

FINAL

**MCPB
Item # 7
7/15/04**

To: Montgomery County Planning Board

From: ICC Internal Review Team (301/495-4545)

Date: July 8, 2004

Subject: Intercounty Connector Study Planning Board Briefing # 4:

- Community Impacts
- Historic and Archeological Impacts
- Park Stewardship and 4(f)
- Bikeway/Trail Routes
- Activities Update

Recommendations:

- Transmit comments to SHA on community and historic property impacts.
- Direct staff on evaluating candidate replacement parkland.

Our purpose for this agenda item is to inform the Planning Board about the status of the study, staff's participation in the study process and how we intend to approach the issue of community impacts, historical and archeological impacts, and making sure that the park system receives land of equivalent natural resource value if and when a build alternative is selected. We await the state's complete evaluation of both environmental and social impacts before making recommendations on alternatives. We will have the opportunity at the Planning Board meeting to hear from citizens, so that issues of concern can be identified for the states consideration and any direction that the Board may wish to give staff. Representatives from the state will there listening and participating in this item.

Following the format of our prior presentations, this briefing highlights our roles in the ICC Environmental Impact Study: as constituent property owners/ stewards of the Montgomery County park system; and as participants and commenting agency.

This staff memorandum is divided into several parts. The first portion will address community, historic and archeological impacts. The staff suggests that this be followed by a 15 minute presentation by the State Highway Administration highlighting their work in these areas, and thereafter, a two hour opportunity for public testimony. The second portion of the memorandum describes candidate parkland replacement using our *Environmental Comparison Methodology* and a brief commentary on bikeway routes. The staff will then provide a brief update on the DEIS and important study activities since the last Planning Board briefing. The last portion of the presentation provides for any additional state comments.

I. COMMUNITY IMPACTS (15 minutes)

Staff has reviewed the 300' scale maps in detail and has used them to prepare a detailed review. See attachment # 1.

The following items summarize the comments from the review of this stage of the planning for the ICC.

1. In Corridor 1, grading for the highway at the interchanges and storm water management facilities extends beyond the 300-foot right-of-way.
2. Corridor 2 changes the function of the MD 28/198 connector into a limited access six-lane highway (the ICC).
3. In the Corridor 2, the Spencerville D Option is the least disruptive of the four sub-options because it does not cross MD 198, and it does not cut off local road access. In the Corridor 2 Option, the combinations of the three groups, Spencerville, Burtonsville and Fairland, have differing impacts depending on which options are connected. A combined alignment of Spencerville D, Burtonsville B, and Fairland B has the fewest impacts of any other combination in terms of property acquisition, displacements and the least amount of relocation of local roads, including MD 198.
4. SHA should include an option for an urban-diamond interchange (or a similar alternative with a smaller footprint) for the Georgia Avenue interchange so that the ICC crosses MD 97 below grade rather than above grade.
5. Corridor 2 has significant community impacts in the southeast quadrant of Olney. The most severe community impact is located in the area north of Norbeck Road and east of Georgia Avenue. The southeast quadrant has low densities, a large-lot development pattern, and sensitive headwaters.
6. Option C in the Upper Rock Creek area passes through two existing communities, Cashell Estates and Winters Run. This route would effectively

eliminate Cashell Estates, one of the oldest residential communities in the planning area, as an intact residential neighborhood.

7. Connections between communities need to be substantially improved and incorporated into the final ICC alignment. Specifically, bikeways have been omitted in the Shady Grove and Fairland areas.
8. The impact of noise from the ICC should be incorporated as soon as possible in the design of the ICC. As an example, communities along Shady Grove Road are already impacted by roadway noise and there are land use and grading constraints to constructing noise barriers.

Additionally, staff is providing comments on the following technical report.

- **PRELIMINARY DRAFT SOCIOECONOMIC AND LAND USE TECHNICAL REPORT**

Since the last Planning Board briefing, the community has had the opportunity to attend any of three SHA informational update meetings. These meetings offered direct opportunity to view detailed 300' scale maps of the alternatives retained for detailed study, as well as other maps and information, and to ask questions directly to SHA staff and their consultants. Our staff review today will focus on the information conveyed by these 300' scale maps. We will also have SHA present a summary of their current work on the technical report. It is our understanding that this report will not be published as a stand alone document, but rather the information it generates will be part of the foundation of the EIS.

Staff has reviewed the preliminary draft report and sent comments by letter to SHA and their consultants. Generally, the report was relatively thorough and the consultants did a reasonably good job including most of the obvious impacts. The text is a dry, dispassionate recounting of the structures to be taken and roads modified. The lack of a road profile (elevations) may have obscured some of the impacts, which may become more evident as the study proceeds. In addition to the many technical comments regarding specific facts, references, and clarifications, the staff recommended the following changes:

- Analyze the impact of the various combinations of options in the eastern part of the county more carefully to assure that readers can truly assess the comprehensive impact of routes composed of various options.
- Update the text with regard to the proposed major change of land use in the Shady Grove Master Plan Public Hearing Draft.
- Include the impact of the various alignments on developments approved but not built.
- Describe in more depth the larger effects on communities where roads are cut off or rerouted, numbers of homes and businesses taken or disrupted, and historical connections severed.

- Describe how Corridor 2 would affect community character and Smart Growth on the large scale.
- Respond to the question, how would the selection of this route affect the public's reliance on local land use and transportation planning?

Beyond the comments already sent to the state by letter, additional areas for consideration follow. Opportunity for public comment with all the support material available will occur after release of the Draft EIS this fall.

Environmental Justice

It is federal policy to avoid disproportionate negative impacts to concentrations of minority and low income populations.

The preliminary draft report identifies the environmental justice population within the study area based upon two criteria – minority population comprising at least 50 percent of the U.S. Census block and/or a block group having more than 10 percent of its population at or below the U.S. Census poverty threshold. Since standards for demarcating environmental justice populations are not promulgated at the federal level, these thresholds were crafted by SHA from several sources, including the Council on Environmental Quality (CEQ), DOT, and Maryland State Highway Administration (SHA) policies and procedures.

The SHA adopted a 50 percent minority threshold rather than referencing the average percentage of minorities living in the study area (42 percent) to be consistent with DOT and SHA guidelines. The report stated that the 50 percent mark captured not all, but most, of the blocks that would have met the lower minority threshold of 42 percent.

The SHA chose a standard for defining a low income area that identifies census blocks that have 10 percent or more of households below the poverty line. The average percentage of household below the poverty line in the study area is 5 percent.

Utilizing poverty status data to define low income may not be the best indicator of the low-income population in Montgomery County, because the national poverty threshold with its relatively low levels of income does not necessarily capture the extent of low-income population living in a high cost area, but rather, may underestimate the population that the environmental justice program seeks to address. Income levels associated with the federal poverty standards are at such relatively low levels (e.g., \$17,603 for a family of four in 2000) that it, for the most part, precludes the feasibility of a household residing in one of the nation's highest cost of living areas. The draft report mentions the U.S. Department of Housing and Urban Development's (HUD's) standard for determining low-income households based upon a percentage of the area's median income. Adopting a federal standard that incorporates the local income distributions may prove to be a better estimate of the low-income population within the bounds of the ICC study area. HUD defines 'very low-income' generally as 50 percent of the area's median family and 'extremely low-income' as 30 percent of the same median. By HUD's definition, the amount for an extremely low-income, four person household in

Montgomery County is \$25,210 -- \$7,600 greater than the federal poverty status threshold. Approximately, 8 percent of the county's families had incomes below \$25,000 in 2000. Expanding the definition of low-income population would most likely increase the number of block groups designated as an environmental justice population area within the ICC study.

It is unclear how many U.S. Census blocks and block groups met SHA's environmental justice population criteria, but the preliminary report includes a two and a half page table listing locations of the environmental justice populations. Only seven environmental justice areas as identified by SHA are within or directly adjacent to the footprint of the proposed ICC build corridors. The draft report found no potential for disproportionately high and adverse effects to the environmental justice population due to residential or business displacements. The mainline of Corridor 1 is the only section where SHA identified potential residential displacements that were designated environmental justice population. SHA found that even though half of these displacements are from minority areas, the pattern of displacement did not constitute a disproportionately high and adverse effect on any single community.

As currently defined, the SHA's environmental justice inventory may be a low-end scenario of minority and low-income populations living in the ICC study area. Expanding the definition to address low-income rather than poverty status may be a more accurate reflection of those populations that the environmental justice initiative is seeking to protect. Staff suggests that consideration be given to exploring alternate measures of low income such as using HUD's definitions, which may prove a better representation of the low-income population living in the ICC study area.

II. HISTORIC AND ARCHEOLOGICAL IMPACTS (15 minutes)

Even though historic resources are to be explicitly avoided under Section 4(f) review, it is also covered by separate federal legislation. Historic and archeological resources are evaluated under Section 106 of the National Historic Preservation Act of 1966, 16 U.S.C. 470. In the National Historic Preservation Act (NHPA), Congress established a comprehensive program to preserve the historical and cultural foundations of the nation as a living part of community life. Section 106 of NHPA is crucial to that program, because it requires consideration of historic preservation in the multitude of federal actions that take place nationwide. Section 106 requires federal agencies to consider the effects of their actions on historic properties and provide the Advisory Council on Historic Preservation (AChP) an opportunity to comment on federal projects prior to implementation. Section 106 review encourages, but does not mandate, preservation. Sometimes there is no way for a needed project to proceed without harming historic properties. Section 106 review does, however, ensure that preservation values are factored into federal agency planning and decisions. Because of Section 106, federal agencies must assume responsibility for the consequences of their actions on historic properties and be publicly accountable for their decisions.

Federal agencies are responsible for initiating Section 106 review, most of which takes place between the agency and state. Appointed by the governor, the State Historic

Preservation Officer (SHPO) coordinates the state's historic preservation program and consults with agencies during Section 106 review. Federal agencies must:

- Determine if Section 106 of NHPA applies to a given project and if so, initiate the review;
- Gather information to decide which properties in the project area are listed or eligible for the National Register of Historic Places;
- Determine how historic properties might be affected;
- Explore alternatives to avoid or reduce harm to historic properties; and
- Reach agreement with the SHPO (and the ACHP in some cases) on measures to deal with any adverse effects or obtain advisory comments from the ACHP, which are sent to the head of the agency.

The ICC will be a federally funded highway; however, the MD State Highway Administration (SHA) is taking the lead on the project and is following the Section 106 procedures. SHA contracted with an architectural history consulting firm – EHT Traceries – to evaluate all older properties within the area of potential effect (APE) and to determine which properties are eligible for the National Register of Historic Places. They have also prepared an *Impact Assessment Technical Report* that discusses the impacts on the identified resources and/or their settings.

It is important to note that SHA (in conjunction with the Maryland Historical Trust) may determine that properties that have not been locally designated on the Montgomery County *Master Plan for Historic Preservation* are actually eligible for the National Register. If they are eligible for the National Register, then they must be addressed through the Section 106 process. Thus, there are more historic standing structures identified in the SHA's *Impacts Assessment Technical Report* than there are historic sites identified in the county's master plans.

Many variations on alignment options for Corridor 1 and Corridor 2 have been evaluated. To summarize the results for standing structures, Corridor 1 will have adverse impacts to:

- Cashell Farm, and
- White's Hardware Store and Residence.

ICC Corridor 1 avoids the majority of the historic properties in the APE.

Corridor 2 will have adverse impacts to:

- Alloway Site and Cemetery (all Spencerville Options);
- Amersley;
- Issac Burton Jr. House (Fairland Option A);
- Cashell Farm;
- Columbia Primitive Baptist church;
- Drayton (all Spencerville Options);
- Edgewood II (all Spencerville Options);
- Free Methodist Church Camp Meeting Ground (Burtonsville Option A);
- Holland Store and James Holland House;
- Llewellyn Fields;

- White's Hardware Store and Residence (Norbeck Options A and B);
- Willow Grove (Norbeck Option B); and
- Woodburn (Norbeck Option B).

Staff is concerned about the impact of Corridor 2 on all the resources listed above. In particular, staff is concerned about construction of Spencerville Option C at Edgewood II, construction of Burtonsville Option A near the Free Methodist Church Camp Meeting Ground, and construction of Norbeck Option B at Willow Grove. Comments on some of the most adversely impacted properties are as follows:

Drayton: Staff feels that the National Register boundary for Drayton should be expanded to include not only the 4.13 acres on which the house and outbuildings are located, but also the 7.6 acre Parcel A which is open space between the house and Spencerville Road.



View from field in front of house

The open field, which is in agricultural use, is an essential vista to the Drayton House. At the time of designation on the *Master Plan for Historic Preservation*, the house was located on 64 acres, which was subsequently subdivided; however, language in the master plan noted that “Although there is potential for a reduction of the environmental setting of this house for subdivision, it would be vital to maintain the vista to Drayton from the Spencerville Road (MD 198). This open space would preserve this country house’s historic spatial relationship to the road.”

This property is not affected by Corridor 1; however, Corridor 2 has some potentially major impacts. Corridor 2, Spencerville A is approximately 1,100 feet away from the currently identified National Register boundary (staff’s suggestion for an expanded boundary would change this distance). Corridor 2, Spencerville B is approximately 700 feet away from the currently identified National Register boundary and would require a noise barrier. Corridor 2, Spencerville C is approximately 400 feet from the currently identified National Register boundary and would probably require acquisition of the field in front of the historic house, which provides its context and vista. In addition, a noise barrier would be required. Corridor 2, Spencerville D would be approximately 700 feet north of the historic property.

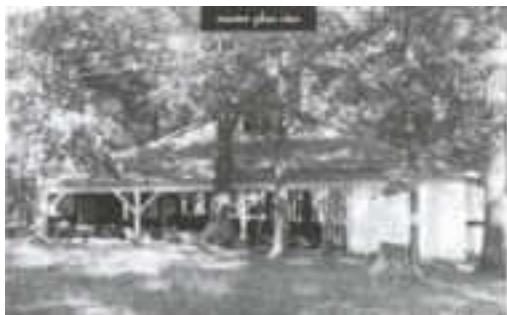
Edgewood II: This is an extremely important early Quaker home (circa 1858), which has been designated on the Montgomery County *Master Plan for Historic Preservation* for its association with the Stabler family. Set within a grove of hardwood trees from which the house obtained its name, the structure and its outbuildings comprise one of eastern Montgomery County's most significant Quaker farmsteads.



View from Oak Hill Road

This property is not affected by Corridor 1; however, Corridor 2 has some potentially major impacts. Corridor 2, Spencerville A brings the highway 1,000 feet from the southern edge of the property and would require installation of a noise barrier. Corridor 2, Spencerville B brings the highway 200-400 feet from the southern edge of the property and would require installation of a noise barrier. Corridor 2, Spencerville C would require approximately 3.5 acres of right-of-way acquisition from the 7.45 acre site. The highway would be 100 feet from the front façade of the house and would render the house virtually unusable. Corridor 2, Spencerville D would bring the highway 1,000 to the north of the Edgewood II property. There would be modern houses between the highway and the historic house.

Free Methodist Church Camp Meeting Ground: The Spencerville Camp Meeting was constructed between 1930 and 1945. It is the only functioning camp meeting in Montgomery County and is probably one of the only one's left in the state of Maryland. It is identified on the Locational Atlas and Index of Historic Sites and consists of a wooden tabernacle and a semi-circular enclave of one-room cabins.



Tabernacle building

This property is not affected by Corridor 1; however, Corridor 2 has some potentially major impacts. Corridor 2, Burtonsville A would pass approximately 50 feet to the south

of the property. The highway would have major visual and sound impact, as would the bridge over Peach Orchard Road. The property would become unusable as a religious retreat and is not easily adaptable to other uses. Corridor 2, Burtonsville B would bring the highway approximately 1,000 feet to the north of the property.

Willow Grove: This master plan site was built in several phases beginning in 1850 and is an excellent example of Quaker architecture. It was built by Roger Brooke VI.

This property is affected by Corridor 1 and Corridor 2. Corridor 1 will be approximately 600 feet south of the property and does not require a noise barrier. Corridor 2, Norbeck A will bring the highway approximately 350 feet south of the property and a noise barrier will be required. Corridor 2, Norbeck B would have the most adverse impact in that it would bring the highway approximately 100 feet to the north of the historic property, and would cut the traditional access to the house, necessitating construction of a bridge crossing over the ICC to access the property, or a new approach road from the east.

Also refer to attachment # 2 for additional information.

Archaeological Resources

To evaluate archaeological resources along the ICC corridors, SHA contracted with the Louis Berger Group to undertake site identification and evaluation studies. Using standard predictive models to review the project corridors, the Group identified 465 acres as having potential to contain archaeological sites. Of this total, 133 acres had been previously surveyed; 202 acres were surveyed by the Group for the current project; and 130 acres remain to be surveyed (94 acres of corridor 2 and 36 acres of corridor 1).

While the corridor common to both alignments yielded 6 archaeological sites (3 prehistoric and 3 historical), corridor 1 contained 12 sites (7 prehistoric, 2 historical and 3 unknown), and corridor 2 had 9 sites (3 prehistoric, 5 historical and 1 unknown).

Almost all the historical sites were typical 19th/20th century farmsteads. Most of the identified prehistoric sites were ubiquitous, small, briefly occupied, upland camps, usually identified as “lithic scatters”. Because such prehistoric sites are difficult to date, hard to identify technologically, and seldom analyzed in a regional context, they tend not to be considered eligible for the National Register of Historic Places. However, these are the prehistoric sites that are most common to our Piedmont Uplands and found throughout Montgomery County.

Of all the sites inventoried, the prehistoric, quartz, Halestone Hill Quarry Site (18MO593) was the most prolific, yielding some 3,000 artifacts per unit. While such artifact counts are not unusual in a quarry setting, the site did yield some tools and a number of spear points dating to the Middle and Late Archaic, Hunting and Gathering, Periods (6500 B.C. to 1000 B.C.). Because it is somewhat unusual to find diagnostic indicators at a quarry and because it is the largest such prehistoric quarry that has so far

been recorded in Montgomery County, I suggest that further on-site investigations might lead to a reassessment of its National Register Eligibility.

III. PARKLAND IMPACTS ANALYSIS

Park property in the context of the NEPA study process is evaluated under Section 4(f) of the Transportation Act of 1966, 49 U.S.C. 303. As owners and stewards of the park system, we have a major role in evaluating the impacts of the ICC on these resources. This will include avoidance, minimization, mitigation and replacement, such that there remains a park system at least as complete as preceded the project. To a great extent, the discussion of avoidance has already been addressed through the development of the Alternates Retained for Detailed Study, or ARDS. **None of the build options within Corridor 1 or Corridor 2 result in a corridor that avoids parklands entirely**, yet the retention of many optional alignments is due, in part, to the parkland avoidance requirements of NEPA. Staff is participating with SHA on discussions of impacts minimization through a number of features including continuing refinements to vertical alignments and the definition of bridge and culvert treatments, to minimize impacts to the many natural and community resources, and stormwater management systems, both within and outside our park system.

Mitigation actions can take several forms, depending upon the resource being impacted. In early 2004, staff provided SHA a summary of the important natural and cultural resources in our potentially affected parklands. Staff has also provided SHA with our GIS layers that define the resources more quantitatively. From a process perspective, a discussion of mitigation and replacement is premature until the minimization options have been exhausted and the impacts of the resulting designs have been described both quantitatively and qualitatively. Nevertheless, staff wants to be ahead of the state on this issue.

One of the key impacts of any build alternative will be a loss of parkland. Per our 1989 MOU, SHA is required to acquire and transfer to M-NCPPC replacement parklands that provide equivalent acreage, economic value, natural resource value, and recreational value as the parkland required to construct the ICC. The determination of acreage and economic value is relatively straightforward. The discussion of recreational value requires some judgment, but in the ICC corridors, is generally related to the constructive use issues related to park trails as opposed to formal active use areas.

At our last briefing, staff presented to the Planning Board a proposed *Environmental Comparison Methodology* that used interior forest as a surrogate for a greater variety of natural resource impacts including “constructive use” of parkland not taken directly. Staff found that sufficient interior forest exists within the county identified future parkland to mitigate the impacts of either Corridor 1 or 2.

Staff now requests that the Planning Board direct the use of interior forest as the primary measure for evaluating the natural resource equivalency for

replacement parkland in fulfillment of the 1989 Memorandum of Understanding with the State Highway Administration.

IV. BIKEWAY/TRAIL ROUTES

Staff has continued to advocate for study of a continuous shared-use (Class I) path within the ICC right-of-way per the County Council's request, but has also considered alternative proposals put forward by the SHA and other members of the study team. One creative and attractive proposal includes conversion of temporary construction haul roads to bike paths upon project completion. Staff understands the SHA concern that a bikeway parallel to the ICC will have a marginal, yet measurable, increase in capital cost and environmental impacts. SHA staff has expressed concern that those increased quantifiable impacts that occur within parkland will affect the qualitative review of parkland impacts under Section 4(f). Based on guidance from the Planning Board, staff will continue to push for a continuous bike path even in the face of increased environmental impacts to parkland. Staff has requested that SHA provide information on the incremental impacts associated with the bike path to facilitate the discussion.

At the time of the first Planning Board January 22 briefing, SHA was unable to provide justification for excluding the path from certain segments of the ICC right-of-way (ROW). Since then, SHA has identified the problem areas and is working on documentation of their concerns. In addition, SHA committed at its June 22, 2004 ICC briefing to the County Council's T&E Committee, to provide detailed documentation of the problem areas and justification for excluding the path from these problem areas as M-NCPPC and DPW&T staff have repeatedly requested. This analysis is needed in order to allow staff to better understand SHA concerns, consider their findings, and help find solutions to address or circumvent the problem areas.

SHA is still developing the ultimate alignment of their proposed ICC bikeway, however, during the public informational meetings in June, SHA was showing the Corridor 1 ICC bikeway as follows (west to east, starting at Shady Grove Metrorail station; route will be presented graphically at the Planning Board briefing):

- Shared use path (formerly called Class I bikeway) along Redland Road
- Shared use path along Needwood Road
- Shared use path in ICC ROW
- Shared use path along Emory Lane
- Shared use path along Georgia Avenue
- Shared use path in ICC ROW
- Bike lanes on Layhill Road/MD 182 and bike lanes on Bonifant Road or a shared use path in ICC ROW or some combination of all
- Bike lanes on New Hampshire Avenue/MD 650
- Shared use path/wide sidewalk on Randolph Road
- Bike lanes on Fairland Road
- Bikeway on US 29 (on-road or off-road to be determined)

- Shared use path along Briggs Chaney Road

Staff has several concerns with this proposed alignment. First, SHA is frequently relying on existing facilities like the Emory Lane path, Randolph Road path and New Hampshire Avenue bike lanes. This essentially amounts to a no-build option and does not meet the purpose and need for a multi-modal facility.

Second, along-road shared use paths may ultimately be a reasonable replacement for some short sections of the ICC bike path where environmental impacts are most severe, but relying on bike lanes and sidewalks (as on Layhill and Fairland Roads) is not a reasonable replacement. Montgomery County master plans envision a continuous shared use path free or nearly free from conflicts with motor vehicles, therefore the alignment of the ICC bikeway described in the bullet list above still remains fundamentally inconsistent with county policy.

Third, staff finds that utilizing un-built shared-use path portions of the countywide bikeway network has some potential, but SHA remains uncommitted about including construction costs of these segments as part of the build alternates. This is an important detail requiring resolution as part of the DEIS.

Fourth, proposed shared use path segments along roads may be in conflict with other proposed future transportation projects. For example, the shared use path along Georgia Avenue south of Emory Lane ideally should be located on the east side of Georgia Avenue to provide a seamless connection to the Olney Manor Park. However, a shared use path is already proposed along the west side of Georgia Avenue as part of the Georgia Avenue Busway. It is unclear at this point whether a path along both sides is effective.

Finally, at an April 20th meeting with SHA and representatives from both Prince George's County and Montgomery County, it was generally agreed that while SHA efforts to both develop a continuous east-west linkage and link to transit stations is useful, most bicyclists will not be traveling end-to-end so the focus should be on serving more local destinations, linking adjacent communities otherwise unconnected and facilitating "circle tours" (using existing and planned park trails) for the non-commuting cyclist. Transportation planning staff will continue to evaluate the proposed bikeway alignment to ensure key connections to local destinations are addressed.

In summary, sensible bike accommodations remain a priority for the staff, as directed by both the Planning Board and the County Council and as supported by active and interested community members. Despite some initial hesitation, **SHA has begun to make progress in addressing the concerns raised late last year, but has not made sufficient progress yet to allow staff to propose either an endorsement, or refinements to, the master plan vision.** The ICC internal review team acknowledges several additional challenges ahead. The challenges include, providing safe crossings at interchanges, providing connector paths to adjoining communities,

providing connector paths to park trail corridors, and deciding whether the pathway is located inside the noise walls on the highway side or outside the noise walls on the community side. Staff will continue to work closely with SHA to address these issues and will develop ICC bike path recommendations for the Planning Board's consideration as part of the comments on the DEIS in the fall.

V. ACTIVITIES UPDATE/DEIS

Since the last Planning Board briefing on June 3, 2004, several matters of importance have occurred during the environmental impact study (EIS) process. Staff is providing review and comment on a number of draft technical reports and materials to support the EIS process and document. The same review and comment is proceeding among our fellow study team agencies. This phase of the study process has been focused on minimizing project impacts and beginning the process of compensatory mitigation.

Staff has characterized some of the key study elements and preliminary findings in the following paragraphs.

One of the procedural characteristics of the ICC study is that proposals and the evaluation of impacts is an iterative process. Responses to agency and public concerns in one functional area typically have a ripple effect on other functional areas. The result is a process in which the alternatives are refined on a continual basis. Since formal concurrence has been obtained on the Alternatives Retained For Detailed Study (ARDS), the horizontal alignment of the roadway should not vary appreciably, but vertical changes are still under review as well as interchange designs and other design treatments that will affect the overall footprint. Public presentations, such as the SHA informational update meetings on June 15, 19, and 24, provided a point at which the refinement process stopped in order to collect feedback. The meetings in Gaithersburg and Laurel were not as greatly attended as the one at Blake High School. At Blake, there was an extended demonstration by the opponents of the project in general and focused in particular against the northern alignment. Each meeting presented a similar informal format that allowed people to view displays that included a detailed 300' scale map of all build options. A copy of these maps was provided to Park and Planning staff for use at the Montgomery Regional Office for various purposes, including forming the basis for current staff review of the community impacts. The presentation of 300' scale mapping to the public at the June workshops provided a useful snapshot of project activities and forms the primary basis for many of the staff comments. Some of the map information raises further questions, particularly regarding current proposals for stormwater management, bike path and trail connections, optional local roadway connections, and property impacts.

Staff is working with SHA to address some outstanding technical questions, but the staff urges the Planning Board to continue to request to the SHA that the Draft Environmental Impact Statement clearly present stand alone alternatives and options and also clearly identify the justification for each option presented as well as its benefits and impacts.

The next pause in the evaluation process will occur with the publication of the DEIS this fall, with an expected Notice of Availability (NOA) on October 29, 2004.

ARDS Concurrence

Two agencies are required to concur with the alternatives retained for detailed study (ARDS). As of May 18, 2004, both those required, the Army Corps of Engineers and the Maryland Department of the Environment have formally concurred.

DEIS

The Interagency Working Group should be receiving the preliminary DEIS July 23, 2004. Future schedule of events are currently as follows:

Draft EIS/Draft 4(f)/Preliminary Section 404	November 2004
Planning Board # 5 (No public testimony)	December 2, 2004
Location/Design/Section 404 Public Hearings	December 2004
Planning Board # 6 (Public Testimony)	January 20, 2005
Close of Public Comment Period	January 2005
Planning Board # 7 (No public testimony)	March 24, 2005
Final EIS	Spring 2005
Record of Decision	Spring 2005
Planning Board # 8 (No public testimony)	June 30, 2005
Construction	Summer 2006-2010
General Election	November 2006

The preliminary DEIS will contain material gathered from the following technical reports and sources.

- **AIR QUALITY TECHNICAL REPORT**

The report evaluated carbon monoxide (CO) emissions as the accepted indicator of vehicle-generated air pollution, and compliance with ambient air quality standards. No violations were identified now or in the study period (2030). Ozone was deferred to the COG modeling of air quality as part of their air quality conformity evaluation.

The Washington Metropolitan Area meets federal air emission standards for carbon monoxide, nitrogen dioxide, sulfur dioxide, lead, and particulate matter, but is in severe non-attainment for ozone. Since the project is located in an ozone non-attainment area, the metropolitan area must conform to specific measures identified in its State Implementation Plan (SIP). Conformance with the SIP is determined through a regional air quality analysis. The ICC is included in the current regional air quality analysis.

The Air Quality Technical Report only evaluated carbon monoxide emissions and compliance with ambient air quality standards for CO. The report indicates that none of

the build alternatives will result in a violation of the 1-hour CO concentration of 35 parts per million (ppm) or the 8-hour CO concentration of 9 ppm at any receptor location. The highest concentrations of CO levels are expected to occur at the Briggs Chaney Road/Old Gunpowder intersection for both Corridor 1 and 2 alignments. The projected maximum CO **1-hour** concentration level is 8 ppm in 2030 (design year) and the estimated maximum CO **8-hour** concentration is 5.4 ppm in 2030.

During construction, the project must comply with Code of Maryland Regulations 26.11.06.03D for air emissions from construction sites. Fugitive air emissions can be controlled by applying water during land disturbing, grading, and construction activities and by covering open body trucks used for the transportation of excavated materials. Prohibiting idling of equipment and vehicles when not in use can minimize mobile source emissions. Application of these measures should minimize air impacts during the construction phases of the project.

- NATURAL ENVIRONMENTAL TECHNICAL REPORT (NETR)

At this time, staff has not completed its review of the NETR. Staff has conducted a selective review of the document to determine how the information in the NETR may clarify or supplement the 1" = 300' plans. Detailed staff comments on selected topics covered by the NETR will be sent directly to SHA. At this time, we do not have sufficient information to comment on a number of items related to environmental impact including stormwater treatment and the possible location of facilities. We will request additional information we need and pursue techniques that minimize impacts.

- PRELIMINARY DRAFT NOISE QUALITY TECHNICAL REPORT

Staff has requested a set of noise contour maps to assist in making further park and community impact assessments.

Other activities occurring since the last Planning Board briefing include:

COG ACTIONS

On July 16, 2004, the Metropolitan Washington Council of Governments (COG) Transportation Planning Board (TPB) was advised by its staff that the draft air quality conformity analysis, the draft 2004 CLRP and the draft FY 2005-2010 TIP scheduled to be released for public comment and inter-agency review July 21, 2004 will be delayed until September 2004. The CLRP considers staging through the year 2030 for projects with an approved financial plan. Park and Planning staff has updated and submitted to COG the Round 6.4 Cooperative Forecast land activity data at the traffic zone level to reflect the ICC alternatives.

SECONDARY and CUMULATIVE EFFECTS ANALYSIS

The DEIS will include a Secondary and Cumulative Effects Analysis (SCEA) to identify indirect, yet foreseeable, impacts of ICC build alternatives. The potential effect on land use patterns is a significant component of the SCEA. SHA has convened an Expert Land Use Panel (ELUP) to evaluate the likely effect of the ICC build alternatives on the forecasted growth in jobs and housing through 2030 in different subareas of the Baltimore-Washington metropolitan area. The ICC ELUP process is similar to one conducted for the I-270/US 15 study and included in the October 2002 DEIS for that study. The ELUP report has not been completed.

TRAVEL DEMAND ANALYSIS

The ICC Study Team is in the process of completing the year 2030 travel demand analyses for Corridor 1 and Corridor 2. Information provided at the June public meetings included a status report on the key transportation measures of effectiveness. These measures are described below generally in the order by which they are produced, with the most complete information available for the first measures described and the most work yet to be completed on the last measures presented.

Travel Times and Accessibility

Forecasted travel times are often viewed as the most immediate and meaningful demonstration of the benefits afforded by a transportation project. Attachment # 3 presents a summary of year 2030 morning peak period travel times between selected origins and destinations for the No-Build, Corridor 1, and Corridor 2 scenarios.

The travel time benefits provided by the ICC, of course vary greatly depending upon the origin and destination pair considered. The greatest time-savings attributable to the ICC in attachment # 3 is a 35-minute reduction associated with Corridor 1 for travel from Shady Grove to the Baltimore-Washington International Airport, from 107 minutes to 72 minutes (a 33% reduction in travel time). The greatest percentage travel time reduction in attachment # 3 is 60% for a trip from Colesville to Konterra (from 30 minutes to 12 minutes).

In most cases, the ICC provides substantial time-savings. Of the 100 origin-destination pairs shown, Corridor 1 provides at least 10 minutes of savings for 45 pairs and Corridor 2 provides at least 10 minutes of savings for 39 pairs. In some cases, however, the additional travel associated with the ICC has an adverse secondary effect. The ICC scenario increases travel times by up to 3 minutes for five of the origin-destination pairs in Corridor 1 and for seven of the origin-destination pairs in Corridor 2.

The presentation of travel times between selected origin-destination pairs is frequently critiqued on two counts. First, any group of selected origin-destination pairs, reflect only a small sample of total travel. Second, travel times don't reflect land use patterns; it may be less important to reach a certain destination if there are many intermediate destinations that serve the same function.

Accessibility measures address these concerns by describing how easy it is for travelers throughout the study area to reach desired destinations, considering both the land use and transportation network. The tradeoff is that while accessibility measures are generally more comprehensive than travel time, they are also more abstract and don't provide the same human scale of reference.

A common measure of accessibility is the number of jobs that are accessible within a constant travel time from study area households.

For the ICC, preliminary forecasts indicate that in the year 2030:

- For the No-Build scenario, the typical study area resident can reach 585,600 jobs within 45 minutes by auto;
- For the Corridor 1 scenario, the typical study area resident can reach 755,600 jobs within 45 minutes by auto (a 29% increase over the No-Build);
- For the Corridor 2 scenario, the typical study area resident can reach 726,100 jobs within 45 minutes by auto (a 24% increase over the No-Build).

Transit Ridership

The ICC will facilitate east-west express bus service between rail transit stations and key employment centers in the study area. The value pricing mechanism associated with the ICC is designed to provide free-flow speed for the portions of the bus trip on the ICC so that the travel time benefits shown for auto users are also provided for transit trips.

The travel demand forecasting includes six new express bus routes that utilize a portion of the ICC between the following termini:

- Shady Grove Metrorail station and Columbia;
- Shady Grove Metrorail station and Muirkirk and Laurel MARC stations;
- Shady Grove Metrorail station and Greenbelt Metrorail station;
- Shady Grove Metrorail station and Glenmont Metrorail station;
- Rockville Metrorail station and Muirkirk MARC station;
- Greenbelt Metrorail station and Burtonsville park-and-ride lot.

For Corridor 1, these six routes are forecasted to serve a total of 11,300 daily trips of which 6,600 are new transit trips. For Corridor 2, the six routes are forecasted to serve a total of 9,300 daily trips, of which 5,500 are new transit trips.

Traffic Volumes

The study team continues refinement of link-specific traffic volumes considering the sensitivity of travel demand to the value pricing schemes being considered for both Corridor 1 and Corridor 2. At this time, the primary findings are similar to those presented at the June 3 Planning Board briefing:

- The ICC is projected to carry between 80,000 and 125,000 vehicles per day on roadway segments located between I-370 and I-95;
- The ICC is projected to carry between 40,000 and 65,000 vehicles per day on roadway segments located between I-95 and US 1.

Intersection Congestion

The ICC study is assessing traffic congestion at 51 intersections in the ICC study area. Analysis will consider both the level of service during the morning and evening peak periods (the severity of congestion) as well as the degree to which peak spreading causes level of service (LOS) F conditions at other times of day (the duration of congestion).

An aggregate measure of both congestion severity and duration is the number of hours that LOS F conditions occur at the study area intersections. Currently, the 51 study

area intersections experience a total of 115 hours of LOS F conditions (or roughly a little more than two hours per intersection per weekday). By the year 2030, seven of the intersections, all in Montgomery County, are planned for conversion to grade-separated interchange, based on the region's current Constrained Long Range Plan. Nevertheless, the aggregate hours of LOS F conditions will nearly double by 2030, with 230 hours of LOS conditions forecast.

Similar information will be provided for Corridor 1 and Corridor 2 build scenarios when the travel forecasting efforts are completed.

PATUXENT RIVER WATERSHED

Under certain Corridor 2 options, portions of the Patuxent River drainage basin are impacted. Since the river is impounded for public water supply purposes, extraordinary precautions will be needed to protect this resource from hazardous spills that might occur if this option were selected for construction. Other concerns include forest cover losses and extreme slopes that exist in this area.

A recent study, *Source Water Assessment for Washington Suburban Sanitary Commission Patuxent Water Filtration Plant* prepared by the Maryland Department of the Environment, June 2004, evaluated the Rocky Gorge reservoir under the 1996 Amendments of the Safe Drinking Water Act. The study identified potential sources of contamination including point and non-point sources, including transportation (e.g. highways), a railroad, a petroleum product pipeline, agriculture, on-site septic systems, and runoff from developed areas.

The susceptibility analysis indicated that phosphorus is the primary concern to the reservoir. Turbidity, disinfection byproducts precursors iron, manganese and protozoan are also contaminants of concern. Among the several recommendations contained in the report is to analyze traffic accident statistics and patterns including potential impacts of the proposed ICC on reservoir water quality.

WSSC has also written directly to SHA about their concerns.

VI. SHA STATUS REPORT

The status report by the SHA includes accomplishments since the last Planning Board meeting and schedule of future events. SHA will incorporate and present those materials available from their public meetings:

- Tuesday, June 15, from 2:00 PM to 8:30 PM at Bohrer Park Activity Center in Gaithersburg,
- Saturday, June 19, from 9:00 AM to 2:00 PM at Blake High School in Cloverly, and
- Thursday, June 24, from 2:00 PM to 8:30 PM at American Legion Post 60 in Laurel.

SHA will also provide the Planning Board an update on:

- Environmental Stewardship
- Secondary and Cumulative Effects Analysis
- University of Maryland Economic Study
- Expert Land Use Panel

- WSSC letter on Patuxent Watershed
- Environmental Justice

Attachments:

- # 1- Memorandum from Community-Based Planning.
- # 2- Historic Structures Effects Table.
- # 3- ICC Peak Travel Times.
- # 4- Communication Received Since Planning Board Briefing # 3.
- # 5- Updated Briefing Schedule.