

LOCUST HILL CITIZENS' ASSOCIATION

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Subject: Comments on *Traffic Noise Analysis, MD 355 Cedar Lane Intersection
Improvement Project, Phase 4*

Dear Ms. Bai and Ms. Brookman:

This letter sets out the response of the Locust Hill Citizens' Association ("LHCA") to the State Highway Administration's ("SHA") *Traffic Noise Analysis, MD 355 Cedar Lane Intersection Improvement Project, Phase 4*, July 2012 ("*Noise Study*"). We believe that the study is fundamentally flawed.

First, the noise measurements used to validate SHA's Traffic Noise Model ("TNM") calculations were taken in the *morning* (southbound) rush hour, pages 2-1, 2-3. However, Phase 4's justification is based on its claimed benefits in alleviating traffic congestion only during the *afternoon* (northbound) rush hour.

This flaw is fundamental because of the specific characteristics of the Phase 4 project area (significant uphill terrain for northbound traffic.) Obviously, traffic accelerating uphill generates significantly more noise per vehicle than those same vehicles would generate coasting downhill (southbound). Further, during the morning hours in which the measurements were taken, southbound traffic is slow moving or stopped, waiting for the Cedar Lane signal to turn green.

As the *Noise Study* states:

Per SHA requirements, the first step in the modeling process is TNM model validation. This validation process is accomplished by comparing the monitored noise measurements with noise levels generated by the computer model using the traffic volumes, speeds, and composition that were witnessed during the noise monitoring effort. This comparison ensures that reported changes in noise levels between Existing and Design Year conditions are due to changes in traffic conditions and not discrepancies between monitoring and modeling techniques.

Noise Study, at 2-1.

Because the TMN was validated using a relatively quieter (downhill) average traffic flow, we believe that the model's calculations, if appropriately validated using afternoon measurements, would show higher noise levels.

Second, nothing in the report discusses the operational characteristics of the Phase 4 auxiliary through lane that would be built adjacent to Locust Hill. That segment is to serve as a merge lane for traffic emerging from the Walter Reed campus. Because traffic in the auxiliary lane would be released by the Cedar Lane signal at the same time as through Rockville Pike traffic, that traffic would be released abreast of the block of through traffic being held at the signal.

In peak periods, many, if not most, vehicles in the auxiliary thus would have to wait for a break in northbound traffic to merge into the through lanes, creating a delay queue. Traffic in this queue thus might need to come to a stop, or near stop, and then accelerate. As a result, these accelerating vehicles, including heavy vehicles, likely would generate significantly more noise than vehicles already operating at the 35 mph "cruise" speed used in the study. See pages 2-4 to 2-5.

Moreover, it is unclear from the study whether the model takes into consideration that the auxiliary lane's traffic would be up to 10 feet closer to east-side homes than at present.

For the above reasons, we believe that the *Noise Study* is invalid and must be redone. We understand from SHA that Phase 4's funding submission to OEA will be delayed until traffic volumes can be assessed using traffic counts following the completion of Cedar Lane Phases 1-3. Moreover, we have been advised that Phase 4's construction would require a redesign effort.

As a result, we believe there is sufficient justification and time available for redoing the *Noise Study*, both taking noise measurements during the afternoon rush hour and expressly taking into consideration the operational factors discussed above. LHCA further requests that LHCA and adjacent communities be consulted with respect to the nature of the new measurements and the study's modeling assumptions prior to SHA's undertaking a revised noise study.

Sincerely,



Richard Levine
President, Locust Hill Citizens' Association

Cc: Barbara Solberg, SHA