ATTACHMENT 10

2 May 2018

Amy Lindsey Planner Coordinator Area 2 Division Maryland - National Capital Park and Planning Commission 8787 Georgia Avenue Silver Spring, Maryland 20910



Phoenix Noise & Vibration, LLC 5216 Chairmans Court, Suite 107 Frederick, Maryland 21703 301.846.4227 (phone) 301.846.4355 (fax) www.phoenixnv.com

Reference: WMAL North Bethesda – Phase I & II Noise Analysis

Report #180319 (Originally Dated 19 March 2018, Revised 2 May 2018)

Preface Letter to Report

Dear Ms. Lindsey:

The following letter is submitted as a preface to the recently submitted WMAL North Bethesda – Phase I & II Noise Analysis report, dated 19 March 2018 (revised 2 May 2018). The Phase I & II Noise Analysis report was updated to address the following changes that occurred with the analysis since the WMAL Phase I Noise Analysis, dated 25 April 2017:

- Reevaluation of the projected growth rates for the I-270 spur and I-495 within the vicinity of the site.
- Due to the changes in the projected growth rates for the I-270 spur and I-495, future transportation noise impact upon the northern and southern portions of the site has been reduced from previously reported.¹
- Consequently, the mitigation required to reduce noise levels within the outdoor activity areas to below the Montgomery County noise level guideline of 65 dBA Ldn has changed.
- Additional analysis has also been completed for the proposed architecture of the home model types offered on lots impacted by future noise levels greater than 65 dBA Ldn. This analysis has been completed to determine if the proposed exterior construction and window/door Sound Transmission Class (STC) ratings are capable of maintaining the indoor noise level requirement of 45 dBA Ldn.

As the result of a meeting on 19 April 2018,² the most recently submitted report (19 March 2018) has been revised to include the source of the data used for the reevaluation of the projected growth rates for I-270 and I-495. The presented 1% annual growth rate used for I-270 and I-495

¹ Phoenix Noise & Vibration Report #150730, WMAL North Bethesda Phase I Noise Analysis, dated 25 April 2017.

² Meeting at Maryland – National Capital Park Commission in Silver Spring, Maryland with Amy Lindsey, Emily Tettelbaum, and Patrick Butler, as well as Nancy Randall of Wells + Associates, and Matt Capece and Kyle Lyne of Toll Bros.



is based upon information published by the Maryland Department of Transportation State Highway Administration (MDSHA) for Montgomery County (see enclosed document) and information provided by the traffic engineer for the project.³

As seen on Page 3 of the document (SHA-M-2), improvements for I-270 and the east I-270 and west I-270 spurs are outlined. In addition to information provided regarding the improvements, the Annual Average Daily Traffic (AADT) volumes for I-270 at the current year (2017) and the projected year (2035) are also provided on Page 3 of the document. For 2017 the AADT along I-270 varies between 87,400-253,400, whereas the projection for 2035 is 98,000-272,000. Based upon the projected AADT provided by the MDSHA, the growth rate used by the MDSHA over the 18-year period is 0.3-0.5%.

While the MDSHA projects a 0.3-0.5% growth rate over the 18-year period, a more conservative growth rate of 1% compounded over 20-years from the date of the study (2038) has been used to determine the future AADT for I-270 and I-495. The 1% growth rate is based upon information provided by Wells + Associates for I-495 and I-270. Based upon an analysis of an 8-year period and an 11-year period of the most recent AADT volumes on I-495, a change of 0.5% and 1.2% occurred each year. Therefore, it was advised by Wells + Associates that a 1% growth rate could be used for I-495 and the I-270 spur, while still remaining conservative.

Please note that this is a change from the 2% growth rate that was previously used for the Phase I Noise Analysis dated 25 April 2017, which is why the resulting future transportation noise levels at the WMAL North Bethesda site have decreased.

As requested, a revised version of the WMAL North Bethesda – Phase I & II Noise Analysis report dated 2 May 2018 has been provided with this letter. Please feel free to contact me with any questions or comments in regard to the report, 301-846-4227 or ksnow@phoenixnv.com.

Sincerely,

Kody Snow Engineer

Enclosed: Maryland Department of Transporatation State Highway Administration-

Montgomery County Interstate Construction Program, dated 1 December 2017

WMAL North Bethesda Phase I & II Noise Analysis, Report #180319, dated 19

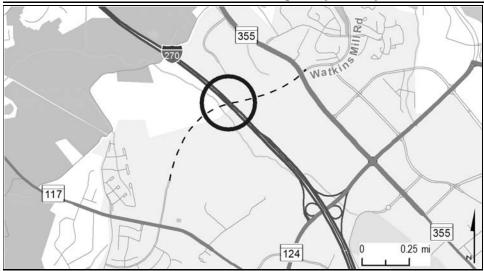
March 2018, revised 2 May 2018

³ Anne M. (Nancy) Randall, Wells + Associates.





MONTGOMERY COUNTY



STATE	E GOALS :	Maryland Transpor	rtation Plan (MT	P)	Goals/Selection Criteria:
☐ s	afety & Secu	rity			Environmental Stewardship
s	System Prese	rvation		X	Community Vitality
X C	Quality of Serv	vice		Х	Economic Prosperity

EXPLANATION: The new interchange will provide new access points to I-270 and provide for additional east-west access for all roadway users while reducing congestion on existing nearby interchange ramps and parallel roadways. This interchange also supports planned growth and economic development in the vicinity.

PROJECT:	I-270	Eisenhower	Highway
PROJECT.	1-210,	LISCIIIIOWCI	I ligitway

Traffic Relief Plan (Statewide - Line 6)

<u>DESCRIPTION:</u> Construct a new I-270 interchange at Watkins Mill Road. Bicycle and pedestrian improvements will be included where appropriate.

<u>PURPOSE & NEED SUMMARY STATEMENT:</u> This project will support economic development and reduce existing congestion at the I-270/MD 124 interchange and the MD 355/MD 124 intersection. It will provide access from I-270 to Metropolitan Grove MARC Station.

SMART GROWTH STATUS: Project N	ot Location Specific Not Subject to PFA Law						
X Project Inside PFA	Grandfathered						
Project Outside PFA —	Exception Will Be Required						
PFA Status Yet To Be Determined	Exception Granted						
ASSOCIATED IMPROVEMENTS:							
I-270 Innovative Congestion Management (Lir	ne 2)						

STATUS: Construction underway. County contributed \$4.9 million towards Engineering.

SIGNIFICANT CHANGE FROM FY 2017 - 22 CTP: The cost decrease of \$10.4 million is due to a favorable bid.

POTENTI	AL FUNDING S	SOURCE:		X SPEC	X SPECIAL X FEDERAL GENERAL X OTHER					
	TOTAL			PROJECT CASH FLOW						
PHASE	ESTIMATED	EXPEND	CURRENT	BUDGET					SIX	BALANCE
	COST	THRU	YEAR	YEAR	FOR P	LANNING P	URPOSES	<u>ONLY</u>	YEAR	TO
	(\$000)	2017	2018	2019	2020	2021	2022	2023	TOTAL	COMPLETE
Planning	1,177	1,177	0	0	0	0	0	0		0 0
Engineering	10,613	10,591	22	0	0	0	0	0	2	2 0
Right-of-way	y 9,807	7,104	200	800	500	1,203	0	0	2,70	3 0
Construction	n 97,716	3	21,260	29,535	30,512	16,406	0	0	97,71	3 0
Total	119,313	18,875	21,482	30,335	31,012	17,609	0	0	100,43	8 0
Federal-Aid	15,375	12,650	222	800	500	1,203	0	0	2,72	5 0

CLASSIFICATION:

STATE - Principal Arterial

FEDERAL - Interstate

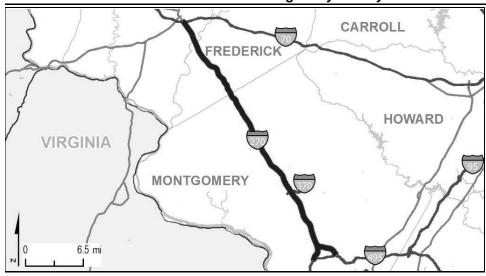
STATE SYSTEM: Primary

Annual Average Daily Traffic (vehicles per day)

CURRENT (2017) - 164,000

PROJECTED (2035) - 182,000

STIP REFERENCE #MO3511 12/01/2017 PAGE SHA-M-1



STATE GOALS: Maryland Transportation Plan (MTP) Goals/Selection Criteria: **Environmental Stewardship**

Safety & Security System Preservation

Community Vitality

Quality of Service **Economic Prosperity**

EXPLANATION: As one of Maryland's most heavily traveled roadways, I-270 congestion affects both motorist safety and the economy. These improvements will reduce congestion and improve safety and reliability for all roadway users.

PROJECT: I-270, Eisenhower Highway

DESCRIPTION: Implementation of innovative congestion management (ICM) tools to reduce congestion on I-270, including the east I-270 and west I-270 spurs (31.5 miles). Improvements will include a series of roadway and technology-based improvements.

PURPOSE & NEED SUMMARY STATEMENT: This project will reduce congestion and improve safety and reliability.

SMART GROWTH STATUS:	oject Not Location Specific
X Project Inside PFA Project Outside PFA	Grandfathered Exception Will Be Required
PFA Status Yet To Be Determined	Exception Granted
ASSOCIATED IMPROVEMENTS:	•

I-270, Interchange at Watkins Mill Road (Line 1)

Traffic Relief Plan (Statewide - Line 6)

STATUS: Construction underway.

SIGNIFICANT CHANGE FROM FY 2017 - 22 CTP: The cost increase of \$6.8 million is due to construction testing and inspection activities.

POTENTIA	POTENTIAL FUNDING SOURCE: X SPECIAL FEDERAL GENERAL OTHER								₹	
	TOTAL			PROJE	ECT CASH F	<u>LOW</u>				
PHASE	ESTIMATED	EXPEND	CURRENT	BUDGET					SIX	BALANCE
	COST	THRU	YEAR	YEAR	FOR P	LANNING P	URPOSES (ONLY	YEAR	TO
	(\$000)	2017	2018	2019	2020	2021	2022	2023	TOTAL	COMPLETE
Planning	0	0	0	0	0	0	0	0		0 0
Engineering	2,061	2,061	0	0	0	0	0	0		0 0
Right-of-way	0	0	0	0	0	0	0	0		0 0
Construction	109,751	5,225	15,186	28,799	30,335	30,206	0	0	104,52	6 0
Total	111,812	7,286	15,186	28,799	30,335	30,206	0	0	104,52	6 0
Federal-Aid	0	0	0	0	0	0	0	0		0 0

CLASSIFICATION:

STATE - Principal Arterial

FEDERAL - Interstate

STATE SYSTEM: Primary

Annual Average Daily Traffic (vehicles per day)

CURRENT (2017) - 87,400 - 253,400

PROJECTED (2035) - 98,000 - 272,000

/ -	547	1	PROJECT: I-495, Capital Beltway
187		97	<u>DESCRIPTION:</u> Resurface I-495 from I-270Y to Seminary Road (Inner Loop) (5.9 miles).
495	192 MONTGOMERY		PURPOSE & NEED SUMMARY STATEMENT: This project enhances the longevity of the roadwa surface.
	(8)	1	SMART GROWTH STATUS: Project Not Location Specific Not Subject to PFA Law
187		0.65 mi	X Project Inside PFA Grandfathered Project Outside PFA Exception Will Be Required
191	185	N	PFA Status Yet To Be Determined Exception Granted
			ASSOCIATED IMPROVEMENTS:
STATE GOALS: Maryland Tran	sportation Plan (MTP) Goals/Selection Criteria:		
Safety & Security	Environmental Stewardship		
X System Preservation	Community Vitality		
Quality of Service	Economic Prosperity		
EXPLANATION: The resurfacing w	ill extend the lifespan of the roadway, while enhancir	g the	STATUS: Open to Service.

quality of travel along the corridor.

SIGNIFICANT CHANGE FROM FY 2017 - 22 CTP: None.

POTENTIAL FUNDING SOURCE: X SPECIAL FEDERAL GENERAL OTHER								₹		
	TOTAL			PROJ	ECT CASH F	LOW				
PHASE	ESTIMATED	EXPEND	CURRENT	BUDGET					SIX	BALANCE
	COST	THRU	YEAR	YEAR	FOR PLANNING PURPOSES ONLY			YEAR	TO	
	(\$000)	2017	2018	2019	2020	2021	2022	2023	TOTAL	COMPLETE
Planning	0	0	0	0	0	0	0	0		0 0
Engineering	350	350	0	0	0	0	0	0		0 0
Right-of-way	/ 0	0	0	0	0	0	0	0		0 0
Construction	9,003	8,605	398	0	0	0	0	0	39	8 0
Total	9,353	8,955	398	0	0	0	0	0	39	8 0
Federal-Aid	0	0	0	0	0	0	0	0		0 0

CLASSIFICATION:

STATE - Principal Arterial

FEDERAL - Interstate

STATE SYSTEM: Primary

Annual Average Daily Traffic (vehicles per day)

CURRENT (2017) - 106,000 -231,000

PROJECTED (2035) - 125,000 - 240,000

STIP REFERENCE #MO1881 12/01/2017 PAGE SHA-M-3

EXPLANATION: This grade-separation project will reduce travel times along both Randolph Road

and MD 97 (Georgia Avenue) and improve safety by separating through movements. The new

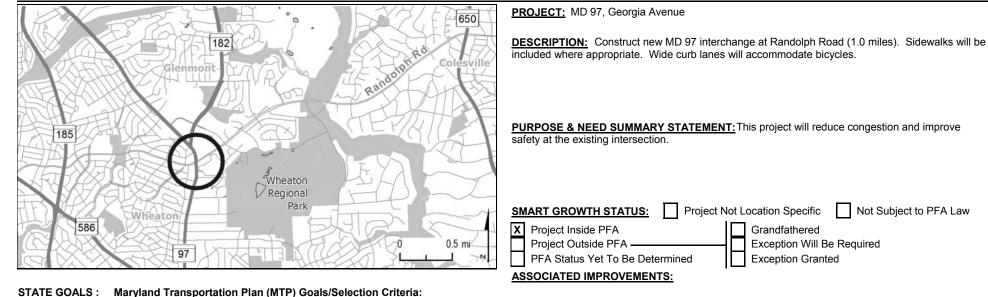
interchange will also provide new sidewalks and wide curb lanes to safely accommodate all

Safety & Security System Preservation

Quality of Service

roadway users.

Not Subject to PFA Law



Environmental Stewardship

Community Vitality

Economic Prosperity

STATUS: Construction underway. County contributed \$14.4 million for Right-of-Way and Advanced Utilities

SIGNIFICANT CHANGE FROM FY 2017 - 22 CTP: The cost decrease of \$3.8 million is due to a reduction in utility expenditures.

POTENTIA	POTENTIAL FUNDING SOURCE: X SPECIAL X FEDERAL GENERAL X OTHER								₹	
	TOTAL			PROJE	CT CASH F	LOW				
PHASE	ESTIMATED	EXPEND	CURRENT	BUDGET					SIX	BALANCE
	COST	THRU	YEAR	YEAR	FOR P	LANNING P	URPOSES (<u>YINC</u>	YEAR	TO
	(\$000)	2017	2018	2019	2020	2021	2022	2023	TOTAL	COMPLETE
Planning	1,097	1,097	0	0	0	0	0	0		0 0
Engineering	6,019	6,019	0	0	0	0	0	0		0 0
Right-of-way	21,920	19,900	653	500	867	0	0	0	2,02	0 0
Construction	47,555	32,674	14,881	0	0	0	0	0	14,88	1 0
Total	76,591	59,690	15,534	500	867	0	0	0	16,90	1 0
Federal-Aid	42,230	29,658	12,572	0	0	0	0	0	12,57	2 0

CLASSIFICATION:

STATE - Intermediate Arterial

FEDERAL - Other Principal Arterial

STATE SYSTEM: Secondary

Annual Average Daily Traffic (vehicles per day)

CURRENT (2017) - 50,000 (MD 97)

31,000 (Randolph Road)

PROJECTED (2035) - 59,100 (MD 97)

41,000 (Randolph Road)

STIP REFERENCE #MO8541 12/01/2017 PAGE SHA-M-4

	PROJECT: MD 97, Geor
Reddy Branch Stream Valley Park	DESCRIPTION: Constru
Brookeville Rd Brighton Dam Rd	
Dam Rd	
olney La	PURPOSE & NEED SUN Town of Brookeville and i
Gold Mine Rd	
Cartet Mill May	
Ca of Mill	SMART GROWTH STAT
	Project Inside PFA
Manor 0 0.2 mi	X Project Outside PFA
Oaks Park N	PFA Status Yet To B
	ACCOCIATED IMPROVE

STATE GOALS :	Maryland Transportation Plan (MTP) Goals/Selection	Criteria:

EXPLANATION: This project will improve safety and operations for both through and local roadway users.

	140 07	0! -	A
PROJECT:	MD 97.	Georgia	Avenue

ict a two lane highway from south of Brookeville, near Gold Mine Road, to ulders will accommodate bicycles (0.7 miles).

IMARY STATEMENT: This project will reduce traffic congestion in the mprove traffic operations and safety on existing MD 97.

SMART GROWTH STATUS: Project N	Not Location Specific Not Subject to PFA Law
Project Inside PFA Project Outside PFA PFA Status Yet To Be Determined	Grandfathered Exception Will Be Required X Exception Granted
ASSOCIATED IMPROVEMENTS:	'

STATUS: Right-of-Way underway. Construction to begin in budget fiscal year. County contributed \$10.0 million towards Engineering and Right-of-Way.

SIGNIFICANT CHANGE FROM FY 2017 - 22 CTP: The cost increase of \$4.9 million is due to a revised estimate. Construction delay due to a change in project delivery method from CMAR (Construction Manager at Risk) to traditional Design-Bid-Build.

<u>POTENTIA</u>	AL FUNDING S	SOURCE:		X SPEC	IAL X FE	DERAL	GENERAL	. X OTHER	₹	
	TOTAL			PROJE	ECT CASH F	LOW				
PHASE	ESTIMATED	EXPEND	CURRENT	BUDGET					SIX	BALANCE
	COST	THRU	YEAR	YEAR	FOR P	LANNING P	URPOSES (ONLY	YEAR	TO
	(\$000)	2017	2018	2019	2020	2021	2022	2023	TOTAL	COMPLETE
Planning	2,064	2,064	0	0	0	0	0	0		0 0
Engineering	8,723	8,303	420	0	0	0	0	0	42	0 0
Right-of-way	2,777	123	611	424	1,619	0	0	0	2,65	4 0
Construction	35,874	222	0	13,826	20,522	1,304	0	0	35,65	2 0
Total	49,438	10,712	1,031	14,250	22,141	1,304	0	0	38,72	6 0
Federal-Aid	1,594	1,594	0	0	0	0	0	0		0 0

Environmental Stewardship Community Vitality **Economic Prosperity**

CLASSIFICATION:

STATE - Minor Arterial

FEDERAL - Other Principal Arterial

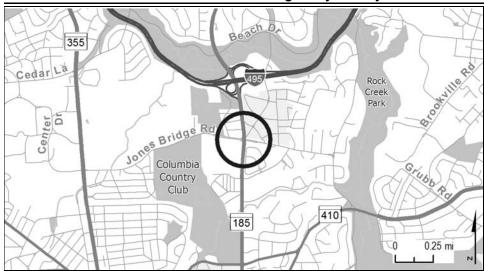
STATE SYSTEM: Secondary

Annual Average Daily Traffic (vehicles per day)

CURRENT (2017) - 11,300

PROJECTED (2035) - 14,000

STIP REFERENCE #MO7461 12/01/2017 PAGE SHA-M-5



STATE GOALS: Maryland Transportation Plan (MTP) Goals/Selection Criteria:

X Safety & Security

System Preservation

Quality of Service

EXPLANATION: Improvements in the vicinity of Naval Support Activity Bethesda are vital to support the congressionally authorized BRAC initiative. These improvements will reduce congestion and improve safety for all roadway users.

PROJECT: MD 185, Connecticut Avenue

<u>DESCRIPTION:</u> Construct MD 185 Phase 3 intersection improvements at Jones Bridge Road. Bicycle and pedestrian facilities will be provided where appropriate. (BRAC Intersection Improvements)

<u>PURPOSE & NEED SUMMARY STATEMENT:</u> Improved access to Naval Support Activity Bethesda is vital to accommodate increased employment as a result of BRAC. This project will improve safety, capacity, and operations.

SMART GROWTH STATUS: Project Not Location	n Specific Not Subject to PFA Law
Project Outside PFA — Excep	dfathered ption Will Be Required ption Granted

ASSOCIATED IMPROVEMENTS:

MD 187, BRAC Intersection Improvements at Oakmount Avenue/West Cedar Lane (Line 7)

MD 320, BRAC Mitigation at Sligo Creek (Line 9)

MD 355, Phases 1-2 BRAC Intersection Improvements at Cedar Lane (Line 11)

MD 355, BRAC Highway Reconstruction, Woodmont Avenue/Glenbrook Parkway to South Wood Road/South Drive (Line 12)

STATUS: Right-of-Way underway. Construction to begin during budget fiscal year. This project is fully funded by the Office of Economic Adjustment.

SIGNIFICANT CHANGE FROM FY 2017 - 22 CTP: The cost increase of \$4.6 million is due to redesigning stormwater management to include an underground facility.

POTENTIA	AL FUNDING S	SOURCE:		X SPEC	IAL X FE	DERAL	GENERAL	X OTHER	₹	
	TOTAL			PROJI	ECT CASH F	LOW				
PHASE	ESTIMATED	EXPEND	CURRENT	BUDGET					SIX	BALANCE
	COST	THRU	YEAR	YEAR	FOR P	LANNING P	URPOSES	<u>ONLY</u>	YEAR	TO
	(\$000)	2017	2018	2019	2020	2021	2022	2023	TOTAL	COMPLETE
Planning	0	0	0	0	0	0	0	0		0 0
Engineering	0	0	0	0	0	0	0	0		0 0
Right-of-way	7,507	3,247	3,717	543	0	0	0	0	4,26	0 0
Construction	n 9,868	0	0	1,702	4,959	3,207	0	0	9,86	8 0
Total	17,375	3,247	3,717	2,245	4,959	3,207	0	0	14,12	8 0
Federal-Aid	17,375	3,247	3,717	2,245	4,959	3,207	0	0	14,12	8 0

Environmental Stewardship

Community Vitality

Economic Prosperity

CLASSIFICATION:

STATE - Minor Arterial

FEDERAL - Other Principal Arterial

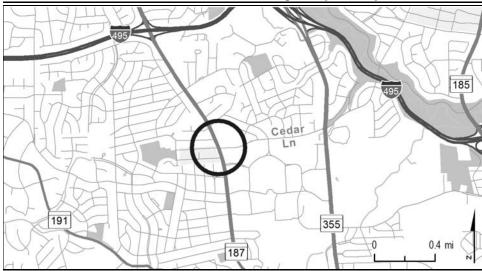
STATE SYSTEM: Secondary

Annual Average Daily Traffic (vehicles per day)

CURRENT (2017) - 79,000

PROJECTED (2035) - 82,000

STIP REFERENCE #MO5938 12/01/2017 PAGE SHA-M-6



 $\underline{\textbf{STATE GOALS:}} \quad \textbf{Maryland Transportation Plan (MTP)} \ \textbf{Goals/Selection Criteria:}$

X Safety & Security

System Preservation

Quality of Service

EXPLANATION: Improvements in the vicinity of Naval Support Activity Bethesda are vital to support the congressionally authorized BRAC initiative. These improvements will reduce congestion and improve safety for all roadway users.

PROJECT: MD 187, Old Georgetown Road

<u>DESCRIPTION:</u> Construct MD 187 intersection improvements at Oakmont Avenue/West Cedar Lane (1.0 miles). (BRAC Intersection Improvements)

<u>PURPOSE & NEED SUMMARY STATEMENT:</u> Improved access to Naval Support Activity Bethesda is vital to accommodate increased employment as a result of BRAC. This project will improve safety, capacity, and operations.

SMART GROWTH STATUS: Project N	Not Subject to PFA Law
X Project Inside PFA	Grandfathered
Project Outside PFA —————	Exception Will Be Required
PFA Status Yet To Be Determined	Exception Granted
ASSOCIATED IMPROVEMENTS:	•

MD 185, Phase 3 BRAC Intersection Improvements at Jones Bridge Road (Line 6)

MD 320, BRAC Mitigation at Sligo Creek (Line 9)

MD 355, Phases 1-2 BRAC Intersection Improvements at Cedar Lane (Line 11)

MD 355, BRAC Highway Reconstruction, Woodmont Avenue/Glenbrook Parkway to South Wood Road/South Drive (Line 12)

STATUS: Open to Service. This project is fully funded by the Office of Economic Adjustment.

SIGNIFICANT CHANGE FROM FY 2017 - 22 CTP: None.

POTENTI	AL FUNDING S	SOURCE:		X SPEC	IAL X FE	DERAL	GENERAL	X OTHER	₹	
	TOTAL			PROJ	ECT CASH F	LOW				
PHASE	ESTIMATED	EXPEND	CURRENT	BUDGET					SIX	BALANCE
	COST	THRU	YEAR	YEAR	FOR P	LANNING P	URPOSES (ONLY	YEAR	TO
	(\$000)	2017	2018	2019	2020	2021	2022	2023	TOTAL	COMPLETE
Planning	0	0	0	0	0	0	0	0		0 0
Engineering	0	0	0	0	0	0	0	0		0 0
Right-of-wa	y 955	889	66	0	0	0	0	0	6	6 0
Constructio	n 3,679	3,216	463	0	0	0	0	0	46	3 0
Total	4,634	4,105	529	0	0	0	0	0	52	9 0
Federal-Aid	4,305	3,850	455	0	0	0	0	0	45	5 0

Environmental Stewardship

Community Vitality

Economic Prosperity

CLASSIFICATION:

STATE - Minor Arterial

FEDERAL - Other Principal Arterial

STATE SYSTEM: Secondary

Annual Average Daily Traffic (vehicles per day)

CURRENT (2017) - 40,500 (MD 187)

9,700 (West Cedar Lane)

PROJECTED (2035) - 46,100 (MD 187)

11,000 (West Cedar Lane)

STIP REFERENCE #MO5933 12/01/2017 PAGE SHA-M-7

OTTAL THOUSANT TO PRINTED TO THE TOTAL TO THE	montgomery county Emo c	GEGORDANI GONOMINOCH NOCH
	HIXIX	PROJECT: MD 195, Carroll Avenue
		DESCRIPTION: Replace Bridge 15033 over Sligo Creek and Sligo Creek Parkway.
Maple Ave		PURPOSE & NEED SUMMARY STATEMENT: The existing structure, built in 1932, is structurally deficient.
Takom Park	Lincol Phun	SMART GROWTH STATUS: Project Not Location Specific Not Subject to PFA Law
THE T	0 0.1 mi	X Project Inside PFA Project Outside PFA PFA Status Yet To Be Determined Grandfathered Exception Will Be Required Exception Granted
		ASSOCIATED IMPROVEMENTS:
STATE GOALS: Maryland Transportation Pla	an (M <u>TP)</u> Goals/Selection Criteria:	
Safety & Security	Environmental Stewardship	
X System Preservation	Community Vitality	
Quality of Service	Economic Prosperity	
EXPLANATION: The existing structure is structure	ally deficient.	STATUS: Open to Service.

SIGNIFICANT CHANGE FROM FY 2017 - 22 CTP: The cost increase of \$1.3 million is due to additional concrete repairs, sign instatllation, and utility costs.

POTENTIA	POTENTIAL FUNDING SOURCE: X SPECIAL X FEDERAL GENERAL X OTHER									
	TOTAL			PROJE	CT CASH F	LOW				
PHASE	ESTIMATED	EXPEND	CURRENT	BUDGET					SIX	BALANCE
	COST	THRU	YEAR	YEAR	FOR P	LANNING P	URPOSES	ONLY	YEAR	TO
	(\$000)	2017	2018	2019	2020	2021	2022	2023	TOTAL	COMPLETE
Planning	0	0	0	0	0	0	0	0		0 0
Engineering	1,146	1,146	0	0	0	0	0	0		0 0
Right-of-way	/ 262	78	76	76	32	0	0	0	18	4 0
Construction	12,392	10,859	1,481	52	0	0	0	0	1,53	3 0
Total	13,800	12,083	1,557	128	32	0	0	0	1,71	7 0
Federal-Aid	10,666	9,543	1,102	21	0	0	0	0	1,12	3 0

CLASSIFICATION:

STATE - Major Collector

FEDERAL - Minor Arterial

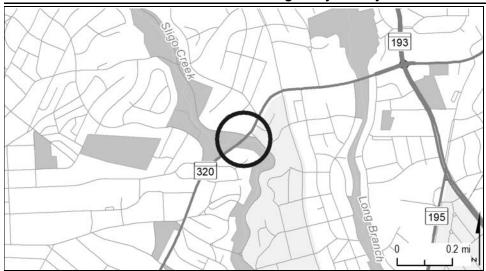
STATE SYSTEM: Secondary

Annual Average Daily Traffic (vehicles per day)

CURRENT (2017) - 8,000

PROJECTED (2035) - 9,200

STIP REFERENCE #MO2401 12/01/2017 PAGE <u>SHA-M-8</u>



ξ	STA	TE GOALS: Maryland Transportation Plan (M	TΡ) Goals/Selection Criteria:
I	X	Safety & Security	X	Environmental Stewardship
		System Preservation	X	Community Vitality
	X	Quality of Service		Economic Prosperity

EXPLANATION: These improvements are required as mitigation for right-of-way impacts to Maryland-National Capital Park and Planning Commission properties resulting from BRAC intersection improvements. The new facilities will improve safety and accessibility for trail users.

PROJECT:	MD 320,	Piney	Branch	Road
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<u>DESCRIPTION:</u> This is a bicycle and pedestrian improvement project consisting of a new bicycle/pedestrian bridge over Sligo Creek which will improve safety and accessibility for trail users. (BRAC Intersection Improvements)

<u>PURPOSE & NEED SUMMARY STATEMENT:</u> Mitigation of BRAC right-of-way impacts to Maryland-National Capital Park and Planning Commission properties in Montgomery County.

SMART GROWTH STATUS: Project No	ot Location Specific Not Subject to PFA Law
X Project Inside PFA Project Outside PFA	Grandfathered Exception Will Be Required
PFA Status Yet To Be Determined	Exception Granted
ASSOCIATED IMPROVEMENTS:	

MD 185, Phase 3 BRAC Intersection Improvements at Jones Bridge Road (Line 6)

MD 187, BRAC Intersection Improvements at Oakmont Avenue/West Cedar Lane (Line 7)

MD 355, Phases 1-2 BRAC Intersection Improvements at Cedar Lane (Line 11)

MD 355, BRAC Highway Reconstruction, Woodmont Avenue/Glenbrook Parkway to South Wood Road/South Drive (Line 12)

STATUS: Construction underway. The Office of Economic Adjustment is funding \$1.5 million for Construction

SIGNIFICANT CHANGE FROM FY 2017 - 22 CTP: The cost increase of \$0.7 million is due to additional utility relocation costs.

POTENTIA	AL FUNDING S	SOURCE:		X SPEC	CIAL X FE	DERAL	GENERAL	X OTHER	₹	
	TOTAL			PROJ	ECT CASH F	LOW				
PHASE	ESTIMATED	EXPEND	CURRENT	BUDGET					SIX	BALANCE
	COST	THRU	YEAR	YEAR	FOR P	LANNING P	URPOSES (<u>YINC</u>	YEAR	TO
	(\$000)	2017	2018	2019	2020	2021	2022	2023	TOTAL	COMPLETE
Planning	0	0	0	0	0	0	0	0		0 0
Engineering	46	46	0	0	0	0	0	0		0 0
Right-of-way	0	0	0	0	0	0	0	0		0 0
Construction	2,752	2,587	165	0	0	0	0	0	16	5 0
Total	2,798	2,633	165	0	0	0	0	0	16	5 0
Federal-Aid	2,721	2,564	157	0	0	0	0	0	15	7 0

CLASSIFICATION:

STATE - Maior Collector

FEDERAL - Minor Arterial

STATE SYSTEM: Secondary

Annual Average Daily Traffic (vehicles per day)

CURRENT (2017) - 21,000

PROJECTED (2035) - 25,500

STIP REFERENCE #MO5936 12/01/2017 PAGE SHA-M-9

	PROJECT: MD 355, Frederick Road
	DESCRIPTION: Replace Bridge 15053 over Little Bennett Creek.
109 Dark Branch Midda Midda Midda	PURPOSE & NEED SUMMARY STATEMENT: The existing structure, built in 1925, is structurally deficient.
	SMART GROWTH STATUS: Project Not Location Specific X Not Subject to PFA Law Project Inside PFA Grandfathered
0 0.25 mi	Project Miside PFA Exception Will Be Required PFA Status Yet To Be Determined Exception Granted
	ASSOCIATED IMPROVEMENTS:
STATE GOALS: Maryland Transportation Plan (MTP) Goals/Selection Criteria:	
Safety & Security Fryironmental Stewardship	

EXPLANATION: The existing structure is structurally deficient.

<u>STATUS:</u> Engineering and Right-of-Way underway. Construction to begin during budget fiscal year. Delay due to necessary acquisition of environmental permits.

SIGNIFICANT CHANGE FROM FY 2017 - 22 CTP: None.

_										
POTENTIA	POTENTIAL FUNDING SOURCE: X SPECIAL X FEDERAL GENERAL OTHER									
	TOTAL			PROJ	ECT CASH F	LOW				
PHASE	ESTIMATED	EXPEND	CURRENT	BUDGET					SIX	BALANCE
	COST	THRU	YEAR	YEAR	FOR P	LANNING P	URPOSES (ONLY	YEAR	TO
	(\$000)	2017	2018	2019	2020	2021	2022	2023	TOTAL	COMPLETE
Planning	0	0	0	0	0	0	0	0	(0
Engineering	1,117	862	255	0	0	0	0	0	255	5 0
Right-of-way	54	6	7	11	11	11	8	0	48	0
Construction	4,000	0	0	1,936	2,064	0	0	0	4,000	0
Total	5,171	868	262	1,947	2,075	11	8	0	4,303	0
Federal-Aid	235	235	0	0	0	0	0	0	(0

Community Vitality
Economic Prosperity

CLASSIFICATION:

STATE - Major Collector

FEDERAL - Major Collector

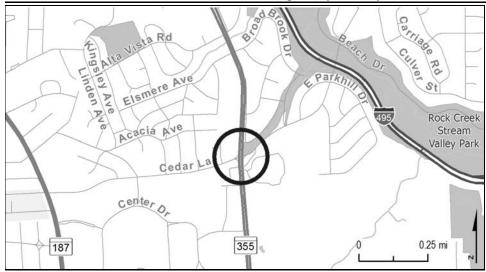
STATE SYSTEM: Secondary

Annual Average Daily Traffic (vehicles per day)

CURRENT (2017) - 7,975

PROJECTED (2035) - 11,175

STIP REFERENCE #MO4271 12/01/2017 PAGE <u>SHA-M-10</u>



STATE GOALS:	Maryland Transp	ortation Plan	MTD	Goals/Soloction	Critoria
STATE GUALS.	maryianu mansp	Jortation Fian ((141 1 17)	Goals/Selection	Cilleile

X Safety & Security

System Preservation

Quality of Service

EXPLANATION: Improvements in the vicinity of Naval Support Activity Bethesda are vital to support the congressionally authorized BRAC initiative. These improvements will reduce congestion and improve safety for all roadway users.

PROJECT: MD 355, Rockville Pike

<u>DESCRIPTION:</u> Construct MD 355 Phase 1-2 intersection improvements at Cedar Lane (1.0 mile). Bicycle and pedestrian facilities will be provided where appropriate. (BRAC Intersection Improvements).

<u>PURPOSE & NEED SUMMARY STATEMENT:</u> Improved access to Naval Support Activity Bethesda is a vital component to accommodate the increase in employment as a result of BRAC. This project will improve safety, capacity, and operations.

SMART GROWTH STATUS: Project N	lot Location Specific Not Subject to PFA Law
X Project Inside PFA Project Outside PFA PFA Status Yet To Be Determined	Grandfathered Exception Will Be Required Exception Granted
ACCOCIATED MADDOVEMENTO	

ASSOCIATED IMPROVEMENTS:

MD 185, Phase 3 BRAC Intersection Improvements at Jones Bridge Road (Line 6)

MD 187, BRAC Intersection Improvements at Oakmont Avenue/West Cedar Lane (Line 7)

MD 320, BRAC Mitigation at Sligo Creek (Line 9)

MD 355, BRAC Highway Reconstruction, Woodmont Avenue/Glenbrook Parkway to South Wood Road/South Drive (Line 12)

STATUS: Open to Service. The Office of Economic Adjustment is funding \$6.8 million for Construction

SIGNIFICANT CHANGE FROM FY 2017 - 22 CTP: The cost increase of \$2.0 million is due to additional drilling and obstruction removal, and cast-in-place inlet installation.

POTENTIA	AL FUNDING S	SOURCE:		X SPEC	IAL X FE	DERAL	GENERAL	X OTHER	₹	
	TOTAL			PROJE	CT CASH F	LOW				
PHASE	ESTIMATED	EXPEND	CURRENT	BUDGET					SIX	BALANCE
	COST	THRU	YEAR	YEAR	FOR P	LANNING P	URPOSES (ONLY	YEAR	TO
	(\$000)	2017	2018	2019	2020	2021	2022	2023	TOTAL	COMPLETE
Planning	0	0	0	0	0	0	0	0		0 0
Engineering	0	0	0	0	0	0	0	0		0 0
Right-of-way	2,283	1,118	250	500	415	0	0	0	1,16	5 0
Construction	15,850	15,586	264	0	0	0	0	0	26	4 0
Total	18,133	16,704	514	500	415	0	0	0	1,42	9 0
Federal-Aid	15,806	14,523	485	500	298	0	0	0	1,28	3 0

Environmental Stewardship

Community Vitality

Economic Prosperity

CLASSIFICATION:

STATE - Intermediate Arterial

FEDERAL - Other Principal Arterial

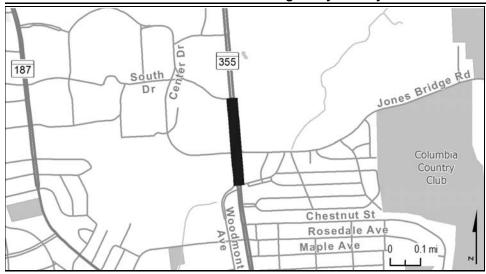
STATE SYSTEM: Secondary

Annual Average Daily Traffic (vehicles per day)

CURRENT (2017) - 62,425

PROJECTED (2035) - 70,000

STIP REFERENCE #MO5932 12/01/2017 PAGE SHA-M-11



STATE GOALS:	Maryland Transportation Plan (MTP) Goals/Selection Criteria
T	.,	T === ::== ============================

Safety & Security System Preservation Quality of Service

Environmental Stewardship Community Vitality **Economic Prosperity**

EXPLANATION: Improvements in the vicinity of the Naval Support Activity Bethesda are vital to support the congressionally authorized BRAC initiative. These improvements will reduce congestion and improve safety for all roadway users.

PROJECT: MD 355, Rockville Pike

DESCRIPTION: Construct MD 355 intersection improvements including upgrades to pedestrian/bicycle facilities, resurfacing, and geometric improvements from Woodmont Avenue/Glenbrook Parkway to South Wood Road/South Drive. (BRAC Intersection Improvements)

PURPOSE & NEED SUMMARY STATEMENT: Improved access to Naval Support Activity Bethesda is a vital component to accommodate the increase in employment as a result of BRAC. This project will improve safety, capacity, and operations.

SMART GROWTH STATUS: Project N	ot Location Specific Not Subject to PFA Law
X Project Inside PFA Project Outside PFA	Grandfathered Exception Will Be Required
PFA Status Yet To Be Determined	Exception Granted
ASSOCIATED IMPROVEMENTS:	

ASSOCIATED IMPROVEMENTS:

MD 185, Phase 3 BRAC Intersection Improvements at Jones Bridge Road (Line 6)

MD 187, BRAC Intersection Improvements at Oakmont Avenue/West Cedar Lane (Line 7)

MD 320, BRAC Mitigation at Sligo Creek (Line 9)

MD 355, Phases 1-2 BRAC Intersection Improvements at Cedar Lane (Line 11)

MD 355, Bus Rapid Transit Study (MTA Line 25)

STATUS: Construction underway. Office of Economic Adjustments is contributing \$4.3 million towards construction. County advertised and is constructing MDOT SHA surface improvements as a part of its Medical Center Metro Crossing Project.

SIGNIFICANT CHANGE FROM FY 2017 - 22 CTP: Construction delayed from FY17 to FY18 due to utility relocations.

POTENTIA	POTENTIAL FUNDING SOURCE: SPECIAL X FEDERAL GENERAL X OTHER									
	TOTAL			PROJ	ECT CASH F	LOW				
PHASE	ESTIMATED	EXPEND	CURRENT	BUDGET					SIX	BALANCE
	COST	THRU	YEAR	YEAR	FOR P	LANNING P	URPOSES	<u>ONLY</u>	YEAR	TO
	(\$000)	2017	2018	2019	2020	2021	2022	2023	TOTAL	COMPLETE
Planning	0	C	0	0	0	0	0	0		0 0
Engineering	0	C	0	0	0	0	0	0		0 0
Right-of-way	0	C	0	0	0	0	0	0		0 0
Construction	4,300	2	1,420	1,895	983	0	0	0	4,29	8 0
Total	4,300	2	1,420	1,895	983	0	0	0	4,29	8 0
Federal-Aid	4,294	C	1,418	1,894	982	0	0	0	4,29	4 0

CLASSIFICATION:

STATE - Intermediate Arterial

FEDERAL - Other Principal Arterial

STATE SYSTEM: Secondary

Annual Average Daily Traffic (vehicles per day)

CURRENT (2017) - 46,550

PROJECTED (2035) - 52,000

STIP REFERENCE #MO5934 12/01/2017 PAGE SHA-M-12

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would be walley La		Straning to
Hidden Valley La	Brah	nms Ave
Musgra	No.	Marlow Farm Terr
Ruxton Rd Ruxton Rd Ruxton Rd Ruxton Rd Ruxton Rd		0.25 mi

PROJECT: US 29, Columbia Pike

<u>DESCRIPTION:</u> Construct a new US 29 interchange at Musgrove Road and Fairland Road. Bicycle and pedestrian accommodations will be included where appropriate.

<u>JUSTIFICATION:</u> Development in the US 29 corridor is resulting in traffic growth and congestion. This project will reduce traffic congestion while improving system operations.

SMART GROWTH STATUS: Project N	lot Location Specific Not Subject to PFA Law
X Project Inside PFA Project Outside PFA PFA Status Yet To Be Determined	Grandfathered Exception Will Be Required Exception Granted
ACCOUNTED IMPROVEMENTS.	

ASSOCIATED IMPROVEMENTS:

US 29, Interchange Construction at Stewart Lane, Tech Road, Greencastle Road, and Blackburn (Line 14)

STATUS: Engineering on hold.

SIGNIFICANT CHANGE FROM FY 2017 - 22 CTP: None

POTENTIA	POTENTIAL FUNDING SOURCE: X SPECIAL X FEDERAL GENERAL OTHER									
	TOTAL			PROJ	ECT CASH F	LOW				
PHASE	ESTIMATED	EXPEND	CURRENT	BUDGET					SIX	BALANCE
	COST	THRU	YEAR	YEAR	FOR P	LANNING P	URPOSES (<u>YINC</u>	YEAR	TO
	(\$000)	2017	2018	2019	2020	2021	2022	2023	TOTAL	COMPLETE
Planning	0	0	0	C	0	0	0	0	(0 0
Engineering	7,000	5,369	35	C	0	0	0	0	3	5 1,596
Right-of-way	1,079	1,079	0	C	0	0	0	0	(0 0
Construction	0	0	0	C	0	0	0	0	(0 0
Total	8,079	6,448	35	C	0	0	0	0	3	5 1,596
Federal-Aid	1,635	1,635	0	C	0	0	0	0	(0 0

CLASSIFICATION:

STATE - Principal Arterial

FEDERAL - Freeway/Expressway

STATE SYSTEM: Primary

Annual Average Daily Traffic (vehicles per day)

CURRENT (2017) - 67,800

PROJECTED (2035) - 81,500

STIP REFERENCE #MO8911 12/01/2017 PAGE <u>SHA-M-13</u>

BLACKBURN RD	198		
GREENCASTLE RD	×0	1172 \$	ALC: Y
200			
650	200		
29			1
	TECH RD	72	
STEWAR	TEN		1 mi

PROJECT: US 29, Columbia Pike

<u>DESCRIPTION:</u> Construct new US 29 interchanges at Stewart Lane, Tech Road, Greencastle Road, and Blackburn Road. Bicycle and pedestrian accommodations will be included where appropriate.

<u>JUSTIFICATION:</u> Development in the US 29 corridor is resulting in traffic growth and congestion. This project will reduce traffic congestion while improving system operations.

SMART GROWTH STATUS: Project N	ot Location Specific Not Subject to PFA Law
X Project Inside PFA	Grandfathered
Project Outside PFA —	Exception Will Be Required
PFA Status Yet To Be Determined	Exception Granted
ASSOCIATED IMPROVEMENTS:	

US 29, Interchange Construction at Musgrove and Fairland Roads (Line 13)

STATUS: Project on hold.

SIGNIFICANT CHANGE FROM FY 2017 - 22 CTP: None.

POTENTIA	AL FUNDING S	SOURCE:		X SPE	CIAL X FE	EDERAL	GENERAL	. OTHER	₹			
	TOTAL			PRO	PROJECT CASH FLOW							
PHASE	ESTIMATED	EXPEND	CURRENT	BUDGET					SIX	BALANCE		
	COST	THRU	YEAR	YEAR	FOR P	LANNING P	URPOSES	<u>YINC</u>	YEAR	TO		
	(\$000)	2017	2018	2019	2020	2021	2022	2023	TOTAL	COMPLETE		
Planning	2,448	2,448	0	(0 0	0	0	0		0 0		
Engineering	4,288	4,288	0	(0 0	0	0	0		0 0		
Right-of-way	545	545	0	(0	0	0	0		0 0		
Construction	0	0	0	(0	0	0	0		0 0		
Total	7,281	7,281	0	(0	0	0	0		0 0		
Federal-Aid	2,267	2,267	0	(0	0	0	0		0 0		

CLASSIFICATION:

STATE - Principal Arterial

FEDERAL - Freeway/Expressway

STATE SYSTEM: Primary

Annual Average Daily Traffic (vehicles per day)

CURRENT (2017) - 60,400 - 74,400

PROJECTED (2035) - 67,000 - 82,000

STIP REFERENCE #MO4253 12/01/2017 PAGE <u>SHA-M-14</u>

STATE HIGHWAY ADMINISTRATION -- Montgomery County -- Line 15

SECONDARY DEVELOPMENT AND EVALUATION PROGRAM

97	<	J H	OWARD
28	198	29	
182	MONTGOM	RY	\mathcal{L}
200	650	$\sqrt{\ /\ /}$	
	0	1 mi	ICE GEORGE'S

PROJECT: MD 28, Norbeck Road, and MD 198, Spencerville Road/Sandy Spring Road

<u>DESCRIPTION:</u> Study of MD 28/MD 198 corridor safety, capacity, and operational improvements in Montgomery and Prince George's counties, between MD 97 and I-95 (11.1 miles). Bicycle and pedestrian accommodations will be included where appropriate.

<u>JUSTIFICATION:</u> This project would address safety in the MD 28/MD 198 corridor. This project would also reduce traffic congestion and improve traffic operations.

SMART GROWTH STATUS: Project N	lot Location Specific Not Subject to PFA Law
Project Inside PFA	Grandfathered
X Project Outside PFA —————	X Exception Will Be Required
PFA Status Yet To Be Determined	Exception Granted
ASSOCIATED IMPROVEMENTS:	
MD 97 Interchange Construction at MD 28 (Lin	ne 16)

STATUS: Planning underway.

SIGNIFICANT CHANGE FROM FY 2017 - 22 CTP: None.

POTENTIA	AL FUNDING S	SOURCE:		X SPEC	IAL X FE	DERAL	GENERAL	OTHER	₹	
	TOTAL			PROJE	CT CASH F	LOW				
PHASE	ESTIMATED	EXPEND	CURRENT	BUDGET					SIX	BALANCE
	COST	THRU	YEAR	YEAR	FOR P	LANNING P	URPOSES (ONLY	YEAR	TO
	(\$000)	2017	2018	2019	2020	2021	2022	2023	TOTAL	COMPLETE
Planning	7,563	7,113	250	200	0	0	0	0	45	0 0
Engineering	0	0	0	0	0	0	0	0		0 0
Right-of-way	0	0	0	0	0	0	0	0		0 0
Construction	0	0	0	0	0	0	0	0		0 0
Total	7,563	7,113	250	200	0	0	0	0	45	0 0
Federal-Aid	3,207	3,207	0	0	0	0	0	0		0 0

CLASSIFICATION:

STATE - Minor Arterial

FEDERAL - Other Principal Arterial

STATE SYSTEM: Secondary

Annual Average Daily Traffic (vehicles per day)

CURRENT (2017) - 20,000 - 37,500 (MD 28)

16,800 - 47,000 (MD 198)

PROJECTED (2035) - 28,000 - 50,000 (MD 28)

24,000 - 58,500 (MD 198)

SECONDARY DEVELOPMENT AND EVALUATION PROGRAM

	PROJECT: MD 97, Georgia Avenue
200	<u>DESCRIPTION:</u> Construct a new MD 97 interchange at MD 28. Bicycle and pedestrian accommodations will be included where appropriate.
1115	<u>JUSTIFICATION:</u> This project will reduce congestion and improve safety at the existing intersection.
28 97 0 0.25 mi	SMART GROWTH STATUS: Project Not Location Specific Not Subject to PFA Law X Project Inside PFA Project Outside PFA PFA Status Yet To Be Determined Exception Will Be Required Exception Granted ASSOCIATED IMPROVEMENTS: MD 28/MD 198, Corridor Study, MD 97 to I-95 (Line 15)
	,

STATUS: Project on hold.

SIGNIFICANT CHANGE FROM FY 2017 - 22 CTP: None.

POTENTIA	AL FUNDING S	SOURCE:		X SPEC	CIAL X FE	EDERAL	GENERAL	OTHER	₹		CLASSIF
	TOTAL			PROJ	ECT CASH F	LOW	•	—			STATE -
PHASE	ESTIMATED	EXPEND	CURRENT	BUDGET					SIX	BALANCE	FEDERA
	COST	THRU	YEAR 2018	YEAR 2019		<u>LANNING P</u> 2021	<u>URPOSES</u> 2022	<u>ONLY</u> 2023	YEAR TOTAL	TO COMPLETE	STATE S
Planning	(\$000) 1,982	2017 1.982		2019		2021	2022	2023	TOTAL	0 0	Annual A
Engineering	*	847	0	C	0	0	0	0		0 0	CURREN
Right-of-way	0	0	0	C	0	0	0	0		0 0	
Construction	0	0	0	C	0	0	0	0		0 0	PROJEC
Total	2,829	2,829	0	(0	0	0	0		0 0	
Federal-Aid	1,581	1,581	0	C	0	0	0	0		0 0	<u> </u>

CLASSIFICATION:

STATE - Intermediate Arterial

FEDERAL - Other Principal Arterial

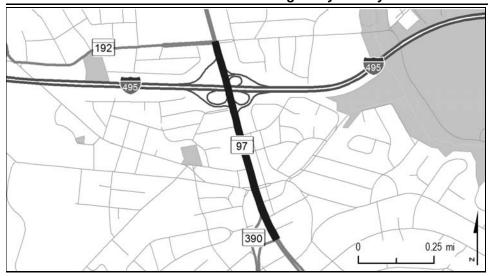
STATE SYSTEM: Secondary

Annual Average Daily Traffic (vehicles per day)

CURRENT (2017) - 47,300

PROJECTED (2035) - 52,000

STIP REFERENCE #M08521 12/01/2017 PAGE <u>SHA-M-16</u>



PROJECT: MD 97, Georgia Avenue

<u>DESCRIPTION:</u> This project will evaluate MD 97 safety and accessibility in Montgomery Hills, between MD 192 and MD 390. Bicycle and pedestrian accommodations will be included where appropriate.

JUSTIFICATION: This project will address safety and traffic operations within the study area.

SMART GROWTH STATUS: Project N	Not Location Specific Not Subject to PFA La
X Project Inside PFA	Grandfathered
Project Outside PFA ——————	Exception Will Be Required
PFA Status Yet To Be Determined	Exception Granted
ASSOCIATED IMPROVEMENTS:	. —
I-495 Inner Loop Resurfacing (Line 3)	

STATUS: Planning underway. Engineering to begin during current fiscal year. County contributed \$3.0 million for Planning.

SIGNIFICANT CHANGE FROM FY 2017 - 22 CTP: None.

POTENTIA	AL FUNDING S	SOURCE:		SPEC	IAL 🔲 FE	DERAL	GENERAL	. X OTHER	₹	
	TOTAL			PROJE	CT CASH F	LOW				
PHASE	ESTIMATED	EXPEND	CURRENT	BUDGET					SIX	BALANCE
	COST	THRU	YEAR	YEAR	FOR P	LANNING P	JRPOSES (<u>YINC</u>	YEAR	TO
	(\$000)	2017	2018	2019	2020	2021	2022	2023	TOTAL	COMPLETE
Planning	3,070	3,044	26	0	0	0	0	0	20	6 0
Engineering	1,000	0	420	580	0	0	0	0	1,000	0 0
Right-of-way	0	0	0	0	0	0	0	0	(0 0
Construction	0	0	0	0	0	0	0	0	(0 0
Total	4,070	3,044	446	580	0	0	0	0	1,020	6 0
Federal-Aid	0	0	0	0	0	0	0	0	(0 0

CLASSIFICATION:

STATE - Intermediate Arterial

FEDERAL - Other Principal Arterial

STATE SYSTEM: Secondary

Annual Average Daily Traffic (vehicles per day)

CURRENT (2017) - 70,000

PROJECTED (2035) - 75,500

STIP REFERENCE #MO2241 12/01/2017 PAGE SHA-M-17

		355
PHASE 3	nuetropoliten Groue	
	117 124	
Clopper Lake Seneca Creek State Park	PHASE 2	0.25 mi

PROJECT: MD 117, Clopper Road/Diamond Avenue

<u>DESCRIPTION:</u> Construct intersection capacity improvements from I-270 to Metropolitan Grove Road (Phase 2) and Metropolitan Grove Road to west of Game Preserve Road (Phase 3) (2.0 miles). Sidewalks will be included where appropriate, including a shared-use path on the south side. Wide curb lanes will accommodate bicycles.

<u>JUSTIFICATION:</u> MD 117 is a heavily traveled commuter route. Capacity improvements are needed to reduce congestion associated with planned and approved development in Germantown that will exceed the current capacity of the highway.

SMART GROWTH STATUS: Project N	ot Location Specific Not Subject to PFA Law
X Project Inside PFA	Grandfathered
Project Outside PFA —————	Exception Will Be Required
PFA Status Yet To Be Determined	Exception Granted
ASSOCIATED IMPROVEMENTS:	
I-270. Interchange Construction at Watkins Mi	Il Road (Line 1)

STATUS: Project on hold.

SIGNIFICANT CHANGE FROM FY 2017 - 22 CTP: None.

I-270, Innovative Congestion Management (Line 2)

POTENTIA	AL FUNDING S	SOURCE:		X SPEC	CIAL X FE	DERAL	GENERAL	. OTHER	₹			
	TOTAL			PROJ	PROJECT CASH FLOW							
PHASE	ESTIMATED	EXPEND	CURRENT	BUDGET					SIX	BALANCE		
	COST	THRU	YEAR	YEAR	FOR P	LANNING P	URPOSES (<u>YINC</u>	YEAR	TO		
	(\$000)	2017	2018	2019	2020	2021	2022	2023	TOTAL	COMPLETE		
Planning	1,030	1,030	0	C	0	0	0	0		0 0		
Engineering	1,909	1,909	0	C	0	0	0	0		0 0		
Right-of-way	0	0	0	C	0	0	0	0		0 0		
Construction	0	0	0	C	0	0	0	0		0 0		
Total	2,939	2,939	0	C	0	0	0	0		0 0		
Federal-Aid	546	546	0	C	0	0	0	0		0 0		

CLASSIFICATION:

STATE - Major Collector

FEDERAL - Minor Arterial

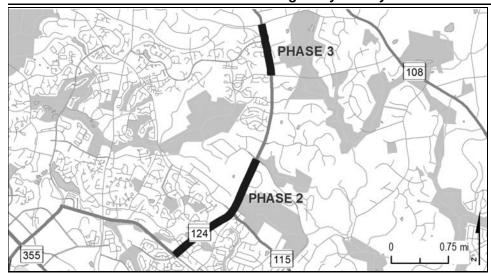
STATE SYSTEM: Secondary

Annual Average Daily Traffic (vehicles per day)

CURRENT (2017) - 30,200 - 49,000

PROJECTED (2035) - 33,000 - 52,000

STIP REFERENCE #M06711 12/01/2017 PAGE SHA-M-18



PROJECT: MD 124, Woodfield Road

<u>DESCRIPTION:</u> Reconstruct MD 124 from Midcounty Highway to south of Airpark Road (Phase 2) (1.6 miles) and from north of Fieldcrest Road to Warfield Road (Phase 3) (0.4 miles). Bicycle and pedestrian accomodations will be included where appropriate.

<u>JUSTIFICATION:</u> MD 124 is a heavily traveled commuter route from northern Montgomery County to the Rockville-Gaithersburg area that experiences capacity and sight distance problems.

SMART GROWTH STATUS: Project No.	ot Location Specific Not Subject to PFA Law
X Project Inside PFA	Grandfathered
Project Outside PFA —————	Exception Will Be Required
PFA Status Yet To Be Determined	Exception Granted
ASSOCIATED IMPROVEMENTS:	

STATUS: Engineering on hold. County contributed \$1.5 million to Engineering and Right-of-Way.

SIGNIFICANT CHANGE FROM FY 2017 - 22 CTP: None.

POTENTIA	AL FUNDING S	X SPEC	X SPECIAL X FEDERAL GENERAL X OTHER							
	TOTAL			PROJE	CT CASH F	LOW				
PHASE	ESTIMATED	EXPEND	CURRENT	BUDGET					SIX	BALANCE
	COST	THRU	YEAR	YEAR	FOR P	LANNING P	URPOSES (<u>YINC</u>	YEAR	TO
	(\$000)	2017	2018	2019	2020	2021	2022	2023	TOTAL	COMPLETE
Planning	2,114	2,114	0	0	0	0	0	0	(0 0
Engineering	3,528	873	880	836	939	0	0	0	2,655	5 0
Right-of-way	5,024	24	0	0	0	0	2,500	2,500	5,000	0
Construction	n 0	0	0	0	0	0	0	0	(0
Total	10,666	3,011	880	836	939	0	2,500	2,500	7,65	5 0
Federal-Aid	655	20	0	0	635	0	0	0	635	5 0

CLASSIFICATION:

STATE - Major Collector

FEDERAL - Minor Arterial

STATE SYSTEM: Secondary

Annual Average Daily Traffic (vehicles per day)

CURRENT (2017) - 21,000

PROJECTED (2035) - 30,000

soo o	Parklamno
Montrose Pkwy	Randolph Rd
Executive Blvd	355 Nicholson 0 0.25 mi

PROJECT: MD 355, Rockville Pike

<u>DESCRIPTION:</u> Construct a grade-separated crossing over CSX Metropolitan Subdivision and an interchange at Parklawn Drive. Pedestrian and bicycle accomodations will be included where appropriate.

<u>JUSTIFICATION:</u> This project will improve safety and reduce traffic congestion that occurs at the Randolph Road/Parklawn Drive intersection and at the Randolph Road CSX Railroad crossing.

SN	IART GROWTH STATUS: Project N	Not L	ocation Specific Not Subject to PFA Law
X	Project Inside PFA		Grandfathered
	Project Outside PFA —————		Exception Will Be Required
	PFA Status Yet To Be Determined		Exception Granted
AS	SOCIATED IMPROVEMENTS:		
Mc	ntrose Parkway East (Montgomery County	/ Pro	rject)

STATUS: Engineering underway. Montgomery County is contributing \$9.0 million to Engineering.

SIGNIFICANT CHANGE FROM FY 2017 - 22 CTP: None.

POTENTIA	AL FUNDING S	SOURCE:		X SPEC	IAL FE	DERAL	GENERAL	X OTHE	₹	
TOTAL			PROJECT CASH FLOW							
PHASE	ESTIMATED	EXPEND	CURRENT	BUDGET					SIX	BALANCE
	COST	THRU	YEAR	YEAR	FOR P	LANNING P	URPOSES (<u>YINC</u>	YEAR	TO
	(\$000)	2017	2018	2019	2020	2021	2022	2023	TOTAL	COMPLETE
Planning	1,860	1,860	0	0	0	0	0	0		0 0
Engineering	9,000	4,125	2,627	2,248	0	0	0	0	4,87	5 0
Right-of-way	0	0	0	0	0	0	0	0		0 0
Construction	0	0	0	0	0	0	0	0		0 0
Total	10,860	5,985	2,627	2,248	0	0	0	0	4,87	5 0
Federal-Aid	0	0	0	0	0	0	0	0		0 0

CLASSIFICATION:

STATE - N/A

FEDERAL - N/A

STATE SYSTEM: Secondary

Annual Average Daily Traffic (vehicles per day)

CURRENT (2017) - 57,750 (MD 355)

PROJECTED (2035) - 66,000 (MD 355)

STIP REFERENCE #MO3441 12/01/2017 PAGE <u>SHA-M-20</u>

Aspen Hill 182 200
MONTGOMERY Wheaton 97

PROJECT: MD 586, Veirs Mill Road, and MD 28, Veirs Mill Road

Montrose Parkway East (Montgomery County Project)

<u>DESCRIPTION:</u> This study will evaluate roadway improvements to implement Montgomery County's bus rapid transit (BRT) system on MD 586 and MD 28 from Rockville to Wheaton (6.1 miles). Wide curb lanes to accommodate bicycles will be included where appropriate.

<u>JUSTIFICATION</u>: This project will enhance transit connections and improve operational efficiency and travel times. This project supports plans for BRT implementation.

SMART GROWTH STATUS: Project No.	ot Location Specific Not Subject to PFA Law
X Project Inside PFA	Grandfathered
Project Outside PFA —————	Exception Will Be Required
PFA Status Yet To Be Determined	Exception Granted
ASSOCIATED IMPROVEMENTS:	

STATUS: Planning complete. Montgomery County is contributing \$6.0 million for Planning.

SIGNIFICANT CHANGE FROM FY 2017 - 22 CTP: The cost decrease of \$1.5 million is due to final expenditures.

POTENTIA	AL FUNDING S	SPEC	IAL F	DERAL	GENERAL	. X OTHER	₹				
TOTAL				PROJECT CASH FLOW							
PHASE	ESTIMATED	EXPEND	CURRENT	BUDGET					SIX	BALANCE	
	COST THRU YE		YEAR	YEAR FOR PLANNING PURPOSES ONLY					YEAR	TO	
	(\$000)	2017	2018	2019	2020	2021	2022	2023	TOTAL	COMPLETE	
Planning	4,493	4,453	40	0	0	0	0	0	4	0 0	
Engineering	0	0	0	0	0	0	0	0		0 0	
Right-of-way	0	0	0	0	0	0	0	0		0 0	
Construction	0	0	0	0	0	0	0	0		0 0	
Total	4,493	4,453	40	0	0	0	0	0	4	0 0	
Federal-Aid	0	0	0	C	0	0	0	0	ı	0 0	

CLASSIFICATION:

STATE - Intermediate Arterial

FEDERAL - Other Principal Arterial

STATE SYSTEM: Secondary

Annual Average Daily Traffic (vehicles per day)

CURRENT (2017) - 21,200 - 46,200

PROJECTED (2035) - 24,000 - 50,000

STIP REFERENCE #MO2441 12/01/2017 PAGE SHA-M-21

STATE HIGHWAY ADMINISTRATION -- MONTGOMERY COUNTY LINE 22

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2017
		Fiscal Year 2017 Completions		
		Resurface/Rehabilitate		
1	MD 117	Clopper Road; Longdraft Road to I-270; safety and resurface Funding provided by the Governor's Investment in Highways and Bridges Initiative	2,388	Completed
2	MD 320	Piney Branch Road; MD 193 to MD 650; safety and resurface	730	Completed
		Traffic Management		
3		Various locations in Montgomery County; signalization	3,760	Completed
4	US 29	Colesville Road; MD 97/ MD 384 to Sligo Creek Parkway/St. Andrews Way; signalization	757	Completed
5	I 270	Eisenhower Memorial Highway; Gude Drive South to north of MD 28; lighting	756	Completed
		Environmental Preservation		
6	MD 190	River Road; Intersection at MD 190 and MD 188; landscape	34	Completed
		Fiscal Years 2018 and 2019		
		Resurface/Rehabilitate		
7		At various locations in Fairland shop area of Montgomery County; patching	1,144	FY 2018
8		At various locations in Montgomery County; mill and resurface	15,927	FY 2018
9		At various locations in Gaithersburg shop area of Montgomery County; patching	1,144	FY 2018
10		At various locations in Montgomery County; mill and resurface	14,772	FY 2018

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2017
		Fiscal Years 2018 and 2019 (cont'd)		
		Resurface/Rehabilitate (cont'd)		
11	MD 28	Darnestown Road; Quince Orchard Road to Argosy Drive; safety and resurface	2,475	FY 2018
12	MD 124	Quince Orchard Road; Orchard Ridge Road to MD 355; safety and resurface	2,831	Completed
13	MD 190	River Road; MD 614 to DC line; safety and resurface	3,525	Under construction
14	MD 193	University Boulevard; I-495 to MD 320; resurface	3,194	Under construction
15	I 270	Eisenhower Memorial Highway; MD 121 to Frederick County line; safety and resurface	6,742	Under construction
16	MD 355	Rockville Pike; Hubbard Avenue to Templeton Place; safety and resurface Funding provided by the Governor's Investment in Highways and Bridges Initiative	2,031	Completed
17	I 495	Capital Beltway; I-270Y to Seminary Road - Outer loop; safety and resurface	8,006	Under construction
18	MD 586	Veirs Mill Road; Structure 15063 to MD 185 and MD 193 to MD 97; safety and resurface Funding provided by the Governor's Investment in Highways and Bridges Initiative	3,496	Under construction
		Bridge Replacement/Rehabilitation		
19		Eight existing bridges on Capital Beltway, Eisenhower Memorial Highway, First Street; clean/paint bridges	2,725	Under construction
20		Seminary Road; Bridge 1512900 over I-495; bridge deck replacement	7,101	Under construction
		Safety/Spot Improvement		
21		CCT walls between CCT and Purple Line; retaining walls	7,635	FY 2018

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2017
		Fiscal Years 2018 and 2019 (cont'd)		
		Safety/Spot Improvement (cont'd)		
22	MD 117	Clopper Road; Between MD 117 and in-stream stormwater management structure; drainage improvements Funding provided by the Governor's Investment in Highways and Bridges Initiative	2,698	Under construction
23	MD 190	River Road; Ventnor Road to Baltimore Avenue; geometric improvements	1,363	Completed
24	MD 198 WB	Sandy Spring Road; at Riding Stable Road; widen and resurface Funding provided by the Governor's Investment in Highways and Bridges Initiative	1,193	Under construction
25	I 270	Eisenhower Memorial Highway; Montrose Road to SB I-270; drainage improvements Funding provided by the Governor's Investment in Highways and Bridges Initiative	755	Under construction
		Traffic Management		
26		MD 185/MD 187/ MD 355 TS reconstruction with APS/CPS; reconstruct signal Funding provided by the Governor's Investment in Highways and Bridges Initiative	3,670	Under construction
27		Thru the city of Takoma Park (MD 195, MD 410 and MD 320); signalization	1,353	Under construction
		Environmental Preservation		
28	I 495	Capital Beltway; IRVM, from MO/PG County line to MD/VA line - Phase 1; landscape	2,116	Under construction
		Intersection Capacity Improvements		
29		I-495 at MD 650 - Ramp from Inner Loop to southbound MD 650; geometric improvements	623	Under construction
30	MD 97	Georgia Avenue; at MD 28; geometric improvements Funding provided by the Governor's Investment in Highways and Bridges Initiative	3,072	Under construction

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2017
		Fiscal Years 2018 and 2019 (cont'd)		
		Intersection Capacity Improvements (cont'd)		
31	MD 355	Frederick Road; at West Old Baltimore Road; geometric improvements Funding provided by the Governor's Investment in Highways and Bridges Initiative	3,123	FY 2019
32	MD 650	New Hampshire Ave; Oakview Drive; Extend left-turn lane on SB MD 650 (Project on hold)		Design Underway
		Bicycle Retrofit		
33	MD 124	Quince Orchard Road; Dosh Drive to MD 117; bicycle-pedestrian route	1,453	FY 2018
34	MD 187	Old Georgetown Road; Lincoln Drive to Charles Street; bicycle-pedestrian route	2,248	Under construction
		TMDL Compliance		
35		Tree planting at various locations in Montgomery County; landscape (Transportation Infrastructure Investment Act of 2013)	1,312	Under construction
		<u>Enhancements</u>		
		Pedestrian/Bicycle Facilities		
36		Ethan Allen Gateway Streetscape; streetscape improvements along MD 410 and MD 650	1,255	FY 2018
37		Falls Road East Shared Use Path; construct sidewalk between Dunster Road and Kimblewick Road along east side of MD 189	100	FY 2018
38		Flower Avenue Green Street Project; install ADA compliant sidewalks, crosswalks, traffic calming and street signs along Flower Avenue	1,040	FY 2018

TEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 201
		Fiscal Years 2018 and 2019 (cont'd)		
		Enhancements (cont'd)		
39		North Branch Hiker-Biker Trail; construct 2.2 mile trail with access to Meadowside Nature Center, The Smith Environmental Center and the Rock Creek Trail	2,000	FY 2018
40		Sligo Creek Trail; Sligo Creek Trail improvements and construct 213 foot trail within Sligo Creek Stream Valley Park	548	FY 2018
		Congressional Earmarks		
41		Complete Streets Near Metro Station; improve pedestrian crossing locations near Twinbrook station and implement road diet on S. Stonestreet Avenue near Rockville station (Earmark \$827,200; CO)	0	
42		Long Branch Village Center; access improvements (Earmark \$750,000; CO)	0	
43		Rockville Intermodal Access: Maryland Avenue and Market Street; Construction of intermodal access project including pedestrian safety improvements along the Baltimore Road corridor (Earmark \$4 million; PE, CO)	0	