### **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

	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	Prior Allocation	Balance To Complete	Total Project Cost
BRIDGES	F1 22	Г1 23	Г1 24	F1 23	F 1 20	F1 2/	Allocation	Complete	Project Cost
DRIDGES									
Bridge Inspection and Inventory	\$31,000	\$32,000	\$33,000	\$34,000	\$35,000	\$36,000	\$0	\$0	\$201,000
Bridge Maintenance and Structural Repair	78,000	82,000	85,000	89,000	94,000	99,000	0	0	527,000
Brown Road over Roaring Run	0	0	270,000	0	1,439,000	0	0	0	1,709,000
Cleaning and Painting of Bridge Structural Steel	234,000	246,000	258,000	271,000	284,000	298,000	0	0	1,591,000
Gaither Road over South Branch Patapsco	2,096,850	0	0	0	0	0	275,000	0	2,371,850
Hawks Hill Road over Little Pipe Creek Tributary	255,000	0	510,000	0	0	0	0	0	765,000
McKinstrys Mill Road over Little Pipe Creek	0	0	250,000	0	0	1,746,000	0	0	1,996,000
Old Kays Mill Road over Beaver Run	0	0	270,000	0	2,296,000	0	0	0	2,566,000
Patapsco Road Bridge Deck Replacement	0	0	0	0	170,000	424,000	0	0	594,000
BRIDGES TOTAL	\$2,694,850	\$360,000	\$1,676,000	\$394,000	\$4,318,000	\$2,603,000	\$275,000	\$0	\$12,320,850
SOURCES OF FUNDING:									
Transfer from General Fund	\$156,000	\$163,000	\$170,000	\$177,000	\$186,000	\$198,000	\$0	\$0	\$1,050,000
Bonds	666,700	0	668,000	0	917,000	570,000	59,000	0	2,880,700
Federal Highway/Bridge	1,872,150	197,000	838,000	217,000	3,215,000	1,835,000	216,000	0	8,390,150
BRIDGES TOTAL	\$2,694,850	\$360,000	\$1,676,000	\$394,000	\$4,318,000	\$2,603,000	\$275,000	\$0	\$12,320,850

# **Bridge Inspection and Inventory**

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

9084

This project provides ongoing funding for the inspection of 20 minor structures that do not qualify for use of Federal funds. Small structures are inspected every four years in the same manner as the 134 major County-maintained structures. Three bridges are inspected annually. This project includes hands-on field inspections of all 20 structures, as well as completion and submission of inspection reports, which summarize findings. Report recommendations are used to evaluate repairs and structure replacements.

	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	Prior Allocation	Balance to Complete	Total Project Cost
-	1 1 22	1123	1 1 27	1123	1120	1127	Amocation	Complete	Troject Cost
Engineering/Design	31,000	32,000	33,000	34,000	35,000	36,000			201,000
Land Acquisition									0
Site Work									0
Construction									0
Equipment/Furnishings									0
Other									0
EXPENDITURES									
-									
TOTAL	31,000	32,000	33,000	34,000	35,000	36,000	0	0	201,000
TOTAL	31,000	32,000	33,000	34,000	35,000	36,000	0	0	201,000
TOTAL SOURCES OF FUNDING	31,000	32,000	33,000	34,000	35,000	36,000	0	0	201,000
	31,000	<b>32,000</b>	33,000	<b>34,000</b>	<b>35,000</b>	<b>36,000</b> 36,000	0	0	201,000
SOURCES OF FUNDING		, ,	, <u>, , , , , , , , , , , , , , , , , , </u>	,		,	0	0	
SOURCES OF FUNDING Transfer from General Fund		, ,	, <u>, , , , , , , , , , , , , , , , , , </u>	,		,	0	0	201,000
SOURCES OF FUNDING Transfer from General Fund Reallocated GF Transfer		, ,	, <u>, , , , , , , , , , , , , , , , , , </u>	,		,	0	0	201,000
SOURCES OF FUNDING  Transfer from General Fund  Reallocated GF Transfer  Local Income Tax		, ,	, <u>, , , , , , , , , , , , , , , , , , </u>	,		,	0	0	201,000

## **Bridge Maintenance and Structural Repair**

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

9882

This project provides ongoing funding for preventative maintenance and small repairs to County-maintained bridges, including: bridge seal, deck joint replacements, structural steel repairs, concrete patching, sediment removal, stream channel stabilization, traffic barrier replacement, and approach roadway repairs. Several projects have been identified for the work types and are listed below.

Listed below are potential sites for a replacement bridge seal project:

CL 208 Baptist over Alloway Creek CL 211 Bowers over Alloway Creek CL 364 Adams Mill over Little Pipe Creek CL 234 Hapes Mill over Big Pipe Creek CL 262 Mayberry over Bear Branch CL 353 Patapsco over W. Branch Patapsco

CL 266 Flickinger over Big Pipe Creek

CL 311 Morgan over S. Branch Patapsco River

River

CL 271 Arters Mill over Big Pipe Creek

CL 272 Halter over Big Pipe Creek

CL 310 Woodbine over S. Branch Patapsco River

Listed below are potential sites for a concrete patching project:

CL 217 Stone over Silver Run CL 310 Woodbine over S. Branch Patapsco River CL 311 Morgan over S. Branch Patapsco River CL 332 Marriottsville over S. Branch Patapsco River CL 353 Patapsco over W. Branch Patapsco River CL 373 Coon Club over E. Branch Patapsco River

_	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	Prior Allocation	Balance to Complete	Total Project Cost
				1					
Engineering/Design									0
Land Acquisition									0
Site Work									0
Construction	78,000	82,000	85,000	89,000	94,000	99,000			527,000
Equipment/Furnishings									0
Other									0
TOTAL	78,000	82,000	85,000	89,000	94,000	99,000	0	0	527,000
SOURCES OF FUNDING									
Transfer from General Fund	78,000	82,000	85,000	89,000	94,000	99,000			527,000
Reallocated GF Transfer									0
Local Income Tax									0
Reallocated Local Income Tax									0

PROJECTED OPERATING						
IMPACTS	0	0	0	0	0	0

Functional Classification: Rural Local

Average Daily Traffic: 395 Bridge Number: CL 346



This project provides planned funding to replace the three cell corrugated steel pipe culverts, located in the central eastern area of Carroll County, with a new structure. The type of replacement structure will be determined based on an alternatives analysis. The structure is posted for weight limits.

	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	Prior Allocation	Balance to Complete	Total Project Cost
-	1 1 22	1 1 23	1124	1123	1120	112/	Milocation	Complete	Troject Cost
Engineering/Design			270,000						270,000
Land Acquisition									0
Site Work					116,000				116,000
Construction					1,108,000				1,108,000
Equipment/Furnishings									0
Other					215,000				215,000
EXPENDITURES									
TOTAL	0	0	270,000	0	1,439,000	0	0	0	1,709,000
TOTAL	0	0	270,000	0	1,439,000	0	0	0	1,709,000
TOTAL SOURCES OF FUNDING	0	0	270,000	0	1,439,000	0	0	0	1,709,000
	0	0	270,000	0	1,439,000	0	0	0	1,709,000
SOURCES OF FUNDING	0	0	270,000	0	1,439,000	0	0	0	
SOURCES OF FUNDING Transfer from General Fund	0	0	<b>270,000</b> 54,000	0	1,439,000 355,800	0	0	0	0
SOURCES OF FUNDING Transfer from General Fund Reallocated GF Transfer	0	0		0		0	0	0	0
SOURCES OF FUNDING  Transfer from General Fund  Reallocated GF Transfer  Bonds	0	0	54,000	0	355,800	0	0	0	0 0 409,800

## Cleaning and Painting of Bridge Structural Steel

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

9686

This project provides ongoing funding for cleaning and painting of bridge structural steel. Cleaning and painting slows deterioration and extends the useful life of steel structures. Funding is accumulated over several years to allow for completion of a larger project.

Listed below are potential sites for the next project:

- CL 207 Baptist Road over Alloway Creek
- CL 208 Baptist Road over Alloway Creek
- CL 211 Bowers Road over Alloway Creek
- CL 262 Mayberry Road over Bear Branch
- CL 272 Halter Road over Big Pipe Creek
- CL 364 Adams Mill Road over Little Pipe Creek
- CL 402 York Road No. 1 over S. Branch Gunpowder Falls

	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	Prior Allocation	Balance to Complete	Total Project Cost
-		1120		1120	1120		1 mio vanion	compiete	110,000 0000
Engineering/Design	20,000	21,000	22,000	23,000	24,000	25,000			135,000
Land Acquisition									0
Site Work									0
Construction	214,000	225,000	236,000	248,000	260,000	273,000			1,456,000
Equipment/Furnishings									0
Other									0
EXPENDITURES									
-									
TOTAL	234,000	246,000	258,000	271,000	284,000	298,000	0	0	1,591,000
TOTAL	234,000	246,000	258,000	271,000	284,000	298,000	0	0	1,591,000
TOTAL SOURCES OF FUNDING	234,000	246,000	258,000	271,000	284,000	298,000	0	0	1,591,000
	<b>234,000</b> 47,000	<b>246,000</b> 49,000	<b>258,000</b> 52,000	<b>271,000</b> 54,000	<b>284,000</b> 57,000	<b>298,000</b> 63,000	0	0	1,591,000 322,000
SOURCES OF FUNDING		, ,	, ,		,	, , , , , , , , , , , , , , , , , , ,	0	0	
SOURCES OF FUNDING Transfer from General Fund		, ,	, ,		,	, , , , , , , , , , , , , , , , , , ,	0	0	322,000
SOURCES OF FUNDING Transfer from General Fund Reallocated GF Transfer		, ,	, ,		,	, , , , , , , , , , , , , , , , , , ,	0	0	322,000
SOURCES OF FUNDING Transfer from General Fund Reallocated GF Transfer Bonds	47,000	49,000	52,000	54,000	57,000	63,000	0	0	322,000 0

Functional Classification: Minor Collector

Average Daily Traffic: 1,190 Bridge Number: CL 313



This project provides funding to replace the steel truss bridge, located in southern Carroll County on the Howard County border, with a new structure. The type of replacement structure will be determined based on an alternatives analysis.

	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	Prior Allocation	Balance to Complete	Total Project Cost
-	1 1 22	11 23	11 24	11 23	11 20	112/	Allocation	Complete	1 Toject Cost
Engineering/Design							275,000		275,000
Land Acquisition									0
Site Work	165,900								165,900
Construction	1,668,450								1,668,450
Equipment/Furnishings									0
Other	262,500								262,500
EXPENDITURES									
-									
TOTAL	2,096,850	0	0	0	0	0	275,000	0	2,371,850
TOTAL	2,096,850	0	0	0	0	0	275,000	0	2,371,850
TOTAL SOURCES OF FUNDING	2,096,850	0	0	0	0	0	275,000	0	2,371,850
	2,096,850	0	0	0	0	0	275,000	0	2,371,850
SOURCES OF FUNDING	<b>2,096,850</b> 411,700	0	0	0	0	0	<b>275,000</b> 59,000	0	
SOURCES OF FUNDING Transfer from General Fund		0	0	0	0	0	,	0	0
SOURCES OF FUNDING Transfer from General Fund Bonds		0	0	0	0	0	,	0	0 470,700
SOURCES OF FUNDING Transfer from General Fund Bonds Reallocated Bonds	411,700	0	0	0	0	0	59,000	0	0 470,700 0

Functional Classification: Rural Local

Average Daily Traffic: 253 Bridge Number: CL 242



This project provides funding to replace the small bridge, located in western Carroll County near the Town of New Windsor. The existing structure is concrete encased steel beams on stone masonry abutments. The type of replacement structure will be determined based on an alternatives analysis. The structure width and waterway opening will be evaluated as part of the analysis.

This project does not qualify for Federal aid due to the overall length of the bridge.

_	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design	250,000								250,000
Land Acquisition	5,000								5,000
Site Work			42,000						42,000
Construction			422,000						422,000
Equipment/Furnishings									0
Other			46,000						46,000
EXPENDITURES									
TOTAL	255,000	0	510,000	0	0	0	0	0	765,000
TOTAL	255,000	0	510,000	0	0	0	0	0	765,000
TOTAL SOURCES OF FUNDING	255,000	0	510,000	0	0	0	0	0	765,000
	255,000	0	510,000	0	0	0	0	0	765,000
SOURCES OF FUNDING	255,000	0	510,000	0	0	0	0	0	
SOURCES OF FUNDING Transfer from General Fund	255,000 255,000	0	510,000 510,000	0	0	0	0	0	0
SOURCES OF FUNDING Transfer from General Fund Reallocated GF Transfer		0		0	0	0	0	0	0
SOURCES OF FUNDING Transfer from General Fund Reallocated GF Transfer Bonds		0		0	0	0	0	0	0 0 765,000

Functional Classification: Rural Local

Average Daily Traffic: 338 Bridge Number: CL 236



This project provides planned funding to replace the bridge, located in western Carroll County, east of the Town of Union Bridge, with a new structure. The type of replacement structure will be determined based on an alternatives analysis. The structure width and waterway opening will be evaluated as part of the analysis.

	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	Prior Allocation	Balance to Complete	Total Project Cost
-	1 1 22	1123	1127	1123	1120	112/	Milocation	Complete	Troject Cost
Engineering/Design			250,000						250,000
Land Acquisition									0
Site Work						138,000			138,000
Construction						1,373,000			1,373,000
Equipment/Furnishings									0
Other						235,000			235,000
EXPENDITURES									
_									
TOTAL	0	0	250,000	0	0	1,746,000	0	0	1,996,000
TOTAL	0	0	250,000	0	0	1,746,000	0	0	1,996,000
TOTAL SOURCES OF FUNDING	0	0	250,000	0	0	1,746,000	0	0	1,996,000
	0	0	250,000	0	0	1,746,000	0	0	1,996,000
SOURCES OF FUNDING	0	0	<b>250,000</b> 50,000	0	0	<b>1,746,000</b> 417,200	0	0	
SOURCES OF FUNDING Transfer from General Fund	0	0	,	0	0		0	0	0
SOURCES OF FUNDING Transfer from General Fund Bonds	0	0	,	0	0		0	0	0 467,200
SOURCES OF FUNDING Transfer from General Fund Bonds Reallocated Bonds	0	0	50,000	0	0	417,200	0	0	0 467,200 0

Functional Classification: Rural Local

Average Daily Traffic: 209 Bridge Number: CL 344



This project provides planned funding to replace the three cell structural plate pipe culverts, located in the Finksburg area of Carroll County, with a new structure. The type of replacement structure will be determined based on an alternatives analysis. The structure is posted for weight limits.

	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design			270,000						270,000
Land Acquisition									0
Site Work					180,000				180,000
Construction					1,831,000				1,831,000
Equipment/Furnishings									0
Other					285,000				285,000
EXPENDITURES	1								
TOTAL	0	0	270,000	0	2 20 6 000		_		
		• 1	270,000	U	2,296,000	0	0	0	2,566,000
SOURCES OF FUNDING		V	270,000	0	2,296,000	0	0	0	2,566,000
SOURCES OF FUNDING Transfer from General Fund			270,000	0	2,296,000	0	0	0	2,566,000
			270,000	0	2,296,000	0	0	0	
Transfer from General Fund			54,000	0	527,200	0	0	0	0
Transfer from General Fund Reallocated GF Transfer				0		0	0	0	0
Transfer from General Fund Reallocated GF Transfer Bonds			54,000	0	527,200	0	0	0	0 0 581,200

Functional Classification: Minor Collector

Average Daily Traffic: 147 Bridge Number: CL 351



This project provides planned funding to replace the concrete deck on the structure, located in eastern Carroll County. This project also includes painting the steel beams and performing substructure masonry repairs.

	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design					170,000				170,000
Land Acquisition									0
Site Work						28,000			28,000
Construction						280,000			280,000
Equipment/Furnishings									0
Other						116,000			116,000
EXPENDITURES									
-									
TOTAL	0	0	0	0	170,000	424,000	0	0	594,000
SOURCES OF FUNDING						Г			1
Transfer from General Fund									0
Reallocated GF Transfer									0
D 1					34,000	152,800			
Bonds					34,000	132,000			186,800
Federal Highway/Bridge					136,000	271,200			186,800 407,200