



Governor Larry Hogan
100 State Circle
Annapolis, Maryland
21401-1925

October 1, 2018

Administrator Gregory Slater
Maryland State Highway Administration
707 North Calvert Street, Baltimore, Maryland
21202-36-01

Subject: Concerns about planned Beltway expansion and comments about alternatives presented

Dear Governor Hogan and Administrator Slater:

I write on behalf of the Carderock Springs community, a historic neighborhood located in Montgomery County, Maryland, whose children and community will be significantly impacted by the planned Beltway Expansion project. The Carderock Springs Citizens Association (“CSCA”) is committed to preserving the unique nature of the Carderock Springs community and protecting the health, safety, and welfare of the residents of the 569 households (with approximately 1,000 adults and 761 children) that make up Carderock Springs and South Carderock residents. We are very concerned about the proposed Beltway expansion, specifically the potential air and noise pollution that it will bring to our community, especially children. Below we provide our comments on the alternatives that are currently under consideration. We trust, as required by law, that our concerns will be considered and addressed as part of the planning process going forward, and hope that collaboratively we can find a solution that will protect our community should any of the Alternatives #2-15 (with exception of #14) proceed.

The Carderock Springs and South Carderock neighborhoods are bisected by the span of Interstate 495 (the “Beltway”) that is within the Beltway Expansion study area. Our community is directly adjacent on both sides of the highway to the State Highway Administration (SHA) right-of-way. Under existing conditions, this adjacent roadway frontage causes our community to experience significant Beltway traffic noise and air pollution. Under any scenario where the Beltway capacity is increased, these impacts will be increased, especially if additional capacity results in traffic lanes moving further towards (or beyond) the edge of the existing right-of-way. Even more our community includes Carderock Springs Elementary School, where the school

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building, athletic fields, and playgrounds are located directly adjacent to the Beltway. Noise levels under existing conditions already exceed 66dB(A) in many Carderock houses and at the elementary school. Finally, Carderock Springs has been designated a National Historic District, that is listed in the National Register of Historic Places, making impacts on our community even more unique (and adverse) and requiring special consideration, a greater level of analysis, and limitations on decision-making under Section 106 of the National Historic Preservation Act and Section 4(f) of the Department of Transportation Act.

Our community submitted I-495&I-270 Scoping comments to SHA on April 30, 2018, to ensure that the scope of SHA's planning and environmental studies under the National Environmental Policy Act (NEPA), including the range of alternatives that SHA carries forward for further analysis, incorporates our environmental concerns and suggested solutions (see the enclosed document Attachment A: CSCA I-495&I-270 Scoping Comments).

During the last Beltway expansion, SHA determined that our community qualified for Type I Noise Abatement due to its high level of Beltway noise, as well significant noise reduction that abatement would provide (impact and feasibility criteria) under 88% community concurrence. In 2001, preliminary analyses indicated that the cost of a barrier would meet reasonability criteria and our community was promised the sound barrier. Unfortunately, SHA's barrier cost estimate doubled in 2005, which caused Carderock Springs to fall outside of the revised "reasonability criteria". Furthermore, in 2016 massive amounts of vegetation separating the neighborhood from the Beltway were removed by SHA as part of the effort to destroy invasive species. Unfortunately, this left our community fully exposed to the full impact of the noise and pollution from the Beltway as no replanting has occurred.

In addition to the noise, we are very concerned about the impact that air emissions have on the hundreds of children that live and go to school in our community. Recent research has demonstrated that local exposure to a freeway adversely effects children's lung development¹. This is a huge concern as Carderock Springs Elementary School, where there are approximately 400 students, and its athletic fields are located right next to the Beltway. Since roadside barrier and vegetation reduces by up to 60% vehicle air pollution², the U.S. Environmental Protection Agency ("EPA") recommends using it to protect children in school³. With the failure to provide a noise wall, and the recent removal of vegetation out of the SHA ROW to address invasive species, the children in our community lack either of protection.

For the reasons above, CSCA representing Carderock Springs and South Carderock residents' provide the following specific comments:

1. SHA should include sound/air pollution barriers as a part of any alternative that includes new lanes or other capacity increases (Alternatives #2,#3,#4,#5,#6,#7,#8,#9,#10,#11,#12, #13, and #15). The existing barrier of Thornley Court should be reassessed to measure if

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its height is sufficient to protect the community. Well-developed landscaping plan of dense foliage and plantings to accompany the sound/air pollution solid barrier should be part of the plan.

2. SHA should not carry forward any alternative that adds 2 lanes in each direction (Alternatives #6,#7,#8,#9,#10, and #11) as these alternatives would reduce the distance between the Beltway and school/residencies and significantly increase noise/air pollution harms.
3. Any alternative that increases the capacity of the Beltway in the vicinity of Exit 39 (River Road) could have direct impacts on River Road and Seven Locks Road, and would likely have indirect impacts on these roads given the likely increase in traffic volumes. As such, SHA should ensure that its project includes measures to minimize such impacts.

We trust that you will seriously consider these comments in moving forward with the evaluation process.



John R. Orrick, Jr.
President
Carderock Springs Citizens Association

cc: Hans Riemer, President, Montgomery County Council
Roger Berliner, Montgomery County Council Member
Marc Korman, Delegate, District 16
Jack R. Smith, Superintendent, Montgomery County Public Schools

¹Gauderman WJ, Vora H, McConnell R, Berhane K, Gilliland F, Thomas D, Lurmann F, Avol E, Kunzli N, Jerrett M, Peters J. **Effect of exposure to traffic on lung development from 10 to 18 years of age: a cohort study.** Lancet. 2007 Feb 17;369(9561):571-7. DOI:10.1016/S0140-6736(07)60037-3.

²Bowker, G. E., Baldauf, R., Isakov, V., Khylstov, A., & Petersen, W. **The effects of roadside structures on the transport and dispersion of ultrafine particles from highways.** Atmospheric Environment. 2007. 41, 8128-8139.

³<https://www.epa.gov/schools/basic-information-about-best-practices-reducing-near-road-pollution-exposure-schools>.

⁴https://495-270-p3.com/wp-content/uploads/2018/07/julyworkshops_widescreen.pdf.

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April 30, 2018

Maryland Department of Transportation
State Highway Administration
I-495 & I-270 P3 Office
707 North Calvert Street
Mail Stop P-601
Baltimore, MD 21202

Subject: CSCA I-495 & I-270 Scoping Comments

To Whom it May Concern:

The Carderock Springs Citizens Association (“CSCA”) is committed to preserving the unique nature of the Carderock Springs community and protecting the interests of Carderock Springs residents. Carderock Springs has been designated a National Historic District, is listed in the National Register of Historic Places, and also includes an elementary school (Carderock Springs Elementary School (CSES)) that is located directly adjacent to the Interstate 495 right-of-way (ROW). The Carderock Springs and South Carderock neighborhoods are bisected by Interstate 495 (the “Beltway”) with direct roadway frontage on both sides of the highway, and thus are directly affected by the current traffic noise and air pollution emanating from the Beltway, and will be equally impacted by any change to the Beltway. Thus, any study prepared in connection with a Beltway expansion or managed lanes under the National Environmental Policy Act (NEPA), Section 106 of the National Historic Preservation Act (Section 106), or Section 4(f) of the Department of Transportation Act (Section 4(f)) must take into account both the direct and indirect impacts and effects that a Beltway expansion – whether a widening or increase in capacity – will have on the residents and elementary school students within the Carderock Springs Neighborhood.

The most significant direct impacts of any project that will increase the capacity of the Beltway are increases in noise and the emissions of harmful air pollutants. Scientific studies have demonstrated that prolonged exposure to traffic noise of at least 69 decibels causes numerous harmful cognitive and health impacts, especially on children, including impaired cognition, attention-span, reading comprehension, speech intelligibility, memory, learning, and problem-solving, as well as increased frustration. Newer research also points out an increased risk for respiratory diseases caused by traffic air pollutants, leading some states, for example California to ban building schools within 500 feet of a highway. Unfortunately, the air supply vents, playground and athletic fields at Carderock Springs Elementary School are located less than 500 feet of the Beltway and the U.S. Environmental Protection Agency’s (EPA) recommendation to use a solid roadside barrier and vegetation has

not been followed. The situation has gotten dramatically worse in recent years when the Virginia part of the Beltway was expanded bringing more traffic volume to our area.

Of immediate and urgent concern is that massive amounts of vegetation separating the school and the neighborhood from the Beltway were removed as part of the effort to destroy invasive species. However, the denudement of vegetation from this area has now left our community more fully exposed to the Beltway as no replanting has occurred. Many residents have noted the significant worsening of air pollution and noise. Further effecting the quality of life is that at night, headlights from vehicles on the beltway are now fully visible in the frontage areas. The community is adamant that any further study of changes in the Beltway not delay the immediate planting of significant vegetation that would also be compatible with the future installation of a solid noise barrier. Residents have raised this issue and have urged our community to take immediate action to protect its residents from harmful effects of the Beltway as described in the enclosed CSCA and PTA resolutions.

The Maryland State Highway Authority last measured Beltway noise in Carderock Springs in 2001 as part of a noise impact study that recorded sustained noise levels in the vicinity of CSES at 79 decibels, with even higher levels recorded at other points along the Beltway and concluded that a noise barrier would significantly decrease Beltway noise impact in our community. To our knowledge, there was no study to record level of air pollutants in Carderock Springs, including CSES. However, scientific studies have shown that vehicle air pollution downwind of roadways can be reduced by up to 60% through the combined use of vegetation and roadside barriers.¹ The U.S. Environmental Protection Agency ("EPA") recommends in its "Best Practices for Reducing Near-Road Pollution Exposure at Schools" using a solid roadside barrier and vegetation along highways to block traffic-related pollutants from degrading air quality near schools.

Carderock Springs residents and parents of children attending CSES are very concerned about the current situation, and even more concerned about any Beltway expansion that will increase the physical ROW, bring the traveled lanes closer to the houses and CSES within the existing ROW, or otherwise increase the Beltway's capacity.

In order to ensure that the environmental reviews associated with the Beltway expansion/managed lanes study meet all of the requirements of NEPA, Section 4(f), and Section 106, SHA's environmental study must include: (i) both the direct impacts and indirect impacts on the residents of the Carderock Springs neighborhood; (ii) the effects of the project on the historic character of the neighborhood and its structures; (iii) the impacts on the sensitive populations/receptors located immediately adjacent to the ROW (i.e., elementary school students); and (iv) measures that will mitigate the project's direct and indirect impacts. Significantly, given that this project will occur on a roadway that bisects a historic district and is adjacent to historic properties, the need to study, account for, and mitigate historic-related impacts (as mandated by Section 106 and Section 4(f)) demands a high level of attention in SHA's studies and evaluations, as these areas will be subject to a higher level of scrutiny.

¹ Bowker, G. E., Baldauf, R., Isakov, V., Khylstov, A., & Petersen, W. *The effects of roadside structures on the transport and dispersion of ultrafine particles from highways*. (2007). Atmospheric Environment, 41, 8128-8139.


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CSCA therefore requests that the scope of SHA's environmental review and EIS in connection with the Managed Lane I-495& I-270 Study specifically include the following:

- Conduct a new noise impact study to serve as the current baseline to measure the current level of Beltway noise in the vicinity of Carderock Springs given increased traffic over the last 17 years. If this study shows that current noise levels require a noise wall as abatement, any project alternative selected, even if limited only to traffic control measures, should include the building of a noise wall.
- The data used for the noise study to project future conditions should be conservative to obtain true and correct traffic projections, both to determine the need for managed lanes, and to estimate actual traffic noise and emissions.
- In conducting the air pollution impact study to measure the current and projected levels of Beltway air pollutant in the vicinity of Carderock Springs, the health impacts of those current levels of pollutants, and the need for mitigation, the study must recognize and take into account the proximity of CSES and its athletic fields to the Beltway, and the potential for traffic to be even closer to these sensitive receptors if the ROW is expanded or if travel lanes are brought closer to the outside boundaries of the existing ROW.
- Evaluation of eligibility of Carderock Springs for Type I abatement under both existing conditions and future conditions.
- Include as part of the project (not as potential mitigation) (i) a solid noise barrier along both sides of the Beltway in the vicinity of Carderock Springs; and (ii) replantings in the area between the Beltway and Carderock Springs (that were cleared of invasive plant species during the summer of 2016).
- Establish an I-495 & I-270 Community Working Group for community members, including Carderock Springs representation to actively participate in the development of the Draft Environmental Impact on I-495 & I-270 Managed Lanes Study and in any Section 106 Programmatic Agreement or Memorandum of Agreement, so the input and comments of these important stakeholders can shape SHA's planning, review, design, and mitigation, rather than having these uniquely-situated stakeholders being relegated to participating only in the post-Draft Environmental Impact Statement public comment period.

We appreciate your taking these comments into consideration in evaluating this project. We would also request that you keep us informed as to the status of the project moving forward.

Very Truly Yours,



John Orrick
President
Carderock Springs Citizens Association

April 30, 2018

Date

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