

North-South Alignment Noise and Vibration Impacts
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1. Which alignment will make it more difficult to mitigate noise and vibration impacts on the Town?

A South alignment of the Trail would be inherently quieter, and is key to mitigating noise and vibration impact.

An attachment to the Town's letter details our concerns and recommendations.

2. Describe these impacts

It appears that the MTA understates the Purple Line's noise and vibration levels along the Trail in the Town and mislabels a "severe impact" as a "negligible impact."

The MTA did not take a single sound measurement within the Town of Chevy Chase and assumed those noise levels were appropriate for the right-of-way along the Town. It says the Town is ordinarily as noisy as East-West Highway near Montgomery Avenue and Jones Bridge Road near Connecticut Avenue.

Second, it appears the MTA underestimates noise emission from light-rail trains. It counts on them being quieter than the manufacturers themselves specify. Its analysis also appears to not fully account for all of the ways trains produce noise, including the location of the rails, the number of trains per day, maintenance of wheels and tracks, the presence of real-world dust/grit/leaves/ imperfections, turns and crossovers, braking, decelerating, accelerating, reflections, canyon effects, and focusing effects when entering the tunnel.

3. Unanswered questions/What the Town should ask for in regard to these impacts

We recommend that the Town request that new studies of noise and vibration be conducted using alignments individually optimized for the trail being North or South of the tracks within the Town. Calibrated measurements of ambient sound within the Town (and at the two places actually measured by the original appendix) should also be taken. The Town will need these noise studies and more complete engineering details in order to determine the mitigation it will request during the preliminary engineering phase of the project.