MCPB
Item # 8
6/3/04

To: Montgomery County Planning Board

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

Date: May 28, 2004

Subject: Intercounty Connector Study:
- Planning Board Briefing # 3 and Status Report
- Park Stewardship

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.

The first portion of the memorandum provides an update on important study activities. The second portion of the memorandum describes staff proposals for evaluating parkland impacts and identifying candidate parkland replacement. In the third and last portion of this memo are the times and locations of the state's public informational meetings scheduled for June 15, June 19, and June 24. The presentation will give the state the opportunity to highlight the most current information from their study.

The purpose of this memo 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 making sure that the park system receives land of equivalent natural resource value at the end of the process. We await the state's complete evaluation of both environmental and social impacts before addressing alternatives.

I. ACTIVITIES UPDATE

Since the last Planning Board briefing on March 4, 2004, several matters of importance have occurred during the environmental impact study (EIS) process. Staff is in the process of providing technical review and comment on a number of draft materials to support the EIS process. The same review and comment is proceeding among our fellow study team agencies. Staff has characterized some of the key study elements and preliminary findings in the following paragraphs.

Detailed impact data tabulation, however, is not yet available. One of the procedural characteristics of the ICC study is that proposals and the evaluation of impacts is an iterative process. Responses to agency 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. Public presentations, such as the SHA workshops on June 15, 19, and 24, will provide a point at which the refinement process stops in order to collect feedback. The staff packet for Worksession # 4 in July will provide more details on both the SHA alternatives as presented at the June workshops, as well as public comment on the alternatives. Thereafter, the next pause in the evaluation process will occur with the publication of the DEIS this autumn, in which the alternatives and their impacts are described in detail to facilitate discussions on which alternative should be supported as the selected alternative.

- **ARDS Concurrence**
  Two agencies, the Maryland Department of the Environment (MDE) and the Army Corps of Engineers (COE) are required to concur with the alternatives retained for detailed study (ARDS). Concurrence has not been officially obtained. It is expected at any time. There are no known obstacles to that concurrence except for a formal letter making its way through the federal process.

- **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). In the absence of further guidance from the Planning Board, staff will continue to push for a continuous bike path even in the face of increased environmental impacts to park land. Staff has requested that SHA provide

information on the incremental impacts associated with the bike path to facilitate the discussion. However, at this time it appears SHA will be presenting alternatives to the public in June that do not include the continuous shared-use path, without the benefit of first knowing the incremental costs and impacts of the path. Staff notes the County Council direction in their December 1, 2003 letter to "include the master planned hiker-biker trail in the ICC right-of-way as part of both Corridors 1 and 2". This guidance will be reviewed, including any information subsequently provided by SHA, during Worksession # 4 tentatively scheduled for July 15.

- **COG Actions**

  On April 21, 2004, the Metropolitan Washington Council of Governments (COG) Transportation Planning Board (TPB) voted to add a group consisting of ten project submissions that included one project with two ICC build alternatives for evaluation in the air quality conformity analysis for the 2004 Constrained Long Range Plan (CLRP) and the FY 2005-2010 Transportation Improvement Program (TIP). The draft air quality conformity analysis, the draft 2004 CLRP and the draft FY 2005-2010 TIP are scheduled to be released for public comment and inter-agency review July 21, 2004 and approved by the TPB at its September 15, 2004 meeting. At that time, the TPB is expected to make a conformity determination on the CLRP as a whole including one ICC build alternative. One alternative will be identified and approved for inclusion in the CLRP and TIP. The CLRP considers staging through the year 2030. Attachment # 2 provides the COG conformity schedule. In order to meet the above schedule, staff is currently updating the Round 6.4 Cooperative Forecast land activity data at the traffic zone level to reflect the ICC alternatives.

- **STREAM VALLEY CROSSINGS**

  SHA intends that the ICC Draft Environmental Impact Statement (DEIS) document whether bridges or culverts can be conclusively proposed for roughly two dozen of the larger crossings. Park and Planning staff prepared an extensive analysis and recommendations on the proposed major stream valley crossing structures and sizes. This included our recommended design guidelines to reduce natural resource impacts, preferred crossing structure, crossing locations where we believe deer passage is important and other relevant commentary. In general, our staff judgment regarding resource protection is fairly consistent with the federal and state resource agencies regarding the larger stream valley crossings where bridges are required.

  There are several stream valley crossings where staff has conveyed to SHA that their proposed crossing structure or length is not sufficient to preserve a natural corridor for the purposes of maintaining connectivity between high quality natural areas and habitats, particularly in parkland, that will be separated or isolated by the ICC. SHA proposes to address many of these differences through presentations in the DEIS, including documentation of benefits, impacts, and costs of alternative crossing treatments for larger crossings. Staff is also

concerned about the smaller crossings that are not included as part of the DEIS. It should be noted that there has been extensive good faith effort on both sides to resolve differing viewpoints. The need to design crossing areas to allow for deer passage at specific crossing sites to facilitate safe wildlife passage and minimize deer-vehicle collisions has also been expressed by staff. A separate Board meeting may be required in the near future to explain in detail any differences that remain between Park and Planning staff and SHA.

- **PRELIMINARY DRAFT NOISE QUALITY TECHNICAL REPORT**
  Staff received the preliminary draft *Noise Quality Technical Report* for review and comment. The purpose of the Technical Report is to determine: existing noise levels; future (2030) noise levels due to the implementation of the ICC build alternatives; if noise mitigation is necessary; and if noise mitigation is feasible and reasonable. Noise levels are presented in terms of A-weighted equivalent sound level, abbreviated as Leq. Leq is the single number presentation of fluctuating sound level for all sound sources during a specific period. Leq is measured in decibels (dBA). The Technical Report uses the Federal Highway Administration's Traffic Noise Model (TNM) to forecast future noise levels. The TNM is a state-of-the-art computer program used for predicting noise impacts near highways. The model includes vehicle type and mix, pavement types, toll booths, on-ramp starting positions, atmospheric conditions, existing topography, or other intervening land uses, to design effective and cost-efficient highway noise barriers. The analysis assessed ambient and future noise levels by collecting data for 183 receptor sites in 43 noise sensitive areas. The majority of the individual receptor sites are in residential areas. **Noise receptors were not located on park property.** When residential units are adjacent to park property, and the area was identified as a noise sensitive area, the noise receptors were located on the residential lot. The park was used as a buffer to determine if noise mitigation is necessary for the residential property and not to determine if the park property warranted noise mitigation.

  The Technical Report does not address future noise levels on park property resulting from the implementation of the ICC. No noise mitigation is proposed for park properties. In reviewing current noise protection measures provided as a result of impacts to affected properties, staff has not been able to find examples of protection for natural resource areas, such as may be found in parks. The Technical Report estimates that over 480 residences will benefit from noise walls for an approximate cost of $16 million, or $33K per residence along Corridor 1. If Corridor 2 were implemented, nearly 230 residences would benefit from noise walls for an approximate cost of $9 million, or $38K per residence. These estimates do not include the residences that would benefit from noise walls when the cost per residence exceeds the State Highway Administration's 1998 Noise Barrier Policy of $50,000.

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

  Staff has received the preliminary draft report for review and comment. The introduction to the report should be amplified to be clear about the role of the document. The text contains a generally accurate accounting of the businesses and residences that would be affected by the various alignments as currently delineated. The text on community cohesion is somewhat limited, and Community Planning staff will provide specific comments to improve the text. The report should also discuss the connectivity and equity impacts of converting portions of the existing roadway network to a toll limited-access highway in Corridor 2 communities. We understand the impacts described in the report reflect the roadway design details available at this time, which will be changing as the alignments are refined. We will continue to raise our concerns about community and environmental impacts in the appropriate alignment discussions. A short section is included in this report on the impacts to parks and recreation. This information will be presented by staff to the Board in detail, before issuance of the section 4(f) report included in the Draft EIS that will be issued this fall. Staff will brief the Board on general park impacts, and will make initial recommendations to the Board over the next few months on 4(f) issues including avoidance, minimization and mitigation techniques. This will be followed by a detailed examination of the impacts to parkland as part of the DEIS 4(f) analysis. The draft *Socioeconomic and Land Use Technical Report* should indicate its relationship to the section 4(f) analysis and specify which is the more definitive document. See Attachment # 4.

- **EXPERT LAND USE PANEL**

  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 ICC ELUP consists of seventeen members who have met on a nearly monthly basis since November 2003. The forecasting process is iterative, featuring both independent analysis and group discussions on likely effects. Concurrence among panel members is not required; the final report will describe both the ELUP forecast trends observed by averaging the individual panel member forecasts as well as the range among panel members. The ELUP members evaluated the year 2030 MWCOG Round 6.3 forecasts being used as the basis for the ICC travel demand forecasting and developed an alternative year 2030 baseline set of demographics. From that new baseline, the panel is considering the secondary demographic impacts of the Corridor 1 and Corridor 2 build alternatives. The ELUP is scheduled to complete their efforts in June 2004. The ELUP final report will note the range of forecasts by individual panel members for each study area subarea. However, based on preliminary

results presented at panel meetings to date, staff believes that the averaged results will suggest that both Corridor 1 and Corridor 2 would be expected to promote some slight increase in total jobs and households both in Montgomery County and in Prince George's County. This is consistent with expected revisions to the Round 6.4 Cooperative Forecast.

- **TRAVEL DEMAND ANALYSIS**

The DEIS will describe the impacts of ICC build alternatives on forecasted 2030 daily and peak period travel conditions. The measures of effectiveness evaluated will be similar to those presented in the 1997 DEIS, including daily and peak period traffic volumes on study area roadways, peak period levels of service at approximately 50 study area intersections, transit mode shares, travel times as indicated by both changes to areawide accessibility to jobs and housing as well as by selected point-to-point travel times, and overall traffic safety. Both ICC Corridor 1 and Corridor 2 alternatives are being evaluated solely as six-lane toll facilities with variable pricing set to maintain a 50 MPH travel speed (similar to techniques currently used on managed-lane facilities in Texas and California). Preliminary results therefore indicate that the maximum daily traffic volume on the ICC will be approximately 125,000 vehicles per day, commensurate with, but slightly lower than the peak load of approximately 135,000 vehicles per day forecasted in the 1997 study.

Optional treatments being considered include:

-A relocation of the ICC eastern terminus from US 1 to I-95 (both Corridor 1 and Corridor 2);
-Removal of the Layhill Road interchange (both Corridor 1 and Corridor 2);
-Removal of certain ramps from the Briggs Chaney Road interchange (Corridor 1 only).

Preliminary results suggest that several other macro-level trends evident in the 1997 DEIS will be confirmed by the current study efforts, including the following effects of ICC build alternatives on 2030 travel conditions:

-An increase in overall study area accessibility, resulting in an increase in total vehicular travel;
-A reduction in traffic volumes on local roadways that parallel the ICC;
-An increase in traffic volumes on roadways that intersect the ICC in the immediate vicinity of ICC interchanges;
-Varying effects on intersection congestion, but with a majority of intersections experiencing improvement equivalent to at least one level-of-service letter grade (i.e., from LOS E to LOS D);
-A minor reduction in Capital Beltway traffic volumes;
-A positive influence on overall motorist safety.

Express bus services are being evaluated along the ICC build alternatives with a focus on connecting to radial Metrorail services at Shady Grove, Glenmont, and Greenbelt and MARC services at Muirkirk and Laurel.

- **BROWN TROUT TECHNICAL GROUP**
  SHA formed an ICC Brown Trout Workgroup in the fall of 2003 for the purpose of bringing together representatives from various government agencies with specific interests and/or knowledge of the brown trout and related aquatic resource of the upper Paint Branch watershed. At one or more of the four meetings that have taken place to date, the group has had representation from federal (COE, FWS, EPA), state (SHA and its consultants, DNR), and local (M-NCPPC, DPS, DEP, MWCOG) agencies. Topics that have been discussed include history and importance of the stream resource, present and expected future health of the resource, stormwater management issues (e.g., SHA's proposal to provide stormwater controls through a "linear" approach, diverting some stormwater runoff out of Paint Branch and into Northwest Branch), ideas and comments on possible stewardship and mitigation projects in the watershed.

  One of the contentious topics at these meetings has been M-NCPPC staff's recommendation to have SHA consider the relocation of the DPW&T Colesville Maintenance Depot to a site outside the upper Paint Branch watershed as a mitigation or stewardship project. The maintenance depot is a high impervious use which is adjacent to the ICC within the Upper Paint Branch Special Protection Area. It includes a fuel pumping station and stores road chemicals, both of which could potentially be damaging to the resources in upper Paint Branch if accidently reaching the water course. Staff believes the depot relocation is a good project to evaluate for the purposes of meeting the intent of the impervious limitation and impact minimization requirements of the UpperPaint Branch environmental overlay zone and for partly offsetting the loss of natural infiltration and forest cover by the ICC within the primary trout spawning stream valley of upper Paint Branch. DPW&T has strongly objected to staff's recommendation. Discussions are continuing. If this issue cannot be resolved at staff level, this may be brought to the Planning Board in the near future for policy direction.

II. PARKLAND IMPACTS ANALYSIS (Estimated 1 hour with discussion)

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. 470. To be included as park 4(f) property, it must be publicly owned and designated as parkland. Some current park property was acquired using ALARF monies and must be distinguished from other park property. As owners and stewards of the park system, we have a major role in determining 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 horizontal and vertical alignments and the definition of bridge and culvert treatments to minimize impacts to the many natural and community resources, both within and outside our park system. The primary issues in these discussions were summarized in the "Stream Crossing" portion of this memorandum.

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. This material is summarized in the Planning Board packet only. Staff has also provided SHA with our GIS layers that define the resources more quantitatively than indicated in the tabular summary and is continually participating in discussions regarding the qualitative values of these resources. From a process perspective, a discussion of mitigation is premature until the minimization options have been exhausted and the impacts of the resulting designs have been described both quantitatively and qualitatively.

One of the key impacts from 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. **The primary challenge facing staff is how to assess natural resource value, particularly in evaluating candidate replacement parklands**. Because this discussion is complex and controversial, staff proposes beginning the discussion at this stage, even before all the avoidance and minimization issues have been addressed. By beginning the discussions now, we aim to streamline the discussions that will need to occur between selection of an alternative and the completion of the Final Environmental Impact Statement in early 2005. The discussion of parkland impacts described in these paragraphs is an important component of the Planning Board's role in the NEPA process. To streamline this review and advance the discussions, staff has included some discussions of potential impacts of a hypothetical "worst-case" scenario in the ICC Master Plan alignment. This discussion has raised two potential concerns that staff proposes to address proactively with the following clarifying statements:

- A Planning Board focus on parkland impacts does not indicate that the Planning Board members or staff, place a higher value on parkland impacts than on other environmental or community impacts in either Corridor 1 or Corridor 2;
- Data contained in this memorandum reflects only a hypothetical case and should not be confused with information subsequently published by SHA for either the informational public meetings this June or in the DEIS this autumn.
- The intent of this method is only to facilitate a discussion of natural resource value to alert SHA to the levels of parkland replacement that, on an order of magnitude scale, may ultimately be required by the Planning Board.

As indicated above, the natural resources in affected parkland are both valuable and complex. Staff stands ready to answer questions regarding those resources as the study proceeds. At this time, however, staff offers a bold proposal to the Planning Board, stated below and explained in the following paragraphs:

The acreage of interior forest should be the primary measure by which the natural resource equivalence of candidate replacement parklands is evaluated.

ENVIRONMENTAL COMPARISON METHODOLOGY

Staff has developed a method using the GIS (Geographic Information System) to broadly quantify ICC impacts to parkland. This method is similar to the one utilized for the *Transportation Policy Report.* Our electronic environmental data, such as interior forest and sensitive areas is not field-verified and tends to underestimate environmental features. However this method allows an accurate comparison of levels of impact. These can be used to rank various alternatives by environmental disturbance indicators rather than providing a quantification of actual environmental disturbance. Features used in this exercise were Interior Forest (derived from large unfragmented forests), Sensitive Areas (a composite of floodplains, riparian wetlands, steam buffers and adjacent steep slopes), Biodiversity Areas (park areas containing unique natural habitats, rare species and high quality natural areas) and the significant natural areas within our park system. Staff will provide a visual presentation of this material on the Board meeting date.

The 1997 DEIS documented the extent of park acreage for a number of optional alignments within two alternatives (the Master Plan Alignment Alternative and the Northern Alignment Alternative) that are generally similar to the Corridor 1 and Corridor 2 alternatives currently being evaluated. The DEIS indicated that the range of Section 4(f) parkland impacted by those alternatives and options ranged from 87.8 acres to 157.3 acres. Staff is optimistic that several of the minimization features currently being evaluated can reduce the acreage of direct Section 4(f) impacts below the levels reported in the 1997 DEIS. Many direct impacts to independent resources can be addressed to a large degree through minimization techniques (such as longer bridge spans) or mitigation projects (such as the creation of replacement wetlands). However, staff finds that interior forest loss is one natural resource impact that cannot be mitigated through design techniques or the construction of additional mitigation projects. Once an interior forest stand canopy is bisected for a roadway, that forest stand is no longer valuable for forest interior dwelling species. Furthermore, the impacts of interior forest loss extend well beyond the direct impacts associated with roadway construction.

The definition of interior forest includes a forested edge, or buffer area of 300'. Therefore, in simplistic terms, if roadway construction traverses an interior forest stand with a 200' wide band of construction activities, the interior forest loss occurs along a band 800' wide (the 200' of direct loss plus the 300' on either side that changes from "interior" status to "edge" status). The impact of interior forest loss in parklands is therefore substantially greater than the direct impact associated with construction. The relationship between direct forest stand impacts and interior forest loss depends upon the

shape and size of affected forest stands. Staff has applied a methodology, similar to that developed during the *Transportation Policy Report*, to predict, at an order-of-magnitude scale, what the interior forest losses might be associated with a hypothetical freeway in the ICC Master Plan alignment. The methodology is described in Attachment # 3. Staff found that this hypothetical project might have approximately 100 acres of direct parkland impacts but would result in a loss of 275 acres of interior forest within the park system. As previously described, these acreage impacts serve only as a guide to relative, order of magnitude impacts and should not be confused with the precise quantification that will be provided as the study progresses by the SHA study team. This exercise does indicate, however, the rough relationship we expect to see between direct impacts and interior forest impacts.

Two primary characteristics of interior forest make it a logical surrogate for the greater variety of natural resource impacts. First, most of the other valued natural resources in the affected park systems are within interior forest. Second, staff has information on interior forest available on a countywide basis. Many other candidate variables previously described, such as biodiversity areas, significant natural areas, and sensitive areas, are only available for our existing park system. Therefore, staff can readily describe these other candidate resources and impacts within our current parks but cannot readily determine what candidate replacement parklands might provide equivalent mitigation sites.

One guiding element for mitigation strategies is proximity of the mitigation site to the impact site. For parklands and natural resource impacts, the ideal mitigation would involve parkland acquisition of properties that are contiguous to the impacted parks or within the same watershed or subwatershed. However, staff anticipates that the amount of interior forest on private properties in the affected watersheds is insufficient to provide the required acreage of replacement interior forest. Therefore staff recommends that sites considered targets for parkland acquisition countywide; through master plans, our Legacy Open Space program, or other conservation programs; be considered candidate replacement parklands for replacement of interior forest in the park system. Staff finds that sufficient interior forest exists in this universe of identified future parkland to mitigate the impacts of either Corridor 1 or Corridor 2 once those impacts have been defined. However, the protection of replacement interior forest may require acquisition of an even larger piece of property. For example, the 459 acre Casey property in the Hoyles Mill Diabase Area contains 206 acres of interior forest. In summary, staff proposes for the Planning Board's consideration the use of interior forest as the primary measure for evaluating the natural resource equivalency as the interior forest measure as it:

- Addresses the primary natural resource that cannot be mitigated through project design or the programming of proactive mitigation projects;
- Provides an overarching "big picture" measure of many overlapping resources to simplify the evaluation process;
- Is readily available for all candidate parkland replacement sites in the county;
- Provides a challenging, yet achievable, goal for SHA to find suitable candidate sites.

III. SHA STATUS REPORT (Estimated 15 minutes)

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 for their upcoming 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 the Environmental Stewardship component of the alternatives definition as well as an update on their responses to the thirteen comments in the County Council's December 1, 2003 letter, included as Attachment # 6.

Attachments:

1- Updated Worksession/Briefing Schedule.
2- COG Proposed Year 2004 CLRP and FY 2005-2010 TIP Air Quality Conformity Schedule.
3- Environmental Comparison Methodology
4- Letter from Chairman Berlage to Stuart Rochester, March 8, 2004.
-FAX from Stuart Rochester to Chairman Berlage, May 26, 2004
5- *INTERCOUNTY CONNECTOR MEMORANDUM OF UNDERSTANDING* Between M-NCPPC and SHA, 1989.
6 – County Council President Subin's December 1, 2003 letter to SHA Administrator Pedersen.