

Lafayette Village Community Association

Wyle Labs Noise Study Results



Background

- VDOT HOT Lanes public hearings May 20st and 21nd
 - First public unveiling of sound barriers to protect communities from increased traffic on HOT Lanes
 - LVCA opposed the design of these sound barriers
 - LVCA wanted a continuous sound barrier
 - LVCA wanted design based on sound measurements taken in our community
 - LVCA wanted sound reduction levels to affect sound at the 2nd story level of our townhomes

Background, continued

➤ LVCA Actions:

- Resolution passed at the semi-annual meeting containing LVCA demands about the sound barriers
- Extensive letter writing campaign to VDOT, elected officials, and other officials
- Meetings with elected officials to raise our concerns

➤ Goal: get VDOT to redesign its proposed sound barriers to reduce noise levels affecting Lafayette Village

- VDOT forced to respond to LVCA with an extensive analysis of LVCA argument

LVCA Noise Study

- LVCA Board contracted with Wyle Laboratories to conduct a sound study and sound barrier design assessment in August
- Sound measurements were taken Sept. 2nd through Sept. 10th
 - Locations of sound monitors: behind the basketball court, behind Brunswick Forest, two behind Colonial Village, one at the 2nd story level

LVCA Sound Study Analysis

- Two standards for noise abatement:
 - VDOT uses “Loudest-Hour Average” sound level for assessing noise abatement. Target abatement is 66 dB
 - Fairfax County uses a “Day-Night Average” (DNL) sound level for the same assessment. Target abatement is 65 dB
 - DNL measured sound levels are about 3dB higher than the Loudest-Hour Average measured sound level

LVCA Sound Study Results

- VDOT's proposed sound barriers reduce noise levels to the VDOT guideline of 66 dB but not to the Fairfax County standard of 65 dB
 - Noise levels at the house at 4020 Lafayette Village Drive do exceed VDOT standards
- The hill adjacent to the Beltway behind Newport Glen, Colonial Village and Trammell Court **does** reduce noise levels from the Beltway
- A minor increase in the height of the sound barriers will reduce all noise levels in the community to Fairfax County standards

Next Steps

- We can request VDOT review its barrier design to address noise levels at 4020 LVD
 - Reducing noise levels at 4020 LVD reduces noise levels for homes on Brunswick Forest, Hampton Forest, Hancock Village
- We can ask local elected officials to ask VDOT to conform to Fairfax County noise abatement standards
- We can work with Fairfax County and other associations to monitor barrier construction and require appropriate landscaping