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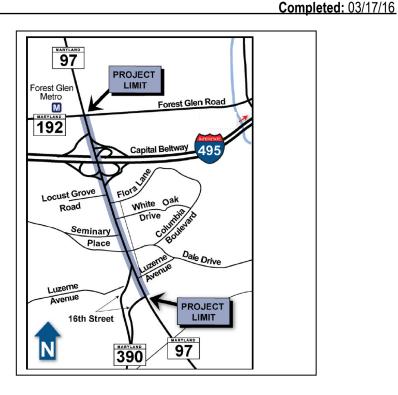
Item No. 7 Date: 03-24-16

Alternatives Review: Georgia Avenue (MD97) Montgomery Hills from Forest Glen Rd (MD192) to Sixteenth St (MD390)

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Description

The Maryland State Highway
Administration (SHA) is studying a
reconstruction of Georgia Avenue
(MD97) to establish a more balanced
approach to transportation within the
corridor by evaluating existing vehicular,
pedestrian, and bicyclist mobility and
safety, while accommodating proposed
rapid transit enhancements and
establishing a sense of place within the
Montgomery Hills community.



Summary

We recommend that the Board approve this project with the following comments to SHA and request that response to these comments be provided with the Mandatory Referral submittal:

We recognize that these recommendations would increase the cost of this project, however there are few locations that could compete with the documented problems here:

- Georgia Avenue (MD97) is the highest volume non-Interstate roadway with the highest volume interchange in Maryland
- The three major intersections within the project limits of just over a half-mile are rated as some of the most congested in Montgomery County, per the 2014 Mobility Assessment Report:
 - o Georgia Avenue (MD97)/Sixteenth Street (MD390) #7
 - o Georgia Avenue (MD97)/Forest Glen Road (MD192) #32
 - o Georgia Avenue (MD97)/Seminary Road/Columbia Boulevard #34

The expanded project would encompass two projects on the County's priority list for State projects (see Attachment 6), #12: MD97 (Georgia Avenue) and Forest Glen Road: pedestrian underpass and safety improvement, and #16: MD97 (Georgia Avenue), I-495 to MD390 (16th Street) in the Construction program. It would also partially address #9: Bicycle-Pedestrian Priority Areas: bike and pedestrian facility improvements, since the project sits within the Montgomery Hills and Forest Glen Metro Station Bicycle Pedestrian Priority Areas.

- 1. Alternative 5 with Cycle Track and Flora Lane Relocated best meets our master plan goals and other Montgomery County policies. The typical sections for Georgia Avenue (MD97) shown in the public hearing document should be modified as follows:
 - a. An excellent bicycle facility is an essential part of the project that moves forward to design. The width of the proposed two-way cycle track on the west side of Georgia Avenue should be increased to nine feet and raised to the top of curb, and be separated from the roadway by a seven-foot-wide landscape panel. A six-foot-wide minimum (eight feet preferred) sidewalk should also be provided.
 - b. Provide a six-foot-wide minimum (eight feet preferred) sidewalk on the east side of Georgia Avenue with a five-foot-wide landscape panel.
 - c. Travel lanes should be ten feet wide except where adjacent to an outside curb.
 - d. Install six-inch-high curbs on MD97 south of the Capital Beltway.
- 2. Extend the separated bikewaysouth along either the east or west side of Sixteenth Street to the project limits in a way that facilitates a safe connection to the planned two-way cycle track on the east side of Sixteenth Street south of the subject project in the future.
- 3. Construct the Forest Glen Pedestrian Tunnel under MD97 at Forest Glen Road as part of this project to improve pedestrian and driver safety, improve the operation of this intersection, and reduce overall construction costs.

Traffic and Bus Rapid Transit Accommodation

- 4. The posted speed limit on MD97 should be no higher than the statutory speed of 30 mph per the Maryland Vehicle Law for a road in a business district. If the existing 35 mph speed limit is not lowered, please provide a written justification.
- 5. Consider constructing a barrier on the Capital Beltway Outer Loop from the top of the ramp from northbound MD97 to the end of the gore of the ramp from southbound MD97. This would eliminate one of the merge points on the Beltway, increasing safety on the Beltway and improving traffic flow on both roads.
- 6. Provide a queue jump for northbound buses on MD97 between the on and off-ramps for the Inner Loop of the Capital Beltway if the existing traffic signal is retained, as shown in Alternative 5.
- 7. In conjunction with the installation of a traffic signal at Flora Lane, consider the feasibility of providing barrier-separation for the rightmost SB lane of MD97 at the traffic signal just north of the Beltway that would allow drivers bound for the Inner Loop to get to the ramp without stopping, and create the opportunity for a queue jump for buses on southbound MD97. Evaluate whether it would be better to relocate the left turns to northbound MD97 from Seminary Road to Seminary Place, which is a simpler T-intersection. Please provide a traffic forecast and analysis of how the proposed changes on MD97 will affect the surrounding area.

- 8. Consider using a horizontal traffic signal head for the northbound lanes on MD97 at the ramp from the Capital Beltway Outer Loop so that the red light can be seen from a farther distance away.
- 9. Provide an analysis of the pros and cons of closing Columbia Boulevard vs. Sutton Place at Seminary Road as part of the Mandatory Referral submission. If Sutton Place is closed at Seminary Road, consider relocating the Sutton Place entrance to the County-owned parking lot to Seminary Road to opposite Selway Lane.
- 10. Coordinate with MCDOT on providing an adequate turnaround on Corwin Drive at the alley that parallels Georgia Avenue.

Other Bicycle and Pedestrian Issues

- 11. Make the intersections of all public streets handicapped accessible; where a safe pedestrian crossing cannot be provided, the intersection should be signed to prohibit the crossing.
- 12. Construct a ten-foot-wide shared use path on the south side of Forest Glen Road, per the Forest Glen Sector Plan, rather than a five-foot-wide sidewalk.
- 13. The pedestrian refuge island and crosswalk on Seminary Road at Snider's should be shown and its design carried forth in any and all alternatives. Provide a median pedestrian refuge for the crosswalk on the south leg of Georgia Avenue at 16th Street.
- 14. Retain the pedestrian refuge island and crosswalk on Seminary Road at Snider's/Selway Lane and carry its design forth in any and all alternatives.

Streetscaping/Urban Design

- 15. Determine the incremental cost of undergrounding the utilities so that a decision can be made whether this can be feasibly achieved as part of this project.
- 16. Any retaining walls that are constructed for this project should use concrete formwork with the same pattern and color as the Beltway Bridge and Forest Glen Pedestrian Bridge.
- 17. Any monolithic concrete medians constructed as part of this project should have an ashlar slate formwork pattern and be dark gray in color.
- 18. Construct brick sidewalks along Georgia Avenue within the limits of this project.
- 19. Where there is not sufficient space for trees in both the median and on the sides of MD97, planting trees on the sides of the road is the priority to provide a better environment for pedestrians and bicyclists.
- 20. Provide a landscape panel of six to eight feet in width on the east side of Sixteenth Street.

Property Impacts

21. Consider the two public parking lots and the surplus land at the Sixteenth Street intersection as potential swaps for commercial property to be acquired for this project. Where full properties would be acquired, consider using some of the land to provide a higher level of landscaping to compensate for more constrained areas that are more difficult to improve.

- 22. Discuss with the property owner and tenants the possibility of replacing the first row of spaces in the parking lot of Dale Center along MD97 with parking spaces behind the shopping center.
- 23. Any relocation of the stacking lane for the car wash should be done in conjunction with the provision of an ample landscaping treatment at the existing driveway opening. Please provide calculations on the required stacking to ensure that the drive aisle for the adjacent shopping center is not blocked with car wash traffic.

Previous Board action

None.

Site Context and Existing Conditions

Between 16th Street and the I-495 (Capital Beltway) Interchange, Georgia Avenue corridor has three travel lanes in each direction. South of the Capital Beltway, a reversible center lane provides a fourth lane southbound in the morning and northbound in the evening to accommodate commuters during peak periods. During non-peak travel periods, this reversible lane operates as a two-way center left-turn lane. Left turns from Georgia Avenue onto side streets are restricted during peak travel periods. Numerous access points to the businesses and secondary streets cause conflicting turning movements from the MD 97 center lane during off-peak periods.

Between I-495 and Forest Glen Road, Georgia Avenue consists of four travel lanes in each direction, separated by a median.

The following intersections along Georgia Avenue are signalized:

- Forest Glen Road
- I-495 Interchange ramps
- Seminary Place
- Seminary Road/Columbia Boulevard
- 16th Street (northbound)

Forty-two commercial properties, twenty-two driveways, and three alleys are located along Georgia Avenue. Two county-owned public parking lots are located on or just off Georgia Avenue, but the access to each is just off Georgia Avenue. Churches are located on either side of the Beltway on the east side of Georgia Avenue. A group of townhouses is located in the southwest quadrant of the interchange and the Metro Station is located in the northwest quadrant. A pedestrian/bicyclist facility crosses the Capital Beltway along the west side of Georgia Avenue, and crosswalks are provided at five intersections. Bus stops are located near Forest Glen Road and Seminary Place.

Additional Information

SHA's Purpose and Need statement for this study may be found here:

http://apps.roads.maryland.gov/WebProjectLifeCycle/MO224_11/htdocs/Documents/Purpose_and_Need/MD% 2097%20Purpose%20and%20Need%204-24-12.pdf

SHA's invitation for the Location/Design Public Hearing may be found here:

http://apps.roads.maryland.gov/WebProjectLifeCycle/MO224_11/HTDOCS/Documents/Location_Design/FINAL%20TRANSLATED%20-%20MD%2097%20Post%20Card%20-%20PC.pdf

SHA's Location/Design Public Hearing packet may be found here:

SHA's Mapping Packet for the Public Hearing may be found here:

http://apps.roads.maryland.gov/WebProjectLifeCycle/MO224_11/HTDOCS/Documents/Location_Design/FULL%20Mapping%20Packet%20(2).pdf

Project Need

The current mix of local and regional (commuter) traffic, coupled with the existing roadway design and sidewalk conditions, creates an automobile-dominated environment that is not always conducive to other modes of transportation. As a result, local business accessibility, pedestrian accessibility, bicycle connectivity, and transit use have become major challenges within the project area.

Traffic Operations

SHA developed Annual Average Daily Traffic (AADT) AM and PM peak-hour volumes for this study. 2011 Existing and 2040 Projected No-Build AADT and Percent Growth along Georgia Avenue are shown in **Table 1**.

TABLE 1 - 2011 Existing and 2040 Projected No-Build AADT								
	Average Daily Traffic (vehicles per day)							
Georgia Avenue Segment	2011 Existing	2040 Projected	Percent Growth					
North of Forest Glen Road (MD 192)	65,000	75,000	15.3%					
Forest Glen Road to I-495	73,000	84,000	15.1%					
I-495 to Seminary Place	81,000	93,000	14.8%					
Seminary Place to Seminary Road/ Columbia Boulevard	71,000	82,000	15.5%					
Seminary Road to Southbound 16th Street	66,000	76,000	15.2%					
Southbound 16th Street to Northbound 16th Street	51,000	59,000	15.7%					
South of 16th Street	35,000	41,000	17.1%					

Level of Service

SHA conducted a Level of Service (LOS) analysis for existing (2011) and projected (2040) No-Build and Build conditions for the preliminary alternatives. LOS is a measure of the congestion experienced by drivers and ranges from "A" (free flow, with little or no congestion) to "F" (failure, with stop-and-go conditions). LOS is normally computed for the peak periods of a typical weekday, with

LOS D (approaching unstable flow) or better generally considered acceptable for intersections or highways in urban and suburban areas. At LOS E, volumes are at or near capacity. Once a segment exceeds capacity, extensive delay begins. LOS F represents conditions where demand exceeds capacity. Traffic experiences operational breakdowns, with stop-and-go conditions and extremely long delays at signalized intersections. LOS and delay times for the 2011 Existing Conditions and the 2040 Projected No-Build are provided in Table 2.

TABLE 2 – Overview of 2011 Existing and 2040 Traffic									
	Exist	ing Con	ditions (2011)	Alterna	ative 1: N	No-Build	(2040)	
	AM PM		M	AM		PM			
Signal Intersection LOS	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	
Forest Glen Road (MD 192)	D	48	С	32	Е	66	С	32	
I-495 Outer Loop Ramps	В	14	В	16	В	16	В	16	
I-495 Inner Loop Ramps	С	34	Α	8	D	43	В	11	
Flora Lane	-	-	-	-	-	-	-	-	
Seminary Place	D	41	В	11		47	В	12	
Seminary Road	С	25	С	32	С	25	D	36	
16th Street (MD 390)	С	25	С	27	С	26	С	26	
Alternative 2: TSM/TDM (2040)									

	Alternative 2: TSM/TDM (2040)					
	Α	M	PM			
Signal Intersection LOS	LOS	Delay (sec)	LOS	Delay (sec)		
Forest Glen Road (MD 192)	F	133	D	41		
I-495 Outer Loop Ramps	D	53	С	27		
I-495 Inner Loop Ramps	Е	63	В	14		
Flora Lane	-	-	-	-		
Seminary Place	Е	59	В	17		
Seminary Road	С	31	D	46		
16th Street (MD 390)	D	51	F	123		

Legend							
LOS	Delay (sec)						
Α	<10						
В	10-20						
С	20-35						
D	35-55						
Е	55-80						
F	>80						

TABLE 2 (Continued) – Overview of 2011 Existing and 2040 Traffic									
	Alternative 3: Master Plan (2040)				Alternative 5: Four Lanes Southbound; Three to Four Lanes Northbound (2040)				
	Α	M	Р	М	АМ		PM		
Signal Intersection LOS	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	
Forest Glen Road (MD 192)	F	81	Е	79	D	52	D	42	
I-495 Outer Loop Ramps	С	22	F	87	В	11	С	21	
I-495 Inner Loop Ramps	С	33	С	34	-	-	-	-	
Flora Lane	Α	7	В	16	-	-	-	-	
Seminary Place	D	47	С	34	D	35	В	14	
Seminary Road	С	24	D	38	С	23	С	34	
16th Street (MD 390)	С	24	F	148	В	15	F	94	
		ative 5, (e Interse			Alternative 5 Cycle Track Option (2040)				
	Α	М	PM		AM		PM		
Signal Intersection LOS	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	
Forest Glen Road (MD 192)	Е	64	D	51	Е	64	D	51	
I-495 Outer Loop Ramps	С	25	В	19	С	25	В	19	
I-495 Inner Loop Ramps	-	-	-	-	-	-	-	-	
Flora Lane	Α	10	Α	10	Α	10	Α	10	
Seminary Place	Е	60	D	46	Е	60	D	46	
Seminary Road	D	27	D	36	D	27	D	36	
16th Street (MD 390)	В	16	F	81	В	16	F	81	

Legend						
LOS	Delay (sec)					
Α	<10					
В	10-20					
С	20-35					
D	35-55					
E	55-80					
F	>80					

Roadway Safety

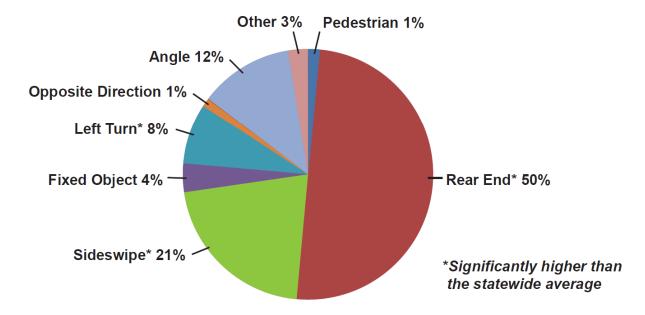
During the three-year period from 2012 through 2014, 297 police-reported crashes occurred within the study limits. Approximately 94 of those crashes (32 percent) resulted in injuries. No fatalities were documented. Rearend, sideswipe, and left-turn crashes each occurred at a rate significantly higher than the statewide average for those types of crashes on similar roadways. The percentages of all crash types along the project corridor are shown in the chart below.

Heavy traffic volumes during peak hours have the greatest impact on safety along the study corridor, as reflected in the high occurrence of sideswipe and rear-end collisions. Heavy traffic volumes decrease the following distance between vehicles, lessening driver reaction time and result in rear-end collisions, which account for almost half of all collisions along the corridor. Approximately 21 percent of the crashes involved vehicle sideswipes, which are typically associated with a high volume of merging vehicles and lane changes. The left-turn collisions are related to turning-movement conflicts and highly congested roadways.

During off-peak periods, the two-way center left-turn lane encourages unmanaged circulation patterns and increases safety concerns, as evidenced by the high proportion of sideswipe, left-turn, and angle crashes that account for just under half of all crashes along the corridor. These types of crashes typically reflect unsafe lane-change and turning-movement conditions. Because the center turn lane allows uncontrolled turning movements, motorists are unable to anticipate accurately when they may have to contend with turning vehicles. Motorists using the two-way center travel lane must make assumptions about the intentions of drivers of oncoming vehicles and determine whether those drivers are turning or continuing on their current paths.

The safety of pedestrians, bicyclists, and motorists along the MD 97 Montgomery Hills corridor is also adversely impacted by a large number of commercial access points and limited access consolidation in both directions.

MD 97 Crashes 2012 - 2014



Vehicular Mobility and Traffic

Vehicular mobility in Montgomery Hills is impeded by several factors, including high traffic volumes along Georgia Avenue, restricted left turns during morning and evening peak periods (which make it more difficult to access neighborhoods and businesses), and numerous commercial access points.

Pedestrian and Bicyclist Accessibility

Sidewalks along this corridor are generally non-compliant with Americans with Disabilities Act (ADA) standards. Signs and utility poles on sidewalks in both directions along Georgia Avenue present numerous obstacles and reduced-width areas for people who use wheelchairs. Those who walk or bicycle through the project study area must constantly be alert for approaching vehicular traffic, drivers exiting the access points, and drivers turning from the uncontrolled center turn lane during off-peak periods.

Transit Accessibility

Transit accessibility is impeded by several factors, including large traffic volumes and the pedestrian and bicyclist obstacles noted in the preceding section of the brochure. Direct ADA access to the Forest Glen Metrorail Station from Georgia Avenue does not exist. Peak-period restrictions on left turns from Georgia Avenue onto Forest Glen Road and relatively short signal times for pedestrians crossing Georgia Avenue make commuter access to the station difficult, especially during peak periods.

Sense of Place

The project seeks to create a distinctive character for the community and improve the roadway along the Georgia Avenue project corridor by:

- minimizing the number of locations where crashes could occur;
- promoting safety within the project limits by providing features that accommodate all roadway users; and
- enhancing the appearance of the project corridor by including landscape features.

Alternatives Retained For Detailed Study (ARDS)

SHA has retained the following alternatives and options for detailed study. Detailed descriptions and mapping for each alternative retained for detailed study are shown in Attachment 1. Descriptions of the alternatives dropped from further study are shown in Attachment 2.

Alternative 1: No-Build

The No-Build Alternative includes no major capital improvements. Minor short-term improvements would occur as a part of routine maintenance and safety operations. The No-Build Alternative does not address the purpose and need for the project. It serves as a baseline for comparing the impacts and benefits associated with the build alternatives.

Alternative 2: Transportation Systems Management/Transportation Demand Management (TSM/TDM)

The TSM/TDM alternative would include improvements at existing signalized intersections such as Transit Signal Priority (TSP), queue jumps, and access consolidation. TSP allows approaching buses to send a signal to a transmitter at a signalized intersection to modify the signal timing and allow the buses to proceed through the signal without stopping. Queue jumps are short additional lanes for transit vehicles that can be combined with right-turn lanes and introduced at various intersections along the corridor. Queue jumps allow the transit buses at signalized intersections to move in front of the through traffic on a green light. Access consolidation increases safety and improves traffic flow by minimizing disruptions caused by turning vehicles by reducing the number of access points. Alternative 2 would also maintain the existing center reversible lane and include a 16-foot-wide outer travel lane in each direction to accommodate on-road bicyclists. Alternative 2 only partially addresses the purpose and need for the project; it would not eliminate the center reversible lane or address pedestrian mobility and safety concerns.

Alternative 3: Master Plan

Alternative 3 would consist of four travel lanes in the southbound direction at all times and a 16-foot-wide grass median that would replace the existing reversible center turn lane. Three travel lanes would be maintained in the northbound direction from 16th Street to Seminary Place, and the roadway would be widened to provide four northbound travel lanes from Seminary Place through Forest Glen Road. A 13.5-foot-wide sidewalk would be provided on both sides of Georgia Avenue, and a new signal at Flora Lane would help bicyclists and pedestrians cross Georgia Avenue. Flora Lane would be shifted south to intersect Georgia Avenue opposite the driveway entrance to the Seminary Place shopping center on the west side of MD97.

Left-turn lanes would be included on Georgia Avenue at the intersections with Forest Glen Road, Flora Lane, Seminary Place, and Seminary Road; the left turn lane at Seminary Place would be used for U-turns only. Right turn lanes would be added on Forest Glen Road at Georgia Avenue. A second left turn lane would be added on the west leg of Seminary Road at Georgia Avenue. Bicycle accommodations would be limited to the existing bicyclist/pedestrian bridge and the local street network. Therefore, the Master Plan Alternative would not include on-road bicycle accommodations along Georgia Avenue through Montgomery Hills.

Alternative 5: Four Lanes Southbound (SB) and Three to Four Lanes Northbound (NB)

Alternative 5 would provide four lanes in the southbound direction with a 17-foot-wide center grass median. Three travel lanes would be maintained in the northbound direction from 16th Street to Seminary Place, and the roadway would be widened to provide four northbound travel lanes from Seminary Place through Forest Glen Road. In an effort to minimize right-of-way impacts, the centerline of the roadway would be shifted slightly near Columbia Boulevard to optimize available right-of-way in that area.

Left-turn lanes would be provided on Georgia Avenue at Forest Glen Road, Seminary Place, and Seminary Road; the left turn lane at Seminary Place would be used for U-turns only. Right turn lanes would be added on Forest Glen Road at Georgia Avenue. A second left turn lane would be added on the west leg of Seminary Road at Georgia Avenue. The ramp to southbound 16th Street would be relocated to the signalized intersection with northbound 16th Street. Alternative 5 includes a 16-foot-wide outside travel lane to accommodate on-road bicycle use. A five-foot-wide sidewalk would be provided on both sides of Georgia Avenue and would be set back from the curb by five feet where space allows.

Alternative 5 with Flora Lane Intersection Relocated

Alternative 5 with Flora Lane Intersection Relocated includes the improvements outlined above for Alternative 5 plus the addition of a new traffic signal on Georgia Avenue at Flora Lane and the deletion of the existing traffic signal on the south side of the Beltway at the ramps to and from the Inner Loop. Flora Lane would be shifted south to intersect Georgia Avenue opposite the driveway entrance to the Seminary Place shopping center on the west side of MD97. The new signalized intersection would accommodate left-turning movements onto Flora Lane and provide improved access for vehicles, pedestrians, and bicyclists accessing Georgia Avenue and the Forest Glen Metrorail Station.

Alternative 5 with Cycle Track Option and Flora Lane Intersection Relocated

Alternative 5 with Cycle Track Option includes the improvements outlined above for Alternative 5 with Flora Lane Intersection Relocated, plus a two-lane/two-way cycle track on the west side of Georgia Avenue that would extend from the existing bicycle/pedestrian bridge to the existing southbound16th Street ramp. The two-way cycle track would include two, four-foot-wide bicycle lanes and a three-foot-wide buffer that would separate vehicular traffic from bicycle traffic. From the southbound 16th Street ramp to the intersection with northbound 16th Street, on-road bicycle lanes would be provided on both sides of Georgia Avenue. The ramp to southbound 16th Street would be relocated to the signalized intersection with northbound 16th Street. A five-

foot-wide sidewalk would be provided on both sides of Georgia Avenue and would be set back from the curb by five feet where space allows.

Measures Of Effectiveness

As part of their Public Hearing packet, SHA included a Measures of Effectiveness table (see Table 3 in Attachment 3) to reflect their approach for developing the project's alternatives and which includes the following measures:

- Automobile Accessibility
- Pedestrian Accessibility
- Bicycle Accessibility
- Transit Accessibility
- Safety
- Other Considerations

While we concur with the finding that Alternative 5 with Cycle Track and Flora Lane Relocated is the best performing alternative, we disagree with the bicycle analysis in Table 3 for two reasons. First, Bicycle Level of Comfort is not the state-of-the-art metric that is currently used; the state-of-the-art metric is Level of Traffic Stress, original published by Peter Furth, which is being used to develop our Bicycle Master Plan. Second, the scaling from Worst to Best obscures the problem that a cycle track with a three-foot-wide buffer with flex-postsr along a seven-lane, 35 mph, extremely high volume road would not be a very comfortable facility for most people. We would rate the alternatives as follows:

- o Alternative 1 (no build): high traffic stress, suitable for very few adults (7% of the population)
- o Alternative 2 (tsm / tdm): high traffic stress, suitable for very few adults (7% of the population)
- Alternative 3 (master plan): high traffic stress, suitable for very few adults (7% of the population)
- Alternative 5 (conventional bike lanes): moderate high traffic stress, suitable for some adults (12% of the population)
- o Alternative 5 Flora lane Relocated (conventional bike lanes): moderate high traffic stress, suitable for some adults (12% of the population)
- Alternative 5 Flora lane Relocated with Cycle Track (cycle track): moderate traffic stress, suitable for many adults (we estimate about 25% of the population)

The fully separated cycle track recommended by staff would result in a low stress facility that would be suitable for most of the adult population, and older children (60% of the population).

In addition, our recommendations would significantly improve Alternative 5 with Cycle Track and Flora Lane Relocated, as well as some of the other alternatives. Since the alternatives are being measured against the "best" alternative rather than an ideal condition, one would have to expand this table greatly to reflect all of the many variables under consideration with this project.

Environmental Summary

Detailed analyses were performed on the ARDS to identify potential impacts on natural, cultural, and socioeconomic resources within the study area. A comparison of potential impacts for each alternative and option is included in Table 4.

TABLE 4 – Summary of Environmental Impacts										
Ro	sources	Alternative 1: No- Build	Alternative 2: TSM/TDM	Alternative 3: Master Plan	Alternative 5	Alternative 5 with Option B	Alternative 5 with Cycle Track			
	Residential Displacements	0	0	0	0	0	0			
	Business Displacements	0	0	5	5	5	5			
Relocations/Property	Property Impacts	0	42	44	44	44	44			
	Right-of-way Required (acres)	О	1.4	3.8	3.8	3.8	3.4			
Natural Resources	Woodland/Forest Impacts (acres)	0	0.2	0.5	0.7	0.7	0.7			
	Hazardous Waste Sites (no.)	0	13	13	13	13	13			
Cultural Resources	Historic Sites (no.)	0	0	1	1	1	1			
Cultural Resources	Archeological Sites (no.)	0	0	0	0	0	0			
Section 4(f) Resources	Name of Resource(s)	N/A	N/A	Calvary Evangelical Lutheran Church	Calvary Evangelical Lutheran Church	Calvary Evangelical Lutheran Church	Calvary Evangelical Lutheran Church			
	Resource Impact (acre)	N/A	N/A	0.26	0.24	0.27	0.24			
Total cost (million \$)		\$0	\$17-\$24	\$25-\$34	\$30 - \$40	\$31 - \$41	\$33 - \$43			

^{*}There will be no impacts on the following resources by any alternative: Rare, threatened or endangered species; streams. 100-year floodplain; wetlands; prime farmland, Chesapeake Bay Critical Area

Land

Use

The Georgia Avenue corridor in Montgomery Hills is dominated by urban and suburban land uses and includes retail, office, commercial, and institutional space immediately adjacent to Georgia Avenue, with medium- to high-density residential communities located primarily behind the commercial uses adjacent to Georgia Avenue. The MD 97 Montgomery Hills Project Planning Study includes an evaluation of the transportation improvements for Georgia Avenue that are included in M-NCPPC's North and West Silver Spring Master Plan.

The Maryland Smart Growth legislation was enacted to limit sprawl and direct state funding for growth-related projects toward county-designated Priority Funding Areas (PFAs). Priority Funding Areas (PFA) are geographic growth areas defined by State law and designated by local jurisdictions as targets for economic development. Because the MD 97 Montgomery Hills Project Planning Study area is located entirely within a designated PFA, the project is consistent with Maryland's Smart Growth Initiatives.

Socioeconomic Resources

SHA owns approximately 100 feet of right-of-way along the Georgia Avenue corridor within the study limits. Additional right-of-way (parcels and buildings) along the corridor will be required to accommodate proposed additional roadway reconfigurations to address the project's purpose and need. The TSM/TDM and build alternatives would require up to 3.8 acres of right-of-way. Five business displacements would be associated with each build alternative, except for Alternative 2. Right-of-way impacts and displacements are provided in Table 4. No parks or recreational areas are located within the study area.

A review of census data has revealed the presence of minority and low-income populations within the project study area. In compliance with Executive Order 12898, Federal *Actions to Address Environmental Justice in Minority Populations and Low-income Populations*, SHA intent is to avoid disproportionately high and/or adverse effects on minority and/or low-income populations throughout the study area.

<u>Cultural Resources</u>

The project is unlikely to impact any intact or potentially significant archeological resources. Two properties within the study area (Grace Episcopal Cemetery and Confederate Monument, and Calvary Evangelical Lutheran Church) are eligible for listing in the National Register of Historic Places (NRHP). Alternatives 3 and 5 would require right-of-way from the Calvary Evangelical Lutheran Church. On August 4, 2015, the Maryland

Historical Trust (MHT) concurred that these alternatives would result in an adverse effect on the Calvary Evangelical Lutheran Church. In accordance with 23 CFR 774 and 49 USC 303, SHA completed a Draft Section 4(f) Evaluation to assess the likely effects of the project on Calvary Lutheran Church and to evaluate options that avoid or minimize impacts on those resources caused by the build alternatives. The Section 4(f) Evaluation will determine whether feasible and prudent avoidance alternatives to the use of the Church property exist, and whether all possible planning to minimize harm to the resources has been performed. A copy of the Draft Section 4(f) Evaluation will be available for review at the public hearing. Consistent with Section 106 of the National Historic Preservation Act, public comments are requested regarding effects on historic properties.

Natural Resources

A field investigation revealed that no streams or wetlands are located within the study area for this project. The study area is located entirely outside any 100-year floodplains. Up to 0.7 acre of trees will be impacted by the project. This project is not located within the Chesapeake Bay Critical Area. The U.S. Fish and Wildlife Service and the Maryland Department of Natural Resources Wildlife and Heritage Service have indicated that no state or federal rare, threatened, or endangered species are known to exist within the project area.

Hazardous Materials

SHA conducted an Initial Site Assessment for the MD 97 Montgomery Hills Project Planning Study area to identify locations with a likely presence of hazardous materials, wastes, or petroleum products. The assessment identified 109 sites within the study area that vary in the level of their potential environmental concern. A Preliminary Site Investigation Screening is recommended for 29 of the sites to gather additional information about potential contamination.

Air Quality and Noise Impacts

A project-level air quality analysis was conducted in accordance with U.S. Environmental Protection Agency (EPA) and FHWA guidelines. The purpose of this analysis was to evaluate the potential effects of the proposed alternatives on the air quality within the project area. The results of the analysis indicated that the project will not cause or contribute to a new violation of the National Ambient Air Quality Standards or increase the frequency or severity of an existing violation.

SHA is currently conducting a detailed noise analysis for this project and identified three Noise Sensitive Areas (NSA) for field monitoring. The full results of the analysis are pending and will be available at the public hearing on December 1, 2015.

Master Plan Consistency

North and West Silver Spring Master Plan (N&WSSMP): This plan may be found at: http://www.montgomeryplanning.org/community/plan_areas/silver_spring_takoma_park/master_plans/nw_ss/nw_ss_toc.shtm

The project is generally consistent with the master plan recommendations shown on pages 49-62 of the plan (see Attachment 4) with the following significant exceptions:

• The master plan recommends four lanes in the southbound direction and three lanes in the northbound direction with a six to sixteen-foot-wide median with street trees, as well as trees on both sides of Georgia Avenue. Alternative 1 (No Build) and Alternative 2 (TDM/TSM) would not implement this master plan recommendation. Alternative 3 and the three variations of Alternative 5 would generally implement this recommendation, as well as the additional recommendation to provide a fourth northbound lane north of Seminary Place.

The rest of our comments below in regard to master plan consistency apply to Alternative 3 and the three variations of Alternative 5 only.

- The master plan calls for retaining the existing eleven-foot-wide travel lanes, but it appears that the existing travel lanes are less than that. While the alternatives propose to provide eleven-foot-wide travel lanes, this would be inconsistent with the Montgomery County Code changes that have occurred since the N&WSSMP was adopted. Since the Montgomery Hills commercial area is now an Urban area, the travel lanes should be ten feet wide. Further discussion on this issue is provided below.
- The master plan specifically recommends the addition of a northbound left turn lane at Seminary Road only and states that left turns should be prohibited at all other intersections during morning and evening peak periods. However left-turn lanes would be included on Georgia Avenue at the intersections with Flora Lane, Seminary Place, and in both directions at Seminary Road. The addition of these left turn bays greatly reduces the space available to achieve the master plan-recommended wide landscaped medians.
- The master plan-recommended retention of the 120-foot-wide right-of-way would not be met, but would be expanded fairly minimally.
- A 12 to 13.5-foot wide panel is recommended in the N&WSSMP between the curb and the building face/right-of-way line. A thirteen-foot-wide panel (sidewalk + landscape area) would be provided in Alternative 3. Only a ten-foot-wide panel would generally be provided in the three variations of Alternative 5 and, north of Seminary Place, only a five-foot-wide curb-attached sidewalk would be provided on the east side of Georgia Avenue. This topic is discussed further below.
- The plan recommends undergrounding utility lines. A significant amount of utility relocation will likely be needed to construct this project. We recommend that the incremental cost of undergrounding the utilities be determined so that a decision can be made whether this can be feasibly achieved as part of this project.
- The plan calls for a number of streetscaping items to be included that are not yet shown:
 - Brick sidewalks
 - o Ornamental pedestrian lighting
 - Street furniture (benches, bollards, trash receptacles)
 - Street trees at 30 feet on center in groundcover panels in the median and along both sides of the road: Ample landscaping is needed to tame what is a very harsh area. Street trees are needed to provide a vertical element that softens the landscape, but additional plant materials are also needed.
- Alternative 3 and the three variations of Alternative 5 would close Columbia Boulevard at Seminary Road rather than closing Sutton Place, as recommended in the master plan (see Attachment 4, page 51). We recommend that SHA provide an analysis of the pros and cons of closing Columbia Boulevard vs. Sutton Place at Seminary Road as part of the Mandatory Referral submission. If Sutton Place is closed at Seminary Road, we recommend that SHA consider relocating the Sutton Place entrance to the County-owned parking lot to Seminary Road to opposite Selway Lane, as recommended in the master plan.
- Alternative 3 and the three variations of Alternative 5 would eliminate the first row of parking spaces along MD97 at the Dale Center, whose tenants include Tropical Ice Cream. This possibility is

anticipated in the master plan but is tied in the master plan to the possible provision of parking spaces behind the shopping center. We recommend that SHA discuss this possibility with the property owner and tenants.

- Alternative 3 and the three variations of Alternative 5 would close Corwin Drive between Georgia Avenue and the alley that parallels Georgia Avenue. A barrier would be placed at the alley and the current intersection would be used to access the commercial businesses along Georgia Avenue north and south of Corwin and additional parking spaces would be created, as the master plan recommends be considered. Corwin Drive is currently used by some drivers to circumvent the traffic signal at Seminary Road/Columbia Blvd to get to eastbound Dale Drive, which is evidenced by the speed humps on Corwin. We recommend that SHA coordinate with MCDOT on providing an adequate turnaround on Corwin Drive at the alley that parallels Georgia Avenue.
- Alternative 5 includes a relocation of the southbound lanes of Sixteenth Street to be adjacent to the northbound lanes at their current intersection with MD97. This possibility is not addressed in the master plan but would be consistent with its general guidance to create a more walkable area by consolidating two intersections into one, and by encouraging slower speeds since a normal right turn from Southbound MD97 to southbound Sixteenth Street would replace the current alignment that facilitates high speeds. The latter would also be facilitated by the fact that there would be a greater grade to climb before making the right turn.

Forest Glen Sector Plan: This plan may be found at:

http://www.montgomeryplanning.org/community/plan_areas/georgia_avenue/master_plans/forest_glen/forestglen_sectorplan96/toc_forestglen.shtm

The Forest Glen Sector Plan recommends that a ten-foot-wide median be provided on the north side of Forest Glen Road to improve pedestrian safety and to accommodate a safe crossing for the planned shared use path that was recommended on the north side of Forest Glen Road. Since the Sector Plan was adopted, MCDOT has constructed the shared use path on the south side of Forest Glen Road because of potential conflicts with a cemetery on the north side. This path ties into the nearby Sligo Creek Trail and only a fairly short segment adjacent to the Montgomery Hills Baptist Church has not been widened to a shared use path. We recommend that a ten-foot-wide path be constructed along the south side of Forest Glen Road rather than the proposed five-foot-wide sidewalk. (See Attachment 5)

No specific recommendation for a grade-separated crossing of Georgia Avenue at Forest Glen Road is recommended in the Sector Plan, but the Plan is repeatedly stresses the need for pedestrian safety improvement, as well as recommends left turn lanes in each direction on MD97 for both driver safety and road capacity reasons. The **Forest Glen Pedestrian Tunnel** project has been through facility planning and would provide a pedestrian tunnel under Georgia Avenue at the Forest Glen Metro Station. It is the County's #12 priority for construction and its design should at a minimum be reflected in the design of this project. We recommend though that both the pedestrian tunnel be made part of this project to improve pedestrian safety, reduce overall construction costs, and improve the operation of this intersection, which is perennially one of our most congested intersections. We note that the pedestrian tunnel at the Medical Center Metro Station, which is anticipated to begin construction in the next few months, was funded as part of the BRAC improvements because it is seen as improving the overall operation of the intersection.

Countywide Transit Corridors Functional Master Plan (CTCFMP): Georgia Avenue (MD97) is designated as a transit corridor in the CTCFMP: http://www.montgomeryplanning.org/transportation/highways/brt.shtm

SHA's public hearing booklet states that the bus rapid transit (BRT) alternative was dropped from further study because the median busway would have negatively affected traffic operations by forcing a reduction in the number of travel lanes and by eliminating needed space for left turn lanes. While the bus ridership forecast for Georgia Avenue (MD97) was sufficient to recommend dedicated transit lanes in the 2013 Countywide Transit Corridors Functional Master Plans, a median busway was not recommended. Dedicated curb lanes achieved by repurposing lanes should be evaluated before selecting an alternative to move forward to design. That analysis should include an evaluation of the person-throughput - the number of people that could be moved through the corridor with dedicated transit lanes - needs to be addressed:

Even if dedicated curb lanes cannot be achieved, there are other treatments that can prioritize transit vehicles or at least give them better accommodation, as shown by the queue jumps shown in the TSM/TDM alternative, which should have been included in the other build alternatives. An opportunity to create one important queue jump at the ramps in the southeast quadrant of the Beltway is discussed below.

We believe that the proposed restriction of the NB curb lane on MD97 to "exit only" to the Inner Loop would go a long way toward correcting the traffic congestion here. The proposed extension of the splitter island between the ramps however should instead be changed to a queue jump for transit vehicles to provide a significant time advantage over the existing condition in one of the most congested segments of MD97. We recommend that a queue jump be provided for northbound buses on MD97 between the on and off-ramps for the Inner Loop of Capital Beltway if the existing traffic signal is retained, as shown in Alternative 5. (See Attachment 5)

• SHA's initial feasibility study recommended providing upgraded BRT stations at Forest Glen Road, at Columbia Blvd/Seminary Road, and at Sixteenth Street, but this work is not yet shown. (Note that a BRT station at Sixteenth Street is not recommended in the CTCFMP, but could be added if project planning shows that it is justified.) Alternative 3 and the three variations of Alternative 5 would have significant impacts on several properties, including the removal of some commercial buildings, which could provide opportunities for and to the extent practicable, these properties acquired should be considered for use as BRT stops in each direction.

Regulatory and National Design Guidance: Montgomery County Urban Areas, Bicycle-Pedestrian Priority Area Guidelines, Maryland Statutory Speeds, AASHTO Pedestrian Guidelines, ADA Best Practices, and AASHTO Roadway Lighting Design Guide:

<u>Urban Areas</u>: The Montgomery Hills commercial area is designated by Montgomery County as an Urban area for the purposes of road design While lower target speeds and narrower roads for these areas have been standard since 2008, the Montgomery County Council enacted stricter requirements last year that set the target speed at 25 mph, travel lane widths at ten feet, and curb radii at fifteen feet. See the bill here: http://www.montgomerycountymd.gov/COUNCIL/Resources/Files/bill/2013/201411125_33-13A.pdf

Bicycle-Pedestrian Priority Areas: The Montgomery Hills commercial area and Forest Glen Metro Station area are designated as Bicycle-Pedestrian Priority Areas, for which many design objectives were set forth in the 2013 Countywide Transit Corridors Functional Master Plan. See pages 67-72 of the Approved and Adopted plan here: http://www.montgomeryplanning.org/transportation/highways/brt.shtm. One of the criteria in those guidelines is to use six-inch-high curbs rather than the standard eight-inch-high curbs so that the length of handicap ramps is minimized, which in turn minimizes the ramps' incursion into the level area of sidewalks is minimized. We note that six-inch curbs were recently approved for use on MD187 in White Flint. We recommend that six-inch-high curbs be installed on MD97 south of the Capital Beltway.

Maryland Statutory Speeds and Road Code Target Speeds in Urban Areas: The current posted speed of MD97 through the business district is 35 mph, but the statutory speed is 30 mph, per Section 21-801.1(b)(2)(i) of the Maryland Vehicle Law. While the statutory limit can be modified, we do not believe that a higher limit should be retained for MD97 when a major goal of this project is creating a more pedestrian- and bicyclist-friendly place. Adherence to the 25 mph speed limit in the County's Road Code for Montgomery Hills as a designated Urban area would be difficult to achieve in this area because of the roadway width, scale of development and proximity to the Beltway. However, we believe that the posted speed limit and the project's design speed should be no higher than 30 mph and recommend that SHA provide a written justification if the existing 35 mph speed limit is not lowered.

Road Code Travel Lane Widths

Eleven-foot-wide travel lanes are proposed but as a Road Code Urban area, the typical travel lane widths should be ten feet, increasing to eleven feet only where adjacent to an outside curb, a bike lane or a parking lane. The current roadway width for the seven-lane configuration appears to be 72 feet, which seven ten-foot-wide lanes plus one foot on each side for the gutter pans. *We recommend that the travel lanes remain ten feet.* Reducing the lane width to ten feet would allow the sidewalk areas to meet the 12 to 13.5-foot-width recommended in the N&WSSMP. We note that even if the travel lane width remains at ten feet, the area of pavement would still increase because of the addition of left turn lanes.

Crosswalks exist at the intersection of all public streets, per Section 21-101.1(i) of the Maryland Vehicle Law, including tee intersections, whether these crosswalks are marked or unmarked. Pedestrians have the right of way at these intersections and handicapped-accessible crossings must be provided across MD97, per ADA. Streets within the project limits where no crosswalk is accommodated in one or more alternatives are: Locust Grove Road, Flora Lane, White Oak Drive, Luzerne Avenue, and Cedar View Court. We recommend that the intersections of all public streets be made handicapped accessible; where a safe pedestrian crossing cannot be provided, the intersection should be signed to prohibit the crossing.

It appears that in some of the drawings of the alternatives that there are five-foot-wide sidewalks that are immediately adjacent to the curb; this should only be done where there is absolutely no alternative. The AASHTO "Guide for the Planning, Design, and Operation of Pedestrian Facilities" (2004) recommends that sidewalks along arterials not in the central business district be six to eight feet wide and have a buffer width of five to six feet. The five-foot-wide sidewalks allow two people to pass each other but do not allow two people to walk side by side; a more comfortable accommodation is needed in a business area. The 12 to 13.5-foot wide panel that was recommended in the N&WSSMP between the curb and the building face/right-of-way line would meet the AASHTO standard. Where more space exists between the curb and the right-of-way line or adjacent buildings and parking lots, such as at the NW corner of MD97/Seminary Road, the sidewalk should be constructed farther back for pedestrian comfort and safety and to reduce the likelihood that sidewalks will be blocked by plowed snow in winter.

While SHA projects are monitored to ensure they comply with ADA requirements, there has been no similar effort to try to meet ADA Best Practices also. This project would better meet ADA Best Practices by providing a minimum six-foot-wide landscape panel to ensure that the sidewalk can be constructed behind – rather than through - the handicap ramps. In addition, having dual directional handicap ramps at corners will better ensure that these ramps are free of plowed snow in winter since single ramps at the apex of the corner often become the repository of snow plowed from both streets.

Continuous lighting to AASHTO standards should be provided within the limits of this project to ensure safety for all users of this very busy road. In addition to the roadway lighting, ornamental pedestrian-scale lighting should be provided for sidewalks and the cycle track.

Additional Analysis

The alternative that best meets our master plan objectives is Alternative 5 with Cycle Track Option and Flora Lane Intersection Relocated. Our additional comments below are intended as modifications to that alternative.

Georgia Avenue

While Alternative 1 (No Build) would have no impact on adjacent properties, Alternative 2 (TSM/TDM) would have minimal impact, the other build alternatives would have fairly significant impacts. Alternative 3 and the three variations of Alternative 5 would require the taking of several properties, including all three gas stations between Seminary Road and Flora Lane, as well as the commercial building at the southeast corner of Flora Lane. As significant as these impacts are, they are far less than SHA's initial concepts would have required, which were modified in response to community input. At the public hearing, there was a concern expressed that the two remaining gas stations are both branded Exxon stations; the one on the southwest corner of the Columbia Blvd/Seminary Road intersection was also described as having a problematic configuration. While the other three gas stations are described as full takes right now for Alternative 5 because the buildings are impacted, it may be possible to reconfigure one or more of these properties for continued use as a gas station or another commercial use.

For properties that are proposed to be acquired though, we believe a creative approach should be taken in determining their ultimate use. The commercial properties that would be acquired under Alternatives 3 and 5 are roughly in the center of the Montgomery Hills commercial area, an area that has one of the lowest percentages of tree cover in Montgomery County. Since it appears that planting trees in the future Georgia Avenue median will be relatively unlikely and trees along the roadside will be difficult in some areas, additional space in properties to be acquired should be used to compensate for other areas where tree cover is lacking. Also, these properties should be considered as the locations for BRT stations, which require more space than typical bus stops.

Also, three additional properties in public ownership should be considered for the same purposes, with the potential for a swap with affected property owners being considered. The County has two public parking lots in the area, one at the northeast corner of Georgia Avenue/Columbia Blvd and one on the south side of Seminary Road at Columbia Blvd just west of Georgia Avenue. The three variations of Alternative 5 would relocate the southbound lanes of Sixteenth Street, creating an intersection with Georgia Avenue that is much smaller than it is at present and freeing up land that is now used as right-of-way. We recommend that the two public parking lots and the surplus land at the Sixteenth Street intersection be considered as potential swaps for commercial property to be acquired for this project.

Fairly short left turn bays are shown for MD97 in the graphics for the alternatives. It is likely that some may need to be longer – even much longer – once more detailed traffic analysis is done. As a result, we believe that it is unlikely that there will be much space for median landscaping. The proposed left turn lane at Seminary Place that would be used for U-turns only does not seem to add sufficient value in a constrained area with so much competition for space.

MD97 Cycle Track/Separated Bike Lanes

A cycle track, or separated bike lanes as they are referred to in our Bicycle Master Plan discussions, is a concept that has been discussed with SHA for the last several years and this is the first time that a cycle track has been studied as part of a State capital project in Montgomery County. We appreciate the inclusion of a cycle track/separated bike lanes as part of the alternatives under review and believe that this is an important element that must be included in the project that moves forward to design. This bike facility is a critical piece of a direct connection between Silver Spring and Wheaton that we are pursuing as part of Montgomery County's Bicycle Master Plan. To the south, the two-way cycle track would connect to the 16th Street cycle track. To the north, it

would tie into a bicycle boulevard concept that Toole Design Group is developing to the north of Forest Glen Road. As important as it is that this project include a cycle track, facilitating good connections to this facility are also important.

While we strongly believe that a cycle track should be provided in the project that moves forward to design, the proposed design meets only the minimum definition of a cycle track would not provide sufficient protection for bicyclists. A three-foot-wide buffer with flex posts may be appropriate on lower volume and lower speed roads, but would be inadequate on a seven lane road with posted speed limit of 35 mph and with the highest non-Interstate traffic volumes in Maryland; the prospect of southbound cyclists facing this volume of northbound MD97 traffic would be fairly daunting. A raised buffer of at least 6 feet is needed to provide adequate separation from traffic so that the average bicyclist would feel comfortable using this facility.

Conventional bike lanes would have only a very slight benefit for bicyclists, which would be outweighed by the detriment to pedestrians, who would have a longer distance to cross Georgia Avenue. The longer crossing time for pedestrians would also shorten the traffic signal phase drivers on Georgia Avenue.

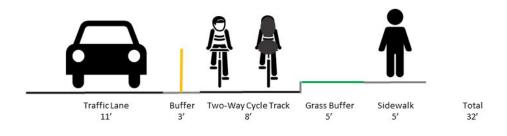
Recommended modifications to cycle track alternative

To correct the drawbacks outlined above, we propose the following changes to the current design for the west side of Georgia Avenue:

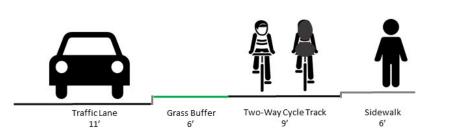
- o Eliminate the flex post buffer
- o Provide a 6" curb between the southbound traffic lanes and raise the cycle track to the level of the top of curb
- o Provide a seven-foot-wide grass buffer between the curb and cycle track
- o Widen the cycle track to nine feet so that there is adequate separation from the curb
- \circ Provide a 2" 3" curb separating the cycle track from the sidewalk
- o Widen the sidewalk to six feet minimum (eight feet preferred) through the commercial area

The above recommendations can be accomplished without requiring additional right-of-way, as shown below:

SHA Cycle Track Alternative



M-NCPPC Cycle Track Proposal



To correct the deficiencies in the proposed five-foot-wide sidewalk on the east side of Georgia Avenue – only a five-foot-wide landscape panel south of Seminary Place and no landscape panel north of that point - we recommend the following changes:

Total

- o Reduce the travel lane widths from eleven feet to ten feet for all lanes not adjacent to the outside curb, saving four feet in typical section width south of Seminary Place and eight feet north of that point.
- The saved space from making the above changes should be used to construct a six-foot-wide minimum (eight feet preferred) sidewalk with a five-foot-wide landscape panel.

Sixteenth Street (MD390) Relocation: For the variations of Alternative 5 that include a relocation of 16th Street, there is a pinchpoint at the westernmost house's back property line, but a landscape panel of six to eight feet could still be provided since ample ROW exists to the north. Once the sidewalk is past that pinchpoint, it should have a greater offset from the curb to provide a better level of comfort for users; the recommended location would tie well into the crosswalk on the south leg of MD97. We recommend that a landscape panel of six to eight feet in width be provided on the east side of Sixteenth Street.

The proposed cycle track along the west side of Georgia Avenue would end at the Sixteenth Street intersection, but should be continued along Sixteenth Street whether or not the southbound lanes are relocated. The draft Greater Lyttonsville Sector Plan includes a recommendation for a cycle track on the east side of Sixteenth Street from Second Avenue to the District of Columbia line. We see two alternatives for the connection between the proposed project and the 16th Street cycle track:

- With a relocation of the southbound Sixteenth Street lanes, the cycle track could be extended along the west side of MD97 to the south side of the MD97/MD390 intersection where the cycle track could be carried along the east side of MD390 within the limits of work.
- Without a relocation of the southbound Sixteenth Street lanes, cycle track could be extended along the existing alignment of the southbound lanes of MD390 and utilize the curb lane of MD390 to the Second Avenue traffic signal where it could cross to the east side.

We recommend that a cycle track be constructed along Sixteenth Street to the project limits in a way that facilitates a safe connection to the planned cycle track on the east side of Sixteenth Street south of the project in the future.

Capital Beltway: While drivers along Georgia Avenue (MD97) have experienced traffic congestion for many years, that congestion took a significant change for the worse in the late 1990s when the ramp from the Outer Loop to SB MD97 was relocated from the NW quadrant of the interchange to the NE quadrant and a new traffic signal installed on MD97 just north of the Beltway. The purpose of that project was to improve safety on the Beltway by removing the weaving condition between entering and exiting traffic at the top of the ramps on the Inner Loop. Congestion increased when the signal on the north side of the Beltway was installed but increased much more significantly when the additional signal was installed on the south side of the Beltway. The latter signal was installed in response to a significant spike in crashes at the north side signal that was likely caused by the limits on sight distance for northbound drivers that was created by the combination of the Beltway bridge and the sag vertical curve on MD97.

Removal of the signal on the south side is included in Alternative 3 and the Flora Lane and Cycle Track options for Alternative 5, all of which include a new traffic signal at Flora Lane; the removal of this signal would likely relieve some of the congestion problems associated with its original installation, but this should only be done with an understanding of the past crash problem associated with the limited sight distance created by the Beltway bridge over MD97, and with a signal timing at Flora Lane that would ensure to the extent possible that drivers approaching the north signal cannot do so at an excessive speed. As we did in our 1997 comments on the Beltway change, we recommend that SHA consider using a horizontal traffic signal head for northbound MD97 traffic at the ramp from the Outer Loop so that the red light could be seen from a farther distance away. (See Attachment 5)

One change that could be made on the Beltway itself has the potential for improving safety and traffic operations both on the Beltway and on MD97. Traffic on the ramp from NB MD97 merges onto the Outer Loop of the Beltway via a fairly short acceleration lane. Just after this merge, traffic on the ramp from SB MD97 merges onto the Outer Loop. Occasionally, drivers entering the Outer Loop from NB MD97 ignore the striped out pavement at the end of their acceleration lane and just enter the acceleration lane from SB MD97 to get a jump on traffic already on the Beltway. Such unsafe maneuvers exacerbate the problems associated with drivers entering the Beltway at multiple locations in a fairly short distance that begins at the top of the ramp from the Inner Loop that occurs at a vertical crest on the Beltway that limits sight distance.

We recommend that SHA consider constructing a barrier from top of the ramp from NB MD97and extending it to the end of the gore of the ramp from SB MD97 to consolidate the merging movements for traffic entering from both ramps to occur at only one location. (See Attachment 5) There is ample room on the Beltway to do this because pavement for a potential additional lane was constructed when the Beltway bridge was replaced in the late 1990s. Safety and operations on MD97 would be improved by lessening the frequency of backups from the ramp that extend onto MD97. Safety and operations on the Outer Loop would be improved by eliminating one of the merge points; improvements would also be seen on the Inner Loop since there would be less traffic blocking the ramp to NB MD97.

As noted elsewhere in this memo, the proposed restriction of the NB curb lane on MD97 to "exit only" to access the Inner Loop should also go a long way toward correcting the traffic congestion here, but the proposed extension of the splitter island between the ramps to effect that restriction should instead be changed to a queue jump for transit vehicles.

In conjunction with the installation of a traffic signal at Flora Lane, we recommend that SHA consider the feasibility of providing barrier-separation for the rightmost SB lane of MD97 at the traffic signal just north of the Beltway that would allow drivers bound for the Inner Loop to get to the ramp without stopping, and create the opportunity for a queue jump for buses on southbound MD97. (See Attachment 5) This would be similar to the operation at MD28 and I-270 where eastbound MD28 traffic can proceed to southbound I-270 without waiting at the signal. The crosswalk on MD97 at the signal would need to be eliminated but this loss would be more than offset by providing a signalized crossing at Flora Lane to the south and the tunnel under Georgia Avenue to the north. The barrier-separated lane could also be used by transit vehicles also whose travel southbound beyond the ramp would be facilitated by constructing a short segment of a bus-only lane in the splitter island between to and from the Inner Loop, similar to what we recommend for northbound traffic, as described above.

The alternatives that eliminate the NB traffic signal in advance of the Beltway should reflect a consideration of the fact that this signal was added because of poor sight distance for the traffic signal north of the Beltway, which resulted in many crashes. A means of avoiding these crashes must be provided as part of this project.

Park Impacts

There are no impacts to public parkland or property owned by MNCPPC.

Coordination with MCDOT's project at Seminary Place, Seminary Road and Second Avenue This project, which MCDOT will be restarting in July 2016, should be considered in the analysis of how the subject project will serve to improve traffic operations and safety. As noted by residents at the public hearing, the provision of full-time left turn lanes on MD97 should reduce cut-through traffic on some local roads, such as Second Avenue.

We recommend that SHA evaluate whether it would be better to relocate the left turns to northbound MD97 from Seminary Road to Seminary Place, which is a simpler T-intersection. A traffic forecast and analysis of how the proposed changes on MD97 will affect the surrounding area should be included in the information submitted as part of the Mandatory Referral.

On the east leg of Columbia Boulevard at MD97, eastbound drivers turning left into the County-owned parking lot often cause congestion problems and possibly safety problems by hindering eastbound through traffic and by cutting through the lanes of westbound traffic queued at the traffic signal on MD97. Consider ways to alleviate this problem, including widening the median island to shelter one left-turning car and possibly striping an area at the driveway opening to ensure a break in the queue.

Car Wash

The car wash on the west side of Georgia Avenue opposite White Oak Drive is a perennial source of backups on southbound Georgia Avenue, even up the ramp and onto the Inner Loop of the Capital Beltway on some weekends. The latter in particular is a potential safety hazard that should be addressed by this project to the extent possible. Because Alternative 3 and the three variations of Alternative 5 include acquisition of the Shell station, SHA has proposed using a portion of the property to greatly lengthen the stacking lane for the car wash. To address this issue, we recommend that the Board make the following comment to SHA:

Any relocation of the stacking lane for the car wash should be done in conjunction with the provision of an ample landscaping treatment at the existing driveway opening. As part of your Mandatory Referral submission, please provide calculations on the required stacking to ensure that the drive aisle for the adjacent shopping center is not blocked with car wash traffic.

Pedestrian Refuges

- The existing location of the crosswalk constitutes a hazard to pedestrians since it is in the direct line of travel for NB vehicles on 16th Street turning right to go SB on MD97; if this segment of 16th Street is not reconfigured, the crosswalk should be relocated slightly to the south. We recommend that a median pedestrian refuge be provided for the crosswalk on the south leg of Georgia Avenue at 16th Street.
- The pedestrian refuge island and crosswalk on Seminary Road at Snider's/Selway Lane is not shown on the current plans, but we recommend that it be retained and its design carried forth in any and all alternatives.

Additional Landscaping/Streetscaping Comments

We recommend that:

- Any retaining walls that are constructed for this project use concrete formwork with the same pattern and color as the Beltway Bridge and Forest Glen Pedestrian Bridge.
- Any monolithic concrete medians constructed as part of this project should have an ashlar slate formwork pattern and be dark gray in color.
- Where full properties would be acquired, consider providing a higher level of landscaping to compensate for more constrained areas that are more difficult to improve.
- Brick sidewalks should be constructed along Georgia Avenue within the limits of this project per the recommendations of the NWSSMP.
- Where there is not sufficient space for trees in both the median and on the sides of MD97, trees should be planted along the sides to provide a better environment for pedestrians and bicyclists.

Public Outreach

The MD 97 Montgomery Hills Project Planning Study was initiated in July 2011, and a project-initiation newsletter was distributed to the public in February 2012. The Project Team held a Purpose and Need Open House on March 13, 2012, at Woodlin Elementary School in Silver Spring to introduce the public to the study and solicit comments. Seventy-five people attended the workshop, and 776 comments were received from interested individuals.

At the Alternatives Public Workshop held at Woodlin Elementary School on June 25, 2013, SHA presented seven preliminary alternatives and two options to the public. Estimated cost, right-of-way requirements, displacements, number of properties impacted, and estimated natural environmental impacts were summarized for each of the preliminary alternatives. In advance of the workshop, SHA distributed a brochure summarizing the project. One hundred eighteen people attended the workshop.

The Project Team has held several targeted meetings with community associations and area business representatives to present project information and answer project-specific questions. In addition, the Project Team formed an 18-member Stakeholder Group representing civic associations, faith communities, Holy Cross Hospital, area businesses, bicycle proponents, Montgomery County Chamber of Commerce, commuters, residents, transit users, and other members recommended by local elected officials. Six Stakeholder Group meetings have been held to date. The group has provided comments and suggestions that have been evaluated

and incorporated into the alternatives whenever possible. Coordination with the Stakeholder Group will continue until the Project Planning process is completed.

Outreach to Limited-English-Proficient (LEP) populations has included publishing advertisements for public meetings in Spanish-language newspapers, translating postcards and brochures for public meetings into Spanish, conducting door-to-door outreach along Georgia Avenue in advance of the June 25, 2013 Alternatives Public Workshop, and providing a Spanish-language interpreter at the workshop. Surveys of Montgomery Hills customers and business owners/ operators were also translated into Spanish.

In summer 2015, SHA conducted a survey of Montgomery Hills customers and business owners/operators to help the project team understand which improvements would be effective in encouraging customers to shop more frequently in the neighborhood. Postcards announcing the availability of an online survey were mailed to approximately 17,000 households in the project area. In addition, project team members conducted on-site surveys on September 3, 2015, providing an opportunity for shoppers and business owners/operators to complete the surveys in person. Survey results were presented at the public hearing on December 1, 2015.

Public Hearing

Staff attended the public hearing, which was attended by approximately 125 people. The tone of the meeting was extraordinarily positive, both about the project itself and for the work that SHA has done with the community in addressing their issues. Our summary is that the project was strongly supported by the community, with the strongest support for improving bicycle and pedestrian facilities, easier connections to the community, and improved aesthetics along Georgia Avenue.

A project web page has been created on SHA's website and can be found here: http://apps.roads.maryland.gov/WebProjectLifeCycle/ProjectInformation.aspx?projectno=MO2241115

Conclusions and Recommendations

This long-awaited project, which is on the County's priority list for State projects, has a very high potential for return on investment for drivers, transit users, pedestrians, bicyclists, business owners and patrons, and residents of the surrounding neighborhoods. For the project with the changes that we have recommended above, we see the following benefits:

For drivers:

- Less congestion on Georgia Avenue and the Capital Beltway
- Greater safety on both roadways
- The elimination of turn restrictions during peak hours

For transit users:

- Faster service via queue jumps
- Better bus stop facilities

For bicyclists:

• A direct, safer, low stress facility between the Forest Glen Metro Station and Sixteenth Street, replacing one of the highest stress bike links in Montgomery County

For pedestrians:

- Wider, ADA-compliant sidewalks that are offset from the roadway
- Safer crossing at major intersections and an additional crosswalk in the center of the business district
- A more pleasant landscaped environment

For business owners and their patrons:

• A true multi-modal facility that provides good, easy access to businesses by any mode, including to and from parking lots and other businesses

For residents of the surrounding area:

- Easier access to their homes and to the business district
- A much improved Georgia Avenue as the gateway to the neighborhoods on either side, downtown Silver Spring, and to the District of Columbia.

We recognize that these recommendations would increase the cost of this project, however there are few locations that could compete with the documented problems here:

- Georgia Avenue (MD97) is the highest volume non-Interstate roadway with the highest volume interchange in Maryland
- The three major intersections within the project limits of just over a half-mile are rated as some of the most congested in Montgomery County, per the 2014 Mobility Assessment Report:
 - o Georgia Avenue (MD97)/Sixteenth Street (MD390) #7
 - o Georgia Avenue (MD97)/Forest Glen Road (MD192) #32
 - o Georgia Avenue (MD97)/Seminary Road/Columbia Boulevard #34

The expanded project would encompass two projects on the County's priority list for State projects (see Attachment 6), #12: MD97 (Georgia Avenue) and Forest Glen Road: pedestrian underpass and safety improvement, and #16: MD97 (Georgia Avenue), I-495 to MD390 (16th Street) in the Construction program. It would also partially address #9: Bicycle-Pedestrian Priority Areas: bike and pedestrian facility improvements, since the project sits within the Montgomery Hills and Forest Glen Metro Station Bicycle Pedestrian Priority Areas.

Attachment 1 - Alternatives Retained For Detailed Study (ARDS)

Alternative 1: No-Build

Alternative 2: Transportation Systems Management/Transportation Demand Management (TSM/TDM)

Alternative 3: Master Plan

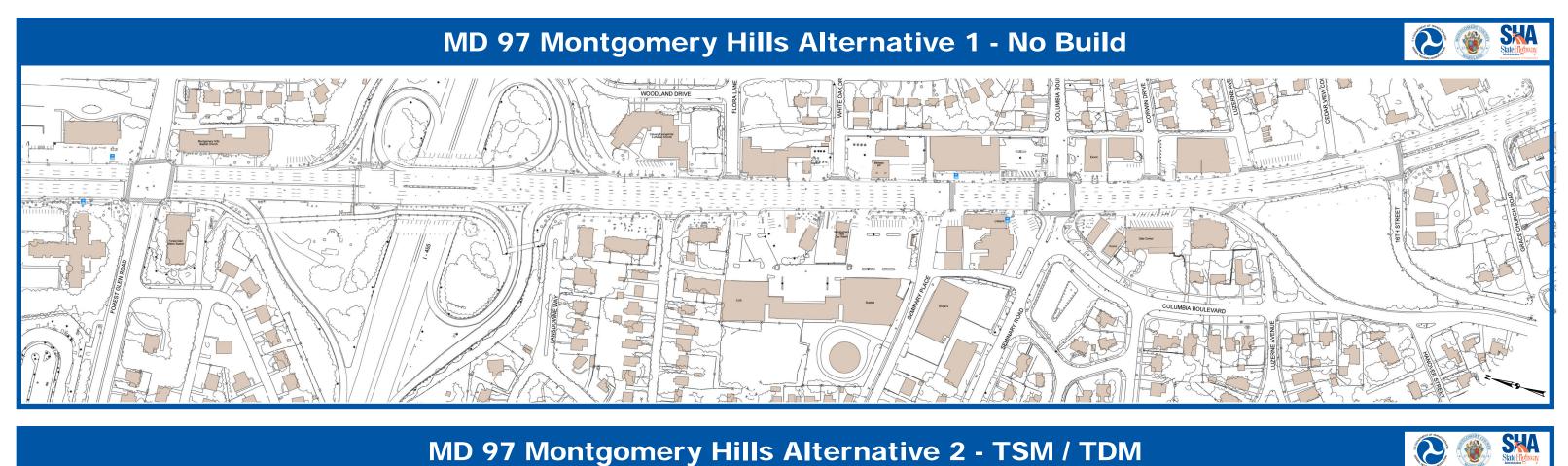
Alternative 5: Four Lanes Southbound (SB) and Three to Four Lanes Northbound (NB)

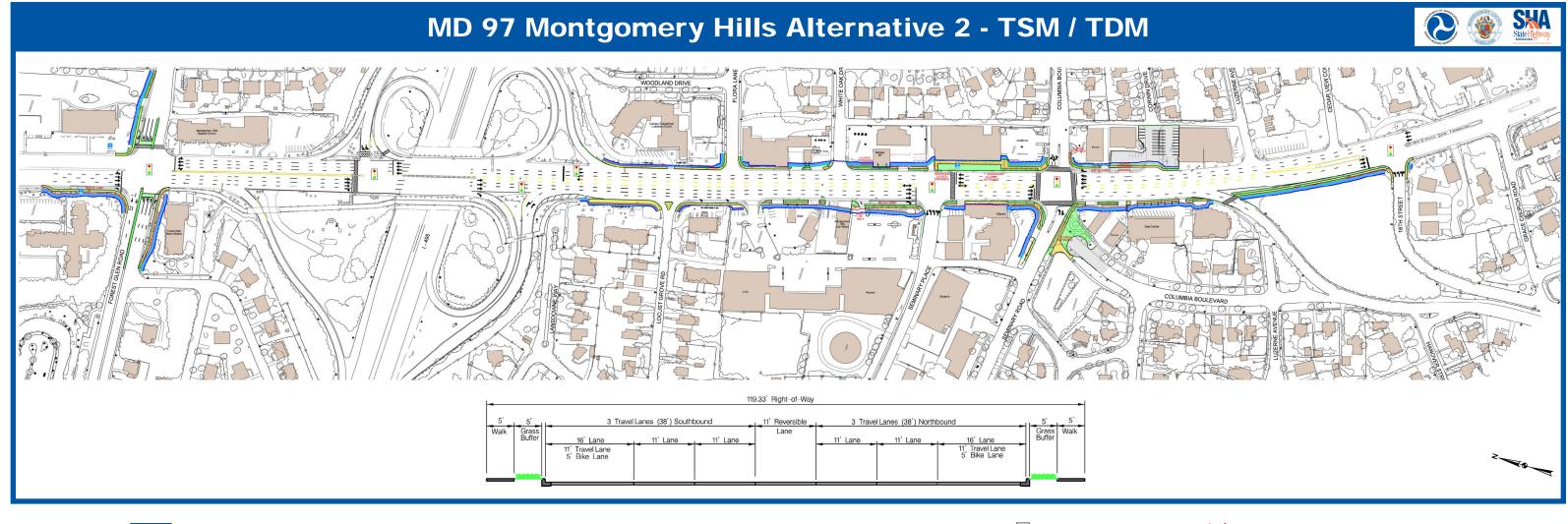
Alternative 5 with Flora Lane Intersection Relocated

Alternative 5 with Cycle Track

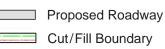
Small-scale mapping for each of the retained alternatives is on the following sheets, but SHA's Mapping Packet for the Public Hearing, which is scalable to a larger size, may be found here:

 $\frac{http://apps.roads.maryland.gov/WebProjectLifeCycle/MO224_11/HTDOCS/Documents/Location_Design/FUL}{L\%20Mapping\%20Packet\%20(2).pdf}$

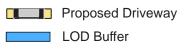




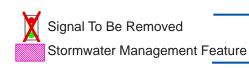




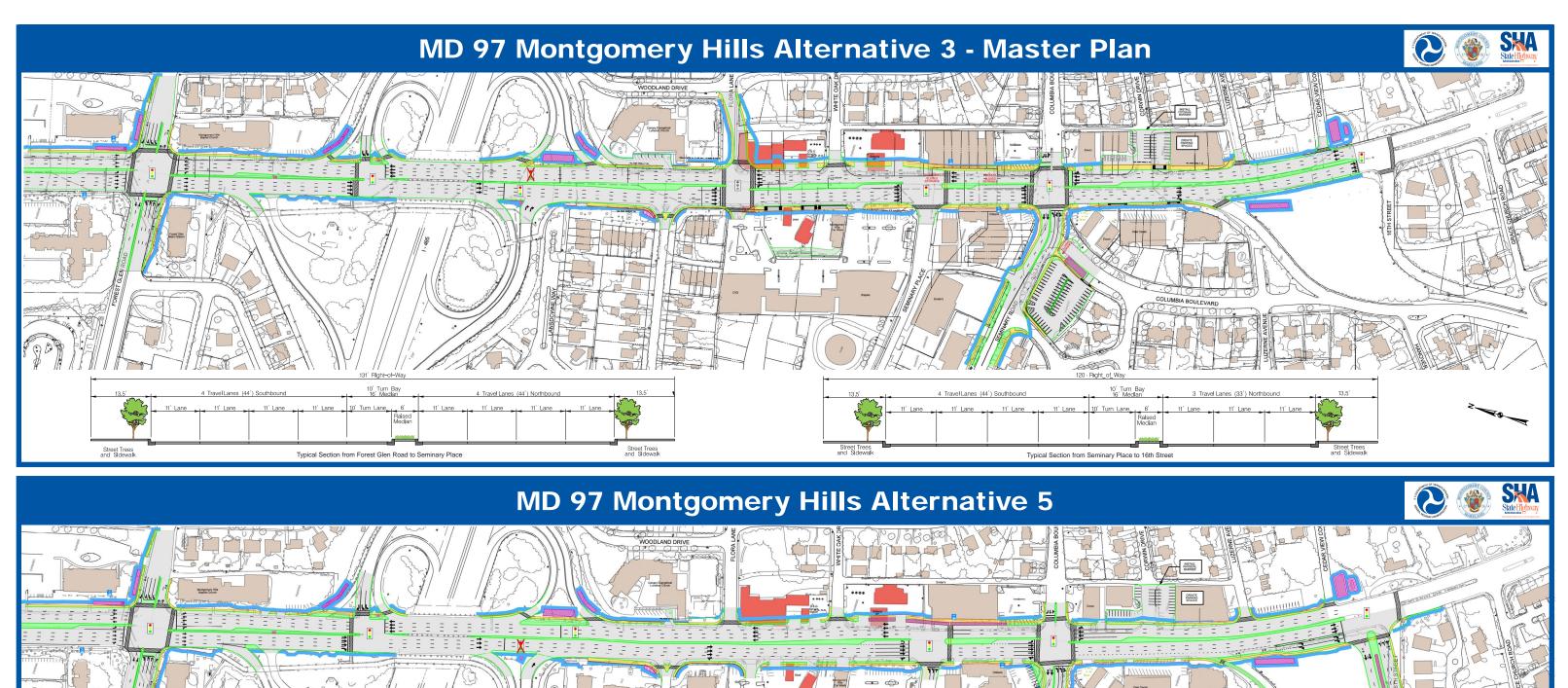


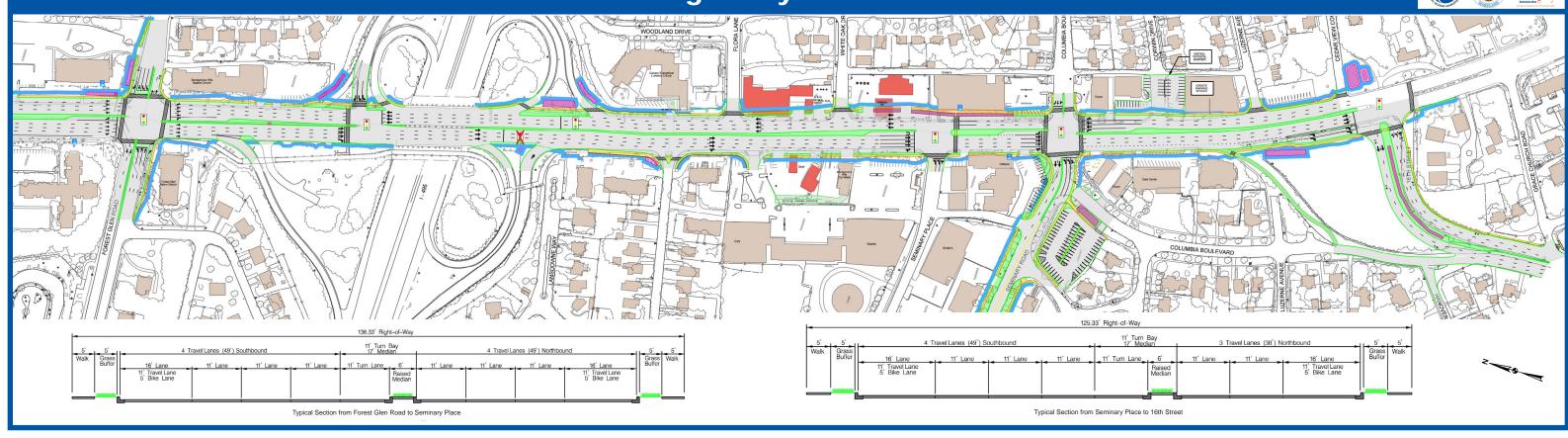




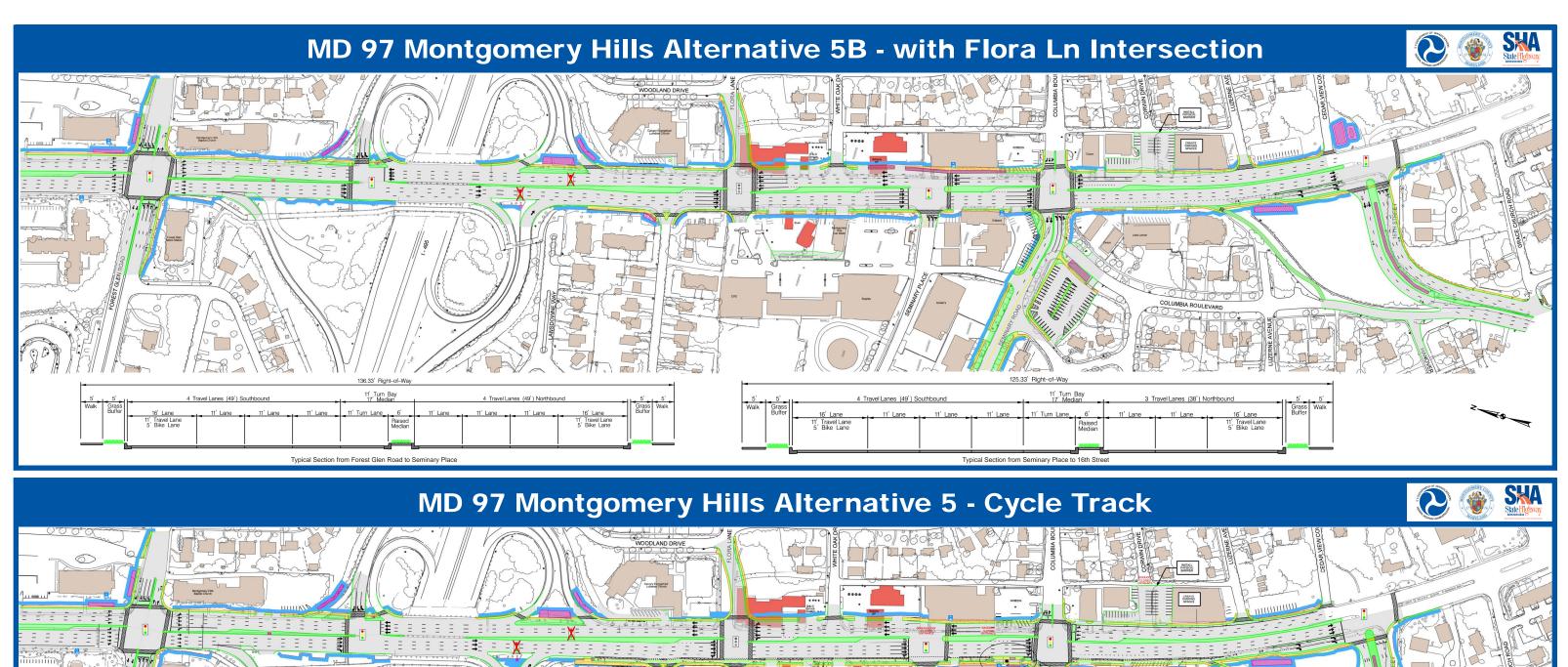


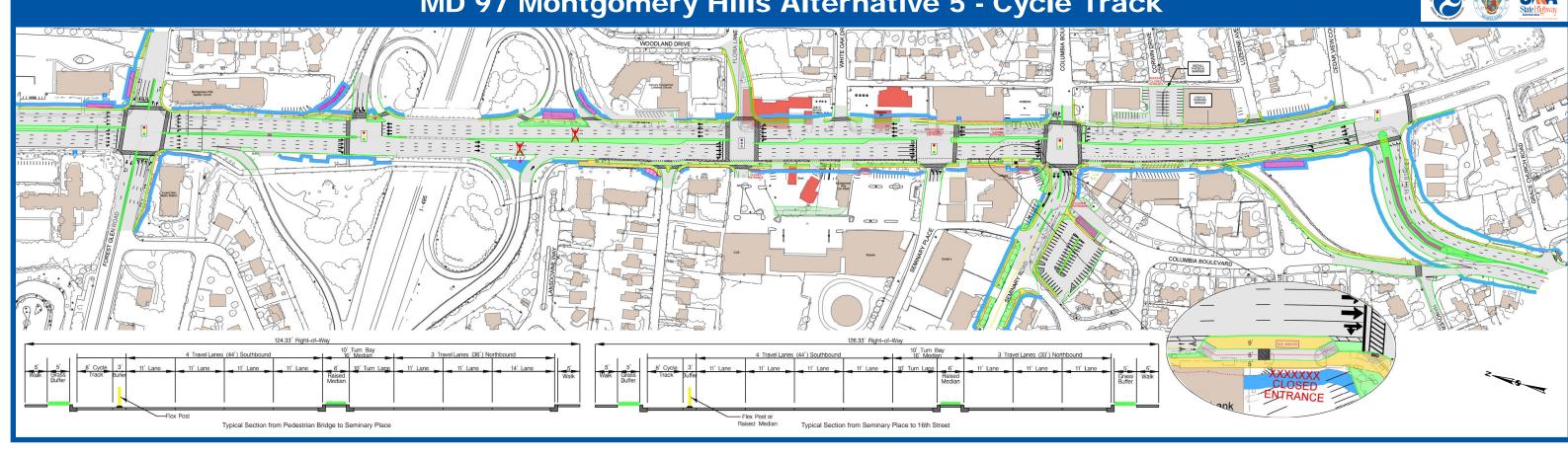
NOT TO SCALE
REVISED
NOVEMBER 2015











Bike Box/Thru Pocket Shading

Proposed Driveway

LOD Buffer

Proposed Sidewalk

Proposed Median/Buffer

LEGEND -

Proposed Roadway

Cut/Fill Boundary

Existing Signal Location

Potential Signal Location

Signal To Be Removed

Stormwater Management Feature

NOT TO SCALE

NOVEMBER 2015

REVISED

Attachment 2 - Alternatives And Options No Longer Under Consideration

The following alternatives and options were dropped from further study:

Alternative 4: Three Lanes NB and SB

This alternative was dropped from further study because, although it would have fewer impacts than some of the other build alternatives, travel-lane capacity would be reduced from seven lanes (including the reversible center turn lane) to six (three lanes in each direction). This reduction would negatively affect traffic operations within the corridor and possibly on I-495.

Alternative 4A: Three Lanes NB and SB with Queue Jumpers/Traffic Signal Priority

SHA dropped this alternative, which consists of Alternative 4, as described above, with the addition of the queue jumps because their finding was that it would result in several additional displacements, and the impacts were not justified when compared to the benefits of the improvement.

Alternative 5: Four Lanes Southbound (SB) and Three to Four Lanes Northbound (NB) with Queue Jumpers/Traffic Signal Priority

SHA dropped this alternative, which consists of Alternative 5, as described above, with the addition of the queue jumps because their finding was that it would result in several additional displacements, and the impacts were not justified when compared to the benefits of the improvement.

Alternative 6: Bus Rapid Transit (BRT)

The Bus Rapid Transit (BRT) alternative was dropped from further study because the median busway would decrease the number of all-purpose travel lanes from seven to six and could negatively affect traffic operations along the corridor. The absence of dedicated left-turn lanes would make left turns difficult and limit access to surrounding businesses and neighborhoods. Alternative 6 allows minimal improvements in pedestrian/bicyclist access through the corridor and offers few options for aesthetics.

Alternative 7: Georgia Avenue Tunnel

The Georgia Avenue Tunnel was dropped from further study because the constructability concerns, increased displacements/impacts, and long-term maintenance costs associated with the alternative outweigh any traffic or aesthetic benefits derived from removing surface traffic from mainline Georgia Avenue in the Montgomery Hills Corridor. Other concerns include the tunnel's ability to accommodate a limited percentage of vehicles because of the close proximity of major traffic generators like the I-495 Interchange and 16th Street. During construction, maintenance of traffic (MOT) would be difficult and could reduce the number of travel lanes by three or four for an extended period of time. The close proximity of the Capital Beltway and its limited access would make suitable detours difficult, and the three-to-four-year construction period could adversely impact area businesses.

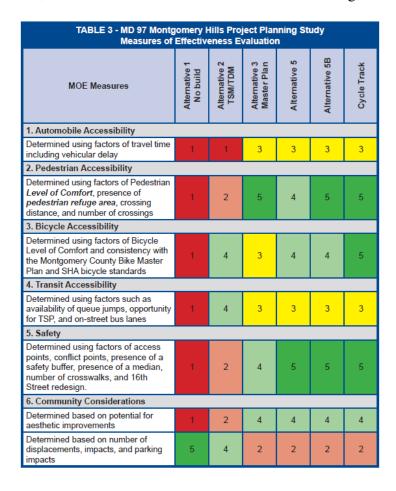
Attachment 3 - Measures of Effectiveness

Text from SHA's Public Hearing packet

In an effort to preserve and enhance the community's character while improving transportation accessibility, SHA and Montgomery County have adopted a holistic approach for developing the project's alternatives. The project team is evaluating a wide range of factors, which are included in the following Measures of Effectiveness (MOE):

- Automobile Accessibility
- Pedestrian Accessibility
- Bicycle Accessibility
- Transit Accessibility
- Safety
- Other Considerations

In Table 3, the alternatives are assigned a number between one (1) and five (5), with 1 being worst and 5 being best, to rank how well each alternative achieves the goals of each MOE relative to the other alternatives.



LEGEND								
Designation:	Worst				Best			
Color Code:	1	2	3	4	5			

Other factors that are not part of the MOEs would include local residential and business traffic circulation and safety, as well as aesthetics and landscape and streetscape opportunities.

As part of this project, the Project Team will consider suggestions received from the public at the Location/Design Public Hearing; Stakeholder Group coordination; and comment cards, letters, and emails. Please use the enclosed comment card to provide your thoughts and suggestions on matters relating to the MOEs. Your comments will help ensure that proposed alternatives for the MD 97 Montgomery Hills Project Planning Study reflect the local community's character and aesthetic preferences.

Montgomery Hills Proposed Concept

This Plan seeks to improve the visual appearance, the pedestrian environment, and the business viability of the commercial center along Georgia Avenue in Montgomery Hills by redesigning the highway into a landscaped urban boulevard.

Montgomery Hills Commercial Center

The Montgomery Hills Commercial Center, located on roughly 18 acres along both sides of Georgia Avenue between the Capital Beltway and 16th Street, is an older commercial area providing shopping and limited office activities to the local and, to a lesser extent, regional market. Retail tenants include CVS, Staples, and Sniders Superfoods Market, which is a grocery anchor that has a loyal customer base due to its marketing, customer service, and quality products.

The commercial area is surrounded by residential neighborhoods. The Forest Glen Metrorail station is located just north of the Beltway on the west side of Georgia Avenue. Downtown Silver Spring and Washington, DC are located just to the south of Montgomery Hills along Georgia Avenue and 16th Street. To the west of Montgomery Hills, across the CSX railroad tracks, is the Brookville Road Industrial Area and the Walter Reed Army Medical Center Annex. The Brookville Road traffic includes large trucks that must move between the industrial area and the Beltway. Primary access to these areas is along Seminary Road/Seminary Place to Brookville Road and/or Linden Lane, which takes traffic through the

Montgomery Hills commercial area and the adjacent residential neighborhoods of Linden and North Woodside-Montgomery Hills.

While the Montgomery Hills portion of Georgia Avenue (MD 97) is only 5 blocks long, the road serves as a regional transportation artery that stretches 25 miles from its southern urban origins in Washington, D.C. to its northern rural terminus at the Montgomery County—Howard County line. Outside of Montgomery County, Route 97 continues all the way to Gettysburg, Pennsylvania.

Through Montgomery Hills, Georgia Avenue is a seven lane highway that carries more traffic than any non-Interstate road in Montgomery County (85,000 cars per day). The center "reversible" lane changes direction depending on the morning or evening peak travel period and left turns from Georgia Avenue are prohibited during these times. The adjacent Capital Beltway/Georgia Avenue interchange is one of the busiest in the State. The overall character of the road favors the vehicular domain: seven lanes of pavement and an assortment of highway signs, signals, billboards, and gas stations. The visual clutter dominates and the driving experience can be confusing and unsettling, even for those who are familiar with the reversible lane.

Equally problematic, the pedestrian domain has been relegated to an inadequate, uncomfortable, and uninviting sidewalk space with no separation from the highway. Sidewalks along Georgia Avenue are typically about 5 feet in width and are generally located next to the curb, with no buffer between the pedestrian and the travel lane. Often, the sidewalk area is consumed by utility and sign poles, which further reduces the available space for pedestrians.

In January 1998, the Department of Park and Planning prepared a report, the Montgomery Hills Commercial Center Economic Health Analysis, to evaluate this area. Development of this analysis included interviews with property owners, tenants, and real estate brokers. According to the report, strong local neighborhood demographics and regional access are positive factors contributing to the economic health of the area.

Factors that limit retailing success in Montgomery Hills include the need to refurbish older buildings if they are to remain competitive and attractive to quality tenants. Some of the buildings in the area were built in the 1920s and the area as a whole appears run down. The limited success of the area is not due to a lack of market support, but rather, characteristics of the area's physical environment.

In addition, development and growth throughout the region have contributed to significant traffic congestion, which often turns the convenience of the Montgomery Hills location into a drawback for local residents and merchants. The issue of pedestrian (and vehicular) access, circulation, and safety emerged repeatedly during the master planning process. It can be difficult, if not dangerous, for residents to walk from their neighborhoods to the local shops, services and transit. For local merchants, the high volume of traffic appears to be both a blessing and a curse. The Georgia Avenue location offers excellent business visibility to a large number of motorists. However, traffic congestion and turn restrictions on Georgia Avenue make local circulation difficult

during peak traffic periods, limiting access to retailers.

Vision

Montgomery Hills—and the residential neighborhoods which surround it—should be a place where people are encouraged to walk, rather than drive. With all the convenience that this location offers, Montgomery Hills should be an attractive, accessible neighborhood center that serves the local community.

This Plan proposes redesigning Georgia Avenue in Montgomery Hills as a landscaped urban boulevard with a center median and wide, unobstructed, tree-lined sidewalks. The design should transform the highway into a pedestrianfriendly urban boulevard with improved local circulation that supports both residents and merchants. The Plan recognizes that Georgia Avenue in Montgomery Hills will not only continue to service regional vehicular traffic, but it is an important neighborhood center as well as a gateway to the revitalized Silver Spring CBD. The Proposed Concept for Montgomery Hills seeks to achieve this vision by balancing the needs of motorists and pedestrians as well as those of merchants and local residents. (See Map 19.)

Proposed Concept

The Proposed Concept recommended by this Plan for Georgia Avenue in Montgomery Hills provides an appropriate balance between the pedestrian and vehicular environment. The Plan seeks to improve pedestrian safety while maintaining the same vehicular levels of service that would be provided by a "do nothing" alternative. Several inter-related road improvements are recommended that would function together to improve vehicular and pedestrian circulation in Montgomery Hills.

The Proposed Concept is expected to have a negligible effect on the levels of traffic service in



Montgomery Hills. The existing and forecast levels of service at principal intersections throughout the North and West Silver Spring Planning Areas is documented in the Silver Spring/Takoma Park Transportation and Circulation Report, included as Appendix E. The 2020 forecast levels of service are expected to be substandard with either the existing configuration or the Proposed Concept. The Proposed Concept, however, improves safety, vehicular accessibility, and the pedestrian environment without degrading the overall level of traffic service in Montgomery Hills.

SHA has jurisdiction over the section of Georgia Avenue in Montgomery Hills. Although the Proposed Concept appears feasible, the State will have to conduct its own in-depth study of this alternative as well as others that may achieve the same goals of making Montgomery Hills more pedestrian and vehicular friendly.

The design details for implementing this Plan's recommendations and addressing the other desired elements of the Proposed Concept will be determined during the State's engineering and design process.

SHA's study should include the section of Georgia Avenue between 16th Street and Dennis Avenue and should address:

- Montgomery Hills;
- the intersection of Georgia Avenue and 16th Street, including access to Hanover Street and Grace Church Road;
- the Capital Beltway interchange;
- the Forest Glen Road intersection.

Recommendations

- Remove the reversible lane and install a center median on Georgia Avenue in Montgomery Hills between 16th Street and Forest Glen Road.
- Maintain the 120-foot Master Plan right-ofway for Georgia Avenue.
- Provide seven or eight travel lanes.
- Provide for evening peak period left turns from northbound Georgia Avenue at one or more intersections within Montgomery Hills.
- Review the 16th Street/Georgia Avenue intersection when the State Highway Administration (SHA) studies the Georgia Avenue corridor.

The projected traffic volume on Georgia Avenue will result in a substandard level of service at this intersection. Reconstruction of the intersection can provide the necessary capacity to accommodate future traffic demands. Objectives the State should consider in studying design alternatives for this intersection include: creating a more attractive gateway location for both the Silver Spring CBD and Montgomery Hills; improving traffic efficiency; and enhancing pedestrian safety and circulation. One alternative that should be reviewed is a modified, signalized traffic circle.

- Study the access to local streets such as Hanover Street and Grace Church Road at the time the State studies the Georgia Avenue/16th Street intersection.
- Conduct a State Highway Administration project planning study with detailed engineering of the Proposed Concept and seek funding for its implementation.

The Proposed Concept includes a number of transportation and urban design elements that collectively create a safer and more aesthetically pleasing environment for both pedestrians and motorists.

The following are elements of the Proposed Concept that the State should include in its study of Georgia Avenue in Montgomery Hills.

- Maintain the current 11-foot lane widths for through travel lanes.
- Provide 4 lanes southbound between the Capital Beltway and 16th Street.
- Provide 4 lanes northbound between Seminary Place and the Capital Beltway.
- Provide 3 lanes northbound between 16th Street and Seminary Place.
- O Permit left turns from northbound Georgia Avenue onto westbound Seminary Road during the evening peak period (these turns would continue to be prohibited during the morning peak period unless the State determines that the turns can be provided without significantly degrading traffic capacity).
- Prohibit left turns from Georgia Avenue at all other intersections during morning and evening peak periods.
- Prohibit left turns from eastbound Seminary Road onto northbound Georgia Avenue during the evening peak period to relieve congestion and improve pedestrian crossings; left turns would be permitted from Seminary Place.
- Provide a new signalized intersection at Flora Lane and Georgia Avenue with pedestrian crosswalks.

- Provide pedestrian edges of at least 12 feet with street trees in groundcover panels, brick sidewalks, ornamental pedestrian lighting and street furnishings.
- Provide a landscaped center median (varying in width between 6 and 16 feet) between Forest Glen Road and 16th Street.
- Screen parking areas.
- Provide special crosswalk treatments.
- Improve building facades with coordinated awnings and signs.
- Reconfigure public parking lots.
- Relocate utility lines underground.
- Narrow and consolidate curb cuts, where possible.
- Remove billboards.

Related Montgomery Hills Issues

The Proposed Concept will have some impacts on the commercial properties and businesses along Georgia Avenue. Possible solutions to mitigate these impacts and improve the business environment in Montgomery Hills are discussed below. These mitigation measures should be negotiated during the design and construction phase by the State and/or the County.

 Consider consolidation of two separate parcels (the Montgomery Hills Car Wash and the Beltway Shell) into one if the Proposed Concept for Georgia Avenue is implemented.

These two businesses, located in front of Staples/CVS on the west side of Georgia Avenue, are on fairly small lots and it would not be possible for both to remain as separate

entities if the Proposed Concept were implemented. Several options were discussed with the property owners. The best solution is for the two sites to be consolidated into one parcel and redeveloped. (See Map 20.) This issue would be negotiated among the parties when the Proposed Concept is implemented.

 Redesign all or a part of the Beltway Amoco if the Proposed Concept for Georgia Avenue is implemented.

This site, located on the east side of Georgia Avenue at White Oak Drive, would be slightly impacted if the Proposed Concept for Georgia Avenue is implemented. Specifically, the canopy and gasoline pumps adjacent to Georgia Avenue would have to be relocated. There are several options to relocate or reorient all or part of the pumps that are closest to Georgia Avenue. These have been discussed with the business owner and should be negotiated when the Proposed Concept is implemented. (See Map 20.)

 Reconstruct Seminary Road between Sutton Place and Georgia Avenue to improve traffic flow and pedestrian circulation.

Seminary Road west of Georgia Avenue should be modified to provide safe vehicular access between shopping and parking areas. The road could be relocated to the south, using the current southern sidewalk as a median. Such relocation would allow for improvements to parking lots, a tree-lined median, tree-lined sidewalks, and the addition of a right turn lane onto southbound Georgia Avenue.

This improvement would require a reconfiguration of Public Parking Lot #12, located on the south side of Seminary Road across from Sniders Superfoods Market, and could result in additional parking in front of the shops along the north side of Seminary Road (in front of Armand's Pizza).

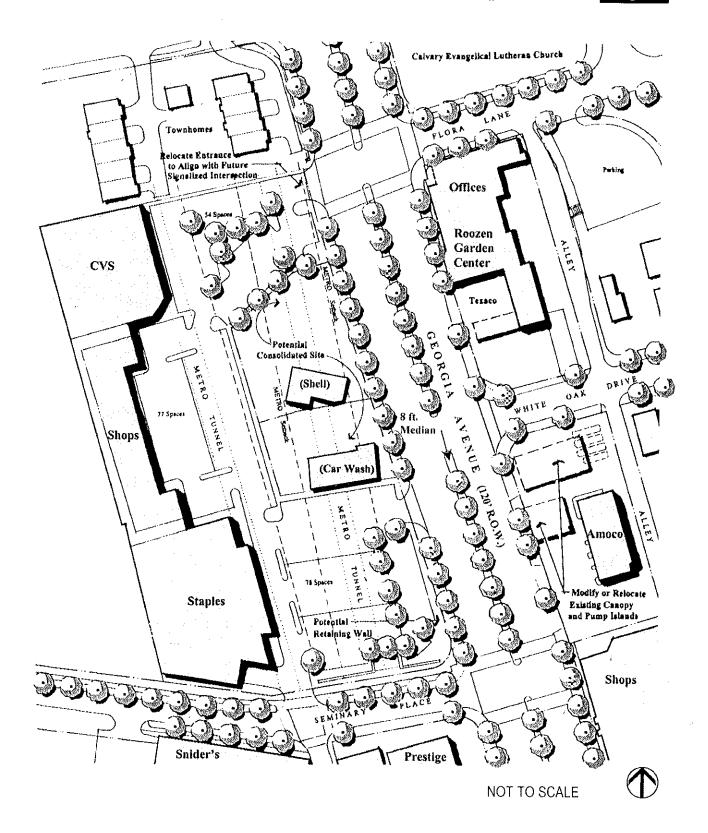
The following measures should be considered to reduce multiple pedestrian and vehicular conflicts on Seminary Road.

- Modify Public Parking Lot #12.
- Construct a median on Seminary Road between Georgia Avenue and Selway Lane.
- Add an eastbound approach lane to Seminary Road at Georgia Avenue.
- O Consider closing Sutton Place between Stratton Road and Seminary Road and construct a green buffer/open space next to the parking lot. This measure will also help to reduce cut-through traffic in the adjacent residential neighborhood.
- Review access to Columbia Boulevard when the Seminary Road improvement is analyzed.
- Reconfigure Public Parking Lot #12 to allow improvements along Seminary Road, relocate the entrance from Sutton Place to opposite Selway Lane.

Public access to 9305 Columbia Boulevard and the parking lot at 9241 Columbia Boulevard must be maintained.

 Maintain Selway Lane for two-way traffic and consider reconstructing Selway Lane as a mixed street.

Selway Lane is an important internal two-way connector road in Montgomery Hills. The objectives for Selway Lane include: maintain it for two-way traffic circulation; maintain low traffic volumes and low traffic speed; accommodate pedestrians; maintain existing businessess; and use locations other than Selway Lane for parking cars associated with the automotive business. Parked cars along



Selway Lane restrict both vehicular and pedestrian circulation on this connector street. Selway Lane is appropriate for the mixed street concept, which accommodates pedestrians, bicyclists, and cars traveling at low speeds. Design elements that are characteristic of attractive pedestrian spaces, including special pavers and streetscape, should be considered for Selway Lane, if improvements are made in the future.

Reconstruct the intersection of Seminary Road, Seminary Place, and Second Avenue. (See Map 21.)

This intersection should be improved to eliminate potentially hazardous traffic and pedestrian conditions and ease traffic flow along Seminary Road. This Plan recommends closing Seminary Road between Seminary Place and Linden Lane (except for driveway access) and modifying Brookville Road between Seminary Road and Linden Lane to allow only right turns to and from Brookville Road. The modifications support reconstruction of the Seminary Place/Second Avenue intersection as a T-type intersection. If changes to the current one-way southbound restrictions on Brookville Road are desired, they can be achieved outside the master plan process through existing DPWT programs, with appropriate changes to this recommendation.

The closure of Brookville Road to through traffic between Seminary Road and Linden Lane, and the closure of Seminary Road between Seminary Place and Linden Lane, will require a total of two lanes with turn lanes on Second Avenue between Seminary Road/Seminary Place and Linden Lane to accommodate the diverted traffic.

Parking

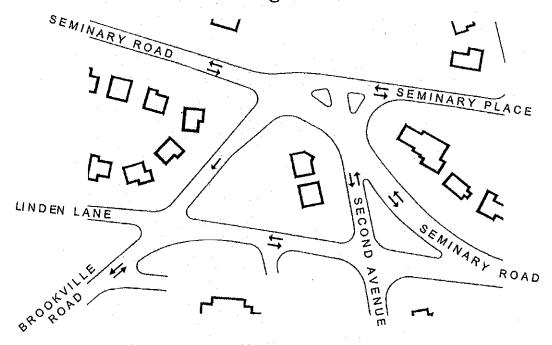
Among retailers interviewed for the Montgomery Hills Commercial Center Economic Health Analysis, lack of parking was viewed second only to local circulation/traffic as the most critical problem facing the area. The Georgia Avenue improvements will result in some loss of existing parking spaces. To alleviate these impacts, the Plan recommends the following possible mitigation measures.

Consider alternative parking arrangements for the Dale Center.

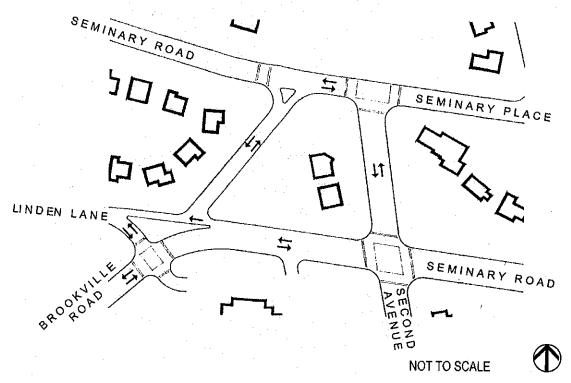
The parking needs for both the Parking Lot District and the retail businesses should be reviewed at the time of the State study to determine the appropriate conceptual design and means for constructing and operating any new parking. This will be particularly important if it appears that the addition of the median will significantly reduce the number of spaces in front of the Dale Center. If a parking need exists, the following options should be considered:

- 1. Determine whether it would be possible to narrow the width of the lanes and/or the median in the area in front of the Dale Center so that it will not be necessary to eliminate the first row of parking (or to at least replace it with some parallel parking);
- 2. Consider closing off Columbia Boulevard just north of its intersection with Rookwood Road and locate new parking in this area, where it will minimize impact on nearby residences; and
- 3. As a last resort it may become necessary to add parking directly behind the Dale Center on lots 8, 9, and 10 with a green buffer or open space along the western edge of these properties. If this is

Existing Conditions



Proposed Conditions



necessary, every effort should be made to minimize the size of the parking lot and/or maximize the buffer for adjoining residences (e.g., changing the grading to place the parking at a lower level that would be less visible to adjacent residents). A vehicular and pedestrian connection between the front and rear lots could be made along the south side of the building.

The additional parking with open space could be achieved through private development (as a special exception), by the Parking District, or through a public/private partnership.

The three existing single-family detached residences along the east side of Columbia Boulevard are recommended to remain in residential use. The two vacant lots and the existing parking lot are also recommended to retain their R-60 zoning. The residentially zoned lots behind the Dale Center should only be used for parking if the Proposed Concept for Georgia Avenue is implemented and there is a loss of parking in front of the center, and the other options for making up the parking loss, outlined above, are not feasible.

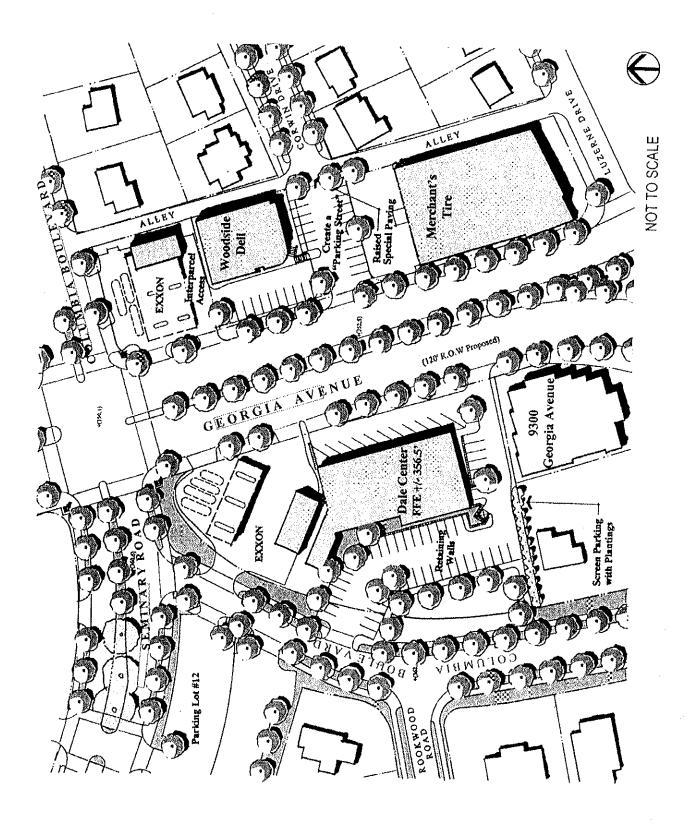
If the Proposed Concept for Georgia Avenue is implemented and these lots are constructed for parking, it is critical that the green buffer between the parking lot and Columbia Boulevard be implemented to provide separation between the residential and business areas. The buffer should be landscaped, perhaps with seating areas and could be designed to include a pedestrian connection between the residential and business communities. In addition, a landscaped buffer between the potential rear parking lot and the residence to the south (9219 Columbia Boulevard) is recommended. The community should be involved in the review of changes to the use of these lots and in the design of the open space.

 Access to Columbia Boulevard should be analyzed when the Seminary Road improvement is implemented.

On the west side of Georgia Avenue, Columbia Boulevard is located between Seminary Road and 16th Street. Many Columbia Boulevard residents would like the street to be closed at its northern terminus with Seminary Road to eliminate cut-through traffic in the neighborhood. To maintain adequate circulation, either the Sutton Place or Columbia Boulevard access points to Seminary Road should be maintained. This Plan recommends the closure of Sutton Place (between Seminary Road and Stratton Road) when the Seminary Road improvement is made and the public parking lot (#12) on Seminary Road is reconstructed. The treatment of Columbia Boulevard should be considered during design of the Seminary Road and public parking lot improvements.

 Analyze traffic management options for the North Woodside-Montgomery Hills neighborhood when the Proposed Concept for Georgia Avenue is implemented.

It is the intent of this Plan to create a more clearly defined boundary between the residential and commercial areas in this section of Montgomery Hills. This Plan recognizes that commercial and non-local cut-through traffic in residential neighborhoods is inappropriate. DPWT should work with this neighborhood to minimize non-local traffic on residential streets through the Residential Traffic Management Program. The neighborhood should be reviewed as a network of interconnected streets with traffic control measures that are coordinated accordingly.



 Consider making Corwin Drive between Georgia Avenue and the public alley into a parking street.

After improvements to Georgia Avenue are completed, the shops on Georgia Avenue north of Corwin Drive (Woodside Deli, Impressions Hair Salon, Etc.) will lose one row of parking spaces in front of the buildings. To mitigate this impact to the businesses, the County should consider providing perpendicular parking spaces on both sides of Corwin Drive between Georgia Avenue and the alley. (See Map 22.) Some type of barrier, either permanent or temporary, should be considered west of the alley to eliminate cutthrough traffic on the residential section of Corwin Drive east of the alley. Corwin Drive residents would like the residential portion of the street to be closed near the public alley, with adequate landscaping and emergency vehicle access.

 Eliminate the nine County-owned, metered, parallel parking spaces in the service road on the east side of Georgia Avenue in front of the strip of stores between Columbia Boulevard/Seminary Road and Seminary Place.

Without utilizing the service road and parking spaces in this section, there would not be adequate dimension to implement the Proposed Concept for Georgia Avenue. (See Map 23.) It is difficult to make up the nine spaces that would be lost in front of the stores. One possibility may be to remove a portion of the stores at either the north or south end of the strip and replace it with parking. Another possibility may be to use the alley on the north end of the building strip for some additional parking spaces. The County-owned public parking lot (Lot #48) adjacent to these stores at the northeast corner of Georgia Avenue and Columbia Boulevard would remain and the entrance to the lot could be reoriented from

Columbia Boulevard to Georgia Avenue so that the stores continue to have direct and convenient access to parking from the main road. The long term spaces in this lot could be reassigned to Parking Lot #12 on Seminary Road so that Lot 48 is available for short-term, patron parking.

Commercial Revitalization/Urban Design

 Initiate a Commercial Revitalization project in Montgomery Hills after the Georgia Avenue improvements have been completed.

The Department of Housing and Community Affairs has attempted revitalization projects in Montgomery Hills in the past with limited success. However, the reconstruction of Georgia Avenue will have some impacts on local businesses, especially during the construction phase. There may be renewed interest among business and property owners at this time to coordinate with other owners and the County to upgrade the physical appearance and to improve the overall business environment in the commercial area.

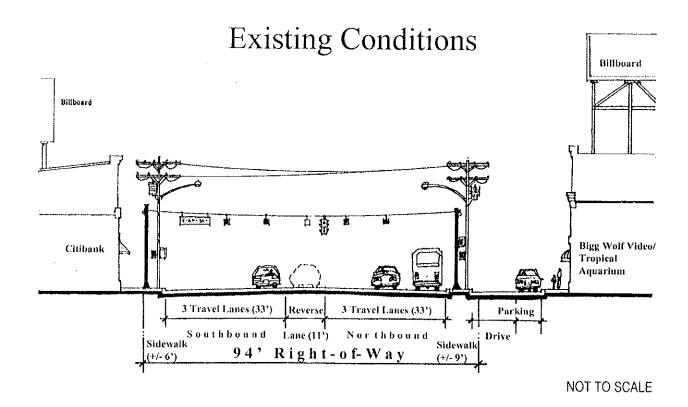
- Establish a working group of representatives from the County, State, M-NCPPC, residents and business owners to develop solutions to improve Montgomery Hills.
- Encourage the business community to establish a merchant's association to coordinate advertising and informational mailings to the community.

During the master planning process for the 1978 North Silver Spring Sector Plan, there was an active Montgomery Hills Businessman's Association. Over the ensuing years, the organization has become defunct. However, during development of the Proposed Concept for Georgia Avenue in Montgomery Hills,

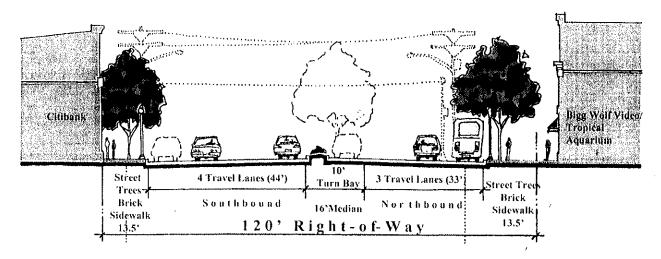
many of the business and property owners started working together to voice their opinions of the project. This renewed cooperative spirit should be fostered and channeled into new projects aimed at improving the business environment in Montgomery Hills.

• Remove billboards in the Montgomery Hills Commercial Center

The Montgomery Hills Commercial Center contains two billboards. They contribute to the visual clutter in the area and should be removed as part of a comprehensive urban design concept for the area. The County is currently pursuing litigation to have the signs permanently removed. This Plan supports the County's efforts toward this end.



Proposed Conditions



NOT TO SCALE



T&E COMMITTEE #2 January 23, 2014

MEMORANDUM

January 21, 2014

TO:

Transportation, Infrastructure, Energy and Environment (T&E) Committee

FROM:

Glenn Orlin, Deputy Council Administrator

SUBJECT:

State transportation priorities letter

The Maryland Department of Transportation (MDOT) anticipates letters from local elected officials regarding their State transportation funding for major capital projects, defined as those projects significant enough to warrant environmental studies. MDOT would like the letter to be updated annually in preparation of their upcoming Draft Consolidated Transportation Program (CTP), its sixyear capital improvements program.

Some jurisdictions update their letters annually, while others do not. The Montgomery County Council and Executive have chosen to update their joint letter in those years when either: (1) there has been a change in the composition of the Council or Executive; or (2) if there is a significant increase in State transportation revenue. The last Council/Executive joint letter was transmitted three years ago, on February 15, 2011, soon after two new Councilmembers were installed in office (©1-3). There is a rationale for updating the letter now, however, because of the large increase in transportation revenue approved by the General Assembly last spring. The FY14-19 CTP programmed most of the funds projected from that increase, but not all of it – especially at the back end of the period. Furthermore, the next CTP will extend out to FY20, and the added revenue in that year has not yet been programmed. \(^1\)

Format. Late last year Council staff met with County DOT and M-NCPPC staff to discuss the format of the next letter. The last several of letters, including the February 2011 version, included essentially five sets of priorities:

- 1. Broad programs of improvements. In particular, these included WMATA's multi-year rehabilitation effort and completion of the BRAC improvements.
- 2. Projects of regional significance in the CTP's Development & Evaluation (D&E) Program but not in its Construction Program. These are megaprojects that have significance beyond the borders of Montgomery County.

¹ Note that it is likely that the Council and Executive will update their letter again next winter, since there will be at least two new Councilmembers and, perhaps, a new Executive.

- 3. Projects of local significance in the CTP's Development & Evaluation (D&E) Program but not in its Construction Program. These projects can also be quite expensive (some are in the \$150-200 million range) but they are significant mainly to Montgomery County.
- 4. Transit projects not in the D&E Program. Major transit projects for which planning funds are being requested.
- 5. Highway and bikeway projects not in the D&E Program. Major highway and bikeway projects for which planning funds are being requested.

Over the years our staff have heard comments from MDOT that five categories are too many, making it difficult to select priorities among them. Therefore, we suggest that the priorities in the new letter be organized into three categories: #1, a combination of #2 and #3, and a combination of #4 and #5.

Furthermore, the D&E priorities in prior letters have included "the kitchen sink" of potential projects. The concern is that such a list overpromises what MDOT can afford in all but the far distant future. Last spring's revenue increase, as large as it was, provided full State funding for only three projects: the Purple Line, the I-270/Watkins Mill Road Interchange, and the Brookeville Bypass. None of the County's D&E priorities made it into the FY14-19 CTP. Therefore, the staffs recommend identifying fewer D&E priorities.

Finally, the letter before you for review is the cover letter of the transmittal to the State. The State requires certain documentation for each project: a map, a fuller description, and an explanation as to how it conforms to the goals of the Maryland Transportation Plan and local master plans. Once the Executive and Council have agreed on the cover letter, County staff will prepare this further documentation as an attachment. The final transmittal would then be signed by the Executive and Council President, likely later this winter, but in time for MDOT's April 1 deadline.

Executive's recommendation. The Executive's recommended cover letter is on ©4-5. As did the 2011 letter, the second paragraph refers to WMATA's rehabilitation program, the priority for eight-car trains, the elimination of the Red Line turnbacks at Grosvenor and Silver Spring, and capacity and circulation improvements at Metro stations. He recommends adding to this list the funding of improvements to fully implement the Priority Corridor Network for buses, which would include signal prioritization, queue jumpers, and other low-cost, low-impact elements. This incorporates one of the priorities identified by both the Planning Board and the Coalition for Smarter Growth (see below).

The third paragraph reiterates that the Purple Line and Stage 1 of the Corridor Cities Transitway (CCT) are the two highest priorities. Although all the State funding has been programmed for the Purple Line, the draft letter recognizes that the federal aid has not yet been secured, and that the State should fund the difference should sufficient federal funding not materialize. The text also recognizes that full construction funding for Stage 1 of the CCT has not been programmed but needs to be.

The Executive's proposed prioritization for Construction Program differs significantly from the 2011 letter. The main differences are:

• Contribution to the cost of the County's <u>Montrose Parkway East</u> project as priority #1. The segment of <u>Montrose Parkway East</u> between Rockville Pike and Parklawn Drive (over the CSX Metropolitan Branch) is part of the State Highway Administration's Highway Needs Inventory,

its master plan of road improvements. Several years ago the Council decided to proactively program the construction of this portion of <u>Montrose Parkway East</u> along with the "County" segment between Parklawn Drive and Veirs Mill Road as one consolidated project, but the State is designing its segment.

Recently the State prepared new cost estimate showing the cost of its segment increasing by \$20-25 million. The Executive's recommendation is that the State fund the difference for this project, which is key to providing access to White Flint from the east. Recall also that this portion of Montrose Parkway East is potentially the western segment of the master-planned Randolph Road Bus Rapid Transit (BRT) corridor.

• US 29 interchanges in Fairland/White Oak interchanges. Although the White Oak Science Gateway (WOSG) Master Plan will be reviewed later this winter, it is clear that some additional development there is desired by both the Executive and the Council to promote jobs and a range of ancillary retail currently missing in the East County. To and from the north the main access to this area would be via US 29 and I-95 (by way of the Intercounty Connector). US 29's master-planned interchanges at Tech Road/Industrial Boulevard and at Fairland Road/Musgrove Road would remove the two remaining bottlenecks hindering this access, and so the Executive recommends them as priorities #2 and #3, respectively.

It should be noted that Fairland/White Oak passes the Transit Adequacy Test of Transportation Policy Area Review (TPAR) but fails the Roadway Adequacy Test, so road improvements are the more pressing need there, especially to and from the north, where density is lower and transit is less viable. Although the master-planned interchange at Stewart Lane would relieve a significant bottleneck to and from the south, the master-planned BRT lines on US 29 and New Hampshire Avenue have potential to provide a major access improvement from the south. Therefore, while the Executive recommends adding the Stewart Lane interchange to the list, he would place it only as the #7 priority.

- Corridor Cities Transitway, Stage 2. Although MDOT cut short its project planning study for the CCT at Metropolitan Grove, the northern portion to Germantown and Clarksburg is still critical to providing a high level of transit access to these communities. The Executive places it as #4 among his recommendations.
- Norbeck Road and Norbeck/Georgia interchange. Norbeck Road (MD 28) between Georgia Avenue and Layhill Road is a twisting two-lane road that needs to be straightened for safety reasons, and is particularly a concern for senior drivers living at Leisure World. While its volume has declined with the opening of the ICC, it has still increased by 27% over the past decade. Widening this segment is recommended as the #4 priority by the Executive. If the project were also to include additional turning lanes at its intersection with Georgia Avenue, then the priority of the planned interchange can be lowered significantly.
- Veirs Mill Road BRT and Georgia Avenue Busway. These two BRT lines are already in project planning, so they are eligible for the Construction priority list. Veirs Mill Road is farther along and has a higher potential ridership, so the Executive recommends listing them as #6 and #13, respectively.

- Forest Glen Pedestrian Underpass. County DOT completed a feasibility study for this underpass beneath Georgia Avenue, but it is currently in abeyance without a path towards completion. The Executive recommends it as the #8 Construction Program priority.
- MD 124 (Woodfield Road). The segment between Midcounty Highway and Airpark Road has been a high priority in past letters, but over the past few years its traffic volume has remained flat. It is a fairly safe roadway, so that is not a concern. As a result the Executive recommends reducing its priority to #9.

Other, lower priorities recommended by the Executive include intersection improvements along Clopper Road (MD 117) in the Quince Orchard area (#10), the master-planned I-270/Newcut Road interchange in Clarksburg (#11), safety and accessibility improvements along Georgia Avenue in Montgomery Hills (#12), and the master-planned US 29/Greencastle Road interchange in Fairland (#15). Dropped from his recommended list is the widening of Woodfield Road north of Fieldcrest Road and the widening of MD 198 from Norwood Road to US 29.

The Executive's top two recommendations for D&E Program funding are the US 29 and MD 355 BRT corridors. As a result of the revenue increase, MDOT has provided \$10 million for BRT studies in Montgomery County, and in his Recommended FY15-20 CIP the Executive proposes using these funds for project planning for these two corridors. But \$10 million is not likely to be enough. Recall that the Veirs Mill Road and Georgia Avenue studies are costing \$6 million and \$5 million, respectively; these two studies comprise about 16 miles of BRT, while the US 29 and MD 355 BRT corridors comprise about twice as much mileage.

The third recommendation is a new project. As part of its West Side Mobility Study, SHA examined rather small-scale—but still expensive—improvements that would improve flow on lower I-270 and the western portion of the Beltway between the I-270 West Spur and Virginia. One of the improvements it identified is the widening of the eastbound Beltway approach to the HOV lane heading north on the West Spur. Currently traffic backs up from the lane divide beyond the point where traffic can freely flow into the northbound HOV lane. This improvement would extend the HOV lane back by three-quarters of mile towards the River Road interchange. Essentially it would be the first stage of the master-planned extension of the HOV lanes to and across the American Legion Bridge to the Virginia HOT lanes. The estimated cost is (only) \$35-40 million, but more environmental assessment must be conducted before it is eligible for the Construction Program.

The Executive's next three D&E priorities are carryovers from the 2011 letter. The Shady Grove Sector Plan requires that the MD 355/Gude Drive interchange be programmed before proceeding with Stage 2 of the transit-oriented development there. The extension of Midcounty Highway south and east of Shady Grove Road to the ICC would eliminate the circuitous connection that currently exists. The master-planned interchange on Great Seneca Highway at Sam Eig Highway/Muddy Branch Road—in addition to Stage 1 of the CCT—would support the development in the middle phases of the Great Seneca Science Corridor Master Plan.

The final D&E priority would be the New Hampshire Avenue BRT corridor. It is particularly important that MDOT be the lead on this study, since two segments of it are in Prince George's County, and its logical terminus is at the Fort Totten Metro Station in the District of Columbia.

Planning Board's recommendations (©6-9, see also its staff's packet on ©10-15). The Board's recommendations for the D&E Program are exactly the same as the Executive's except that it would include the recently master-planned HOV ramps on the south side of the Westlake Drive/Fernwood Road interchange. For the Construction Program, its primary difference is to include the portion of the US 29 BRT line south of White Oak as the #2 priority, to place the US 29/Fairland Road/Musgrove Road interchange at #5, and to not include the US 29/Tech Road/Industrial Boulevard interchange on the list. Many of the Board's recommendations were influenced by the testimony from the Coalition for Smarter Growth (©16-19).

The Council will recall that during its deliberations last fall on the US 29 BRT, there were many doubts raised as to the viability of dedicated BRT lanes on US 29 south of White Oak through Four Corners and the Sligo Hills area of Silver Spring. While the Council adopted the plan assuming dedicated lanes, at the same time many noted that this goal was "aspirational," and that it is very possible that a subsequent project planning study could find that dedicated lanes are not feasible. As a practice the Council has not included among its Construction Program priorities any project that is not already in project planning. The Council should be in a better position to understand the feasibility of dedicated lanes on US 29 south of White Oak by the next time it updates the priority letter, and if so, it could shoot right to the top of the Construction Program priorities. But for now, placing this project among the Construction Program priorities is inappropriate. On the other hand, the interchanges at Tech Road/Industrial Boulevard and Fairland Road/Musgrove Road, as noted above, address the road-based failure identified in the Subdivision Staging Policy's Roadway Adequacy Test, a test that was approved by the Council just over a year ago.

The Planning Board also recommends placing bicycle and pedestrian improvements in Bicycle-Pedestrian Priority Areas as among the top Construction priorities. However, the priorities letter refers to specific projects or (as in the case of WMATA's rehabilitation effort) a program of specific projects. Also, these projects will not require an environmental assessment, so they are not major capital projects.

This does not mean that the County should not pursue State funding ultimately for such bicycle and pedestrian improvements. The CTP includes a third program category beyond Construction and Development & Evaluation: the Safety, Congestion Relief, Highway and Bridge Program. Despite its cumbersome title that attempts to list all projects within it, this program also includes pedestrian and bicycle facilities. It is updated annually. County DOT and M-NCPPC often convey ideas for projects to be funded in this program. A recent example is the Shady Grove Metro Access Road Bikepath, to which MDOT contributed \$1,255,000 from this program.

Municipal recommendations. Council staff invited the Cities of Rockville and Gaithersburg to provide their recommendations. Rockville staff replied that it had no new priorities, and the staff felt uncomfortable conveying priorities without reviewing the matter with its Mayor and Council. So no letter from Rockville is forthcoming.

Gaithersburg's City Manager has forwarded a letter (©20-21) and asked that it be transmitted to the State with the County's letter. The City appreciates the State having funded the I-270/Watkins Mill Road interchange, which had been the County's #1 priority among the projects of local significance. It supports the Stage 1 of the CCT, the MD 355 BRT, and the Clopper Road intersection improvements. However, it opposes the planned interchanges on Great Seneca Highway at Sam Eig Highway and Muddy Branch Road.

Council staff recommendations. Council staff concurs with the Executive's recommendations for the Construction Program. It provides an excellent balance between transit projects where the county's existing and planned densities warrant transit, and highway projects where transit is not as viable. Although there are more highway projects recommended than transit, 57% of the funds requested are for the transit projects, 43% for roads. The percentage for transit would be even higher if more State funds were needed for the Purple Line in the event sufficient federal aid is not forthcoming.

Council staff concurs with the Planning's Board's recommendations for the D&E Program. The only difference between the Planning Board's proposal and the Executive's is that the Planning Board includes, as part of priority #3, a study of the ramps from Fernwood Road/Westlake Drive south to the I-270 West Spur HOV lanes. Since these ramps are close by the proposed HOV lane extension, studying them together makes sense, even if their full utility will not be realized until the full HOV improvement to Virginia is implemented.



February 15, 2011

The Honorable Richard Madaleno, Chair Montgomery County Senate Delegation 214 James Senate Office Building Annapolis, Maryland 21401

The Honorable Brian J. Feldman, Chair Montgomery County House Delegation 223 House Office Building Annapolis, Maryland 21401

Dear Senator Madaleno and Delegate Feldman:

In light of the Draft FY2011-2016 Consolidated Transportation Program we have updated the State transportation priorities we transmitted to you on July 16, 2008. This letter describes our latest sets of priorities for currently unfunded State transportation projects and studies.

We acknowledge and commend the Maryland Department of Transportation (MDOT) for its ongoing support for the Washington Metropolitan Area Transit Authority multi-year capital improvement programs for infrastructure investment to maintain a state of good repair and to implement the National Transportation Safety Board recommendations. Additional capital funding beyond the multiyear funding agreement is needed to operate eight-car trains, eliminate the Red Line turnbacks at Grosvenor and Silver Spring, and to expand the existing station platform and circulation capacity to accommodate existing and projected riders.

Two other points are noteworthy. The Base Realignment and Closure (BRAC) transportation improvements near National Naval Medical Center in Bethesda have been funded for design and land acquisition, but construction funds necessary to complete the improvements are not programmed. Also, the County is currently engaged in a feasibility study of county-wide bus rapid transit (BRT) service. Once the study is complete, we intend to incorporate elements of the countywide study in our master plans to then be in position to have MDOT begin project planning for specific routes in addition to those already underway.

The balance of this letter describes our priorities in several categories.

I. Projects of regional significance that are in the D&E Program but not in the Construction Program. Two major transitways, the Corridor Cities Transitway (CCT) from Shady Grove to Clarksburg, and the Purple Line from Bethesda to Prince George's County are our highest, and co-equal, priorities. The next priority is to complete the BRAC transportation improvements for the National Naval Medical Center in Bethesda. Other regionally significant projects with high priority are the widening of I-270 for high-occupancy-toll (HOT) or high-occupancy-vehicle (HOV) lanes north of Shady Grove and the widening of I-495 for HOT or HOV lanes between the I-270 West Spur and Virginia. While there are issues to be worked out on important aspects of some of these priorities, decisions must be made and funding must be identified promptly to move them forward to completion.



II. Projects of local importance that are in the D&E Program but not in the Construction Program. These are priority projects that have been previously identified by the Executive and Council to the State and/or Federal Delegations. We have already taken steps in the last few years of dedicating the extraordinary amount of \$286 million of County funds to design, acquire land for, and/or build several projects that are or should be the State's responsibility:

- \$14,463,000 to forward fund the MD 355/Montrose grade-separated interchange (being reimbursed by the State).
- \$22,375,000 to construct a 1,200-space garage at the Glenmont Metro Station.
- \$66,961,000 to design and reconstruct Rockville Pike (MD 355) through White Flint.
- \$70,296,000 to design, acquire land, and construct Montrose Parkway from east of Rockville Pike (MD 355) to Parklawn Drive.
- \$14,362,000 towards design and land acquisition for the Georgia Avenue (MD 97)/Randolph Road grade-separated interchange.
- \$6,447,000 to build several intersection improvements on State highways.
- \$10,000,000 to design and acquire land for the Georgia Avenue (MD 97) Bypass around Brookeville.
- \$4,900,000 towards the design of the I-270/Watkins Mill Road interchange.
- \$6,000,000 for preliminary engineering for the Veirs Mill Road (MD 586) BRT line between Wheaton and Rockville.
- \$2,000,000 for preliminary engineering for a pedestrian underpass beneath Georgia Avenue (MD 97) at the Forest Glen Metro Station.
- \$5,000,000 for preliminary engineering for the Georgia Avenue (MD 97) Busway from Glenmont to Olney.
- \$3,000,000 for preliminary engineering for the reconstruction of Georgia Avenue (MD 97) through Montgomery Hills, from 16th Street (MD 390) to Forest Glen Road (MD 192).

Our priority rankings for projects that will be ready for construction funding during the next six years and are currently in the design or project-planning stages are listed below. The funding that needs to be programmed to complete each project is indicated as well.

1 st	I-270/Watkins Mill Road Extended: build bridge over I-270	\$110M
2^{nd}	Woodfield Road: widen to 6 lanes, Midcounty Highway to Snouffer School Road	\$47M
3^{rd}	Georgia Avenue: build 2-lane bypass around Brookeville	\$22M
4 th	Georgia Avenue/Norbeck Road: build grade-separated interchange	\$142M
5 th	Clopper Road: improve intersections from I-270 to Seneca Creek State Park	\$56M
6 th	I-270/Watkins Mill Road Extended: complete grade-separated interchange	\$55M
7^{th}	Spencerville Road: widen to 4 lanes from Old Columbia Pike to US 29	\$31M
8 th	Norbeck Road: widen to 4 lanes from Georgia Avenue to Layhill Road	\$135M
9 th	I-270/Newcut Road: build grade-separated interchange	\$138M
10 th	Woodfield Road: widen to 6 lanes from Snouffer School Road to Airpark Road and	
	from Fieldcrest Road to Warfield Road	\$54M
11 th	US 29/Fairland Road/Musgrove Road: build grade-separated interchange	\$148M
12 th	MD 28/198: widen to 4 lanes from Layhill Road to Old Columbia Pike	\$183M.

The total funding that needs to be programmed to complete these 12 projects is more than \$1.1 billion.



The Honorable Richard Madaleno and Brian J. Feldman February 16, 2011 Page 3

III. Transit projects that are not in the D&E Program. As noted above, the County has programmed sufficient funds for MDOT to conduct preliminary engineering studies for the Veirs Mill Road BRT and the Georgia Avenue Busway. MOUs are being finalized and these studies should appear in the D&E Program of the Draft FY12-17 CTP. The County has also programmed funds for a project planning study of a pedestrian underpass beneath Georgia Avenue at the Forest Glen Metro Station.

Our priority in this category is to fund corridors proposed by our Countywide BRT Study and subsequent master plan amendments. These corridors may include, but are not limited to: US 29, MD 355, MD 650, the North Bethesda Transitway, and MD 193. Furthermore, as we move forward on this project, we seek support for interim steps to give higher priority for buses on State roads throughout the County.

IV. Highway and bikeway projects that are not in the D&E Program. Our priority rankings for highway and bikeway projects to be added to the D&E Program are:

1st Frederick Road (MD 355)/Gude Drive: grade-separated interchange

2nd Midcounty Highway Extended: construction from Intercounty Connector to Shady Grove Road

3rd Intercounty Connector Hiker-Biker Trail: Shady Grove to Prince George's County

4th Sam Eig Highway: grade-separated interchanges from I-270 to Great Seneca Highway (MD 119); and grade-separated interchange at Great Seneca Highway and Muddy Branch Road

5th Frederick Road (MD 355): widening from 2000' south of Brink Road to future Frederick Road/Clarksburg Bypass

6th Rockville Pike (MD 355): improvement from Woodmont Avenue to I-495, including a grade separated interchange at Cedar Lane

7th Veirs Mill Road (MD 586)/Randolph Road: grade-separated interchange

8th Veirs Mill Road (MD 586): widening from Twinbrook Parkway to Randolph Road

9th Frederick Road (MD 355): reconstruction north of Old Town Gaithersburg

10th I-270/Gude Drive: grade-separated interchange

11th MD 108 Bypass around Laytonsville

V. Other comments. We appreciate your acceptance of the White Flint Sector Plan area as the State's first Bicycle and Pedestrian Priority Area (BPPA). We will work with you to coordinate an implementation plan that will time the State's bicycle and pedestrian facility investments so they are coordinated with White Flint's staging plan.

We also appreciate your having accepted the Wheaton, Twinbrook, and Shady Grove Metro Station areas as transit-oriented development (TOD)-designated areas under Section 7-102 of the Maryland Code. We now nominate the White Flint Metro Station vicinity as a fourth area to be granted TOD status, but with the understanding that capital projects in any of these areas do not supersede the priorities listed above. Maps describing these areas are enclosed.

If you need any clarifications about our recommendations, please contact us.

Sincerely

Isiah Leggett

County Executive

Valerie Ervin, President

County Council

Enclosures

cc: The Honorable Martin O'Malley, Governor, State of Maryland Beverley Swaim-Staley, Secretary, Maryland Department of Transportation Françoise Carrier, Chair, Montgomery County Planning Board



February, 2014

The Honorable Jamie Raskin, Chair Montgomery County Senate Delegation James Senate Office Building, Room 122 Annapolis, Maryland 21401 The Honorable Anne R. Kaiser, Chair Montgomery County House Delegation House Office Building, Room 151 Annapolis, Maryland 21401

Dear Senator Raskin and Delegate Kaiser:

In light of the Draft FY2014-2019 Consolidated Transportation Program we have updated the State transportation priorities we last transmitted to you dated February 15, 2011. This letter describes our latest sets of priorities for currently unfunded or underfunded State transportation projects and studies.

We urge the Maryland Department of Transportation (MDOT) to support the Washington Metropolitan Area Transit Authority's multi-year capital improvement programs for infrastructure investment to maintain a state of good repair. Additional funding is needed to operate eight-car trains, eliminate the Red Line turnbacks at Grosvenor and Silver Spring, to expand the existing station platform and circulation capacity to accommodate existing and projected riders, and to implement capital improvements to facilitate its Bus Priority Network.

We deeply appreciate the State providing funding for the Purple Line and for Stage 1 of the Corridor Cities Transitway (CCT) from Shady Grove to Metropolitan Grove. These projects are our highest transportation project priorities. We are optimistic that the Federal Government will authorize and appropriate its share of the cost of the Purple Line, but until in case it does not, a high priority would be for the State to make up the difference. Regarding Stage 1 of the CCT, we also urge that a means for achieving full funding be sought. Additionally, we recognize and appreciate your funding of the I-270 at Watkins Mill Interchange, the Brookeville Bypass, the additional funding for the MD 28 – MD 198 Study, and the design of Interchanges along US 29. Advancing these projects support our economic development and safety of the traveling public.

The balance of this letter describes our State funding priorities for MDOT's Construction Program and the Development and Evaluation (D&E) Program, respectively:

PRIORITIES FOR THE CONSTRUCTION PROGRAM

- Montrose Parkway East: contribution to cost of segment from MD 355 to Parklawn Drive
- 2. US 29/Tech Road: grade-separated interchange
- 3. US 29/Fairland Road/Musgrove Road: grade-separated interchange
- 4. Corridor Cities Transitway Stage 2, Metropolitan Grove to Clarksburg
- 5. MD 28 (Norbeck Rd.), Georgia Avenue to Layhill Road: widen to 4 lanes, with safety improvements
- 6. MD 586 (Veirs Mill Road) Bus Rapid Transit line
- 7. US 29/Stewart Lane: grade-separated interchange
- 8. Forest Glen Pedestrian Underpass beneath Georgia Avenue
- 9. MD 124 (Woodfield Road), Midcounty Highway to Airpark Drive: widen to 4 lanes
- 10. MD 117 (Clopper Road), I-270 to Seneca Creek State Park: improve intersections
- 11. I-270/Newcut Road: grade-separated interchange
- 12. MD 97 (Georgia Avenue), Forest Glen Road to 16th Street: safety and accessibility improvements
- 13. MD 97 (Georgia Avenue) Bus Rapid Transit line, Olney to Wheaton
- 14. MD 97 (Georgia Avenue)/MD 28 (Norbeck Road): grade-separated interchange
- 15. US 29/Greencastle Road: grade-separated interchange-



The Honorable Jamie Raskin and Anne R. Kaiser February , 2014 Page 2

Once the project planning studies evaluating the addition of high-occupancy-vehicle (HOV) lanes on I-270 (I-370 to Frederick County) and I-495 (I-270 West Spur to Virginia) are re-initiated, and once a funding strategy is developed for these megaprojects of statewide significance, we will include them among the Construction Program priorities. We urge you to complete details and cost estimates for smaller segments of these corridors that your staff has been analyzing. They could be implemented in a shorter time frame, produce immediate congestion reduction benefits and the much lower costs make them very cost-effective.

PRIORITIES FOR THE D&E PROGRAM

- 1. US 29 Bus Rapid Transit line, Burtonsville to Silver Spring: additional funds to complete project planning
- MD 355 Bus Rapid Transit line, Germantown to Bethesda: additional funds to complete project planning
- 3. I-495 (Capital Beltway): extend HOV lane south of I-270 West Spur
- 4. MD 355 (Frederick Road)/Gude Drive: grade-separated interchange
- 5. MD 115 (Midcounty Highway) Extended, ICC to Shady Grove Road
- 6. MD 119 (Great Seneca Highway)/Sam Eig Highway/Muddy Branch Road: grade-separated interchanges
- 7. MD 650 (New Hampshire Avenue) Bus Rapid Transit line, White Oak to Eastern Avenue

Attached is a fuller description of these projects, and how each conforms to local master plans and the goals of the Maryland Transportation Plan. If you need any clarifications about our recommendations, please contact us.

Sincerely,	
Isiah Leggett	Craig Rice, President
County Executive	County Council

cc: The Honorable Martin O'Malley, Governor, State of Maryland Jim Smith, Secretary, Maryland Department of Transportation Françoise Carrier, Chair, Montgomery County Planning Board



OFFICE OF THE CHAIR

January 17, 2014

Mr. Isiah Leggett, County Executive Executive Office Building (EOB) 101 Monroe Street, 2nd Floor Rockville, Maryland 20850

and

Mr. Craig Rice, Council President Council Office Building 100 Maryland Avenue, 5th Floor Rockville, Maryland 20850

RE: State Transportation Priorities

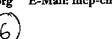
Dear Mr. Leggett and Mr. Rice:

At our regularly scheduled meeting on January 9, 2014, the Planning Board discussed the update of the County's State Transportation Priorities letter that is expected to be transmitted to the Montgomery County Delegation next month. (A copy of the staff memo for this discussion is enclosed for your information.) We offer our comments below for your consideration in the preparation of that letter.

Highest Priorities

We recommend the following as the County's highest transportation priorities:

- Support for the Washington Metropolitan Area Transit Authority multi-year capital improvement programs for infrastructure investment to maintain a state of good repair.
- Additional Metrorail funding to operate eight-car trains to eliminate the Red Line turnbacks at Grosvenor and Silver Spring, and to expand the existing station platform and circulation capacity to accommodate existing and projected riders.
- Construction of the Purple Line.



Mr. Isiah Leggett Mr. Craig Rice January 17, 2014 Page 2 of 4

- Construction of the Corridor Cities Transitway (CCT) Stage 1.
- Bicycle and pedestrian improvements in Bicycle-Pedestrian Priority Areas, including those designated in the Countywide Transit Corridors Functional Master Plan.

The first three priorities were included in your February 15, 2011 letter to the Delegation. The CCT was also included on that list, but since design work is proceeding only on Stage 1 of the CCT from Shady Grove to Metropolitan Grove, we have included only that segment in the highest priority list. Stage 2 is included in the priorities for the Construction Program, which is shown below along with the priorities for the Development and Evaluation Program.

The last item on this list is new. Bicycle and pedestrian improvements are greatly needed in commercial business districts and Metro station areas. With the County's growth coming increasingly in the form of mixed use development, the growth of transit usage, and the increase in bicycling, including from the County's introduction of bikeshare, a comprehensive program of bicycle and pedestrian improvements is needed in these areas to ensure that benefits of the County's investments in transit can be fully realized.

The White Flint Sector Plan area is the state's first Bicycle-Pedestrian Priority Area. More than two dozen other areas have been designated in the County's master plans, most recently in the Countywide Transit Corridors Functional Master Plan, and are awaiting State confirmation of the designation. The major roadways in all of these areas that serve as transit routes are State highways whose safety and accessibility must be improved.

Other Priorities

Our recommendations for additions to the Construction and Development & Evaluation programs are also tailored to support the County's economic development goals. Where a transit solution could reasonably be considered to provide the needed transportation capacity in the near-term over roadway improvements, it was given a higher priority.

With the Council's recent unanimous approval of the Countywide Transit Corridors Functional Master Plan, it is clear that transit must become a much more significant part of our future transportation system. Where transit can be used to meet our transportation needs, we believe that it moves us closer to a sustainable transportation network that has lesser impacts on existing communities, natural resources, and parkland. We also understand that heavy investment in transit is not the solution to the transportation needs in every area of the County, nor is it the answer to every transportation problem, even in densely populated areas of the County.

Mr. Isiah Leggett Mr. Craig Rice January 17, 2014 Page 3 of 4

We recommend the following as the County's priorities for the Construction and Development & Evaluation programs:

Construction Program

- Montrose Parkway East: contribution to cost of segment from MD 355 to Parklawn Drive
- 2. US 29 Bus Rapid Transit line, White Oak to Silver Spring
- 3. Roadway and other capital improvements to facilitate implementation of WMATA's Priority Corridor Network, which would enhance bus service through improvements such as signal priorities and queue jumpers, better passenger amenities, new buses with low floors and hybrid technology, and new limited stop services.
- 4. Corridor Cities Transitway Stage 2, Metropolitan Grove to Clarksburg
- 5. MD 28 (Norbeck Rd.), Georgia Avenue to Layhill Road: widen to 4 lanes, with safety improvements, and intersection improvements to the Georgia Avenue/Norbeck Avenue intersection
- 6. US 29/Fairland Road/Musgrove Road: grade-separated interchange
- 7. MD 586 (Veirs Mill Road) Bus Rapid Transit line
- 8. Forest Glen Pedestrian Underpass beneath Georgia Avenue
- 9. I-270/Newcut Road: grade-separated interchange
- 10. MD 97 (Georgia Avenue), Forest Glen Road to 16th Street: safety and accessibility improvements
- 11. MD 97 (Georgia Avenue) Bus Rapid Transit line, Olney to Wheaton
- 12. MD 124 (Woodfield Road), Midcounty Highway to Airpark Drive: widen to 4 lanes
- 13. MD 117 (Clopper Road), I-270 to Seneca Creek State Park: improve intersections
- 14. MD 97 (Georgia Avenue)/MD 28 (Norbeck Road): grade-separated interchange

Development & Evaluation Program

- 1. US 29 Bus Rapid Transit line, Burtonsville to White Oak
- 2. MD 355 Bus Rapid Transit line, Germantown to Bethesda
- 3. I-495 (Capital Beltway): extend HOV lane south of I-270 West Spur, including HOV ramps on the south side of Westlake Drive/Fernwood Road
- 4. MD 355 (MD 355)/Gude Drive: grade-separated interchange
- 5. MD 115 (Midcounty Highway) Extended, ICC to Shady Grove Road

Mr. Isiah Leggett Mr. Craig Rice January 17, 2014 Page 4 of 4

- 6. MD 119 (Great Seneca Highway)/Sam Eig Highway and Muddy Branch Road: grade-separated interchanges
- 7. MD 650 (New Hampshire Avenue) Bus Rapid Transit line, White Oak to Eastern Avenue

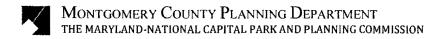
Thank you for the opportunity to review this project and for your attention to this matter. If you have any questions or comments concerning our review, please call Larry Cole at 301-495-4528.

Sincerely,

Françoise M. Carrier

Chair

Enclosure



MCPB Item No. 10

Date: 01-09-14

State Transportation Priorities

Larry Cole, Master Planner, larry.cole@montgomeryplanning.org, 301-495-4528

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Completed: 12/23/13

Summary

Every few years, the County Executive and Council forward a joint letter of recommendations for state transportation projects and studies to the Montgomery County Delegation for their consideration in approving the final FY2014-2019 Consolidated Transportation Program, the Draft of which was released in October 2013:

http://www.mdot.maryland.gov/Office of Planning and Capital Programming/CTP/CTP 14 19/Index. html. The last letter was sent on February 16, 2011 (see Attachment 1) and the new letter is anticipated to be sent in February 2014.

The joint priority letter serves as advice to the Montgomery County Delegation in their yearly budget negotiations but also serves as a standing guide to MDOT and SHA as to what the County's priorities are, and developments in the planning and design of these priority projects are highlighted in the monthly capital transportation program meetings that are attended by SHA, County staff, and Planning staff.

Recommendations

We recommend that the Board transmit the following transportation priorities to the County Executive and Council for their consideration in their update of the joint priorities letter. This letter should include a restatement of support for the County's highest transportation priorities, which are:

- Support for the Washington Metropolitan Area Transit Authority multi-year capital improvement programs for infrastructure investment to maintain a state of good repair.
- Additional Metrorail funding to operate eight-car trains to eliminate the Red Line turnbacks at Grosvenor and Silver Spring, and to expand the existing station platform and circulation capacity to accommodate existing and projected riders.
- Construction of the Purple Line, and
- Construction of the Corridor Cities Transitway (CCT) Stage 1





Since design work is proceeding only on Stage 1 of the CCT from Shady Grove to Metropolitan Grove, we have included only that segment in the highest priority list. Stage 2 would still be included in the priorities for the Construction Program, which is shown below along with the priorities for the Development and Evaluation Program.

PRIORITIES FOR THE CONSTRUCTION PROGRAM

- 1. Montrose Parkway East: contribution to cost of segment from MD 355 to Parklawn Drive
- 2. US 29 Bus Rapid Transit line, White Oak to Silver Spring
- Corridor Cities Transitway Stage 2, Metropolitan Grove to Clarksburg
- 4. MD 28 (Norbeck Rd.), Georgia Avenue to Layhill Road: widen to 4 lanes, with safety improvements, and intersection improvements to the Georgia Avenue/Norbeck Avenue intersection
- 5. US 29/Fairland Road/Musgrove Road: grade-separated interchange
- 6. MD 586 (Veirs Mill Road) Bus Rapid Transit line
- 7. Forest Glen Pedestrian Underpass beneath Georgia Avenue
- 8. I-270/Newcut Road: grade-separated interchange
- 9. MD 97 (Georgia Avenue), Forest Glen Road to 16th Street: safety and accessibility improvements
- 10. MD 97 (Georgia Avenue) Bus Rapid Transit line, Olney to Wheaton
- 11. MD 124 (Woodfield Road), Midcounty Highway to Airpark Drive: widen to 4 lanes
- 12. MD 117 (Clopper Road), I-270 to Seneca Creek State Park: improve intersections
- 13. MD 97 (Georgia Avenue)/MD 28 (Norbeck Road): grade-separated interchange

PRIORITIES FOR THE DEVELOPMENT & EVALUATION PROGRAM

- 1. US 29 Bus Rapid Transit line, Burtonsville to White Oak
- 2. MD 355 Bus Rapid Transit line, Germantown to Bethesda
- 3. I-495 (Capital Beltway): extend HOV lane south of I-270 West Spur, including HOV ramps on the south side of Westlake Drive/Fernwood Road
- 4. MD 355 (MD 355)/Gude Drive: grade-separated interchange
- 5. MD 115 (Midcounty Highway) Extended, ICC to Shady Grove Road
- MD 119 (Great Seneca Highway)/Sam Eig Highway and Muddy Branch Road: gradeseparated interchanges
- 7. MD 650 (New Hampshire Avenue) Bus Rapid Transit line, White Oak to Eastern Avenue

With the Council's recent unanimous approval of the Countywide Transit Corridors Functional Master Plan, it is clear that transit must become a much more significant part of our future transportation system. Heavy investment in transit is not the solution to the transportation needs in every area of the County nor is it the answer to every transportation problem, even in densely populated areas of the





County. But where roadway widenings to solve perennial traffic congestion would significantly affect existing communities, natural resources and parkland, a more efficient solution is needed.

This update of the joint priorities letter, coming fairly soon after a significant increase in transportation funding, offers the opportunity to reassess what the County's overall priorities should be in creating a sustainable transportation network. The recommended projects put a much higher focus on transit projects than has been true in the past. These transit projects are recommended where feasible and supported by existing policy, and will help to support the County's economic development goals.

Changes to the list from the 2011 letter also reflect changes from the previous list because of project completions; changes in funding that negate the need to continue to include them; and changes in traffic growth.

The following section includes detailed comments on the projects and studied recommended for inclusion in the priorities letter.

Construction

Montrose Parkway East (#1): This project was not previously on the list because most of it (east of Parklawn Drive) was a County project. The Montrose Road grade-separation at the CSX tracks is still a separate SHA project but these projects are now being designed to be constructed together. A State contribution is needed to move the combined project forward to support development in the White Flint Sector Plan area.

<u>US29 Bus Rapid Transit from White Oak to Silver Spring (</u>#2) and US29 interchanges, including <u>US29/Fairland Road/Musgrove Road</u> (#5): The US29 interchange projects completed the Project Planning process more than a decade ago and are intended to accommodate forecast traffic volumes in this corridor. (Weekday traffic volumes have increased over 10% in this corridor since 2006.) Following completion of the interchange planning effort, three interchanges were constructed; at Randolph Road/Cherry Hill Road, at Briggs Chaney Road, and at MD198. Additional interchanges that are planned but not yet built would be at Stewart Lane, at Tech Road/Industrial Parkway, at Fairland Road/Musgrove Road, at Greencastle Road, and at Blackburn Road.

The US29/Fairland Road/Musgrove Road interchange was included in the 2011 Construction priorities and the Draft FY14-19 Maryland Consolidated Transportation Program (CTP) added \$7M in design funding for this project, whose construction cost is estimated to be \$128M. (See Attachment 2 for Council staff's Overview of the Draft FY14-19 CTP.)

During our preliminary discussions with Council and MCDOT staff on the new priority list, three additional US29 interchanges were considered for inclusion on the list: at Stewart Lane, at Tech Road/Industrial Parkway, and at Greencastle Road, the estimated construction cost for which would be \$344M. They are all Master Plan-recommended facilities but there is a tension between continuing to devote significant transportation funding to moving general traffic in the US29 corridor and funding bus





rapid transit (BRT) in the same corridor. By comparison, the estimated construction cost of dedicated transit lanes from Silver Spring to Burtonsville is nearly the same as these three interchanges - \$351M.

We believe that prioritizing the US29 transit corridor improvements is the better choice. The White Oak Science Gateway Master Plan emphasizes place-making in White Oak and BRT is the key piece of infrastructure needed to develop mixed use activity centers in this corridor. BRT also offers great potential in intercepting long distance trips originating in Howard County, freeing up road capacity to serve these activity centers.

Since no new pavement is recommended for US29 BRT south of White Oak and the necessary improvements are mostly operational, we expect that planning for that segment could be completed fairly quickly. We recommend that this segment be expedited ahead of the BRT segment north of White Oak, where additional pavement is required, and be placed directly in the Construction priorities list.

Because the project planning for the US29 interchanges was done so long ago, it needs to be updated to reflect current environmental regulations; it may be a couple of years before these projects are ready to enter the construction program. During that time, planning for the US29 BRT segment north of White Oak should be expedited so that we can better understand the traffic impacts and benefits of all the projects in the US29 corridor more fully.

BRT is an integral element of the soon to be adopted White Oak Science Gateway Master Plan. We know that we need BRT to provide an adequate level of mobility in the US29 corridor and should pursue its implementation as soon as possible. Early BRT implementation on the southern half of the corridor will give us good information on what beneficial impact there will be on traffic demand. The need for additional interchanges on US29 can then be considered in that context.

<u>Corridor Cities Transitway Stage 2</u> (#3): MTA elected not to include the segment from Metropolitan Grove to Clarksburg in its Environmental Impact Statement for the segment between the Shady Grove Metro Station and Metropolitan Grove. But this important project needs to be pursued as a high priority in order to provide more effective access to transit in the Germantown and Clarksburg areas.

MD 28 (Norbeck Rd.), Georgia Avenue to Layhill Road (#4) and MD 97 (Georgia Avenue)/MD 28 (Norbeck Road) interchange (#13): The traffic volume on this road dropped over the last year with the opening of the ICC, but is still up 27% over the last decade. In addition to roadway widening, the straightening of Norbeck Road is needed for safety reasons. A grade-separated interchange is master planned at the Georgia Avenue/Norbeck Avenue intersection, but intersection improvements should be pursued first to alleviate traffic problems and the interchange moved to a lower priority. The Draft FY14-19 CTP added \$3M in preliminary engineering for the length of MD28/MD198 between Georgia Avenue and US29.

MD 586 (Veirs Mill Road) Bus Rapid Transit line (#6): The planning for this project is being done by SHA but is funded by Montgomery County. This existing transit ridership in this corridor is one of the highest in the County. The corridor is planned to eventually provide a key east west connection (when coupled with University Boulevard) linking Rockville with Takoma Langley via Wheaton.



<u>Forest Glen Pedestrian Underpass</u> (#7): The planning for this project was funded and completed by Montgomery County. This project would provide a safer grade-separated pedestrian and bicyclist crossing at the Georgia Avenue/Forest Glen intersection, as well as direct access to the Forest Glen Metro Station.

<u>I-270/Newcut Road interchange</u> (#8): This interchange would serve the growing Clarksburg area and would be partially funded by the Cabin Branch development.

MD 97 (Georgia Avenue), Forest Glen Road to 16th Street (#9): The planning for this project is being done by SHA but is funded by Montgomery County. This segment of Georgia Avenue is the highest volume non-Interstate highway in the State of Maryland (69K average annual weekday traffic).

MD 97 (Georgia Avenue) Bus Rapid Transit line (#10): The planning for this project is being done by SHA but is funded by Montgomery County. The forecasting done for the CTCFMP showed lower ridership than most other corridors in the plan but implementation would likely be easier.

MD 124 (Woodfield Road), Midcounty Highway to Airpark Drive (#11): The traffic volume on this road has been relatively flat over the past decade, but two County widening projects on Snouffer School Road, which intersects MD124 at about the midpoint of the subject project, are intended to accommodate future traffic growth associated with the development of the Multi-Agency Service Park and Public Service Training Academy and with private development. These developments would increase traffic on MD124. The Draft FY14-19 CTP added \$1.9M in design funding for this project.

MD 117 (Clopper Road), I-270 to Seneca Creek State Park (#13): This project was put on hold about a decade ago, during which time the traffic volume on this road has dropped about 9%. Rather than a general widening of the roadway, this project is a series of intersection improvements intended to address localized congestion problems.

Development and Evaluation

<u>US 29 Bus Rapid Transit line</u>, <u>Burtonsville to White Oak (#1)</u>: This segment of the US29 corridor includes additional lanes for BRT but all of the necessary right-of-way exists so the duration of the planning phase should be fairly short.

MD 355 Bus Rapid Transit line, Germantown to Bethesda (#2): This corridor has the highest forecast BRT ridership but there are many different right-of-way constraints that will take some time to resolve during planning.

<u>I-495 (Capital Beltway)</u>: extend HOV lane south of I-270 West Spur (#3): This project would address the high levels of congestion on I-270 and the Capital Beltway, including the American Legion Bridge, and facilitate transit service to Tysons Corner.

MD 355 (MD 355)/Gude Drive: grade-separated interchange (#4): There is a high level of congestion at this intersection that would be alleviated by the construction of the master-planned interchange. Dedicated transit lanes on MD355 (Development and Evaluation priority #2) would need to be included in this study.



MD 115 (Midcounty Highway) Extended, ICC to Shady Grove Road (#5): This project would provide a direct connection to the ICC and would likely remove traffic from other area roads. This project was recommended by the Board to be included in the ICC project but SHA declined to do so.

MD 119 (Great Seneca Highway)/Sam Eig Highway and Muddy Branch Road interchanges (#6): These interchanges would address existing congestion and serve future development in the Great Seneca Science Corridor. This area would also be served by the CCT Stage 1 (Construction priority #3)

MD 650 (New Hampshire Avenue) Bus Rapid Transit line, White Oak to Eastern Avenue (#7): This corridor has high existing and forecast ridership. Implementation of dedicated lanes would support existing MetroExtra service, which is the precursor to BRT.

Conclusion

The recommended list of projects includes some significant roadway projects and studies that would provide additional traffic capacity and relieve congestion at some major intersections in addition to a significant number of transit projects and studies that would enable us to increase the personthroughput – the ability to move more people – on our roads without greatly increasing the footprint of those roads. We recommend that the Board transmit this list of priorities to the County Executive and Council for their consideration in their update of the joint priorities letter.





Coalition for Smarter Growth

DC • MD • VA

January 9, 2014

Francoise Carrier, Chair Montgomery County Planning Board, M-NCPPC 8787 Georgia Avenue Silver Spring, MD 20910

RE: State Transportation Priorities

Dear Planning Board:

Thank you for this opportunity to comment on the county's Transportation Priority Letter. My name is Cheryl Cort and I am speaking on behalf of the Coalition for Smarter Growth, the leading non-profit group advocating for transit and walkable communities in the DC region, which counts thousands of supporters in Montgomery County.

We'd like to remind the Board that state law governing the priority letter process "requires MDOT and the local jurisdictions seeking project funding to demonstrate the relationship between prioritized projects and the long-term goals of the Maryland Transportation Plan and local land use plans." The goals of the Maryland Transportation Plan focus on safety for all users, system preservation, and environmental conservation.

Restatement of the County's highest transportation priorities: We applaud the high priority placed on the critical transportation investments of WMATA's multi-year capital program and the Purple Line, both of which meet state and county goals. We ask that funding for WMATA not only include the multi-year capital improvements program and Metrorail funding for eight-car trains, but also include Metrobus Priority Corridor Network (PCN) implementation. We also recommend including MARC improvements for the Brunswick Line.

Beyond these highest priorities, we find the priorities for the list of construction, and development and evaluation programs to be a mixed bag of projects. Some will help, and some will hurt the county's ability to provide better and more sustainable transportation choices for its residents. We applaud the many Bus Rapid Transit line projects that occur throughout the lists. These BRT projects should not only build-out the infrastructure for transit vehicles and stations, it should also ensure enhanced pedestrian and bicycle access and safety.

We are alarmed, however, by the county's continued commitment to a long list of costly road capacity projects despite growing emphasis on creating a sustainable transportation network that increases the role of transit. We suggest that these costly road capacity projects be re-evaluated in light of long term national and local downward trends in driving, current environmental standards, and increased focus on providing quality transit services. We must make wise choices with limited funds to build the right projects to support county and state goals.

The current draft list you are considering today begins to shift this lopsided investment approach, but much more re-evaluation of expensive road capacity projects is needed. The county needs to leverage state funds to support road projects that enhance the safety and access for all users. Investments need to encourage other forms of travel besides driving to fully address our transportation needs.

Past studies, many which were done years ago, conclude a long list of interchanges and widenings are necessary. However, long term demographic trends towards driving less, especially among our largest demographic group – 24-35 year olds, calls into question the validity of the assumptions and projections of these studies. As the County builds more high quality transit and focuses new housing and jobs around transit stations, constructing more unwalkable roadways and interchanges will only undermine these investments.

As the Board considers the draft list of projects, we ask you to prioritize advancement of the BRT projects, and increased investment in road and intersection improvements that enhance safety and accessibility for pedestrians and bicyclists.

Below are our suggestions on the draft priority letter that better supports the county's goals of relieving the burden of traffic congestion, making it easier for residents not to drive, and fight climate change.

HIGHEST TRANSPORTATION PRIORITIES – as we stated before, we recommend adding:

Metrobus Priority Corridor Network (PCN) implementation with WMATA investments

MARC Growth and Investment Plan: MARC ridership is booming, and the Brunswick Line provides a much-needed alternative in the busy I-270 corridor. We urge the County to request funding for the Brunswick Line upgrades for 2020 as outlined in the MARC Growth and Investment Plan.

CONSTRUCTION PROGRAM - projects that meet County and State goals

US 29 Bus Rapid Transit line, White Oak to Silver Spring
MD 586 (Veirs Mill Road) Bus Rapid Transit line
MD 97 (Georgia Avenue) Bus Rapid Transit line, Olney to Wheaton
We ask the Board to advance these projects as high priorities for full funding.



Corridor Cities Transitway Stage 2: We urge the Board to lower costs for the Corridor Cities Transitway by following the recommendations of the Kittelson report to eliminate to the extent possible tunnels and grade-separated interchanges, which will only create unsafe pedestrian conditions and drive up costs.

Recommended additions to Construction Program:

ADA best practices for pedestrians along all BRT routes and around rail stations construction funds: As the county builds the Purple Line and Bus Rapid Transit, it should ensure that state roadways have sidewalks and pedestrian infrastructure that meet ADA best practices, as specified in the new Countywide Transit Corridors Functional Master Plan.

Bicycle-Pedestrian Areas Capital Funding Program: Capital funds should be allocated through this program to implement State Bicycle-Pedestrian Areas. These areas will enhance pedestrian/bike access to transit and help alleviate traffic congestion, and reduce pollution.

DEVELOPMENT AND EVALUATION PROGRAM

US 29 Bus Rapid Transit line, Burtonsville to White Oak
MD 355 Bus Rapid Transit line, Germantown to Bethesda
MD 650 (New Hampshire Avenue) Bus Rapid Transit line, White Oak to Eastern Avenue
We urge the county to ensure full funding for planning Bus Rapid Transit on US 29, MD 355 and
MD 650 to quickly advance these major transit corridors to construction.

Recommended additions to Development and Evaluation Program:

Additional cycletracks to support and connect new bikeshare network. To support the County's new bikeshare network, Montgomery should prioritize funding cycletrack connections between stations.

CONSTRUCTION PROGRAM - Projects to reconsider and defer

Montrose Parkway East: We ask the Board to reconsider the purpose of this project, and its expanding scope and cost. Montrose Parkway East undermines White Flint's walkable future by creating a new, fast moving roadway that will be an unsafe barrier for pedestrians and cyclists. We ask that the County invest instead in the state roads (355 and Old Georgetown Road) needed to create a new street grid for White Flint.



MD 28 (Norbeck Rd.), Georgia Avenue to Layhill Road: widen to 4 lanes, intersection improvements to Georgia Avenue/Norbeck Avenue intersection

MD 97 (Georgia Avenue)/MD 28 (Norbeck Road): grade-separated interchange

While we appreciate the shifting of the interchange component to the #13 position on the Construction Program list, we still request that the widening and costly interchange proposal be revaluated and deferred in light of other more important investments. These projects are part a wasteful half billion dollar proposed investment in road capacity directly parallel to the \$2 billion ICC. With ICC use continuing to fall below original projections, spending money on parallel road capacity will only draw commuters away, cutting needed toll revenue and ensuring that the investment in the ICC will continue to be underutilized. The county should consider SHA's newer plans for a much lower impact, lower cost alternative to improve pedestrian safety and access in the corridor.

US 29/Fairland Road/Musgrove Road grade-separated interchange. We urge the board to defer this and other US 29 interchange projects and pursue US 29 BRT improvements for a similar cost. Providing high quality transit will help alleviate the burden of traffic congestion and create a more sustainable transportation system into the future. Furthermore, many of the studies calling for US 29 interchanges were completed several years ago and need to be updated with current data and assumptions.

MD 124 (Woodfield Road), Midcounty Highway to Airpark Drive: widen to 4 lanes. The County should consider whether the ICC has made widening unnecessary in this location in order to save capital costs.

DEVELOPMENT AND EVALUATION PROGRAM - projects to reconsider and defer

MD 355 (Rockville Pike)/ Gude Drive grade-separated interchange. We urge the Board to reconsider and defer this project. This is another intersection on one of the highest priority BRT corridors, right by Montgomery College which will be a major transit trip generator. Building a grade-separated interchange here is incompatible with the County's investments in bikeshare and coming BRT to this area.

MD 119 (Great Seneca Highway)/Sam Eig Highway and Muddy Branch Road: grade-separated interchanges. We ask the Board to defer and re-evaluate this project given that these costly grade-separated interchanges associated with the CCT will only serve to create a more pedestrian unfriendly environment. We ask that the CCT be used to divert traffic to transit trips to alleviate traffic congestion, and avoid interchanges which are automobile-exclusive and high cost facilities.

Thank you for your consideration.

Sincerely,

Cheryl Cort Policy Director





January 17, 2014

The Honorable Craig Rice Council Office Building 100 Maryland Avenue Rockville, Maryland 20850

Dear Council President Rice,

Staff would like to take this opportunity to communicate the City of Gaithersburg's transportation funding priorities for the Maryland Department of Transportation's Consolidated Transportation Program. The City respectfully requests that our suggestions be incorporated into the final letters submitted to the Montgomery County Delegation Chairs.

We would like to express our tremendous appreciation for the County and State's effort to fully fund the Watkins Mill Road Interchange. We ask that design begin as expeditiously as possible and look forward to its completion in 2016.

Gaithersburg strongly supports the furthering of efforts on a County-wide BRT system. Of particular importance to the City is the proposed MD 355 Route that will run from Germantown to Bethesda. Once completed, this transit network and MD 355 in particular will provide an effective and sustainable alternative mode of transportation for our burgeoning community. As this route has developed, City staff has worked closely with our colleagues in Montgomery County, and we will continue be cooperative partners as it moves forward.

The City of Gaithersburg has been extremely supportive of the Corridor Cities Transitway and it remains a key transportation priority. We are pleased that design for Stage 1 is proceeding and request that the construction of Stage 1, from Shady Grove to Metropolitan Grove, be designated the County's top transportation priority. All land use approvals in the western portion of Gaithersburg for the last 40 years have been influenced by this planned transit project.

We would also like express our support of the MD 117, I-270 to Seneca Creek State Park, intersection improvements. While traffic has dropped off slightly and the State Project has been on hold for years, improvements are critical in order to address safety and alleviate heavy congestion. The City requests that this project remain a construction priority.

The City is opposed to the inclusion of MD 119 (Great Seneca Highway)/ Muddy Branch Road grade separated interchanges in the development and evaluation program. The City has voiced its

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MAYOR Sidney A. Katz COUNCIL MEMBERS Jud Ashman Cathy C. Drzyzgula Henry F. Marraffa, Jr. Michael A. Sesma Ryan Spiegel CITY MANAGER Tony Tomasello



The Honorable Craig Rice January 17, 2014 Page Two

concerns and stated the following in Gaithersburg's adopted 2009 Transportation Element: "The City does not support any grade separated interchanges within the City limits such as the proposed MD 124 and MD 119 interchange that may impede the implementation of the recommendations in the adopted City Master Plan, preclude the Kentlands CCT Realignment, or conflict with any approved development site plans." We respectfully request that the County recommend a more viable, beneficial project in its place.

We appreciate the work that County staff puts into compiling the respective list of priorities and look forward to working closely with you and your colleagues as we continue to advocate for these projects. Please feel free to contact me should you have any questions.

Sincerely

Tony Tomasello City Manager

ce: Mayor and City Council