




Midcounty Highway Alternatives Review

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Description

- Staff Briefing and Recommendation on the alternatives evaluated for the MCDOT Midcounty Corridor Study.
- Study Area: Bounded by I-270 to the west, I-370 and the Intercounty Connector (MD 200) to the south, Snouffer School Road and Wightman Road to the east, and Snowden Farm Parkway to the north.

Summary

- **Staff Recommendations:** Staff recommends that the Planning Board transmit the following recommendations to MCDOT:
 1. Eliminate Alternative 4 Modified from further consideration; and
 2. Evaluate a transit alternative that includes elements of Bus Rapid Transit (BRT) as described in the soon to be adopted Countywide Transit Corridors Functional Master Plan and incorporates elements of Alternatives 2 and 5 before selecting a preferred alternative; and
 3. If parkland mitigation is needed, Park staff recommends that the Planning Board support a mitigation strategy that includes a combination of park replacement, recreational facilities (e.g. trails) and environmental stewardship projects (e.g. stream restoration, wetland creation, and/or stormwater retrofits). The replacement land should be of equal or greater natural, cultural, and recreational value to that lost due to construction of the road. This strategy would apply to any alternative selected as a result of this study. Alternatives with lower park impact would require little or no mitigation, whereas alternatives with significant impacts would likely require an extensive mitigation package.

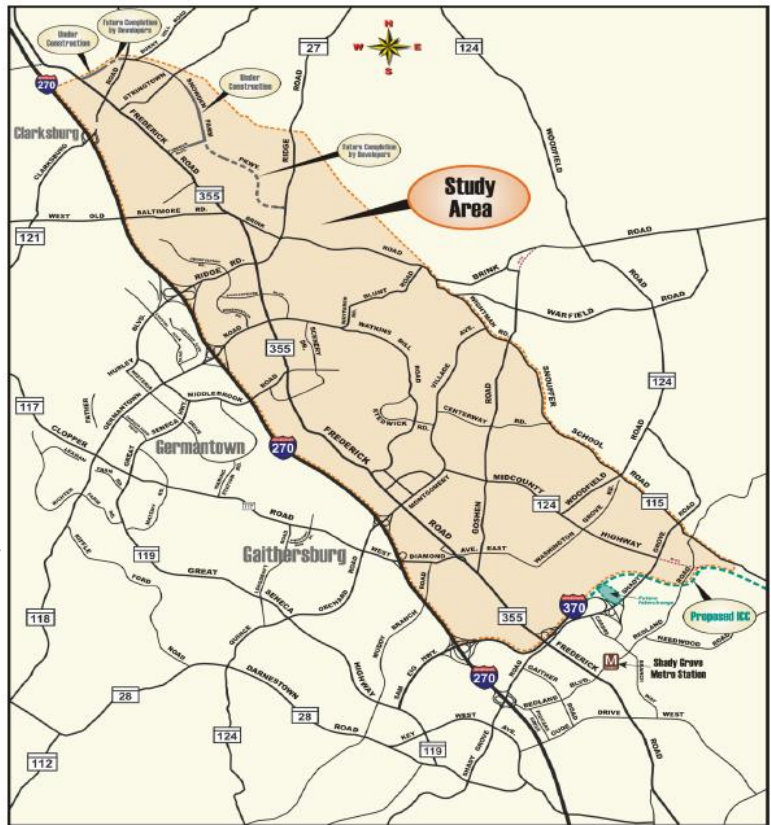


Image Source: MCDOT May 2013 Draft Environmental Effects Report

While the master plan alignment of Midcounty Highway would provide a new roadway connection within the regional transportation network, many of the alternatives studied in the Draft Environmental Effects Report would have significant impacts to parkland, community and environmental resources. As a result of those impacts and anticipated County Council adoption of the Planning Board Draft Countywide Transit Corridors

Functional Master Plan, planning staff believes further evaluation, including a substantive transit alternative, is warranted before a preferred alternative is selected. In addition, Alternative 4 should be dropped from any further consideration. Consideration of all other alignments should await the completion of the transit alternative.

Background

Montgomery County Planning Department Review and Recommendation

The Montgomery County Department of Transportation (MCDOT) recently completed a multiyear evaluation of Midcounty Highway, a master planned transportation facility that has also been referred to as M-83 or the Eastern Arterial in past master plans and studies. The intent of that evaluation was to determine whether the master plan alignment could be constructed under state and federal environmental regulations, and to identify potential alternatives to the master plan alignment that have the potential to meet the project's purpose and need statement. This study provides an opportunity to determine if there is another way to satisfy the purpose and need in a way that is more closely aligned to a more transit-oriented future. All findings of the study were published in the MCDOT May 2013 Draft Environmental Effects Report (MCDOT EER).

The MCDOT EER is unlike most transportation facility planning studies in that its main purpose was to determine whether the roadway *could* be built within the current regulatory environment and which alternatives serve the purpose and need. The U.S. Army Corps of Engineers (USACE) has not yet published its findings on whether the master plan alignment could obtain state and federal permits, and whether any of the alternatives studied satisfies the purpose and need with fewer impacts than the master plan alternative. One of the alternatives proposed in the MCDOT EER for USACE consideration, Alternative 2, proposes a Transportation Systems Management/ Transportation Demand Management (TSM/TDM) alternative. The TSM portion of Alternative 2 consists of specific intersection improvements; however, the TDM portion lacks a robust transit analysis, consisting of minimal improvements to local bus service along MD 355. This lack of transit is due to the timing of the study and the fact that the Countywide Transit Corridors Functional Master Plan (CTCFMP) has not yet been approved and adopted, thus MCDOT did not include an analysis of Bus Rapid Transit (BRT) in the TSM/TDM alternative.

Analysis beyond that already completed for the MCDOT EER is necessary prior to the selection of a preferred alternative to ensure a complete and adequate evaluation of Midcounty Highway. A formal evaluation of transit is imperative to the viability of future transportation capacity in the corridor. Although transit was not a viable alternative when the MCDOT EER was reinitiated in 2004, BRT is believed to be an integral part of the future countywide transportation network and is expected to be adopted by County Council, as part of the CTCFMP, on November 26, 2013. Alternative 4 Modified should be removed from further consideration because of its impacts on adjacent properties and because the circuitous nature of the alignment would not meet future traffic needs.

Staff recommends that MCDOT agree to parkland mitigation measures based on the principles described in this staff report and the attached memo from the Department of Parks as necessary to offset the potentially severe impacts to parkland of this project.

Midcounty Highway (M-83) History

M-83 first appeared in the 1966 Germantown Master Plan as Major Highway M-5. This roadway was intended to widen, and in some places realign, the existing MD 355 following a recommendation in the 1966 Germantown Plan that MD 355 be routed west, at Ridge Road, to become the new circumferential “ring road,” through the future corridor city of Germantown. In 1974, the proposed MD 355 Germantown Ring Road was eliminated from the Plan, MD 355 returned to its present-day alignment, and M-83 retained as a parallel route east of MD 355. Midcounty Highway, on its current master plan alignment, is proposed as a four to six-lane limited access highway between Clarksburg and Gaithersburg.

Master Plan Context

In order to fully understand the planning context surrounding Midcounty Highway, it is important to understand a chronology of County master plans, beginning with the 1964 M-NCPPC General Plan, and ending with the Planning Board Draft CTCFMP. The 1964 General Plan, *On Wedges and Corridors*, established the corridor city concept for Montgomery County and placed a strong emphasis on the role of transit in accomplishing the density necessary to support that concept. Each Plan since the 1964 General Plan has recommended transit as an integral part of the regional transportation network. That Plan specifically stated that roadways alone could never provide enough capacity to support development in the future corridor cities. In response to the need for a regional transit network, the Planning Board prepared the CTCFMP to propose a countywide transit network capable of supporting future transportation demand. The CTCFMP includes two transit facilities within the Midcounty Corridor study area, a BRT line along the MD 355 corridor and the previously-approved Corridor Cities Transitway (CCT). At the time this staff report was prepared, Council adoption of the CTCFMP is anticipated to occur on or about November 26, 2013.

Since the 1966 Germantown Plan, portions of the roadway have been included in the 1989 Germantown Master Plan, Gaithersburg Vicinity Master Plan (1985, 1988, and 1990) and Clarksburg Master Plan and Hyattstown Special Study Area (1994). Each of these documents assumed future construction of Midcounty Highway, among other proposed transportation facilities, in determining appropriate future land use densities. The 1994 Clarksburg Master Plan recommended that the need for M-83 be reexamined in the context of the next update to the *Germantown Master Plan*. The Germantown Master Plan has not been revised in its entirety since then; however, the 2009 Germantown Employment Corridor Master Plan expanded the right-of-way for MD 355 if the preferred alternative was to accommodate additional improvements to MD 355. Although master plan recommended land use densities were predicated on Midcounty Highway, the un-built portions of the roadway are not in the current Capital Improvement Program (CIP) and are not currently factored into adequate public facilities findings for development approval. A more detailed evaluation of Midcounty Highway within the context of approved and adopted master plans is provided in Attachment A.

Two segments of the Master Plan alignment are built and open to traffic, one to the ultimate roadway section standard, from Shady Grove Road to Montgomery Village Avenue, and one to a two-lane roadway section standard, between Middlebrook Road and Grassy Knoll Terrace. This second, smaller roadway section carries local residential traffic to the Middlebrook Manor subdivision. In addition to these two sections, a majority of the remaining master planned right-of-way is located either within MNCPPC parkland, was dedicated as right-of-way, or reserved for future right-of-way dedication.

April 1992 Planning Board Review

The Planning Board discussed a previous MCDOT evaluation of the Midcounty Highway alignment, the “Environmental Documentation Report,” in April 1992. The result of that discussion was a recommendation to the County Council that supported a five-lane cross-section for Watkins Mill Bridge in conjunction with future M-83 construction. The 1992 staff report stated that M-83 is an essential part of the total transportation system for the entire I-270 corridor. The staff report also concluded that the proposed Brink Road—Wightman Road—Snouffer School Road (now referred to as Alternative 4 Modified) was too circuitous, would not serve the traffic needs, and would result in disruption of existing communities.

May 2013 Environmental Effects Report

Due to funding constraints, planning and design of Midcounty Highway was not actively pursued between 1992 and late 2003. In December 2003, MCDOT began studying the need and feasibility of building the remainder of the Master Plan alignment. In addition to the purpose and need, MCDOT examined the environmental impacts of the Master Plan alignment and state and federal regulatory agencies raised concerns about the environmental impacts the potential of obtaining the needed permits associated with the Master Plan alignment and requested the following: 1) the purpose and need for the Master Plan alignment be further defined; 2) that other alternatives (including ‘no build’ options) be evaluated; and 3) that the project follow the National Environmental Protection Act (NEPA) process.

As part of this study, MCDOT, the USACE, the U.S. Environmental Protection Agency, and the Maryland Department of Environment reached concurrence on a *Purpose and Need Statement* in January 2007. The current study analyzed eleven potential alternative alignments, which were subsequently reduced to the five “Build” alternatives and one “No-Build” alternative currently under review. These “Alternatives Retained for Detailed Study” (ARDS) were evaluated in the May 2013 MCDOT EER, and are summarized below. Exhibits for each alignment and additional information received from MCDOT responding to questions raised on the Planning Board Tour are included in Attachment B.

Alternative 1 – No-Build Alternative

Not considered to be a viable solution by MCDOT because it would not meet the project’s needs. Its inclusion in this study is to provide a baseline comparison for the five Build alternatives.

- Preliminary cost estimate: \$0

Alternative 2 – Transportation Systems Management/Travel Demand Management

Implement minor, relatively low-cost intersection improvements within existing rights-of-way to improve the 16 Study Area intersections expected to have unacceptable traffic congestion in the design year (2030) under the No-Build scenario. Some enhancements to local bus service were included in this alternative. No significant transit improvements were considered because the CTCFMP had not been completed when the EER was being prepared. Specific roadway and transit improvements associated with this alignment are summarized in Attachment C.

- Preliminary cost estimate: \$41 million

Alternative 4 Modified - Brink-Wightman-Snouffer School-Muncaster Mill

Widen the Brink-Wightman-Snouffer School-Muncaster Mill corridor to a four to six-lane divided highway. A sidewalk, 10-foot wide shared use path, and two 5.5-foot on-street bicycle lanes would be provided to improve pedestrian and bicycle access. This alternative would include more than 125 access points (13 signalized intersections, 25 unsignalized intersections, and 90 driveways). Additionally, this alternative would require that an existing two-lane roadway be modified to accommodate the four to six-lane divided highway cross-section.

- Preliminary cost estimate: \$251 million

Alternative 5 –MD 355 with Service Roads

Improve MD 355 to a six-lane divided highway, with service roads at select locations. The service roads would reduce the number of existing driveways from 62 to 17, thereby reducing the potential for accidents and increasing efficiency of the roadway. Three commercial properties would be displaced as a result of this alternative, however, those displacements would be the result of the proposed MD 355 widening, not the proposed service drives.

- Preliminary cost estimate: \$120 million

Alternative 8 – Master Plan Alignment Truncated at Watkins Mill Road

Construct a new four-lane divided highway with access controls, following the Midcounty Highway Master Plan alignment from Snowden Farm Parkway to Watkins Mill Road. This alternative would leave a gap in Midcounty Highway, between Watkins Mill Road and Montgomery Village Avenue, to avoid impacts to the Whetstone Run stream valley in Montgomery Village. Three Northern Terminus Options are proposed at the north end of this alignment: Option A would follow the Master Plan alignment, Option D would traverse the Agricultural Reserve (but would reduce impacts to sensitive resources in North Germantown Greenway Stream Valley Park), and Option B would incorporate existing Brink Road and Ridge Road. MCDOT staff believes that Option B is undesirable in terms of traffic operations and safety. The portion of Alternative 8B outside of parkland that follows the Master Plan alignment has been reserved for Midcounty Highway through the subdivision review process.

- Option A Preliminary cost estimate: \$274 million
- Option B Preliminary cost estimate: \$255 million
- Option D Preliminary cost estimate: \$267 million

Alternative 9 – Master Plan Alignment

Construct a new four-lane divided highway with access controls, following the Midcounty Highway Master Plan alignment between Snowden Farm Parkway and Montgomery Village Avenue, for a distance of 5.7 miles. Connecting to the existing Midcounty Highway to the south and Snowden Farm Parkway to the north, Alternative 9 would complete a 12.2-mile highway between Gaithersburg and Clarksburg. This alternative includes the same three Northern Terminus Options described for Alternative 8.

- Option A Preliminary cost estimate: \$357 million
- Option B Preliminary cost estimate: \$338 million
- Option D Preliminary cost estimate: \$350 million

In May 2013, the draft MCDOT EER document was published, initiating a 60-day public comment period. During that time, an August 7, 2013 public hearing was held by the U.S. Army Corps of Engineers and Maryland Department of Environment at Seneca Valley High School. Although the project timeline has

since been revised by MCDOT, the initial schedule anticipated selection of a preferred alternative alignment in September 2013 with County Executive and Council concurrence following one month later in October 2013. The revised project schedule currently anticipates selection of a preferred alternative by MCDOT in late 2013 or early 2014. The Planning Board received a briefing on the MCDOT EER from MCDOT on July 18, 2013 and participated in a tour of the Midcounty Corridor study area during its October 3, 2013 meeting.

After review of the MCDOT EER materials, participation in the Planning Board tour discussion, and consideration of the written testimony received, Planning staff recommends that the MCDOT consider additional study of alternatives before selecting a preferred alternative.

Recommendation #1:

Staff recommends that MCDOT evaluate a transit alternative that incorporates elements of Alternatives 2 and 5 with the proposed MD 355 Bus Rapid Transit (BRT) network. The May 2013 MCDOT EER states that BRT was not considered in the Midcounty Corridor Study because, “BRT is not currently identified in the County Master Plans, the CLRP, or the Montgomery County Capital Improvement Program...” While the Transit Corridors Plan has not yet been adopted, the County Council is anticipated to take action on November 26, 2013 and MCDOT has studies underway to facilitate implementation of a BRT network.

Considering the County Council’s anticipated action on the CTCFMP, the amount of time already spent evaluating the Midcounty Corridor, and the estimated costs of a new transportation facility the staff finds it in the public interest to fully evaluate the effectiveness of a transit alternative and include that alternative in consideration with the remaining Midcounty Highway alternatives.

This alternative should include consideration of the full BRT network, complementary local feeder bus service, selected intersection improvements from Alternative 2 and widening 355 beyond the service lanes studied in Alternative 5. Staff will work with MCDOT to identify the network elements that should be tested in this evaluation.

Recommendation #2:

Staff recommends that Alternative 4 Modified be eliminated from further consideration. For the reasons previously stated and those described throughout the remainder of this report, Alternative 4 Modified is the least desirable of the Alternatives Retained for Detailed Study. This recommendation was also made by the Planning Board in 1992.

Recommendation #3:

Park staff recommends that the Planning Board support a mitigation strategy that includes a combination of park replacement, recreational facilities (e.g. trails) and environmental stewardship projects (e.g. stream restoration, wetland creation, and/or stormwater retrofits). The replacement land should be of equal or greater natural, cultural, and recreational value to that lost due to construction of the road. This strategy would apply to any alternative selected as a result of this study. Alternatives with lower park impact would require little or no mitigation, whereas alternatives with significant impacts would likely require an extensive mitigation package.

With the exception of Alternative 4 Modified, staff's recommendation does not constitute a rejection of the alignment alternatives; it is intended to ensure that all options have been considered to the extent practicable before the County commits to a specific alternative. This will help to ensure the most cost effective and socially responsible use of public funds.

Evaluation of Alternatives Retained for Detailed Study (ARDS)

Each of the build alternatives described in the May 2013 MCDOT EER was evaluated by planning staff to determine the extent of its impacts and expected transportation improvement. Staff's assessment for each alternative is described in the sections below and organized according to General Considerations, Transportation, Community, and Environmental impacts.

General Considerations

There is no dispute that the master plans for various planning areas were prepared assuming the eventual construction of a Midcounty Highway, however, the General Plan and most of the community plans also supported transit as the preferred means for serving many of our transportation needs into the future. In many documents, it is clearly stated that we cannot build enough roadways to accommodate transportation demand in single-occupant vehicles. The extensive parkland, environmental and community impacts of Alternatives 4, 8 and 9 demands that we further examine using transit and improvements to existing roads to arrive at an alternative that significantly reduces those impacts (see explanation of impacts starting on page 11).

Given that the County is now planning a BRT network and reconsidering local bus service operation to make BRT as efficient as possible, it is reasonable to consider that some combination of enhanced transit service and improvements to existing roadways, as proposed in Alternatives 2 and 5, may provide adequate transportation capacity without additional highway construction. The environmental and community impacts associated with the master plan alignment of M-83 are such that it is necessary for all alternatives, including transit, be evaluated within the context of master planned land use/transportation balance.

Transportation Analysis

Estimated future transportation impacts include traffic congestion, travel time, and a preliminary calculation indicating the potential for a transit alternative. Transit has the ability to increase total commuter throughput without constructing additional highway lane miles. Although all new roadways initially reduce traffic congestion and improve travel times, their long-term affect typically induces demand for additional single-occupant vehicle trips and contributes to increased traffic congestion.

Traffic is expected to grow through 2030¹, the horizon year of the MCDOT EER, with the highest levels of traffic congestion and crash rates projected to occur under Alternative 1, the "No-Build" Scenario. Under Alternative 1 conditions, sixteen intersections will exceed acceptable critical lane volume (CLV) traffic

¹ The average growth rate used in the MCDOT EER traffic study varies for each alternative. Alternative 9 CLV increases 19% in the PM peak hour, however, Alternative 5 has the least CLV increase of 11% in the AM peak hour, compared to the 31% increase for Alternative 9. Alternatives 5 and 8 have the second least CLV increases of approximately 83% in the PM peak hour.

congestion standards. Comparatively, the number of intersections above the CLV congestion standard would be reduced by approximately 50% as a result of Alternatives 2, 5, or 9 being implemented as the preferred alternative. Alternative 9, the Master Plan Alignment, offers the greatest improvement of future traffic conditions² available under any build alternative evaluated in the MCDOT EER. It should be noted that at least six of the sixteen intersections described above are located south of Montgomery Village Avenue (MD 124) and are projected to exceed the policy area congestion standard regardless of which alternative is selected.

A Synchro traffic modeling analysis completed as part of the MCDOT EER compared peak-hour peak-direction travel time for each of the five build alternatives. Compared to Alternative 1:

- The largest percentage of travel time reduction is along Alternative 9 with approximately 55% less in the AM and PM peak hours,
- The second largest percentage of travel time reduction is along MD 355 with approximately 28% less in the AM peak for Alternatives 5, 8, and 9 and 37% less in the PM peak hours for Alternatives 5 and 9.
- The lowest percentage of travel time reduction is along MD 355 with 19% less in the AM peak hours for Alternatives 2 and 4 Modified.

The estimated 55% reduction in travel time is greatest along Alternative 9, however, the percent reduction along MD 355 for Alternatives 5, is projected to be only 37% less than the No Build, or approximately three more minutes of travel time.

Although the MCDOT EER did not include formal evaluation of a rapid transit alternative, staff believes further evaluation of the MD 355 BRT system is warranted based on the recent progress and current status of the CTCFMP. In August 2011, MCDOT completed a feasibility study for BRT implementation, which was followed by the County Executive's January 2012 Recommended CIP funding request for a detailed study of the MD 355 BRT corridor and repeated statements that the MD 355 BRT corridor is a high priority for implementation.

Basis for Requesting Analysis of an Enhanced TSM/TDM/ Transit Alternative for Midcounty Highway

There are essentially three reasons related to the transportation network and accepted technical methodology to conduct additional analysis. These include the following:

Transportation Policy Area Review (TPAR) Analysis – Master Plan Context

The Planning Department's work in support of the most recent Subdivision Staging Policy included the evaluation of a scenario that consisted of the Round 8.0 year 2040 land use forecast and a road network that included selected projects in the Constrained Long Range Plan (CLRP). These projects that were selected to address congestion identified in scenarios that considered no improvements beyond those in the currently adopted CIP. When additional improvements were included, both the Germantown East and Clarksburg Policy Areas were determined to be adequate with respect to roadway network performance, although the Gaithersburg City Policy Area was found to be inadequate for roadway

² Favorable analysis of the master plan alignment in the MCDOT EER is heavily influenced by proposed increased in roadway lane miles.

network performance. The CCT was included in the network but no elements of the BRT network in the Planning Board Draft of the CTCFMP were included in this TPAR scenario. The following assumptions were included in this scenario with respect to Midcounty Highway:

- Construction of the segment between Middlebrook Road and Ridge Road as a 4-lane arterial
- No construction between Montgomery Village Avenue and Middlebrook Road
- Widening of the existing segment between Shady Grove Road and Montgomery Village Ave to 6 lanes
- Construction of the segment between Shady Grove Road and the ICC as a 4-lane arterial. This roadway segment is not part of the MCDOT EER analysis.

One finding of this analysis is that area-wide transportation/land use balance may be potentially attainable by the year 2040 without constructing Midcounty Highway in its entirety. However, additional transportation capacity (i.e., roadway and/or transit) may be needed in order to accommodate master plan-recommended full build-out land use densities in the area. The addition of BRT to this scenario should be considered before the selection of a preferred alternative is chosen.

Countywide Transit Corridors Functional Master Plan (CTCFMP)

The Planning Board Draft of the CTCFMP includes MD 355 as one of ten designated corridors. This corridor is projected to have the second highest daily ridership of all of the proposed corridors. The County Council Transportation & Environment (T&E) Committee recently included a modification to the alignment of this corridor that will provide enhanced service to Germantown East and Montgomery College.

Enhanced Transit as Component of TSM/TDM Alternative

It is an accepted practice for impact analysis documents, such as the MCDOT EER, to include viable enhancements to the transit network as part of the TSM alternative. The level of transit service assumed in the TSM analysis for the Midcounty Highway alternatives analysis will not be consistent with the latest policy directive from the County and the City of Gaithersburg related to the CTCFMP if the CTCFMP is approved and adopted. Additionally, it may not be consistent with some network assumptions that will likely be considered by the Department in the upcoming Gaithersburg East/Montgomery Village Master Plan.

Based on the master plan emphasis on transit, staff developed the following preliminary evaluation of a transit alternative using data from the MCDOT EER. This evaluation is rudimentary given data availability and should be formally evaluated by MCDOT prior to selection of a preferred alternative. Using MCDOT EER data, including 2005 traffic count data and projected 2030 Average Daily Traffic (ADT) volumes for major roadway segments between Ridge Road and Montgomery Village Avenue, staff determined that ADT is expected to increase from an average of 33,000 vehicles per day in 2005 to 45,500 in 2030. This increase averages to approximately 12,500 more vehicles per day, or a 38% increase in traffic volume. Based on this limited preliminary analysis, staff believes that the estimated 38% increase in ADT may be accommodated within the projected 2040 BRT ridership of 15,200 riders per day. On November 5, 2013, the T&E Committee voted to forward the CTCFMP to the full Council for discussion and approval, which is anticipated to occur by the end of this month. Assuming that action comes to pass, ***BRT on MD355 will soon become part of the master plan and should be assumed in the evaluation of all alternatives included in the Midcounty Highway study.***

The countywide BRT network is a major sea change in how the County sees its transportation future and the extent to which any of the alternatives should be pursued for future construction needs to be considered in light of a more transit-oriented future.

The table below summarizes the MCDOT EER with respect to how each of the alternatives addresses elements of the transportation needs.

Table 1: Transportation Impacts							
Alternative	Intersection Congestion¹	Vehicle Safety	Network Connectivity	Accommodate Future Growth	Pedestrian Bicycle	MD 355 Traffic²	Travel Time²
Alternative 1	-H	-H	-H	-H	-H	n/a	n/a
Alternative 2	-L	-L	-L	-L	+L	-L	-L
Alternative 4 Modified	-H	-L	-L	-L	+H	+L	-L
Alternative 5	-L	+L	+H	+L	+L	+L	+L
Alternative 8	-H	+H	+H	+H	+H	-L	+L
Alternative 9	-L	+H	+H	+H	+H	+H	+H

n/a = No new impact or no change from existing conditions
 - L = Low negative impact - M = Medium negative impact - H = High negative impact
 + L = Low positive impact + M = Medium positive impact + H = High positive impact
¹Compared intersections with CLV value exceeding its CLV congestion standard.
²Compared with Alternative 1, No Build travel times.

The following sections summarize staff findings with respect to the impact of the alternatives outside parkland. A separate memo (attached) details the parkland impacts that are summarized later in this memo.

Community and Historic Resource Impacts

Community impacts include traffic noise, privately owned well and septic facility destruction, agricultural fragmentation, property takings, community cohesion, and damage to historic resources. As a result of community impacts to properties along the Brink-Wightman-Snouffer School Road corridor, located far from any master planned highways, staff recommends that Alternative 4 Modified be permanently eliminated from further consideration.

Traffic Noise and Visual Impacts

All build alternatives have the potential to increase traffic noise; however, the degree to which noise and visual impacts will be generated varies by alignment and time of year. Although a comprehensive

noise analysis is difficult to complete at this stage in the process, it is important to consider the following qualitative noise impacts posed by each alternative:

- Alternatives 8 and 9 would introduce a new highway into areas which are not currently subjected to highway noise or visual impact, including parkland, the Dayspring Church Silent Retreat Center, farmland, a cemetery, and remote neighborhoods.
- Alternative 4 would change a two-lane road into a four to six-lane highway, resulting in additional noise and visual impact attributable to both and increase in traffic volumes as well as highway widening that moves the traffic closer to the residences.
- Alternatives 2 and 5 are not expected to produce a substantial increase in noise or visual impact.
- Topography will play an integral role in the final effect of visual impacts as a result of the selected alignment's vertical relation to adjacent properties.

In response to concerns raised by the Dayspring Church Silent Retreat Center, the MCDOT EER states, "...The proximity of a new regional highway along Alternative 8 or 9 would introduce a visual and audible intrusion into the pastoral setting. The 67 dBA noise contour would extend onto Dayspring property a distance of 80 feet from the proposed sidewalk along the southbound lanes of Alternative 9, and 70 feet from the proposed sidewalk along the southbound lanes of Alternative 8. Consequently, the property would be impacted by noise." Information received in a November 6, 2013 letter from MCDOT indicates that they are "confident that the 57dBA threshold would unlikely be exceeded in the vicinity of the lodge, inn and outdoor reflecting area as a result of the proposed improvement related to Alternative 8/9." Any decisions regarding noise mitigation would be determined by MCDOT during the final design phase. As a result, the need for and impacts of noise wall construction on adjacent properties is unknown.

Well and Septic

In accordance with the Germantown and Gaithersburg Vicinity master plan visions of preserving agriculture and large lot residential uses, many of the properties along the northern boundary of the study area are outside of the County's sewer envelope and rely on private well and septic facilities. These properties are most heavily impacted by Alternative 4 Modified, which will impact the well and septic facilities of 20 residential dwellings. Alternatives 8 and 9 using Northern Terminus Option B is expected to affect five dwellings, and Northern Terminus Option D, three dwellings. Staff does not recommend extending public water and sewer utilities to these properties because such action is contradictory to existing policy and practice intended to protect the Agricultural Reserve.

Although the existing sewer envelope includes properties on Alternative 5, staff is aware of two properties that are not connected to public water and sewer and anticipates that there may be others. Property owners have informed staff that connection to public water and sewer is prohibitively expensive due to the distance between utility lines and non-serviced properties.

Takings and Property Impacts

Property takings defined by the MCDOT EER fall into two main categories: displacements and "strip takes." Displacements are assumed to occur when the physical limits of roadway construction would encroach upon a building, deny access to a property, disrupt the well or septic system without replacing

it, or prevent a property from fulfilling its intended use. Strip takes are assumed to occur when any part of the project is required to acquire portions of property parcels to execute tasks associated with project implementation. Under these definitions, Alternative 4 would displace two residences while Alternatives 8 and 9, Options B and D, would each displace one residence. Alternative 5 would displace three businesses, of which one is currently abandoned. There are no residential or business displacements associated with Alternatives 1 or 2.

Space for stormwater management and noise abatement measures is difficult to incorporate into the projected limits of disturbance until a preferred alternative is selected and more detailed engineering plans developed. It is therefore possible that limits of disturbance, and impacts to adjacent properties, may be expanded to include such features. It should also be noted that the standard right-of-way and typical road section for this roadway classification (Major Dual Highway) was 120 feet according to an older edition of the road code. This standard was likely used when Midcounty Highway was originally planned, and the standard increased to 150 feet in a recent edition of the County Road Code. The study done for the MDOT EER used a section less than 150 feet, but in excess of 120 feet in some locations. This suggests that impacts on adjacent properties could be greater than those studied to date.

Agricultural Fragmentation

North of Germantown, the County's Agricultural Reserve begins at Brink Road. The Agricultural Reserve was established in 1980 to ensure the continuing economic viability of farming through the preservation of a large, contiguous area permanently dedicated to farmland. The proposed master plan alignment alternatives have the potential to impact nearly 400 acres of Rural Density Transfer-zoned land. Alternatives 8 and 9, Terminus Option D, result in the greatest agricultural fragmentation, impacting the largest area of farmland. Option A, the Master Plan alignment, is expected to have less impact because the 1994 Clarksburg Plan includes a provision to rezone the area from the RDT to the Rural zone, once the location and design of Midcounty Highway is finalized. Alternatives 8 and 9 B and Alternative 4 Modified would cause less fragmentation of the area because these alternatives would follow the existing Brink Road.

Alternative 4 Modified or Alternatives 8 or 9, Northern Terminus Option D, could create pressure for rezoning/redevelopment of properties along these alternatives. The parcels along Brink and Wightman Roads currently zoned RE-2 (Residential, one detached home per 2 acres) and the undeveloped properties north of Brink Road located within the Agricultural Reserve currently zoned RDT are the most likely to be affected by Option D. According to the Montgomery County Water and Sewer Plan, there are no foreseeable plans to extend public water and sewer to any of these properties. The lack of public water and sewer is consistent with the zoning and land use goals of this area, and reduces development pressure.

The 105-acre Woodfield Farm and the 120-acre Benson-Sibley Farm are two properties zoned RDT that have previously (unsuccessfully) requested sewer service to develop churches. Both farms would be bisected by Northern Terminus Option D. If this option is selected, the property owners could ask the County Council to consider a zoning change. Fragmentation of these farms or future development for non-farm uses would negatively impact this area of the Agricultural Reserve.

Community Cohesion Impacts

Based on analysis completed in the MCDOT EER, staff expects negative impacts to community cohesion as a result of Alternatives 4, 8, and 9. Alternative 4 would widen and flatten an existing two-lane road through low-density residential areas to a four to six-lane road, making crossing the road to visit neighbors or access parks and recreation facilities more difficult. Community cohesion impacts created by Alternatives 8 and 9 are more discrete because much of the alignment goes through parkland or near larger tracts. However, such impacts would be more significant where they occur based on the width of the proposed roadway cross section and the proximity of the homes. In most cases, however, the master plan alignment was known before the homes were built. An evaluation of air quality impacts discussed in the MCDOT EER indicated that each of the alternatives would comply with federal and state air quality standards. A discussion of the possible causal relationship, between vehicle emissions and the health of nearby residents, is included in Attachment D.

Alternative	Noise	Well & Septic	Community Cohesion	Takings and Property Impacts	Agricultural Fragmentation	Historic
Alternative 1	n/a	n/a	n/a	n/a	n/a	n/a
Alternative 2	- L	n/a	n/a	n/a	n/a	n/a
Alternative 4 Modified	-H	-H	-H	-H (242)	- L	-H
Alternative 5	-M	- L	- L	-H (92)	n/a	-M
Alternative 8	-H	*	-H	*	*	- L
Alternative 9	-H	*	-H	*	*	- L
Terminus Option A	-H	- L	-H	- L (8A: 96 / 9A: 125)	- L	- L
Terminus Option B	-H	-M	-H	-M (8B: 120/ 9B: 149)	- L	- L
Terminus Option D	-H	-M	-H	-M (8D: 103/ 9D: 132)	-M	- L
n/a = No new impact or no change from existing conditions - L = Low negative impact - M = Medium negative impact - H = High negative impact + L = Low positive impact + M = Medium positive impact + H = High positive impact (242) = Number of Properties affected *See Terminus alternatives						

Historic Impacts

The MCDOT EER identifies a list of architectural resources potentially eligible for designation on the National Register of Historic Places. Some of these are designated in the Master Plan for Historic Preservation or identified in the Montgomery County Locational Atlas and Inventory. Other sites

included in the MCDOT EER were evaluated but not found to merit designation. Since Planning staff has yet to evaluate the balance of the identified resources, further study will be required once a preferred alternative is identified. Based on analysis contained in the MCDOT EER, the alternative with the most negative impacts to historic resources is Alternative 4 Modified. As a result of these impacts, this alternative should be eliminated from further consideration.

The following table identifies resources identified in either the Master Plan for Historic Preservation (MPHP) or Locational Atlas (LA) that are within the area of potential impact and summarizes staff's recommendation for each alternative.

Table 4: Historic Resource Impacts		
Alternative	Master Plan for Historic Preservation (MPHP) Locational Atlas (LA) Resources	Recommendation/ Comment
Alternative 4	MPHP: Wightman (Thompson) House (#14/53); Benson House (#/41); Sarah Posey House (#20/42) LA: Woodfield Farm (#14/49)	Staff recommends this alternative be eliminated due to adverse effects to historic and cultural resources in the Prathertown vicinity, including a property taking on the Wightman (Thompson) House
Alternative 5	MPHP: Cider Barrel (#19-33); Neelsville Presbyterian Church (#19/5)	This alternative has limited adverse effects to historic and cultural resources. The Cider Barrel would likely be affected. The Germantown Master Plan recommends that the Cider Barrel be relocated if a viable use is not identified in its current location. The Cider Barrel should be relocated if mitigation is required.
Alternatives 8 & 9	LA: Woodfield Farm (#14/49)	This alternative has limited adverse effects to historic and cultural resources.

Environmental Impacts

Environmental impacts include those associated riparian and floodplain areas, stream valleys, and forest/ forest interior dwelling habitats. Based on the preliminary limits of disturbance provided in the MCDOT EER, specific environmental impacts are difficult to quantify at this time. This is due to the combination of two factors:

- Significant topography and wetland challenges within the proposed alignments make it impossible to define limits of disturbance within the most sensitive areas at this early stage. Additionally, limits of disturbance provided by the consultant do not necessary include construction features such as staging areas, access roads, and other temporary construction impacts that can result in loss of significant resources.
- Impacts are Discrete and not in the context of the entire system.

Riparian Zone and Floodplain Impacts

Riparian areas include a complex natural stream system that includes the low and high flow channels, floodplain, and biological communities. These communities include above-ground and subsurface terrestrial communities, such as forests and meadows and their soils, the in-stream aquatic community, and the subsurface zones where the groundwater and surface water interface within the soil profile. Although riparian system losses are not fully evaluated in the MCOT EER, many elements of riparian systems are contained within a stream's floodplain, which was evaluated in the MCDOT EER. Floodplains perform important natural functions, including temporary storage of floodwaters, moderation of peak flows, maintenance of water quality, groundwater recharge, and prevention of erosion. Floodplains also provide habitat for wildlife, recreational opportunities, and aesthetic benefits.

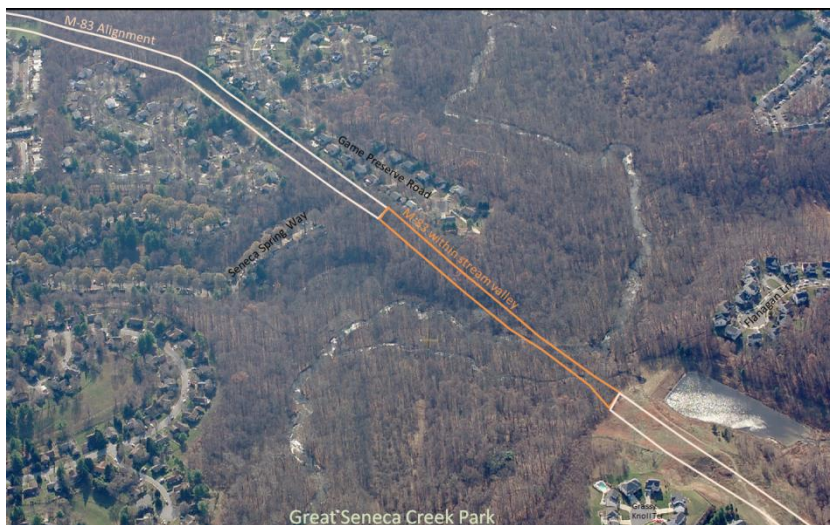
Staff believes the floodplain and riparian losses could be greater than envisioned in the MCDOT EER due to the need for stormwater management measures and the likely disturbance caused by filling, grading, and construction of retaining walls; each of which will be better defined upon selection of a preferred alternative and completion of detailed engineering plans. Staff anticipates that more detailed floodplain studies will accompany detailed engineering plans, which may identify additional areas of floodplain not currently delineated within the MCDOT EER. The most significant floodplain impacts are associated with Alternatives 8 and 9 and occur primarily where the alignment crosses Great Seneca Creek and along Whetstone Run. It is imperative that the full range of impacts to riparian and floodplain functions be considered following selection of a preferred alternative.

Great Seneca Creek Stream Valley

The proposed roadway crossing of Great Seneca Creek takes place where the creek channel is approximately 30-feet wide within a 715-foot wide floodplain. The floodplain is deeply incised in the landscape and would be approximately sixty feet below the proposed road grade.

Approaching from the south, Alternatives 8 and 9 are located on the side of a 35% slope, the base of which is the Great Seneca Creek channel and floodplain.

A 400-foot long retaining wall with earthen fill is proposed in this location, 300 feet of which will be based in the floodplain within 20-30 feet of the stream channel. Two bridge abutments are proposed within the floodplain to support a new 500-foot long bridge. In its entirety, the road will be within the stream buffer area for approximately 1,270 feet. It appears that the floodplain width will be narrowed, from 700-feet to 500 feet, at the Great Seneca Creek crossing.



Whetstone Run

The Whetstone Run stream channel measures approximately 20-30 feet wide within a 300-400 foot wide floodplain. Impacts to Whetstone Run, caused by Alternative 9, are severe where the alignment

runs parallel to the stream for approximately 2,700 feet. Within this area, the roadway is proposed to be partially or completely within the stream buffer. For approximately 350 feet in the area between the Windbrooke Condominiums and Watkins Mill Elementary School, Alternative 9 is nearly adjacent to the stream channel. This condition represents an older alignment design that would not be favored today because of its proximity to the stream channels and floodplains. Additionally, Planning staff estimates that this parallel alignment within the stream valley increases the total potential floodplain losses by 40%, compared to Alignment 8, which avoids this area entirely.



In order to construct Alternative 9 in this location, as proposed, the road must be constructed on fill, relying on a proposed retaining wall that would be constructed adjacent to the stream channel. This retaining wall would prevent the stream channel from meandering within the floodplain and its construction would likely result in loss of forest as well as soil compaction within the northern stream buffer, while the southern stream buffer would be lost entirely. A shared-use path is proposed adjacent to the roadway alignment on a 225-foot long, 14-foot wide pedestrian bridge that will overhang the stream buffer. Although this pedestrian bridge would have five feet of vertical clearance, recovery of streambank vegetation on the north side of the stream will be challenging.

If design of this alternative progresses, particular care should be taken to address the loss of floodwater storage caused by floodplain impacts. The areas adjacent to Watkins Mill Elementary School, Montgomery Village’s South Valley Park, and the City of Gaithersburg’s Blohm Park are of particular concern given their respective elevations and proximity to the floodplain.

The crossing of the Whetstone floodplain is limited by existing development. This has placed the crossing at a wide “S” bend in the channel. In order to minimize the size of the bridge needed, it is proposed that the stream be rechanneled and straightened in this location. A series of earthen fill and retaining walls would lift the road out of the floodplain, narrowing the floodplain width from 330 feet to 220 feet in this location. Impacts associated with the construction of two bridge abutments and the stream channel realignment is likely to be severe. All of the floodplain forest is likely to be permanently removed.

Impacts to Wildcat Branch

According to the 1994 Clarksburg Master Plan, Little Bennett Creek and Wildcat Branch watersheds “are considered to be most susceptible to adverse development effects, and a low density land use pattern is the most effective strategy for protecting environmental resources from urbanization” (page 137). It was therefore designated a Special Protection Area in the Clarksburg Master Plan in the vicinity of the Midcounty Highway impacts for two reasons: First, due to significant Midcounty Highway impacts such as forest removal, massive grading and a stream crossing, the potential for adverse impact to this watershed is substantial; second, because the area to the west of Midcounty Highway is planned to be rezoned from RDT to Rural as soon as Midcounty Highway has a final design (page 76). Increased development potential in what had been an agricultural area, together with the large roadway will increase impervious levels beyond what is normally tolerable for a Use III stream.

According to the State Department of Natural Resources, “The most sensitive fishery resource observed along [the Midcounty Highway master plan alignment] is the Wildcat Branch.”

Other Stream Valley Impacts within the Great Seneca Creek Watershed

Just north of Great Seneca Creek Crossing, along Alternatives 8 and 9, the road is partially built between two subdivisions. Just west of the alignment, the King Tributary flows at the base of the road embankment. These alignments would extend the fill area to within 20-70 feet of the stream for a length of approximately 800-feet.

In some smaller stream reaches, no floodplain is delineated for the stream; however, in many cases, wetlands associated with the stream channel in these areas may perform many functions similar to floodplains. This is the case where the alternatives cross the Dayspring Tributary. Specific impacts to floodplains are identified in the assessment of Alternatives 4, 5, 8, and 9 (Alternative 2 has no identified floodplain impacts). Floodplain disturbance and loss is minimal for Alternative 5, only affecting Route 355 at the existing crossing of Great Seneca Creek.



Impacts associated with Alternative 4 occur where the existing roads would have to be widened as they cross over Cabin Branch and its tributaries, North Creek and its tributaries, and the main stem of Great Seneca Creek. While most of these crossings are relatively perpendicular to the stream, the cumulative total of floodplain lost is high relative to all of the other Alternatives except for Alternative 9, due to the number of stream crossings. The road follows King Tributary, a small tributary of Great Seneca Creek located just north of the Great Seneca Creek crossing, for approximately 800-feet.

Forest and Forest Interior Impacts to Great Seneca Greenway

Forest loss will be significant along Alternatives 8 and 9. In addition to the stream valley forests mentioned earlier, large forested tracts in Great Seneca Creek Park and North Germantown are of particular concern. Two of these forests contain forest interior dwelling habitats that are among the largest in Montgomery County, ranking seventeenth and eighteenth in size. Alternatives 8 and 9 will break these forest tracts into fragments of much lesser ecological value. This is not a loss than can be mitigated in place and will be very difficult to mitigate within the County.

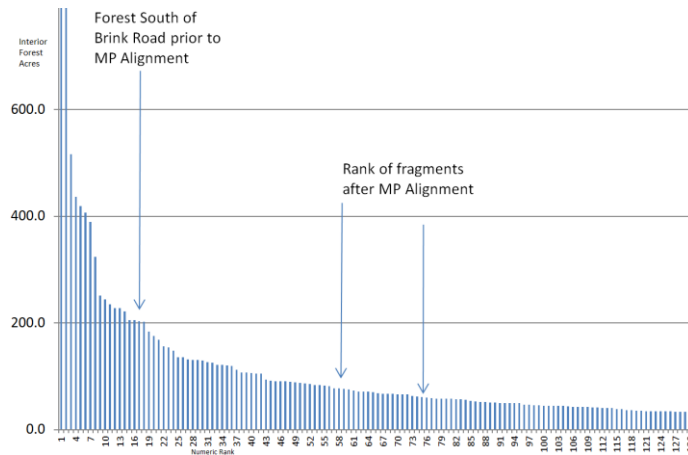


Exhibit demonstrating the extent of interior forest fragmentation possible with the master plan alternative.

Alternative	Floodplain and Riparian Areas	Stream Channel	Forest/ Forest Habitat	Forest Interior	Wetlands	Wildcat Branch SPA	Slopes
Alternative 1	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Alternative 2	L-	L-	L-	n/a	L-	L-	n/a
Alternative 4 Modified	H-	L-	M-	n/a	L-	L-	L-
Alternative 5	L-	L-	L-	n/a	L-	L-	L-
Alternative 8A	M-	M-	H-	H-	H-	H-	H-
Alternative 8B	M-	M-	H-	H-	H-	H-	H-
Alternative 8D	M-	M-	H-	H-	H-	H-	H-
Alternative 9A	H-	H-	H-	H-	H-	H-	H-
Alternative 9B	H-	H-	H-	H-	H-	H-	H-
Alternative 9D	H-	H-	H-	H-	H-	H-	H-

n/a = No new impact or no change from existing conditions
 - L = Low negative impact - M = Medium negative impact - H = High negative impact
 + L = Low positive impact + M = Medium positive impact + H = High positive impact

Impacts to Parkland

(See also Attachment E – Department of Parks Memorandum for more detail on Parkland impacts and Recommendations)

Policy Background/Guidance

Parklands potentially impacted by the Master Plan alignments were purchased between 1968 and 1982. Although these purchases were subsequent to M-83 appearing in various Planning documents, they were purchased prior to the modern environmental movement in the United States. The National Environmental Protection (NEPA) act was passed in 1969, Clean Air Act in 1970, the Maryland Sediment Control Law in 1970, the Clean Water Act in 1972 and the Endangered Species Act in 1973. M-NCPPC adopted the “Guidelines for the Environmental Management of Development in Montgomery County” in 1983. Prior to these landmark policies, the impacts of development on natural resources were not at the forefront of land use decision making. When the latest Germantown Master Plan was under review in 1989, only federally funded projects were required to protect, and mitigate for the impact to, sensitive areas. The mechanism for this is through the NEPA process. In fact, it wasn’t until the Economic Growth Resource Protection Act of 1992 (which lead to Article 66B in the Annotated Code of Maryland) that each County and/or Municipality in Maryland was required to provide for protection of sensitive areas during the planning and development process. Since that time, land use decision making has become more balanced and more attention is paid to sensitive areas and smart growth. This shift was made clear when the Clarksburg Master Plan was created in 1994 and the environmental impacts resulting from the highway were analyzed. The following was included in the Master Plan language: “M-83 will be designed to mitigate its impact on Wildcat Branch in the Great Seneca Creek watershed and its tributaries. The need for M-83 will be reexamined in the context of the next update to the Germantown Master Plan.”

Natural Resource Impacts

When a large linear development – such as a highway – fragments a high quality forest, the resulting impacts are not isolated to the Limits of Disturbance. An ‘edge effect’ occurs creating a microclimate whereby sunlight and wind penetrate to a much greater extent resulting in the drying out the interior and encouraging growth of opportunistic non-native invasive species at the edge. These species then spread and competitively dominate the native understory vegetation. Edge effect also allows an increase in predation, brood parasitism, and a decrease in habitat for forest interior dwelling songbirds and other inhabitants.



North Germantown Biodiversity Area Forest

The North Germantown biodiversity area contains unique aquatic and terrestrial features rarely seen in Montgomery County. It is dominated by steep slopes, rock outcrops, mature high quality mixed oak and oak-hickory forests, and large quantities of springs, seeps and wetlands providing clean, cold, highly

oxygenated water to the bedrock stream running through it. There are eleven plant species listed as rare, and 45 listed as uncommon to this region. Some of the uncommon species found throughout this biodiversity area include: fringe-tree, red choke berry, black ash, royal fern, false hellebore, white turtlehead, primrose leaved violet, wood anemone, dwarf ginseng, turk’s cap lily, several uncommon sedges and at least 3 orchids (little club spur orchid, large whorled pogonia orchid and rattlesnake plantain orchid.) The large interior forest also provides prime habitat for a wide variety of forest interior birds (e.g. scarlet tanager, oven bird, worm eating warbler, Louisiana waterthrush.)



Turk’s cap lily growing on bedrock outcrop

The piedmont region – the dominant geological province in Montgomery County - represents the transitional area between the mountainous Blue Ridge eco-region and the coastal plain. The term ‘Piedmont’ is a French word meaning “foot of the mountains”. Streams typical of this region are characterized by gently rolling topography and incised stream valleys (resulting in a proliferation of riffle, run, and pool habitats.) Although bedrock outcrops do exist in piedmont stream valleys where the overlaying rocky material has eroded, the contiguous, stable, and un-incised stretch of bedrock stream

within the North Germantown Greenway Stream Valley Park is a rarity in the piedmont and the only stretch this long in M-NCPPC parkland. This characteristic provides habitat for a unique community of aquatic and terrestrial flora and fauna found nowhere else in the County.



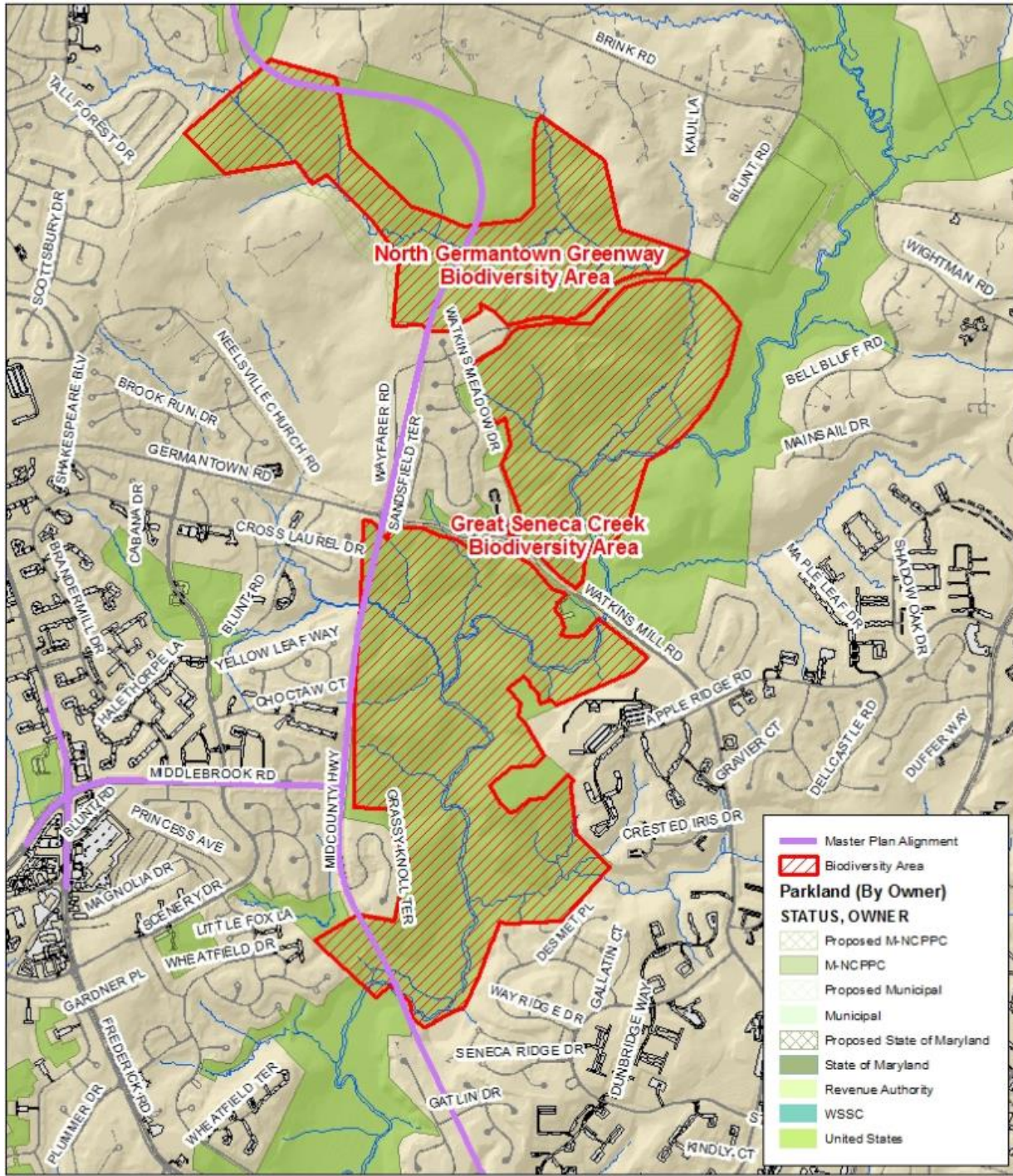
Bedrock Stream with wetland outfall

The Master Plan alignments (8 and 9) with an approximate 180 ft. wide limit of disturbance would have a potentially calamitous impact to resources described above. These alignments bisect three of the largest biodiversity areas in the County (Figure 1).

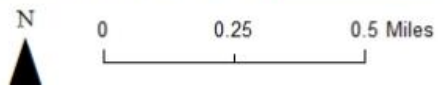
Impacts to Trail Experiences

The Seneca Creek Greenway Trail is a natural surface trail that runs from north beginning at Damascus Recreational Park to South ending at MD 355 where it connects to the natural surface trail in Seneca Creek State Park. The Master Plan alignment affects a contiguous 2.9 mi section of the Seneca Creek Greenway Trail that offers a unique, nearly “wilderness” experience on a trail. The proposed M-83 Master Plan alignment will bisect the trail, reducing the longest uninterrupted section by a mile.. It is also important to note that while the master plan alignment crosses the trail only once, the new highway will be within sight and hearing of half of the northern section of the trail severely compromising the trail users’ experience.

Figure 1: Biodiversity Areas Impacted by the Master Plan Alignments



Map compiled by Amanda Matheny.
 Information from M-NCPPC
 GIS- intended for general
 planning purposes only.



Support for Alignment with Least Amount of Park Impact

Park staff recognize the need to improve the transportation service in the Midcounty area as an important goal. However, the Master Plan alignments have unacceptable impacts to natural and recreational resources. Park staff recommend an alignment that accomplishes the desired traffic improvement, connectivity and mobility while minimizing impacts to M-NCPPC’s park system. Accordingly, the Department of Parks support the Planning Department’s recommendation to further consider and evaluate a transit alternative that incorporates elements of Alternatives 2 and 5 and that the Master Plan alignments be removed from further consideration.

Total M-NCPPC Park Impacts by Built Alignment

	Alternative 4 Modified	Alternative 5	Alternative 8A and 9A	Alternative 8B and 9B	Alternative 8D and 9D
Total Acres of Park Impact	15.46 acres	9,821 sq. ft. (0.22 acres)	40.47 acres	28.45 acres	30.50 acres
Biodiversity Area	0	0	20.65 acres	16.09 acres	16.09 acres
Forest Interior Dwelling Species (FIDS) Habitat	0	0	79.63 acres	62.91 acres	62.91 acres
Impacts to Resource-based Recreation	Medium	Low	High	High	High
Forest	6.52 acres	0	32.03 acres	21.52 acres	22.11 acres
Streams and their buffers	2.96 acres	3,015 sq. ft.	7.47 acres	6.48 acres	7.44 acres
Wetlands and their buffers	2.30 acres	0	1.47 acres	1.59 acres	1.47 acres
Areas of high and moderate prehistoric archaeological potential	11.79 acres	8,285 sq. ft.	31.29 acres	22.23 acres	22.98 acres
Areas of high and moderate historic archaeological potential	28,692 sq. ft.	8,167 sq. ft.	4.13 acres	1.86 acres	1.90 acres
Natural Surface Trail/Hard Surface Trail (including sidewalks)	366.8 ft. / 666.4 ft.	0/0	545 ft./0	545 ft./0	545 ft./0
Managed Open Space	1.11 acres	4,561 sq. ft.	2,474 sq. ft.	2,474 sq. ft.	2,474 sq. ft.

WHITE NUMBERS in RED BOXES denote the largest impact to a specific resource among all alignments, RED NUMBERS in YELLOW BOXES denote the second largest impact
 Alternative 1 – No Build and Alternative 2 – Traffic Flow Adjustments have no park impacts

MITIGATION

Following the Board’s discussion on September 12, 2013, park staff summarizes three alternate mitigation strategies, as follows:

1. No mitigation is required because M-83 is a master planned highway.
 - a. The Board should be aware that the ICC was also a master planned highway and the Department of Parks, in coordination with other State and Federal agencies worked together to develop a mitigation strategy that included park replacement (8.5:1) and a suite of environmental stewardship projects in addition to the NEPA required compensatory mitigation projects.

2. Pursue a strategy of mitigation based on replacement parkland of equal to greater natural, cultural and recreational value.
 - a. The Board should be aware that this strategy will require acquisition of land beyond the study area. More specifically, due to the quality of resources impacted by the Master Plan alignment, staff would likely identify suitable properties within the Legacy Open Space Functional Master Plan approved and adopted by the Montgomery County Planning Board and the County Council.
3. A combination of park replacement, recreational facilities (e.g. trails) and environmental stewardship projects (e.g. stream restoration, wetland creation, and/or stormwater retrofits). The replacement land should be of equal or greater natural, cultural, and recreational value to that lost due to construction of the road.

The Master Plan alignment significantly impacts both natural and recreational facilities; accordingly, staff recommends option 3 as a mitigation strategy.

Once an alignment is approved, staff will use the outcome of the above environmental analysis as the basis for developing a specific mitigation package. This package will be brought back to the Board for review and approval.

Correspondence

A summary of correspondence received on the MCDOT EER is included in Attachment F. Through the week of November 4, 2013, M-NCPPC staff received 242 pieces of correspondence on the various build alternatives, expressing a number of different views on the project. For simplicity, this section of the staff report will generalize public comments and briefly describe the main points from each group. This brief summary is intended to provide an overview of comments received and does not capture the specificity of any single piece of correspondence. Public testimony will continue to be accepted through November 20, 2013. Additionally, there will be an opportunity for public comment at the Planning Board item associated with this staff report.

- Favor Midcounty Highway – Those who provided comments generalized under this group indicated that Midcounty Highway is an essential part of the transportation network and is necessary for the future success of the Clarksburg Community.
- Oppose certain Midcounty Highway Alternatives– Comments generalized under this group indicated that certain alignments are believed to be unacceptable for a variety of reasons. Although these comments opposed one or more specific alignments, many supported a transit alternative or improvements to the MD 355 corridor. These comments are organized sequentially, by alternative:
 - Alternative 4 Modified – Community and historic impacts, including impacts to Prathertown and existing homes constructed before this alignment’s consideration as an alternative to the master plan.
 - Alternative 5 – The City of Gaithersburg opposes this alignment based on assumed impacts to commercial properties along MD 355.
 - Alternative 8 – Environmental impacts, community impacts
 - Alternative 9 – Environmental impacts, community impacts

- Oppose Midcounty Highway – Comments generalized under this group indicated that none of the build alternatives, except those that improve existing roadways, are acceptable. These comments were supported with concerns for environmental, fiscal, and community impacts.

Summary/ Conclusion

While the master plan alignment of Midcounty Highway would provide a new roadway connection within the regional transportation network, many of the alternatives studied in the Draft Environmental Effects Report would have significant impacts to parkland, community and environmental resources. As a result of those impacts and the anticipated County Council adoption of the Planning Board Draft Countywide Transit Corridors Functional Master Plan, planning staff believes further evaluation, including a substantive transit alternative, is warranted before a preferred alternative is selected. In addition, Alternative 4 should be dropped from any further consideration because of significant community impacts and the circuitous nature of the route. Consideration of all other alignments should await the completion of the transit alternative. Decisions about specific parkland mitigation should await a determination of a preferred alternative.

Staff recommends that the Planning Board transmit the following recommendations to MCDOT:

1. Eliminate Alternative 4 Modified from further consideration;
2. Evaluate a transit alternative that includes elements of Bus Rapid Transit (BRT) as described in the soon to be adopted Countywide Transit Corridors Functional Master Plan and incorporates elements of Alternatives 2 and 5 prior to selecting a preferred alternative; and
3. If parkland mitigation is needed, Park staff recommends that the Planning Board support a mitigation strategy that includes a combination of park replacement, recreational facilities (e.g. trails) and environmental stewardship projects (e.g. stream restoration, wetland creation, and/or stormwater retrofits). The replacement land should be of equal or greater natural, cultural, and recreational value to that lost due to construction of the road. This strategy would apply to any alternative selected as a result of this study. Alternatives with lower park impact would require little or no mitigation, whereas alternatives with significant impacts would likely require an extensive mitigation package.

Attachments

1. Attachment A – Master Plan History and Environmental Legislation
2. Attachment B – ARDS Exhibits and MCDOT Letter (11/6) re: follow-up from tour
3. Attachment C – Alternative 2 Roadway Improvements
4. Attachment D – Health Analysis
5. Attachment E – Department of Parks Memorandum
6. Attachment F – Public Comments received through 11/14/13
7. Attachment G - City of Gaithersburg letter