Overview of Public Works CIP

The Public Works CIP includes two sections: Roads and Bridges.

Approximately \$97.7M is included in the FY 22 - 27 CIP to maintain and rehabilitate 900 miles of 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 sealing, overlay, mill and overlay, full-depth reclamation, and reconstruction.

Included is \$0.1M to support State road projects. Contributing to State projects may expedite the planning process for State roads in Carroll County.

Ongoing funding is included for inspection of storm drains. Video inspections will assess the condition of the storm drain system and rehabilitation funding is included for pipe lining and replacement of storm drains and small drainage structures.

Funding is included for the replacement or rehabilitation of six 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 2022 TO 2027

							Prior	Balance To	Total
	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	Allocation	Complete	Project Cost
ROADS									
Highway Safety Improvements	\$33,000	\$35,000	\$37,000	\$38,000	\$40,000	\$42,000	\$0	\$0	\$225,000
Pavement Management Program	13,286,000	11,293,000	15,525,000	15,878,000	16,673,000	17,510,000	0	0	90,165,000
Pavement Preservation	1,180,000	1,215,000	1,255,000	1,260,000	1,310,000	1,335,000	0	0	7,555,000
Ramp and Sidewalk Upgrades	85,000	88,000	92,000	96,000	103,000	109,000	0	0	573,000
Small Drainage Structures	253,000	283,000	313,000	343,500	360,000	378,000	0	0	1,930,500
State Road Projects	100,000	0	0	0	0	0	834,990	0	934,990
,									
Storm Drain Rehabilitation	253,000	283,000	313,000	343,500	360,000	378,000	0	0	1,930,500
Storm Drain Video Inspection	146,000	153,000	161,000	169,000	177,000	186,000	0	0	992,000
ROADS TOTAL	\$15,336,000	\$13,350,000	\$17,696,000	\$18,128,000	\$19,023,000	\$19,938,000	\$834,990	\$0	\$104,305,990
SOURCES OF FUNDING:									
Transfer from General Fund	\$100,000	\$0	\$161,000	\$1,219,000	\$1,277,000	\$1,311,000	\$834,990	\$0	\$4,902,990
Bonds	10,871,000	11,314,000	15,379,000	15,685,000	16,520,000	17,399,000	0	0	87,168,000
Reallocated Bonds	2,830,000	0	0	0	0	0	0	0	2,830,000
State Highway Administration	176,000	176,000	176,000	176,000	176,000	176,000	0	0	1,056,000
Highway User Revenue	1,359,000	1,860,000	1,980,000	1,048,000	1,050,000	1,052,000	0	0	8,349,000
ROADS TOTAL	\$15,336,000	\$13,350,000	\$17,696,000	\$18,128,000	\$19,023,000	\$19,938,000	\$834,990	\$0	\$104,305,990

Highway Safety Improvements

Donald England, Management and Budget Analyst (410) 386-2082

This project provides ongoing funding to address roadway segments and intersections with a history of frequent or severe crashes, and those with a significant potential for crashes. Possible improvements include minor changes in intersection geometry, turn lanes, signing additions or upgrades, traffic calming measures and pavement marking upgrades.

Recently completed improvements includes Sunshine Way traffic calming, Bartholow Road pedestrian crossing, Compton Lane instersection evaluation.

_	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design		I							0
Land Acquisition									0
Site Work									0
Construction	33,000	35,000	37,000	38,000	40,000	42,000			225,000
Equipment/Furnishings									0
Other									0
EXPENDITURES									
_									
TOTAL	33,000	35,000	37,000	38,000	40,000	42,000	0	0	225,000
	33,000	35,000	37,000	38,000	40,000	42,000	0	0	225,000
TOTAL SOURCES OF FUNDING Transfer from General Fund	33,000	35,000	37,000	38,000	40,000	42,000	0	0	225,000
SOURCES OF FUNDING	33,000	35,000	37,000	38,000	40,000	42,000	0	0	
SOURCES OF FUNDING Transfer from General Fund	33,000	35,000 35,000	37,000 37,000	38,000 38,000	40,000	42,000 42,000	0	0	0
SOURCES OF FUNDING Transfer from General Fund Reallocated GF Transfer	33,000						0	0	0
SOURCES OF FUNDING Transfer from General Fund Reallocated GF Transfer Highway User Revenue	33,000						0	0	0 0 225,000

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Pavement Management Program

Donald England, Management and Budget Analyst (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 traffic barriers will be inspected, repaired, replaced, or added where necessary, and sidewalk accessibility will also be evaluated and included if upgrades are due.

Maintaining a road network in satisfactory condition is one of the goals of the Department of Public Works. While addressing roads that are near failure is important, maintaining roads in fair and satisfactory condition is important as well. It is cost effective to address roads while the amount of repair is minimal and this balanced approach keeps the network in satisfactory condition.

During the FY 20 budget process, funding over FY 21 - 23 was reduced by \$4.7M.

	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design	125,000	125,000	125,000	128,000	135,000	142,000			780,000
Land Acquisition									0
Site Work									0
Construction	12,250,000	10,225,000	14,300,000	15,000,000	15,750,000	16,540,000			84,065,000
Equipment/Furnishings									0
Other	911,000	943,000	1,100,000	750,000	788,000	828,000			5,320,000
EXPENDITURES									
TOTAL	13,286,000	11,293,000	15,525,000	15,878,000	16,673,000	17,510,000	0	0	90,165,000
SOURCES OF FUNDING									
Transfer from General Fund				800,000	800,000	800,000			2,400,000
Bonds	10,280,000	10,660,000	14,661,000	14,902,000	15,697,000	16,534,000			82,734,000
Reallocated Bonds	2,830,000								2,830,000
State Highway Administration	176,000	176,000	176,000	176,000	176,000	176,000			1,056,000
Highway User Revenue		457,000	688,000					-	1,145,000
PROJECTED OPERATING									
IMPACTS	0	0	0	0	0	0			

Pavement Preservation

Donald England, Management and Budget Analyst (410) 386-2082

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

The project list will be generated in the spring in preparation for the summer construction season.

_	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Degign									0
Engineering/Design									0
Land Acquisition									0
Site Work									0
Construction	1,180,000	1,215,000	1,255,000	1,259,000	1,296,000	1,335,000			7,540,000
Equipment/Furnishings									0
Other									0
EXPENDITURES									
TOTAL	1,180,000	1,215,000	1,255,000	1,259,000	1,296,000	1,335,000	0	0	7,540,000
_									
SOURCES OF FUNDING									
Transfer from General Fund				249,000	286,000	325,000			860,000
Reallocated GF Transfer									
									0
Highway User Revenue	1,180,000	1,215,000	1,255,000	1,010,000	1,010,000	1,010,000			6,680,000
Highway User Revenue Reallocated Highway User Revenue	, ,	1,215,000	1,255,000	1,010,000	1,010,000	1,010,000			
	, ,	1,215,000	1,255,000	1,010,000	1,010,000	1,010,000			6,680,000

Donald England, Management and Budget Analyst (410) 386-2082

This project provides ongoing funding to upgrade or replace non-compliant ramps and sidewalks for ADA accessibility. Non-compliant ramps and sidewalks are also addressed through the Pavement Management Program. This project allows for the acceleration of the replacement and upgrade process.

	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	Prior Allocation	Balance to Complete	Total Project Cost
	11 22	1123	1127	1123	1120	1127	Milocation	Complete	Troject Cost
Engineering/Design									0
Land Acquisition									0
Site Work	8,500	8,500	9,000	9,000	9,500	10,000			54,500
Construction	69,000	72,000	75,000	79,000	85,000	90,000			470,000
Equipment/Furnishings									0
Other	7,500	7,500	8,000	8,000	8,500	9,000			48,500
EXPENDITURES									
-									
_									
TOTAL	85,000	88,000	92,000	96,000	103,000	109,000	0	0	573,000
TOTAL	85,000	88,000	92,000	96,000	103,000	109,000	0	0	573,000
TOTAL SOURCES OF FUNDING	85,000	88,000	92,000	96,000	103,000	109,000	0	0	573,000
	85,000	88,000	92,000	96,000	103,000	109,000	0	0	573,000
SOURCES OF FUNDING	85,000	88,000	92,000	96,000	103,000	109,000	0	0	
SOURCES OF FUNDING Transfer from General Fund	85,000 85,000	88,000 88,000	92,000 92,000	96,000 96,000	103,000	109,000	0	0	0
SOURCES OF FUNDING Transfer from General Fund Reallocated GF Transfer							0	0	0
SOURCES OF FUNDING Transfer from General Fund Reallocated GF Transfer Bonds							0	0	0 0 573,000

Small Drainage Structures

Donald England, Management and Budget Analyst (410) 386-2082

This project provides ongoing funding to rehabilitate or replace deteriorated drainage structures including culvert headwalls and ancillary drainage features.

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

	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	Prior Allocation	Balance to Complete	Total Project Cost
		1123		1120	1120	112,	111104411011	compress	110,000 0000
Engineering/Design									0
Land Acquisition									0
Site Work									0
Construction	253,000	283,000	313,000	343,500	360,000	378,000			1,930,500
Equipment/Furnishings									0
Other									0
EXPENDITURES									
-									
TOTAL	253,000	283,000	313,000	343,500	360,000	378,000	0	0	1,930,500
TOTAL	253,000	283,000	313,000	343,500	360,000	378,000	0	0	1,930,500
TOTAL SOURCES OF FUNDING	253,000	283,000	313,000	343,500	360,000	378,000	0	0	1,930,500
	253,000	283,000	313,000	343,500	360,000	378,000	0	0	1,930,500
SOURCES OF FUNDING	253,000	283,000	313,000	343,500	360,000	378,000	0	0	
SOURCES OF FUNDING Transfer from General Fund	253,000 253,000	283,000	313,000	343,500 343,500	360,000	378,000 378,000	0	0	0
SOURCES OF FUNDING Transfer from General Fund Reallocated GF Transfer							0	0	0
SOURCES OF FUNDING Transfer from General Fund Reallocated GF Transfer Bonds							0	0	0 0 1,930,500

9847

Storm Drain Rehabilitation

Donald England, Management and Budget Analyst (410) 386-2082

8627

This project provides ongoing funding to maintain the storm drain system through rehabilitation and replacement. The County maintains about 180 miles (or 950,000 feet) of storm drain infrastructure, primarily located in neighborhoods where curbing, inlets, and manholes exist. Many of these systems were constructed with corrugated metal pipe, which has a life span of 30 - 50 years.

In 2018 and 2019, 3,490 linear feet of storm drain pipes were rehabilitated and in 2020, 3,600 linear feet of storm drain pipes will be rehabilitated.

	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	Prior Allocation	Balance to Complete	Total Project Cost
		1120	1121	1120	1120	112,	111104411011	compress	110,000 0000
Engineering/Design									0
Land Acquisition									0
Site Work									0
Construction	253,000	283,000	313,000	343,500	360,000	378,000			1,930,500
Equipment/Furnishings									0
Other									0
EXPENDITURES									
-									
TOTAL	253,000	283,000	313,000	343,500	360,000	378,000	0	0	1,930,500
TOTAL	253,000	283,000	313,000	343,500	360,000	378,000	0	0	1,930,500
TOTAL SOURCES OF FUNDING	253,000	283,000	313,000	343,500	360,000	378,000	0	0	1,930,500
	253,000	283,000	313,000	343,500	360,000	378,000	0	0	1,930,500
SOURCES OF FUNDING	253,000	283,000	313,000	343,500	360,000	378,000	0	0	
SOURCES OF FUNDING Transfer from General Fund	253,000 253,000	283,000 283,000	313,000	343,500 343,500	360,000	378,000 378,000	0	0	0
SOURCES OF FUNDING Transfer from General Fund Reallocated GF Transfer		-					0	0	0
SOURCES OF FUNDING Transfer from General Fund Reallocated GF Transfer Bonds		-					0	0	0 0 1,930,500

Donald England, Management and Budget Analyst (410) 386-2082

This project provides ongoing funding to gather video inspection data of existing storm drain pipes. Inspection data is also collected for roads repaired through the Pavement Management program. Video inspections will determine if repairs or replacements are needed, and funding is provided for infrastructure rehabilitation in Storm Drain Rehabilitation.

	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design	146,000	153,000	161,000	169,000	177,000	186,000			992,000
Land Acquisition									0
Site Work									0
Construction									0
Equipment/Furnishings									0
Other									0
EXPENDITURES									
TOTAL	146,000	153,000	161,000	169,000	177,000	186,000	0	0	992,000
SOURCES OF FUNDING									
Transfer from General Fund			161,000	169,000	177,000	186,000			693,000
Reallocated GF Transfer									0
Highway User Revenue	146,000	153,000							299,000
Reallocated Highway User Revent	ue								0
PROJECTED OPERATING IMPACTS	0	0	0	0	0	0			