

Appendix – R-3
DEIS Comment Period Comments and Responses

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ACOE	2.16.05	1	<p>The wetland and stream impacts quantified in the DEIS have been calculated by including all of these resources which fall within the right-of-way lines. This fact, and the fact that the Corps is now taking jurisdiction over the wash ponds, account for the majority of the increase in aquatic impacts between the 1997 DEIS and the 2004 DEIS. In order for the corps to authorize a discharge of fill in a regulated wetland or stream, a finding of compliance with the 404(b)(1) Guidelines must be made (see 40 CFR 230.1 et seq.) In order for us to make this finding, the applicant must demonstrate that the impacts have been avoided and minimized to the extent practicable at each proposed discharged site. Including all wetlands and stream areas that fall within the right-of-way lines as impact does not demonstrate compliance with the 404(b)(1) Guidelines. The determination of whether appropriate steps have been taken to avoid and minimize adverse effects to aquatic resources as required by the Guidelines is frustrated due to the lack of precise impact information provided in the DEIS. In order to make our factual determinations and finding of compliance with the Guidelines, the Corps needs the actual proposed footprint of fill and full documentation of compliance with the Guidelines at each of the proposed discharged sites. This must be included in the FEIS.</p>	<p>Additional avoidance and minimization measures have been studied by the study team in an effort to reduce impacts to aquatic resources. This information on Avoidance and Minimization is included in the FEIS. In order to comply with 404(b)(1) guidelines, impact calculations have been refined using a 25-foot buffer beyond the cut/fill lines to accurately depict the potential impacts of the selected alternative. In many areas this is the ROW. In areas where the ROW is outside this limit, an LOD has been estimated as accurately as possible at this phase of engineering to allow calculation of impacts. These impacts are presented in the FEIS and individual wetland impacts and avoidance and minimization will be included in revisions to the JPA. A draft table of permanent impacts and avoidance and minimization at each individual resource has been provided to the ACOE on July 8, 2005. In addition a summary table of temporary/relocation impacts and conversion impacts by corridor and segment was also been provided on that date. It should be noted that these tables have not yet been through the entire QA/QC process needed before release of the FEIS, so they may be subject to some degree of change. SHA investigated specific opportunities for stream relocation rather than piping to help reduce waterway impacts, these relocations are included in the draft temporary/relocation table provided and in Chapter IV of the FEIS.</p>
ACOE	2.16.05	2	<p>We recommend the establishment of a committee comprised of Federal Highway Administration (FHWA), State Highway Administration (SHA), Maryland Department of the Environment (MDE), and Corps personnel to review the plans and quantify, for each alternative, the aquatic resources that the committee determines are needed to accomplish the project goals and objectives. The committee should also determine the areas where it is appropriate to require stream relocation or restoration rather than piping, and areas where retaining walls and other minimization measures should be explored.</p>	<p>Additional avoidance and minimization measures have been included in revisions to the JPA. In addition a summary table of temporary/relocation impacts and conversion impacts by corridor and segment was also provided. SHA investigated specific opportunities for stream relocation rather than piping to help reduce waterway impacts, these relocations are included in the draft temporary/relocation table provided and in Chapter IV of the FEIS.</p>
ACOE	2.16.05	3	<p>Future meetings of the study team should reach consensus on construction-related impacts. A discussion of these impacts needs to be included in the FEIS. Issues of concern include (1) whether to require portable bridges or pipe culverts at temporary stream crossings, (2) whether to require causeways or trestles for access across wetlands, (3) whether to require a haul road or allow heavy trucks on the local road network, (4) whether construction equipment access roads should be located between, or outside, parallel bridge spans, (5) the limits of forest clearing outside bridges and beyond the toe of fill, (6) whether to grub woody vegetation cleared beneath bridges, (7) the limits of slope protection beneath bridges, (8) requirements for restoration, or replacement of temporary</p>	<p>SHA has included estimates of construction-related impacts in the FEIS wherever possible. SHA will continue to work on addressing construction-related impacts as design moves forward. SHA is developing an Environmental Management Plan for the project that will include a Design Review Manager tasked with coordinating design issues with permitting agencies, including more detailed review of construction-related impacts that will not fully be known until final design is initiated. The Environmental Management approach is discussed in Section IV.A. 7. of the FEIS. Write-ups of the anticipated methods of access and construction impacts or aquatic resources have been developed for inclusion in the FEIS and were provided to the ACOE on July 8, 2005. Except for the Rock Creek Option C</p>

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			impacts, (9) requirements for control of invasive species in temporary-disturbed areas, (10) areas where earth can be temporarily stockpiled, (11) areas where the Konterra wash ponds can be de-watered, if determined necessary, and (12) areas that are off-limits to the construction of batch plants.	crossing of Rock Creek, the impacts will be confined to the ROW shown needed for the permanent bridges and roadway. A goal to be addressed in the contract documents will be to minimize construction traffic on residential streets.
ACOE	2.16.05	4	If a build alternative is ultimately permitted, we support the use of environmental monitors during construction. The Woodrow Wilson Bridge project has a proven record of environmental compliance, and that model should be copied on this project. This should be a commitment cited in the FEIS.	Thank you for your comments. Your comments were considered during the decision-making process. SHA also considers the use of environmental monitors a success and intends to use the WWB project as a model for the ICC. SHA has presented details on the roles and responsibilities of the Environmental Monitors and Construction Inspectors to the Interagency Working Group, and has included these details in Section IV. A. 7.
ACOE	2.16.05	5	As a result of sediment and erosion control issues raised on two recent SHA detail- build construction projects, we are very concerned about the challenge of managing this issue on the ICC. Based on a meeting we held with SHA personnel and the contractor of one of those projects, and based on discussions at SHA's Maryland Quality Initiative (MdQI) conference, we understand the maintenance of sediment control devices poses a unique challenge on detail- build projects because there is no way for a prospective bidder to predict whether the construction period will be an unusually wet year that requires greater than normal labor and materials costs to maintain the sediment control devices. By removing some of the uncertainty and risk for contractors, SHA would have more cooperative contractors, resulting in better compliance with the sediment and erosion control regulations. at the MdQI conference, we attended a presentation on SHA's new incentive/ disincentive policy for sediment and erosion control. We strongly recommend consideration of methods to remove some of the uncertainty and risk for contractors. One suggestion raised by one of SHA's environmental monitors was to include a contingency bid item for maintenance of sediment control devices. This would enable a detail- build contractor to be assured of being compensated every time maintenance is performed, thereby eliminating the delays and resistance that result when the contractor is concerned about having to perform work that was not anticipated in his bid price. It is imperative that this issue be resolved so that contractors on future detail- build projects will be cooperative, responsive, and prompt in addressing sediment and erosion control deficiencies. so long at this continues to be an issue on other detail-build projects, we will factor this concern into our permit decision on the ICC.	Erosion and sediment control during construction of an ICC build alternative is among SHA/MdTA's highest priorities. In the DEIS SHA has included area required for construction of ESC measures at the expense of increasing right-of-way because of the importance of ESC on this project. SHA has committed to providing redundant ESCs in sensitive watersheds, including Montgomery County Special Protection Areas and tributaries to Rocky Gorge Reservoir. SHA is considering a number of ideas (beyond MDE requirements) to maximize ESC during construction of SHA projects including: establishing contingency bid items for ESC items so that environmental monitors' recommendations, if out of the design-build scope of work, can be accommodated without the design-builder incurring risk; developing emergency response procedures for prescribed actions and clean-up activities in the event that a sediment spill occurs; and investigating the use of chemical flocculents for improving the effectiveness of sediment traps and basins. Construction related items such as contract structuring with respect to design-build risk, emergency response plan development and implementation, and use of flocculents will be addressed in future phases of the ICC and with agency coordination.
ACOE	2.16.05	6	We agree with the statement on Page IV-184 of the DEIS that there would be a need for redundant sediment and erosion controls in the Paint Branch and Patuxent watersheds.	Thank you for your comment. Your comment has been used in the decision making process. SHA will further detail the use of redundant erosion and sediment controls in the Paint Branch and Patuxent River watersheds in Section IV. F. 6. b.
ACOE	2.16.05	7	At the MdQI conference, we learned that SHA is exploring the use of coagulants	SHA in cooperation with the University of Maryland is performing research on the

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			<p>containing either polyacrylamides (which SHA identified as carcinogenic) or alum to expedite the settling of fine materials in their sediment basins. A water quality analysis of these additives which discusses their health effects and their impacts on aquatic species must be included in the FEIS.</p>	<p>use of flocculents to enhance the efficiency of sediment traps. This research is directly related to WSSC's request that SHA take extraordinary measures to protect the water supply from potential sediment pollution during construction, and to perform the research outside of a water supply reservoir watershed. The flocculents being analyzed are currently in use by some Maryland jurisdictions, but without the level of oversight that SHA requires given the potential risks involved. We do not anticipate having the research completed before completing the FEIS, and will only employ flocculents on the ICC with concurrence from the agencies if the research proves that such use would be environmentally beneficial.</p>
ACOE	2.16.05	8	<p>There are two options for Corridor 1 through Northwest Branch Park. Northwest Branch Option A was developed to reduce the impact to aquatic resources as Corridor 1 traverses the park. It greatly reduces the floodplain and wetland impacts, and eliminates the need for a relocation of Northwest Branch main stem. While both alignments result in extensive forest clearing, the trees in the floodplain and wetlands provide some additional aquatic functions not provided by the upland trees, such as flood storage, nutrients exchange, anchoring the streambanks, a buffer against pollutants entering the streams, and aquatic habitat structure. Northwest Branch Option B would incur more direct and indirect impact on the stream. The Corps can only authorize the alternative that results in the least impact to aquatic resources, unless that alternative has other significant adverse environmental consequences. We are not aware of any significant adverse environmental consequences associated with Northwest Branch Option A that would make Northwest Branch option B permissible. Both options provide identical benefits to highway capacity, safety, operations, mobility, and diversion of traffic from the local road network. Both options have similar community impacts. Although Northwest Branch Option A displaces a fire- damaged storage facility associated with the Trolley Museum, we understand that the Museum has plans to relocate to another site. In the absence of any impacts that would justify selecting the more- damaging option, Northwest Branch Option B is not permissible.</p>	<p>In its development of a preferred alternative SHA is taking into consideration each of the factors described in your comments with regard to the environmental effects of Northwest Branch Options A and B.</p>
ACOE	2.16.05	9	<p>The Secondary and Cumulative Effects Analysis (SCEA) contrasts the potential secondary development effects of Corridor 1 and Corridor 2 on the Rocky Gorge watershed. Based on development projections by the Expert Land Use Panel (ELUP), the Burtonsville Traffic Analysis District (TAD) and the Laytonsville TAD would experience 350 acres of secondary development with Corridor 1 and 800 acres of secondary development with Corridor 2, in the Rocky Gorge watershed. The SCEA considers the 450- acre difference in projected secondary development to constitute a substantial disparity between the two alternatives in terms of impacts to the reservoir. The SCEA also indicates that between now and</p>	<p>An effort has been made to clarify the effects that secondary development may have in the Rocky Gorge watershed. The results of these efforts has been reported in Section IV. K. stating that certain areas will develop at a much higher or much lower density.</p>

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			the year 2010, 4551 acres of near- term development are expected to occur in the Rocky Gorge watershed regardless of whether or not the ICC is constructed. It appears that far more damage will occur between now and 2010, than would occur as a consequence of the construction of either ICC alternative. While the Corps is genuinely concerned about the potential impact that Corridor 2 would have on the Reservoir, these facts put a different perspective on the 450-acre disparity in development potential between the two alternatives. The Full extent of projected development in the Rocky Gorge watershed, including the near-term development, needs to be clarified in the FEIS.	
ACOE	2.16.05	10	The SCEA and DEIS discuss the impacts of additional impervious surface in Rocky Gorge watershed in qualitative terms (increased stream erosion, lost reservoir capacity, potential impacts to aquatic life, increased cost of water treatment, etc). The direct impact, the impacts of the near-term development, and the impacts of the secondary development need to be described quantitatively to explain the consequences of these impacts on water quality, and the findings discussed in the FEIS. This will help us better understand the significance of the secondary impacts of future development.	SHA and the project study team have worked with WSSC to develop a more quantitative discussion of the possible impacts to the reservoir. SHA has modeled pollutant loads from the highway corridor for select constituents both with and without stormwater management to more quantitatively assess the water quality impact on the reservoir. Basic modeling has also been conducted to assess the loads of these same pollutants resulting from the various future growth scenarios in the SCEA. Information resulting from these efforts has been included in the FEIS, Chapter IV.K.
ACOE	2.16.05	11	Please provide a risk assessment of potential for a hazmat accident occurring in the reservoir watershed, with the Burtonsville A Option, and discuss the findings in the FEIS. (We acknowledge that Burtonsville B should not receive further consideration due to its proximity to the reservoir).	This type of analysis has been now documented in the FEIS, Chapter IV.F.5.c.
ACOE	2.16.05	12	For the Corridor 1 Alternative, we continue to encourage the consideration of a deep well to pump cold groundwater into the Good Hope tributary in order to help sustain the stream during summer months, which is the time when the impacts of low base flows and high temperature is most pronounced. Please provide your analysis of the feasibility, cost, and impacts of this proposal, and summarize your findings in the FEIS.	SHA is still investigating the possible ways to augment base flow in the Good Hope tributary to Paint Branch. At the March 25, 2005, meeting of the Brown Trout Working Group, SHA presented it's concerns over using a Deep Well. Based on SHA's Engineering Geology Division's studies, a deep well to pump groundwater could have a negative effect on existing cool water flows to the Good Hope. SHA, with the help of the University of Maryland, is investigating technology that could be used to treat either storm water or public water to be used for augmentation. Results will be forwarded to you when the study is finished.
ACOE	2.16.05	13	Please clarify in the FEIS how you intend to manage the watershed draining off the proposed highway embankment at the three existing swales between Station 705 and 735.	Runoff from the roadway surface will be treated through a continuous sand filter in the roadside and median ditches and discharged to the mainstem of Paint Branch near Station 740 right. Discharge from the roadway fill slope will enter the existing woods as sheet flow, eventually reaching the Good Hope tributary as either surface or ground water. The drainage swales crossing the alignment from north to south in this area will be maintained with culverts in the appropriate locations. This information is summarized in Chapter IV.F.6.b.
ACOE	2.16.05	14	Please provide more specific details about the management of the channel protection volume in Paint Branch watershed. If the existing retention pond at Spring Oak Estates is to be expanded and converted to a 12- hour detention pond	The pond at Oak Springs is no longer being considered for modification under the ICC project due to parkland (4f) impacts associated with taking the pond as right of way. Stormwater management water quality and channel protection requirements

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			in order to manage this volume, we would need to know the extent of the impact to parklands, forest, streams, etc. required for the pond expansion. We note that as an alternative to these additional impacts, underground storage of the channel protection volume remains an option. The costs, impacts, and feasibility of each option must be analyzed, and the conclusions reported in the FEIS.	have been addressed through linear sand filters and underground storage respectively. This information has been included in Table IV-55.
ACOE	2.16.05	15	In January 2005, we received MDE's assessment of the value of the Konterra wash pond wetlands. The wash ponds are dominated by phragmites, an invasive species that not only out competes other plants (thereby eliminating vegetative diversity), but also has a dense root mat that eliminates habitat for most aquatic species. MDE concluded that the wash pond wetlands have minimal habitat value. Given the amount of sediment that has been deposited in the wetland downstream of the 35-foot high dam, and the lack of storage capacity in the ponds, it appears the ponds have little, if any, remaining sediment retention function or flood storage function. Our conclusion mirror those of MDE. Nevertheless, the wash ponds are regulated wetlands, and an analysis of minimization efforts is required in the FEIS.	From Avoidance & Minimization analysis , there is limited opportunity to minimize the impacts to the largest of the wash ponds located in the proposed I-95 interchange since the location of the interchange cannot be substantially shifted as presented in the DEIS (p. IV-200). SHA has been successful in minimizing the impacts to a number of other more diverse wetlands in the interchange as discussed on p. IV-201 of the DEIS and will continue to try to further reduce impacts. These efforts are presented for each wetland to an Interagency Working Group and the results are presented in Section IV. F. 7. e. of the FEIS.
ACOE	2.16.05	16	At an August 19, 2004, meeting with URS and SHA staff, we requested an analysis of a slight bowing of the alignment northward to minimize the fragmentation of wetland 6JA and to minimize impacts to the identified population of Aster radula and Smilax pseudochina, two State-protected plant species. Such a shift would not impact any residences. We wish to emphasize that we are not suggesting a change in the location of Corridor 1's intersection with U.S. Route 1. In consideration of potential wetland minimization, this request must be addressed, and the findings reported in the FEIS. Furthermore, because this area is slated for development, consideration should be given to the possibility of permanently protecting the plants' habitat.	SHA continues to evaluate a shift in the alignment to minimize impacts to Konterra wash pond wetlands (Wetland 6JA) and to avoid impacting the state-protected Aster radula and Smilax pseudochina. These options and the associated impacts have been presented to Interagency Working Group and coordinated with Konterra to assess the most prudent alternative. These options and reasons behind the final alignment selection have been fully addressed in Section IV. F. 7. e. SHA has also assessed the possibility of permanently protecting the state-listed plant species as part of wetland mitigation or environmental stewardship opportunities.
ACOE	2.16.05	17	At an August 19, 2004, meeting with URS and SHA staff, we were shown a preliminary plan for a replacement wash pond for Laurel Sand and Gravel. The plan indicated a replacement pond was to be constructed in the stream. We strongly discourage construction of in-stream ponds because they disrupt normal bedload transport. In addition, we would discourage the use of any jurisdictional stream as a disposal site for an industrial waste. We also have concerns with the erosive velocities that would be produced at the outlet of the proposed 650- foot long culvert on a 4.7% grade. It appears that the stream could be restored to its pre-existing gradient if the dam were breached. Please explore alternatives to address these concerns and include the findings in the FEIS. Furthermore, note that these impacts are not presently part of the joint permit application, though they need to be if wash ponds will be relocated in a jurisdictional area.	Alternatives for replacement of the existing sediment basins have been developed as requested and presented to the ACOE at a JPA coordination meeting. Further evaluation of these alternatives is awaiting completion of geotechnical studies that are expected to occur during final design activities. SHA will continue to coordinate with the ACOE on this issue as more detailed studies move forward. This information has been summarized in the FEIS in the avoidance and minimization discussions for Waters of the U.S, Chapter IV.F.7.e.
ACOE	2.16.05	18	We remain concerned about the feasibility of construction on top of the wash	At the I-95 interchange, the ACOE expressed concerns over the difficulty of road

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			<p>ponds. The employees at Laurel Sand and Gravel have advised that while the wash pond wetlands have a dry outer crust, the material below is extremely fluid. Depending upon the results of soil borings (which have not yet been performed), it may be determined necessary to excavate, de-water, and dispose of the large volume of watery clay contained in the ponds. This operation, which could require substantial acreage and significant hauling, has the potential to result in additional impacts to the natural and human environment. The Corps is particularly concerned with the potential impacts that a de-watering and disposal operation could have on aquatic resources. This activity and its potential impacts need to be discussed in the FEIS.</p>	<p>construction on top of the sediment basins and also requested that SHA investigate ways that relocation of the dam might avoid the replacement of an in-stream impoundments upstream. Based on these concerns, SHA initiated two investigations, soil borings in the vicinity of the wash ponds, including borings in the pond, and an investigation of potential methods for constructing on top of the wash ponds and their accumulated fine materials.</p> <p>Borings on the pond side of the largest dam noted that there were up to 30' of fines that would need to be consolidated if constructed over. Since avoidance of this area was not possible and the removal and disposal of the material of the fines a costly and time consuming process, other methods for dealing with them were investigated and summarized in a "Memorandum of Alternative Design and Construction Methods to Removal and Replacement of Poor Material, dated April 2005". Six basic methods, and examples of each, for constructing on top of these materials were included in this memorandum. The interim results of these investigations were presented to the ACOE and MDE on April 21, 2005.</p> <p>During this presentation SHA also committed to creating a replacement wash pond for the two existing wash ponds whose function was being eliminated by the ICC/I-95 interchange. The replacement pond would be an in-line pond until it was no longer needed by the aggregate mining operation, then converted to an off-line pond by the owner of the mine. Thereby preventing fines from this new pond from being washed and deposited downstream. It was also agreed at this meeting that ICC SWM ponds would be off-line, not in-line ponds, in the area of the ICC/I-95 interchange, and that the fines from the existing wash ponds would be prevented from being washed downstream as part of the design contract for work in this area.</p> <p>SHA will continue to investigate these identified methods as final design moves forward and coordinate closely with agencies on the decisions potentially affecting the fines of the existing as well as the proposed new wash pond.</p>
ACOE	2.16.05	19	<p>Please provide the details on the replacement of the approximately 800 acres of forest that could be impacted (worst case), as this amount of forest loss could have a significant impact on water quality if not replaced. Such information must be contained in the FEIS.</p>	<p>Efforts are currently underway to locate potential reforestation sites. These efforts have involved both a desktop and field review process. Whenever possible, potential sites were located within the immediate project area, watershed, or county by coordinating with local governmental agencies, or by reviewing existing county master plans, watershed assessments, and specific project studies. From this information, a list detailing each potential reforestation site's location, potential acreage, landscape position, watershed, and ownership status was constructed. The sites were then evaluated in accordance with Maryland Reforestation Law criteria and other important details such as parcel size, adjacency to streams, access, and forest tract connectivity.</p>

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				<p>Potential mitigation site acreage identified to date include the following:</p> <ul style="list-style-type: none"> - Approximately 220 acres owned by WSSC - The potential for as many as 200 acres associated with Seneca Creek State Park - 50 to 75 acres of unassigned SHA reforestation credit - 100+ acres within the ICC ROW - 50 to 100 reforestation acres associated with the parkland mitigation - 100 acres associated with the Casey property - An estimated 50 acres as part of wetland mitigation and stream restoration sites.
ACOE	2.16.05	20	<p>The DEIS lacked information on the location of replacement parkland, which is essential to our determination of whether the project is in the public interest. Please provide this information and include it in the FEIS.</p>	<p>The DEIS intended to only include the location of potential parkland replacement sites as under Section 4(f) the final determination of Section 4(f) mitigation is made in coordination with the jurisdictional officials (in this case the park owners). Since the completion of the DEIS, the team has coordinated with M-NCPPC to reach agreement on the proposed parkland mitigation. The mitigation package has been agreed upon by M-NCPPC. The mitigation package has been presented and discussed with the Interagency Working Group. The proposed mitigation, which includes more specific information on replacement parkland, is presented in Chapter V and Chapter VII of the FEIS.</p>
ACOE	2.16.05	21	<p>The FEIS needs to address how traffic from Longmeade residence on the west side of Corridor 1 would be able to access MD 28 while the bridge carrying Longmeade Crossing Drive over Corridor 1 is under construction.</p>	<p>Longmeade Crossing Drive is planned to remain open at all times during construction. Therefore access to MD 28 via Longmeade Crossing should not be adversely impacted by the construction of the ICC. A temporary detour to one side or the other of Longmeade Crossing is planned so that a bridge can be constructed on the present alignment to allow ICC traffic to pass below Longmeade Crossing.</p>
ACOE	2.16.05	22	<p>The proposed partial interchange with Corridor 1 at Old Columbia Pike and Briggs Chaney Road are not proposed on the Master Plan. The FEIS must discuss how these new interchanges would transform the communities along Old Columbia Pike and Briggs Chaney Road. There is no traffic projection for Old Columbia Pike in the DEIS. Traffic projections would be necessary to assess the noise impact on residences and the impacts on accessibility to community facilities such as Paint Branch High School and Benjamin Banneker Middle School. These two new interchanges would be utilized by truck traffic delivering cars to the Auto Mall on Briggs Chaney Road, because constraints on space preclude these local movements being accommodated at the proposed Corridor 1/ U.S. 29 interchange. This would significantly change the composition of traffic on Old Columbia Pike, and this road could potentially require future widening to accommodate the additional volume, bringing the traffic closer to the existing residences. The change in character of Old Columbia Pike would exacerbate noise and proximity impacts for the residents living along the road, and likely exert a destabilizing influence on the neighborhood as people either seek to</p>	<p>SHA has decided to remove the access ramps between the ICC and Old Columbia Pike based on overwhelming Public Hearing comment requests to eliminate them. With the elimination of these ramps, access to the local roads would be provided primarily by either the US-29/Randolph Road or US-29/Brigg's Chaney Road interchanges. SHA developed and shared the analysis effects of various local ramp combinations and their impacts on local roadways, such as Old Columbia Pike Pike, Brigg's Chaney, Fairland, and Randolph Road, and their intersections with residents, the County, and Resource Agencies. The response heard almost universally was to favor the elimination of ramps to and from Old Columbia Pike, and acceptance of lower Levels of Service on local road intersections. Although not on the Fairland Master Plan, Montgomery County does support the proposed partial interchange at Briggs Chaney Road. This partial interchange provides access to eastbound ICC from Briggs Chaney Road, and provides access to Briggs Chaney Road from westbound ICC. Access to/from Briggs Chaney Road from the west is accomplished through the ICC/US 29 and US 29/Briggs Chaney Road interchanges.</p>

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			relocate or convert their residences into rental properties or offices due to the severe change in proximity impacts. We understand SHA is currently evaluating whether the function of the partial interchange at Old Columbia Pike could be served by the proposed Fairland Road/ U.S. 29 interchange, thus allowing the partial interchange, there would continue to be a need to assess in the FEIS the impact of the additional projected traffic that would utilize Old Columbia Pike to assess the Fairland Road / U.S.29 interchange.	
ACOE	2.16.05	23	The document has a detailed analysis of the impact of Spencerville Option A on the Free Methodist Camp Meeting Ground. The DEIS states that Spencerville Option A would have noise and visual impacts that would rise to the level of "substantial impairment of the attributes and features that contribute to the historical significance of the property". Please provide an analysis of a cut-and-cover section to reduce the "substantial impairment", and report the conclusion in the FEIS.	Alignment shift and tunnel options in the vicinity of the Free Methodist Camp Meeting Ground have been studied. A tunnel along the Meeting Ground, extending far enough west and east to avoid noise impacts to the Meeting Ground, would cost approximately \$60 million more than the open section shown in the DEIS. An alignment shift, termed Burtonsville Option X, to place the ICC approximately 550 feet south of Burtonsville Option A has been developed. Both the tunnel and Burtonsville Option X are addressed in the FEIS (Chapter V).
ACOE	2.16.05	24	The Columbia Primitive Baptist Church would experience an adverse effect with Burtonsville A and B due to the change in visual setting associated with clearing of the existing woods to the north of the church. In an effort to reduce the adverse effect, we recommend that the ramp from eastbound Corridor 2 to existing U.S. 29 be relocated to the east side of existing U.S. 29, so that a wooded buffer of more than 200 feet would remain between the church and Corridor 2. Please provide an analysis of this recommendation, and report the findings in the FEIS.	Subsequent to the DEIS, several options were developed and evaluated in this area, including relocating the ramp terminus to the east side of U.S. 29. However, based on coordination with Maryland Historic Trust, such options did not eliminate the adverse effect on Columbia Primitive Baptist Church, cost more, and in some cases resulted in problematic traffic operation. Therefore, these options, which were provided to the ACOE, on July 8, 2005, have not been adopted.
ACOE	2.16.05	25	With Corridor 1, the intersection of Layhill, Norwood, and Ednor Roads is projected to be 25% over capacity (DEIS fig. IV-14), which would be an improvement over the 78% over capacity (DEIS, Fig.IV-17), which is far more congested than the No-Build scenario. With either Build alternative or the No-Build, it is apparent that a future intersection improvement would be needed to address congestion and, as confirmed by a representative of Montgomery County DPWT at a recent interagency meeting, the historic Red Door Store could possibly require relocation in order to make the necessary intersection improvements. The likelihood of relocation would be even more pronounced if Corridor 2 was selected. This potential future impact to the historic site should be disclosed in the FEIS, as it may affect SHA's decision whether to invest environmental stewardship funds in the rehabilitation of the structure.	There may be potential cumulative impacts to this historic site associated with future intersection improvements that may be needed if the ICC is constructed. This potential impact is examined in Section IV.K. of the FEIS. It should be noted that the LOS shown in the DEIS was incorrect at the MD182/Norwood Road/Ednor Road intersection. The potential Environmental Stewardship project at the Red Door Store has not been selected as part of the final package, partly because of the potential for future secondary impacts to this site. The current 2030 V/C ratios are: No-Build (AM/PM) 1.39 1.38 Corridor 1 (AM/PM) 1.25 1.20 Corridor 2 (AM/PM) 1.45 1.36
ACOE	2.16.05	26	Based on comments from the public hearings, there are apparently a number of historic cemeteries affected by Corridor 2. Please provide an assessment of the impacts to these cemeteries, and include the information in the FEIS.	The Area of Potential Effects (APE) for archeology included the limits of right-of-way and limits of ground disturbance associated with construction impacts under all alternatives retained for detailed study. The APE was thoroughly investigated through archival research and field investigation. At the time the DEIS was prepared, no cemeteries had been identified within the archeological APE. Since that time, supplemental archeological identification investigation has been

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				<p>conducted by the Louis Berger Group, Inc. (Berger). One potential cemetery has been identified on Corridor 2, Burtonsville Option A. This small cemetery was identified through informant interview and further researched through archival investigation. A "colored graveyard" is mentioned in deeds dating from 1926 to 1950. A local informant indicated that he remembered the cemetery as "Billy Ward's graveyard." Research in the U.S. Census showed that the African-American Ward family lived near the graveyard by 1870 and owned the parcel including the graveyard from 1880 to 1966.</p> <p>SHA has undertaken additional archival research and a remote sensing study to further delineate the graveyard. Results of the remote sensing study identified 25 anomalies, 24 of which may represent graves. The cemetery is considered potentially significant for the information it can provide about mortuary behavior among the African-American community in nineteenth century Montgomery County and may also be significant because of its association with the African-American community and events relating to its development. The results of the archeological and remote-sensing studies are being coordinated with the Maryland Historical Trust and other interested parties. Burtonsville Option A has been shifted to the northwest in this area to avoid the potential cemetery. Thus, the cemetery now lies outside the archeology APE for the ICC and will not be impacted by the project. Correspondence showing the proposed alignment shift was submitted to MHT on July 13. Plans were provided to the ACOE on July 8, 2005. Chapter II.D.2 and Chapter IV.E.2 of the FEIS have been revised to include discussions of the cemeteries.</p>
ACOE	2.16.05	27	<p>The Noise Quality Technical Report (NQTR) indicates that the homes in the Norwood Village community (located in the southwest quadrant of the MD 28/ MD 182 intersection) would be subjected to noise levels approaching or exceeding the noise abatement criteria. The NQTR indicates that the noise levels experienced in Norwood Village would be partly attributable to the ICC and partly attributable to traffic on MD 28, and concludes that construction of a wall along the ICC would have no effectiveness for this community due to the noise that would continue to emanate from MD28. However, the NQTR does not evaluate the effectiveness of mitigating the ICC noise by constructing a wall on the south side of MD 28. Such a wall would be expected to effectively mitigate noise from both roads. (This approach would be consistent with the strategy that was employed for the noise wall on Spencerville C that would protect Edgewood II from both the MD 198 noise as well as the ICC noise). This wall should not be rejected without analysis simply because, as an added benefit, it might mitigate noise from a road other than proposed project. We recognize that such a wall would require a break for the Wallingford Road entrance to the community,</p>	<p>Although the Norwood Village community exceeds SHA noise abatement criteria, it is primarily (not partly) impacted by noise from Norbeck Road, which is a Montgomery County highway. Without noise from traffic on Norbeck Road the residences would not be impacted; the ICC will add only one decibel to the noise levels from traffic on Norbeck Road. As stated in the NQTR, it is not feasible to build an effective (one that provides a 7-10 dBA insertion loss) barrier within ICC ROW. We believe that mitigation of noise from traffic on county roads is outside the scope of the ICC noise analysis. If an effective noise barrier were to be constructed on the south side of Norbeck Road to protect the residences from noise from both the ICC and Norbeck Road, the barrier would not meet Reasonableness Criteria according to SHA Sound Barrier Policy, because the difference between Build and No-Build noise levels at receptors within the Norwood Village community are less than 3 dBA.</p>

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			<p>however, we would expect that by wrapping the walls for a short distance along Wallingford Road, the requisite insertion loss could be achieved. It also appears that sight distance concerns for vehicles leaving the subdivision via Wallingford Road would not be an impediment if the wall were constructed along the property lines. Please provide an analysis of this request and discuss the findings in the FEIS.</p>	
ACOE	2.16.05	28	<p>At Norbeck Knolls (Noise Sensitive Area 26-1), the NQTR indicates that a combination of three barriers extending 4079 feet from Rebecca Court to 900 feet east of Whitehaven Road would benefit 11 residences, but would not qualify as reasonable due to the cost per residence. A single wall constructed immediately adjacent to Corridor 2 (rather than adjacent to relocated Whitehaven Road), which starts and ends at the same points as the combination wall, would need to be only 3350 feet long to protect the same 11 residences, and could potentially qualify as reasonable under your cost criteria. Please provide an analysis of this wall to reduce highway noise at the community of Norbeck Knolls and the Amersly historic site, and include your findings in the FEIS.</p>	<p>Many of the residences of Norbeck Knolls and the Amersley Historic Site are 35 to 45 feet above the elevation of the ICC roadway. The NQTR analyzed barriers at the most effective location, which is at the top of the slope near the receptors. This barrier would be 4079 feet long with an average height of approximately 16 feet. The barrier has a total cost of \$1,272,800 and an approximate cost/residence of \$115,700. A barrier adjacent to the roadway would have to be much taller to overcome the vertical elevation difference between roadway and receptors. Additional analysis shows that a barrier along the roadway would be 3500 feet long with an average height of approximately 23 feet. The barrier has a total cost of \$1,523,000, and an approximate cost/residence of \$117,100. Neither of these barrier options meets cost reasonableness criteria. Since the costs exceed \$100,000 they do not qualify for project averaging per SHA Sound Barrier Policy. This analysis has been included in Section IV. G. 4. b.</p>
ACOE	2.16.05	29	<p>The top of page V-41 of the NQTR indicates that the investigation of a noise barrier is warranted for noise receptor 30D with Spencerville Option A to Burtonsville A. However, we could not find an analysis of such a barrier in the feasibility analysis which begins on page V-58. Please provide the missing analysis, and discuss the conclusions in the FEIS.</p>	<p>As indicated on page V-95 and V109 of the NQTR, traffic noise at receptor 30D is mitigated by the barrier for NSA 39-1, and its feasibility analysis is included in the analysis for that NSA.</p>
ACOE	2.16.05	30	<p>Page V-87 and V-88 indicate that two noise barriers along the south side of Corridor 2 were found reasonable to protect 17 residences in NSA 30 under the Spencerville A to Burtonsville B Option. The two barriers consist of a 1200-foot barrier west of Good Hope Road and a 2600-foot barrier on the north side of Spencerville Knolls extending from MD 198 to Batson Lane (Plates 59 and 72 of the NQTR). The 2600-foot barrier appears to protect only 4 residences. The FEIS mapping needs to clearly depict the residences that would benefit from such a wall and should confirm that this wall qualifies under your cost criteria.</p> <p>The Spencerville B to Burtonsville B Option evaluated an identical 2600-foot barrier between MD 198 and Batson Lane, but did not include the 1200-foot barrier west of Good Hope Road (Plates 63 and 72), which appears feasible to construct along the south side of Relocated MD 198 in order to protect the Upland drive community. In this case, the barrier was found to be not reasonable. Would the addition of a 1200-foot barrier west of Good Hope Road make the</p>	<p>As shown on page V-108 of the NQTR, for Spencerville A to Burtonsville B (over Good Hope), 17 “residences” are benefited. The “benefited residences” consists of seven houses, and one church (Round Oak Missionary Baptist Church) which, in accordance with SHA Sound Barrier Policy, is considered to be 10 “equivalent residences”. This information is shown on the mapping included in the NQTR.</p> <p>Residences on Upland Drive are displaced under Spencerville A. For Spencerville B to Burtonsville A, receptor (30D) adjacent to Upland Road at this location was not impacted. We added additional analysis points to investigate the sound levels at residences on Upland Drive. The additional analysis demonstrate that the residences on Upland Drive will be impacted. In order to protect these residences the barrier included in the DEIS for NSA 28 would be extended to protect Upland Drive residences. This extended barrier would be 3800 feet long with an average height of approximately 16 feet. The barrier would have a total cost of \$1,139,400 and an approximate cost/residence of \$54,250. Considering project cost averaging</p>

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			barrier for Spencerville B to Burtonsville B option reasonable, as did for Spencerville A to Burtonsville B Option? Please provide your analysis and discuss the findings in the FEIS.	this barrier would meet Feasibility and Reasonableness criteria.
ACOE	2.16.05	31	There does not appear to have been any noise receptor modeled along the Upland Drive community. Consequently, it is not known whether the Spencerville B to Burtonsville Option A would result in a noise increase sufficient to warrant an investigation of the Feasibility of a noise barrier in order to protect the Upland Drive community. In this case, the barrier was found to be not reasonable. Would the addition of a 1200-foot barrier west of Good Hope Road make the barrier for Spencerville B to Burtonsville B Option reasonable, as it did for Spencerville A to Burtonsville B Option? Please provide your analysis and discuss the findings in the FEIS.	A receptor (30D) adjacent to Upland Road at this location was not impacted. We added additional analysis points to investigate the sound levels at residences on Upland Drive. The additional analysis demonstrate that the residences on Upland Drive will be impacted . In order to protect these residences the barrier included in the DEIS for NSA 28 would be extended to protect Upland Drive residences. This extended barrier would be 3800 feet long with an average height of approximately 16 feet. The barrier would have a total cost of \$1,139,400 and an approximate cost/residence of \$54,250. Considering project cost averaging this barrier would meet Feasibility and Reasonableness criteria.
ACOE	2.16.05	32	The top of page IV-110 in the DEIS indicates that a noise barrier was considered reasonable and feasible for the Amersley historic site. However, page V-75 of the NQTR indicates a barrier is not reasonable. Which is correct? The FEIS must be consistent on this issue.	The Build noise levels at Amersley are 10 dBA or more above peak ambient noise levels and, therefore, this site is impacted. As shown on plate V-103; a barrier was analyzed and determined to be “not reasonable” due to cost. The cost per residence is \$115,700. A reasonable barrier is one that costs \$50,000 or less per residence, or is between \$50,000 and \$100,000 and the project average cost is \$50,000 or less per residence. Since the cost of this barrier is more than \$100,000 per residence it does not qualify for project cost averaging. The information contained in the NQTR is correct. This information has been clarified in Section IV. G. 4. b.
ACOE	2.16.05	33	By drawing a 67 dBA contour line throughout the parklands, and another contour line representing a 10 dBA increase, the area of parkland that is impacted by either a 10dBA increase or noise in excess of 67 dBA can be determined. This acreage needs to be quantified in the FEIS.	Additional analysis has been performed for parks and mapping has been prepared that shows Impact Zones within parks. However, undeveloped parkland is not considered to be a noise sensitive land use under current state and federal noise regulations and policies.
ACOE	2.16.05	34	It is not clear why the townhouses on Dinsdale Drive in the Longmeade community would experience a design year noise level of only 62 dBA when the townhouses are immediately adjacent to the ICC, and the ICC is on fill. Homes that are the same distance from the ICC elsewhere in Longmeade are projected to experience 66-68 dBA noise levels. Noise barriers were not considered to be warranted as a result of the low noise projection. Please substantiate that this noise projection is correct.	This area was analyzed as NSA 11. The noise levels shown in the NQTR are correct. The residences on Dinsdale Drive will experience only 62 dBA because there is an existing berm between the residences and the ICC which will remain. Adjacent residences are not protected by this berm. Barriers were investigated for the impacted portions of the Longmeade community; however, the existing berm protects residences on Dinsdale Drive and reduces noise levels so that a barrier is not required for these residences. The adjacent barriers will tie into this berm. As an option, a screen wall may be included on top of this berm to reduce visual impacts.
ACOE	2.16.05	35	In case there is still any misunderstanding about our position, we wish to clarify that we are amenable to considering an application for a low-impact bike path in the ICC Study area, whether as part of your application for an ICC, or as an independent project. Our expectation would be that the streams are bridged, however, we would be satisfied with bridges of the type that are typically used on trail systems, as opposed to an expensive widening of a freeway bridge. We	The ACOE position on permitting for the trail is acknowledged. SHA is still in consultation on options for bike trail development, however, SHA has included the impacts from the bike trail in the most recent impact calculations for wetlands and waters that are included in the FEIS. Additionally, portions of the bike path that have logical termini along the ICC right of way will be paved as part of the ICC's construction.

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			<p>would also expect that the trail would be routed to avoid wetlands and sensitive natural resources, and that it could make use of areas that would already have been cleared or disturbed, such as utility corridors, abandoned railroad right-of-ways, or areas that the contractor would be clearing anyway for haul roads (assuming an ICC is also authorized). Based on information conveyed at the public hearings, we understand that SHA proposes to grade, but not pave, the bike path. In order to consider an authorization for this ancillary project, the Corps would need to know the amount of impact to aquatic resources that would be required specifically to construct the proposed portion of the bike path. Furthermore, because SHA is not proposing to construct a continuous bike path, we would need supporting documentation that the portions of the bike path for which SHA is seeking a Department of the Army permit would constitute a single and complete project (i.e., documentation of independent utility). Please provide the missing data, and include that information in the FEIS. As with the replacement wash pond at Konterra we note that a bike path is not presently part of the joint permit application. If this is part of the project it must be added so that the requisite NEPA and 404(b) (1) analysis can be performed.</p>	
U.S. DOI	2.25.05	36	<p>The Department prefers the Corridor 2 alternative since it will cause the fewest impacts to high-quality aquatic resources, parklands, and wildlife habitat of the "build" alternatives. We support the following alignment options within the Corridor 2 alternative because they minimize impacts to Section 4(f) resources: Rock Creek Option C, Norbeck Option A or B, Spencerville Option A or B, Burtonsville Option A, and Fairland Option A. We believe the section of an alignment that uses these options along Corridor 2 will cause the least harm to Section 4(f) properties. However, if the selected preferred alternative is Corridor 1, we have provided comments on its impacts to resources of concern. We believe the selection of Corridor 1 as the preferred alternative will require substantially mitigation to balance out the net impact to Section 4(f) properties.</p>	<p>The proposed parkland mitigation package has been presented to the Inter Agency Working Group (IAWG) on March 1, 2004. DOI has since indicated that the mitigation proposed for either alternative balances out the net impacts to Section 4(f) resources.</p>
U.S. DOI	2.25.05	37	<p>In evaluating Table 1, it appears that if the less environmentally damaging options of Corridor 1 and 2 were selected, the impacts to wetlands, floodplains, and streams would be similar for both corridors. However, the wetlands and floodplains along Corridor 1 are of much higher quality than those along Corridor 2. Even though the acreage is similar, the qualitative loss of aquatic resources is substantially greater along Corridor 1.</p>	<p>It is true that many of the wetland, floodplain, and stream resources within the broad, stream valley parks along the Corridor 1 alignment are of higher quality than those along the Corridor 2 alignments higher in the watershed. However, specific avoidance and minimization measures have been proposed along the Corridor 1 alignment to lessen the amount of disturbance to those resources. Also, disturbances to headwater systems, such as would occur if Corridor 2 were chosen, can have greater negative effects to downstream resources within the watershed because there is less buffering capability within these typically narrower, steeper headwater systems. By bridging important wetland, stream, and floodplain systems along Corridor 1, the disturbances should be better able to stabilize once construction is completed.</p>

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U.S. DOI	2.25.05	38	The loss of FIDS habitat ranges from approximately 332-511 acres on Corridor 1, compared to 135-250 acres along Corridor 2. There is no contiguous tract of FIDS habitat within the study area large enough to replace what would be lost by construction of Corridor 1. The FIDS habitat in parklands could only be replaced by with a large tract of mature forest land elsewhere in Montgomery County. The FIDS population would decrease in the ICC study area, but would be protected in another area of the County. The potential significant loss of FIDS habitat is of great concern to the Department.	Coordination has occurred with DOI regarding the proposed number of Forest Interior Dwelling Species (FIDS) impacts. The number of impacted FIDS habitat is actually less than provided in the comment. Efforts are being made to consider FIDS habitat as part of the reforestation goals proposed for the project. In addition, the Casey property is being considered for compensation towards FIDS habitat loss. The Casey property includes a large tract of mature forest suitable for FIDS habitat.
U.S. DOI	2.25.05	39	Full mitigation for parkland impacts would successfully account for all of the diverse biological values that exist in the parkland today.	Parkland mitigation sites were selected based on their ability to replace the functions and values of the parkland impacted by the ICC. Those diverse biological values that exist in the parkland would be replaced by providing parkland mitigation as well as compensatory mitigation and environmental stewardship enhancements.
U.S. DOI	2.25.05	40	M-NCPPC has designated North Branch Stream Valley Park and Upper Paint Branch Stream Valley Park as Special Protection Areas, which need special protection from future development.	The North Branch Stream Valley Park Special Protection Area was discussed within the DEIS on p.II-107 and II-131 through II-133 and within the Draft Section 4(f) Evaluation on p. V-13. The Upper Paint Branch Stream Valley Park Special Protection Area was discussed within the DEIS on p.II-107 and II-131 through II-133 and within the Draft Section 4(f) Evaluation on p. V-28.
U.S. DOI	2.25.05	41	However, the four parks listed above (North Branch Stream Valley Park, Upper Paint Branch Stream Valley Park, Rock Creek Regional Park, Northwest Branch Park) protect large contiguous forest habitats that are uncommon in Montgomery County. In summary, Corridor 1 impacts four of these ecologically sensitive areas, while Corridor 2 limits impacts to two of the Ecologically Sensitive areas.	SHA is aware of the importance of these resources and although complete avoidance of impacts is not possible with the selection of a build alternative, a wide array of avoidance and minimization measures (e.g., longer bridges, steeper slopes, etc.) have been included in designs to reduce the potential impacts of the roadway on these resources.
U.S. DOI	2.25.05	42	The Department recommends that parkland impacts be replaced with a large contiguous mature forest of equal or greater acreage, and of equal or greater ecological sensitivity. We would also like to explore the concept of using undeveloped farmland adjacent to these parks where FIDS habitat exists. These areas could evolve over time into new FIDS habitat that would better compliment the existing park use more so than residential development. To count toward mitigation for FIDS habitat, the land would have to be planted with forest species, and should be provided at a ratio approaching 2 to 1.	A large parcel in the Poolesville area of Montgomery County, the Casey Property, is also being provided to M-NCPPC as compensation for impacts to FIDS habitat associated with the Corridor1 Alternative. This inclusion of this site as mitigation for FIDS habitat was agreed upon through coordination with M-NCPPC and was also supported by the US DOI. Since there is no regulatory requirement for the replacement of FIDS habitat and no required ratio at which replacement lands must be provided, the project team sought, and ultimately obtained, agreement from those agencies that the Casey Property would constitute adequate mitigation for FIDS habitat.
U.S. DOI	2.25.05	43	The DEIS does not discuss the values of these Ecologically Sensitive Areas or the vigorousness of the rare or threatened plant populations at each site. Lacking this information, the Department rates the larger Ecologically Sensitive Areas in protected parklands as higher value than the privately held areas; because of their size, large buffered locations, and protected status as parkland.	Each Ecologically Sensitive Area is discussed in the RTE chapter of the FEIS (II.E.10), including a discussion of what RTE species are known to be contained within that area. SHA is aware of the importance of these resources and although complete avoidance of impacts is not possible with the selection of a build alternative, a wide array of avoidance and minimization measures have been included in designs to reduce the potential impacts of the roadway on these resources.

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U.S. DOI	2.25.05	44	Corridor 1 - The Department recommends that Northwest Branch Park Option B be dropped from further consideration. This option would require the relocation of between 1,400 to 1,600 feet of Northwest Branch which is a sizable stream. This stream would have to be relocated through floodplain areas upstream and downstream of the bridge and through a portion of Wetland 2CC. Those additional impacts were not tabulated in the DEIS; therefore the selection of Option B would increase the impacts above the levels stated in the DEIS. The proposed longitudinal crossing of Northwest Branch and the impact to high quality wetlands, floodplains, and wildlife habitat would constitute the most damaging environmental impacts of Corridor I.	We agree that selection of Northwest Branch Option B could add wetland impact to 2CC and stream impact to 2AA. An assessment of these impacts were not included in the DEIS because of a lack of design detail for the stream relocation. SHA has taken this into consideration when choosing a preferred alternate.
U.S. DOI	2.25.05	45	Corridor 2 - The Department recommends that Spencerville Option D and Burtonsville Option B be dropped from further consideration. These options would require excessive grading on steep slopes, impact 13.4 acres of FIDS habitat, and lower oxygen levels in the reservoir with increased runoff of sediment, nutrients, and organic matter. One area that would be graded and filled during highway construction is less than 1,200 feet from the shores of a cove of the Rocky Gorge Reservoir. The excessive grading of the hills and filling of the valleys could accelerate the filling of the reservoir with sediments from the highly erodible soils in the watershed. This also will increase the quantity of soil bound nutrients and organic matter flowing into the reservoir. The reservoir was listed as mesotrophic-eutrophic by the Maryland Department of Natural Resources in 1966. The reservoir experiences low oxygen levels in the summer and is impacting the aquatic resources including fish (DEIS Vol. I, p. 11-66).	The study team has completed several additional studies in the Spencerville and Burtonsville area of Corridor 2 as has been suggested. The team worked closely with the DOI and other state, federal and local agencies to use the technical information and public/agency input to share thinking about options within each corridor prior to comparing the benefits and impacts of each corridor. Specifically related to your comments in this portion of the study area, the conclusion was to pursue Burtonsville Option A versus Option B and Spencerville B compared to Options A, C or D. Again, we thank the DOI for their participation in that process.
U.S. DOI	2.25.05	46	The Corridor 2 alignment which includes Spencerville Option D and Burtonsville Option B has the greatest potential for accelerating sedimentation and eutrophication of this reservoir. This alignment would contribute to reduced reservoir storage capacity and degraded water quality over the long-term. Further, a road close to a reservoir poses a potential spill risk from a truck hauling oil, gas, or other hazardous materials. These hazardous materials could flow downstream affecting aquatic resources and the drinking water system that provides potable water to 700,000 homes and businesses in the area (DEIS Vol. 1, p. 11-65).	The study team has completed several additional studies in the Spencerville and Burtonsville area of Corridor 2 as has been suggested. The team worked closely with the DOI and other state, federal and local agencies to use the technical information and public/agency input to share thinking about options within each corridor prior to comparing the benefits and impacts of each corridor. Specifically related to your comments in this portion of the study area, the conclusion was to pursue Burtonsville Option A versus Option B and Spencerville B compared to Options A, C or D. Again, we thank the DOI for their participation in that process.
U.S. DOI	2.25.05	47	The Department recommends reconsideration of the proposal to bridge a small spring on a tributary of the Good Hope that is located behind the Montgomery County Maintenance Depot. The bridge would be only a few feet above the spring which will prevent any vegetation from growing under the bridge. The spring provides a small amount of water to the small tributary of the Good Hope during the summer when inputs of cold water are needed. The Department recommends the elimination of the bridge and the establishment of a groundwater	A bridge over a small spring on a tributary of the Good Hope is no longer being considered, and a spring box has been included instead. SHA is still investigating the possible ways to augment base flow in the Good Hope tributary to Paint Branch. At the March 25, 2005, meeting of the Brown Trout Working Group, SHA presented it's concerns over using a Deep Well. Based on SHA's Engineering Geology Division's studies, a deep well to pump groundwater could have a negative effect on existing cool water flows to the Good Hope. SHA, with

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			well and pump. A groundwater pump could provide substantial amounts of cold water to the Good Hope during the summer months, more than the spring would ever provide. This groundwater well and pump would maximize the benefits of the linear stormwater system. The bridge over the spring would provide only minimal benefits to the Good Hope Tributary.	the help of the University of Maryland, is investigating technology that could be used to treat either storm water or public water to be used for augmentation. Results will be forwarded to you when the study is finished.
U.S. DOI	2.25.05	48	A vegetated corridor under a high bridge is the best possible passage a road project can offer. However, for this passage to work properly, all rip-rap protection for the bridge piers and abutments should be covered with at least two feet of earth. The earth cover will also allow some vegetation to become re-established to provide food and cover for wildlife. In addition, the rip-rap placement should be minimized to leave the floodplain soil intact so vegetation can regrow. The removal of tree trunks under the bridge also should be minimized. The stumps will hold the soil and will start to re-sprout during the growing season. The new shoots will provide food and cover for wildlife inhabiting the area. Rock piles next to bridge abutments prevent wildlife passage. Rip-rap should be buried.	Thank you for your comments. Your comments were considered during the decision-making process. Those suggestions and others will be examined in the ongoing coordination phase of the planning and final design process after the FEIS.
U.S. DOI	2.25.05	49	Since the sediment elevation in the box culvert cannot be determined before the box is in place, the Department recommends against a box culvert with less than a 12-foot by 12-foot opening. Smaller box culverts could limit deer use. Smaller box culverts do provide good travel corridors for medium-sized carnivores and omnivores such as raccoons, grey fox, and opossum. These species will use box culverts with only three or four feet of vertical clearance.	The locations for wildlife passage, particularly deer, have been determined through coordination with local, state, and federal agencies and are shown in the FEIS. The minimum size opening at such locations is 12'W x 10'H (actual culvert height is 12', allowing 2' of fill). Where small mammal crossings are proposed, the structure required for design will be made larger than it would be otherwise, or a supplemental pipe approximately 6' in diameter will be provided.
U.S. DOI	2.25.05	50	The Department agrees with the majority of the locations and structures as proposed. We suggest that the box culverts proposed at Station 150 and Station 276 be reduced in size to prevent, or at least discourage, deer passage. Otherwise, these passages may direct deer to busy roadways (Shady Grove Road and Muncaster Mill Road). There is a tributary to the North Branch of Rock Creek that is surrounded by a mature forest. This stream is located at Station 297 and may be acquired by the M-NCPPC for parkland. The Department recommends that a deer passage structure be placed next to this stream.	The majority of the agencies involved in the discussion of deer passage felt such passage should be accommodated at stations 150, 276, and 297, and deer passage cells are thus shown at these locations in the FEIS. Please note that the culvert at Station 297 will be designed to also accommodate human passage.
U.S. DOI	2.25.05	51	An eight-foot high fence should be erected at the edges of construction zone clearing, across all parkland properties, to preclude deer from crossing the Intercounty Connector.	The edges of the ICC ROW will have either an 8-foot high fence or a noise barrier.
U.S. DOI	2.25.05	52	To minimize the long-term impacts to reptile and amphibian populations, we would like to explore options such as a two to three foot high fence of geotextile material, aluminum, or treated wood attached to the deer fence to prevent reptiles and amphibians from accessing the highway. A portion of this barrier could be buried in the ground to prevent turtles from digging under the fence and to prevent other reptiles and amphibian from crawling under the fence. The	SHA is committed to 8 foot high deer fencing throughout the corridor in areas where feasible to construct and maintain. In addition, in effort to keep smaller wildlife off of the right of way, SHA has committed to the installation of a small gauge wire mesh along anyplace a wall is not planned. Also at the current level of planning and design, the SHA has committed to numerous bridge spans, oversized deer culverts and specially designed small mammal culverts (includes special 2-

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			Department would like to participate in the location and design of these barriers.	foot dry ledge) in locations where suitable habitat exists on either side of the proposed right of way. This is expected to provide many opportunities for safe passage most terrestrial wildlife, including herptiles. Because of the ongoing planning for noise walls, retaining walls and other features within the right of way, the precise locations of any "wildlife barrier features" beyond the standard deer fence are not known at this time, and will be determined on an "as-needed" basis as planning and design advances and will be coordinated with DOI.
U.S. DOI	2.25.05	53	Vernal pools should be created to replace pools covered by highway fill and in areas where populations of amphibians have been disconnected from a vernal pool that is located on the other side of the ICC.	It is anticipated that vernal pool creation will be conducted in conjunction with wetland mitigation sites.
U.S. DOI	2.25.05	54	The Department would like to be involved in the location of these vernal pool creation sites.	The team will include DOI in any further vernal pool creation discussions.
U.S. DOI	2.25.05	55	The Department requests the opportunity to participate in the evaluation of potential FIDS habitat replacement sites.	It is expected that the interested agencies, including DOI will be included in the evaluation of FIDS habitat replacement sites.
U.S. DOI	2.25.05	56	IC-15 represents two small stream reaches in the gravel mine area that are proposed for restoration. However, the Department believes that IC-15 has low potential for providing good habitat for fish. LP-17 is a potential wetland creation and stream restoration site located in a rapidly developing area. The Department has determined that LP-17 has low potential for providing good quality wildlife or fishery habitat.	SHA notes the comments for IC-15 and has dropped this sites from further consideration. As discussed in the ES/CM workshops Site LP-17 is a highly degraded wetland/stream restoration site that is still included in the package.
U.S. DOI	2.25.05	57	NW-128 is a baseball and football field located on a frequently flooded floodplain next to Northwest Branch. The organization that maintains the fields would like to relocate to higher ground. NW-128 has excellent potential for wetland restoration. The Department offers its assistance in the evaluation of these and other mitigation and environmental stewardship sites.	SHA has been coordinating with MNCPPC and located a potential replacement field on the Llewellyn Property, which is a parkland mitigation site. SHA will continue to coordinate with DOI as the project moves forward.
U.S. DOI	2.25.05	58	Based on information in the DEIS, the Department prefers Corridor 2 over Corridor 1 for the construction of the ICC. The Department offers technical assistance to identify and prioritize the selection of FIDS replacement habitat and the sites used for mitigating the impacts to parkland, wetlands and stream channels. We suggest that consensus-based decision making among the inter-agency working group be the rule. The mitigation list is long, but the potential of these sites to replace the functions and values of the impacted wetlands and streams ranges from negligible to good. To date, there are no sites selected for replacement of FIDS habitat.	Thank you for your comment. Your comment has been used in the decision making process. FIDS habitat mitigation has been identified and SHA will continue to coordinate with DOI.
U.S. DOI	2.25.05	59	The Service is concerned about the future extension of the Intercounty Connector beyond US 1 and through the Patuxent Wildlife Research Refuge. The Research Refuge is a trust resource of the Department of the Interior. The 12,790 acre area provides habitat for fish and wildlife. Over 200 species of migratory birds use the lands for feeding, resting, breeding, nesting, and raising of young. The Refuge is	The SHA/MdTA have no plans to extend the ICC, if built, east of US 1. Throughout this study and the one that was conducted in the 1990s, SHA has explicitly stated that there are no plans to extend the ICC. Moreover, Prince George's County has continued to study removing A-44 (the master plan alignment east of US 1) from its plans and have not been exercising any reservation or

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			the home of the U.S. Geological Survey's Patuxent Wildlife Research Center, which conducts research on a variety of sensitive species that require quiescent environmental surroundings. Some of these species are listed under the Endangered Species Act (e.g. whooping crane) and the work at the Research Refuge is critical to the recovery of these species. The Service would like the Final Environmental Impact Statement to recognize that any analysis of potential future development of the ICC beyond the scope of this proposed project consider the Refuge and the research that occurs at the site.	dedication of right-of-way along it for many years. In fact, even some properties which were placed in reservation years ago have since had the reservations expire and homes have been constructed on some of those lots.
U.S. DOI	2.25.05	60	Because selenium is not discussed in the text of the report, the citation alone without further explanation, appears out of context, is extraneous, and could be misleading. The likelihood of selenium becoming toxic in the proposed project region is slight.	This citation was used in the NETR to discuss the general response of fish to selenium as this was one of the constituents tested during water quality monitoring. However, since this text is not included in the DEIS, the reference will be removed from the DEIS references list.
U.S. DOI	2.25.05	61	Section 4(f) Evaluation should analyze the potential of constructive use due to noise, vibration, change in access, visual intrusion, air quality, and loss of function (conversion from FIDS habitat to edge habitat) for those portions of parkland which are adjacent to the right-of-way condors. Parkland that should be evaluated for constructive use includes Rock Creek Regional Park, North Branch Stream Valley Park, Rock Creek Stream Valley Park, Northwest Branch Recreation Park, and Northwest Branch Stream Valley Park - Unit 5.	Section 4(f) uses due to property acquisition (as opposed to constructive uses) occur at each of the parks listed in this comment. According to Section 4(f), a constructive use does not occur when there is a physical use of a Section 4(f) resource.
U.S. DOI	2.25.05	62	A statement in the first full paragraph on page V-6, indicates that FHWA is considering whether the parkland potentially affected by the alignment referred to as Northwest Branch Option A should be considered as a Section 4(f) impact. The Department's position is that land outside of the Designated Transportation Area is subject to the Section 4(f) regulations. However, the department understands that Northwest Branch Option B has been determined by the US Army Corps of Engineers to be unpermittable, due to its significant impacts to high-quality aquatic resources. The Department would consider a conversion of the Designated Transportation Area to permanent park use to be appropriate mitigation for the use of this Section 4(f) parkland. The acreage appears to be similar, the resources are nearly identical, and selection of Option A will better protect the significant aquatic resources of the Stream Valley Park.	FHWA has concluded that the parkland affected along Northwest Branch Option A would be subject to the requirements of Section 4(f). However, because there is general agreement among the Federal and State resource agencies (ACOE, USFWS, EPA, MD DNR, and MDE) as well as M-NCPPC that Northwest Branch Option A would minimize harm to the aquatic resources within the park. In addition, M-NCPPC has stated that, if Option A is selected, the remainder of the land within the Designated Transportation Corridor will be converted to parkland.
U.S. DOI	2.25.05	63	Text on pages V-6 and V-7 indicates that construction impacts in the vicinity of the proposed bridges have not been accounted for within the Section 4(f) Evaluation. Any additional land needed from Section 4(f) properties, either temporary or permanent, should be analyzed and documented before the use occurs, and is subject to formal review and consultation by the Department. To avoid any subsequent misunderstanding, the Department advises at this time that the removal of mature trees from parkland will be considered as interfering with the activities and purposes of the park resources on a permanent basis and	The Final Section 4(f) Evaluation addresses all permanent and temporary impacts to Section 4(f) resources. All temporary occupancies of Section 4(f) resources have been evaluated in accordance with the temporary use criteria described in the Draft Section 4(f) Evaluation. No parkland is proposed to be used for construction staging areas.

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			therefore, would not be considered a temporary occupancy of Section 4(f) resources. The Department recommends that the FEIS contain a commitment ensuring that no parkland will be used for construction staging areas.	
U.S. DOI	2.25.05	64	The placement of stormwater management facilities in parkland has not been sufficiently documented or justified in the Section 4(f) Evaluation.	The design of the build alternatives has been revised to contain all stormwater management facilities located in parks within the footprint of the roadway. By placing these facilities in underground storage tanks, the need for additional right-of-way within parklands for stormwater management has been eliminated.
U.S. DOI	2.25.05	64	The road design information in several locations throughout corridors 1 and 2 includes the use of retaining walls and/or condensed right of way to reduce the impact to adjacent residential properties and historic properties. These elements should be applied, where possible, to reduce the impacts to adjacent Section 4(f) parkland as well. Also, using a cut and cover technique in the vicinity of the Free Methodist Camp Meeting Ground would completely eliminate the adverse impact to this historic site. Cut and cover is proposed along other portions of the alignment to lessen impacts to nearby residences, and it should be used as well to avoid impacts to the Free Methodist Camp Meeting Ground, which is a Section 4(f) historic property.	Tables showing the potential parkland acreage savings that would result from retaining walls and the associated cost increase were presented to the Interagency Working Group after publication of the DEIS. Considering the small acreage savings, high cost, and intrusive visual impact of the walls, it was decided walls would be provided only in key location in parks, as shown in the FEIS. Alignment shift and tunnel options in the vicinity of the Free Methodist Camp Meeting Ground have been studied. A tunnel along the Meeting Ground, extending far enough west and east to avoid noise impacts to the Meeting Ground, would cost approximately \$60 million more than the open section shown in the DEIS. An alignment shift, termed Burtonsville Option X, to place the ICC approximately 550 feet south of Burtonsville Option A has been developed. Both the tunnel and Burtonsville Option X are addressed in the FEIS (Chapter V).
U.S. DOI	2.25.05	65	The description of the use of Section 4(f) resources, which begins on page V-13, needs to include a brief summary of all the natural and cultural resources which will be affected. Each type of resource should be mentioned, and quantified for each named park. For instance, in Mill Creek Stream Valley Park, the total use of 8.2 acres is minimally described as “forested land”. A more useful and appropriate summary would tally all of the specific resources analyzed in Chapter 4, such as the total length of trails, linear feet of stream, size and quality of wetlands and floodplain, acreage of FIDS habitat, presence of county champion or specimen trees, and habitat for federal and state rare, threatened, and endangered species. The description of Northwest Branch Option A on page V 4 1 should quantify the amount of Section 4(f) land that would be needed.	The descriptions of Section 4(f) uses throughout the document include a general description of the nature of the land affected and does not repeat the detailed quantification of natural resources impacts that was included in Chapter IV, Environmental Consequences. However, the Evaluation of Alternatives includes more detailed natural resource quantities where necessary to compare relevant impacts within parks. The description of the Section 4(f) use of Northwest Branch Option A has been revised to include the acreage of the Section 4(f) use.
U.S. DOI	2.25.05	66	The least harm analysis needs to include consideration of the likely use or disposition of the Transportation Designated Areas along Corridor I, in the event that Corridor 2 is selected as the build alternative. According to the M-NCPPC, this land would remain in public ownership and be converted to parkland. This is potentially a significant benefit to the Section 4(f) park resources in the vicinity of the Transportation Designated Areas.	If the Corridor 2 Alternative is selected, the likely use or disposition of the Designated Transportation Areas would be at the discretion of the M-NCPPC. Although, M-NCPPC has stated that the unused portion of the Designated Transportation Area adjacent to Northwest Branch Stream Valley Park - Unit 5 would be converted to parkland if Northwest Branch Option A is selected, the agency has not indicated their intentions for these lands if the Corridor 2 Alternative is selected.
U.S. DOI	2.25.05	67	The Section 4(f) Evaluation specifically defines the roles of the FHWA, SHA, the Maryland State Historic Preservation Officer, and the M-NCPPC. However,	A reference was added to the Final Section 4(f) Evaluation to define the role of the Department of Interior as requested.

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			there is no mention of the role of the Department of the Interior. This description should be supplemented with an explanation of the role of the Secretary of the Interior as advisor to the Secretary of Transportation, and as the federal technical expert for natural and cultural resources located within public park and recreation lands.	
U.S. DOI	2.25.05	68	The DEIS should include a summary of the research conducted by the project sponsor which was used to determine that none of the impacted park lands in the study area are subject to the applicability of Section 4(f). The results of the research and the determination should be added to the Section 4(f) Evaluation.	The Project Team coordinated with the parkland jurisdictional officials (M-NCPPC, MCRA, WSSC, etc.) in the project area to determine the applicability of Section 4(f) to their facilities. FEIS Chapter 7, Agency Coordination and Public Involvement, includes this correspondence. The Department of the Interior has also reviewed and accepted the Section 4(f) findings.
U.S. DOI	2.25.05	69	The use of Section 4(f) land could be reduced substantially by removing the proposed stormwater management facilities from the parkland and placing them underground within the Designated Transportation Area. This potential for minimization should be more thoroughly explored. We would be pleased to participate in discussions regarding the application of this technique, as well as other Best Management Practices.	Since the circulation of the Draft Section 4(f) Evaluation, a commitment has been made to remove the proposed traditional on-site stormwater management facilities from within parklands and replace these facilities with underground systems to decrease parkland impacts.
U.S. DOI	2.25.05	70	The DEIS states that the remaining interior forest would be divided into four separate stands, of 58.3 acres, 42 acres, and 14.7 acres. However, the CBCAC definition of FIDS habitat requires a minimum area of 50 acres. Therefore, only the 58.3 acre parcel would continue to function as FIDS habitat, and 118.1 acres of FIDS habitat would be lost. The Section 4(f) parkland currently functions as FIDS habitat, so the loss of FIDS habitat is a constructive use to the extent that it occurs beyond the ICC right-of-way, which is the area of direct use.	The acreage for each remaining parcel in Chapter IV of the DEIS was understood by some agencies to be the actual overall forest parcel size after the construction of a build corridor or option. The ICC team has evaluated the comment from DOI on FIDs and FIDS impact. The numbers provided in the DEIS are believed to be correct. The acreages shown in the DEIS are actually the new forest interior size for new parcel associated with the ICC. For example the 58.3 acres stand in the DEIS refers to the forest interior portion of a much larger stand. The actual size of this entire parcel, including the 58.3 acres of forest interior, is 152 acres. The ICC team has submitted maps of some of the forest interior areas with the overall size acreage to some of the agencies. The text in Table II-22 has been revised to clarify this.
U.S. DOI	2.25.05	71	The Draft Section 4(f) Evaluation does not consider the potential of indirect impacts, also referred to as constructive use, for Rock Creek Regional Park and Rock Creek Stream Valley Park. Since the land within the proposed ICC corridor was not designated for transportation use at the time the parkland was acquired, the effects of locating a transportation facility adjacent to parkland needs to be considered. Noise, vibration, and visual intrusion should all be analyzed and quantified within the DEIS.	According to 23 CFR Section 771.135, Section 4(f) Constructive Use can only occur when a "transportation project does not incorporate land from a section 4(f) resource." Therefore, if there is a Section 4(f) use of a property resulting from the incorporation of land from the resource into the project, "constructive use" cannot occur. A Section 4(f) use would occur at Rock Creek Regional Park. Therefore, a constructive use cannot also occur. The ICC would not be adjacent to Rock Creek Stream Valley Park.
U.S. DOI	2.25.05	72	The functions of the Stream Valley Parks have been designated by M-NCCPC as stream protection and passive recreation. The FHWA noise policy should be applied to all adjacent parkland where the ICC is not contained within a Designated Transportation Area. The Department cannot calculate the exact acreage because no noise monitoring was conducted in the parkland. However,	Noise analyses for all ICC alternatives and options were conducted in accordance with FHWA criteria contained in 23CFR772, and SHA Sound Barrier Policy, dated May 11, 1998. Noise levels were determined at location of noise sensitive use. These are ground level locations of common human activity within a noise sensitive land use. SHA has interpreted their Noise Policy such that publicly

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			<p>where the alignment of Corridor 2 is adjacent to the Free Methodist Camp Meeting Grounds, the DEIS states that the ICC will increase noise by at least 10 decibels as far as 150 feet past the ICC right-of-way. The Department concludes that the same increase in noise will occur where the ICC is adjacent to parkland.</p>	<p>owned parks are not considered a noise sensitive use except at picnic areas, pavilions, band shells, amphitheaters, and similar locations. Per the request of FHWA, additional analysis has been performed for parks and mapping has been prepared that shows impact zones within parks. An impact zone is an area where the build levels are 66 dBA or greater, or are 10 dBA over existing ambient levels. The analysis shows that there are no noise sensitive park uses, as defined above, within these impact zones. Therefore, mitigation of traffic noise by sound barriers was not analyzed at parks.</p>
U.S. DOI	2.25.05	73	<p>The FIDS habitat in the Upper Rock Creek Watershed, which includes Mill Creek Stream Valley Park and Rock Creek Regional Park, would be severely impacted. The DEIS states that for Rock Creek Option A, the FIDS habitat that currently contains 131.5 acres, would be severed. Approximately 15 acres would be lost completely (a portion of which occurs within the TDA), and 40.5 acres would be converted to edge habitat (these acres occur in the adjacent parkland). The DEIS states that two small FIDS habitats would remain; one measuring 46 acres, the other only 28.5 acres. However, the Chesapeake Bay Critical Area study released in 2000 defines FIDS habitat as being a minimum of 50 acres. Using the CBCA definition, the entire Upper Rock Creek Watershed FIDS area of 131.5 acres would be lost with 15.1 acres converted to road use, and 116.4 acres converted to edge habitat.</p>	<p>The acreage for each remaining parcel in Chapter IV of the DEIS was understood by some agencies to be the actual overall forest parcel size after the construction of a build corridor or option. The ICC Team has evaluated the comment from DOI on FIDS impact. The numbers provided in the DEIS are believed to be correct. The acreages shown in the DEIS are actually the new forest interior size for new parcel associated with the ICC. For example the 46 acre and 28.5 acre stands in the DEIS refers to the forest interior portion of a much larger stand. The actual size of this entire parcel, including both the 46 acres and 28.5 acres of forest interior, is 356.4 acres. The ICC team has submitted maps of some of the forest interior areas with the overall size acreage to some of the agencies. The text in Table II-22 has been revised to clarify this.</p>
U.S. DOI	2.25.05	74	<p>For Rock Creek Option C, 2.8 acres of the original 131.5 acre habitat would be lost completely and 14.1 acres would be converted to edge habitat. The FIDS habitat would be reduced to 114.6 acres. The loss of FIDS habitat on parkland is a constructive use because it is a significant impairment of the existing function. Based on the above analysis, the Department strongly favors Option C.</p>	<p>According to 23 CFR Section 771.135, Section 4(f) Constructive Use can only occur when a "transportation project does not incorporate land from a Section 4(f) resource." Both Rock Creek Options A and C require an actual 4(f) use of Rock Creek Regional Park; therefore, a constructive use does not exist. FHWA recognizes the importance of FIDS habitat within the park resources and has offered M-NCPPC compensation (the Casey Property) to replace much of the impacted FIDS habitat.</p>
U.S. DOI	2.25.05	75	<p>The parklands that will be impacted by Corridor 1 contain large contiguous stands of mature forest of high value for Forest Interior Dwelling Species (FIDS). These forests also contain high quality floodplains and wetlands. These forests are becoming scarce in central Maryland as this area continues to be developed. The U.S. Fish and Wildlife Service Mitigation Policy recommends that these Category 2 areas (high value lands becoming scarce) should be replaced with land, of equal habitat value. Corridor 1 bisects large contiguous tracts of forests in four parks. These parks include: Rock Creek Regional Park, North Branch Stream Valley Park, Northwest Branch Stream Valley Park, and Upper Paint Branch Stream Valley Park. Corridor 2 bisects contiguous forests in two parks. These include Rock Creek Regional Park and North Branch Stream Valley Park. This letter addresses the parkland issues under the section labeled Forest Interior</p>	<p>Efforts are currently underway to locate potential reforestation sites. These efforts have involved both a desktop and field review process. Whenever possible, potential sites were located within the immediate project area, watershed, or county by coordinating with local governmental agencies, or by reviewing existing county master plans, watershed assessments, and specific project studies. From this information, a list detailing each potential reforestation site's location, potential acreage, landscape position, watershed, and ownership status was constructed. The sites were then evaluated in accordance with Maryland Reforestation Law criteria and other important details such as parcel size, adjacency to streams, access, and forest tract connectivity. For FIDS habitat reforestation, large open areas within or adjacent to existing FIDS habitats are being looked at. Furthermore, the Casey property, an area dominated by mature forest, is being considered. Through a</p>

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			Dwelling Species (FIDS) Habitat.	combination of the Casey property and reforestation efforts, it is anticipated that sufficient FIDS compensation will be identified to match direct and indirect FID impacts.
U.S. DOI	2.25.05	76	<p>More information is needed in order to determine the sufficiency of this proposed mitigation. The goal of mitigating with replacement parkland is to provide land of equal utility. Equal utility is a quantitative and qualitative assessment. The Section 4(f) Evaluation should quantify and qualify each segment of parkland that will be impacted. In addition to total acreage, the quantity and quality of floodplain, wetland, forest cover, and FIDS habitat should all be provided. The presence of streams and specimen and champion trees should be noted. In addition to the resources, the location and accessibility of the replacement land is a component of the equal utility equation.</p> <p>The same information should also be provided for each parcel of proposed replacement parkland so that a comprehensive comparison can be made. Without this information, it is difficult, if not impossible, to determine the extent to which the conceptual mitigation sites meet the threshold of equal utility.</p>	The Final Section 4(f) Evaluation, Least Harm Analysis, provides a description of each impacted parkland area that includes both quantitative and qualitative assessment of the functions and values of that land. Replacement parkland parcels selected for mitigation of Section 4(f) park uses were evaluated based on their ability to replace the functions and values of the parkland that would be acquired by SHA to accommodate the ICC. These functions and values are generally provided by the natural features such as floodplains, wetlands, streams, forests and FIDS habitat. The amount of these resources that would be provided by each parkland replacement parcel is described in the Final Section 4(f) Evaluation.
U.S. DOI	2.25.05	77	An additional potential parkland replacement site has been identified in western Montgomery County. This parcel is 458.7 acres and predominantly forested with 341.3 acres of FIDS habitat. No other information is provided regarding the natural resources contained within this site. Therefore the suitability of this land to replace parkland which contains streams, forested floodplain, and forested wetlands cannot be determined. As mentioned earlier, we look forward to participating in future discussions to select replacement land.	Chapter IV, Environmental Consequences includes a complete description of the referenced property in Western Montgomery County (the Casey Property). However, this site is not proposed as Section 4(f) parkland mitigation, but rather as compensation to be provided to M-NCPPC for other resource impacts, namely impacts to FIDS habitat.
U.S. DOI	2.25.05	78	A decision to build the ICC along Option A should include a commitment to convert the Designated Transportation Area to permanent park use. This would replace the mature upland forest along Option A with the mature upland forest located in the Designated Transportation Area. This conversion to parkland would equalize the park impacts of Option A with those of Option B. The construction of the ICC along Option A would cause far less environmental damage to the Northwest Branch Recreational Park and the Northwest Branch Stream Valley Park than would a highway along the Option B Corridor.	The M-NCPPC has stated that in the event that Northwest Branch Option A is constructed, the remaining portion of the Designated Transportation Area along Northwest Branch Option B would be converted to parkland. This decision is made solely at the County level as they are the owners and managers of this property.
U.S. DOI	2.25.05	79	Measures to minimize and/or mitigate harm to the Holland Store, James Holland House, and the Free Methodist Church Camp Meeting Ground historic resources are not specifically addressed in the DEIS. Noise walls could be provided to reduce noise, and vegetative buffers could be added to diminish visual intrusions. The Department would like to participate in the selection of mitigation for historic properties.	Measures to minimize and/or mitigate harm to the Holland Store, James Holland House, and the Free Methodist Church Camp Meeting Ground historic resources have been developed in compliance with Section 106 of the National Historic Preservation Act. These measures are detailed in the Section 106 Memorandum of Agreement that has been developed for this project and are summarized in the FEIS and Section 4(f) Evaluation. As a member of IAWG, DOI will have the opportunity to participate in the selection of mitigation for historic properties. This

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				will include review and comment on the Preferred Alternative and Conceptual Mitigation document in advance of the FEIS/Section 4(f).
U.S. DOI	2.25.05	80	The Department believes that harm to Section 4(f) properties along this alignment can be minimized further. The constructive use of the Free Methodist Church Camp Meeting Ground could be completely eliminated by shirting the alignment of Corridor 2 to the south in this vicinity. Or the constructive use of the Free Methodist Church Camp Meeting Ground could be completely avoided by lowering the ICC alignment in this area and covering it with an urban deck. The first option would cause displacement of some additional residential properties, and the second option would increase the consumption cost of the project. However, similar measures are being used on other parts of the ICC to avoid or minimize impacts to residences, so it would appear to be reasonable to use these measures to avoid impacting a Section 4(f) property.	Additional studies of potential avoidance options at the Free Methodist Church Camp meeting Ground resulted in the conclusion that a southern alignment shift would avoid the constructive use of this resource. Chapter V, Final Section 4(f) Evaluation, now includes this option in the analysis of alternatives.
U.S. DOI	2.25.05	81	The Department believes that the loss of FIDS habitat may be understated in the DEIS because parcels significantly less than fifty acres in size are counted as viable FIDS habitat. The Department believes it is likely that the smaller amount of FIDS habitat lost along Corridor 2 could be replaced within Montgomery County; however it is unlikely that the larger loss of FIDS habitat along Corridor 1 could be replaced within Montgomery County.	<p>The acreage for each remaining parcel in Chapter IV of the DEIS was understood by some agencies to be the actual overall forest parcel size after the construction of a build corridor or option. The ICC Team has evaluated the comment from DOI on FIDS and FIDS impact. The numbers provided in the DEIS are believed to be correct. The acreages shown in the DEIS are actually the new forest interior size for new parcel associated with the ICC. For example the 46 acre and 28.5 acre stands for Upper Rock Creek watershed in the DEIS refers to the forest interior portion of a much larger stand. The actual size of this entire parcel, including both the 46 acres and 28.5 acres of forest interior, is 356.4 acres. The ICC team has submitted maps of some of the forest interior areas with the overall size acreage to some of the agencies.</p> <p>Reforestation sites are still being selected; however, for FIDS habitat reforestation, large open areas within or adjacent to existing FIDS habitats are being looked at.</p>
U.S. DOI	2.25.05	82	The Department believes that with the selection of Corridor 1, the population of FIDS in Montgomery County will decline. The Department requests the establishment of a groundwater well to contribute cold water to the Good Hope Tributary.	Engineering Geology Division has conducted fracture trace analysis and environmental records search to determine the feasibility of using a groundwater well to augment base flow in the Good Hope. These studies indicated that pumping of groundwater in the Good Hope would be likely to have negative effects on the existing base flow contributions to the stream. Consequently, this has been dropped from further study. SHA does, however, continue to evaluate the feasibility of augmenting cool base flows with stormwater that would be stored, cooled and released to the stream, with a possible backup system using potable water if stormwater supplies were low. These studies will continue into final design and SHA will continue to coordinate closely with the agencies on this issue. A summary of these various investigations has been included in the FEIS. FIDS habitat preservation is also being included with the Casey property as part of the

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				overall ICC mitigation package. This is private land that will become public parkland.
U.S. DOI	2.25.05	83	The Department suggests the elimination of deer passage provisions at Stations 150 and 276, along with the addition of a deer passage structure at station 297. The Department suggests providing fence for deer and a barrier for reptiles and amphibians along all the parkland adjacent to the right-of-way.	As discussed with the wildlife passage team, deer culverts were requested at Stations 150 and 276. The M-NCPPC, in particular, has expressed a desire for deer culverts at both of these locations. The Team has agreed to also have a deer culvert at Station 297. Efforts will be made to minimize wildlife from accessing through the fence along the ICC. This includes extending an eight-foot fence along the project limits.
U.S. DOI	2.25.05	84	The Department recommends the creation of replacement vernal pools as needed to support amphibian breeding.	SHA is committed to establishment of a variety of various habitats including vernal pools at the proposed ES/CM sites.
U.S. DOI	2.25.05	85	The Department requests the opportunity to participate in the selection of replacement FIDS habitat, stream restoration, wetland creation, and environmental stewardship sites.	It is expected that the interested agencies will be included in the selection of replacement sites for these resources.
U.S. DOI	2.25.05	86	The Department believes that stormwater management should be located outside of parkland to the greatest extent possible.	Several refinements have been made to reduce the SWM areas within parkland and are reflected throughout Volume II.
U.S. DOI	2.25.05	87	The Department believes that constructive use of parkland due to loss of FIDS habitat, and due to the introduction of noise, vibration, and visual disruption should be accounted for in the document.	According to 23 CFR Section 771.135, Section 4(f) Constructive Use can only occur when a "transportation project does not incorporate land from a section 4(f) resource." Therefore, if there is a Section 4(f) use of a property resulting from the incorporation of land from the resource into the project, "constructive use" does not also occur. As well, a "constructive use" does not occur where the transportation project was concurrently planned with the park. The designated transportation corridors were allocated as such prior to or at the same time the adjacent property was designated as parkland. For this reason, the reviewer mentioned potential impacts of a roadway system to an adjacent park were/are viewed as acceptable by M-NCPPC the designation of transportation right-of-way. For those resources where there is no incorporation of land into the project, but the project's proximity impacts could result in a substantial impairment of the resources, an analysis of constructive use was conducted. This analysis is included in the Final Section 4(f) Evaluation.
U.S. DOI	2.25.05	88	These impacts should be considered in the document. Parkland should not be used for staging.	The contract documents will require contractors to stay within the proposed ICC Row lines in park areas.
U.S. DOI	2.25.05	89	The project should incorporate all possible measures to minimize harm to parklands and historic resources.	The study team has included various methods to avoid and minimize harm to parkland and historic resources. These methods include alignment shifts, retaining walls, extended bridge lengths, underground stormwater management, reduced grading limits and other features detailed in the FEIS Chapter V.
NOAA/USDC	01.12.2005	90	All available geodetic control information about horizontal and vertical geodetic control monuments in the subject area is contained on the National Geodetic Survey's home page at the following Internet World Wide Web address: http://www.nas.noaa.gov . After entering the this home page, please access the	The National Geodetic Survey site was visited and the presence of monumentation within the vicinity of the project was noted. If planned activities will disturb or destroy NGS monuments, NGS will be notified as required. Funding for surveys, construction stakeout and related activities are included as part of the project.

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			<p>topic "Products and Services" and then access the menu item "Data Sheet." This menu item will allow you to directly access geodetic control monument information from the National Geodetic Survey data base for the subject area project. This information should be reviewed for identifying the location and designation of any geodetic control monuments that may be affected by the proposed project.</p>	
NOAA/USDC	01.12.2005	91	<p>If there are any planned activities which will disturb or destroy these monuments, NOS requires not less than 90 days' notification in advance of such activities in order to plan for their relocation. NOS recommends that funding for this project includes the cost of any relocation(s) required.</p>	<p>The National Geodetic Survey site was visited and the presence of monumentation within the vicinity of the project was noted. If planned activities will disturb or destroy NGS monuments, NGS will be notified as required. Funding for surveys, construction stakeout and related activities are included as part of the project.</p>
U.S. EPA	02.25.2005	92	<p>As a result of our review and extensive coordination with project sponsors and resource agencies, EPA believes that the ICC Corridor 2 represents a build alternative that will meet project needs, and, with certain design and alignment options, reduce environmental impacts to acceptable levels.</p>	<p>Corridor 1 has been selected as the State Preferred Alternative. Your comments have been considered in the decision making process, however, Corridor 1 would perform better than Corridor 2AX and 2DB in meeting the elements of the ICC Purpose and Need that are related to community mobility, movement of people and goods, and serving existing and future development patterns. Corridor 1 would have fewer community impacts and is projected to carry more traffic on the ICC than Corridor 2AX and 2DB, in part because Corridor 1 is part of the existing County Master Plan and existing and planned development has occurred in anticipation of the highway in the Corridor 1 location. In addition, residents have been alerted to Corridor 1 through a Montgomery County ordinance requiring notice of, and an opportunity to review, area Master Plans as a prerequisite to all real estate closings in the County since the early 1970s. Corridor 1 would also be located within a greater portion of PFAs, thereby making this Corridor more consistent with state Smart Growth laws, and able to better serve both existing development and planned future development.</p>
U.S. EPA	02.25.2005	93	<p>The quality of several wetlands in the riparian/park complexes impacted by Corridor 1 necessitates an evaluation beyond the mere comparative tabulation of wetland area. Several forested wetlands are integral components of larger expanses of intact forest that comprise a local park network. The complex of upland, wetland and riparian forest exhibit ecological function beyond that contained within any individual forest component. The internal structure of the selected wetlands, combined with their spatial relationship with other forest components, gives the resource exceptional value, and classification as "reference standard wetlands" within the context of the Hydrogeomorphic Approach to Wetland Assessment. Moreover, despite the commitment to bridge large sections of the forest complex, we believe that the environmental impacts inherent in highway construction (e.g. access paths, staging areas, on-site construction) could significantly diminish the structure, function, and value (both ecologically and socially) of the residual forest remnants that will exist after construction.</p>	<p>The decision to span the larger streams with bridges was made for a variety of environmental and aesthetic reasons including keeping direct wetland, forest and floodplain impacts as small as possible. SHA acknowledged in the DEIS that some indirect impacts to forests could occur including increased sunlight penetration and the possibility for invasive species introduction. It is also quantified that residual forest remnants may provide less forest interior dwelling species habitat. The direct forest impact calculations in the EIS are based on a limit of disturbance provided by the section engineers and was developed to accommodate the on-site construction, staging areas and overall access. The proposed use of an environmental monitor could help to further minimize tree loss or other indirect impacts within the right-of-way, however the extent of this minimization is not able to be predicted at this time.</p>

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U.S. EPA	02.25.2005	94	Public concern is very strong for protection of a large drinking water supply reservoir, located approximately one mile from proposed Corridor 2 alignment. The agency requests that additional risk evaluation and risk minimization measures be incorporated into the analysis of this alignment.	SHA has developed a more quantitative discussion of the possible impacts to the reservoir. SHA has currently modeled pollutant loads from the highway corridor for select constituents both with and without stormwater management to more quantitatively assess the water quality impact on the reservoir. Basic modeling has also been conducted to assess the loads of these same pollutants resulting from the various future growth scenarios in the SCEA. SHA has also developed a Comparative Water Resource Hazard Assessment to better evaluate the potential for hazardous waste spills in the reservoir watershed. Information resulting from these efforts is included in the FEIS.
U.S. EPA	02.25.2005	95	The EPA expects more detailed mitigation and environmental stewardship commitments to be available before SHA announcement of a preferred alternative. A mitigation package developed for corridors must consider impacts to (and loss of) interior forest habitat in Corridor 1, and to a lesser extent, Corridor 2. The loss and degradation of habitat for forest interior species - habitat reduced in the Washington D.C. region by development to few areas beyond the park systems - needs compensation within the mitigation offered. As there is significant concern about water quality and secondary development in the Rocky Gorge watershed, consideration may be given to investigating forested land for preservation in the Montgomery or Howard County area of this watershed. The Agency will continue to cooperate with SHA to identify appropriate mitigation for wetland, stream and forest resource losses, as well as enhancements through environmental stewardship.	Mitigation and stewardship opportunities were reviewed with agencies in two workshops in February 2005. The commitments made at these workshops have been presented in the Preferred Alternative Compensatory Mitigation Package (PACM). This package includes mitigation for forests, wetlands, streams and other natural and human resources.
U.S. EPA	02.25.2005	96	The document needs an explanation of the increase in wetland, forest, and stream impacts in comparison to earlier studies. The EPA understands that the increases are primarily the result of tabulation of impacts to include the whole width of the right of way (ROW), instead of simply the footprint of the road. For NEPA purposes, the use of conservative, worst-case estimates may be appropriate. However, for the purpose of the Section 404 permit analysis, more realistic numbers are needed. It may be preferable to develop a table comparing ROW impacts and what impacts are expected to aquatic and forest resources during construction. Other factors should be discussed, such as variations in wetland delineations due to the extended drought and more detailed delineation study.	The reasons for the increase in wetland and stream impacts are discussed in the FEIS Summary (S-16) and the Environmental Consequences section of the document (IV-194). Forest impacts have increased from the 1997 study due to the increased accuracy used during the 2004 study to calculate the impacts. Impact calculations will be refined using a 25-foot buffer beyond the cut/fill lines to accurately depict the potential impacts of the selected alternative. In many areas this is the ROW. In areas where the ROW is outside this limit, an LOD will be estimated as accurately as possible at this phase of engineering to allow calculation of impacts.
U.S. EPA	02.25.2005	97	As there is concern about construction in Rocky Gorge Reservoir watershed, locations may be suggested where cut and fill could be reduced, and a number of acres of wetland and stream channel impacts could be avoided or minimized with refinement of design.	ICC horizontal and vertical alignments throughout the project, including the Rocky Gorge Reservoir watershed, were set to minimize impacts to 4(f) resources, communities, forests, wetlands and streams to the extent possible while meeting the constraints and with consideration to the design of crossing existing roadways, roadways under construction (i.e., relocated US 29), existing utilities (i.e., PEPCO tower line) and to drainage/stormwater management design. These constraints and considerations have an affect on depth of cut and fill along the alignment. Impacts

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				to streams have been minimized through considerations such as perpendicular stream crossings, retaining walls where feasible and the extension of bridge wingwalls. Impacts to wetlands have been additionally minimized or avoided with alignment shifts, retaining walls where feasible and the extension of bridge wingwalls. To the extent possible and assuming the selection of a build alternate, further design refinements to minimize cuts and fills and impacts to wetlands and streams will be considered.
U.S. EPA	02.25.2005	98	There is a need for a risk evaluation of the reservoir, possibly modeling to estimate direct impacts (impervious surface), road runoff impacts and secondary development impacts (which would apply to either corridor). Any measures that can be incorporated to minimize potential impact of hazardous material spills, terrorist acts (intentional spills), sediment release during construction and roadway runoff during regular highway operation should be identified. Directing runoff away from the reservoir could be evaluated. It would be appropriate to review issues from construction of the US 29 crossing of the Rocky Gorge Reservoir to avoid repeating problems and possibly improve runoff conditions to the reservoir. As roads often approach or cross reservoirs, there should be some standard practices to follow and improve upon.	SHA and the project study team are continuing to work with WSSC to develop a more quantitative analysis of the possible impacts to the reservoir. SHA has modeled pollutant loads from the highway corridor for select constituents both with and without stormwater management to more quantitatively assess the water quality impact on the reservoir. Basic modeling has also been conducted to assess the loads of these same pollutants resulting from the various future growth scenarios in the SCEA. SHA is also worked on the development of a risk assessment to better evaluate the potential for hazardous waste spills in the reservoir watershed. Information resulting from these efforts has been included in the FEIS. SHA is aware of the problems on US 29, but does not anticipate these impacts to the reservoir on the ICC due to a more proactive environmental management approach that among other things includes redundant sediment and erosion control, onsite environmental monitors and construction inspectors.
U.S. EPA	02.25.2005	99	The EPA requests that the document more clearly describe the stormwater management activities proposed for the alignments. Explicit comments should be made clear concerning the type of design and the rationale for different segments of the proposed highway. Technical rationale should include advantages, disadvantages, possible failure points (such as freezing temperatures or weather events), explanation of runoff pathways from the road and possible consequences, how different designs handle common road runoff and potential hazardous spills, maintenance issues, information supporting the use of any new technologies, and other information relevant to the selection and operation of stormwater management design. The document should indicate when commitment will be made to stormwater management design.	Detailed information on stormwater management design approaches, treatment effectiveness, temperature effects, and maintenance of baseflow and other technical rationale will be located in Table IV-55. In summary, it should be noted that SHA is committed to protecting water resources from ICC related impacts with a variety of innovative SWM techniques, in compliance with the latest MDE criteria, regardless of the alternative selected. Advanced technologies that in many cases exceed MDE minimum requirements will be used to mitigate specific anticipated impacts and address the unique needs of the individual receiving stream systems. SHA also is dedicated to exceeding the minimum regulatory requirement for providing water quality control for a 1-inch rainfall event; an MDE requirement that is meant to capture and provide water quality treatment for 90 percent of annual runoff volume. Instead, SHA has committed to provide water quality control for a 1.5-inch rainfall event throughout the project corridors to capture more than 95 percent of annual runoff volume to better protect or improve the existing stream conditions. To ensure that SWM facilities constructed as part of the ICC function as designed long-term, these facilities will be under the jurisdiction of MDE's Federal National Pollutant Discharge Elimination System (NPDES) Phase II General Permit for

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				State and Federal Agencies when issued. The NPDES permit outlines minimum inspection and maintenance frequency requirements, routine inspection of facilities, and maintenance prioritization based on inspection results. Through all these measures, it is MdTA's and SHA's goal to exceed SWM requirements set forth by MDE, to ensure the long-term effectiveness of these measures, and, by doing so, overcome past shortcomings of SWM in protecting water resources.
U.S. EPA	02.25.2005	100	The Agency requests a formalization of a process for review of design decisions including the selection of culvert and bridge dimensions, wildlife passages (including amphibian and reptile passage and deer exclusion fencing), placement and style of stormwater management facilities, use of retaining walls and noise barriers, and specifics such as the height of interchanges (in particular for the Corridor 1 interchange with US 29).	SHA is willing to work with EPA to address their concerns, including the location and height of noise walls, retaining walls and the overall interchange height. A written policy on this commitment however may not be in the best interest of either party as it may be too formal and not cover all of or allow the flexibility desired for a design build type project. It is also important to note that the ICC in this location, US-29 to Little Paint Branch, is more or less centered on top of the existing stream and at the lowest point of the stream valley. Therefore opportunities to add open ditches and wildlife passages in this area to address some of the concerns may be limited. The ICC is required to provide facilities that will not adversely affect upstream or downstream flooding. Finally, SHA has committed to a narrow median, steeper side slopes (2:1 vs 3:1) and reforestation of the side slopes to limit impacts to interior forests. These issues have been discussed with individual agency representatives as well as with the Interagency Working Group before and after publication of the DEIS. The information presented in the FEIS reflects the results of this coordination.
U.S. EPA	02.25.2005	101	It is recognized that many changes recommended by various agencies were incorporated into the Secondary and Cumulative Effects Analysis. The review of the new document, there are inconsistencies between text and tables, and some confusion within the text. If a new document is to be issued with a Final EIS, the Agency would be pleased to participate in revisions.	Thank you for your comments. Coordination will continue with your agency on this issue and the study team will continue to QA/QC the document for inconsistencies.
U.S. EPA	02.25.2005	102	The Agency followed the development of, concepts for a bike path along or near the proposed ICC during interagency meetings. EPA has no reason to dictate opinion on the style or location of a path, as this is seen as a local planning decision made with SHA. EPA did not question or voice exception to proposed impacts for the additional land needed for a bike path. EPA would be pleased to work with the interagency team to find a way to minimize environmental impact of a selected pathway. EPA recognizes the strong public support expressed in email and at the public meetings, and acknowledges that the environmental benefit of public use of a pathway may justify environmental impacts.	Thank you. The SHA continues to work with all interested agency and public stakeholders on studies of the bicycle plan. We appreciate the EPA's support and opinions provided throughout the alternatives development process.
U.S. EPA	02.25.2005	103	The Agency commends SHA for the exceptional work done for the Environmental Justice study, and the response to our earlier comments on the preliminary EIS. EPA suggests that documentation in the DEIS should include more detailed maps of housing tracks and the alignments, showing comparisons	Statewide averages for minority and low-income residents can be included in Section IV. B. 2. to provide context for the ICC project study area. However, for the purposes of analyzing impacts of the proposed ICC, county- and study-area wide averages provide the basis for determining whether concentrations of

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			of community demographics with State averages for minority and/or low income residents.	<p>minority/low-income populations are present. This approach ensured that the unique characteristics of the study area population was properly considered in conducting the analysis.</p> <p>Although Census data is readily available, detailed maps comparing one community against another, block-level race data, or block-group level income data are not as easy to obtain. It was determined that providing assembled demographic information in the DEIS would have provided a readily available tool to target low-income or minority communities for purposes unrelated to the transportation study.</p>
U.S. EPA	02.25.2005	104	Though efforts to minimize stream and wetland impacts have been included in the design, unavoidable direct and indirect impacts are present. Design features intended to minimize impacts, such as bridges and stormwater infiltration devices, can exacerbate other problems such as noise, runoff, or infiltration of contaminants.	Thank you for your comments. Your comments were considered during the decision-making process. SHA continues its efforts to balance the varied impacts, resource protection priorities and requirements of the roadway design to minimize the overall impact of the project on the human and natural resources of the project area.
U.S. EPA	02.25.2005	105	The changes in habitat and water quality represent a particular threat to the Good Hope and Gum Spring tributaries of Paint Branch, where the only naturally reproducing brown trout population in Montgomery County and the metropolitan Washington D.C. area exist. Regional sampling has demonstrated that water quality in this portion of the Paint Branch is the highest in the Anacostia watershed. Paint Branch has been designated Class D (natural trout) waters by the State of Maryland. This resource is valued by the community and county, who have instituted a Special Protection Area (SPA), with restrictions on development and impervious surface, to help maintain water quality and the trout population. Riffle and pool complexes characteristic of trout habitat are identified as "special aquatic sites" in Section 404(b)(1) Guidelines that are the foundation of the program that concerns the deposition of fill in waters of the United States. These resources are rare in a heavily populated suburban area. SHA has given extensive consideration to the resource. Corridor 1 design in the SPA has an advanced stormwater management system and directs runoff from the road to areas outside the SPA to avoid contamination of the Goad Hope and Gum Springs. Yet there is considerable risk that the trout population will be lost when highways span trout streams, with slope stormwater runoff, forest clearing, added sediment load, and the potential failure of infiltration systems (allowing uncontrolled runoff or slow release of potential hazardous spills).	SHA acknowledges the importance of maintaining water quality in the Upper Paint Branch watershed and has incorporated a wide array of design elements that are anticipated to allow for the continued maintenance of the high water quality in this system. SHA will be responsible for maintaining these high water quality conditions through its MDE-issued water quality certification and NPDES permit. SHA has committed to bridges, innovative stormwater management, redundant sediment and erosion control, environmental monitors, mitigation and environmental stewardship projects in this watershed and believes that the water quality of the system can be maintained through the use of these measures during construction and operation of the ICC. In reference to riffle pool complexes, the bridges that have been included in the roadway design avoid impacts to riffle pool complexes in the Paint Branch.
U.S. EPA	02.25.2005	106	It is the opinion of EPA that the best that can be done to maintain water quality in Paint Branch, if a build alternative is selected, is to use Corridor 2. Corridor 2 avoids the direct crossing and headwaters of Gum Springs and Good Hope, which give the fish population a better chance for survival. Environmental Stewardship	SHA believes that the extraordinary measures included in the ICC design will allow for maintenance of high water quality in the Paint Branch system. The ES projects proposed under both Corridors 1& 2 would help improve conditions in these important headwater streams.

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			options performed for the Paint Branch will further the chances of success for maintaining the trout population and for improvement of water quality in this valuable system.	
U.S. EPA	02.25.2005	107	A road dissecting protected parklands, removing and fragmenting habitat, will degrade stream buffers, provide establishment sites for invasive species, reduce interior nesting bird habitat, increase water temperature, and reduce water quality. The resources have been protected by Maryland-National Capital Park and Planning Commission (MNCPPC) for preservation of the ecological function and for passive recreational public use and appreciation. The changes in habitat, added road noise (particularly at bridges) and associated litter in the parkland will compromise and significantly diminish the experience of quiet and solitude for hundreds to thousands of feet from the road.	M-NCPPC created the stream valley parks with conservation in mind, but, at the same time, the same jurisdictional agency designated transportation corridors adjacent to this parkland. Under Section 4(f), parkland replacement lands and minimization and mitigation measures have been developed commensurate to the impacts to the recreational facility.
U.S. EPA	02.25.2005	108	It is the opinion of EPA that the expansive wetlands in Northwest Branch include representatives of the highest quality wetland complexes in the Washington D.C, region. The value of this resource has been emphasized and prioritized by the resource agencies involved in this study, and efforts were made to minimize impacts by bridging. Bridging has reduced the quantified wetland impact in Northwest Branch Park to 1.3 acres, in a complex of over 40 acres of wetlands. As with other sensitive resources, engineering considerations have been generous, but because of the route of the alignment, significant resource effects will still remain.	As mentioned, SHA has taken great strides to minimize the deleterious effects of the Corridor 1 alignment through the stream valley. While it is true that crossing these resource rich areas will still have negative effects on the overall system, the system may be better able to absorb the impact with much of the ecological functions intact than would those resources higher in the headwaters of the watershed. SHA has also noticed that these large diverse wetlands are currently threatened by the incising of the stream channel and tributary headcuts. SHA's proposed stream mitigation in Northwest Branch will help to correct these conditions and avoid the long-term dewatering of the wetlands. However, SHA does acknowledge that forest interior habitat and the species that rely on it for survival, will be permanently affected within the large stream valley parks. To compensate for these impacts, SHA will comply with the Maryland Reforestation Law. Reforestation for FIDS habitat will be concentrated in large open areas within or adjacent to existing FIDS habitat.
U.S. EPA	02.25.2005	109	Due to bridging, many of the functions of the wetlands and floodplains will be maintained with construction of a highway. There is concern that runoff from bridges and compaction of soils during construction will exacerbate the existing flooding which occurs along the Northwest Branch. Construction of a highway will reduce habitat value, introduce noise, litter and invasive species. It is Likely that the plant and animal communities will significantly change after a road bisects the habitat. Interior forest, which is integrated with the wetland systems, will be fragmented and this special habitat will be lost.	The ICC is required to provide facilities that will not adversely affect upstream or downstream flooding. Both stormwater quantity as well as quality ponds or facilities have been provided to address the ICC's run-off during construction as well as after opening. In addition SHA has committed to a narrow median, steeper side slopes (2:1 vs 3:1), higher bridge clearances in most park locations to allow sunlight and plant growth under the bridges post construction), longer bridges (to span a majority of these sensitive areas), and committed to construction methods that will limit both permanent and temporary impacts to these areas to a minimum. All of these issues have been considered in the alternatives evolution and selection process. Detailed analysis will be conducted during the field design phase to assure there is no significant increase in flooding. It should be noted that the drainage area to the eastern Corridor 1 crossing at Northwest Branch is approximately 8,800 acres, of which 160 acres are within the Corridor 1 ROW.

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U.S. EPA	02.25.2005	110	Each of the alternatives include Environmental Stewardship (ES) projects to try to improve past environmental damage from development and enhance aspects of the human environment. It is difficult to measure the changes that these projects (e.g. low impact, best management practices for stormwater runoff for older communities) will have on the aquatic systems. However, these projects are likely to offer the best plan for addressing water quality and stream integrity threats from past development. It is difficult to determine if ES projects will offset direct or secondary impacts of a highway, but the effort is recognized as a sincere attempt to address ongoing problems in the watershed.	Thank you for your comments. Your comments were considered during the decision-making process.
U.S. EPA	02.25.2005	111	The adverse impacts to existing neighborhoods are significant. Although Corridor 1 stays in a designated ROW (which was shown on county master plans) it is closer to more homes than Corridor 2. Excluding options at Rock Creek, approximately 43 residential displacements will occur and many communities, notably the thousands of residents of Longmeade and residents near the interchange with US 29, will be in very close proximity to the highway. As a ROW was designated on local plans and much of the alignment is in woodland, a fewer number of neighborhood intrusions (e.g. cul-de-sacs) are needed in Corridor 1. More of Corridor 1 lies within Priority Funded Areas than Corridor 2.	Thank you for your comments. Your comments were considered during the decision-making process.
U.S. EPA	02.25.2005	112	Secondary and cumulative impacts were investigated for a study area defined in the Secondary and Cumulative Effects Analysis (SCEA) technical report. The environmental impact from secondary and cumulative development are very significant, particularly in comparison to a No Action alternative. Secondary and cumulative impacts were similar between build alternatives, with slightly fewer impacts associated with Corridor 1. Although the replacement of forest and wetland losses is mandated, it can take decades for newly planted land to function as a mature ecosystem. Systems that suffer from forest and habitat fragmentation may never be effectively restored; and although mitigation wetland sites may be carefully selected, it is difficult to replace the specific functions of systems lost. The consequences of these losses may be far reaching.	Thank you for your comments. Your comments were considered during the decision-making process. An emphasis was placed on this in Section IV.K. of the FEIS.
U.S. EPA	02.25.2005	113	The western portion of the project area has an alignment shared by Corridor 1 and 2. This includes the crossing through Mill Creek, Rock Creek, and North Branch of Rock Creek, Option C was proposed to minimize impacts in Rock Creek Regional Park, by crossing a narrow segment of park, where a bridge can span the entire stream and floodplain of the creek. Option C has similar total stream impacts, though it appears that can be reduced with an overpass design of Olde Mill Run Drive. Option C displaces approximately 17 residences and bisects the community of Winters Run and Cashell Estates. Although Option C follows the designated corridor for the Midcounty Highway through Winters Run, a wider ROW is required by an ICC; Cashell Estates had no reserved land. Option A,	Your preference for Rock Creek Option C has been noted. SHA's preferred option is Rock Creek Option C with a grade-separated crossing with the ICC under Olde Mill Run Road.

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			crosses the high value, though somewhat degraded waters and wetlands of Rock Creek and a large portion of parkland (without transportation reservation). Based on environmental and parkland minimization features, Option C is preferred.	
U.S. EPA	02.25.2005	114	The DEIS presents the option to terminate the ICC at 1-95 or to continue the road to US 1. Impacts in this section include 37.4 acres of wetlands created incidental to mining activities for either option. Both options also impact two higher quality wetlands. The longer road has 7.3 acres of additional impact and about 5900 linear foot of additional stream impacts. With some notable exception, the area is dominated by lower quality resources, in an area planned for future commercial and residential development. An evaluation of moving the interchange to the north to minimize fragmentation of aquatic resources and minimize impact to state protected vegetation identified in the area should be explored.	SHA has considered both a shift to the north and the south of the DEIS alignment to address concerns of impacts to Rare, Threatened and Endangered (RTE) species, wetlands and private property. Further coordination with the Army Corps of Engineers, Maryland Department of the Environment and the U.S. Fish & Wildlife Service has lead to them agreeing to two classes of wetlands, higher and lower value, Wetland complex 6j was deemed to be of higher value than the wetlands to the west of it by these agencies. An alignment to the south of the DEIS alignment was recommended by SHA and concurred to by these agencies as the preferred shift as it best met the desired goals of avoidance and minimization. This shift and its related impact modifications have been included in Section IV. F. 7. e.
U.S. EPA	02.25.2005	115	Corridor 2 has similar acres of aquatic impact to Corridor 1 and less forest impact. Direct impacts to wetlands range between 62.7 to 75.3 acres, and direct impacts to streams range between 6.7 to 9.3 miles. Most significantly, Corridor 2 crosses lower quality wetlands and stream buffers, particularly in the Northwest Branch and Paint Branch watersheds. Generally, the crossings of aquatic resources (streams, wetlands, riparian corridors) differ markedly along the two corridor options. Along Corridor 1 the highway is oriented within and/or parallel to the axis of the resources, thereby creating extensive and continuous impacts. In contrast, highway Corridor 2 is generally oriented perpendicular to the axis of the resources resulting in limited impacts in extent and duration. It is more likely that the function of Corridor 2 resources can be replaced, and possibly improved, when compared to the protected parkland of Corridor 1. The area of Corridor 2 has limited natural diversity or prime habitat. It is not part of land identified by Maryland DNR in its Green Infrastructure Assessment, as are the parks in Corridor 1. Corridor 2 does cross into the Patuxent River watershed where a large water supply reservoir is maintained. Potential impact to this supply is of concern. The Agency gives Corridor 2 an EC rating assuming the option which minimizes potential impact to the Patuxent watershed is selected (Burtonsville A) and if the study incorporates risk avoidance measures for the reservoir. Environmental Concern is based on direct, secondary and cumulative impacts to streams, wetlands, floodplains, forests and the reservoir, community and historic sites, and secondary growth.	While it is clear that many of the streams along Corridor 2 are smaller and have less extensive protected wetland/riparian complexes, the smaller streams affected in the Northwest Branch watershed by Corridor 2 have the highest water quality conditions in the Northwest Branch system according the MCDEP. In addition, the larger systems along Corridor 1 have been bridged to avoid impacts, while it is not practical to bridge the numerous smaller systems along Corridor 2.
U.S. EPA	02.25.2005	116	The concern of added runoff and stream channel erosion during construction and operation of a highway are relevant for both corridors. Activities which concentrate runoff and clear vegetation can accelerate erosion of stream banks, increase sediment loading and deterioration of conditions for fish spawning. Any	Thank you for your comments. Your comments were considered during the decision-making process.. SHA shares the concern for impacts to headwater streams as these areas often provide vital functions not performed at the same level lower in the watershed (nutrient uptake at the channel/water interface) and are not

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			damage to the headwaters of a stream can be carried downstream. This concern would exist for the headwater streams of the Northwest Branch and Left and Right Fork of Paint Branch, crossed by Corridor 2.	practical to bridge due to their numbers and size. However, SHA is committed to minimizing impacts to all resources during construction and operation of the roadway and as mentioned elsewhere has incorporated numerous innovative measures into the project for this purpose.
U.S. EPA	02.25.2005	117	It should be noted that the alignment of Corridor 2 does not cross the headwaters of Gum Springs and Good Hope. The Left and Right Forks of Paint Branch, and Northwest Branch, have compromised water quality including elevated temperature due to the presence of in-channel stormwater management ponds, and limited riparian buffer. Efforts must be taken in headwater streams to minimize the risk of sediment releases during construction, engineer good stream crossings, and implement measures to minimize stream degradation. Although there is significant risk locating the crossings in headwaters, the added distance may provide opportunities for water quality to rebound from disturbance or accident before reaching the portion of streams supporting fish populations.	SHA is committed to minimizing impacts to all resources during construction and operation of the roadway and as mentioned elsewhere has incorporated numerous innovative measures into the project for this purpose. SHA believes that these measures, that include redundancy of sediment and erosion control in the most sensitive watersheds, on-site environmental monitors and other measures can greatly reduce the potential for sediment releases that would damage fish populations.
U.S. EPA	02.25.2005	118	Montgomery County expresses concern that growth will be difficult to control if a "Change or Mistake Rule" is executed to the Master Plan by selecting Corridor 2 which is not a part of the Master Plan.	If Corridor 2 were to be selected, the Change or Mistake rule could be evoked. Under the strict Maryland Change or Mistake Rule, standard rezoning for a parcel of land can only be considered where there was a mistake in the existing zoning or a substantial change in the character of the neighborhood has occurred. This rule reinforces the authority of the Master Plan and its comprehensive zoning. According to M-NCPPC officials, who have a lot of experience with land use in this region, a choice of the No-Action or Corridor 2 Alternatives would likely be deemed "a substantial change in the character of the neighborhood," opening up areas never planned for development.
U.S. EPA	02.25.2005	119	Spencerville Options A or B, to Burtonsville Option A, have the least aquatic and forest impact. Although Burtonsville Option B minimizes impacts to the Paint Branch watershed, it intrudes into the valuable forest area buffering the public water supply of the Rocky Gorge Reservoir, and a county Biodiversity Area. This option has more direct environmental impacts and more indirect impacts including increased sediment and common contaminant loading and potential hazardous spills that could impact the reservoir. Burtonsville A follows the divide between Paint Branch and the Patuxent watershed, and moves into the Patuxent watershed near US 29, staying about one mile from the reservoir and maintaining a substantial buffer and area for capture of runoff. The proposed measures to minimize risk to the watershed, and any additional measures that are determined to be effective and feasible, should be discussed with the stewards of the reservoir and in order to maximize effort to reduce risk.	Preference for Burtonsville Option A noted. SHA has further evaluated potential risks and water quality impacts to the reservoir and the project's ability to minimize these impacts. This information is included in the FEIS.
U.S. EPA	02.25.2005	120	The EPA requests risk avoidance measures be included in the document and planning with appropriate authorities to minimize impacts along Burtonsville Option A, including a valuable wetland near Good Hope Road and the Free	The study team has completed several additional studies in the Spencerville and Burtonsville area of Corridor 2 as has been suggested. The team worked closely with the DOI and other state, federal and local agencies to use the technical

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			<p>Methodist Church Meeting Ground along Spencerville Options A or B. It is apparent that Spencerville Option C has no environmental advantages, and more historic site impacts than other alignments. Burtonsville Option B (which requires use of Spencerville Option D) has substantial environmental impact in the area buffering the reservoir, and EPA requests that the option be dropped from further consideration.</p>	<p>information and public/agency input to share thinking about options within each corridor prior to comparing the benefits and impacts of each corridor. Specifically related to your comments in this portion of the study area, the conclusion was to pursue Burtonsville Option A versus Option B and Spencerville B compared to Options A, C or D. Again, we thank the DOI for their participation in that process.</p>
U.S. EPA	02.25.2005	121	<p>It is the opinion of the Agency that factors such as economic growth, travel time savings and changes in level of service on existing roads are generally similar for both corridors. It is clear that a decision to build or not build an ICC, and whether to use Corridor 1 or 2, involves the serious analysis of complex factors of environment, community, potential sprawl, traffic improvements, and improvements to quality of life. These factors are weighted differently by each member of the public and government. From the perspective of the natural environment, Corridor 1 is most damaging.</p>	<p>The transportation benefits to the study area are not similar for Corridors 1 and 2. The study documentation shows that Corridor 1 outperforms Corridor 2 for many of the measures. With respect to the natural environment, while it is true that Corridor 1 would have a greater effect on broad, forested riparian systems, it would have less overall wetland and stream impact because of the extensive use of bridges within these broad riparian corridors. Plus, some resources, such as aquatic biota within the Northwest Branch watershed, are actually of higher quality within Corridor 2 than Corridor 1. We agree that the decision-making process is a complex one, requiring much thorough consideration and coordination with our partners.</p>
U.S. EPA	02.25.2005	122	<p>The Agency will look forward to FHWA and SHA's suggestions for reduction of construction-related impacts, including sediment control and methods to address concerns regarding construction impacts to wetlands and floodplains.</p>	<p>Since publication of the DEIS and considering comments received on it, efforts have been made to reduce the ICC impacts. Stormwater management has been shifted underground in especially sensitive areas to reduce the amount of land required. The use of retaining walls and steep sloped was evaluated and found generally not to be cost effective (this data was shared with the agencies at an IAWG meeting). However, refinements have been made at some of the major stream crossings, in some cases adding retaining walls. Requirements have been placed in the Joint Permit Application to avoid certain wetland areas.</p>
U.S. EPA	02.25.2005	123	<p>The EPA is aware that the No Build will not satisfy the Purpose and Need of the study. Alternatively, avoidance of environmental impacts of a roadway can only be achieved with a No Build; therefore the alternate is given an LO rating. A representative of the EPA attended each public hearing and the Agency is aware of the great volume of public testimony supporting and opposing the highway. There is substance to the argument that neither build alternative will significantly relieve traffic on local roads, the expected time savings (especially for shorter trips) is low, and that the projected cost of building the highway is high. There is substance to the argument that induced travel is a result of new highways. Real improvement in traffic congestion will require the coordination of the public and private sectors, to promote incentives to reduce commuting time and distance, increase car pool opportunities, develop and use public transit options, improve transportation infrastructure, and apply "Balanced" land use planning.</p> <p>Any build alternative is a tradeoff of cost and environmental loss for the</p>	<p>An ICC would improve performance at up to 42 of the 50 key intersections studied in either the AM or PM peak period. Also, an ICC would reduce the number of hours that drivers experience congested conditions at the worst intersections in the Study Area. For the Corridor 1 alternative there is a 24% reduction in the number of hours that drivers experience congested conditions, and for the Corridor 2 alternative there is a 25% reduction.</p> <p>Many existing roadways in the study area would benefit from a reduction in the average weekday traffic (AWDT) caused by the ICC alternatives. Roads such as MD 28, MD 198, Randolph Road, and Cherry Hill Road are projected to experience decreases in AWDT of more than 10% for the build alternatives when compared to the no-action alternative.</p> <p>Trips internal to the study area exhibit significant travel time savings. For example, a trip from Colesville to Shady Grove in the AM peak is expected to take 37</p>

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			<p>convenience of the commercial and private motorist, and the promotion of economic expansion. Every individual would give different value to these elements. Even a statement that the "economic expansion or the public benefits of the road, exceeds the investment cost", can bring disagreement among the public with regard to the value of "expansion" and the definition of "benefit". The EPA advises FHWA and SHA to carefully and thoughtfully evaluate the complexities of the many costs and benefits.</p>	<p>minutes under the 2030 No-Action alternative. The Build Alternatives reduce that time to 23 minutes for Corridor 1 and 29 minutes for Corridor 2. That reflects a savings of up to 38 percent with Corridor 1 and 22 percent for Corridor 2.</p> <p>Induced demand is a concern that many citizens often have towards the construction of any new freeway facility. However, what is often called induced demand is not truly new demand, but the reorientation of existing demand to other locations. While the construction of the ICC would allow some people to make longer trips, the total number of new trips is relatively insignificant.</p> <p>The reason for this is that currently all commuters are already making daily work trips in addition to trips involving shopping, etc. The total number of new trips would not be very substantial due to the fact that the auto mode choice is already in the mature stages of its existence and that new development in the area will occur whether the ICC is built or not. In fact 80% of the total households projected to be in the study area by 2030 are already located there. The one impact that the ICC would have with regards to travel demand is the creation of longer trips. This is largely due to the improvement in mobility that would come with the ICC. Induced demand has often been described as having occurred after the creation of the Interstate system (vacation trips) and the introduction of the automobile. In today's modern society, people in major cities are already making the number of trips that are allowed due to current needs. Additional trips in the future will be due more to demographic changes than to new roads.</p> <p>There is a consensus among several transportation professionals based on previous studies that public transportation alone would not work to lower congestion in the study area. Transit is still an important component of the overall transportation system in the ICC study area. The no-build alternative includes a significant increase in transit service for the study area. The ICC will be able to support express commuter bus service, which was included as part of both build alternatives. One of the benefits of the ICC is that commuter buses will be able to take advantage of its high level of service.</p> <p>One of the most significant features of the ICC is the planned use of managed lanes, where tolls are used to maintain at least a Level of Service (LOS) of D. As a result transit service in the study area would have improved access and commute times. The managed lanes of the ICC would allow express busses and other HOV's to use the ICC without having to pay a toll. This combination of congestion free and toll free travel creates an incentive that would promote more car pooling and public transit usage. Transit users on the ICC would also have direct access to both</p>

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				<p>MARC and Metro rail stations. With these incentives to use transit there is the potential to reduce the number of auto trips which is one of the goals of Travel Demand Management (TDM).</p> <p>With the No-Action and Build alternatives several additional roadway improvements are scheduled to occur or have already occurred. For example, the intersection of Georgia Ave. (MD 97) and Norbeck Rd. (MD 28) will be converted into a grade separated interchange. The intersection of Georgia Ave. (MD 97) and Randolph Rd. will also be converted into a grade separated interchange. At the present time, US 29 is being improved. Several at-grade intersections are being converted into grade separated interchanges along US 29.</p> <p>Based on the findings of the screening of alternatives with respect to purpose and need, the balanced land use alternative would provide minimal impact on east-west roadways (approximately 2% of total travel volumes). Also, it was found that shifts in land use alone would not provide efficient and reliable capacity to move goods and people. In the study area a substantial amount of planned developments have already been built, therefore fewer opportunities are available to change settled land use patterns.</p> <p>While balanced land use by itself would not solve a significant portion of the traffic congestion problems in the study area, the ICC could still facilitate balanced land use. Balanced land use basically means mixed use or M-X-T zoning. Konterra, for example, is a M-X-T project. The ICC would facilitate such a development because of the ICC's direct access to the planned development and because the ICC's managed lanes could benefit mass transit and HOV which could directly access Konterra. Also, the ICC would benefit transit at the Shady Grove Metro station which already has King Farm, an M-X-T project, in close proximity, as well as Kentlands, another M-X-T project, which is in close proximity to the western most terminus of the ICC. Both Kentlands and King Farm are already built, but King Farm is not yet complete. The ICC could help King Farm continue to develop as planned for mixed use.</p> <p>In addition to Konterra, King Farm, and Kentlands, there could be future M-X-T developments in the future. Corridor 1 has already been factored into the existing land use patterns. Therefore, Corridor 1 would serve existing communities and more PFA areas. The SCEA does project that Corridor 2 has slightly more potential for future development, but that land that could be considered open for development around Corridor 2 is primarily not in a PFA. This means there would be restrictions on how dense a development could get built due to other</p>

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				<p>infrastructure limitations (water/sewer, schools, etc) thereby making such a development less likely to be a M-X-T development.</p> <p>In summary, for the screening of alternatives with respect to purpose and need, no other alternative was found that could simultaneously address the need for community mobility and safety, the need for the movement of goods and people to and from economic centers, address local land use issues, as well as provide for homeland security.</p>