Preliminary Design phase revealed an alternative that will reduce the length of water main extension required from 4,000 feet to approximately 750 feet.

Project Schedule

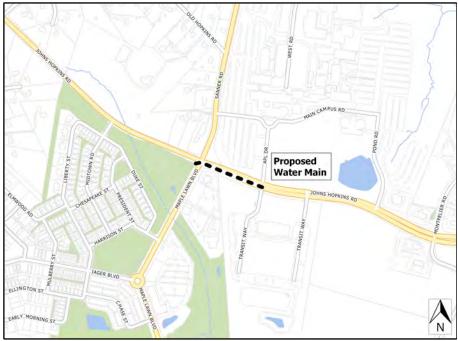
FY17 - Construction, Project Complete

FY18 - Close project

Operating Budget Impact

Annual Bond Redemption \$ \$95,000

\$6,500 represents the cost of operation and maintenance of the water main.



WATER PROJECTS

Number: W8306

Project: FY2013 SANNER ROAD WATER MAIN LOOP

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	335	0	335	0	0	0	0	0	0	0	0	0	0	335
CONSTRUCTION	1,650	0	1,650	0	0	0	0	0	0	0	0	0	0	1,650
ADMINISTRATION	15	0	15	0	0	0	0	0	0	0	0	0	0	15
Total Expenditures	2,000	0	2,000	0	0	0	0	0	0	0	0	0	0	2,000
METRO DISTRICT BOND	2,000	0	2,000	0	0	0	0	0	0	0	0	0	0	2,000
Total Funding	2,000	0	2,000	0	0	0	0	0	0	0	0	0	0	2,000

Project Status:

\$111,901 spent and encumbered through February 2016

1. Project under construction.

Project: W8307-FY2013 BROKEN LAND PKWY WATER MAIN

Description

Operating Budget Impact

A project for the design and construction of 4,100 LF of 30-inch water main along Annual Bond Redemption \$ \$242,250 Broken Land Parkway from Stevens Forest Road to Cradlerock Way.

\$6,100 represents the cost of operation and maintenance of the water main.

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.

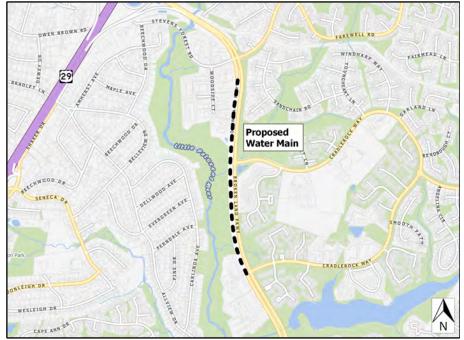
Remarks

The project was brought before the Public Works Board on January 13, 2009.

Project Schedule

FY17 - Construction

FY18 - Complete and close project.



WATER PROJECTS

Number: W8307

Project: FY2013 BROKEN LAND PKWY WATER MAIN

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	985	0	985	0	0	0	0	0	0	0	0	0	0	985
CONSTRUCTION	4,100	0	4,100	0	0	0	0	0	0	0	0	0	0	4,100
ADMINISTRATION	15	0	15	0	0	0	0	0	0	0	0	0	0	15
Total Expenditures	5,100	0	5,100	0	0	0	0	0	0	0	0	0	0	5,100
METRO DISTRICT BOND	5,100	0	5,100	0	0	0	0	0	0	0	0	0	0	5,100
Total Funding	5,100	0	5,100	0	0	0	0	0	0	0	0	0	0	5,100

Project Status:

\$180,918 spent and encumbered through February 2016 Project under design.

WATER PROJECTS

Project: W8308-FY2013 US29 WATER MAIN/MD32 TO MD216 Number: W8308

Description

A project for the design and construction of 14,000 LF of 24-inch water main parallel to US29 from MD32 to MD216.

Justification

The project will provide additional hydraulic capacity and increase 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 Howard County Master Plan for Water and Sewerage and is needed to provide for adequate domestic water supply and fire protection.

Remarks

The project was brought before the Public Works Board on January 13, 2009.

Project Schedule

FY17 - Study, Design, and Land Acquisition

FY18 - Design, Construction

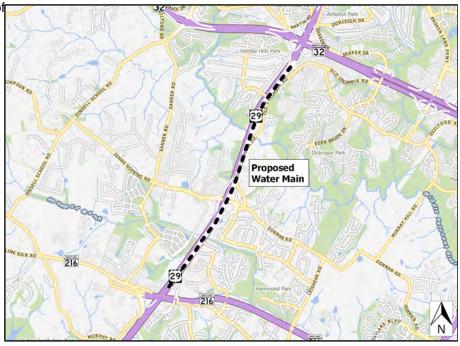
FY19 - Construction

FY20 - Project Complete, Close

Operating Budget Impact

Annual Bond Redemption \$ \$498,750

\$20,860 represents the cost of operation and maintenance of the water main.



WATER PROJECTS

Number: W8308

Project: FY2013 US29 WATER MAIN/MD32 TO MD216

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,190	0	1,190	610	0	0	0	0	610	0	0	0	0	1,800
LAND ACQUISITION	285	0	285	0	0	0	0	0	0	0	0	0	0	285
CONSTRUCTION	0	0	0	8,400	0	0	0	0	8,400	0	0	0	0	8,400
ADMINISTRATION	15	0	15	0	0	0	0	0	0	0	0	0	0	15
Total Expenditures	1,490	0	1,490	9,010	0	0	0	0	9,010	0	0	0	0	10,500
METRO DISTRICT BOND	1,490	0	1,490	9,010	0	0	0	0	9,010	0	0	0	0	10,500
Total Funding	1,490	0	1,490	9,010	0	0	0	0	9,010	0	0	0	0	10,500

Project Status:

\$0 spent and encumbered through February 2016 Project is in the study phase.

Project: W8309-FY2014 MISSION ROAD WATER MAIN LOOP

Description

Operating Budget Impact

A project for the design and construction of 4,500 LF of 12-inch water main along Annual Bond Redemption \$ \$112,100 Mission Road to Columbia Gateway Drive.

\$6,705 represents the cost of operation and maintenance of the water main.

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

FY17 - Design, Construction

FY18 - Construction, Project Complete

FY19 - Project Close



WATER PROJECTS

Number: W8309

Project: FY2014 MISSION ROAD WATER MAIN LOOP

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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

Project Status:

\$162,580 spent and encumbered through February 2016 Project is under design and land acquisition.

Project: W8312-FY2011 ROCKBURN HILL (CROSSVIEW RD) WATER MAIN

Description

A project for the design and construction of 1,200 LF of 8-inch water main from the terminus of County owned Rockburn Hill Road, west to Crossview Road to serve 6 properties.

Justification

The project was requested by 3 property owners located west of Rockburn Hill Road on Crossview Road. The properties are within the Metropolitan District and eligible for public water service.

Remarks

1. The project was brought before the Public Works Board on January 12, 2010.

Project Schedule

FY17 - Close

Operating Budget Impact

Annual Bond Redemption \$ \$9,500

\$1,800 represents the cost of operation and maintenance of the water main.



WATER PROJECTS

Number: W8312

Project: FY2011 ROCKBURN HILL (CROSSVIEW RD) WATER MAIN

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	85	0	85	0	0	0	0	0	0	0	0	0	0	85
LAND ACQUISITION	90	0	90	0	0	0	0	0	0	0	0	0	0	90
CONSTRUCTION	525	0	525	0	0	0	0	0	0	0	0	0	0	525
ADMINISTRATION	5	0	5	0	0	0	0	0	0	0	0	0	0	5
Total Expenditures	705	0	705	0	0	0	0	0	0	0	0	0	0	705
UTILITY CASH	505	0	505	0	0	0	0	0	0	0	0	0	0	505
METRO DISTRICT BOND	200	0	200	0	0	0	0	0	0	0	0	0	0	200
Total Funding	705	0	705	0	0	0	0	0	0	0	0	0	0	705

Project Status:

\$630,635 spent and encumbered through February 2016 Project has been completed.

Project: W8313-FY2011 FIRE HYDRANT INSPECTION PROGRAM

Description

Operating Budget Impact

Develop a Fire Hydrant Inspection Program that will include all County owned fire Annual Bond Redemption \$ \$82,935 hydrants within the distribution system. The data will be stored in our current database, cataloging specific fire hydrant information such as manufacturer, year this enhanced inspection schedule required by HCFR will increase the installed, size, number of turns, turn direction, and cataloged inspection data for Bureau of Utilities' Operating budget by approximately \$35,000/year with

installed, size, number of turns, turn direction, and cataloged inspection data for Bureau of Utilities' Operating budget by approximately \$35,000/year with each scheduled inspection. During the inspection process, fire hydrants are to be one (1) contingent employee to monitor and inspect the progress of the exercised and their operability verified, and hydrant valves located and exercised. contractor(s), and one (1) regulation inspector.

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

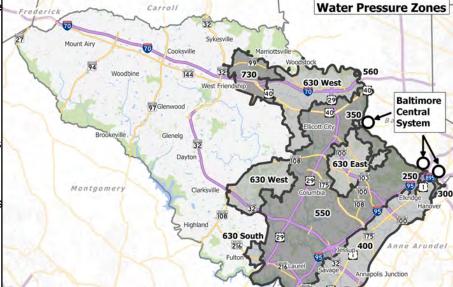
Howard County Fire and Rescue has requested that the Bureau of Utilities perform annual inspections on each fire hydrant as part of their ISO program. This will include populating the existing Hansen Database with fire hydrant information for speedier reporting of fire hydrant status, creation of fire 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 year.
- 2. There are approximately 10,200 fire hydrants owned by Howard County.
- 3. HCFR requirements for modeling and inspections are followed throughout.
- 4. FY15 A Regulation Inspector I position was approved for managing the inhouse capital projects.

Project Schedule

FY17 - Continued hydrant inspections and repairs.



WSSC Supply Point

WATER PROJECTS

Number: W8313

Project: FY2011 FIRE HYDRANT INSPECTION PROGRAM

(In Thousands)					Five	Year Ca	apital Pro	gram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	400	100	500	100	100	100	100	100	500	0	0	0	0	1,000
CONSTRUCTION	3,740	750	4,490	750	750	750	750	750	3,750	0	0	0	0	8,240
ADMINISTRATION	114	23	137	23	23	23	23	23	115	0	0	0	0	252
Total Expenditures	4,254	873	5,127	873	873	873	873	873	4,365	0	0	0	0	9,492
UTILITY CASH	1,746	0	1,746	0	0	0	0	0	0	0	0	0	0	1,746
IN-AID of CONSTRUCT UTILITIES	762	873	1,635	873	873	873	873	873	4,365	0	0	0	0	6,000
METRO DISTRICT BOND	1,746	0	1,746	0	0	0	0	0	0	0	0	0	0	1,746
Total Funding	4,254	873	5,127	873	873	873	873	873	4,365	0	0	0	0	9,492

Project Status:

^{\$1,213,768} spent and encumbered through February 2016
3. FY17 - Anticipated to inspect 11,000 hydrants @ \$65 per hydrant plus additional testing.

WATER PROJECTS

Number: W8316

Project: W8316-FY2013 ILCHESTER ROAD WATER MAIN REHABILITATION

Description

A project for the rehabilitation of 5,800 feet of 12-inch water main within Ilchester Annual Bond Redemption \$ \$144,875 Road from Montgomery Road to Ellis Lane and reinforcement of the 630 zone.

Justification

The water mains were constructed in 1963 and 1967 and have ruptured numerous times. The project will determine the cause of the failures and repair or replace defective portions of the water main.

Remarks

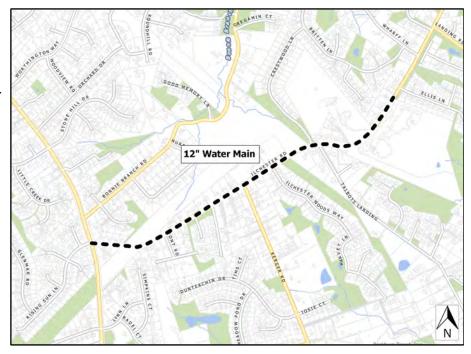
The project was brought before the Public Works Board on December 13, 2011.

Project Schedule

FY17 - Close

Operating Budget Impact

The cost of operation and maintenance will be reduced by the reduction of main breaks in this area.



WATER PROJECTS

Number: W8316

Project: FY2013 ILCHESTER ROAD WATER MAIN REHABILITATION

(In Thousands)		Five	Year Ca	apital Pro	ogram		Master Plan							
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	340	0	340	0	0	0	0	0	0	0	0	0	0	340
LAND ACQUISITION	50	0	50	0	0	0	0	0	0	0	0	0	0	50
CONSTRUCTION	2,650	0	2,650	0	0	0	0	0	0	0	0	0	0	2,650
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	3,050	0	3,050	0	0	0	0	0	0	0	0	0	0	3,050
METRO DISTRICT BOND	3,050	0	3,050	0	0	0	0	0	0	0	0	0	0	3,050
Total Funding	3,050	0	3,050	0	0	0	0	0	0	0	0	0	0	3,050

Project Status:

\$2,007,690 spent and encumbered through February 2016 Project is complete.

Project: W8317-FY2013 ELKRIDGE PUMP STATION IMPROVEMENTS

Description

A project for the design and installation of a 1,250 kW emergency generator and Annual Bond Redemption \$ \$147,250 electrical, mechanical, and structural improvements at the Elkridge Water Pumping Station.

Operating Budget Impact

The annual cost of operation and maintenance is estimated at \$50,000.

Justification

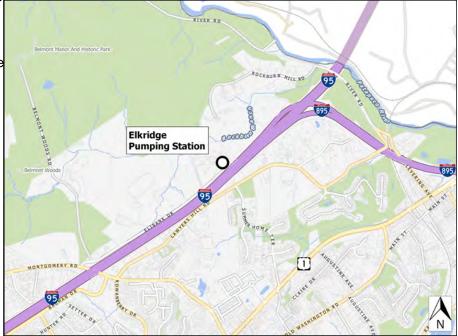
The Elkridge Pumping Station provides for one third of Howard County's summer water demands. During the 2011 storm events, the station lost both the primary and secondary incoming electrical services. An emergency generator is necessary to insure an adequate water supply for domestic needs and fire protection. Electrical, mechanical, and structural upgrades are needed to replace failed equipment and provide reliability to the station.

Remarks

- 1. The project was brought before the Public Works Board on December 13, 2011.
- 2. Request represents additional required modifications to the station and the latest engineer's estimate for design and construction.

Project Schedule

FY17 - Construction, Project complete, Project close



WATER PROJECTS

Number: W8317

Project: FY2013 ELKRIDGE PUMP STATION IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	375	0	375	0	0	0	0	0	0	0	0	0	0	375	
CONSTRUCTION	2,700	0	2,700	0	0	0	0	0	0	0	0	0	0	2,700	
ADMINISTRATION	25	0	25	0	0	0	0	0	0	0	0	0	0	25	
Total Expenditures	3,100	0	3,100	0	0	0	0	0	0	0	0	0	0	3,100	
METRO DISTRICT BOND	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	

Project Status:

\$1,984,952 spent and encumbered through February 2016 Project is under construction.

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.
- 2. Request represents the latest Engineers Estimate for construction cost. Budget estimate revision represents predicted cost of project based on final refinement of design and predicted market conditions at bidding.

Project Schedule

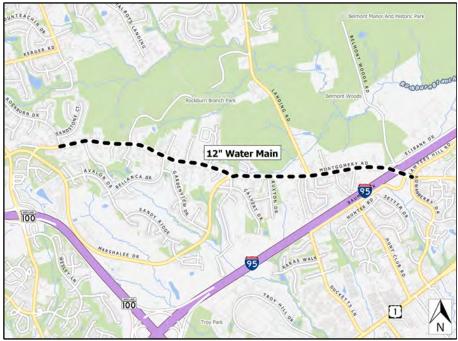
FY17 - Construction, Project Complete

FY18 - 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.



WATER PROJECTS

Number: W8318

Project: FY2013 MONTGOMERY ROAD WATER MAIN REHABILITATION

(In Thousands)					Five	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	1,095	0	1,095	0	0	0	0	0	0	0	0	0	0	1,095	
CONSTRUCTION	4,500	1,000	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	5,610	1,000	6,610	0	0	0	0	0	0	0	0	0	0	6,610	
METRO DISTRICT BOND	5,610	1,000	6,610	0	0	0	0	0	0	0	0	0	0	6,610	
Total Funding	5,610	1,000	6,610	0	0	0	0	0	0	0	0	0	0	6,610	

Project Status:

\$362,033 spent and encumbered through February 2016 Project is under construction.

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

The project was brought before the Public Works Board on December 13, 2011.

Project Schedule

FY17 - Construction

FY18 - Complete and close project

Operating Budget Impact

Annual Bond Redemption \$ \$237,500

The annual additional power cost and the cost of operation and maintenance of the pipelines is estimate at \$25,000.



WATER PROJECTS

Number: W8320

Project: FY2013 WHISKEY BOTTOM PUMP STATION RELOCATION

(In Thousands)		Five	Year Ca	apital Pro	ogram		Master Plan							
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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	0	4,000	0	0	0	0	0	0	0	0	0	0	4,000
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10
Total Expenditures	5,000	0	5,000	0	0	0	0	0	0	0	0	0	0	5,000
METRO DISTRICT BOND	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

Project Status:

\$523,132 spent and encumbered through February 2016 Project is under construction.

Description

A project for the design and construction of 3,000 LF of 8-inch water main within Annual Bond Redemption \$\$55,338 the Pirch Way/Aspern Drive community.

Justification

The water main was constructed in 1980 and has had 13 water main breaks within the last 10 years, 8 water main breaks within the last 3 years. The water main breaks exhibited heavy pitting, which is evidence of corrosion failures, and has caused extensive road damage. The project will replace the water mains in this area.

Remarks

1. The project was brought before the Public Works Board on December 13, 2011.

Project Schedule

FY17 - Project complete, close

Operating Budget Impact

The cost of operation and maintenance will be reduced by the reduction of main breaks in this area.



Project: FY2013 PIRCH WAY/ASPERN DRIVE WATER REPLACEMENT

(In Thousands)					Five	Year Ca	apital Pro	ogram		Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project	
PLANS & ENGINEERING	205	0	205	0	0	0	0	0	0	0	0	0	0	205	
CONSTRUCTION	1,100	0	1,100	0	0	0	0	0	0	0	0	0	0	1,100	
ADMINISTRATION	10	0	10	0	0	0	0	0	0	0	0	0	0	10	
Total Expenditures	1,315	0	1,315	0	0	0	0	0	0	0	0	0	0	1,315	
UTILITY CASH	150	0	150	0	0	0	0	0	0	0	0	0	0	150	
METRO DISTRICT BOND	1,165	0	1,165	0	0	0	0	0	0	0	0	0	0	1,165	
Total Funding	1,315	0	1,315	0	0	0	0	0	0	0	0	0	0	1,315	

Project Status:

\$1,229,728 spent and encumbered through February 2016
1. This project is complete.

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 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 ductile 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.

Project Schedule

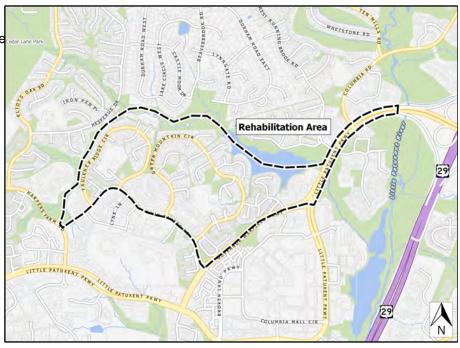
FY17 - Design, Construction

FY18 - Project complete, close

Operating Budget Impact

Annual Bond Redemption \$ \$80,750

The cost of operation and maintenance will be reduced by the reduction of main breaks in this area.



WATER PROJECTS

Number: W8322

Project: FY2013 WILDE LAKE WATER MAIN STUDY and REHABILITATION

(In Thousands)					Five	Year Ca	apital Pro	ogram	Master Plan					
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	835	0	835	0	0	0	0	0	0	0	0	0	0	835
CONSTRUCTION	850	0	850	0	0	0	0	0	0	0	0	0	0	850
ADMINISTRATION	15	0	15	0	0	0	0	0	0	0	0	0	0	15
Total Expenditures	1,700	0	1,700	0	0	0	0	0	0	0	0	0	0	1,700
METRO DISTRICT BOND	1,700	0	1,700	0	0	0	0	0	0	0	0	0	0	1,700
Total Funding	1,700	0	1,700	0	0	0	0	0	0	0	0	0	0	1,700

Project Status:

\$990,360 spent and encumbered through February 2016

1. Piloting of new rehabilitation techniques is in progress.

Description

A project for the design and construction of a diversion structure, pumping station, elevated storage tank and reclaimed water lines to supply Fort Meade with reclaimed water to be used for non-potable purposes.

Justification

This project was requested by Fort Meade. Without the development of a reclaimed water supply to the Fort, wells would need to be drilled in an already stressed aquifer. Construction of this project will develop an efficient and cost-effective water conservation program that will lower existing and future water demands. This project will also provide Howard County with an additional income source.

Remarks

- 1. Work includes the design, construction and inspection of the reclaimed water system.
- 2. The construction of this project will be in Anne Arundel County.

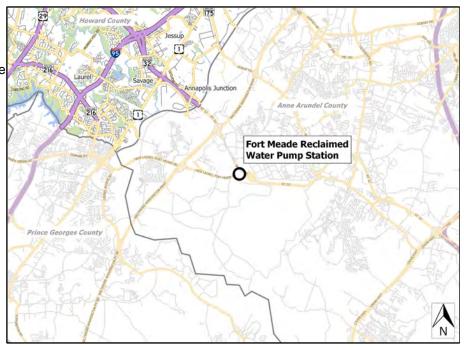
Project Schedule

FY17 - Close Project

Operating Budget Impact

Annual Bond Redemption \$ \$2,707,500

This project, when operational, will have a cost associated with the operation and maintenance of specific County owned facilities which will be recovered through the reclaimed water rates.



WATER PROJECTS

Number: W8323

Project: FY2013 FORT MEADE RECLAIMED WATER

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	lan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	2,600	0	2,600	0	0	0	0	0	0	0	0	0	0	2,600
CONSTRUCTION	54,160	0	54,160	0	0	0	0	0	0	0	0	0	0	54,160
ADMINISTRATION	240	0	240	0	0	0	0	0	0	0	0	0	0	240
Total Expenditures	57,000	0	57,000	0	0	0	0	0	0	0	0	0	0	57,000
METRO DISTRICT BOND	57,000	0	57,000	0	0	0	0	0	0	0	0	0	0	57,000
Total Funding	57,000	0	57,000	0	0	0	0	0	0	0	0	0	0	57,000

Project Status:

\$32,633,193 spent and encumbered through February 2016

1. Project is complete.

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.

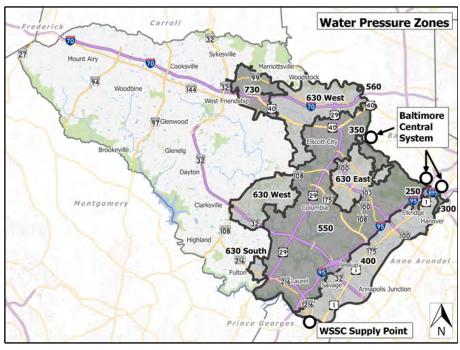
Project Schedule

Ongoing program FY17 - 1. Waters Edge 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.



Project: FY2014 WATER SYSTEM LOOPING/FIRE PROTECTION UPGRADE

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	320	80	400	80	80	80	0	0	240	0	0	0	0	640
LAND ACQUISITION	265	65	330	65	65	65	0	0	195	0	0	0	0	525
CONSTRUCTION	1,400	350	1,750	350	350	350	0	0	1,050	0	0	0	0	2,800
ADMINISTRATION	15	5	20	5	5	5	0	0	15	0	0	0	0	35
Total Expenditures	2,000	500	2,500	500	500	500	0	0	1,500	0	0	0	0	4,000
METRO DISTRICT BOND	2,000	500	2,500	500	500	500	0	0	1,500	0	0	0	0	4,000
Total Funding	2,000	500	2,500	500	500	500	0	0	1,500	0	0	0	0	4,000

Project Status:

\$140,448 spent and encumbered through February 2016
Projects completed: FY15 and prior - 1. Charted Drive Water Main Loop
Projects completed: FY16 - 1. Corridor Road Water Main Loop

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 rate charge approved by the County Council as part of the annual User Fee 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, and a reclaimed water pipeline that extends to the property line of the Dreyer's Ice Cream facility in Laurel.
- 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 potetential 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.

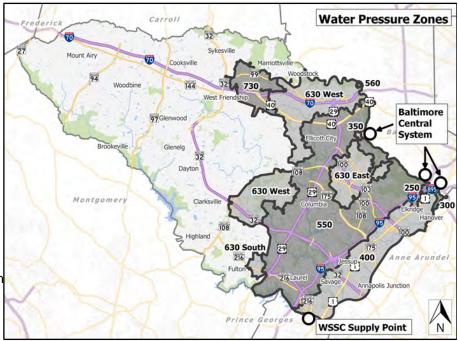
Project Schedule

FY17 - Alignment study and design of reclaimed water pipeline from the LPWRP to the existing Guilford Water Storage Tank. FY18 - Construction. FY18-19 -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 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	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	700	0	700	200	200	0	0	0	400	0	0	0	0	1,100
CONSTRUCTION	3,750	0	3,750	750	750	0	0	0	1,500	0	0	0	0	5,250
ADMINISTRATION	123	0	123	23	23	0	0	0	46	0	0	0	0	169
Total Expenditures	4,573	0	4,573	973	973	0	0	0	1,946	0	0	0	0	6,519
METRO DISTRICT BOND	4,573	0	4,573	973	973	0	0	0	1,946	0	0	0	0	6,519
Total Funding	4,573	0	4,573	973	973	0	0	0	1,946	0	0	0	0	6,519

Project Status:

\$0 spent and encumbered through February 2016
Project on hold for FY15 pending real estate negotiations for the new Guilford Water Tank.

Project: W8326-FY2015 SAINT PAUL STREET WATER MAIN

WATER PROJECTS

Number: W8326

Description

A project for the design and construction of 400 LF of 8-inch water main in Saint Annual Bond Redemption \$ \$19,000 Paul Street in Ellicott City.

Justification

The existing water main was constructed within an easement on the Saint Paul Church property in 1964 on a 30 percent slope, and provides water service to multiple properties through a single water house connection. Subsequent site improvements made by the church have placed the water main between 2 buildings. The project will relocate the 6-inch water main on the church property to Saint Paul Street, completing the loop with College Avenue; thereby providing improved maintenance access and eliminating the shared water house connections.

Remarks

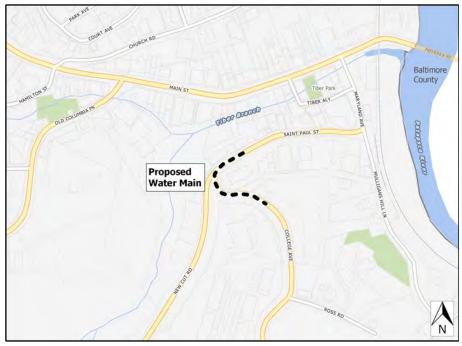
The project was brought before the Public Works Board on January 14, 2014.

Project Schedule

FY17 - Construction, Close

Operating Budget Impact

The annual cost of operation and maintenance will be unchanged.



Project: FY2015 SAINT PAUL STREET WATER MAIN

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	73	0	73	0	0	0	0	0	0	0	0	0	0	73
CONSTRUCTION	325	0	325	0	0	0	0	0	0	0	0	0	0	325
ADMINISTRATION	2	0	2	0	0	0	0	0	0	0	0	0	0	2
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

Project Status:

\$293,921 spent and encumbered through February 2016
1. Project design completed.
2. Project construction is in progress.

Project: W8327-FY2015 OLD LAWYER HILL ROAD WATER SUPPLY MAIN REPLACEMENT

Number: W8327

Description

Operating Budget Impact

A project for the replacement of 2,300 LF of 8-inch water main in Old Lawyers Hill Annual Bond Redemption \$\$50,350 Road.

Justification

The annual cost of operation and maintenance of the water main will be reduced.

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

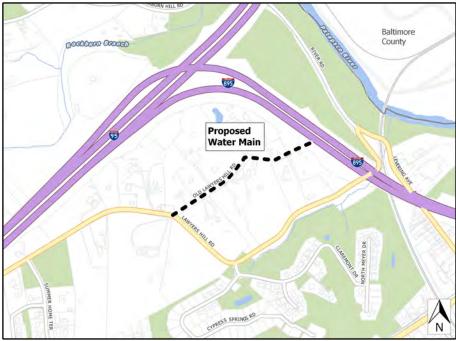
- 1. The water mains on either end of the Old Lawyers Hill Road water main have been replaced or are in the process of being replaced.
- 2. The project was brought before the Public Works Board on January 14, 2014.
- 3. The map has been updated to reflect the revised limits of proposed work. The segment north of I895 is now included in the scope of W8300.
- 4. Request represents the latest Engineers Estimate of construction cost.

Project Schedule

FY17 - Design, Construction

FY18 - Project complete

FY19 - Close



WATER PROJECTS

Number: W8327

Project: FY2015 OLD LAWYER HILL ROAD WATER SUPPLY MAIN REPLACEMENT

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	160	0	160	0	0	0	0	0	0	0	0	0	0	160
CONSTRUCTION	780	100	880	0	0	0	0	0	0	0	0	0	0	880
ADMINISTRATION	10	10	20	0	0	0	0	0	0	0	0	0	0	20
Total Expenditures	950	110	1,060	0	0	0	0	0	0	0	0	0	0	1,060
METRO DISTRICT BOND	950	110	1,060	0	0	0	0	0	0	0	0	0	0	1,060
Total Funding	950	110	1,060	0	0	0	0	0	0	0	0	0	0	1,060

Project Status:

\$25,197 spent and encumbered through February 2016 Project is under design.

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

The project was brought before the Public Works Board on January 14, 2014.

Project Schedule

FY17 - Study, Land Acquisition, Design

FY18 - Design, Construction

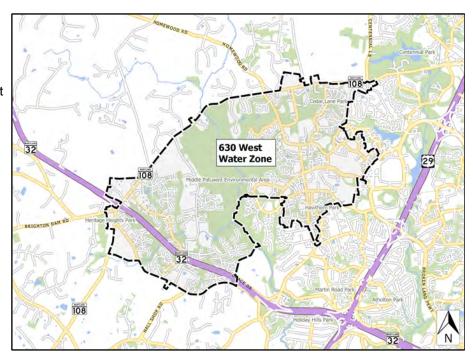
FY19 - Construction, Project complete

FY20 - Close

Operating Budget Impact

Annual Bond Redemption \$ \$475,000

The annual cost of operation and maintenance of the pumping station is \$50,000.



WATER PROJECTS

Number: W8328

Project: FY2015 630 WEST ZONE WATER PUMPING STATION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,000	0	1,000	750	0	0	0	0	750	0	0	0	0	1,750
LAND ACQUISITION	325	0	325	0	0	0	0	0	0	0	0	0	0	325
CONSTRUCTION	0	0	0	7,900	0	0	0	0	7,900	0	0	0	0	7,900
ADMINISTRATION	15	0	15	10	0	0	0	0	10	0	0	0	0	25
Total Expenditures	1,340	0	1,340	8,660	0	0	0	0	8,660	0	0	0	0	10,000
METRO DISTRICT BOND	1,340	0	1,340	8,660	0	0	0	0	8,660	0	0	0	0	10,000
Total Funding	1,340	0	1,340	8,660	0	0	0	0	8,660	0	0	0	0	10,000

Project Status:

\$94 spent and encumbered through February 2016Project is currently under land acquisition and design.

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.

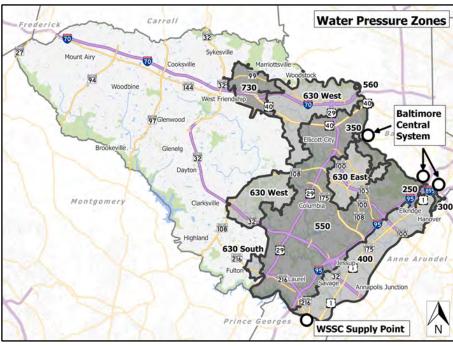
Project Schedule

Ongoing program

FY17 - Scheduled and routine PCCP monitoring and inspection

Operating Budget Impact

No impact on operating budget.



Project: FY2015 PCCP STUDY AND FAILURE MITIGATION

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	250	50	300	50	50	50	50	0	200	0	0	0	0	500
CONSTRUCTION	1,375	375	1,750	375	375	375	375	0	1,500	0	0	0	0	3,250
ADMINISTRATION	65	15	80	15	15	15	15	0	60	0	0	0	0	140
EQUIPMENT & FURNISHINGS	310	60	370	60	60	60	60	0	240	0	0	0	0	610
Total Expenditures	2,000	500	2,500	500	500	500	500	0	2,000	0	0	0	0	4,500
UTILITY CASH	2,000	500	2,500	500	500	500	500	0	2,000	0	0	0	0	4,500
Total Funding	2,000	500	2,500	500	500	500	500	0	2,000	0	0	0	0	4,500

Project Status:

\$313,555 spent and encumbered through February 2016
Projects completed: FY15 and prior - 1. Inspection and monitoring of prestressed concrete cylinder pipe

Project: W8330-FY2017 OLD COLUMBIA PIKE WATER MAIN REHABILITATION/REPLACEMENT

WATER PROJECTS

Number: W8330

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 transmissions mains which are protected with impresses currents, are located in areas know to have corrosive soils and stray currents 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

FY17 - Design

FY18 - Design, construction

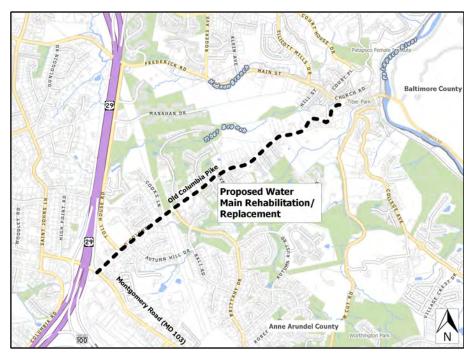
FY19 - Construction, project complete

FY20 - 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.



WATER PROJECTS

Number: W8330

Project: FY2017 OLD COLUMBIA PIKE WATER MAIN REHABILITATION/REPLACEMENT

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	500	500	0	0	0	0	0	0	0	0	0	0	500
CONSTRUCTION	0	250	250	3,250	0	0	0	0	3,250	0	0	0	0	3,500
ADMINISTRATION	0	5	5	10	0	0	0	0	10	0	0	0	0	15
Total Expenditures	0	755	755	3,260	0	0	0	0	3,260	0	0	0	0	4,015
METRO DISTRICT BOND	0	755	755	3,260	0	0	0	0	3,260	0	0	0	0	4,015
Total Funding	0	755	755	3,260	0	0	0	0	3,260	0	0	0	0	4,015

Project Status:

\$0 spent and encumbered through February 2016

1. New project

Project: W8331-FY2017 TWIN RIVERS ROAD WATER MAIN REPLACEMENT

Description

Operating Budget Impact

A project to replace 6,000 LF of 12-inch diameter water main within Twins Rivers Annual Bond Redemption \$ \$121,838 Road; between Governor Warfield Parkway and Harpers Farm Road. Scope includes the design and construction necessary to replace the deteriorating water The cost of operation and maintenance will be reduced by the reduction of main.

main breaks in this area.

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

FY17 - Design

FY18 - Design, construction

FY19 - Construction, project complete

FY20 - Project Close



WATER PROJECTS

Number: W8331

Project: FY2017 TWIN RIVERS ROAD WATER MAIN REPLACEMENT

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	0	500	500	0	0	0	0	0	0	0	0	0	0	500
CONSTRUCTION	0	250	250	1,800	0	0	0	0	1,800	0	0	0	0	2,050
ADMINISTRATION	0	5	5	10	0	0	0	0	10	0	0	0	0	15
Total Expenditures	0	755	755	1,810	0	0	0	0	1,810	0	0	0	0	2,565
METRO DISTRICT BOND	0	755	755	1,810	0	0	0	0	1,810	0	0	0	0	2,565
Total Funding	0	755	755	1,810	0	0	0	0	1,810	0	0	0	0	2,565

Project Status:

\$0 spent and encumbered through February 2016

1. New Project

Project: W8600-UTILITY SYSTEMIC ADDITIONS / IMPROVEMENTS

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.

Project Schedule

Ongoing program

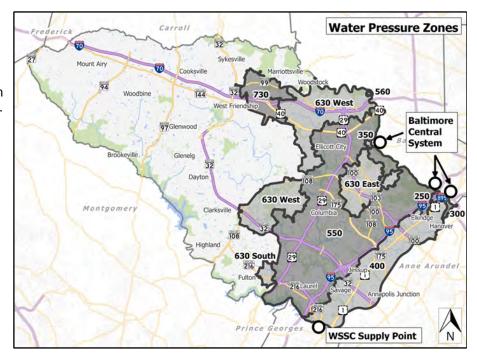
FY17 - Decommissioning of the North Laurel Waste Water Pumping Station

FY18 - Decommissioning of he Whiskey Bottom Water Pump Station

Operating Budget Impact

Annual Bond Redemption \$\$380,000

None



Project: UTILITY SYSTEMIC ADDITIONS / IMPROVEMENTS

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	1,215	0	1,215	0	0	0	0	0	0	0	0	0	0	1,215
CONSTRUCTION	8,400	0	8,400	0	0	0	0	0	0	0	0	0	0	8,400
EQUIPMENT & FURNISHINGS	2,500	0	2,500	0	0	0	0	0	0	0	0	0	0	2,500
Total Expenditures	12,115	0	12,115	0	0	0	0	0	0	0	0	0	0	12,115
UTILITY CASH	4,000	0	4,000	0	0	0	0	0	0	0	0	0	0	4,000
GRANTS	115	0	115	0	0	0	0	0	0	0	0	0	0	115
METRO DISTRICT BOND	8,000	0	8,000	0	0	0	0	0	0	0	0	0	0	8,000
Total Funding	12,115	0	12,115	0	0	0	0	0	0	0	0	0	0	12,115

Project Status:

\$7,495,754 spent and encumbered through February 2016

Projects completed: FY16 and prior -

- 1. Élevation 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

Project: W8601-FY2016 ACQUISITION CONTINGENCY FUND Number: W8601

Description

Operating Budget Impact

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. None

Justification

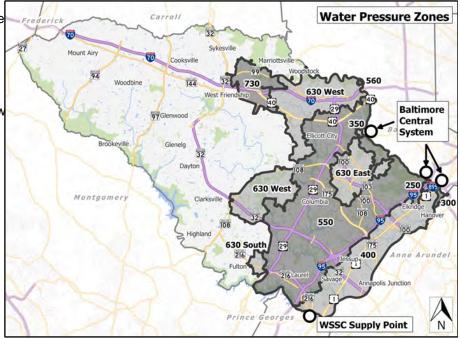
This project is provided as a contingency fund for plats, legal fees, title research, appraisal and acquisition on projects that do not have monies funded for this type of work.

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



WATER PROJECTS

Number: W8601

Project: FY2016 ACQUISITION CONTINGENCY FUND

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	200	0	200	100	0	100	0	100	300	0	0	0	0	500
LAND ACQUISITION	395	0	395	100	0	100	0	100	300	0	0	0	0	695
ADMINISTRATION	5	0	5	5	0	5	0	5	15	0	0	0	0	20
Total Expenditures	600	0	600	205	0	205	0	205	615	0	0	0	0	1,215
UTILITY CASH	550	0	550	155	0	155	0	155	465	0	0	0	0	1,015
IN-AID of CONSTRUCT UTILITIES	50	0	50	50	0	50	0	50	150	0	0	0	0	200
Total Funding	600	0	600	205	0	205	0	205	615	0	0	0	0	1,215

Project Status: \$0 spent and encumbered through February 2016

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.
- 2. Request represents the advancement of funds in the capital program.

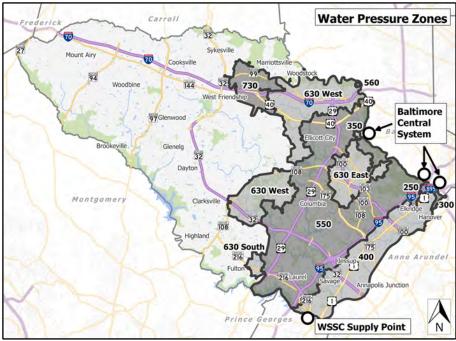
Project Schedule

Ongoing program

Operating Budget Impact

Annual Bond Redemption \$ \$144,875

None.



WATER PROJECTS

Number: W8602

Project: FY2016 SLEEVES RELOCATIONS AND APPURTENANCES

(In Thousands)					Five	Year Ca	apital Pro	ogram				Master F	Plan	
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	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:

\$0 spent and encumbered through February 2016

Project: W8698-ROUTINE WATER EXTENSION PROGRAM

WATER PROJECTS

Number: W8698

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.
- 2. Request represents the advancement of funds in the capital program.

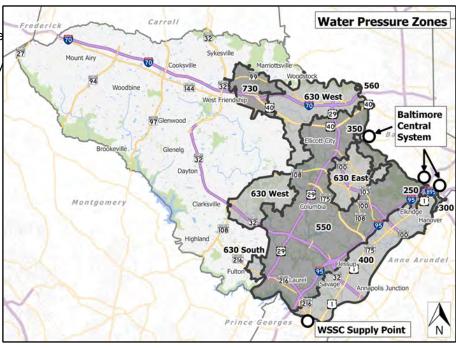
Project Schedule

Ongoing program
FY17 - 1. Trotter Road Water and Sewer Extension

Operating Budget Impact

Annual Bond Redemption \$ \$351,500

\$1.50 per foot per year represents the estimated cost of maintenance of water mains (small diameter), valves and easement over the utility.



Project: ROUTINE WATER EXTENSION PROGRAM

(In Thousands)		Five	Year Ca	apital Pro	ogram	Master Plan								
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
PLANS & ENGINEERING	667	100	767	100	100	100	100	100	500	0	0	0	0	1,267
CONSTRUCTION	2,909	500	3,409	500	500	500	500	500	2,500	0	0	0	0	5,909
ADMINISTRATION	74	25	99	25	25	25	25	25	125	0	0	0	0	224
Total Expenditures	3,650	625	4,275	625	625	625	625	625	3,125	0	0	0	0	7,400
METRO DISTRICT BOND	3,650	625	4,275	625	625	625	625	625	3,125	0	0	0	0	7,400
Total Funding	3,650	625	4,275	625	625	625	625	625	3,125	0	0	0	0	7,400

Project Status:

\$1,312,031 spent and encumbered through February 2016

Projects completed: FY16 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

Project: W8812-FY2012 ADV DEPOSIT LARGE WATER HOUSE CONNECTIONS

Description

A project to provide for the construction, inspection services, and ordering of large water meters for sites that do not require formal developer agreements, but instead require Advanced Deposit Order (ADO) agreements for water services larger than 1 inch, fire hydrants, short main extensions, or other appurtenances. Construction work limited to 200 feet (combined water/sewer). The following criteria must be met: 1. Extensions are necessary to provide frontage to existing lots or parcels within the Metropolitan District. 2. Developer is responsible for all engineering, plans, and construction stakeout. 3. Parcels or lots are not subdividable. 4. Acquisition of utility easements is not required. 5. Front foot benefit charge affects the ADO requester only.

Justification

The Howard County Code Section 20.308 establishes the requirements to charge for connections, and the requirement to receive payment prior to making the connection.

Remarks

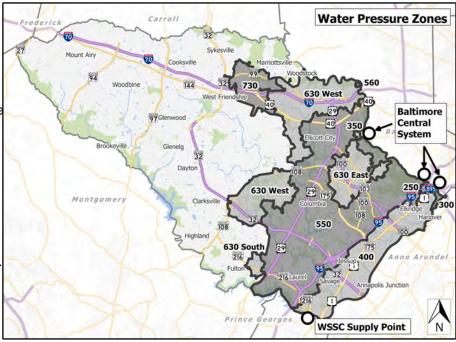
An ADO agreement provides for the contractual basis for the connection request. Each connection's cost is accounted for separately against this project.
 After August 1, 2007, developers will hire Howard County licensed on-site utilty contractors, at their cost, to perform the work. The County will continue to construct these connections only at the discretion of the Director of Public Works.

Project Schedule

FY17 - Construction Ongoing project

Operating Budget Impact

None.



Project: FY2012 ADV DEPOSIT LARGE WATER HOUSE CONNECTIONS

(In Thousands)		Five	Year Ca	apital Pro	ogram	Master Plan								
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	250	0	250	0	0	0	0	0	0	0	0	0	0	250
ADMINISTRATION	2	0	2	0	0	0	0	0	0	0	0	0	0	2
Total Expenditures	252	0	252	0	0	0	0	0	0	0	0	0	0	252
DEVELOPER CONTRIBUTION	252	0	252	0	0	0	0	0	0	0	0	0	0	252
Total Funding	252	0	252	0	0	0	0	0	0	0	0	0	0	252

Project Status: \$48,000 spent and encumbered through February 2016

Project: W8862-FY2012 WATER HOUSE CONNECTIONS

Description

A project to provide for the construction of water house connections by the Bureau of Utilities for residential size up to 1 inch. These connections are made when new connections are required for lots or homes where none exist. Connections installed by Developer Agreement, capital project, or by developer's utility contractor under County inspection (post August 1, 2007) are not included. Also included are charges for water meters under DILP application process.

Justification

The Howard County Code Section 20.308 establishes the requirements to charge for connections. This capital project allows the installation costs to be capitalized and incorporated into the County's asset management system.

Remarks

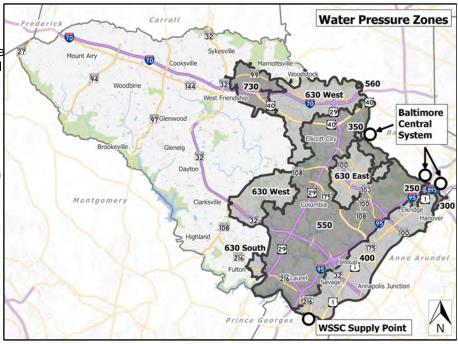
- 1. Water house connection charges are collected when the property owner submits an application to connect to the public system.
- 2. Funds collected from the connection charges are credited to this project when the connections are not existing.
- 3. House connections previously installed by the Bureau of Utilities to be installed by the developer's utility contractor under County inspection (post Aug. 1, 2007). Bureau of Utilities will install connections only at the discretion of the Director of Public Works.

Project Schedule

- 1. FY17 Construction.
- 2. Ongoing project.

Operating Budget Impact

None.



Project: FY2012 WATER HOUSE CONNECTIONS Number: W8862

(In Thousands)		Five	Year Ca	apital Pro	ogram	Master Plan								
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	500	150	650	0	0	0	0	0	0	0	0	0	0	650
ADMINISTRATION	2	0	2	0	0	0	0	0	0	0	0	0	0	2
EQUIPMENT & FURNISHINGS	50	0	50	0	0	0	0	0	0	0	0	0	0	50
Total Expenditures	552	150	702	0	0	0	0	0	0	0	0	0	0	702
DEVELOPER CONTRIBUTION	552	150	702	0	0	0	0	0	0	0	0	0	0	702
Total Funding	552	150	702	0	0	0	0	0	0	0	0	0	0	702

Project Status : \$232,942 spent and encumbered through February 2016

Project: W8913-FY2013 DEVELOPER REBATES WATER & SEWER

Description

Land developers in Howard County desiring to provide public water and/or sewer services to a proposed development, request the County to permit them to extend the existing systems to serve their proposed developments through prefinancing of these extensions under terms of a developer's agreement. All such facilities when completed will be County owned and maintained.

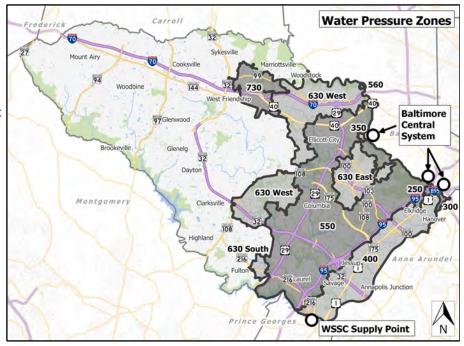
Justification

The Developer's Agreements establish a rebate policy providing for the reimbursement of certain monies when new accessible base and front foot benefit charges are created. The aggregate refund will not exceed 100% of the actual cost of the extensions excluding the construction cost of the house connections, rights-of-way, and engineering. The specific rebate amount is predicated upon the front foot assessments which provide the source of the debt service for the County's refinancing requirements.

Remarks

Project Schedule

Ongoing program



Project: FY2013 DEVELOPER REBATES WATER & SEWER

(In Thousands)		Five	e Year Ca	apital Pro	ogram	Master Plan								
Appropriation Object Class	Prior Appr.	FY2017 Budget	Appr. Total	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Sub Total	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	Total Project
CONSTRUCTION	4,000	0	4,000	0	0	0	0	0	0	0	0	0	0	4,000
Total Expenditures	4,000	0	4,000	0	0	0	0	0	0	0	0	0	0	4,000
IN-AID of CONSTRUCT UTILITIES	4,000	0	4,000	0	0	0	0	0	0	0	0	0	0	4,000
Total Funding	4,000	0	4,000	0	0	0	0	0	0	0	0	0	0	4,000

Project Status: \$0 spent and encumbered through February 2016