# **Overview of Public Works CIP**

The Public Works FY 17 – 22 CIP includes two separate sections: Roads and Bridges.

Johnsville Road Sidewalk project will provide a connection to Eldersburg Elementary School, Liberty High School, residential neighborhoods, and the commercial corridor along MD 32 (Sykesville Road) via Bartholow Road. This project will be 80 percent funded for design and construction costs by the Safe Routes to School Program, administered by the Maryland Department of Transportation.

Approximately \$82 million is included in the FY 17 - 22 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.

Included in FY 17 is \$1.1 million for Storm Drain Rehabilitation, based on anticipated Highway User Revenue planned in the Governor's Budget.

Also included is ongoing bridge maintenance and replacement/repairs for four bridges.

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

#### COMMUNITY INVESTMENT PLAN FOR FISCAL YEARS 2017 TO 2022

	2017	2018	2019	2020	2021	2022	Prior Allocation	Balance to Complete	Total Project Cost
ROADS:								•	
Highway Safety Improvements	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$0	\$0	\$180,000
Johnsville Road Sidewalk	290,256	0	0	0	0	0	29,200	0	319,456
Market Street Extended	63,000	0	861,900	0	0	0	1,208,005	0	2,132,905
Pavement Management Program	11,180,000	11,685,000	12,210,000	12,660,000	13,120,000	13,770,000	0	0	74,625,000
Pavement Preservation	1,080,000	1,130,000	1,220,000	1,250,000	1,280,000	1,320,000	0	0	7,280,000
Ramp and Sidewalk Upgrades	75,000	75,000	75,000	75,000	75,000	75,000	0	0	450,000
Small Drainage Structures	84,000	87,000	90,000	93,000	95,000	98,000	0	0	547,000
Storm Drain Rehabilitation	1,100,000	0	180,000	180,000	180,000	300,000	0	0	1,940,000
ROADS TOTAL	\$13,902,256	\$13,007,000	\$14,666,900	\$14,288,000	\$14,780,000	\$15,593,000	\$1,237,205	\$0	\$87,474,361
SOURCES OF FUNDING:									
Transfer from General Fund	\$34,691	\$850,000	\$1,120,000	\$1,150,000	\$1,180,000	\$1,090,000	\$22,045	\$0	\$5,446,736
Property Tax	0	0	0	0	0	0	758,005	0	758,005
Bonds	10,240,359	10,871,000	12,260,900	11,852,000	12,314,000	13,217,000	457,155	0	71,212,414
Reallocated Bonds	56,024	0	0	0	0	0	0	0	56,024
Reallocated GF Transfer	929,617	0	0	0	0	0	0	0	929,617
Highway Administration	176,000	176,000	176,000	176,000	176,000	176,000	0	0	1,056,000
Highway User Revenue	2,210,000	1,110,000	1,110,000	1,110,000	1,110,000	1,110,000	0	0	7,760,000
Grants (MDE, CDBG)	255,565	0	0	0	0	0	0	0	255,565
ROADS TOTAL	\$13,902,256	\$13,007,000	\$14,666,900	\$14,288,000	\$14,780,000	\$15,593,000	\$1,237,205	\$0	\$87,474,361

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

	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Prior Allocation	Balance to Complete	Total Project Cost
•									
Engineering/Design									0
Land Acquisition									0
Site Work									0
Construction	30,000	30,000	30,000	30,000	30,000	30,000			180,000
Equipment/Furnishings									0
Other									0
EXPENDITURES	•	•			•			•	·
TOTAL	30,000	30,000	30,000	30,000	30,000	30,000	0	0	100.000
					20,000	20,000	U	U	180,000
				, , , , , , , , , , , , , , , , , , ,	20,000	20,000	<u> </u>	U	180,000
SOURCES OF FUNDS				, and the second	20,000	20,000	U	U	180,000
SOURCES OF FUNDS Transfer from General Fund				ŕ	20,000	20,000	U	U	180,000
					25,000	50,000	0	0	,
Transfer from General Fund					25,000	20,000	0		0
Transfer from General Fund Local Income Tax	30,000	30,000	30,000	30,000	30,000	30,000			0
Transfer from General Fund Local Income Tax Property Tax	30,000	30,000	30,000	30,000					0 0
Transfer from General Fund Local Income Tax Property Tax	30,000	30,000	30,000	30,000				0	0 0

Length: Approximately 790 feet

Limits: Opposite Victor Drive to Bartholow Road

This project provides funding for construction of a sidewalk along Johnsville Road in Freedom. The project will provide sidewalk connections to Eldersburg Elementary School, Liberty High School, residential neighborhoods, and the commercial corridor along MD 32 (Sykesville Road) via Bartholow Road. Eighty percent of design and construction costs are being funded by the Safe Routes to School Program, administered by the Maryland Department of Transportation.

	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Prior Allocation	Balance to Complete	Total Project Cost
•	·		-						- J
Engineering/Design							29,200		29,200
Land Acquisition									0
Site Work									0
Construction									0
Equipment/Furnishings									0
Other	290,256								290,256
EXPENDITURES									
	-								
TOTAL	290,256	0	0	0	0	0	29,200	0	319,456
	ī								
SOURCES OF FUNDS		<u> </u>							
Transfer from General Fund	34,691						22,045		56,736
Property Tax									0
Bonds							7,155		7,155
Grants (MDE, CDBG)	255,565								255,565
PROJECTED OPERATING IMPACTS									

8318

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Functional Classification: Collector Average Daily Traffic: TBD Length: Approximately 1,400 ft

Limits: MD 140 to Old Westminster Pike

This project provides 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. The connection to MD 140 will be located at the existing traffic signal at Market Street/Old Baltimore Road.

The prior allocation of \$1.2 million was for land acquisition.

	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Prior Allocation	Balance to Complete	Total Project Cost
-								•	<u> </u>
Engineering/Design									(
Land Acquisition	63,000						1,208,005		1,271,005
Site Work			66,300						66,300
Construction			663,000						663,000
Equipment/Furnishings									0
Other			132,600						132,600
TOTAL	63 000	0	861 900	0	0	0	1 208 005	0	2 132 905
TOTAL	63,000	0	861,900	0	0	0	1,208,005	0	2,132,905
SOURCES OF FUNDS									
Transfer from General Fund									0
Local Income Tax									0
Property Tax							758,005		758,005
Bonds	63,000		861,900				450,000		1,374,900
PROJECTED OPERATING IMPACTS	0	0	0	0	0	0			

### **Pavement Management Program**

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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 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 17	FY 18	FY 19	FY 20	FY 21	FY 22	Prior Allocation	Balance to Complete	Total Project Cost
									<del></del>
Engineering/Design	100,000	105,000	110,000	115,000	120,000	125,000			675,000
Land Acquisition									0
Site Work									0
Construction	10,570,000	11,050,000	11,550,000	11,970,000	12,400,000	13,020,000			70,560,000
Equipment/Furnishings									0
Other	510,000	530,000	550,000	575,000	600,000	625,000			3,390,000
EXPENDITURES									
	_								
TOTAL	11,180,000	11,685,000	12,210,000	12,660,000	13,120,000	13,770,000	0	0	74,625,000
TOTAI	11,180,000	11,685,000	12,210,000	12,660,000	13,120,000	13,770,000	0	0	74,625,000
TOTAI SOURCES OF FUNDS	11,180,000	11,685,000	12,210,000	12,660,000	13,120,000	13,770,000	0	0	74,625,000
	11,180,000	11,685,000 800,000	<b>12,210,000</b> 800,000	<b>12,660,000</b> 800,000	<b>13,120,000</b> 800,000	<b>13,770,000</b> 800,000	0	0	74,625,000 4,000,000
SOURCES OF FUNDS	<b>11,180,000</b> 10,018,359				., .,	., .,	0	0	
SOURCES OF FUNDS Transfer from General Fund	1	800,000	800,000	800,000	800,000	800,000	0	0	4,000,000
SOURCES OF FUNDS Transfer from General Fund Bonds	10,018,359	800,000	800,000	800,000	800,000	800,000	0	0	4,000,000 68,583,359
SOURCES OF FUNDS Transfer from General Fund Bonds Reallocated Bonds	10,018,359	800,000	800,000	800,000	800,000	800,000	0	0	4,000,000 68,583,359 56,024
SOURCES OF FUNDS Transfer from General Fund Bonds Reallocated Bonds Reallocated GF Transfer	10,018,359 56,024 929,617	800,000	800,000 11,234,000	800,000 11,684,000	800,000 12,144,000	800,000 12,794,000	0	0	4,000,000 68,583,359 56,024 929,617

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 30-35 miles.

	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design									0
Land Acquisition									0
Site Work									0
Construction	1,080,000	1,130,000	1,220,000	1,250,000	1,280,000	1,320,000			7,280,000
Equipment/Furnishings									0
Other									0
EXPENDITURES									
	_								
TOTAL	1,080,000	1,130,000	1,220,000	1,250,000	1,280,000	1,320,000	0	0	7,280,000
TOTAL	1,080,000	1,130,000	1,220,000	1,250,000	1,280,000	1,320,000	0	0	7,280,000
TOTAI	1,080,000	1,130,000	1,220,000	1,250,000	1,280,000	1,320,000	0	0	7,280,000
	1,080,000	<b>1,130,000</b> 50,000	<b>1,220,000</b> 140,000	<b>1,250,000</b> 170,000	<b>1,280,000</b> 200,000	<b>1,320,000</b> 240,000	0	0	7,280,000
SOURCES OF FUNDS	1,080,000	, ,	, ,	, ,	, ,	, ,	0	0	
SOURCES OF FUNDS Transfer from General Fund	1,080,000	, ,	, ,	, ,	, ,	, ,	0	0	800,000
SOURCES OF FUNDS Transfer from General Fund Local Income Tax	1,080,000	, ,	, ,	, ,	, ,	, ,	0	0	800,000
SOURCES OF FUNDS  Transfer from General Fund  Local Income Tax  Property Tax		50,000	140,000	170,000	200,000	240,000	0	0	800,000

# Ramp and Sidewalk Upgrades

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This project provides 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 for review.

This project allows for acceleration of the replacement and upgrade of: 66.5 miles of sidewalk within the County right-of-way 855 curb ramps at various intersections 3,048 driveways and entrances considered part of the sidewalk network

-	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Prior Allocation	Balance to Complete	Total 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
SOURCES OF FUNDS									
Transfer from General Fund									0
Local Income Tax									0
Property Tax									0
Bonds	75,000	75,000	75,000	75,000	75,000	75,000			450,000
PROJECTED OPERATING IMPACTS	0	0	0	0	0	0	•		

# **Small Drainage Structures**

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This project provides ongoing funding to repair or replace deteriorated drainage structures including culvert pipes, headwalls, and ancillary drainage features. Some recently completed project sites include Salem Bottom Road pipe culvert replacement, Piney Run Court drainage system, and White Rock Road culvert replacement/repairs.

The Department of Public Works is working toward incorporating 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.

	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Prior Allocation	Balance to Complete	Total Project Cost
•								•	<u> </u>
Engineering/Design									0
Land Acquisition									0
Site Work									0
Construction	84,000	87,000	90,000	93,000	95,000	98,000			547,000
Equipment/Furnishings									0
Other									0
EXPENDITURES									
_									
TOTAL	84,000	87,000	90,000	93,000	95,000	98,000	0	0	547,000
TOTAL	84,000	87,000	90,000	93,000	95,000	98,000	0	0	547,000
TOTAL SOURCES OF FUNDS	84,000	87,000	90,000	93,000	95,000	98,000	0	0	547,000
	84,000	87,000	90,000	93,000	95,000	98,000	0	0	547,000
SOURCES OF FUNDS	84,000	87,000	90,000	93,000	95,000	98,000	0	0	
SOURCES OF FUNDS Transfer from General Fund	84,000	87,000	90,000	93,000	95,000	98,000	0	0	0
SOURCES OF FUNDS Transfer from General Fund Local Income Tax	84,000 84,000	<b>87,000 87,000</b>	90,000	93,000 93,000	<b>95,000</b> 95,000	<b>98,000</b> 98,000	0	0	0
SOURCES OF FUNDS  Transfer from General Fund  Local Income Tax  Property Tax							0	0	0

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This project, previously included as Storm Drain Inspections, provides funding to gather video camera data of the older metal storm drain pipes to assess the condition and determine if repairs or replacements are needed. Funding is included in FY 22 to begin needed repairs or replacement of existing storm drain pipes and structures.

The County maintains about 180 miles (or 950,000 feet) of storm drain infrastructure, mostly located in neighborhoods where curbing and inlets 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.

Funding in FY 17 is contingent on receiving Highway User Revenue as included in the Governor's Budget.

	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Prior Allocation	Balance to Complete	Total Project Cost
									<b>y</b>
Engineering/Design			180,000	180,000	180,000	50,000			590,000
Land Acquisition									0
Site Work									0
Construction	1,100,000					250,000			1,350,000
Equipment/Furnishings									0
Other									0
EXPENDITURES									
	•								
TOTAL	1,100,000	0	180,000	180,000	180,000	300,000	0	0	1,940,000
	1								
SOURCES OF FUNDS						-		Γ	
Transfer from General Fund			180,000	180,000	180,000	50,000			590,000
Property Tax									0
Bonds						250,000			250,000
Highway User Revenue	1,100,000								1,100,000
PROJECTED OPERATING IMPACTS							•		