MONTGOMERY COUNTY PLANNING BOARD
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

OFFICE OF THE CHAIRMAN

August 18, 2010

Neil Pedersen
State Highway Administration Transportation
Office of the Administrator
707 North Calvert Street
C-400
Baltimore, MD 21202

RE: Connecticut Avenue (MD185)/Jones Bridge Road/Kensington Parkway Intersection
SHA Contract No. MO5935570

Mandatory Referral No. MR2010808

Dear Mr. Pedersen:

The Planning Board reviewed the Mandatory Referral of this project at our regularly scheduled meeting on July 22, 2010 and disapproved the project because of the reasons listed below.

As with the other intersection projects being pursued in response to the BRAC move of Walter Reed Hospital to the National Naval Medical center campus, we appreciate the State Highway Administration's efforts to mitigate the transportation impacts to this area of the county. We believe, though, that in addition to the concerns raised by our staff in their memo to us (see Enclosure 1), we did not have sufficient information to be able to approve this project. Our concerns are:

1. Our staff received a revised Mandatory Referral submission on July 7th, only one week prior to the due date for a public posting of their memo to us. We believe that the truncated review time was not sufficient for a full review.

2. Phase 3 was deleted from the project under review, but since the intent is to build it as part of the same overall BRAC program, it should have been submitted with Phases 1 and 2.

3. The ultimate SHA proposal requires the Board's approval of a forest conservation easement revision as well as additional park impacts that were not submitted for Mandatory Referral review.

4. The combined SHA and MCDOT agency proposals to address access concerns to the Chevy Chase Valley community that could be adversely affected by the proposed project seem to

prematurely presume M-NCPPC concurrence on a new roadway crossing North Chevy Chase Local Park.

5. The eastern end of the Jones Bridge Road Shared Use Path project proposed by MCDOT is affected by your project as submitted and also by the Phase 3 project. In our approval of MCDOT's project on July 15, 2010, we recommended that the eastern 350 feet be constructed as part of your intersection project, but also that an alignment of the path along the south side of Jones Bridge Road be considered (see Enclosure 2).

6. Providing a good level of landscaping as part of these projects is important in achieving the residents' vision for their community, the fulfillment of the Master Plan's vision for the Green Corridors Policy, and the General Plan's vision for the county (See Enclosure 3, a memo from our Urban Design Division). This is true on Connecticut Avenue as well as the other state highways covered by these projects.

7. While the BRAC coordination process demonstrated extensive community coordination, the public testimony we received revealed that the affected communities and individual property owners at this location do not yet have either an understanding or consensus on how their long-standing access and safety concerns are being addressed. The community's concerns, and ours, are exacerbated by the many moving parts itemized above.

We request a response in 60 days to the issues raised above, including the status of the Section 4(f) evaluation (avoidance, minimization, and mitigation strategies), and how improvements at this intersection will be pursued.

Thank you for your attention to this matter. If you have any questions or comments concerning our review, please do not hesitate to call me at 301-495-4605, or you may call Larry Cole at 301-495-4528.

Sincerely,

Françoise M. Carrier
Chair

Enclosures (3)

MONTGOMERY COUNTY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

MCPB
ITEM NO. 6
7-22-10

July 15, 2010

MEMORANDUM

TO: Montgomery County Planning Board

VIA: Dan Hardy, Chief DKH
Move/Transportation Planning Division

NY Nkosi Yearwood, Senior Planner
Vision/Community-Based Planning

FROM: Larry Cole: 301-495-4528, for Transportation Planning LC

PROJECTS: Old Georgetown Road (MD187)/West Cedar Lane/Oakmont Avenue
SHA Contract No. MO5935370
Mandatory Referral No. MR2010805

Rockville Pike (MD355)/Cedar Lane/West Cedar Lane Intersection
SHA Contract No. MO5935270
Mandatory Referral No. MR2010806

Rockville Pike (MD355)/Center Drive/ Jones Bridge Road Intersection
SHA Contract No. MO5935470
Mandatory Referral No. MR2010807

Connecticut Avenue (MD185)/Jones Bridge Road/Kensington Parkway Intersection
SHA Contract No. MO5935570
Mandatory Referral No. MR2010808

REVIEW TYPE: Mandatory Referral

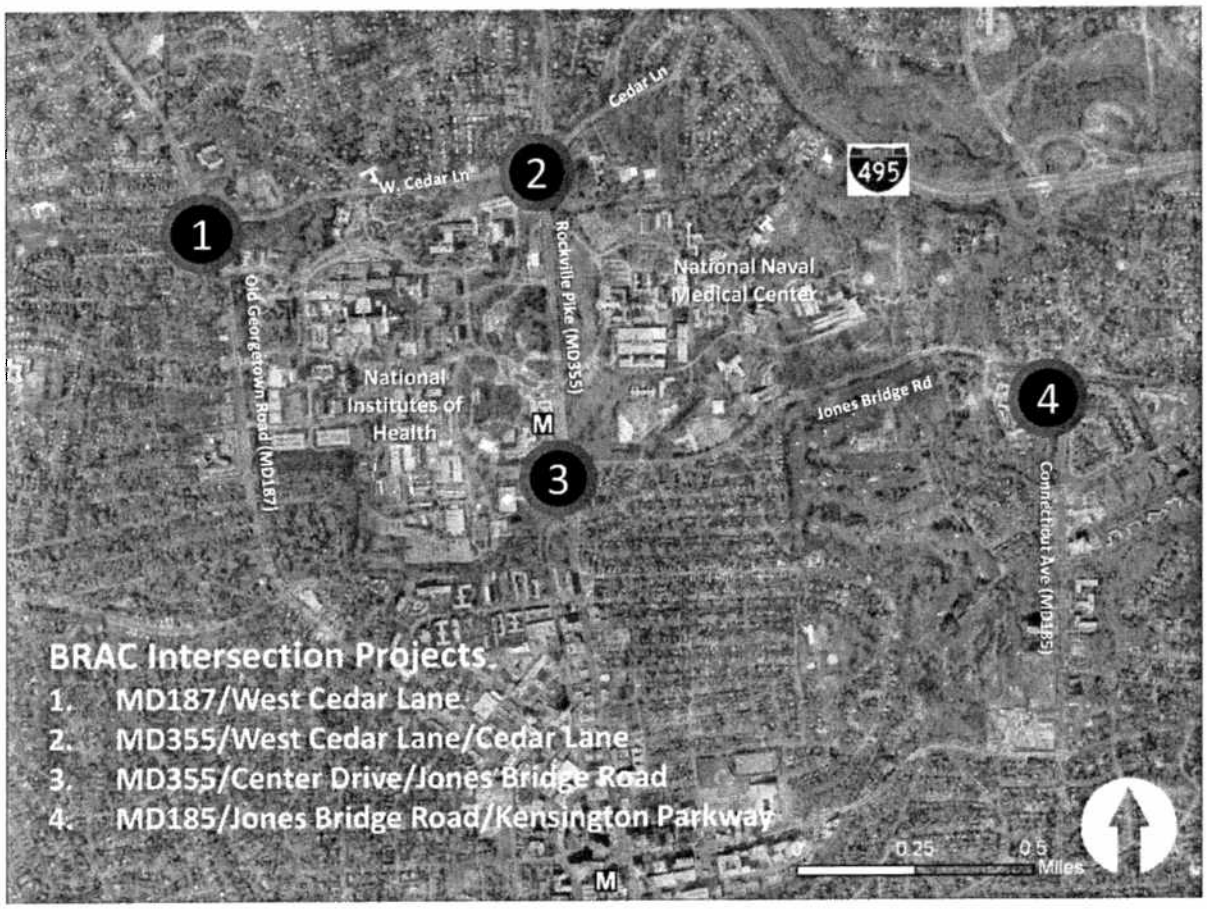
APPLICANT: Maryland State Highway Administration (SHA)

APPLYING FOR: Plan Approval

COMMUNITY-BASED PLANNING TEAM AREA: South Central Transit Corridor

EXECUTIVE SUMMARY

As part of the State's response to the transportation challenges posed by the Base Relocation and Closure (BRAC) move of Walter Reed Army Medical Center from Washington, DC to the National Naval Medical Center (NNMC) by September 2011, SHA proposes to make improvements to four adjacent and nearby intersections. The goal of these projects is to maintain the existing level of service with the influx of BRAC-related traffic as well as the growth in background traffic. Our goal in this memo is to balance the need to address the short-term traffic impacts of the BRAC move with the broader long-term vision of the Bethesda-Chevy Chase Master Plan. These projects should address the needs of pedestrians and bicyclists on an equal footing with other users of the public right-of-way and provide facilities that achieve the Master Plan vision of well-landscaped roads that are compatible with the communities through which they pass.



RECOMMENDATION: Approval of the four subject Mandatory Referral projects with the following comments

General

1. Make additional area bicycle and pedestrian improvements needed to provide safe and convenient access to the NIH and NNMC campuses within the overall BRAC traffic impact area rather than the limits of the individual intersection projects within that area.

2. Revise the proposed handicap ramp designs to meet ADA Best Practices wherever possible, including locating sidewalks and paths behind handicap ramps at intersections to avoid unnecessary grade changes for handicapped persons.

3. Widen proposed sidewalks and shared use paths by two feet where they are located adjacent to the curb.

4. At intersections where SHA believes that a safe ADA-accessible crossing cannot be provided, we recommend that the intersections be signed to prohibit the crossing and to direct pedestrians to the safest crossing.

5. Provide supporting documentation of any final decision not to provide crosswalks on all legs of signalized intersections.

6. Evaluate the lighting along the roads covered by these projects for their adherence to current AASHTO lighting standards and upgrade and augment these facilities where needed.

7. Continue to coordinate with MCDOT on their Countywide Bus Rapid Transit Study and consider the designation of additional through travel lanes as "diamond lanes" for restricted use by buses and high-occupancy vehicles during peak periods along the State highways covered by these projects.

8. Consider providing a four-foot-wide smooth concrete panel as part of the proposed decorative crosswalks to accommodate persons with disabilities.

9. Where large volumes of pedestrians and bikes are expected, consider making the crosswalks wider than ten feet.

10. Provide shade trees between the curb and sidewalk wherever possible. Major deciduous trees are recommended over flowering trees in the ROW to provide a better sense of scale on these wide roads. Utilize species of trees that can accommodate the pruning needed to accommodate overhead utilities.

11. Impervious surfaces in the median should be avoided wherever possible in favor of landscaping. Four-foot-wide medians should be planted with liriope.

12. Landscaping and streetscaping should be provided that ensures community compatibility; reflects the national importance of the National Institutes of Health, the National Naval Medical Center, and the Howard Hughes Medical Institute; and is compatible with the landscaping plans of those institutions.

13. Work with our staff to achieve mutually acceptable revisions to landscaping plans for all four intersections within 60 days or prior to submission of Phase 3 for the MD185/Jones Bridge Road project.

14. Provide responses to all other comments within 60 days.

A. Old Georgetown Road (MD 187)/West Cedar Lane/Oakmont Avenue

1. Complete the North Bethesda Trail by replacing the existing sidewalk along the east side of MD187 with a eight-foot-wide minimum shared use path from Charles Street to Alta Vista Road and by extending the proposed path from Center Drive to Lincoln Street.

2. Provide shade trees on both sides of the North Bethesda Trail extension along NIH's frontage and provide additional planting materials to enhance this facility. Provide shade trees between the curb and sidewalk/path elsewhere on this project.

3. Construct the proposed sidewalk on the west side of MD187 five feet from the curb, except in the immediate vicinity of the northeast corner of the Walter Johnson House.

4. Reconsider providing a six-foot-wide pedestrian refuge on the south leg of MD187 at West Cedar Lane/Oakmont Avenue.

5. Provide a design treatment for the proposed sidewalk at the Walter Johnson House that ensures the structural stability of the house and is attractive.

6. At the proposed MD187 median cut-through for the fire station, use the same gray color for the concrete as the rest of the ashlar slate median treatment.

B. Rockville Pike (MD355)/Cedar Lane/West Cedar Lane

1. Permit the PM peak operation of the proposed half-signal at North Wood Road only if there are no significant additional delays to MD 355 traffic.

2. Provide a crosswalk on the south leg of MD355 at Cedar Lane/West Cedar Lane or provide a pedestrian-actuated signal to stop traffic in both directions at the proposed half-signal at North Wood Road. The bus stops on either side of MD355 at North Wood Road should be eliminated if no safe crossing is provided.

3. Offset the proposed shared use path in the northeast and southwest quadrants of the MD355/ Cedar Lane/West Cedar Lane intersection, as well as the sidewalk in the southeast quadrant, so that they are outside the handicap ramp area. Provide a direct

sidewalk connection between the sidewalks in the northwest quadrant so that the users do not have to traverse ramps to travel around the corner.

4. Provide a continuous ten-foot-wide shared use path along the west side of MD355 between the West Cedar Lane and Jones Bridge Road intersections.

5. Widen the landscape buffer adjacent to the proposed shared use path to eight to eleven feet along the west side of MD355 between Wilson Drive and the NIH Commercial Vehicle Inspection Facility. This can be accomplished by using a 4:1 slope between the path and curb without increasing impacts on NIH property.

6. Develop a landscaping plan in conjunction with NIH and NNMC staff that includes provision of shade trees between the shared use path/sidewalk and curb along both sides of MD355 between the West Cedar Lane and Jones Bridge Road intersections.

7. Provide a replacement for the monumental entrance to the Stone Ridge School that is acceptable to the school.

8. Provide mitigation for the impacts to the park property in the northeast quadrant of the MD355/Cedar Lane intersection as follows:

    a. Design and construct the proposed stormwater facility as a well-landscaped amenity.

    b. Remove non-native invasive plants from the forested area downstream of the proposed pond site to improve the health and appearance of the streamside forest.

    c. Relocate the sanitary sewer line as close to the pond site as feasible to minimize the loss of quality forest.

    d. Reconstruct the shared use path along Cedar Lane from MD355 to Elmhirst Parkway to be offset from the roadway by a five-foot-wide (min.) landscape panel with street trees, outside the immediate area of the culvert under Cedar Lane, where possible while minimizing stream impacts. Where this cannot be accomplished, reconstruct the path to ten feet wide where adjacent to the curb and twelve feet wide where adjacent to both the curb and the culvert parapet.

    e. Obtain a signed Memorandum of Understanding from the Montgomery County Department of Parks prior to commencement of any construction related activities on parkland.

    f. Design and construct a hiker-biker trail bridge over Sligo Creek just downstream of Piney Branch Road by June 30, 2012. As a follow-up to our earlier agreement on SHA's Piney Branch Road (MD320) project.

C. Rockville Pike (MD355)/ Center Drive/Jones Bridge Road Intersection

1. Provide a crosswalk on the north leg of MD355 at Jones Bridge Road.

2. Offset the proposed shared use path in the northwest quadrant of the MD355/Center Drive intersection so that it is outside the handicap ramp area.

3. Provide shade trees between the shared use path/sidewalk and curb along both sides of MD355.

4. Continue to coordinate with MCDOT on the MD355 Crossing Study and any resulting project. If large-scale utility relocation is required for a subsequent project, particularly if the NNMC fence is to be moved, we recommend that the undergrounding of utilities be considered. If the utilities are not undergrounded, the poles should be moved back to provide an eight-foot-wide landscape buffer between the curb and sidewalk.

5. Offset the sidewalk on the traffic island at Glenbrook Parkway at MD355 as well as the ramps on either side of the island by about 12-15 feet from the curb to improve pedestrian safety.

D. Connecticut Avenue (MD185)/Jones Bridge Road/Kensington Parkway

1. Provide a continuous line of street trees between the curb and sidewalk for the length of this project to the extent possible.

2. Signalize the ramp from the Inner Loop of the Capital Beltway to southbound Connecticut Avenue, and consider providing a crosswalk on MD185 at this intersection to link to the sidewalk connection at Inverness Drive in North Chevy Chase.

3. Consider deleting the signal phasing for Kensington Parkway at MD185/Jones Bridge Road during PM peak hours and accommodating southbound parkway traffic at a new signal on MD185 at Montrose Driveway, which should include a marked crosswalk on MD185.

4. If a safe crossing cannot be provided at MD185/Montrose Driveway, the bus stops at this intersection should be moved or eliminated.

5. Provide six-foot-wide median refuges on both legs of Jones Bridge Road at MD185.

6. Construct dual directional ramps at the southeast corner of MD185/Jones Bridge Road and construct the proposed sidewalk behind the ramps, in conformance with ADA Best Practices.

7. Consider widening the proposed sidewalk on the east side of MD185 between Jones Bridge Road and Manor Road to an eight-foot-wide shared use path.

8. Include the construction of a shared use path on the north side of Jones Bridge Road within the limits of work of Phase 3 when that project is submitted for Mandatory Referral, and coordinate the limits of work with MCDOT whose project would extend that path to MD355.

INTRODUCTION

The Planning Board reviewed the BRAC Draft Environmental Impact Statement (EIS) on 1/10/08 and the Final EIS on 5/1/08. The transportation impacts to the Bethesda area caused by this move are minimized in part in the Transportation Management Plan (TMP) for NNMC (reviewed by the Board on 1/15/09), which set forth their goals for encouraging non-SOV commutes for their employees, whose numbers would increase by about 2,500. There will still be a significant impact however from the increase of almost a half-million visitors per year, approximately 1,860 per day. Appendix C-3 provides links to the DEIS, FEIS, and related Planning Board staff packets.

Lt. Governor Anthony Brown, Chair of the Governor's BRAC Subcabinet, has correctly stated that the Bethesda BRAC is unusual in that it is in a highly urban area. As such, it needs a greater attention to detail than other BRAC locations. These intersections along MD355 in particular should reflect an overall design concept that addresses the relationship of the Medical Center "precinct" to the Bethesda CBD and to nearby neighborhoods, from large-scale to pedestrian-scale details.

ORGANIZATION OF STAFF PACKET AND RELATED MATERIALS

The BRAC transportation projects reflect the integration of many federal, state, and local agency plans and policies and the project development process has benefited from extensive stakeholder coordination. The staff packet for the Mandatory Referral reviews for these four SHA intersection projects comprises the following materials:

- This memorandum contains the **staff recommendations** and a summary of concerns common to all four intersections
- Attachments A through D, provided under separate cover, contain **intersection-specific descriptions and staff analyses.**
- Appendices A through J provide additional background material for the BRAC project recommendations. These appendices are available on the Department's BRAC website: http://www.montgomeryplanning.org/transportation/brac/supporting_documents.shtm

MANDATORY REFERRAL OVERVIEW

The four SHA intersection projects are part of a suite of mobility projects contemplated to mitigate the adverse effects of BRAC actions on the area's transportation system. Appendix C-2 summarizes the status of these projects as of June 2010, ranging from the NNMC Transportation Management Plan already underway to both on-campus and off-campus initiatives for transit, bicycle, pedestrian, and roadway improvements.

The following sections of this report summarize staff interests and concerns that informed our recommendations on all four intersection projects:

- The relationship of these projects to other BRAC mobility projects
- The 1990 Bethesda/Chevy Chase Master Plan guidance on multimodal solutions
- The purpose and need for increased roadway mobility
- The synergy between these projects and the Countywide BRT study
- Bicyclist accommodation
- Pedestrian accommodation
- Lighting
- Landscaping
- Community Involvement

Relationship to Other Mobility Projects

The focus of SHA's projects has been primarily to address the needs of drivers, with lesser attention paid to the needs of other users. This is most clearly the case in regard to the limits of each project, which have been set according to the program of improvements needed for the roadway; pedestrian and bike improvements were proposed only within those limits. As indicated in Appendix C-2, the objective of the suite of mobility projects is to provide a complementary and multimodal network. **The linkages among the multiple BRAC mobility projects require continual monitoring and adjustment to ensure that multimodal network concept is retained.** The staff recommendations provide some of those adjustments.

Two particular characteristics stand out. SHA proposes no pedestrian or bicyclist improvements in a 950-foot-long gap between SHA's Cedar Lane and Jones Bridge Road intersection projects on Wisconsin Avenue/Rockville Pike simply because the proposed roadway improvements do not extend this far. MD355 is the main thoroughfare in this area and the gateway to the two federal campuses and the need for a well-designed roadway has been repeatedly stressed by the public. MCDOT has proposed reconstructing the east side sidewalk in this gap. At one point during the planning process, improvements to widen the west side shared use path from eight feet to ten feet in width were considered. This improvement is no longer included in any agency's current implementation plans. This characteristic of the BRAC mitigation projects demonstrates the degree to which all government agencies need to continue their coordination in implementing the County's master plan as well as the federal facility master plans.

A more serious deficiency is the lack of completion of the North Bethesda Trail. This trail is a regional transportation facility intended to connect White Flint and Bethesda. Millions of dollars in County and Federal funds have been spent to construct bridges over I-495 and I-270 for this trail. However, these projects provide the logical opportunity to close two gaps in the trail along Old Georgetown Road. In a May 2009 meeting with SHA, NIH, and MNCPPC staff and with bike advocates from NIH and WABA, SHA agreed that they would build the trail along NIH's frontage to connect with the trail segment along the south side of the campus that leads to the Woodmont Triangle, but the completion is not shown on the plans. The trail improvements have been confined to only what is adjacent to the needed roadway improvements. We recommend the missing trail segments be completed.

Master Plan Guidance

The 1990 Bethesda-Chevy Chase Master Plan is replete with recommendations to minimize roadway widening and to focus our efforts toward improving transit service and pedestrian and bicyclist accommodation as the way to satisfy the transportation needs in this area. Appendix A-2 summarizes this guidance and Appendix A-3 provides site-specific recommendations for the roadways that form the subject intersections.

The demand for vehicular travel to and through Bethesda continues to grow and access to both the federal campuses and the Bethesda CBD is an important consideration for area residents, employees, and visitors. Accommodation of travel demand must be balanced with environmental and design elements that retain the area's desirability as a place to live. The Bethesda/Chevy Chase Master Plan was written with a thorough understanding of that balance. If the Master Plan vision of a true multi-modal transportation system is to be achieved, good facilities providing continuity and connectivity for pedestrians, bicyclists, and transit users must be considered on their own merits and provided where needed.

MDOT/SHA has the primary responsibility for ensuring that the State highways in the area of NNMC can safely accommodate all modes of travel. Good pedestrian and bicyclist accommodation, including accommodation for transit patrons, is essential to ensure the success of the NNMC's Transportation Management Plan for the BRAC.

With the exception of the planned interchange at MD355/Cedar Lane, the master planned roadway network is essentially complete. We believe that the other facilities recommended in the Master Plan for the public right-of-way – pedestrian and bicyclist accommodation, improved transit and streetscaping – should be accomplished as part of ensuring a multimodal approach to access and mobility needs.

Purpose and Need for Increased Roadway Mobility

The BRAC FEIS identified the need for intersection improvements at four locations external to the BRAC campus, each at the junction of a State highway and a County arterial road, where current and proposed mobility conditions are substandard from the perspectives of federal, state, and local policies:

- Old Georgetown Road (MD 187) and Cedar Lane
- Rockville Pike (MD 355) and Cedar Lane
- Rockville Pike (MD 355) and Jones Bridge Road
- Connecticut Avenue (MD 185) and Jones Bridge Road / Kensington Boulevard

While the BRAC move is the genesis of these improvements, NNMC is not the major traffic generator in this area. During the AM peak hour, 18% of vehicles traveling on Rockville Pike in the southbound direction just south of Cedar Lane are headed to the National Naval Medical Center. The mobility improvements will provide benefits that go beyond mere mitigation of the BRAC traffic impacts and provide capacity that will serve planned but unbuilt development in the Bethesda CBD and vicinity.

Given the context of the 1990 Bethesda / Chevy Chase Master Plan recommendations to promote non-SOV travel, the provision of traditional roadway capacity such as intersection widening projects requires substantial concurrence on the need and value for such improvements. This coordination is particularly important in an urban environment where local policies accept greater levels of congestion (the 1600 CLV standard in the Bethesda/Chevy Chase Policy Area reflects LOS E traffic conditions) than is typical of statewide or national guidance. The analysis also requires demonstration of mobility improvement levels beyond the standard letter-grade metrics typically used. Appendix I-1 contains 2009 correspondence between Chairman Hanson and MDOT Secretary Swaim-Staley confirming a mutual desire to focus on and document a comprehensive, multimodal approach to the needs identified in the BRAC EIS process.

One early critique of the intersection projects was that congestion would be at LOS E or LOS F regardless of the intersection design, so why bother? Appendix C-6 summarizes the benefits of the proposed improvements using both critical lane volume (CLV) and vehicular delay metrics. While it remains true that all of the intersections will operate at LOS E or LOS F even with improvements, **the effect of the improvements will be to reduce total peak hour delays by about 45%**, to a level of delay substantially lower than currently experienced.

A second concern can be summarized by the phrase that solving traffic congestion by intersection widening is like solving obesity by loosening one's belt. In an area promoting transit and nonmotorized solutions, will easing roadway congestion create additional travel demand? Such latent demand will be a result of additional transit-oriented development already master-planned for the Bethesda CBD and vicinity. Even the most transit-oriented development generates additional vehicle trips, so planning for this traffic growth is actually a desirable outcome.

A third concern is that the intersection improvements contribute to the promotion of progressive Transportation Demand Management (TDM) actions for both the Bethesda CBD and the federal campuses. The staff recommendations note that additional capacity provided along the state highways can facilitate future transit or HOV priority treatments and the project implementation should be further coordinated with ongoing studies of such treatments.

Finally, while the prevailing traffic flows are heavily influenced by single-occupant vehicles on home-to-work journeys, the mission of the NNMC includes the provision of access to health care. The development and review of the SHA proposals by interagency staff and interested stakeholders considers the fact that not all NNMC clientele have multiple choices of travel mode or time of day.

Bus Rapid Transit (BRT) Study

MCDOT is currently undertaking a countywide BRT study as summarized in Appendix F-1. The current routes under consideration in the area of the proposed projects include all three north-south routes: MD187, MD355, and MD185. Appendix F-2 describes the Priority Corridor Network plan that WMATA created in 2008 to promote faster bus service on the major routes; it includes the following roads in the area of the proposed projects: MD187 north of West Cedar

Lane, West Cedar Lane from MD187 to MD355, and MD355 south of West Cedar Lane. The most significant common element between the two studies is the segment of MD355 fronting the NIH and NNMC campuses.

The Bethesda/Chevy Chase Plan recommends that we consider a widening of MD355 in this segment from six lanes to eight lanes for HOV use beyond the life of the Master Plan. MCDOT's BRT study is not yet complete and there is currently no proposal to implement BRT on any of the above-mentioned roadway segments. However, the proposed roadway widening on MD355 could make it easier to implement dedicated bus lanes in the future and these projects do not appear to create any major impediment to accommodating BRT in the future. The SHA concepts include additional travel lanes (less than one-half mile in length) to carry traffic on the state highways through the two most congested intersections in the study area; MD 355 at Cedar Lane and MD 185 at Jones Bridge Road/Kensington Boulevard. **These additional lanes are on roadway segments that are too short to be useful stand-alone elements of an HOV or BRT network, yet they could be incorporated into a network of priority "diamond lane" (HOV and/or BRT) treatments.**

In early 2010, Department staff facilitated a visioning exercise with the BRAC Implementation Committee, which is discussed in greater detail in Community Involvement below. As part of this visioning exercise (presentation materials in Appendix H-2), we prepared some conceptual diagrams showing the typical cross section that could accommodate different BRT options along MD355 between the two federal campuses, ranging from an operational change to the SHA proposal to a more robust 150-foot-wide boulevard with a center transitway.

The greatest constraints limiting a wider MD355 appear to be the existing Medical Center Metro Station and NIH garage on the west side and the NNMC guard houses (particularly the South Wood Drive gate) on the east side. SHA's subject intersection projects along MD355 would impact NIH property more than that of NNMC, but it is likely that implementation of BRT in this corridor in the future would require more impacts on NNMC's property.

Bicyclist Accommodation

The BRAC mitigation effort has provided the means for both state and county projects to complete a substantial portion of the off-road bicycle network serving the federal campuses. Appendix C-8 summarizes the bike-ped projects as presented by MCDOT to the BIC in March 2010.

In May 2009, we hosted a meeting attended by SHA, MCDOT, NIH, a representative of the NIH bike club, and a Washington Area Bicyclists Association representative. The meeting was prompted by early designs of the four intersection projects that did not include adequate accommodation for pedestrians and bicyclists. **The result of the meeting was that we achieved a consensus that the Master Plan off-road bike accommodation was a higher priority than the on-road bike lanes recommended in SHA's Bicycle Pedestrian Design Guidelines**. A slightly wider curb lane would be provided but the emphasis would be on providing a wider shared use path with a wider landscaped offset from the roadway.

SHA has followed this agreement but with two exceptions. The completion of the North Bethesda Trail is currently not part of these projects, nor is the orphan segment of shared use path between the MD355/Cedar and MD355/Jones Bridge intersections.

The Master Plan shared use paths in this area, plus the construction of a shared use path on Jones Bridge Road that is scheduled to be reviewed by the Board on 7/15/10, would contribute to the robust network of paths described above. It is important that the two links noted above be completed as part of SHA's BRAC projects.

Pedestrian Accommodation

The four intersection projects propose continuous pedestrian access along both sides of all roadways throughout these projects, but the sidewalks or paths are often be too close to, or at, the curb. This location would place pedestrians in close proximity to large volumes of fast-moving vehicles as well as subject them to the annoyance of grit and stormwater runoff being splashed up from the roadway. Also, the seasonal safety hazard of curb-attached sidewalks being blocked by plowed snow was amply demonstrated this year. For two to three weeks after the early February snowstorms, pedestrians were forced to walk in the travel lanes of State highways, most of which serve as transit routes in our urban areas. Placing sidewalks directly adjacent to multi-lane roadways makes clearing the sidewalks by abutting property owners a next-to-impossible task because the snow from three or four travel lanes is piled on top of the normal snowfall. This is a serious safety hazard that must be avoided wherever possible.

In addition to providing safe access for pedestrians along our roads, we also need safe convenient pedestrian access across those roads, particularly with respect to transit stops. In the past, there have been pedestrian fatalities associated with bus patrons headed to or from bus stops. In response over the last several years, MCDOT has relocated many bus stops as well as making other improvements to increase safety. The design of these intersection projects reflects agreement between MNCPPC, SHA, MCDOT and WMATA staff on revisions to improve the connections between bus stops and pedestrian crossings to avoid these problems.

Pedestrians have the right-of-way at unsignalized intersections except where they are legally prohibited from crossing. All locations where pedestrian crossings are allowed are required to be ADA-accessible. But ADA accessibility is sometimes missing on these projects, because a designer doesn't want to encourage people to cross there. Encouragement may be useful for those pedestrians with multiple routes and choices but not for those who need to cross the street at that location (to get to or from their bus stop, for instance).

We have previously commented to SHA that where they believe a safe ADA-accessible crossing cannot be provided, they should sign the intersections to prohibit the crossing and to direct pedestrians to the safest crossing. The SHA policy is to not post such signs at unsignalized intersections and that the lack of a ramp implies a prohibition of the crossing. A legal unmarked crossing remains however, and it's unclear to us how the pedestrian is supposed to know that it's unsafe to cross rather than thinking the agency just hasn't gotten around to putting the ramp in. Users of the public right-of-way depend on guidance from the operating agencies as to the safety of their facilities.

The other major issue in regard to pedestrian accommodation is the ability to take the most direct route across an intersection. When crosswalks are not provided on all legs of a signalized intersection, the pedestrian is often faced with the choice of the increased exposure of crossing the other three legs (as well as the time it take to do so) or by taking a chance and walking across the unmarked leg without any guidance. The latter can be particularly hazardous where split-phase signals are used (where opposing legs of an intersection get a green signal at different times.) Yet, only the smallest of the four subject intersections – MD187/West Cedar Lane – has the full complement of crosswalks included in the design. There may be a benefit of additional throughput for vehicles when crosswalks are eliminated, but it comes at a potential cost to pedestrian accessibility and possibly safety. We recommend that written waivers for the non-provision of these crosswalks be provided so that the trade-offs are known.

The staff focus on pedestrian accommodation for these projects is influenced by the high volume of travelers using all modes along these roads. State highways in Montgomery County have a pedestrian collision rate that is seven times that of County roads on a centerline-mile basis. Pedestrian collisions on State highways are more than twice as likely to result in fatalities as those on County roads. From the perspective of assessing safety problems and countermeasures, a standard measure of exposure is in incidents per vehicle-mile of travel (VMT). State highways have more collisions per mile and more fatalities per collision simply because they have higher traffic volumes and speeds. So high volume, high speed roads are often considered safe as they have lower collision rates when weighted by VMT.

However, from the perspective of a pedestrian, bicyclist, or transit user, the perception of safety on an adjacent roadway doesn't improve simply because there's more traffic on it. In general, the opposite is true; the greater the volume and speed, the greater the perceived safety problem. Wider roads with higher traffic volumes are typically more difficult to cross because there are more potential conflicts during a longer exposure time and fewer safe gaps in traffic to cross at unsignalized intersections. Because of the higher number of collisions on high volume roads and the greater likelihood of a pedestrian fatality on higher speed roads, it is even more important to use best engineering practices when we are making changes to these State roads.

Lighting

Lighting affects the safety of users of the public right-of-way, particularly in more urbanized areas. While signalized intersections on State highways in urban or densely developed suburban areas usually have some lighting, they are most often not designed to achieve a particular lighting level or consistency. Unsignalized intersections often have no lighting, creating potentially hazardous conditions for pedestrians who cross there, even though pedestrians have the right-of-way at such intersections and even though there are many bus stops at such intersections, as noted above. SHA's lighting policy is different from Montgomery County's, which is to provide continuous lighting on such roadways. It also differs from that of the American Association of State Highway and Transportation Officials (AASHTO), which also recommends continuous lighting as well as specific lighting levels at intersections.

Section 2-602 of the Annotated Code of Maryland requires that *"Access to and use of transportation facilities by pedestrians and bicycle riders shall be considered and* ***best***

engineering practices regarding the needs of bicycle riders and pedestrians shall be employed in all phases of transportation planning, including highway design, construction, reconstruction, and repair as well as expansion and improvement of other transportation facilities." (emphasis added)

We are concerned that the variance from AASHTO and from SHA's own Bicycle and Pedestrian Design Guidelines may put SHA's lighting policy at odds with State law. Lighting plans have not yet been submitted for these projects but our experience on other recent projects provides some cause for concern. For example, the MD355/Montrose Parkway interchange project was designed with no lighting for a 900-foot length between the ends of the ramps, which were considered the only "intersections". Because most of this length was on an elevated bridge in a wide right-of-way, the County found that the only lighting sources (vehicle headlights and the moon) were insufficient and spent $1M to provide lighting for pedestrians as an addition to this project. Similarly, the County provided lighting for the state's MD124 widening project now under construction. Lighting should have been considered a basic component of these projects.

During the day, both the pedestrian and the driver can act to avoid a potential collision. At night without adequate lighting, the faster moving party - the driver – is left without the advance information needed to avoid a collision. Even where we have "continuous lighting", the spacing of fixtures is often inadequate to provide the desired level of lighting.

As we widen roads to accommodate more vehicular traffic, we must ensure that we provide adequate, safe facilities for other users of the public right-of-way and ensure that each crossing is as safe as it can be. Lighting along the roads covered by these projects should be evaluated for their adherence to current AASHTO lighting standards and upgraded where needed.

Landscaping

The Master Plan endorses a policy of maintenance and enhancement of Green Corridors along the major highways of the B-CC Master Plan area, intended to stabilize the residential character of the area along major highways:

"Maintain and enhance planting of vegetation along roadsides and in medians of major highway corridors. Much of the green character is already in place in Bethesda-Chevy Chase. Design guidelines include: placing a landscaped buffer between the curb and relocated sidewalks, placing trees in medians and along curbs, screening of front yard parking, and relocating utility poles to allow for optimum tree planting and sidewalks. Visibility for highway safety must also be considered. Protection and enhancement projects will require coordination between the Maryland State Highway Administration and the Montgomery County Department of Transportation, as well as local property owners, municipalities, and civic associations...."

All four proposed intersection projects are deficient in providing adequate landscaping. Taken as a whole, they would move us further away from the recommendation that the State highways be maintained as Green Corridors. They would not provide trees between the curb and sidewalk or shared use path, would remove many existing median trees, and they would make any future

landscaping projects in the right-of-way more difficult because what little space there is would be taken up with additional pavement.

We recommend that street trees be planted between the curb and sidewalks/shared use paths at a minimum. This would still fall short of the goal of getting trees in the median also, but trees along the sides of the road would at least frame the roadway and would provide a more pleasant environment for pedestrians and well as establishing a visual buffer for residents along these major roads.

The section of MD 355 between the NIH and NNMC campuses forms one possible exception to the general rule that street trees should consistently be located between the curb and the sidewalk. In this section, MD 355 is the public access between two federal facilities that each have their own master plans. These campus master plans reflect their facility needs for development and their landscaping components incorporate historic resource, environmental resource, viewshed, and security issues. While staff does not believe that a continuous, tree-lined MD 355 is necessarily inconsistent with the campus plans, we recognize that in this segment, the front lawns of the two federal facilities are a greater contributor to the Green Corridor concept than whatever SHA could accomplish in a limited right-of-way. We therefore urge SHA to work with both federal agencies to develop a landscaping plan for this roadway segment.

There are some additional locations where overhead utilities are an issue in the determination of whether shade trees can be accommodated. The first choice should be to choose species that can accommodate the pruning required to accommodate overhead wires, such as the London plane trees that have been used along East West Highway in Silver Spring. The second choice would be to provide ornamental trees that have a shorter mature height, as long as they do not interfere with sight distance. The third choice would be to provide shrubs and other plant materials between the curb and sidewalk to provide a psychological buffer for pedestrians and improve the appearance of the road. The proposed medians are generally too narrow to support the planting of shade trees, but there are also several locations where the proposed median is only four feet wide, for which SHA has proposed to provide an ashlar slate textured concrete. Because of the general lack of adequate landscaping on these projects, we believe that extraordinary measures should be taken to provide landscaping on these narrow medians. Normally, medians six feet or greater are planted with grass and those less than six feet wide are paved. The median of Connecticut Avenue (MD185) in Chevy Chase south of East West Highway (MD410) provides a good example of where the high-quality of this residential area prompted SHA to plant a very narrow median with liriope. This fairly tough plant has survived well over the years and helps to break up visually what would be a large expanse of pavement in a fine neighborhood. We recommend that a similar treatment be provided on these projects where the median width is at least four feet wide.

SHA has proposed to provide decorative crosswalks on MD187 and MD355, reflecting their recognition of the need for a good streetscape treatment around the two federal campuses. We appreciate the inclusion of decorative crosswalks, but have two comments on the design. First, consideration should be given to the needs of the handicapped and the desire to have a bump-free path. Last year, the County Council took action to restrict the use of brick sidewalks because of

concerns raised by the Commission of People with Disabilities. To address this issue, we recommend that SHA consider providing a four-foot-wide smooth concrete panel in the middle or on the stop bar side of the proposed crosswalk to accommodate those who are more sensitive to the vibrations. Where large volumes of pedestrians are expected, SHA should consider making the crosswalks wider than ten feet.

In general, the staff comments on landscaping reflect the fact that in the need to focus on engineering and property/resource impacts, less attention has yet been directed toward landscaping details. Landscaped buffers with trees are needed on these wide roadways and a greater than usual effort is needed on the part of SHA to maximize opportunities to plant trees in constrained rights-of-way. We recommend that SHA continue to work with us to develop a mutually acceptable landscaping plan for each of the intersections.

Community Involvement

SHA has worked extensively with the community. They've made four presentations to the BRAC Implementation Committee and had more than forty other meetings with citizen groups and stakeholders. During the past year they have also presented these projects to the County Council, held a public workshop at Bethesda/Chevy Chase High School, made a presentation to the Washington Council of Governments on January 14, 2010, and discussed the projects with the Board during their roundtable discussion on January 21, 2010.

The BRAC Implementation Committee (BIC) is comprised of almost three dozen stakeholders that have met monthly over the last three-and-a-half years to provide feedback to the agencies implementing the BRAC and the transportation response. SHA and MDOT have regularly participated in these meetings.

On February 16, 2010, M-NCPPC staff led a visioning exercise with the BRAC Implementation Committee (BIC) in order to develop a vision for the BRAC planning area. The vision agreed upon by the BIC was that "**BRAC is a catalyst to build, create, and focus a world class center of medical excellence that preserves, enhances and respects the existing communities.**" In addition, the committee created a list of 35 attributes that they believed embodied a successful community. Members of the committee were then asked to vote on these attributes. The top three attributes were:

1. Brand community as world class medical center where community can live, work, play, innovate, learn and heal
2. Ensure safe and reasonable access to existing communities
3. Ensure connections beyond BRAC projects

During a second exercise on April 27, 2010, members created a list of attributes that they would like to see included in the BRAC projects. The top attributes were:

1. Safe access
2. Systemwide interconnectedness
3. Sustainable vision for CBD and environs
4. Doesn't preclude long term objectives

Similar interests have been expressed by correspondence from the Coalition of Military Medical Center Neighbors, representing several area civic associations, in Appendix I-3. **We have benefited from the information and guidance obtained through these exercises in the review of this project and the preparation of our recommendations.**

Conclusion

We have worked extensively with SHA, MCDOT, NNMC, and NIH to continue to refine the design of these intersections and the other transportation projects in the State and County's response to the BRAC move. We have also met regularly with the members of the BRAC Implementation Committee, who have provided valued insight on their community's qualities and challenges, and the potential benefits and impacts of the proposed projects.

The physical constraints affecting these projects are extremely high, as reflected in the Appendix C-2 project cost estimate of $110M. SHA has addressed both the short-term impact of the BRAC move as well as some of the chronic traffic congestion in this area.

We cannot accommodate all the people that would choose to travel to and through this area in single-occupant vehicles. To try to do so would reduce the desirability of this area by dividing neighborhoods with wide roadways that are devoid of landscaping and pedestrian facilities; such non-auto facilities would then only be used by those with no other choice. The Bethesda/Chevy Chase Master Plan takes the view that we should essentially stay with the road system we now have, but improve other modes of travel – pedestrian, bicycle, and transit – so that alternatives to the congested roadways exist, and that our public rights-of-way be well-landscaped to enhance the communities through which these major roads pass. **The key is to find the right balance between demand management, multimodal mobility, and community compatibility and insist on design excellence for projects that fit that balance.**

While the focus of these four projects is on vehicular mobility, we find that they do, within the context of the suite of other mobility projects and with the consideration of our staff recommendations, fulfill the priorities of the BRAC Implementation Committee to ensure safe access and connectivity to a world class center of medical excellence while promoting sustainable, long-range goals for the vitality of the communities that they serve.

ATTACHMENT D

PROJECT: Connecticut Avenue (MD185)/Jones Bridge Road/Kensington Parkway Intersection
SHA Contract No. MO5935570
Mandatory Referral No. MR2010808

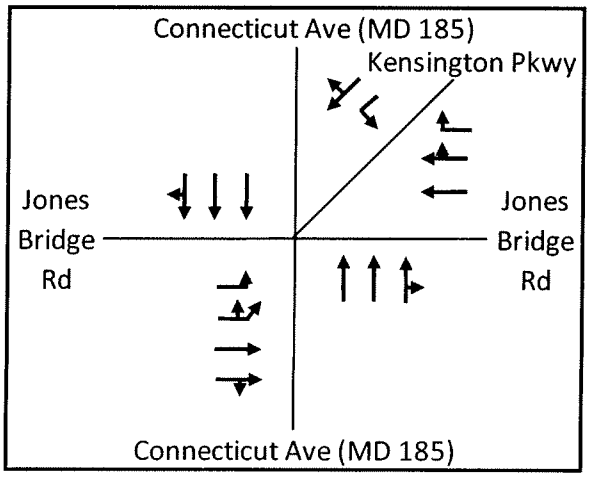
PROJECT DESCRIPTION

The current project would construct Phases 1 and 2 of the ultimate intersection project, extending along Connecticut Avenue (MD185) from just north of Manor Road to just south of the Capital Beltway (I-495). The current project would:

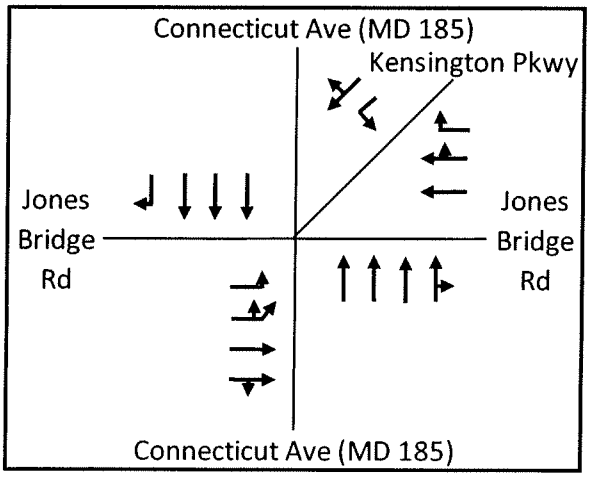
- Construct a continuous southbound right turn lane on MD185 from the ramp from the Inner Loop to Jones Bridge Road
- Remove the free-right-turn island in the northwest corner of the MD185/Jones Bridge Road intersection
- Construct an additional northbound through lane on MD185 from 300 feet north of Manor Road to the Capital Beltway
- Construct a new sidewalk along the east side of MD185 from Montrose Driveway to Inverness Drive at the northbound ramp to the Inner Loop
- Reconstruct the majority of the sidewalks within the limits of work to be offset from the curb
- Make the intersections within the limits of work ADA-compliant
- Construct a stormwater management facility at the end of the Inner Loop ramp to southbound MD185.

Plans for this project may be found on our website at:
http://www.montgomeryplanning.org/transportation/brac/brac6.shtm

Existing Configuration



Proposed Configuration



PROJECT PHASING

SHA proposes to construct improvements to this intersection in three phases. The July 2010 Mandatory Referral review is for Phases 1 and 2, which would construct improvements along MD 185 in the southbound (Phase 1) and northbound (Phase 2) directions, respectively. No changes would be made to the Jones Bridge Road approaches in Phases 1 and 2.
Phase 3 of the proposed project includes improvements along Jones Bridge Road, includubgan additional left turn lane on eastbound Jones Bridge Road and replacing the westbound through-right lane with separate through and right lanes. The Mandatory Referral review originially covered all three phases, but SHA removed Phase 3 from the project as of June 30. Phase 3 includes significant construction on Jones Bridge Road, impacting the significant boundary walls of both the Chevy Chase Park community in the southeast quadrant of the intersection and Howard Hughes Medical Institute (HHMI) in the southwest quadrant. Once the exact impacts to the Forest Conservation easement on HHMI property, as well as the mitigation for these impacts, have been resolved, we anticipate the Phase 3 will be submitted as a Mandatory Referral for review in fall 2010.

FINDINGS

Master Plan

Connecticut Avenue (MD185): The project is **not consistent** with the Master Plan in regard to the number of northbound through lanes and the provision of landscaping.

SHA's Bicycle and Pedestrian Design Guidelines (MD185 only)

Intersection: No crosswalk would be provided on the north leg of the MD185/Jones Bridge Road/Kensington Parkway intersection.

No handicap ramps are shown to cross MD185 at Parsons Road, Montrose Driveway, or Woodlawn Avenue.

Sidewalk: Continuous sidewalks would be provided within the project limits.

On-road bike accommodation: The recommended bike lanes would not be provided but the curb lanes would be slightly wider.

Landscape buffers: The landscape buffers proposed are generally substandard.

American Association of State Highway and Transportation Officials (AASHTO)

Several segments of the proposed sidewalk do not meet the AASHTO recommendation to be two feet wider where immediately adjacent to the roadway curb.

AASHTO recommends that a pedestrian refuge island be considered where the crossing distance is greater than 60 feet. The crossing distance of the west and east legs of Jones Bridge Road would be 90 feet and 75 feet respectively.

American with Disabilities Act (ADA)

The project meets the minimum accommodation required by ADA, but does not meet ADA Best Practices in the following respects:

- Sidewalks and paths are located too close to the curb at intersection corners, requiring users to negotiate multiple ramps to travel along the sidewalk around the corner.

- Sidewalks are located adjacent to the curb at driveways, requiring users to negotiate multiple ramps to travel along the sidewalk.

No ADA-accessible crossings of MD185 are proposed at Parsons Road, Montrose Driveway, or Woodlawn Avenue.

STAFF ANALYSIS

Roadway

The proposed roadway widening would accommodate the addition of two lanes, a continuous southbound right turn lane from the Beltway Inner Loop ramp to Jones Bridge Road and an additional northbound through lane from just north of Manor Road to the Inner Loop. The impacts of the proposed improvements on traffic operations are summarized below:

	Without Improvements			With Improvements[1]		
Location	**CLV AM/(PM)**	**Delay per vehicle AM/(PM) in seconds**	**Weekday Peak Hour Delay (hours)**	**CLV AM/(PM)**	**Delay per vehicle AM/(PM) in seconds**	**Weekday Peak Hour Delay (hours)**
185/Jones Bridge	1860 / (1955)	146 / (194)	677	1503 / (1755)	85 / (148)	467

Master Plan Consistency Regarding Functional Classification and Number of Lanes

Auxiliary lanes are normally not considered when assessing whether a project is consistent with the Master Plan. The proposed southbound continuous right turn lane is a very long auxiliary lane at 1,400 feet, but we believe that it is consistent with the Master Plan.

The proposed additional northbound through lane is almost a half-mile long. We believe that this is too long to be considered an auxiliary lane and that it is inconsistent with what the Master Plan recommends. In addition, the construction of this lane would prompt the removal of the existing median with street trees that ***is*** recommended in the Master Plan.

If the northbound lane is not built however, most of the traffic benefit in the evening rush hour would not be gained. The existing 194 second PM delay per vehicle shown in the table above would be reduced only to 190 seconds rather than 148 seconds. In essence, the improvements along MD 185 (Phases 1 and 2) save all travelers about one minute of delay and the improvements along Jones Bridge Road (Phase 3) save all travelers another minute of delay.

We recommend therefore that the Board approve the widening of Connecticut Avenue but with an eye toward our programmed functional master plan amendment work program element in FY 12 that incorporates future transit and carpool priority treatments, and with reservations about the visual impact to the community, which is addressed further in the following paragraphs.

[1] For Phases 1, 2, and 3 combined, the "With Improvements" CLV during the AM peak hour would be 1452 and during the PM peak hour would be 1508. The PM peak period delay per vehicle would be reduced to 89 seconds and the weekday peak hour delay would be reduced to 327 hours.

The 1990 Bethesda / Chevy Chase Master Plan recommends Connecticut Avenue as a six-lane major highway. Whereas the Master Plan contemplates the potential for future widening for HOV-priority treatments on Rockville Pike, no such similar language exists for Connecticut Avenue.

The recommendation for a given number of lanes applies to through lanes, not turning lanes or other auxiliary lanes at intersections. In fact, all master plans adopted during the past eight years have had a footnote in the street and highway classification table stating that "these are the number of planned through lanes for each segment, not including lanes for turning, parking, acceleration, or other purposes auxiliary to through travel".

In some cases, lanes that carry traffic through an intersection are appropriately considered as auxiliary lanes when they exist solely to move people and goods past a given choke point, as opposed to through a community. This situation is most common near freeway interchanges; examples where a six-lane major highway has had a fourth through lane added at an intersection include Colesville Road (US 29) through Four Corners, Old Georgetown Road at the I-270 spurs, and MD 355 at Shady Grove Road near I-370.

The distribution of traffic using the Capital Beltway headed to the federal NIH and NNMC campuses, the Bethesda Central Business District, and other destinations in Montgomery County and Washington DC means that the section of Connecticut Avenue north of Jones Bridge Road will, for the foreseeable future, carry much higher traffic volumes than the portion south of Jones Bridge Road. As described below, many alternatives to an eight-lane portion of Connecticut Avenue were considered by the BRAC Implementation Committee during the past two years.

Staff finds that while the eight-lane concept is undesirable from a placemaking perspective, there is a need to improve access and mobility at this location and that the SHA concept is the best option available that balances access, mobility and safety needs with design and community compatibility needs. It is tempting to either recommend deletion of the eight-lane section or deferral for further study of additional alternatives. However, staff finds it is unlikely that subsequent study would match either the two-year effort of design and outreach undertaken as part of the BRAC effort, or find a better solution.

As is the case with the additional lanes on MD 355, staff finds that further operational analysis would be valuable to determine whether and how the additional capacity on Connecticut Avenue could ultimately facilitate bus and carpool priority treatments. Appendix J-2 describes analysis staff undertook along MD 355 indicating person-throughput could be enhanced by HOV-2 lane designation. Similar information is not yet available for MD 185; staff will pursue this effort analysis in conjunction with the Countywide BRT study and analysis during the next year to be developed for the Chevy Chase Lake Sector Plan technical efforts. The provision of additional capacity along MD 185 between Jones Bridge Road and the Capital Beltway will help facilitate access to the Chevy Chase Lake area, but the need for improvements exists today, regardless of what development may be contemplated in the future Chevy Chase Lake Sector Plan.

Staff recommends that this eight lane connection between the Beltway ramps and Jones Bridge Road should not be considered just an auxiliary lane, but rather that:

- Continued investigation of the potential for diamond-lane (HOV and/or BRT) priority treatments be examined as part of the Countywide BRT study and in conjunction with the long-range forecasting being prepared for the Chevy Chase Lake Sector Plan, and that
- The eight-lane section, with appropriate HOV or BRT priority treatments, be incorporated into the Department's Master Plan of Highways amendment scheduled for prearation during FY 12.

Alternative concepts to improve access and mobility

Inner Loop ramp: During our coordination with SHA on the design of this project over the past year, we suggested that they consider signalizing the ramp from the Inner Loop to southbound MD185, similar to what they did several years ago at Georgia Avenue (MD97). The MD97 operation stops southbound traffic so that the ramp traffic can exit the Beltway and eliminates the conflicts between ramp traffic that wants to move left to continue on southbound MD97 and traffic on southbound MD97 that wants to turn right to the shopping center in Montgomery Hills, to Seminary Lane, or to Sixteenth Street. SHA has some concerns with potential stacking on the Beltway, but the MD97 change has proved very beneficial, as has the same treatment at ramp from the Inner Loop to southbound MD355.

Our goal in recommending this change was to reduce the need for the continuous southbound right-turn lane so that impacts to adjacent properties would be reduced. SHA found that installing a signal would not provide a comparable traffic benefit, but would be beneficial if the number of lanes on the ramp were increased to two or three. We believe that we should take advantage of the opportunity to provide a traffic benefit that does not adversely impact the community and recommend that this signal be installed.

Reversible Lane: The need for four through lanes is only present during the peak period and in the peak direction. One engineering solution would be to consider the type of reversible lane system currently employed along Georgia Avenue and Colesville Road serving the Silver Spring CBD. A reversible lane solution would improve efficiency in reducing the amount of impervious pavement and direct impacts to adjacent properties. However, a reversible lane solution would create adverse effects on design and community compatibility, particularly considering the amount of signing and turning restrictions needed to ensure safe operations.

Kensington Parkway Partial Closure: This road is the fifth leg of a very busy intersection. While the traffic volumes on Kensington Parkway are relatively low, the inclusion of a separate signal phase to accommodate southbound traffic decreases the efficiency of the intersection as a whole. We suggested to SHA that they consider eliminating this phase by prohibiting southbound Kensington Parkway traffic entering the intersection Traffic would instead turn right onto Montrose Driveway then turn onto MD 185 at a new signal. A preliminary look at this alternative has shown that it would provide a benefit at the Jones Bridge Road intersection, although there are concerns about cut-through traffic entering the Chevy Chase Valley neighborhood and the reconstruction of the east leg of Montrose Driveway that would required. We recommend continuing consideration of this alternative if it is shown to be feasible, at least during the peak periods.

Spring Valley Road Connection: The Master Plan recommends that special attention be paid to the intersection of Jones Bridge Road and Spring Valley Road to improve access to Chevy Chase Valley neighborhood in the northwest quadrant of the MD185/ Jones Bridge Road intersection. Residents here say that access to their neighborhood is already very difficult from both roads and many fear that it will become more difficult after the BRAC actions, regardless of the proposed improvements.

The continuous southbound right-turn lane on MD185 will facilitate traffic flow onto Jones Bridge Road, which may reduce available gaps for residents exiting the Chevy Chase Valley community.

In response to this concern, MCDOT offered to conduct a neighborhood traffic study to look at four options for alleviating this problem. The alternatives, developed with input from the community and our staff, were:

1. Installation of a new traffic signal at MD185/Montrose Driveway, as noted above.
2. Installation of a new traffic signal at Jones Bridge Road/Spring Valley Road.
3. Construction of a new road extending through North Chevy Chase Local Park from the western terminus of Montrose Driveway or Woodlawn Road to Jones Bridge Road at Platt Ridge Drive, a signalized intersection.
4. Construction of a new road from the western terminus of Montrose Driveway or Woodlawn Road to the existing park road in North Chevy Chase Local Park.

DOT received copies of the final report on Friday, July 9, and we received a copy MCDOT's report on July 13, 2010. We have not had sufficient time to review the study thoroughly before the due date of this memo, but their consultant's recommendation is to build Alternative 3 as a permanent solution, but to construct Alternative 2 as a timely interim solution. MCDOT has indicated that they will be installing the signal prior to SHA's construction and they would like to meet with our staff and the Planning Board to discuss the proposed new road on parkland sometime this fall. We believe that the new signal will address the problem for the time being, but DOT concurs with the Consultant's finding that the signal at this location, is not a permanent solution. These proposals are designed to improve local residential access for a small community, not to disperse traffic already on Jones Bridge Road or MD 185. Staff therefore finds that none of the Spring Valley Road connections would have a substantial effect on the need for, or performance of, the proposed improvements at the MD 185/Jones Bridge intersection.

Pedestrian Accommodation

The proposed changes to the Connecticut Avenue (MD185)/Jones Bridge Road/Kensington Parkway intersection of would affect pedestrians in two major ways. First, there would be an additional northbound travel lane to cross on the south leg of MD185 and the median would be narrowed by about nine feet, although the remaining six-foot-wide pedestrian refuge would be adequate. Second, the free-right-turn in the northwest quadrant of the intersection would be eliminated. This would increase the crossing distance by about sixteen feet and about five

seconds at the normal walking speed, although it would also decrease the speed at which vehicles turn the corner.

The crossing distance of the west and east legs of Jones Bridge Road would be 90 feet and 75 feet respectively, both of which exceed the point at which AASHTO recommends that a median pedestrian refuge be considered. We recommend that the median ends be widened to six feet so that refuges can be provided.

The sidewalk and ramp at the southeast corner of the intersection are proposed to be rebuilt immediately adjacent to the curb with a single ramp at the apex. We recommend that directional ramps be built for each of the two crosswalks and that the proposed sidewalk be built behind the ramps, in conformance with ADA Best Practices.

The existing sidewalks along MD185 are generally immediately adjacent to the roadway curb within the 2500-foot project length. Most of the sidewalk would be reconstructed to be offset from the curb as part of this project, but about 800 feet on the east side of the road would remain attached to the curb. It appears that some additional areas could be offset from the curb within the scope of the project, but SHA's design goes a long way toward correcting this problem. We recommend that where curb-attached sidewalk are unavoidable, they should be constructed two feet wider to provide a greater measure of pedestrian safety and comfort per AASHTO recommendations.

The Master Plan recommends that the safety of the pedestrian crossing at Montrose Driveway be improved and that signalization be considered. If such a signal was installed, it would provide a great improvement in the safety of transit riders and other pedestrians, including the communities on either side of Connecticut Avenue. Currently, there is no signalized crossing in the 0.7-mile distance between Beach Drive and Jones Bridge Road. No crosswalk exists or is proposed on the north leg of MD185 at the Jones Bridge Road intersection. To cross between North Chevy Chase and the Chevy Chase Recreation Association swim and tennis club on Spring Valley Road, one has to cross the other four legs of the intersection (Kensington Pkwy, the east leg of Jones Bridge Road, the south leg of Connecticut Avenue, and Jones Bridge again.)

SHA is considering whether to stripe a crosswalk at the Montrose Driveway location, which is also a bus stop. If they determine that it is unsafe to cross at this intersection, the bus stops should be moved or eliminated and the intersection should be posted to prohibit the crossing.

If a safe crosswalk cannot be provided at Montrose Driveway, there is another possibility to provide a safe crossing of Connecticut Avenue between Beach Drive and Jones Bridge Road. If the recommended traffic signal is installed at the Inner Loop ramp, it would be possible to provide a crosswalk between the Inner Loop ramp termini to northbound and southbound MD185. Such a crosswalk would be at the sidewalk connection to Inverness Drive and could provide this needed link between the Chevy Chase Valley and North Chevy Chase neighborhoods. The stop bar that now exists for northbound MD185 traffic would have to be moved south and control traffic now bound for the Inner Loop also.

Off-Road Bicyclist Accommodation

A short segment of the shared use path proposed by MCDOT along the north side of Jones Bridge overlaps the Phase 3 work of this intersection project and we believe that it would best be done as part of SHA's work since the Phase 3 relocation of the Jones Bridge curb line to the south would result in more room to create a better facility.

Unlike the other major north-south State highways affected by the BRAC projects, no Master Plan bike facilities are planned on MD185, so the lack of bike lanes that are recommended in SHA's guidelines would result in very little accommodation for bicyclists on MD185. An on-road bike route along Kensington Parkway would accommodate north-south bike traffic north of Jones Bridge Road, but there is no provision south of Jones Bridge Road.

As part of the preliminary work on the Chevy Chase Lake Sector Plan, the east side of MD185 between Jones Bridge Road and Manor Road has been identified as a possible location of a shared use path to address this deficiency. While the slope here may make construction more difficult, there is the horizontal space even with SHA's proposed additional northbound through lane to accommodate such a path and we recommend that this path be considered.

Landscaping

The 1990 B-CC Master Plan recommended that the then-existing concrete median be removed and replaced with a 14-foot-wide grass median; the language in the Plan supported purchasing four homes on the east side on MD185 in order to achieve the creation of the median and the construction of a sidewalk on the east side. As part of the Green Corridors Policy, the Plan also recommended that trees be planted in the median and on both sides of the road. A wider median was created with street trees but no trees were planted on the sides of the road.

This project was originally designed to accomplish the additional northbound lane by taking homes of the east side, which would have been consistent with the Plan. After receiving public comment, SHA decided against taking the homes reducing the 14- to 15-foot wide median with trees to a six-foot-wide grass median, which is too narrow to plant trees. Most sidewalks within the project limits would be offset from the roadway by a landscape panel, but in most cases it would be only three feet wide, too narrow to plant trees.

A total of ten trees would be planted in the median at the ends of the project that would be unaffected by the roadway widening, but more than two dozen median trees would be removed. The only other tree planting would be around the proposed stormwater management facility at the end of the Beltway ramp from the Inner Loop.

In summary, there would be a significant diminishment of the Connecticut Avenue streetscape with the proposed project, falling even further behind the Master Plan vision. SHA should maximize the opportunities to plant trees between the curb and sidewalk, utilizing appropriate species that can tolerate the pruning needed to accommodate overhead utilities. Where it is not possible to plant trees between the curb and sidewalk, shade trees should be planted behind the sidewalk and additional plant materials, such as shrubs, should be provided to achieve a well-

landscaped roadway. We support an amendment to the Master Plan number of lanes to address mobility needs, but Master Plan goals of community compatibility and attractive roadways still need to be addressed.

Environmental Guidelines

The project is within the Lower Rock Creek watershed, a USE I-P designation. The Countywide Stream Protection Strategy (CSPS) rates this watershed as poor.

The project (Phase I and Phase II) has no grading or other land disturbing activities within streams, wetlands, or environmental buffers. However, Phase 3, which is not included in this Mandatory Referral, includes significant construction on Jones Bridge Road, and would impact the Forest Conservation easement on Howard Hughes Medical Institute property. Phase 3 will come back before the Planning Board as a separate Mandatory Referral with a proposal to address the Forest Conservation easement.

Forest Conservation

The project is exempt from submission of a forest conservation plan. A forest conservation exemption (#42010205E) was granted under the provisions of Section 22A-5(f) as "a governmental project reviewed for forest conservation purposes by the State Department of Natural Resources under the Code of Maryland Regulations". The exemption was confirmed on May 20, 2010.

Historic

No County-listed historic properties are within the project limits.

Park Impacts

This project has only a minimal impact on Park property, about 15 square feet of acquisition.

Enclosure 2

MONTGOMERY COUNTY PLANNING BOARD
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

OFFICE OF THE CHAIRMAN

August 20, 2010

Mr. Arthur Holmes, Jr., Director
Montgomery County Department of Transportation
101 Monroe Street, 10th floor
Rockville, MD 20850

RE: Jones Bridge Road Shared Use Path
From Wisconsin Avenue (MD355) to Connecticut Avenue (MD185)
CIP No. 501300
Mandatory Referral No. MR2010809

Dear Mr. Holmes:

At our regularly scheduled meeting on July 15, 2010, the Planning Board reviewed and approved the Mandatory Referral for this project with the following comments.

Some of the numbered comments made below address specific locations along the route of the proposed shared use path on the north side of Jones Bridge Road. As a general comment, we recommend that you explore the possibility of moving the eastern half of the proposed shared use path to the south side of the road, crossing at the proposed traffic signal at NNMC's University Road gate. This recommendation is made with the objective of minimizing impacts to residents along the north side of Jones Bridge Road at the east end of the project, while still providing a shared use path of adequate width to accommodate users safely. Our detailed comments are:

1. Widen the proposed segments of five-foot-wide shared use path to eight feet minimum.

2. The proposed path adjacent to the curb should be ten feet wide.

3. Widen the proposed landscape panel to greater than five feet where possible.

4. At the western project limit, extend the proposed path about 60 feet and realign the first 300 feet of the proposed path to be behind the utility pole to provide a greater offset from the road.

5. Provide handicap ramps at all bus stops and at all intersections within the project limits where safe pedestrian crossings of Jones Bridge Road can be accommodated. Where a safe intersection crossing cannot be provided, signs should be posted to prohibit the crossing and direct pedestrians to the nearest safe crossing.

6. Locate the proposed path behind handicap ramps wherever possible.

7. Provide shade trees between the path and curb wherever possible. Where it is not possible to achieve this, provide trees behind the path and provide other plant materials between the path and curb.

8. Provide a ten-foot-wide path in front of the home and driveway at 4003 Jones Mill Road.

9. Delete the easternmost 350 feet of proposed path from the project if SHA agrees to construct it as part of their MD185/Jones Bridge Road intersection project.

10. Continue to coordinate with SHA on their work within your project limits.

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

Sincerely,

Françoise M. Carrier
Chair

MONTGOMERY COUNTY PLANNING DEPARTMENT

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

July 7, 2010

TO: Larry Cole, Planner Coordinator
Move/Transportation Division

VIA: John Carter, Chief JC
Urban Design and Preservation Division

FROM: Margaret K. Rifkin, Planner Coordinator/Urban Designer MKR

SUBJECT: BRAC Intersections:

MD 187/West Cedar Lane/Oakmont Avenue –	MR No. 2010805
MD 355/West Cedar Lane/Cedar Lane –	MR No. 2010806
MD 355/Jones Bridge Road –	MR No. 2010807
MD 185/Jones Bridge Road/Kensington Parkway –	MR No. 2010808

STAFF RECOMMENDATION

This proposal is not consistent with the recommendations in the relevant approved and adopted Montgomery County plans. The following comments recommend actions to achieve consistency and should be transmitted to the State Highway Administration:

1. Provide consistency with the General Plan Refinement (1992), North Bethesda/Garrett Park Master Plan (1992/1994/1997), Bethesda-Chevy Chase Master Plan (1990) and White Flint Sector Plan (2010). Provide a design for Wisconsin Avenue as a landscaped boulevard that contributes to this community's unique character and identity. Include transit in the design, coordinated with the on-going County Bus Rapid Transit Study. Include at a minimum, all of Wisconsin Avenue between the southern and northern limits of disturbance for the intersection projects.

2. Provide consistency with the Bethesda-Chevy Chase Master Plan "Green Corridors Policy" which applies to major highways, in the design of the improvements on Wisconsin Avenue, Connecticut Avenue and Old Georgetown Road.

   a. Allow space for tree panels for large shade trees, sidewalks and bikeways as well as for landscaped medians. Where it is not possible to provide a median of adequate size for trees, provide other types of plant materials.

   b. Locate trees between the curb and the sidewalk on each Green Corridor street and on the legs of cross streets at intersections.

3. Provide for bikeways and pedestrian ways per the Bethesda-Chevy Chase Master Plan, as follows:

   a. Wisconsin Avenue/Cedar Lane Intersection: Widen the pedestrian path at the stormwater management pond.

   b. Connecticut Avenue/Jones Bridge Road/Kensington Parkway Intersection: Reduce the width of Jones Bridge Road and preserve all the existing woodland and stone retaining wall in the southwest quadrant per the Green Corridors Policy and recommendations for that site on page 43 of the plan.

   c. Old Georgetown Road/West Cedar Lane Intersection: Extend the North Bethesda Trolley Trail from Center Lane to Lincoln Street and provide a landscaped setback from the curb with street trees per the Green Corridors Policy.

   d. Wisconsin Avenue/Jones Bridge Road Intersection: On the west side of **Wisconsin Avenue separate pedestrians and bicyclists from moving traffic by** widening the path and place bollards along the curb. In the northeast quadrant on Jones Bridge Road, to allow for optimum tree planting and sidewalks per the Green Corridors Policy, relocate one utility pole, remove the concrete island and reduce the radius of the curb.

ANALYSIS

Comment #1 Provide a design for Wisconsin Avenue

While there is no single document with a design concept for all of Wisconsin Avenue, the series of individual plans that cover its length form the framework for one. This framework should be used to promote the unique design and character of each of the communities along the length, consistent with the General Plan Refinement (Approved and Adopted 1992):

"*Objective 1: Recognize, reinforce, or create each community's unique character and identity... (General Plan Refinement page 76)*

G. Require attractive transportation system elements and surroundings to reinforce community identity.

H. Improve pedestrian and bike routes by streetscape enhancement and road design guidelines....

J. Require transportation system elements to instill a sense of location, orientation, and destination at an appropriate scale for their functions."

Several of the BRAC projects are in the same community. They affect a significant portion of Wisconsin Avenue within that community. There should be a design for Wisconsin Avenue that shows how each of these BRAC projects will contribute to a final unified design that will

reinforce the community's unique character and identity. This will ensure consistency with the objectives of the General Plan Refinement.

Comment # 2: Provide consistency with the Green Corridors Policy

The Bethesda –Chevy Chase Master Plan establishes a vision for Wisconsin Avenue, Old Georgetown Road and Connecticut Avenue of walkable, attractive green major highways with street trees along the curb, setback sidewalks and tree shaded medians. As follows:

3.11 Green Corridors Policy (Bethesda-Chevy Chase Master Plan page 30)

"The Master Plan endorses a policy of maintenance and enhancement of Green Corridors along the major highways of the Planning Areas. The policy is recommended to stabilize the residential character of the area along major highways.... Following is the Green Corridors policy for the Bethesda-Chevy Chase Area:

Maintain and enhance planting of vegetation along roadsides and in medians of major highway corridors. Much of the green character is already in place in Bethesda-Chevy Chase. Design guidelines include: placing a landscaped buffer between the curb and relocated sidewalks, placing trees in medians and along curbs, screening of front yard parking, and relocating utility poles to allow for optimum tree planting and sidewalks. Visibility for highway safety must also be considered. Protection and enhancement projects will require coordination between the Maryland State Highway Administration and the Montgomery County Department of Transportation, as well as local property owners, municipalities, and civic associations...."

Comment #3: Provide for bikeways and pedestrian ways by revising the designs.

The Plan states improving access and safety for pedestrians and bicyclists is one of its objectives:

"2.13 Transportation Goals and Objectives

5. Achieve a significant shift of new travel from auto use to transit and other mobility alternatives.

c. Provide improved access and safety for pedestrians and bicyclists." (Bethesda-Chevy Chase Master Plan, page 19)

The "Green Corridors Policy" recommends how that should best be done on the major highways. The Plan also informs the particulars of the design for the Connecticut Avenue/Jones Bridge Road Intersection. It states, concerning the Howard Hughes complex in the southwest quadrant:

"- Site design should preserve significant areas of trees... and improve pedestrian access in the area...Limit coverage to 20% building; 50% land...Rationale...Enhance and protect the wooded character of the site."(Page 43)

The Plan recommends a maximum 48 foot "ultimate pavement width" for Jones Bridge Road at that location (p 127). Therefore, in order to achieve consistency with the Plan, the design should be revised to preserve the woodland and stone retaining wall and reduce the pavement width that is currently shown.

The redesign of the Old Georgetown Road/West Cedar Lane Intersection should include an extension of the North Bethesda Trolley Trail from Center Lane to Lincoln Street designed to include a landscaped buffer and street trees per the "Green Corridors Policy." The Plan states:

4.13 Bicycle and Pedestrian Paths (page 102)

This Plan endorses the expansion of pedestrian paths and bikeways to form a network linking residential neighborhoods with public facilities…Sidewalks should … be provided along roadways in the following priority:

1. Major Highway
2. Arterials
3. Primary streets.

Old Georgetown Road is a major highway and therefore is a priority location for the expansion of sidewalks and bikeways per the master plan.