

MEMORANDUM

November 20, 2019

TO: Planning, Housing, and Economic Development (PHED) Committee

FROM: Glenn Orlin, ^{GO} Deputy Director

SUBJECT: Forest Glen/Montgomery Hills Sector Plan—evaluation of transportation adequacy at buildout; transportation elements, evaluation of school adequacy at buildout, fiscal impact statement

PURPOSE: Develop Committee recommendations

Councilmembers: Please bring your copy of the Final Draft Plan to this worksession.

This staff report addresses transportation and school adequacy at the time of the buildout, the Final Draft's transportation elements, and its fiscal impact statement.¹ Some technical corrections will be made to the final document, but they are not identified in this report. The purpose of this worksession is for the Committee to make recommendations about these matters. This staff report addresses recommendations that differ from the Final Draft from the Executive, the Department of Transportation (DOT), other public hearing testimony and correspondence, and Council staff.

Those anticipated to attend include:

Casey Anderson, Chair, Planning Board
Gwen Wright, Director, Planning Department
Leslye Howerton, Area 1 Chief, Planning Department
Melissa Williams, Senior Planner, Area 1, Planning Department
Katherine Mencarini, Area 1, Planning Department
Stephen Aldrich, Functional Planning & Policy Division, Planning Department
Christopher Conklin, Director, DOT
Andrew Bossi, Director's Office, DOT

1. Loosening the congestion standard. The study area is partly in the Silver Spring/Takoma and Kensington/Wheaton Policy Areas, both of which have an intersection congestion standard of 80 seconds/vehicle under the Subdivision Staging Policy (SSP). In other words, motor vehicles are not supposed encounter an average delay of more than 80 seconds at any signalized intersection in planning

¹ Key words: #ForestGlenMontgomeryHills, plus search terms sector plan, road, transit, bikeway, sidewalk.

area during morning and evening peak periods. This is an average: depending upon when a vehicle approaches an intersection, the delay could be as high as two minutes or more per intersection.

The Sector Plan recommends changing the congestion standard to 120 seconds/vehicle at seven intersections along Georgia Avenue, allowing for congestion to get 50% worse before mitigation would be warranted. The Final Draft states:

The recommendation is based on the high ratio of regional traffic, the comparatively small master-planned densities included in the sector plan and the plan area's location between two downtowns. Increasing the policy area standard accepts the unique circumstances of the corridor and provides flexibility for future development, which is the only viable means of achieving the safety and placemaking goals set forth in this plan. (p. 37).

DOT has raised a concern about this approach:

We are concerned that the recent trend in master plans increasing the delay standards is an unsustainable approach and does not reflect the multimodal intent of having varying traffic performance standards. Simply increasing the intersection delay threshold does not automatically mean that other alternatives are provided or performance for other modes is achieved, and on its own could be detrimental to mixed-traffic bus services along the corridor. (©4)

Council staff generally concurs with DOT. Furthermore, the Final Draft's stated rationale for loosening the congestion standard could be applied in several locations throughout the County; the circumstances in Forest Glen/Montgomery Hills are hardly unique in this regard. However, what is unique is that the core of the planning area is within a half-mile of the Forest Glen Metro Station, so there is a strong rationale for designating this core as a Red Policy Area, which would carry with it an average intersection congestion standard of 120 seconds/vehicle.

Council staff recommendation: Add text in the Plan calling to include in the SSP a new Red Policy Area encompassing an area of roughly one half-mile radius from the Forest Glen Metro Station. One half-mile is the generally recognized distance for walkability; it is used by WMATA and has been the basis for establishing the boundaries of the existing ten Red Policy Areas. The 120 seconds/vehicle standard would thus apply to these intersections along Georgia Avenue:

- August Drive
- Forest Glen Road
- Capital Beltway off-ramp paired signals (north and south)
- Flora Lane (planned)
- Seminary Place
- Seminary Road

The Georgia Avenue intersections at Dennis Avenue and at 16th Street are well beyond a half-mile, so they would retain the current 80 seconds/vehicle standard.

Another implication of creating this new Red Policy Area is that a development within it would have its transportation impact tax reduced by more than half, providing more of an incentive for the buildout of the planned land use. (School impact tax rates do not differentiate among the types of policy

areas.) The most recent impact tax rates for Orange and Red Policy Areas for the major tax categories are:

	Orange Policy Area Rates	Red Policy Area Rates
Single-family attached	\$16,030/unit	\$6,413/unit
Multi-family low-rise	\$12,465/unit	\$4,986/unit
Multi-family high-rise	\$8,904/unit	\$3,561/sf GFA
Office	\$17.90/sf GFA	\$7.15/sf GFA
Retail	\$16.00/sf GFA	\$6.35/sf GFA

The creation of this new Red Policy Area could be implemented by resolution as an amendment to the 2016-2020 SSP or as part of the 2020-2024 SSP to be adopted no later than November 15, 2020. The exact boundary of the area would be specified in that resolution.

2. Intersection improvements. Even with a considerable loosening of the congestion standard, analysis of some of the intersections along Georgia Avenue shows that they will likely fail, ultimately. If they do, then much of the proposed development in the Final Draft will not be able to pass the SSP’s Local Area Transportation Review (LATR) test, and so cannot be approved. On the next page of this staff report are the results of an analysis performed by Mead & Hunt for the Planning staff (contained in the Technical Appendix) that identifies examples of intersection improvements—mostly involving added through and turn lanes—that would ultimately be needed meet the 120 seconds/vehicle standard.

DOT points out that the intersection analysis that was performed does not include the “spillback” effects: queues from one congested intersection backing up through a neighboring intersection. *Therefore, the estimates of travel delay in the Technical Appendix are likely underestimated.* DOT recommends evaluating transportation adequacy as the travel time needed to traverse a corridor, rather than individual intersections. This is not the LATR test now, but it might be considered in the development of the 2020-2024 SSP.

The final design of the Beltway/Georgia Avenue grade separated interchange could have a major impact on traffic flow through the area. The Short-Term Design Alternative (p. 23 of the Final Draft) would eliminate the loop ramp in the southeast quadrant of the interchange and relocate the eastbound-to-northbound movement to the same off-ramp used for eastbound-to-southbound traffic. The intersection analysis noted above assumes this improvement, which would eliminate the congestion caused by weaving between eastbound-to-northbound and northbound-to-westbound traffic. However, Planning staff recently has suggested evaluating a channelized signal bypass ramp as part of this alternative, which has the promise of further reducing queuing in this location (©9). The Long-Term Design Alternative—creating a diverging diamond interchange—may reduce congestion from the interchange area even more (p. 24 of the Final Draft).

What this all means is that, while congestion is likely to exceed even the looser standard, there is not enough known to identify in the Plan explicit intersection improvements that would be needed to meet the SSP standard and thus allow all the planned development to proceed. Furthermore, it is possible that the LATR test itself may change in the 2020-2024 SSP to be approved in a year’s time.

**Examples of Intersection Improvements
Needed to Meet the 120 Seconds/Vehicle Delay Standard
(Noted in the Technical Appendix)**

Forest Glen Road and Georgia Avenue

- Repurpose the inmost through lane to a left-turn only lane in the northbound direction.
- Repurpose the inmost through lane to a left-turn only lane in the southbound direction. Add an additional through right lane.
- Widen the roadway in the eastbound direction to make room for an additional through lane and a new right turn only lane.
- Create a new left turn only lane in the westbound direction by repurposing an existing through lane. Add an additional through lane and an additional through-right lane.
- Add bike boxes on the Forest Glen Road approaches.
- Reduce curb radii on all four corners to reduce vehicle turning speed and improve pedestrian safety.
- Consider and study the impact of “dropping” or blocking far right lane after southbound I-495 on-ramp to improve lane utilization.

Seminary Road/Columbia Boulevard and Georgia Avenue

- Repurpose the reversible lane to southbound and northbound left-turn lanes, restoring left turns during the peak hour.
- Add a new southbound through/right-turn lane.
- Add a new northbound through/right-turn lane.
- Repurpose the existing eastbound through/right-turn/left-turn lane to an exclusive left-turn lane.
- Add a new eastbound through/right-turn lane.
- Reduce curb radii to reduce turning speed and increase pedestrian safety.
- Carve out left turn pockets from the median to be installed as part of the Maryland SHA Georgia Avenue MD 97 Montgomery Hills project.

16th Street and Georgia Avenue (needed for the current standard of 80 seconds/vehicle)

- Relocate or abandon 16th Street south slip lane and replace with a bicycle and pedestrian connection. Reroute 16th Street southbound to 16th Street northbound intersection.
- Repurpose one southbound lane to an exclusive right-turn lane onto 16th Street.
- Widen the west side of Georgia Avenue to allow for a second right-turn lane from the southbound direction. The eastern leg is a grade-separated sidewalk as this is a T-intersection.

Council staff recommendation: Include the following text as the last paragraph in Section “2.1.3 Intersections and Crossings” on p. 33 of the Final Draft:

At the time of this Sector Plan’s adoption, both the final design of the Georgia Avenue/Beltway interchange and its effect on vehicle delay, and the Local Area Transportation Review standard to be used in the 2020-2024 Subdivision Staging Policy, are not known. Therefore, any intersection improvement that is needed to meet the congestion standard in the most current SSP is in conformance with this Sector Plan.

Council staff recommendation: Include the Planning staff’s recommended text to evaluate a northbound signal bypass ramp at the Georgia Avenue/Beltway interchange as part of the Short-Term Design Alternative (©9).

3. *Woodland Drive Extended.* The Final Draft recommends extending Woodland Drive from its dead-end north of St. John the Evangelist Catholic Church and School to Medical Park Drive, merely a few feet in right-of-way owned by the County. It also recommends creating a new link of Woodland Drive between Medical Park Drive and Dennis Avenue, where it would connect to another existing section of Woodland Drive extending north to Evans Parkway Neighborhood Park. It recommends that both new segments be designated as a Business District Street with a 60’-wide right-of-way. The right-of-way would include the roadway link, sidewalks, and a shared-road bikeway, part of the Glenmont-to-Silver Spring Breezeway in the *Bikeway Master Plan* (2018). The purpose of this recommendation is for “improving connectivity for all transportation modes.” It also notes that the connection “would only be fully realized with the redevelopment of the medical office use located at the southeastern corner of Dennis and Georgia Avenues” (p. 25).

This recommendation has generated considerable testimony and correspondence in opposition from the church and residents in neighboring communities. A representative example is the testimony of the Woodside Homeowners Association, which believes connecting the dead-end roadway to Medical Park Drive would increase cut-through traffic in the community and endanger students, especially those of the St. John’s School, which sits across Woodland Drive from the church (©10-11). There is no opposition to the sidewalk or bikeway connections.

Council staff is of two minds about the proposed roadway link between the dead end and Medical Park Drive. First, it is important to recognize that existing Woodland Drive is classified as a Secondary Residential Street, which, according to Section 49-31(m) of the County Code “is a road meant to provide access between a residential development with fewer than 200 dwelling units and one or more higher classification roads ...” It is a road that mainly exists to provide access to property along its length, although a modest amount of through traffic can be tolerated. The questions are whether opening the road to improve connectivity for motor vehicles would overwhelm the neighborhood and be a danger to the students.

The County has means for mitigating both cut-through traffic and speed. Cut-through traffic is managed through an Executive Regulation approved in 1994 that would allow for potential turn restrictions or prohibitions on a connected Woodland Drive if the one-hour traffic volume is at least 250 vehicles/hour (about 4 vehicles/minute) and if 50% or more of this traffic is “non-local.” If these criteria are met, DOT would develop a Through Traffic Volume Access Restriction Plan, which would be

implemented after a public hearing if most of the affected households sign a petition approving it.² Speed on residential streets can be addressed through a host of traffic calming measures, including speed humps, curb extensions, medians, pedestrian refuge islands, edge lines to narrow wide roadway to create parking lane or shoulder, as well as SMART trailer and direct police enforcement.³

On the other hand, while roadway connectivity would be a benefit to many residents in the neighborhoods east of Georgia Avenue between Forest Glen Road and Dennis Avenue, it likely will not be necessary to meet the SSP congestion standards on Georgia Avenue's intersections in Forest Glen. The potential need to conduct a cut-through traffic study and to implement traffic calming measures would be obviated if the road were not connected.

Council staff recommends approving one of the following two options:

Option #1: Concur with the Final Draft, except that the road segment from the dead-end to Medical Park Drive would be classified not as a Business District Street, but as a Secondary Residential Street, as is the rest of existing Woodland Drive.

Option #2: Same as Option #1, with the caveat that the road connection between the dead-end and Medical Park Drive would not be built until and unless: (1) the Georgia Avenue/Dennis Avenue intersection fails the SSP LATR test; and (2) a full-movement signalized intersection at Georgia Avenue and Medical Park Drive is not approved by SHA. Any redevelopment of the Medical Park properties and natural traffic growth along Dennis Avenue likely will never exceed the capacity of these two Georgia Avenue intersections if both allow full movements and are signalized. The distance between the Dennis Avenue and Medical Park Drive intersections with Georgia Avenue is about 600'—the signals in Montgomery Hills are closer—so if traffic were ever to warrant it, Council staff believes a full-movement signalized intersection at Medical Park Drive should be approvable. In the very unlikely event that both the above conditions are met, however, Woodland Drive should be opened to allow some access from the Medical Park area to the August Drive full-movement signalized intersection.

4. Kiss-and-ride lot at the Forest Glen Medical Center property. The Staff Draft had recommended a kiss-and-ride facility on this site at the northeast corner of Georgia Avenue and Forest Glen Road, which will also be the eastern portal of the Forest Glen Passageway beneath Georgia Avenue. The Final Draft eliminated the reference to the kiss-and-ride facility. DOT recommends reinserting it and specifically mentioning it in the transportation section of the Plan (©1, 3). With such a facility, commuters from the east side of Georgia Avenue would not have to cross the avenue twice to go to and from the existing kiss-and-ride on the west side. Furthermore, commuters heading north on Georgia Avenue could reach an east-side kiss-and-ride without making the left turn across the avenue. The facility could be used both by Metrorail and, eventually, Bus Rapid Transit (BRT) patrons.

The Final Draft's urban design section for the Forest Glen Medical Center property includes the following recommendation:

² Here is the regulation: https://www.montgomerycountymd.gov/DOT-Traffic/Resources/Files/PDF/exreg17_94am.pdf

³ Here is the speed hump regulation: <https://www.montgomerycountymd.gov/DOT-Traffic/Resources/Files/PDF/speedhumpreg.pdf>

- Provide a drop-off area accessible from Woodland Drive for transit users. (p. 74)

Planning staff has noted that “kiss-and-ride” carries the implication that this would be a WMATA kiss-and-ride facility, and WMATA may have more stringent design requirements than could be readily accommodated on this site. The staff reports that the property is not opposed to a drop-off and pick-up area on the site, and that nearby residents generally support it so that kiss-and-ride drivers would be less likely to park on Woodland Drive.

Council staff recommendation: Amend the bullet on p. 74 to read:

- **Provide an on-site drop-off and pick-up area for transit users that is accessible from Woodland Drive.**

Also, include this text in an appropriate place in the transportation section of the Plan.

5. Access from the northwest quadrant to the Metro Station and the Forest Glen Passageway.

The Board of Directors of Americana Finnmark testified for better access to the Forest Glen Metro Station and to the Forest Glen Passageway (see excerpt on ©12). Their testimony noted that wheelchair-bound residents, those with strollers, and others who cannot use stairs must presently walk west from Forest Glen Road to the kiss-and-ride entrance, and then east again to the portal to the tunnel under Forest Glen Road leading to the station, about 1,300’ in all.

The specific text regarding the Forest Glen Passageway in the Final Draft is general:

This plan confirms and supports the funded project and recommends detailed considerations for the final design stage, which includes locations for additional elevators on Forest Glen Road west of Georgia Avenue. Consult the Transportation Appendix for details. (p. 37)

The Appendix states:

- Reduce exposure to conflicts with vehicles by installing an additional elevator on the northwest corner so pedestrians with strollers and other walking assistance devices do not have cross Forest Glen Road to access the planned elevators on the southwest corner.
- WMATA should consider installing an additional elevator that can be accessed at street-level on the north side of Forest Glen Road (near the existing stair access) on the WMATA site should it decide to redevelop the surface parking lot and bus drop-off.

However, an elevator right at the northwest corner of Georgia Avenue and Forest Glen Road is not feasible, as vent shafts are already located there. The alternative suggested location would be on the north side of Forest Glen Road just above the existing pedestrian tunnel, which is about 500’ from the northwest corner of the intersection.

The initial plan for the Forest Glen Passageway already assumes a new elevator from ground level to the station’s elevator lobby (where the Passageway would begin) near the existing steps down to the lobby, which is at the southeast corner of Forest Glen Road and Coleridge Drive. While this would require pedestrians to walk across Forest Glen Road, the distance from the northwest corner of Georgia Avenue and Forest Glen Road is only about 300’, and this elevator would bring them directly into the

lobby, as opposed to a north-side elevator that would not. Outside elevators are expensive to construct and maintain; given the relatively low demand for pedestrian access compared to other stations in the county, one elevator serving the west side of Georgia Avenue should be enough. Unlike Georgia Avenue, crossing Forest Glen Road is not difficult for pedestrians. Given that Georgia Avenue traffic will always have significantly more “green time” than Forest Glen Road, there should be more than enough time for pedestrians to cross Forest Glen Road safely.

Council staff recommendation: Revise the text on p. 37 to read:

This plan confirms and supports the funded project and recommends detailed considerations for the final design stage, which includes the location for an elevator on the south side of Forest Glen Road near the existing steps into the station lobby.

6. Public school adequacy. The Final Draft’s discussion of public school capacity is on pp. 60-61. It notes that up to 2,186 new dwelling units could be built under the proposed zoning, and given the likely mix of unit types, this residential development is estimated to generate about 345 elementary school (ES) students, 150 middle school (MS) students, and 198 high school (HS) students. The forecast for the 2034 school year, based on existing zoning, shows that Einstein HS will be above capacity by 601 students, that Sligo MS will exceed capacity by 29 students, and the cumulative enrollment of Singer ES and Woodlin ES will be 229 students *below* capacity. (An addition at Woodlin ES will add capacity for 252 more students by September 2023.) Thus, if no further capacity were available to these schools, the capacity deficits at buildout would be: 799 students at Einstein HS, 179 students at Sligo MS, and 116 students at Singer and Woodlin.ESs.

At the HS level relief is on the horizon. By the 2025-2026 school year, a new 2,700-student Woodward HS will open, and Northwood HS’s expansion will open with a capacity for 1,192 more students. If neither project is deferred by the Council in its review of the FY21-26 CIP—and history strongly suggests that the Council will defer neither project—then the Einstein Cluster (as well as the Walter Johnson and Blair Clusters) will come out of moratorium by next July. The Planning staff’s forecast of the 2020 School Test (based on approval of the Superintendent’s Request) is on ©13. It is likely that there will be enough relief from this 3,892-student increase in capacity to address Einstein HS’s ultimate 799-student deficit. If not, the Einstein campus is large enough to fit a modest addition.

At Sligo MS the ultimate 179-student deficit could be partially mitigated by a boundary adjustment with Newport Mill MS, which is projected to have a 121-student capacity surplus in 2034. Also, the former Montgomery Hills Junior HS houses a private school and could eventually be reclaimed as a public MS. Furthermore, Sligo MS’s 21.7-acre site is likely large enough to accommodate a small addition, if necessary.

At the ES level there are ample opportunities to address the 116-student capacity deficit. These former schools are in the vicinity: Forest Grove ES (leased to Holy Cross Hospital), MacDonald Knolls ES (housing County programs), Pleasant View ES (leased to a private school), and Woodside ES (housing the County’s Department of Health and Human Services). Any of them could be reclaimed over time.

For a plan to be in “balance” between its planned development and its ability to house students generated by the development, it is enough to show that it is likely that the County will be able to

provide enough public school capacity at buildout. **Council staff finds that the Final Draft meets the public school adequacy objective.**

7. Fiscal Impact Statement (FIS). On November 20, the Office of Management and Budget (OMB) transmitted the Executive's FIS for this plan (©14-17). Executive staff estimates the County cost of new capital improvements associated with the Final Draft to be \$162.5 million: \$134.8 million for transportation projects and \$27.7 million for the proportional cost of new school capacity. The total fiscal impact is estimated to be \$296.1 million, including \$114.7 by the State and Federal governments and \$18.9 million to be built by the private sector.

The major transportation projects assumed to be the County's fiscal responsibility are:

- Georgia Avenue South BRT between Dennis Avenue and Spring Street: \$32.5 million
- Forest Glen Passageway: \$20.2 million
- Woodland Drive Bikeway Breezeway: \$20.8 million
- A program of sidewalk improvements: \$21.1 million

The FIS makes certain assumptions about the share of costs between the County, State, and developers. For example, it presumes that the BRT cost would be split evenly between the State and County, even though the current State administration has made clear to date that it is not participating financially in BRT. It also presumes that the County would pick up half the \$32 million cost to narrow each side of Georgia Avenue by 3' north of Forest Glen Road and south of 16th Street to provide space to expand bicycle and pedestrian facilities behind the curbs. Given the State's history of not providing significant funding for sidewalk and bikeway improvements along their highways, this is an optimistic assumption.

The FIS estimates that the Final Draft's elements, once implemented, would add \$16.5 million/year to the County's operating costs. More than half this cost, \$10.6 million, is associated with teachers and other staff needed to serve the additional students. Most of the balance, \$4.0 million, would be the cost of operating the Plan area's segment of the Georgia Avenue South BRT.

Attachments

County Executive's hearing testimony	©1-2
Department of Transportation's comments	©3-8
Planning staff's text re signal bypass alternative	©9
Woodside HOA testimony on Woodland Drive Extended	©10-11
Excerpt from Americana Finnmark's testimony	©12
Forecasted results of July 2020 Public School Adequacy Test	©13
Fiscal impact statement	©14-17

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Good evening. Greg Ossont testifying on behalf of County Executive Elrich.

In general, the County Executive supports the Forest Glen/Montgomery Hills Sector Plan recommendations, with the following additional comments:

Affordable Housing: The Executive supports recommendations to preserve existing affordable housing at the Fields of Silver Spring and the Belvedere Apartments, and also the land use, zoning, and environmental recommendations for the Forest Glen Apartments recently purchased by Montgomery Housing Partnership. Given the recommended rezoning of the WMATA and Forest Glen Medical Center properties and their extremely close proximity to Metro, the Executive urges you to take advantage of this opportunity to address the demand for affordable housing near transit by strengthening the affordable housing components on these sites. For example, he supports AIM's request that any land disposed of by WMATA include 30% affordable housing, preferably with at least half the affordable units priced for under 50% AMI. On both properties, consideration should be given to requiring specific numbers of family-size housing units – for example, asking for 25% two-bedroom and 20% three- or four-bedroom units. These recommendations are consistent with responding to the housing demands documented by COG and Urban Institute analysts and supported by the Council's recently adopted resolution. The Executive also supports the sector plan recommendations for habitat preservation and restoration on these sites to enhance the quality of life for future residents and those who now live near these properties.

Transportation: Montgomery County Department of Transportation makes the following major suggestions: first, restore reference to a Metro "Kiss and Ride" on the east side of Georgia Avenue; second, MCDOT supports the proposed expansion of the Parking Lot District concurrent with the adoption of this plan; and lastly, they have expressed concern about the continuing increase in delay thresholds for master plans in lieu of other strategies that address the congestion impacts of additional development. Along those lines, the Executive notes that the BRT is shown on only some

of the diagrams in the plan, with a design that eliminates a reversible lane in the middle. He is concerned that this may make offloading from 495 even worse than it is now.

Small Business Support: As noted in the Sector Plan, nearly 90% of the businesses in the Sector Plan area are small and employ 25 people or less, and most likely will be adversely affected by the transportation recommendations in this plan and the Georgia Avenue improvements planned by the Maryland State Highway Administration. Page 86 of the plan does a good job of laying out some of the problems and identifying potential sources of assistance. The Executive requests that your discussion of transportation issues consider specific ways the county can preemptively address some of the problems these businesses are likely to face.

Thank you for the opportunity to speak. The Executive branch looks forward to participating in the upcoming work sessions.

MEMORANDUM

November 6, 2019

TO: Greg Ossont, Deputy Director
Department of General Services

FROM: Christopher Conklin, P.E., Director
Department of Transportation

SUBJECT: Forest Glen / Montgomery Hills Sector Plan
MCDOT Planning Board Draft Comments

Thank you for the opportunity to review the November 2019 Planning Board Draft of the Forest Glen / Montgomery Hills Sector Plan. Our most significant comments from the attached detailed page-by-page comments are highlighted below, with the footnotes referencing the comment number in the attachment:

- 1) **Kiss & Ride:**¹⁸ The Public Hearing Draft included a reference to a Kiss & Ride as part of any redevelopment of the Forest Glen Medical Center, but this Planning Board Draft appears to have omitted this reference. We strongly recommend that references to a Kiss & Ride facility on the east side of Georgia Ave be restored in this section as well as added into the Transportation section.

Such a facility would help serve northbound traffic seeking to access the Metro station, particularly after the Pedestrian Tunnel is constructed. This could reduce northbound left-turn demand from Georgia onto Forest Glen and may specifically improve pickup/drop-off access via the Beltway.

Any references should also leave open alternative or complementary design possibilities, such as Kiss & Ride facilities directly serving the Beltway that could potentially be integrated into the State's Traffic Relief Plan project.

- 2) **MDOT Traffic Relief Plan:**⁷ As of 11/4/2019, the State has expressed that the ICC Alternative is no longer under consideration. This may necessitate revisions to how the plan describes the Traffic Relief Plan.

Also worth considering is the utility of advancing this Sector Plan at the current schedule, as opposed to waiting for further information on the Traffic Relief Plan so that it can be more precisely incorporated into this plan. At this time the State has not released information as to the access and impacts of this project on Georgia Ave, and it is therefore difficult to accurately assess future traffic conditions.

- 3) **Parking Lot District:**¹⁶ We support the suggested expansion of the Parking Lot District and would be receptive to legislation concurrent with the master plan authorizing such a change.
- 4) **Delay Thresholds:**¹² We are concerned that the recent trend of master plans increasing the delay standards is an unsustainable approach and does not reflect the multimodal intent of having varying traffic performance standards. Simply increasing the intersection delay threshold does not automatically mean that other alternatives are provided or performance for other modes is achieved, and on its own could be detrimental to mixed-traffic bus services along the corridor. This metric is also insufficient for understanding how a closely spaced set of intersections will perform as a system.

This corridor is a major gateway to the Silver Spring CBD and the impacts to travel time and throughput on this corridor should be fully considered in the development of the recommendations. Increased vehicle travel times may be a reasonable tradeoff for substantial improvements to pedestrian and bicycle access and improved corridor aesthetics, however, this decision should be informed by consideration of appropriate performance measures. Specific intersection performance is secondary to corridor performance for this plan and many others.

- 5) **Stormwater Management:**^{8,9} Confirmation is necessary that these cross-sections adequately accommodate stormwater management needs. ~~We also, and~~ note that 7 foot wide landscaped areas may be necessary (instead of the currently shown 6 foot areas) if they are intended to serve as stormwater management facilities.
- 6) **Traffic Analysis:**²⁴ The last set of columns on page 96 of the Technical Appendix appear to imply that the only difference from preceding columns is a ~~change~~ change in the congestion threshold. It is therefore not clear why any of the analysis outputs have changed in this column. Clarification is requested from MNCPPC staff on this data.

Should you have any questions regarding our comments on the plan, please feel free to contact me or Mr. Andrew Bossi, Senior Engineer, at 240-777-7200.

CC:AB

cc: Gary Erenrich, MCDOT
Andrew Bossi, MCDOT
Greg Ossont, DGS
Amy Donin, DGS

0		Agency	Division	Team	Commenter	Page	Section	Comment
1	*	MCDOT	DO	Policy	AB	2	Table 1	The includes a line "Address Intersection Capacity Deficits", but there does not appear to be anything in this main document further referencing these deficits nor the mitigation identified in the Appendix (p103). Wherever considered appropriate in the document (p37 is suggested, under <i>Policy Area Roadway Network Test</i>), consider providing some narrative or reference to the more detailed information presented in the Appendix.
2	*	MCDOT	DO	Policy	AB	3	Table 1	Long Term - Consider referencing the creation of a new ped/bike bridge on the east side of Georgia, across the Beltway.
3	*	MCDOT	DO	Policy	AB	3	Table 1	Long Term - Consider referencing the creation of new business streets on the west side of Georgia in Montgomery Hills (the Main Street Grid).
4		MCDOT	DO	Policy	AB	3	Table 1	RE: #42, "Modify or reconstruct the existing pedestrian bridge as a part of any redesign or reconfiguration of the beltway interchange." --- this would be done implicitly as part of any such work impacting is such that it would need to be reconstructed. If there is any further actionable intent by this line it should be made more clear.
5		MCDOT	DO	BRT	DB	20	Long-Term Vision	<i>2nd Bullet</i> - Consider deleteing the word "high-end" from "Designated space for high-end bus rapid transit station furniture." Should this be broader to include all bus stops and shelters?
6		MCDOT	DO	Policy	AB	21	Figure 2	The alignment as shown would create undesirable operational difficulties by Seminary Road and Sutton Place. The graphic should be revised to show a more direct connection between Seminary Road and Seminary Place. We recognize the graphic is illustrative, but in the past developers have sought to interpret these graphics very precisely & the graphics should therefore do their best to reflect aspirational yet realistic conditions.
7		MCDOT	DO	Policy	GE	25	MDOT SHA Traffic Relief Plan	<i>1st Paragraph</i> - As of 11/4/2019, the State has expressed that the ICC Alternative is no longer under consideration. This paragraph may need to be either omitted or revised. Also worth considering is the utility of advancing this Sector Plan at the current schedule, as opposed to waiting for further information on the Traffic Relief Plan so that it can be more precisely incorporated into this plan. At this time the State has not released information as to the access and impacts of this project on Georgia Ave, and it is therefore difficult to accurately assess future traffic conditions.
8	*	MCDOT	DO	Policy	AB	26-29	Cross-Sections	Confirm that these cross-sections adequately accommodate stormwater management needs.
9	**	MCDOT	DO	Policy	AB	26-29	Cross-Sections	If the planting strips are intended to serve as stormwater management facilities these should be a minimum of 7 ft each to provide for curb/barrier that reduces the risk of peds/bikes falling into the facility.
10		MCDOT	DO	Policy	AB	30	Table 2	It is not clear why any of the Existing Lanes / Planned Lanes boxes are blank.
11	**	MCDOT	DO	Policy	AB	37	Table 2	Note that each Business street, under the current design standards would have only 1 lane of parking feasible within the 60 ft ROW assigned, and this parking lane could potentially be eliminated if deemed necessary for adequate bike/ped facilities. We do not object to this, but are only raising awareness should this be an issue to others.

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Agency Division Team Commenter Page Section Comment

RE: Average Vehicle Delay Standard - We are concerned that the recent trend of master plans increasing the delay standards is an unsustainable approach, and relies on a metric that does not adequately consider the non-auto intent behind the increased thresholds.

Intersection metrics looks at intersections in isolation, which can be especially problematic in corridors such as this, where intersections may meter traffic and allow downstream points to function better.

12 ** MCDOT DO Policy AB 37

Policy Area
Roadway
Network
Adequacy
Test

Furthermore, increasing congestion thresholds only establishes that more congestion is permitted, without any actionable means of providing alternatives. Eventually the approach of higher congestion tolerances may encounter complications and/or pushback against any further increases.

Consider evaluating travel times through the corridor rather than as much of a focus on individual intersections. The Roadway TPAR Test may be one such current regulatory means of doing this.

We anticipate that as part of the pending SSP Rewrite we will press for consideration of some form travel time evaluation. One idea we are currently interested in is some form of mode-neutral travel time evaluation where by as long as a user is able to travel a path within a defined amount of time by *some* available mode (e.g. transit) it can be considered passing even if other available modes (e.g. SOVs) may not be considered passing.

13 MCDOT DO Policy AB 37

Policy Area
Roadway
Network
Adequacy
Test

We recommend that the Silver Spring / Forest Glen / Montgomery Hills UMP be performed concurrently with the upcoming work on the Silver Spring Minor Master Plan.

14 MCDOT DO Commuter Services, BRT SLB, DB 38

Map 10

Remove word "Stations" from map title so it reads "Bus Rapid Transit Corridors"

15 MCDOT DO BRT DB 38

2.1.4 A

In the sentence "The plan confirms the alignment and master-planned right-of-way for the Georgia Avenue South Bus Rapid Transit route" it is not clear what "the Plan" refers to. CTCFMP? or This plan? The first sentence in the next paragraph is similarly unclear: "The plan also confirms the future bus rapid transit (BRT) station locations at Forest Glen Road and Dexter Avenue."

16 MCDOT DO Policy AB 48

Parking Lot
District

We support the suggested expansion of the Parking Lot District and would be receptive to legislation concurrent with the master plan authorizing such a change.

17 MCDOT DO BRT DB 70

3.1.1 B

"Upon redevelopment, this site should be considered an appropriate location for a future Georgia Avenue bus rapid transit (BRT) stop." The phrasing makes it seem like a statement of fact - that it will be appropriate. But, I think the intent is to recommend that we consider the IF redeveloped location would be a good location. Can this be rephased/clarified? Hopefully this would happen during any redevelopment process, and not after the fact.

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0	u	Agency	Division	Team	Commenter	Page	Section	Comment
18		MCDOT	DO	Policy	AB	74	Forest Glen Medical Center	<p>The Public Hearing Draft included a reference to a Kiss & Ride as part of any redevelopment of the Forest Glen Medical Center, but this Planning Board Draft appears to have omitted this reference. We strongly recommend that references to a Kiss & Ride facility on the east side of Georgia Ave be restored in this section as well as added into the Transportation section.</p> <p>Such a K&R facility would help serve northbound traffic seeking to access the Metro station, particularly after the Pedestrian Tunnel is constructed. This could reduce northbound left-turn demand from Georgia onto Forest Glen, and may specifically improve pickup/dropoff access via the Beltway.</p> <p>Any references should also leave open alternative or complementary design possibilities, such as K&R facilities directly serving the Beltway that could potentially be integrated into the State's Traffic Relief Plan project.</p>
19		MCDOT	DO	Policy	AB	9	Technical Appendix	<p>Typo - Lots of commas in a row midway through the 1st paragraph.</p> <p><i>[repeat of earlier comment]</i></p>
20		MCDOT	DO	BRT	DB	18	Technical Appendix	<p>Consider deleting the word "high-end" from "Designated space for high-end bus rapid transit station furniture." Should this be broader to include all bus stops and shelters?</p>
21		MCDOT	DO	Policy	AB	19-20	Technical Appendix	<p>Combine these two pages.</p> <p><i>[repeat of earlier comment]</i></p>
22	22	MCDOT	DO	Policy	AB	20	Technical Appendix	<p>The alignment as shown would create undesirable operational difficulties by Seminary Road and Sutton Place. The graphic should be revised to show a more direct connection between Seminary Road and Seminary Place.</p> <p>We recognize the graphic is illustrative, but in the past developers have sought to interpret these graphics very precisely & the graphics should therefore do their best to reflect aspirational yet realistic conditions.</p>
23	**	MCDOT	DO	Policy	AB	67	Technical Appendix	<p><i>1st Paragraph</i> - TPAR has not been completely eliminated by adoption of the SSP. While it was eliminated as a component of development review, per the approval of the SSP by the Planning Board on 8/1/2016 and upheld by the Council approval on 11/15/2016 (see p3 of the 10/31/2016 Council Analyst Packet at link below): TPAR has been retained for testing master plan transportation adequacy.</p> <p>https://montgomerycountymd.granicus.com/MetaViewer.php?view_id=136&clip_id=12402&meta_id=127769</p>

1. Short-Term Design Alternative: Beltway Ramp Reconfiguration Removing the existing southeast cloverleaf (Beltway inner loop off-ramp to northbound Georgia Avenue) will eliminate the weaving that occurs between motorists merging onto the Beltway's outer loop (westbound) ramp and those motorists exiting the inner loop of the Beltway headed northbound on Georgia Avenue. This change will improve safety on Georgia Avenue as vehicles approach and pass beneath the Beltway. Those motorists exiting the inner loop and heading northbound on Georgia Avenue would share an expanded inner loop off-ramp where southbound Georgia Avenue traffic is routed today.

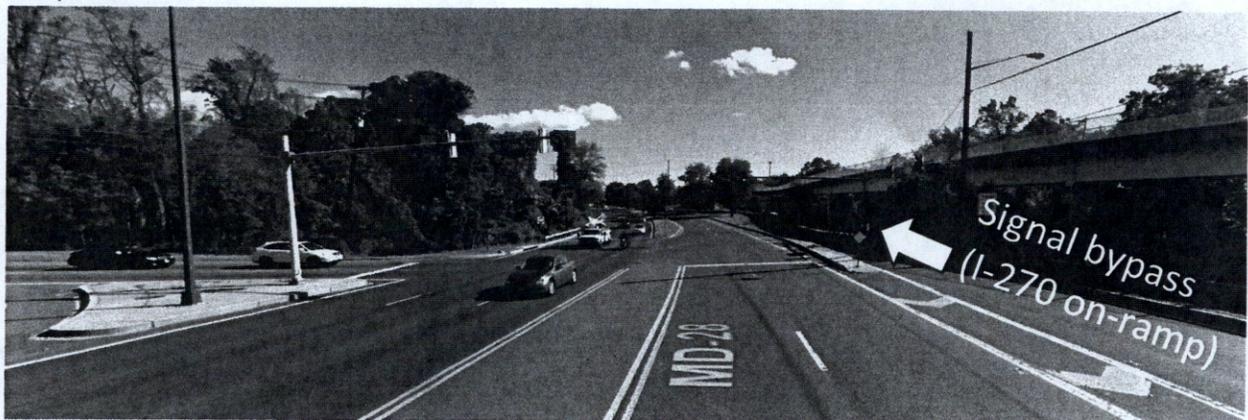
This reconfiguration is expected to improve safety and could potentially improve traffic flow on Georgia Avenue northbound as merging would no longer be necessary. Improvements for pedestrians and cyclists on the east side of Georgia Avenue should also be considered. Additional detail on pedestrian and bicycle connections across the Beltway are included in the Intersections and Crossings section of the sector plan.

PROPOSED
ADDED
TEXT

Another design treatment to consider and study further that would improve traffic flow, reduce queuing and increase safety is a channelized signal bypass for the two Beltway on-ramps, accessed from northbound Georgia Avenue. This treatment has been applied at other interchanges in the County. As an example, Figure X, shows the southbound I-270 on-ramp, accessed from eastbound Darnestown Road (MD 28).

Figure X: Signal Bypass in Rockville, MD

Motorists who wish to access the southbound I-270 on-ramps stay to the right of the concrete barrier (rightmost lane) and are then able to bypass the signals for eastbound Darnestown Road. This helps traffic to flow off Darnestown Road and reduce spillbacks and queuing further west. The signal is still needed to provide safe, left turning movements for traffic exiting I-270 from the off-ramp.



3

Montgomery County Council Public Hearing: Forest Glen/Montgomery Hills Sector Plan - Nov. 12, 2019

Woodside HOA Testimony and Opposition to Proposed Changes to Woodland Drive, Silver Spring, MD

L. Peyton Myers
President, Woodside HOA

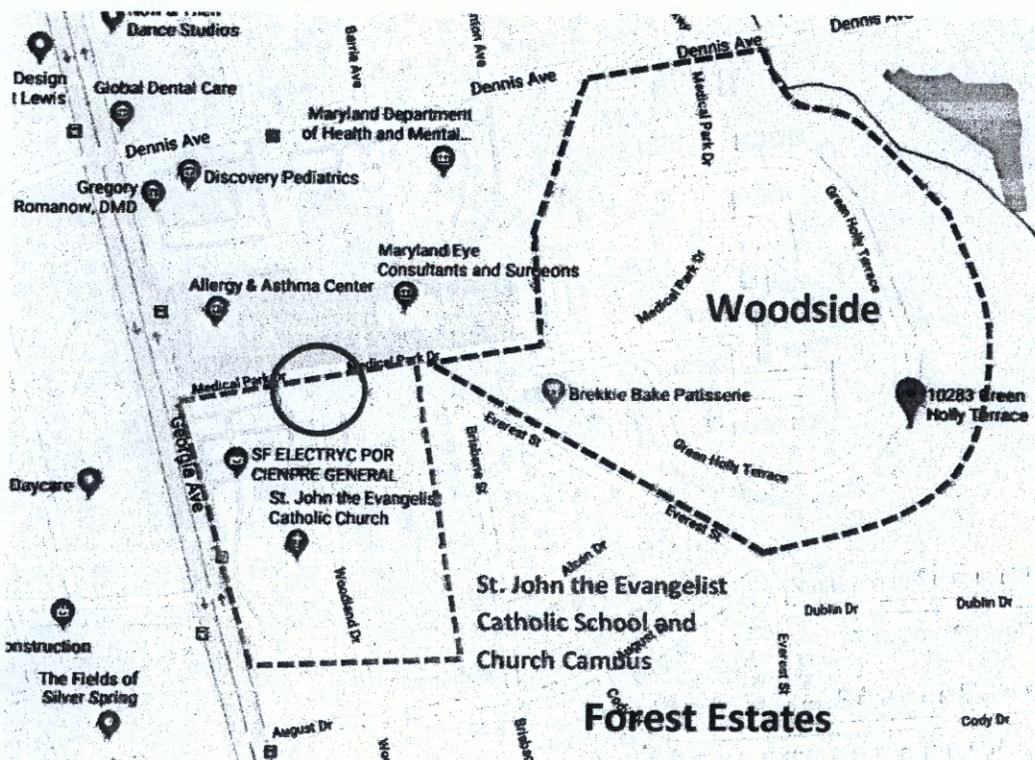
Dear Councilmembers,

Thank you for this opportunity. I am Peyton Myers, President of Woodside Homeowners Association. I am representing Woodside HOA today.

Woodside is a community of 231 homes near the intersection of Medical Park Drive and Dennis Avenue approximately halfway between downtown Wheaton MD and the Forest Glen Metro.

We are mostly in agreement with many of the changes in the Forest Glen Sector Plan such as bicycle connections. This would be good for our community as well as the neighboring communities.

We are, however, strongly against a major change from the existing plan. The current draft of the new plan proposes to open a dead-end road at Woodland Drive that bisects the St. John the Evangelist School and Catholic Church campus before reaching Medical Park Drive.



This proposal would adversely affect our community in multiple ways:

- **First, traffic would drastically increase in our community.** Our community of 231 homes has a single point of access to the south by turning left at the stop sign at the intersection of Dennis & Medical Park. This intersection is already congested and increasing traffic at Medical Park & Dennis or further along at Dennis & Georgia would make ingress and egress from our community almost impossible.
- **Second, our children attending County schools would be put into danger.** The county school bus stop is on the curve and downhill slope at Medical Park and Castlehedge Terrace. Busses stop here multiple times during rush hour to pick up and drop off children. If Medical Park is given more traffic from the opening of Woodland Drive, this blind curve would become an even more dangerous situation for our children.
- **Third, and most importantly, the children of St John the Evangelist School would be adversely affected.** We are concerned as neighbors and directly concerned as we have residents that send children to the school. School children cross Woodland Drive multiple times a day to attend religious services at the church and play on the road-adjacent playground. Opening this road to free-flowing traffic would greatly endanger the school children.

Lastly, we would like to point out that the Planning Board did not appear to thoroughly investigate the impact of this drastic change from the current plan.

- They did not consult either Woodside HOA or St John the Evangelist Catholic School before proposing the plan.
- No traffic study was conducted to investigate the effects of the drastic change that they are proposing.
- The MD state data on the intersection at the nearby intersection of August & Georgia does not show congested traffic in need of remediation.

So, there is no good reason for opening a street through an elementary school campus to free-flowing traffic. The only suggested reason for opening the street is "connectivity" – which although a wonderful concept – is a buzz word. Connectivity as a theoretical concept should not be used as a sole justification to drastically effect a community and school without studying the adverse effects of these actions.

In summary, **Woodside HOA does support most of the concepts in the Forest Glen Sector Plan but would strongly oppose opening Woodland Drive to traffic due to safety and traffic concerns that have not been studied or addressed by the County.**

We hope that the Montgomery County Council would drop this poorly thought-out part of the plan that would adversely affect our community and our children.

Thank you.

L. Peyton Myers
President, Woodside HOA
2038 Flowering Tree Terrace
Silver Spring, MD 20902
L.Peyton.Myers@gmail.com

(11)

ask you, is it really possible to increase the population of the area by almost 50% and not affect the quality of life of those of us already living there? And if the basis for increased density is maximizing the ridership at the Forest Glen Station when it was initially characterized as a light service stop, how would additional elevators be added and how can the emergency evacuation of that station be improved when there are no escalators for quick and easy escape?

A recent survey of 123 households in our community supports an alternative vision to the one being considered. We are currently circulating a petition and have already collected close to 1,000 signatures both in the Forest Glen neighborhood and surrounding neighborhoods for whom Georgia Avenue is their access north and south.

I would like to mention briefly what we support in the plan in its current state and some modifications we would like to see:

- We welcome the focus on safety for pedestrians. We hope there will be access to the proposed tunnel under Georgia Avenue from both the east AND west side. At the present time, pedestrians with disabilities and mothers with strollers or anyone else who cannot use the stairs at Forest Glen to enter the Metro system must walk to the bus lot and enter the tunnel for access to the Metro station. An additional safety measure would be a light at Tilton Drive

PRELIMINARY Subdivision Staging Policy FY 2021 School Test Results Summary
Reflects the MCPS Superintendent's Recommended FY 2021 Capital Budget and Recommended FY 2021-2026 Capital Improvements Program (CIP)
 Conducted November 1, 2019

IMPORTANT: These are preliminary results of the FY2021 Annual School Test that would take effect on July 1, 2020. These results are based on the MCPS Superintendent's recommended FY2021 Capital Budget and recommended FY21-26 CIP. The preliminary results will be updated throughout the budget cycle as future decisions are made by the Board of Education, County Executive and County Council. The official and final test will be conducted in June 2020 after the County Council has adopted the FY2021 budget and FY21-26 CIP.

School Test Description and Details	School Test Outcome	Elementary School Inadequate	Middle School Inadequate	High School Inadequate
CLUSTER TEST Inadequate if cluster is over 120% utilization, by level Test year 2025-26	<u>MORATORIUM</u> Moratorium required in cluster service areas that are inadequate.			
	<u>OPEN CONDITIONALLY - Placeholder</u> Placeholder projects prevent these cluster service areas from entering moratoria. <i>See notes.</i>			
	<u>OPEN CONDITIONALLY - CIP</u> Planned projects in other clusters and/or future reassignments prevent these cluster service areas from entering moratoria. <i>See notes.</i>			Montgomery Blair ¹ Albert Einstein ¹ Walter Johnson ² Richard Montgomery ³ Quince Orchard ³
(13) INDIVIDUAL SCHOOL TEST Inadequate if school is over 120% utilization and at or above seat deficit thresholds Elementary: 110 seats Middle: 180 seats Test year 2025-26	<u>MORATORIUM</u> Moratorium required in school service areas that are inadequate.	Highland View ES (Northwood) Mill Creek Towne ES (Magruder) Judith A. Resnik ES (Magruder)	Argyle MS (Kennedy)	
	<u>OPEN CONDITIONALLY - Placeholder</u> Placeholder projects prevent these school service areas from entering moratoria. <i>See notes.</i>			
	<u>OPEN CONDITIONALLY - CIP</u> Planned projects in other schools and/or future reassignments prevent these school service areas from entering moratoria. <i>See notes.</i>	Rachel Carson ES ⁴ (Quince Orchard) Clarksburg ES ⁵ (Clarksburg/Seneca Valley) JoAnn Leleck ES ⁶ (Springbrook) Strawberry Knoll ES ⁷ (Gaithersburg) Summit Hall ES ⁷ (Gaithersburg)		

FY2021 ANNUAL SCHOOL TEST NOTES

The test outcome for any school or cluster service area not identified on the results summary table is "open."

- ¹ The Blair and Einstein cluster service areas are open conditionally due to approved CIP projects that will reassign among Blair HS, Einstein HS, Northwood HS and Woodward HS in September 2025.
- ² The Walter Johnson cluster service area is open conditionally due to an approved CIP project that will reassign students between Walter Johnson HS and Woodward HS in September 2025.
- ³ The Richard Montgomery cluster and Quince Orchard cluster service areas are open conditionally due to an approved CIP project that will reassign students among Gaithersburg HS, Richard Montgomery HS, Quince Orchard HS, Wootton HS and Crown HS in September 2025.
- ⁴ The Rachel Carson ES service area is open conditionally due to an approved CIP project that will reassign students between Rachel Carson ES and DuFief ES in September 2022.
- ⁵ The Clarksburg ES service area is open conditionally due to an approved CIP project that will reassign students among Clarksburg ES, Cedar Grove ES, Wilson Wims ES and Clarksburg ES #9 in September 2022.
- ⁶ The JoAnn Leleck ES at Broad Acres service area is open conditionally due to an approved CIP project that will reassign students between Leleck ES and Roscoe R. Nix ES/Cresthaven ES in September 2022.
- ⁷ The Strawberry Knoll ES and Summit Hall ES service areas are open conditionally due to an approved CIP project that will reassign students among Gaithersburg ES, Rosemont ES, Strawberry Knoll ES, Summit Hall ES, Washington Grove ES and Gaithersburg ES #8 in September 2022.



ROCKVILLE, MARYLAND

MEMORANDUM

November 20, 2019

TO: Nancy Navarro, President, County Council

FROM: Richard S. Madaleno, Director, Office of Management and Budget *RSM*

SUBJECT: Fiscal Impact Statement - Forest Glen/Montgomery Hills Sector Plan

Please find the attached County Capital and Operating Fiscal Impact Statement which provides cost estimates assumed to be incurred as a result of the Forest Glen/Montgomery Hills Sector Plan.

RSM:cm

c: Christopher Conklin, Director, Department of Transportation
Mary Beck, Office of Management and Budget
Naeem Mia, Office of Management and Budget

**County Capital and Operating Cost Estimates Assumed to be Incurred as a Result of the
Forest Glen/Montgomery Hills Sector Plan
11/19/2019**

Capital Improvement Projects

<u>Project</u>		<u>Lead Agency</u>	<u>Description</u>	<u>Total County Costs</u>	<u>Total State/Federal Costs</u>	<u>Total Private Costs</u>	<u>Total</u>
Inter-changes	Beltway Interchange Alternatives/Georgia Ave. Reconstruct	MDOT SHA	State costs estimated at \$100,000 for planning and design studies to evaluate short-term and long-term design alternatives to current interchange configuration to address safety and traffic flow issues. Improvements are identified in the MDOT SHA MD 97 Montgomery Hills project and are estimated at \$40,000,000. Costs are assumed to be State responsibility.	\$ -	\$ 40,100,000	\$ -	\$ 40,100,000
	Georgia Ave. & Forest Glen Rd.	MDOT SHA	Add southbound through lane, eastbound right lane, westbound turn lane and westbound through lane.	\$ -	\$ 6,000,000		\$ 6,000,000
Intersections	Georgia Ave. & Seminary Pl.	MDOT SHA	Add northbound through lane.	\$ -	\$ 1,500,000		\$ 1,500,000
	Georgia Ave. & Seminary Rd.	MDOT SHA	Add northbound through lane, southbound through lane, eastbound through lane.	\$ -	\$ 4,500,000		\$ 4,500,000
	Georgia Ave. & 16th St.	MDOT SHA	Add southbound right lane.	\$ -	\$ 1,500,000		\$ 1,500,000
	Protected Intersections	MCDOT/ MDOT SHA	Unit price \$500,000 each, across an estimated 4 intersections where separated bike lanes intersect with other separated bike lanes or shared use paths. There may be some duplicative costs, as some Protected Intersections might be implemented concurrent with Separated Bike Lane projects or intersection retrofits.	\$ 1,500,000	\$ 500,000	\$ -	\$ 2,000,000
Mass Transit	Bus Rapid Transit: Georgia Ave. South	MCDOT/ MDOT SHA	Implement the Bus Rapid Transit - Georgia Avenue South corridor between Spring Street and Dennis Avenue. Total costs for implementation estimated at \$65,000,000 with 50/50 cost sharing with State.	\$ 32,500,000	\$ 32,500,000	\$ -	\$ 65,000,000
	Micro-Transit Pilot	MCDOT	On-demand service centered on Forest Glen Metro. Estimated need for 3 total buses (4-5 yr lifespan) for an expected customer wait time of 7-8 minutes.	\$ 500,000	\$ -	\$ -	\$ 500,000
	Bikeshare	MCDOT/Private	Total estimate at \$800,000. Capital costs for Capital Bikeshare only, including 9 station installation, bikes, and 1 set of bike replacements. Does not include Operations Likely to be built out by private contributions, grants or a public CIP may also be feasible. Other options may include dockless bikeshare, electric assist bikeshare, shared scooters, and yet-to-be-developed technologies and modes.	\$ 400,000	\$ -	\$ 400,000	\$ 800,000
New Roads	B-1 Woodland Dr. Extension	MCDOT	Extension of existing two-lane Woodland Drive from its northern terminus (approaching Medical Park Drive) to Dennis Avenue within a 60' right-of-way for an approximate distance of 700' (0.13 miles). Assumed to be built during redevelopment of private property.	\$ -	\$ -	\$ 3,400,000	\$ 3,400,000
	B-2 Sutton Pl. Extension	MCDOT	Extension of existing two-lane Sutton Place from Seminary Road to northern boundary of Seminary Place Shopping Center. Assumed to be built during redevelopment of private property.	\$ -	\$ -	\$ 6,800,000	\$ 6,800,000
	B-3 Flora Ln. Extension	MCDOT	Extension of existing two-lane Flora Lane from northern terminus of Sutton Place Extension to Georgia Avenue (opposite existing Flora Lane). Assumed to be built during redevelopment of private property.	\$ -	\$ -	\$ 2,200,000	\$ 2,200,000
	B-4 White Oak Dr. Extension	MCDOT	Extension of existing two-lane White Oak Drive from Sutton Place Extension to Georgia Avenue (opposite existing White Oak Drive). Assumed to be built during redevelopment of private property.	\$ -	\$ -	\$ 2,200,000	\$ 2,200,000

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**County Capital and Operating Cost Estimates Assumed to be Incurred as a Result of the
Forest Glen/Montgomery Hills Sector Plan
11/19/2019**

Ped / Bike Focused	Georgia Avenue Long-Term Ped/Bike Improvements	MCDOT/ MDOT SHA	Expansion and conversion of facilities behind the curb to improve ped and bike infrastructure	\$ 900,000	\$ 900,000	\$ 3,100,000	\$ 4,900,000
	Sidewalk Improvements at Various Locations	MCDOT	Implement improvements identified in the Pedestrian Level of Comfort (PLoC) study deemed "unacceptable pedestrian links." 22 improvements identified by DOT. State costs (\$3.0M) assumed for 16th Street and Forest Glen Road improvements; private participation (\$800K) assumed for Arthur Avenue.	\$ 21,100,000	\$ 3,000,000	\$ 800,000	\$ 24,900,000
	Dale Drive Pedestrian and Safety Project	MCDOT	Bike/pedestrian path. Preferred alternative to be presented in fall/winter 2020.	\$ 8,400,000	\$ -	\$ -	\$ 8,400,000
	Woodland Dr. Breezeway	MCDOT	Structure over Beltway to provide pedestrian/bike access on the east side and connect two dead-ends of Woodland Drive. Part of Silver Spring-Glenmont "Breezeway" as identified in 2018 Bicycle Master Plan.	\$ 20,800,000	\$ -	\$ -	\$ 20,800,000
	Seminary Rd. / Columbia Blvd. Bikeway	MCDOT	Separated bike lanes on both sides of Seminary Road from Columbia Blvd. to Georgia Avenue to Second Avenue.	\$ 7,600,000	\$ -	\$ -	\$ 7,600,000
	16th St. Bikeway	MCDOT	Two-way separated bike lanes on 16th Street (south/east side).	\$ 800,000	\$ 800,000	\$ -	\$ 1,600,000
	Forest Glen Passageway	MCDOT	Currently programmed in the FY20 Approved CIP as Project No. 501911 at an approximate cost of \$18.472 million. Design to begin in FY21 and construction to start in FY23. Costs may increase due to inflation and re-estimation.	\$ 20,200,000	\$ -	\$ -	\$ 20,200,000
	Protected Crossings at Georgia Avenue in the Woodside District	MCDOT	Three protected crossings on Georgia Avenue at: 1) 16th Street (southbound); 2) Highland Drive; and 3) Noyes Drive.	\$ -	\$ -	\$ -	\$ -
	High-Visibility Upgrades	MDOT SHA	All signalized intersections. Area-wide cost estimate.	\$ -	\$ 100,000	\$ -	\$ 100,000
	Curb Extensions	MCDOT/ MDOT SHA	Approximately \$20,000 per pair for an estimated 41 pairings.	\$ 600,000	\$ 300,000	\$ -	\$ 900,000
	Protected Crossings and Signal Retrofits	MCDOT/ MDOT SHA	For 8 full signals and 4 enhanced crossings.	\$ 2,400,000	\$ 7,000,000	\$ -	\$ 9,400,000
	Bike / Ped Priority Area (BIPPA)	MCDOT	Unit estimate for undefined Ped/Bike Safety Treatments throughout the plan area. Includes associated needs like ADA ramp upgrades, APS/CPS, high-visibility crosswalk markings, etc.	\$ 1,000,000	\$ -	\$ -	\$ 1,000,000
Schools - Capital	Elementary School	MCPS	345 new elementary school students based on 2,186 new housing units. Based on \$37,192 cost per seat.	\$ 12,830,280	\$ -	\$ -	\$ 12,830,280
	Middle School	MCPS	150 new middle school students based on 2,186 new housing units. Based on \$39,600 cost per seat.	\$ 5,940,000	\$ -	\$ -	\$ 5,940,000
	High School	MCPS	198 new high school students based on 2,186 new housing units. Based on \$46,875 cost per seat.	\$ 8,906,250	\$ -	\$ -	\$ 8,906,250
TOTAL ESTIMATED CAPITAL IMPROVEMENTS COST (ONE-TIME)				\$ 148,376,630	\$ 88,700,000	\$ 18,900,000	\$ 263,976,630

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**County Capital and Operating Cost Estimates Assumed to be Incurred as a Result of the
Forest Glen/Montgomery Hills Sector Plan
11/19/2019**

Transit	Improve Bus Services	WMATA	Improve Y and Q local bus route operations on Georgia Ave. Cost estimate for WMATA unknown.	\$ -	\$ 5,572,550
		Micro-Transit Operations	MCDOT	Based on 3 buses and annual operating cost of \$511,350 per bus.	
	BRT on Georgia Ave.	MCDOT	Based on 2.0 miles of service route.	\$ 4,038,500	
Ped/Bike	Bikeshare	MCDOT	Operating costs only	\$ 326,350	\$ 326,350
Schools - Annual Operating	Elementary	MCPS	345 new elementary school students based on 2,186 new housing units. Based on \$15,799 annual cost per student.	\$ 5,450,700	\$ 10,589,800
	Middle	MCPS	150 new middle school students based on 2,186 new housing units. Based on \$14,888 annual cost per student.	\$ 2,233,200	
	High	MCPS	198 new high school students based on 2,186 new housing units. Based on \$15,294 annual cost per student.	\$ 2,905,900	
Total Estimated Annual Operating Budget Impact (OBI)				\$ 16,488,700	\$ 16,488,700
Notes					
(1) County, State, and private developer costs are shown in the chart above. Source(s) for cost estimates: MCDOT, OMB.					
(2) Operating costs are representative of annual costs at full build-out of the plan. The assumed plan lifetime is through 2045.					
(3) Capital costs do not include right-of-way acquisition.					
(4) Rounding - Individual values rounded up to nearest \$50, which is the cause of any apparent summation discrepancies.					
(5) Inflation - All Dollars are in 2019 Dollars.					
Richard S. Madaleno, Director Office of Management and Budget					
Date					

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