



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

September 29, 2016

Mr. Ben Hark  
Environmental Section-Head  
Engineering Division WVDOH  
1334 Smith Street  
Charleston, WV 25301

Mr. Jason Workman  
Director, Program Development  
Federal Highway Administration  
Geary Plaza, Suite 200  
700 Washington Street, East  
Charleston, WV 25301

Re: US 340 Improvement Study Supplemental Draft Environmental Impact Statement  
Jefferson County, West Virginia CEQ No. 20160174

Dear Mr. Hark and Mr. Workman:

In accordance with the National Environmental Policy Act (NEPA) of 1969, Section 309 of the Clean Air Act and the Council on Environmental Quality regulations implementing NEPA (40 CFR 1500-1508), the United States Environmental Protection Agency (EPA) has reviewed the US 340 Improvement Study Supplemental Draft Environmental Impact Statement (SDEIS). The SDEIS has been prepared by the Federal Highway Administration (FHWA) in conjunction with the West Virginia Department of Highways (WVDOH). The SDEIS evaluates alternatives to improve the existing two-lane section of US 340 from the existing four-lane section just south of the state boundary in Clarke County, Virginia to the existing four-lane section of the Charles Town Bypass in Jefferson County, West Virginia.

The SDEIS explains the history of the project from the November 2001 Draft EIS which evaluated eight build alternatives to subsequent public feedback on alternatives, to the current study. EPA provided comment in a letter dated April 8, 2002. At the time, we recommended efforts to reduce floodplain impacts and improvements to the cumulative effects analysis. No Final EIS was prepared for the 2001 study. The SDEIS evaluates the No-Build alternative and seven build alternatives. Alternative 4 A is the Preferred Alternative. This alternative is 4.5 miles long and has three residential relocations, four business relocations, and impacts two noise receptors, eight historic resources, 1.1 acre of wetlands, 5.1 acres of floodplains, 1, 315 linear feet of stream and costs \$49,920,000.

While we understand the complexity of the project area, the SDEIS does not provide detail on the process used for the selection of the preferred alternative, nor does it offer descriptions of the various resources, potential impacts, and avoidance and minimization of impacts. In addition, stormwater management and design adaptation have not been evaluated. These, though important features, may increase impacts. It is also unclear how coordination with Virginia will take place since the project crosses the state line. Coordination should occur prior to the FSEIS so impacts and issues can be discussed in the NEPA document and commitments can be made in the Record of Decision (ROD).

Based on our review summarized above and presented in the attached Detailed Technical Comments, EPA has rated the environmental impacts associated with this project as Environmental Concerns, Insufficient Information (EC2). A description of our rating system can be found at:

[www.epa.gov/nepa/environmental-impact-statement-rating-system-criteria](http://www.epa.gov/nepa/environmental-impact-statement-rating-system-criteria)

We suggest the project team maintain close coordination with affected residents and continue to explore methods to avoid and minimize construction and operational impacts associated with the build alternatives. If you have questions regarding these comments, the staff contact for this project is Ms. Barbara Okorn; she can be reached at 215-814-3330.

Sincerely,



Barbara Rudnick  
NEPA Team Leader

Enclosure

**Enclosure**  
**Detailed Technical Comments for Supplemental Draft Environmental Impact Statement,**  
**US 340 Improvement Study, West Virginia**

**Alternatives**

- While we understand that a range of alternatives was evaluated during the history of this project, additional detail should be provided on the methodology used for deciding which alternatives would be evaluated in this SDEIS. Based on the information presented, it is not clear why Alternative 4 which was originally dismissed in 2002, was brought back for the SDEIS; and Alternatives 6 and 8 which were retained and studied in detail in 2002, were not evaluated in the SDEIS.
- The SDEIS should provide additional rationale for the ranking of alternatives found on page III-7. It is not clear how the criteria were established.
- The analysis of the build alternatives on pages III-8 to 10 states whether alternatives were eliminated or retained for further consideration. The next section states that Alternative 4A is the preferred alternative. The preceding section gives the impression there will be more analysis to narrow down the retained alternatives. Clarification should be provided.
- The proposed facility is described as having a 60 mile-per-hour design speed with a 40-foot depressed median throughout the length of the project. Consideration should be given to minimizing the footprint of the road in areas of resource impact, if possible.
- Stormwater management (SWM) facilities do not appear to be included within the limit of disturbance (LOD) for the alternatives. Though SWM is critical to protection of water quality, the placement of facilities could greatly increase impacts. SWM should not be placed in aquatic habitats. SWM should address existing and new conditions. We recommend proposed locations be included in the Final SEIS.

**Social and Environmental Justice (EJ)**

- The minority population of Jefferson County is more than double the state average. Please state how this was factored into the EJ assessment.
- The minority populations of Census Block Groups 972800-3 and 4 exceed the minority population percentage for the state, but not for Jefferson County.
- The percentage of persons living below the poverty level exceeds the Jefferson County average in Census Block Group 972800-3 and 010100-2, supporting that there are areas of Environmental Justice concern identified in the study area. Please highlight.
- Please state how low income residents are impacted by the relocations. Are any structures occupied by or serving low income residents being impacted by relocations or takings? It is noted that none of the properties to be relocated are minority owned; are any minority occupied?

- A car service business and two restaurants are being relocated. How are the impacts being addressed?
- More time should be taken to conduct a comprehensive Environmental Justice assessment, looking at the totality of impacts upon the at-risk populations, identifying the at-risk populations, and assessing all those activities that may impact those populations.
- The EIS did not state the methodology used to identify EJ communities nor provide clear benchmarks for identification of EJ communities. EPA recommends the following approach to determination of appropriate benchmarks.
  - Apply the 50% test (all areas that are more than 50% are areas of EJ concern. Benchmark value should be compared to the state or county average)
  - If the percent minority population is greater than the state or county average, then this would equal the Area of Potential EJ concern; OR
  - Set a benchmark that exceeds the state or county average by a given percentage (e.g., taking 120% of the state or county average). (see below)
- We do not recommend the convention of adding 20 percentage points to the minority population percentage. Adding 20 percentage points to an average may have an unintended result on the assessment, particularly when the minority/low income population is a small percentage value. For example, if the percentage is five percent, adding 20 percentage points to that value increase the benchmark by 500%.
- We recommend a methodology to be protective of at-risk communities and more inclusive of potential communities of concern. We recommend using a benchmark calculated by taking the minority population percentage and then adding 20 percent of the value (for example,  $5\% \times 1.2$  (20 percent of 5)) = 6% a difference of 20%). This method is consistent, treating all populations the same way. We suggest that recalculated thresholds be used and reevaluate the impact assessment.
- A coordination plan should be developed to assist the community with concerns and impacts related to impacts associated with the projects. We suggest that the project team closely coordinate with residents related to displacements and other impacts.
- Construction routes/corridors and staging areas should be identified and included in the environmental analysis to determine potential risks to human health and the environment. EPA is concerned with potential impacts to the public, children and EJ communities. Exposure risks from dust, hazardous materials, noise and traffic should be addressed in the FSEIS. In addition, please address if Contingency Plans are in place to address potential risks from spills, hazardous materials exposure, etc.
- Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, requires each federal agency to identify and assess environmental health and safety risks to children. It is recommended that the environmental document provide an assessment of potential exposures and susceptibilities to pollutants of concern for children.

### Historic Resources

- EPA appreciates the coordination done with the State Historic Preservation Office (SHPO) and the information provided in the SDEIS. Approaches to avoid or minimize historic impacts should be pursued. Coordination should continue with the SHPO. The SDEIS references archaeological models from 1999. Is there more recent information that should be used? It is unclear if this was done.
- Page IV-30 mentions that a small historic bridge that carries Bullskin Run will be reconstructed. Coordination should occur with resource agencies to insure that the structure can sufficiently accommodate wildlife passage.

### Aquatic Resources

- Page IV-37 states that the southernmost tributary of Long Marsh Run is located in Clarke County, Virginia and that no impacts are anticipated. It appears that the project may have the potential to cause direct or indirect impacts to the resource. This should be clarified and potential unavoidable impacts should be disclosed in the FSEIS.
- Streams and wetlands should be described and displayed in mapping in greater detail. Page IV-37 states that all stream runs are contained within culverts but page IV-43 states that some wetland complexes are associated with streams. The entire size of wetland complexes should be provided as well as the size of the potential impact to each. Discussion of wetland function in the watershed should be included in the Final SEIS.
- Additional analysis should be conducted to ensure that the hydrology of springs, wetlands, and streams is not adversely impacted by this project.
- After avoidance and minimization has been maximized, the agencies should work to identify mitigation that can replace lost functions of resources in the watershed.
- The EIS should evaluate remnant wetlands. There may be instances where the remaining portion of wetlands does not provide the original functions due to project impacts.
- The wetland impact numbers provided on Tables 1-1, III-3, and IV-13 are inconsistent. Corrections should be made and all figures should be checked.
- Any geologic formation associated with springs or sinkholes should be investigated to identify if these features are present in the study area. Protection of water quality should be enhanced in areas vulnerable to rapid infiltration and hydrologic movement and more closely monitored as necessary. We recommend that any potential drinking water supplies associated with these resources be identified in the Final SEIS.

### Groundwater

- Potential impacts associated with the project should be evaluated. This includes construction, spills, impervious surface, road runoff, etc.

### Terrestrial Resources

- Coordination should continue with the US Fish and Wildlife Service (USFWS) regarding migratory birds and endangered species. It is not clear if USFWS concurs with the findings presented in the SDEIS related to the Indiana bat and Northern long-eared bat. We recommend that the Final SEIS include correspondence from USFWS to provide the reader information on the biological findings.
- Wildlife passage should be considered in the project design. We recommend discussion of potential passage locations in the Final SEIS.
- Efforts should be made to avoid and minimize impacts to terrestrial resources. Corridors should be maintained to the maximum extent possible for wildlife travel. Upland buffers should also be maintained around aquatic habitat.

### Construction

- The EIS should give estimates of how much borrow and fill will be needed and how waste material will be disposed of or borrow will be delivered. For example, there may be a significant increase in traffic from hauling away excess dirt, etc. What routes would these trucks take, how many trips/day and for what duration?
- Stormwater ponds, best management practices (BMPs) and construction staging areas should not be located in wetlands and streams. Stormwater management alternatives that address the existing and new construction should be considered.
- The document mentions sinkholes, springs and caves. Will there be construction issues related to these features? We recommend identification of any karst or spring/sinkhole features, presentation of locations of these features and statement of any construction/operational contingencies potentially appropriate for this highway. We recommend this information be included in the Final SEIS.

### GHG/Climate Change

- EPA recommends that Federal agencies use a reasonable approach in the consideration of Greenhouse Gas (GHG) emissions and climate change impacts in the NEPA analysis. This approach includes an estimate of the GHG emissions associated with the project during construction and operation, a qualitative description of relevant climate change impacts, and an analysis of reasonable alternatives and/or practicable mitigation measures to reduce project-related GHG emissions. The SDEIS does not include this reasonable approach. The NEPA analysis did not address the appropriateness of considering changes to the design of the proposal to incorporate GHG reduction measures and resilience to foreseeable climate change. The SDEIS did not state whether commitments will be made

to ensure implementation of design or other measures to reduce GHG emissions or to adapt to climate change impacts.

- The estimated GHG emissions can serve as a reasonable proxy for climate change impacts when comparing the proposal and alternatives. In disclosing the potential impacts of the proposal and reasonable alternatives, consideration should be given to whether, and to what extent, the impacts may be exacerbated by expected climate change in the action area, as discussed in the “affected environment” section.
- The NEPA analysis should describe measures to reduce GHG emissions associated with the project, including reasonable alternatives or other practicable mitigation opportunities and disclose the estimated GHG reductions associated with such measures. The alternatives analysis should, as appropriate, consider practicable changes to the proposal to make it more resilient to anticipated climate change. EPA further recommends that the Record of Decision (ROD) commits to implementation of reasonable mitigation measures that would reduce project-related GHG emissions.

### **Cumulative Impacts**

- While the SDEIS briefly discusses the past, existing, and future conditions of the project area, cumulative impacts from the proposed project on aquatic and other resources should be evaluated in the FSEIS. The document should address potential indirect and cumulative effects in the project area; analysis may aid in the identification of resources that are likely to be adversely affected by multiple projects, and sensitive resources that could require additional measures. It is suggested that a secondary and cumulative effects analysis begin with defining the geographic and temporal limits of the study; this is generally broader than the study area of the project. The cumulative impact analysis should evaluate impacts to environmental resources that have the potential to be impacted by the project (i.e. wetlands, surface water, etc).
- Indirect and temporary impacts to resources should also be analyzed.

