Overview of Public Works CIP

The Public Works FY 18 – 23 CIP includes two separate sections: Roads and Bridges.

Approximately \$87.7 million is included in the FY 18-23 CIP to maintain roads throughout the County. Approximately thirty-five percent of the County's road network is considered mainline or arterial roads. These roads carry a higher traffic volume. Sixty-five percent are lower volume roadways, including neighborhood roads. Typical repair strategies include patching, overlay, mill and overlay, full depth reclamation, and reconstruction.

Funding is provided to update the 1994 Design Manual for Roads and Storm Drains to meet current industry standards.

Included in FY 18 – 23 is \$0.6 million to support State road projects. Contributing to State projects may expedite the planning process for State roads in Carroll County. Market Street Extended, a new road construction project, will create a more direct connection to MD 140 from Old Westminster Pike.

Funding is included for the replacement or rehabilitation of nine bridge structures.

For additional information on these or other Public Works projects, please refer to the individual project pages.

COMMUNITY INVESTMENT PLAN FOR FISCAL YEARS 2018 TO 2023

	2018	2019	2020	2021	2022	2023	Prior Allocation	Balance to Complete	Total Project Cost
ROADS:	2016	2019	2020	2021	2022	2023	Allocation	Complete	Floject Cost
Design Manual Update	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000
Highway Safety Improvements	30,000	31,000	32,000	33,000	34,000	35,000	0	0	195,000
Market Street Extended	0	720,000	0	0	0	0	1,271,005	0	1,991,005
Pavement Management Program	11,685,000	12,210,000	12,660,000	13,120,000	13,770,000	14,375,000	0	0	77,820,000
Pavement Preservation	1,050,000	1,082,000	1,114,000	1,147,000	1,181,000	1,216,000	0	0	6,790,000
Ramp and Sidewalk Upgrades	75,000	75,000	75,000	75,000	75,000	75,000	0	0	450,000
Small Drainage Structures	115,000	121,000	127,000	133,000	140,000	147,000	0	0	783,000
Storm Drain Rehabilitation	321,409	298,000	347,000	396,000	445,000	494,000	0	0	2,301,409
Transportation/State Projects	0	0	200,000	200,000	200,000	0	100,000	0	700,000
ROADS TOTAL	\$13,526,409	\$14,537,000	\$14,555,000	\$15,104,000	\$15,845,000	\$16,342,000	\$1,371,005	\$0	\$91,280,414
SOURCES OF FUNDING:									
	000,000	00.00					4400 000		# c c c c c c c c c c c c c c c c c c c
Transfer from General Fund Property Tax	\$935,000 0	\$967,000 0	\$1,199,000 0	\$1,232,000 0	\$1,181,000 0	\$1,016,000 0	\$100,000 758,005	\$0 0	\$6,630,000 758,005
Bonds	10,999,000	12,250,000	12,036,000	12,552,000	13,344,000	14,006,000	513,000	0	75,700,000
Reallocated Bonds	0	0	0	0	0	0	0	0	0
Reallocated GF Transfer	250,000	0	0	0	0	0	0	0	250,000
Highway Administration	176,000	176,000	176,000	176,000	176,000	176,000	0	0	1,056,000
Reallocated Highway User Revenue	22,409	0	0	0	0	0	0	0	22,409
Reallocated Highway User Revenue Highway User Revenue	22,409 1,144,000	0 1,144,000	0 1,144,000	0 1,144,000	0 1,144,000	0 1,144,000	0	0	22,409 6,864,000

This project provides funding for consultant services to review the 1994 Design Manual for Roads and Storm Drains and update the Manual to meet the current guidelines of the American Association of State Highway Officials (AASHTO), the Federal Highway Administration (FHWA), the MD State Highway Administration (SHA), and any other technical guidelines. Updating the document will assist local engineers and surveyors in meeting design standards when preparing development documents.

	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Prior Allocation	Balance to Complete	Total Project Cost
·	1110	111)	1 1 20	11 21	1 1 22	11 23	Anocation	Complete	1 Toject Cost
Engineering/Design	250,000								250,000
Land Acquisition									0
Site Work									0
Construction									0
Equipment/Furnishings									0
Other									0
EXPENDITURES									
	•								
TOTAL	250,000	0	0	0			•		
		v	v	U	0	0	0	0	250,000
		v	v	U	U	U	U	0	250,000
SOURCES OF FUNDS		v	v	U	U	U	U	0	250,000
SOURCES OF FUNDS Transfer from General Fund				U	0	0	0	0	250,000
			•	v	U	U	U	0	,
Transfer from General Fund				V	0	0	0	0	0
Transfer from General Fund Local Income Tax	250,000			V	0		0	0	0
Transfer from General Fund Local Income Tax Property Tax				V	0	0	U	0	0 0 0

This project provides ongoing funding to address roads and road intersections with a history of frequent or severe accidents, and those with a significant potential for accidents. Among the possible improvements are minor changes in intersection geometry, turn lanes, signing additions or upgrades, traffic calming measures, and pavement marking upgrades.

Recent safety improvements:

Nicodemus Road Woodbine Road Hoods Mill Road Wine Road Marvin Ave

	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design									0
Land Acquisition									0
Site Work									0
Construction	30,000	31,000	32,000	33,000	34,000	35,000			195,000
Equipment/Furnishings									0
Other									0
EXPENDITURES									
	-								
TOTAL	30,000	31,000	32,000	33,000	34,000	35,000	0	0	195,000
	•								
SOURCES OF FUNDS									
Transfer from General Fund									0
Local Income Tax									0
Property Tax									0
Highway User Revenue	***	21.000	22.000	22 000		25.000			
riigiiway Osei Kevenue	30,000	31,000	32,000	33,000	34,000	35,000			195,000
riigiiway Osei Keveliue	30,000	31,000	32,000	33,000	34,000	35,000			195,000

0240

Functional Classification: Collector Average Daily Traffic: TBD Length: Approximately 1,400 feet Limits: MD 140 to Old Westminster Pike

This project provides planned funding for the construction of a more direct connection to MD 140 from Old Westminster Pike. This connector will reduce traffic on Old Baltimore Road and the local streets that extend from Old Westminster Pike to Old Baltimore Road, and will provide redundancy in the road network. The connection to MD 140 will be located at the existing traffic signal at Market Street/Old Baltimore Road.

The prior allocation of \$1.3 million was for land acquisition.

	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design									0
Land Acquisition							1,271,005		1,271,005
Site Work		51,000							51,000
Construction		516,000							516,000
Equipment/Furnishings									0
Other		153,000							153,000
EXPENDITURES									
_	•								
TOTAL	0	720,000	0	0	0	0	1,271,005	0	1,991,005
	•								
SOURCES OF FUNDS									
Transfer from General Fund									0
Local Income Tax									0
Property Tax							758,005		758,005
Bonds		720,000					513,000		1,233,000
				·		·		·	
PROJECTED OPERATING							_		

IMPACTS

Heidi K. Pepin, Management and Budget Project Coordinator (410) 386-2082

This project provides ongoing funding for the maintenance, repair or rehabilitation of the County's 900 miles of paved roads. A pavement management software program is used to collect road condition information and to recommend the most cost-effective repair. Repair strategies include: patching, overlay, mill and overlay, full depth reclamation, and reconstruction. Drainage structures and guardrails will be replaced or added where necessary.

Approximately thirty-five percent of the County's road network is considered mainline or collector and arterial roads. These roads typically carry a higher traffic volume. Sixty-five percent are lower volume roads, including neighborhood roads.

	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Prior Allocation	Balance to Complete	Total Project Cost
								•	<u>'</u>
Engineering/Design	105,000	110,000	115,000	120,000	125,000	125,000			700,000
Land Acquisition									0
Site Work									0
Construction	11,050,000	11,550,000	11,970,000	12,400,000	13,020,000	13,600,000			73,590,000
Equipment/Furnishings									0
Other	530,000	550,000	575,000	600,000	625,000	650,000			3,530,000
EXPENDITURES									
TOTAL	11,685,000	12,210,000	12,660,000	13,120,000	13,770,000	14,375,000	0	0	77,820,000
	_								
SOURCES OF FUNDS									
Transfer from General Fund	800,000	800,000	800,000	800,000	800,000	800,000			4,800,000
Bonds	10,709,000	11,234,000	11,684,000	12,144,000	12,794,000	13,399,000			71,964,000
Reallocated Bonds									0
Highway Administration	176,000	176,000	176,000	176,000	176,000	176,000			1,056,000
PROJECTED OPERATING									

This project provides ongoing funding to place a maintenance seal coat, such as microsurface, on various roads. Pavement preservation is applied to roads while they are still in good condition and before the onset of serious damage. Annual funding addresses approximately 30-40 miles.

The upcoming project list is generated in the spring in preparation for the summer construction season.

	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design									0
Land Acquisition									0
Site Work									0
Construction	1,050,000	1,082,000	1,114,000	1,147,000	1,181,000	1,216,000			6,790,000
Equipment/Furnishings									0
Other									0
EXPENDITURES									
	_								
TOTAL	1,050,000	1,082,000	1,114,000	1,147,000	1,181,000	1,216,000	0	0	6,790,000
TOTAL	1,050,000	1,082,000	1,114,000	1,147,000	1,181,000	1,216,000	0	0	6,790,000
TOTAL SOURCES OF FUNDS	1,050,000	1,082,000	1,114,000	1,147,000	1,181,000	1,216,000	0	0	6,790,000
	1,050,000	1,082,000 32,000	1,114,000 64,000	1,147,000 97,000	1,181,000 131,000	1,216,000 166,000	0	0	6,790,000 490,000
SOURCES OF FUNDS	1,050,000		, ,	, ,		, ,	0	0	
SOURCES OF FUNDS Transfer from General Fund	1,050,000		, ,	, ,		, ,	0	0	490,000
SOURCES OF FUNDS Transfer from General Fund Local Income Tax	1,050,000		, ,	, ,		, ,	0	0	490,000
SOURCES OF FUNDS Transfer from General Fund Local Income Tax Property Tax		32,000	64,000	97,000	131,000	166,000	0	0	490,000

This project provides ongoing funding to upgrade or replace non-compliant sidewalk ramps for ADA accessibility. Non-compliant ramps and sidewalks are also addressed through the Pavement Management Program. As part of this process, a self-evaluation of pedestrian facilities within county rights-of-way has been completed and will be used to develop a prioritized plan to address deficiencies. Funding in this project will address approximately 850 curb ramps at various intersections and is planned to continue through FY 25.

							Prior	Balance to	Total
	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Allocation	Complete	Project Cost
Engineering/Design									0
Land Acquisition									0
Site Work	7,500	7,500	7,500	7,500	7,500	7,500			45,000
Construction	60,000	60,000	60,000	60,000	60,000	60,000			360,000
Equipment/Furnishings									0
Other	7,500	7,500	7,500	7,500	7,500	7,500			45,000
EXPENDITURES									
	-								
_									
TOTAL	75,000	75,000	75,000	75,000	75,000	75,000	0	0	450,000
TOTAL	75,000	75,000	75,000	75,000	75,000	75,000	0	0	450,000
TOTAL SOURCES OF FUNDS	75,000	75,000	75,000	75,000	75,000	75,000	0	0	450,000
	75,000	75,000	75,000	75,000	75,000	75,000	0	0	450,000
SOURCES OF FUNDS	75,000	75,000	75,000	75,000	75,000	75,000	0	0	
SOURCES OF FUNDS Transfer from General Fund	75,000	75,000	75,000	75,000	75,000	75,000	0	0	0
SOURCES OF FUNDS Transfer from General Fund Local Income Tax	75,000 75,000	75,000 75,000	75,000 75,000	75,000 75,000	75,000 75,000	75,000 75,000	0	0	0
SOURCES OF FUNDS Transfer from General Fund Local Income Tax Property Tax					,		0	0	0 0

9847

This project provides ongoing funding to repair or replace deteriorated drainage structures including culvert pipes, headwalls, and ancillary drainage features. Recently completed project sites include Kridlers Schoolhouse Road, Lineboro Road, Grave Run Road, and Dr. Stitely Road pipe culvert replacements, Deep Run Road pipe slip-lining rehabilitation, and Wildorlyn Drive storm drainage system.

The Department of Public Works continues to incorporate all pipe culverts and drainage structures into the Geographic Information System (GIS). Once the locations are identified and mapped, field condition assessments can be made to help determine the most cost-effective approach to replacing and repairing these drainage structures.

							Prior	Balance to	Total
	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Allocation	Complete	Project Cost
,									
Engineering/Design									0
Land Acquisition									0
Site Work									0
Construction	115,000	121,000	127,000	133,000	140,000	147,000			783,000
Equipment/Furnishings									0
Other	Į l								0
EXPENDITURES									
	ı								
TOTAL	115,000	121,000	127,000	133,000	140,000	147,000	0	0	783,000
	•								
SOURCES OF FUNDS									
Transfer from General Fund									0
	ı								
Local Income Tax									0
Local Income Tax Property Tax									0
	115,000	121,000	127,000	133,000	140,000	147,000			
Property Tax	115,000	121,000	127,000	133,000	140,000	147,000			0

This project provides ongoing funding to gather video camera data of existing storm drain pipes and to maintain the storm drain system through repairs and replacement. Video inspections will assess condition to determine if repairs or replacements are needed and funding is provided for infrastructure rehabilitation.

The County maintains about 180 miles (or 950,000 feet) of storm drain infrastructure, mostly located in neighborhoods where curbing, inlets, and manholes exist. Many of the storm drain systems were constructed in the late 1960s and 1970s and may be reaching the end of their useful life.



Photograph of a deteriorated metal pipe.

	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Prior Allocation	Balance to Complete	Total Project Cost
•								•	J
Engineering/Design	135,000	135,000	135,000	135,000	50,000	50,000			640,000
Land Acquisition									0
Site Work									0
Construction	186,409	163,000	212,000	261,000	395,000	444,000			1,661,409
Equipment/Furnishings									0
Other									0
EXPENDITURES									
_									
TOTAL	321,409	298,000	347,000	396,000	445,000	494,000	0	0	2,301,409
SOURCES OF FUNDS									
Transfer from General Fund	135,000	135,000	135,000	135,000	50,000	50,000			640,000
Bonds	100,000	100,000	150,000	200,000	335,000	385,000			1,270,000
Reallocated Highway User	22,409								22,409
Highway User Revenue	64,000	63,000	62,000	61,000	60,000	59,000			369,000
PROJECTED OPERATING IMPACTS	0	0	0	0	0	0			

8629

This project provides planned funding to support State road projects in Carroll County. Contributing County funding to State projects may encourage the planning process and the construction of State roads in Carroll County.

	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Prior Allocation	Balance to Complete	Total Project Cost
•	1110	1117	1120	1121	1 1 22	1123	Miocation	Complete	Troject Cost
Engineering/Design			200,000	200,000	200,000		100,000		700,000
Land Acquisition									0
Site Work									0
Construction									0
Equipment/Furnishings									0
Other									0
EXPENDITURES									
TOTAL	0	0	200,000	200,000	200,000	0	100,000	0	700,000
TOTAL	0	0	200,000	200,000	200,000	0	100,000	0	700,000
TOTAL SOURCES OF FUNDS	0	0	200,000	200,000	200,000	0	100,000	0	700,000
	0	0	200,000	200,000	200,000	0	100,000	0	700,000
SOURCES OF FUNDS	0	0	,	, , , , , , , , , , , , , , , , , , ,		0	ŕ	0	
SOURCES OF FUNDS Transfer from General Fund	0	0	,	, , , , , , , , , , , , , , , , , , ,		0	ŕ	0	700,000
SOURCES OF FUNDS Transfer from General Fund Local Income Tax	0	0	,	, , , , , , , , , , , , , , , , , , ,		0	ŕ	0	700,000
SOURCES OF FUNDS Transfer from General Fund Local Income Tax Property Tax	0	0	,	, , , , , , , , , , , , , , , , , , ,		0	ŕ	0	700,000